

GENOA CHARTER TOWNSHIP BOARD

Regular Meeting

July 17, 2023

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: July 17, 2023
2. Request to approve June 19, 2023 regular meeting minutes.

Approval of Regular Agenda:

3. Livingston County Economic Development update presentation.
4. Consideration of a recommendation for approval of a Planned Unit Development agreement, final PUD site plan and environmental impact assessment to allow for 204 apartment units. The property consists of two vacant parcels with parcel ID numbers 4711-11-300-014 and 4711-14-100-002 located on the southeast corner of Grand River and Dorr Road. The request is petitioned by Grand River Dorr, LLC.
 - A. Disposition of Planned Unit Development agreement
 - B. Disposition of Impact Assessment (5-3-23)
 - C. Disposition of Final PUD Site Plan (5-30-23)
5. Consideration of a recommendation for approval of an amendment to the Summerfield Pointe Planned Unit Development Agreement, preliminary condominium site plan and environmental impact assessment to reduce the project from 140 attached condominiums to 102 single family detached homes and 12 attached condominiums. The project is located on Lawson Drive, North of Grand River Avenue. The request is petitioned by Healy Homes of Summerfield, LLC.
 - A. Disposition of PUD Agreement Amendment
 - B. Disposition of Environmental Impact Assessment (9-26-22)
 - C. Disposition of Preliminary Site Condominium Plan (9-26-22)
6. Request for an amendment to **Resolution #5** pursuant to MCL 41.724, to approve an adjustment to the roll for the McNamara Road Improvement Special Assessment District for a project cost increase of \$6,835.00 to be spread equally among the property within the district for the remaining years. (Roll Call)

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: July 17, 2023

All information below through July 12, 2023

TOWNSHIP GENERAL EXPENSES	\$	239,179.88
June 23, 2023 Bi Weekly Payroll	\$	120,103.05
July 7, 2023 Bi Weekly Payroll	\$	123,881.90
OPERATING EXPENSES DPW (503 FN)	\$	329,745.53
OPERATING EXPENSES Oak Pointe (592FN)	\$	108,975.35
OPERATING EXPENSES Lake Edgewood (593FN)	\$	73,563.25
TOTAL	\$	995,448.96

FNBCK Check Register

07/12/2023 09:54 AM
 User: denise
 DB: Genoa Township

CHECK REGISTER FOR GENOA TOWNSHIP
 CHECK NUMBERS 38266 - 40000

Page: 1/1

Check Date	Check	Vendor Name	Amount
Bank FNBCK CHECKING ACCOUNT			
06/15/2023	38266	AMERICAN AQUA	33.00
06/15/2023	38267	BLUE CROSS & BLUE SHIELD OF MI	53,604.10
06/15/2023	38268	VERIZON WIRELESS	379.83
06/15/2023	38269	WEST SHORE SERVICES, INC.	2,125.00
06/19/2023	38270	BUSINESS IMAGING GROUP	1,087.62
06/19/2023	38271	MANER COSTERISAN	2,500.00
06/19/2023	38272	SEWARD HENDERSON PLLC	4,199.00
06/22/2023	38273	COMCAST	263.05
06/22/2023	38274	CONSUMERS ENERGY	145.57
06/22/2023	38275	DELTA DENTAL	3,844.77
06/22/2023	38276	ETNA SUPPLY COMPANY	10,905.00
06/22/2023	38277	GENOA TOWNSHIP DPW FUND	18.32
06/22/2023	38278	LANDSCAPE DESIGN & ASSOCIATES LLC	4,015.00
06/22/2023	38279	MICHIGAN SOLAR SOLUTIONS	267.75
06/22/2023	38280	MUTUAL OF OMAHA	2,168.94
06/22/2023	38281	QUADIENT FINANCE USA, INC	2,500.00
06/28/2023	38282	CAPITAL ONE	450.56
06/28/2023	38283	DIANA LOWE	70.74
06/28/2023	38284	NORTHERN PLUMBING, INC.	425.00
06/28/2023	38285	OFFICE EXPRESS INC.	173.50
06/28/2023	38286	SAFEBUILT LLC	3,058.52
06/29/2023	38287	DTE ENERGY	30.09
06/29/2023	38288	DYKEMA GOSSETT PLLC	13,044.80
06/29/2023	38289	MICHIGAN OFFICE SOLUTIONS	235.55
07/05/2023	38290	ALLSTAR ALARM LLC	345.00
07/05/2023	38291	COOPER'S TURF MANAGEMENT LLC	1,510.00
07/05/2023	38292	GORDON FOOD SERVICE	514.10
07/05/2023	38293	MEI TOTAL ELEVATOR SOLUTIONS	139.89
07/05/2023	38294	NETWORK SERVICES GROUP, L.L.C.	50.00
07/05/2023	38295	PERFECT MAINTENANCE CLEANING	565.00
07/05/2023	38296	PONTEM	565.00
07/05/2023	38297	SECURE TECH GROUP	145.00
07/05/2023	38298	SMART BUSINESS SOURCE	50.50
07/05/2023	38299	DTE ENERGY	1,133.05
07/10/2023	38300	DTE ENERGY	291.53 V
		Void Reason: WRONG VENDOR	
07/10/2023	38301	FEDERAL EXPRESS CORP	51.48
07/10/2023	38302	MICHIGAN OFFICE SOLUTIONS	344.20
07/10/2023	38303	SAFEBUILT LLC	4,783.83
07/10/2023	38304	TRI COUNTY SUPPLY, INC.	514.27
07/10/2023	38305	DTE ENERGY	37.86
07/10/2023	38306	DTE ENERGY	253.67
07/11/2023	38307	CONTINENTAL LINEN SERVICE	140.45
07/11/2023	38308	DYKEMA GOSSETT PLLC	3,912.20
07/11/2023	38309	WASTE MANAGEMENT CORP, SERVICES	118,505.80
07/11/2023	38310	WASTE MANAGEMENT CORP, SERVICES	72.87
FNBCK TOTALS:			
Total of 45 Checks:			239,471.41
Less 1 Void Checks:			291.53
Total of 44 Disbursements:			239,179.88

June 23, 2023 Bi Weekly Payroll

Check Date	Bank	Check Number	Name	Check Gross	Physical Check Amount	Direct Deposit	Status
06/23/2023	FNBCK	13849	GRAJEK, CHRISTOPHER	215.57	189.92	0.00	Open
06/23/2023	FNBCK	EFT816	FLEX SPENDING (TASC)	840.38	840.38	0.00	Open
06/23/2023	FNBCK	EFT817	INTERNAL REVENUE SERVICE	28,637.54	28,637.54	0.00	Open
06/23/2023	FNBCK	EFT818	PRINCIPAL FINANCIAL	4,826.00	4,826.00	0.00	Open
06/23/2023	FNBCK	EFT819	PRINCIPAL FINANCIAL	2,600.03	2,600.03	0.00	Open
Totals:				37,119.52	37,093.87	0.00	
Total Physical Checks:		Number of Checks: 005					
Total Check Stubs:		4					

Pay Period End Date: 06/16/2023 Check Post Date: 06/23/2023 Bank ID: FNBCK

* YTD values reflect values AS OF the check date based on all current adjustments, checks, void checks

ZBA CHAIR	0.00	0.00	0.00	410.60			
ZBA MINUTES	0.00	0.00	0.00	882.30			
ZBA MINUTES OT	0.00	0.00	0.00	0.00			
ZBA PER DIEM	0.00	0.00	0.00	2,577.02			
Gross Pay This Period	118,678.10	Deduction Refund	0.00	Net Pay This Period	35,668.92	Gross Pay YTD	1,446,096.35
				83,009.18		Dir. Dep.	82,819.26

Physical Check Amount \$37,093.87
Net Pay This Period \$83,009.18
TOTAL \$120,103.05

July 7, 2023 Bi Weekly Payroll

Check Date	Bank	Check Number	Name	Check Gross	Physical Check Amount	Direct Deposit	Status
07/07/2023	FNBCK	13850	ROJEWSKI, DEBRA L	4,141.55	2,895.41	0.00	Open
07/07/2023	FNBCK	13851	< Check added as Void >	0.00	0.00	0.00	Void
07/07/2023	FNBCK	13852	< Check added as Void >	0.00	0.00	0.00	Void
07/07/2023	FNBCK	13853	< Check added as Void >	0.00	0.00	0.00	Void
07/07/2023	FNBCK	13854	< Check added as Void >	0.00	0.00	0.00	Void
07/07/2023	FNBCK	13855	< Check added as Void >	0.00	0.00	0.00	Void
07/07/2023	FNBCK	13856	< Check added as Void >	0.00	0.00	0.00	Void
07/07/2023	FNBCK	13857	< Check added as Void >	0.00	0.00	0.00	Void
07/07/2023	FNBCK	13858	< Check added as Void >	0.00	0.00	0.00	Void
07/07/2023	FNBCK	13859	< Check added as Void >	0.00	0.00	0.00	Void
07/07/2023	FNBCK	EFT820	FLEX SPENDING (TASC)	840.38	840.38	0.00	Open
07/07/2023	FNBCK	EFT821	INTERNAL REVENUE SERVICE	28,913.27	28,913.27	0.00	Open
07/07/2023	FNBCK	EFT822	PRINCIPAL FINANCIAL	4,876.00	4,876.00	0.00	Open
07/07/2023	FNBCK	EFT823	PRINCIPAL FINANCIAL	2,600.03	2,600.03	0.00	Open
Totals:				41,371.23	40,125.09	0.00	
Total Physical Checks:		Number of Checks: 014					
Total Check Stubs:		10					
		4					

Pay Period End Date: 06/30/2023 Check Post Date: 07/07/2023 Bank ID: FNBCK

* YTD values reflect values AS OF the check date based on all current adjustments, checks, void checks

VACATION PTIME	0.00	0.00	0.00	2,701.81			
WELL IQ	0.00	0.00	143.44	5,240.65			
ZBA CHAIR	1.00	0.00	215.57	1,262.61			
ZBA MINUTES	1.00	0.00	181.65	1,063.95			
ZBA MINUTES OT	0.00	0.00	0.00	0.00			
ZBA PER DIEM	5.00	0.00	1,017.25	5,376.87			
Gross Pay This Period	119,700.84	Deduction Refund	0.00	Net Pay This Period	35,944.03	Gross Pay YTD	1,565,411.97
				83,756.81		Dir. Dep.	80,861.40

Physical Check Amount \$40,125.09
Net Pay This Period \$83,756.81
TOTAL \$123,881.90

503FN Check Register

Check Date	Check	Vendor Name	Amount
Bank 503FN DPW-UTILITIES #233			
06/14/2023	5838	UNITED STATES POSTAL SERVICE	77.44
06/20/2023	5839	ADVANCE AUTO PARTS	20.99
06/20/2023	5840	AUTO-LAB OF LIVINGSTON	62.04
06/20/2023	5841	BLACKBURN MFG. CO	575.72
06/20/2023	5842	CORRIGAN OIL COMPANY, NO.II	1,360.11
06/20/2023	5843	GIFFELS WEBSTER	7,637.50
06/20/2023	5844	MYERS AUTOMOTIVE	421.98
06/20/2023	5845	PORT CITY COMMUNICATIONS, INC.	223.72
06/20/2023	5846	RED WING BUSINESS ADVANTAGE ACCOUNT	675.00
06/20/2023	5847	TETRA TECH INC	3,850.00
06/20/2023	5848	TRITECH SOFTWARE SYSTEMS	12,115.05
06/20/2023	5849	WINDSTREAM	61.77
06/21/2023	5850	HOME DEPOT CREDIT SERVICES	2,189.25
06/28/2023	5851	GENOA TWP GENERAL FUND	300,000.00
07/06/2023	5852	TRACTOR SUPPLY CO.	474.96
503FN TOTALS:			
Total of 15 Checks:			329,745.53
Less 0 Void Checks:			0.00
Total of 15 Disbursements:			329,745.53

592FN Check Register

Check Date	Check	Vendor Name	Amount
Bank 592FN OAK POINTE OPERATING FUND #592			
06/21/2023	5825	ADVANCE AUTO PARTS	205.57
06/21/2023	5826	AMERICAN AQUA	2,759.51
06/21/2023	5827	AT&T	288.64
06/21/2023	5828	BYRUM ACE HARDWARE	59.99
06/21/2023	5829	CONCRETE CONSTRUCTION. INC.	2,239.35
06/21/2023	5830	CONSUMERS ENERGY	243.02
06/21/2023	5831	COOPER'S TURF MANAGEMENT LLC	705.00
06/21/2023	5832	GENOA TOWNSHIP DPW FUND	25,756.83
06/21/2023	5833	GENOA TOWNSHIP DPW FUND	296.73
06/21/2023	5834	GENOA TOWNSHIP DPW FUND	13,533.00
06/21/2023	5835	HARTLAND SEPTIC SERVICE, INC.	950.00
06/21/2023	5836	LOREA TOPSOIL & AGGREGATE	77.00
06/21/2023	5837	BRIGHTON ANALYTICAL LLC	440.00
06/21/2023	5838	GENOA TOWNSHIP DPW FUND	1,194.00
06/21/2023	5839	GENOA TOWNSHIP DPW FUND	21,704.92
06/21/2023	5840	GENOA TOWNSHIP DPW FUND	53.47
06/21/2023	5841	HACH COMPANY	836.16
06/21/2023	5842	HAVILAND PRODUCTS COMPANY	6,300.00
06/21/2023	5843	HYDROCORP	226.87
06/21/2023	5844	LIEDEL EXCAVATING CONTRACTORS LLC	8,400.00
06/21/2023	5845	LOREA TOPSOIL & AGGREGATE	185.00
06/21/2023	5846	PARAGON LABORATORIES	830.00
06/21/2023	5847	WATER SOLUTIONS UNLIMITED, INC	2,335.00
06/28/2023	5848	AT&T LONG DISTANCE	61.65
06/28/2023	5849	LIVINGSTON CO. REGISTER OF DEEDS	30.00
07/10/2023	5850	DTE ENERGY	2,083.76
07/10/2023	5851	DTE ENERGY	1,197.67
07/10/2023	5852	GENOA TOWNSHIP G/O NEW USER FUND	15,900.00
07/11/2023	5853	AT&T LONG DISTANCE	82.21
592FN TOTALS:			
Total of 29 Checks:			108,975.35
Less 0 Void Checks:			0.00
Total of 29 Disbursements:			108,975.35

593FN Check Register

07/12/2023 10:00 AM
 User: denise
 DB: Genoa Township

CHECK REGISTER FOR GENOA TOWNSHIP
 CHECK NUMBERS 4290 - 5000

Page: 1/1

Check Date	Check	Vendor Name	Amount
Bank 593FN LAKE EDGEWOOD OPERATING FUND #590			
06/20/2023	4290	BRIGHTON ANALYTICAL LLC	804.00
06/20/2023	4291	BYRUM ACE HARDWARE	149.98
06/20/2023	4292	COMPLETE BATTERY SOURCE	96.21
06/20/2023	4293	COOPER'S TURF MANAGEMENT LLC	987.00
06/20/2023	4294	GENOA OCEOLA SEWER	314.17
06/20/2023	4295	GENOA TOWNSHIP DPW FUND	11,900.83
06/20/2023	4296	GENOA TOWNSHIP DPW FUND	286.05
06/20/2023	4297	GENOA TOWNSHIP DPW FUND	6,169.00
06/20/2023	4298	CONSUMERS ENERGY	167.93
06/20/2023	4299	GENOA TOWNSHIP DPW FUND	1,037.92
07/06/2023	4300	CITY OF BRIGHTON	10,461.74
07/06/2023	4301	CITY OF BRIGHTON	37,710.05
07/10/2023	4302	DTE ENERGY	3,478.37
593FN TOTALS:			
Total of 13 Checks:			73,563.25
Less 0 Void Checks:			0.00
Total of 13 Disbursements:			73,563.25

GENOA CHARTER TOWNSHIP BOARD
Regular Meeting
June 19, 2023

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, Jean Ledford, Terry Croft, Diana Lowe, Robin Hunt, and Paulette Skolarus. Absent was Jim Mortensen. Also present were Township Manager Kelly VanMarter, Utility Director Greg Tatara and no persons in the audience.

The Pledge of Allegiance was recited.

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

Approval of Consent Agenda:

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

- 1. Payment of Bills: June 19, 2023**
- 2. Request to approve June 5, 2023 regular meeting minutes.**

Regular Agenda

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

- 3. Request for approval of a fireworks display on Lake Chemung on July 1, 2023 as submitted by Chris Bonk.**

Supervisor Rogers noted the current insurance policy has been submitted and it is at the table for each trustee tonight.

Moved by Skolarus, supported by Croft, to approve the Public Fireworks Display permit for Chris Bonk located on a floating platform in Lake Chemung on July 1, 2023. The applicant shall ensure that all requirements of the Brighton Area Fire Authority are met. **The motion carried unanimously.**

- 4. Request to approve the Lake Edgewood Consolidation Project and amend the Fiscal Year 2023-2024 Budget for General Fund 101 and American Rescue Plan Act (ARPA) Fund 464 as follows:**

- A. **Fund 464 - Eliminate the allocation for “Additional Recycling Expenses”, Line Item 464- 521-802-000 and to dedicate all remaining unallocated ARPA funds which is currently projected to be \$531,621 to the Lake Edgewood Consolidation project new line item 464-261-803-001.**
- B. **Fund 101 - Amend the General Fund 101 budget to eliminate the revenue for Line Item 101-000-699-464 “transfer in from ARPA Fund #464”.**
- C. **Approve the Lake Edgewood Conversion Engineering Design & Permitting Phase Proposal from Tetra Tech dated June 14, 2023 with costs not to exceed \$64,000.**

Mr. Tatara provided a history of both the Lake Edgewood and Genoa-Oceola wastewater treatment plants and his proposal to consolidate them into one plant. He estimates the total cost of the project to be \$1,371,025. He is recommending approval of the project, including the proposal from Tetra Tech.

Moved by Skolarus, supported by Ledford, to amend Fund 464 to eliminate the allocation for “Additional Recycling Expenses”, Line Item 464-521-802-000 and to dedicate all remaining unallocated ARPA funds which is currently projected to be \$531,621 to the Lake Edgewood Consolidation project new line item 464-261-803-001. **The motion carried unanimously.**

Moved by Ledford, supported by Croft, to amend the General Fund 101 budget to eliminate the revenue for Line Item 101-000-699-464 “transfer in from ARPA Fund #464”. **The motion carried unanimously.**

Moved by Lowe, supported by Skolarus, to approve the Lake Edgewood Conversion Project and the Engineering Design & Permitting Phase Proposal from Tetra Tech dated June 14, 2023 with costs not to exceed \$64,000. **The motion carried unanimously.**

- 5. **Request to approve water rate adjustments in response to the City of Brighton’s revised fee schedule effective July 1, 2023 as recommended by the accountants and Utility Director as follows:**
 - A. **Increase the Lake Edgewood North Star (Conference Center Drive) Quarterly Water Fee to \$7.66 / 1,000 gallons from \$7.06 / 1,000 gallons;**
 - B. **Increase the Lake Edgewood Other Quarterly water fee to \$7.34 / 1,000 gallons from \$6.76 / 1,000 gallons;**
 - C. **Hold the applicable Brighton City water connection fee at \$2,802 per REU and the sewer connection at \$7,198 per REU.**

Mr. Tatara explained the rate schedule and the agreement that the township has with the City of Brighton.

Moved by Hunt, seconded by Croft, to increase the Lake Edgewood North Star (Conference Center Drive) Quarterly Water Fee to \$7.66 / 1,000 gallons from \$7.06/1,000 gallons. **The motion carried unanimously.**

Moved by Skolarus, supported by Ledford, to increase the Lake Edgewood Other Quarterly water fee to \$7.34 / 1,000 gallons from \$6.76/1,000 per 1,000 gallons. **The motion carried unanimously.**

Mr. Tatara advised there is no need for a motion to hold the current water and sewer connection fees.

6. Request to approve the proposal with BS&A Software dated June 5, 2023 for Software and Services associated with BSA Cloud Upgrade as budgeted in Fund 101-261-751-000.

Ms. Skolarus questioned the amount of the increase. Ms. VanMarter stated the total cost is \$126,540.

Ms. Hunt stated many municipalities are upgrading to cloud storage, so much that the waiting list is 18 months. It will save money, eliminate problems that the township has been experiencing with the server, and eliminate the manual updates needed. Ms. VanMarter added that there are a lot of new features with this upgrade.

Moved by Lowe, supported by Hunt, to approve the proposal with BS&A Software dated June 5, 2023 for Software and Services associated with BSA Cloud Upgrade as budgeted in Fund 101-261-751-000. **The motion carried unanimously.**

7. Request to approve a professional services proposal from Lindhout Associates architects dated June 1, 2023 for architectural and planning services related to security upgrades to the Boardroom at the Township Hall for an amount not to exceed \$5,750 from Fund 249-265-981- 008.

There was a discussion regarding the possible changes to the boardroom.

Moved by Lowe, supported by Hunt, to approve the professional services proposal from Lindhout Associates architects dated June 1, 2023 for architectural and planning services related to security upgrades to the Boardroom at the Township Hall for an amount not to exceed \$5,750 from Fund 249-265-981-008. **The motion carried unanimously.**

8. Request to approve a professional services proposal from Lindhout Associates architects dated June 1, 2023 for architectural and planning services related to park planning and parking lot expansion options at the Township Hall for an amount not to exceed \$3,680 from Fund 208-751-934-006.

Ms. VanMarter stated there is funding available in the budget to expand the township hall parking. Lindhout will provide options for additional parking and the inclusion of a pickleball court, as the township has received many requests for this from members of the public.

Ms. Skolarus requested to have some evergreen trees planted along the I-96 Expressway to help eliminate the noise.

Moved by Skolarus, supported by Ledford, to approve the professional services proposal from Lindhout Associates architects dated June 1, 2023 for architectural and planning services related to park planning and parking lot expansion options for the Genoa Township Park for an amount not to exceed \$3,680 from Fund 208-751-934-006. **The motion carried unanimously.**

Member Discussion

Ms. Skolarus stated there will be an election in November for the Howell Schools and they will reimburse the township. She will be bringing the budget information before the Board in August.

Supervisor Rogers advised the Board that the May 2023 Howell Area Parks and Recreation Authority (HAPRA) Participation Report is at the table this evening for each member.

There was a discussion regarding the high-speed internet service in the township.

Adjournment

Moved by Ledford, supported by Lowe, to adjourn the meeting at 7:18 pm. **The motion carried unanimously.**

Respectfully Submitted,

Patty Thomas
Recording Secretary

Approved:

Paulette Skolarus, Clerk
Genoa Charter Township

Bill Rogers, Supervisor
Genoa Charter Township



MEMORANDUM

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

TO: Honorable Board of Trustees
FROM: Amy Ruthig, Planning Director
DATE: July 11, 2023
RE: Legacy Apartments - Dorr/Grand River Ave. Final RPUD PUD

In consideration of the approval recommendations by the Township Planning Commission on June 12, 2023, please find the attached proposed final residential planned unit development agreement, plan and impact assessment for your consideration. The proposed involves two properties located on the southeast corner of Grand River Avenue and Dorr Road. The 37-acre parcel is 4711-14-100-002 and the smaller 14.6-acre parcel is 4711-11-300-014. Both are being utilized as farm land.

The proposal is for construct 204-apartment units within 18 buildings, and an accessory clubhouse and pool.



SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

H. James Mortensen

Terry Croft

Diana Lowe

MANAGER

Kelly VanMarter

Procedurally, the Planning Commission is to review the final PUD site plan, Environmental Impact Assessment and edited PUD agreement and put forth recommendations to the Township Board following a public hearing. The project was heard before the Planning Commission on June 12, 2023 and the Commission recommended approval. Based on that recommendation I offer the following for your consideration:

PUD AGREEMENT

Moved by _____, Supported by _____ to APPROVE the PUD Agreement revised on June 7, 2023 with the following conditions:

1. The applicant must address any comments provided by Township staff.
2. The applicant must work with Township staff to ensure that significant aesthetic enhancements are made to the primary corner intersection at Grand River Avenue and Dorr Road. The conversion of the pond from detention with water fountain to infiltration basin with standpipe, overflow spillway and retaining wall all visible from the roadway must be aesthetically improved. This may involve the addition of a water feature, signage, decorative walls, enhanced landscaping, and improved seed mix or sod, etc. Township staff may consult with the Planning Commission on final design of the intersection enhancements if necessary. No permits shall be issued for any work on the site until the intersection enhancement plan is approved and incorporated into the PUD Agreement.

ENVIRONMENTAL IMPACT ASSESSMENT

Moved by _____, Supported by _____ to APPROVE the Environmental Impact Assessment dated May 3, 2023 as submitted.

SITE PLAN

Moved by _____, Supported by _____ to APPROVE the Final PUD Plan dated May 30, 2023 with the following conditions:

1. Township staff and applicant will work with the Livingston County Road Commission to determine if they will agree to allow the installation of the sidewalk along Dorr Road as depicted on the plan.
2. The applicant shall address the conditions comments provided in the review letters of the engineer, planner, fire marshal, Drain Commissioner, and Livingston County Road Commission.
3. The applicant must work with Township staff to ensure that significant aesthetic enhancements are made to the primary corner intersection at Grand River Avenue and Dorr Road. The conversion of the pond from detention with water fountain to infiltration basin with standpipe, overflow spillway and retaining wall all visible from the roadway must be aesthetically improved. This may involve the addition of a water feature, signage, decorative walls, enhanced landscaping, and improved seed mix or sod, etc. Township staff may consult with the Planning Commission on final design of the intersection enhancements if necessary. No permits shall be issued for any work on the site until the intersection enhancement plan is approved and incorporated into the PUD Agreement.

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

Best Regards,



Amy Ruthig



GENOA CHARTER TOWNSHIP APPLICATION
Planned Unit Development (PUD)

APPLICANT NAME: GRAND RIVER DORR, LLC (Mark Kassab)
APPLICANT EMAIL: MKASSAB@MSHAPIROREALESTATE.COM
APPLICANT ADDRESS & PHONE: 31550 Northwestern Hwy, Suite 200 Farmington Hill, MI 48334 (248) 865-0066
OWNER'S NAME: Grand River Dorr, LLC
OWNER ADDRESS & PHONE: same as above
TAX CODE(S): 47-11-14-100-002 4711-11-300-014

QUALIFYING CONDITIONS (To be filled out by applicant)

- 1. A PUD zoning classification may be initiated only by a petition.
2. It is desired and requested that the foregoing property be rezoned to the following type of PUD designation:
[X] Residential Planned Unit Development (RPUD)
[] Planned Industrial District (PID)
[] Mixed Use Planned Unit Development (MUPUD)
[] Redevelopment Planned Unit Development (RDPUD)
[] Non-residential Planned Unit Development (NRPUD)
[] Town Center Planned Unit Development (TCPUD)
3. The planned unit development site shall be under the control of one owner or group of owners and shall be capable of being planned and developed as one integral unit.

EXPLAIN The development will be developed, owned and operated by a single ownership entity

- 4. The site shall have a minimum area of twenty (20) acres of contiguous land, provided such minimum may be reduced by the Township Board as follows:
A. The minimum area requirement may be reduced to five (5) acres for sites served by both public water and public sewer.
B. The minimum lot area may be waived for sites zoned for commercial use (NSD, GCD or RCD) where the site is occupied by a nonconforming commercial, office or industrial building, all buildings on such site are proposed to be removed and a new use permitted within the underlying zoning district is to be established.

minimum necessary to allow redevelopment of the site, while still meeting the spirit and intent of the ordinance.

- C. The PUD site plan shall provide one or more of the following benefits not possible under the standards of another zoning district, as determined by the Planning Commission:
- preservation of significant natural or historic features
 - a complementary mixture of uses or a variety of housing types
 - common open space for passive or active recreational use
 - mitigation to offset impacts
 - redevelopment of a nonconforming site where creative design can address unique site constraints.
- D. The site shall be served by public sewer and water. The Township may approve a residential PUD that is not served by public sewer or water, provided all lots shall be at least one (1) acre in area and the requirements of the County Health Department shall be met.

Size of property is 51.9+/- acres.

DESCRIBE BELOW HOW THE REQUESTED PUD DESIGNATION COMPLIES WITH AFOREMENTIONED MINIMUM LOT SIZE REQUIREMENTS.

The proposed development is over 51 acres. The development will preserve natural features and provided common open space opportunities for the residents, including walking trails, a community building and swimming pool. The site is constrained by regulated wetlands and create design is required to address the constraints. The site has access to public water supply and sanitary sewer.

STANDARDS FOR REZONING TO PLANNED UNIT DEVELOPMENT (RESPOND HERE OR WITHIN THE IMPACT STATEMENT)

1. How would the PUD be consistent with the goals, policies and future land use map of the Genoa Township Master Plan, including any subarea or corridor studies. If conditions have changed since the Master Plan was adopted, the consistency with recent development trends in the area;

The future land use map for Genoa Township identifies mixed use town center. However, a change in need for retail services has been observed in the market. There is a lack of ability to attract new retail to compete with the existing retail services already located in the area. The proposed use is consistent with the high intensity use along the Grand River Corridor. This is consistent with surrounding land use and provides a transition to the residential areas to the south.

2. The compatibility of all the potential uses in the PUD with surrounding uses and zoning in terms of land suitability, impacts on the environment, density, nature of use, traffic impacts, aesthetics, infrastructure and potential influence on property values;

The RPUD with an HDR underlying zoning is a transitional residential zoning that is typically found adjacent to high and medium intensity uses. This is consistent with this property and its surrounding uses. In this situation the property is surrounded by industrial, general business and office. There is residential to the north (higher density) and the south (lower density). The RPUD allows for additional open space, protection of natural features, and is supported by the existing infrastructure.

3. The capacity of infrastructure and services sufficient to accommodate the uses permitted in the requested district without compromising the "health, safety and welfare" of the Township;

The proposed development will be compatible with past planning efforts and therefore the infrastructure is present to support it. The township services planned for this area will not be overtaxed by the development.

4. The apparent demand for the types of uses permitted in the PUD; Successful development area reaching various age demographics that seek amenities, less maintenance nature preservation and convenience to restaurants and shopping. This location is well located between Brighton and Howell where downtown shopping and restaurants are available as well as the Genoa retail and restaurant area at Latson and Grand River.

AFFIDAVIT

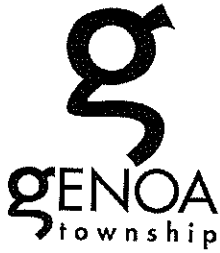
The undersigned says that they are the Owner (owner, lessee, or other specified interest) involved in this petition and that the foregoing answers and statements herein contained and the information herewith submitted are in all respects true and correct to the best of his/her knowledge and belief.

BY: Mark Kassab, Grand River Dorr, LLC
ADDRESS: 315550 Northwestern Hwy, ste 200 Farmington Hills 48334

Contact Information - Review Letters and Correspondence shall be forwarded to the following:
Jonathan Curry of PEA Group at jcurry@peagroup.com
Name Business Affiliation E-mail

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.

PROJECT NAME: Grand River Dorr
PROJECT LOCATON & DESCRIPTION: 6080 W Grand River (Grand River/Dorr)
SIGNATURE: [Signature] DATE: 6/2/22
PRINT NAME: MARK KASSAB PHONE: 248-865-0066
COMPANY NAME & ADDRESS: 315550 Northwestern Hwy, ste 200 Farmington Hills 48334



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: Grand River Dorr, LLC
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: Grand River Dorr, LLC

SITE ADDRESS: 6080 W Grand River PARCEL #(s): ~~47-11-11-200-014~~ 11-300-014

APPLICANT PHONE: (248) 865-0066 OWNER PHONE: () 47-11-14-100-002

OWNER EMAIL: mkassab@mshapriorealestate.com

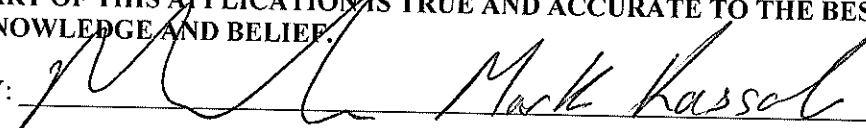
LOCATION AND BRIEF DESCRIPTION OF SITE: 51.9 acres +/- at the South East Corner of
Grand River and Dorr Road

BRIEF STATEMENT OF PROPOSED USE: _____

The proposed use will be a RPUD - multifamily development consisting of 204 apartment homes in 18 buildings, with a community clubhouse and pool.

THE FOLLOWING BUILDINGS ARE PROPOSED: _____
18 buildings in 12-plex or 6-plex configuration, and a community clubhouse.

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:  Mark Kassal

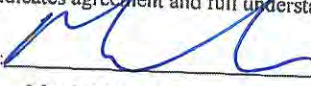
ADDRESS: 315550 Northwestern Hwy., Farmington Hills, MI 48334

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

1.) Mark Kassab of Grand River Dorr, LLC at mkassab@mshapirorealestate.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:  DATE: 6/2/22
PRINT NAME: Mark Kassab PHONE: 248-865-0066
ADDRESS: 315550 Northwestern Highway, ste 200 Farmington Hills 48334

4. Carbon monoxide alarms shall be installed within the common area of the residence and shall be hardwired with battery backup.
5. A minimum of one 10lbs. ABC dry chemical fire extinguisher shall be provided in the basement for occupant use. It shall be installed in an open and conspicuous location.

Chairman Grajek suggested that the applicant request to have this item tabled this evening due to the many outstanding requirements from the planner, engineer and fire marshal.

Ms. Yapici stated she has updated her application to address many of the planner's concerns. She has information from the health department regarding the septic system.

The call to the public was opened at 7:00 pm.

Mr. Jeff Koziara of 7806 Collingwood Drive asked if this could be a legitimate business in this area. He is not in favor of this. It is currently a quiet neighborhood.

An email was received on June 9, 2023 from David and Lisa Johnson of 7861 Herbst Road stating they are opposed to this request because they feel it will reduce their privacy and decrease the value of their property.

The call to the public was closed at 7:03.

Commissioner Chouinard would like to see more information on the egress window in the bedroom. This is going to be required by the building department and the fire department.

Commissioner Dhaenens asked who Ms. Yapici envisioned to be her customers. She stated there are people who are at the cancer center, the dialysis center, etc. in the area. He agrees with the requirements of the planner, engineer and the fire marshal. These issues must be met at the time this item is before the Commission again.

Commissioner McCreary advised the applicant that the requirements do not have to be completed prior to the next meeting, but there must be a commitment and plan to comply with those requirements.

Moved by Commissioner Lowe, seconded by Commissioner Dhaenens, to table the request for a special land use application, environmental impact assessment and sketch plan to allow for a proposed Bed and Breakfast located at 7854 Collingwood Drive, just west of Grand River Avenue for Nazmiye Yapici until the July 10, 2023 Planning Commission Meeting. **The motion carried unanimously.**

OPEN PUBLIC HEARING #2...Consideration of a Planned Unit Development agreement, final PUD site plan and environmental impact assessment to allow for 204 apartment units. The

property consists of two vacant parcels with parcel ID numbers 4711-11-300-014 and 4711-14-100-002 located on the southeast corner of Grand River and Dorr Road. The request is petitioned by Grand River Dorr, LLC.

- A. Recommendation of Planned Unit Development agreement
- B. Recommendation of Impact Assessment (5-3-23)
- C. Recommendation of Final PUD Site Plan (5-30-23)

Mr. Mark Kassab of Grand River Dorr, LLC and Mr. Jonathan Curry of PEA Group, the engineer, were present.

Mr. Kassab stated they have done and submitted an updated traffic study to include the hospital, they have spoken to the Drain Commissioner and Livingston County Road Commission regarding the storm water runoff, they spoke to the Township's DPW and have agreed to contribute toward the upgrade of a sewer pump station, they have moved the setbacks further away from Grand River, and they have added the wetland delineation signage.

Mr. Curry stated they are not discharging any more runoff onto Grand River than what it is currently and the drainage on the back of the site is oversized.

Mr. Borden reviewed his letter dated June 6, 2023. He noted that since the previous review letter, the applicant has addressed almost all his concerns.

1. The applicant must provide a revised PUD Agreement addressing comments provided to date.
2. Building design, materials, and colors are subject to review and approval by the Planning Commission; however, they are generally consistent with the approved conceptual PUD plan.
3. He requests the applicant add the Dorr Road sidewalk connection and crosswalk to the overall site plan. It is depicted on the landscape plan. Ms. Byrne noted that the Road Commission did not want that sidewalk installed as it does not lead to another sidewalk. After a brief discussion, the Commissioners requested that Township staff speak to the Road Commission to see if they will agree to allow the installation of the sidewalk.
4. The applicant must address any additional comments provided by the Township Engineer and/or the Brighton Area Fire Authority with respect to vehicular circulation and site engineering.

Ms. Byrne reviewed her letter dated June 7, 2023.

1. A private road is proposed. After final site plan approval, private road construction plans should be submitted to the Township for review and approval.
2. The petitioner has submitted plans to the Livingston County Drain Commissioner (LCDC) for review and approval. Comments in their letter dated May 9, 2023, should be addressed and approval from the LCDC should be obtained. Since remaining comments from LCDC are not major, we believe the drainage plan is adequate for Planning Commission and Board

approval. Approval from the LCDC should be provided to the Township prior to a Land Use permit being issued.

3. The petitioner is proposing multiple connections to the existing storm sewer on Grand River Avenue. The LCRC will need to approve all proposed connections to their storm sewer system and said approval should be provided to Genoa Township prior to a Land Use permit being issued.
4. The grading plan shows areas with slopes exceeding 1:4. Planning Commission approval is required for 1:3 slopes. Steeper slopes are required on this site due to the large change in grade across the site and the SESC plan shows soil erosion control blankets on all slopes exceeding 1:4; therefore, we have no objection to the 1:3 slopes.
5. The petitioner is proposing multiple retaining walls up to 14-feet high. Genoa Township's Zoning Ordinance requires that retaining walls over three feet tall be designed by a professional engineer, with design calculations demonstrating its structural stability being submitted as part of the site plan. This should be provided prior to a Land Use permit being issued.
6. Tetra Tech completed a utility study for the proposed development and recommended connection locations and necessary system improvements for both the proposed water main and sanitary sewer. The petitioner has included our recommendations in their utility plan and has agreed to pay for a portion of the recommended sewer collection system upgrades.
7. After final site plan approval, the petitioner will be required to submit construction plans to MHOG Sewer and Water Authority for review and approval of the proposed water main and sanitary sewer.

The Fire Marshal's letter from May 16, 2023 stated the following.

A minimum vertical clearance of 13½ feet shall be maintained along the length of all apparatus access drives. This includes but is not limited to porte-cochere, lighting, and large canopy trees. A number of trees must be relocated, the species modified, or the road width increased to not overhang the roadways. A note was provided to address plantings at final site and construction review on the previous submittal; however the artist rendering indicates over 400 large canopy trees lining the roadways throughout the development. As they grow and reach full growth, nearly all species will either partially or completely encroach the roadway. Additional consideration shall be made to placement and species and will require the ownership to include the overhead clearance requirement in the facility maintenance plan. The applicant remains committed to addressing the tree canopy concerns prior to construction approval through modification of locations and species of the trees. The Fire Authority did present an increase in drive width to 32 feet as an alternative.

Mr. Kassab stated they have spoken to the fire marshal and have agreed to plant a different type of tree that will not cause issues for their apparatuses.

Mr. Kassab stated he has received the letter from Ms. Kim Hiller of the Livingston County Road Commission dated April 21, 2023.

Commissioner Dhaenens thanked the developer for making the changes that were requested.

Commissioner Rauch agrees with Commissioner Dhaenens. Regarding the detention pond at the corner of Dorr Road and Grand River, noting it will not be a wet pond, and while there is a retaining wall and landscaping proposed, he was wondering if there could be something added to dress it up, such as signage for the development on top of the retaining wall. Mr. Kassab agrees and is willing to discuss it further with the township.

It was noted that the colored renderings and building material samples were included in the preliminary site plan submittal and are acceptable to the Planning Commission.

The call to the public was opened at 7:38 with no response.

Moved by Commissioner Rauch, seconded by Commissioner Dhaenens, to recommend to the Township Board approval of the Planned Unit Development agreement to allow for 204 apartment units on two vacant parcels with parcel ID numbers 4711-11-300-014 and 4711-14-100-002 located on the southeast corner of Grand River and Dorr Road for Grand River Dorr, LLC, contingent upon the following:

- The applicant shall address the conditions comments provided in the review letters of the engineer, planner, fire marshal, Drain Commissioner, and Livingston County Road Commission.

The motion carried unanimously.

Moved by Commissioner Rauch, seconded by Commissioner Lowe, to recommend to the Township Board approval Impact Assessment dated May 3, 2023 to allow for 204 apartment units. on two vacant parcels with parcel ID numbers 4711-11-300-014 and 4711-14-100-002 located on the southeast corner of Grand River and Dorr Road for Grand River Dorr, LLC. **The motion carried unanimously.**

Moved by Commissioner Rauch, seconded by Commissioner Dhaenens, to recommend to the Township Board approval of the Final PUD Site Plan dated May 30, 2023 to allow for 204 apartment units. on two vacant parcels with parcel ID numbers 4711-11-300-014 and 4711-14-100-002 located on the southeast corner of Grand River and Dorr Road for Grand River Dorr, LLC, contingent upon the following:

- The building design materials and colors presented in the preliminary site plan submittal are acceptable to the Planning Commission
- The Planning Commission requests that township staff and applicant work with the Livingston County Road Commission to determine if they will agree to allow the installation of the sidewalk along Dorr Road as depicted on the plan.
 - The applicant shall address the conditions comments provided in the review letters of the engineer, planner, fire marshal, Drain Commissioner, and Livingston County Road Commission.

- The Planning Commission approves the deviation for the height of the retaining wall for the detention pond on the northwest corner of Dorr Road and Grand River.
- The petitioner shall work with township staff to understand opportunities to add signage or entry features at the northwest corner of Dorr Road and Grand River.

The motion carried unanimously.

OPEN PUBLIC HEARING #3...Discussion regarding proposed solar ordinance

Mr. Borden presented the proposed amendments to the township's solar energy systems ordinance.

Commissioner Dhaenens understands the township's desire to not have solar panels allowed in the front yard; however, in some cases, the front yard is the only location for it to be effective. Mr. Borden stated there are some conditions and zoning districts where they are allowed in the front yard.

There was a discussion regarding the requirements regarding property size, setbacks, etc. and if any properties in the Township meet them. Commissioners were asked to send their comments to Ms. Ruthig, and Ms. VanMarter so they could address them and return to the Planning Commission with a final draft of the ordinance.

ADMINISTRATIVE BUSINESS:

Staff Report

Ms. Ruthig stated there will be two items on July's meeting agenda.

Approval of the May 8, 2023 Planning Commission meeting minutes

Moved by Commissioner McCreary, seconded by Commissioner Rauch, to approve the minutes of the May 8, 2023 Planning Commission Meeting as presented. **The motion carried unanimously.**

Member Discussion

There were no items to discuss this evening.

Adjournment

Moved by Commissioner Dhaenens, seconded by Commissioner McCreary, to adjourn the meeting at 8:06 pm. **The motion carried unanimously.**

2. Request to approve November 7, 2022 regular meeting minutes
3. Request Board approval to adjust the Refuse Special Assessment Roll, #X0012, and to adjust the 2022 Winter tax roll accordingly for parcel numbers 4711-09-201-243, 4711-19-300-008, ~~4711-26-300-044~~ 4711-23-200-013, 4711-33-401-016, 4711-34-403-006, and 4711-34-403-007.

Regular Agenda

Moved by Hunt, supported by Lowe, to approve the Regular Agenda as presented. **The motion carried unanimously.**

4. Consideration of a recommendation for approval and adoption of rezoning ordinance number Z22-03 and associated Planned Unit Development (PUD) agreement, impact assessment and conceptual PUD site plan. The request is to rezone approximately 52 acres from the Neighborhood Service District, Medium Density Residential district and the Town Center Overlay district to a Residential Planned Unit Development overlay of the High Density Residential District (HDR) to allow for 204 apartment units with a net density of 6.23 units per acre. The property consists of two vacant parcels with parcel ID numbers 4711-11-300-014 and 4711-14-100-002 located at the southeast corner of Grand River and Dorr Road. The request is petitioned by Grand River Dorr, LLC.
 - A. Disposition of Rezoning Ordinance Z-22-03 (requires roll call vote)
 - B. Disposition of PUD Agreement
 - C. Disposition of Impact Assessment
 - D. Disposition of Conceptual PUD Site Plan

Mr. Mark Kassab provided a history of the property as well as his company. They own many high-end apartment complexes in Michigan. He stated they will not be encroaching into the wetlands. The current zoning allows for a zero foot setback; however, they are proposing a 75 foot setback on Grand River and 68 feet on Dorr Road. They are proposing a less dense development than what would be allowed under the current zoning. They have discussed the expansion of Grand River with the Livingston County Road Commission and if it is needed, they will accommodate that. He cannot speak if these residents will be using Lake Chemung; however he has spoken to Mr. Wilson and he is in support of this project.

Mr. Kassab showed a colored photo rendering of the proposed buildings and explained the floor plans. He also showed the site plan and what the views will be from both Grand River and Dorr Road.

Mr. Mortensen is concerned with the amount of brick facing the roads. Mr. Kassab stated that nearly 100 percent of the front of the buildings will be brick or stone.

Ms. Skolarus questioned the location of the mailboxes. Mr. Kassab stated the clubhouse will have an area for both mail and parcel deliveries.

Ms. Ledford questioned the results of the traffic study. Ms. Jill Bauer, the traffic engineer, stated they have done a traffic study to include the hospital expansion. She stated there were no significant changes when it was included.

Ms. Hunt clarified that the water and sewer system has capacity for this development. Mr. Kassab will confirm again with MHOG that there is capacity. If there is not, then they will not be able to build what they are proposing

Ms. VanMarter noted that more details, such as building elevations and materials, environmental impacts, etc. will need to be developed and presented to the Planning Commission and Township Board for final review and approval.

Moved by Hunt, supported by Mortensen to approve and adopt Ordinance Z-22-03. This approval is made because the proposed amendment to the Zoning Map and reclassification as a Residential Planned Unit District (RPUD) /High Density Residential (HDR) with the related development agreement, impact assessment and conceptual plan has been found to comply with the qualifying conditions and the criteria stated in 10.03.01, 10.07.01 and 22.04 of the Township Zoning Ordinance. **The motion carried unanimously with a roll call vote (Ledford - yes, Croft - yes, Hunt - yes, Lowe - yes, Mortensen - yes, Skolarus - yes, and Rogers - yes).**

Moved by Hunt, supported by Lowe to approve the PUD Agreement revised on November 1, 2021 with the following conditions:

1. The revised PUD agreement submitted, made revisions to an outdated earlier version of the agreement. The applicant must work with staff and the Township attorney to blend the agreements and revisions must be made to the satisfaction of Township staff.
2. All deviations requested must be specifically detailed including setbacks requested outlined in the PUD Agreement.
3. The applicant must address any comments provided by the Township Planner and Engineer, Utilities Director and/or Brighton Area Fire Authority.

The motion carried unanimously.

Moved by Ledford, supported by Lowe, to approve the Environmental Impact Assessment dated May 25, 2022 as submitted. **The motion carried unanimously.**

Moved by Hunt, supported by Lowe, to approve the Conceptual PUD Plan dated November 4, 2022 with the following conditions:

1. The final site plan shall include all items as required by Section 10.06 as required by ordinance.

2. The deviations along Grand River for building and parking setbacks shall be reviewed to determine if they can be moved further south to decrease the 25-foot deviation.

The motion carried unanimously.

5. Request to approve the proposal from Douglas Electric dated November 4, 2022 for the Township Hall parking lot and driveway lighting improvements excluding and deducting both alternates for a total construction project cost not to exceed \$145,325.50 (\$126,370 + 15% contingency).

Ms. Hunt asked if this proposal includes lighting for the basketball courts as requested by a resident, whose letter is in this evening's packet. Ms. VanMarter stated that was Alternate Proposal #2, which was removed from her recommendation. It can be done at a later date. Supervisor Rogers requested the Board discuss adding lighting to the court.

Moved by Lowe, supported by Mortensen, to approve the proposal from Douglas Electric dated November 14, 2022 with removal and deductions for alternate proposals 1 and 2 for a project total not to exceed \$145,325.50 (\$126,370 plus 15% contingency). **The motion carried unanimously.**

6. Consideration of Resolution 221121 for Censure and Reprimand of the Township Clerk, Paulette Skolarus. (requires roll call vote)
 - A. If necessary, consider motion to enter into closed session under the Open Meetings Act, MCL 15.268(h) to consider material exempt from discussion or disclosure by state or federal statute (attorney-client communications). (requires roll call vote and 2/3 majority)
 - B. Consider motion to adjourn the closed session and reconvene in open session. (roll call)

Ms. VanMarter distributed the Resolution for Censure and Reprimand of the Township Clerk for all Board Members to read.

Ms. Skolarus asked to make a presentation. Mr. Rogers stated he requested at the last Board Meeting that any further discussion regarding the investigation be placed as an agenda item and that the Clerk submit that request as required by policy. She did not provide it as required therefore, that item is not on tonight's agenda. Ms. Lowe asked if Ms. Skolarus read the entire resolution. Ms. Skolarus responded that she did not. Ms. Lowe encouraged Ms. Skolarus to read the entire resolution.

Ms. Skolarus would like to present data to the Board regarding her and Mr. McCririe's payroll from 2016. Ms. Hunt stated a motion was approved at the October 26, 2022 Special Board Meeting that no more Township funds or resources shall be used regarding this payroll issue, and asked if Ms. Skolarus used the Township copier to make copies of the data to present to each of the Board Members this evening. Ms. Skolarus indicated that she did make copies on the Township copier.



June 6, 2023

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Amy Ruthig, Planning Director
Subject:	Legacy Apartment Homes – Final PUD Plan Review #2
Location:	Southeast corner of Grand River Avenue and Dorr Road
Zoning:	RPUD Residential Planned Unit Development

Dear Commissioners:

At the Township’s request, we have reviewed the revised submittal from Grand River Dorr, LLC requesting review and approval of a final PUD site plan for a multiple-family development on 51.9 acres of land at the southeast corner of Grand River and Dorr (plans dated 5/30/23).

A. Summary

1. The applicant must provide a revised PUD Agreement addressing comments provided to date.
2. Building design, materials, and colors are subject to review and approval by the Planning Commission; however, they are generally consistent with approved conceptual PUD plan.
3. We request the applicant add the Dorr Road sidewalk connection and crosswalk to the overall site plan (it is depicted on the landscape plan).
4. The applicant must address any additional comments provided by the Township Engineer and/or the Brighton Area Fire Authority with respect to vehicular circulation and site engineering.

B. Proposal/Process

The proposal entails 204 apartment units within 18 buildings. The development also includes several resident amenities:

- A clubhouse/community center with an outdoor pool;
- Open space and park areas with benches and trash receptacles throughout;
- A dog park and pet waste stations;
- Pedestrian paths and bike racks throughout the property; and
- Electric vehicle charging stations;
- Decorative entrance features, including masonry walls/piers and metal fencing; and
- Preservation of a significant wetland area.

Procedurally, the Planning Commission is to review the final PUD site plan, Environmental Impact Assessment, and edited PUD Agreement, and put forth a recommendation on each to the Township Board.



Aerial view of site and surroundings (looking north)

C. Final PUD Site Plan Review

- 1. PUD Agreement.** At the time of this review, the applicant is still editing the PUD Agreement to address comments put forth during the initial review.

The document previously submitted addressed the comments raised during our review of the conceptual PUD site plan and rezoning.

In addition to addressing comments provided by staff and the Township Attorney, the applicant is also adding language to incorporate signage along the limits of disturbance around the wetland areas, as requested.

The plan itself identifies 10 signs along the wetland areas stating, “protected area/do not mow beyond this sign.”

- 2. Consistency with PUD.** The final PUD site plan is consistent with the approved conceptual PUD site plan with respect to use, number of units/density, number/types of buildings, development amenities, and the dimensional deviations granted by the Township.
- 3. Dimensional Requirements.** As noted in Section 1.3 of the PUD Agreement and on Sheet C-2.1 of the final PUD site plan, the approved RPUD includes dimensional and design deviations from conventional Ordinance requirements.

Of note, the deviations include reduced open space areas along public roadways, allowance for site grading into the 25’ natural features setback, increase in the amount of parking, and building material modifications.

Based on our review, the final PUD site plan is consistent with the dimensional requirements granted for this RPUD.

- 4. Buildings.** The building drawings include 2 elevations with slight variations in materials. Overall, materials include brick and 2 types of siding (horizontal and shake-style).

The approved RPUD included deviations to reduce the percentage of brick and increase the percentage of siding on the garage facades.

Building materials and colors are subject to review and approval by the Planning Commission. The applicant should be prepared to present building material and color samples (and/or a color rendering) to the Commission as part of its review.

- 5. Pedestrian Circulation.** The plan includes 5' public sidewalks within the Grand River and Dorr Road rights-of-way.

The Dorr Road sidewalk includes a connection and crosswalk across the roadway to the public sidewalk on the west side of the roadway. It should be noted, however, that the connection and crosswalk are depicted on the landscape plan, but not the overall site plan. We request the applicant add this detail to the overall site plan.

Internally, the plan includes 5' sidewalks along the drives, around and between buildings, as well as a 5' pathway through the open space and park areas, consistent with the approved conceptual PUD plan.

- 6. Vehicular Circulation.** Vehicular access is provided via 2 new drives, with access to/from both Grand River Avenue and Dorr Road.

The drives are aligned with existing roadways (Hughes for Grand River and Sterling Drive for Dorr).

The traffic study recommends an upgraded traffic signal at the Grand River and Hughes intersection. A note on Sheet C-2.2 indicates that design and installation of the new signal will be completed by the Road Commission.

The applicant must address any additional comments provided by the Township Engineer and/or the Brighton Area Fire Authority with respect to vehicular circulation (including any comments on the traffic study).

- 6. Parking.** Section 14.04 requires 2 spaces per unit with 2 bedrooms or more. Each of the 204 units proposed contains at least 2 bedrooms; as such, the project requires 408 parking spaces.

The site plan provides a total of 703 parking spaces – 408 garage spaces, 204 driveway spaces, and 91 additional spaces for guest, clubhouse, and mailbox parking.

Guest, clubhouse, and mailbox parking spaces meet the dimensional and design standards of Section 14.06.

The approved PUD granted an increase in the amount of parking provided, per Section 14.02.06. While the final site plan has 2 additional spaces beyond the conceptual site plan, the request is in keeping with the approved PUD.

- 7. Landscaping.** Plantings are located throughout the development, with an emphasis on the road frontages and entranceways, along internal drives, and around buildings and storm water areas.

Overall, the plan includes 374 deciduous trees, 284 evergreen trees, and 2,494 shrubs, as well as ornamental grasses and perennials.

It is also worth noting that the revised landscape plan incorporates previous review comments from the Fire Authority regarding tree overhang along roadways.

- 8. Exterior Lighting.** The lighting plan includes a variety of fixtures - ornamental light poles/fixtures, decorative sconces, bollard lights, and decorative and conventional wall-mounted fixtures.

The plan and details depict compliant fixture styles and light intensities throughout the development.

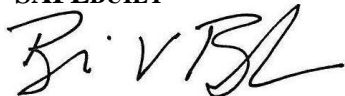
- 9. Refuse Removal.** A note on Sheet C-2.1 states that “trash collection will be provided via individual trash carts for each unit with curb side trash collection.”

- 10. Impact Assessment.** In summary, the Assessment notes that the proposed project is not expected to have an adverse impact upon natural features, stormwater, surrounding land, public services/utilities, or traffic and pedestrians.

As previously referenced, the traffic study recommends signal improvements at the Grand River/Hughes intersection and the plan reflects such.

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



June 7, 2023

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

**Re: Legacy Apartments
Final Site Plan Review No. 2**

Dear Ms. Ruthig,

Tetra Tech conducted a second review of the proposed Legacy Apartment Homes final site plan and accompanying documents last dated May 30, 2023. The plans were prepared by PEA Group on behalf of Grand River Dorr, LLC. The site is located on the southeast quadrant of the Grand River Avenue and Dorr Road intersection. The proposed development consists of 204 multi-family units and includes sanitary sewer and water main improvements, on-site storm sewer and detention, and private road improvements. We offer the following comments:

TRAFFIC/PAVEMENT

1. A private road is proposed. After final site plan approval, private road construction plans should be submitted to the Township for review and approval.

DRAINAGE AND GRADING

1. The petitioner has submitted plans to the Livingston County Drain Commissioner (LCDC) for review and approval. Comments in their letter dated May 9, 2023, should be addressed and approval from the LCDC should be obtained. Since remaining comments from LCDC are not major, we believe the drainage plan is adequate for Planning Commission and Board approval. Approval from the LCDC should be provided to the Township prior to a Land Use permit being issued.
2. The petitioner is proposing multiple connections to the existing storm sewer on Grand River Avenue. The LCRC will need to approve all proposed connections to their storm sewer system and said approval should be provided to Genoa Township prior to a Land Use permit being issued.
3. The grading plan shows areas with slopes exceeding 1:4. Planning Commission approval is required for 1:3 slopes. Steeper slopes are required on this site due to the large change in grade across the site and the SESC plan shows soil erosion control blankets on all slopes exceeding 1:4; therefore, we have no objection to the 1:3 slopes.
4. The petitioner is proposing multiple retaining walls up to 14-feet high. Genoa Township's Zoning Ordinance requires that retaining walls over three feet tall be designed by a professional engineer, with

Ms. Amy Ruthig
Re: Legacy Apartments
Final Site Plan Review No. 2
June 7, 2023
Page 2

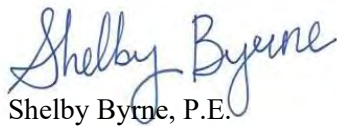
design calculations demonstrating its structural stability being submitted as part of the site plan. This should be provided prior to a Land Use permit being issued.

UTILITIES

1. Tetra Tech completed a utility study for the proposed development and recommended connection locations and necessary system improvements for both the proposed water main and sanitary sewer. The petitioner has included our recommendations in their utility plan and has agreed to pay for a portion of the recommended sewer collection system upgrades.
2. After final site plan approval, the Petitioner will be required to submit construction plans to MHOG Sewer and Water Authority for review and approval of the proposed water main and sanitary sewer.

The petitioner has addressed our previous comments and we have no further engineering related concern with the proposed final site plan. We recommend the above comments be considered as part of the final site plan approval process and that the Township obtain necessary documents and approvals prior to Land Use Permit issuance. 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

May 16, 2023

Kelly VanMarter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Legacy Apartments PUD
6080 W. Grand River
Genoa Twp., MI

Dear Kelly:

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on May 12, 2023 and the drawings are dated April 10, 2023. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition.

1. A minimum vertical clearance of 13½ feet shall be maintained along the length of all apparatus access drives. This includes but is not limited to porte-cochere, lighting, and large canopy trees. A number of trees must be relocated, the species modified, or the road width increased to not overhang the roadways. *(A note was provided to address plantings at final site and construction review on the previous submittal, however the artist rendering indicates over 400 large canopy trees lining the roadways throughout the development. As they grow and reach full growth, nearly all species will either partially or completely encroach the roadway. Additional consideration shall be made to placement and species, and will require the ownership to include the overhead clearance requirement in the facility maintenance plan.)***(The applicant remains committed to addressing the tree canopy concerns prior to construction approval through modification of locations and species of the trees. The Fire Authority did present an increase in drive width to 32 feet as an alternative.)**

IFC 503.2.1

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, FM, CFPS
Fire Marshal

cc: Amy Ruthig amy@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

April 21, 2023

Jacob Holda, P.E.
PEA Group
7927 Nemco Way, Suite 115
Brighton, MI 48116

Re: Legacy Apartment Homes, Genoa Township, Sections 11 and 14
LCRC# P-23-01

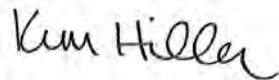
Dear Jacob:

I have completed the review of the construction plans, dated April 10, 2023, for the above-referenced project and offer the following comments.

1. The private road names Waters Drive, Woody Trail, and Chemung Hill Circle have been reserved for this development.
2. A contractor will need 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 not required for plan approval.
3. The attached red lined plans contain our comments.
4. We are working on a conceptual design for the traffic signal at Grand River and Hughes Road, the approach and/or sidewalk may need to be modified to accommodate poles, appurtenances, etc. We are also working on a cost share agreement to present to the developer.
5. Approval from the Livingston County Drain Commission will need to be obtained and submitted for the proposed storm water system.

Please email the revised plans to me for review at khiller@livingstonroads.org. 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)
Don Cucco, Property Owner (via email)



Brian Jonckheere

Livingston County Drain Commissioner
2300 E. Grand River Ave., Ste. 105
Howell, MI 48843-7581
Phone: 517-546-0040 FAX: 517-545-9658
Website: www.livgov.com/drain Email: drain@livgov.com

May 9, 2023

Mr. Jacob Holda
PEA Group
7927 Nemco Way
Brighton, Michigan 48116

Re: The Legacy Apartment Homes Preliminary Site Plans
Southwest 1/4 of Sec. 11 & Northwest 1/4 of Sec. 14
Genoa Charter Township

Dear Mr. Holda:

We received Preliminary Site Plans and Infiltration Test Results for the above referenced development on April 19, 2023. The submitted information has been reviewed for conformance with the recently updated L.C.D.C. "Procedures and Design Criteria for Stormwater Management Systems." My comments on the proposed drainage design are as follows:

- 1.) Drainage System Ownership - The plans should include a general note stating that "The proposed drainage system shall be owned and properly maintained by the property owner." If required by local ordinance, a stormwater maintenance agreement, similar to that found in Appendix K of the current L.C.D.C. Design Criteria, should be executed with Genoa Township prior to final project approval.
- 2.) Overall Drainage Concept - The 51.94 acre development site located on the southeast corner of Grand River Avenue and Dorr Road is proposed to include 15 apartment buildings containing 204 residential units, a clubhouse, their associated roadways, parking areas and two stormwater management basins. Currently runoff from the northerly 13.80 acres of the site sheet flows to the Grand River Ave. storm sewer system which directs it north to Lake Chemung. Runoff from the remainder of the site currently sheet flows south to an onsite wetland area which outlets through the Grand Beach County Drain to Lake Chemung.

The runoff from the northerly 9.00 acres of the developed site is to be routed by proposed storm sewers to a stormwater

detention/infiltration basin located in the northwest corner of the property, which will discharge to the Grand River Ave. drainage system. Runoff from the remainder of the developed site is to be directed to a proposed stormwater detention basin located adjacent to the onsite wetland, which will also serve as its outlet. This proposed drainage design configuration will require 4.80 acres of the site to be shifted to the Grand Beach County Drain drainage district, which is discussed further in Item 8 below.

- 3.) Topographic Survey - The existing underground gas and electric utilities located within the proposed forebay area of the South Detention Basin should be identified on the Topographic Survey sheets and noted to be removed or relocated.
- 4.) Drainage Area Plans - Sheets C-6.5 and C-6.6 should show the drainage area boundaries and acreages of the tributary areas encompassing the North and South Detention Basins. It appears that part of the tributary area containing the South Basin has not been accounted for in its design. It also appears that the drainage boundary lines along Dorr Road should be shifted to its Master Planned Right-of-Way line and the scale noted on Sheet C-6.5 should be corrected.
- 5.) Stormwater Detention/Infiltration - Our calculations confirm that the North Detention/Infiltration Basin has been properly designed based on the indicated tributary area of 9.00 acres, the weighted runoff coefficient of 0.54 and a maximum discharge rate of 0.15 CFS/acre. However, as previously mentioned, at least part of the drainage area containing the South Detention Basin has been omitted from its design. The area surrounding this basin should be confirmed and its design calculations revised as necessary to include its entire tributary area and reflect its permanent pool in the weighted runoff calculation. The following additional stormwater detention/infiltration related items should also be addressed on the plans:
 - a.) The proposed outlet control structure details provided on Sheet C-6.2 should include an anti-seep collar on the outlet pipes.
 - b.) The proposed inverts shown on the Water Quality Unit detail found on Sheet C-68 don't match those shown

elsewhere in the plans. The treatment capacity of the proposed Cascade CS-8 stormwater structure should be noted on the plans and must exceed 9.7 CFS.

- c.) A Land Use Summary Table, similar to that found in Appendix J of the current L.C.D.C. Design Criteria, should be included on the Cover Sheet of the plans.

6.) Storm Sewers - The runoff flowing to IN 30C is currently missing from the storm sewer design calculations. A complete review of the proposed storm sewer design will be performed at the time of the project's Construction Plan submittal which should address the following additional storm sewer related items:

- a.) The proposed rim elevations of CB 22 and CB 23 should be above the 982 freeboard elevation of the South Detention Basin.
- b.) Rip-rap aprons should be shown and noted on the plans and profiles at all discharge end sections. The rip-rap detail found on Sheet C-9.3 should be revised to specify a minimum of 10 S.Y. of angular stone.
- c.) The roof drainage from the entire east side of Building #11 must be routed to the storm sewer system. The intended purpose of the 6" storm leads shown near each building should be noted on the plans, as they do not appear to be for roof drainage.
- d.) The end section symbols for ES 37 and ES 51 shown on Sheets C-5.1 and C-5.5 should be shifted to their proper position.
- e.) The proposed drainage structure locations should be clearly defined on the plans using road stationing with offsets, dimensions from property lines or a project coordinate system. If a coordinate system is used for this purpose, coordinates should also be provided for the parcel's property corner.

7.) Site Grading - A pavement high point elevation should be shown between CB 30E and CB 32A on Sheet C-3.2. A complete review of the proposed site grading design will be performed at the time of the project's Construction Plan submittal which should address the following additional grading related items:

- a.) A Typical Building Grading Detail should be included on the plans showing the proposed grading of the porches and walks in relationship to the indicated building finished grade elevation.
- b.) The retaining wall detail shown on Sheet C-9.2 which specifies a maximum height of 6'-0" should be revised to reflect the proposed 8' height near the west end of the South Detention Basin and 14' height along the south side of the North Detention Basin.

8.) Addition of Lands to Grand Beach Drainage District - MCL 280.433 (2) addresses the addition of lands to the drainage district. Attached is an agreement pursuant to MCL 280.433 to effectuate same. The original assessment roll spread \$220,000 over 353 acres, for a cost per acre of \$623.23. Based on the addition of 4.8 acres, the attached agreement requires a deposit of \$2991.50, in order to fulfill the requirement that the added lands pay their pro-rata share of the construction costs of the Grand Beach Drain.

I am withholding approval of the Construction Plans for the Legacy Apartment Homes until the above-mentioned items have been addressed.

Very truly yours,



Kenneth E. Recker, II, P.E.
Chief Deputy Drain Commissioner

Enclosure (Agreement)

C: Kelly VanMarter, Genoa Twp. Manager
Amy Ruthig, Genoa Twp. Planning Director
Bill Rogers, Genoa Twp. Supervisor
Kim Hiller, Livingston County Road Commission
Paul Lewsley, SDA
Shelby Byrne, Tetra Tech
Mark Kassab, Grand River LLC

PLANNED UNIT DEVELOPMENT AGREEMENT

THE LEGACY APARTMENT HOMES

Entered into between:

Grand River Dorr, LLC

a Michigan limited liability company

and

Genoa Charter Township, County of Livingston

Dated: _____, 2023

PLANNED UNIT DEVELOPMENT AGREEMENT

This Planned Unit Development Agreement ("**Agreement**") is entered into as of _____ 2023, by Grand River Dorr LLC, a Michigan liability company, whose address is 31550 Northwestern Hwy., Ste 220, Farmington Hills, MI 48334 ("**Owner**") and Genoa Charter Township, a Michigan Charter Township, whose address is 2911 Dorr Road, Brighton, Michigan 48116 ("**Township**").

RECITALS

- A. Owners, own certain real property consisting of **52+/-** acres located in the Genoa Charter Township, Michigan which is more particularly described on **Exhibit A** attached hereto (the "**Property**"). The Property has been established as two (2) separate tax parcels consisting of 11-11-300-014 and 11-14-100-002.
- B. Owner desires to develop the Property as a Planned Unit Development, which will consist of a development of **204** attached apartment units.
- C. At a meeting held by the Township Planning Commission on July ____, 2022, the Township Planning Commission recommended approval of Owner's Preliminary Planned Unit Development Site Plan for the Project prepared by PEA Engineering – Job Number **2021-0578**, last revised **5/24/2022** ("**Preliminary Site Plan**"), subject to certain conditions as more fully set forth in Section 2.3 below.
- D. At a meeting held by the Township Board on _____ 2022, the Township Board approved the Preliminary Site Plan, subject to certain conditions as more fully set forth in Section 2.3 below.
- E. At a meeting held by the Township Planning Commission on _____ 2023, the Township Planning Commission approved Owner's Final Plan for the Project subject to certain conditions as more fully set forth in Section 2.3 below. The Final Development Site Plan is attached as **Exhibit B** as is referred to herein as the "**PUD Plan**."
- F. At a meeting held by the Township Board on _____ 2023, the Township Board approved Owner's Planned Unit Development Agreement on the Project, subject to the conditions set forth in this Agreement, including without limitation Section 2.3 below.
- G. The Township determined that the Property qualifies for development as a Residential Planned Unit Development (RPUD) under the Genoa Charter Township's Zoning Ordinance ("**Zoning Ordinance**") because the Project will provide preservation of significant natural features and provide common open space for passive or active recreational use.
- H. By entering in this Agreement, Owner, and the Township desire to set forth the parties' obligations with respect to the Property and the Project and the terms and requirements under which the Property and the Project shall be developed.

NOW, THEREFORE, in consideration of the premises and the mutual covenants of the parties described in this Agreement, the parties agree as follows:

ARTICLE I

DESCRIPTION OF THE PROJECT; PUD AND PUD PLANS

- 1.1 Description of Project.** The overall project (“Project”) covers an area comprising **52 +/-** acres located along Grand River Road and Dorr in the Township. The project will contain **204** attached apartment units (each, a “Project”). The Project generally meets the requirement of the Zoning Ordinance and is consistent with the conditions imposed in the recommendation for approval by the Planning Commission. The Project shall include open space and other elements as set forth in this Agreement and the PUD Plan. The Project will also contain approximately **29** acres of total open space.
- 1.2 Final PUD Plan Approval; Exhibits.** The PUD Plan was approved by the Township Planning Commission on _____, 2023. The PUD Plan approval grants the Owner the right to improve as set forth in the PUD Plan, as the same may be modified and amended in accordance with the Township Zoning Ordinance are incorporated herein and made a part thereof by reference.
- 1.3 Deviations from and/or Modifications to Standard Zoning Requirements.** Except as otherwise provided in this Agreement and the PUD Plan attached hereto, Owner shall generally adhere to all Township Ordinances. Deviations from the Township Zoning Ordinance which the Township shall be deemed to have granted, and hereby grants, as well as modifications to standard zoning requirements which will be requested, if any, are as set forth on the PUD Plan. Deviations requested are as follows:

ZONING Deviations

Commented [AR1]: DEVIATIONS

- 3.05.02 (e) Modification of the horizontal minimum curve radius from 150’ to 100’
- 15.05.03 road to garage and parking driveways less than 30’ radius.
- 10.03.01(c) The open space along the exterior public roads shall have a depth ranging from 100’ to a minimum of 75’ either landscaped or preserved in a natural wooded condition. Minimum open space from the existing public road rights of way is 75% wide.
- 12.01.03 Request for reduction in the percentage of brick required on building walls exposed to a public road to 54% and an increase in percentage of vinyl siding (or other materials outlined in 4.8(b) hereof) to 46%. Front facing elevations along Grand River and Dorr Road will contain a higher end material in addition to the enhanced frontage landscaping along both roads.
- 12.02.04 Garage access areas with parking allowed in front of garages will not provide interior landscaping.
- 13.02.04(d) Request for grading up to 10’ from regulated wetland.
- 14.02.06 Request to exceed parking space requirement more than 20%, to 75%

14.06.09 Parking lots and related maneuvering aisles shall meet minimum setbacks from adjacent street R.O.W. as shown in the schedule of regulations and have parking lot landscaping. The minimum distance to a parking space in front of a garage is 13' from the back of the curb of the site roadway.

14.06.10 Parking lots shall have minimum rear and side yard setbacks including berming and landscaping. Requesting deviation to a minimum of 11.9'.

a) **Intentionally Omitted.**

1.4 **Owner.** The obligations contained in this Agreement which apply to the Owner shall remain the responsibility of the Owner until such time as the Owner has assigned its obligations under this Agreement to a successor Owner who has assumed Owner's obligations under this Agreement in writing or to an association of owners that assume such obligations. Wherever the term "Owner" is used in this Agreement, it shall be deemed to include (i) the Owner named in this Agreement and the entity identified as the Owner (ii) the Owners of the Property.

1.5 **Name and Address of Owner.** The Owner of the Property described on Exhibit A is Grand River Dorr, LLC, whose address is c/o Mark Kassab, 31550 Northwestern Highway, Suite 220, Farmington Hills, MI 48334.

1.6 **Statement of Planning Objectives to Be Achieved by the Owner.** The primary planning objectives of this development is to provide Apartments for rent consisting of stacked ranch units.

1.7 **Statement of Applicant's Intention Regarding Leasing.** It is the intent of the Owner to develop the Project and to market for leasing of apartment homes.

ARTICLE II

REQUIREMENTS FOR DEVELOPMENTS

2.1 **Development Standards.** The Property shall be developed and improved compliance with the following:

- (a) The Charter Township of Genoa Zoning Ordinance, as amended, except were modified by this Agreement and the Exhibits attached hereto;
- (b) This Agreement;
- (c) The PUD Plan;
- (d) The conditions set forth in Section 2.3 below; and
- (e) All Applicable federal, state and country laws, rules and regulations.

2.1 **Effect of PUD Approval.** To the extent that developing the Property in accordance with this Agreement and the PUD Plan will deviate from the Zoning Ordinance or any other Township

ordinance or regulation, this Agreement and the PUD Plan shall control. To the extent this Agreement and PUD Plan attached hereto are silent on development issues, the Project shall comply with the Zoning Ordinance and other Township ordinances and regulations. All improvements constructed in accordance with this Agreement and the PUD Plan shall be deemed to be conforming under the Zoning Ordinance and in compliance with all ordinances of the Township. The Project shall not be subject to any additional requirements contained in any amendments or additions to Township Zoning Ordinance adopted subsequent to the date of this Agreement which conflict with the provisions of this Agreement, including the PUD Plan and/or any plans which are approved pursuant to this Agreement.

- 2.2 Conditions to Approval.** Owner shall obtain all state, county, and federal permits for the development of the Project. Owner shall not install any site improvements within the Property, including without limitation, installation of roads and utilities, until the completion of such pre-construction meeting as required by the Township Engineer or Utility System Authorities (the “Site Improvement Pre-Con Meeting”). Notwithstanding the foregoing, Owner shall be entitled to obtain a grading permit from the Township and thereafter commence grading and clearing activities.

ARTICLE III

USES WITHIN THE PROJECT

- 3.1 Approved Uses for the Project.** The Project will consist of a residential project containing **204** attached apartment units, with approximately **29 acres** of total open space, per the PUD Plan.
- 3.2 Permitted Density.** The Project will have a density of approximately **6.18** residential units per acre based on the net acreage of the property.

ARTICLE IV

OWNER'S RIGHTS AND OBLIGATIONS

- 4.1 Right to Develop; Phasing.** Owner shall develop the Property in accordance with the PUD Plan and this Agreement in a single phase.
- 4.2 Development Schedule.** Owner shall commence development of Phase I on or about _____, 2023.
- 4.3 Internal Roads in the Project.** The internal roads within the Project will be private and asphalt or concrete. As such, internal circulation drives shall be built in conformance with the applicable requirements and standards of the Township for private roads.
- 4.4 Landscape Plan.** The Landscape Plan which is part of the PUD Plan attached hereto as Exhibit B identifies the landscaping to be installed within the Project.
- 4.5 Utilities.**

- (a) **Sanitary Sewer System.** Sanitary sewers are available to the site and the Owner must connect to the Township's sanitary sewer system. Connection to the sanitary sewer system shall require payment of all applicable fees, charges, and assessments, in accordance with the Township's Ordinance. The PUD Plan identifies the sewer lines and related sanitary sewer easements to be dedicated to the Township.
- (b) **Water System.** Water service sewers is available to the site and the Owner must connect to the Township's water system. Connection to the water system shall require payment of all applicable fees, charges, and assessments, in accordance with the Township's Ordinance. The PUD Plan identifies the water lines and related water easements to be dedicated to the Township.

4.6 Storm Water Detention. Storm water shall be conveyed by a storm sewer system to a storm water detention basin located within the Project. All such storm water drainage facilities, including the detention basin and all related improvements shall be designed in accordance with all applicable ordinances in addition to the Livingston County Drain Commission engineering regulations and standards.

4.7 Signs and Entryway Features. The PUD Plan attached hereto includes an entry wall monument, signage, stone, piers and decorative fencing, which is approved. Demarcation signs shall be installed along the natural features' 25-foot setback to ensure that encroachment does not take place. Owner shall otherwise comply with all the sign regulations in the Township's sign ordinance, as amended.

Commented [AR2]: Exhibit to be added for new entryway design following input from staff.

4.8 Architectural and Site Design Guidelines. The Project shall be developed in conformance with the following architectural and site minimum standards:

- (a) **Minimum Setbacks.** Setback's requirements shall be as specified in the PUD Plan.
- (b) **Exterior Materials.** The materials used on the exterior of the attached units shall consist of any of the following materials: brick, vinyl, or similar siding, or stone. Elevations of buildings that directly front along Grand River and Dorr Road will contain a material other than horizontal vinyl siding. Alternatives to horizontal siding may be LP siding, decorative shakes (vinyl or wood). This will only be applicable to the frontage on the building elevation along Grand River and Dorr Road.
- (c) **Driveway and Sidewalks.** Curbs, gutters, and sidewalks shall be constructed of concrete. Parking lots and interior driveways will be constructed of asphalt or concrete.
- (d) **Garages.** All dwellings shall have an attached garage.

ARTICLE V

PERFORMANCE GUARANTEE REQUIREMENTS

- 5.1 **Performance Guaranties.** Performance guarantees covering the estimated cost of improvements for the applicable phase being developed shall be provided to the extent required by and in accordance with the Township's Ordinances. The Owner shall place a bond, cash, or other form of financial instrument for any such performance guarantees required by the Township.
- 5.2 **Escrow for Offsite Sanitary Upgrade:** The Developer has agreed to assist the Township with an upgrade to an off-site pump station (Pump Station 10). The Developer shall place in escrow an amount equivalent to the cost of its proportionate share of its impact to the pump station. As a condition of approvals, the Owner and Township shall enter into a Utility Pump Station Escrow Agreement in the form substantially similar to the version shown on Exhibit ____.

Commented [AR3]: Per Attorney review: missing a program and financing for maintaining common areas, walkways, signs, lighting and landscaping- see 10.05.04 (c)

ARTICLE VI

MAINTENANCE OF OPEN SPACE AND COMMON AREAS

- 6.1 **Common Elements and Common Facilities.** The Owner shall be responsible for the maintenance and repair of all roads, utilities that are not dedicated to the Township, storm drainage facilities, existing common areas and features (e.g., walkways, signs, lighting, and landscaping) and open space. The use and access of the wetlands will be established as a conservation easement over the regulated wetlands in a form to be agreed upon with EGLE (and the Township, if required).

ARTICLE VII

TOWNSHIP'S RIGHTS AND OBLIGATIONS

- 7.1 **Permits and Authorizations.** The Township shall grant to Owner and its contractors and subcontractors all Township permits and authorizations necessary to bring and/or construct all utilities necessary to service the Property and to otherwise develop and improve the Property in accordance with the PUD Plan, provided the Owner has first made all requisite filings and submissions for permits, complied with the requirements for said permits or authorizations, submissions and paid all required fees in accordance with the Township's Ordinances in addition to the agencies having authority over such. The Owner will be responsible for obtaining all required approvals and necessary permits or authorizations from the appropriate agencies, including but not limited to approvals and/or permits from the Utility Authority.
- 7.2 **Township Action for Failure to Maintain Property.** In the event the Owner defaults in its obligation to maintain the Property in a reasonable condition, using reasonable standards, and consistent with and as required under the PUD Plan and this Agreement, the Township may seek such remedies as provided by Section 21.04 of the zoning ordinance. The cost and expense of such curative action, including the cost of notices by the Township and the reasonable legal, planning, and engineering fees and cost incurred by the Township shall be paid by the Owner. Such amount shall constitute a lien on the property and the Township may require such costs and expenses to be paid prior to the commencement of work.

ARTICLE VIII

MISCELLANEOUS PROVISIONS

- 8.1 Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Michigan.
- 8.2 Counterparts.** This Agreement may be executed in multiple counterparts, each of which shall be deemed an original and all of which shall constitute one agreement. The signature of any party to any counterpart shall be deemed to be a signature to, and may be appended to, any other counterpart.
- 8.3 Successors and Assigns.** The terms, provisions and conditions of this Agreement are and shall be deemed to be of benefit to the Property and shall run with and bind the Property, and shall bind and inure to the benefit of the successors and assigns of the parties to this Agreement.
- 8.4 Amendment.** This Agreement may only be modified by written agreement of the Township and Owner or any successor in title who assumes Owner's rights and obligations hereunder. Notwithstanding, any amendments to this Agreement shall also require the written consent of Owners if Owners continue to hold title to any portion of the Property.
- 8.5 Authority.** This Agreement has been duly authorized by all necessary action of Owner and the Township, through the approval of the Township Board at a meeting in accordance with the laws of the State of Michigan, and the ordinances of the Township. By the execution of this Agreement, the parties each warrant that they have the authority to execute this Agreement and bind the Property in its respective entities to its terms and conditions.
- 8.6 Partial Invalidity.** Invalidation of any of the provisions contained in this Agreement or of the application thereof to any person by judgment or court order shall in no way affect any of the other provisions hereof or the application thereof to any other person and the same shall remain in full force and effect.
- 8.7 No Partnership.** None of the terms or provisions of this Agreement shall be deemed to create a partnership or joint venture between Owner and the Township.
- 8.8 Incorporation of Documents.** The recitals contained in this Agreement, the introductory paragraph, and all exhibits attached to this Agreement and referred to herein shall for all purposes be deemed to be incorporated in this Agreement by this reference and made apart of this Agreement.
- 8.9 Integration Clause.** This Agreement is intended as the complete integration of all understandings between the parties related to the subject matter herein. No prior contemporaneous addition, deletion or other amendment shall have any force or effect whatsoever, unless referenced in this Agreement.
- 8.10 Incorporation of Owner's Representations, Warranties and Information.** All representations, warranties and information previously provided by Owner in any

submission by the Owner to the Township are hereby incorporated in this Agreement by reference.

- 8.11 Recording.** This Agreement, or a notice of its existence, shall be executed by the Owner and Owners and recorded by the Owner in the office of the Livingston County Register of Deeds, and may be recorded by any of the undersigned parties following the execution of this Agreement prior to land use permit issuance.
- 8.12 Waiver.** Failure of either party to insist upon strict performance of any of the terms, conditions or covenants hereof shall not be deemed to be a waiver of any rights or remedies that such party may have hereunder, at law or in equity, and shall not be deemed a waiver of any subsequent breach or default under this Agreement. No waiver by either party of any default under this Agreement shall be effective or binding unless made in writing and no such waiver shall be implied from any omission by the party to take an action with respect to the default. No express written waiver of any default shall affect any other default or cover any other period of time, and one or more written waivers of any default shall not be deemed to be a waiver of any subsequent default in performance of the same or any other term or provision contained in this Agreement.
- 8.13 Violations.** Violations of the provisions of this Agreement shall be deemed to be violations of the Township Zoning Ordinance and shall entitle the Township to all the rights and remedies provided by the Zoning Ordinance or any other applicable law for such violation.

[Signatures and notarization are contained on the following pages]

[Signature page to Planned Unit Development Agreement]

The parties hereto have executed this Agreement as of the year and date set forth above.

"OWNER"

Grand River Dorr, LLC,
A Michigan Limited Liability Company

By: _____

Mark Kassab

Its: Authorized Agent

[Signatures and notarization are continued on the following page]

[Signature page to Planned Unit Development Agreement]

"TOWNSHIP"

Genoa Charter Township, Livingston County
A Michigan Charter Township

By: _____

Its:

STATE OF MICHIGAN)
) ss.
COUNTY OF LIVINGSTON)

The foregoing PUD Agreement was acknowledged before me on this day of _____, 2023, by _____, Township Supervisor of Genoa Charter Township, a Michigan Charter Township, on behalf of the Township.

EXHIBIT A

LEGAL DESCRIPTION OF THE PROPERTY

PROPERTY DESCRIPTION:

BEING A PART OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 11, AND A PART OF THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 14, TOWN 2 NORTH, RANGE 5 EAST, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS:

BEGINNING AT THE SOUTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 11 SAME BEING THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 14; THENCE, ALONG THE WEST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, SAME BEING THE CENTERLINE OF DORR ROAD (66 FOOT RIGHT OF WAY), SOUTH 00 DEGREES 15 MINUTES 00 SECONDS EAST, A DISTANCE OF 1340.74 FEET TO THE SOUTHWEST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14; THENCE ALONG THE SOUTH LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, NORTH 89 DEGREES 50 MINUTES 12 SECONDS EAST, A DISTANCE OF 1335.60 FEET TO THE SOUTHEAST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14; THENCE ALONG THE EAST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, NORTH 00 DEGREES 02 MINUTES 14 SECONDS WEST, A DISTANCE OF 1029.24 FEET TO THE SOUTHEAST CORNER OF A PARCEL DESCRIBED IN WARRANTY DEED RECORDED IN LIBER 777, PAGE 269, LIVINGSTON COUNTY RECORDS; THENCE ALONG THE SOUTHERLY LINE OF SAID PARCEL, SOUTH 86 DEGREES 34 MINUTES 33 SECONDS WEST, A DISTANCE OF 140.24 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL; THENCE ALONG THE SOUTHERLY LINE OF S PARCEL DESCRIBED IN WARRANTY DEED RECORDED IN LIBER 2443, PAGE 454, LIVINGSTON COUNTY RECORDS, NORTH 89 DEGREES 56 MINUTES 58 SECONDS WEST, A DISTANCE OF 235.00 FEET TO A POINT BEING 375.00 FEET WEST OF THE EAST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14; THENCE ALONG A LINE BEING 375.00 FEET WEST OF AND PARALLEL TO THE EAST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, NORTH 00 DEGREES 02 MINUTES 14 SECONDS WEST, A DISTANCE OF 315.00 FEET TO A POINT ON THE NORTH LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14 SAME BEING THE SOUTH LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11; THENCE ALONG A LINE BEING 375.00 WEST AND PARALLEL TO THE EAST LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11, NORTH 00 DEGREES 07 MINUTES 24 SECONDS EAST, A DISTANCE OF 420.56 FEET TO THE SOUTHERLY LINE OF GRAND RIVER AVENUE (100 FOOT RIGHT OF WAY); THENCE ALONG SAID SOUTHERLY LINE, NORTH 68 DEGREES 30 MINUTES 00 SECONDS WEST, A DISTANCE OF 1037.63 FEET TO A POINT ON THE WEST LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11 SAME BEING THE CENTERLINE OF SAID DORR ROAD; THENCE ALONG SAID WEST LINE OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11, SOUTH 00 DEGREES 04 MINUTES 32 SECONDS WEST A DISTANCE OF 800.00 FEET TO THE POINT OF BEGINNING. CONTAINING 2,262,563 +- SQUARE FEET OR 51.941 +- ACRES OF LAND.

EXHIBIT B

PUD PLAN

(see attached)

EXHIBIT C

UTILITY PUMP STATION ESCROW AGREEMENT

(to be attached)

UTILITY PUMP STATION ESCROW AGREEMENT

THIS UTILITY PUMP STATION ESCROW AGREEMENT (this "Agreement") is entered into effective this ____ day of _____, 2023 (the "Effective Date") by and between Grand River Dorr, LLC, a Michigan limited liability company with an address of 31550 Northwestern Hwy., Ste 220, Farmington Hills, MI 48334 ("Developer"), and Genoa Charter Township, a Michigan Charter Township with an address of 2911 Dorr Road, Brighton, Michigan 48116 (the "Township").

RECITALS

A. Developer owns property located in Genoa Township consisting of 52+/- acres located in the Genoa Charter Township, Michigan which is more particularly described on **Exhibit A** attached hereto (the "Property"). The Property has been established as two (2) separate tax parcels consisting of parcel numbers 11-11-300-014 and 11-14-100-002.

B. Developer has requested that the Property be served by the existing sanitary sewer offsite pump station, which pump station is known as Pump Station 10 (the "Pump Station").

C. In order to serve the Property via the Pump Station, the Township is required to perform certain upgrades to the Pump Station (the "Pump Station Upgrades").

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Developer and Township agree as follows:

AGREEMENT

1. The Township has obtained a bid for the construction of the Pump Station Upgrades, which is attached to this Agreement as Exhibit B (the "Pump Station Upgrades Bid").

2. The Developer agrees that it shall pay its proportionate share of the cost of the Pump Station Upgrades, as shown on the Pump Station Upgrades Bid, (the "Developer's Cost"). The Township and the Developer acknowledge and agree that the Developer's Cost is forty-two thousand two hundred and 00/100 Dollars (\$42,200.00). The Developer's Cost shall be placed in escrow with the _____ (the "Escrow Authority") in accordance with the following procedure:

(a) Developer shall place fifty percent (50%) of the Developer's Cost in escrow with the Escrow Authority upon the issuance of the first (1st) building permit for the Project (as that term is defined in the PUD Agreement between Developer and Township entered into on even date herewith).

(b) Developer shall place the remaining fifty percent (50%) of the Developer's Cost in escrow with the Escrow Authority upon the issuance of any permit applicable to the second fifty percent (50%) of the entire Project.

3. Upon _____, the Township shall sign the Pump Station Upgrades Bid and commence work on the Pump Station Upgrades. The Township shall oversee the installation, testing, and operation of the Pump Station Upgrades and pay the balance of the costs for the Pump Station Upgrades. The Township's acceptance of any portion of the Developer's Cost shall be evidence of the Township's binding commitment to complete the Pump System Upgrades.

4. Following completion of the Pump System Upgrades, the Township shall promptly reimburse the Developer for its proportionate share of any remaining funds held in escrow for the Pump System Upgrades.

5. No failure or delay in the performance of this Agreement by either party shall be deemed to be a breach when such failure or delay is occasioned by or due to any act of god, strikes, lockouts, wars, riots, epidemics, explosions, sabotage, breakage, accidents to machinery or lines of pipe, the binding order of any court or governmental authority, or any other cause, whether of the kind herein enumerated, or otherwise not in control of the party claiming suspension, provided that no cause or contingency shall relieve the Developer of its obligation to make payment.

6. This Agreement represents the entire agreement between the parties related to the Pump System Upgrades and supersedes all prior representations, negotiations, or agreements regarding the same, whether written or oral.

7. Should any provisions of this Agreement be found by a Court to be invalid for any reason, it shall be severed from the Agreement and the remaining provisions shall remain in full force and effect.

8. The parties, through their authorized representatives, have executed this Agreement as of the Effective Date.

DEVELOPER:

Grand River Dorr, LLC,
a Michigan limited liability company

TOWNSHIP:

Genoa Charter Township,
a Michigan charter township

By: _____
Name: _____
Its: _____

By: _____
Name: _____
Its: _____

EXHIBIT A

LEGAL DESCRIPTION OF THE PROPERTY

PROPERTY DESCRIPTION:

BEING A PART OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 11, AND A PART OF THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 14, TOWN 2 NORTH, RANGE 5 EAST, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS:

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EXHIBIT B

Pump Station Upgrades Bid

**OPINION OF PROBABLE CONSTRUCTION COST
TETRA TECH**

3497 Coolidge Road, East Lansing, MI 48823

Telephone: (517) 316-3930

PROJECT: Legacy Apartments Utility Study
 LOCATION: Genoa Township
 BASIS FOR ESTIMATE: CONCEPTUAL PRELIMINARY FINAL
 WORK: Pump Station 10 Improvements
Including new pumps and electrical upgrades

DATE: 3.9.2023
 PROJECT NO. 200-12736-23008
 ESTIMATOR: S.Byrne
 CHECKED BY: G Markstrom
 CURRENT ENR: 13176

ITEM NO.	DESCRIPTION	QUANT.	UNIT	UNIT AMOUNT	TOTAL AMOUNT
1	General				
6	Utility Allowance (2% of Construction Cost)	1	LS	-	\$3,000
7	General Conditions (2% of Construction Cost)	1	LS	-	\$3,000
8					
9	Pump Station Upgrades				
10	New Pumps (800 gpm at 72' TDH)	2	EA	\$40,000.00	\$80,000.00
11	Pump Station Electrical Upgrades	1	LS	\$50,000.00	\$50,000.00
12					
13					
14					
15					
16					
22					
23	Project Subtotal				\$136,000.00
24					
25	Engineering, Legal, Administration, and Financing (25% Construction Total)				\$34,000.00
26	Contingency (30% Construction Total)				\$41,000.00
27					
28					
TOTAL CONSTRUCTION COST					\$211,000.00

GRAND RIVER DORR LLC

DBA

THE LEGACY APARTMENT HOMES

OWNER:

GRAND RIVER DORR LLC

PREPARED BY:

MARK KASSAB

31550 NORTHWESTERN, STE 220

FARMINGTON HILLS, MI 48334

248-865-0066

THE LEGACY APARTMENT HOMES

FINAL PUD SITE PLAN

APPLICATION & COMMUNITY IMPACT STATEMENT

COMMUNITY IMPACT STATEMENT

Table of Contents

COMMUNITY IMPACT STATEMENT

- 1.0 General Project Information**
 - 1.1 Project Overview**
 - 1.2 Master Plan Analysis**
 - 1.3 Surrounding Uses**

- 2.0 Community and Facilities Services**
 - 2.1 Police and Fire Demand**
 - 2.2 Utilities**
 - 2.3 Stormwater Management**

- 3.0 Economics**
 - 3.1 Tax Revenues Analysis**
 - 3.2 Job Analysis**

- 4.0**
 - 4.1 Natural resources Analysis**
 - 4.2 Hazardous Materials**
 - 4.3 Air Quality Impact**
 - 4.4 Groundwater Impact**
 - 4.5 Noise**

- 5.0 Traffic**

- 6.0 Development Statement**

- 7.0 Appendices**
 - Exhibit A Fiscal Impact Statement**
 - Exhibit B PUD Final Site Plans**
 - Exhibit C Traffic Impact Study**
 - Exhibit D Soils Investigation Report**
 - Exhibit E Infiltration Testing Report**
 - Exhibit F Wetland Report**

SECTION 1: GENERAL PROJECT INFORMATION

1.1 Project Overview

The Legacy Apartment Homes is a proposed residential community consisting of 204 attached apartments with an associated clubhouse and pool. The project shall include open space and other elements as set forth in this Agreement and the PD plan. The project will include approximately 22 acres of total open space (35 acres when including all wetlands). This site is currently vacant and was zoned Neighborhood Services District (NSD) and Medium Density Residential (MDR) with Town Overlay and has been rezoned to High-Density Residential (HDR), and Residential Planned Unit Development (RPUD).

The proposed land use consists of multi-family apartment homes. The project will have 3.92 units per acre based on 51.94 gross acreage and 6.18 units per acre based on 33.03 net acreage. The proposed development will be compatible with past planning efforts and therefore the infrastructure is present to support it. The township services planned for this area will not be overtaxed by the development.

Unit counts and densities for the proposed The Legacy Apartment Homes are as follows:

204 Multi-Family Dwelling Units (51.94 gross Acres/33.03 Net Acres):

3.92	DU/Gross Acre
6.18	DU/Net Acre

Refer to **Exhibit B** for the PUD Final Site Plans.

1.2 Master Plan Analysis

- **Value communities and neighborhoods** – The Legacy Apartment Homes will be an exclusive neighborhood community targeting demographics of multiple ages. The development will focus on quality building materials and attention to architecture details. This location is well located between Brighton and Howell where downtown shopping and restaurants are available as well as the Genoa retail and restaurant area at Latson and Grand River.
- **Walkable neighborhoods** – In addition to sidewalk proposed on both sides of the planned internal roadways, the development will also have a system of pathways within the extensive open space areas.

- **Variety of recreational facilities** – The Legacy Apartment Homes proposes a successful development area reaching various age demographics that seek amenities, less maintenance, nature preservation and convenience to restaurants and shopping. sidewalks and interconnectivity within the community, dog park, gazebo, EV Charging Stations throughout, benches, clubhouse, Amazon Hub station, pool and fitness center consisting of a Yoga room, business center, dog wash to accommodate residents of all ages, interests, and physical abilities.

Refer **Exhibit B**, PUD Final Site Plans for additional information of the neighborhood layout and representative architectural details.

1.3 **Existing Surrounding Uses**

As shown within the attached zoning map, the existing surrounding uses for the subject site are uses of varying densities. These existing uses are as follows:

- **North:** GCD- General Commercial District
- **East:** OSD
- **West:** Industrial
- **South:** Rural Residential

SECTION 2: COMMUNITY AND FACILITY SERVICES

2.1 **Police and Fire Demand**

The Livingston County Sheriff in addition to the Michigan State Police will be providing Public Safety services required to accommodate the proposed use.

The Brighton Area Fire Department, as part of an existing Governmental agreement will provide fire protection services. There will be numerous fire hydrants located on the subject property. Fire Department Connections (FDC's) will be located on each building in addition to the buildings having an internal fire suppression system. Station 34 on Dorr Road is located approximately 1/4 mile away from the subject property.

The property is accessed from Grand River and Dorr Road. Both entrances are designed to accommodate emergency vehicle access.

A fiscal impact statement is prepared and attached to the CIS to determine the annual tax revenue. The additional net annual tax revenue at full buildout will be approximately \$836,662. The additional tax revenues are in addition to the one-time utility connection charges in the amount of \$3,080,400.

2.2 Utilities

Utility services will be provided by existing public water and sewer systems in the area. The development proposes a total of 204 apartment unit connections to the existing public utilities. We estimate an average daily usage of 36,500 gallons per year per person with an annual usage of approximately 19,000,000 gallons per year.

All Utility lines, structures, and trenches shall be constructed in accordance with the standards and requirements of Genoa Township, MHOG, Livingston County and MDOT. All hydrants will be a minimum of 4.5' from back of curb.

A utility capacity study undertaken by TetraTech for Genoa Township determined that the water supply system adjacent to the site is more than adequate to serve the proposed population and suggested connection locations which have been followed in the latest plan.

Water main connections to the existing mains will be completed to provide for a looped system in accordance with the Township standards and placed within public easements. The proposed site water mains will be 8" in diameter and connect to the existing 12" main on Dorr Road 16' main on Grand River Rd.

The Tetrattech study identified one downstream sanitary sewer pump station which would need to be upgraded for additional capacity prior to occupancy of all units of the proposed development. The downstream gravity and pressure sewers all have adequate capacity for the designed flows. The developer is assisting the Township to fund the pump station improvements as is documented in the development agreement.

2.3 Stormwater Management

Stormwater management for quality treatment and flood storage will be provided in two (2) proposed stormwater basins on the site. These basins will be designed and approved in accordance with the Livingston County Drain Commissioner's (LCDC) standards to accommodate the 100-year frequency storm runoff from the proposed development.

The stormwater basin proposed at the corner of Grand River and Dorr (“North Basin”) was designed as an infiltration basin pursuant to LCDC rules and based on favorable soils discovered at this location. Refer to **Exhibit E** for the Infiltration Testing Report. Furthermore, based on the Livingston County Road Commission's (LCRC) rules, no increase in runoff volume or flow is allowed to the Grand River Avenue storm sewer system. Additional infiltration volume beyond what is required by LCDC is provided, preventing any increase in runoff from the site to Grand River Avenue and the downstream outlet to Lake Chemung. A manufactured stormwater treatment unit will remove sediment from the site stormwater prior to entering the infiltration basin.

The stormwater basin located at the southern end of the development (“South Basin”) is restricted to a lower flow than typically required for detention basins in Livingston County due to its location in the Grand Beach Drainage District. Discharge from the southern portion of the site to the wetlands and ultimate outlet at Lake Chemung is designed with a restriction of 0.06 cfs per acre, compared to the standard design requirement of 0.15 cfs/acre. The outlet rate from the basin will be less than the undeveloped agricultural runoff rate of its tributary area.

Refer to the full PUD Final Site Plan Drawing Set for detailed stormwater calculations

SECTION 3: ECONOMICS

3.1 Tax Revenue Analysis

A fiscal impact analysis was prepared to determine the anticipated annual tax revenue to be generated as a result of the development. Based on this analysis, we anticipate Legacy Apartment Homes will have a taxable value of approximately \$22,950,000 and will generate an annual revenue gain of approximately \$911,139. Currently the property is generating \$24,659 in annual taxes.

3.2 Jobs Created

Legacy Apartment Homes will be a residential development. Legacy Apartment Homes will create 100 +/- construction jobs during the installation of the

infrastructure and the building of the apartment buildings on the site. In addition, The Legacy Apartments will employ 5-6 permanent leasing and maintenance staff.

Refer to **Exhibit A** for the Fiscal Impact Analysis Calculations

SECTION 4: ENVIRONMENT

4.1 Natural Resources Analysis

The proposed development is +/- 52 acres. The development will preserve natural features and provided common open space opportunities for the residents, including walking trails, a community building and swimming pool. The site is constrained by regulated wetlands to the South and Southeast portion of the property. Refer to **Exhibit F** for the Wetland Report. The area of proposed development is primarily vacant farmed land with minimal tree removal required.

Storm water runoff for the site will be treated, infiltrated, and detained in accordance with applicable Township, County and State requirements prior to discharge from the site. No significant impact or pollution to offsite water bodies is anticipated with the development.

The proposed development will seek to preserve existing wooded areas around the perimeter of the development where grading would allow, to serve as a buffer between the development and neighboring properties. New trees will be planted in the proposed development in accordance with an approved Landscaping Plan.

4.2 Hazardous Materials

No hazardous materials are planned to be manufactured, used, or stored on site.

4.3 Air Quality Impact

Legacy Apartment Homes is a residential development that does not plan to have any significant impact to the air quality of the area. No quantifiable type or quantities of pollutants are expected to be released in the air. During construction, special measures will be included within the Soil Erosion and Sedimentation (SESC) Plan to mitigate any potential dust creation during dryer site conditions, including the use of water trucks.

4.4 Groundwater Impact

Legacy Apartment Homes is a residential development that will utilize connections to the existing public utilities in the area. The development fits within the master planned unit density for the area and does not plan to have any significant impact to the groundwater levels within the area.

Surface water on the site flows toward the north and south from a ridge line running east and west through the site. The inclusion of significant stormwater infiltration in the northern site stormwater basin will assist with groundwater recharge, as will the large areas of open space and undisturbed wetlands on the southern portion of the site.

Based on the results of the geotechnical investigation and infiltration testing on site, perched ground water was located in isolated sand seams at depths of 4 to 19 feet. Groundwater flow within sand seams is anticipated to generally follow the surface flow on site. Only one location on site was found with groundwater following completion of a test boring, near the wetlands at the south end of the site.

Refer to **Exhibit D** for the Soils Investigation Report, and **Exhibit E** for the Infiltration Testing Report.

4.5 Noise

Legacy Apartment Homes is a residential development that does not plan to have any significant impact to the increased noise in the area. During construction, the development intends to minimize noise as reasonable and follow the Township's ordinance regarding hours of allowed construction operation.

SECTION 5: TRAFFIC

Legacy Apartment Homes is a residential project consisting of a multi-family dwelling units that are proposed to have access off Grand River Road in addition to Dorr Road. The main access to the community will be from Grand River Road which is a State Road. There is a secondary access off Door Road.

A Traffic Impact Study (TIS) has been prepared by Rowe Engineering in accordance with the Township Ordinance and was coordinated with the traffic study completed for the hospital expansion to the east. The report was completed in accordance with the requirements specified by the Michigan

Department of Transportation (MDOT), the Livingston County Road Commission (LCRC), and Genoa Township.

A copy of the TIS attached as **Exhibit C**.

DEVELOPER'S STATEMENT

After a five decades of residential building in Michigan, MJC Companies® is proud to be one of the state's largest privately-owned and operated builders, as well as one of the top 100 builders in the nation. Since 1972, the company has garnered a reputation of value and innovation with single-family homes and condominiums that offer a carefree lifestyle in desirable neighborhoods.

And that reputation still holds true today. With deep roots in an array of communities in Livingston, Macomb, Oakland and Wayne counties, MJC Companies® is excited to be a part of Michigan's rich history and is confident in the future of the state and dedicated to the families who live here.

Specializing in new construction, MJC Apartment homes and condominiums offer a wide choice of locations, flexible floor plans, and an abundance of the most desired amenities within pleasant communities including some with pools, walking trails and ponds.

MJC Companies® looks forward to enduring its longstanding presence in Southeast Michigan as it continues to develop communities of choice for generations to come.

Charities, Sponsorships & Clubs

- Alzheimer's Association
- Building Industry Association - Charitable and Education Foundation
- Capuchin Soup Kitchen
- Cardinal Mooney Catholic High School
- Children's Charities at Adios
- Club Calabria
- Club Terrasini
- Club Di Santa Fara
- De La Salle Collegiate High School
- Fraternal Order of Police
- Interfaith Volunteer Caregivers
- Italian American Culture Society
- Karmanos Cancer Institute
- Mackinac Island Historical Preservation
- March of Dimes
- Men of the Sacred Heart
- Michigan Historical Society
- Mat Gaberty Heart Fund
- Macomb Foundation
- Mt. Clemens General –Board Member
- Mt. Clemens Regional Oncology
- Multiple Sclerosis Foundation
- MPURE – Department of Urology at William Beaumont Hospital
- Muscular Dystrophy Association
- National Italian American Foundation
- Northville Park & Recreation
- Nothdurft Pediatric Endowment
- Special Olympics
- St. John Health Foundation
- St. John Hospital Guild
- St. Lawrence Athletics
- St. Louis Center– (helping to raise, \$800,000 dollars in the last 10 years)
- Utica Community Schools
- USC Shoah Foundation

EXHIBIT A

FISCAL IMPACT STATEMENT

**The Legacy Apartments Homes - 204-Unit Community
Fiscal Impact**

Property Development

Property Tax Revenue

Housing Type	Market Value Per Unit	State Equalized Value Per Unit	Taxable Value Per unit	Total Units	Estimated Market Value	Estimated Taxable Value
Apartment Homes	\$ 225,000	\$ 225,000	\$ 112,500	204	\$ 45,900,000	\$ 22,950,000
				<u>204</u>		<u>\$ 22,950,000</u>

	Current Millage Rate	Estimated Taxable Value	Tax Generated
SUMMER TAX REVENUE GENERATION			
State Ed Tax	6.0000	\$ 22,950,000	\$ 137,700
County Tax	3.2391	\$ 22,950,000	\$ 74,337
HO School Oper	18.0000	\$ 22,950,000	\$ 413,100
HO School Debt	2.7500	\$ 22,950,000	\$ 63,113
Livingston ISD	3.2315	\$ 22,950,000	\$ 74,163
BR Fire Auth	0.8733	\$ 22,950,000	\$ 20,042
WINTER TAX REVENUE GENERATION			
County Ambulance	0.2863	\$ 22,950,000	\$ 6,571
HCMCA-Parks	0.2089	\$ 22,950,000	\$ 4,794
Veterans Relief	0.1127	\$ 22,950,000	\$ 2,586
Genoa Alloc	0.7855	\$ 22,950,000	\$ 18,027
HO School Debt	2.7500	\$ 22,950,000	\$ 63,113
HO Library	1.0382	\$ 22,950,000	\$ 23,827
BR Fire Auth	1.5000	\$ 22,950,000	\$ 34,425
Total Estimated Annual Revenue from Property Taxes			\$ 935,798
			<u>\$ 24,659</u>
Less Current Property Tax Revenue Generation			<u>\$ 911,139</u>
Total Net annual Revenue from Property Taxes			

Estimated Residents

Land Use	Units	Unit Factor Per Us Census	Projected Population
Residential	204	2.55	<u>520</u>

Utility Revenue

Water and Sewer Capital Connection Fee	Water Capital Fee	Sewer Capital Fee	Total Capital Charges	Total Units	Total Estimated Fee
Building Type					
Units	\$ 7,900.00	\$ 7,200.00	\$ 15,100	204	\$ 3,080,400
					\$ -
Total Estimated Connection Fee		(Fees per. DPS)		204	<u>\$ 3,080,400</u>

Annual Water/Sewer Usage Fees	Estimated Population	Annual Usage (Gal); Assume 36,500 gal/yr/person	Usage fee/1000 Gal.	Total Estimated Fees
Apartments	520	18,987,300	\$11.28	\$ 214,177
		Annual Water Usage Fees		\$ 214,177
Total Utility-Related Fees				<u>\$ 214,177</u>

Township Expenditures Per Budget

Total Expenditures - 2022 Budget (per Genoa.org)	\$ 6,412,166
Township Population (per 2020 SEMCOG)	<u>20,692</u>
Township Expenditures Per Resident	\$ 309.89

	# Residents	Expenditure per Resident	Total
Total Annual Expenditures for Legacy Apartment	520	\$ 309.89	\$ 161,202.82

The Legacy Apartment - One-Time Utility Connection Revenue	\$ 3,080,400
The Legacy Apartment - Annual Revenue Gain (Loss)	\$ 964,113

EXHIBIT B

FINAL PUD PLANS

PUD FINAL SITE PLAN

THE LEGACY APARTMENT HOMES

6080 W. GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL

PROPERTY DESCRIPTION:

BEING A PART OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 11, AND A PART OF THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 14, TOWN 2 NORTH, RANGE 5 EAST, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS:

BEGINNING AT THE SOUTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 11 SAME BEING THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 14; THENCE ALONG THE WEST LINE OF SAID NORTHWEST QUARTER OF SECTION 14, SAME BEING THE CENTERLINE OF DORR ROAD (66 FOOT RIGHT OF WAY), SOUTH 00 DEGREES 15 MINUTES 00 SECONDS EAST, A DISTANCE OF 1340.74 FEET TO THE SOUTHWEST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14; THENCE ALONG THE SOUTH LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, NORTH 89 DEGREES 50 MINUTES 12 SECONDS EAST, A DISTANCE OF 1335.60 FEET TO THE SOUTHEAST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14; THENCE ALONG THE EAST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, NORTH 00 DEGREES 02 MINUTES 14 SECONDS WEST, A DISTANCE OF 1029.24 FEET TO THE SOUTHEAST CORNER OF A PARCEL DESCRIBED IN WARRANTY DEED RECORDED IN LIBER 777, PAGE 269, LIVINGSTON COUNTY RECORDS; THENCE ALONG THE SOUTHERLY LINE OF SAID PARCEL, SOUTH 86 DEGREES 34 MINUTES 33 SECONDS WEST, A DISTANCE OF 140.24 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL; THENCE ALONG THE SOUTHERLY LINE OF SAID PARCEL DESCRIBED IN WARRANTY DEED RECORDED IN LIBER 2443, PAGE 454, LIVINGSTON COUNTY RECORDS, NORTH 89 DEGREES 56 MINUTES 58 SECONDS WEST, A DISTANCE OF 235.00 FEET TO A POINT BEING 375.00 FEET WEST OF THE EAST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14; THENCE ALONG A LINE BEING 375.00 FEET WEST OF AND PARALLEL TO THE EAST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, NORTH 00 DEGREES 02 MINUTES 14 SECONDS WEST, A DISTANCE OF 315.00 FEET TO A POINT ON THE NORTH LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14 SAME BEING THE SOUTH LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11; THENCE ALONG A LINE BEING 375.00 FEET WEST AND PARALLEL TO THE EAST LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11, NORTH 00 DEGREES 07 MINUTES 24 SECONDS EAST, A DISTANCE OF 420.56 FEET TO THE SOUTHERLY LINE OF GRAND RIVER AVENUE (100 FOOT RIGHT OF WAY); THENCE ALONG SAID SOUTHERLY LINE, NORTH 86 DEGREES 30 MINUTES 00 SECONDS WEST, A DISTANCE OF 1037.63 FEET TO A POINT ON THE WEST LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11, SAME BEING THE CENTERLINE OF SAID DORR ROAD; THENCE ALONG SAID WEST LINE OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11, SOUTH 00 DEGREES 04 MINUTES 32 SECONDS WEST A DISTANCE OF 800.00 FEET TO THE POINT OF BEGINNING. CONTAINING 2,262,563 +/- SQUARE FEET OR 51.941 +/- ACRES OF LAND.



LOCATION MAP
1"=500'

SHEET INDEX	
SHEET NO.	TITLE
	COVER
C-1.1	TOPOGRAPHIC SURVEY OVERALL
C-1.2	TOPOGRAPHIC SURVEY NORTH
C-1.3	TOPOGRAPHIC SURVEY SOUTH
C-1.4	TREE LIST
C-2.1	OVERALL SITE PLAN
C-2.2	SITE PLAN NORTH
C-2.3	SITE PLAN SOUTH
C-3.1	GRADING PLAN NORTH
C-3.2	GRADING PLAN SOUTH
C-4.1	UTILITY PLAN NORTH
C-4.2	UTILITY PLAN SOUTH
C-5.1	STORM SEWER PROFILES
C-5.2	STORM SEWER PROFILES
C-5.3	STORM SEWER PROFILES
C-5.4	STORM SEWER PROFILES
C-5.5	STORM SEWER PROFILES
C-6.1	OVERALL STORMWATER MANAGEMENT PLAN
C-6.2	POND DESIGN DETAILS
C-6.3	NORTH POND DESIGN CALCULATIONS
C-6.4	SOUTH POND DESIGN CALCULATIONS
C-6.5	NORTH STORM SEWER DRAINAGE AREAS
C-6.6	SOUTH STROM SEWER DRAINAGE AREAS
C-6.7	STORM DESIGN CALCULATIONS
C-6.8	WATER QUALITY UNIT
C-7.1	SESC PLAN NORTH
C-7.2	SESC PLAN SOUTH
C-8.1	VEHICLE TRACKING
C-9.1	CONSTRUCTION NOTES
C-9.2	NOTES & DETAILS I
C-9.3	NOTES & DETAILS II
C-9.4	NOTES & DETAILS III
MHOG - 1.0	MHOG STANDARD DETAILS
MHOG - 2.0	MHOG STANDARD DETAILS
MHOG - 3.0	MHOG STANDARD DETAILS
LS-1	OVERALL LANDSCAPE PLAN VIEW
LS-2	GENERAL PLANTING DETAIL PLAN
LS-3	GENERAL PLANTING DETAIL PLAN
LS-4	MATERIAL LIST, PLANT DETAILS & LANDSCAPE NOTE
LS-5	ENTRANCE PLANTING DETAIL PLAN
LS-6	CLUBHOUSE & BUILDING FOUNDATION PLANTING DETAIL PLAN
LS-7	DETENTION PLANTING DETAIL PLAN
LS-8	ENTRY DETAIL PLAN
LS-9	SITE AMENITY PLAN
---	ARCHITECTURAL COVER SHEET
1	FOUNDATION PLAN
2	FIRST FLOOR PLAN
3-A	SECOND FLOOR
4-A	ELEVATIONS
4-B	ELEVATIONS

DESIGN TEAM

OWNER/APPLICANT/DEVELOPER
GRAND RIVER DORR, LLC
315550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334
CONTACT: MARK KASSAB
PHONE: 248.865.0066
EMAIL: MKASSAB@MSHAPIROREALESTATE.COM

CIVIL ENGINEER
PEA GROUP
7927 NEMCO WAY, STE. 115
BRIGHTON, MI 48116
CONTACT: JONATHAN E. CURRY, PE
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ARCHITECT
BURMANN ASSOCIATES INC.
119 W. ST. CLAIR
ROMEO, MICHIGAN 58065-4655
PHONE: 586.752.5010, MOBILE: 586.201.1602
EMAIL: GREATARCHITECTS@CHARTER.NET

SURVEYOR

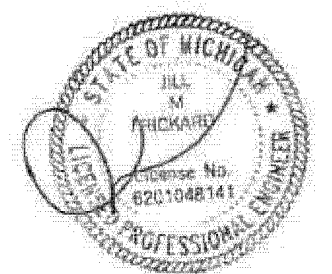
HUBBELL ROTH AND CLARK
555 HULET DRIVE
BLOOMFIELD HILLS, MICHIGAN 48303
CONTACT: MELISSA COATTE, P.E.
PHONE: 248-454-6300
EMAIL: mcoatta@hrcengr.com

LANDSCAPE ARCHITECT/PLANNER

FELINO A. PASCUAL AND ASSOCIATES
24333 ORCHARD LAKE ROAD SUITE G
CONTACT: FELINO A. PASCUAL, RLA, CLARB
PHONE: 248.557.5588



REVISIONS	
DESCRIPTION	DATE
PUD FINAL SITE PLAN SUBMITTAL	4/10/2023



NOT FOR CONSTRUCTION

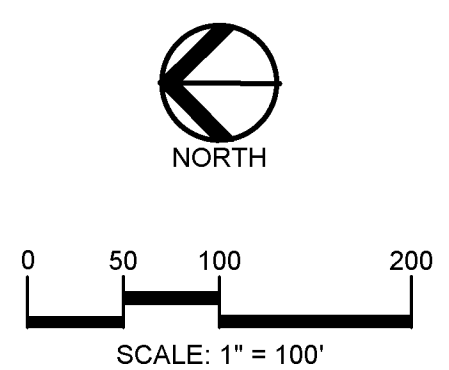
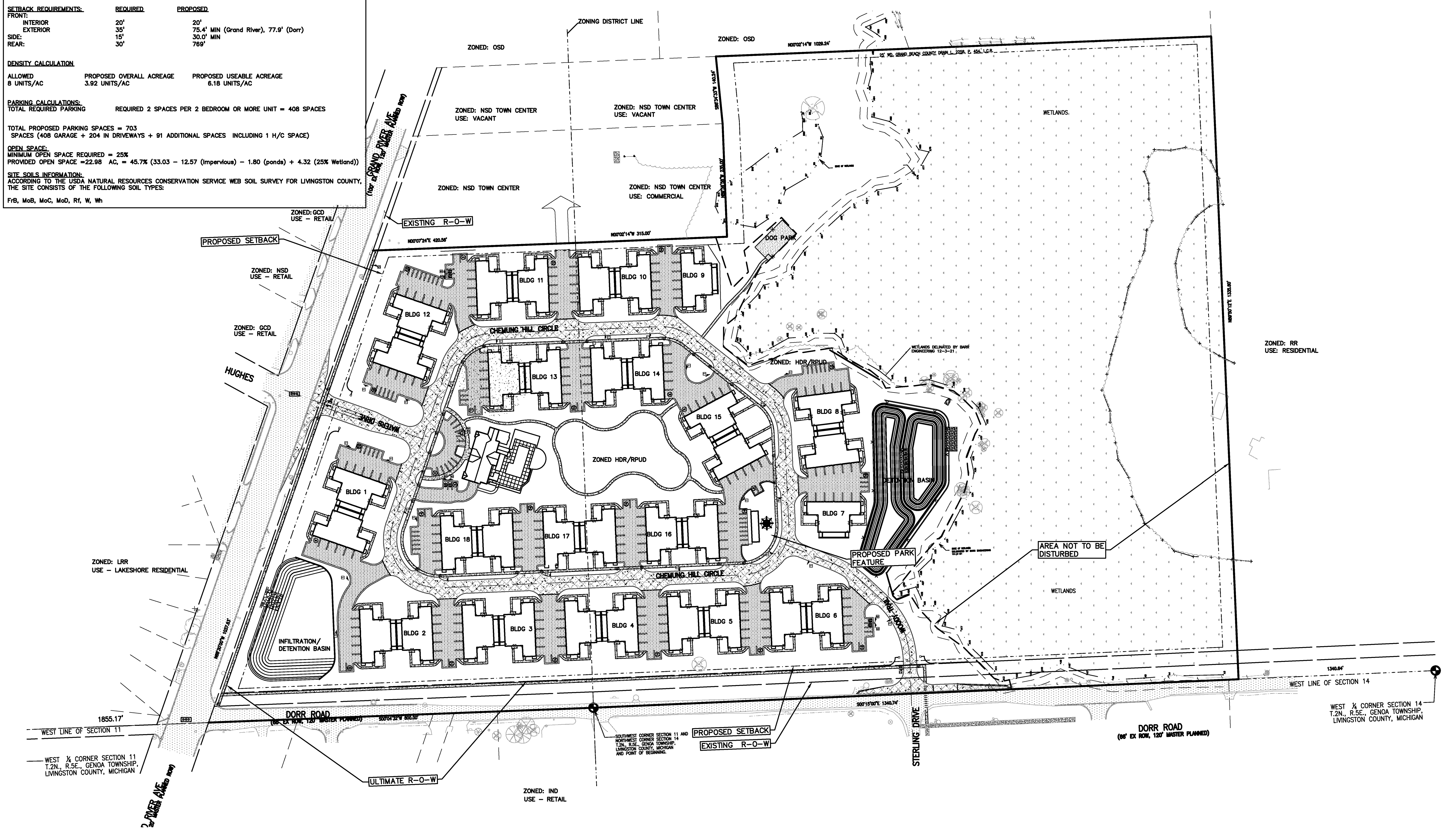
SITE DATA TABLE:			
SITE AREA	ORDINANCE	PROPOSED	
	20.0 ACRES MIN.	51.84 ACRES GROSS (Wetland 17.29 ac, ROW 1.62 ac)	33.03 ACRES NET
DENSITY	8 UNITS/ACRE	6.18 UNITS/ACRE (NET)	
ZONING:	EXISTING:	NSD AND MDR WITH TOWN CENTER OVERLAY	
	PROPOSED:	HDR, RPUD	
USE:	EXISTING:	VACANT	
	PROPOSED:	204 MULTI-FAMILY DWELLING UNITS, CLUBHOUSE AND POOL	
BUILDING INFORMATION:			
MAXIMUM ALLOWABLE BUILDING HEIGHT = 40 FEET (3 STORIES)			
PROPOSED BUILDING HEIGHT = 27 FEET (2 STORIES)			
BUILDING FOOTPRINT AREA = 5,898 - 11,981 SQ.FT.			
CLUBHOUSE - 6,658 SQ. FT.			
TOTAL BUILDING FOOTPRINT AREA = 203,492 SQ.FT.			
UNIT	LIVING AREA	BEDROOMS	NUMBER OF UNITS
	A	2	68
	B	2	68
C	3	68	
LOT COVERAGE	REQUIRED	PROPOSED (BASED ON NET ACRES)	
	35% MAX	14.3%	45.4%
PERCENT IMPERVIOUS	REQUIRED	PROPOSED	
	50% MAX	14.3%	45.4%
SETBACK REQUIREMENTS:			
FRONT:	REQUIRED	PROPOSED	
	INTERIOR	20'	20'
EXTERIOR	35'	75.4' MIN (Grand River), 77.9' (Dorr)	
SIDE:	REQUIRED	PROPOSED	
	15'	30.0' MIN	
REAR:	30'	769'	
DENSITY CALCULATION:			
ALLOWED	PROPOSED OVERALL ACREAGE	PROPOSED USEABLE ACREAGE	
8 UNITS/AC	3.92 UNITS/AC	6.18 UNITS/AC	
PARKING CALCULATIONS:			
TOTAL REQUIRED PARKING	REQUIRED 2 SPACES PER 2 BEDROOM OR MORE UNIT = 408 SPACES		
TOTAL PROPOSED PARKING SPACES = 703	SPACES (408 GARAGE + 204 IN DRIVEWAYS + 91 ADDITIONAL SPACES INCLUDING 1 H/C SPACE)		
OPEN SPACE:			
MINIMUM OPEN SPACE REQUIRED = 25%	PROVIDED OPEN SPACE = 22.98 AC = 45.7% (33.03 - 12.57 (Impervious) - 1.80 (Ponds) + 4.32 (25% Wetland))		
SITE SOILS INFORMATION:			
ACCORDING TO THE USDA NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY FOR LIVINGSTON COUNTY, THE SITE CONSISTS OF THE FOLLOWING SOIL TYPES:			
FrB, MoB, MoC, MoD, Rf, W, Wh			

APPROVED ORDINANCE MODIFICATIONS:	
ZONING	
3.05.02 (e) / 15.05.03	MODIFICATION OF THE HORIZONTAL MINIMUM CURVE RADIUS FROM 150' TO 100', AND CURB RADI FROM ROAD TO GARAGE AND PARKING DRIVEWAYS LESS THAN 30' RADIUS.
10.03.01 (C)	THE OPEN SPACE ALONG THE EXTERIOR PUBLIC ROADS SHALL GENERALLY HAVE A DEPTH OF AT LEAST ONE HUNDRED (100) FEET EITHER LANDSCAPED OR PRESERVED IN A NATURAL WOODED CONDITION.
12.01.03	REDUCTION IN THE PERCENTAGE OR BRICK REQUIRED ON BUILDING WALLS EXPOSED TO PUBLIC AND AN INCREASE IN PERCENTAGE OF VINYL OR FIBER CEMENT SIDING AND WOOD SIDING.
13.02.04 d.	REQUEST FOR GRADING UPTO 10' FROM REGULATED WETLAND.
14.02.06	REQUEST TO EXCEED PARKING SPACE REQUIREMENT MORE THAN 20%
14.06.09	PARKING LOTS AND RELATED MANEUVERING AISLES SHALL MEET MINIMUM SETBACKS FROM ADJACENT STREET R-O-W AS SHOWN IN THE SCHEDULE OF REGULATIONS AND HAVE PARKING LOT LANDSCAPING
14.06.10	PARKING LOTS SHALL HAVE MINIMUM REAR AND SIDE YARD SETBACKS INCLUDING BERMING AND LANDSCAPING.

NOTE:

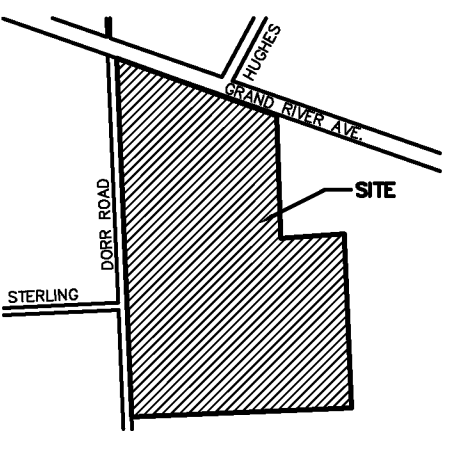
- PROPERTY WILL BE DEVELOPED OWNED AND OPERATED BY A SINGLE OWNERSHIP ENTITY.
- TRASH COLLECTION WILL BE PROVIDED VIA INDIVIDUAL TRASH CARTS FOR EACH UNIT WITH CURB SIDE TRASH COLLECTION.

LEGEND:			
[Symbol]	CONCRETE PAVEMENT	[Symbol]	CONCRETE CURB AND GUTTER
[Symbol]	ASPHALT PAVEMENT	[Symbol]	REVERSE GUTTER PAN
[Symbol]	GRAVEL	[Symbol]	SETBACK LINE
[Symbol]	WETLAND	[Symbol]	SIGN
[Symbol]	CONCRETE CURB AND GUTTER	[Symbol]	LIGHTPOLE
[Symbol]	REVERSE GUTTER PAN	[Symbol]	FENCE
[Symbol]	SETBACK LINE	[Symbol]	GUARD RAIL



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

CAUTION!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT
GRAND RIVER DORR LLC.
315550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	

ORIGINAL ISSUE DATE:
APRIL 10, 2023

DRAWING TITLE
OVERALL SITE PLAN

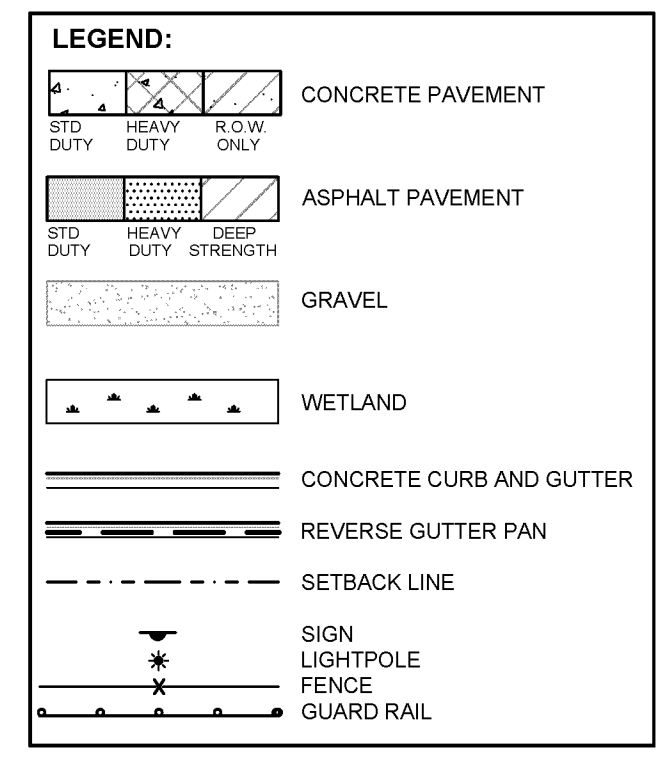
PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR
DRAWING NUMBER:	

NOT FOR CONSTRUCTION **C-2.1**

S:\PROJECTS\2021-0578 LAURENCE GRAND TOWNSHIP\SUBSITE PLANS\C-2.01_Plan-01-Overall.dwg

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

- ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
- 'NO PARKING-FIRE LANE' SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AT 50'-100' FOOT INTERVALS OR AS DIRECTED BY THE FIRE OFFICIAL.
- SIGNS ARE TO BE PLACED TO AVOID UTILITIES. IN GENERAL SIGN POST ARE TO BE A MINIMUM OF 3' FROM THE CURB. REFER TO UTILITY SHEET.



SIGN LEGEND:

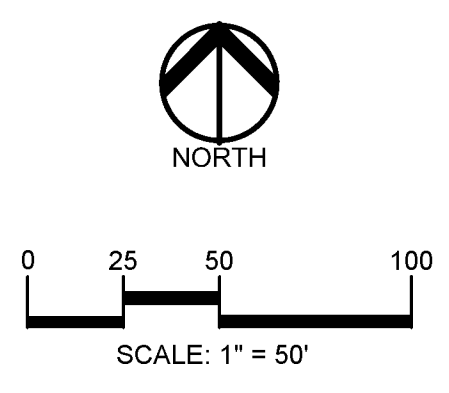
'NO PARKING FIRE LANE' SIGN	1
'STOP' SIGN	2
'BARRIER FREE PARKING' SIGN	3
'VAN ACCESSIBLE' SIGN	4
'SIDEWALK ENDS' SIGN	5
ELECTRIC VEHICLE SIGN	6

REFER TO DETAIL SHEET FOR SIGN DETAILS

SIDEWALK RAMP LEGEND:

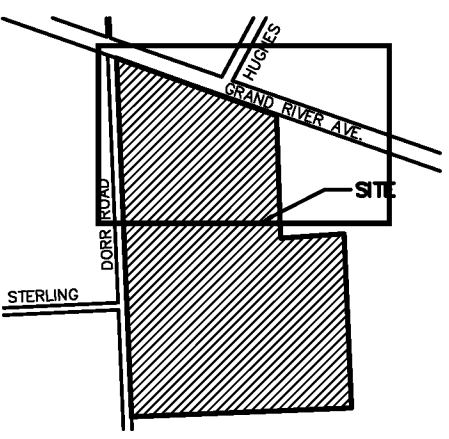
SIDEWALK RAMP 'TYPE R'	⊗
CURB DROP ONLY	⊙

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



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

CAUTION!
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CLIENT
GRAND RIVER DORR LLC.
31550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

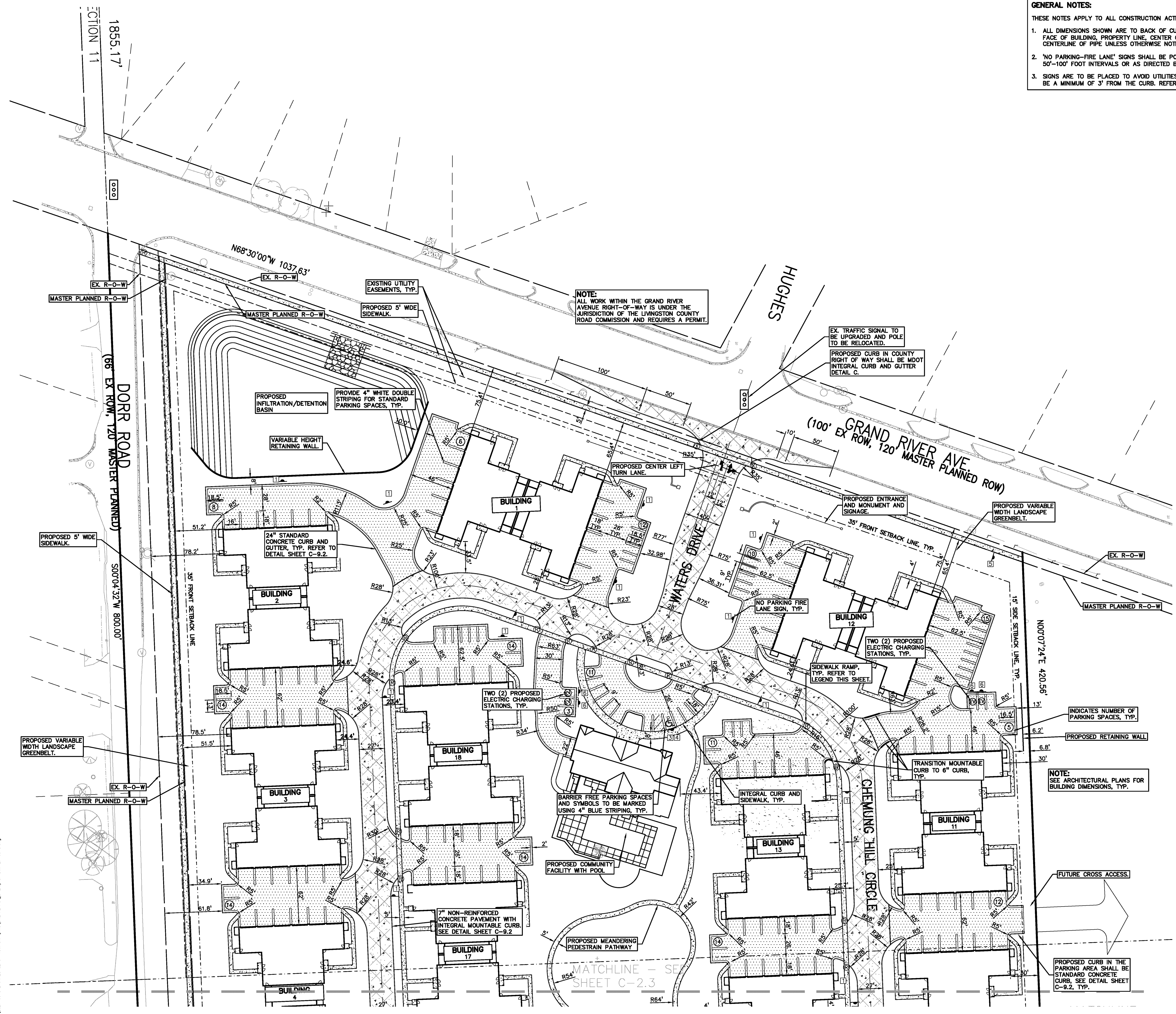
REVISIONS

NO.	DATE	DESCRIPTION

ORIGINAL ISSUE DATE:
APRIL 10, 2023

DRAWING TITLE
SITE PLAN NORTH

PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR
DRAWING NUMBER:	



S:\PROJECTS\2021\0021-0578 LAURENCE GROVE TOWNSHIP\0021-0578 PLANS\C-2.0 3P 2021-04-08.dwg

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

1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
2. 'NO PARKING-FIRE LANE' SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AT 50'-100' FOOT INTERVALS OR AS DIRECTED BY THE FIRE OFFICIAL.
3. SIGNS ARE TO BE PLACED TO AVOID UTILITIES. IN GENERAL SIGN POST ARE TO BE A MINIMUM OF 3' FROM THE CURB. REFER TO UTILITY SHEET.

SIGN LEGEND:

'NO PARKING FIRE LANE' SIGN	1
'STOP' SIGN	2
'BARRIER FREE PARKING' SIGN	3
'VAN ACCESSIBLE' SIGN	4
'SIDEWALK ENDS' SIGN	5
ELECTRIC VEHICLE SIGN	6

REFER TO DETAIL SHEET FOR SIGN DETAILS

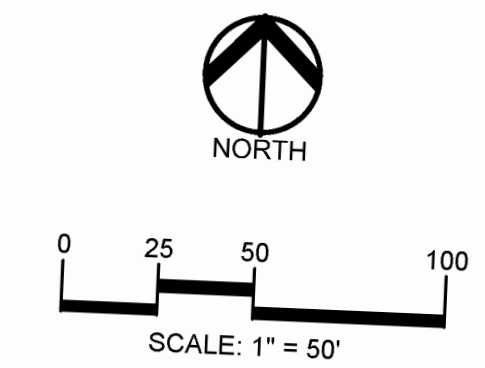
LEGEND:

CONCRETE PAVEMENT	(Symbol)
ASPHALT PAVEMENT	(Symbol)
GRAVEL	(Symbol)
WETLAND	(Symbol)
CONCRETE CURB AND GUTTER	(Symbol)
REVERSE GUTTER PAN	(Symbol)
SETBACK LINE	(Symbol)
SIGN LIGHTPOLE	(Symbol)
FENCE	(Symbol)
GUARD RAIL	(Symbol)

SIDEWALK RAMP LEGEND:

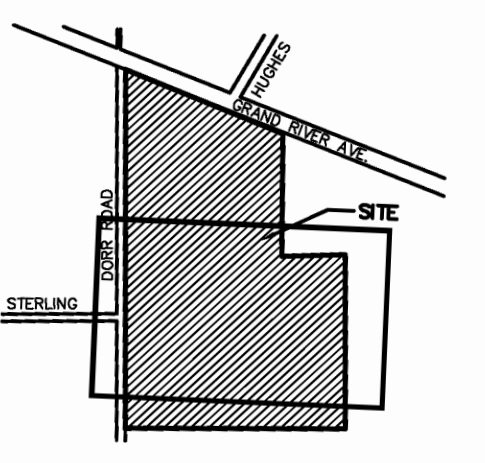
SIDEWALK RAMP 'TYPE R'	(Symbol)
CURB DROP ONLY	(Symbol)

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



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

CAUTION!
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CLIENT
 GRAND RIVER DORR LLC.
 31550 NORTHWESTERN HIGHWAY
 FARMINGTON HILLS, MI 48334

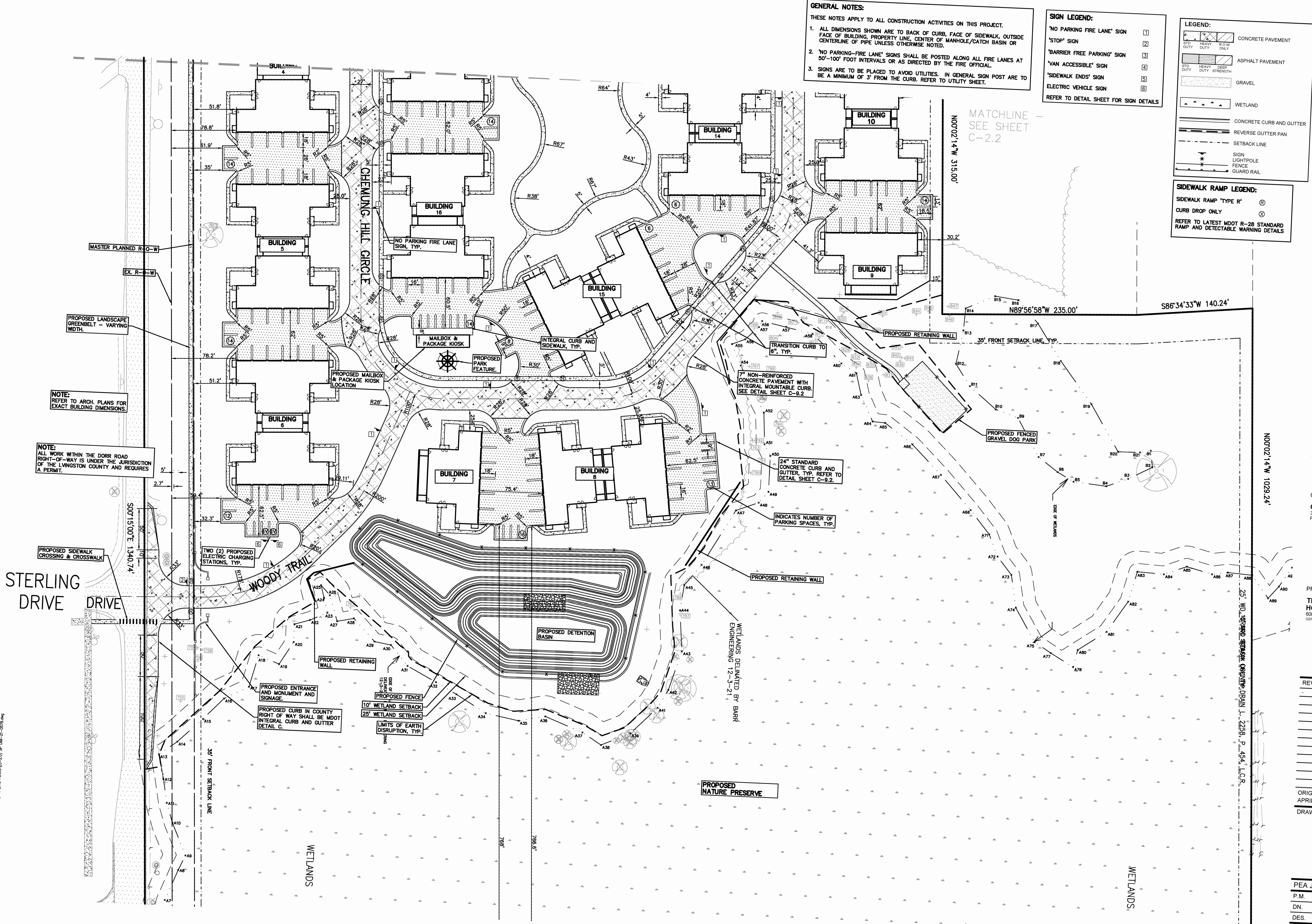
PROJECT TITLE
 THE LEGACY APARTMENT HOMES
 6080 W GRAND RIVER
 GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS

ORIGINAL ISSUE DATE:
 APRIL 10, 2023

DRAWING TITLE
SITE PLAN SOUTH

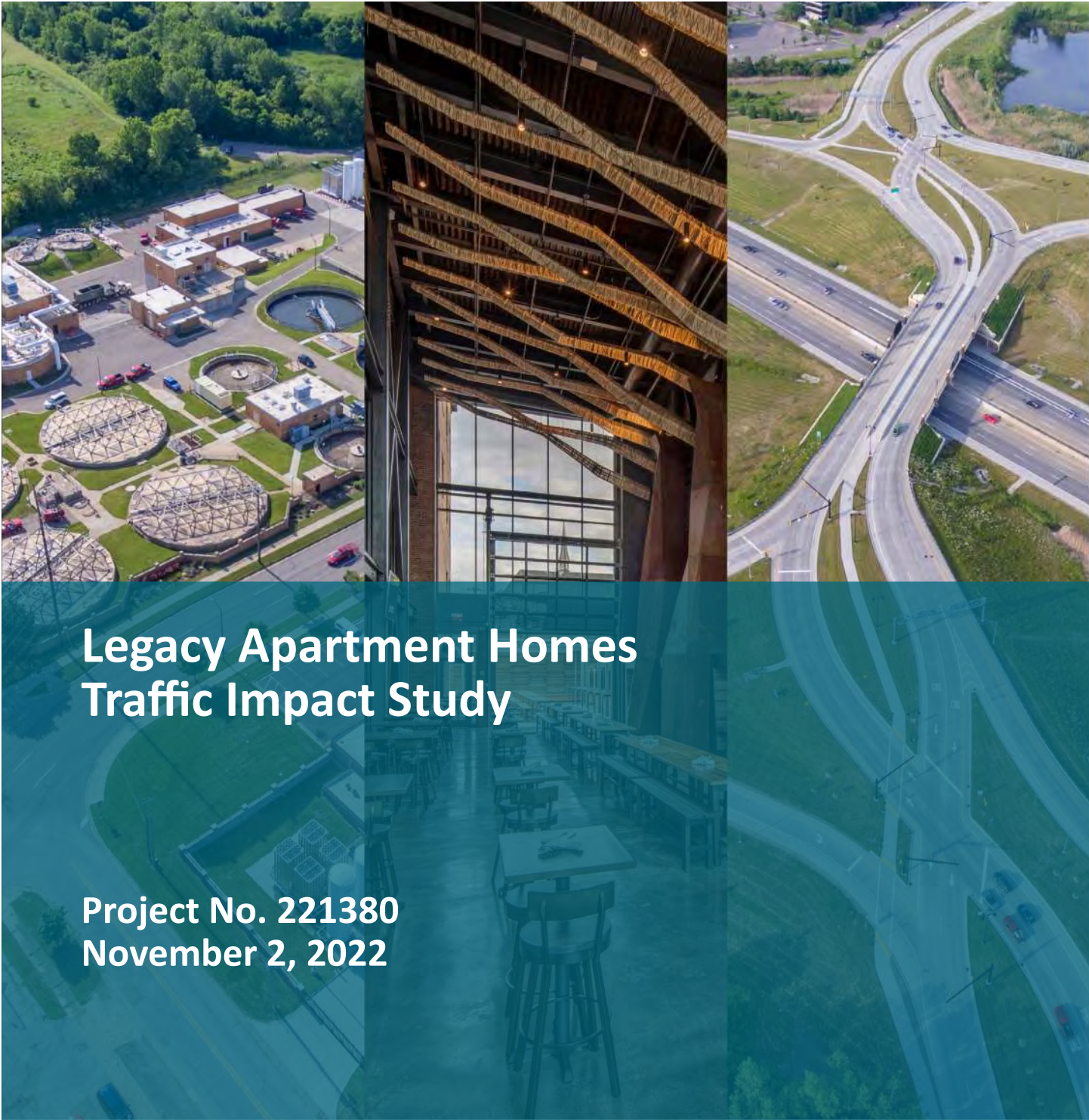
PEA JOB NO. 2021-0578
 P.M. JEC
 DN. JMR
 DES. JMR
 DRAWING NUMBER:



S:\PROJECTS\2021\2021-0578-0578-0578 LAURIEC GENOA TOWNSHIP\MSU\SITE PLANS\C-2.3 23 04M-21-0278.dwg

EXHIBIT C

TRAFFIC IMPACT STUDY



Legacy Apartment Homes Traffic Impact Study

Project No. 221380
November 2, 2022

Legacy Apartment Homes Traffic Impact Study

**Prepared For:
Grand River Dorr LLC
Farmington Hills, Michigan**

**November 2, 2022
Project No. 221380**

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List of Abbreviations/Acronyms

AASHTO	American Association of State Highway and Transportation Officials
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
LUC	Land Use Code
LCRC	Livingston County Road Commission
NB	Northbound
SB	Southbound
SEMCOG	SE Michigan Council of Governments
TDMS	Transportation Data Management System
TIS	Traffic Impact Study
TMC	Turning Movement Count
Township	Genoa Township
TWLTL	Two-Way Left Turn Lane
WB	Westbound

References

- The Highway Capacity Manual, 6th Edition.* (2016). Washington, DC.
- The Highway Capacity Manual: 2000.* (2000). Washington, DC.
- Trip Generation Handbook, 3rd Edition.* (2017). Washington DC.
- Trip Generation Manual, 11th Edition.* (2021). Washington DC.

Executive Summary

Fishbeck has completed a traffic impact study (TIS) related to the development of Legacy Apartment Homes located in the southeast (SE) quadrant of Grand River Avenue and Dorr Road in Genoa Township (Township), Livingston County, Michigan. The vacant lot is proposed to be developed into multifamily residential with 204 dwelling units (DU) proposed. The development will be open and fully operational in 2025.

The proposed site plan includes a driveway on Grand River Avenue that will be the south approach of the signalized intersection of Grand River Avenue and Hughes Road and a driveway on Dorr Road that will be the east approach of the unsignalized intersection of Dorr Road and Sterling Drive.

This study was conducted according to the methodologies and guidance published by Institute of Transportation Engineers (ITE), American Association of State Highway and Transportation Officials (AASHTO), Livingston County Road Commission (LCRC) and the Township.

Vehicular, Turning Movement Counts (TMCs) were collected at the study intersections on December 14, 2021, during the weekday a.m. (7 a.m. to 9 a.m.) and p.m. (4 p.m. to 6 p.m.) time frames of the roadway network. Due to the impact of COVID-19, historical traffic data from the SE Michigan Council of Governments (SEMCOG) website was reviewed. Based on this review, an adjustment factor of 1.16 and 1.11 was determined for the a.m. and p.m. peak hours, respectively to adjust the completed TMCs to “Pre-COVID-19 levels”.

There is one known project in the site vicinity that could add additional traffic volumes to the study network. The following development was included:

- St. Joseph Mercy Brighton Health Center Expansion.


Site-generated traffic was forecast using the information and methodologies specified in the latest version of Trip Generation, Trip Generation Manual, 11th Edition, 2021. The existing traffic volumes, site layout, and engineering judgement were used to develop a trip distribution model for the a.m. and p.m. peak hours for the new traffic generated by the proposed development. Additionally, directions of origin, surrounding residential densities, and commuting patterns were considered.

Level of Service (LOS) analyses were conducted for existing, background, and two total future conditions based on Highway Capacity Manual (HCM) 6th Edition, methodologies using Synchro traffic analysis software. One future condition analyzed included a scenario for the signalized driveway at Grand River Avenue and Hughes Road that would require widening of Hughes Road to accommodate a southbound (SB) left and right/through lane. The other future condition analyzed was a scenario that would create split phasing of the traffic signal operation for the northbound (NB) and SB approaches of the Grand River Avenue and Hughes Road intersection and not require widening of Hughes Road. Synchro network models were also simulated using SimTraffic to evaluate network operations including intersection queueing.

Based on findings of the HCM operational analyses and site traffic generation, the proposed development, including trips generated by the expansion of the St. Joseph Mercy Brighton Health Center, will not result in any significant impact to the adjacent road network. The proposed alternative that provides split phasing of the traffic signal operation for the NB and SB approaches of the Grand River Avenue and Hughes Road intersection and will not require widening of Hughes Road is the preferred alternative. Driveway 1 is to be constructed with a left turn lane and right/through lane.

The opinions, findings, and conclusions expressed in this TIS are those of Fishbeck and not necessarily those of the Owner/Applicant, LCRC, or the Township.

Prepared By:



Jill Bauer, PE, PTOE
Project Manager – Fishbeck

1.0 Introduction

1.1 Project Overview

On behalf of Grand River Dorr LLC, Fishbeck has conducted a traffic impact study (TIS) related to the development of Legacy Apartment Homes located in the southeast (SE) quadrant of Grand River Avenue and Dorr Road in Genoa Township (Township), Livingston County, Michigan. The vacant lot is proposed to be developed into multifamily residential with 204 dwelling units (DU)'s proposed. The development will be open and fully operational in 2025.

The proposed site plan includes a driveway on Grand River Avenue that will be the south approach of the signalized intersection of Grand River Avenue and Hughes Road and a driveway on Dorr Road that will be the east approach of the unsignalized intersection of Dorr Road and Sterling Drive.

The project location and study intersections are indicated in Figure 1 – Project Location and Study Network.

Figure 1 – Project Location and Study Network



1.2 Study Methodology

The objectives of this TIS were to determine what impacts, if any, the proposed project will have on adjacent roadway traffic operations, and to develop recommendations for any improvements necessary to mitigate the project impacts on the studied intersections. Study analyses were completed relative to typical weekday a.m. and p.m. peak traffic periods.

This study was conducted according to the methodologies and guidance published by Institute of Transportation Engineers (ITE), American Association of State Highway and Transportation Officials (AASHTO), Livingston County Road Commission (LCRC) and the Township.

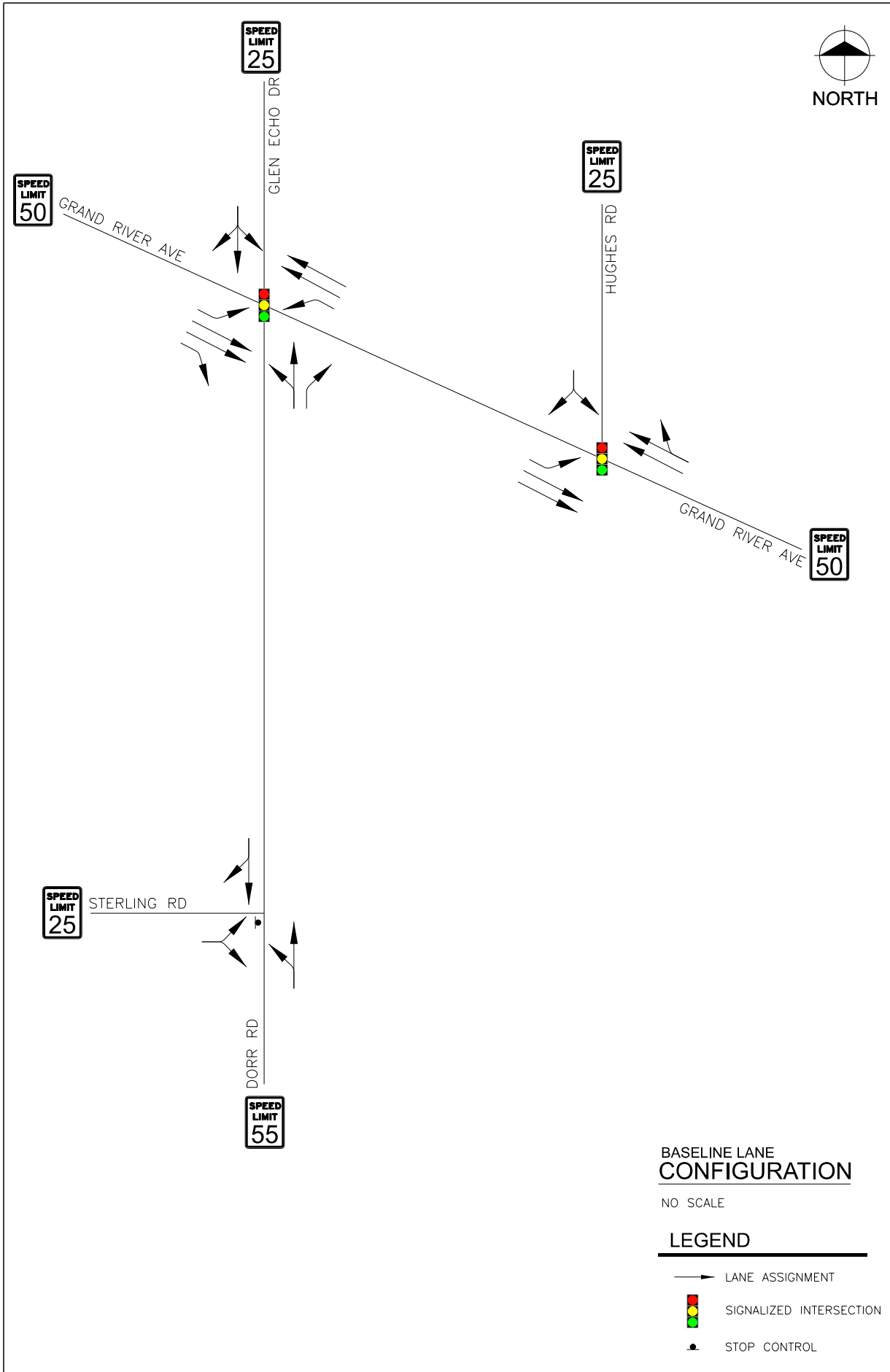
1.3 Intersection Characteristics

Based on the type and size of the proposed development, input from LCRC, and the likely area of influence for the site trips, traffic operations were analyzed for the following intersections:

1. Grand River Avenue and Dorr Road/Glen Echo Drive (signalized).
2. Grand River Avenue and Hughes Road/Driveway 1 (signalized).
3. Dorr Road and Sterling Drive/Driveway 2 (unsignalized).

The existing intersection lane configurations, traffic controls, and posted speed limits are indicated in Figure 2 – Existing Lane Configurations.

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Multifamily Residential Development
 Genoa Township, MI 48843
Traffic Impact Study

BASELINE LANE CONFIGURATION

NO SCALE

LEGEND

- LANE ASSIGNMENT
- 🚦 SIGNALIZED INTERSECTION
- STOP CONTROL

PROJECT NO.
221380

FIGURE NO.
2

1.4 Existing Traffic Volumes

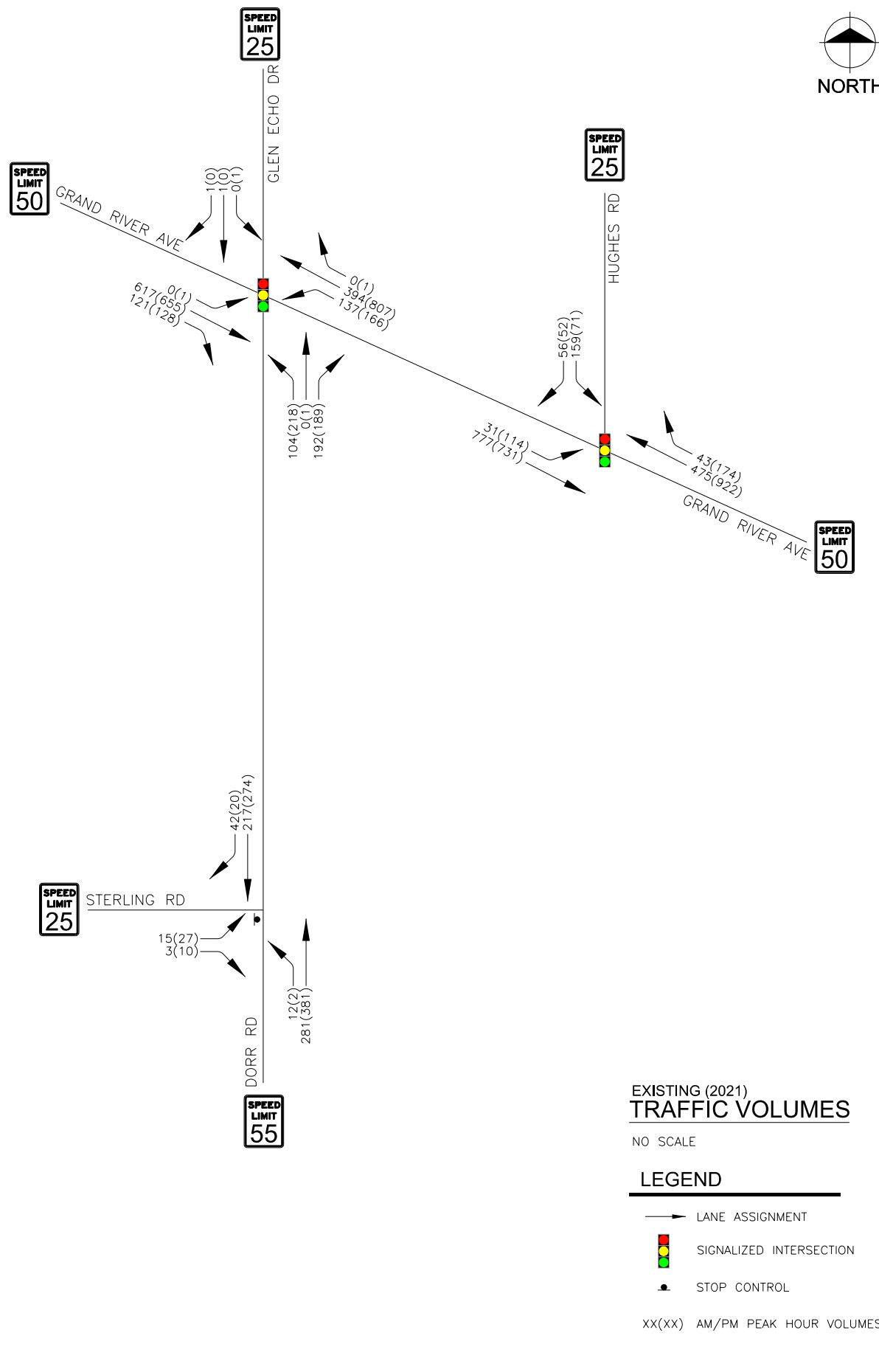
Vehicular Turning Movement Counts (TMC) were collected at the following study intersections during the weekday a.m. (7 to 9 a.m.) and p.m. (4 to 6 p.m.) peak traffic periods of the road network on December 14, 2021:

- Grand River Avenue and Dorr Road/Glen Echo Drive.
- Grand River Avenue and Hughes Road.
- Dorr Road and Sterling Drive.

Due to the impact of COVID-19, current traffic volume data may not be representative of typical operations. Historical traffic data from the SE Michigan Council of Governments (SEMCOG) website was reviewed. Based on this review, an adjustment factor of 1.16 and 1.11 was determined for the a.m. and p.m. peak hours, respectively to adjust the completed TMCs to “Pre-COVID-19 levels”.

Traffic volume information can be found in Appendix 1 – Traffic Volume Data, which include heavy vehicle data. The adjusted existing traffic volumes used in this study are indicated in Figure 3– Existing Traffic Volumes.

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Multifamily Residential Development
Genoa Township, MI 48843

Traffic Impact Study

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FIGURE NO.
3

2.0 Existing Conditions Analysis

2.1 Traffic Operations Analysis Methodology

Synchro was used to perform Highway Capacity Manual (HCM) operational analyses during the a.m. and p.m. peak hours for all the intersections within this study. According to the most recent edition of the HCM, Level of Service (LOS) is a qualitative measure describing operational conditions of a traffic stream or intersection. LOS ranges from A to F, with LOS A representing desirable traffic operations characterized by low delay and LOS F representing extremely poor traffic operations characterized by excessive delays and long vehicle queues. LOS D is considered acceptable for most areas. Table 1 – LOS Criteria presents the HCM criteria for various LOS for unsignalized and signalized intersections. The color coding in the table is used in the LOS analysis summary tables later in this report.

Table 1– LOS Criteria

LOS	Average Stopped Vehicle Delay (seconds)	
	Unsignalized	Signalized
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

2.2 Existing Conditions Traffic Analysis

Synchro models for the existing network were created based on the existing roadway configurations and traffic controls. Where applicable, data concerning the existing intersection and roadway lane configurations, geometry, and traffic control that were observed in the field were entered in the models. The traffic signal timing permits for the signalized intersections were provided by LCRC for use in the models.

The resulting LOS and delay for the existing conditions are indicated in Table 2 – LOS Analysis for Existing Conditions.

Table 2 – LOS Analysis for Existing Conditions

Approach	LOS/Delay(s)			
		a.m. Peak Hour		p.m. Peak Hour
Grand River Avenue and Dorr Road/Glen Echo Drive (Signalized)				
EB Grand River Avenue	B	18.6	B	19.7
WB Grand River Avenue	A	3.3	A	3.3
NB Dorr Road	C	29.1	D	38.6
SB Glen Echo Drive	D	52.3	E	61.4
Overall	B	16.0	B	15.9
Grand River Avenue and Hughes Road (Signalized)				
EB Grand River Avenue	B	12.7	B	15.8
WB Grand River Avenue	A	6.8	A	5.8
SB Hughes Road	D	46.3	D	43.1
Overall	B	16.1	B	11.8
Dorr Road and Sterling Drive (Stop-Controlled)				
EB Sterling Drive	B	14.1	B	14.5
NB Dorr Road	A	0.3	A	0.0
SB Dorr Road	A	0.0	A	0.0
Overall	A	0.7	A	1.1

Eastbound (EB)
 Northbound (NB)
 Southbound (SB)
 Westbound (WB)

Further analysis of the LOS results for existing conditions revealed that most movements, approaches, and intersections are expected to operate at an acceptable LOS D or better during both the a.m. and p.m. peak hours, with the following exceptions:

- Grand River Avenue and Dorr Road/Glen Echo Drive
 - The SB approach operates at LOS E in the p.m. peak hour.

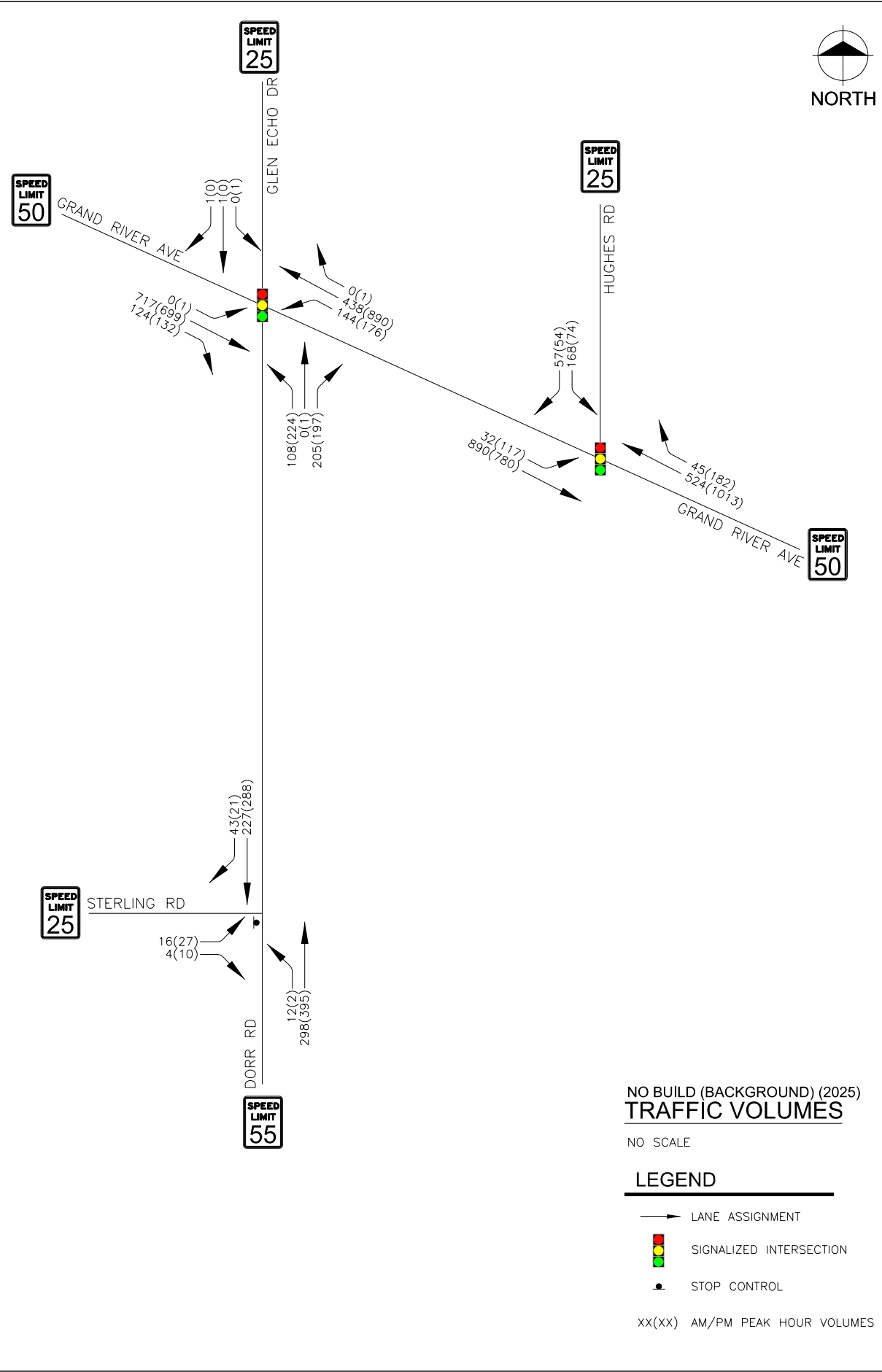
SimTraffic simulations were also reviewed to observe network operations and vehicle queues. For existing conditions, study network operations are acceptable, without significant vehicle queues or spill-back from available storage lanes. No 95th percentile queue lengths for the turning movements exceeded the provided storage length. See Appendix 2 – Existing LOS Output Reports for the existing conditions LOS reports and queueing analysis reports.

3.0 Background Conditions Analysis

Historical traffic data on the SEMCOG Transportation Data Management System (TDMS) website was referenced to determine the applicable growth rate for the existing traffic volumes to the project build-out year in 2025. Based on this review, a background growth rate of 0.75% was utilized. In addition, one background development was identified and included in the background traffic conditions. Fishbeck was provided the TIS completed for the proposed St. Joseph Mercy Brighton Health Center Expansion, this development has a buildout year of 2024. The intersections of Grand River Avenue/Dorr Road and Grand River Avenue/Hughes Road were included in the prepared TIS.

Refer to Appendix 3 – Background Development Trip Generation for additional details related to the trip generation forecast at these intersections. The total background traffic volumes are indicated in Figure 4 – Background Traffic Volumes.

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Genoa Township, MI 48843
Traffic Impact Study

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FIGURE NO.
4

3.1 Background Conditions Traffic Analysis

The resulting LOS and delay for the background conditions are presented in Table 3 – LOS Analysis for Background Conditions.

Table 3 – LOS Analysis for Background Conditions

Approach	LOS/Delay (s)			
	a.m. Peak Hour		p.m. Peak Hour	
Grand River Avenue and Dorr Road/Glen Echo Drive (Signalized)				
EB Grand River Avenue	C	20.6	C	20.8
WB Grand River Avenue	A	3.6	A	8.5
NB Dorr Road	C	28.7	D	39.0
SB Glen Echo Drive	D	52.3	E	61.4
Overall	B	16.9	B	18.5
Grand River Avenue and Hughes Road (Signalized)				
EB Grand River Avenue	B	13.9	B	16.8
WB Grand River Avenue	A	7.3	A	6.5
SB Hughes Road	D	47.3	D	42.8
Overall	B	16.7	B	12.4
Dorr Road and Sterling Drive (Stop-Controlled)				
EB Sterling Drive	B	14.4	C	15.0
NB Dorr Road	A	0.3	A	0.0
SB Dorr Road	A	0.0	A	0.0
Overall	A	0.7	A	1.1

Further analysis of the LOS results for background conditions revealed that most movements, approaches, and intersections are expected to continue to operate at an acceptable LOS D or better during both the a.m. and p.m. peak hours, with the following exceptions:

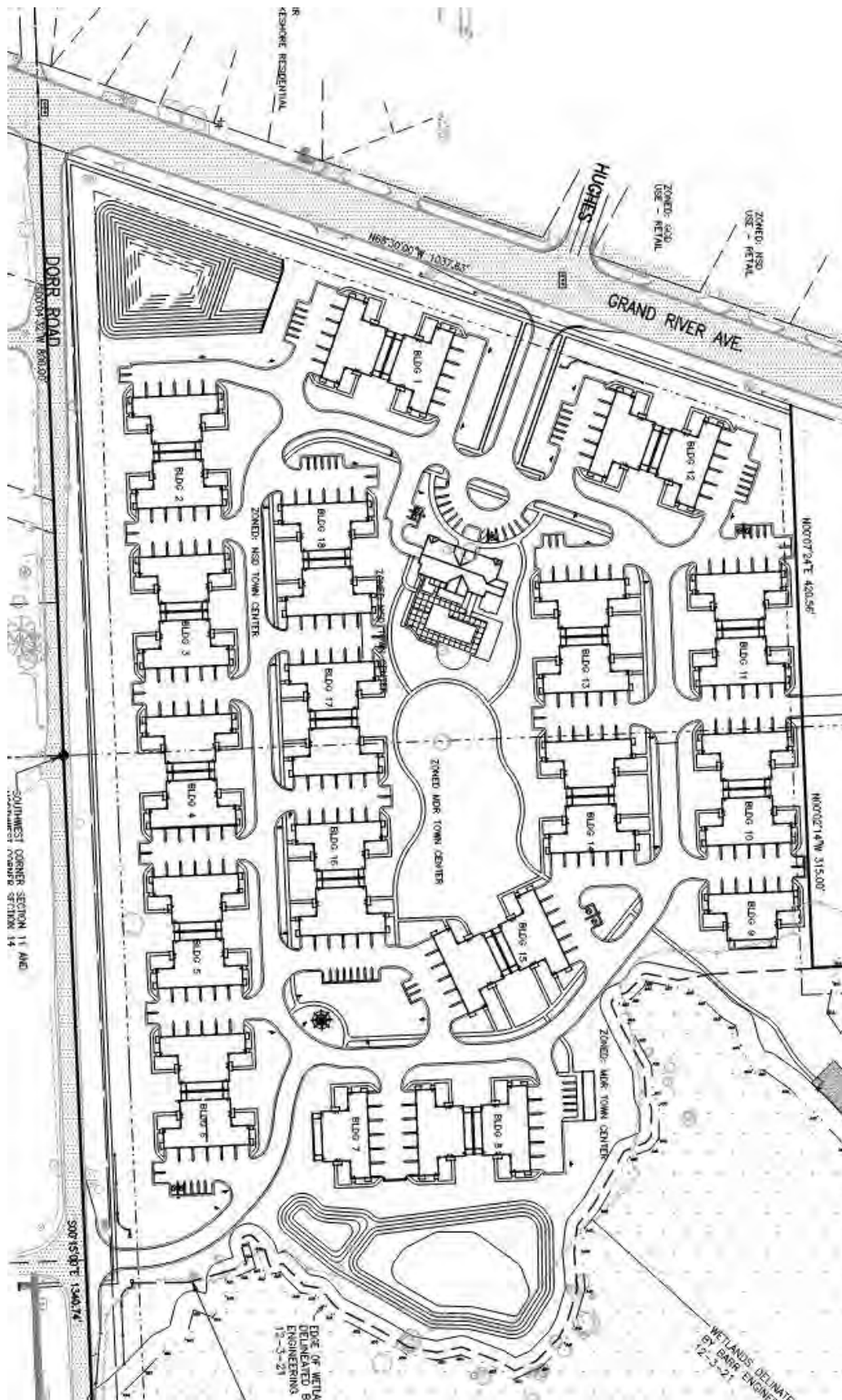
- Grand River Avenue and Dorr Road/Glen Echo Drive:
 - The SB approach continues to operate at LOS E in the p.m. peak hour.

SimTraffic simulations were also reviewed to observe network operations and vehicle queues. For background conditions, study network operations are acceptable, without significant vehicle queues or spill-back from available storage lanes. No 95th percentile queue lengths for the turning movements exceed the provided storage length, see Appendix 4 – Background LOS Output Reports.

4.0 Site Traffic Characteristics

A representation of the current conceptual site plan is provided in Figure 5 – Conceptual Site Plan, see below.

Figure 5 – Conceptual Site Plan



4.1 Trip Generation

Using the information and methodologies specified in the latest version of Trip Generation, Fishbeck forecast the weekday a.m. and p.m. peak hour trips associated with the proposed development.

Table 4 – Trip Generation for Proposed Development presents the resulting trip generation for the development. Refer to Appendix 5 – Trip Generation Calculations.

Table 4 – Trip Generation for Proposed Development

ITE LUC	LUC	Units	a.m. Peak Hour			p.m. Peak Hour			Weekday
			In	Out	Total	In	Out	Total	
220	Multifamily Housing (Low-Rise)	204 DU	21	65	86	68	40	108	1,383
Total New Trips			21	65	86	68	40	108	1,383

Land Use Code (LUC)

4.2 Trip Distribution

The directions that site traffic will travel to and from were based upon existing traffic patterns during the a.m. and p.m. peak hours. The existing traffic patterns reflect the gravity between origins and destinations in the study area, and therefore an accurate indication of where the proposed trips would be coming from and going to.

Table 5 – Trip Distribution provides the probable distribution based on the existing traffic patterns.

Table 5 – Trip Distribution

Direction	Via	New Trips			
		a.m. Peak Hour		p.m. Peak Hour	
		To	From	To	From
North	Hughes Road	4%	7%	7%	5%
South	Dorr Road	13%	18%	13%	16%
East	Grand River Avenue	54%	31%	35%	46%
West	Grand River Avenue	29%	44%	45%	33%

The trip distribution for the site is indicated in Figure 6 – Trip Generation Volumes, see below. These trips were added to the background volumes (Figure 4) to result in the future conditions volumes in Figure 7– Future Conditions Volumes.



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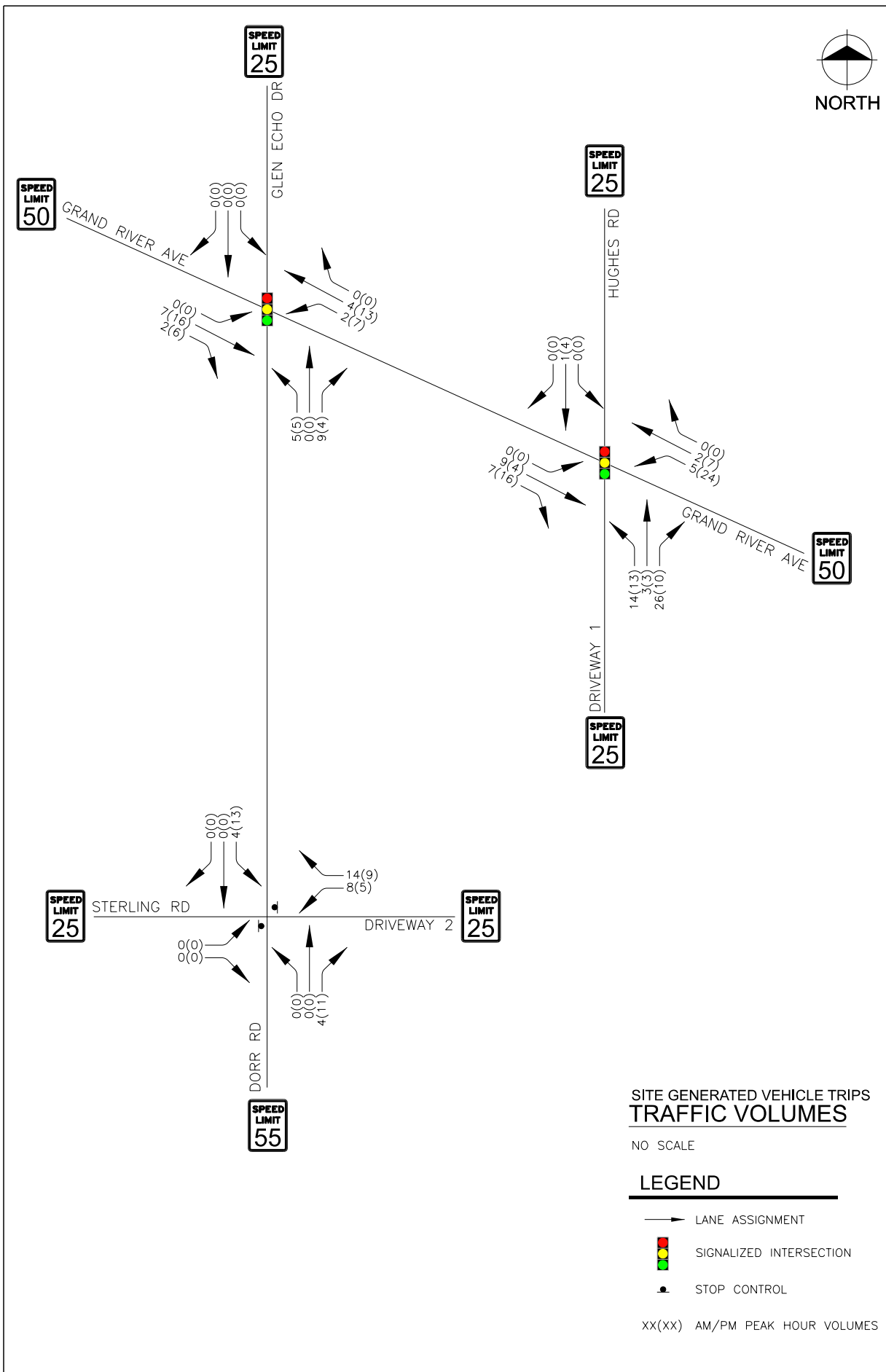
Multifamily Residential Development

Genoa Township, MI 48843

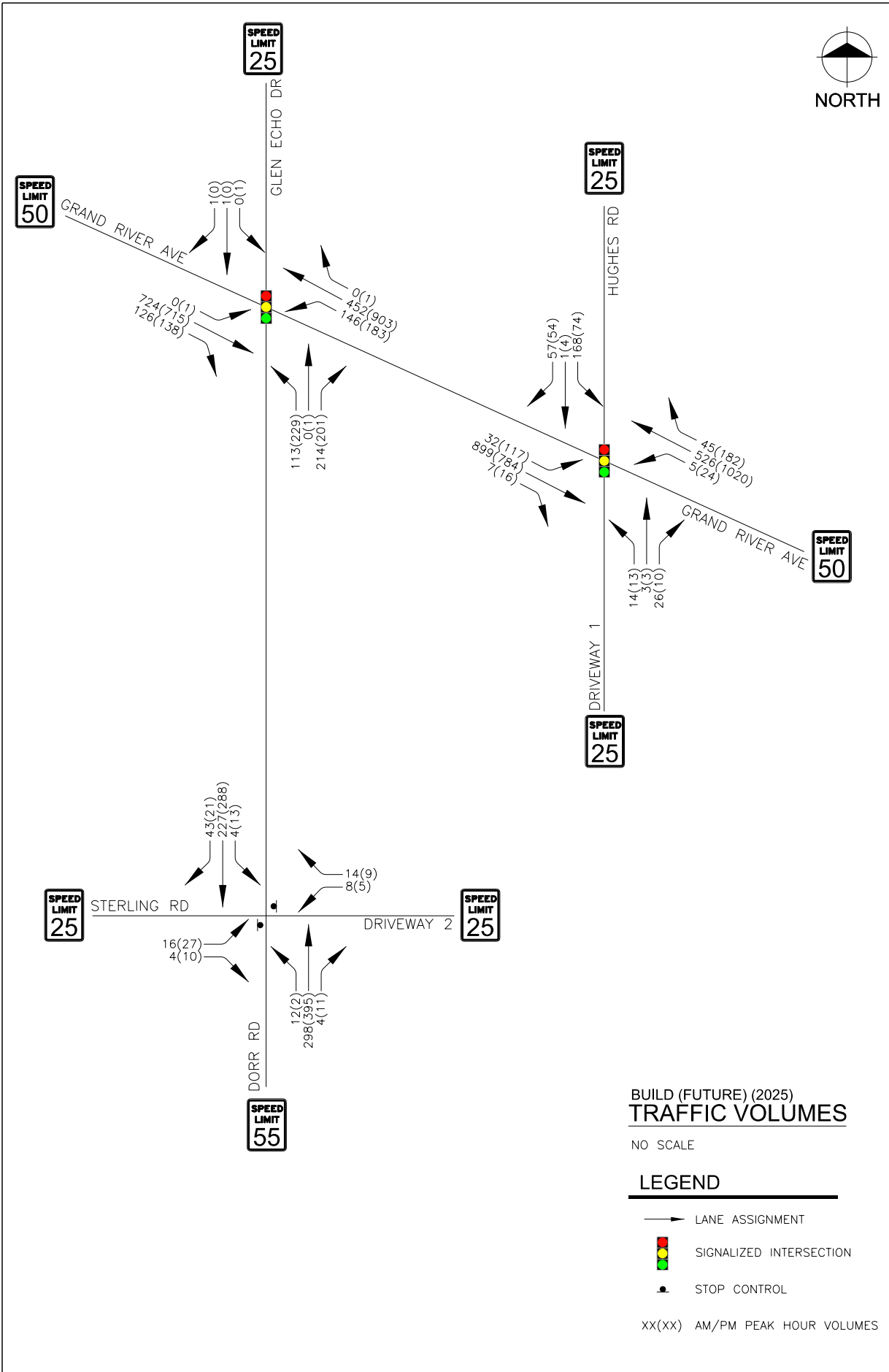
Traffic Impact Study

PROJECT NO.
221380

FIGURE NO.
6



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Multifamily Residential Development
Genoa Township, MI 48843

Traffic Impact Study

PROJECT NO. 221380
FIGURE NO. 7

5.0 Future Conditions Analysis

5.1 Turn Lane Warrants

An evaluation was performed in accordance with LCRC requirements to determine if left turn passing lanes or right turn deceleration lanes are required at the site driveways. The results of the analysis indicated that a left turn passing lane is warranted at Driveway 1. WB Grand River Avenue already has a center left turn lane present. All turn lane warrant charts are in Appendix 6 – Turn Lane Warrants. The results of the analysis are presented in Table 6 – Turn Lane Warrants.

Table 6 – Turn Lane Warrants

Intersection	Movement	Result
Grand River Avenue and Hughes Road/Driveway 1	WB Left Turn	Warranted ¹
	EB Right Turn	Not Warranted
Dorr Road and Sterling Drive/Driveway 2	SB Left Turn	Not Warranted
	NB Right Turn	Not Warranted

¹Two-way left turn lane (TWLTL) exists

5.2 Future Conditions Traffic Analysis

Due to the construction of Driveway 1 as the NB approach of the intersection of Grand River Avenue and Hughes Road, LCRC requested that the SB approach be widened to accommodate a left turn lane and shared right/through lane. Driveway 1 is also to be constructed with a left turn lane and right/through lane. The resulting LOS and delay for the future conditions are indicated in Table 7 – LOS Analysis for Future Conditions.

Table 7 – LOS Analysis for Future Conditions

Approach	LOS/Delay (s)			
		a.m. Peak Hour		p.m. Peak Hour
Grand River Avenue and Dorr Road/Glen Echo Drive (Signalized)				
EB Grand River Avenue	C	21.3	C	21.5
WB Grand River Avenue	A	3.7	A	8.9
NB Dorr Road	C	28.6	D	39.3
SB Glen Echo Drive	D	52.3	E	61.4
Overall	B	17.2	B	19.0
Grand River Avenue and Hughes Road/Driveway 1 (Signalized)				
EB Grand River Avenue	B	14.5	B	16.3
WB Grand River Avenue	A	7.5	A	5.9
NB Driveway 1	C	26.5	D	35.1
SB Hughes Road	D	32.4	D	36.8
Overall	B	15.1	B	11.8
Dorr Road and Sterling Drive/Driveway 2 (Stop-Controlled)				
EB Sterling Drive	C	16.4	C	17.8
WB Driveway 2	B	13.3	B	13.8
NB Dorr Road	A	0.3	A	0.0
SB Dorr Road	A	0.1	A	0.3
Overall	A	1.2	A	1.6

Further analysis of the LOS results for future conditions revealed that most movements, approaches, and intersections are expected to continue to operate at an acceptable LOS D or better during both the a.m. and p.m. peak hours, with the following exceptions:

- Grand River Avenue and Dorr Road/Glen Echo Drive:
 - SB approach continues to operate at LOS E in the p.m. peak hour.

SimTraffic simulations were also reviewed to observe network operations and vehicle queues. For future conditions, study network operations are acceptable, without significant vehicle queues or spill-back from available storage lanes. No 95th percentile queue lengths for the turning movements exceed the provided storage length. See Appendix 7 – Future LOS Output Reports for the future conditions LOS reports and queueing analysis reports.

5.3 Future Conditions with Split Phasing Traffic Analysis

LCRC suggested split phasing of the traffic signal operation for the NB and SB movements as an alternative to the SB approach being widened. Driveway 1 is to be constructed with a left turn lane and right/through lane. The resulting LOS and delay for the future conditions are indicated in Table 8 – LOS Analysis for Future Conditions with Split Phasing.

Table 8 – LOS Analysis for Future Conditions with Split Phasing

Approach	LOS/Delay (s)			
	a.m. Peak Hour		p.m. Peak Hour	
Grand River Avenue and Dorr Road/Glen Echo Drive (Signalized)				
EB Grand River Avenue	C	21.3	C	21.5
WB Grand River Avenue	A	3.6	A	8.7
NB Dorr Road	C	28.6	D	39.3
SB Glen Echo Drive	D	52.3	E	61.4
Overall	B	17.2	B	18.9
Grand River Avenue and Hughes Road/Driveway 1 (Signalized)				
EB Grand River Avenue	C	22.0	C	23.9
WB Grand River Avenue	B	13.6	B	13.4
NB Driveway 1	D	38.0	D	38.6
SB Hughes Road	D	45.6	D	41.8
Overall	C	23.0	B	19.1
Dorr Road and Sterling Drive/Driveway 2 (Stop-Controlled)				
EB Sterling Drive	C	16.4	C	17.8
WB Driveway 2	B	13.3	B	13.8
NB Dorr Road	A	0.3	A	0.0
SB Dorr Road	A	0.1	A	0.3
Overall	A	1.2	A	1.6

Further analysis of the LOS results for future conditions revealed that most movements, approaches, and intersections are expected to continue to operate at an acceptable LOS D or better during both the a.m. and p.m. peak hours, with the following exceptions:

- Grand River Avenue and Dorr Road/Glen Echo Drive:
 - SB approach continues to operate at LOS E in the p.m. peak hour.

SimTraffic simulations were also reviewed to observe network operations and vehicle queues. For future conditions, study network operations are acceptable, without significant vehicle queues or spill-back from available storage lanes. No 95th percentile queue lengths for the turning movements exceed the provided storage length. See Appendix 8 – Future with Split Phase LOS Output Reports for the future conditions with split phasing LOS reports and queueing analysis reports.

6.0 Findings and Recommendations

The analyses conducted for this TIS indicate the proposed development will not result in any significant impact to the adjacent road network. The proposed site access configuration is appropriate and will acceptably facilitate site ingress and egress. The proposed alternative that provides split phasing of the traffic signal operation for the NB and SB approaches of the Grand River Avenue and Hughes Road intersection and will not require widening of Hughes Road is the preferred alternative. In this alternative, Driveway 1 is to be constructed with a left turn lane and right/through lane. This conclusion is supported by the following key findings:

1. Existing and proposed storage lengths are adequate for all movements in existing and future conditions.
2. Lane configurations and physical capacity are appropriate within the study area.

EXHIBIT D

SOILS INVESTIGATION REPORT

SOILS INVESTIGATION
PROPOSED RESIDENTIAL DEVELOPMENT
GRAND RIVER AVENUE AND DORR ROAD
GENOA TOWNSHIP, MICHIGAN

GRAND RIVER DORR LLC
31550 NORTHWESTERN HIGHWAY
SUITE 220
FARMINGTON HILLS, MICHIGAN 48334

OCTOBER 26, 2022
BY
McDOWELL & ASSOCIATES

McDowell & Associates

Geotechnical, Environmental & Hydrogeological Services • Materials Testing & Inspection

21355 Hatcher Avenue • Ferndale, MI 48220
Phone: (248) 399-2066 • Fax: (248) 399-2157
www.mcdowasc.com

October 26, 2022

Grand River Dorr LLC
31550 Northwestern Highway
Suite 220
Farmington Hills, Michigan 48334

Job No. 22-173

Attention: Mr. Don Cucco
Subject: Soils Investigation
Proposed Residential Development
Grand River Avenue and Dorr Road
Genoa Township, Michigan

Dear Mr. Cucco:

In accordance with your request, we have made a Soils Investigation at the subject project. We had previously made a Soils Investigation at this site in 2004, and due to the changes of the site plan and building locations you requested further investigation. The results of the previous investigation can be found in a report dated September 28, 2004 (M&A Job No. 04-407).

Field Work and Laboratory Testing

Nine Soil Test Borings, designated as A through G, I and J, were performed at the subject property at the approximate locations shown on the Soil Boring Location Plan which accompanies this report. The boring locations were selected by you and field located by others. The borings were advanced to depths ranging from about fifteen feet (15') to twenty feet (20') below the existing ground surface at the boring locations.

Soil descriptions, groundwater observations and the results of field and laboratory tests are to be found on the accompanying Logs of Soil Test Borings and summary sheet of Sieve Analysis results.

The borings encountered about six inches (6") to one foot six inches (1'6") of surficial topsoil/fill and possible fill, which consisted of topsoil, sand, silt and vegetation. Borings B through D, F, I and J were underlain by natural soil and stiff to extremely stiff brown silty clay to depths ranging from nine feet (9') to fourteen feet (14'), underlain by compact to extremely compact fine to medium sand to the termination of the deepest boring at twenty feet six inches (20'6"). Boring D has an interbedded medium compact sand pocket. At Borings A and E, the topsoil was underlain by a very compact sand layer to depths ranging from one foot one inch (1'1") to three feet six inches (3'6") below the ground surface, underlain by soft to extremely stiff silty sandy clay, underlain by compact to very compact fine to medium sand to the termination depth of the borings at fifteen feet six inches (15'6").

Soil descriptions and depths shown on the boring logs are approximate indications of change from one soil type to another and are not intended to represent an area of exact geologic change or stratification.

Groundwater was encountered in the borings at initial depths ranging from four feet four inches (4'4") to nineteen feet six inches (19'6") below the existing ground surface. No water was found in Borings E and I. The groundwater levels were measured upon completion of drilling in Boring A at a depth of fifteen feet (15') below the existing ground surface. The rest of the borings were dry. It should be noted that short-term groundwater observations may not provide a reliable indication of the depth of the water table. In clay or clayey soils, this is due to the slow rate of infiltration of water into the borehole as well as the potential for water to become trapped in overlying layers of granular soils during periods of heavy rainfall. Water levels in granular soils fluctuate with seasonal and climatic changes as well as the amount of rainfall in the area immediately prior to the measurements. It should be expected that groundwater fluctuations could occur on a seasonal basis and that seams of water-bearing sands or silts could be found within the various clay strata at the site.

Standard Penetration Tests (SPTs) made during the sampling operation indicate that the soils have poor to very good strengths and densities. At the tests in the native soils, penetration indices ranged from 4 to 36 blows per foot. All SPTs were performed with a rope and cathead safety hammer.

Project Description

It is understood that you are proposing to construct a residential development with one- to two-story, slab-on-grade multi-family structures at the subject property. It is anticipated that the structures will transmit relatively light loads to the supporting soils.

Foundation Recommendations

Based on the project information provided and the results of field and laboratory tests, the indications are that the structure could be supported by conventional spread or strip footings. All exterior footings should be constructed at, or below, a minimum frost penetration depth of three feet six inches (3'6") below finished grade. All interior and exterior load-bearing footings should extend through non-engineered fill soils (if any), soils containing significant amounts of organic substances or excessively weak soils. All strip footings should be continuously reinforced in order to minimize any noticeable effects of differential settlement.

Footings constructed at the following boring locations could be proportioned for the design soil pressures shown below, provided this results in the footings bearing on native, non-organic soils:

<u>Boring</u>	<u>Depth</u>		<u>Soil Pressure (psf)</u>
A	1'6"	to 3'6"	4,000
	3'6"	to 8'0"	2,000
B	1'6"	to 5'0"	4,000
	5'0"	to 8'0"	3,500
C	1'6"	to 3'6"	4,000
	3'6"	to 8'0"	1,500

<u>Boring</u>	<u>Depth</u>		<u>Soil Pressure (psf)</u>
D	1'6"	to 3'0"	4,000
	3'0"	to 8'0"	2,000*
E	1'6"	to 3'0"	4,000
	3'0"	to 8'0"	1,500
F	1'6"	to 4'0"	3,500
	4'0"	to 8'0"	2,500
G	1'6"	to 6'0"	4,000
	6'0"	to 8'0"	3,000
I	1'6"	to 3'6"	4,000
	3'6"	to 8'0"	3,000
J	1'6"	to 8'0"	4,000

*Where sand type soils are overlying clay soils, it is suggested that footing inverts be at least one foot (1') above the top of clay. If this is not possible, it is suggested that the footings extend down to the underlying clay.

Based on the above chart, it appears that lower strength soils may be encountered in Borings C, D and E between the depth of three feet six inches (3'6") and eight feet (8'), which may necessitate slightly larger than normal footing sizes. Higher design soil pressures are available at various depths in the borings and could be detailed, if desired.

Groundwater Considerations

Groundwater was encountered in the borings at initial depths ranging from four feet four inches (4'4") to nineteen feet six inches (19'6") below the existing ground surface. No water was found in Borings E and I. The groundwater levels were measured upon completion of drilling in Boring A at a depth of fifteen feet (15') below the existing ground surface. The rest of the borings were dry. Seepage from wet sand seams (if encountered) should be manageable with construction pumping and sumps. However, this is not known for certain. If large volumes of water or saturated granular soils are encountered, special dewatering techniques may be required. Care must be taken to minimize the removal of soil fines during any pumping operations. If standing water remains on the clay-type footing invert soils for an extended period of time, it may result in a couple inches of "slop" material at the footing invert. This material should be removed prior to the placement of concrete.

Floor Slabs

With the exception of some surficial topsoil, the soil subgrade appears reasonably suitable for floor slab support. Any surficial topsoil or other obviously objectionable material should be removed and the subgrade thoroughly proof-compacted. If, during the proof-compaction operation, areas are found where the soils yield excessively, the yielding materials should be scarified, dried and recompacted or removed and replaced with engineered fill. Where fill or backfill is required to raise

the subgrade for concrete floors or backfill utility trenches, it is suggested that clean, well-graded granular soils be used. If clay material is utilized, it should be placed within 3% of its optimum moisture content. The fill should be deposited in horizontal lifts not to exceed nine inches (9") in thickness with each lift being compacted uniformly to a minimum density of 95% of its maximum value as determined by the Modified Proctor Test (ASTM D-1557).

Fill soils were encountered in borings up to a depth of one foot six inches (1'6"). If the possibility of more than normal differential settlement can be tolerated, slab-on-grade floors or floor-supporting backfill could be placed at, or near, the present grade in the vicinity of these borings. Any topsoil or other obviously objectionable material should be removed and the subgrade thoroughly proof-compacted. If, during the proof-compaction operation, areas are found where the soils yield excessively, the yielding materials should be scarified, dried and recompacted or removed and replaced with engineered fill.

If the possibility of more than normal differential movement cannot be tolerated, then all existing fill soils should be removed and replaced with engineered fill meeting the requirements outlined above, or the floor slab should be structurally supported.

If any existing structures are found, they should be entirely removed from the proposed building area. Buried utilities should be removed or grouted in place. Resulting excavations should be backfilled with engineered fill meeting the requirements outlined above.

To minimize capillary action under floor slabs, we suggest placing at least four inches (4") of clean material on the subgrade followed by a suitable plastic vapor barrier between the clean material and the concrete slab. The clean material could consist of pea stone, MDOT Class I sand, 2NS sand or 6AA crushed stone.

Closing

Experience indicates that actual subsurface conditions at the site could vary from those found at the nine test borings made at specific locations. It is, therefore, essential that McDowell & Associates be notified of any variation of soil conditions to determine their effects on the recommendations presented in this report. The evaluations and recommendations presented in this report have been formulated on the basis of reported or assumed data relating to the proposed project. Any significant change in the final design plans should be brought to our attention for review and evaluation with respect to the prevailing subsoil conditions.

It is recommended that the services of McDowell & Associates be engaged to observe the soils in the footing excavations prior to concreting in order to test the soils for the required bearing capacities. Testing should also be performed to check that suitable materials are being used for controlled fills and that they are properly placed and compacted.


If we can be of any further service, please feel free to call.

Very truly yours,

McDOWELL & ASSOCIATES



Tony (Antoine) Merheb, M.S., P.E.
Senior Geotechnical Engineer

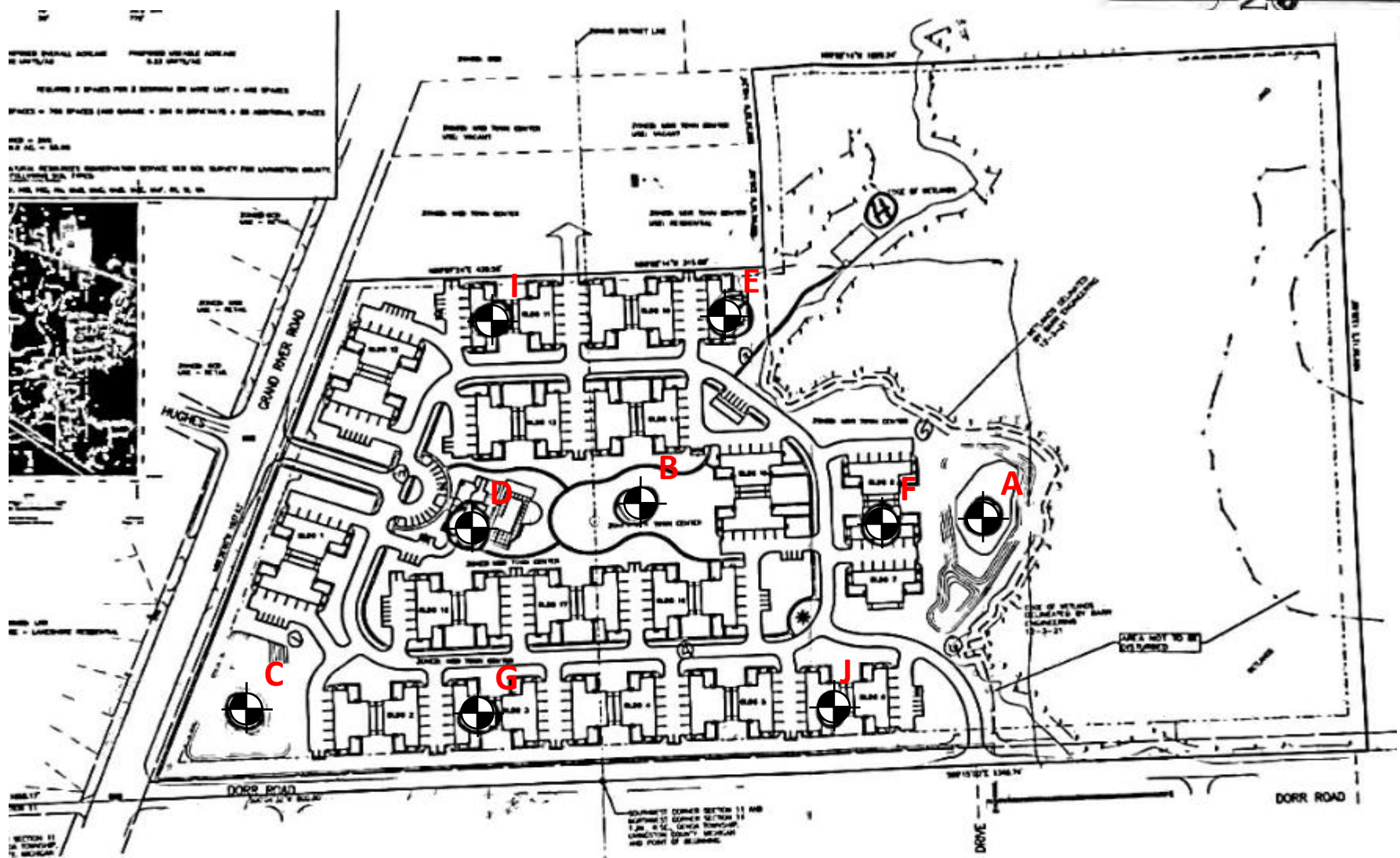


Robert McDowell, M.S., P.E.
CEO McDowell & Associates

TM/

SIEVE ANALYSIS SUMMARY

<u>Boring</u>	<u>Sample</u>	<u>% Passing #4 Sieve</u>	<u>% Passing #10 Sieve</u>	<u>% Passing #40 Sieve</u>	<u>% Passing #100 Sieve</u>	<u>% Passing #200 Sieve</u>
C	D	100.0	99.7	98.1	85.2	60.7
D	C	79.5	69.3	51.8	23.0	15.8
E	D	98.0	95.4	83.2	43.2	27.8
I	D	89.0	77.4	52.2	24.6	17.9




SPACES 2 SPACES PER 2 BURNING OR MORE LIGHT - 400 SPACES
 SPACES = 700 SPACES (400 SPACES) + 300 IN DRIVEWAYS + 300 ADDITIONAL SPACES



Note: Base drawing prepared by others.

LEGEND

 Soil Boring Locations, A through G, I and J:
 Drilled by McDowell & Associates



McDowell & Associates
 21355 Hatcher Avenue
 Ferndale, Michigan 48220
 Phone: (248) 399-2066
 Fax: (248) 399-2157

**Soil Boring & Test Pit
 Location Plan**

Job No. 22-173

EXHIBIT E

INFILTRATION TESTING REPORT



September 22, 2022
PEA Project No: 2021-0578

via email: dcuccio@mshapirorealestate.com

Mr. Don Cucco
M. Shapiro Real Estate Group
31550 Northwestern Highway
Farmington Hills, Michigan 48334

**RE: Infiltration Testing
The Legacy Park Apartment Homes
SE Corner of Grand River Ave. & Dorr Road
Genoa Township, Livingston County, MI**

PEA Group is pleased to submit this summary of our field infiltration testing at the above referenced project site. Eight test pits designated A-1 through D-2 were excavated during the site visit on September 8, 2022. Test pits were excavated to depths approved by Livingston County and ranged from 4 to 14.5 below the ground surface (bgs.). Guidelines require 3 feet of clearance between the test depth and the groundwater surface or clay layer. Upon inspection of the excavated test pits, and completion of infiltration testing, the test pits were backfilled with the excavated soil.

It is our understanding that M. Shapiro Real Estate Group proposes to construct 18 apartment homes, a clubhouse and pool, and detention basins on the property located at the southeast corner of Grand River Avenue and Dorr Road. Test locations A-1, A-2, D-1, and D-2 were performed in proposed detention basins, and locations C-1, B-2, C-1, and C-2 were performed in proposed greenspace areas in the central and southern portions of the site. Please refer to the test location diagram attached to this report for test locations and existing site features.

At the test locations we generally encountered 4 to 10 inches of silty topsoil overlying clays with varying amounts of silt, sand, and gravel. Granular sand soils were encountered at test location A-1 from 11.5 feet to termination depth of 14.5 feet bgs; at location B-1 beneath the topsoil to a termination depth of 7 feet bgs; and at location B-2 beneath the topsoil to a depth of 3 feet bgs. Infiltration testing was performed at locations A-1 and B-1 within the sand at depths of 11.5 feet and 3.5 feet, respectively. At location B-2 infiltration testing was not performed due to clay encountered at 3 feet bgs. to termination depth of 6 feet bgs.

Infiltration testing was performed using a double ring infiltrometer and the procedure outlined in the Livingston County Drain Commissioner Procedures and Design Criteria for Stormwater Management Systems at test locations A-1 and B-1 at the depths outlined above. At the test locations we embedded the double ring infiltrometer apparatus into the native granular soil. We made sure the apparatus was embedded with a good seal. We then filled both rings of the apparatus with clean water and presoaked each location in accordance with Livingston County Drain Commissioner Guidelines. After the presoak, the apparatus was filled water again and the water level was measured with a tape to the nearest 1/16" in 2 to 4 minute intervals for the infiltration test. We performed three trials at each location. The results of each trial were tabulated on data sheets. The infiltration rate over the last trial was used to calculate the

unfactored infiltration rate. We applied appropriate safety factors to the unfactored results to obtain our recommended infiltration rate at each location. For the purposes of site suitability, Livingston County Drain Commission allows areas with tested soil infiltration rates as low as 0.1 inches per hour to be used for infiltration BMPs. However, in the design of these BMPs and the sizing of the BMP, the designer should incorporate a safety factor. The Livingston Drain Commission Procedures and Design Criteria for Stormwater Management Systems indicates a safety factor of two (2) must be used in the design of stormwater infiltration systems.

At location A-1, after applying the appropriate safety factor, we recommend an infiltration rate of 1 in./hr. within the sand at a depth of 11.5 feet bgs. At location B-1, after applying the appropriate safety factor, we recommend an infiltration rate of 2 in./hr. within the sand at a depth of 3.5 feet bgs.

If you have any questions regarding this report, or if we may be of further assistance to you in any respect, please feel free to contact us. We appreciate the opportunity to have been of service to you.

Sincerely,

PEA Group



Kevin Bennett
Geotechnical Staff Engineer



D. Jack Sattelmeier, PE
Director of Geotechnical Engineering

Attachments: Log of Test Pit
 Location Plan

PEA GROUP

LOG OF TEST PIT

PEA GROUP JOB NO: 2021-0578

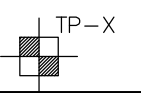
PEA GROUP PROJECT NAME: Lautrec Genoa Township

TEST PIT #	ELEV. (Feet)	DEPTH (Feet)	DESCRIPTION	REMARKS
A1	979.5	0" – 5" 5" – 11' 11.5' – 14.5'	TOPSOIL: Dark Brown Silty Sand Brown SANDY CLAY, Some Silt, Trace Gravel Brown SILTY SAND, Trace to Little Clay	Infiltration test performed At 11.5'
A2	977.5	0" – 4" 4" – 10'	TOPSOIL: Dark Brown Silty Sand Brown SANDY CLAY, Some Silt, Trace to Little Gravel	No infiltration test Performed due to clay
B1	989.5	0" – 10" 10" – 7'	TOPSOIL: Dark Brown Silty Sand Brown SILTY SAND	Infiltration test performed At 3.5'
B2	989.5	0" – 4" 4" – 3' 3' – 6'	TOPSOIL: Dark Brown Silty Sand Brown SILTY SAND Brown SANDY CLAY, Some Silt	No infiltration test Performed due to clay
C1	987.5	0" – 5" 5" – 5' 5' – 7'	TOPSOIL: Dark Brown Silty Sand Brown SANDY CLAY, Little Silt Gray SILTY CLAY, Little Sand	No infiltration test Performed due to clay
C2	984.0	0" – 5" 5" – 5'	TOPSOIL: Dark Brown Silty Sand Brown SANDY CLAY, Some Silt, Trace Gravel	No infiltration test Performed due to clay
D1	978.5	0" – 4" 4" – 3.5' 3.5' – 4'	TOPSOIL: Dark Brown Silty Sand FILL: Brown Sandy Clay FILL: Crushed Limestone	No infiltration test Performed. Stopped Digging at 4' due to possible unmarked underground utility trench`
D2	977.5	0" – 6" 6" – 6'	TOPSOIL: Dark Brown Silty Sand Brown SANDY CLAY, Some Silt, Trace Gravel	No infiltration test Performed. Due to clay
NOTES:				
BY:KB		DATE: 9/20/2022		FIGURE:1

Infiltration Test Pit Number	Existing Ground Elevation (EG)	Proposed Ground Elevation (PG)	Infiltration Test Elevation (ITE)	Cut From EG to ITE	Minimum Test Pit Excavation Elevation (See Note)
A1	979.5	971.0	968.0	11.5	966.0
A2	977.5	971.0	968.0	9.5	966.0
B1	989.5	989.0	986.0	3.5	984.0
B2	989.5	987.5	984.5	5.0	982.5
C1	987.5	985.0	982.0	5.5	980.0
C2	984.0	985.0	982.0	2.0	980.0
D1	978.5	975.0	972.0	6.5	970.0
D2	977.5	975.0	972.0	5.5	970.0

Adjacent Relevant Elevations
Edge of Wetland: 974 +/-

SOIL INVESTIGATION LEGEND:

PROPOSED TEST PIT LOCATION 

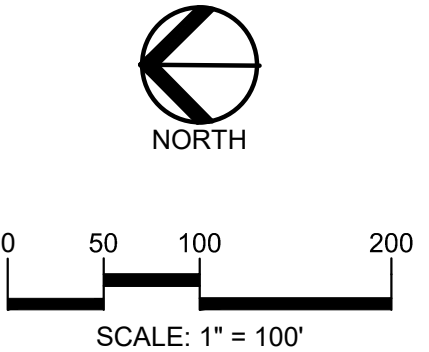
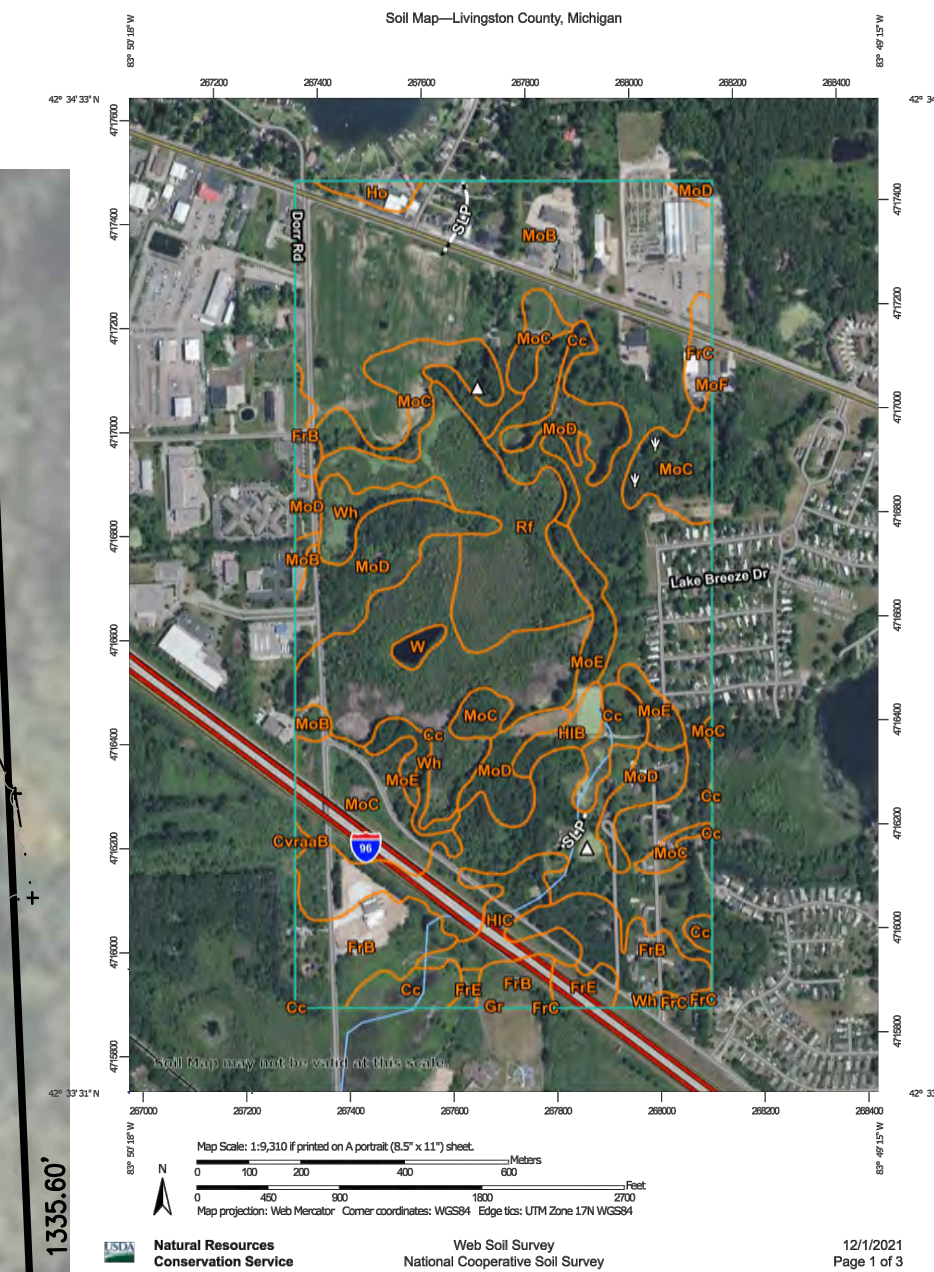
SOIL INVESTIGATION

PER THE US DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE SOILS MAP FOR LIVINGSTON COUNTY, SITE SOILS CONSIST OF:

MoC - WAWASEE LOAM, 2-6% SLOPES
MoS - WAWASEE LOAM, 6-12% SLOPES

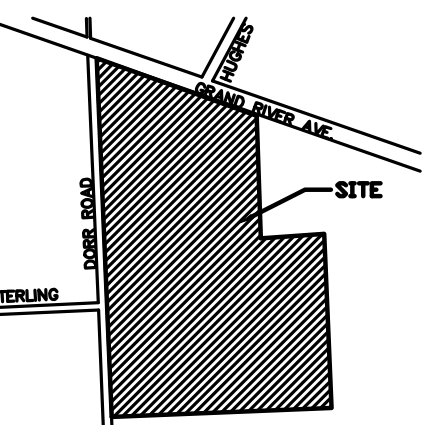
LEGEND:

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN LIGHTPOLE
- FENCE
- GUARD RAIL



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

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



CLIENT
GRAND RIVER DORR LLC.
31555 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS
REVISED PER TWP COMMENTS 6.23.22

ORIGINAL ISSUE DATE:
MAY 24, 2022

DRAWING TITLE
INFILTRATION TESTING

PEA JOB NO. 2021-0578
P.M. JEC
DN. JMR
DES. JMR
DRAWING NUMBER:

NOT FOR CONSTRUCTION

IT-1

EXHIBIT F

WETLAND REPORT

January 25, 2022

Mr. Mark Kassab
M. Shapiro Real Estate Group
31550 Northwestern Highway, Suite 220
Farmington Hills, MI 48334

Re: Wetland Delineation Report – Grand River and Dorr, Genoa Township

Dear Mr. Kassab:

At your request, Barr Engineering Co. (Barr) conducted a wetland delineation at the above-referenced site. The purpose of this wetland delineation report is to summarize the results of the wetland delineation conducted on December 3, 2021.

1.0 Area of Investigation Description

The Area of Investigation (AOI) includes parcel numbers 4711-11-300-014 and 4711-17-100-002, located in Genoa Township of Livingston County. Surrounding land uses and cover types include residential, forest, and agriculture. The dominant land uses and cover types within the AOI consist of crops, forested areas, and scrub-shrub and open water wetlands.

1.1 Desktop Review

Barr conducted a desktop review of the site to evaluate aerial imagery, topography, soil types, and mapped wetlands within the AOI prior to the wetland delineation. As part of the desktop review, Barr staff reviewed resources such as the Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS; Figure 1), National Wetland Inventory (NWI; Figure 2), and aerial photography.

1.2 Methodology

The wetland delineation was conducted in a manner consistent with the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0, USACE 2012)*. The wetland delineation procedures outlined in these manuals require the evaluation of on-site vegetation, soils, and hydrologic characteristics. Site observations are described in the sections below.

The wetland boundaries were flagged in the field with alpha-numerical labeled pink flagging tape. Flagging was located using traditional survey methods by PEA.

1.3 Results

The AOI includes emergent (PEM) and scrub-shrub (PSS) wetland habitats. Figure 3 depicts the approximate location of the wetland areas encountered on site and the attached U.S. Army Corps of Engineers (USACE) wetland data forms provide additional detail relative to the wetlands and the boundaries we have flagged.

Vegetation, Soil, and Hydrology

Wetland A and Wetland B

Both Wetland A and Wetland B consist of PEM/PSS habitat types and have similar plant species compositions. Wetland A is located along the southern end of the AOI and is identified by flags A1-A92. Wetland B is located on the eastern side of the property and is identified by flags B1-B19. The vegetation identified within these wetlands includes species such as silver maple (*A. saccharinum*), eastern cottonwood (*Populus deltoides*), Button Bush (*Cephalanthus occidentalis*), silky dogwood (*Cornus racemose*), multiflora rose (*Rosa multiflora*), sensitive fern (*Onoclea sensibilis*), and reed canary grass (*Phalaris arundinacea*). Both primary and secondary wetland hydrology indicators were identified within the wetlands. The soils are described in the Web Soil Survey as Rifle muck, 0 percent slopes (very poorly drained) and Carlisle muck, 0 to 2 percent slopes (very poorly drained). The soils evaluated within the wetland were consistent with these descriptions, as they appeared to be very poorly drained, displaying hydric characteristics.

In contrast, the adjacent upland areas included species such as black cherry (*Prunus serotina*), bur oak (*Quercus macrocarpa*), red oak (*Quercus rubra*), common prickly ash (*Zanthoxylum Americanum*), multiflora rose (*Rosa multiflora*), and riverbank grape (*Vitis Riparia*) with no observed evidence of wetland hydrology or soils.

1.4 Conclusions

Based on observations of topography, vegetation, soil, and indicators of hydrology, Barr has determined that wetland habitat is present within the AOI. These wetland areas were identified as PEM, and PSS habitat types. According to Part 303, Wetlands Protection, of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, wetlands regulated by the State of Michigan include wetlands that are:

1. Located within 500 feet of, or having a direct surface water connection to, an inland lake, pond, river, or stream; or
2. Greater than 5 acres in size; or
3. Located within 1,000 feet of, or having a direct surface water connection to, the Great Lakes or Lake St. Clair; or
4. A water of the United States as that term is used in section 502(7) of the Federal Water Pollution Control Act, 33 USC 1362; or
5. Known to have a documented presence of an endangered or threatened species under Part 365 of State of Michigan 1994 PA 451, as amended or the Federal Endangered Species Act of 1973, Public Law 93-205; or
6. Rare or imperiled.

Wetland A appears to be regulated under Part 303, as it is greater than 5 acres in size. Wetland B appears to be regulated under Part 303 as it appears to be located within 500 feet of a stream which occurs off-site, to the east. Therefore, a Part 303 permit would be required from the Michigan Department of Environment, Great Lakes, and Energy ("EGLE") in most instances to place fill, remove soil, drain surface water from, or make use of these wetlands.

Please be advised that EGLE has regulatory authority regarding the wetland boundary location(s) and jurisdictional status of wetlands in the State of Michigan. Barr's wetland determination was performed in general accordance with accepted procedures for conducting wetland determinations in Michigan. Barr provides no warranty, guarantee, or other agreement in respect to the period of time for which this wetland determination will remain valid. Barr's conclusions reflect our professional opinion based on the site conditions within the AOI observed during the site visits. Discrepancies may arise between current and future wetland determinations and delineations due to changes in vegetation and/or hydrology as the result of land use practices or other environmental factors, whether on-site or on adjacent or nearby properties. In addition, wetland delineations performed outside the growing season, from late-October until late-April, may differ from those performed at the same site during the growing season due to the presence of snow cover or frozen ground conditions. We recommend our wetland boundary determination and jurisdictional opinion be reviewed by EGLE prior to undertaking any activity within any identified wetlands.

Thank you for the opportunity to provide this wetland delineation. If you have any questions, please contact either Jeff King at 248.207.6996 (email jking@barr.com) or me at your convenience at 810.247.1229 (email ftompson@barr.com).

Sincerely,

BARR ENGINEERING CO.



Frances Thompson

Ecologist

References

U.S. Army Corps of Engineers (USACE). 1987. *Corps of Engineers Wetlands Delineation Manual*. Washington, DC.

USACE. 2012. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)*. Washington, DC.

Figures:

Figure 1 – WSS

Figure 2 – NWI

Figure 3 – Mapped Wetlands

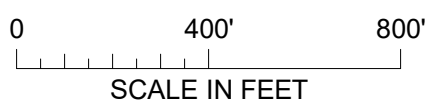
Attachments:

Attachments – USACE Wetland Determination Data Forms



Map Unit Legend

Map Unit Symbol	Map Unit Name
Cc	Carlisle muck, 0 to 2 percent slopes
FrB	Fox-Boyer complex, 2 to 6 percent slopes
MoB	Wawasee loam, 2 to 6 percent slopes
MoC	Wawasee loam, 6 to 12 percent slopes
MoD	Miami loam, 12 to 18 percent slopes
MoE	Miami loam, 18 to 25 percent slopes
Rf	Rifle muck
Wh	Washtenaw silt loam



Project Office:
BARR ENGINEERING CO.
 3005 BOARDWALK STREET
 SUITE 100
 ANN ARBOR, MI 48108
 Ph: 1-800-270-5017
 Fax: (732) 922-4401
 www.barr.com

Scale	1"=400'
Date	12/03/2021
Drawn	FMT
Checked	JK
Designed	FMT
Approved	JK

Grand River Road and Dorr Road
Genoa Township, Livingston County

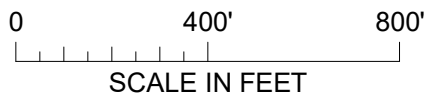
Web Soil Survey

BARR PROJECT No. 22471022.00	
CLIENT PROJECT No.	
SHEET No. 1	REV. No.



Part 303 Final Wetlands Inventory

- Wetlands as identified on NWI and MIRIS maps
- Soil areas which include wetland soils
- Wetlands as identified on NWI and MIRIS maps and soil areas which include wetland soils



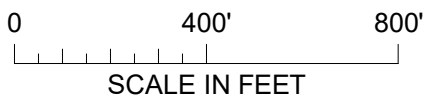
Project Office:
 BARR ENGINEERING CO.
 3005 BOARDWALK STREET
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 ANN ARBOR, MI 48108
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 Fax: (732) 922-4401
 www.barr.com

Scale	1"=400'
Date	12/03/2021
Drawn	FMT
Checked	JK
Designed	FMT
Approved	JK

**Grand River Road and Dorr Road
 Genoa Township, Livingston County**

National Wetland Inventory

BARR PROJECT No. 22471022.00	
CLIENT PROJECT No.	
SHEET No. 2	REV. No.



Project Office:
 BARR ENGINEERING CO.
 3005 BOARDWALK STREET
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 www.barr.com

Scale	1"=400'
Date	12/03/2021
Drawn	FMT
Checked	JK
Designed	FMT
Approved	JK

Grand River Road and Dorr Road
 Genoa Township, Livingston County

Wetland Boundary Map

BARR PROJECT No. 22471022.00	
CLIENT PROJECT No.	
SHEET No. 3	REV. No.

PUD FINAL SITE PLAN

THE LEGACY APARTMENT HOMES

6080 W. GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL

PROPERTY DESCRIPTION:

BEING A PART OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 11, AND A PART OF THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 14, TOWN 2 NORTH, RANGE 5 EAST, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS:

BEGINNING AT THE SOUTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 11 SAME BEING THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 14; THENCE, ALONG THE WEST LINE OF SAID NORTHWEST QUARTER OF SECTION 14, SAME BEING THE CENTERLINE OF DORR ROAD (66 FOOT RIGHT OF WAY), SOUTH 00 DEGREES 15 MINUTES 00 SECONDS EAST, A DISTANCE OF 1340.74 FEET TO THE SOUTHWEST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14; THENCE ALONG THE SOUTH LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, NORTH 89 DEGREES 50 MINUTES 12 SECONDS EAST, A DISTANCE OF 1335.60 FEET TO THE SOUTHEAST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14; THENCE ALONG THE EAST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, NORTH 00 DEGREES 02 MINUTES 14 SECONDS WEST, A DISTANCE OF 1029.24 FEET TO THE SOUTHEAST CORNER OF A PARCEL DESCRIBED IN WARRANTY DEED RECORDED IN LIBER 777, PAGE 269, LIVINGSTON COUNTY RECORDS; THENCE ALONG THE SOUTHERLY LINE OF SAID PARCEL, SOUTH 86 DEGREES 34 MINUTES 33 SECONDS WEST, A DISTANCE OF 140.24 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL; THENCE ALONG THE SOUTHERLY LINE OF SAID PARCEL DESCRIBED IN WARRANTY DEED RECORDED IN LIBER 2443, PAGE 454, LIVINGSTON COUNTY RECORDS, NORTH 89 DEGREES 56 MINUTES 58 SECONDS WEST, A DISTANCE OF 235.00 FEET TO A POINT BEING 375.00 FEET WEST OF THE EAST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14; THENCE ALONG A LINE BEING 375.00 FEET WEST OF AND PARALLEL TO THE EAST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, NORTH 00 DEGREES 02 MINUTES 14 SECONDS WEST, A DISTANCE OF 315.00 FEET TO A POINT ON THE NORTH LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14 SAME BEING THE SOUTH LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11; THENCE ALONG A LINE BEING 375.00 FEET WEST AND PARALLEL TO THE EAST LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11, NORTH 00 DEGREES 07 MINUTES 24 SECONDS EAST, A DISTANCE OF 420.56 FEET TO THE SOUTHERLY LINE OF GRAND RIVER AVENUE (100 FOOT RIGHT OF WAY); THENCE ALONG SAID SOUTHERLY LINE, NORTH 88 DEGREES 30 MINUTES 00 SECONDS WEST, A DISTANCE OF 1037.63 FEET TO A POINT ON THE WEST LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11, SAME BEING THE CENTERLINE OF SAID DORR ROAD; THENCE ALONG SAID WEST LINE OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11, SOUTH 00 DEGREES 04 MINUTES 32 SECONDS WEST A DISTANCE OF 800.00 FEET TO THE POINT OF BEGINNING. CONTAINING 2,262,563 +/- SQUARE FEET OR 51.941 +/- ACRES OF LAND.



LOCATION MAP
1"=50'

SHEET INDEX	
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	COVER
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C-1.2	TOPOGRAPHIC SURVEY NORTH
C-1.3	TOPOGRAPHIC SURVEY SOUTH
C-1.4	TREE LIST
C-2.1	OVERALL SITE PLAN
C-2.2	SITE PLAN NORTH
C-2.3	SITE PLAN SOUTH
C-3.1	GRADING PLAN NORTH
C-3.2	GRADING PLAN SOUTH
C-4.1	UTILITY PLAN NORTH
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C-5.1	STORM SEWER PROFILES
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C-5.5	STORM SEWER PROFILES
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C-6.3	NORTH POND DESIGN CALCULATIONS
C-6.4	SOUTH POND DESIGN CALCULATIONS
C-6.5	NORTH STORM SEWER DRAINAGE AREAS
C-6.6	SOUTH STROM SEWER DRAINAGE AREAS
C-6.7	STORM DESIGN CALCULATIONS
C-6.8	WATER QUALITY UNIT
C-7.1	SESC PLAN NORTH
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C-8.1	VEHICLE TRACKING
C-9.1	CONSTRUCTION NOTES
C-9.2	NOTES & DETAILS I
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MHOG - 1.0	MHOG STANDARD DETAILS
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LS-2	GENERAL PLANTING DETAIL PLAN
LS-3	GENERAL PLANTING DETAIL PLAN
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---	ARCHITECTURAL COVER SHEET
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2	FIRST FLOOR PLAN
3-A	SECOND FLOOR
4-A	ELEVATIONS
4-B	ELEVATIONS
	PHOTOMETRIC PLAN

DESIGN TEAM

OWNER/APPLICANT/DEVELOPER	CIVIL ENGINEER	ARCHITECT
GRAND RIVER DORR, LLC 315550 NORTHWESTERN HIGHWAY FARMINGTON HILLS, MI 48334 CONTACT: MARK KASSAB PHONE: 248.865.0066 EMAIL: MKASSAB@MSHAPIROREALESTATE.COM	PEA GROUP 7927 NEMCO WAY, STE. 115 BRIGHTON, MI 48116 CONTACT: JONATHAN E. CURRY, PE PHONE: 844.813.2949 EMAIL: JCURRY@PEAGROUP.COM	BURMANN ASSOCIATES INC. 119 W. ST. CLAIR ROMEEO, MICHIGAN 58065-4655 PHONE: 586.752.5010, MOBILE: 586.201.1602 EMAIL: GREATARCHITECTS@CHARTER.NET

SURVEYOR

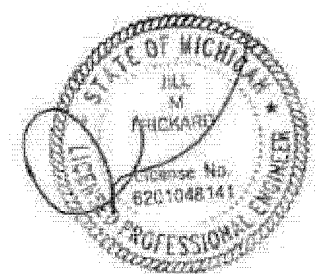
HUBBELL ROTH AND CLARK
555 HULET DRIVE
BLOOMFIELD HILLS, MICHIGAN 48303
CONTACT: MELISSA COATTE, P.E.
PHONE: 248-454-6300
EMAIL: mcoatta@hrcengr.com

LANDSCAPE ARCHITECT/PLANNER

FELINO A. PASCUAL AND ASSOCIATES
24333 ORCHARD LAKE ROAD SUITE G
CONTACT: FELINO A. PASCUAL, RLA, CLARB
PHONE: 248.557.5588



REVISIONS	
DESCRIPTION	DATE
PUD FINAL SITE PLAN SUBMITTAL	4/10/2023
REV PER TWP	5/00/2023



NOT FOR CONSTRUCTION

OVERALL PROPERTY DESCRIPTION:

BEING A PART OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 11, AND A PART OF THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 14, TOWN 2 NORTH, RANGE 5 EAST, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS:

BEGINNING AT THE SOUTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 11 SAME BEING THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 14; THENCE, ALONG THE WEST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, SAME BEING THE CENTERLINE OF DORR ROAD (66 FOOT RIGHT OF WAY), SOUTH 00 DEGREES 15 MINUTES 00 SECONDS EAST, A DISTANCE OF 1340.74 FEET TO THE SOUTHWEST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14; THENCE ALONG THE SOUTH LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, NORTH 89 DEGREES 50 MINUTES 12 SECONDS EAST, A DISTANCE OF 1335.60 FEET TO THE SOUTHEAST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14; THENCE ALONG THE EAST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, NORTH 00 DEGREES 02 MINUTES 14 SECONDS WEST, A DISTANCE OF 1029.24 FEET TO THE SOUTHEAST CORNER OF A PARCEL DESCRIBED IN WARRANTY DEED RECORDED IN LIBER 777, PAGE 269, LIVINGSTON COUNTY RECORDS; THENCE ALONG THE SOUTHERLY LINE OF SAID PARCEL, SOUTH 86 DEGREES 34 MINUTES 33 SECONDS WEST, A DISTANCE OF 140.24 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL; THENCE ALONG THE SOUTHERLY LINE OF SAID PARCEL DESCRIBED IN WARRANTY DEED RECORDED IN LIBER 2443, PAGE 454, LIVINGSTON COUNTY RECORDS, NORTH 89 DEGREES 58 MINUTES 58 SECONDS WEST, A DISTANCE OF 235.00 FEET TO A POINT BEING 375.00 FEET WEST OF THE EAST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14; THENCE ALONG A LINE BEING 375.00 FEET WEST OF AND PARALLEL TO THE EAST LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14, NORTH 00 DEGREES 02 MINUTES 14 SECONDS WEST, A DISTANCE OF 315.00 FEET TO A POINT ON THE NORTH LINE OF SAID NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 14 SAME BEING THE SOUTH LINE OF SAID SOUTHWEST QUARTER OF SECTION 11; THENCE ALONG A LINE BEING 375.00 FEET WEST AND PARALLEL TO THE EAST LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11, NORTH 00 DEGREES 07 MINUTES 24 SECONDS EAST, A DISTANCE OF 420.58 FEET TO THE SOUTHERLY LINE OF GRAND RIVER AVENUE (100 FOOT RIGHT OF WAY); THENCE ALONG SAID SOUTHERLY LINE, NORTH 68 DEGREES 30 MINUTES 00 SECONDS WEST, A DISTANCE OF 1037.63 FEET TO A POINT ON THE WEST LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11 SAME BEING THE CENTERLINE OF SAID DORR ROAD; THENCE ALONG SAID WEST LINE OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11, SOUTH 00 DEGREES 04 MINUTES 32 SECONDS WEST A DISTANCE OF 800.00 FEET TO THE POINT OF BEGINNING. CONTAINING 2,262,563 +- SQUARE FEET OR 51.941 +- ACRES OF LAND.

47-11-14-100-002 PROPERTY DESCRIPTION (FROM TWP RECORDS):

SEC. 14 T2N R5E NW 1/4 EXC BEG NE CORN, TH. S 306.5 FT, TH S 86D W 136 FT, TH S 89D W 235 FT, TN N TO SEC LN, TH S 373 TO POB.

47-11-11-200-014 PROPERTY DESCRIPTION (FROM TWP RECORDS):

SEC. 11 T2N R5E ALL OF SW 1/4 OF SW 1/4 LYING S OF GRAND RIVER ROAD EXC E 375 FT THEREOF.

TOPOGRAPHIC AND BOUNDARY SURVEY DISCLAIMER:

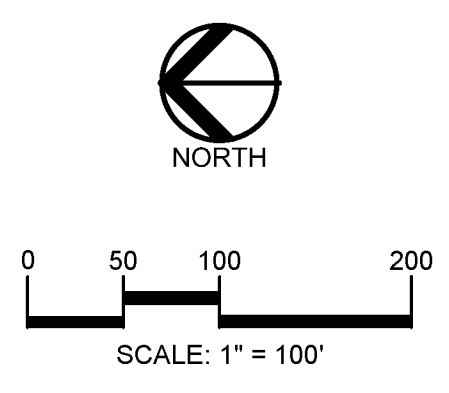
TOPOGRAPHIC AND BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, EXISTING ELEVATIONS, EXISTING PHYSICAL FEATURES AND STRUCTURES WAS PROVIDED BY HRC, INC. THE NORTH WETLAND LINES WERE IDENTIFIED BY BARR ENGINEERING AND FIELD LOCATED BY PEA GROUP.
INDIVIDUAL TREES IDENTIFIED AND FIELD LOCATED BY PEA GROUP.
PEA GROUP WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS/OMISSIONS RESULTING FROM SURVEY INACCURACIES.

- BM NO. 300
ARROW ON HYDRANT EAST SIDE OF DORR ROAD
OPPOSITE ENTRANCE TO 2200 DORR ROAD.
ELEV = 980.69
- BM NO. 301
ARROW ON HYDRANT EAST SIDE DORR ROAD 100'+/-
NORTH OF STERLING DRIVE.
ELEV = 990.00
- BM NO. 302
MAG NAIL NORTHWEST FACE UTILITY POLE 350'+/-
EAST OF DORR ROAD 250'+/- NORTH OF STERLING DRIVE.
ELEV = 987.92
- BM NO. 303
ARROW ON HYDRANT EAST SIDE DORR ROAD 100'+/-
SOUTH OF CENTERLINE OF GRAND RIVER ROAD.
ELEV = 998.44
- BM NO. 304
ARROW ON HYDRANT EAST SIDE DORR ROAD, 385'+/-
SOUTH OF CENTERLINE OF GRAND RIVER ROAD.
ELEV = 986.61
- BM NO. 305
ARROW ON HYDRANT SOUTH SIDE GRAND RIVER 100'+/-
EAST OF CENTERLINE OF DORR ROAD.
ELEV = 978.96
- BM NO. 306
ARROW ON HYDRANT NORTH SIDE GRAND RIVER 75'+/-
EAST OF HUGHES ROAD
ELEV = 975.81
- BM NO. 307
ARROW ON HYDRANT NORTH SIDE OF GRAND RIVER
AT 6161 GRAND RIVER
ELEV = 978.92

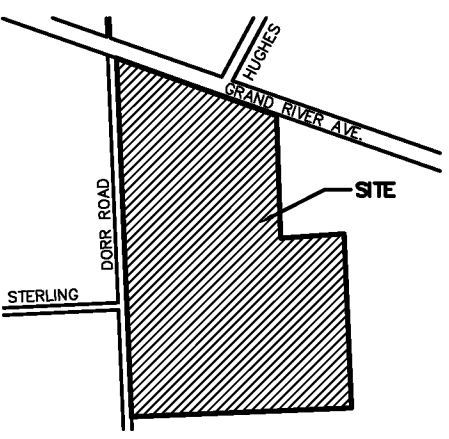
LEGEND:

- OH-ELEC-W-O EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV EX. U.G. CABLE TV & PEDESTAL
- UG-COMM EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
- EX. GAS LINE
- EX. GAS VALVE & GAS LINE MARKER
- EX. TRANSFORMER & IRRIGATION VALVE
- EX. WATER MAIN
- EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- EX. WATER VALVE BOX & SHUTOFF
- EX. SANITARY SEWER
- EX. SANITARY CLEANOUT & MANHOLE
- EX. COMBINED SEWER MANHOLE
- EX. STORM SEWER
- EX. CLEANOUT & MANHOLE
- EX. SQUARE, ROUND & BEEHIVE CATCH BASIN
- EX. YARD DRAIN & ROOF DRAIN
- EX. UNIDENTIFIED STRUCTURE
- EX. MAILBOX, SIGN & LIGHTPOLE
- EX. FENCE
- EX. GUARD RAIL
- EX. DEC. TREE, CONIFEROUS TREE & SHRUB
- EX. TREE TAG, & TREE LINE
- EX. SPOT ELEVATION
- EX. CONTOUR
- EX. WETLAND

- IRON FOUND / SET
- NAIL FOUND / NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND / SET
- SECTION CORNER FOUND
- RECORDED / MEASURED / CALCULATED



CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY AS APPLIED TO THE COMPLETION OF ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



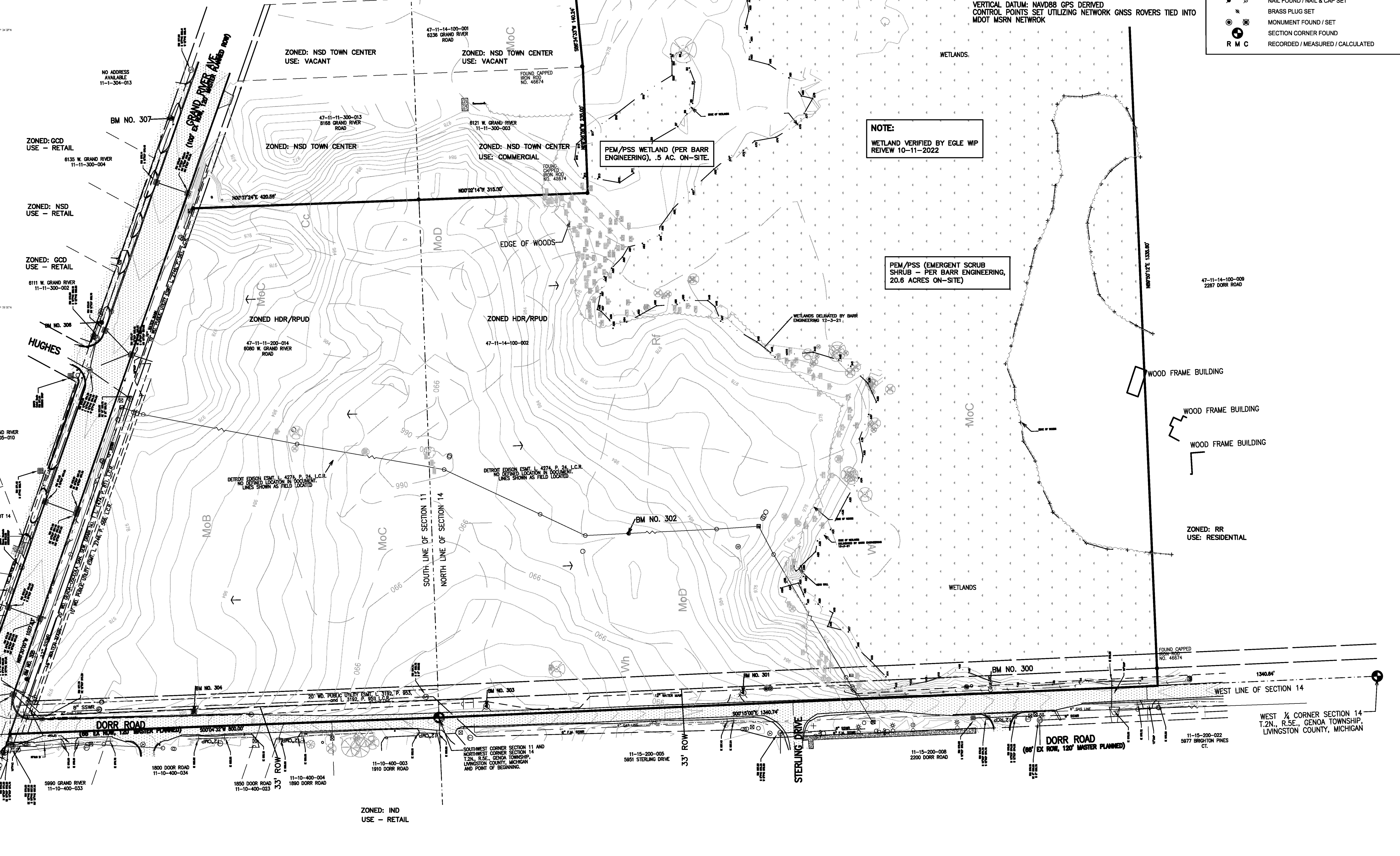
CLIENT
GRAND RIVER DORR LLC.
31550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	REV PER TWP	DATE

ORIGINAL ISSUE DATE:
APRIL 10, 2023
DRAWING TITLE
TOPOGRAPHIC SURVEY OVERALL

PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR
DRAWING NUMBER:	



NOTE:
WETLAND VERIFIED BY EGLE WIP
REVIEW 10-11-2022

PEM/PSS (EMERGENT SCRUB SHRUB - PER BARR ENGINEERING, 20.6 ACRES ON-SITE)

PEM/PSS WETLAND (PER BARR ENGINEERING), .5 AC. ON-SITE.

S:\PROJECTS\2021-0578-0578 LAUTREC GENOA TOWNSHIP\WETLAND PLANS(C-1.0) 0P_TPO-21-0578.dwg

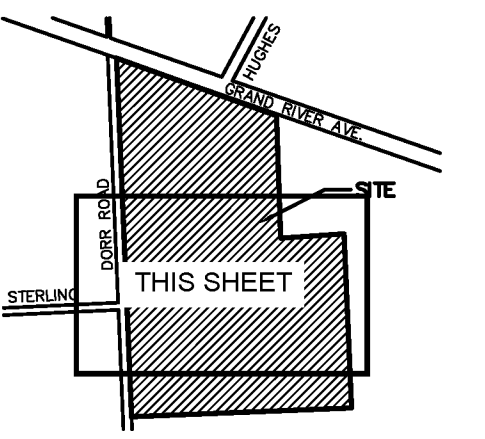
NOT FOR CONSTRUCTION **C-1.1**



0 25 50 100
SCALE: 1" = 50'



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



CLIENT
GRAND RIVER DORR LLC.
315550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

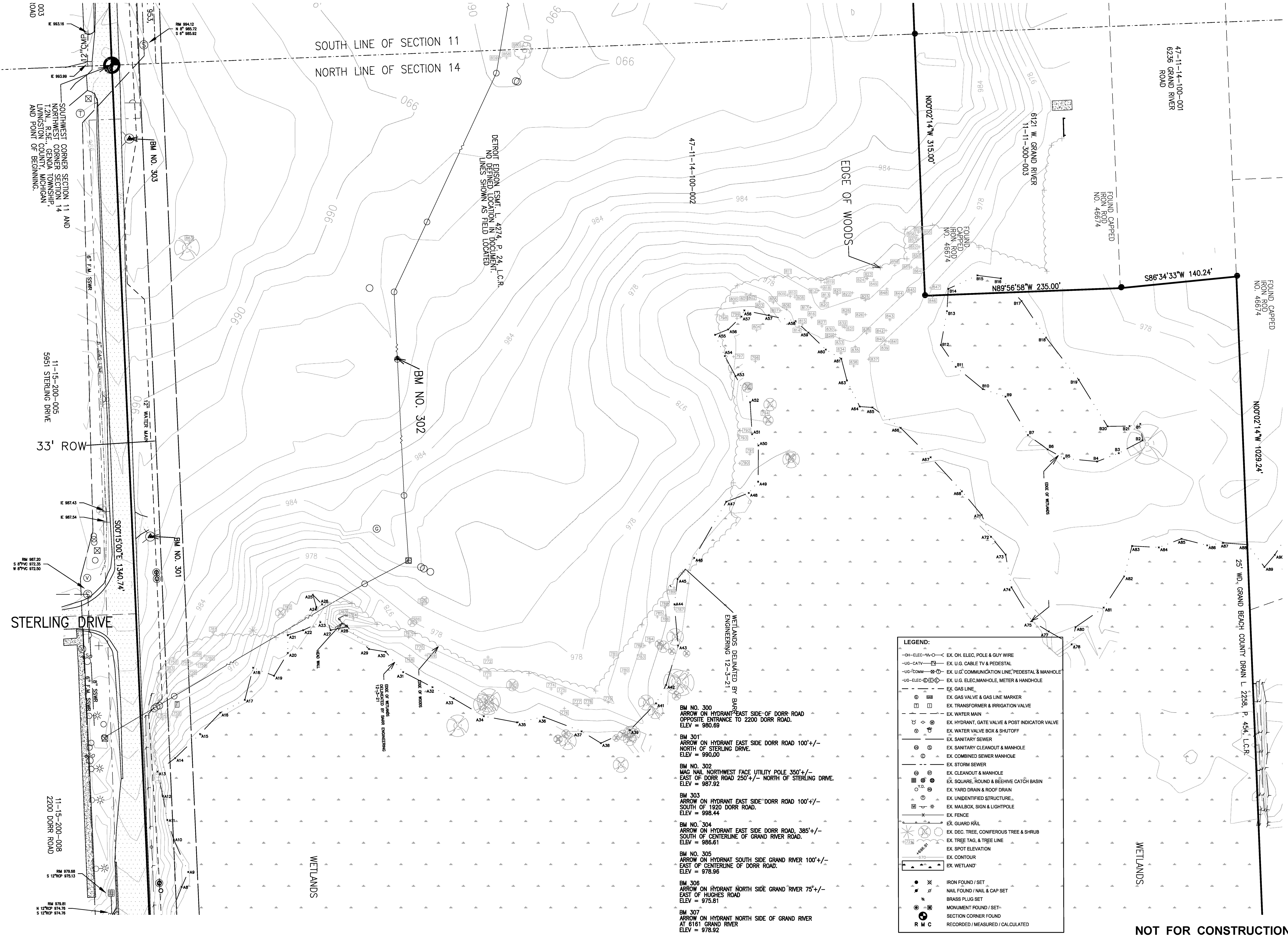
PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	
REV PER TWP	5-30-23

ORIGINAL ISSUE DATE:
APRIL 10, 2023
DRAWING TITLE
TOPOGRAPHIC SURVEY SOUTH

PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR
DRAWING NUMBER:	

NOT FOR CONSTRUCTION **C-1.3**



LEGEND:

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

BM NO. 300
ARROW ON HYDRANT EAST SIDE OF DORR ROAD
OPPOSITE ENTRANCE TO 2200 DORR ROAD.
ELEV = 980.69

BM NO. 301
ARROW ON HYDRANT EAST SIDE DORR ROAD 100'+/-
NORTH OF STERLING DRIVE.
ELEV = 990.00

BM NO. 302
MAG NAIL NORTHWEST FACE UTILITY POLE 350'+/-
EAST OF DORR ROAD 250'+/- NORTH OF STERLING DRIVE.
ELEV = 987.92

BM NO. 303
ARROW ON HYDRANT EAST SIDE DORR ROAD 100'+/-
SOUTH OF 1920 DORR ROAD.
ELEV = 988.44

BM NO. 304
ARROW ON HYDRANT EAST SIDE DORR ROAD, 385'+/-
SOUTH OF CENTERLINE OF GRAND RIVER ROAD.
ELEV = 986.61

BM NO. 305
ARROW ON HYDRANT SOUTH SIDE GRAND RIVER 100'+/-
EAST OF CENTERLINE OF DORR ROAD.
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BM NO. 306
ARROW ON HYDRANT NORTH SIDE GRAND RIVER 75'+/-
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BM NO. 307
ARROW ON HYDRANT NORTH SIDE OF GRAND RIVER
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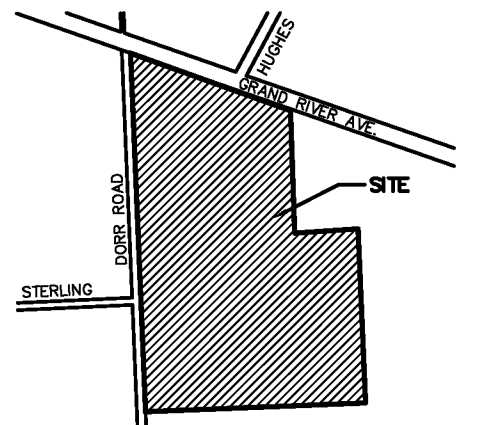
S:\PROJECTS\2021-0578-0578 LAURENCE GRAND TOWNSHIP\COMPLETE PLANS\C-1.3 TOPO-2-0578.dwg

TAG NO.	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS
752	RO	10	Red Oak	Quercus rubra	Good	
753	RO	11	Red Oak	Quercus rubra	Good	
754	PN	18	Pin Cherry	Prunus pennsylvanica	Good	
755	RO	13	Red Oak	Quercus rubra	Good	
756	RO	10	Red Oak	Quercus rubra	Good	
757	RO	10	Red Oak	Quercus rubra	Good	x1
758	RO	9	Red Oak	Quercus rubra	Good	
759	RO	11	Red Oak	Quercus rubra	Good	
760	RO	8	Red Oak	Quercus rubra	Good	x1
761	RO	10	Red Oak	Quercus rubra	Good	
762	BX	21	Box elder	Acer negundo	Fair	x1
763	AP	10	Domestic Apple	Malus sylvestris	Fair	x1
764	BC	10	Wild Black Cherry	Prunus serotina	Poor	
765	BG	10	Bigtooth Aspen	Populus grandidentata	Good	
766	E	10	American Elm	Ulmus americana	Good	
767	AP	9	Domestic Apple	Malus sylvestris	Fair	
768	BC	10	Wild Black Cherry	Prunus serotina	Fair	
769	MW	12	White Mulberry	Morus alba	Fair	
770	BC	13	Wild Black Cherry	Prunus serotina	Fair	
771	BC	13	Wild Black Cherry	Prunus serotina	Fair	
772	BC	9	Wild Black Cherry	Prunus serotina	Fair	
773	BC	15	Wild Black Cherry	Prunus serotina	Fair	
774	AP	12	Domestic Apple	Malus sylvestris	Fair	
775	AP	8	Domestic Apple	Malus sylvestris	Fair	
776	AP	8	Domestic Apple	Malus sylvestris	Fair	x1
777	AP	8	Domestic Apple	Malus sylvestris	Fair	
778	RO	9	Red Oak	Quercus rubra	Good	
779	AP	10	Domestic Apple	Malus sylvestris	Fair	
780	AP	12	Domestic Apple	Malus sylvestris	Fair	
781	RO	12	Red Oak	Quercus rubra	Good	
782	AP	11	Domestic Apple	Malus sylvestris	Fair	
783	AP	10	Domestic Apple	Malus sylvestris	Fair	
784	AP	8	Domestic Apple	Malus sylvestris	Fair	x1
785	BG	8	Bigtooth Aspen	Populus grandidentata		
786	BG	10	Bigtooth Aspen	Populus grandidentata	Very Poor	
787	BG	9	Bigtooth Aspen	Populus grandidentata	Fair	
788	BG	10	Bigtooth Aspen	Populus grandidentata	Fair	
789	BG	10	Bigtooth Aspen	Populus grandidentata	Very Poor	
790	AP	8	Domestic Apple	Malus sylvestris	Fair	
791	AP	8	Domestic Apple	Malus sylvestris	Fair	x5
792	BG	9	Bigtooth Aspen	Populus grandidentata	Good	
793	RO	12	Red Oak	Quercus rubra	Fair	
794	SWO	14	Swamp White Oak	Quercus bicolor	Fair	
795	SWO	14	Swamp White Oak	Quercus bicolor	Fair	
796	SWO	16	Swamp White Oak	Quercus bicolor	Fair	
797	BX	11	Box elder	Acer negundo	Poor	x1
798	AP	18	Domestic Apple	Malus sylvestris	Fair	x5
799	BG	11	Bigtooth Aspen	Populus grandidentata	Dead	
800	BC	9	Wild Black Cherry	Prunus serotina	Fair	
801	BC	16	Wild Black Cherry	Prunus serotina	Poor	
802	BC	14	Wild Black Cherry	Prunus serotina	Fair	
803	BC	16	Wild Black Cherry	Prunus serotina	Fair	x1
804	GA	8	Green Ash	Fraxinus pennsylvanica	Poor	x1
805	BC	18	Wild Black Cherry	Prunus serotina	Fair	
806	BC	9	Wild Black Cherry	Prunus serotina	Fair	
807	BC	9	Wild Black Cherry	Prunus serotina	Fair	
808	BC	14	Wild Black Cherry	Prunus serotina	Poor	x1

TAG NO.	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS
809	BC	13	Wild Black Cherry	Prunus serotina	Fair	
810	BC	11	Wild Black Cherry	Prunus serotina	Poor	
811	BC	12	Wild Black Cherry	Prunus serotina	Fair	
812	BC	16	Wild Black Cherry	Prunus serotina	Fair	x1
813	BC	13	Wild Black Cherry	Prunus serotina	Fair	
814	BC	8	Wild Black Cherry	Prunus serotina	Poor	
815	BC	9	Wild Black Cherry	Prunus serotina	Fair	
816	PN	11	Pin Cherry	Prunus pennsylvanica	Fair	check YB
817	PN	12	Pin Cherry	Prunus pennsylvanica	Fair	
818	BC	9	Wild Black Cherry	Prunus serotina	Fair	
819	BX	12	Box elder	Acer negundo	Fair	
820	BC	13	Wild Black Cherry	Prunus serotina	Fair	
821	BC	11	Wild Black Cherry	Prunus serotina	Fair	
822	PN	14	Pin Cherry	Prunus pennsylvanica	Good	
823	BX	17	Box elder	Acer negundo	Fair	x1
824	BX	8	Box elder	Acer negundo	Fair	
825	BX	10	Box elder	Acer negundo	Fair	
826	BX	8	Box elder	Acer negundo	Fair	
827	SM	21	Silver Maple	Acer saccharinum	Good	x1
828	BC	10	Wild Black Cherry	Prunus serotina	Poor	
829	BC	11	Wild Black Cherry	Prunus serotina	Very Poor	crow broke off
830	BC	8	Wild Black Cherry	Prunus serotina	Poor	
831	BC	9	Wild Black Cherry	Prunus serotina	Fair	
832	BC	8	Wild Black Cherry	Prunus serotina	Poor	
833	BC	12	Wild Black Cherry	Prunus serotina	Fair	
834	BC	9	Wild Black Cherry	Prunus serotina	Poor	
835	BX	8	Box elder	Acer negundo	Very Poor	x1
836	BX	10	Box elder	Acer negundo	Fair	
837	PN	11	Pin Cherry	Prunus pennsylvanica	Fair	
838	BC	12	Wild Black Cherry	Prunus serotina	Fair	
839	RO	18	Red Oak	Quercus rubra	Fair	
840	YB	13	Yellow Birch	Betula alleghaniensis	Fair	
841	BX	8	Box elder	Acer negundo	Poor	
842	BC	8	Wild Black Cherry	Prunus serotina	Fair	
843	BX	8	Box elder	Acer negundo	Very Poor	
844	BC	16	Wild Black Cherry	Prunus serotina	Fair	
845	BX	8	Box elder	Acer negundo	Poor	
846	BC	27	Wild Black Cherry	Prunus serotina	Fair	x1
847	BC	14	Wild Black Cherry	Prunus serotina	Fair	
848	BX	9	Box elder	Acer negundo	Fair	
849	BX	9	Box elder	Acer negundo	Very Poor	
850	BX	8	Box elder	Acer negundo	Fair	x1
851	BO	16	Black Oak	Quercus velutina	Good	x1
852	BX	9	Box elder	Acer negundo	Poor	x3
853	BX	9	Box elder	Acer negundo	Fair	
854	BC	11	Wild Black Cherry	Prunus serotina	Fair	
855	RO	13	Red Oak	Quercus rubra	Fair	
856	BC	13	Wild Black Cherry	Prunus serotina	Fair	
857	RO	11	Red Oak	Quercus rubra	Fair	
858	BC	8	Wild Black Cherry	Prunus serotina	Fair	x3
859	BC	8	Wild Black Cherry	Prunus serotina	Fair	
860	RO	17	Red Oak	Quercus rubra	Good	x1
861	AP	17	Domestic Apple	Malus sylvestris	Poor	x2
862	AP	25	Domestic Apple	Malus sylvestris	Poor	
863	WO	38	White Oak	Quercus alba	Very Poor	
864	BC	13	Wild Black Cherry	Prunus serotina	Fair	



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CLIENT
GRAND RIVER DORR LLC.
315550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	
REV PER TWP	5-30-23

ORIGINAL ISSUE DATE:
APRIL 10, 2023
DRAWING TITLE
TREE LIST

PEA JOB NO. 2021-0578
P.M. JEC
DN. JMR
DES. JMR
DRAWING NUMBER:

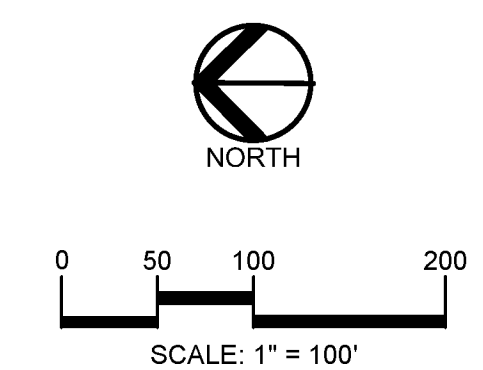
SITE DATA TABLE:			
SITE AREA	ORDINANCE	PROPOSED	
	20.0 ACRES MIN.	51.94 ACRES GROSS (Wetland 17.29 ac, ROW 1.62 ac) 33.03 ACRES NET	
DENSITY	8 UNITS/ACRE	6.18 UNITS/ACRE (NET)	
ZONING:	EXISTING:	NSD AND MDR WITH TOWN CENTER OVERLAY	
	PROPOSED:	HDR, RPUD	
USE:	EXISTING:	VACANT	
	PROPOSED:	204 MULTI-FAMILY DWELLING UNITS, CLUBHOUSE AND POOL	
BUILDING INFORMATION:			
MAXIMUM ALLOWABLE BUILDING HEIGHT = 40 FEET (3 STORIES)			
PROPOSED BUILDING HEIGHT = 27 FEET (2 STORIES)			
BUILDING FOOTPRINT AREA = 5,898 - 11,981 SQ.FT.			
CLUBHOUSE = 6,658 SQ. FT.			
TOTAL BUILDING FOOTPRINT AREA = 203,492 SQ.FT.			
UNIT	LIVING AREA	BEDROOMS	NUMBER OF UNITS
	A 1,471 SFT	2	68
	B 1,629 SFT	2	68
C 1,585 SFT	3	68	
LOT COVERAGE	REQUIRED	PROPOSED (BASED ON NET ACRES)	
	35% MAX	14.3%	
PERCENT IMPERVIOUS	REQUIRED	PROPOSED	
	50% MAX	45.4%	
SETBACK REQUIREMENTS:			
FRONT:	REQUIRED	PROPOSED	
INTERIOR	20'	20'	
EXTERIOR	35'	75.4' MIN (Grand River), 77.9' (Dorr)	
SIDE:	15'	30.0' MIN	
REAR:	30'	76.3'	
DENSITY CALCULATION:			
ALLOWED	PROPOSED OVERALL ACREAGE	PROPOSED USEABLE ACREAGE	
8 UNITS/AC	3.92 UNITS/AC	6.18 UNITS/AC	
PARKING CALCULATIONS:			
TOTAL REQUIRED PARKING	REQUIRED 2 SPACES PER 2 BEDROOM OR MORE UNIT = 408 SPACES		
TOTAL PROPOSED PARKING SPACES = 703			
SPACES (408 GARAGE + 204 IN DRIVEWAYS + 91 ADDITIONAL SPACES INCLUDING 1 H/C SPACE)			
OPEN SPACE:			
MINIMUM OPEN SPACE REQUIRED = 25%			
PROVIDED OPEN SPACE = 22.98 AC = 45.7% (33.03 - 12.57 (Impervious) - 1.80 (ponds) + 4.32 (25% Wetland))			
SITE SOILS INFORMATION:			
ACCORDING TO THE USDA NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY FOR LIVINGSTON COUNTY, THE SITE CONSISTS OF THE FOLLOWING SOIL TYPES:			
FrB, MoB, MoC, MoD, Rf, W, Wh			

APPROVED ORDINANCE MODIFICATIONS:	
ZONING	
3.05.02 (e) / 15.05.03	MODIFICATION OF THE HORIZONTAL MINIMUM CURVE RADIUS FROM 150' TO 100' AND CURB RADI FROM ROAD TO GARAGE AND PARKING DRIVEWAYS LESS THAN 30' RADIUS.
10.03.01 (C)	THE OPEN SPACE ALONG THE EXTERIOR PUBLIC ROADS SHALL GENERALLY HAVE A DEPTH OF AT LEAST ONE HUNDRED (100) FEET EITHER LANDSCAPED OR PRESERVED IN A NATURAL WOODED CONDITION.
12.01.03	REDUCTION IN THE PERCENTAGE OR BRICK REQUIRED ON BUILDING WALLS EXPOSED TO PUBLIC AND AN INCREASE IN PERCENTAGE OF VINYL OR FIBER CEMENT SIDING AND WOOD SIDING.
13.02.04 d.	REQUEST FOR GRADING UPTO 10' FROM REGULATED WETLAND.
14.02.06	REQUEST TO EXCEED PARKING SPACE REQUIREMENT MORE THAN 20%
14.06.09	PARKING LOTS AND RELATED MANEUVERING AISLES SHALL MEET MINIMUM SETBACKS FROM ADJACENT STREET R-O-W AS SHOWN IN THE SCHEDULE OF REGULATIONS AND HAVE PARKING LOT LANDSCAPING
14.06.10	PARKING LOTS SHALL HAVE MINIMUM REAR AND SIDE YARD SETBACKS INCLUDING BERMING AND LANDSCAPING.

NOTE:

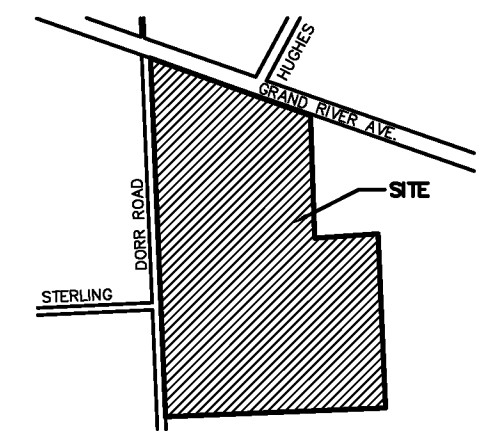
- PROPERTY WILL BE DEVELOPED OWNED AND OPERATED BY A SINGLE OWNERSHIP ENTITY.
- TRASH COLLECTION WILL BE PROVIDED VIA INDIVIDUAL TRASH CARTS FOR EACH UNIT WITH CURB SIDE TRASH COLLECTION.

LEGEND:	
[Symbol]	CONCRETE PAVEMENT
[Symbol]	ASPHALT PAVEMENT
[Symbol]	GRAVEL
[Symbol]	WETLAND
[Symbol]	CONCRETE CURB AND GUTTER
[Symbol]	REVERSE GUTTER PAN
[Symbol]	SETBACK LINE
[Symbol]	SIGN LIGHTPOLE
[Symbol]	FENCE
[Symbol]	GUARD RAIL



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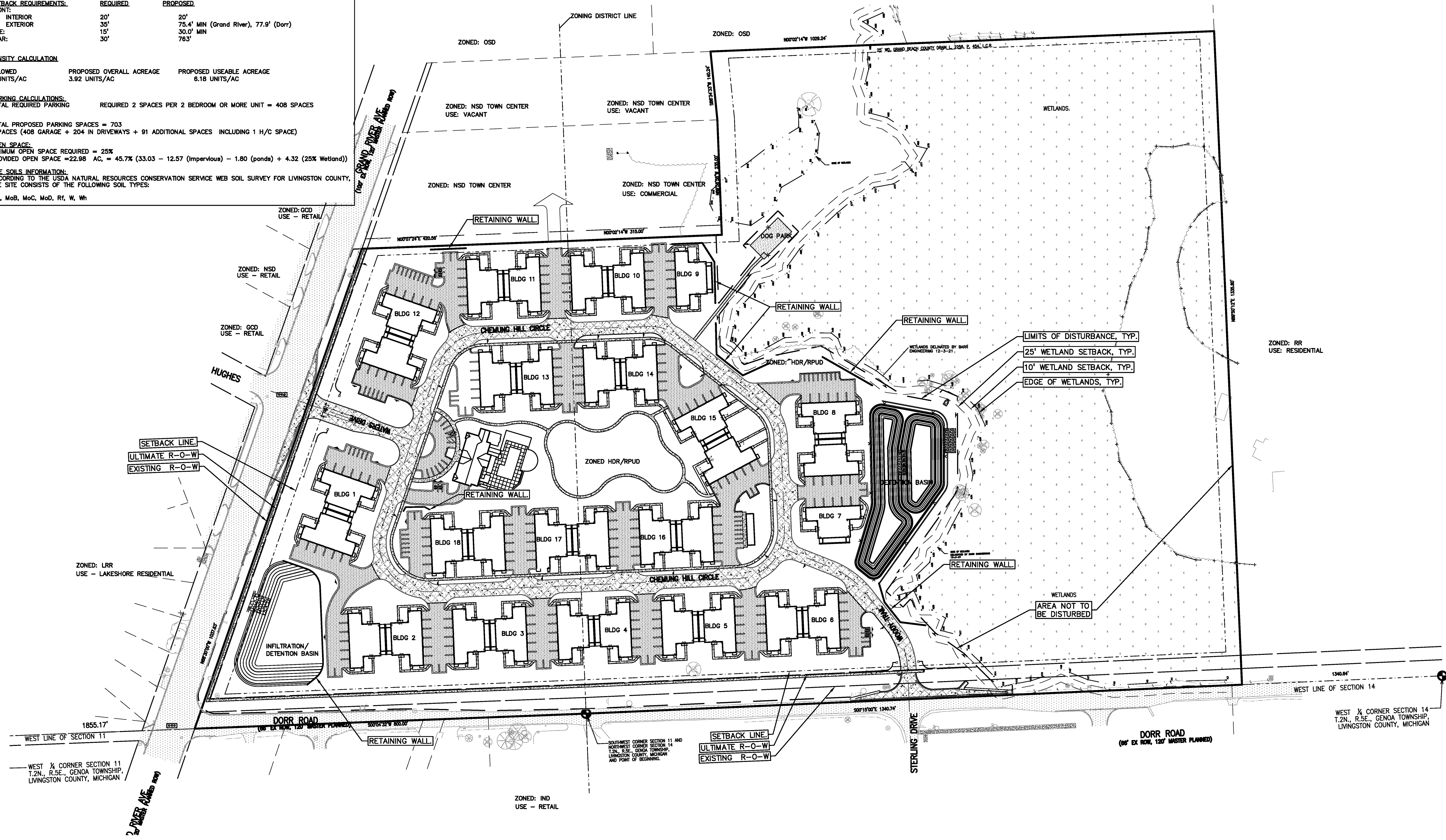
PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	
REV PER TWP	5-30-23

ORIGINAL ISSUE DATE:
APRIL 10, 2023

DRAWING TITLE
OVERALL SITE PLAN

PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR
DRAWING NUMBER:	



NOT FOR CONSTRUCTION **C-2.1**

S:\PROJECTS\2021-0578 LAURENCE GENOA TOWNSHIP\MOBILE PLANS\C-2.01 01-21-23-0578.dwg

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

- ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
- 'NO PARKING-FIRE LANE' SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AT 50'-100' FOOT INTERVALS OR AS DIRECTED BY THE FIRE OFFICIAL.
- SIGNS ARE TO BE PLACED TO AVOID UTILITIES. IN GENERAL SIGN POST ARE TO BE A MINIMUM OF 3' FROM THE CURB. REFER TO UTILITY SHEET.

LEGEND:

	CONCRETE PAVEMENT
	ASPHALT PAVEMENT
	GRAVEL
	WETLAND
	CONCRETE CURB AND GUTTER
	REVERSE GUTTER PAN
	SETBACK LINE
	SIGN
	LIGHTPOLE
	FENCE
	GUARD RAIL

SIGN LEGEND:

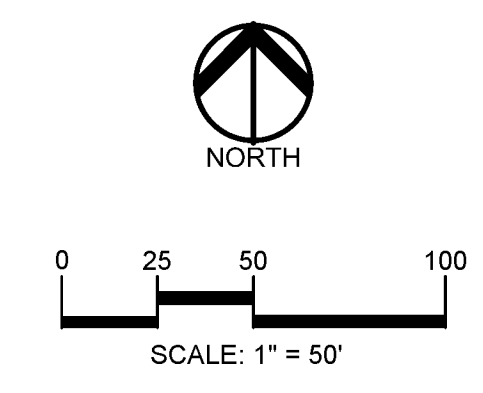
'NO PARKING FIRE LANE' SIGN	1
'STOP' SIGN	2
'BARRIER FREE PARKING' SIGN	3
'VAN ACCESSIBLE' SIGN	4
'SIDEWALK ENDS' SIGN	5
ELECTRIC VEHICLE SIGN	6
DO NOT MOW SIGN	7

REFER TO DETAIL SHEET FOR SIGN DETAILS

SIDEWALK RAMP LEGEND:

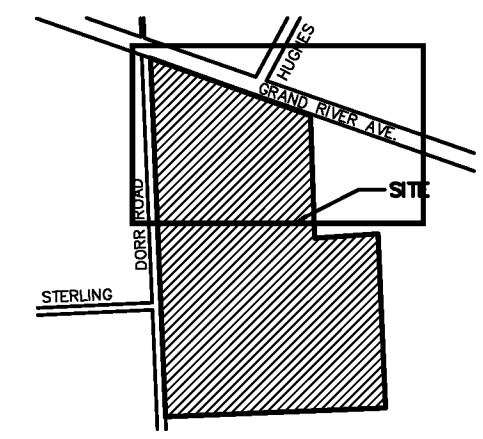
SIDEWALK RAMP 'TYPE R'	Ⓡ
CURB DROP ONLY	Ⓢ

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



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CLIENT
GRAND RIVER DORR LLC.
31550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS

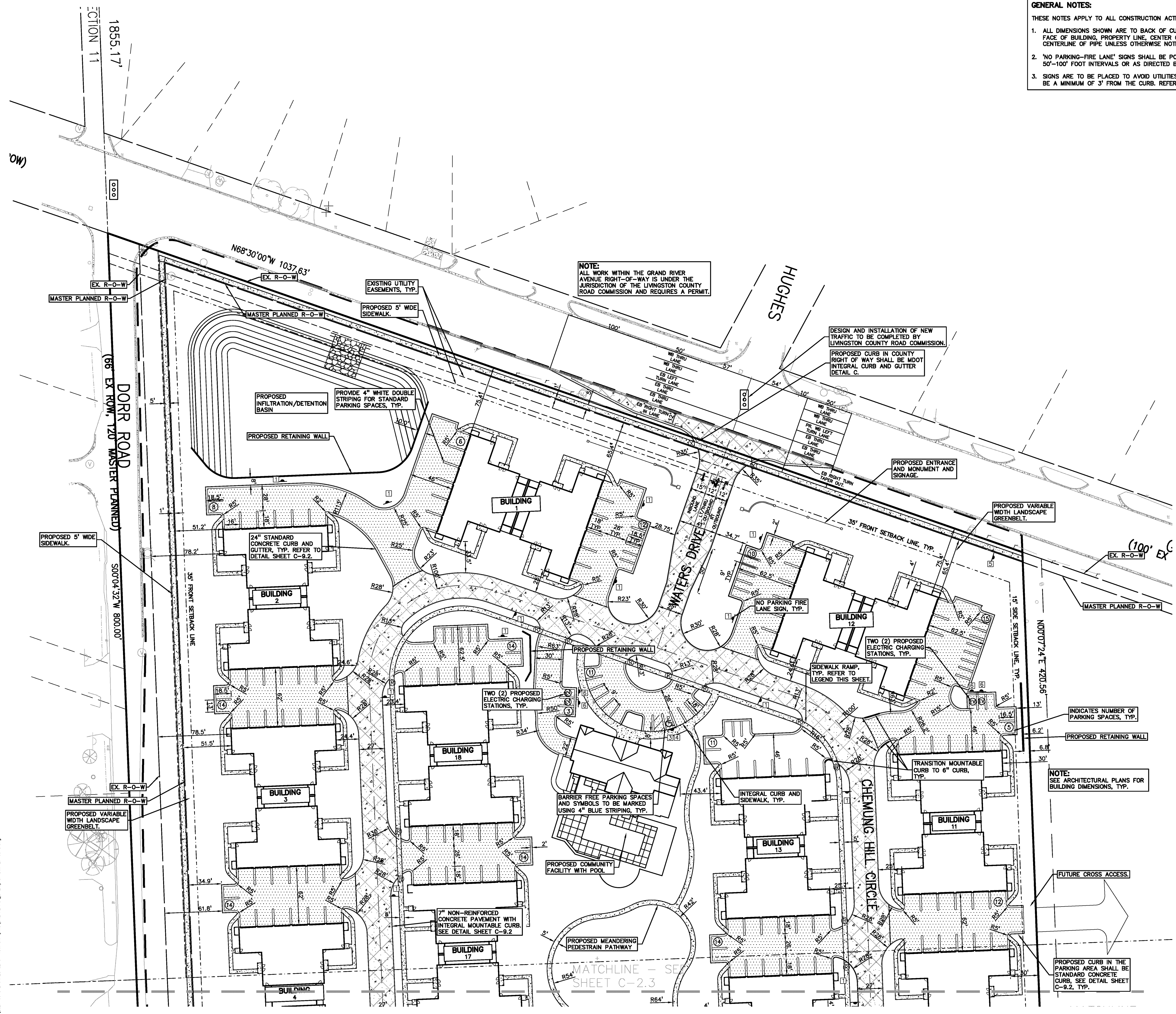
REV	PER	DATE
1	TVP	5-30-23

ORIGINAL ISSUE DATE:
APRIL 10, 2023

DRAWING TITLE
SITE PLAN NORTH

PEA JOB NO. 2021-0578
P.M. JEC
DN. JMR
DES. JMR
DRAWING NUMBER:

NOT FOR CONSTRUCTION **C-2.2**



S:\PROJECTS\2021\0578\LAURENCE\GENOA_TOWNSHIP\WORKSHEETS\PLANS\C-2.03_P1.dwg - 21-0578.dwg

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

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SIGN LEGEND:

'NO PARKING FIRE LANE' SIGN	1
'STOP' SIGN	2
'BARRIER FREE PARKING' SIGN	3
'VAN ACCESSIBLE' SIGN	4
'SIDEWALK ENDS' SIGN	5
ELECTRIC VEHICLE SIGN	6
DO NOT MOW SIGN	7

REFER TO DETAIL SHEET FOR SIGN DETAILS

LEGEND:

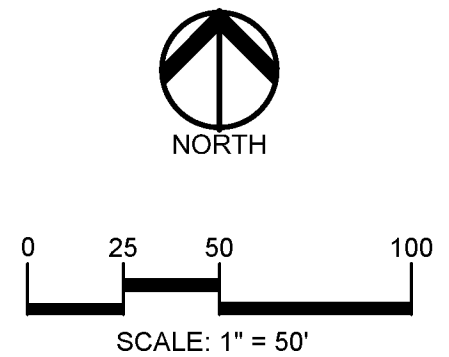
CONCRETE PAVEMENT	CONCRETE PAVEMENT
ASPHALT PAVEMENT	ASPHALT PAVEMENT
GRAVEL	GRAVEL
WETLAND	WETLAND
CONCRETE CURB AND GUTTER	CONCRETE CURB AND GUTTER
REVERSE GUTTER PAN	REVERSE GUTTER PAN
SETBACK LINE	SETBACK LINE
SIGN LIGHTPOLE	SIGN LIGHTPOLE
FENCE	FENCE
GUARD RAIL	GUARD RAIL

SIDEWALK RAMP LEGEND:

SIDEWALK RAMP 'TYPE R'

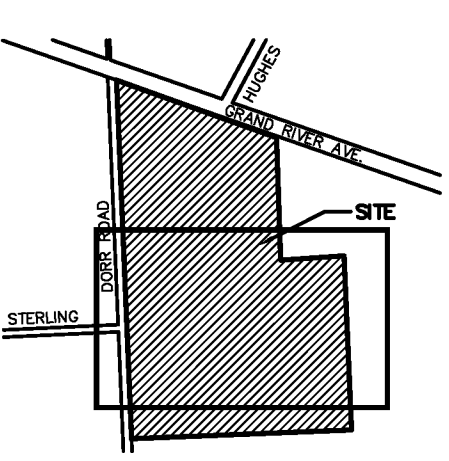
CURB DROP ONLY

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



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31550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	REV PER TWP	DATE

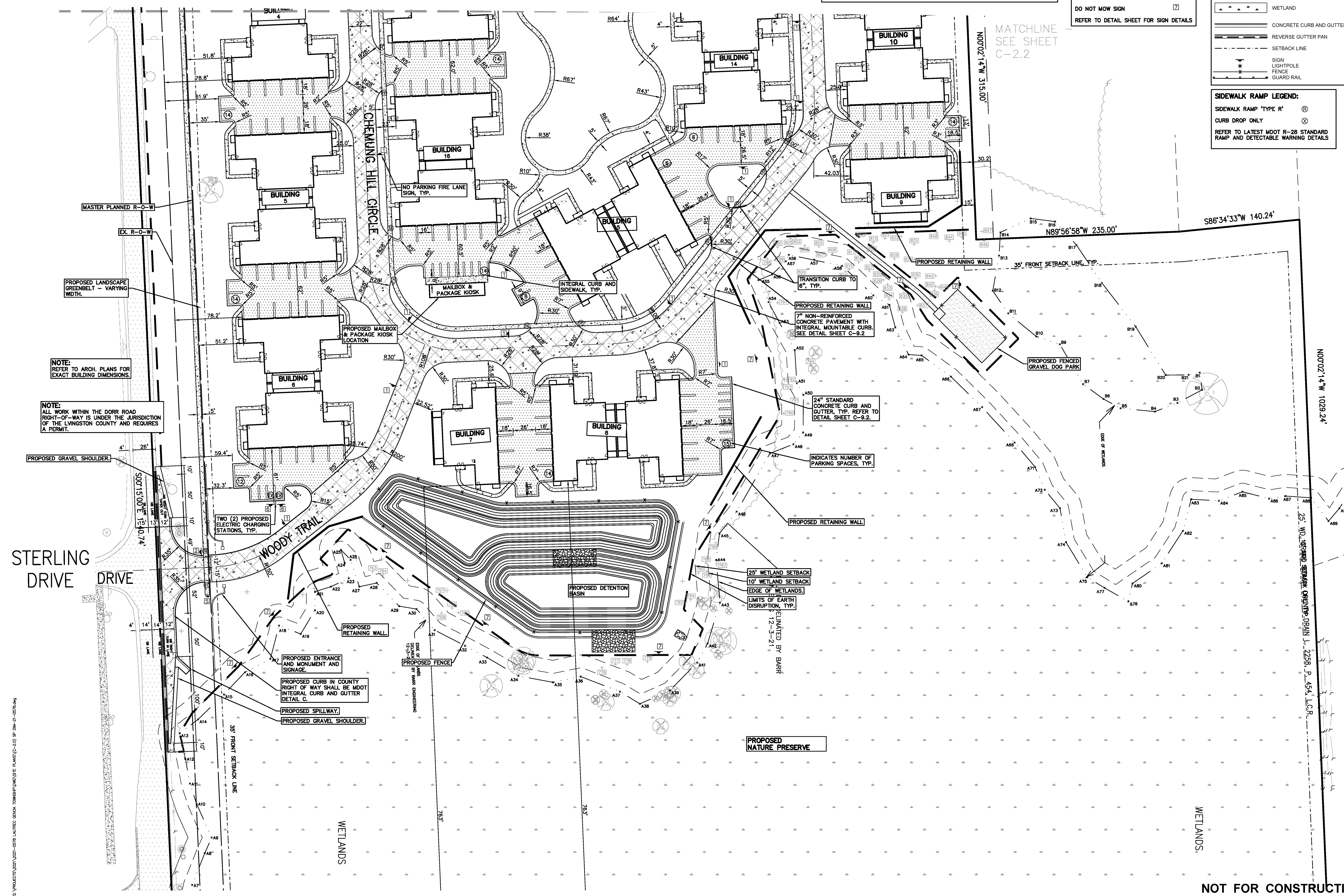
ORIGINAL ISSUE DATE:
APRIL 10, 2023

DRAWING TITLE
SITE PLAN SOUTH

PEA JOB NO. 2021-0578
P.M. JEC
DN. JMR
DES. JMR
DRAWING NUMBER:

C-2.3

NOT FOR CONSTRUCTION



NOTE:
ALL WORK WITHIN THE DORR ROAD RIGHT-OF-WAY IS UNDER THE JURISDICTION OF THE LIVINGSTON COUNTY AND REQUIRES A PERMIT.

NOTE:
REFER TO ARCH. PLANS FOR EXACT BUILDING DIMENSIONS.

PROPOSED LANDSCAPE GREENBELT - VARYING WIDTH.

MASTER PLANNED R-O-W
EX. R-O-W

TWO (2) PROPOSED ELECTRIC CHARGING STATIONS, TYP.

PROPOSED ENTRANCE AND MONUMENT AND SIGNAGE
PROPOSED CURB IN COUNTY RIGHT OF WAY SHALL BE MDOT INTEGRAL CURB AND GUTTER DETAIL C.
PROPOSED SPILLWAY.
PROPOSED GRAVEL SHOULDER.

PROPOSED NATURE PRESERVE

INDICATES NUMBER OF PARKING SPACES, TYP.

25' WETLAND SETBACK
10' WETLAND SETBACK
EDGE OF WETLANDS.
LIMITS OF EARTH DISRUPTION, TYP.

7" NON-REINFORCED CONCRETE PAVEMENT WITH INTEGRAL MOUNTABLE CURB. SEE DETAIL SHEET C-9.2

24" STANDARD CONCRETE CURB AND GUTTER, TYP. REFER TO DETAIL SHEET C-9.2.

TRANSITION CURB TO 6", TYP.

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

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PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

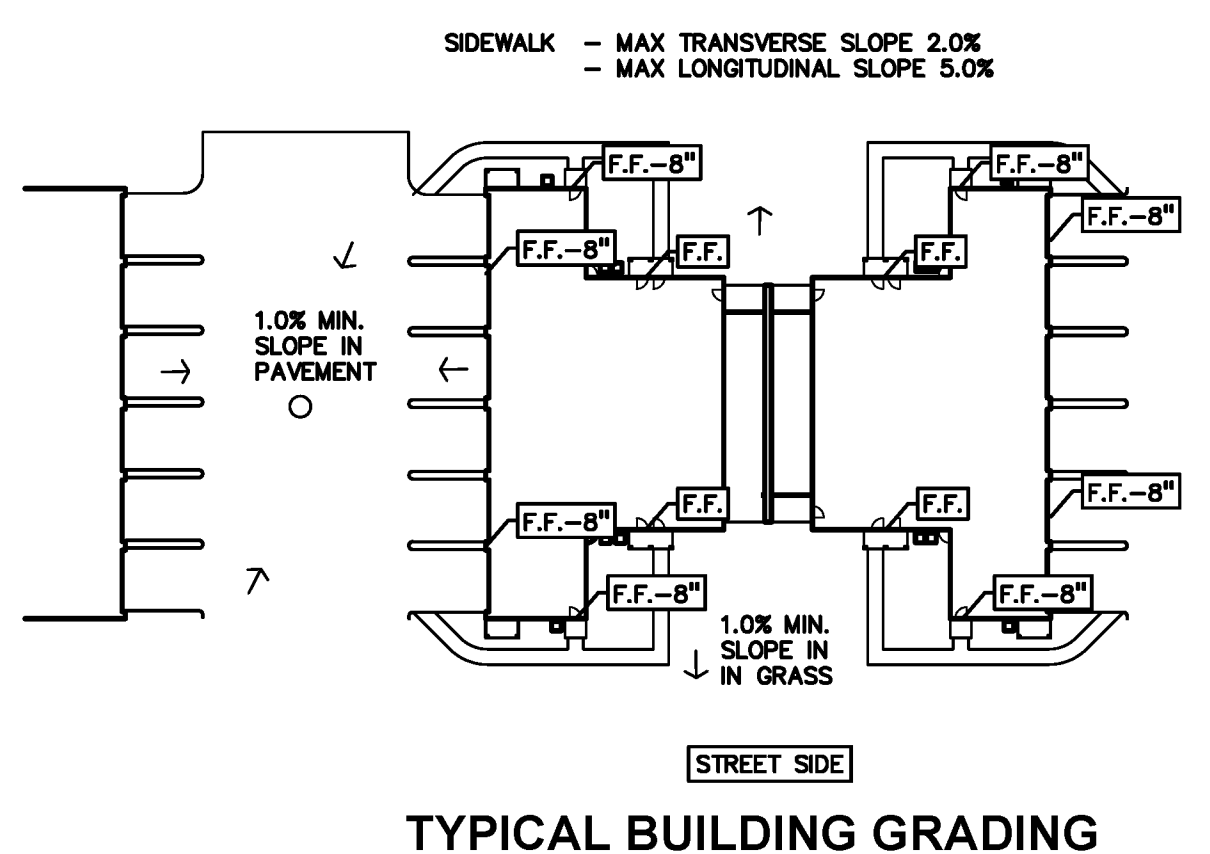
PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

PROPOSED RETAINING WALL

NOTE:

1. DETENTION AND SEDIMENTATION PONDS SHALL BE EXCAVATED, TOP SOILED, SEEDED AND MULCHED AND TACKED PRIOR TO THE START OF MASSIVE EARTH DISRUPTION.
2. PRIOR TO PROJECT COMPLETION THE PONDS SHALL HAVE ALL SEDIMENT REMOVED AND THE STONE AROUND THE STAND PIPE STRUCTURE SHALL BE REFRESHED WITH CLEAN STONE.
3. FIRST FLOOR IS 8" ABOVE FINISH GRADE.



GRADING LEGEND:

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

ABBREVIATIONS

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

SYMBOLS: GRADING

PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.

PROPOSED CONTOUR LINE

ABBREVIATIONS:

- T/C = TOP OF CURB
- G = GUTTER GRADE
- T/P = TOP OF PAVEMENT
- T/S = TOP OF SIDEWALK
- T/W = TOP OF WALL
- B/W = BOTTOM OF WALL
- F.G. = FINISH GRADE
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CLIENT
GRAND RIVER DORR LLC.
 31550 NORTHWESTERN HIGHWAY
 FARMINGTON HILLS, MI 48334

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

PROJECT TITLE
THE LEGACY APARTMENT HOMES
 6080 W GRAND RIVER
 GLENDA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS

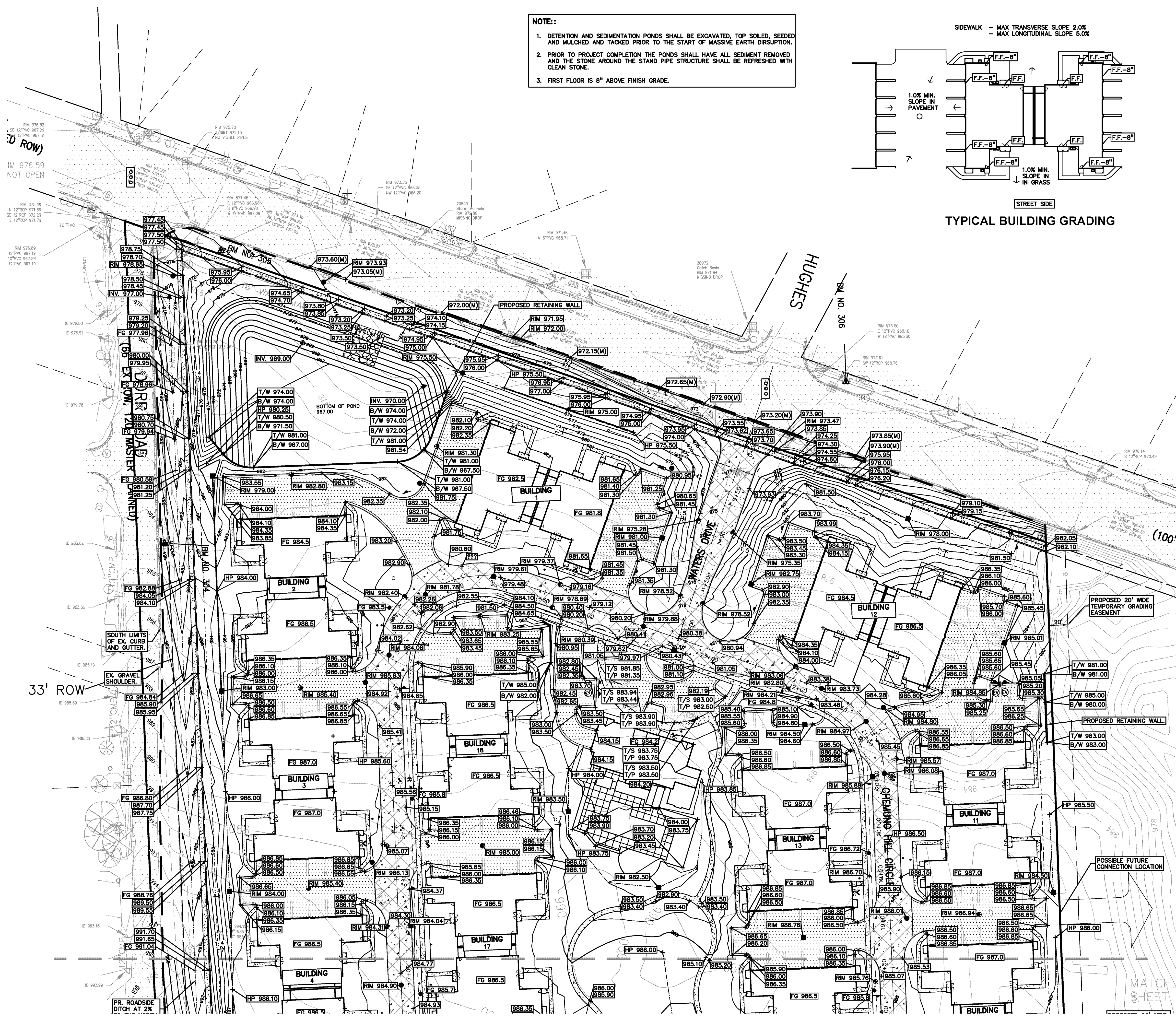
REV	PER	TWP	DATE
5			5-30-23

ORIGINAL ISSUE DATE:
 APRIL 10, 2023

DRAWING TITLE
GRADING PLAN NORTH

PEA JOB NO. 2021-0578
 P.M. JEC
 DN. JMR
 DES. JMR

DRAWING NUMBER:
C-3.1



MATCHLINE - SEE SHEET C-3.2

NOT FOR CONSTRUCTION

C-3.1

S:\PROJECTS\2021-0578 LAUREL GROVE TOWNSHIP\COMPLETE PLANS\C-3.1.DWG

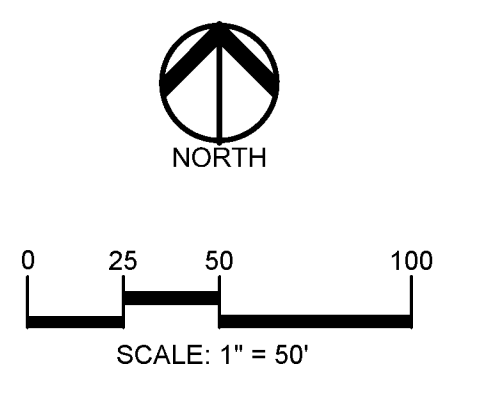
SYMBOLS: GRADING
 PROPOSED SPOT ELEVATION:
 TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES. 622.50
 PROPOSED CONTOUR LINE 922
 ABBREVIATIONS:
 T/C = TOP OF CURB
 G = GUTTER GRADE
 T/P = TOP OF PAVEMENT
 T/S = TOP OF SIDEWALK
 T/W = TOP OF WALL
 B/W = BOTTOM OF WALL
 F.G. = FINISH GRADE
 RIM = RIM ELEVATION

GRADING LEGEND:
 EXISTING SPOT ELEVATION 898.91
 PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES. 622.50
 EXISTING CONTOUR 670
 PROPOSED CONTOUR 922
 PROPOSED REVERSE GUTTER PAN
 PROPOSED RIDGE LINE
 PROPOSED SWALE/DITCH

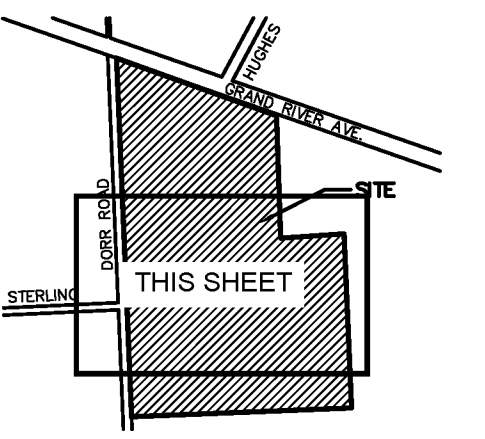
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 T/S = TOP OF SIDEWALK RIM = RIM ELEVATION
 T/W = TOP OF WALL BW = BOTTOM OF WALL

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 2. PRIOR TO PROJECT COMPLETION THE PONDS SHALL HAVE ALL SEDIMENT REMOVED AND THE STONE AROUND THE STAND PIPE STRUCTURE SHALL BE REFRESHED WITH CLEAN STONE.
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 6080 W GRAND RIVER
 GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

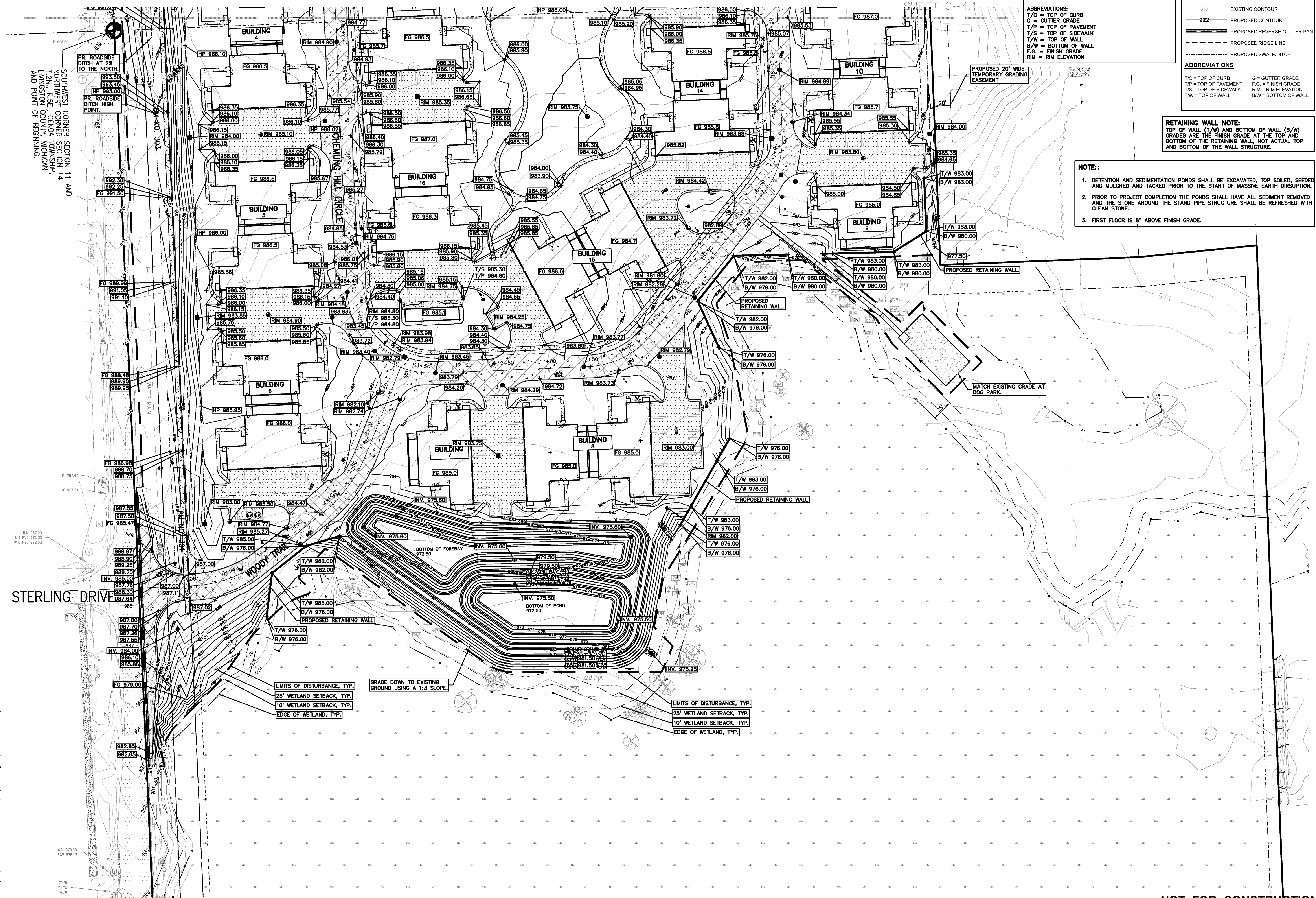
REVISIONS	
REV PER TWP	5-30-23

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DRAWING TITLE
GRADING PLAN SOUTH

PEA JOB NO. 2021-0578
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DRAWING NUMBER:

NOT FOR CONSTRUCTION

C-3.2



SOUTHWEST CORNER SECTION 11 AND
 NORTHWEST CORNER SECTION 14,
 T.2N., R.3E., GENOA TOWNSHIP,
 LIVINGSTON COUNTY, MICHIGAN,
 AND POINT OF BEGINNING.

S:\PROJECTS\2021\0578 LAURENCE GRAD. TOWNSHIP\COMPLETE PLANS\C-3.03.PE GRAD-21-0578.dwg

NOTE:
1. ALL STORM DRAINS 15" IN DIAMETER AND LARGER SHALL HAVE ANIMAL GUARDS INSTALLED TO PREVENT ENTRANCE TO THE SYSTEM.

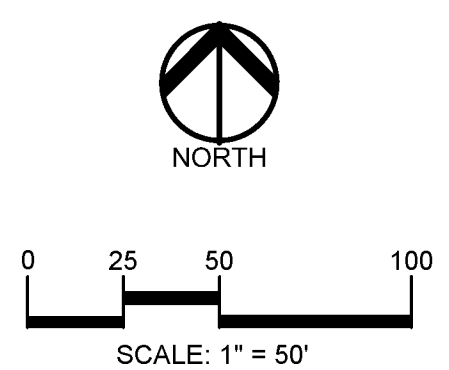
- GENERAL UTILITY NOTES:**
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF MHOG AND GENOA TOWNSHIP.
 - ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH MDOT CLII SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER TRENCHES TO BE COMPACTED TO 90% OR BETTER.
 - WHERE EXISTING MANHOLES OR SEWER PIPE ARE TO BE TAPPED, DRILL HOLES 4" CENTER TO CENTER, AROUND PERIPHERY OF OPENING TO CREATE A PLANE OF WEAKNESS JOINT BEFORE BREAKING SECTION OUT.
 - THE LOCATIONS AND DIMENSIONS SHOWN ON THE PLANS FOR EXISTING UTILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING. THE DESIGN ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN. CONTRACTOR SHALL FIELD VERIFY UTILITIES.
 - THE CONTRACTOR SHALL COORDINATE TO ENSURE ALL REQUIRED PIPES, CONDUITS, CABLES AND SLEEVES ARE PROPERLY PLACED FOR THE INSTALLATION OF GAS, ELECTRIC, PHONE, CABLE, IRRIGATION, ETC. IN SUCH A MANNER THAT WILL FACILITATE THEIR PROPER INSTALLATION PRIOR TO THE PLACEMENT OF THE PROPOSED PAVEMENT AND LANDSCAPING.
 - CONTRACTOR SHALL INSPECT ALL EXISTING PUBLIC STORM SEWER, SANITARY SEWER AND WATER MAIN STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION AND WITH THE GOVERNING AGENCY INSPECTOR PRIOR TO ESTABLISHING FINAL GRADE. NOTIFY THE ENGINEER, OWNER/DEVELOPER, AND GOVERNING AGENCY IF STRUCTURE IS DEEMED TO BE STRUCTURALLY UNSOUND AND/OR IN NEED OF REPAIR.

- STORM SEWER NOTES:**
- ALL STORM SEWER 12" DIAMETER OR LARGER SHALL BE REINFORCED CONCRETE PIPE (RCP C-76) CLASS IV WITH MODIFIED TONGUE AND GROOVE JOINT WITH RUBBER GASKETS UNLESS SPECIFIED OTHERWISE (ASTM C-443).
 - ALL STORM SEWER LEADS SHALL BE CONSTRUCTED AT 1.00% MINIMUM SLOPE.
 - ALL STORM SEWER 10" OR LESS AND/OR LEADS SHALL BE PVC SCHEDULE 40.

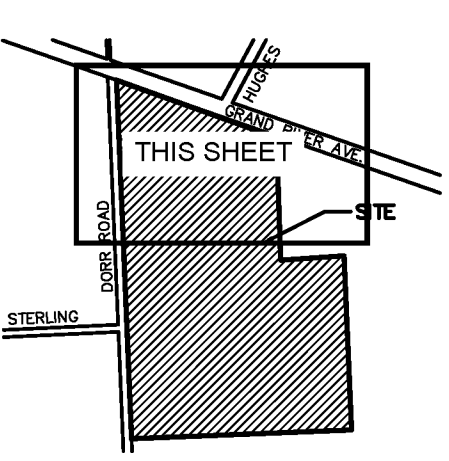
- WATER MAIN NOTES:**
- ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 5.5' BELOW FINISH GRADE. WHEN WATER MAINS MUST DIP TO PASS UNDER A STORM SEWER OR SANITARY SEWER, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH BY THE USE OF VERTICAL TWENTY TWO AND A HALF (22.5%) DEGREE BENDS, PROPERLY ANCHORED.
 - ALL TEES, BENDS, CONNECTIONS, ETC. ARE CONSIDERED INCIDENTAL TO THE JOB.
 - PHYSICAL CONNECTIONS SHALL NOT BE MADE BETWEEN EXISTING AND NEW WATER MAINS UNTIL REQUIRED TESTING IS SATISFACTORILY COMPLETED.
 - MAINTAIN 10' HORIZONTAL CLEARANCE BETWEEN OUTER EDGE OF WATERMAIN AND ANY SANITARY/STORM SEWER OR STRUCTURE.
 - NO PHYSICAL CONNECTION TO THE EXISTING WATER MAIN CAN BE MADE UNTIL ALL NEW WATER MAIN PASSES PRESSURE AND BACTERIOLOGICAL TESTS TO THE SATISFACTION OF THE MARION, HOWELL, OCEOLA, GENOA (MHOG) SEWER AND WATER AUTHORITY.
 - ALL WATER MAIN AND FITTINGS (3" DIAMETER AND LARGER) DUCTILE IRON, CLASS 52.
 - WATER MAIN SERVICE LEADS SHALL BE TYPE 'K' ANNEALED STEEL COPPER WITH FLARED FITTINGS, UNLESS OTHERWISE NOTED.
 - ALL FIRE HYDRANTS SHALL BE E.I.W. #58R MODEL #250 PER MHOG STANDARDS.
 - ALL HYDRANTS TO BE A MINIMUM OF 5' FROM BACK OF CURB, TYP.
 - ALL NECESSARY FITTINGS, THRUST BLOCKS, RESTRAINING GLANDS, BLOW OFFS, ETC. FOR WATER MAIN ARE CONSIDERED INCIDENTAL TO THIS PROJECT. THE CONTRACTOR SHALL INSTALL THESE ITEMS AS NECESSARY AND AS REQUIRED BY THE MHOG.
 - THE WATER MAIN CONTRACTOR SHALL NOTIFY THE INSPECTION SECTION OF THE MHOG/GENOA TOWNSHIP AT 810-227-5225 AT LEAST THREE WORKING DAYS IN ADVANCE OF STARTING CONSTRUCTION.

- FIRE DEPARTMENT NOTES:**
- WATER METER ROOMS/FIRE SPRINKLER ROOMS SHALL BE LOCATED ON THE STREET SIDE OF THE BUILDINGS. FIRE SPRINKLER RISER ROOMS SHALL BE PROVIDED WITH SIGNAGE IDENTIFYING THE ROOM AND ITS ADDRESS WITH RED LETTERS ON WHITE BACKGROUND.
 - THE WATER METER/FIRE SPRINKLER RISER ROOMS SHALL BE PROVIDED WITH HEAT AND INSULATION TO MAINTAIN THE ROOM TEMPERATURE ABOVE 40 DEGREES FAHRENHEIT.
 - THE FDC FOR EACH BUILDING MAY BE LOCATED IMMEDIATELY OUTSIDE THE WATER METER/FIRE SPRINKLER RISER ROOM. THE FDC FOR THE CLUBHOUSE SHALL BE LOCATED ON THE FRONT OF THE BUILDING REGARDLESS OF THE LOCATION OF THE RISER ROOM.
 - ALL FIRE ACCESS DRIVES ARE TO BE PROVIDED WITH VERTICAL CLEARANCE OF 13.5 FEET. THIS INCLUDES BUT IS NOT LIMITED TO PORTE-COCHERE, LIGHTING, AND LARGE CANOPY TREES.
 - EACH BUILDING SHALL INCLUDE THE BUILDING NUMBERS A MINIMUM OF 6" HIGH LETTERS/NUMBERS OF CONTRASTING COLORS AND BE CLEARLY VISIBLE FROM THE STREET. EACH UNIT ADDRESS SHALL BE A MINIMUM OF 4" HIGH. WHITE UNIT ADDRESSES LOCATED ON THE NON-STREET-SIDE OF THE BUILDINGS, ADDITIONAL YARD SIGNS VISIBLE FROM THE PARKING AREAS WILL BE REQUIRED. EACH WATER METER/FIRE SPRINKLER RISER ROOM SHALL BE PROVIDED WITH THEIR OWN ADDRESS. THE LOCATION AND SIZE OF THE ADDRESS LABELING SHALL BE COORDINATED AND APPROVED PRIOR TO INSTALLATION. ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 5.5' BELOW FINISH GRADE.

- SANITARY SEWER NOTES:**
- DOWNSPOUTS, WEEP TILE, FOOTING DRAINS OR ANY CONDUIT THAT CARRIES STORM OR GROUND WATER SHALL NOT BE ALLOWED TO DISCHARGE INTO A SANITARY SEWER.
 - ALL SANITARY LEADS SHALL BE CONSTRUCTED AT 1.00% MINIMUM SLOPE.
 - ALL SANITARY SEWER 8" OR LARGER SHALL BE PVC SDR 26 TYPE PSM SEWER PIPE WITH BELL AND SPIGOT ENDS FOR GASKETED JOINTS. (FITTINGS ASTM D 3034, PVC BELL ENDS, GASKETS ASTM F 477, ELASTOMERIC SEALS).
 - ALL SANITARY SEWER LEADS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 23.5 PIPE AND FITTINGS. ALL JOINTS TO BE ELASTOMERIC GASKET JOINTS PER ASTM D3212 UNLESS OTHERWISE NOTED.
 - SANITARY LEADS SHALL BE PROVIDED WITH CLEANOUTS EVERY 100 FEET AND AT EVERY BEND AS SHOWN. ALL CLEANOUTS TO BE PROVIDED WITH E.I.L.W. #1565 BOX OR EQUAL.



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CLIENT
GRAND RIVER DORR LLC.
315550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	REV PER TYP	DATE

ORIGINAL ISSUE DATE:
APRIL 10, 2023

DRAWING TITLE
UTILITY PLAN NORTH

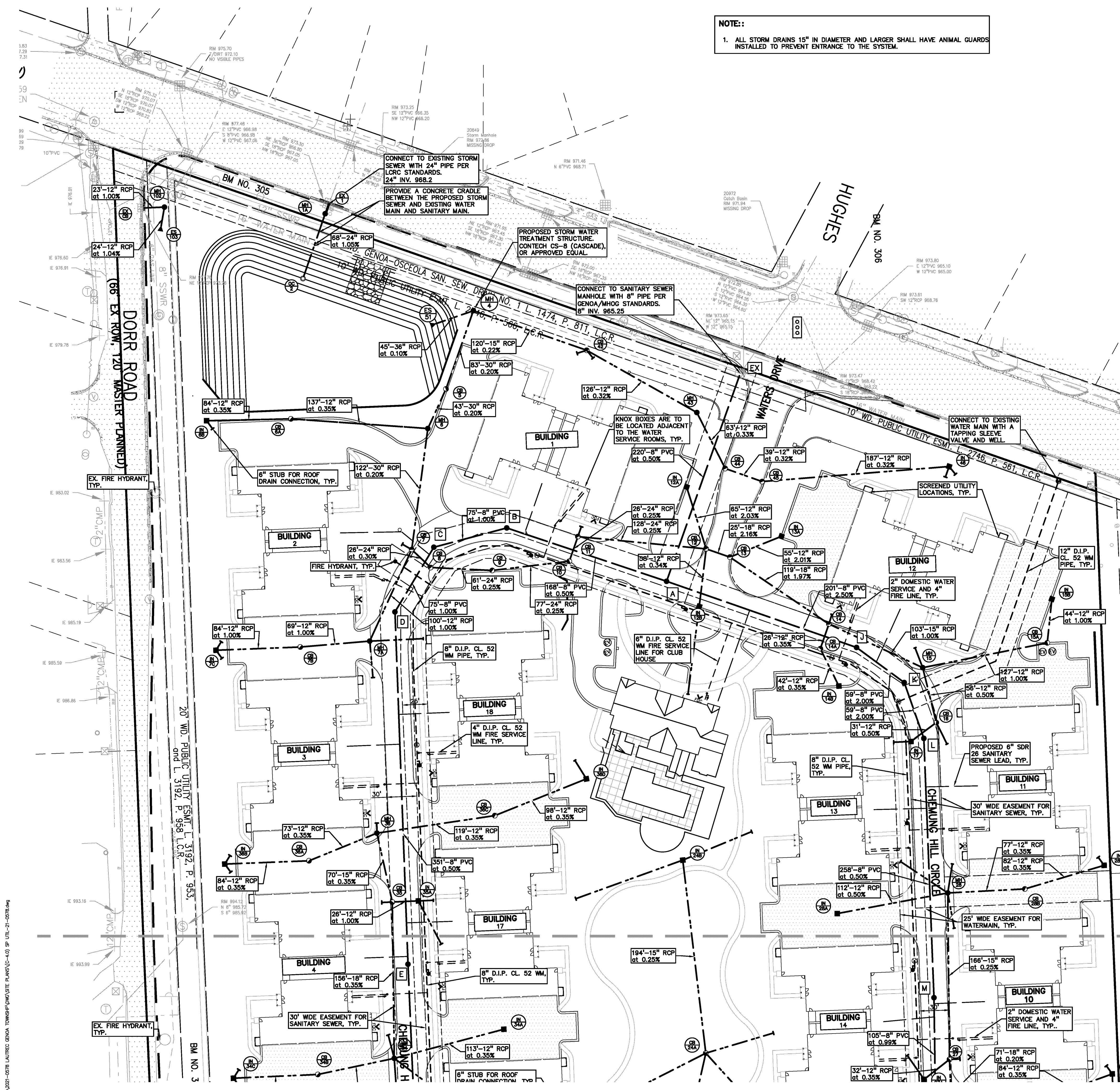
PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR
DRAWING NUMBER:	

UTILITY LEGEND:

-OH-ELEC-W-O-	EX. OH. ELEC. POLE & GUY WIRE
-UG-CATV-	EX. U.G. CABLE TV & PEDESTAL
-UG-COMM-	EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
-UG-ELEC-	EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
-GAS LINE	EX. GAS LINE
⊕	EX. GAS VALVE & GAS LINE MARKER
⊕	EX. TRANSFORMER & IRRIGATION VALVE
—	EX. WATER MAIN
⊕	EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
⊕	EX. WATER VALVE BOX & SHUTOFF
⊕	EX. SANITARY SEWER
⊕	EX. SANITARY CLEANOUT & MANHOLE
⊕	EX. COMBINED SEWER MANHOLE
⊕	EX. STORM SEWER
⊕	EX. CLEANOUT & MANHOLE
⊕	EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
⊕	EX. YARD DRAIN & ROOF DRAIN
⊕	EX. UNIDENTIFIED STRUCTURE
- - -	PROPOSED WATER MAIN
⊕	PROPOSED HYDRANT AND GATE VALVE
⊕	PROPOSED TAPPING SLEEVE, VALVE & WELL
⊕	PROPOSED POST INDICATOR VALVE
⊕	PROPOSED SANITARY SEWER
⊕	PROPOSED SANITARY CLEANOUT & MANHOLE
⊕	PROPOSED STORM SEWER
⊕	PROPOSED STORM SEWER CLEANOUT & MANHOLE
⊕	PROPOSED CATCH BASIN, INLET & YARD DRAIN

MATCHLINE - SEE SHEET C-4.2

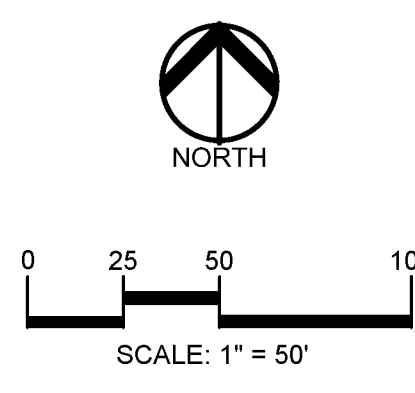
NOT FOR CONSTRUCTION **C-4.1**



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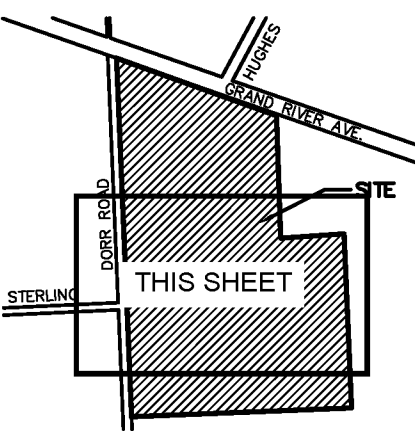
UTILITY LEGEND:

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—UG—CATV—	EX. U.G. CABLE TV & PEDESTAL
—UG—COMM—	EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
—UG—ELEC—	EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
—GAS—	EX. GAS LINE
—GAS VALVE & GAS LINE MARKER	EX. GAS VALVE & GAS LINE MARKER
—TRANSFORMER & IRRIGATION VALVE	EX. TRANSFORMER & IRRIGATION VALVE
—WATER MAIN	EX. WATER MAIN
—HYDRANT, GATE VALVE & POST INDICATOR VALVE	EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
—WATER VALVE BOX & SHUTOFF	EX. WATER VALVE BOX & SHUTOFF
—SANITARY SEWER	EX. SANITARY SEWER
—SANITARY CLEANOUT & MANHOLE	EX. SANITARY CLEANOUT & MANHOLE
—COMBINED SEWER MANHOLE	EX. COMBINED SEWER MANHOLE
—STORM SEWER	EX. STORM SEWER
—CLEANOUT & MANHOLE	EX. CLEANOUT & MANHOLE
—SQUARE, ROUND, & BEEHIVE CATCH BASIN	EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
—YARD DRAIN & ROOF DRAIN	EX. YARD DRAIN & ROOF DRAIN
—UNIDENTIFIED STRUCTURE	EX. UNIDENTIFIED STRUCTURE
—PROPOSED WATER MAIN	PROPOSED WATER MAIN
—PROPOSED HYDRANT AND GATE VALVE	PROPOSED HYDRANT AND GATE VALVE
—PROPOSED TAPPING SLEEVE, VALVE & WELL	PROPOSED TAPPING SLEEVE, VALVE & WELL
—PROPOSED POST INDICATOR VALVE	PROPOSED POST INDICATOR VALVE
—PROPOSED SANITARY SEWER	PROPOSED SANITARY SEWER
—PROPOSED SANITARY CLEANOUT & MANHOLE	PROPOSED SANITARY CLEANOUT & MANHOLE
—PROPOSED STORM SEWER	PROPOSED STORM SEWER
—PROPOSED STORM SEWER CLEANOUT & MANHOLE	PROPOSED STORM SEWER CLEANOUT & MANHOLE
—PROPOSED CATCH BASIN, INLET & YARD DRAIN	PROPOSED CATCH BASIN, INLET & YARD DRAIN



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

CAUTION!!
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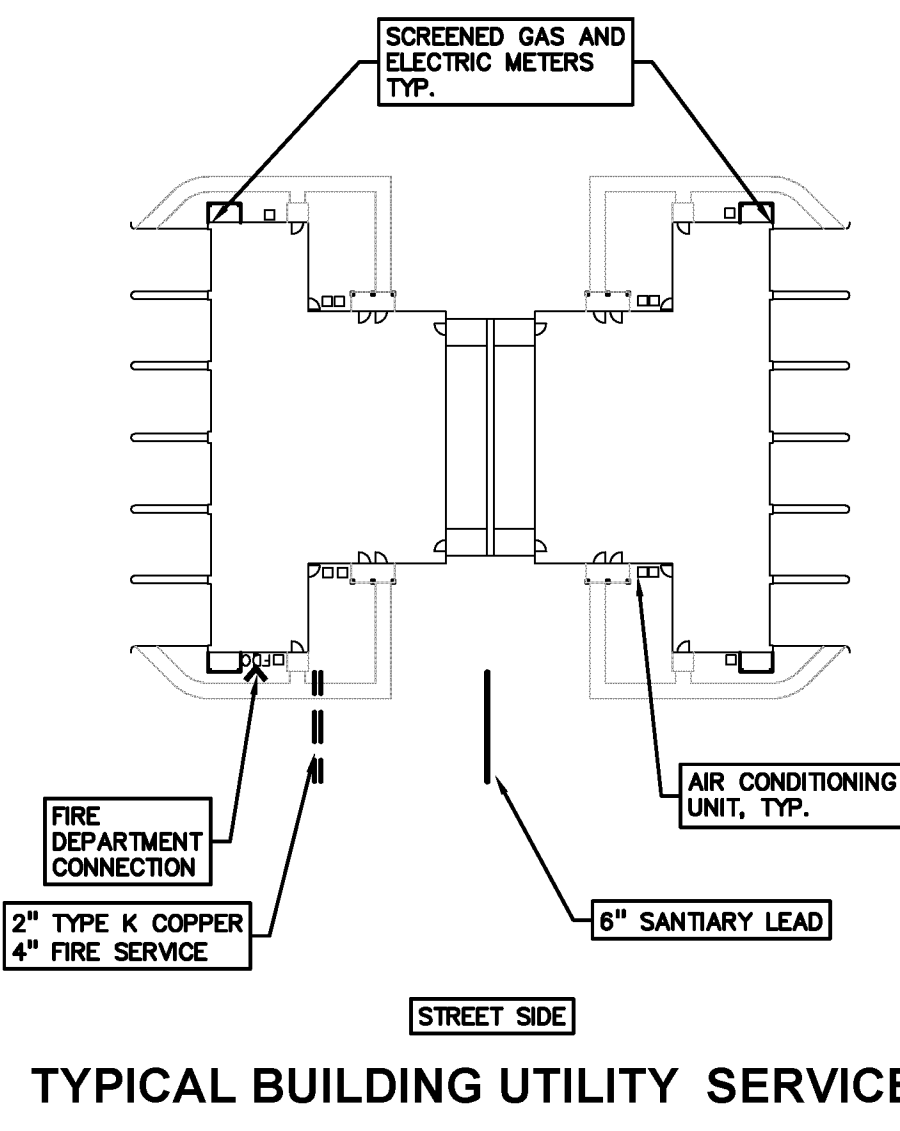
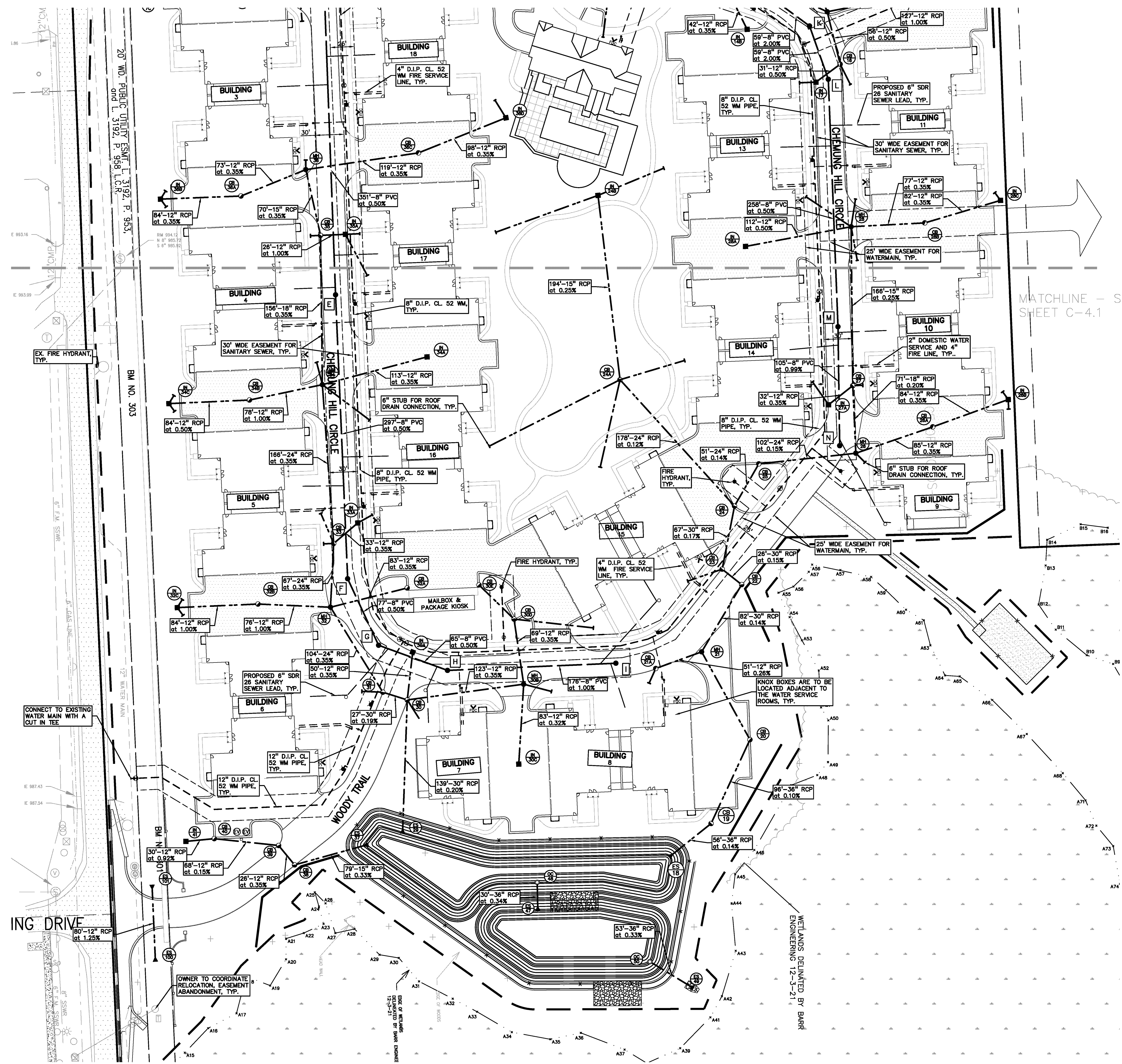
CLIENT
GRAND RIVER DORR LLC.
315550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	
REV PER TYP	5-30-23

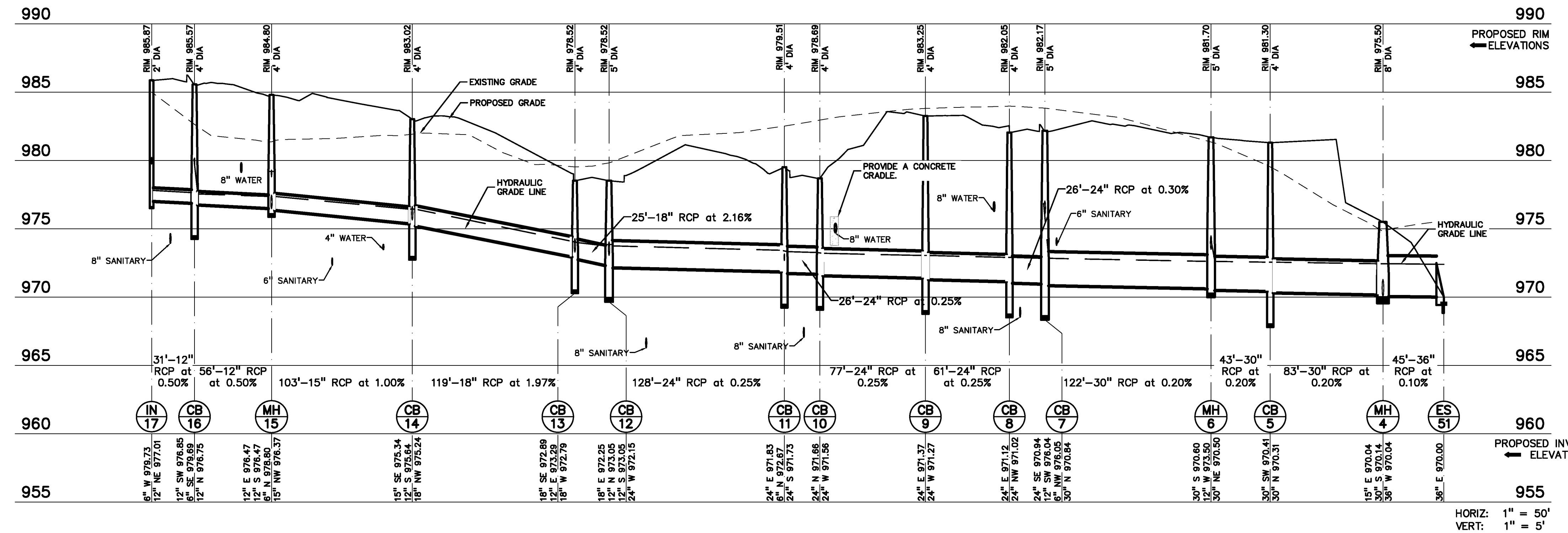
ORIGINAL ISSUE DATE:
APRIL 10, 2023
DRAWING TITLE
UTILITY PLAN SOUTH

PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR
DRAWING NUMBER:	

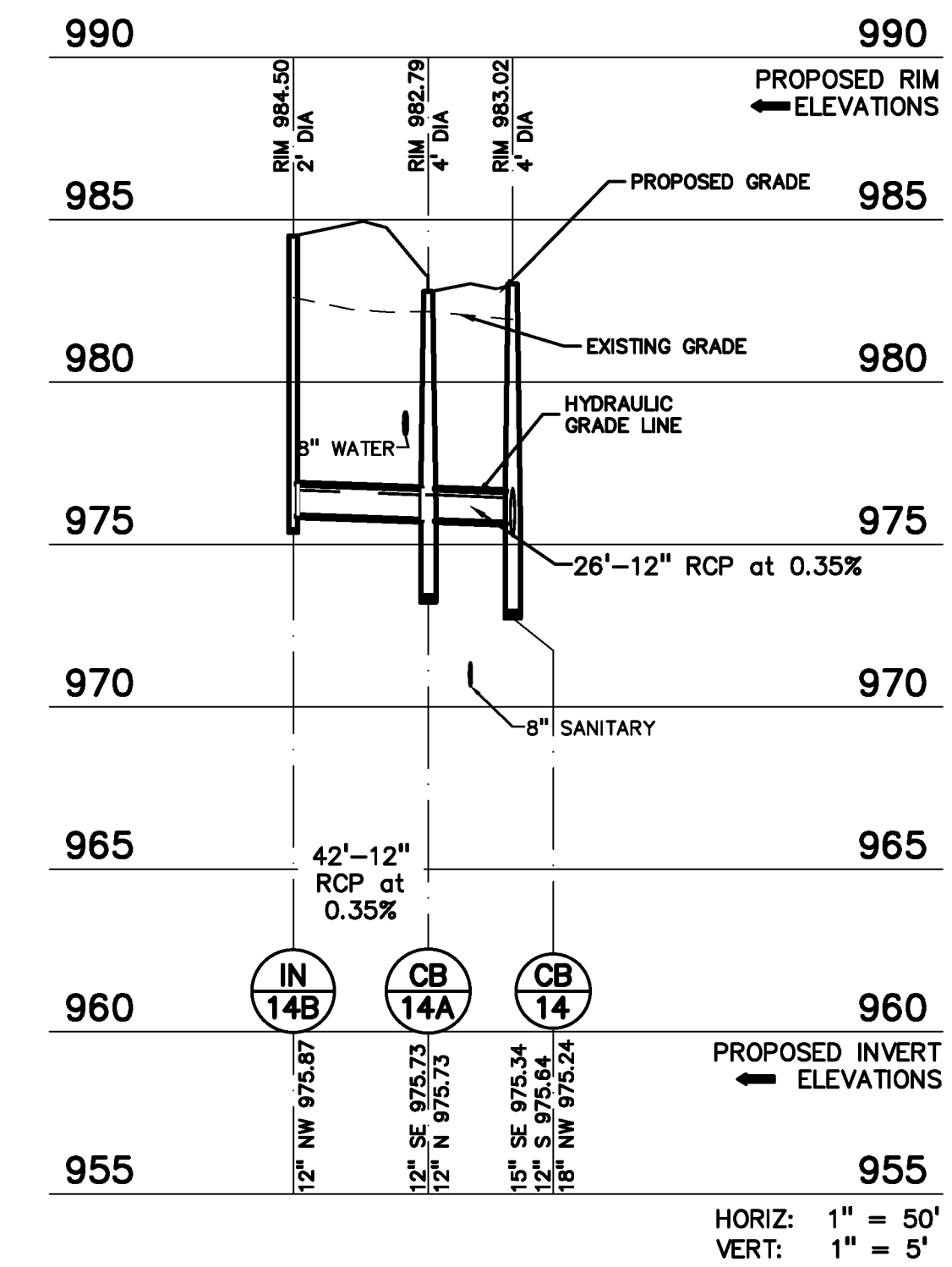


TYPICAL BUILDING UTILITY SERVICE

NOT FOR CONSTRUCTION **C-4.2**



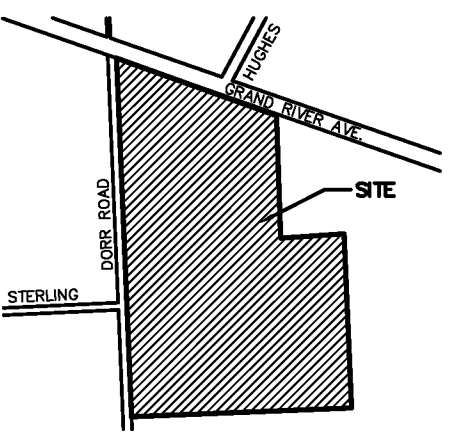
IN17-ES51 PROFILE



IN14B-CB14 PROFILE



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FARMINGTON HILLS, MI 48334

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GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

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REV PER TWP	5-30-23

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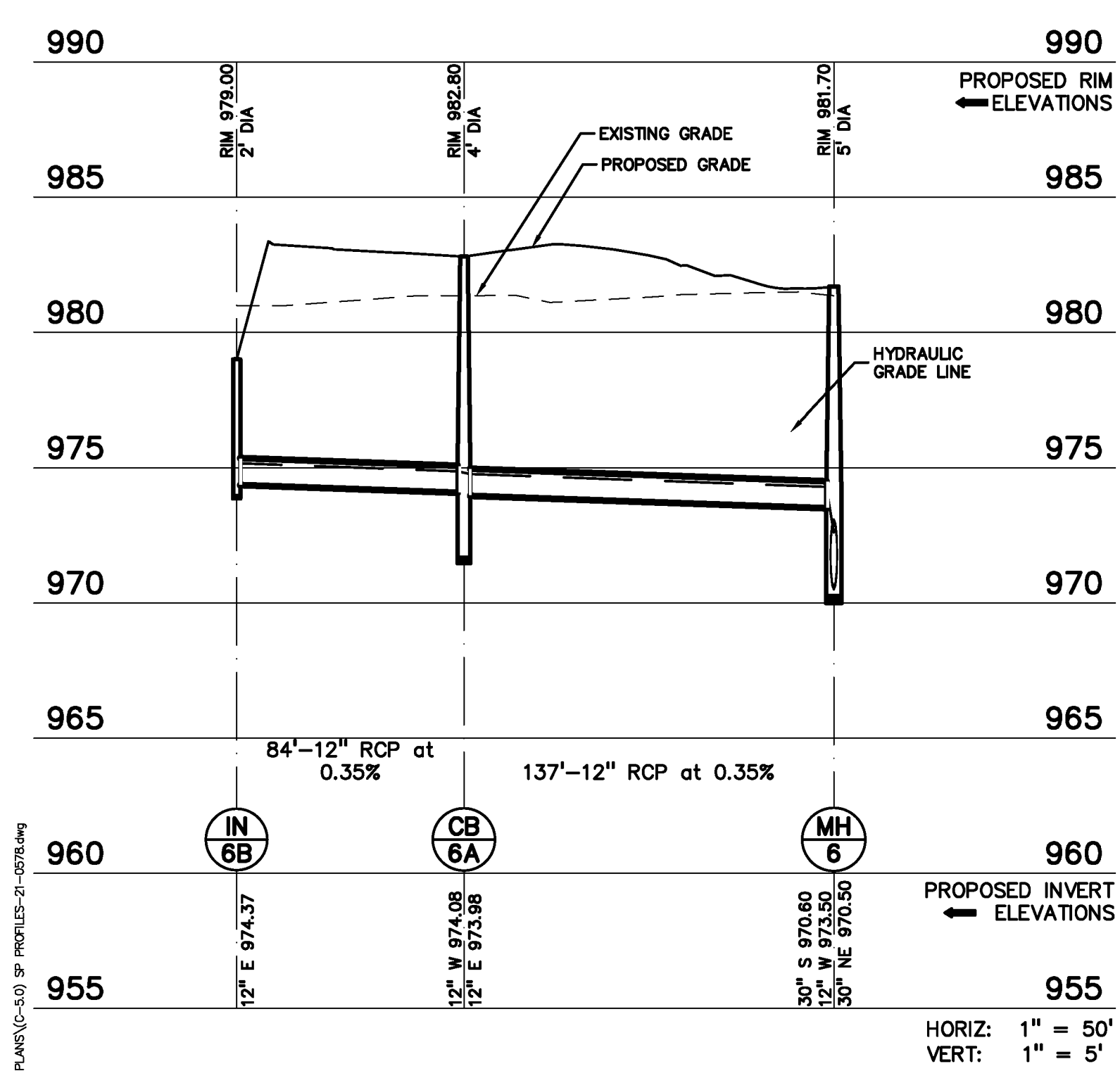
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PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR
DRAWING NUMBER:	

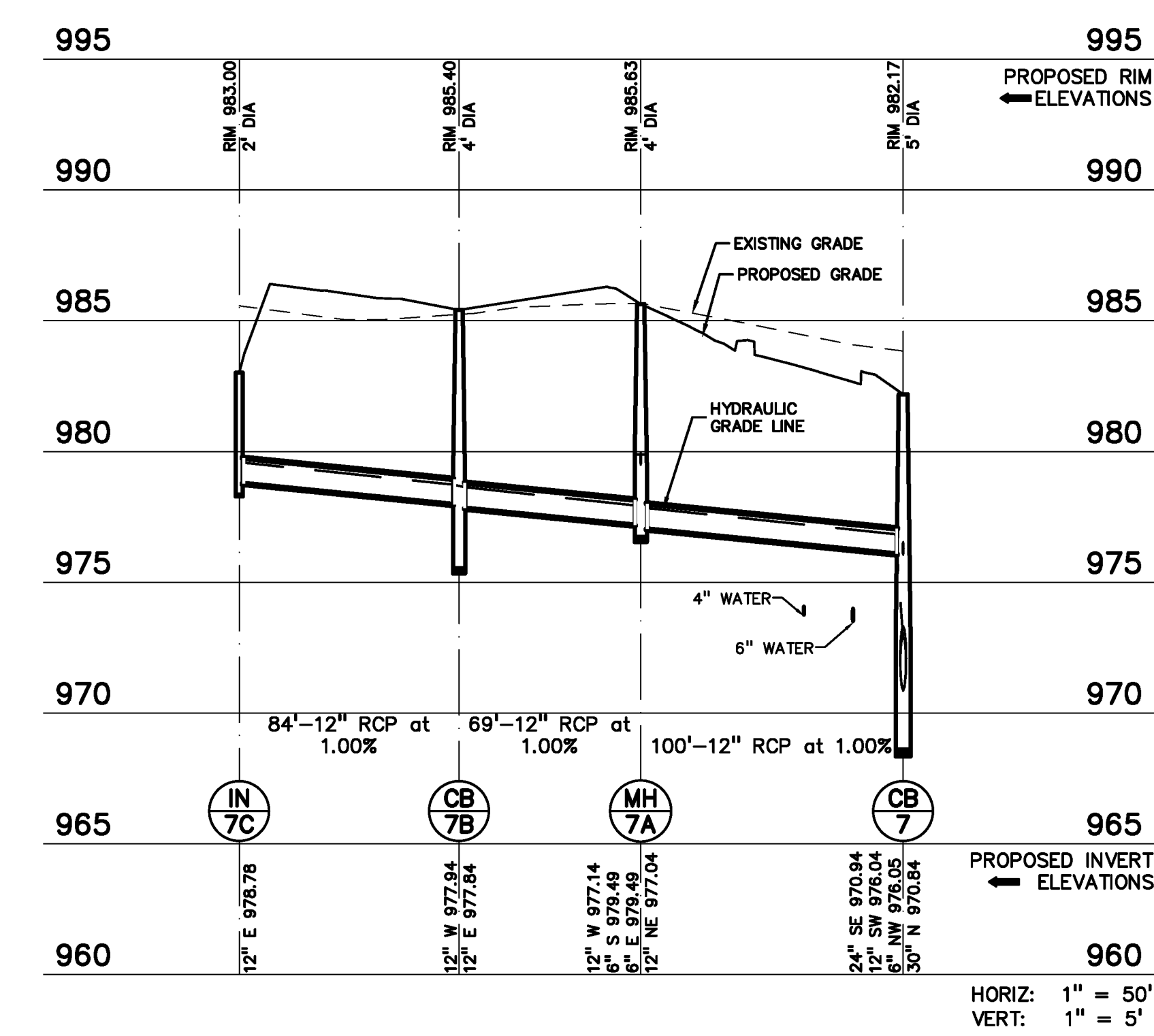
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NOT FOR CONSTRUCTION

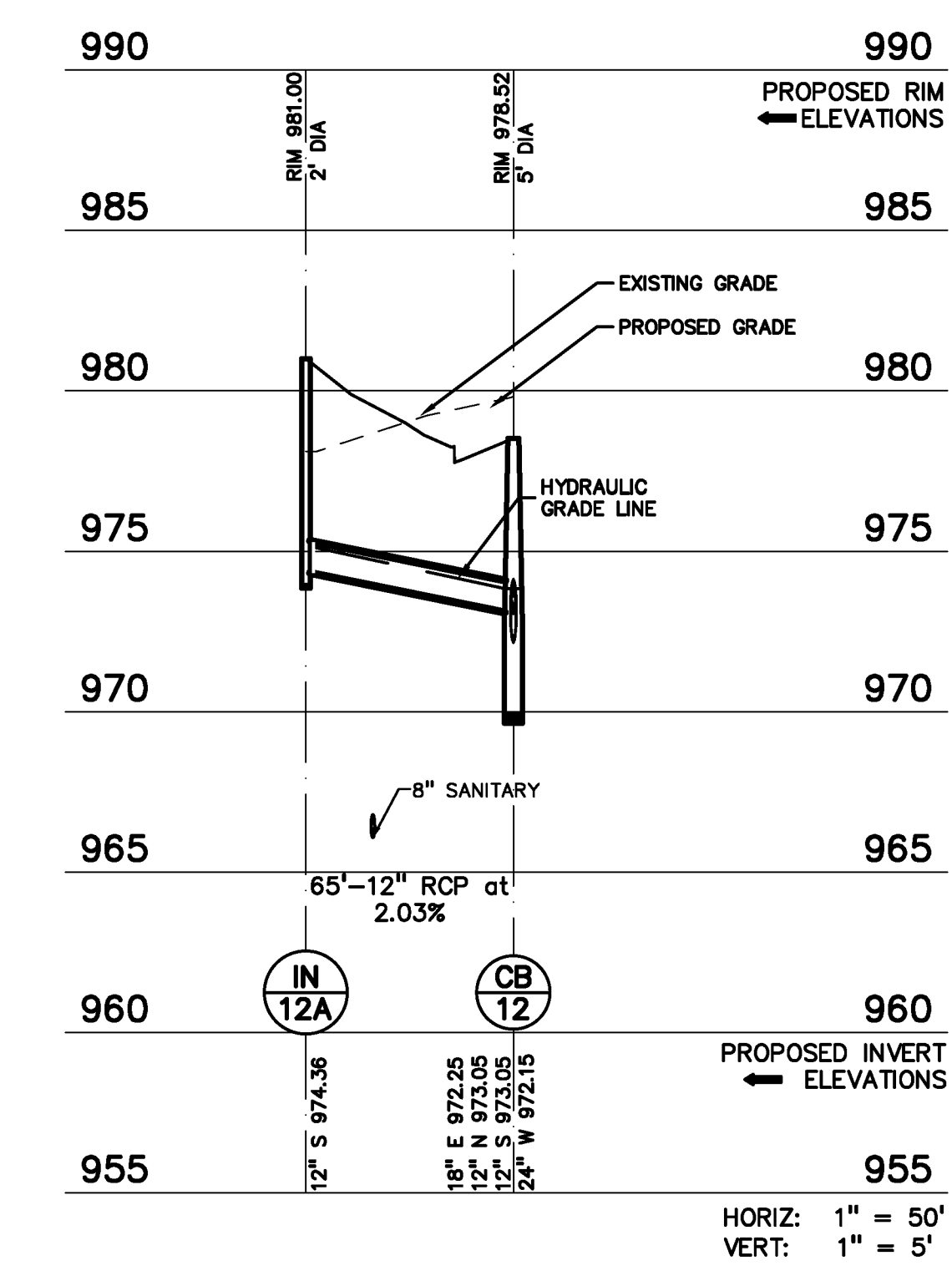
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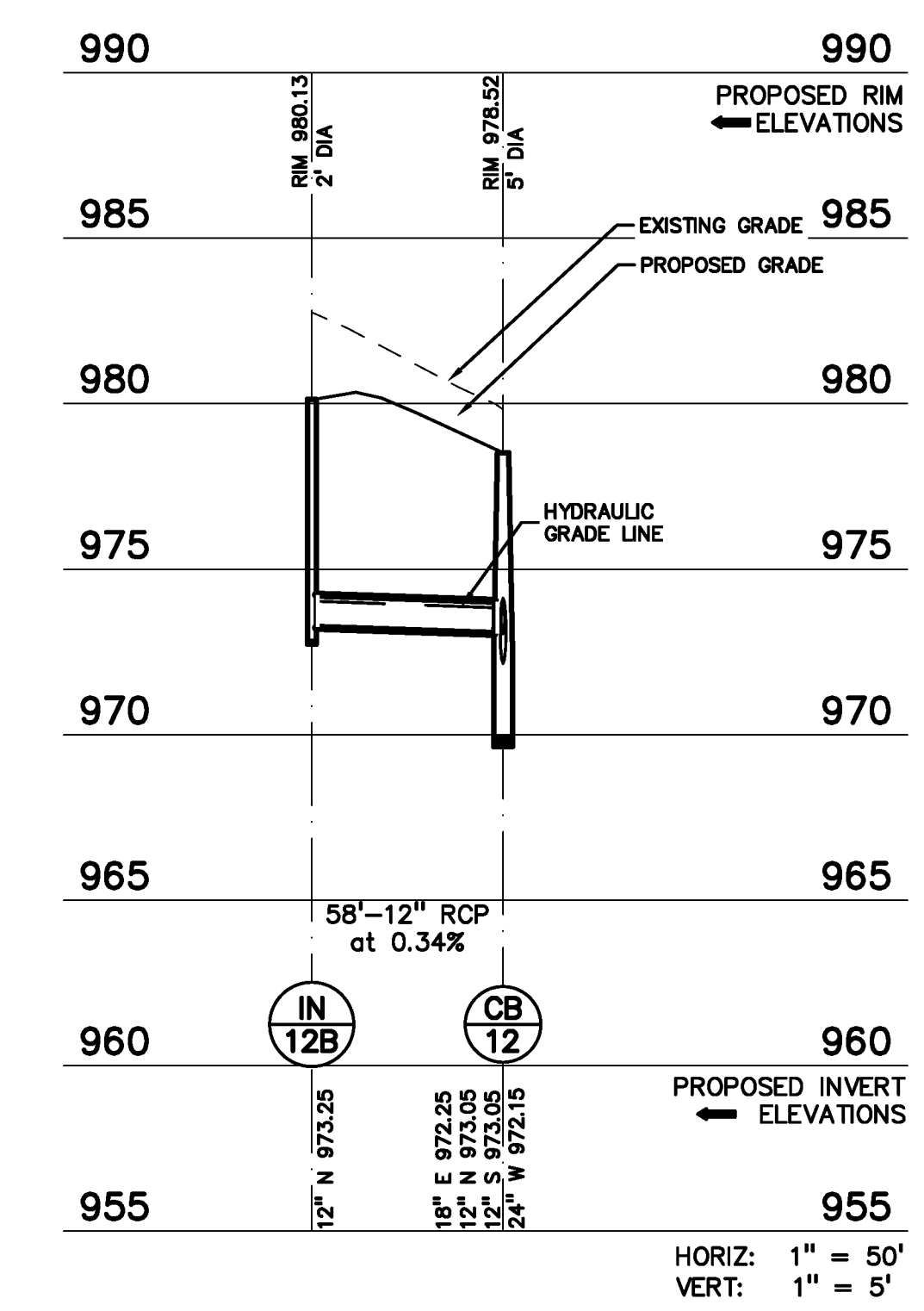
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IN7C-CB7 PROFILE

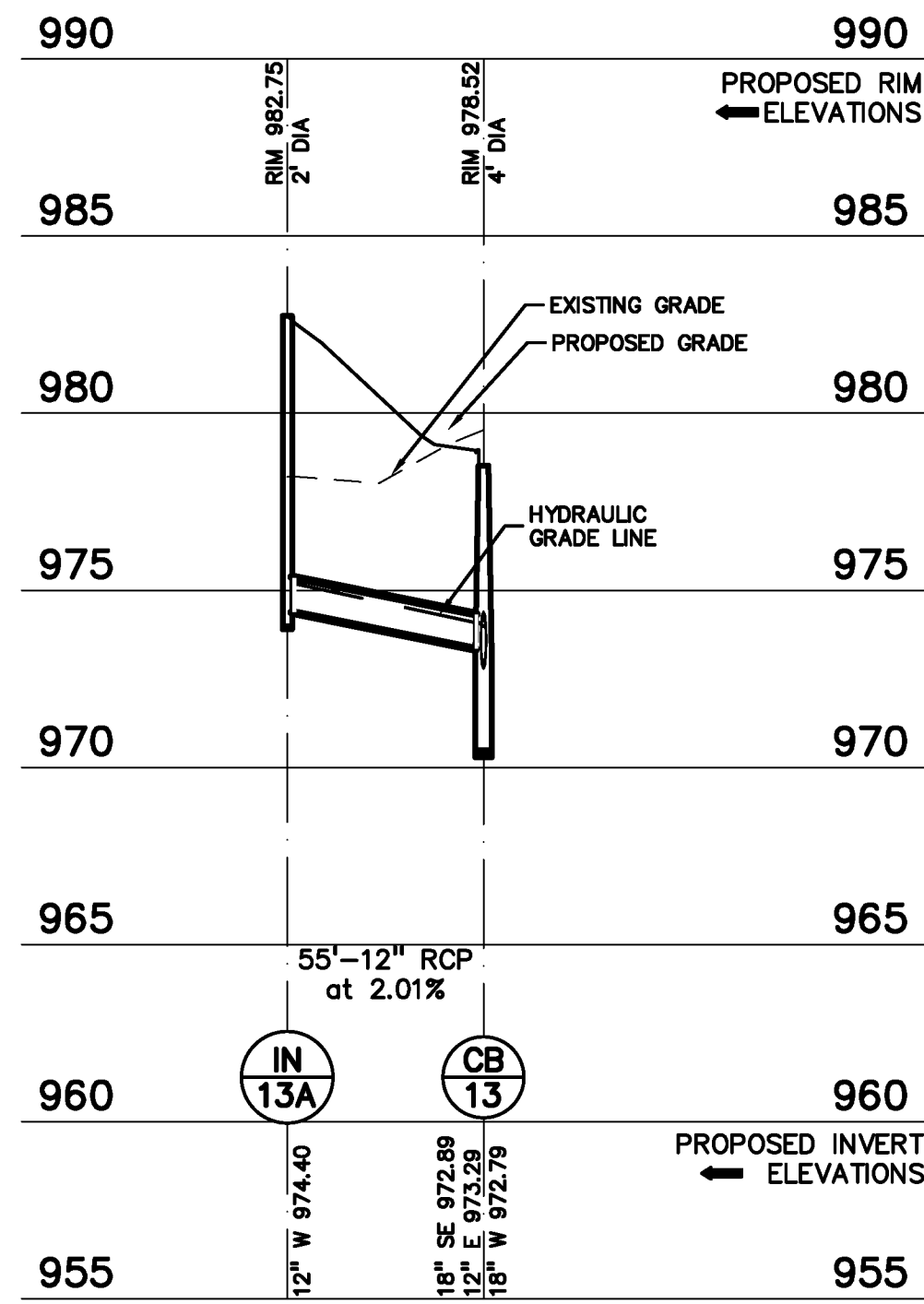


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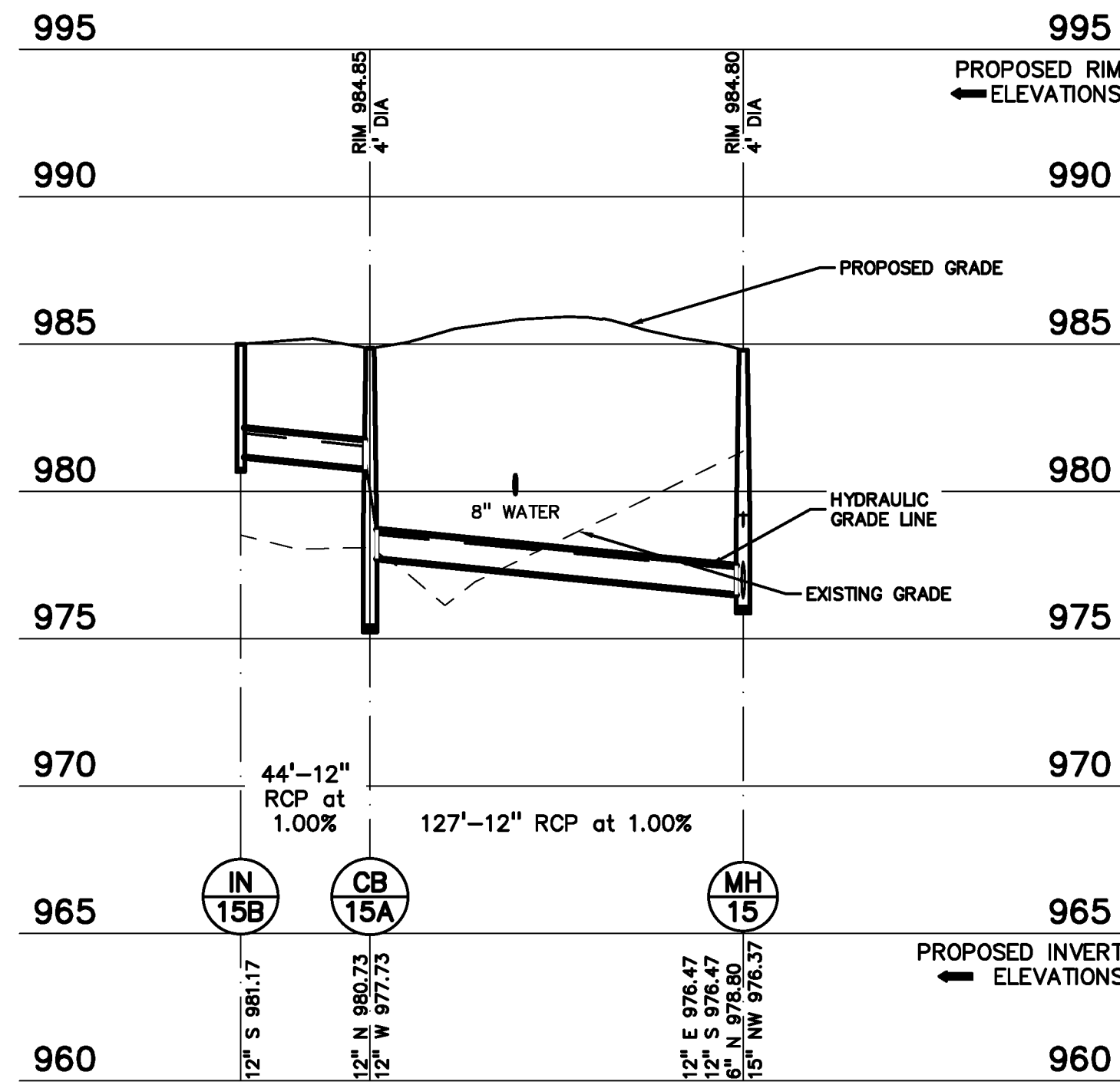


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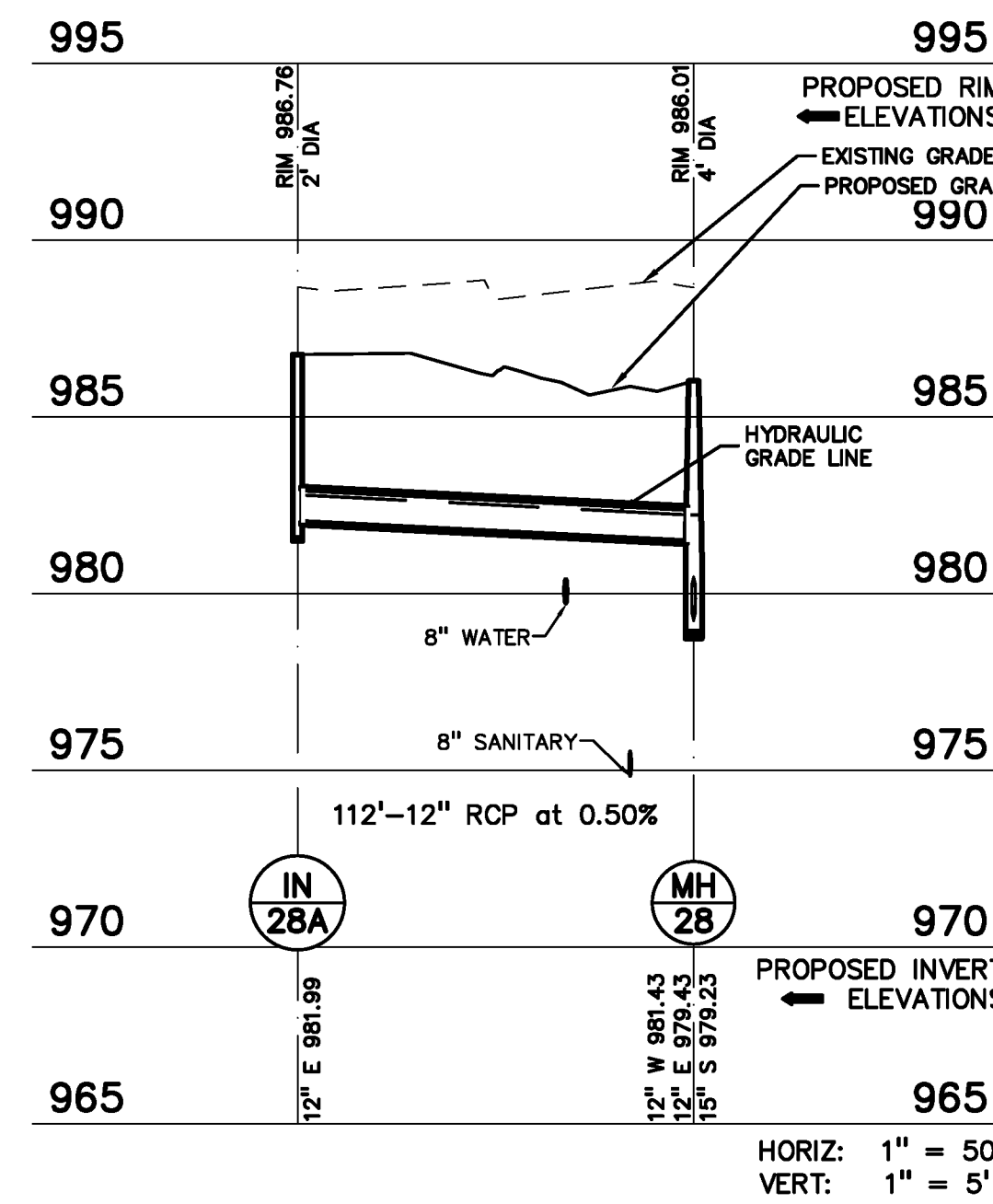
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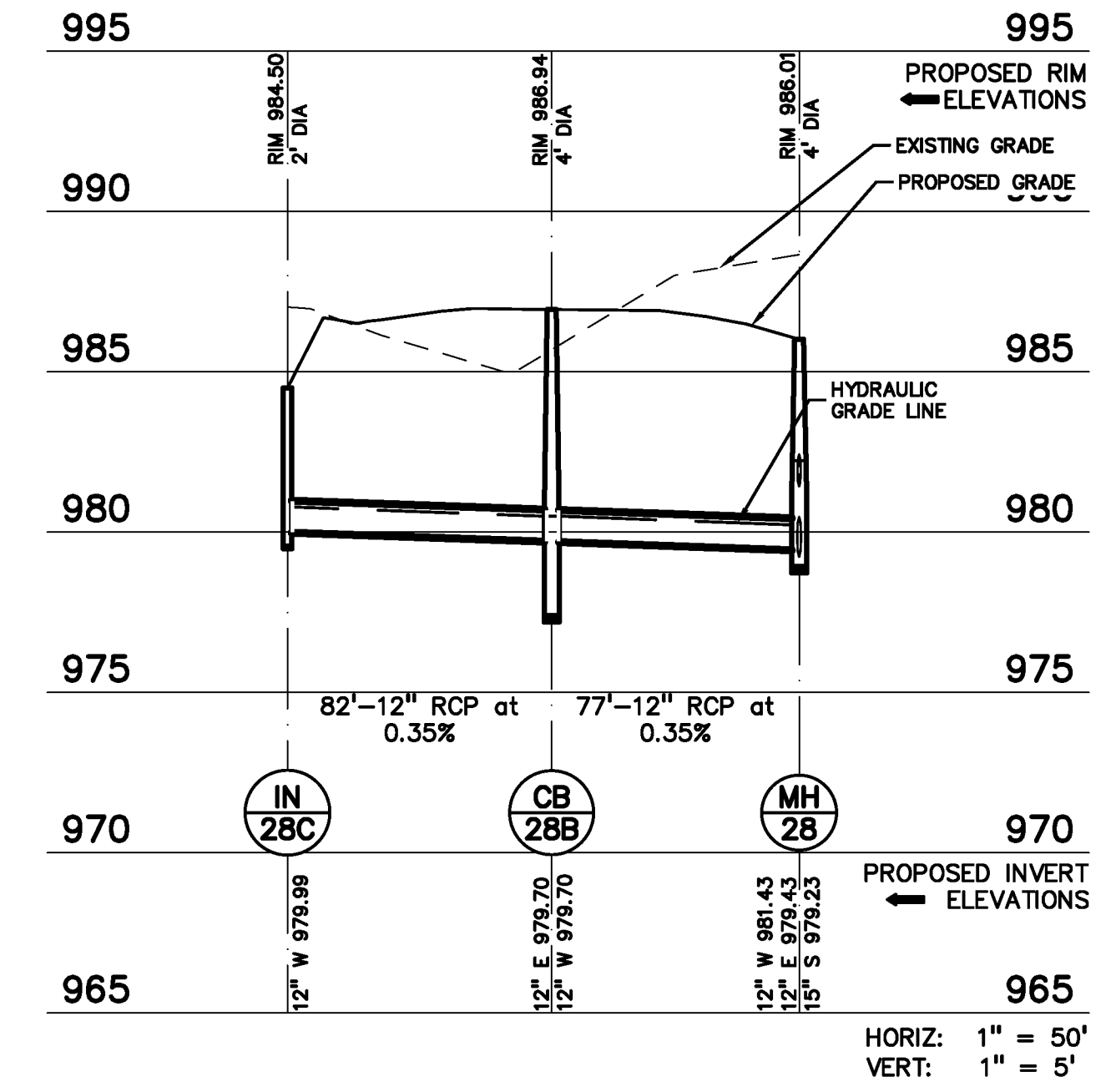
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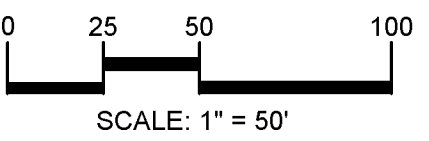
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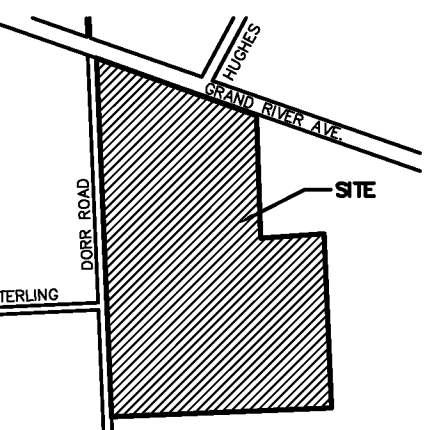
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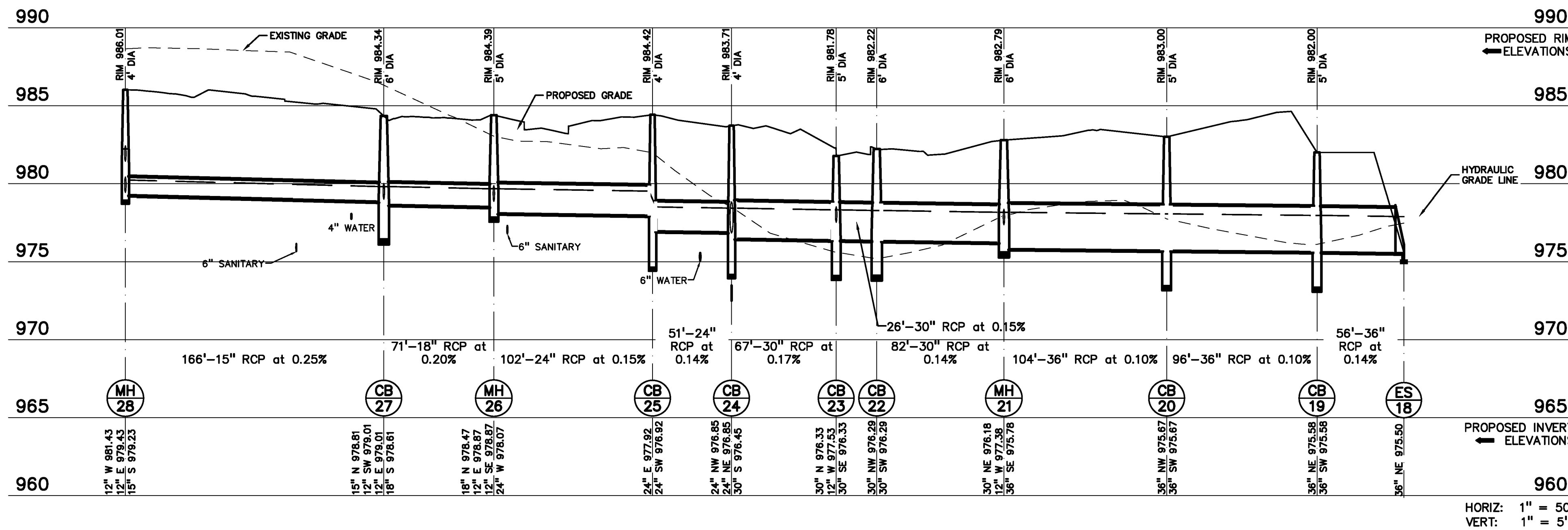
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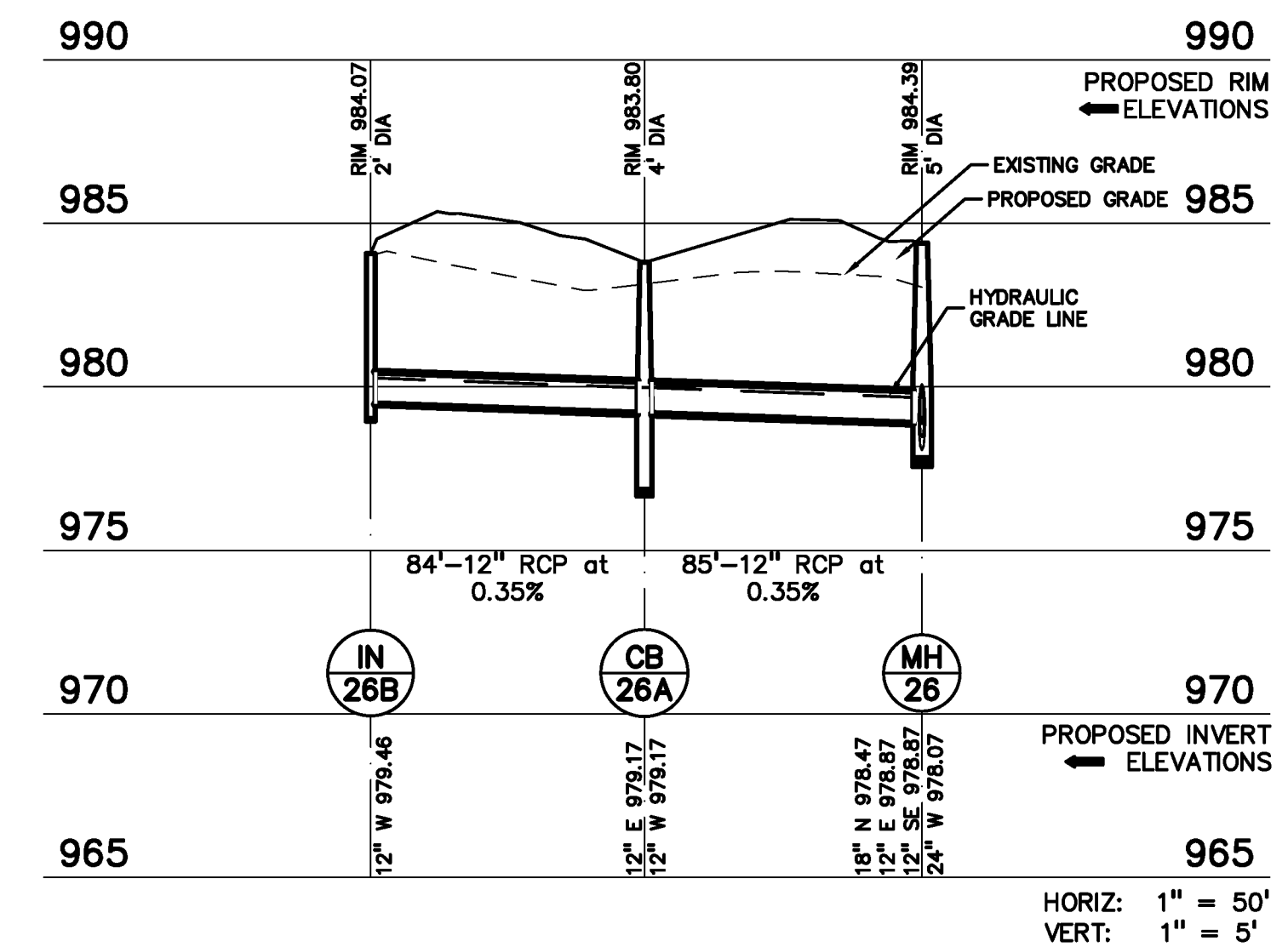
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CLIENT
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31550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334



MH28-ES18 PROFILE



IN26B-MH26 PROFILE

PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	
REV PER TWP	5-30-23

ORIGINAL ISSUE DATE:
APRIL 10, 2023

DRAWING TITLE

STORM SEWER PROFILES

PEA JOB NO. 2021-0578

P.M. JEC

DES. JMR

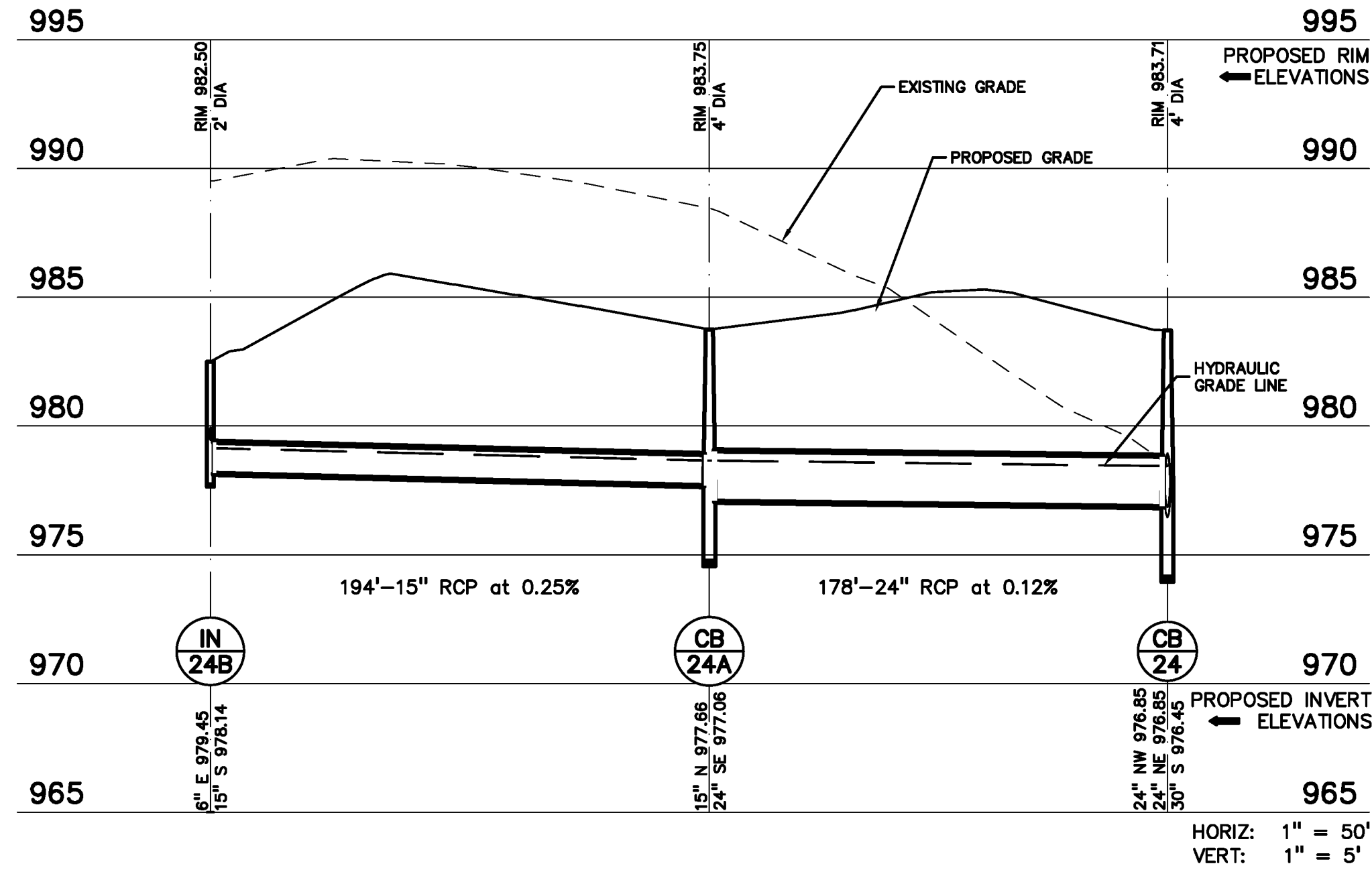
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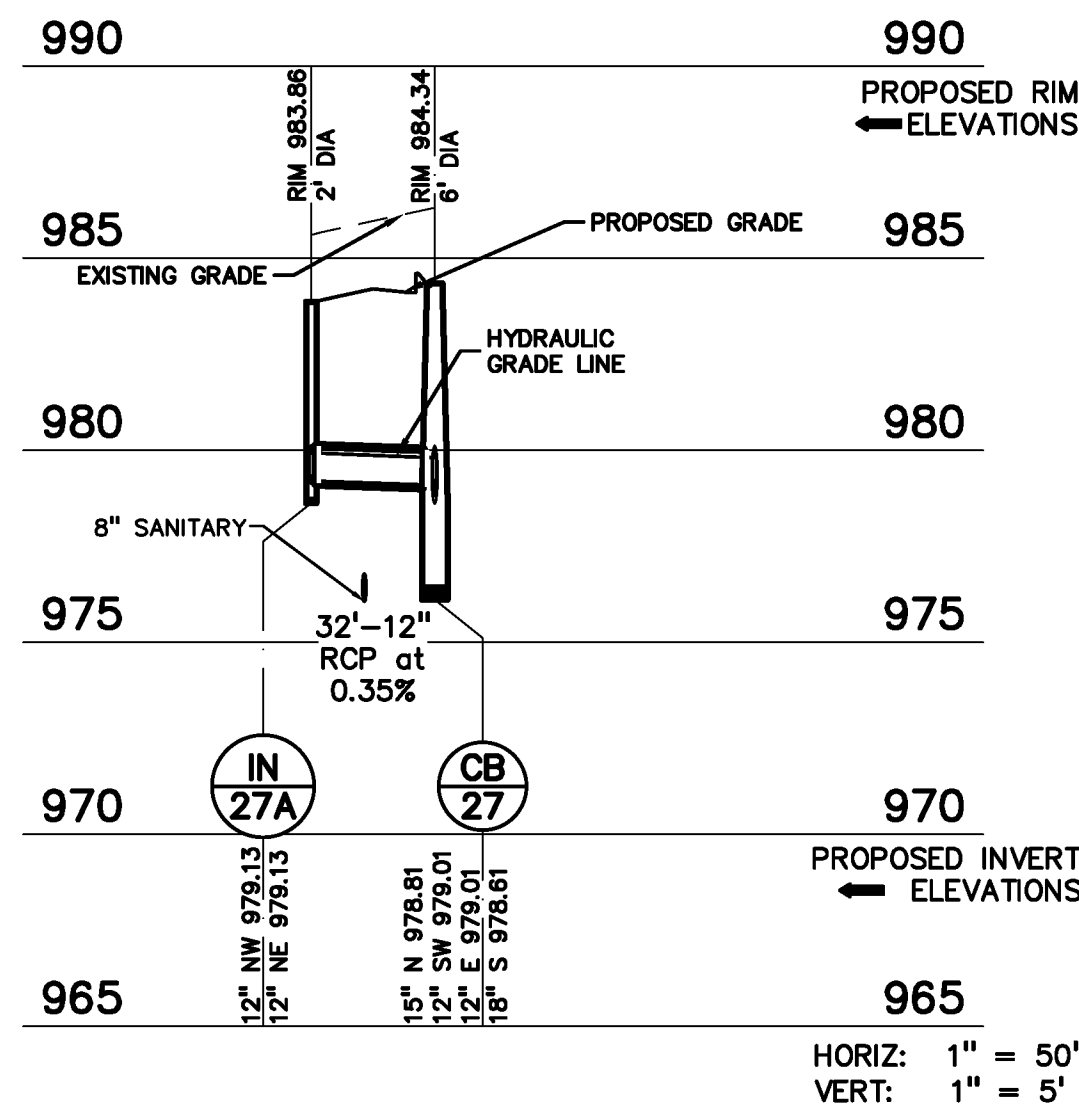
C-5.2

PREMIUM TRENCH BACKFILL NOTE:
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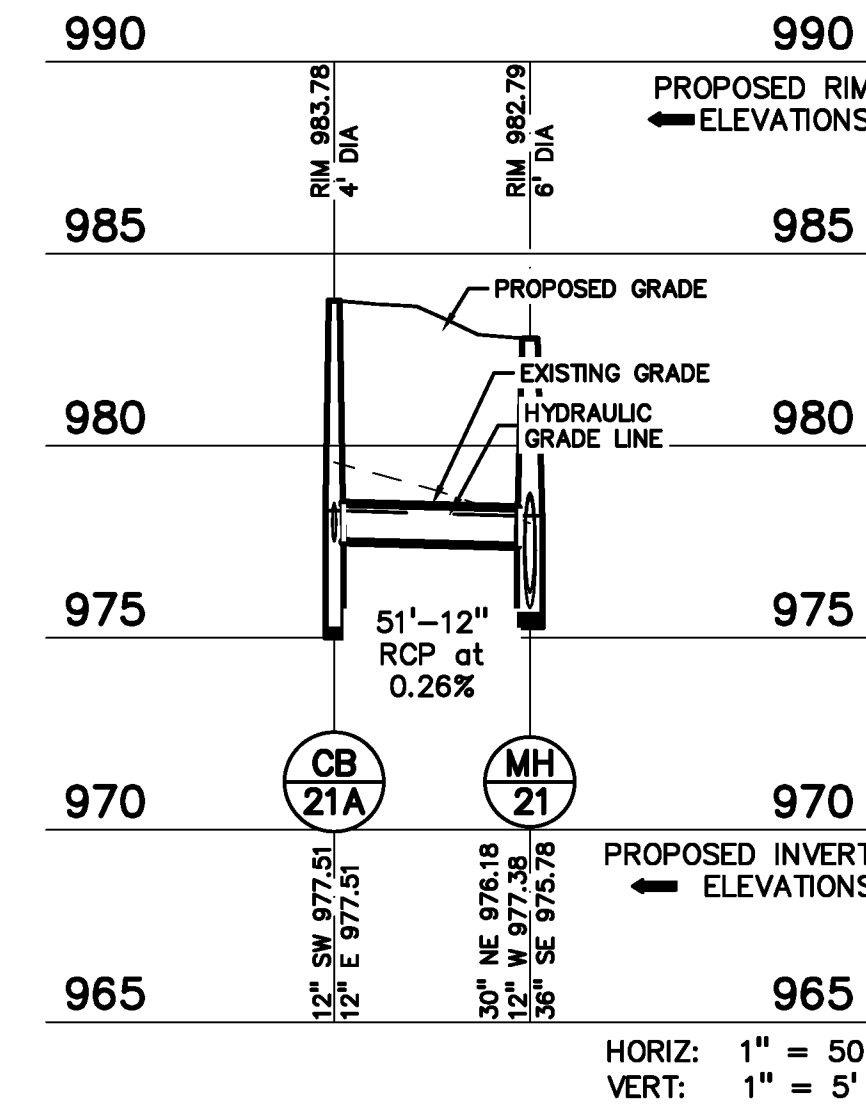
NOT FOR CONSTRUCTION



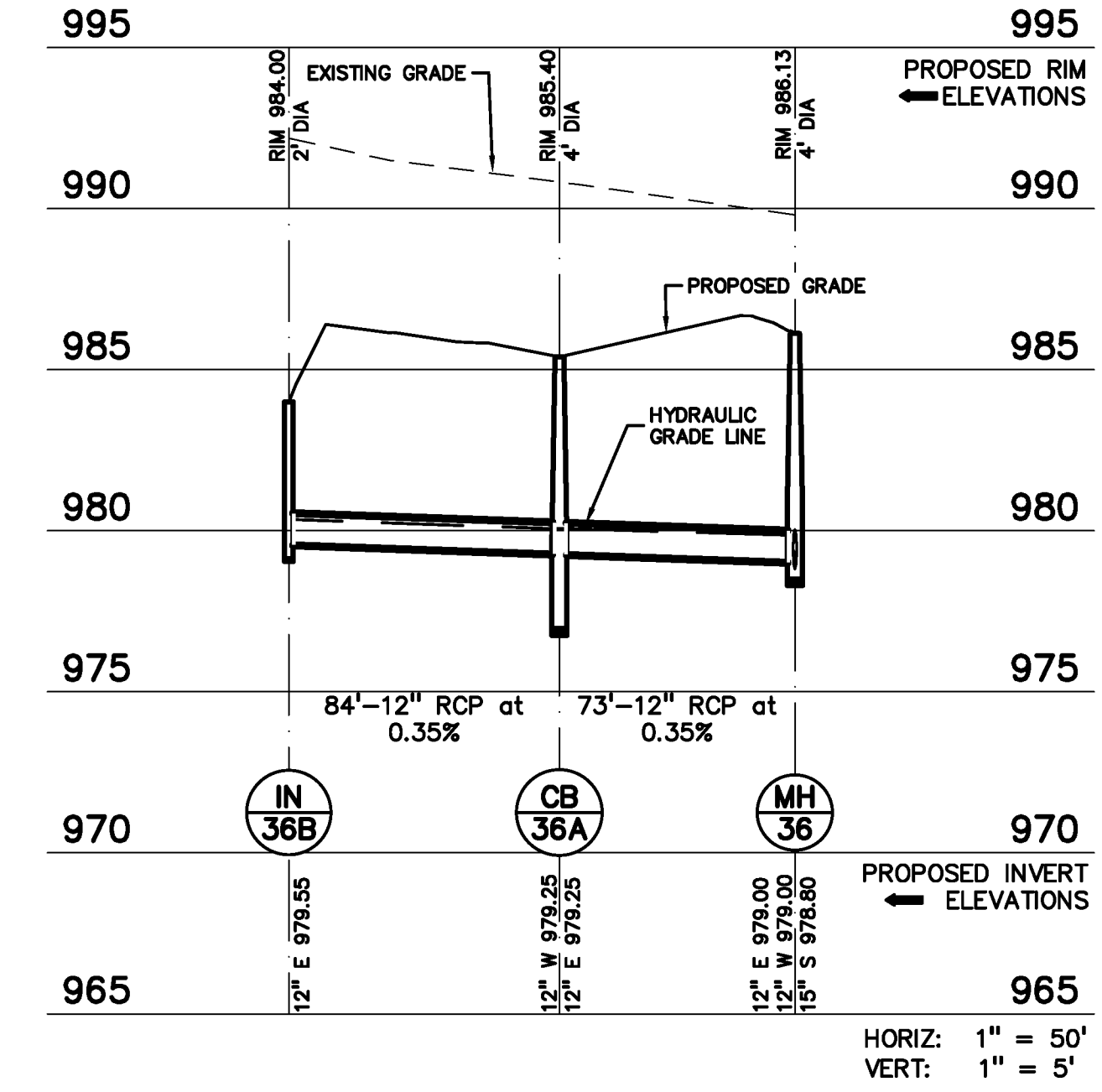
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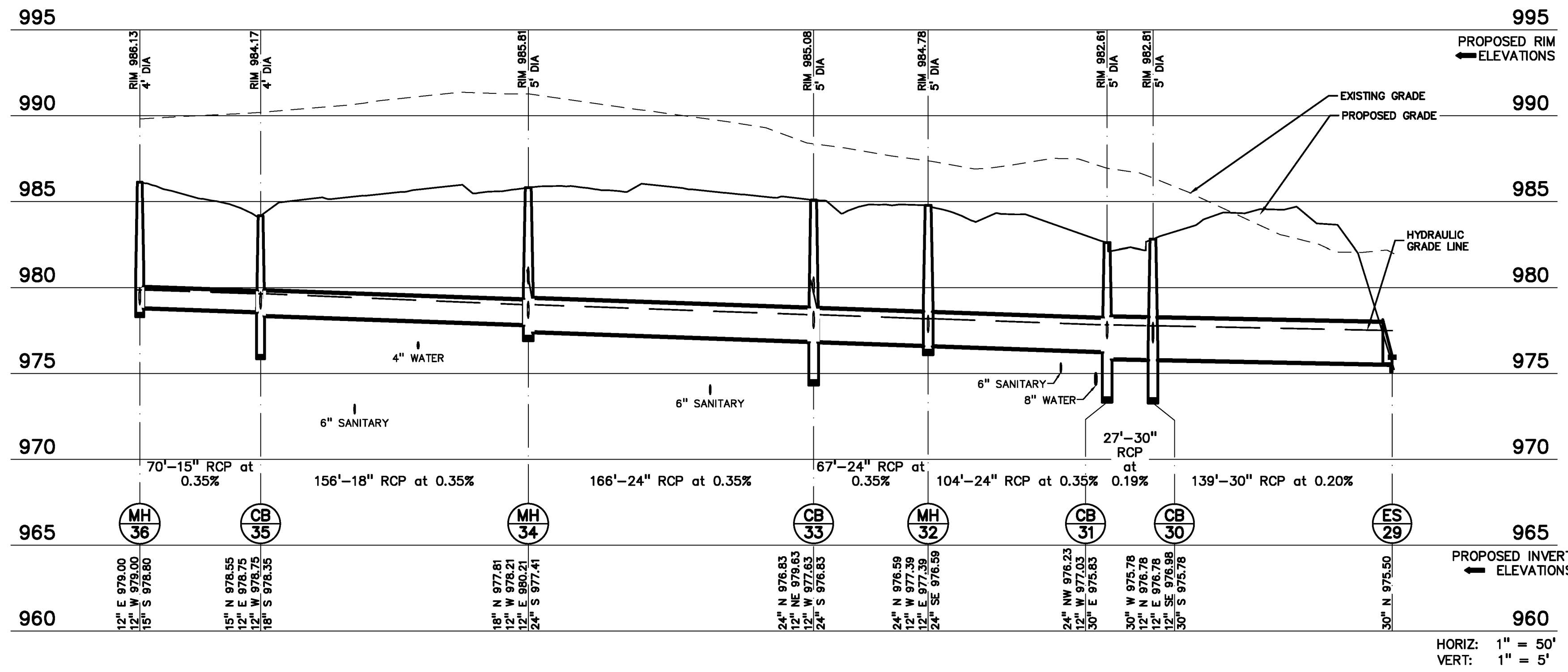
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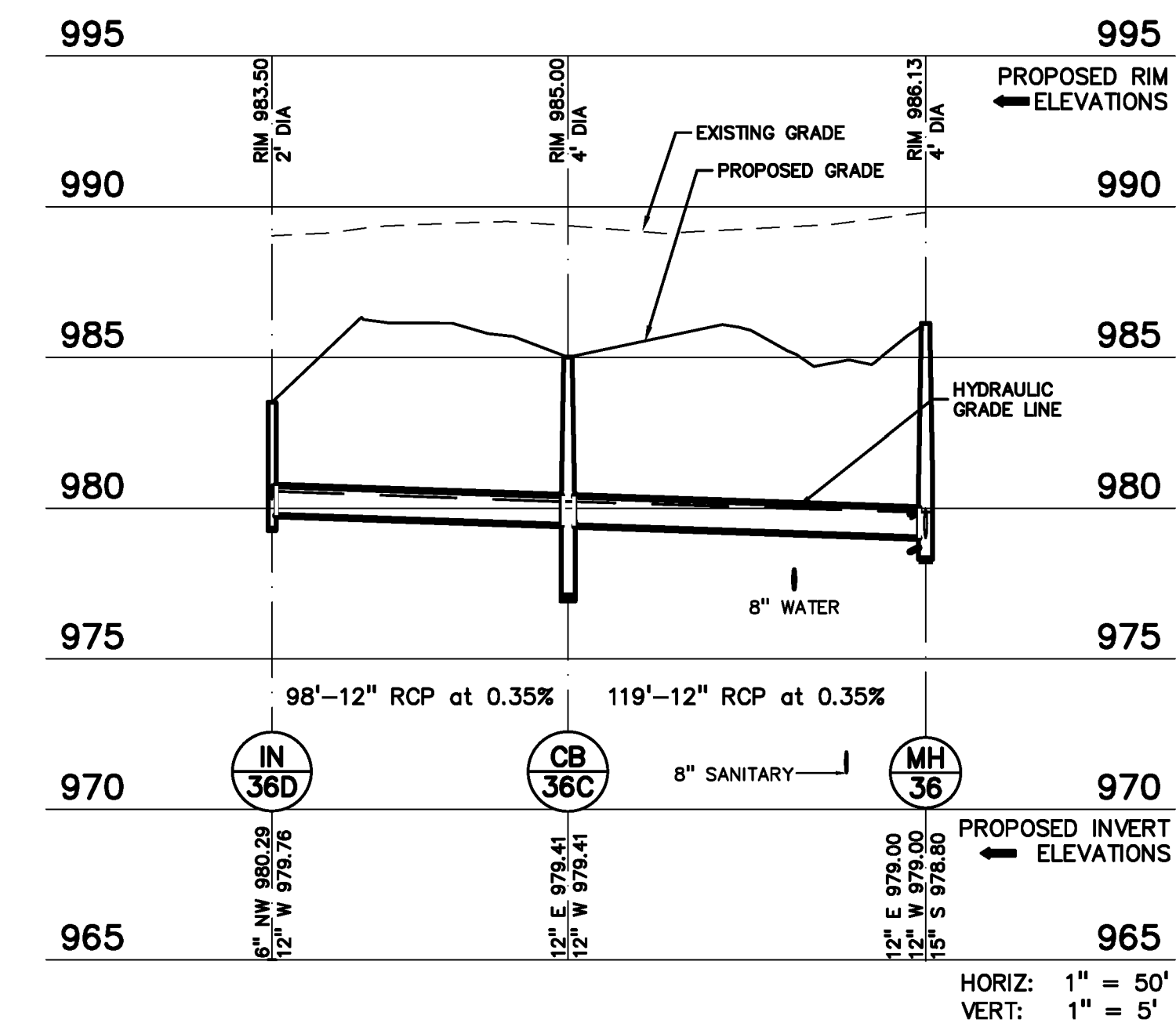
CB21A-MH21 PROFILE



MH36-ES29 (1) PROFILE



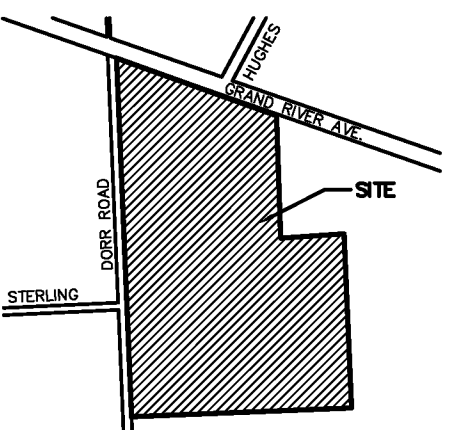
MH36-ES29 PROFILE



IN36D-MH36 PROFILE



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31550 NORTHWESTERN HIGHWAY
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PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	
REV PER TWP	5-30-23

ORIGINAL ISSUE DATE:
APRIL 10, 2023

DRAWING TITLE

STORM SEWER PROFILES

PEA JOB NO. 2021-0578

P.M. JEC

DN. JMR

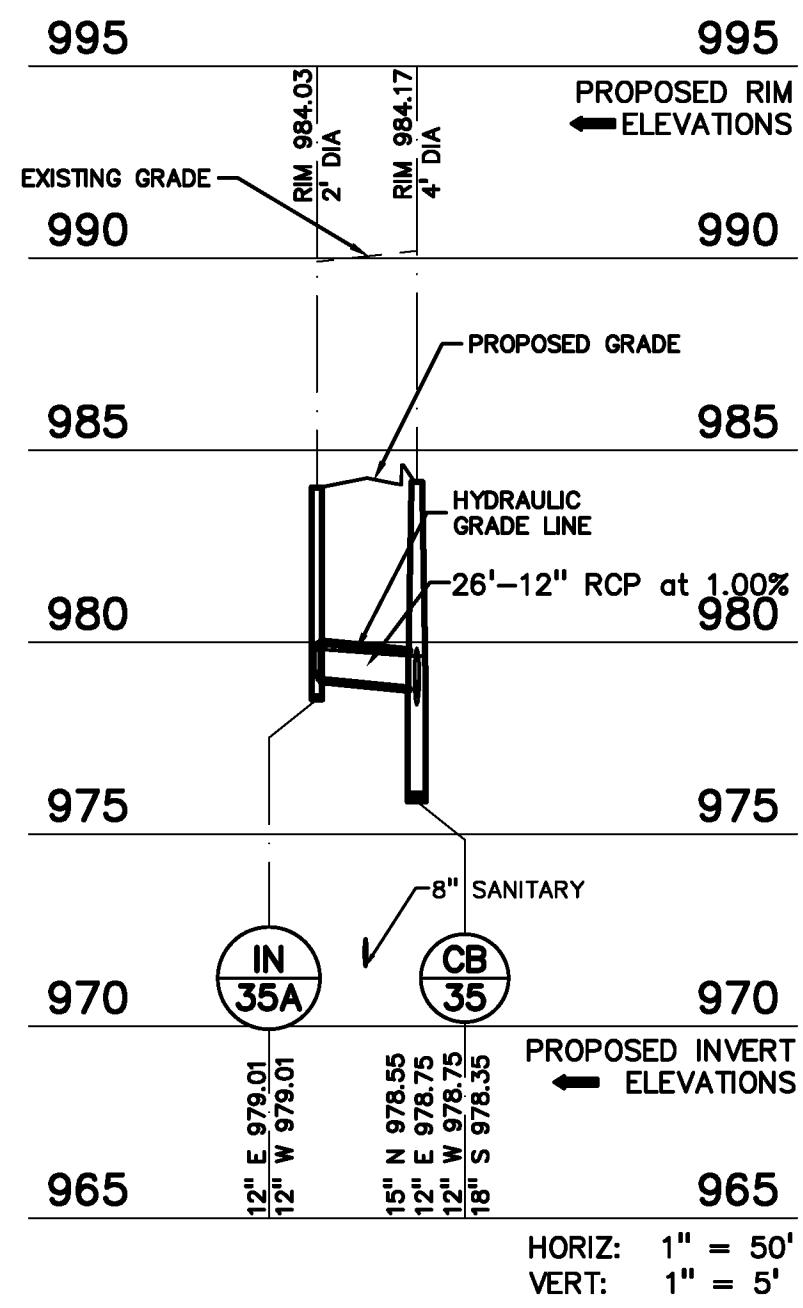
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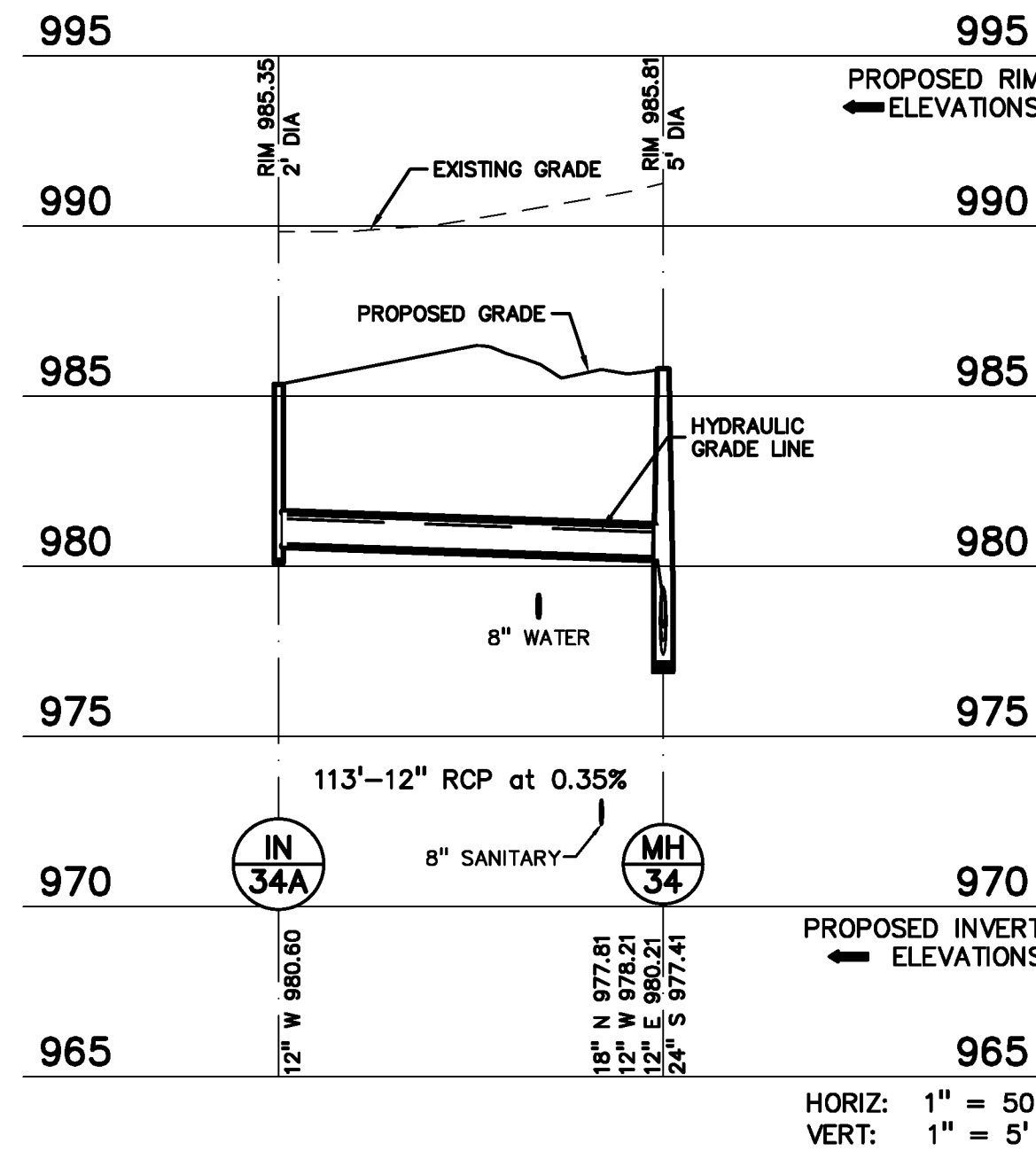
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NOT FOR CONSTRUCTION

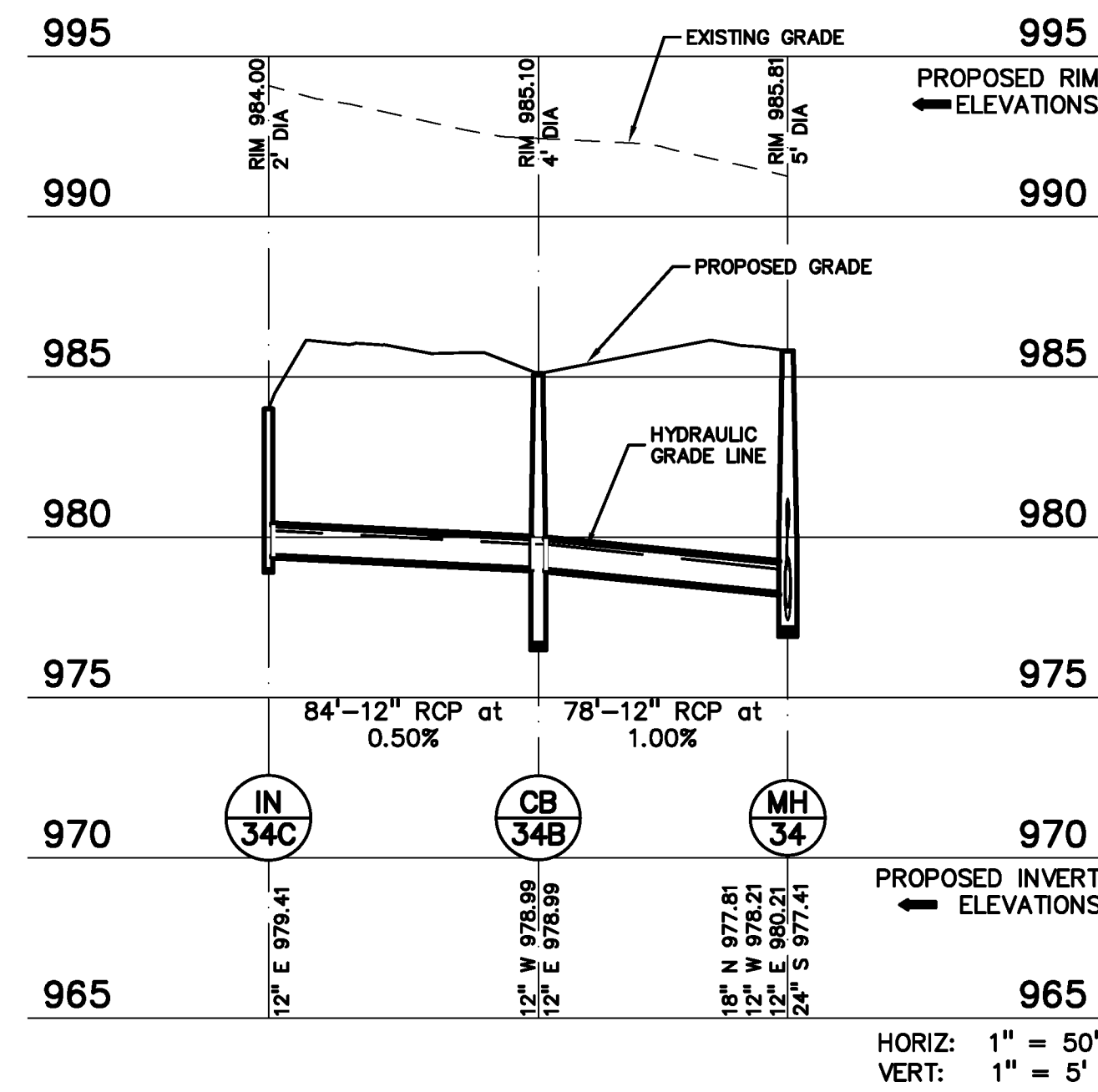
C-5.3



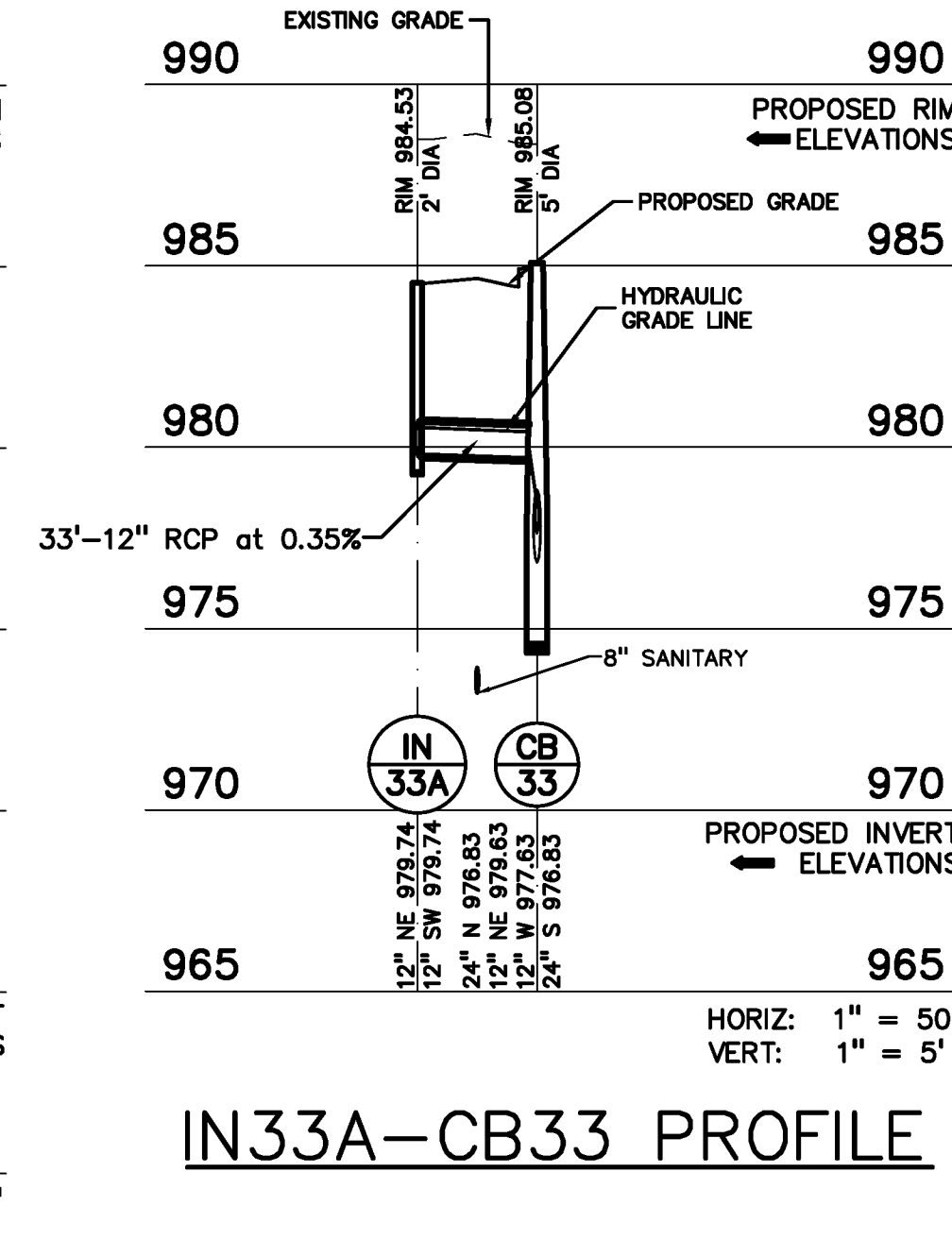
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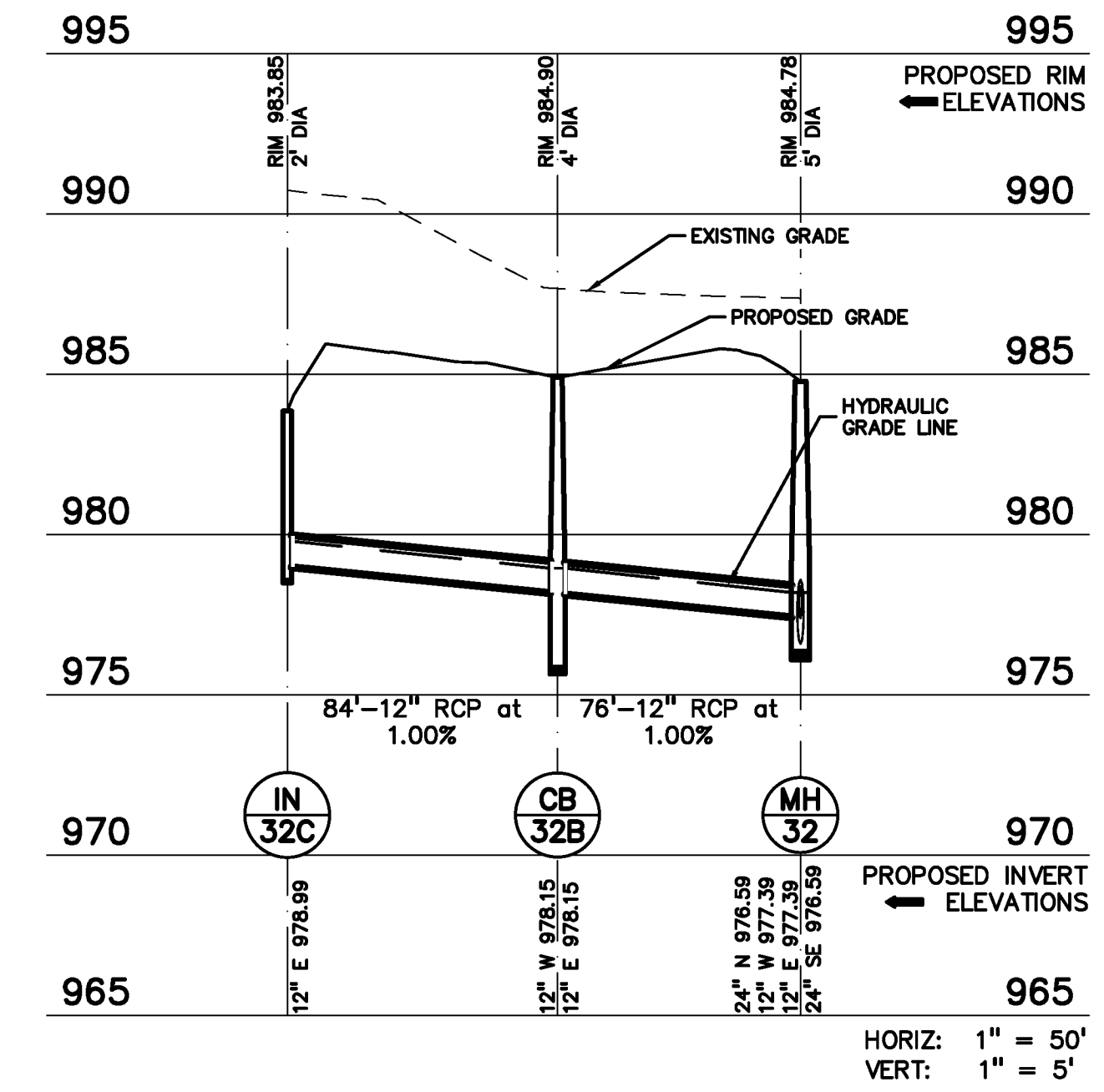
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IN34C-MH34 PROFILE



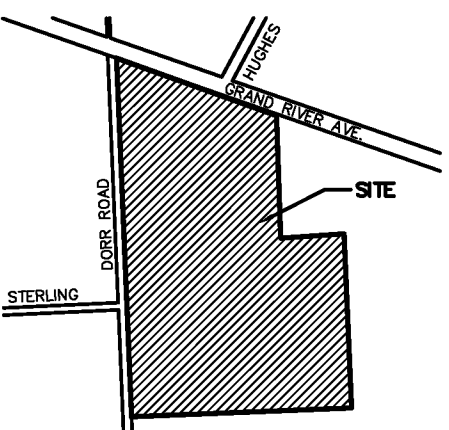
IN33A-CB33 PROFILE



IN32C-MH32 PROFILE



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315550 NORTHWESTERN HIGHWAY
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PROJECT TITLE
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GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	
REV PER TWP	5-30-23

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STORM SEWER PROFILES

PEA JOB NO. 2021-0578

P.M. JEC

DN. JMR

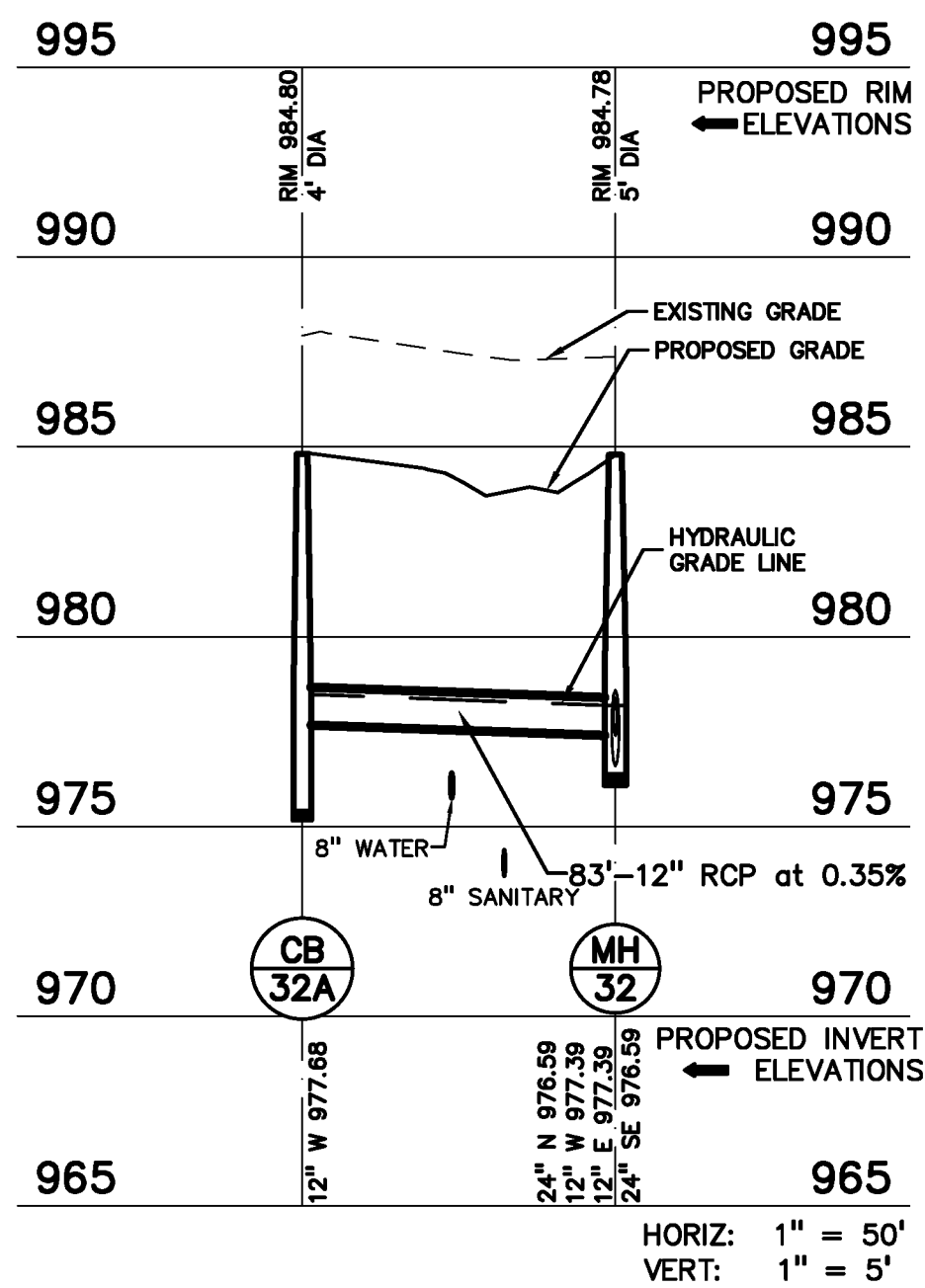
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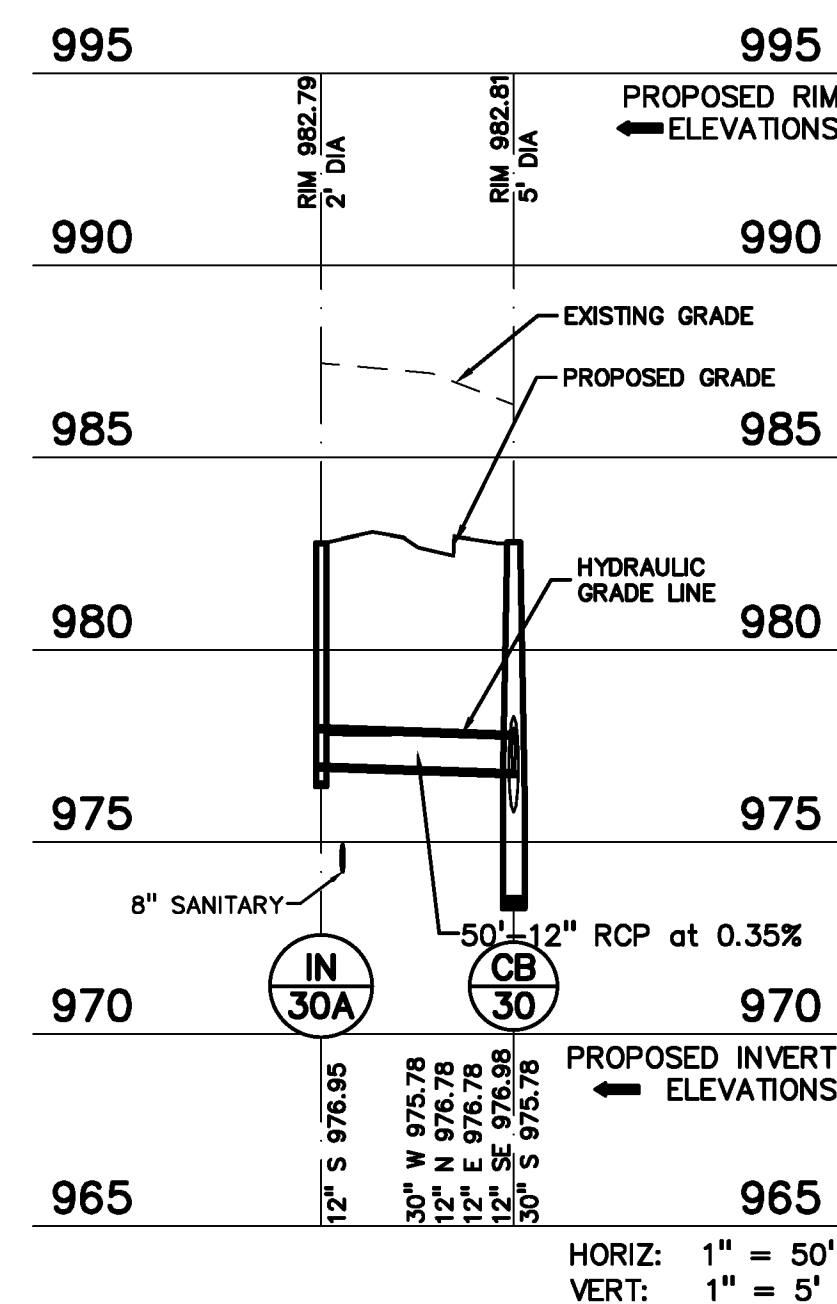
C-5.4

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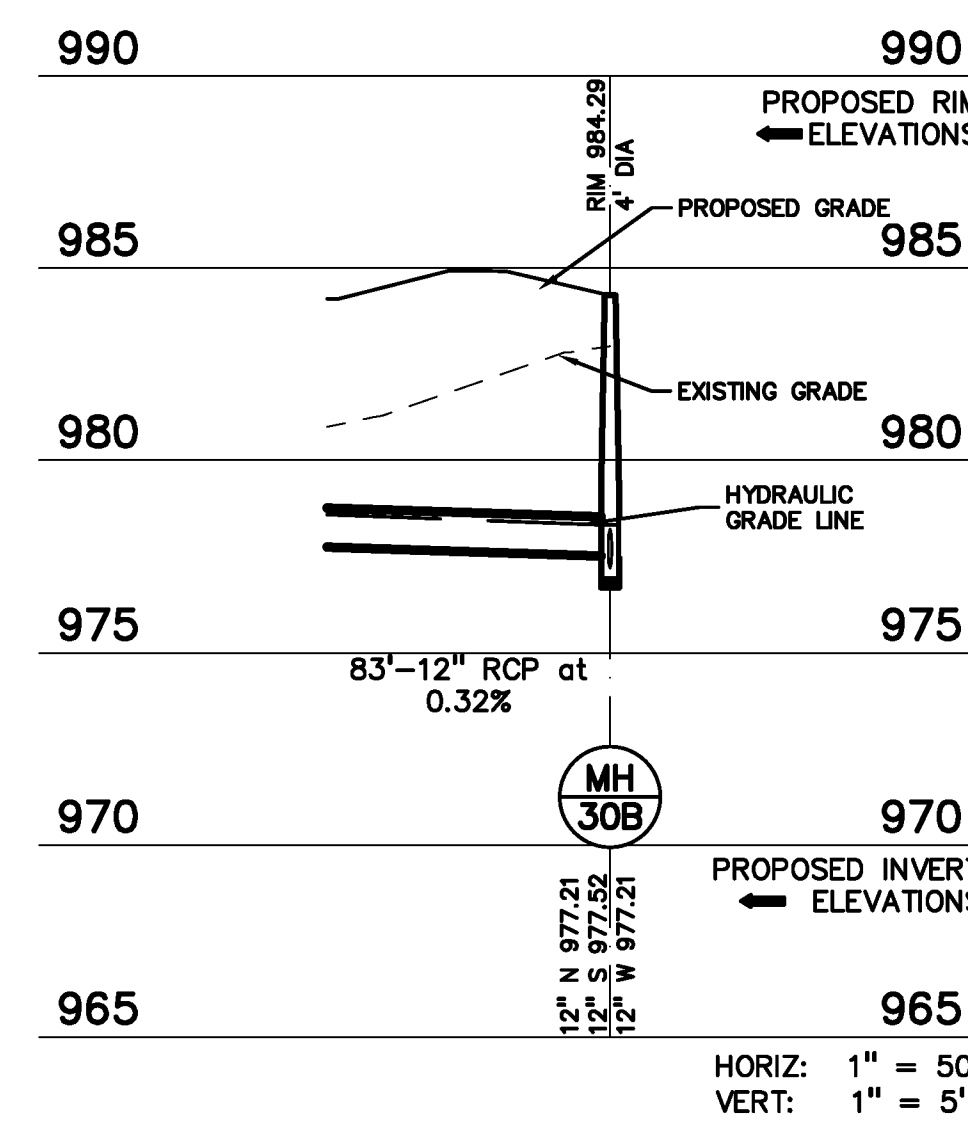
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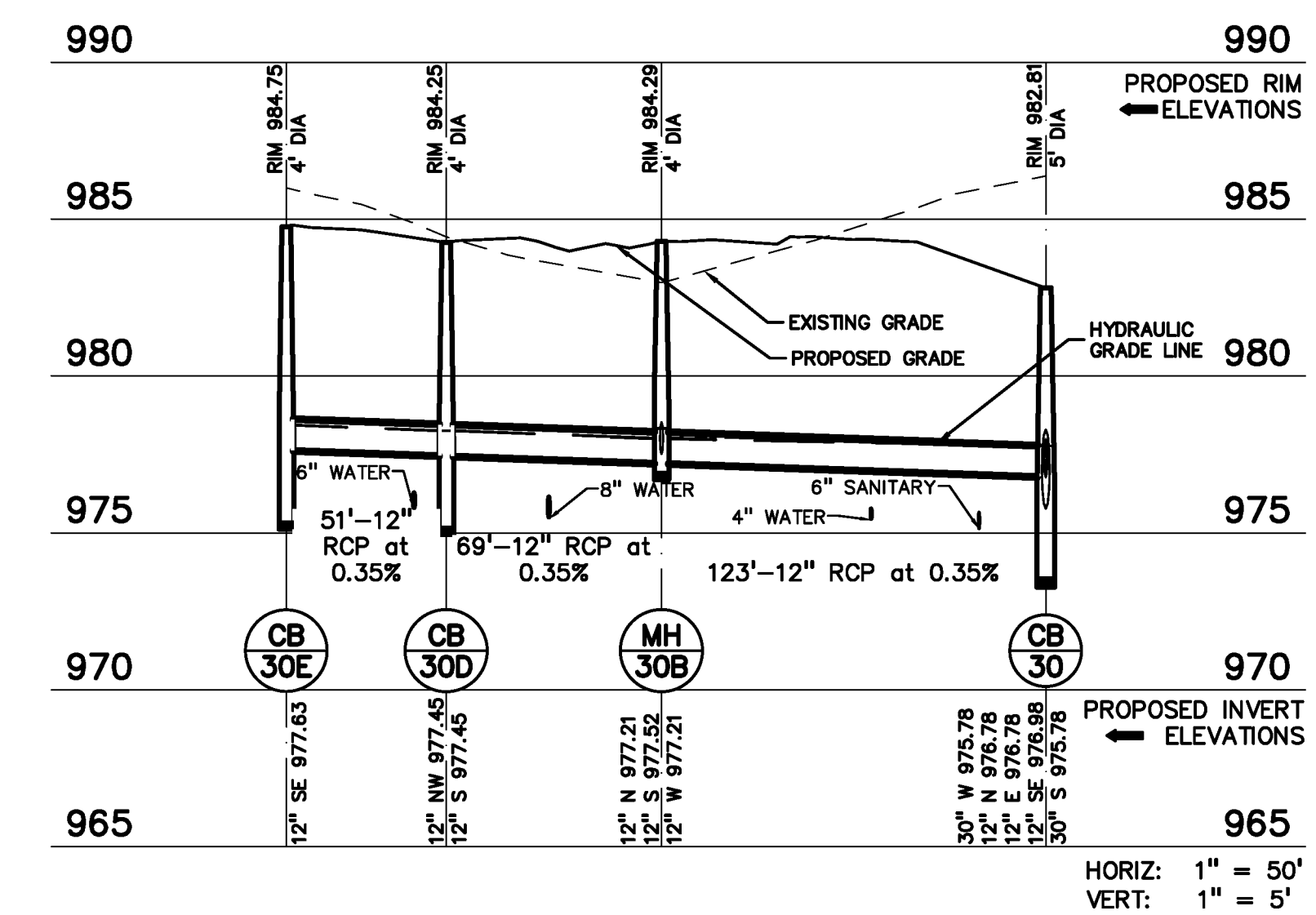
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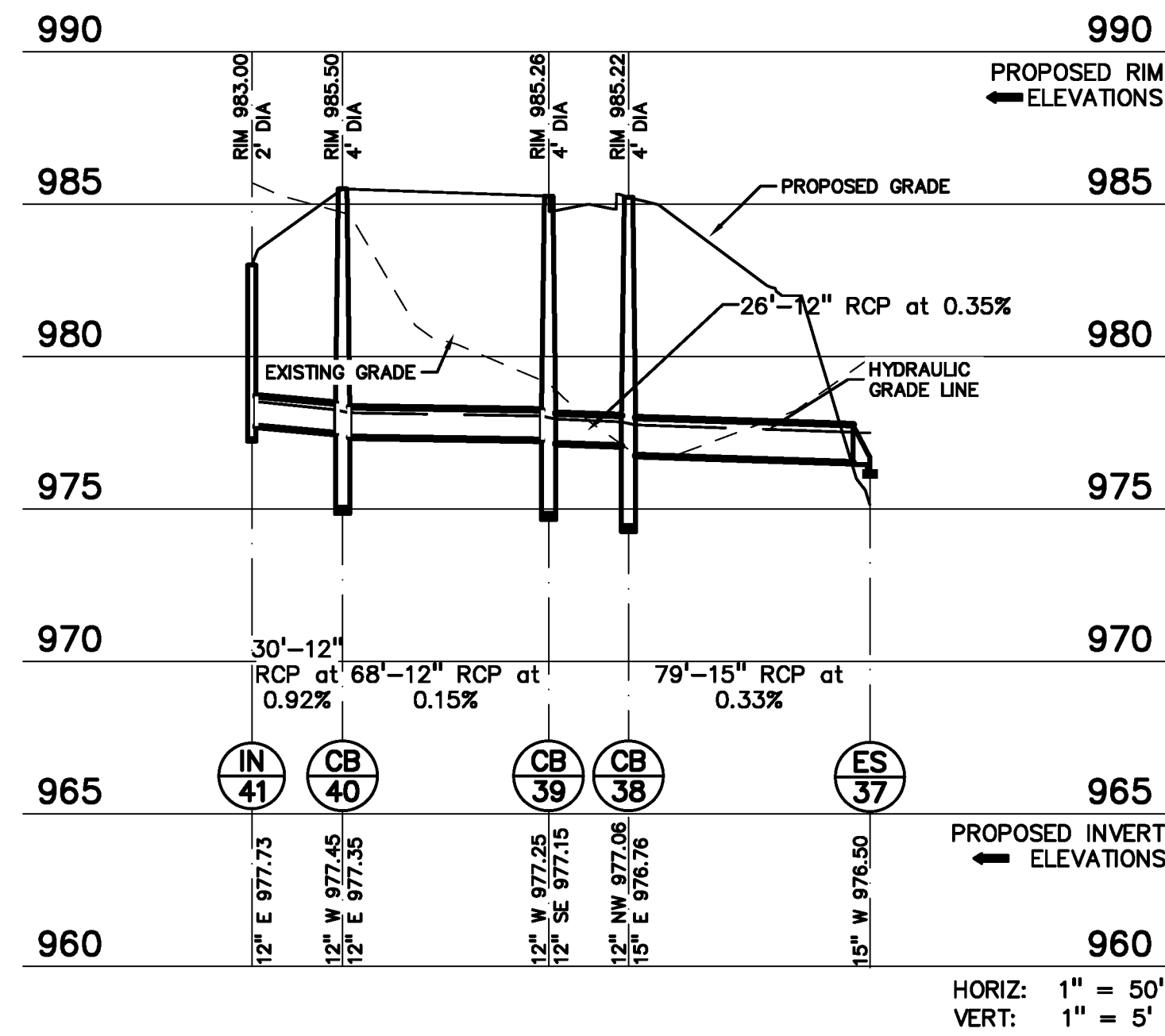
IN30A-CB30 PROFILE



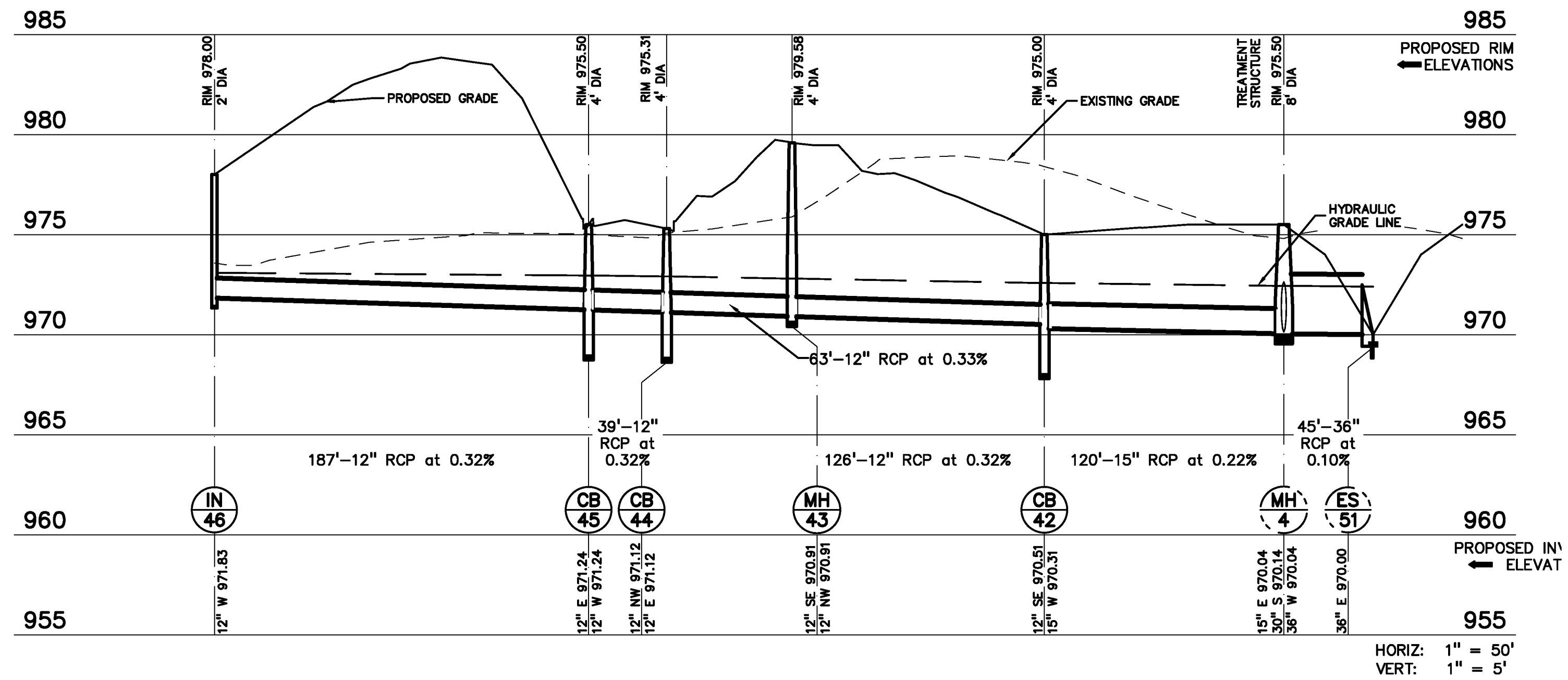
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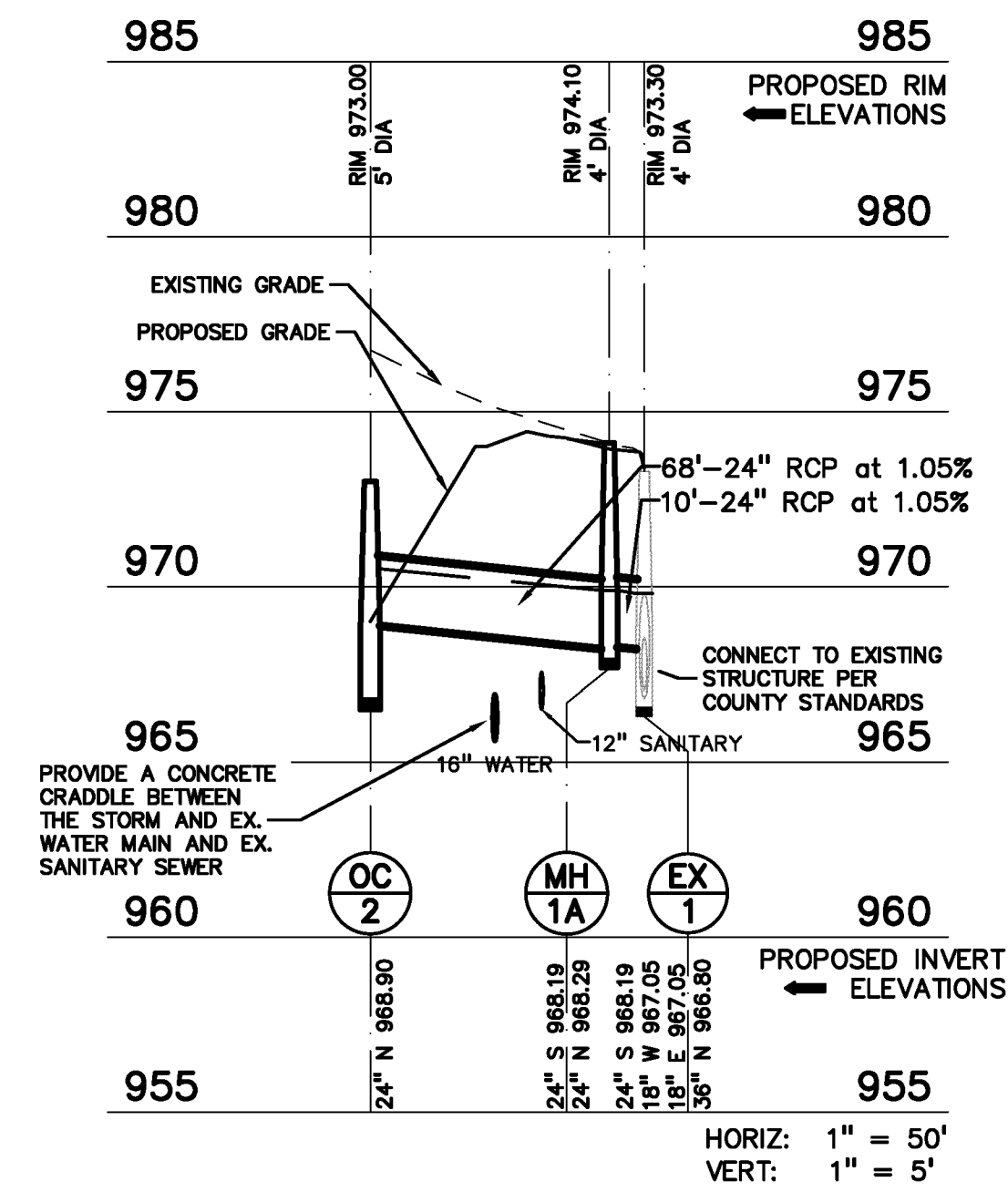
CB30E-CB30 PROFILE



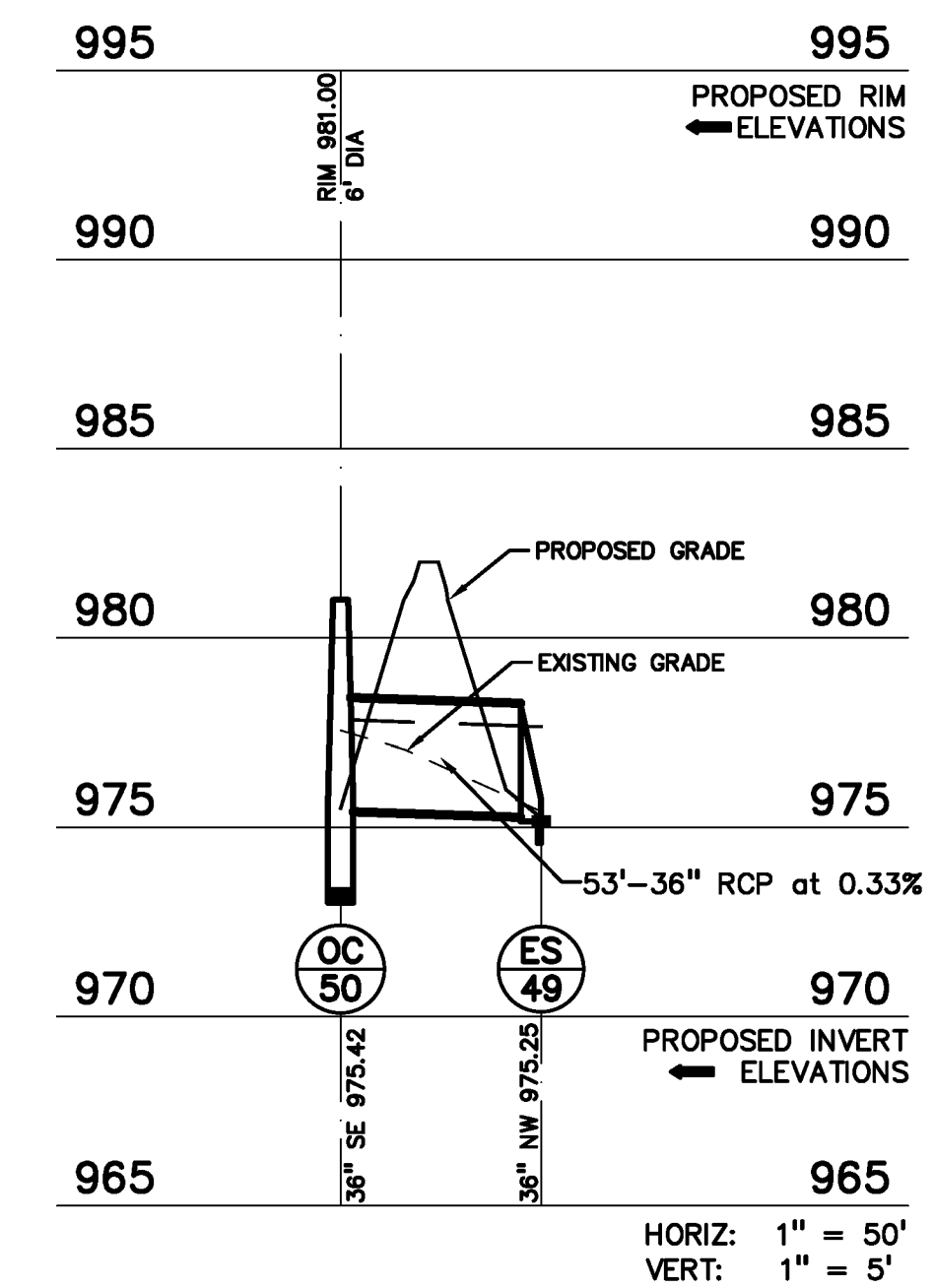
IN41-ES37 PROFILE



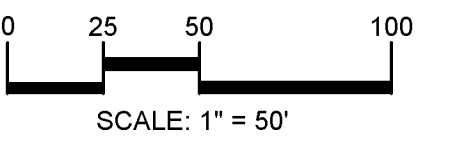
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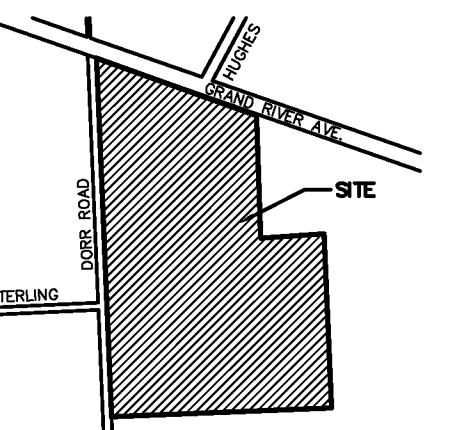
OC2-EX1 PROFILE



OC50-ES49 PROFILE



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GRAND RIVER DORR LLC.
 315550 NORTHWESTERN HIGHWAY
 FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
 6080 W GRAND RIVER
 GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	
REV PER TWP	5-30-23

ORIGINAL ISSUE DATE:
 APRIL 10, 2023

DRAWING TITLE

STORM SEWER PROFILES

PEA JOB NO. 2021-0578

P.M. JEC

DN. JMR

DES. JMR

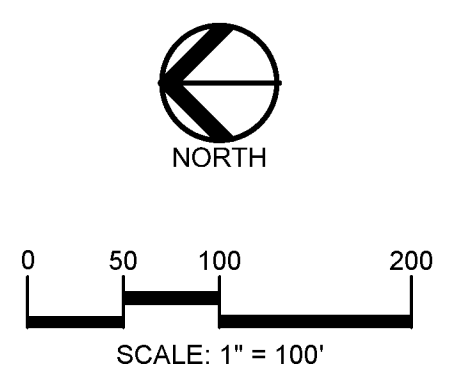
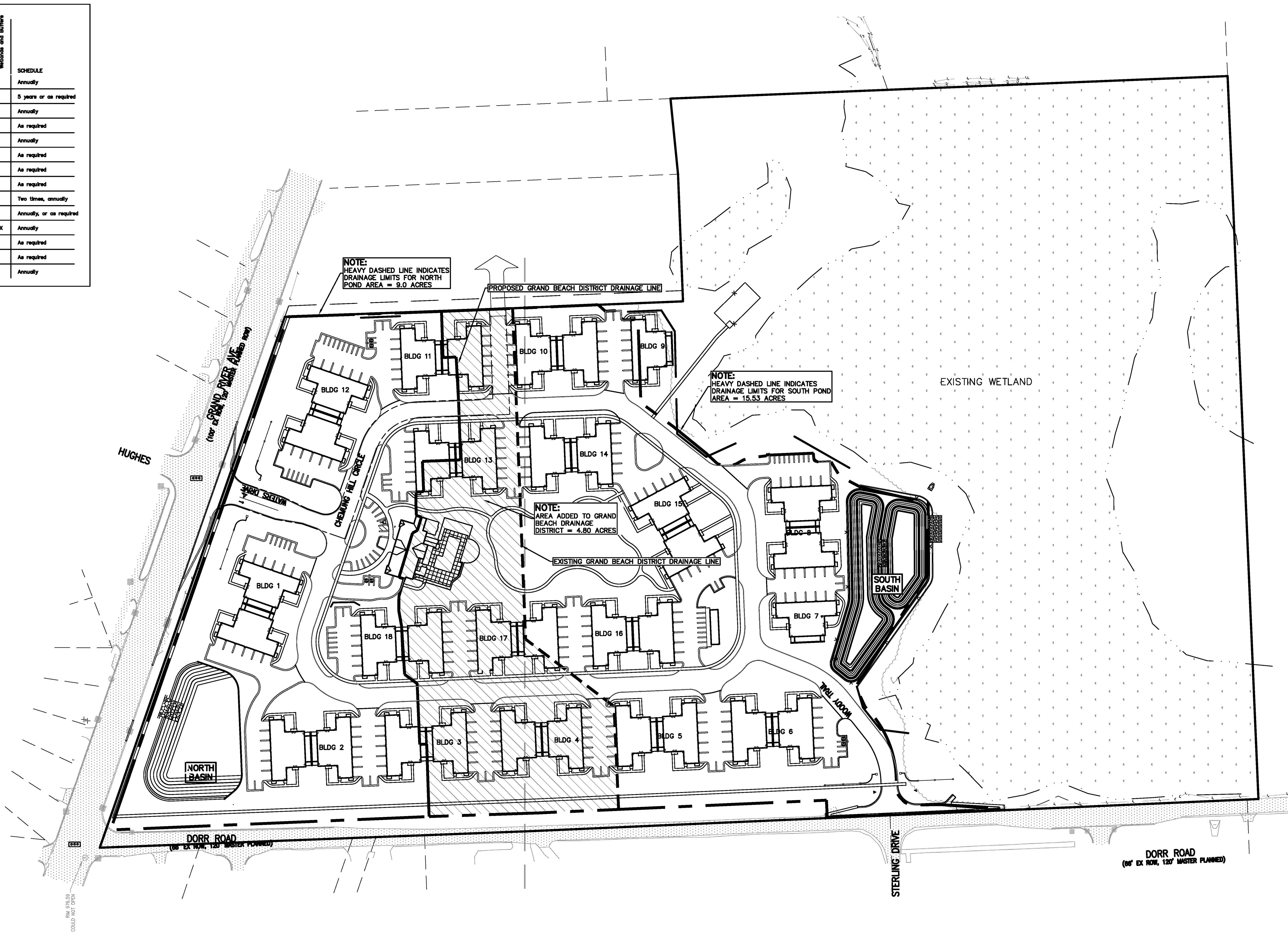
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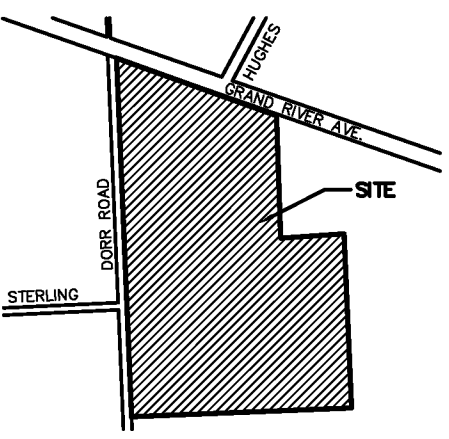
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C-5.5

STORMWATER MANAGEMENT SYSTEM MAINTENANCE TASKS AND SCHEDULE										
TASKS	COMPONENTS								SCHEDULE	
	Storm Sewer System	Catch Basins	Catch Basins	Channels & Ditches	Bank Outlet Filters	Bank Forelays	Storm Basins	Overflow Structures		Discharge Outlets
Inspect for accumulated sediment	X	X			X	X	X			Annually
Removal of accumulated sediment > 1' deep	X	X			X	X	X			5 years or as required
Inspect for erosion				X		X	X	X		Annually
Reestablish permanent controls, eroded areas				X		X	X	X		As required
Inspect for floatables and debris	X	X	X		X	X	X			Annually
Remove floatables and debris	X	X	X		X	X	X			As required
Replace Outlet Filter gravel jackets				X						As required
Replace rip-rap or stone check dams				X						As required
Mowing				X		X	X	X		Two times, annually
Vegetation and animal control				X		X	X	X		Annually, or as required
Professional engineer observation during rain event	X	X	X	X	X	X	X	X	X	Annually
Modifications per engineering recommendation	X	X	X	X	X	X	X	X	X	As required
Professional engineer, emergency observations										As required
Maintenance & inspection records by Owner										Annually



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REVISIONS	REV PER TWP	DATE

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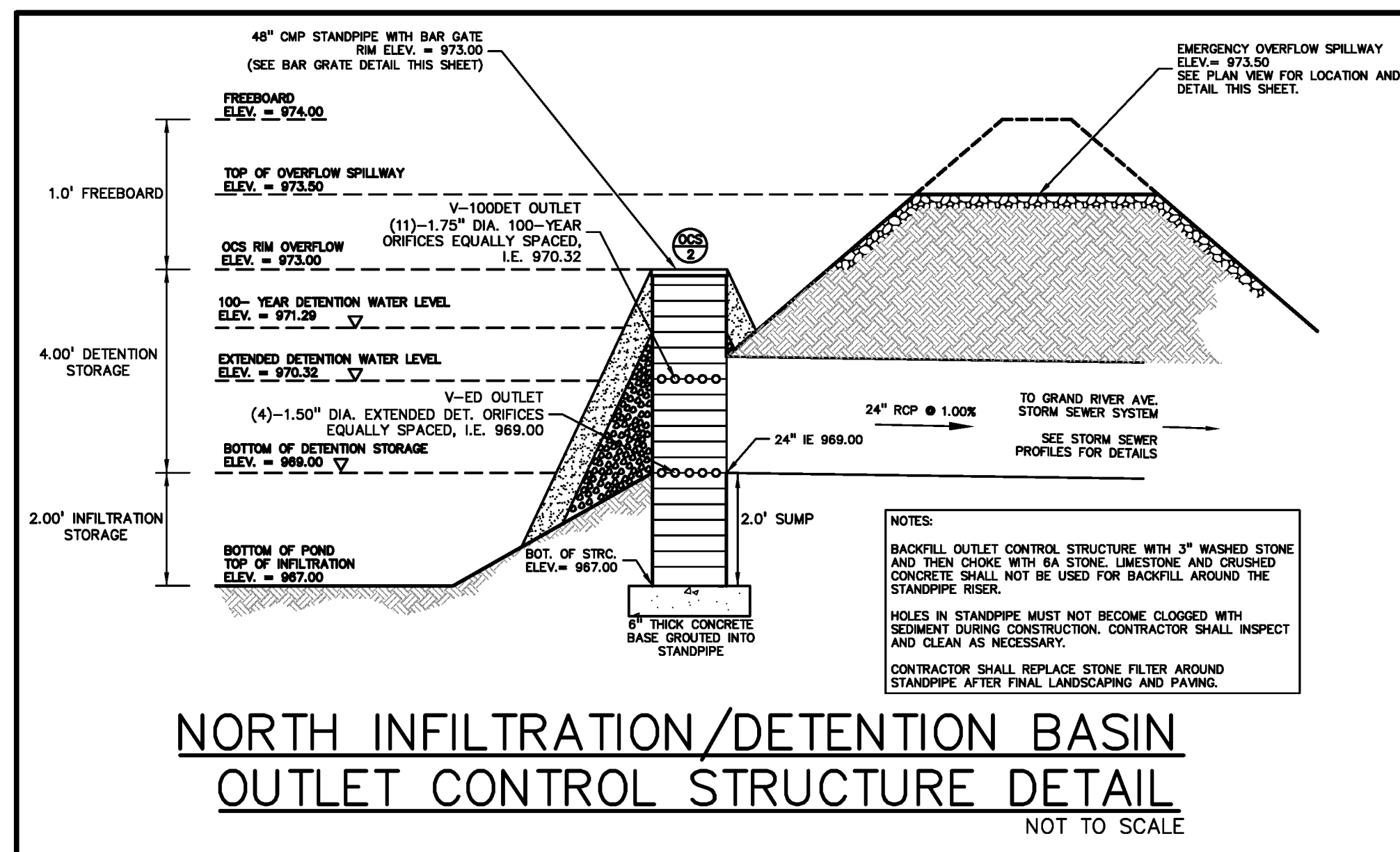
DRAWING TITLE
OVERALL STORMWATER MANAGEMENT PLAN

PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR
DRAWING NUMBER:	

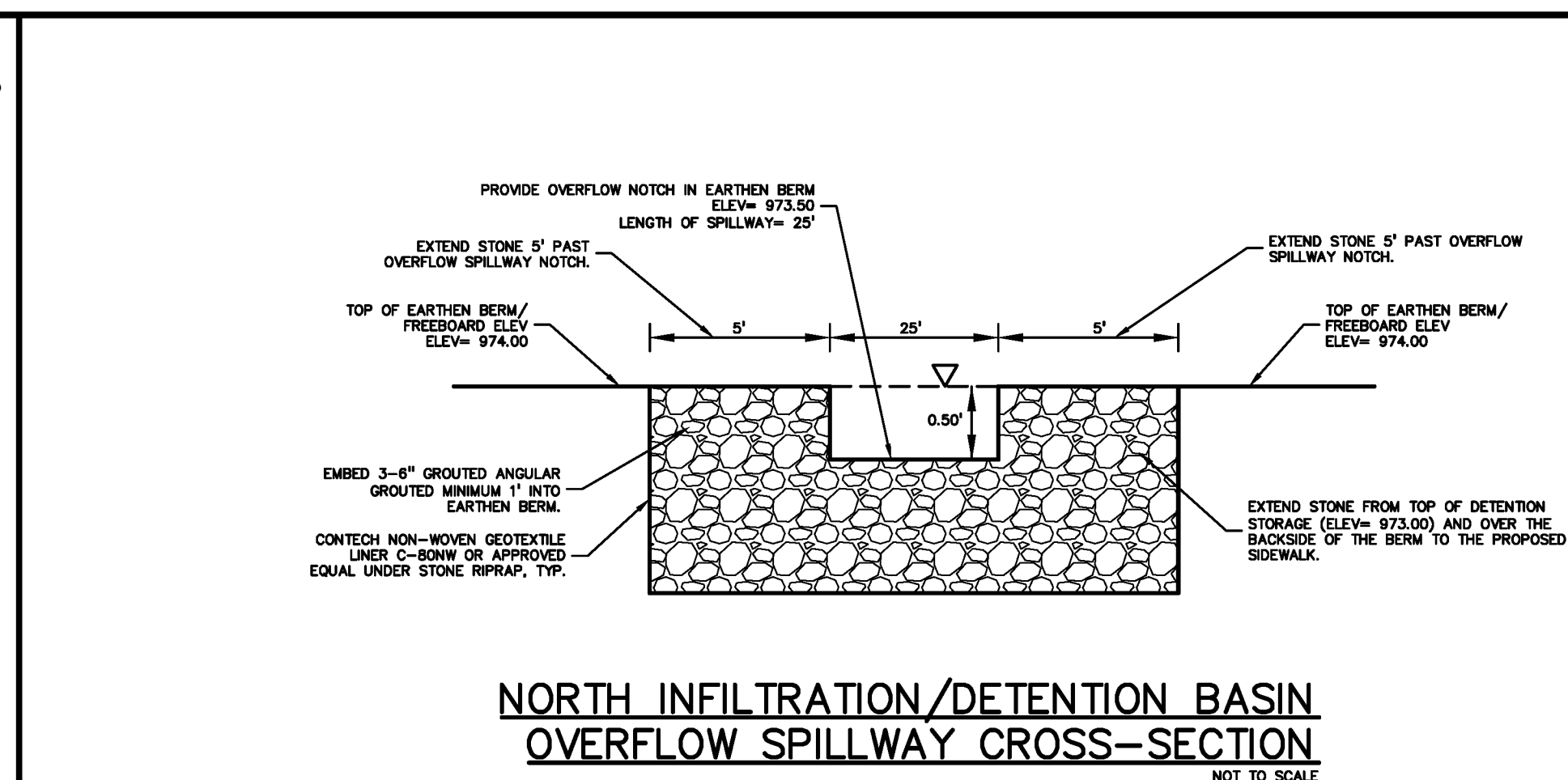
OVERALL STORMWATER MANAGEMENT PLAN

S:\PROJECTS\2021\0578 LAURENCE GRAND TOWNSHIP\WORKSITE PLANS(C-6.1) 01 SITE-21-0578.dwg

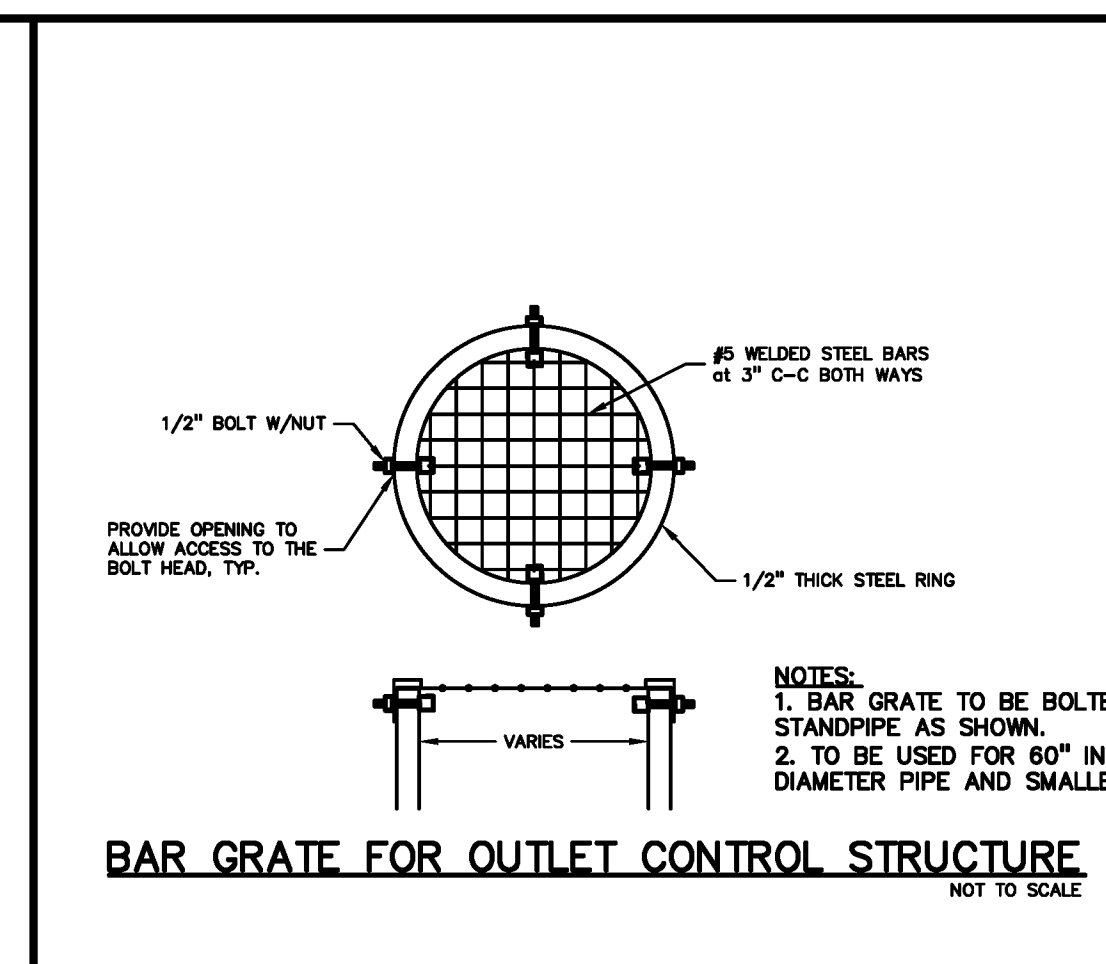
NORTH DETAILS



**NORTH INFILTRATION/RETENTION BASIN
OUTLET CONTROL STRUCTURE DETAIL**
NOT TO SCALE

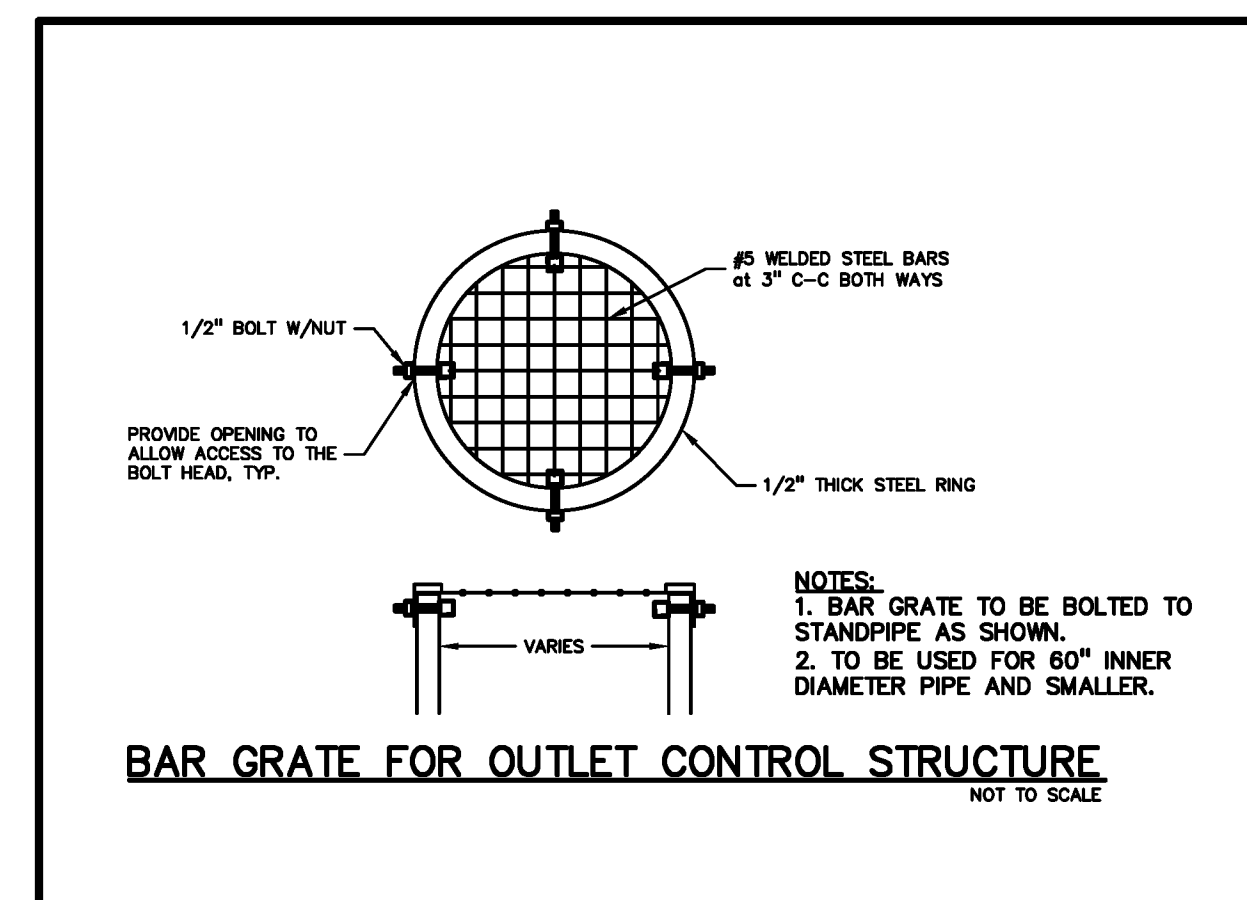


**NORTH INFILTRATION/RETENTION BASIN
OVERFLOW SPILLWAY CROSS-SECTION**
NOT TO SCALE

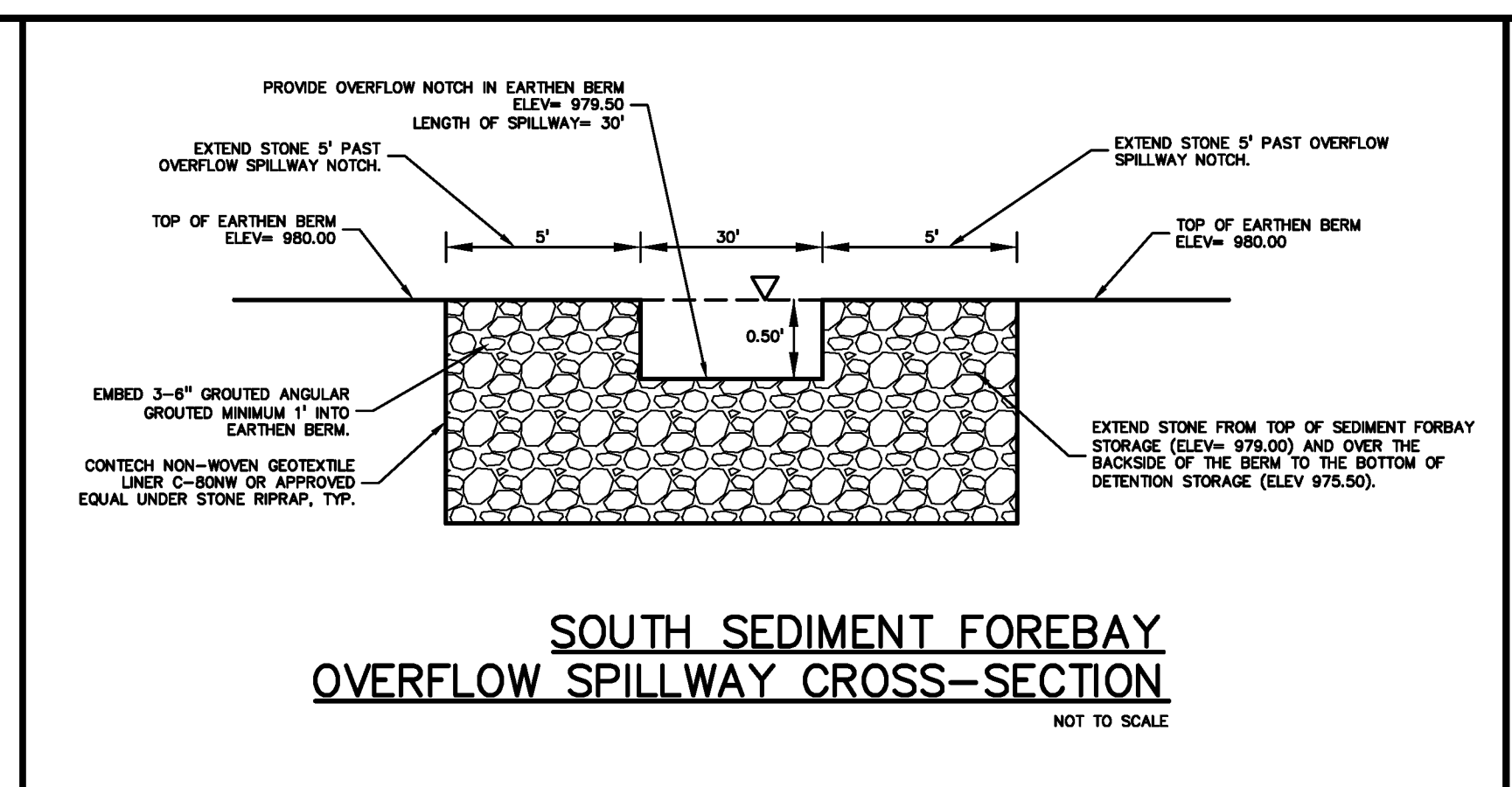


BAR GRATE FOR OUTLET CONTROL STRUCTURE
NOT TO SCALE

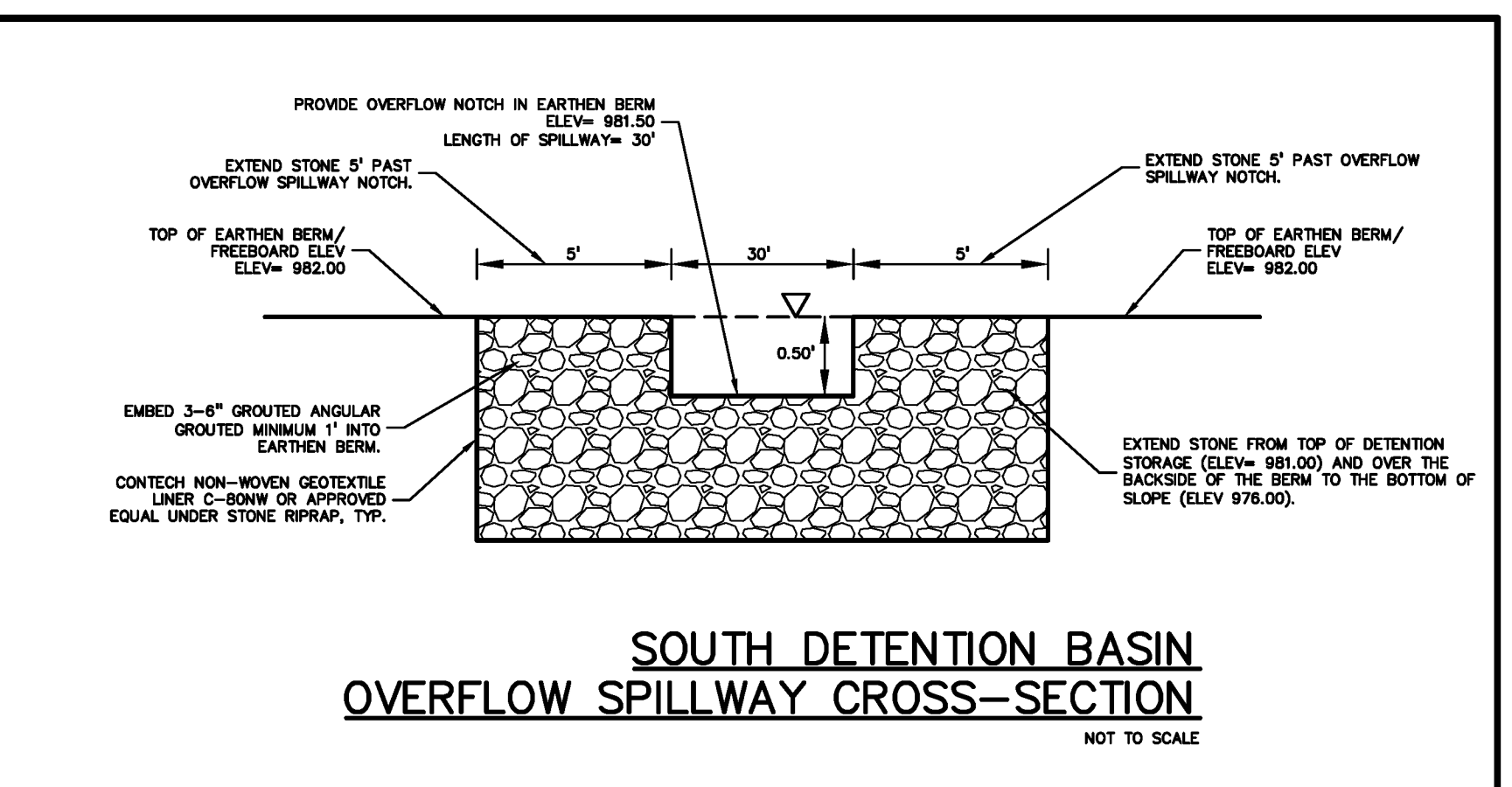
SOUTH DETAILS



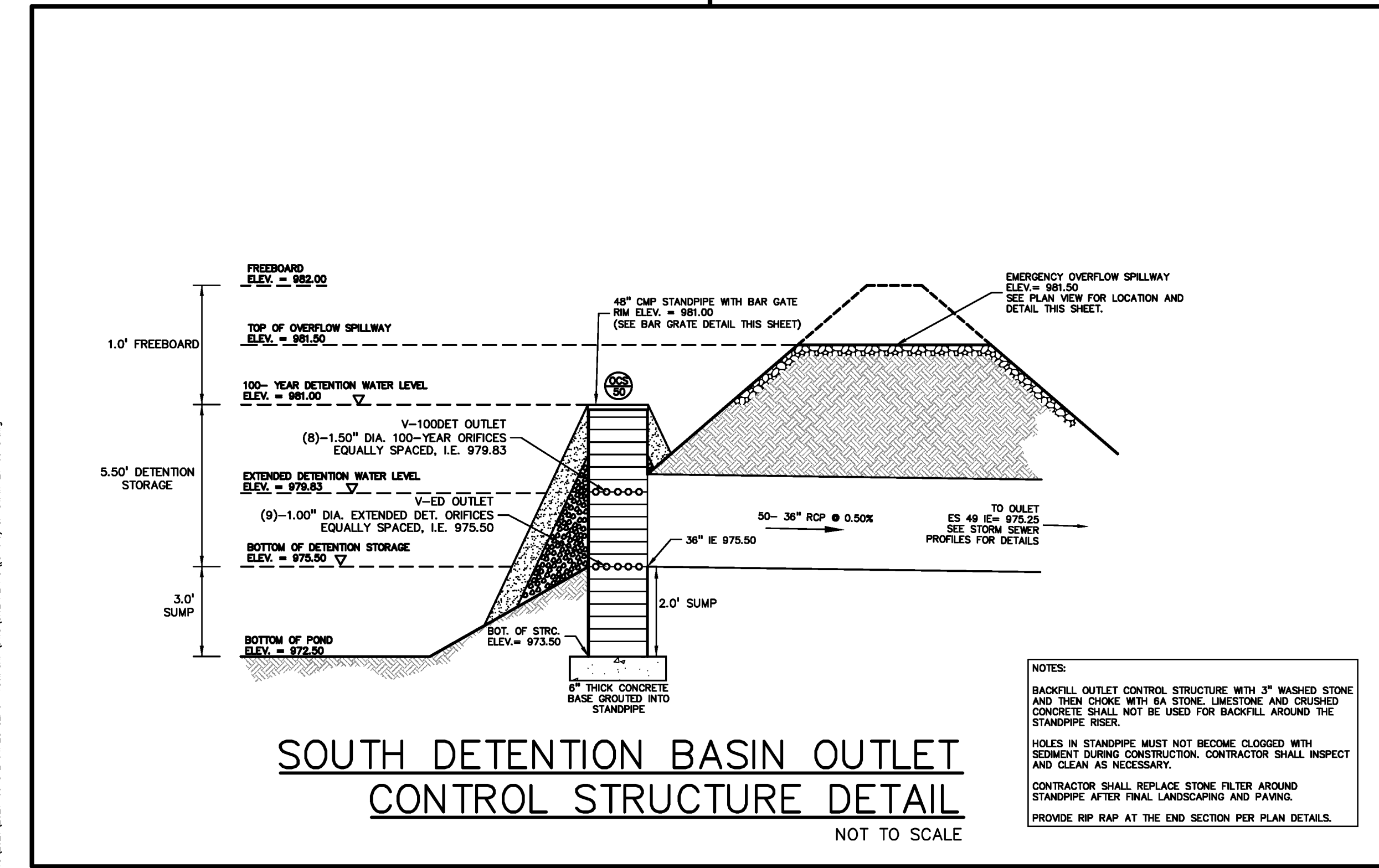
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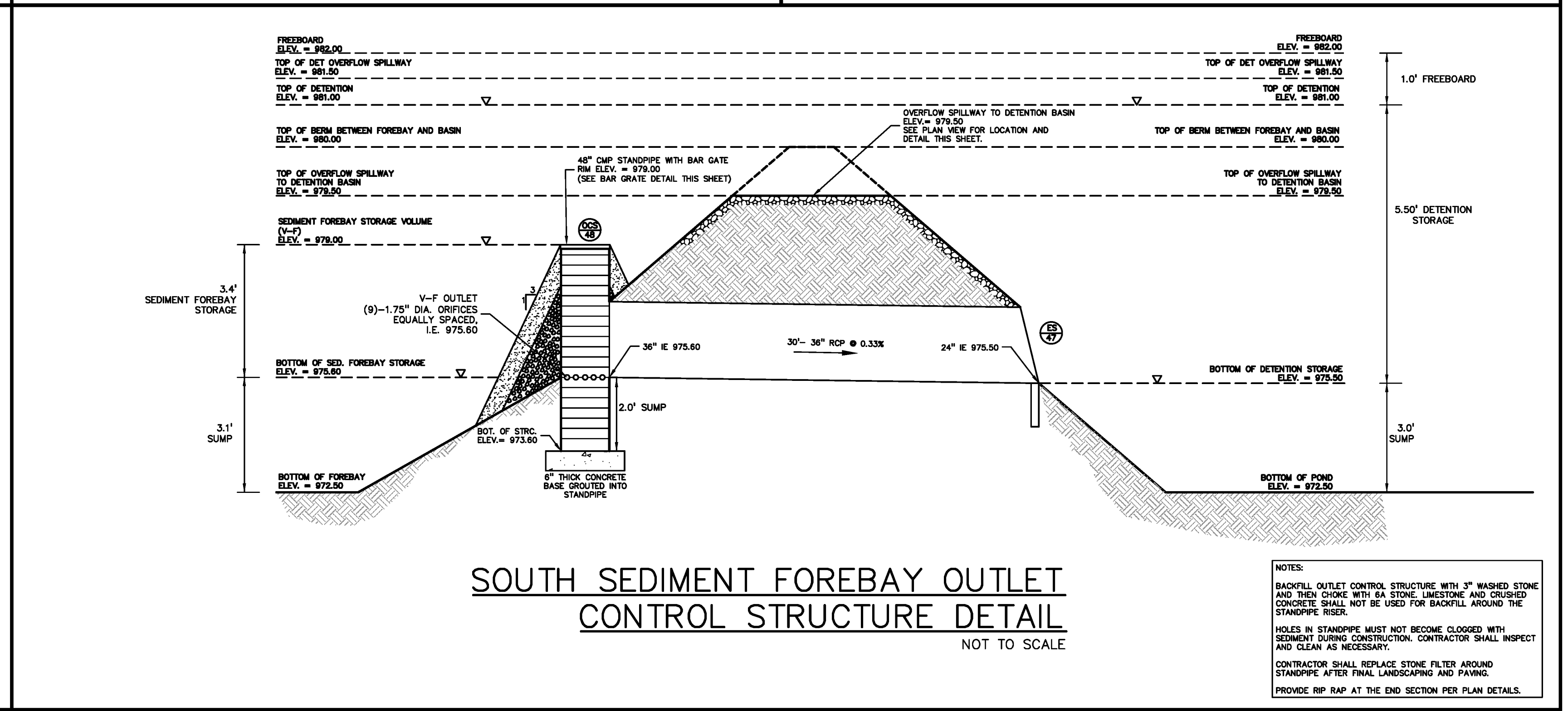
**SOUTH SEDIMENT FOREBAY
OVERFLOW SPILLWAY CROSS-SECTION**
NOT TO SCALE



**SOUTH DETENTION BASIN
OVERFLOW SPILLWAY CROSS-SECTION**
NOT TO SCALE

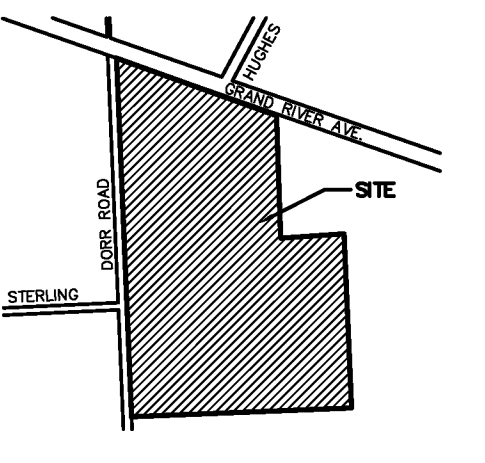


**SOUTH DETENTION BASIN OUTLET
CONTROL STRUCTURE DETAIL**
NOT TO SCALE



**SOUTH SEDIMENT FOREBAY OUTLET
CONTROL STRUCTURE DETAIL**
NOT TO SCALE

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REVISIONS	
REV PER	TWP
5-30-23	

ORIGINAL ISSUE DATE:
APRIL 10, 2023
DRAWING TITLE
**POND DESIGN
DETAILS**

PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR
DRAWING NUMBER:	

NORTH STORM WATER REQUIRED CALCULATIONS

Project: Legacy Genoa- North Pond	
Location: Genoa Township, Livingston County, Michigan	
Project No: 2021-0578	
BY: JAH	
CK:	
Date: 5/23/2023	
Infiltration and Detention Calculations Using Livingston County Procedures and Design Criteria for Stormwater Management Systems Version 5.6 (March 2022)	
1 Pre-Development Site Drainage to Grand River Drainage District	
Pre-Development Site Conditions:	
Permeous Area (B soil):	13.80 acres
Impervious Area	0.00 acres
Water Area	0.00 acres
Total Tributary Area:	13.80 acres
Permeous Runoff Coefficient 'C' (B SOIL):	0.20
Impervious Runoff Coefficient 'C':	0.90
Water Runoff Coefficient 'C':	1.00
Weighted Runoff Coefficient 'C':	0.20
2 Post-Development Site Drainage to Grand Beach Drainage District	
Post-Development Site Conditions:	
Permeous Area (B soil):	4.63 acres
Impervious Area	4.37 acres
Water Area	0.00 acres
Total Tributary Area:	9.00 acres
Permeous Runoff Coefficient 'C' (B SOIL):	0.20
Impervious Runoff Coefficient 'C':	0.90
Water Runoff Coefficient 'C':	1.00
Weighted Runoff Coefficient 'C':	0.54
3 Water Quality Volume- V (WQ)	
1.0 inch rainfall depth over the Trib Area This requirement is considered met if the full CPVC infiltrated on site	
V (WQ)= Required Volume in CF A= Contributing Area in Ac C= Post Development Runoff Coefficient	
V (WQ)= (3.630)(C)(A)	
A	9.00 acres
C	0.54
V (WQ)	17.642 CF
4 Channel Protection Volume (CPVC)- V (CP)	
1.3 inch rainfall depth over the Trib Area This volume is required to be captured and infiltrated on site to the Maximum Extent Practical	
V (CP)= Required Volume in CF A= Contributing Area in Ac C= Post Development Runoff Coefficient	
V (CP)= (4.719)(C)(A)	
A	9.00 acres
C	0.54
V (CP)	22.934 CF
5 Extended Detention Volume- V (ED)	
1.9 inch rainfall depth over the Trib Area and released over 48 hrs Also called the Channel Protection Rate Volume Control (CPRC)	
V (ED)= Required Volume in CF A= Contributing Area in Ac C= Post Development Runoff Coefficient	
V (ED)= (6.897)(C)(A)	
A	9.00 acres
C	0.54
V (ED)	33.519 CF
6 Extended Detention Outlet Rate for Sediment Forebay and Detention Basin- Q (ED)	
required flow rate to release V (ED) in 48 hours	
Q (ED)= Outlet rate for both forebay and detention basin in cfs V (ED)= Required Volume in CF	
Q (ED)= V (ED) / ((48 hr)(60 min/hr)(60 sec/min))= V (ED) / 172,800	
V (ED)	33.519 CF
Q (ED)	0.19 CFS
7 100 Year Peak Intensity- I (100)	
I (100)= Peak Intensity of storm in in/hr Tc= Time of Concentration from Storm Sewer Design (farthest point in trib area to ES into pond) I (100)= (83.3) / (Tc + 9.17)^0.81	
Tc	18.70 minutes
I (100)	5.62 in/hr
8 100 Year Post-Development Peak Inflow Rate- Q (100 IN)	
Q (100 IN)= 100 Year Peak Inflow rate in CFS A= Contributing Area in Ac C= Post Development Runoff Coefficient I (100)= Peak Intensity of storm in in/hr	
Q (100 IN)= (C)(A)(I) (100)	
A	9.00 acres
C	0.54
I (100)	5.62 in/hr
Q (100 IN)	27.34 CFS
9 100 Year Variable Release Rate- Q (VRR)	
Q (VRR)= 100 Year variable release rate in cfs/acre A= Contributing Area in Ac	
Q (VRR)= 1.1055 - (0.206)(ln(A))	
A	9.00 acres
Q (100 VRR)	0.65 cfs/acre

10 100 Year Allowable Post-Development Peak Flow rate- Q (100 P)	
use Q (VRR) to calculate unless there is a LCDC specified restricted rate Per LCDC restricted release rate is 0.15 cfs/acre	
Q (100 P)= 100 Allowable 100 Year post development peak flow rate in cfs Q (VRR)= 100 Year variable release rate in cfs/acre A= Contributing Area in Ac	
Q (100 P)= (Q (VRR))(A)	
Q (100 VRR)	0.15 cfs/acre (Per LCDC)
A	9.00 acres
Q (100 P)	1.35 CFS
11 Post-Development 100 Year Peak Runoff Volume- V (100 R)	
V (100 R)= Post Development 100 Year peak runoff volume in CF C= Post Development Runoff Coefficient A= Contributing Area in Ac	
V (100 R)= (18985)(C)(A)	
A	9.00 acres
C	0.54
V (100 R)	92,267 CF
11A Pre-Development 100 Year Peak Runoff Volume- V (Pre- 100 R)	
V (Pre- 100 R)= Pre-Development 100 Year peak runoff volume in CF C= Pre-Development Runoff Coefficient A= Contributing Area in Ac	
V (100 R)= (18985)(C)(A)	
A	13.80 acres
C	0.20
V (100 R)	52,399 CF
11B Difference in Pre and Post 100 Year Peak Runoff Volumes	
Per LCRC, the difference in the Pre and Post 100 Year peak runoff volumes is required to be infiltrated	
V (100 R)= Post Development 100 Year peak runoff volume in CF V (100 R-Pre)= Pre-Development 100 Year peak runoff volume in CF	
Infiltration Volume Required (Per LCRC)= V (100 R) - V (100 R-Pre)	
V (100 R)	92,267 CF
V (100 R-Pre)	52,399 CF
Infiltration Volume Required (Per LCRC)=	39,869 CF
12 Storage Curve Factor- R	
R= Storage Curve Factor for the 100 Year detention Volume (dimensionless) Q (100 P)= 100 Allowable 100 Year post development peak flow rate in cfs Q (100 IN)= 100 Year Peak inflow rate in CFS	
R= [0.206 - 0.15ln(Q(100P)/Q(100IN))]	
Q (100 P)	1.35 cfs
Q (100 IN)	27.34 cfs
R	0.66
13 100 Year Detention Basin Size- V (100 D)	
V (100 D)= Required 100 Year detention volume in CF V (100 R)= Post Development 100 Year peak runoff volume in CF R= Storage Curve Factor for the 100 Year detention Volume (dimensionless) V (CP-P)= Provided Infiltration Volume in CF Note: V (100 D) must be greater than or equal to V (ED)	
V (100 D)= V (100 R) * R - V (CP-P)	
V (100 R)	92,267 CF
R	0.66
V (CP-P)	0 CF
V (100 D)	60,639 CF
14 Mechanical Pre-Treatment Requirement- Q (WQ)	
Required Water quality treatment is 80 MG/L TSS or 80% TSS Removal	
Q (WQ)= 1 year water quality peak flow rate in CFS that the unit needs to be able to treat per criteria above A= Contributing Area in Ac C= Post Development Runoff Coefficient Tc= Time of Concentration from Storm Sewer Design (farthest point in trib area to ES into pond)	
Q (WQ)= (C)(A)(I)(Tc+30)	
A	9.00 acres
C	0.54
Tc	18.70 min
Q (WQ)	9.68 CFS
15 Detention Basin Emergency Overflow Spillway	
Sized for 100 Year Peak Inflow- Q (100 IN)	
Q (100 IN)= 100 Year Peak Inflow in CFS H= Depth of Water over Spillway in ft W= Width of spillway in ft Q (Spillway)= Capacity of Spillway in CFS calculated using the Cipoletti Weir Equation	
Q (Spillway)= (3.367)(W)(H^1.5)	
Q (100 IN)	27.34 CFS
H	0.50 ft
W	25.00 ft
Q (Spillway)	29.76 cfs

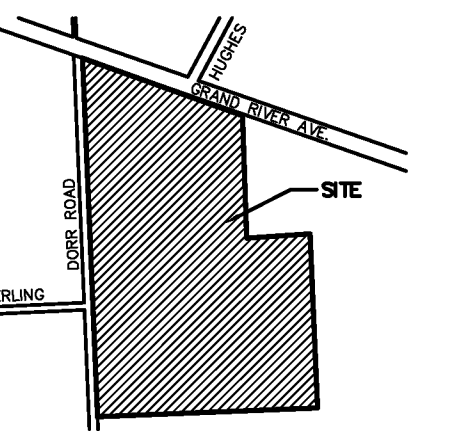
NORTH STORM WATER PROVIDED CALCULATIONS

Project: Legacy Genoa- North Pond					
Location: Genoa Township, Livingston County, Michigan					
Project No: 2021-0578					
BY: JAH					
CK:					
Date: 4/7/2023					
Detention Storage, Infiltration Storage and Outlet Calculations Using Livingston County Procedures and Design Criteria for Stormwater Management Systems Version 5.6 (March 2022)					
1 Infiltration Volume					
Infiltration Volume Required (Per LCRC)= 39,869 CF					
Infiltration Volume During 6 Hour Storm					
Bottom Bed Area (969.00 Contour Area)= 23,534 sq ft					
Infiltration Design Rate = 1 in/hr					
Infiltration Period = 6.00 hrs					
Infiltration Volume = Bed Bottom Area * in/hr * infiltration period * 1/12 = 11,767 CF					
Infiltration Volume After Storm					
Surface Storage Volume (CF) (967.00 to 969.00)					
CONTOUR ELEV	Contour AREA	INCR VOLUME	CUMUL VOLUME		
Bottom of Detention	969.00	23,534	23,534		
	968.00	21,126	19,956		
Top of Infiltration	967.00	18,786	-		
Surface Storage Volume Provided= 42,286 CF					
Total Infiltration Volume Provided= (Volume During Storm) + (Surface Storage Volume) = 54,053 CF					
3 Required Storage Volume in Detention Basin					
Storage Volume Required in Detention Basin Req= V (100 D)					
60,639 CF					
4 Detention Volume Provided					
BASIN SIZING					
CONTOUR ELEV	Contour AREA	INCR VOLUME	CUMUL VOLUME	V (100 D)	V (ED)
				60,639	33,519
Top of Detention	973.00	33,453	32,205	113,898	-
	972.00	30,956	29,710	81,693	-
	971.00	28,453	27,224	51,984	-
Bottom of Detention	970.00	25,985	24,760	24,760	-
					970.32
5 Total 100 Year Detention Volume= Detention Volume Provided					
Total Volume Provided= 113,898 CF					
6 Extended Detention Volume- V (ED) Outlet Calcs					
V (ED)= Required Extended Detention Volume in CF Q (ED)= V (ED) Outlet rate in cfs H (w)= Average Head over outlet orifice= 0.4 * Distance from Storage Elev to Outlet A= Total Area of orifice Required= Q (ED) / (0.62 * SQRT (2 * G * H(w))) Q (actual)= 0.62 * A (total) * SQRT (2 * G * H(w)) Drain time = V (ED) / Q (actual) * 3600					
V (ED)	33,519 CF				
Q (ED)	0.19 CFS				
V (ED) Storage Elevation	970.22				
V (ED) Outlet Elevation	969.00				
H (w)	0.49 ft				
A	0.06 SF				
Outlet Hole Diameter:	1.5 in				
Restriction Hole Area:	0.0123 sq ft				
Number of Restriction Holes:	4				
A (Total)= Total Restriction Hole Area:	0.049 sq ft				
Q (actual)	0.17 cfs				
Drain Time:	54.60 hrs				

7 100 Year Outlet Calcs	
V (100 D)= Required 100 year detention volume in CF Q (P)= 100 Year allowable release rate in cfs Q (through V-ED outlet when 100 year storm)= 0.62 * A (total V-ED) * SQRT (2 * 32.2 * (X100 - Xbot)) A= Area of orifice= Q (100 VRR) / (0.62 * SQRT (2 * G * (X100 - XVED)))	
V (100 D)	60,639 CF
Q (P)	1.35 cfs
100 Year storm Flow through V (ED) orifices	
Xbot= Bottom of Det Elev (V ED outlet elev)=	969.00
X100= V (100 D) Storage Elev=	971.29
Head= X100-Xbot	2.29 ft
Q (through V-ED outlet for 100 year storm)=	0.37 cfs
Remaining flow to pass through the V (100) orifices	
Q (max 100)= Q (P) - Q (through V-ED outlet for 100 year storm)=	0.98 cfs
100 Year flow through V(100) orifices	
XVED= Elev of VED Storage (V 100 outlet elev)=	970.32
X100= V (100 D) Storage Elev=	971.29
Head= X100-Xved	0.97 ft
A (max 100)= Q (max 100) / 0.62 * sqrt (2 * 32.2 * Head)	0.20 SF
Outlet Hole Diameter:	1.75 in
Restriction Hole Area:	0.0167 sq ft
Number of Restriction Holes:	11
A (Total)= Total Restriction Hole Area:	0.18 sq ft
Q (through V-100 outlet for 100 year storm)=	0.90 cfs
Drain Time:	13.27 hrs



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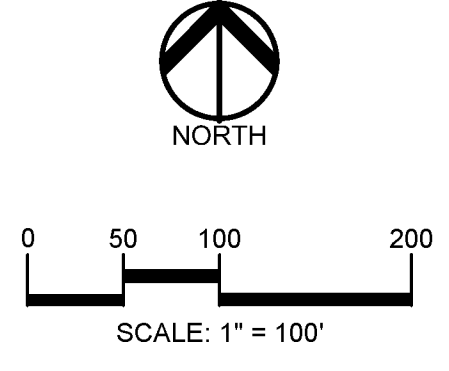
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CALCULATIONS**

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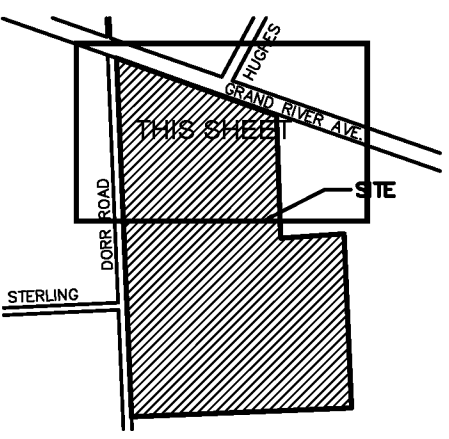
LEGEND

- | | | |
|------------------|------------------|---------------------|
| ● IRON FOUND | ⊗ BRASS PLUG SET | ⊙ SEC. CORNER FOUND |
| ⊗ IRON SET | ⊙ MONUMENT FOUND | R RECORDED |
| ⊗ NAIL FOUND | ⊙ MONUMENT SET | M MEASURED |
| ⊗ NAIL & CAP SET | | C CALCULATED |
-
- | | |
|--------------|---|
| — CH—ELEC—M— | ELEC. PHONE OR CABLE T.V. GUY LINE, POLE & GUY WIRE |
| —UG—CATV— | UNDERGROUND CABLE T.V. CATV PEDESTAL |
| ⊗ UG—PHONE— | TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE |
| ⊗ UG—ELEC— | ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE |
| ⊗ | GAS MAIN, VALVE & GAS LINE MARKER |
| ⊗ | WATERMAIN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE |
| ⊗ | SANITARY SEWER, CLEANOUT & MANHOLE |
| ⊗ | STORM SEWER, CLEANOUT & MANHOLE |
| ⊗ | COMBINED SEWER & MANHOLE |
| ⊗ | SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN |
| ⊗ | POST INDICATOR VALVE |
| ⊗ | WATER VALVE BOMBYDRANT VALVE BOX, SERVICE SHUTOFF |
| ⊗ | MALIBOX, TRANSFORMER, IRRIGATION CONTROL VALVE |
| ⊗ | UNIDENTIFIED STRUCTURE |
-
- | | | |
|-----|----------------|--------|
| 670 | SPOT ELEVATION | 671.21 |
| — | CONTOUR LINE | — |
| — | FENCE | — |
| — | GUARD RAIL | — |
| — | STREET LIGHT | — |
| — | SIGN | — |
-
- | | | |
|---------|-----------------|-----------------------------|
| CONC. | CONCRETE | STD. HEAVY R.G.V. DUTY ONLY |
| ASPH. | ASPHALT | STD. HEAVY DEEP DUTY ONLY |
| GRAVEL | GRAVEL SHOULDER | STRENGTH |
| WETLAND | WETLAND | |



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

CAUTION!!
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CLIENT
GRAND RIVER DORR LLC.
315550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

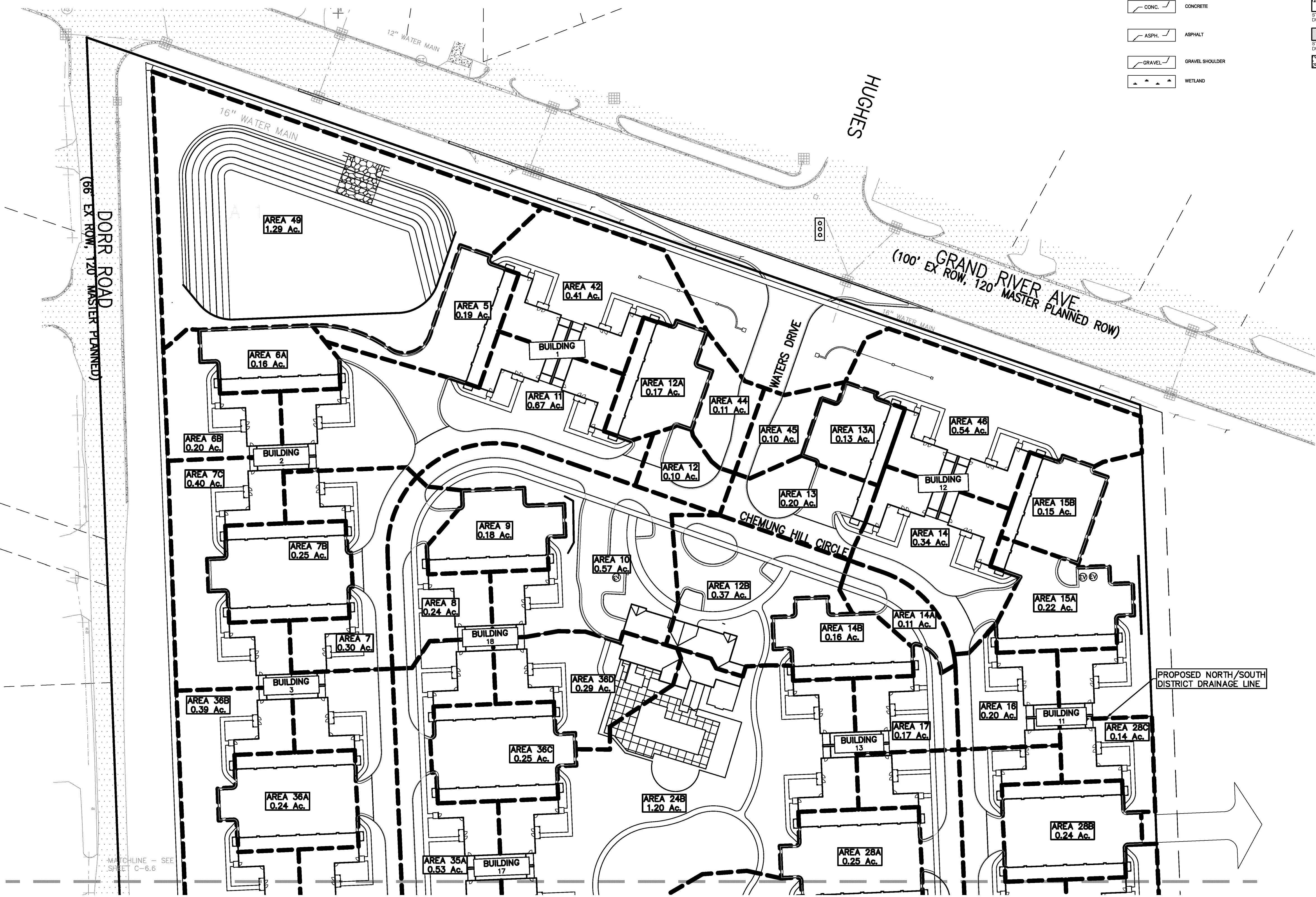
PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	REV	PER	TWP	DATE
	1	REV PER TWP		5-30-23

ORIGINAL ISSUE DATE:
APRIL 10, 2023

DRAWING TITLE
NORTH STORM SEWER DRAINAGE AREAS

PEA JOB NO. 2021-0578
P.M. JEC
DN. JMR
DES. JMR
DRAWING NUMBER:



PROPOSED NORTH/SOUTH DISTRICT DRAINAGE LINE

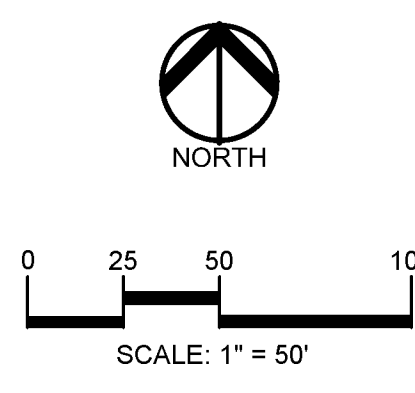
MATCHLINE - SEE SHEET C-6.6

NOT FOR CONSTRUCTION

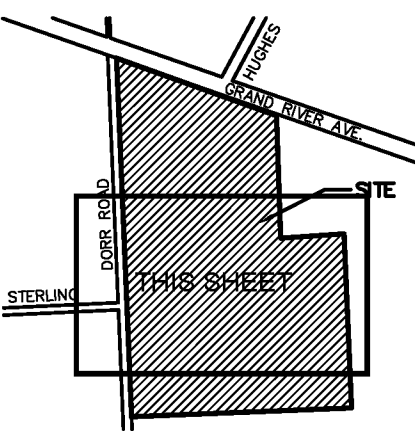
C-6.5

LEGEND

- | | | |
|------------------|------------------|---------------------|
| ● IRON FOUND | ⊕ BRASS PLUG SET | ⊙ SEC. CORNER FOUND |
| ⊙ IRON SET | ⊕ MONUMENT FOUND | ⊙ RECORDED |
| ⊙ NAIL FOUND | ⊕ MONUMENT SET | ⊙ MEASURED |
| ⊙ NAIL & CAP SET | | ⊙ CALCULATED |
-
- | | |
|--------------|---|
| — OH-ELEC-M— | ELEC. PHONE OR CABLE TV OH. LINE, POLE & GUY WIRE |
| — UG-CATV— | UNDERGROUND CABLE TV, CATV PEDESTAL |
| — UG-PHONE— | TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE |
| — UG-ELEC— | ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE |
| — WTR-MAN— | GAS MAN. VALVE & GAS LINE MARKER |
| — WTR-MAN— | WATER MAIN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE |
| — WTR-MAN— | SANITARY SEWER, CLEANOUT & MANHOLE |
| — WTR-MAN— | STORM SEWER, CLEANOUT & MANHOLE |
| — WTR-MAN— | COMBINED SEWER & MANHOLE |
| — WTR-MAN— | SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN |
| — WTR-MAN— | POST INDICATOR VALVE |
| — WTR-MAN— | WATER VALVE, SOAKAWAY VALVE BOX, SERVICE SHUTOFF |
| — WTR-MAN— | MANHOLE, TRANSFORMER, IRRIGATION CONTROL VALVE |
| — WTR-MAN— | UNIDENTIFIED STRUCTURE |
-
- | | |
|-------------|-----------------|
| — 670 — | SPOT ELEVATION |
| — 671 — | CONTOUR LINE |
| — X — X — | FENCE |
| — U — U — | GUARD RAIL |
| — * — * — | STREET LIGHT |
| — S — S — | SIGN |
| — CONC. — | CONCRETE |
| — ASPH. — | ASPHALT |
| — GRAVEL — | GRAVEL SHOULDER |
| — WETLAND — | WETLAND |
-
- | | |
|--------------------------|-----------------------------------|
| — 671 — | PROPOSED |
| — STD. HEAVY B.O.W. — | STANDARD HEAVY B.O.W. DUTY ONLY |
| — STD. HEAVY DEEP DUTY — | STANDARD HEAVY DEEP DUTY STRENGTH |



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CLIENT
GRAND RIVER DORR LLC.
315550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

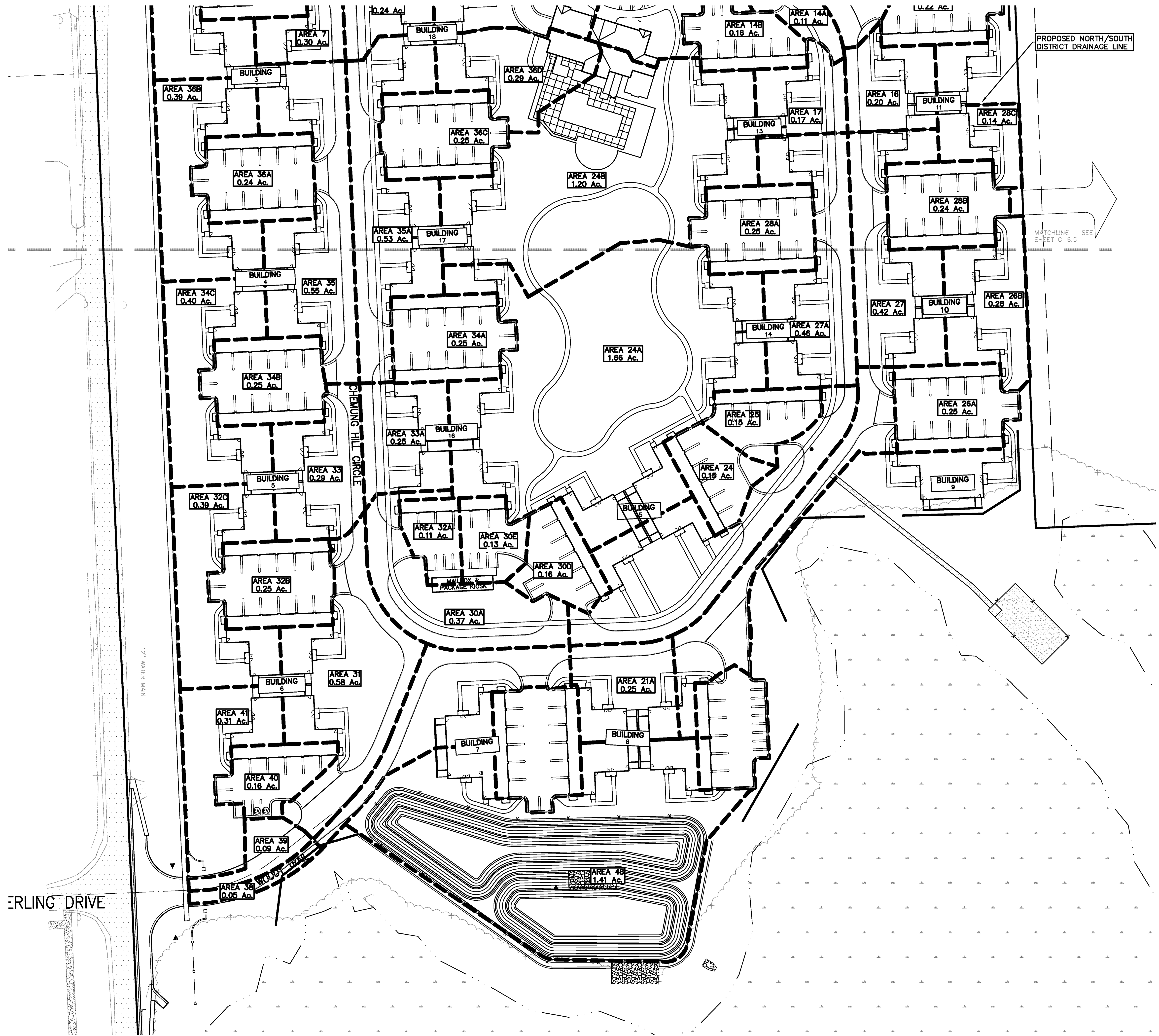
REVISIONS	REV PER TWP	DATE

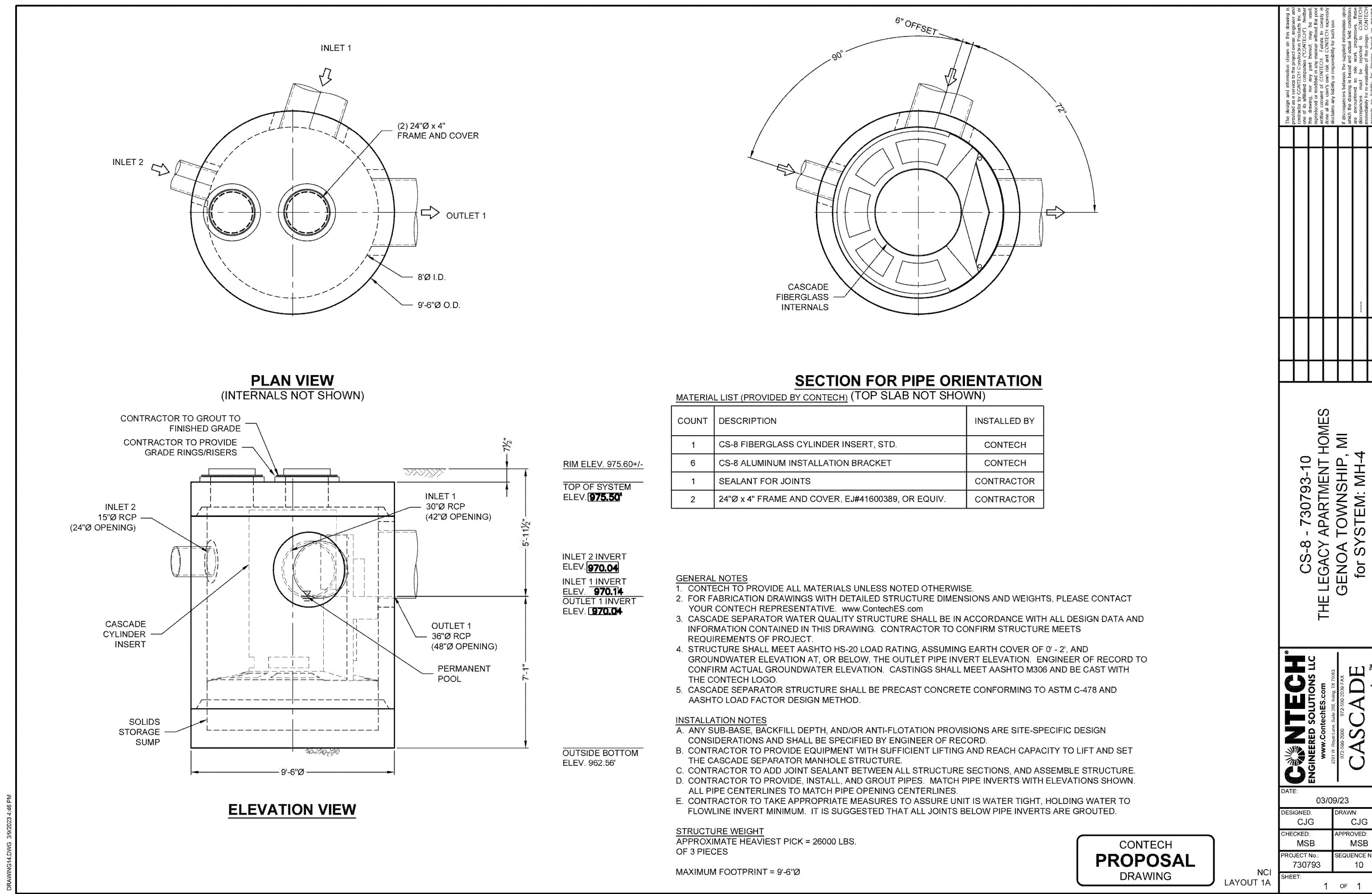
ORIGINAL ISSUE DATE:
APRIL 10, 2023

DRAWING TITLE
SOUTH STORM SEWER DRAINAGE AREAS

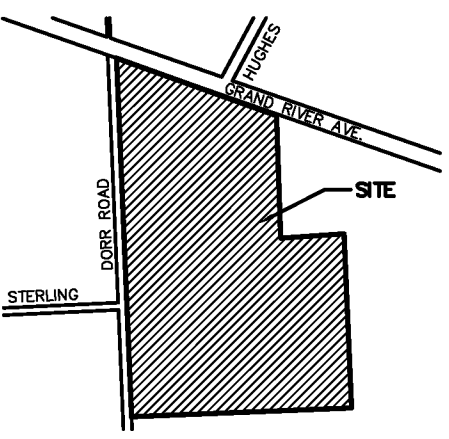
PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR
DRAWING NUMBER:	

NOT FOR CONSTRUCTION C-6.6



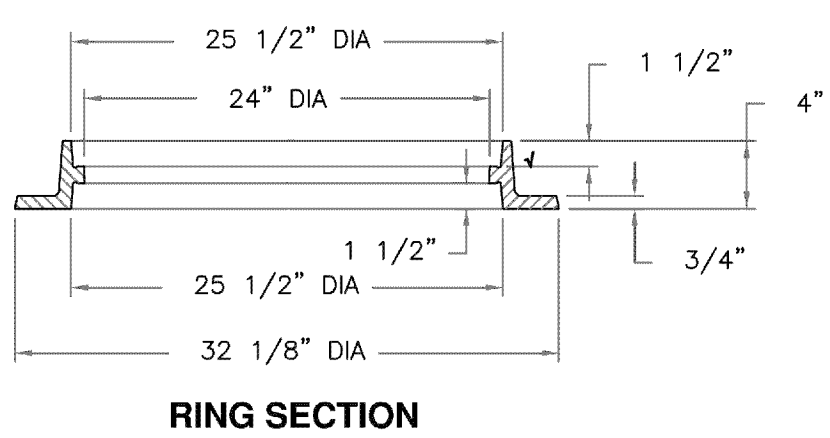
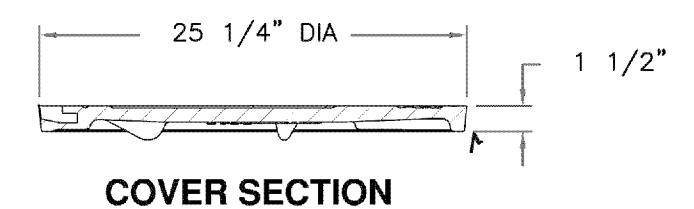
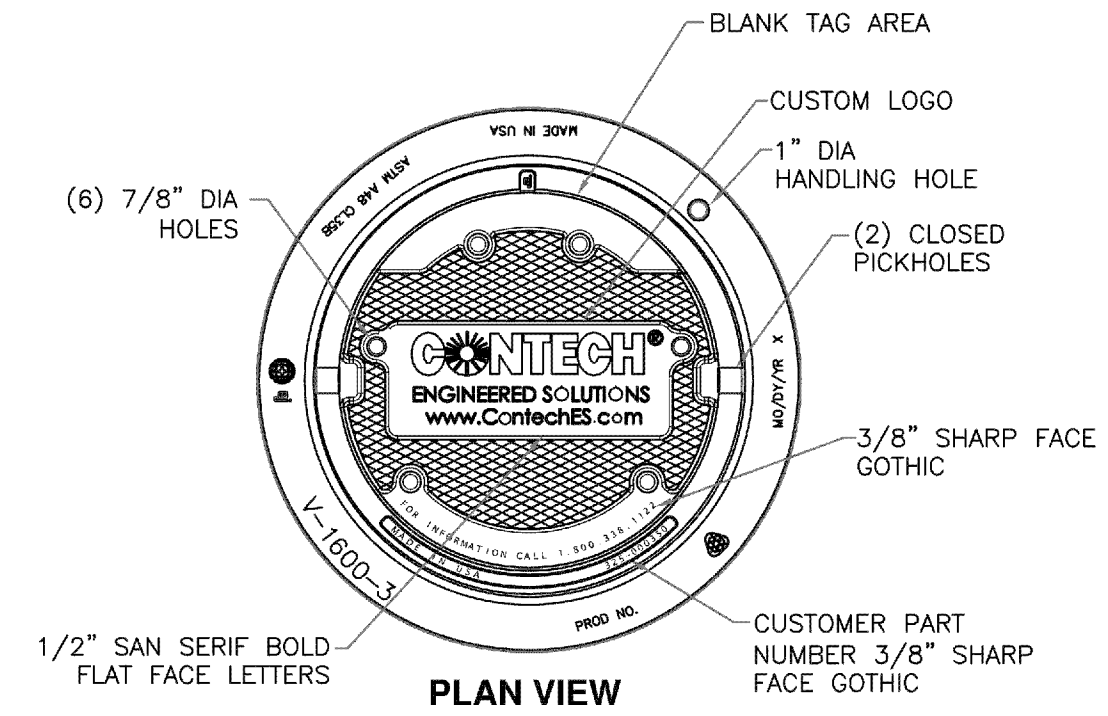


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CLIENT
GRAND RIVER DORR LLC.
31550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

V1600-3 V1610-3 Assembly



Product Number
41600389

Design Features

- Materials
- Frame: Gray Iron (CL35B)
- Cover: Gray Iron (CL35B)

-Design Load
Heavy Duty

-Open Area
r15

-Coating
Unstipped

-Designates Machined Surface

Certification

- ASTM A48
- Country of Origin: USA

Major Components

41600310
41600374

Drawing Revision
05/02/2008 Designer: DEW
6/20/2017 Revised By: DAE

Disclaimer
Weights (lb., kg) dimensions (inches/mm) are shown for your guidance. We reserve the right to modify specifications without prior notice.

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Contact
800 626 4653
ejco.com

PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	REV PER TWP	DATE

ORIGINAL ISSUE DATE:
APRIL 10, 2023

DRAWING TITLE
WATER QUALITY UNIT

PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR

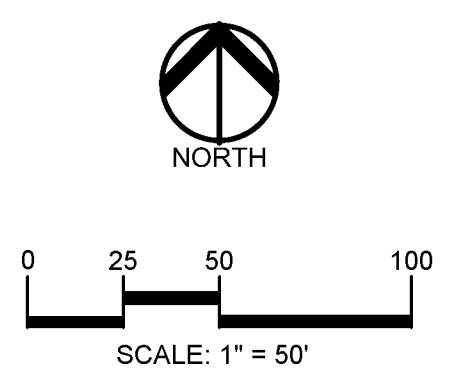
DRAWING NUMBER:

SYMBOLS: EROSION CONTROL

	SILT FENCE (REFER TO LIVINGSTON COUNTY SOIL EROSION AND SEDIMENTATION CONTROL DETAIL SHEET)
	INLET FILTER (REFER TO LIVINGSTON COUNTY SOIL EROSION AND SEDIMENTATION CONTROL DETAIL SHEET)
	TEMPORARY CONSTRUCTION ACCESS DRIVE (REFER TO LIVINGSTON COUNTY SOIL EROSION AND SEDIMENTATION CONTROL DETAIL SHEET)
	EROSION CONTROL BLANKETS
	RIP RAP
	APPROXIMATE TEMPORARY SEEDING LOCATIONS

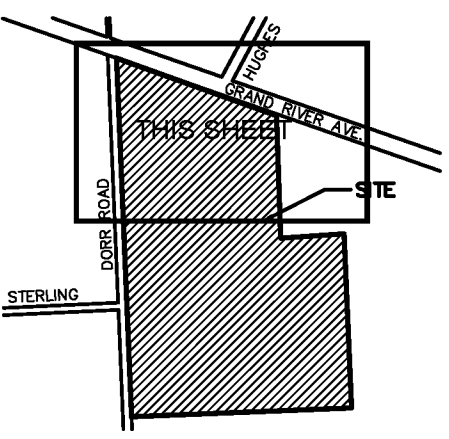
NOTE:
REFER TO SHEET C-9.3 FOR EROSION CONTROL NOTES & DETAILS

- EROSION CONTROL STANDARDS:**
- ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS AND SPECIFICATIONS OF THE JURISDICTIONAL AGENCY UNDER PART 91 OF ACT 451 OF 1994, AS AMENDED.
 - DAILY INSPECTIONS SHALL BE MADE BY CONTRACTOR WHILE WORKING TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENT CONTROL MEASURES. ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY. ALL SOIL EROSION CONTROL PROVISIONS SHALL BE PROPERLY MAINTAINED DURING CONSTRUCTION.
 - EROSION AND ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS. WATERWAYS INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES, AND PONDS.
 - CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES REQUIRED AND AS DIRECTED ON THESE PLANS. CONTRACTOR SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT PERMANENT STABILIZATION OF SLOPES, DITCHES, AND OTHER EARTH CHANGE AREAS HAVE BEEN COMPLETED.
 - STAGING THE WORK WILL BE DONE BY THE CONTRACTOR AS DIRECTED IN THESE PLANS AND AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED EARTH.
 - SOIL EROSION CONTROL PRACTICES WILL BE ESTABLISHED IN EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SILT OFF THE SITE.
 - DUST SHALL BE CONTROLLED BY WATERING OR BY OTHER APPROVED MEANS THROUGHOUT ALL CONSTRUCTION OPERATIONS.
 - PERMANENT SOIL EROSION CONTROL MEASURES FOR SLOPES, CHANNELS, DITCHES OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 5 CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHERE SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED WITHIN 5 CALENDAR DAYS. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED BEFORE A CERTIFICATE OF COMPLIANCE IS ISSUED.
 - THE CONTRACTOR SHALL PRESERVE NATURAL VEGETATION AS MUCH AS POSSIBLE.
 - ANY WORK OUTSIDE OF THE LIMITS OF DISTURBANCE SHALL REQUIRE A SEPARATE GRADING PERMIT.
 - FOLLOWING THE PLACEMENT OF 4" OF TOPSOIL AND HYDROSEED, STRAW MULCH BLANKET IS TO BE INSTALLED PERPENDICULAR ALONG THE PROPOSED SLOPES 1:4 OR STEEPER FROM TOP OF SLOPE TO TOE OF SLOPE, INCLUDING DITCH BOTTOMS, AND IT MUST BE PEGGED IN PLACE.
 - ALL MUD/DIRT TRACKED ONTO EXISTING COUNTY/CITY ROADS FROM THIS SITE, DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
 - TEMPORARY STABILIZATION OF THE ENTIRE SITE SHALL BE COMPLETED AND APPROVAL OBTAINED FROM THE LIVINGSTON COUNTY DRAIN COMMISSIONERS OFFICE PRIOR TO THE ISSUANCE OF ANY SINGLE FAMILY DWELLING PERMITS.



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CLIENT
GRAND RIVER DORR LLC.
315550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS

REV PER TWP	5-30-23
-------------	---------

ORIGINAL ISSUE DATE:
APRIL 10, 2023

DRAWING TITLE
SOIL EROSION AND SEDIMENTATION CONTROL NORTH

PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR

DRAWING NUMBER:

TOTAL AREA OF EARTH DISTURBANCE = 26.96 ACRES

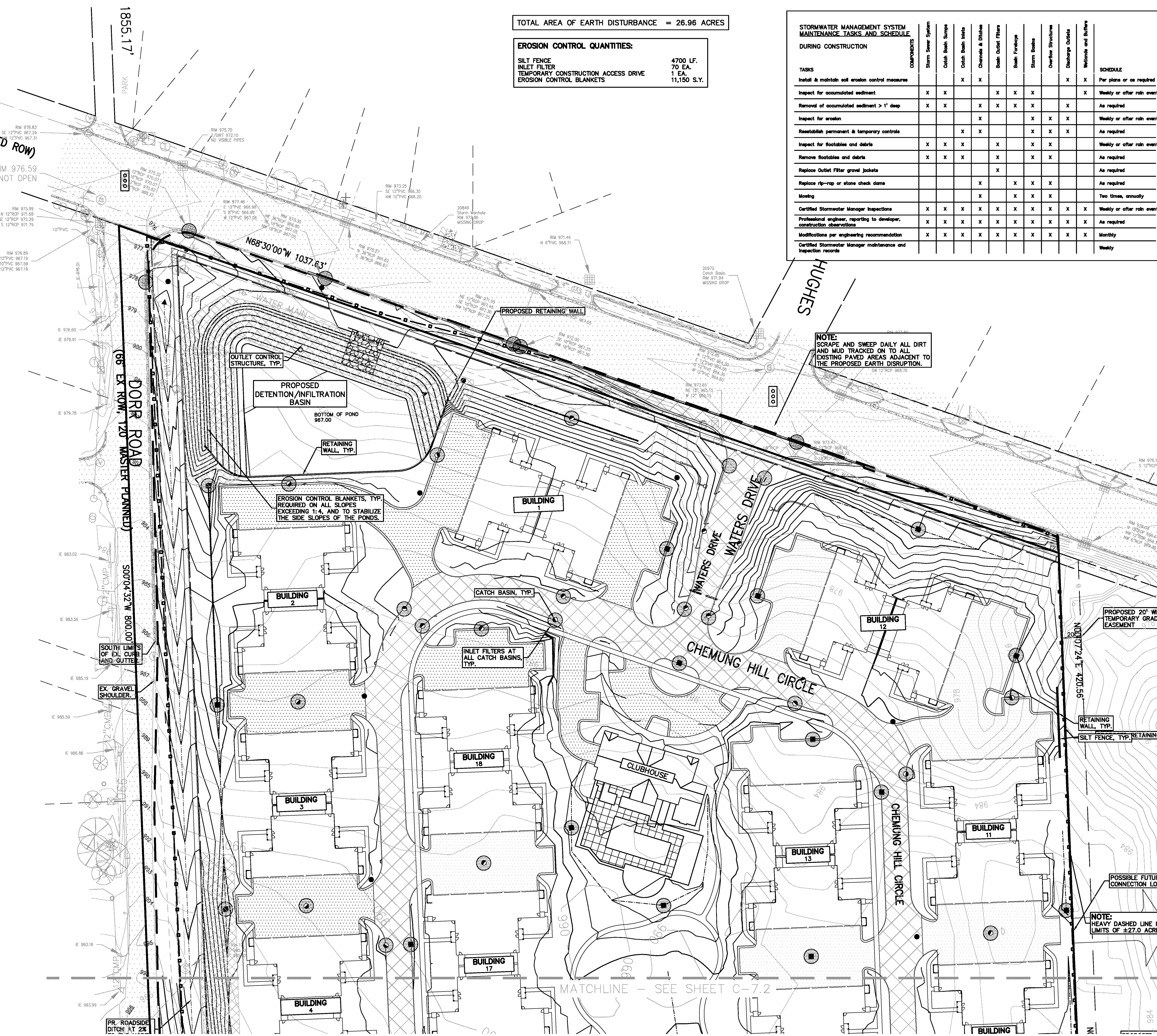
EROSION CONTROL QUANTITIES:

SILT FENCE	4700 LF.
INLET FILTER	70 EA.
TEMPORARY CONSTRUCTION ACCESS DRIVE	1 EA.
EROSION CONTROL BLANKETS	11,150 S.Y.

STORMWATER MANAGEMENT SYSTEM MAINTENANCE TASKS AND SCHEDULE DURING CONSTRUCTION

TASKS	Storm Sewer System	Catch Basins	Catch Basin Inlets	Channels & Ditches	Bank Outlet Filters	Bank Erosion	Storm Basins	Overflow Structures	Discharge Outlets	Wetlands and Buffers	SCHEDULE
Install & maintain soil erosion control measures			X	X							Per plans or as required
Inspect for accumulated sediment	X	X			X	X				X	Weekly or after rain event
Removal of accumulated sediment > 1" deep	X	X			X	X			X		As required
Inspect for erosion			X				X	X	X		Weekly or after rain event
Reestablish permanent & temporary controls			X	X			X	X	X		As required
Inspect for rootables and debris	X	X	X		X		X	X			Weekly or after rain event
Remove rootables and debris	X	X	X		X		X	X			As required
Replace Outlet Filter gravel jackets					X						As required
Replace rip-rap or stone check dams				X	X	X	X				As required
Mowing					X	X	X	X			Two times, annually
Certified Stormwater Manager Inspections	X	X	X	X	X	X	X	X	X	X	Weekly or after rain event
Professional engineer, reporting to developer, construction observations	X	X	X	X	X	X	X	X	X	X	As required
Modifications per engineering recommendation	X	X	X	X	X	X	X	X	X	X	Monthly
Certified Stormwater Manager maintenance and inspection records											Weekly

NOTE:
SCRAPE AND SWEEP DAILY ALL DIRT AND MUD TRACKED ON TO ALL EXISTING PAVED AREAS ADJACENT TO THE PROPOSED EARTH DISRUPTION.



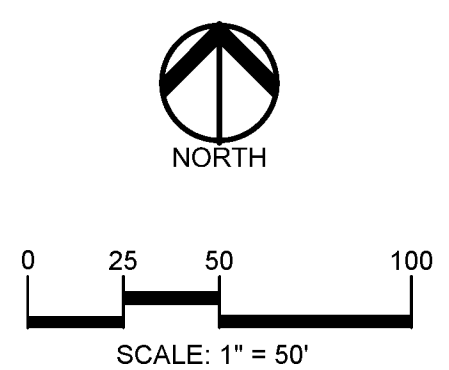
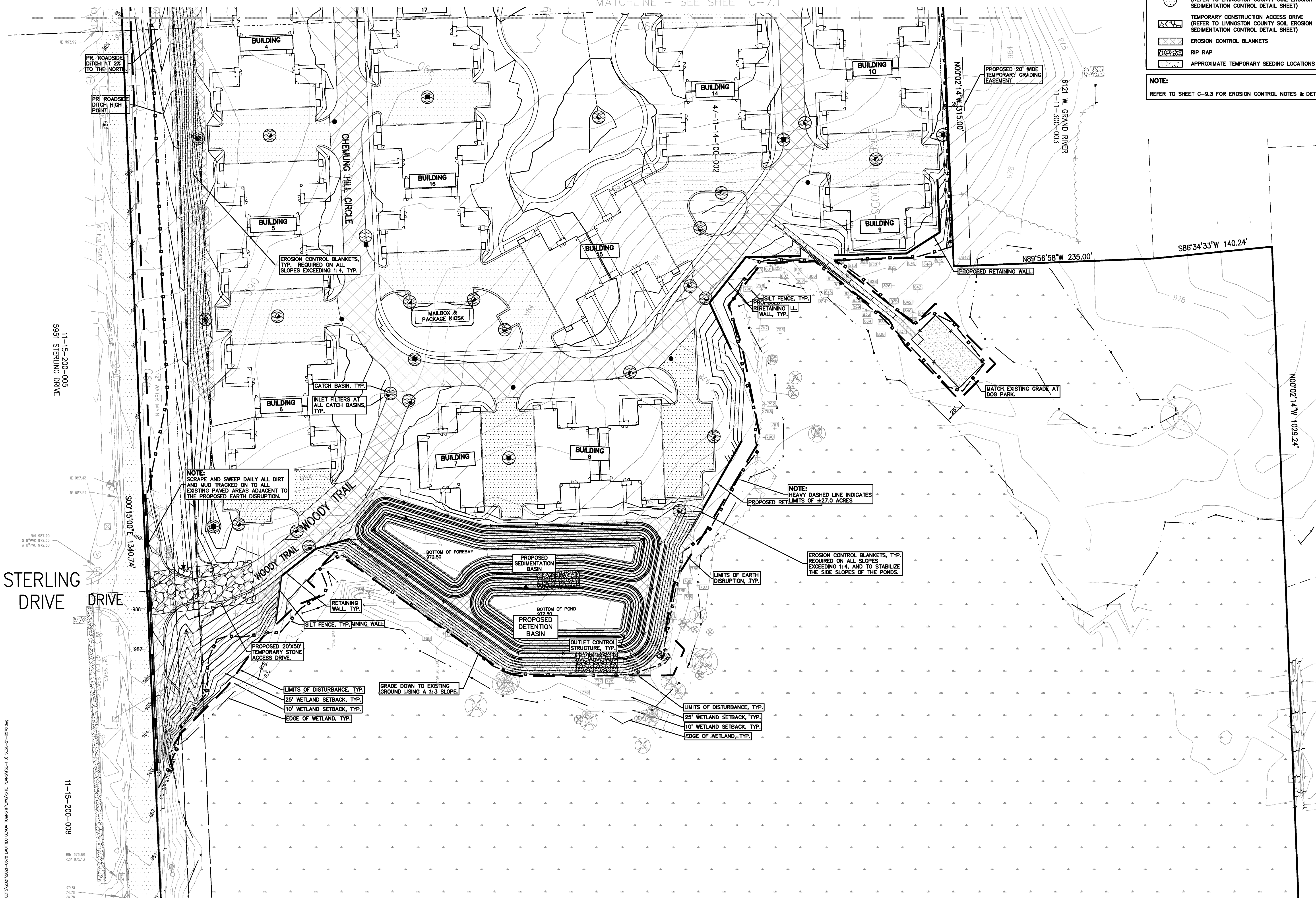
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SYMBOLS: EROSION CONTROL

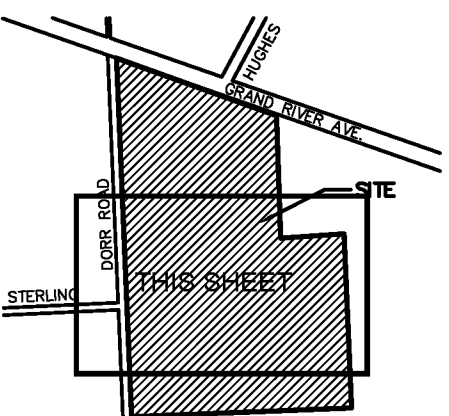
- □ — SILT FENCE (REFER TO LIVINGSTON COUNTY SOIL EROSION AND SEDIMENTATION CONTROL DETAIL SHEET)
- INLET FILTER (REFER TO LIVINGSTON COUNTY SOIL EROSION AND SEDIMENTATION CONTROL DETAIL SHEET)
- ▨ TEMPORARY CONSTRUCTION ACCESS DRIVE (REFER TO LIVINGSTON COUNTY SOIL EROSION AND SEDIMENTATION CONTROL DETAIL SHEET)
- ▨ EROSION CONTROL BLANKETS
- ▨ RIP RAP
- APPROXIMATE TEMPORARY SEEDING LOCATIONS

NOTE:
 REFER TO SHEET C-9.3 FOR EROSION CONTROL NOTES & DETAILS

MATCHLINE - SEE SHEET C-7.1



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CLIENT
GRAND RIVER DORR LLC.
 31550 NORTHWESTERN HIGHWAY
 FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
 6080 W GRAND RIVER
 GLENDA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

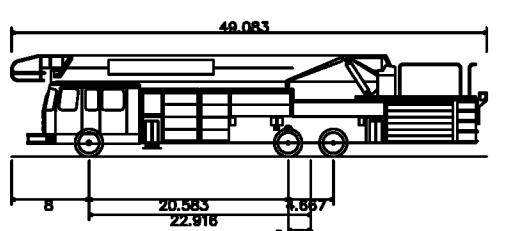
REVISIONS	REV PER TYP	DATE

ORIGINAL ISSUE DATE:
 APRIL 10, 2023

DRAWING TITLE
SOIL EROSION AND SEDIMENTATION CONTROL SOUTH

PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR
DRAWING NUMBER:	

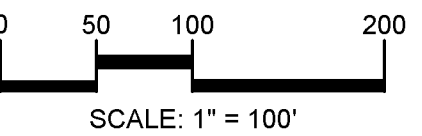
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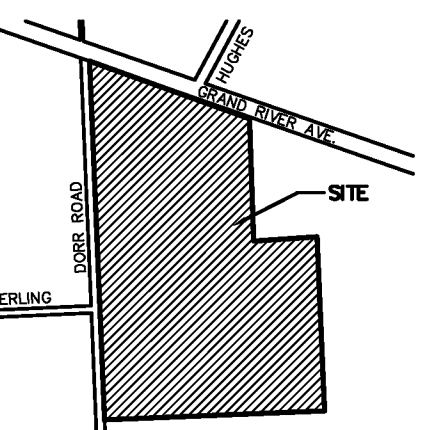
Genoa Township Fire Truck
 Overall Length 49.083ft
 Overall Width 8.167ft
 Overall Body Height 10.451ft
 Min Body Ground Clearance 0.891ft
 Track Width 8.167ft
 Lock-to-lock time 5.00s
 Max Steering Angle (Virtual) 45.00°



NORTH



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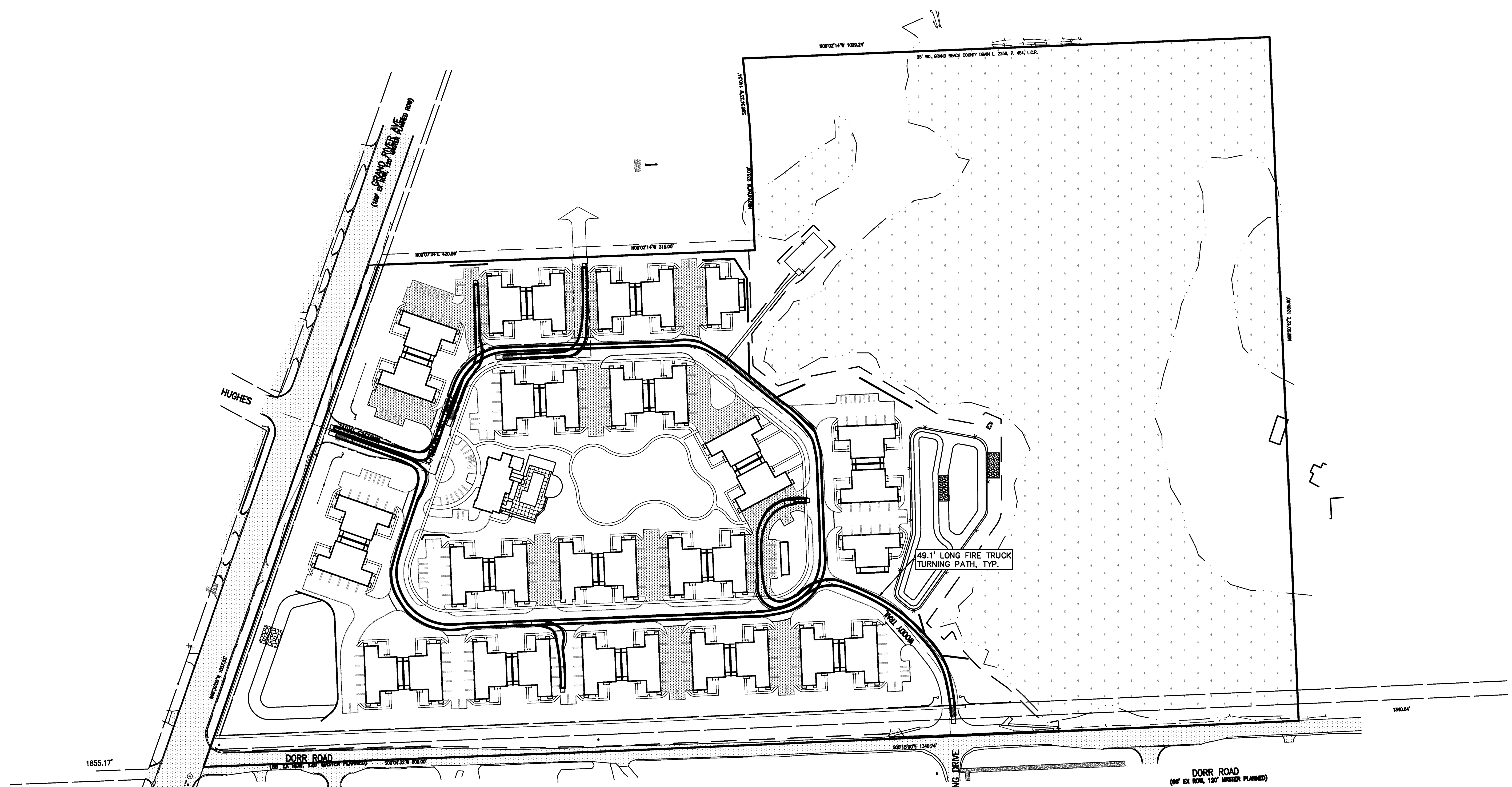
CLIENT
GRAND RIVER DORR LLC.
 31550 NORTHWESTERN HIGHWAY
 FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
 5080 W GRAND RIVER
 GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN.

REVISIONS	
REV PER TWP	5-30-23

ORIGINAL ISSUE DATE:
 APRIL 10, 2023
 DRAWING TITLE
VEHICLE TRACKING

PEA JOB NO.	2021-0578
P.M.	JEC
DN.	JMR
DES.	JMR
DRAWING NUMBER:	



S:\PROJECTS\2021\2021-0578 LAUREL GENOA TOWNSHIP\MO\SITE PLANS\G-7.0 3P TRUCK-21-0578.dwg

GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

1. ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT OSHA, LIVINGSTON COUNTY ROAD AND DRAIN COMMISSION AND MUNICIPALITY STANDARDS AND REGULATIONS.
2. THE CONTRACTOR SHALL NOTIFY THE COUNTY AND TOWNSHIP ENGINEERS AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
3. THE CONTRACTOR SHALL CONTACT THE ENGINEER SHOULD THEY ENCOUNTER ANY DESIGN ISSUES DURING CONSTRUCTION. IF THE CONTRACTOR MAKES DESIGN MODIFICATIONS WITHOUT THE WRITTEN DIRECTION OF THE DESIGN ENGINEER, THE CONTRACTOR DOES SO AT HIS OWN RISK.
4. ALL NECESSARY PERMITS, TESTING, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL COUNTY AND TOWNSHIP INSPECTION FEES.
5. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. IF NO NOTIFICATION IS GIVEN AND DAMAGE RESULTS, SAID DAMAGE WILL BE REPAIRED AT SOLE EXPENSE OF THE CONTRACTOR. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
6. CONTRACTOR SHALL VERIFY THAT THE PLANS AND SPECIFICATIONS ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHERMORE, VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING FINAL APPROVAL, HAVING TO BE ADJUSTED OR RE-DONE, SHALL BE AT THE CONTRACTOR'S EXPENSE. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND/OR SPECIFICATIONS, THEY SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE TO THE CONTRACTOR.
7. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
8. ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
9. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, SIGNAGE, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY MAINTAIN TRAFFIC IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION). THE DESIGN ENGINEER, OWNER, LIVINGSTON COUNTY AND STATE SHALL NOT BE HELD LIABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY REGULATIONS DURING THE CONSTRUCTION PERIOD.
10. THE USE OF CRUSHED CONCRETE IS PROHIBITED ON THE PROJECT WITHIN 100 FEET OF ANY WATER COURSE (STREAM, RIVER, COUNTY DRAIN, ETC.) AND LAKE, REGARDLESS OF THE APPLICATION OR LOCATION OF THE WATER COURSE OR LAKE RELATIVE TO THE PROJECT LIMITS.
11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

CONSTRUCTION MATERIAL SUBMITTALS

UNLESS REQUIRED OTHERWISE IN THE PROJECT SPECIFICATIONS, THE CONTRACTOR SHALL ONLY SUBMIT THE FOLLOWING CONSTRUCTION MATERIAL SUBMITTALS, AS APPLICABLE TO THE PLANS, FOR REVIEW BY THE ENGINEER, UNLESS APPROVED IN ADVANCE AND IN WRITING BY THE ENGINEER, ANY MATERIAL SUBMITTALS PROVIDED TO THE ENGINEER FOR REVIEW IN ADDITION TO THIS LIST SHALL BE RETURNED TO THE CONTRACTOR WITHOUT A REVIEW BEING PERFORMED.

1. SOIL EROSION AND SEDIMENTATION CONTROL MEASURES
2. UTILITY TRENCH BACKFILL MATERIAL WITH ALL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER
3. RIP RAP MATERIAL WITH ALL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER
4. STORM AND SANITARY SEWER PIPING INCLUDING JOINTS
5. STORM AND SANITARY SEWER STRUCTURES
6. STORM AND SANITARY SEWER STRUCTURE FRAME AND COVERS INCLUDING CLEAN OUTS
7. WATER DISTRIBUTION SYSTEM PIPING INCLUDING JOINTS
8. WATER DISTRIBUTION SYSTEM STRUCTURES
9. WATER DISTRIBUTION SYSTEM STRUCTURE FRAME AND COVERS
10. WATER DISTRIBUTION SYSTEM SHUT OFF BOXES
11. WATER DISTRIBUTION SYSTEM FIRE HYDRANTS
12. WATER DISTRIBUTION SYSTEM GATE VALVES
13. STORM WATER MANAGEMENT OUTLET CONTROL STRUCTURES INCLUDING COVERS OR GRATES
14. STORM WATER MANAGEMENT OUTLET SEDIMENTATION BASIN RISERS INCLUDING GRATES
15. STORM WATER MANAGEMENT MECHANICAL PRE-TREATMENT UNITS INCLUDING COVERS
16. STORM WATER MANAGEMENT OIL/GREASE SEPARATORS
17. STORM WATER MANAGEMENT UNDERGROUND DETENTION SYSTEM MATERIAL AND SHOP DRAWINGS DEPICTING THE LAYOUT OF THE SYSTEM
18. PAVEMENT AGGREGATE BASE MATERIAL WITH ALL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER
19. PAVEMENT UNDERDRAIN MATERIAL AND BACKFILL WITH ALL BACKFILL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER
20. PAVEMENT MIX DESIGNS SUBMITTED FOR REVIEW BY THE ENGINEER MUST FOLLOW THE CURRENT MDOT REVIEW CHECKLISTS AS SUMMARIZED BELOW AND ALL MATERIAL DATA INCLUDED IN THE SUBMITTAL BEING DATED WITHIN 60 DAYS OF THE SUBMITTAL UNLESS APPROVED OTHERWISE BY THE ENGINEER:
 - B.1. CONCRETE MIX DESIGN REVIEW CHECKLIST (FORM 2000)
 - B.2. SUPERPAVE MIX DESIGN CHECKLIST (FORM 1862)
 - B.3. MARSHALL MIX DESIGN CHECKLIST (FORM 1849)
21. SITE FENCING AND GATES INCLUDING FOOTINGS
22. SITE RAILINGS INCLUDING FOOTING OR EMBEDMENTS
23. ANY ITEMS SHOWN IN THE PLANS OR DETAIL SHEETS THAT SPECIFICALLY STATE FOR THE CONTRACTOR TO SUBMIT A SHOP DRAWING TO THE ENGINEER FOR REVIEW. THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO:
 - ** RETAINING WALL MATERIAL AND STRUCTURAL CALCULATIONS
 - ** TRENCH DRAIN MATERIAL AND SHOP DRAWING DEPICTING THE LAYOUT OF THE SYSTEM
 - ** ANY SPECIALTY ITEMS SHOWN IN THE PLANS OR DETAIL SHEETS THAT SPECIFICALLY DO NOT STATE FOR THE CONTRACTOR SHALL SUBMIT A SHOP DRAWING TO THE ENGINEER FOR REVIEW BUT THE CONTRACTOR REQUESTS TO BE REVIEWED. THE CONTRACTOR'S REQUEST FOR REVIEW MUST BE IN WRITING AND APPROVED BY THE ENGINEER PRIOR TO SUBMITTING THE INFORMATION.

PAVING NOTES:

1. IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.
2. REFER TO ARCHITECTURAL PLANS FOR DETAILS OF FROST SLAB AT EXTERIOR BUILDING DOORS.
3. CONSTRUCTION TRAFFIC SHOULD BE MINIMIZED ON THE NEW PAVEMENT. IF CONSTRUCTION TRAFFIC IS ANTICIPATED ON THE PAVEMENT STRUCTURE, THE INITIAL LIFT THICKNESS COULD BE INCREASED AND PLACEMENT OF THE FINAL LIFT COULD BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED. THIS ACTION WILL ALLOW REPAIR OF LOCALIZED FAILURE, IF ANY DOES OCCUR, AS WELL AS REDUCE LOAD DAMAGE ON THE PAVEMENT SYSTEM.
4. ALL EXPANSION JOINTS AND CONCRETE PAVEMENT JOINTS TO BE SEALED.
5. CONCRETE PAVEMENT JOINTING – UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION:
 - 5.1. WHERE PROPOSED CONCRETE ABUTS A STRUCTURE, PROVIDE A MINIMUM 1/2" EXPANSION JOINT. THE JOINT FILLER BOARD MUST BE AT LEAST THE FULL DEPTH OF THE CONCRETE AND HELD DOWN A 1/2" TO ALLOW FOR SEALING.
 - 5.2. WHERE PROPOSED CONCRETE ABUTS EXISTING CONCRETE OR IN BETWEEN POURS OF PROPOSED CONCRETE (CONSTRUCTION JOINT), PROVIDE 5/8" DOWELS EVERY 30' CENTER TO CENTER HALF WAY ALONG THE THICKNESS OF THE PROPOSED PAVEMENT. ALTERNATE DOWELS SIZES AND SPACING MUST BE APPROVED THE ENGINEER PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
 - 5.3. WHERE PROPOSED CONCRETE ABUTS EXISTING OR PROPOSED SIDEWALK OR CURBING, PROVIDE A MINIMUM 1/2" EXPANSION JOINT.
 - 5.4. CONTROL, LONGITUDINAL AND/OR TRANSVERSE JOINTS SHALL BE PLACED TO PROVIDE PANELS WITHIN THE PAVEMENT AS SQUARE AS POSSIBLE WITH THE FOLLOWING MAXIMUM SPACING PARAMETERS:
 - 5.4.1. 6-INCH THICK CONCRETE PAVEMENT: 12' X 12'
 - 5.4.2. 8-INCH THICK CONCRETE PAVEMENT: 15' X 15'
 - 5.4.3. IRREGULAR-SHAPED PANELS MAY REQUIRE THE USE OF REINFORCING MESH OR FIBER MESH AS DETERMINED BY THE ENGINEER. THE USE OF MESH MUST BE APPROVED THE ENGINEER PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
 - 5.6. IF A JOINT PLAN IS NOT PROVIDED IN THE PLANS, THE CONTRACTOR SHALL SUBMIT ONE TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
6. CONCRETE CURBING JOINTING – UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION
 - 6.1. JOINTS WHEN ADJACENT TO ASPHALT PAVEMENT
 - 6.1.1. PLACE CONTRACTION JOINTS AT 10' INTERVALS
 - 6.1.2. PLACE 1/2" EXPANSION JOINT AT CATCH BASINS, EXISTING AND PROPOSED SIDEWALK OR EXISTING CURBING.
 - 6.1.3. PLACE 1" EXPANSION JOINT:
 - 6.1.3.1. AT SPRING POINTS OF INTERSECTIONS OR ONE OF THE END OF RADIUS LOCATIONS IN A CURVE
 - 6.1.3.2. AT 400' MAXIMUM INTERVALS ON STRAIGHT RUNS
 - 6.1.3.3. AT THE END OF RADIUS AT OPPOSITE ENDS IN A CURBED LANDSCAPE ISLAND
 - 6.2. JOINTS WHEN TIED TO CONCRETE PAVEMENT
 - 6.2.1. PLACE CONTRACTION JOINTS OPPOSITE ALL TRANSVERSE CONTRACTION JOINTS IN PAVEMENT
 - 6.2.2. PLACE 1/2" EXPANSION JOINT AT CATCH BASINS, EXISTING AND PROPOSED SIDEWALK OR EXISTING CURBING.
 - 6.2.3. PLACE 1" EXPANSION JOINT OPPOSITE ALL TRANSVERSE EXPANSION JOINTS IN PAVEMENT
 - 6.2.4. CURB AND GUTTER AND CONCRETE SHALL BE TIED TOGETHER SIMILAR TO A LONGITUDINAL LANE TIE JOINT (MDOT B1 JOINT)
- 6.3. IN BETWEEN POURS OF PROPOSED CONCRETE CURBING (CONSTRUCTION JOINT):
 - 6.3.1. CARRY THE REBAR CONTINUOUSLY BETWEEN POURS
 - 6.3.2. IF THE REBAR IS NOT LONG ENOUGH TO CARRY CONTINUOUSLY, THEN TIE TWO PIECES OF REBAR PER THE LATEST MDOT SPECIFICATIONS
7. CONCRETE SIDEWALK JOINTING – UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION
 - 7.1. PLACE TRANSVERSE CONTRACTION JOINTS EQUAL TO THE WIDTH OF THE WALK WHEN WIDTH IS LESS THAN 8'
 - 7.2. PLACE TRANSVERSE AND LONGITUDINAL CONTRACTION JOINTS EQUAL TO 1/2 THE WIDTH OF THE WALK WHEN WIDTH IS EQUAL TO OR GREATER THAN 8'
 - 7.3. PLACE 1" EXPANSION JOINT WHERE ABUTTING SIDEWALK RAMP AND/OR RADIUS IN INTERSECTION
 - 7.4. PLACE TRANSVERSE 1/2" EXPANSION JOINT AT MAXIMUM OF 100' SPACING
 - 7.5. PLACE 1/2" EXPANSION JOINT WHEN ABUTTING A FIXED STRUCTURE, OTHER PAVEMENT (CONCRETE PAVEMENT AND DRIVE APPROACHES), UTILITY STRUCTURES, LIGHT POLE BASES AND COLUMNS

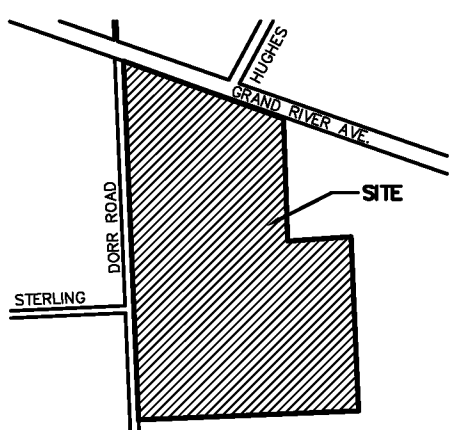
GENERAL GRADING AND EARTHWORK NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING TREES AND BRUSH AND REMOVE ALL THAT ARE NECESSARY TO GRADE SITE.
2. ALL GRADES ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
3. THE STAGING OF CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY WITHIN THE SITE BOUNDARIES. ANY CONSTRUCTION ACTIVITIES OUTSIDE OF THE SITE BOUNDARIES SHALL BE AT THE SOLE RESPONSIBILITY AND RISK OF THE CONTRACTOR.
4. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE AUTHORIZED PUBLIC AGENCY OF JURISDICTION. AN EROSION CONTROL PERMIT MUST BE SECURED FROM THE LIVINGSTON COUNTY DRAIN COMMISSION OFFICE PRIOR TO CONSTRUCTION.
5. ALL EARTHWORK AND GRADING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS INVESTIGATION AND REPORT.
6. REFER TO SOIL EROSION CONTROL PLAN FOR ADDITIONAL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES.
7. THE DETENTION BASIN SIDE SLOPES AND ALL SLOPE EXCEEDING 1:5 MUST BE STABILIZED BY SODDING OR BY PLACING A MULCH BLANKET PEGGED IN PLACE OVER SEED.
8. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH THE LANDSCAPE PLANS. PROVIDE A MINIMUM OF 3" OF TOPSOIL IN THESE AREAS UNLESS OTHERWISE NOTED.
9. THE CONTRACTOR SHALL NOTE EXISTING UNDERGROUND UTILITIES WITHIN AND ADJACENT TO THE SITE. BACKFILL FOR EXISTING UTILITY TRENCHES SHALL BE EXAMINED CRITICALLY. ANY TRENCHES FOUND TO HAVE SOFT, UNSTABLE OR UNSUITABLE BACKFILL MATERIAL IN THE OPINION OF THE THIRD PARTY TESTING COMPANY, THAT ARE TO BE WITHIN THE ZONE OF INFLUENCE OF PROPOSED BUILDINGS OR PAVEMENT SHALL BE COMPLETELY EXCAVATED AND BACKFILLED WITH SUITABLE MATERIAL.
10. ON-SITE FILL CAN BE USED IF THE SPECIFIED COMPACTION REQUIREMENTS CAN BE ACHIEVED. IF ON-SITE SOIL IS USED, IT SHOULD BE CLEAN AND FREE OF FROZEN SOIL, ORGANICS, OR OTHER DELETERIOUS MATERIALS.
11. THE FINAL SUBGRADE/EXISTING AGGREGATE BASE SHOULD BE THOROUGHLY PROOFROLLED USING A FULLY LOADED TANDEM AXLE TRUCK OR FRONT END LOADER UNDER THE OBSERVATION OF A GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS THAT CANNOT BE MECHANICALLY STABILIZED SHOULD BE REINFORCED USING GEOGRIDS OR REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTATED BY FIELD CONDITIONS.
12. SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS SUSCEPTIBLE TO FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAVATIONS THAT MAY BE REQUIRED BELOW THE TOPSOIL IN FILL AREAS OR BELOW SUBGRADE IN CUT AREAS WILL BE CLASSIFIED AS SUBGRADE UNDERCUTTING.
13. SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDERCUTTING SHALL BE BACKFILLED AS RECOMMENDED IN THE GEOTECHNICAL ENGINEERING REPORT FOR THE PROJECT.
14. ANY SUB-GRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED INCIDENTAL TO THE JOB.



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51550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

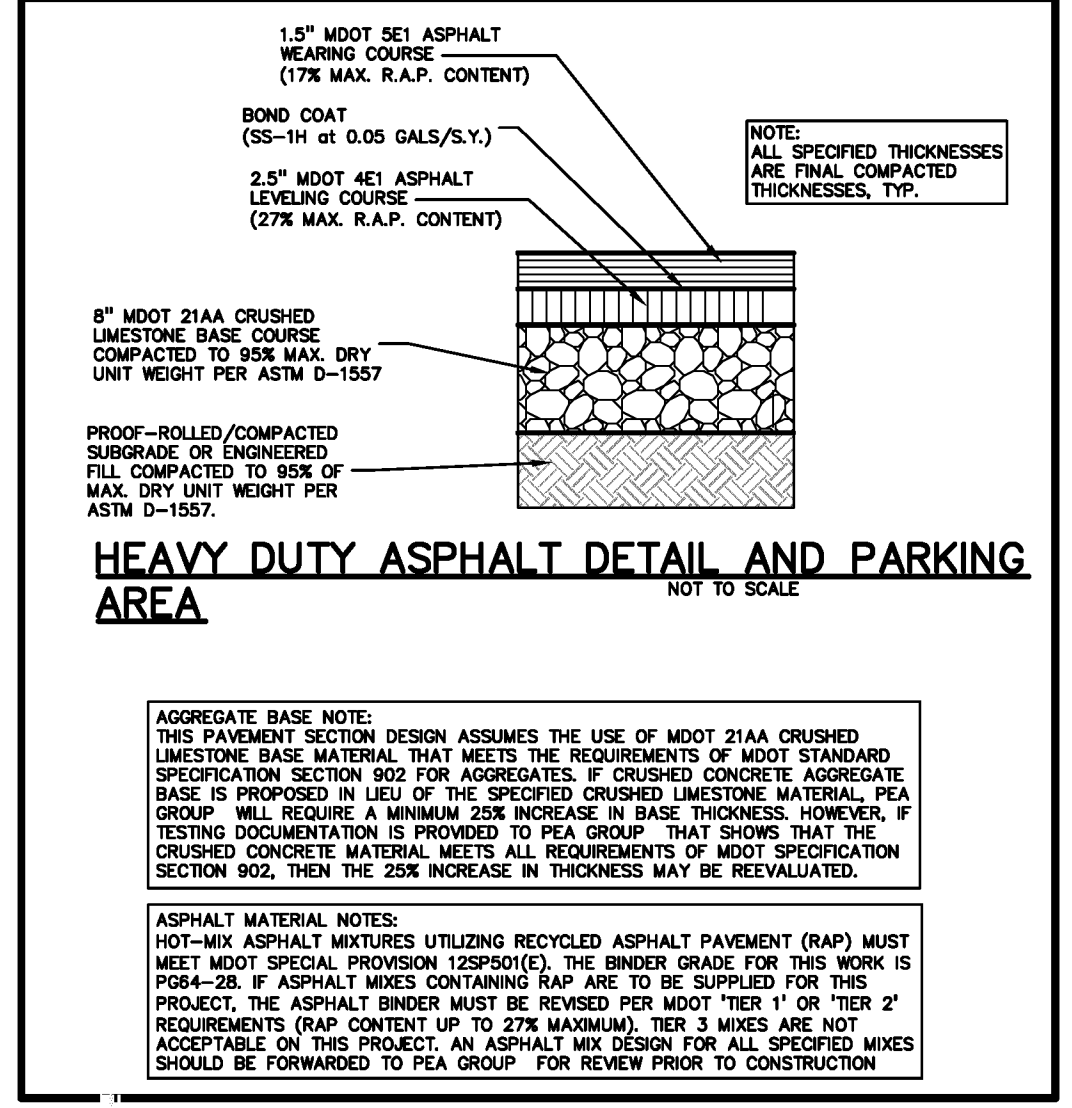
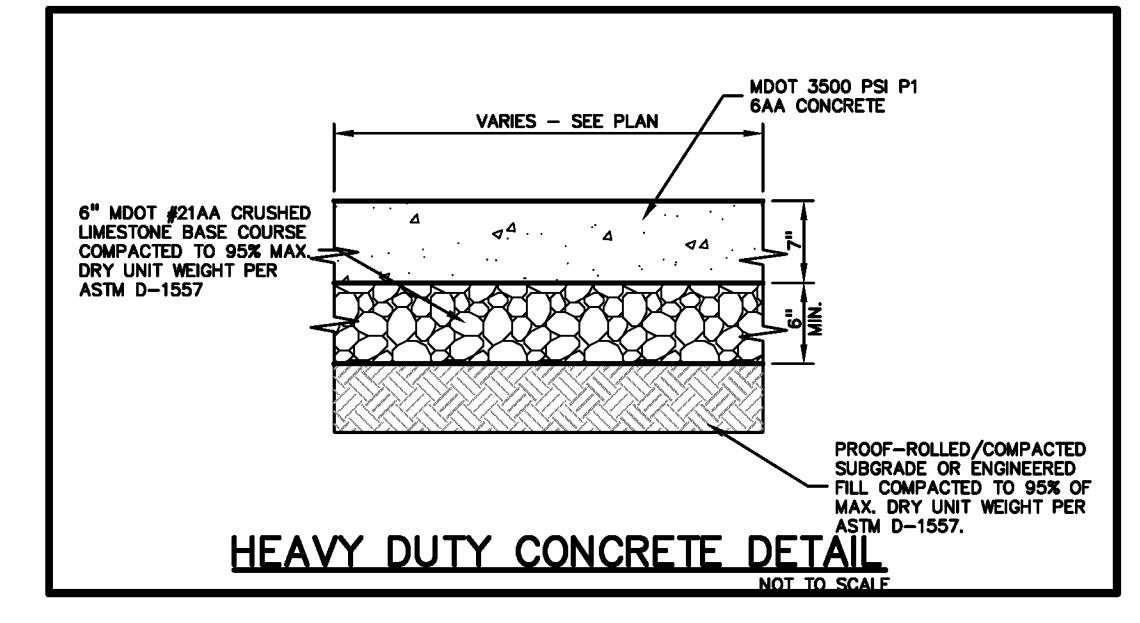
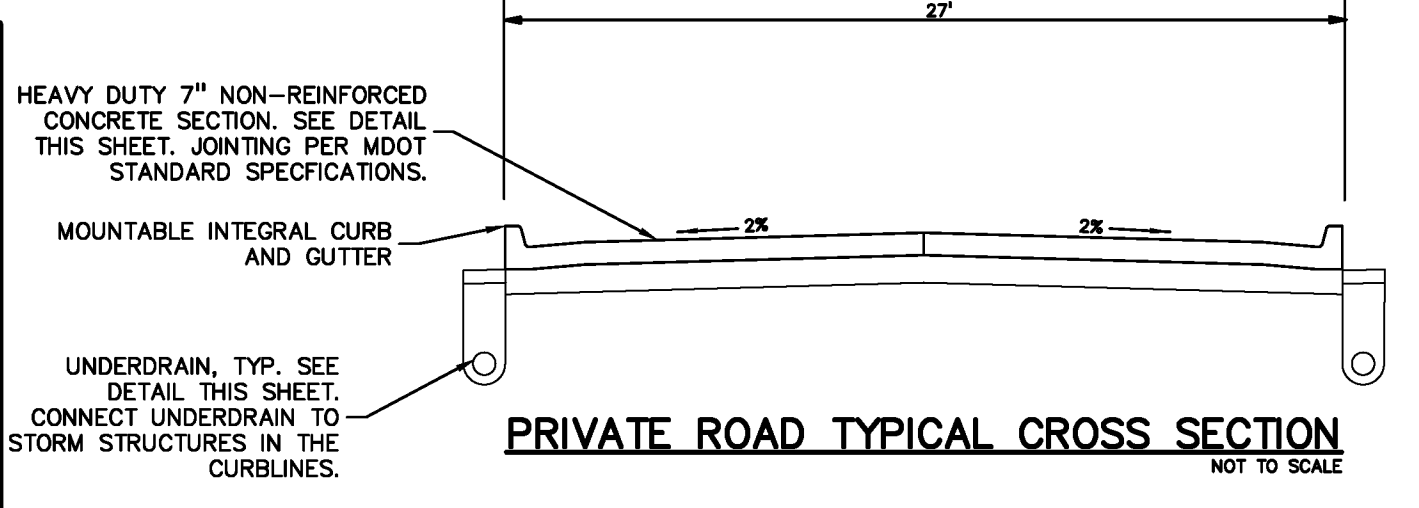
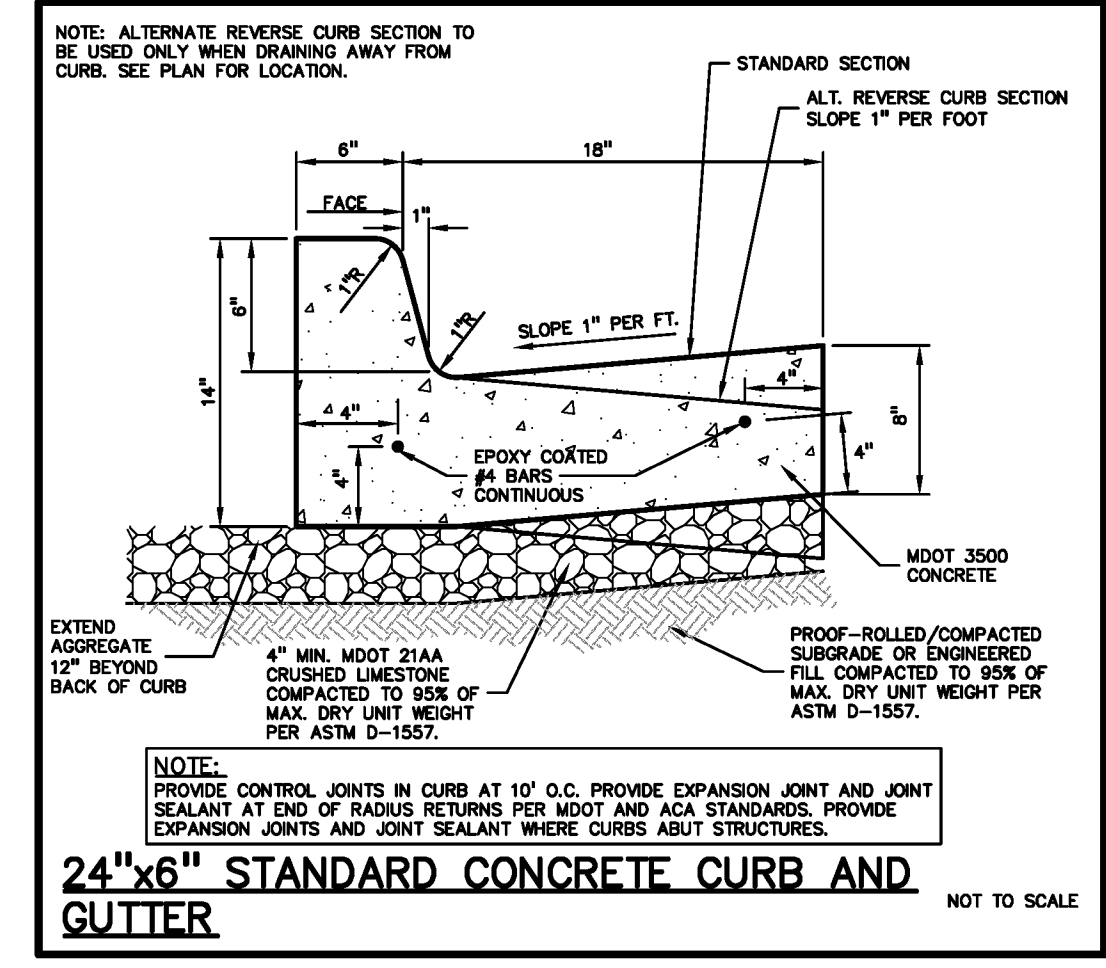
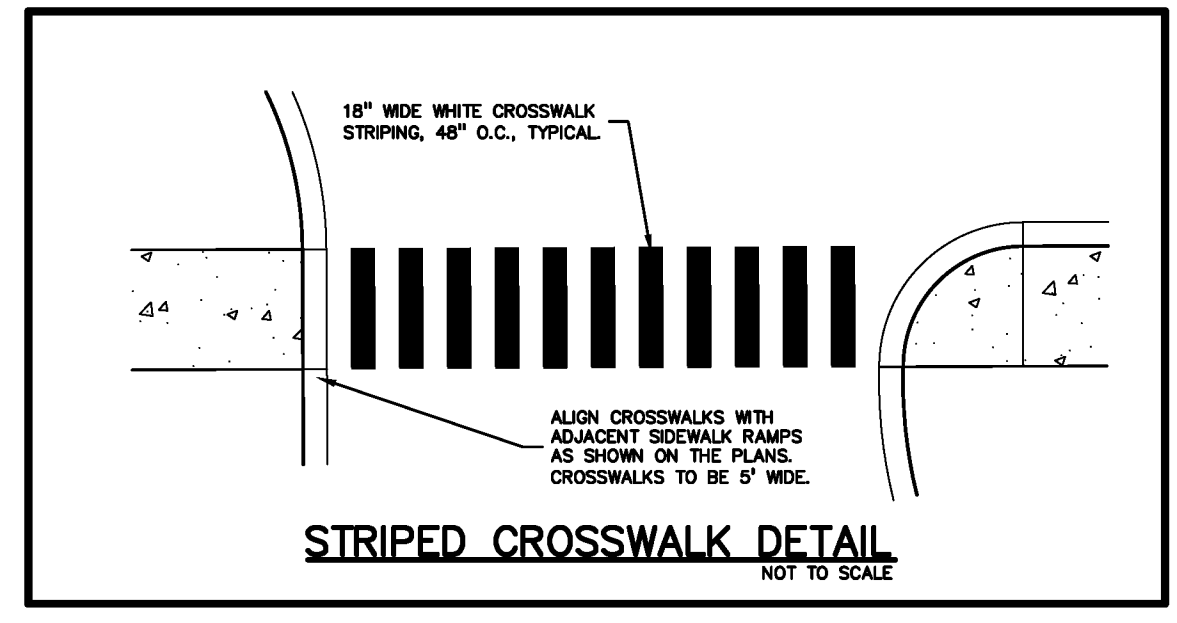
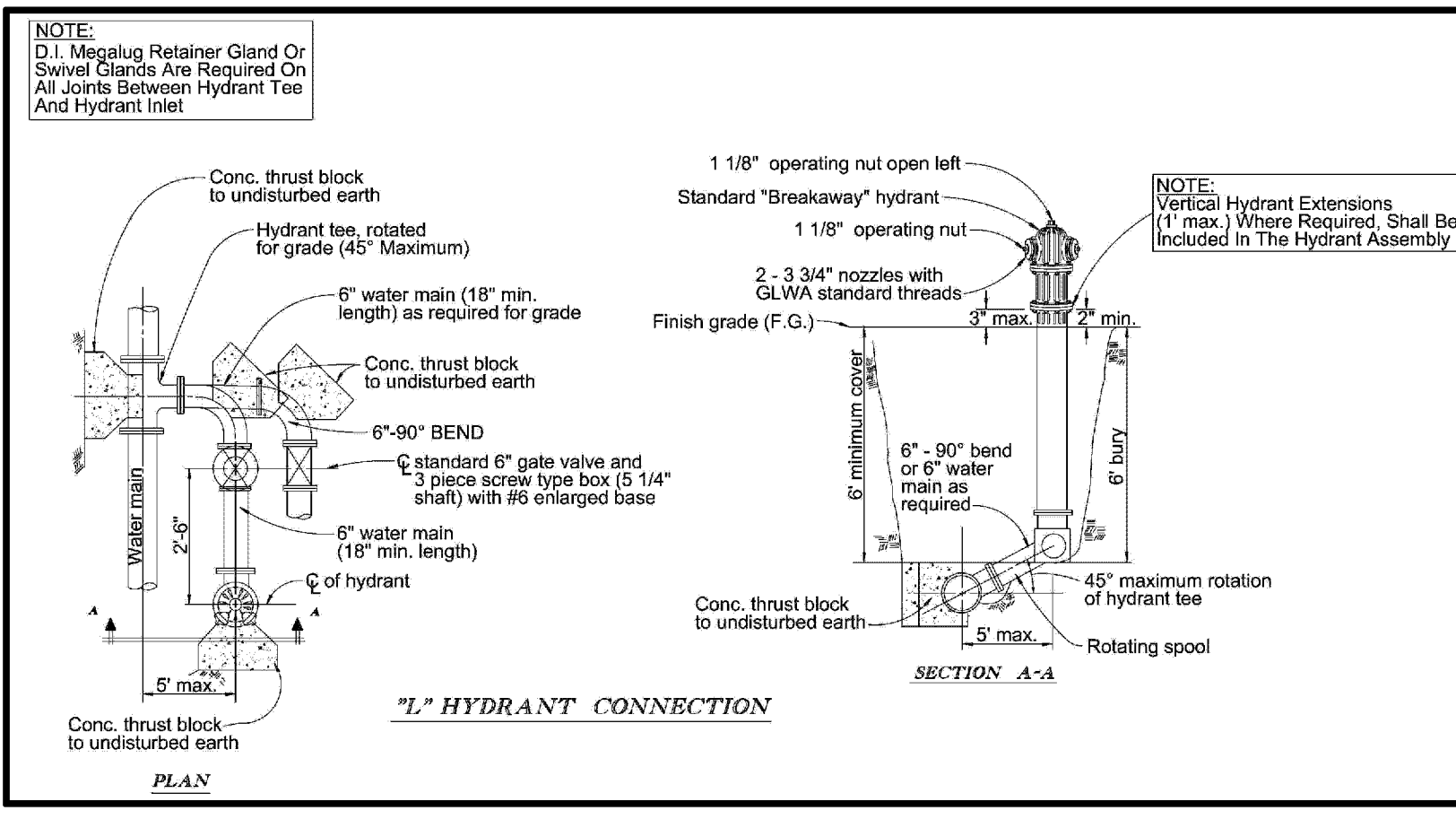
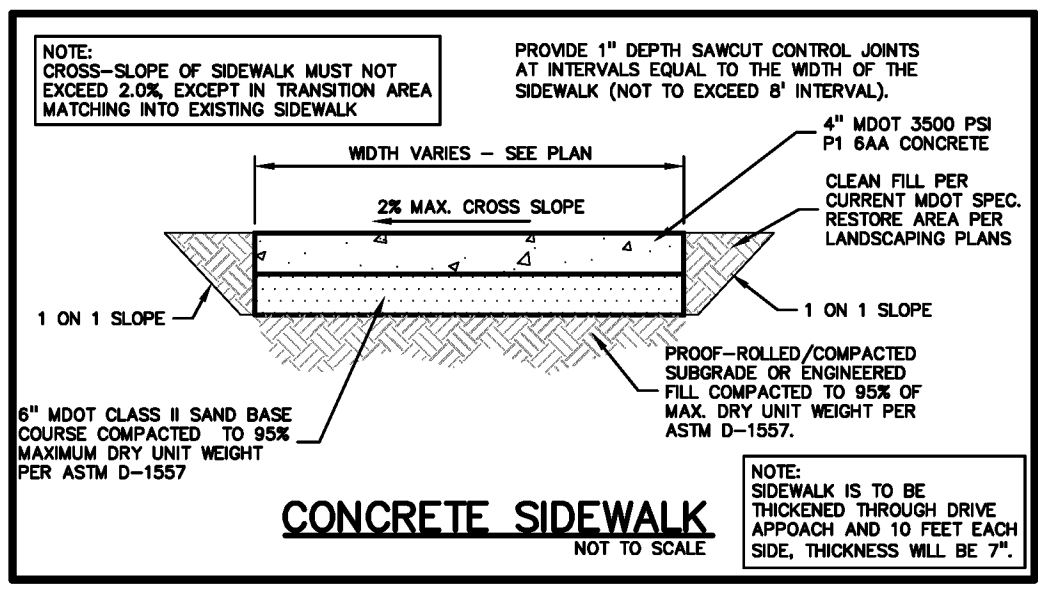
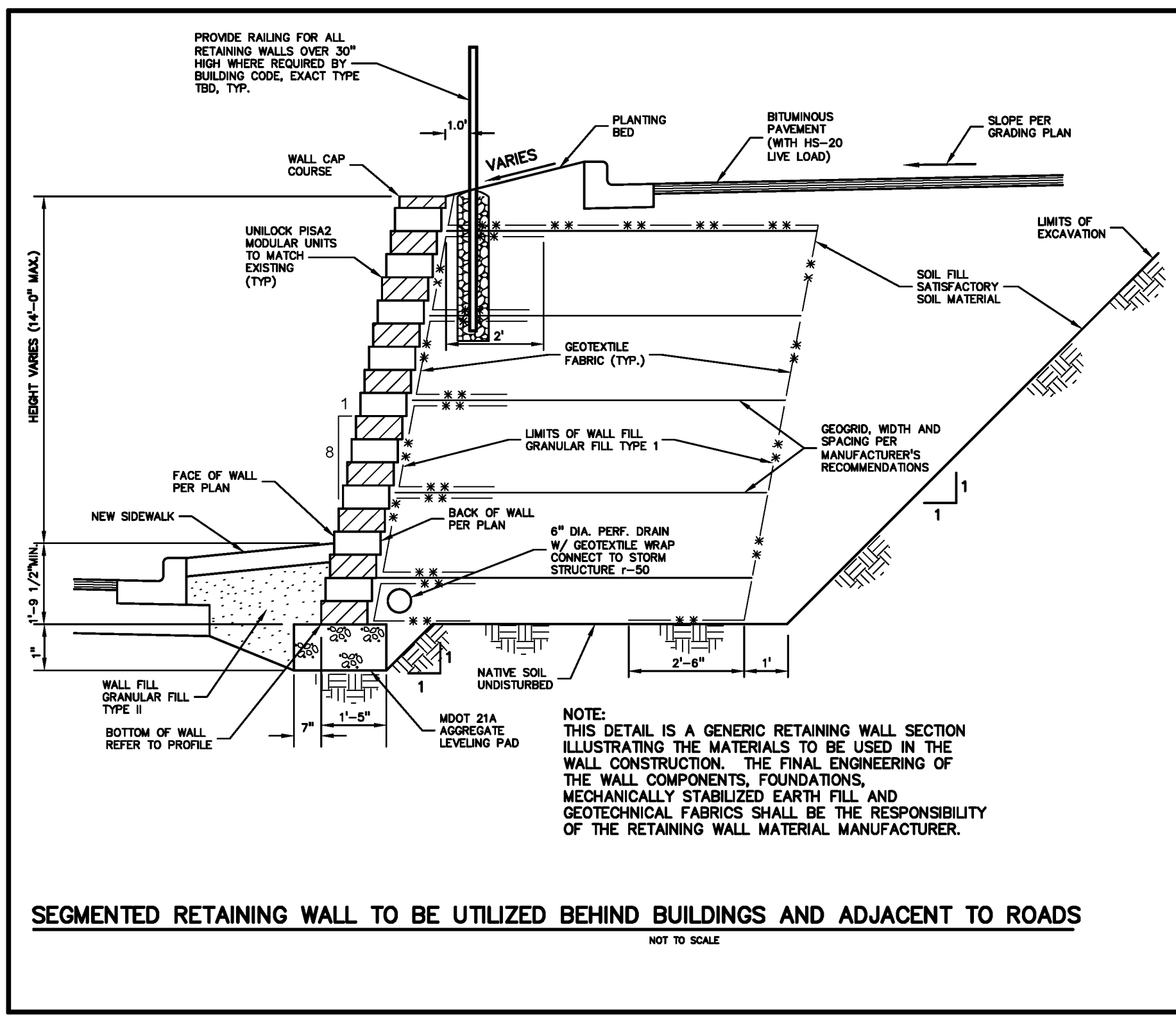
PROJECT TITLE
THE LEGACY APARTMENT HOMES
6080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

REVISIONS	
REV PER TWP	5-30-23

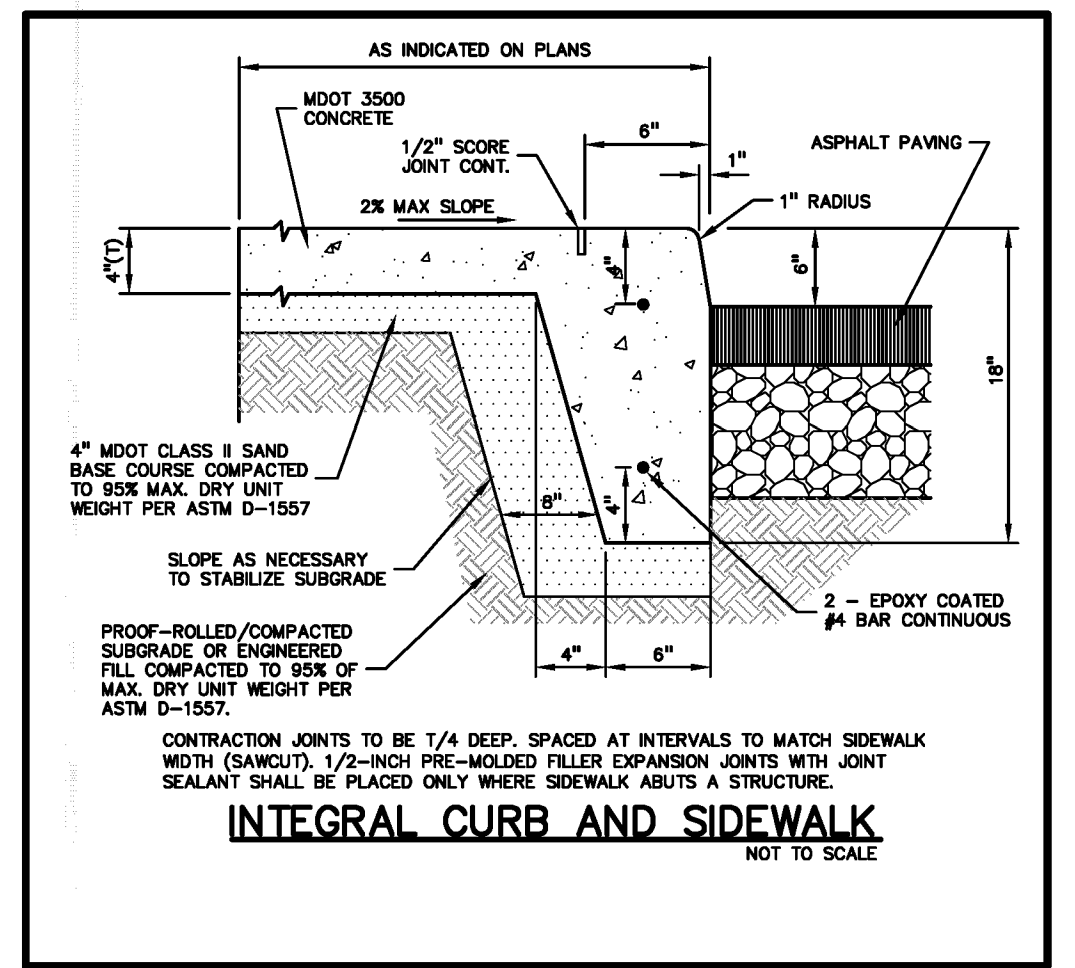
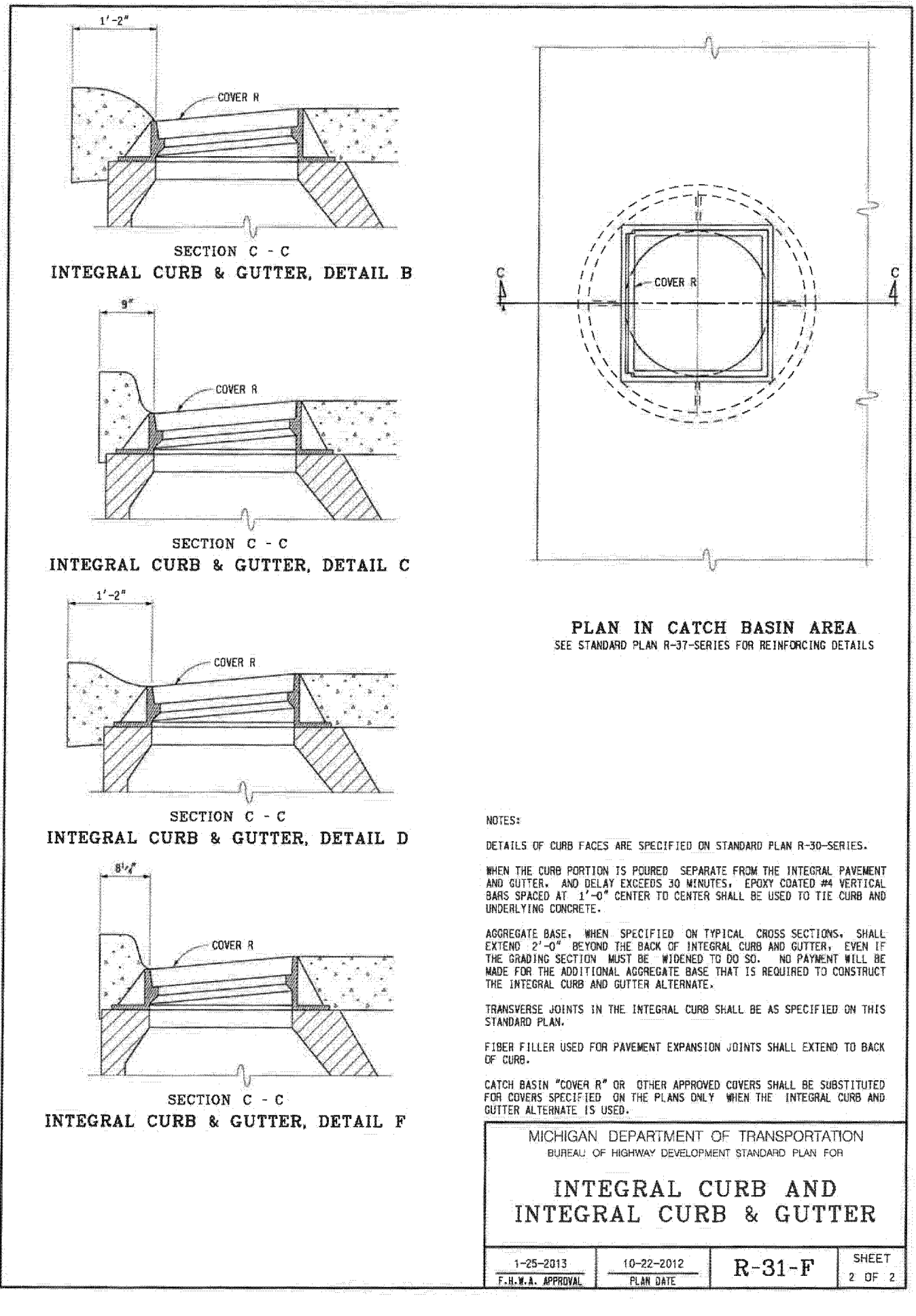
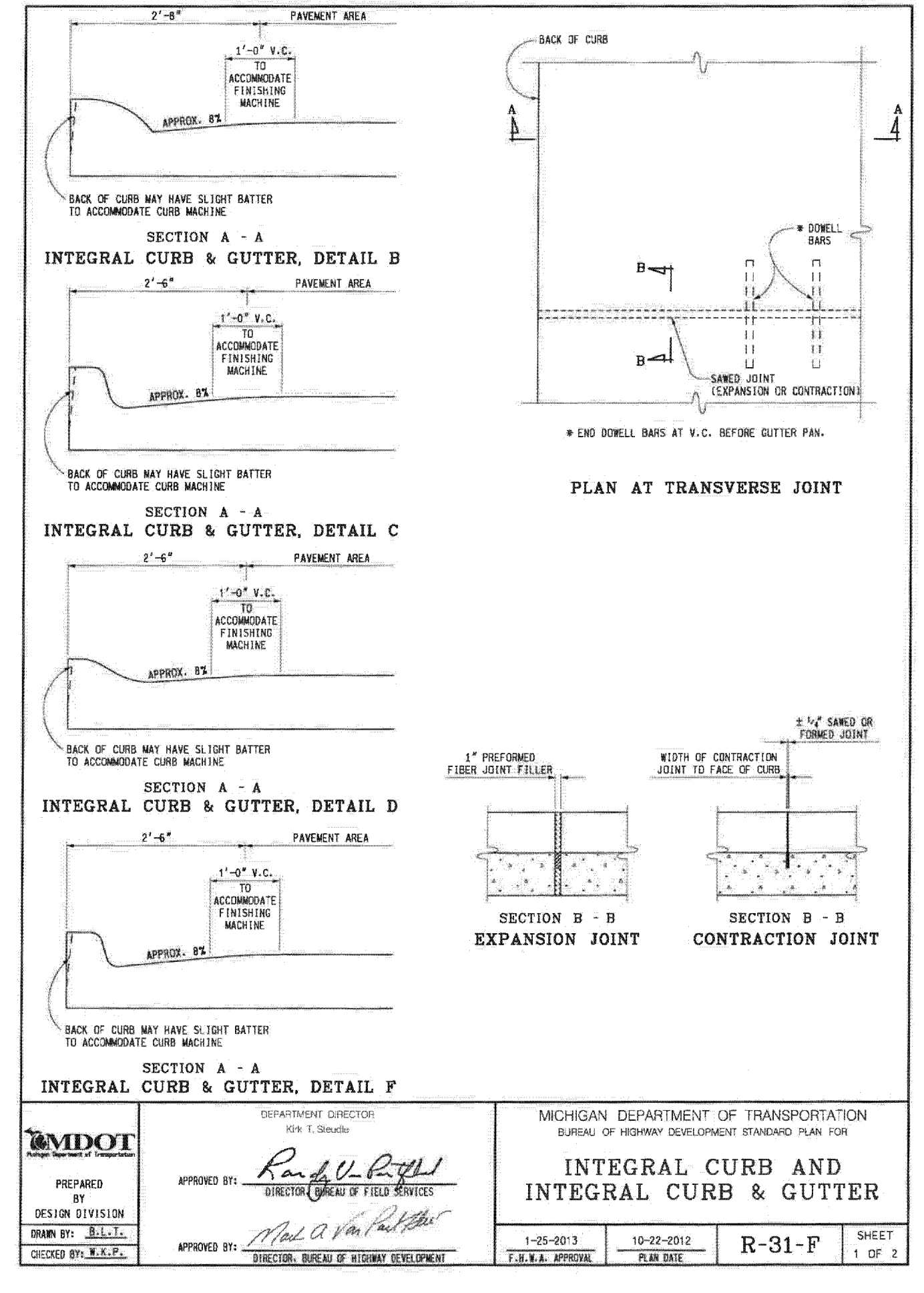
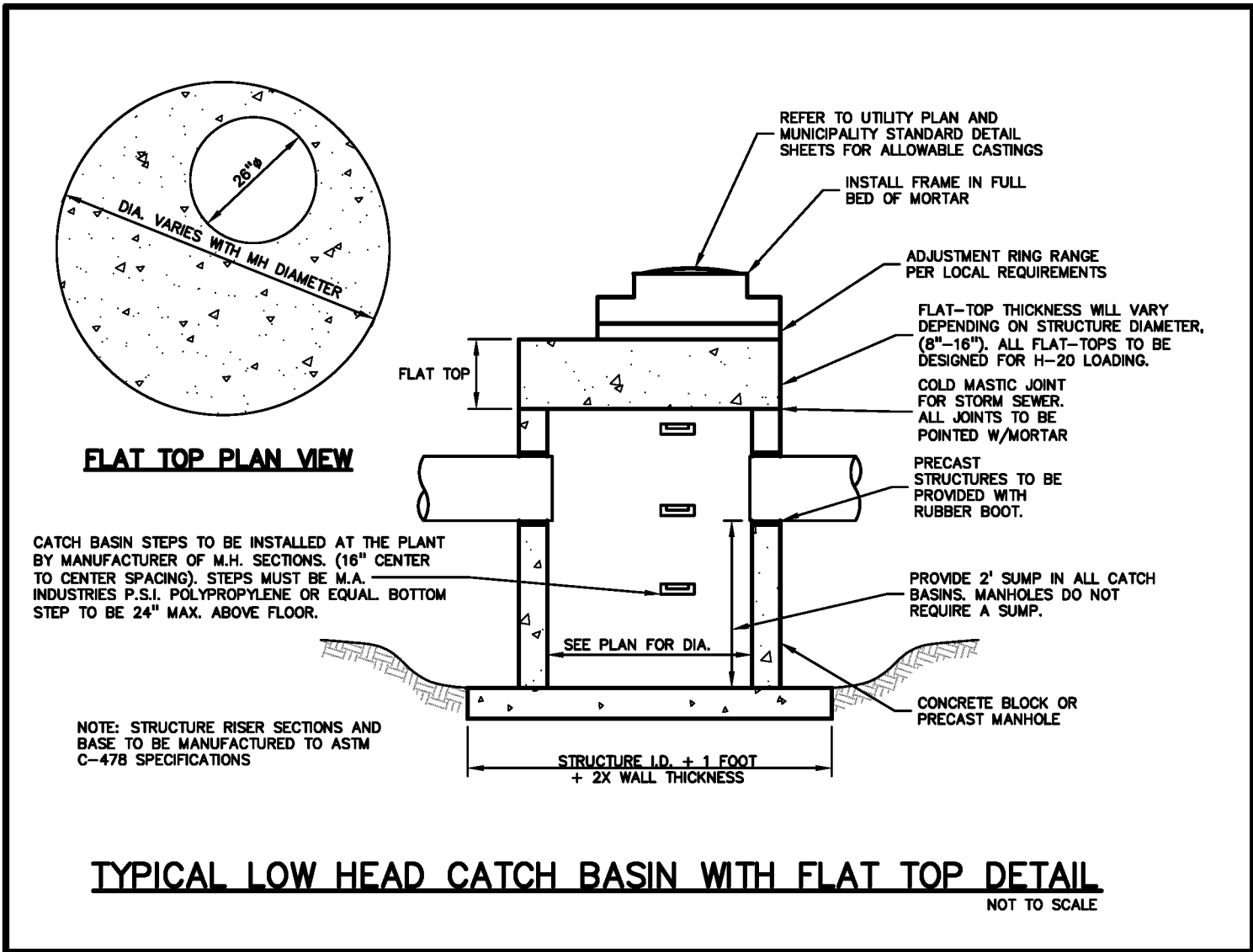
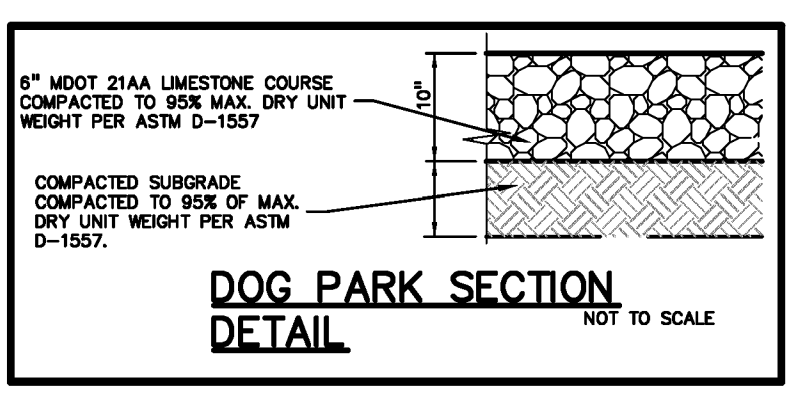
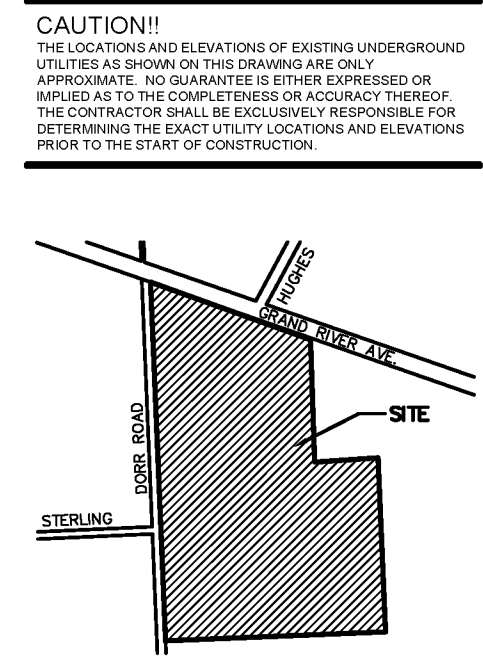
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CONSTRUCTION NOTES

PEA JOB NO.	2021-0578
P.M.	JEC
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GRAND RIVER DORR LLC.
31550 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334

PROJECT TITLE
THE LEGACY APARTMENT HOMES
5050 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

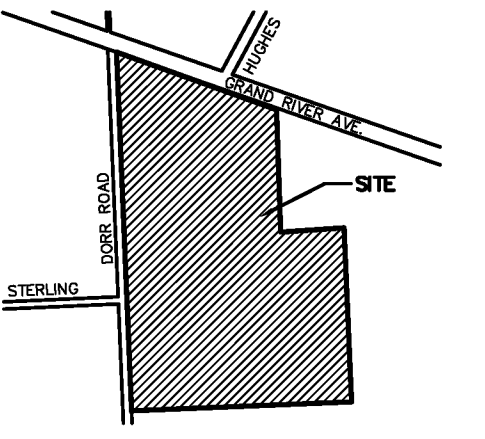
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NOTES AND DETAILS I

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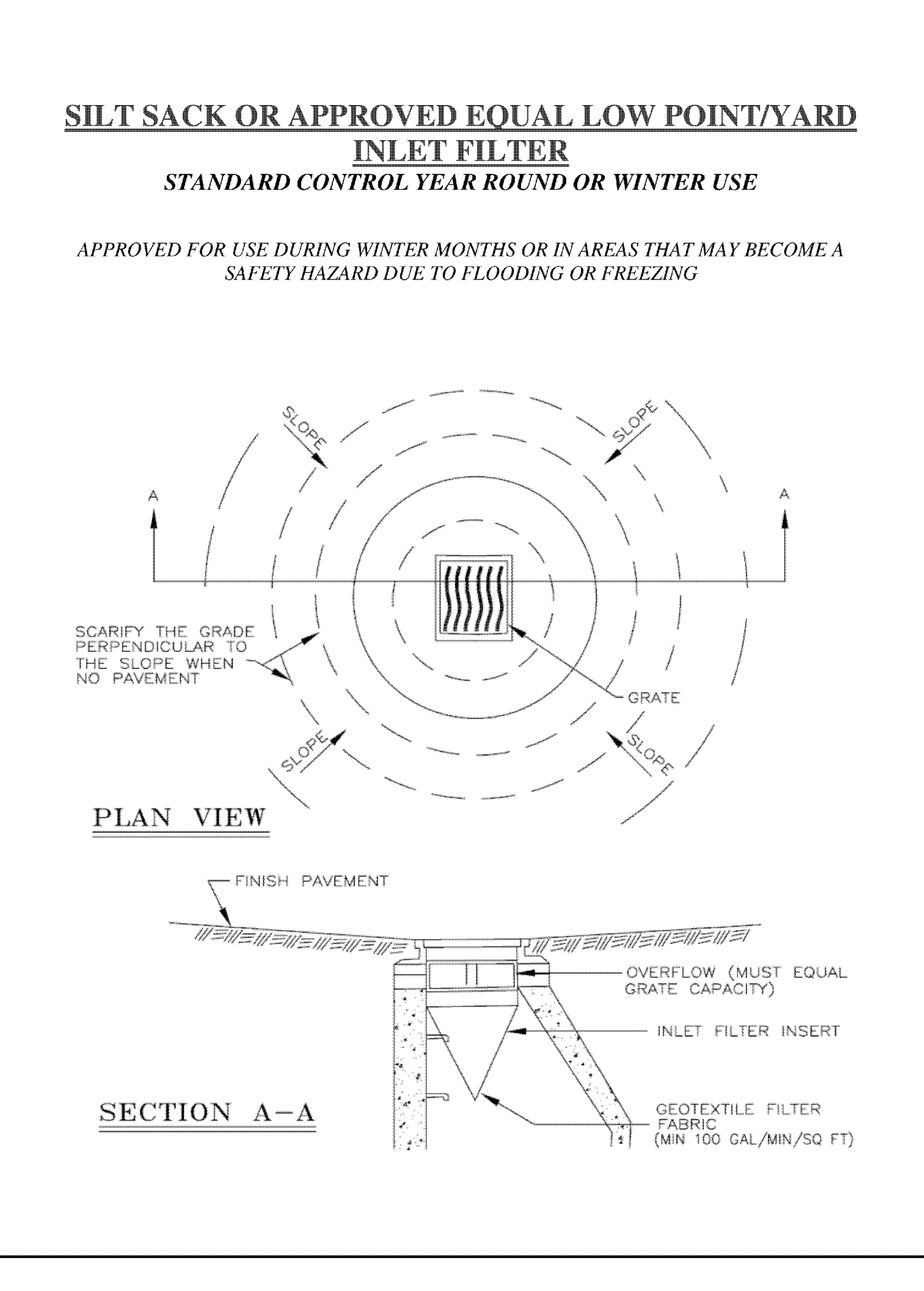
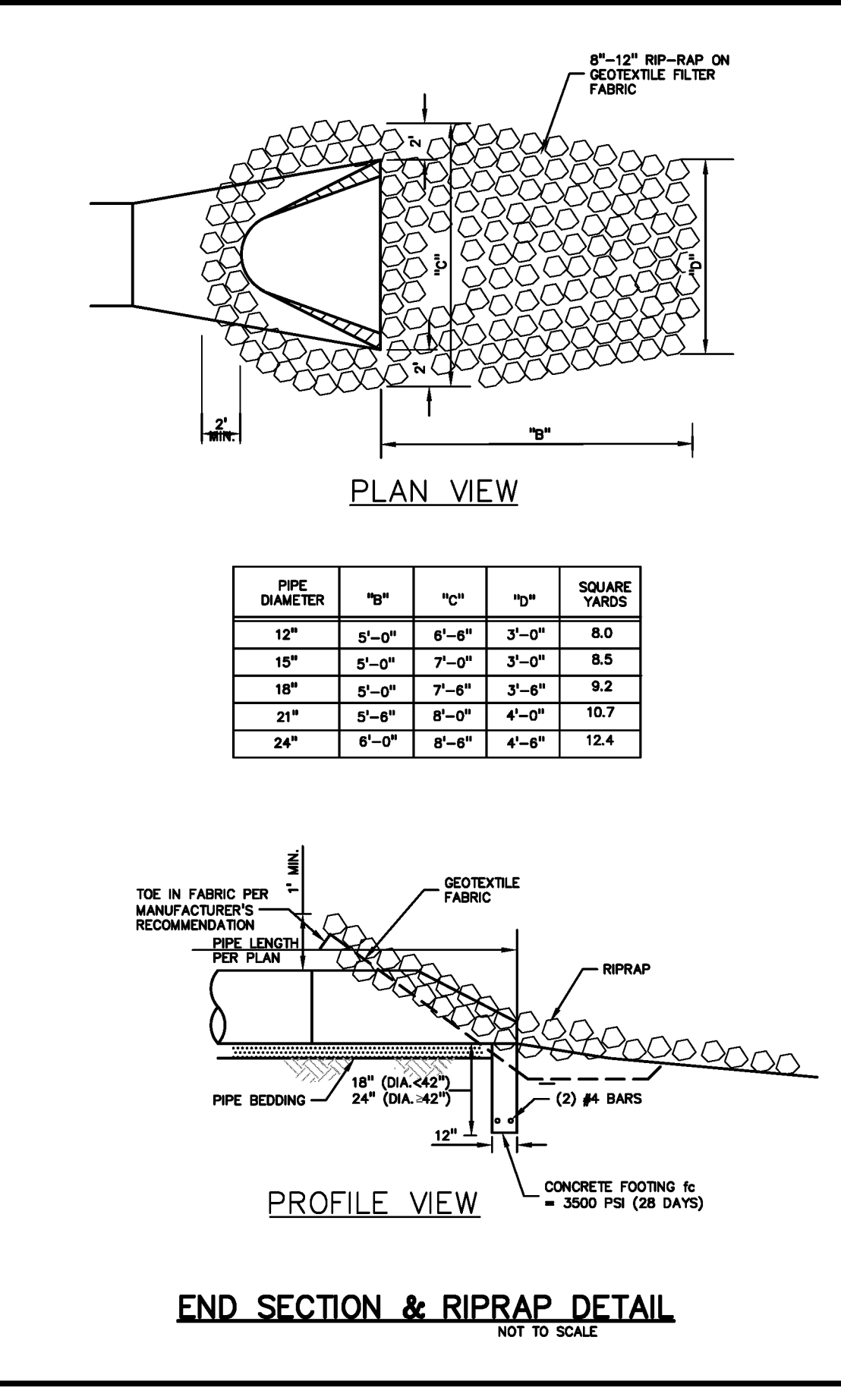
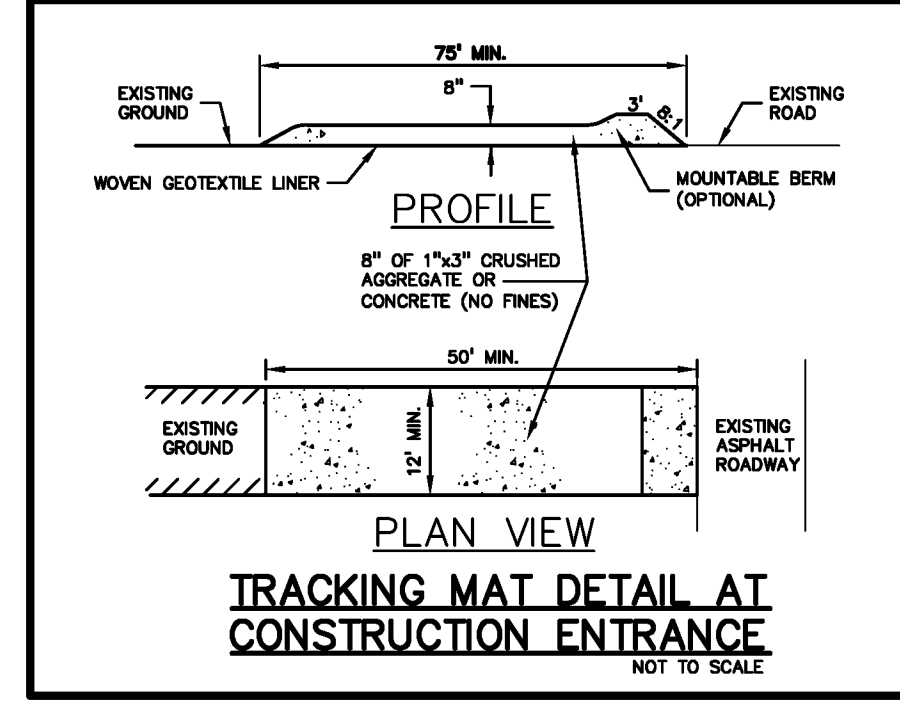
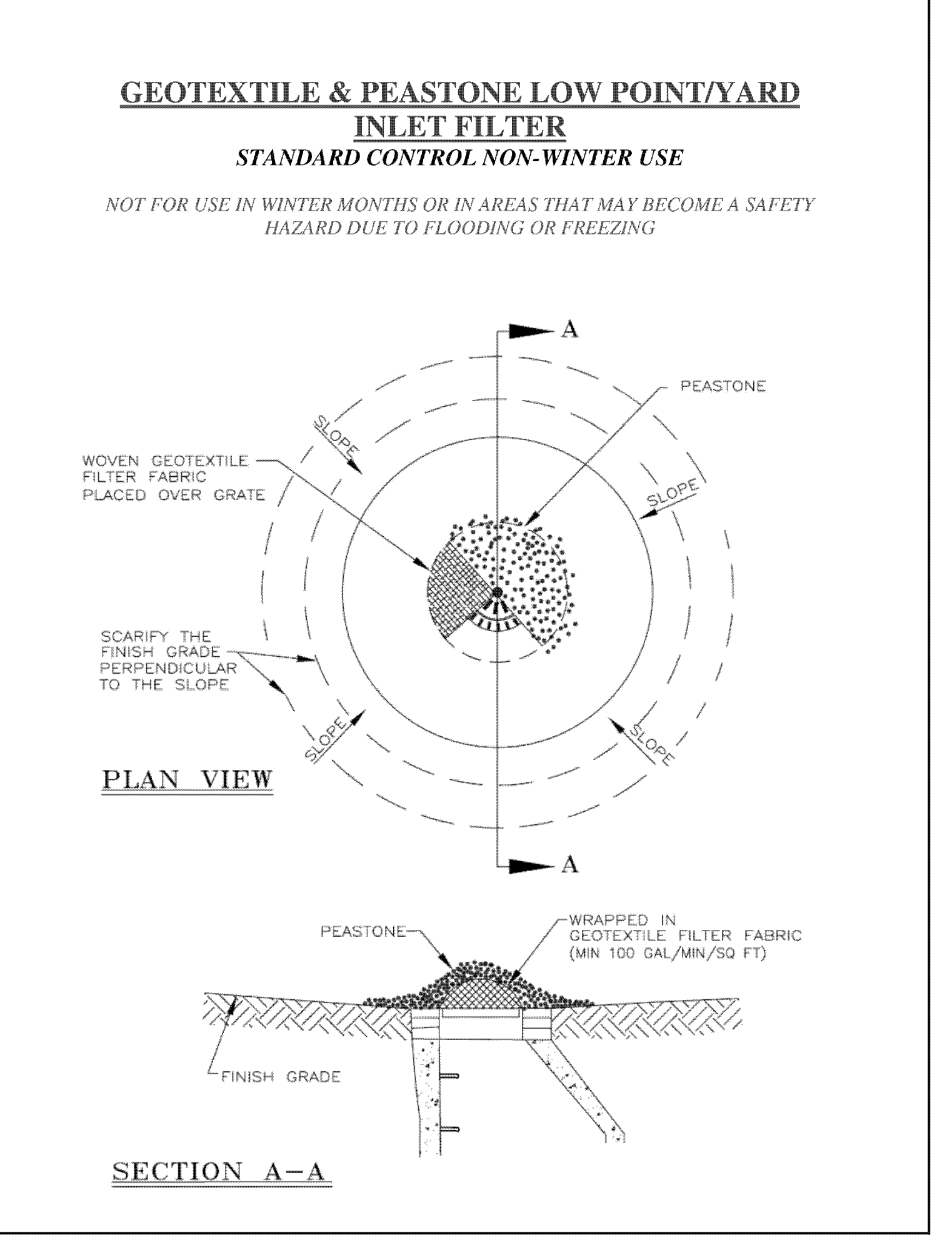
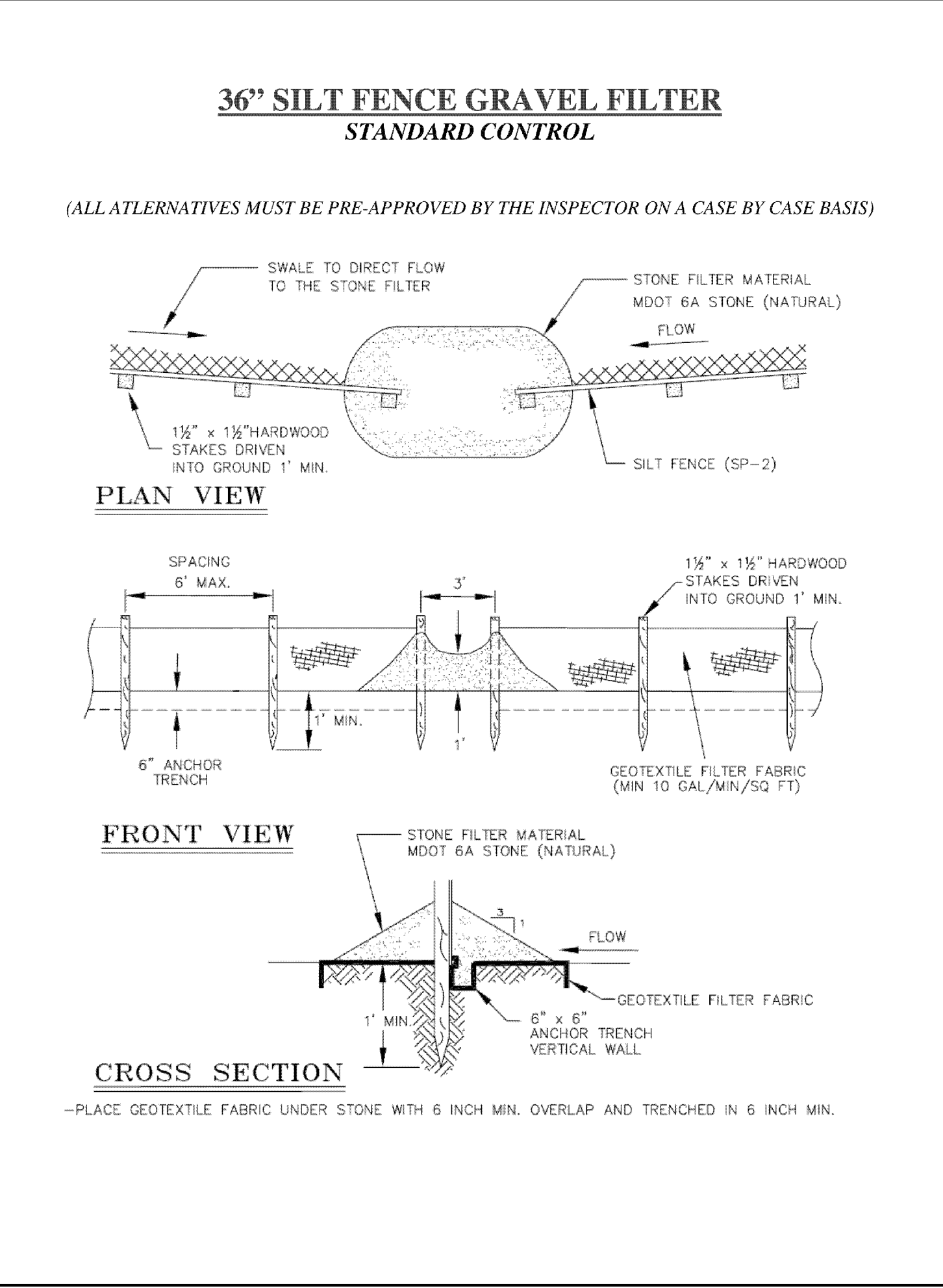
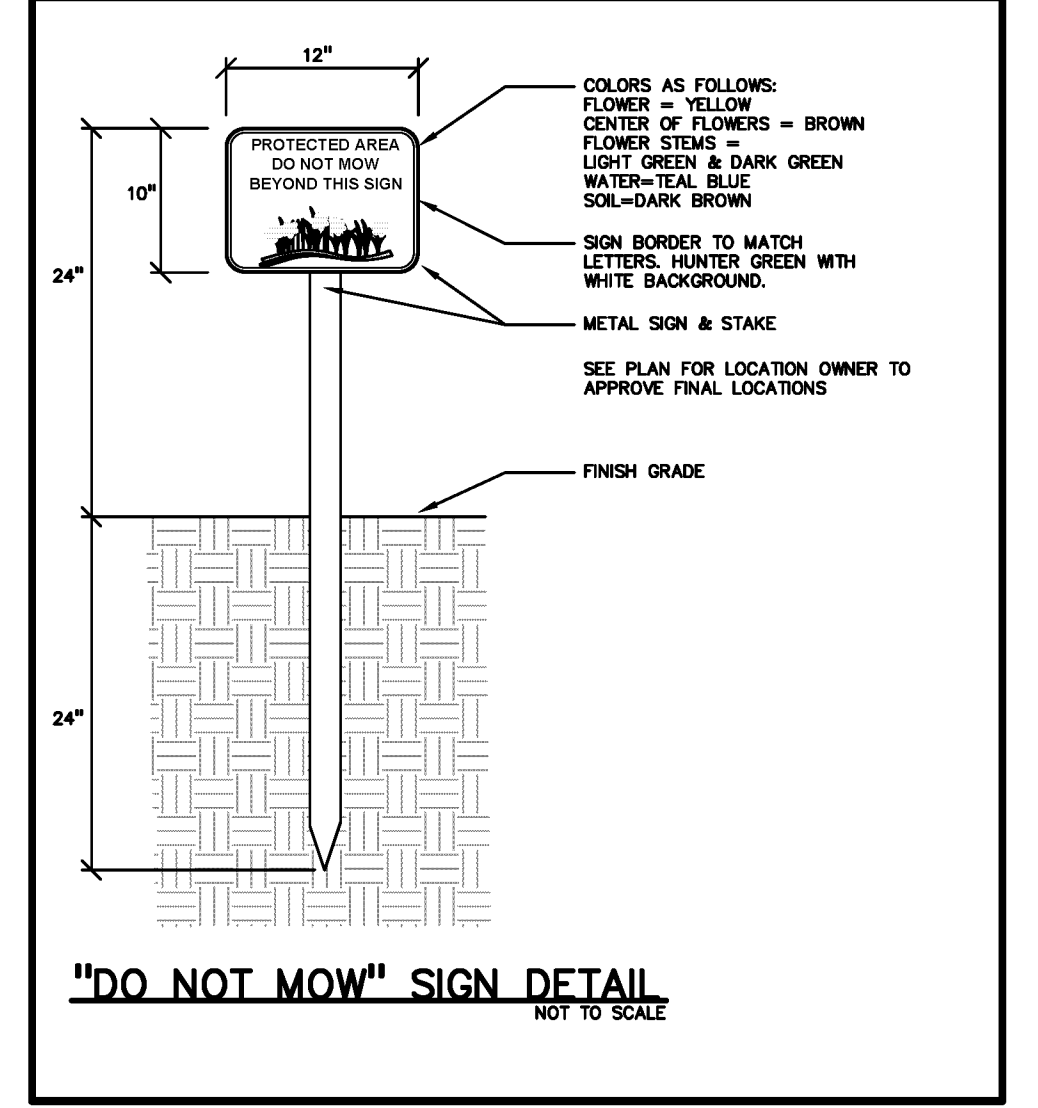
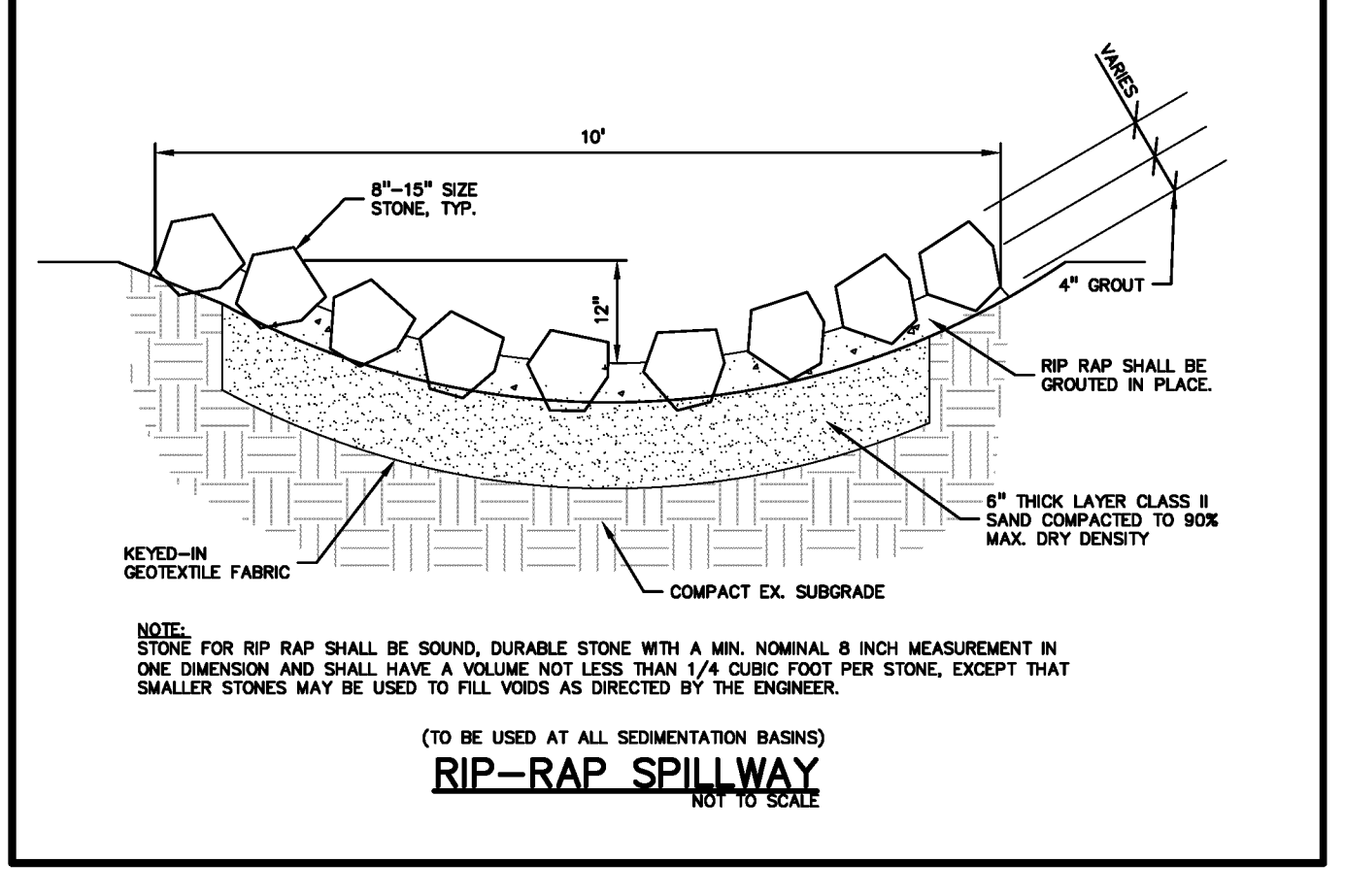
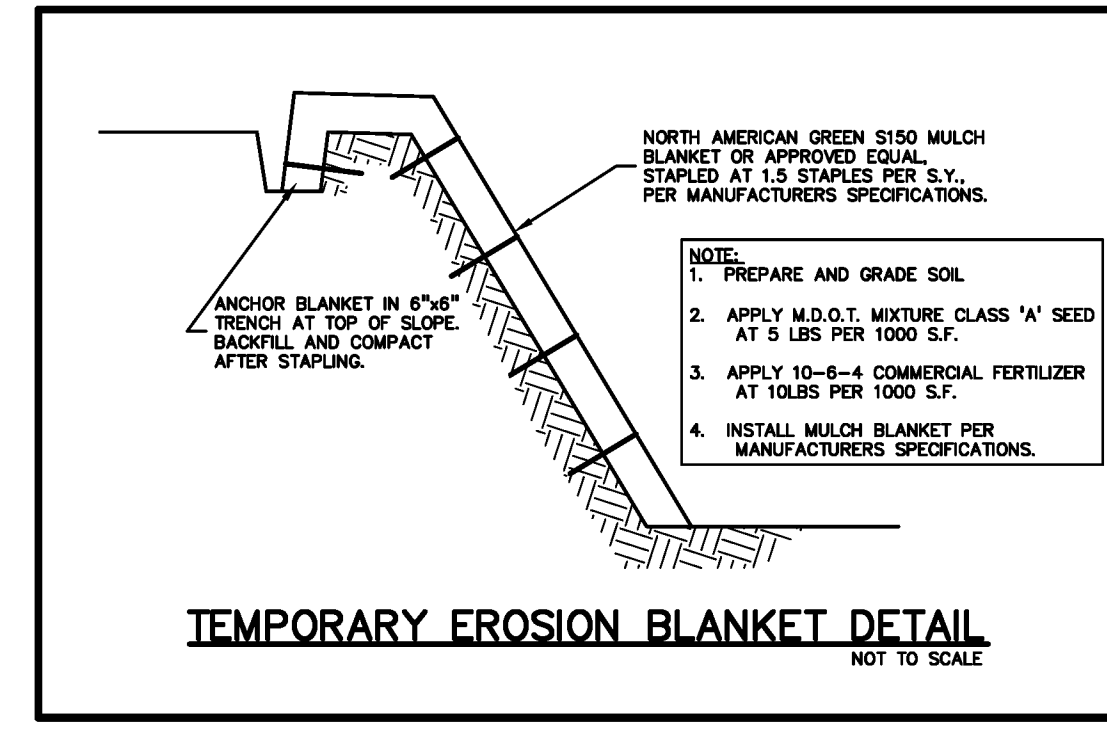
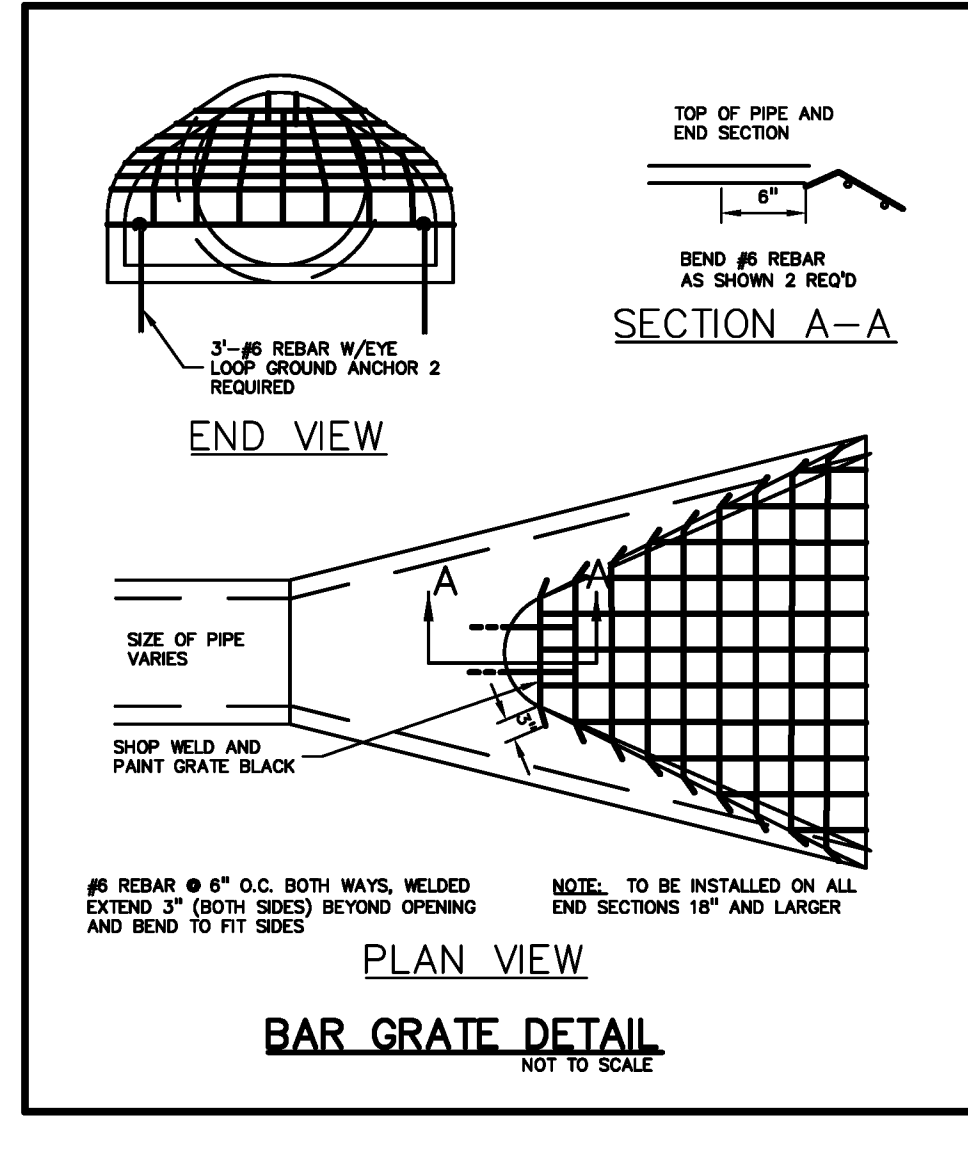
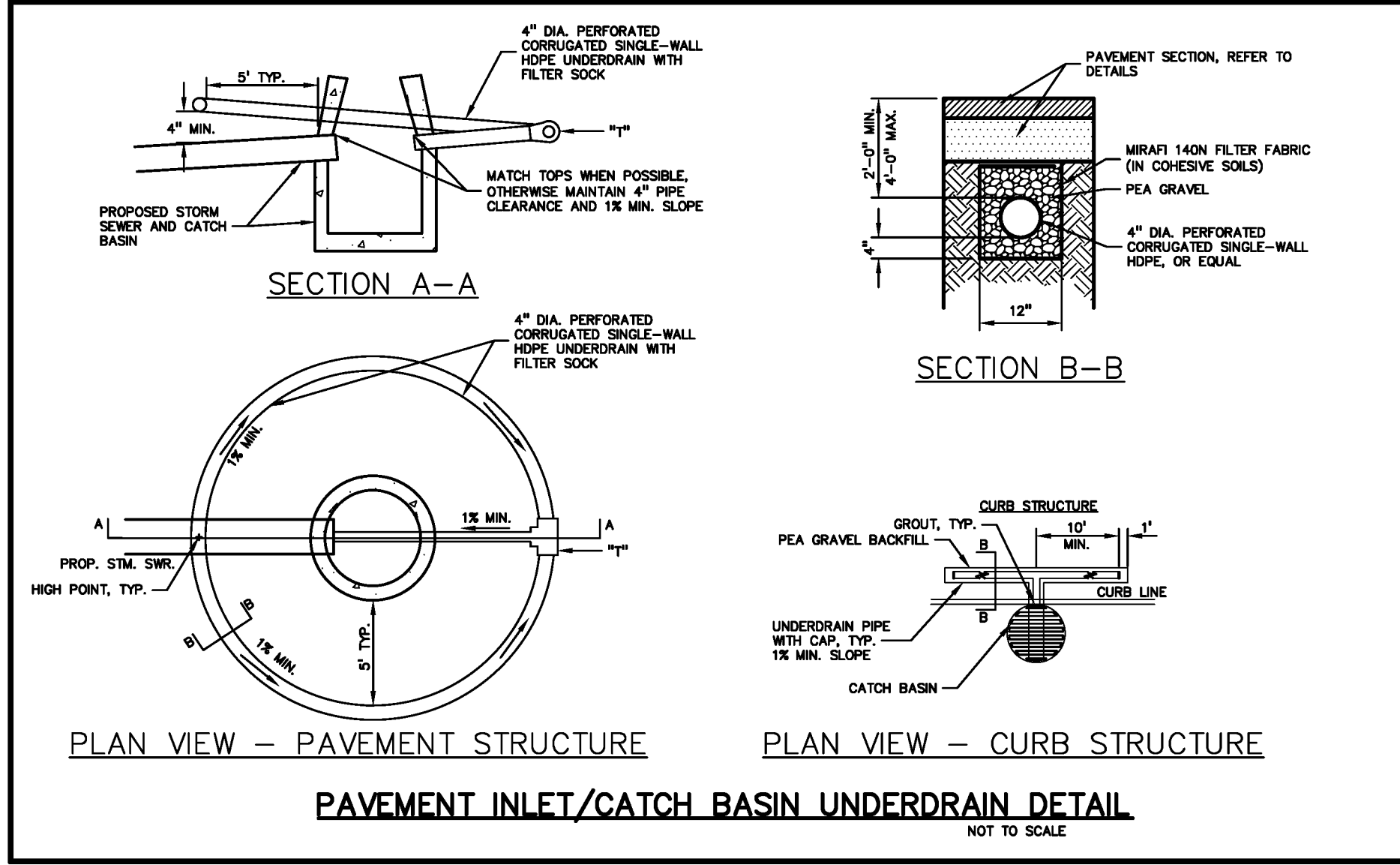
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THE LEGACY APARTMENT HOMES
5080 W GRAND RIVER
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

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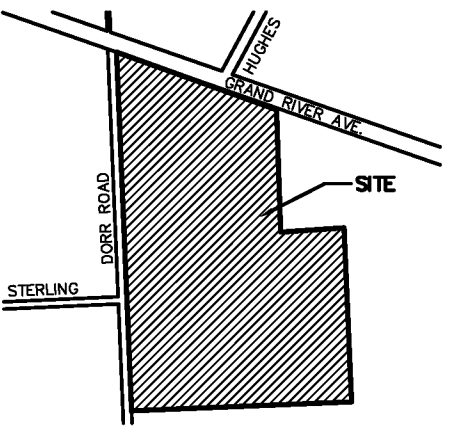
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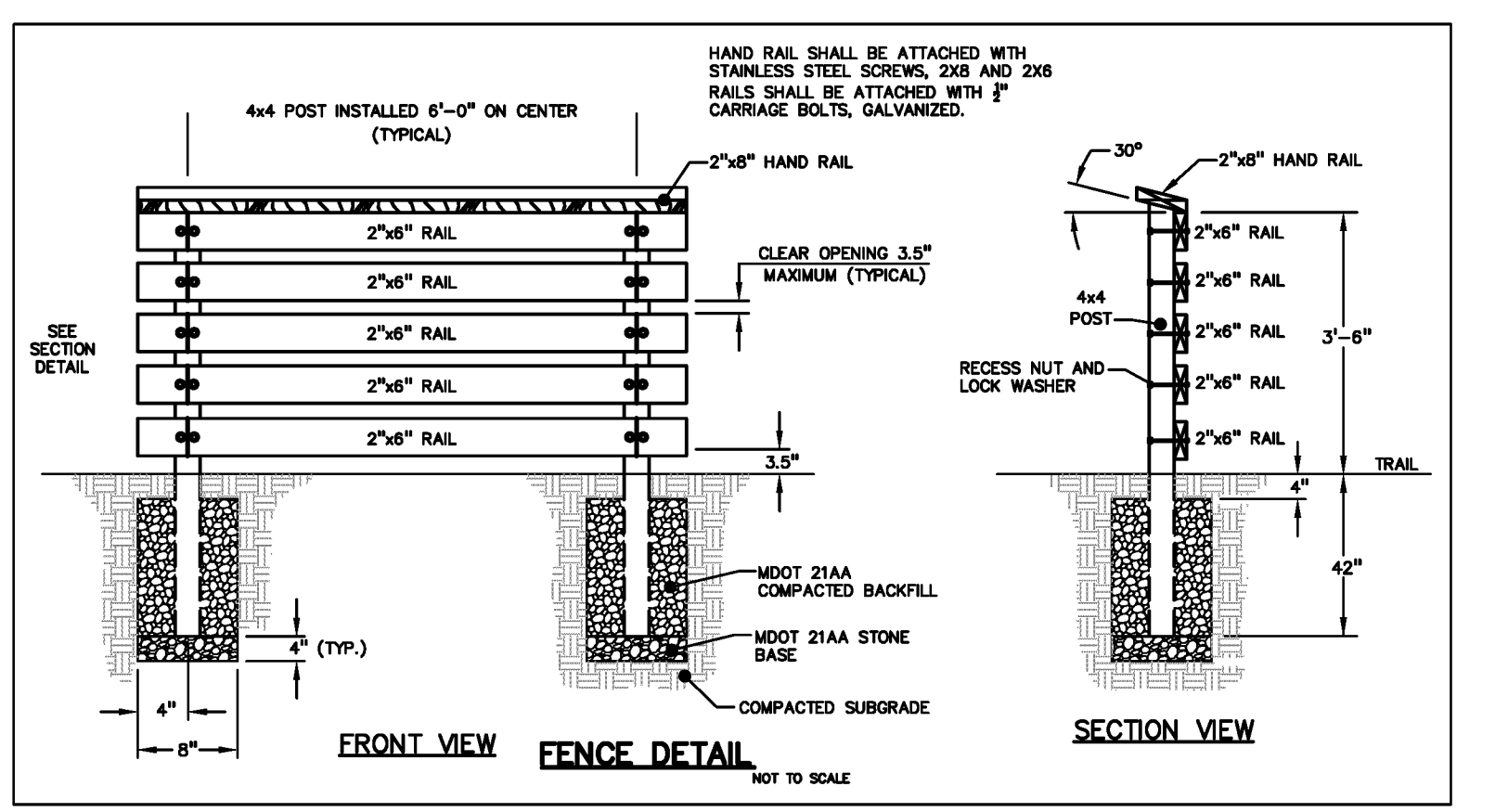
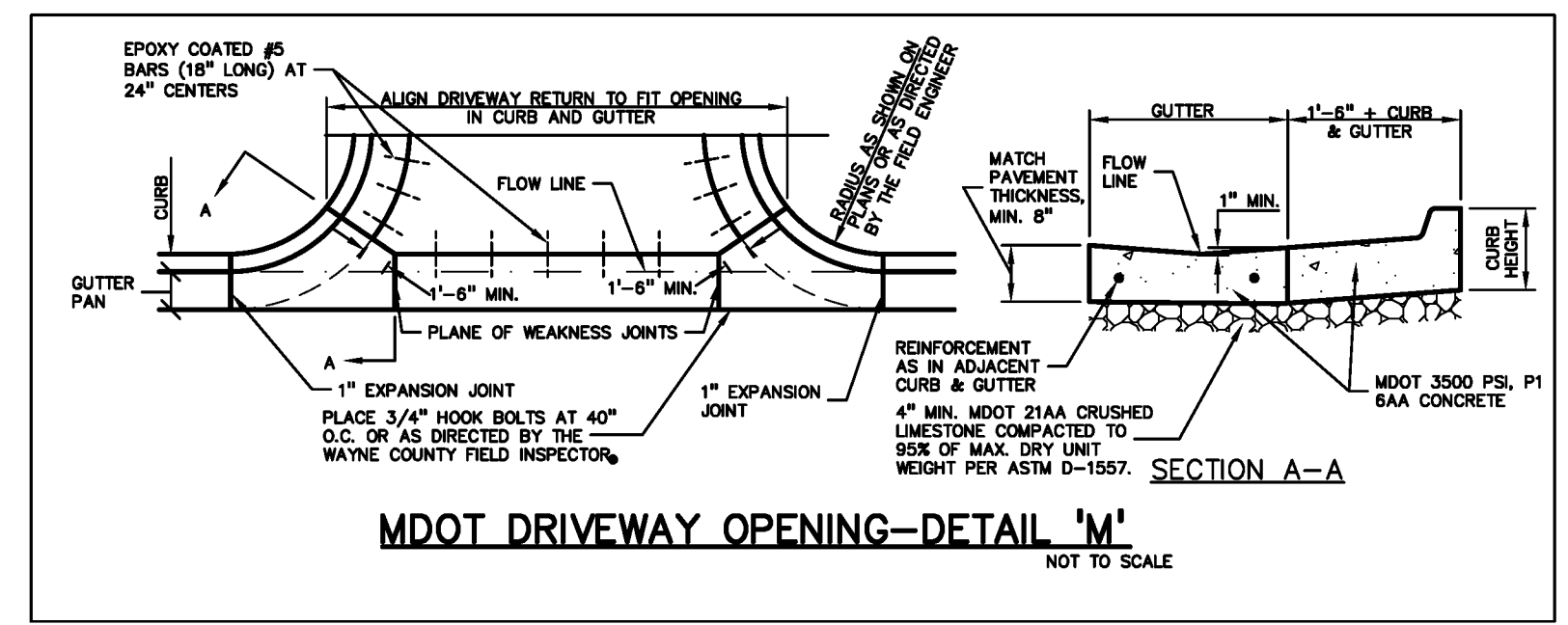
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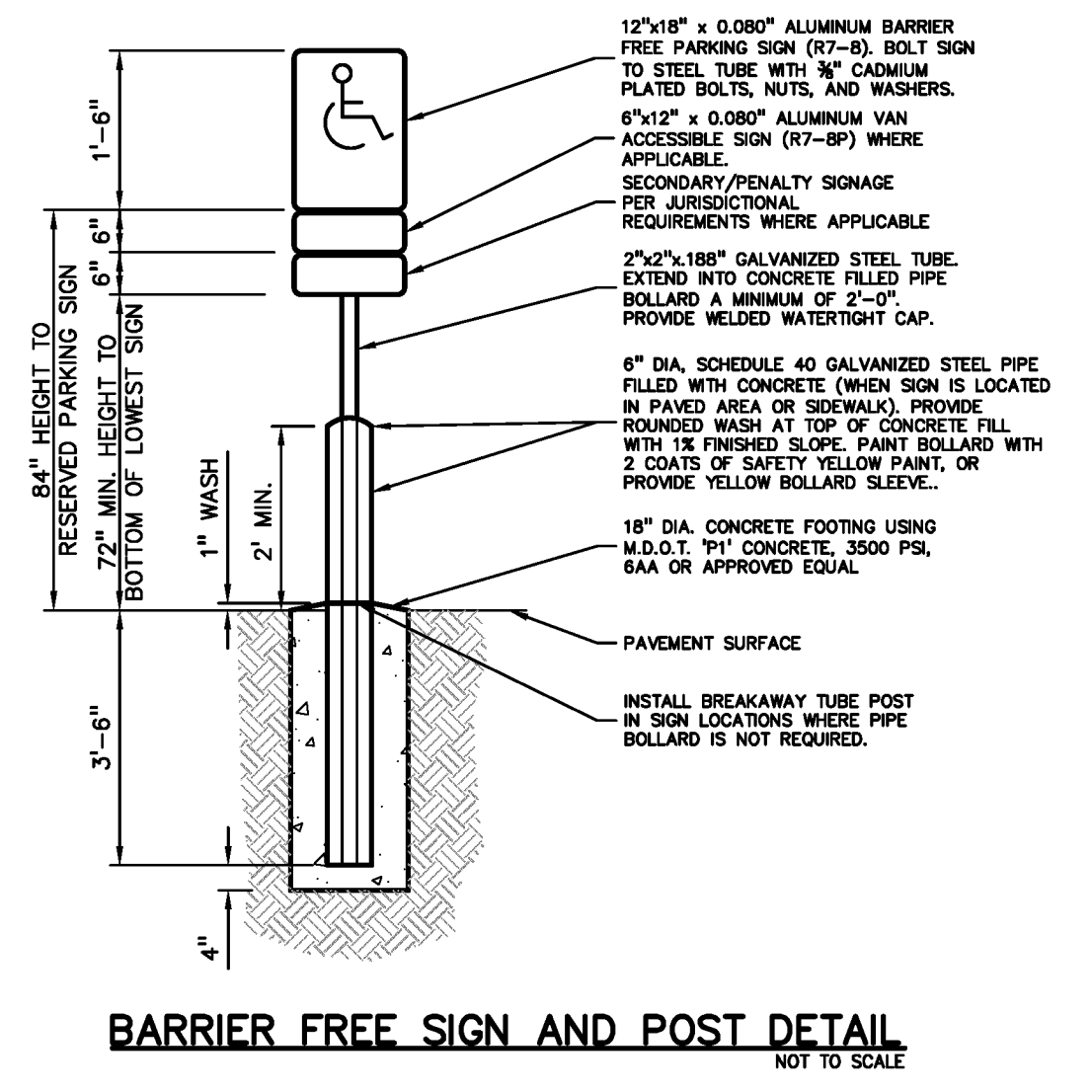
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NOTES AND DETAILS III

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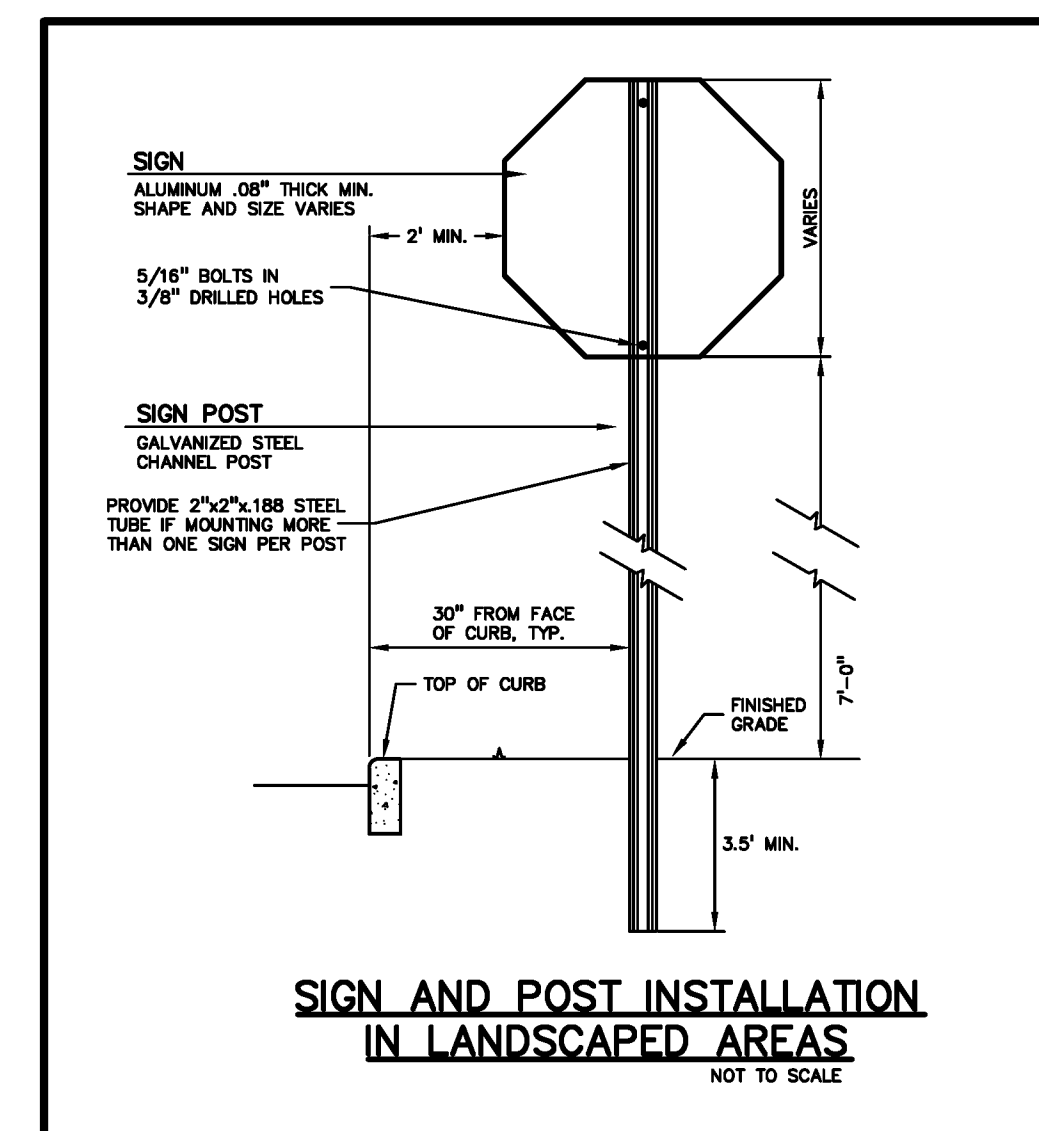


BARRIER FREE SIGN NOTES:

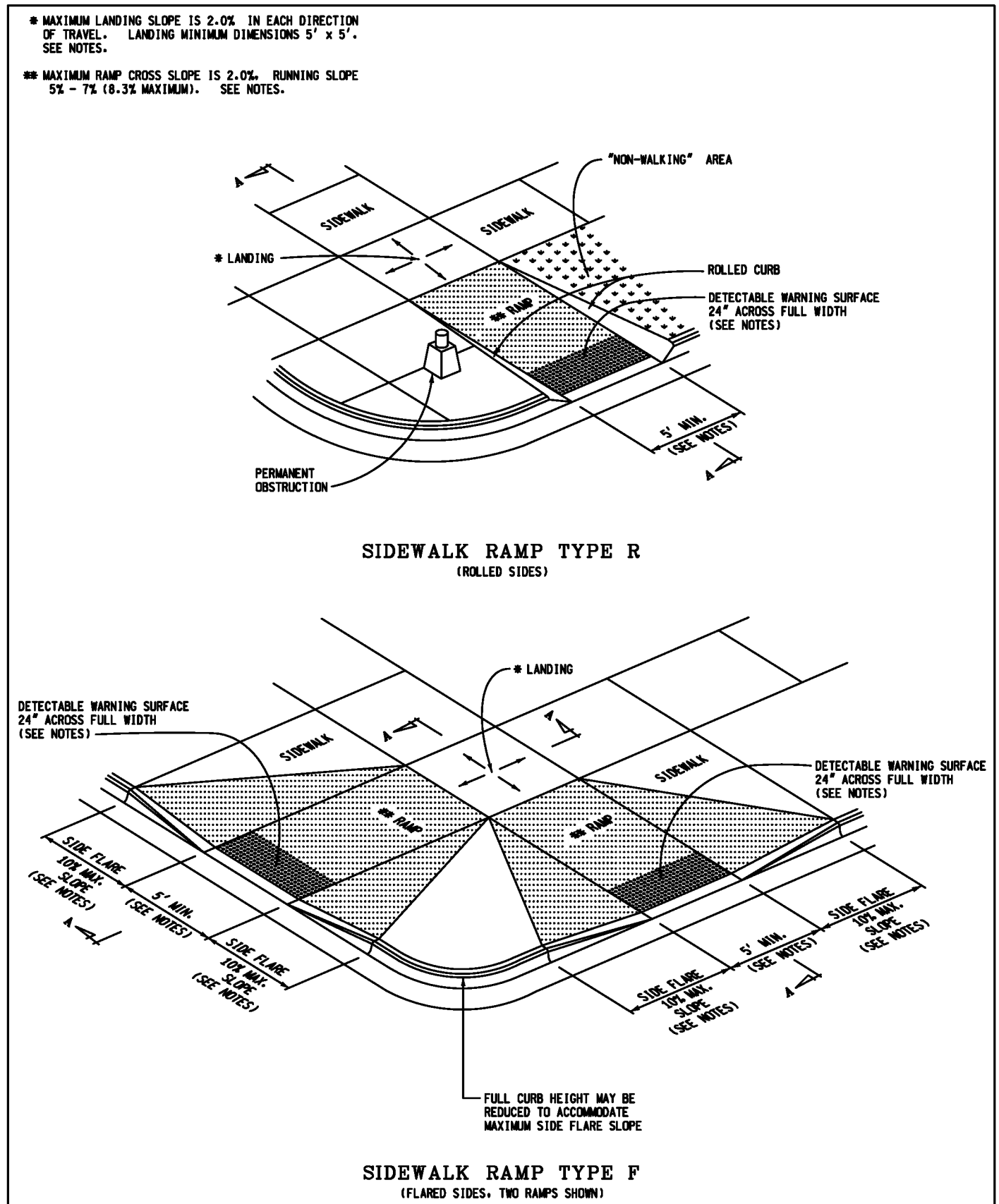
- ONE SIGN IS REQUIRED AT EACH BARRIER FREE PARKING SPACE.
- ALL SIGNS SHALL COMPLY WITH THE LATEST STANDARDS OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- WHEN TWO BARRIER FREE PARKING SPACES ARE ADJACENT AND FACING EACH OTHER, TWO SIGNS ARE REQUIRED, BUT CAN BE MOUNTED ON THE SAME POST.
- SIGN POSTS SHALL BE 2" NOM. SQUARE 14-GAUGE GALVANIZED STEEL TUBE WITH 7/16" HOLES AT 1" CENTERS. POSTS SHALL TELESCOPE INSIDE ANCHOR POSTS A MINIMUM OF 12".
- ANCHOR POSTS SHALL BE 2.25" NOM. SQUARE 12-GAUGE GALVANIZED STEEL POST, A MINIMUM OF 3 FEET LONG.
- IF THESE NOTES AND DETAILS CONFLICT WITH LOCAL CODES AND ORDINANCES, THE STRICTER REQUIREMENT SHOULD BE USED.
- ALTERNATE MATERIALS MAY BE USED IF IN COMPLIANCE WITH A.D.A. GUIDELINES AND LOCAL REQUIREMENTS.



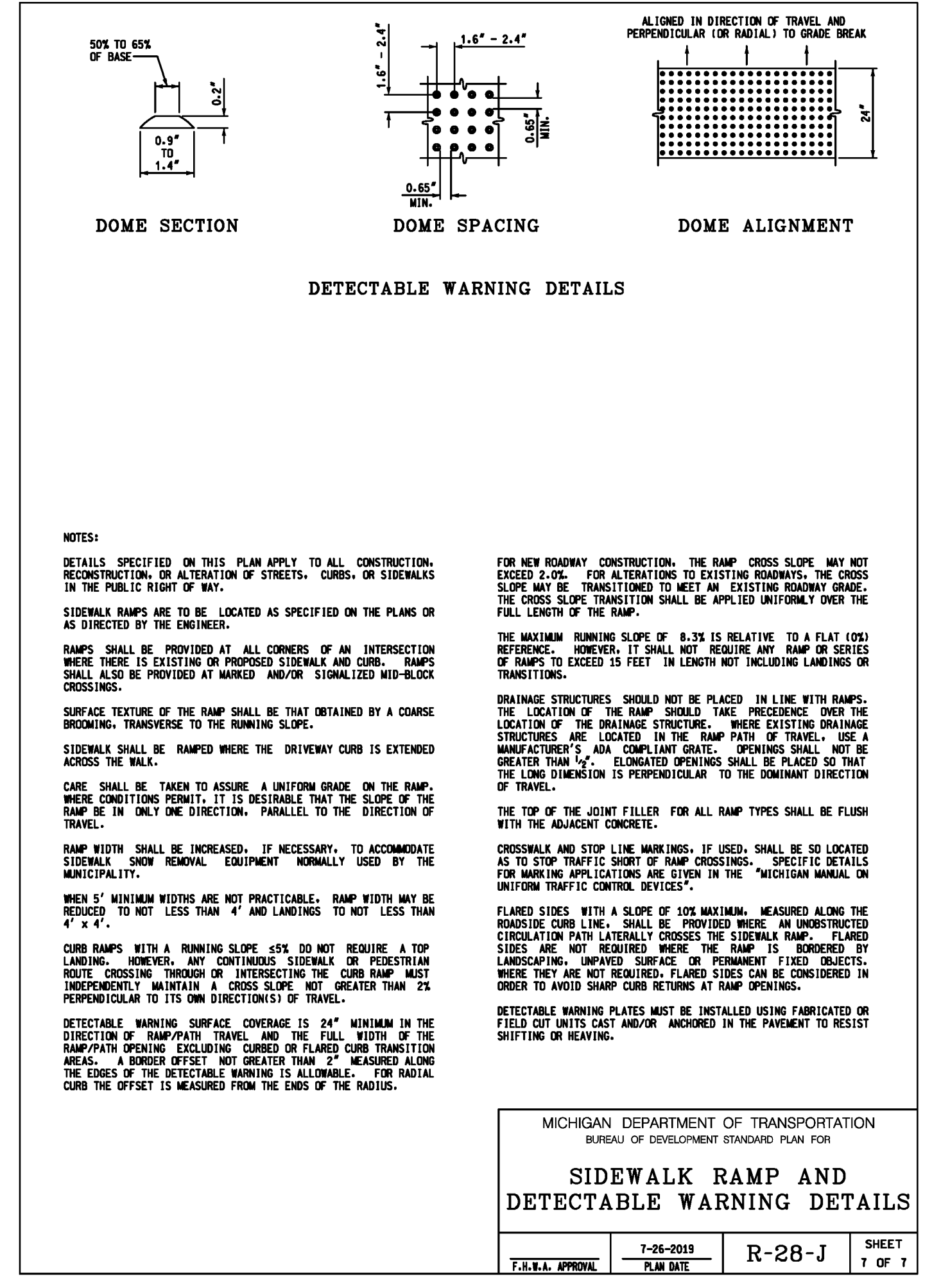
BARRIER FREE SIGN AND POST DETAIL
NOT TO SCALE



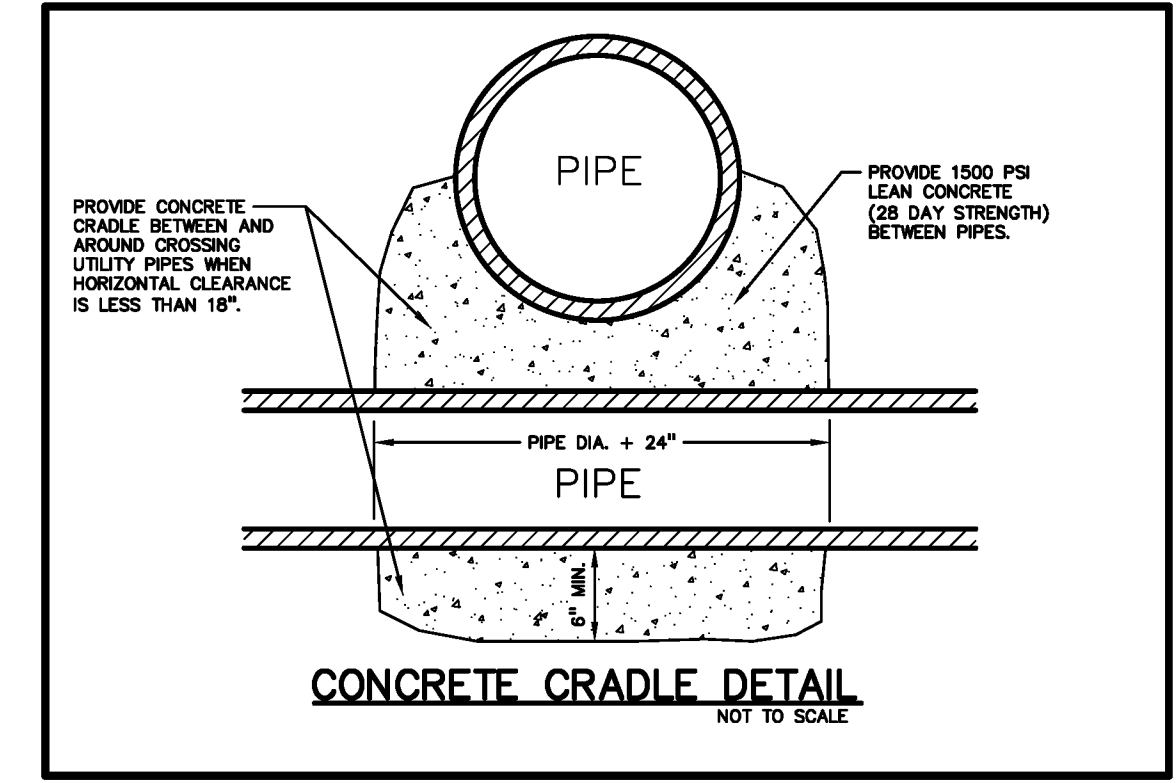
SIGN AND POST INSTALLATION IN LANDSCAPED AREAS
NOT TO SCALE



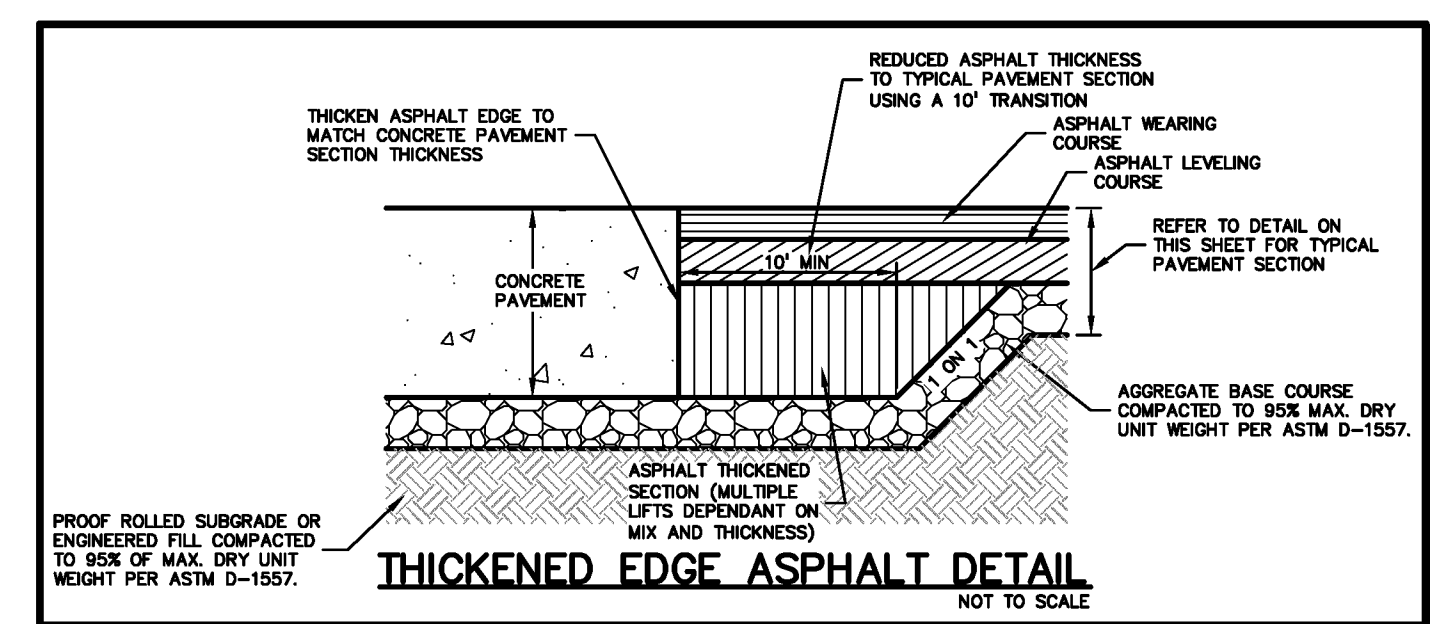
DEPARTMENT DIRECTOR Paul C. Anglin		MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF DEVELOPMENT STANDARD PLAN FOR	
PREPARED BY DESIGN DIVISION		MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF DEVELOPMENT STANDARD PLAN FOR	
DRAWN BY: B.L.L.T.		SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	
CHECKED BY: B.L.L.T.		7-26-2019 PLAN DATE	
APPROVED BY: DIRECTOR, BUREAU OF FIELD SERVICES		7-26-2019 PLAN DATE	
APPROVED BY: DIRECTOR, BUREAU OF DEVELOPMENT		7-26-2019 PLAN DATE	
F.B.I.A. APPROVAL		F.B.I.A. APPROVAL	
R-28-J		R-28-J	
SHEET 1 OF 7		SHEET 1 OF 7	



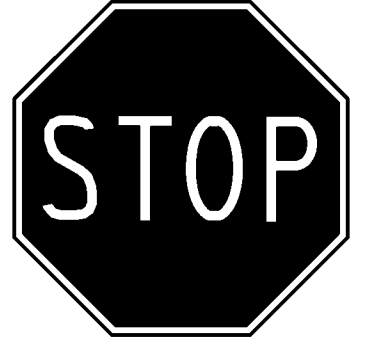
MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF DEVELOPMENT STANDARD PLAN FOR			
SIDEWALK RAMP AND DETECTABLE WARNING DETAILS			
F.B.I.A. APPROVAL	7-26-2019 PLAN DATE	R-28-J	SHEET 1 OF 7



CONCRETE CRADLE DETAIL
NOT TO SCALE



THICKENED EDGE ASPHALT DETAIL
NOT TO SCALE



STOP SIGN DETAIL
NOT TO SCALE



RESERVED PARKING ONLY SIGN DETAIL
NOT TO SCALE



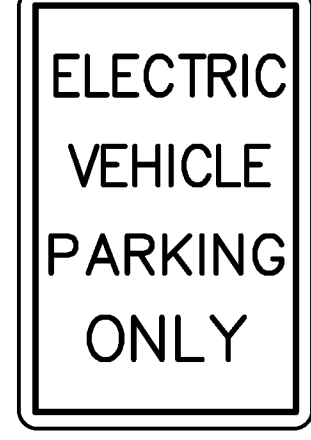
RESERVED PARKING ONLY SIGN DETAIL
NOT TO SCALE



VAN ACCESSIBLE PARKING SIGN DETAIL
NOT TO SCALE



SIDEWALK ENDS SIGN DETAIL
NOT TO SCALE



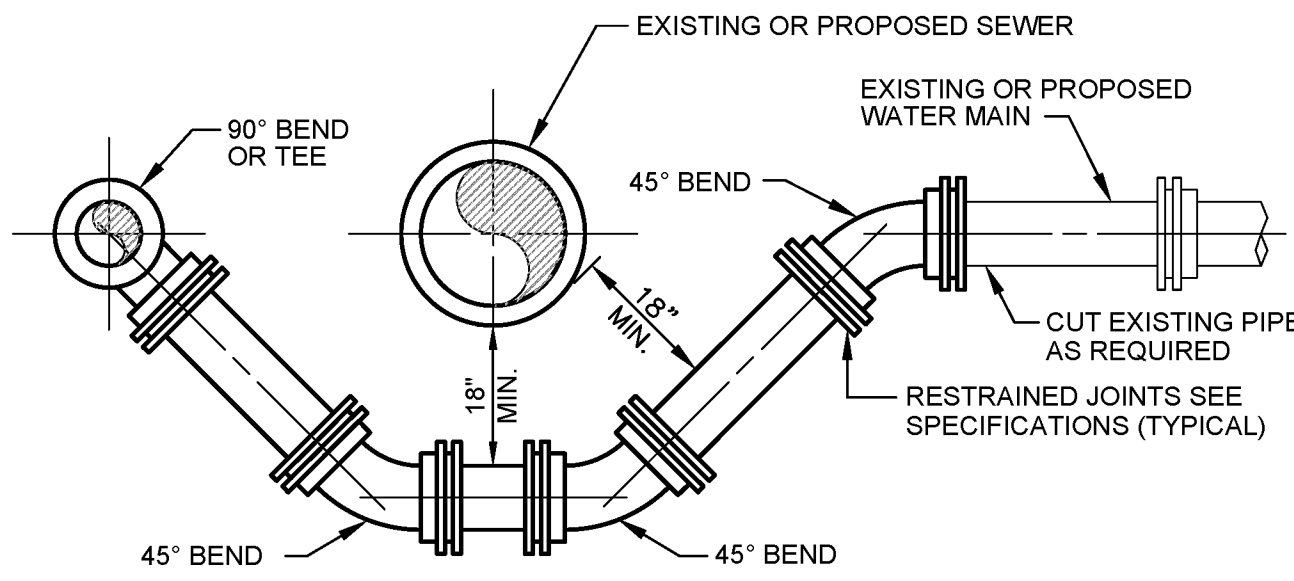
ELECTRIC VEHICLE PARKING SIGN DETAIL
NOT TO SCALE



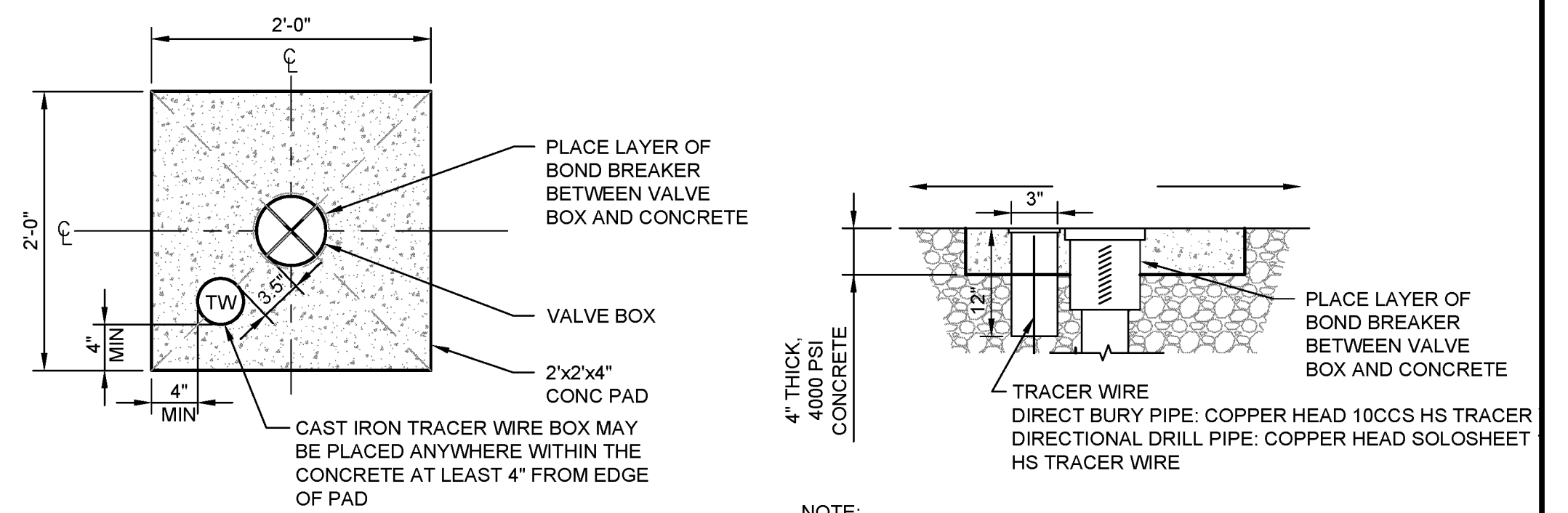
NO PARKING SIGN DETAIL
NOT TO SCALE

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 THE 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



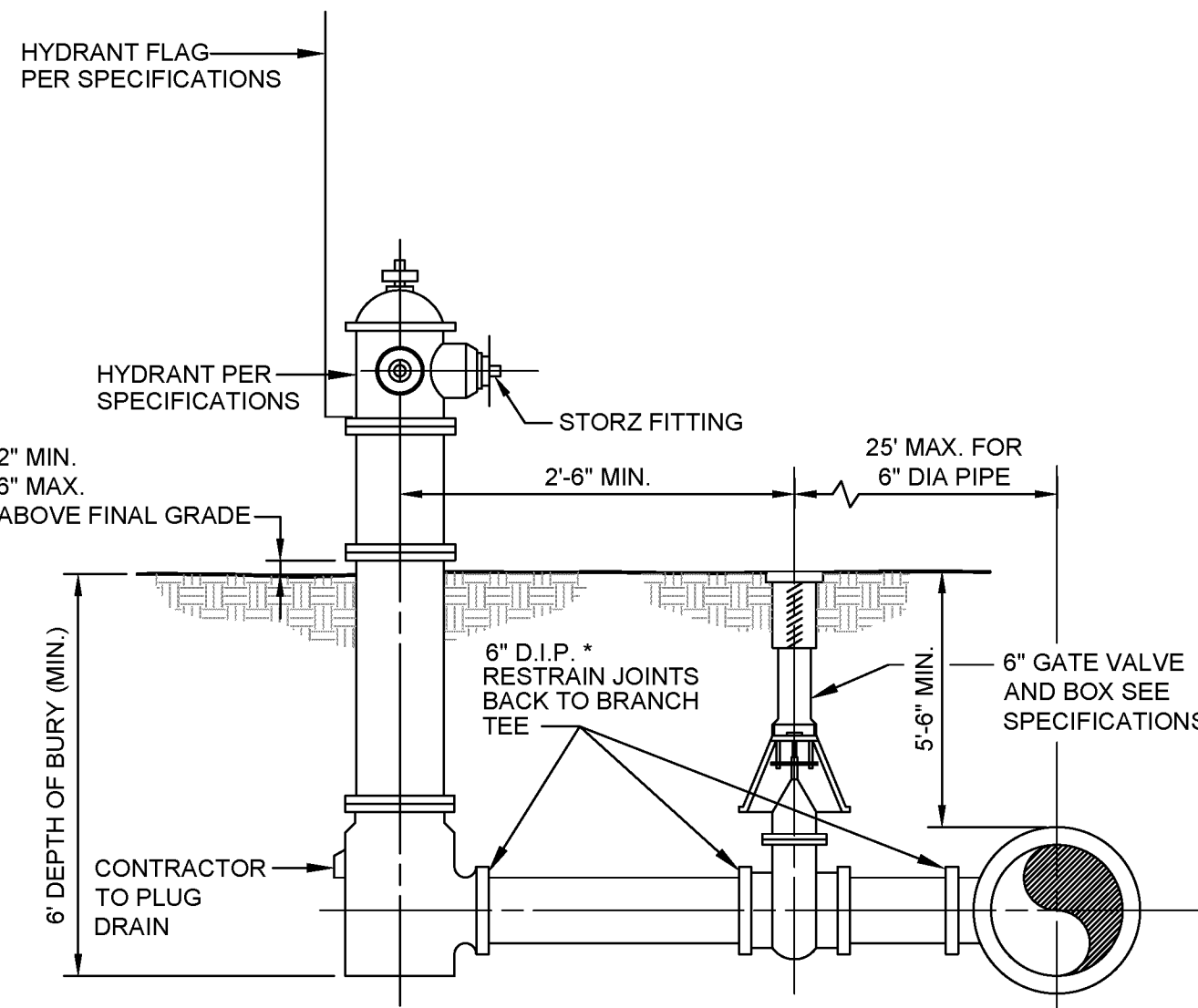
WATER MAIN UTILITY OFFSET



NOTE: ALL BOXES & ADJOINING TW BOXES SHALL BE ENCASED IN A CONC. PAD UNLESS OTHERWISE DETERMINED BY MHOOG.

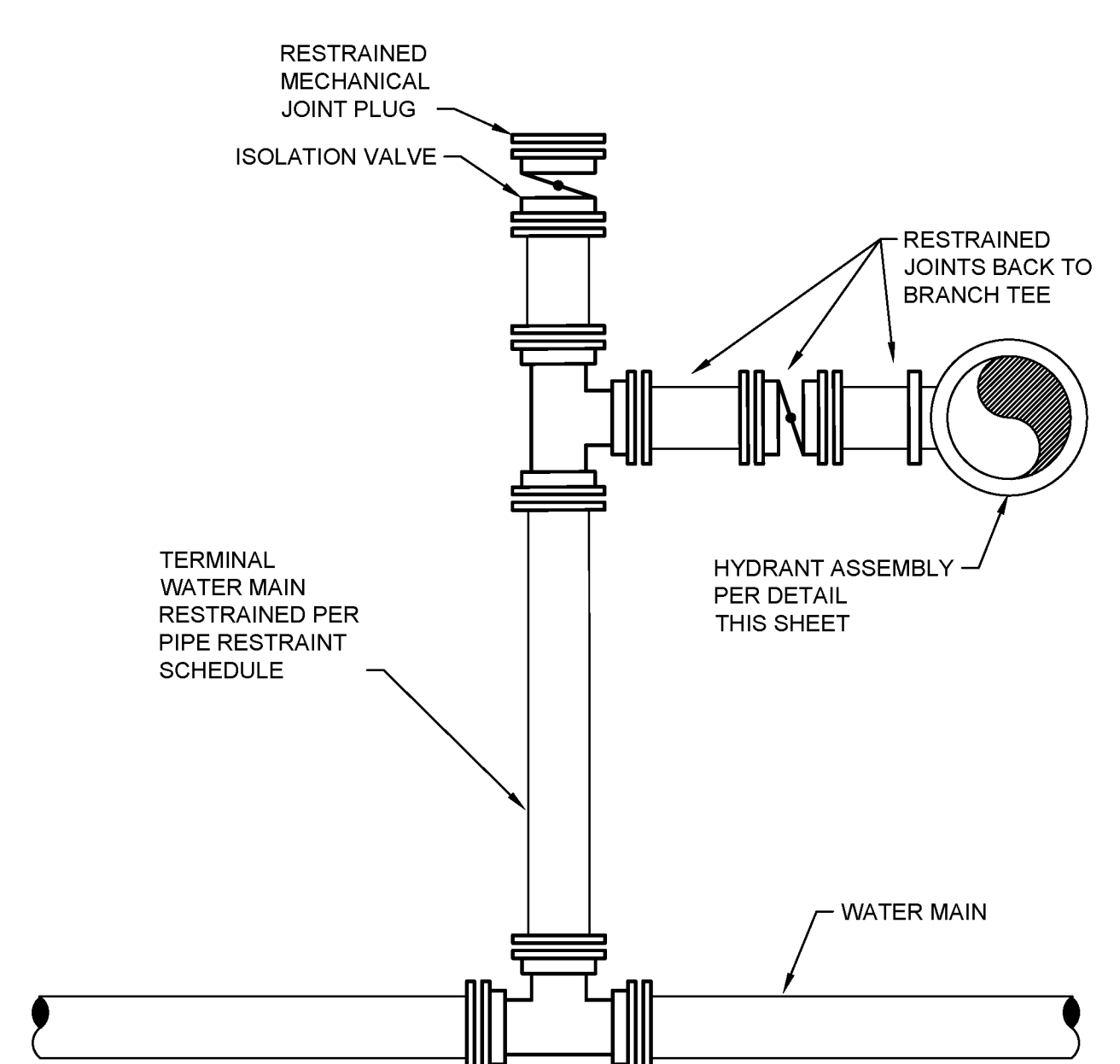
PLAN
VALVE/TRACER WIRE BOX IN CONCRETE DETAIL
NO SCALE

- NOTE:
- TRACER WIRE BOXES LOCATED WITHOUT A VALVE BOX ONLY REQUIRE AN 18" X 18" CONCRETE PAD.
 - TRACER WIRE BOX SHALL HAVE A LOCKING LID W/STANDARD AWWA PENTAGON KEY.
 - TRACER WIRE BOX SHALL BE COPPERHEAD RB14" TP IN ASPHALT INSTALLATIONS AND CD14" TP FOR ALL OTHER INSTALLATIONS.

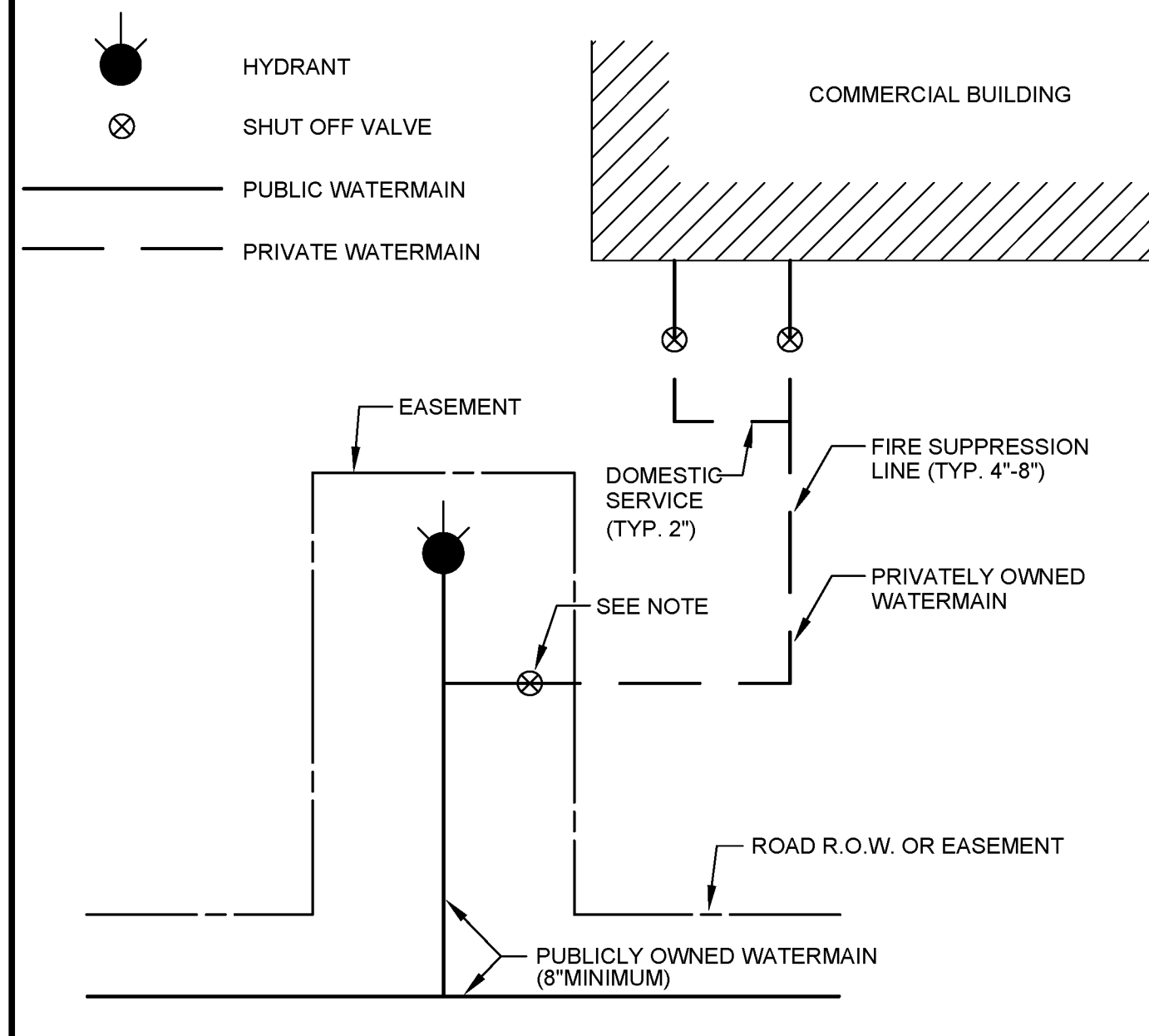


* THE LENGTH OF 6" PIPE FROM THE MAIN TO THE HYDRANT ASSEMBLY CANNOT EXCEED 25'. ANY PIPE OVER 25 FEET SHALL BE 8" DIAMETER MINIMUM AND DESIGNED PER MHOOG SPECIFICATIONS.

FIRE HYDRANT ASSEMBLY

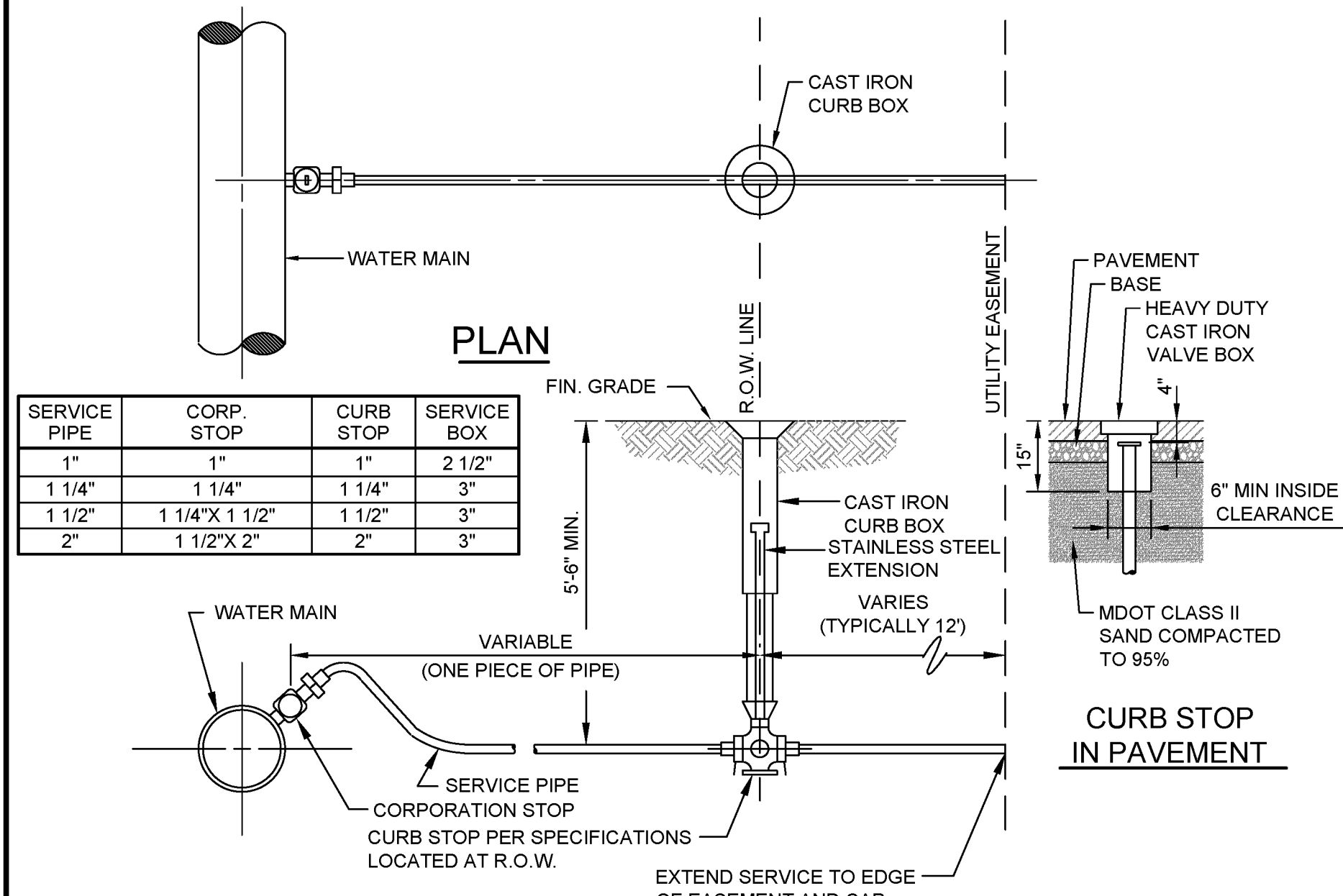


TERMINAL HYDRANT DETAIL

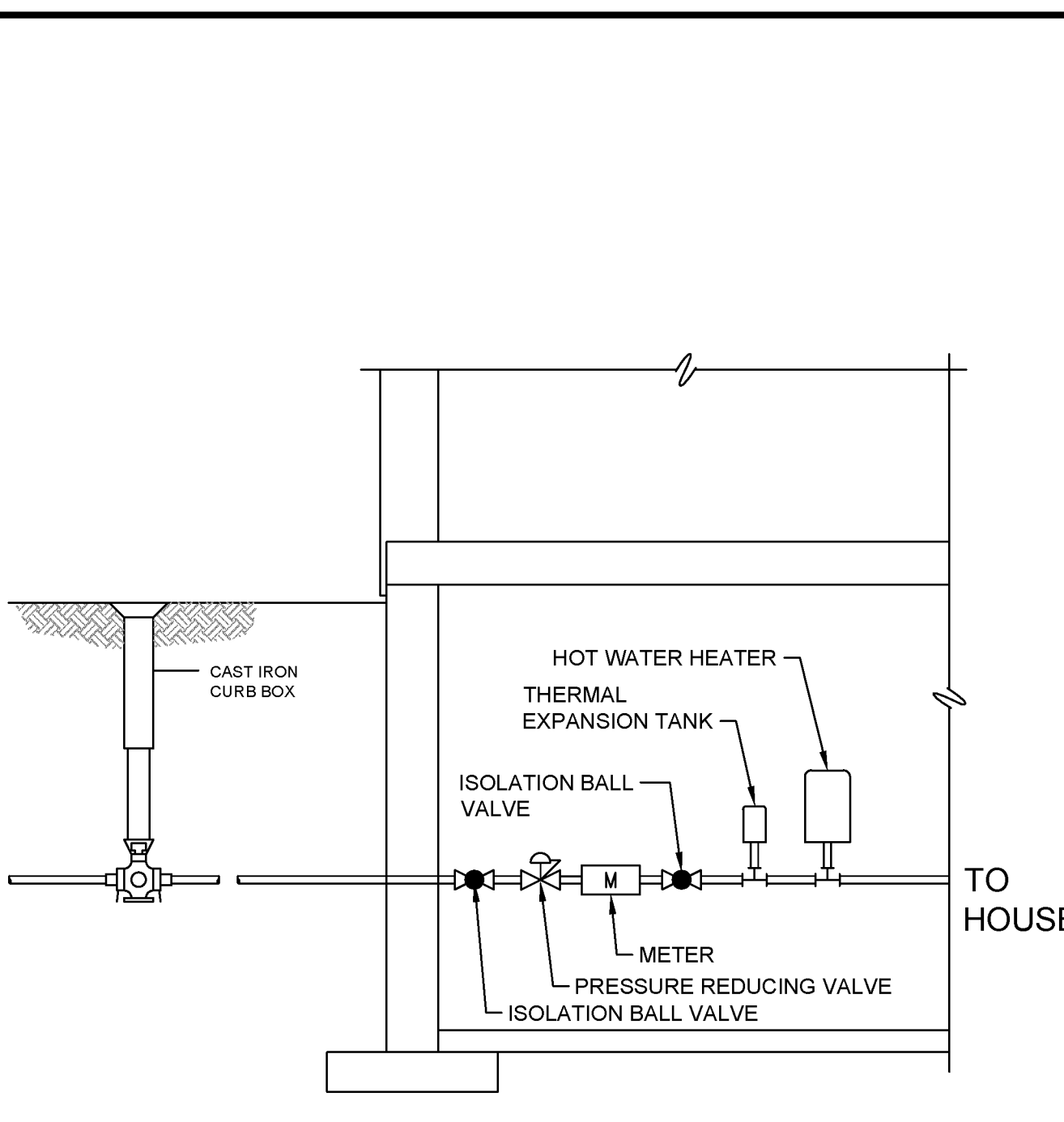


NOTE: PUBLICLY OWNED SHUT OFF VALVE TO BE LOCATED IN EASEMENT.

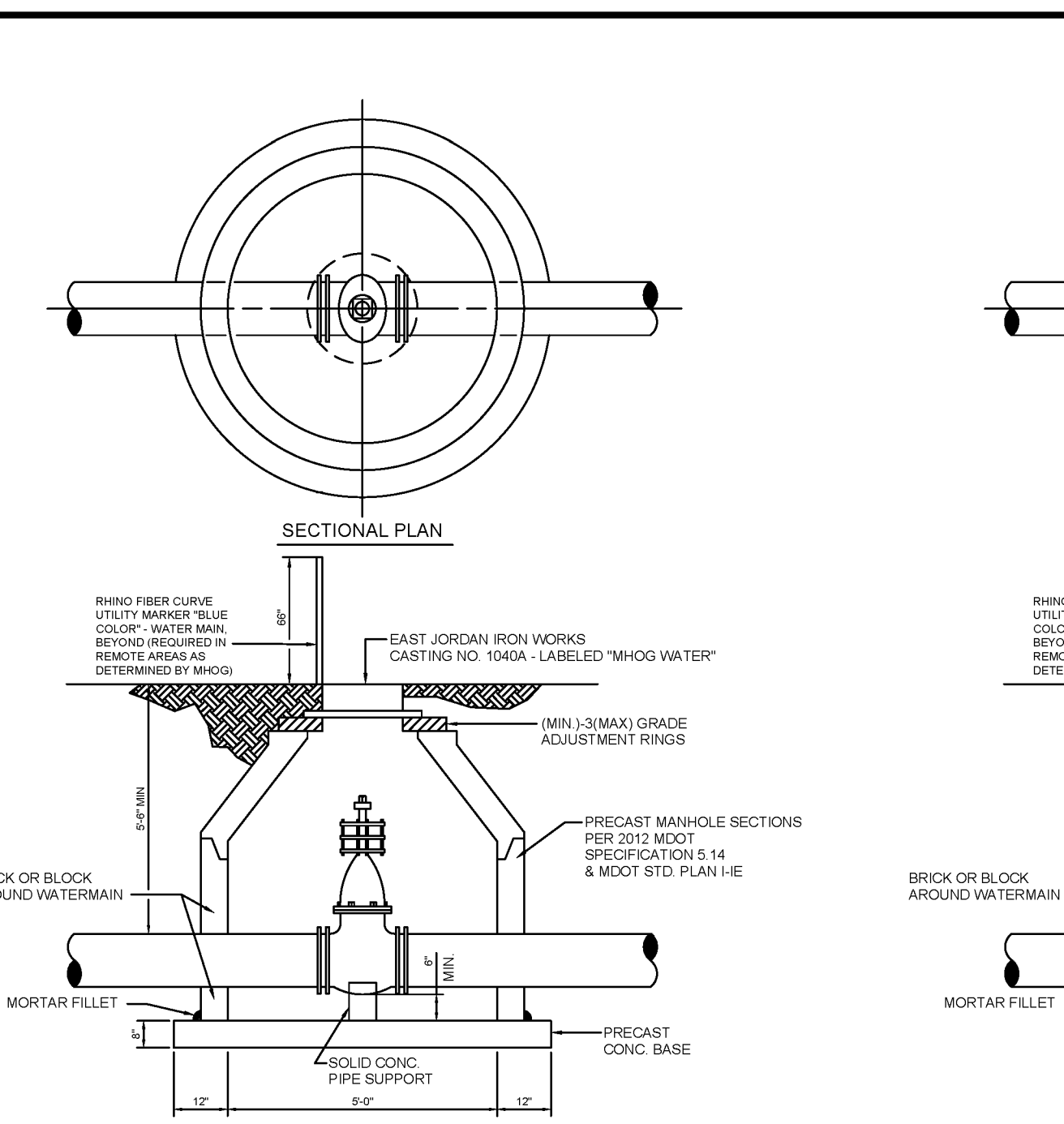
COMMERCIAL BUILDING WATER SERVICE LAYOUT



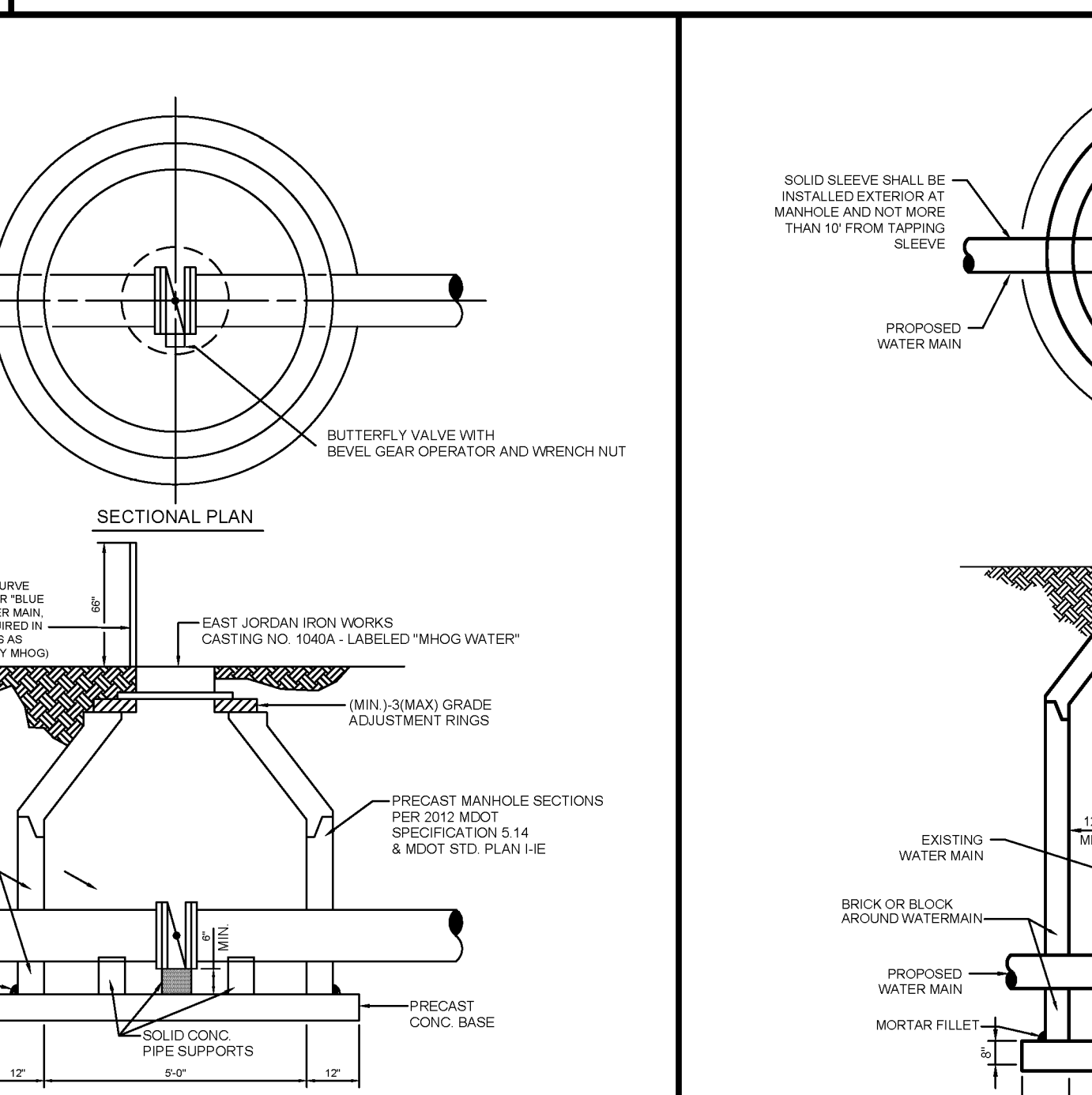
SECTION
WATER SERVICE LATERAL



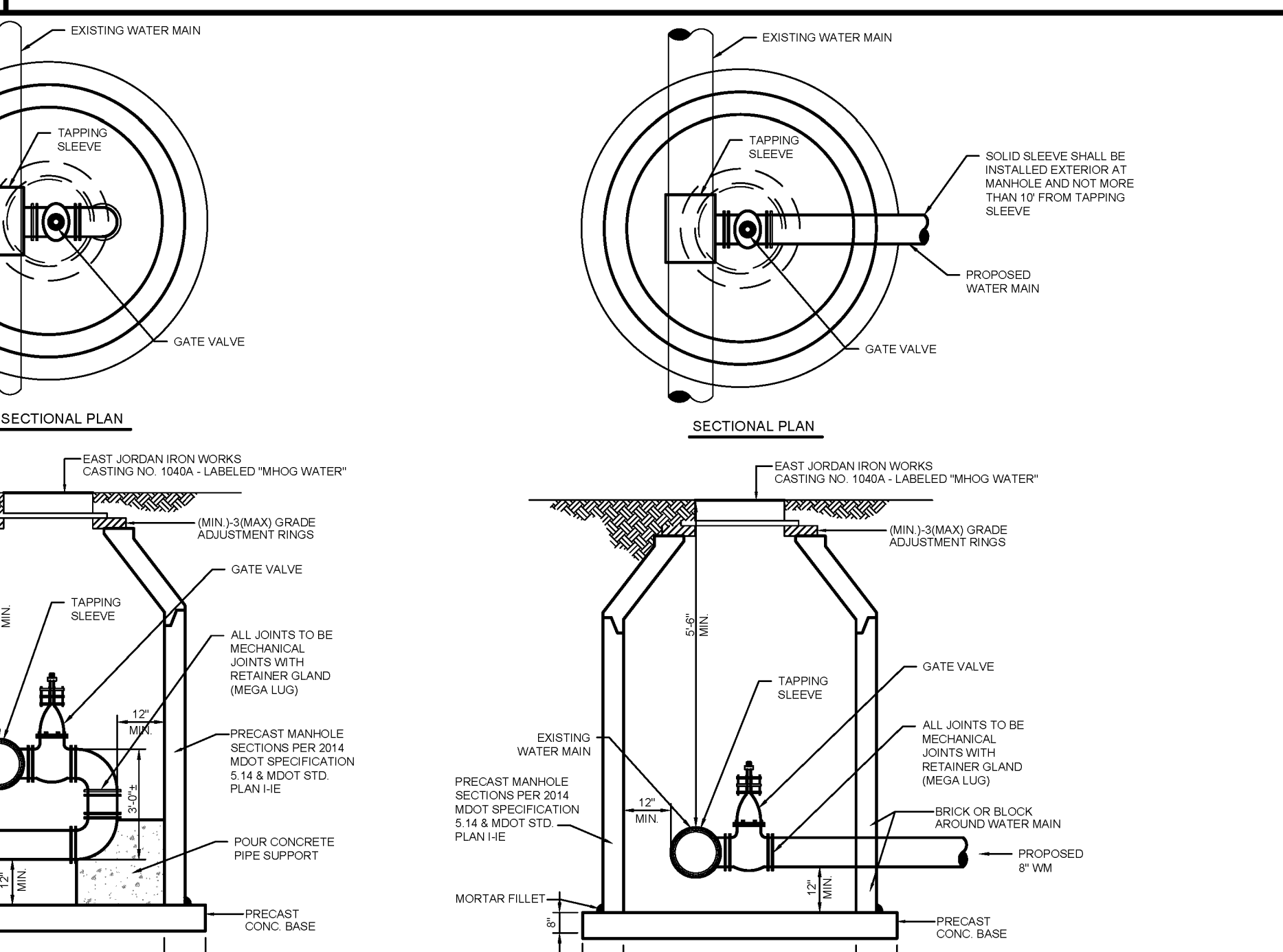
PRIVATE RESIDENCE
PRESSURE REDUCING VALVE (PRV)



VALVE AND GATE WELL



BUTTERFLY VALVE AND WELL



REVERSE TAP GATE WELL

REGULAR TAP GATE WELL



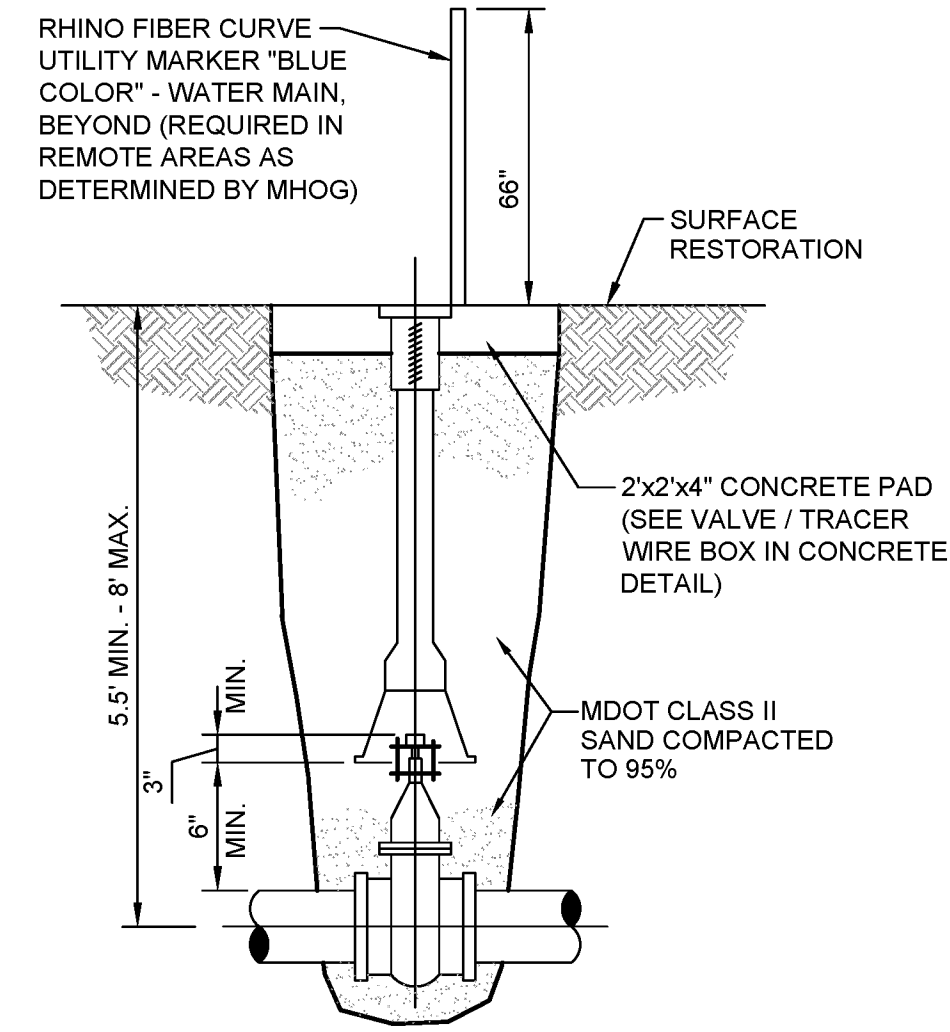
MARION HOWELL OCEOLA GENOA
Sewer and Water Authority

Scale: NONE
Issued Date JANUARY - 2014
UPDATED: MAY 2015
UPDATED: FEBRUARY 2016
UPDATED: APRIL 2016
UPDATED: OCTOBER 2017
UPDATED: FEBRUARY 2019

STANDARD DETAILS

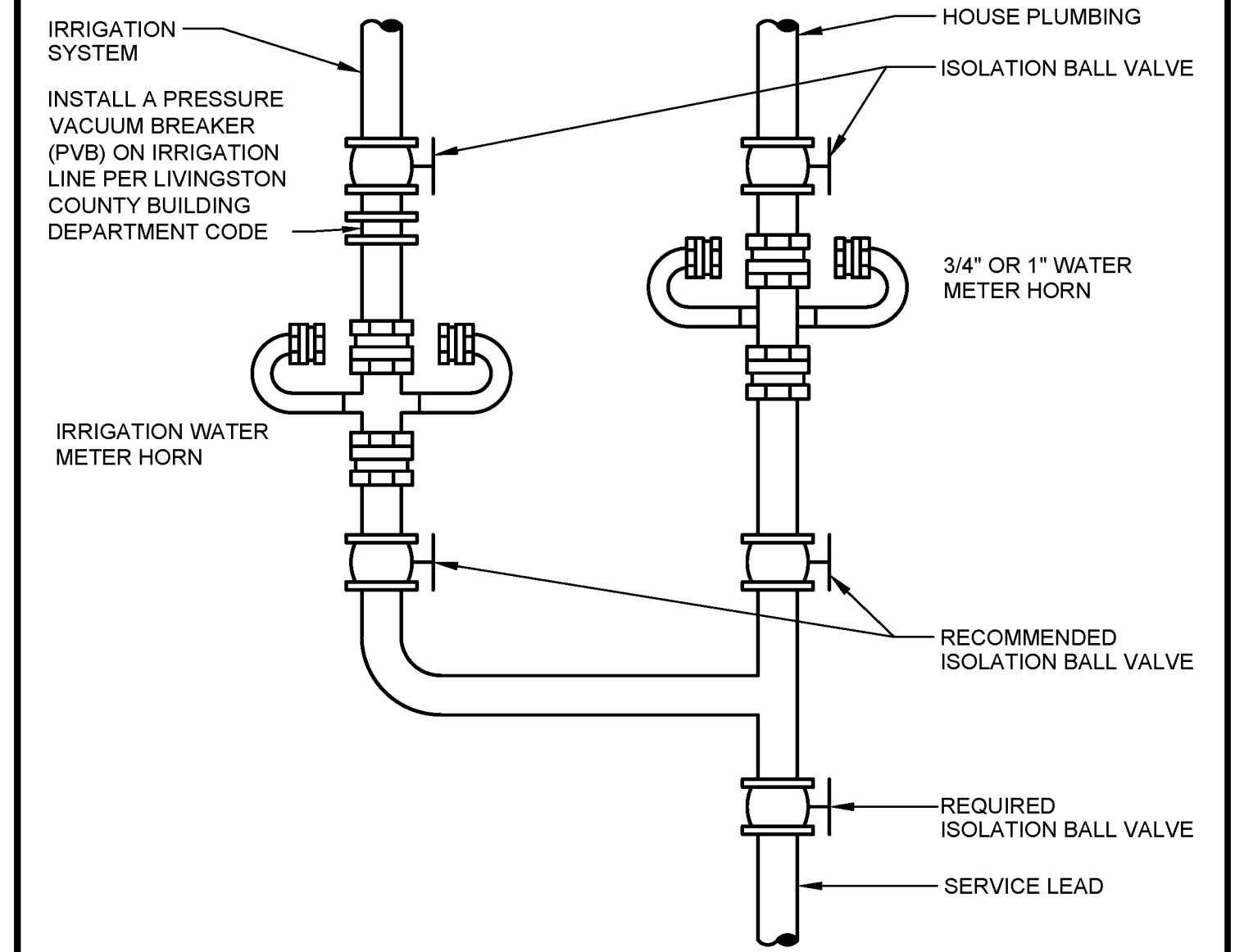
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Friday, February 6, 2019 9:13:59 AM DRAWING: P:\IER\12719200-12719-00-000\CAD\SheetFiles\Mhog-std.dwg



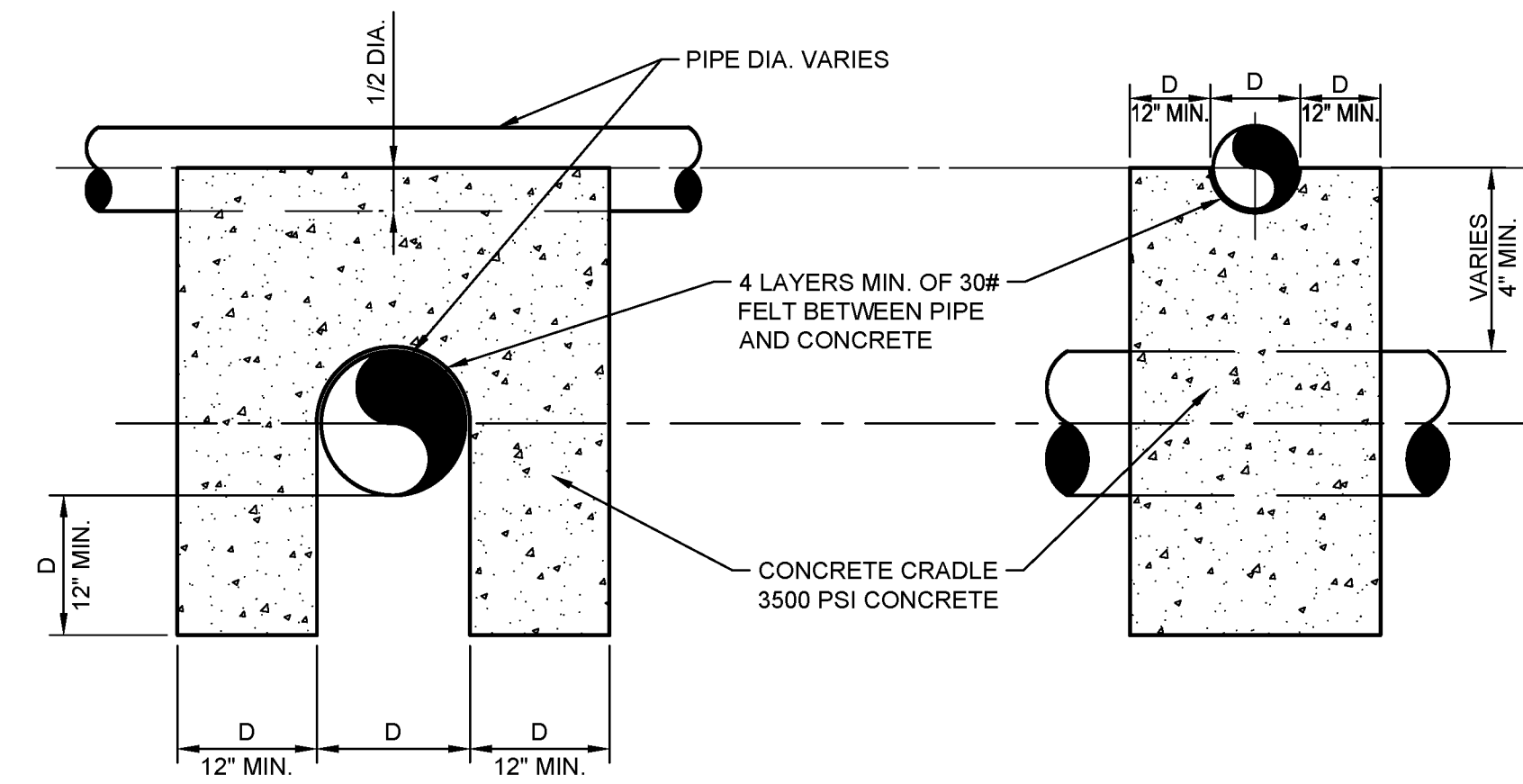
- NOTES:
1. VALVE BOX SHALL NOT REST ON VALVE OR MAIN LINE PIPE.
 2. A VALVE STEM EXTENSION WITH CENTERING RING IS REQUIRED FOR VALVES BURIED DEEPER THAN 6'.

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 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

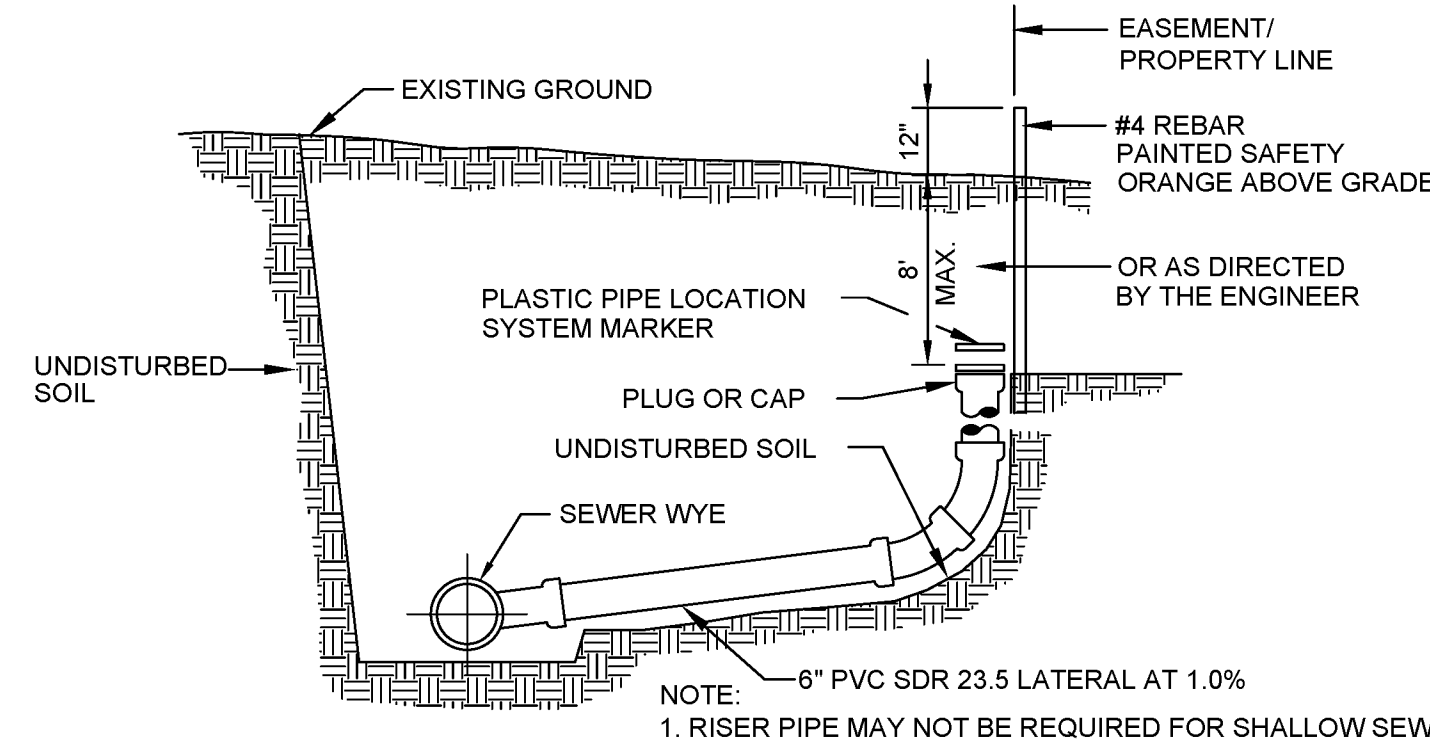
NO SCALE



MARION HOWELL OCEOLA GENOA
Sewer and Water Authority

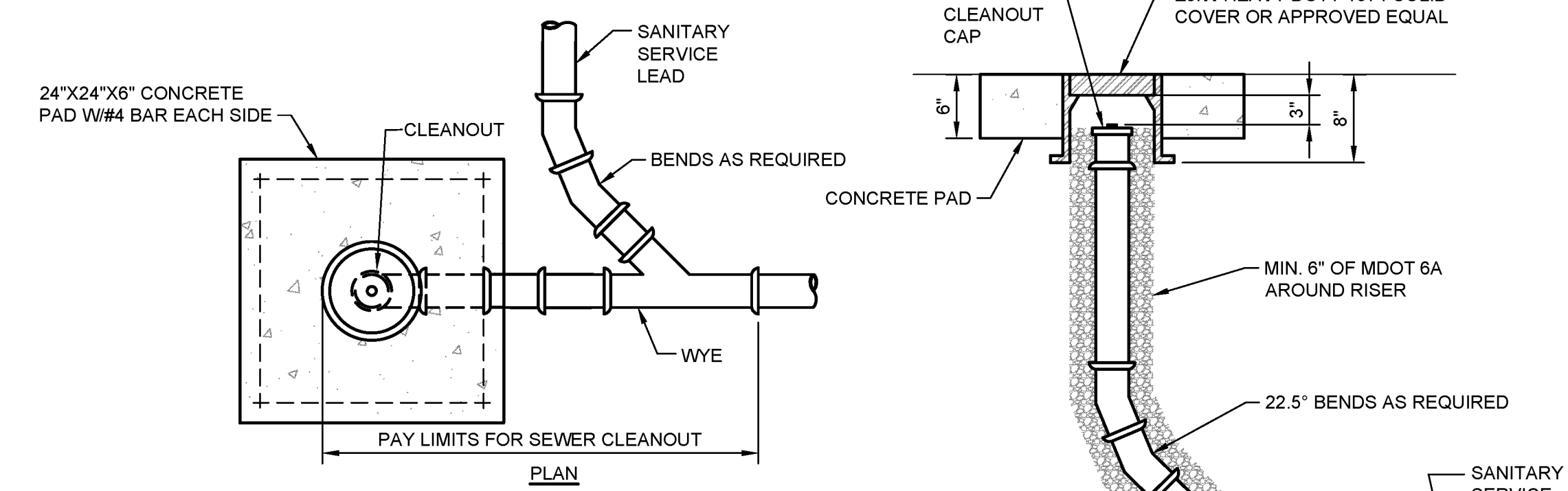
STANDARD DETAILS

Scale: NONE
 Issued Date JANUARY - 2014
 UPDATED: MAY 2015
 UPDATED: FEBRUARY 2016
 UPDATED: APRIL 2016
 UPDATED: OCTOBER 2017
 UPDATED: FEBRUARY 2019



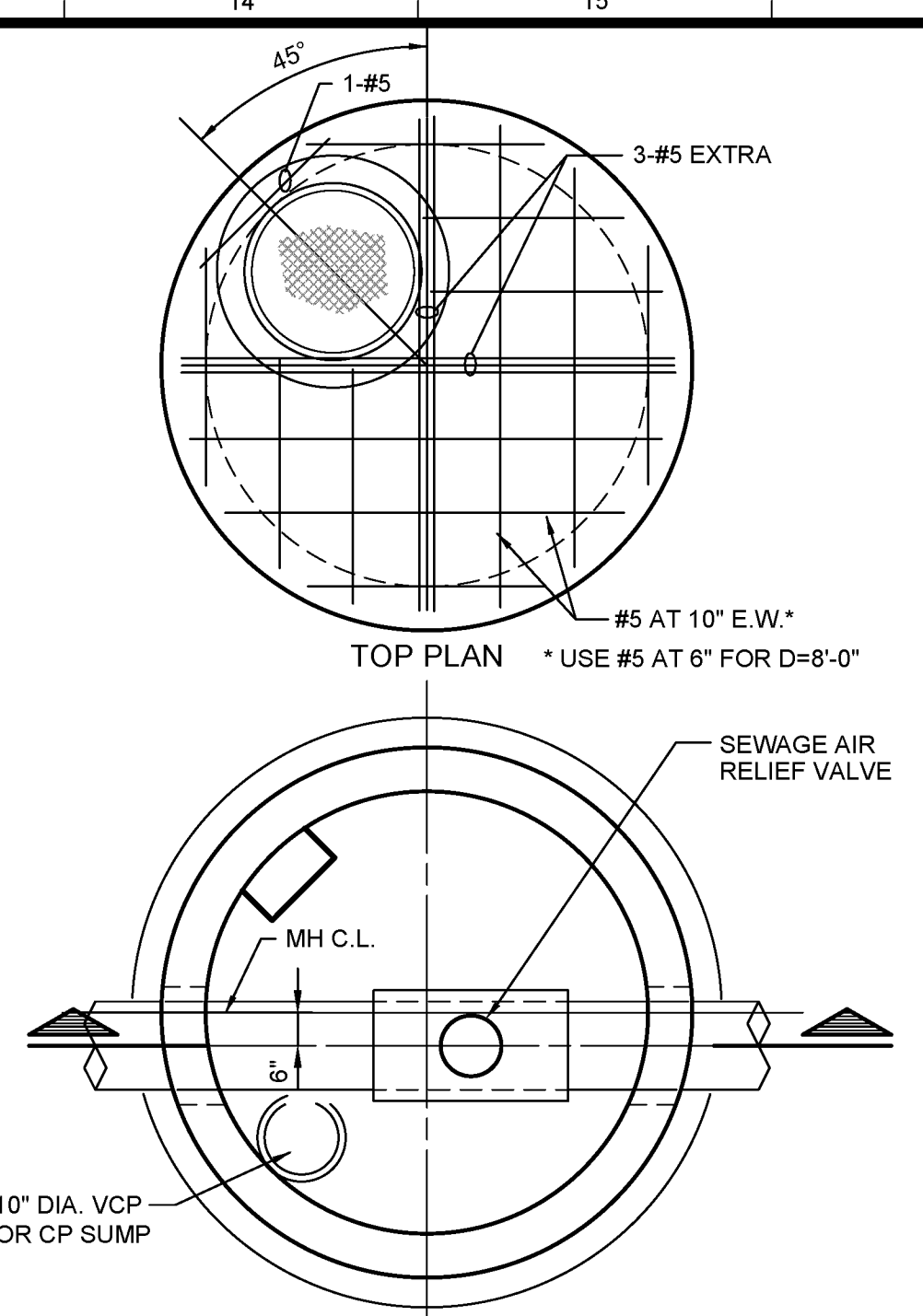
SANITARY SEWER LATERAL

NOTE: 6" PVC SDR 23.5 LATERAL AT 1.0%
 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.



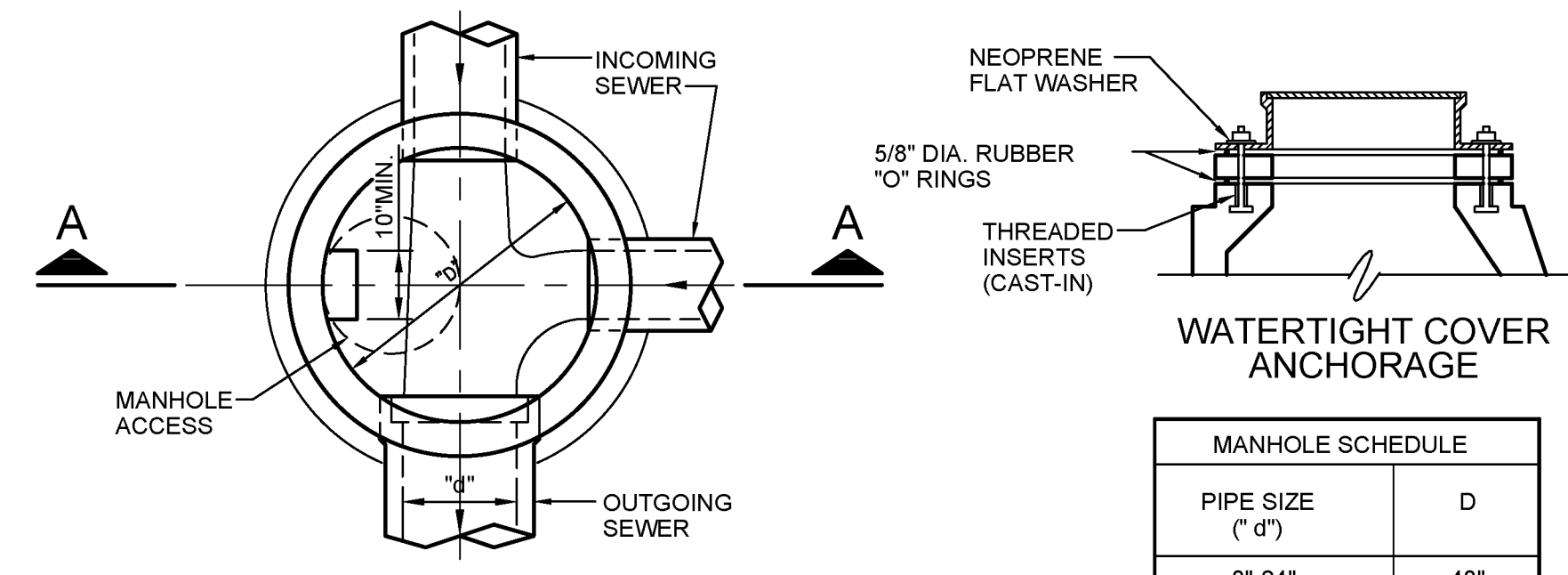
SEWER CLEANOUT DETAIL

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 MHOG.
 4. THERE MUST BE A 3" GAP FROM THE BOTTOM OF THE CLEAN OUT LID TO THE TOP OF THE THREADED CAP.



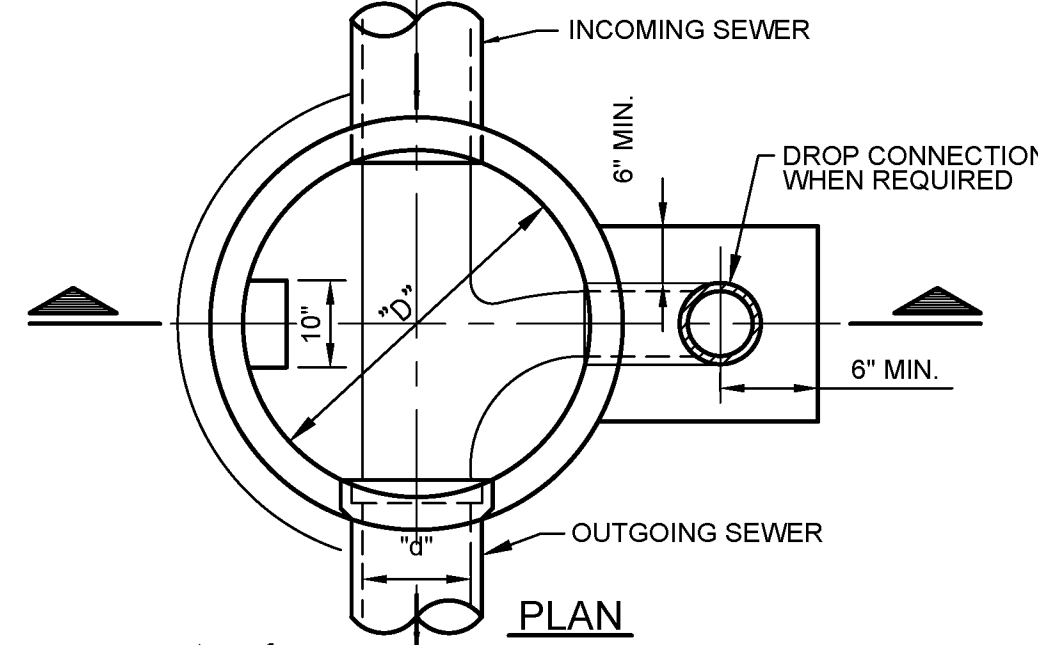
AIR RELIEF STRUCTURE

NOTE: ALL PLUMBING MATERIALS TO BE NON-CORROSIVE. ALL FITTINGS SHALL BE STAINLESS STEEL.

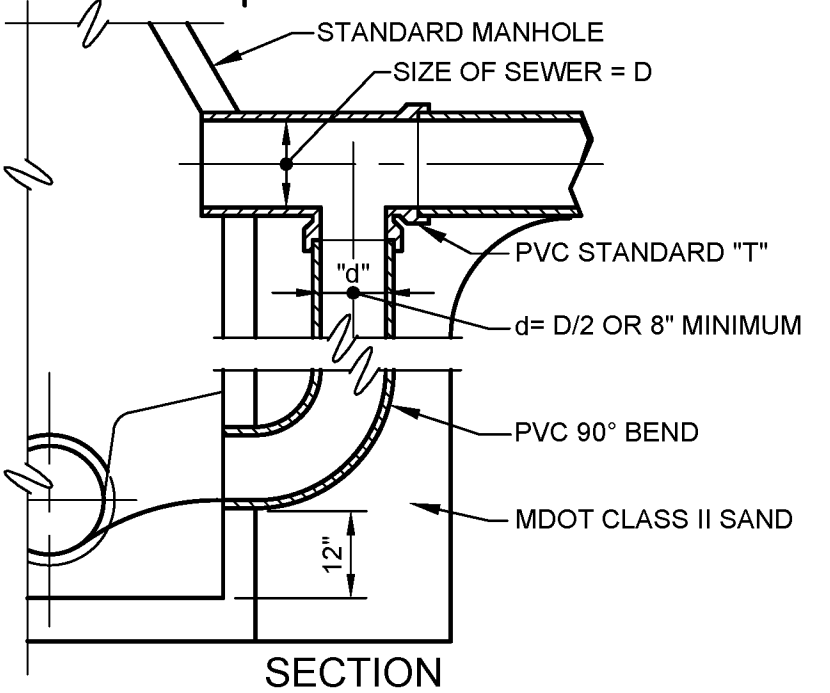


WATERTIGHT COVER ANCHORAGE

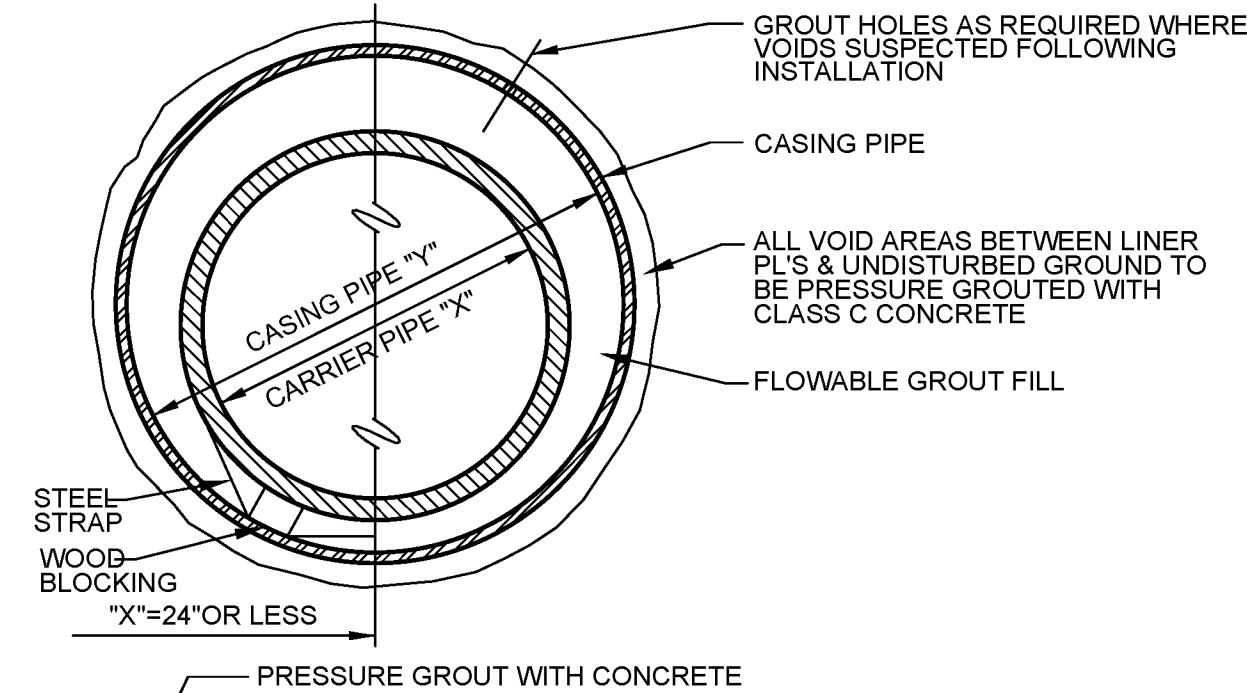
MANHOLE SCHEDULE	
PIPE SIZE ("d")	D
8"-24"	48"
27"-36"	60"
42"-48"	72"
54"	84"



DROP CONNECTION



REQUIRED WHEN AN INLET PIPE IS 24" OR MORE ABOVE THE OUTLET PIPE IN A MANHOLE



CASING PIPE

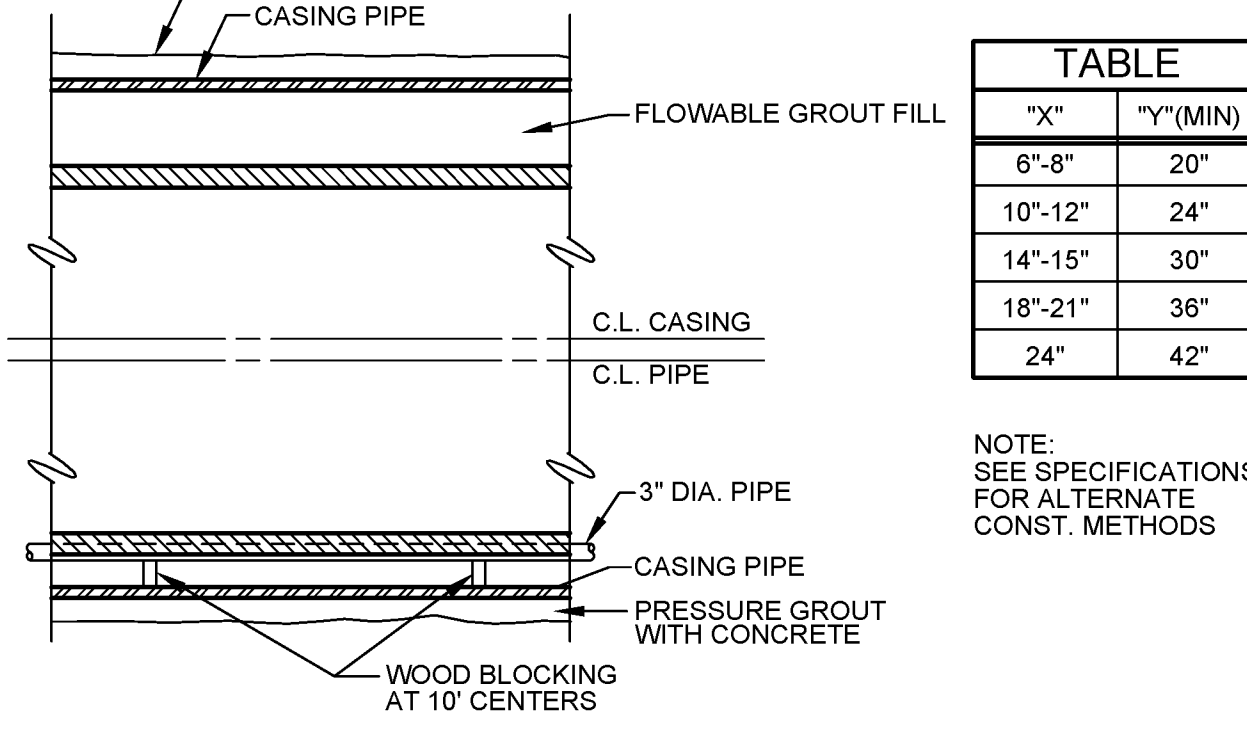
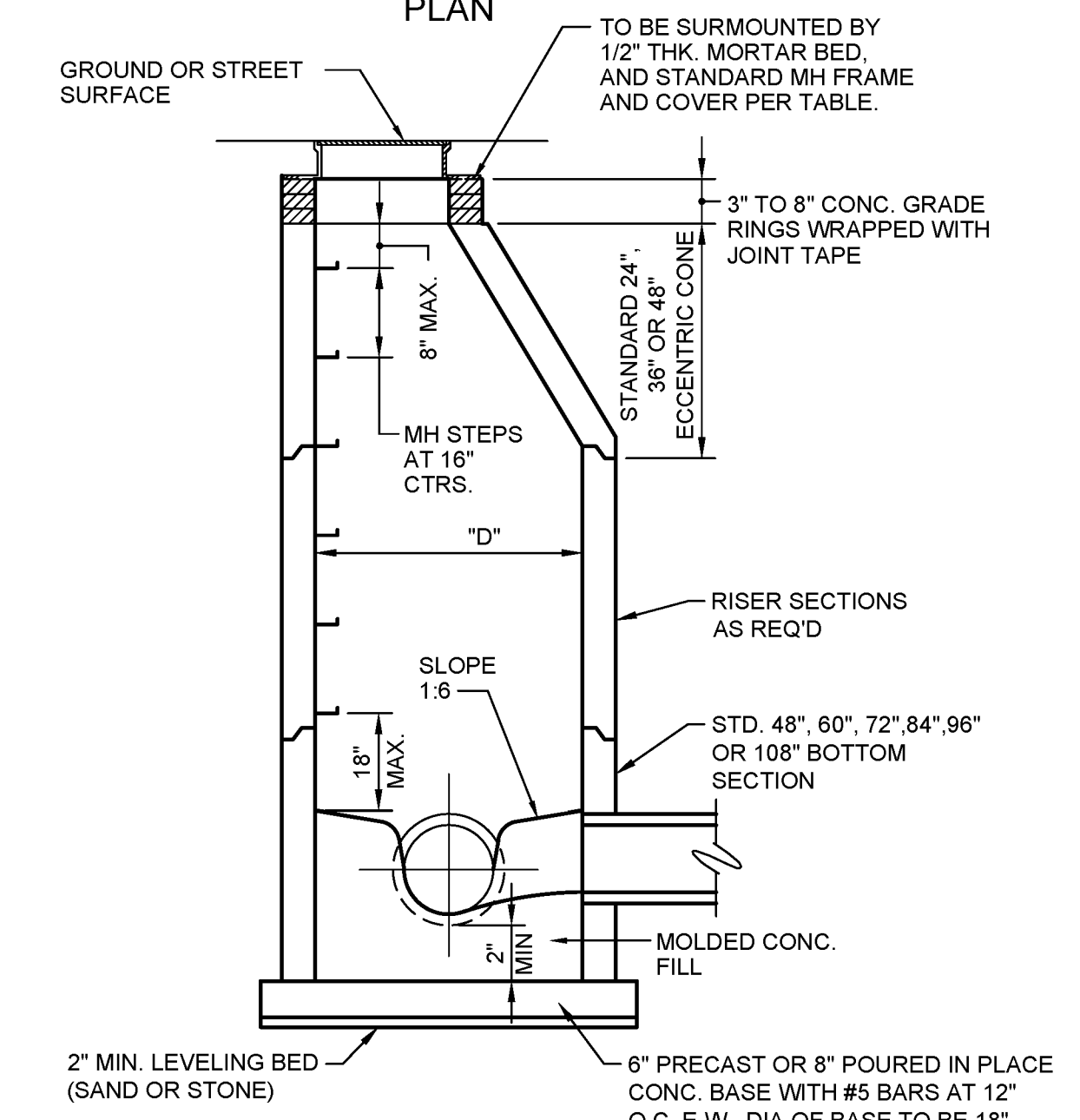


TABLE	
"X"	"Y"(MIN)
6"-8"	20"
10"-12"	24"
14"-15"	30"
18"-21"	36"
24"	42"

NOTE: SEE SPECIFICATIONS FOR ALTERNATE CONST. METHODS



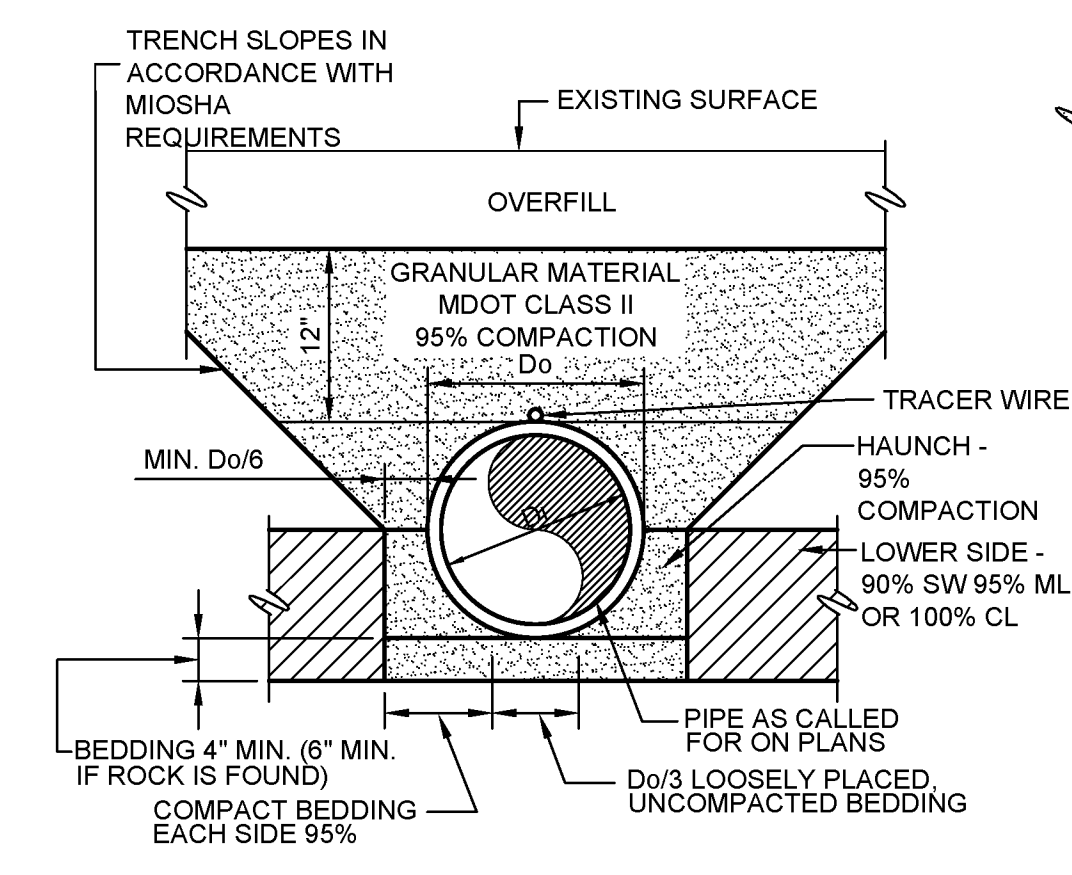
SECTION A-A

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 SLVC.
 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.

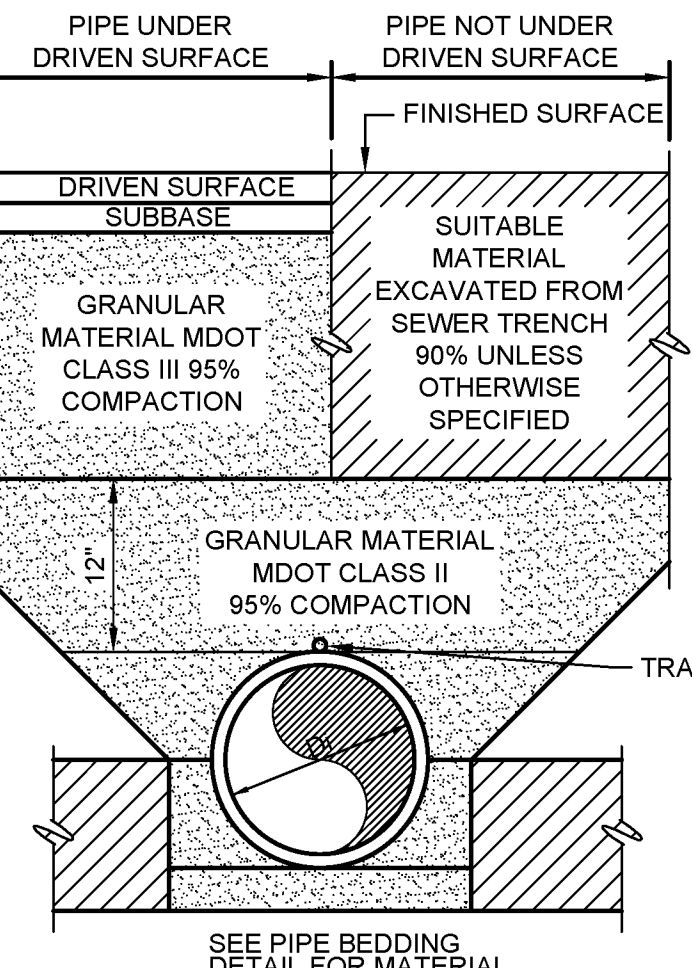
FRAME & COVER FOR SANITARY SEWER MANHOLES			
TYPE	TYPE OF COVER	MANUFACTURER OR EQUAL	
		EAST JORDAN	NEENAH
MH	SANITARY - SOLID SELF-SEALING	1040.0000	R-1642
MH	SANITARY - SOLID WATERTIGHT	1040-APT	R-1916-F
CO	SOLID	1574A	R-1973-A

STANDARD MANHOLE

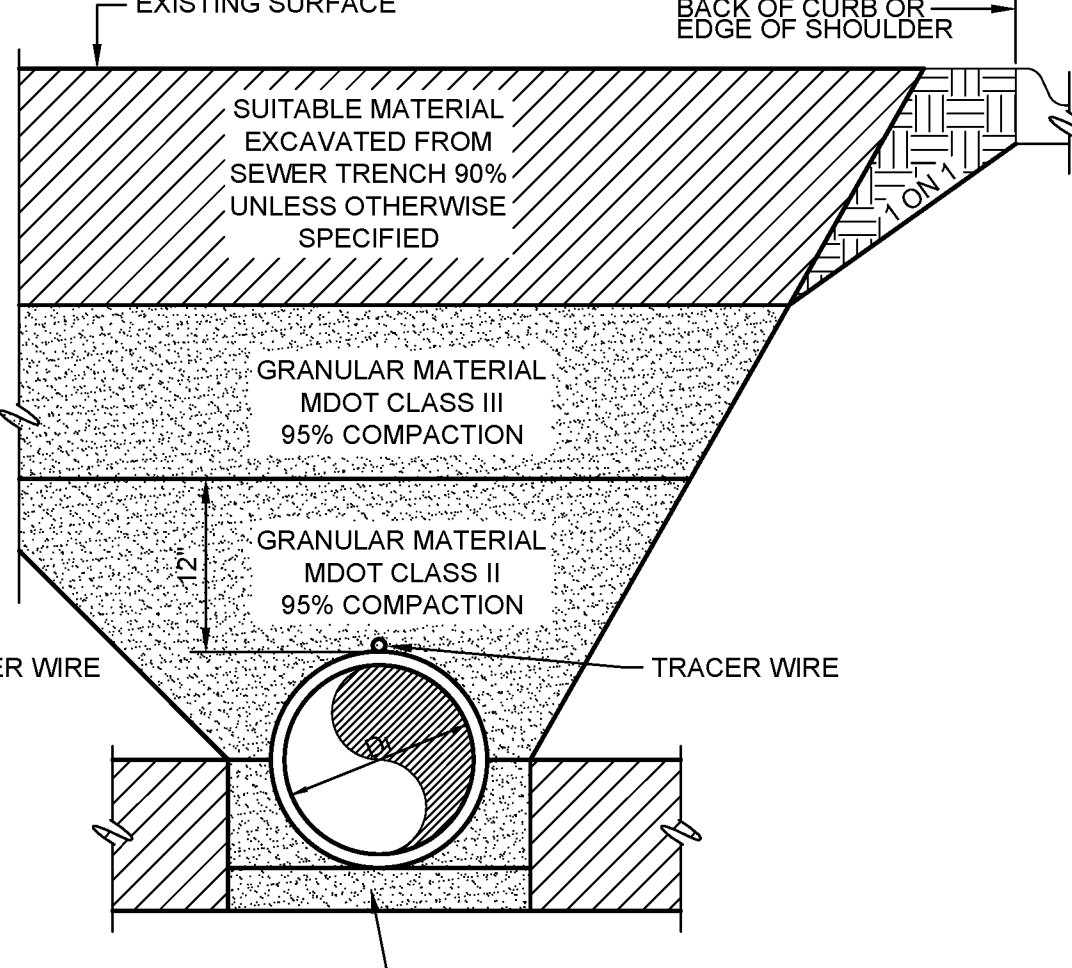
NOTES:
 1. COMPACTION PRESENTED AS MINIMUM STANDARD PROCTOR VALUES.
 2. MATERIALS AROUND THERMOPLASTIC PIPE WITH DIAMETER < 6 INCHES SHALL PASS 0.5 INCH SIEVE. MATERIALS AROUND OTHER PIPES SHALL PASS 1.5 INCH SIEVE.
 3. MATERIALS AROUND HDPE PIPE TO BE MDOT 6A OR 21AA.
 4. DRIVEN SURFACE IS DRIVEWAY, PARKING AREA, ROAD BED OR SHOULDER.
 5. UTILITY TRENCHES LOCATED WITHIN A MDOT ROW SHALL CONFORM TO MDOT STANDARD DETAIL R-83.
 6. TRACER WIRE IS REQUIRED ON FORCE MAIN ONLY AND SHALL BE BROUGHT TO GRADE AT A MINIMUM EVERY 1000 FEET IN A APPROVED CAST IRON TRACER WIRE BOX ENCASED IN CONCRETE OR WITH AN APPROVED GREEN MARKER POST.



PIPE BEDDING

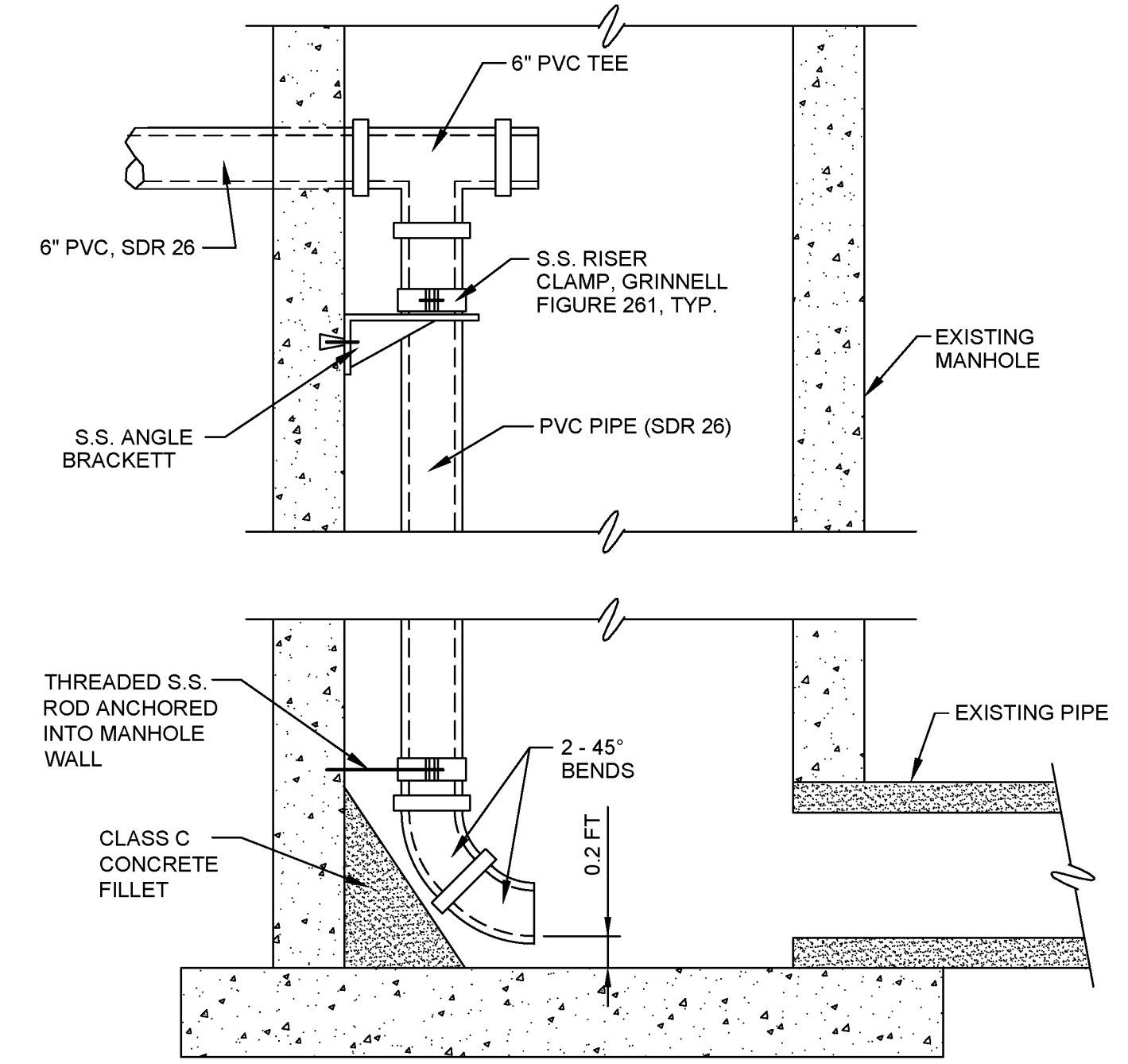


PIPE UNDER/NOT UNDER DRIVEN SURFACE



PIPE WITHIN INFLUENCE OF DRIVEN SURFACE

TRENCH EXCAVATION & PIPE BEDDING



INTERIOR SEWER LATERAL DROP CONNECTION



MARION HOWELL OCEOLA GENOA
Sewer and Water Authority

STANDARD DETAILS

Scale: NONE
 Issued Date: JANUARY - 2014
 UPDATED: MAY 2015
 UPDATED: FEBRUARY 2016
 UPDATED: APRIL 2016
 UPDATED: OCTOBER 2017
 UPDATED: FEBRUARY 2019

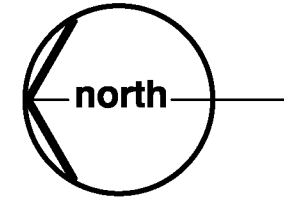
site plan study for:

The Legacy Apartment Homes

Genoa Township, Michigan

note
 preliminary concept plan for inspection purposes
 only and in no way official or approved for record
 purposes.

scale: 0' 50' 100' 200' 300'
 1" = 100'-0"

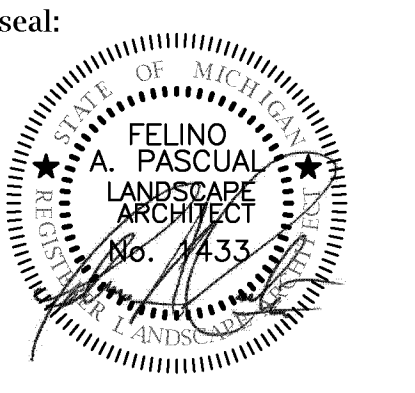
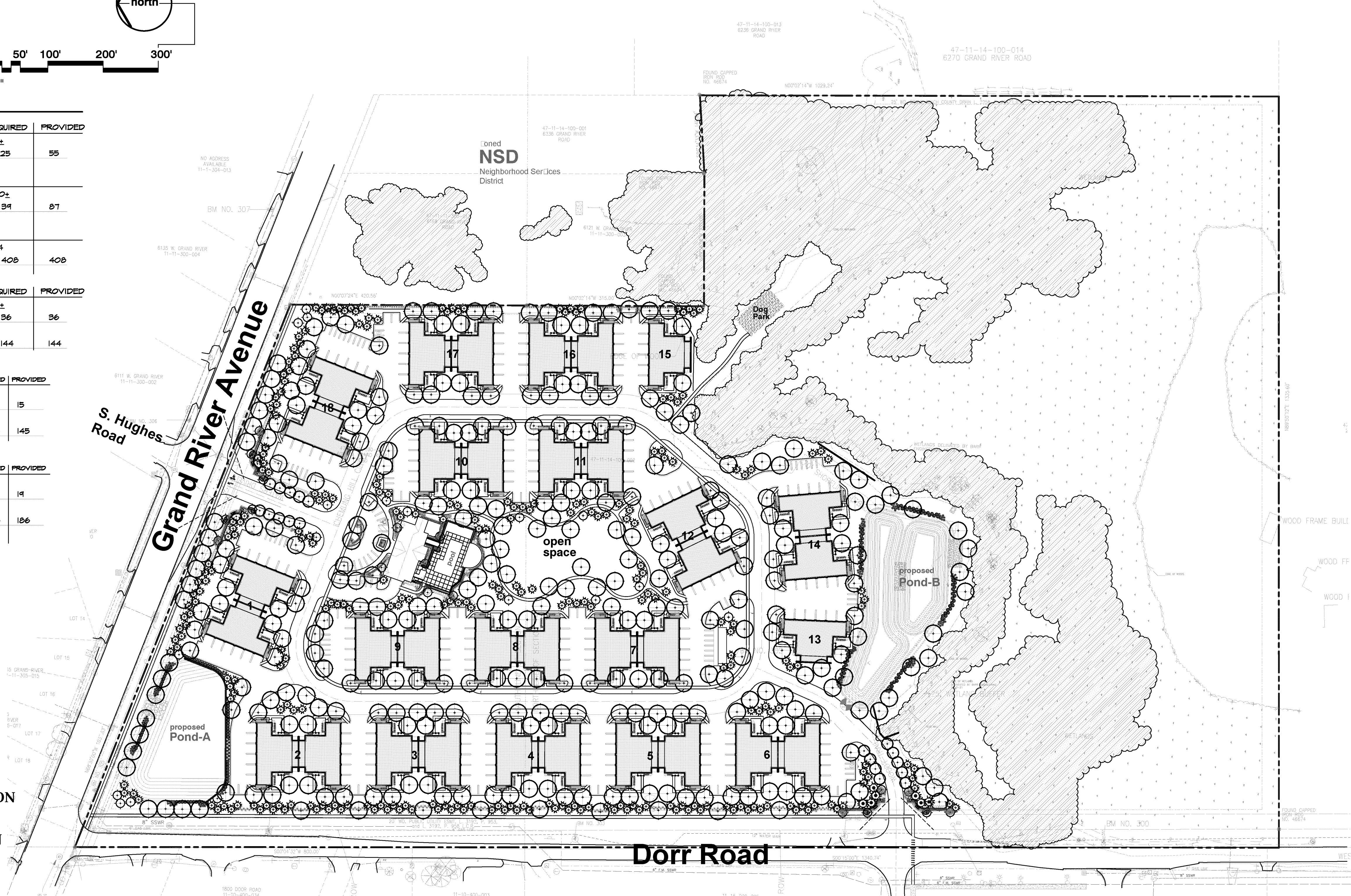


landscape requirements:

	REQUIRED	PROVIDED
greenbelt (Grand River Avenue)		
TOTAL LINFT. OF GREENBELT FRONTAGE	945±	
ONE (1) 2 1/2" CANOPY OR EVERGREEN TREE PER 40 LINFT. (945 LINFT. / 40 LINFT. = 24.8 TREES)	25	55
greenbelt (Dorr Road)		
TOTAL LINFT. OF GREENBELT FRONTAGE	1570±	
ONE (1) 2 1/2" CANOPY OR EVERGREEN TREE PER 40 LINFT. (1570 LINFT. / 40 LINFT. = 39.25 TREES)	39	87
street trees (interior residential streets)		
TOTAL NO. OF RESIDENTIAL UNITS PROVIDED	204	
TWO (2) 2 1/2" CANOPY TREES PER RESIDENTIAL UNIT (204 UNITS X 2 TREES = 408 TREES)	408	408
landscape screening		
TOTAL LINFT. OF BOUNDARY FRONTAGE	721±	
ONE (1) 2 1/2" CANOPY OR EVERGREEN TREE PER 20 LINFT. (721 LINFT. / 20 LINFT. = 36.05 TREES)	36	36
OR FOUR (4) SHRUBS PER 20 LINFT. (721 LINFT. / 20 LINFT. = 36.05 X 4-SHRUBS=144.2)	144	144
detention pond-A		
TOTAL LINFT. OF POND PERIMETER	727±	
ONE (1) DECIDUOUS OR EVERGREEN TREE PER 50 LINFT. (727 LINFT. / 50 LINFT. = 14.5 TREES)	15	15
TEN (10) SHRUBS PER 50 LINFT. (727 LINFT. / 50 LINFT. = 14.5 X 10-SHRUBS=145)	145	145
detention pond-B		
TOTAL LINFT. OF POND PERIMETER	932±	
ONE (1) DECIDUOUS OR EVERGREEN TREE PER 50 LINFT. (932 LINFT. / 50 LINFT. = 18.64 TREES)	19	19
TEN (10) SHRUBS PER 50 LINFT. (932 LINFT. / 50 LINFT. = 18.64 X 10-SHRUBS=186.4)	186	186

landscape sheet index

- LS-1 OVERALL LANDSCAPE PLAN VIEW
- LS-2 GENERAL PLANTING DETAIL PLAN
- LS-3 GENERAL PLANTING DETAIL PLAN
- LS-4 MATERIAL LIST, PLANT DETAILS & LANDSCAPE NOTE
- LS-5 ENTRANCE PLANTING DETAIL PLAN
- LS-6 CLUBHOUSE & BUILDING FOUNDATION PLANTING DETAIL PLAN
- LS-7 DETENTION PLANTING DETAIL PLAN
- LS-8 ENTRY DETAIL PLAN
- LS-9 SITE AMENITY PLAN



client:
LAUTREC
 31550
 Northwestern
 HWY. Suite 200
 Farmington Hills,
 Michigan 48334

project:
**THE
 LEGACY
 APARTMENT
 HOMES**

project location:
 Genoa Township,
 Michigan
 Grand River Avenue &
 Dorr Road
 sheet title:
 CONCEPTUAL
 LANDSCAPE PLAN

job no./issue/revision date:
 LS22.028.11 SPA 11-2-2022
 LS23.053.05 SPA 5-1-2023

drawn by:
 JP, HP, DK
 checked by:
 FP
 date:
 4-15-2023

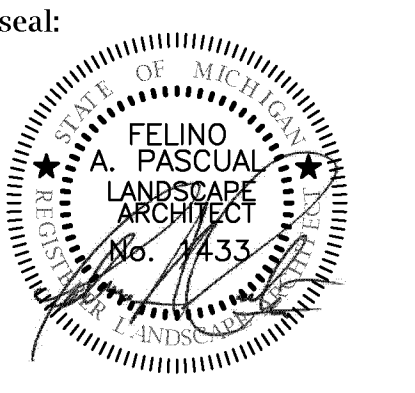
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 figured dimensions only



The location and elevations of existing
 underground utilities as shown on this
 drawing are only approximate. no guarantee
 is either expressed or implied as to the
 completeness of accuracy. contractor shall
 be exclusively responsible for determining the
 exact location and elevation prior to the start
 of construction

project no:
 LS23.053.05

sheet no:
LS-1 of 9



client:
LAUTREC
 31550
 Northwestern
 HWY. Suite 200
 Farmington Hills,
 Michigan 48334

project:
**THE
 LEGACY
 APARTMENT
 HOMES**

project location:
 Genoa Township,
 Michigan
 Grand River Avenue &
 Dorr Road

GENERAL LANDSCAPE
 PLANTING DETAIL

job no./issue/revision date:
 LS22.028.11 SPA 11-2-2022
 LS23.053.05 SPA 5-1-2023

drawn by:
JP, HP, DK
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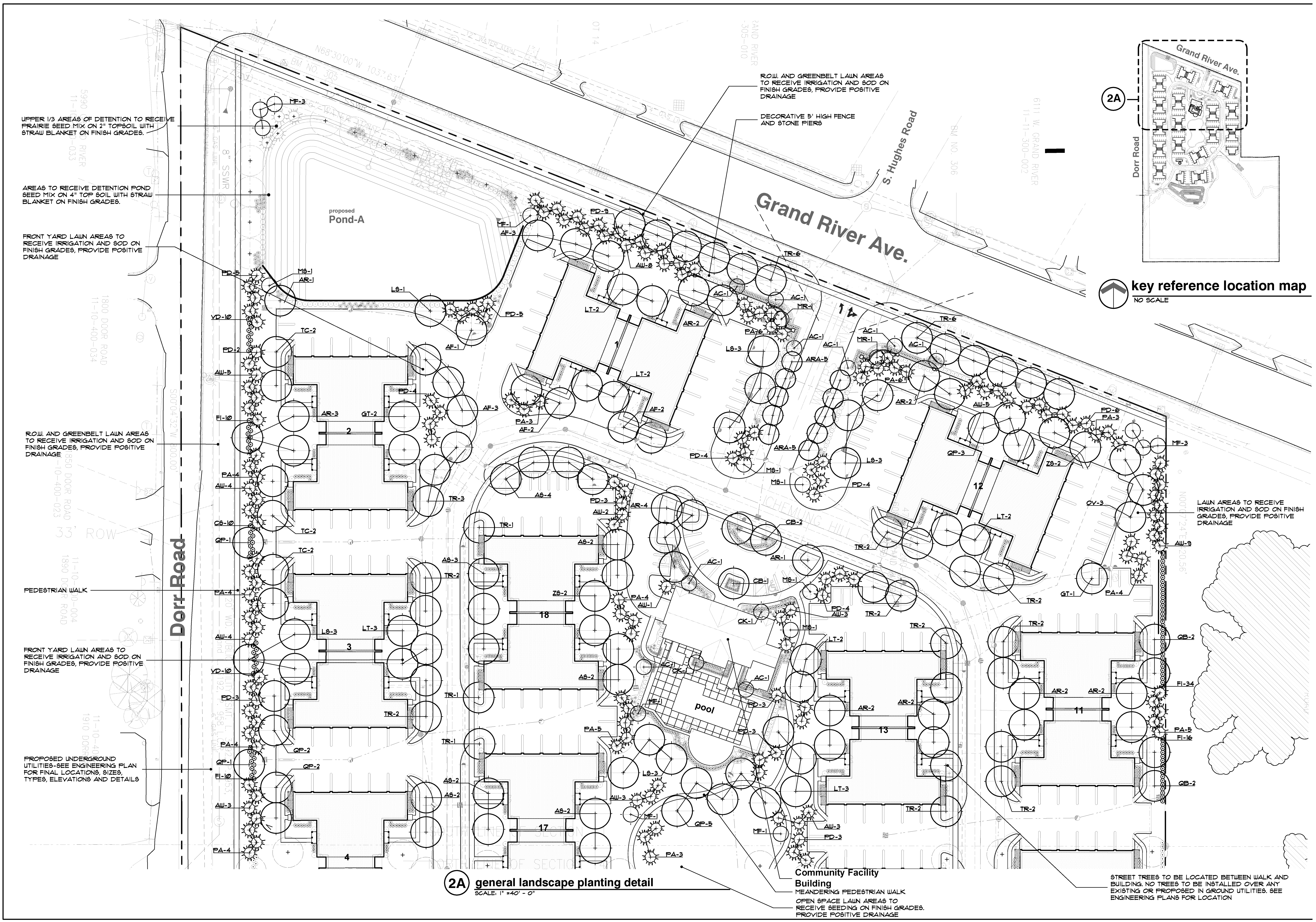
Do Not scale drawings. Use
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The location and elevations of existing
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 completeness of accuracy, contractor shall be
 exclusively responsible for determining the
 exact location and elevation prior to the start
 of construction

project no:
LS23.053.05

sheet no:
LSC-2 of 9



2A

key reference location map
 NO SCALE

STREET TREES TO BE LOCATED BETWEEN WALK AND BUILDING. NO TREES TO BE INSTALLED OVER ANY EXISTING OR PROPOSED IN GROUND UTILITIES. SEE ENGINEERING PLANS FOR LOCATION

2A general landscape planting detail
 SCALE: 1" = 40' - 0"

Community Facility Building
 MEANDERING PEDESTRIAN WALK
 OPEN SPACE LAWN AREAS TO RECEIVE SEEDING ON FINISH GRADES. PROVIDE POSITIVE DRAINAGE

UPPER 1/3 AREAS OF DETENTION TO RECEIVE PRAIRIE SEED MIX ON 2" TOPSOIL WITH STRAW BLANKET ON FINISH GRADES.

AREAS TO RECEIVE DETENTION POND SEED MIX ON 4" TOP SOIL WITH STRAW BLANKET ON FINISH GRADES.

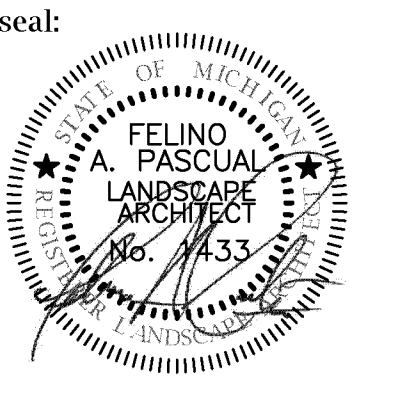
FRONT YARD LAWN AREAS TO RECEIVE IRRIGATION AND SOD ON FINISH GRADES, PROVIDE POSITIVE DRAINAGE

ROW, AND GREENBELT LAWN AREAS TO RECEIVE IRRIGATION AND SOD ON FINISH GRADES, PROVIDE POSITIVE DRAINAGE

FRONT YARD LAWN AREAS TO RECEIVE IRRIGATION AND SOD ON FINISH GRADES, PROVIDE POSITIVE DRAINAGE

PROPOSED UNDERGROUND UTILITIES-SEE ENGINEERING PLAN FOR FINAL LOCATIONS, SIZES, TYPES, ELEVATIONS AND DETAILS

LAWN AREAS TO RECEIVE IRRIGATION AND SOD ON FINISH GRADES, PROVIDE POSITIVE DRAINAGE



client:
LAUTREC
 31550
 Northwestern
 HWY. Suite 200
 Farmington Hills,
 Michigan 48334

project:
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 LEGACY
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 HOMES**

project location:
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 date:
4-15-2023

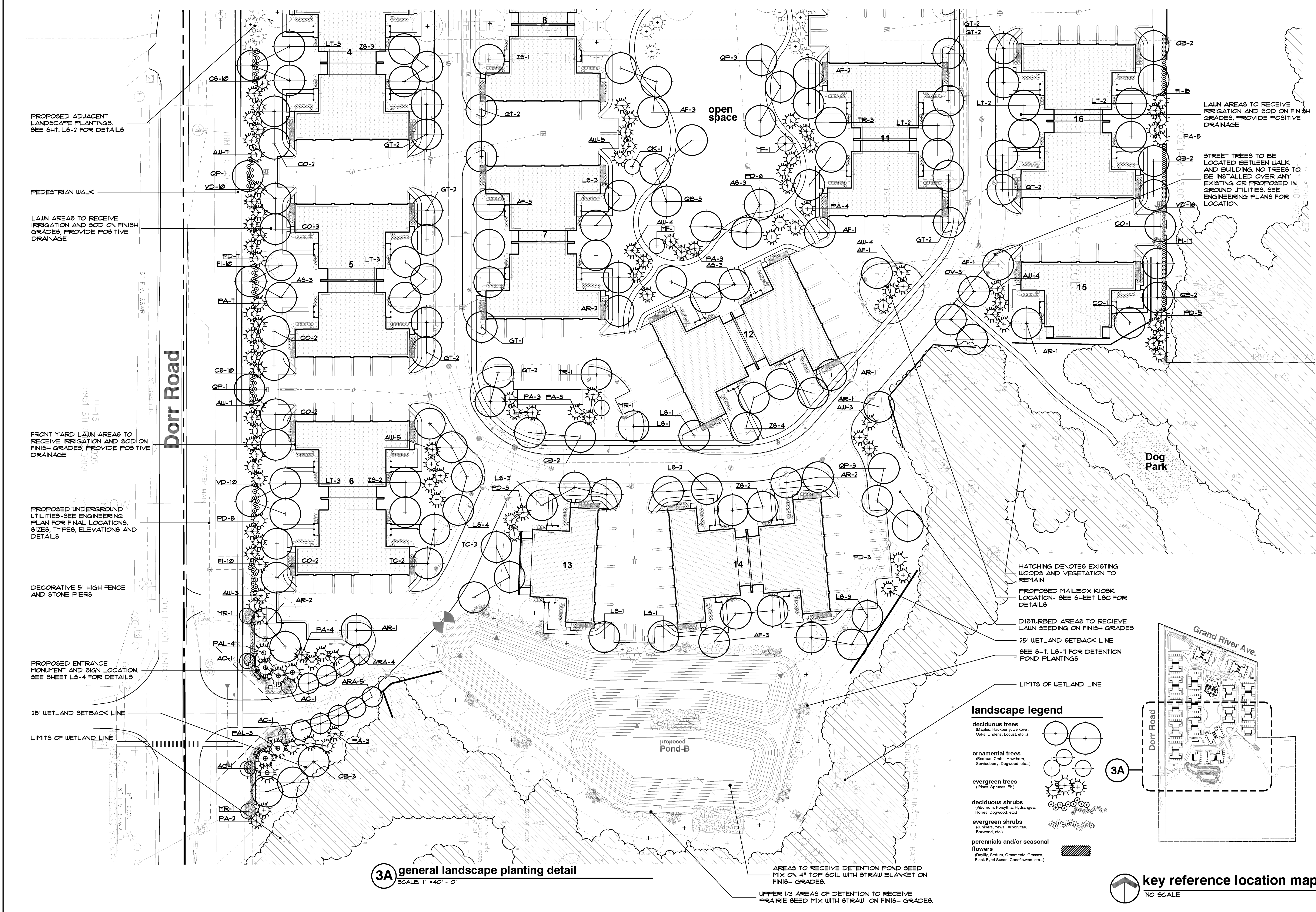
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 of construction

project no:
LS23.053.05

sheet no:
LSC-3 of 9



PROPOSED ADJACENT
 LANDSCAPE PLANTINGS.
 SEE SHT. L6-2 FOR DETAILS

PEDESTRIAN WALK

LAWN AREAS TO RECEIVE
 IRRIGATION AND SOD ON FINISH
 GRADES, PROVIDE POSITIVE
 DRAINAGE

FRONT YARD LAWN AREAS TO
 RECEIVE IRRIGATION AND SOD ON
 FINISH GRADES, PROVIDE POSITIVE
 DRAINAGE

PROPOSED UNDERGROUND
 UTILITIES-SEE ENGINEERING
 PLAN FOR FINAL LOCATIONS,
 SIZES, TYPES, ELEVATIONS AND
 DETAILS

DECORATIVE 5' HIGH FENCE
 AND STONE PIERS

PROPOSED ENTRANCE
 MONUMENT AND SIGN LOCATION.
 SEE SHEET L6-4 FOR DETAILS

25' WETLAND SETBACK LINE

LIMITS OF WETLAND LINE

open
 space

LAWN AREAS TO RECEIVE
 IRRIGATION AND SOD ON FINISH
 GRADES, PROVIDE POSITIVE
 DRAINAGE

STREET TREES TO BE
 LOCATED BETWEEN WALK
 AND BUILDING. NO TREES TO
 BE INSTALLED OVER ANY
 EXISTING OR PROPOSED IN
 GROUND UTILITIES. SEE
 ENGINEERING PLANS FOR
 LOCATION

HATCHING DENOTES EXISTING
 WOODS AND VEGETATION TO
 REMAIN

PROPOSED MAILBOX KIOSK
 LOCATION- SEE SHEET L6C FOR
 DETAILS

DISTURBED AREAS TO RECEIVE
 LAWN SEEDING ON FINISH GRADES

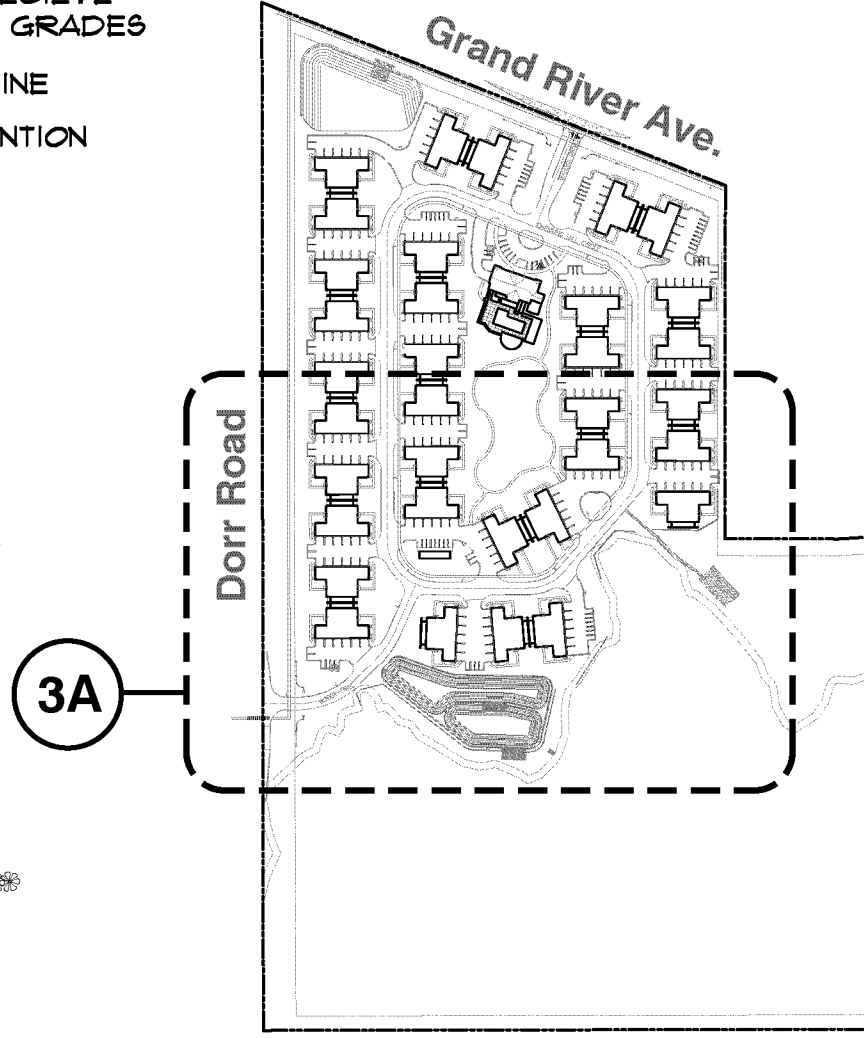
25' WETLAND SETBACK LINE

SEE SHT. L6-1 FOR DETENTION
 POND PLANTINGS

LIMITS OF WETLAND LINE

landscape legend

- deciduous trees**
 (Maples, Hackberry, Zelkova,
 Oaks, Lindens, Locust, etc.)
- ornamental trees**
 (Redbud, Crab, Hawthorn,
 Serviceberry, Dogwood, etc.)
- evergreen trees**
 (Pines, Spruces, Fir)
- deciduous shrubs**
 (Oleander, Forsythia, Hydrangea,
 Hollies, Dogwood, etc.)
- evergreen shrubs**
 (Junipers, Yews, Arborvitae,
 Boxwood, etc.)
- perennials and/or seasonal
 flowers**
 (Daylily, Sedum, Ornamental Grasses,
 Black Eyed Susan, Corellovers, etc.)

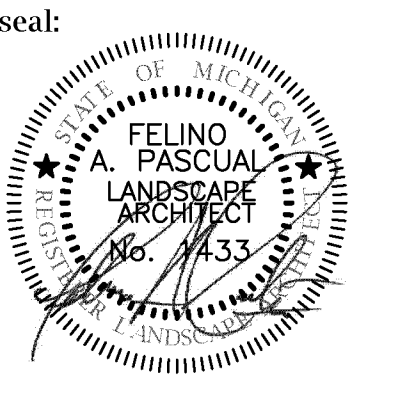


3A general landscape planting detail
 SCALE: 1" = 40' - 0"

AREAS TO RECEIVE DETENTION POND SEED
 MIX ON 4" TOP SOIL WITH STRAW BLANKET ON
 FINISH GRADES.

UPPER 1/3 AREAS OF DETENTION TO RECEIVE
 PRAIRIE SEED MIX WITH STRAW ON FINISH GRADES.

key reference location map
 NO SCALE



client:
LAUTREC
 31550
 Northwestern
 HWY. Suite 200
 Farmington Hills,
 Michigan 48334

project:
**THE
 LEGACY
 APARTMENT
 HOMES**

project location:
 Genoa Township,
 Michigan
 Grand River Avenue &
 Dorr Road

sheet title:
 LANDSCAPE MATERIAL
 LIST, PLANT DETAILS &
 NOTES

job no./issue/revision date:
 LS22.028.11 SPA 11-2-2022
 LS23.053.05 SPA 5-1-2023

drawn by:
JP, HP, DK
 checked by:
FP
 date:
4-15-2023

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project no:
LS23.053.05

plant material list

key	quant. 2A	quant. 3A	botanical name	common name	size	comments
DECIDUOUS TREES						
LT	10	15	LIRIODENDRON TULIPIFERA	TULIPTREE	2 1/2" BB	
GT	3	15	GLEDITSIA TRI. NERMIS 'SKYCOLE'	SKYLINE LOGJST	2 1/2" BB	
TR	36	4	TILIA AMERICANA 'REDMOND'	REDMOND LINDEN	2 1/2" BB	
CO	-	13	CELTIS OCCIDENTALIS	NORTHERN HACKBERRY	2 1/2" BB	
TC	6	5	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LINDEN	2 1/2" BB	
AF	11	14	ACER X 'FREEMANI'	AUTUMN BLAZE RED MAPLE	2 1/2" BB	
AR	21	10	ACER RUBRUM	RED MAPLE	2 1/2" BB	
ARA	10	9	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	2 1/2" BB	
LS	16	15	LIQUIDAMBAR STYRACIFLUA	AMERICAN SWEETGUM	2 1/2" BB	
OV	3	3	QUERCUS RUBRA	RED OAK	2 1/2" BB	
QP	14	8	QUERCUS PALUSTRIS	PIN OAK	2 1/2" BB	
AS	11	9	ACER SACCHARUM	SUGAR MAPLE	2 1/2" BB	
GB	4	12	QUERCUS 'BICOLOR'	SWAMP WHITE OAK	2 1/2" BB	
ZS	4	10	ZELKOVA SERATA 'GREENVASE'	GREENVASE ZELKOVA	2 1/2" BB	
CB	3	2	CARPINUS BETULUS 'FASTIGIATA'	COLUMNAR EUROPEAN HORNBEAM	2 1/2" BB	
EVERGREEN TREES						
AW	50	42	ABIES CONCOLOR	CONCOLOR WHITE FIR	8' BB	
PD	60	25	PICEA PUNGENS	COLORADO SPRUCE	6' BB	
PA	54	35	PICEA GLAUCA	WHITE SPRUCE	6' BB	
PAL	-	1	PICEA GLAUCA	WHITE SPRUCE	10' BB	
SHRUBS						
FI	20	20	FORSYTHIA INTERMEDIA	BORDER FORSYTHIA	5' CONT.	60" O.C. SPACING
CS	10	20	CORNUS STOLONIFERA	REDTIG DOGWOOD	5' CONT.	60" O.C. SPACING
VD	20	20	VIBURNUM D. 'SYNNESTVEDT'	CHICAGO LUSTRE VIBURNUM	5' CONT.	60" O.C. SPACING

planting landscape notes:

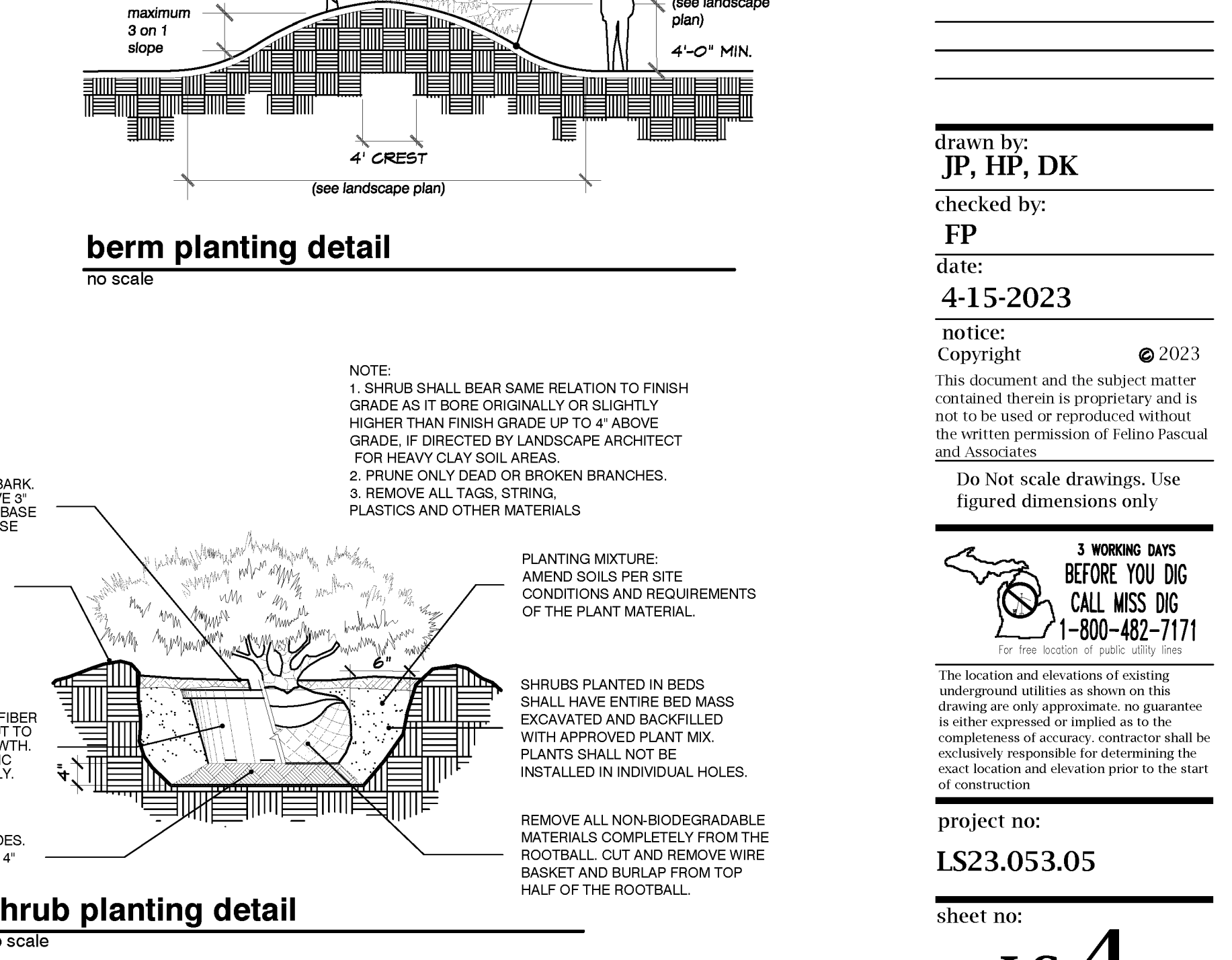
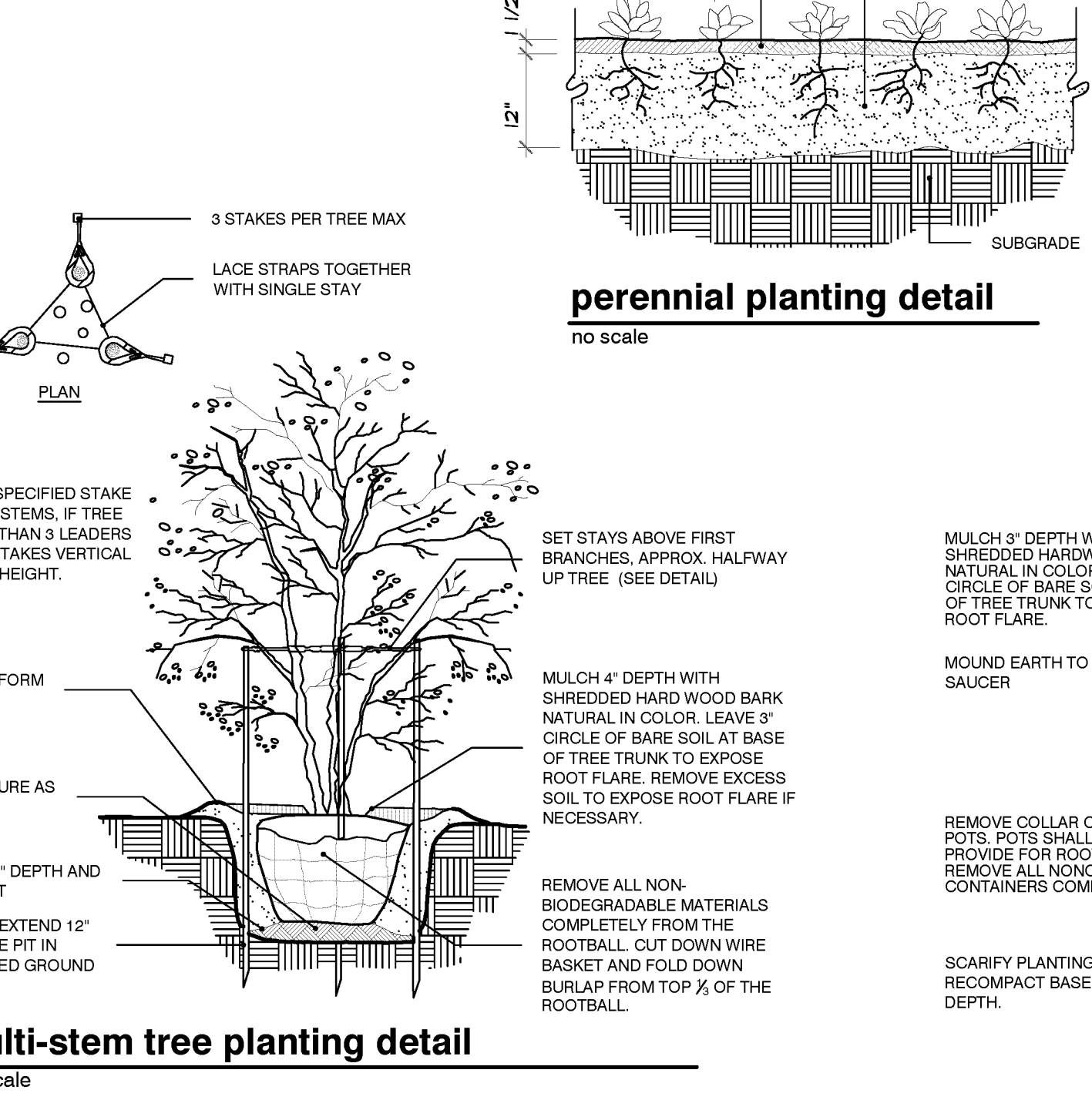
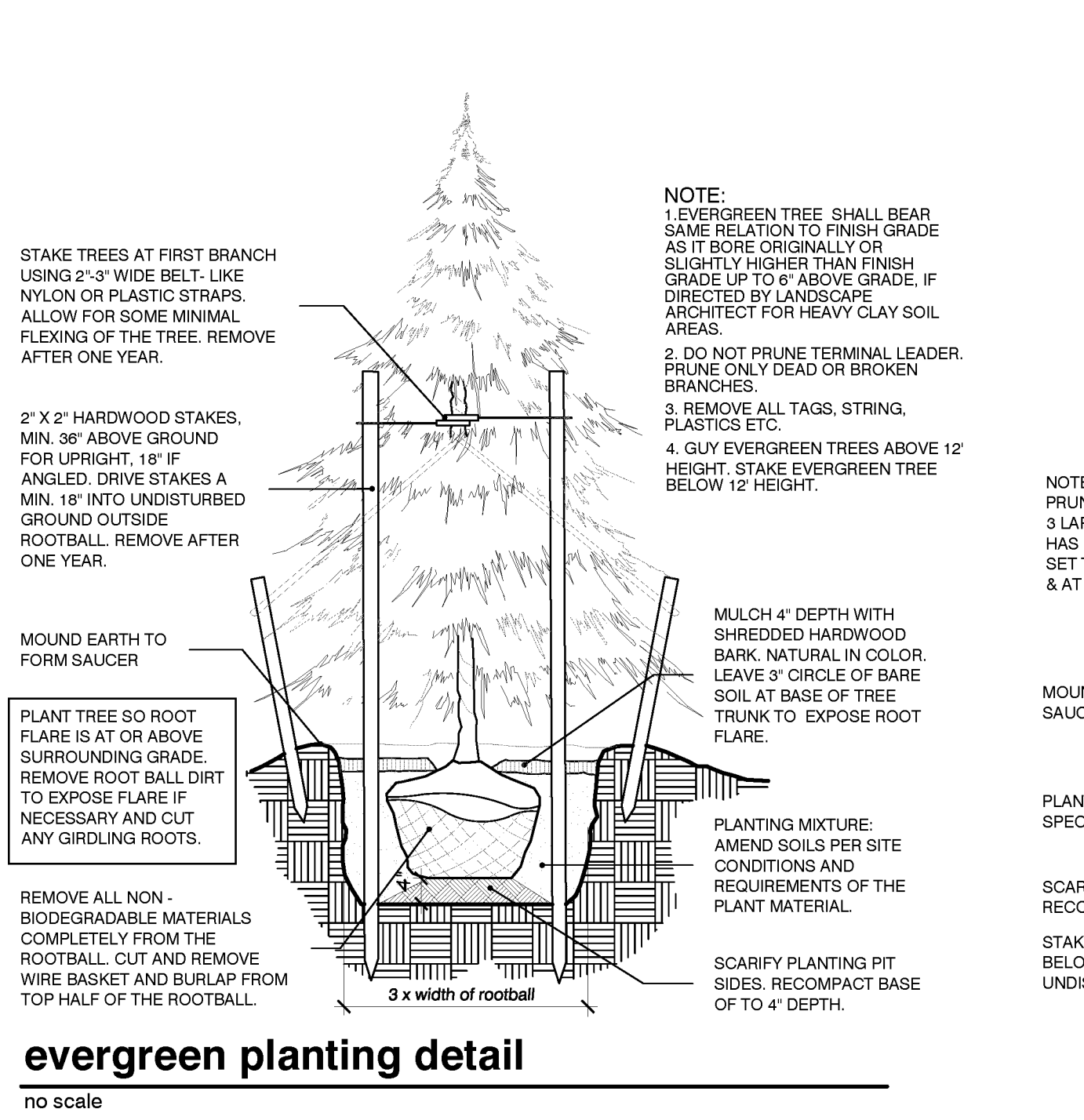
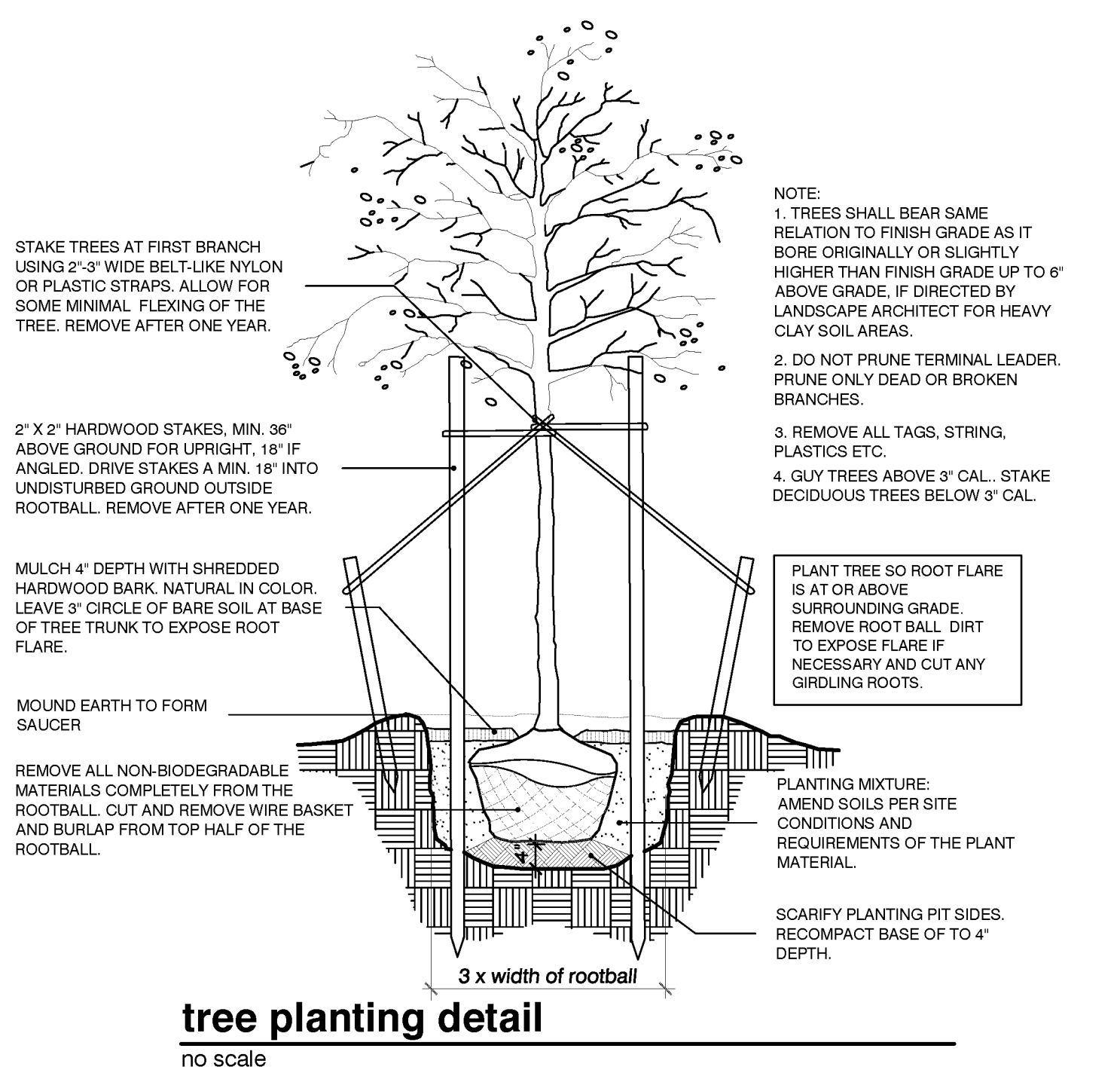
- GENERAL NOTES:**
- PLANT MATERIALS TO BE INSTALLED ACCORDING TO THE GENOA TOWNSHIP AND CURRENT AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARDS.
 - PLANT MATERIALS TO BE GUARANTEED FOR 2 YEARS. REPLACE FALLING MATERIAL WITHIN 1 YEAR, OR THE NEXT APPROPRIATE PLANTING PERIOD.
 - PLANT MATERIALS TO BE OF PREMIUM QUALITY, NO. 1 GRADE NORTHERN NURSERY GROWN, IN HEALTHY CONDITION, FREE OF PESTS AND DISEASES.
 - MULCH IS TO BE NATURAL COLORED, FINELY SHREDDED HARDWOOD BARK OF 4" THICK BARK MULCH FOR TREES IN 4" DIA. CIRCLE W/3" PULLED AWAY FROM TRUNK. 3" THICK BARK MULCH FOR SHRUBS AND 2" THICK BARK MULCH FOR PERENNIALS.
 - CALL 1-800-482-7171 PRIOR TO ANY CONSTRUCTION.
- DECIDUOUS 4 EVERGREEN TREE:**
- TREE SHALL BE INSTALLED SAME RELATIONSHIP TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 6" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.
 - DO NOT PRUNE TERMINAL LEADER. PRUNE ONLY DEAD OR BROKEN BRANCHES.
 - REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS THAT ARE UNSIGHTLY AND COULD CAUSE GIRDLING.
 - REMOVE TREE STAKES, GUY WIRES AND TREE WRAP AFTER ONE WINTER SEASON.
- SHRUB:**
- SHRUB SHALL BE INSTALLED SAME RELATIONSHIP TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 4" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.
 - DO NOT PRUNE TERMINAL LEADER. PRUNE ONLY DEAD OR BROKEN BRANCHES.
 - REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS THAT ARE UNSIGHTLY AND COULD CAUSE GIRDLING.

landscape maintenance notes:

- LANDSCAPE MAINTENANCE PROCEDURES AND FREQUENCIES TO BE FOLLOWED SHALL BE SPECIFIED ON THE LANDSCAPE PLAN, ALONG WITH THE MANNER IN WHICH THE EFFECTIVENESS, HEALTH AND INTENDED FUNCTIONS OF THE VARIOUS LANDSCAPE AREAS ON THE SITE WILL BE ENSURED.
- LANDSCAPING SHALL BE KEPT IN A NEAT, ORDERLY AND HEALTHY GROWING CONDITION, FREE FROM DEBRIS AND REFUSE.
 - PRUNING SHALL BE MINIMAL AT THE TIME OF INSTALLATION, ONLY TO REMOVE DEAD OR DISEASED BRANCHES. SUBSEQUENT PRUNING SHALL ASSURE PROPER MATURATION OF PLANTS TO ACHIEVE THEIR APPROVED PURPOSE.
 - ALL DEAD OR DISEASED PLANT MATERIAL SHALL BE REMOVED AND REPLACED WITHIN SIX (6) MONTHS AFTER IT DIES OR IN THE NEXT PLANTING SEASON, WHICHEVER OCCURS FIRST. THE PLANTING SEASON FOR DECIDUOUS PLANTS SHALL BE BETWEEN MARCH 15 AND NOVEMBER 15 OR UNTIL THE PREPARED SOIL BECOMES FROZEN. THE PLANTING SEASON FOR EVERGREEN PLANTS SHALL BE BETWEEN MARCH 1 AND JUNE 1. PLANT MATERIAL INSTALLED TO REPLACE DEAD OR DISEASED MATERIAL SHALL BE AS CLOSE AS PRACTICAL TO THE SIZE OF THE MATERIAL IT IS INTENDED TO REPLACE.

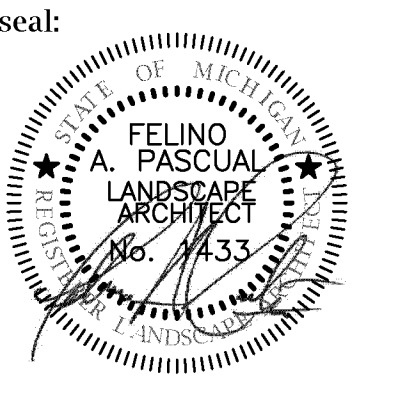
general landscape notes:

- LANDSCAPE CONTRACTOR SHALL VISIT THE SITE, INSPECT EXISTING CONDITIONS, REVIEW PROPOSED PLANTINGS AND RELATED WORK, CONTACT THE OWNER AND/OR LANDSCAPE ARCHITECT WITH ANY CONCERNS OR DISCREPANCY BETWEEN THE PLAN, PLANT MATERIAL LIST, AND/OR SITE CONDITIONS.
- PRIOR TO BEGINNING OF CONSTRUCTION ON ANY WORK, CONTRACTORS SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES, GAS, ELECTRIC, TELEPHONE, CABLE TO BE LOCATED BY CONTACTING 1-800-DIG-1-800-482-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COORDINATE ALL RELATED WORK ACTIVITIES WITH OTHER TRADES AND REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER PRIOR TO COMMENCING.
- NUMERICAL VALUE ON THE LANDSCAPE QUANTITIES SPECIFIED ON THE PLAN TAKE PRECEDENCE OVER GRAPHIC REPRESENTATION. VERIFY ANY CONCERN-DISCREPANCY WITH LANDSCAPE ARCHITECT.
- ALL CONSTRUCTION AND PLANT MATERIAL LOCATION TO BE ADJUSTED ON-SITE IF NECESSARY.
- ALL SUBSTITUTIONS OR DEVIATIONS FROM THE LANDSCAPE PLAN MUST BE APPROVED BY GENOA TOWNSHIP AND LANDSCAPE ARCHITECT.
- ALL LARGE TREES AND EVERGREENS TO BE STAKED, GUYED AND WRAPPED AS DETAIL SHOWN ON PLAN.
- PLANT BEDS TO BE DRESSED WITH MIN. 4" OF FINELY DOUBLE SHREDDED HARDWOOD BARK MULCH.
- DIG SHRUB PITS 1' LARGER THAN SHRUB ROOT BALLS AND TREE PITS 2' LARGER THAN ROOT BALL. BACK FILL WITH ONE PART TOP SOIL AND ONE PART SOIL FROM EXCAVATED PLANTING HOLE.
- NATURAL COLOR, FINELY SHREDDED HARDWOOD BARK MULCH REQUIRED FOR ALL PLANTINGS.
- REMOVE ALL TWINE, WIRE AND BURLAP FROM TREE AND SHRUB EARTH BALLS, AND FROM TREE TRUNKS. 4" THICK BARK MULCH FOR TREES IN 4" DIA. CIRCLE WITH 3" PULLED AWAY FROM TRUNK. 4" THICK BARK MULCH FOR SHRUBS AND 4" THICK BARK MULCH FOR PERENNIALS.
- PLANT MATERIAL QUALITY & INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT AMERICAN ASSOCIATION OF NURSERYMEN LANDSCAPE STANDARDS.
- PROVIDE FEAT SOD FOR ALL NEW AND DISTURBED LAWN AREAS UNLESS NOTED OTHERWISE.
- ALL PLANTING AREAS TO BE PREPARED WITH APPROPRIATE SOIL MIXTURES AND FERTILIZER BEFORE PLANT INSTALLATION.
- PLANT TREES AND SHRUBS GENERALLY NO CLOSER THAN THE FOLLOWING DISTANCES FROM SIDEWALKS, CURBS AND PARKING STALLS:
 - SHADE TREES _____ 5 FT.
 - ORNAMENTAL AND EVERGREEN TREES _____ 10 FT. (OR AS FINE, SPRUCE, ETC.)
 - SHRUBS THAT ARE LESS THAN 1 FOOT TALL AND WIDE AT MATURITY _____ 2 FT.
- NO TREES OR EVERGREENS TO BE INSTALLED OVER ANY PROPOSED OR EXISTING UTILITY LINES AS SHOWN ON THE OVERALL LANDSCAPE PLAN. SEE ENGINEERING PLANS FOR LOCATION AND DETAILS.
- ALL LAWN AREAS AND LANDSCAPE BEDS TO BE FULLY IRRIGATED WITH A AUTOMATIC UNDERGROUND SYSTEMS. IRRIGATION SYSTEM TO HAVE SEPARATE ZONES FOR LAWN AREAS, PARKING ISLANDS, AND SHRUB BEDS WITH DIFFERENT CONTROL MOISTURE LEVEL ADJUSTMENT PER ZONE AS REQUIRED.
- UNLESS NOTED OTHERWISE, LANDSCAPE BEDS ADJACENT TO LAWN TO RECEIVE EDGING. EDGING SHALL BE 4" X 1/8" METAL (FINISH BLACK OR GREEN) OR APPROVED EQUAL AND TO BE INSTALLED WITH HORIZONTAL METAL STAKES AT 32" O.C. OR PER MANUFACTURER'S SPECIFICATION.
- ALL NEW PARKING ISLANDS AND LANDSCAPE BEDS ADJACENT AND NEXT TO BUILDING SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND POOR SOILS A MIN. OF 16"-18" DEPTH BACK FILL WITH GOOD, MEDIUM TEXTURED PLANTING SOILS. ADD A MIN. 4" OF TOPSOIL OVERFILL TO FINISH GRADE. PROVIDE POSITIVE DRAINAGE.
- WATERING OF ALL PLANTS AND TREES TO BE PROVIDED IMMEDIATELY AND MULCHING WITHIN 24 HOURS AFTER INSTALLATION.
- ALL TREE PITS TO BE TESTED FOR PROPER DRAINAGE PRIOR TO TREE PLANTING. PROVIDE APPROPRIATE DRAINAGE SYSTEM AS REQUIRED IF THE TREE PIT DOES NOT DRAIN SUFFICIENTLY.
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE PLANT MATERIALS AND IRRIGATION INSTALLATION FOR A PERIOD OF TWO YEAR BEGINNING AFTER THE COMPLETION OF LANDSCAPE INSTALLATION DATE APPROVED BY THE CITY OR LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE DURING AND AT THE END OF THE GUARANTEE PERIOD, ANY DEAD OR UNACCEPTABLE PLANTS, AS DETERMINED BY THE TOWNSHIP OR LANDSCAPE ARCHITECT, WITHOUT COST TO THE OWNER.



perennial planting detail
 no scale

shrub planting detail
 no scale



client:
LAUTREC
 31550
 Northwestern
 HWY. Suite 200
 Farmington Hills,
 Michigan 48334

project:
**THE
 LEGACY
 APARTMENT
 HOMES**

project location:
 Genoa Township,
 Michigan
 Grand River Avenue &
 Dorr Road

sheet title:
 ENTRANCE LANDSCAPE
 PLANTING DETAIL

job no./issue/revision date:
 LS22.028.11 SPA 11-2-2022
 LS23.053.05 SPA 5-1-2023

drawn by:
JP, HP, DK
 checked by:
FP
 date:
4-15-2023

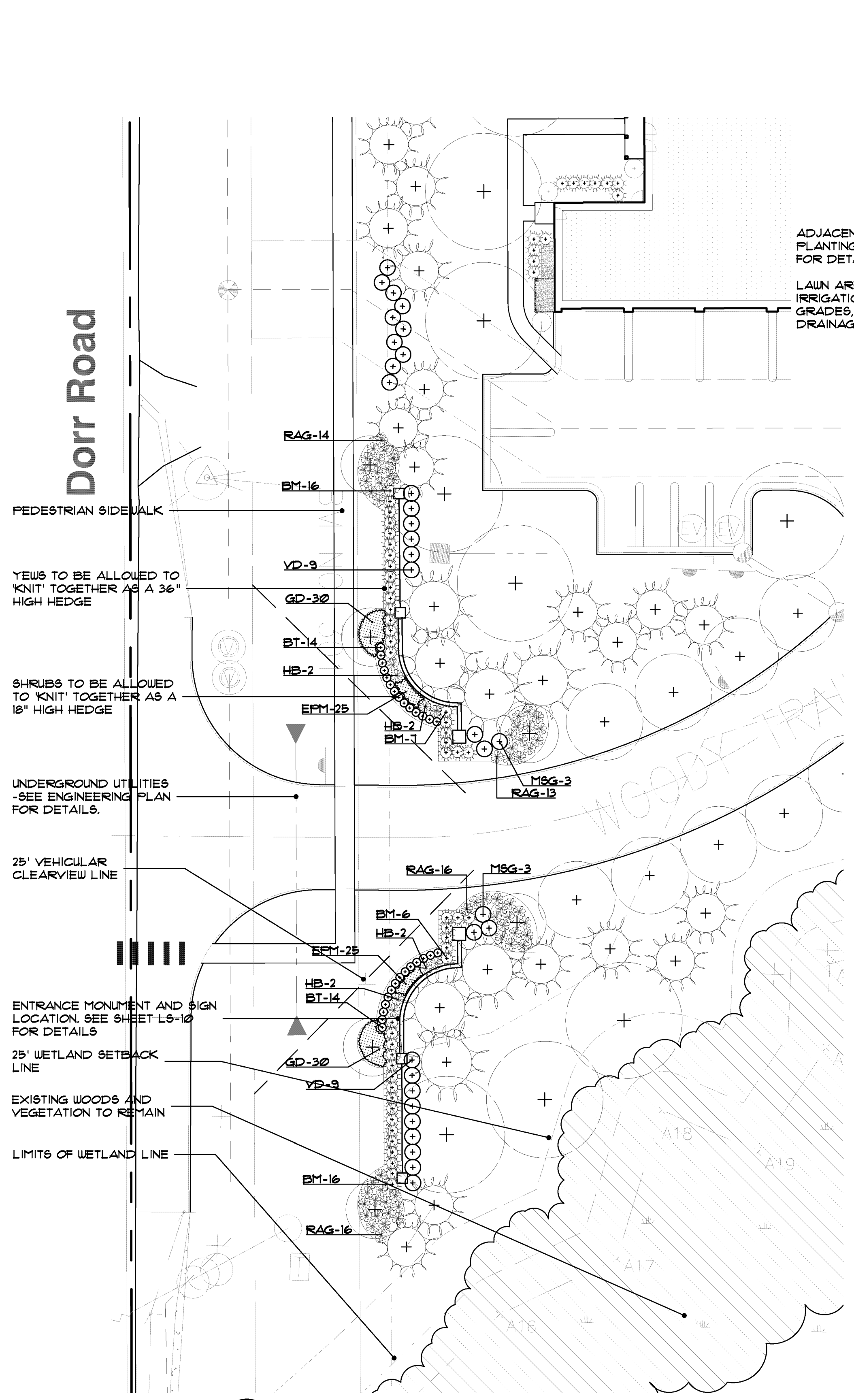
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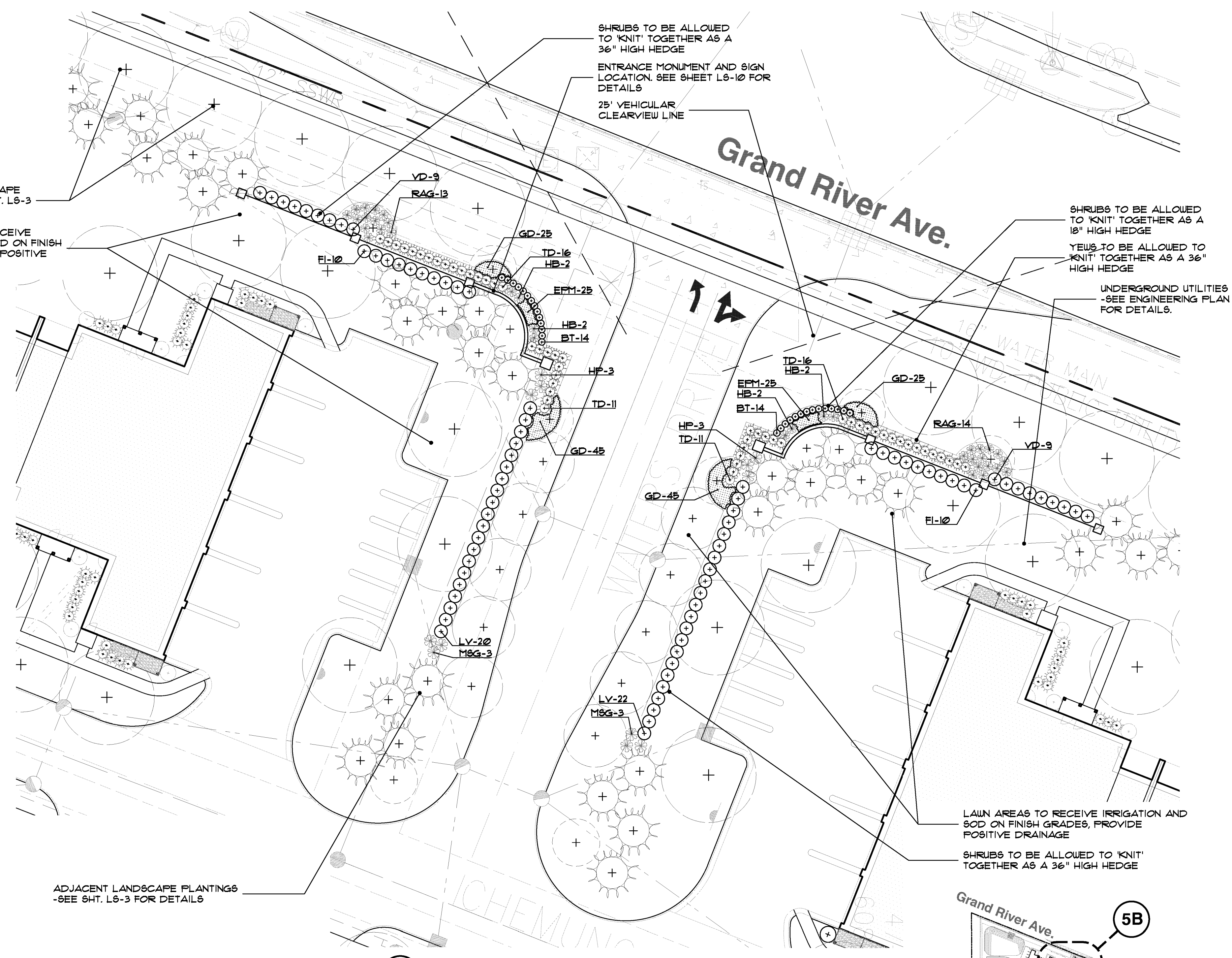
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LS23.053.05

sheet no:
LS-5 of 9



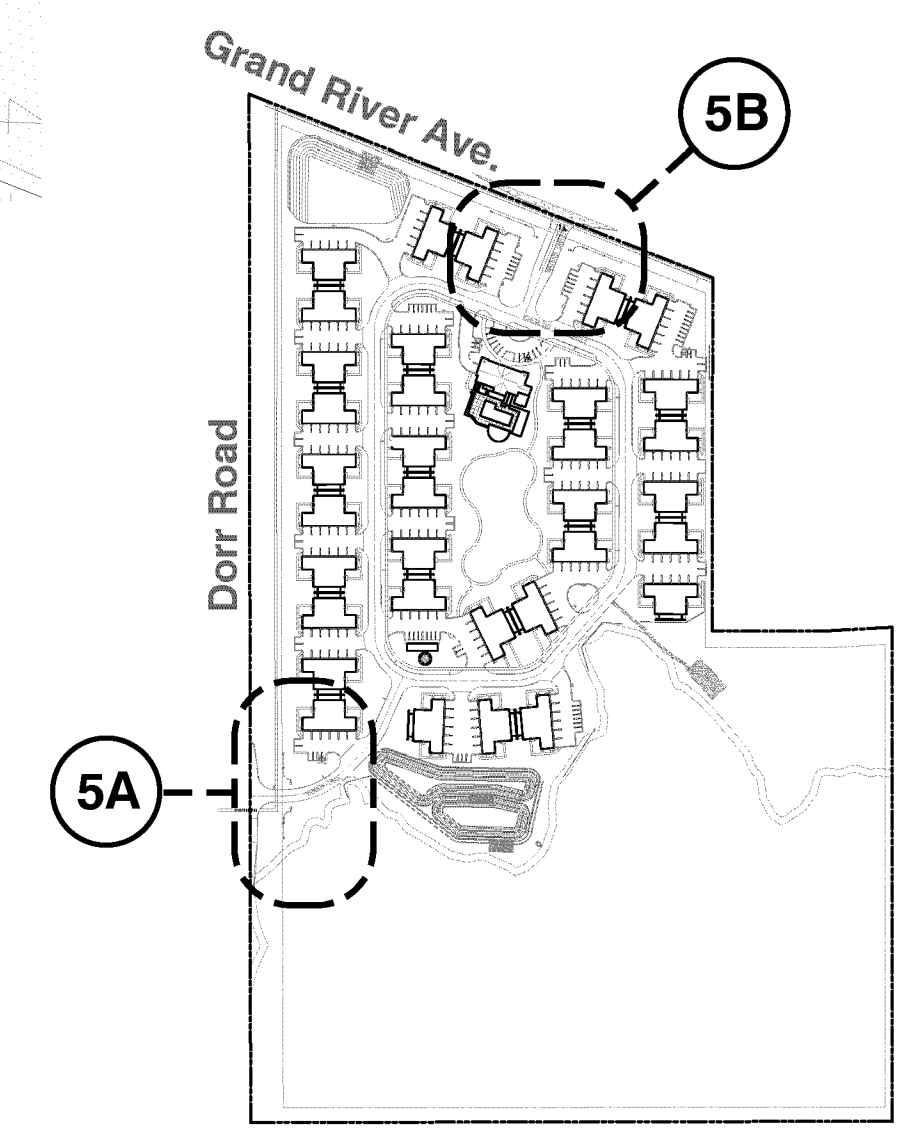
5A landscape planting detail
 SCALE: 1" = 40' - 0"



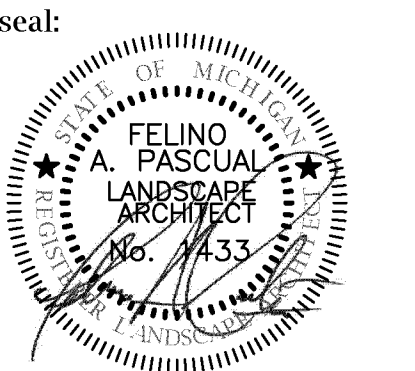
5B landscape planting detail
 SCALE: 1" = 40' - 0"

plant material list

key	quant. 5A	quant. 5B	botanical name	common name	size	comments
SHRUBS						
TD	-	54	TAXUS XM. DENSIFORMIS	JAPANESE DENSE YEW	3" CONT.	36" O.C. SPACING
BM	45	-	BUXUS 'GREEN MOUNTAIN'	GREEN MOUNTAIN BOXWOOD	30" CONT.	36" O.C. SPACING
VD	15	15	VIBURNUM DENSATA 'SYNNESTVEDT'	CHICAGO LUSTRE VIBURNUM	3" CONT.	60" O.C. SPACING
LV	-	42	LIGUSTRUM X. 'VICARY'	VICARY PRIVET	3" CONT.	60" O.C. SPACING
RAG	51	21	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	3" CONT.	42" O.C. SPACING
FI	-	20	FORSYTHIA INTERMEDIA	BORDER FORSYTHIA	3" CONT.	60" O.C. SPACING
BT	25	25	BERBERIS THUNBERGII 'CRIMSON PYGMY'	CRIMSON PYGMY BARBERRY	3" CONT.	24" O.C. SPACING
HP	-	6	HYDRANGEA P. 'BULK'	QUICK FIRE HYDRANGEA	3" CONT.	36" O.C. SPACING
HB	8	8	HYDRANGEA P. 'ILVOBO'	BOBO HYDRANGEA	3" CONT.	36" O.C. SPACING
PERENNIALS AND GRASSES						
M5G	6	6	MISCANTHUS SINENSIS 'GRACILLIMUS'	JAPANESE SILVER MAIDEN GRASS	3" CONT.	36" O.C. SPACING
EPM	50	50	ECHINACEA 'PIXIE MEADOWBRITE'	'PIXIE MEADOWBRITE' PURPLE CONEFLOWERS	1" CONT.	12" O.C. SPACING
GD	60	140	GERANIUM 'DILY'S'	DILY'S HARDY GERANIUM	1" CONT.	16" O.C. SPACING



key reference location map
 NO SCALE



client:
LAUTREC
 15750
 Northwestern
 HWY. Suite 200
 Farmington Hills,
 Michigan 48334

project:
**THE
 LEGACY
 APARTMENT
 HOMES**

project location:
 Genoa Township,
 Michigan
 Grand River Avenue &
 Dorr Road

sheet title:
 CLUBHOUSE & BUILDING
 FOUNDATION LANDSCAPE
 PLANTING PLAN

job no./issue/revision date:
 LS22.028.11 SPA 11-2-2022
 LS23.053.05 SPA 5-1-2023

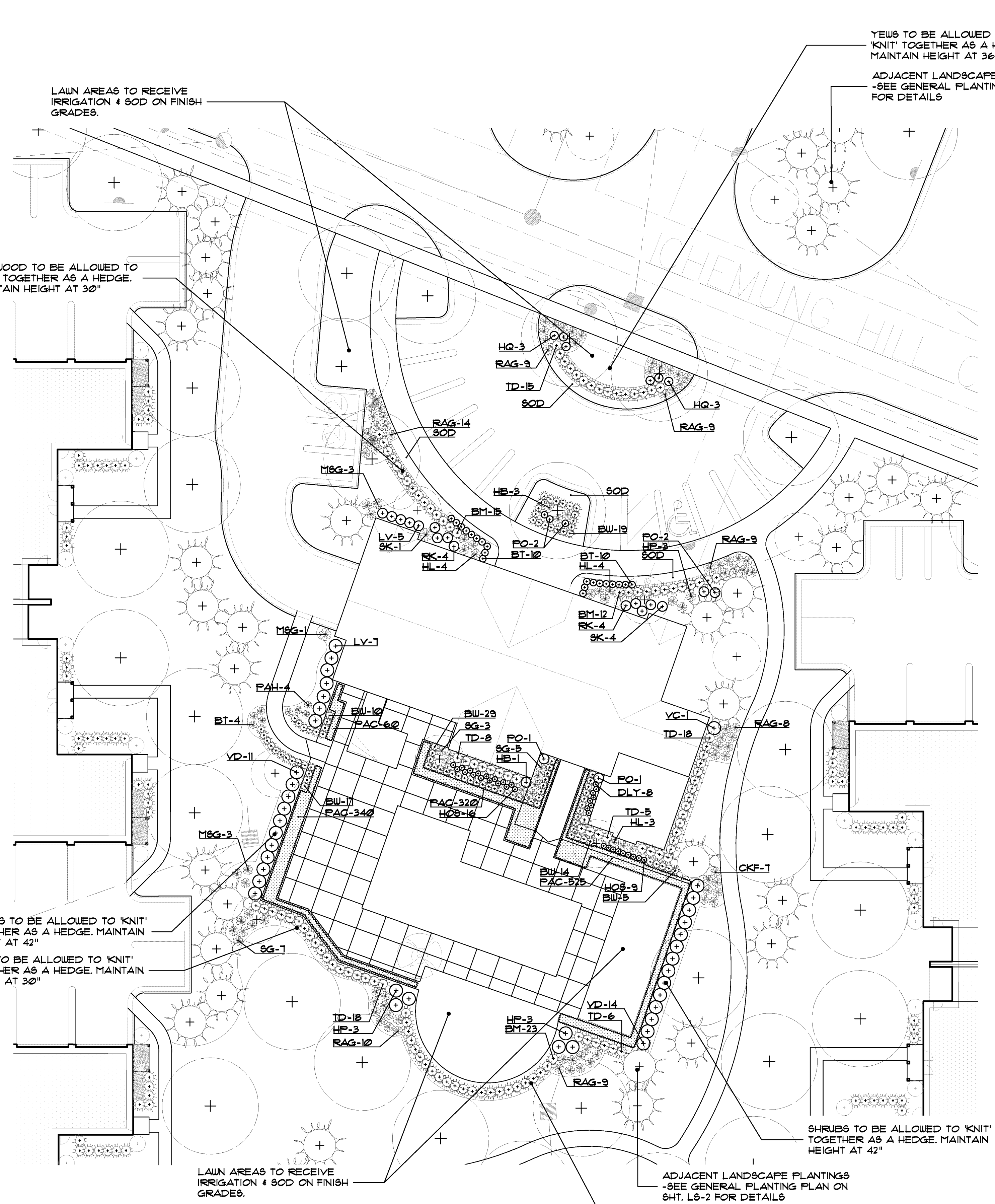
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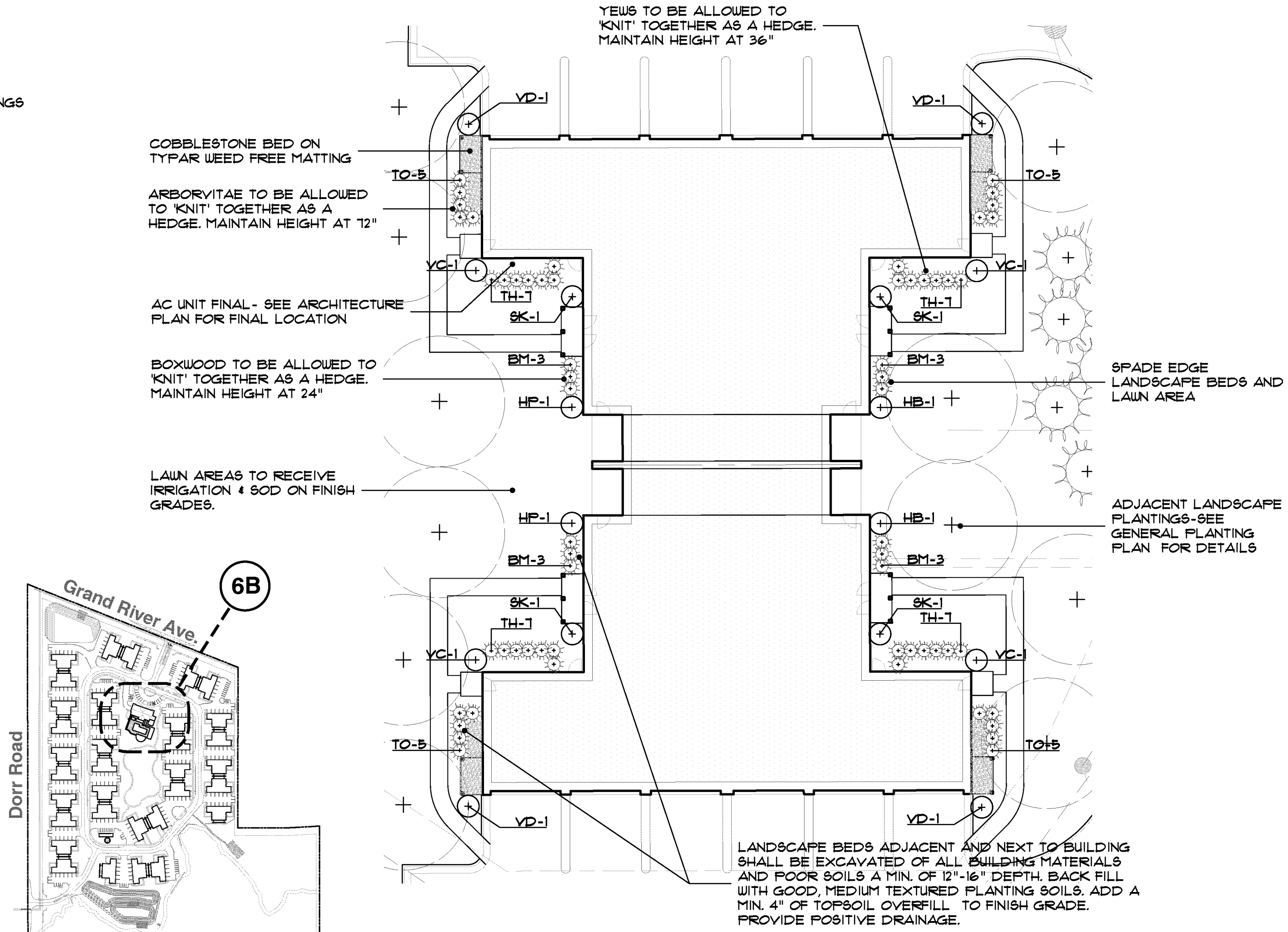


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project no:
LS23.053.05



6A clubhouse landscape planting detail
 SCALE: 1" = 20' - 0"



6B typical building foundation landscape planting detail
 SCALE: 1" = 20' - 0"



key reference location map
 NO SCALE

BUILDING CONDITIONS

NO. OF 6-UNIT BUILDING	2
NO. OF 12-UNIT BUILDING	16

plant material list

key	quant. 6A	quant. 6B	botanical name	common name	size	comments
SHRUBS						
TD	10	416	TAXUS XM. DENSIFORMIS	JAPANESE DENSE YEWS	36" CONT.	36" O.C. SPACING
BM	50	204	BUXUS 'GREEN MOUNTAIN'	GREEN MOUNTAIN BOXWOOD	30" CONT.	36" O.C. SPACING
BW	94	-	BUXUS 'VARDAR VALLEY'	VARDAR VALLEY BOXWOOD	30" CONT.	36" O.C. SPACING
VD	25	68	VIBURNUM DENSATA 'SYNNESTVEDT'	CHICAGO LUSTRE VIBURNUM	36" CONT.	60" O.C. SPACING
LV	12	-	LIGUSTRUM X. 'VICARYI'	VICARY PRIVET	36" CONT.	60" O.C. SPACING
RAG	68	-	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	36" CONT.	42" O.C. SPACING
BT	24	-	BERBERIS THUNBERGII 'CRIMSON PYGMY'	CRIMSON PYGMY BARBERRY	36" CONT.	24" O.C. SPACING
HP	9	34	HYDRANGEA P. 'BULK'	QUICK FIRE HYDRANGEA	36" CONT.	36" O.C. SPACING
HB	4	34	HYDRANGEA P. 'ILYOBO'	BOBO HYDRANGEA	36" CONT.	36" O.C. SPACING
HQ	6	-	HYDRANGEA P. 'BULK'	QUICK FIRE HYDRANGEA	36" CONT.	36" O.C. SPACING
HL	11	-	-	-	-	-
TO	-	340	THUJA OCCIDENTALIS 'TECHNY'	TECHNY ARBOVITAE	6" BB	48" O.C. SPACING
YC	1	68	VIBURNUM CARLESII	KOREAN SPICE VIBURNUM	36" CONT.	48" O.C. SPACING
RK	8	-	ROSA X OSA EASY 'DOUBLE RED'	OEO EASY DOUBLE RED RED ROSA	36" CONT.	48" O.C. SPACING
PO	6	-	PHYSCARPUS OPULIFOLIUS 'SEWARD'	SUMMER WINE NINEBARK	36" CONT.	42" O.C. SPACING
SG	15	-	SPHRAEA X.B. 'BUNALDA 'GOLDPLAME'	GOLDPLAME SPIREA	36" CONT.	36" O.C. SPACING
SK	5	68	SYRINGA PATULA 'MISS KIM'	MISS KIM DWARF LILAC	3" BB	48" O.C. SPACING
PERENNIALS AND GRASSES						
M8G	1	-	MISCANTHUS SINENSIS 'GRACILLIMUS'	JAPANESE SILVER MAIDEN GRASS	36" CONT.	36" O.C. SPACING
FAH	4	-	PENNISETUM ALOPECUROIDES 'HAMELN'	DWARF FOUNTAIN GRASS	36" CONT.	36" O.C. SPACING
CKF	1	-	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	36" CONT.	36" O.C. SPACING
H08	25	-	HOSTA 'PATRIOT'	PATRIOT HOSTA	11" CONT.	18" O.C. SPACING
PAC	1245	-	PACHYSANDRA TERMINALIS 'GREEN CARPET'	GREEN CARPET PACHYSANDRA	32"/FLAT	120" O.C. SPACING
DLY	8	-	CORNUS FLAVIRAMEA	HAPPY RETURN DAYLILY	11" CONT.	18" O.C. SPACING

detention pond landscape requirement:

detention pond-A		REQUIRED	PROVIDED	detention pond-B		REQUIRED	PROVIDED
TOTAL LIN.FT. OF POND PERIMETER		727±		TOTAL LIN.FT. OF POND PERIMETER		492±	
ONE (1) DECIDUOUS OR EVERGREEN TREE PER 50 LIN.FT. (127 LIN.FT. / 50 LIN.FT. = 14.5 TREES)		15	15	ONE (1) DECIDUOUS OR EVERGREEN TREE PER 50 LIN.FT. (492 LIN.FT. / 50 LIN.FT. = 9.84 TREES)		19	19
TEN (10) SHRUBS PER 50 LIN.FT. (127 LIN.FT. / 50 LIN.FT. = 14.5 X 10-SHRUBS=145)		145	145	TEN (10) SHRUBS PER 50 LIN.FT. (492 LIN.FT. / 50 LIN.FT. = 9.84 X 10-SHRUBS=106.4)		106	106

basin construction notes

PROPER CONSTRUCTION TECHNIQUES, PARTICULARLY INSTALLATION OF VEGETATION, ARE IMPORTANT TO THE SUCCESSFUL FUNCTIONING OF OPEN DETENTION BASINS, ESPECIALLY FOR CONSTRUCTED WETLAND TYPE OPEN DETENTION BASINS IN ORDER TO ESTABLISH A DENSE AND DIVERSE EMERGENT WETLAND PLANT COMMUNITY. GENERAL GUIDELINES FOR VEGETATION INSTALLATION INCLUDE:

- IF EMERGENT PLANT STOCK IS PROPOSED IN THE POND ZONE, THE SUPPLIED PLUS MATERIAL MUST HAVE SUFFICIENT VEGETATIVE GROWTH EXTENDING OUT OF THE WATER ONCE PLANTED.
- SEED MUST BE PLANTED ABOVE THE PERMANENT WATER ELEVATION.
- ALL SEEDED AREAS SHOULD BE PROPERLY STABILIZED WITH A MUGH BLANKET PEGGED IN PLACE.
- DEPENDING ON THE TYPE OF VEGETATION BARRIERS MAY BE REQUIRED FOR ONE YEAR TO PROTECT THE PLANTINGS (E.G. SNOW FENCE OR NETTING TO DETER WILDLIFE, PREVENT MOWING).
- IF DETENTION BASIN ARE COMPACTED, THE SLOPES MUST BE ROTOTILLED, 4" (FOUR) OF COMPOST OR TOPSOIL MUST BE ADDED
- "NO MOW ZONE" SIGNS MUST BE PLACED AROUND THE BASIN
- DETENTION BASIN NATIVE SEEDING TO BE PERFORMED IN EARLY SPRING OR LATE FALL. AQUATIC PLANTS SHOULD BE ESTABLISHED IN THE SUMMER AFTER THE COVER CROP HAS ESTABLISHED

lawn area:

SOD LAWN AREAS SHALL BE KENTUCKY BLUE GRASS BLEND GRASS IN A SOD NURSERY ON LOAM SOIL. SOD TO BE INSTALLED ON MINIMUM 4" TOPSOIL.

SEEDED LAWN AREAS SHALL CONSIST OF THE FOLLOWING TYPES AND PROPORTIONS:

- 5% PERENNIAL RYE GRASS
- 10% RED FESCUE
- 25% CHEWING FESCUE
- 60% KENTUCKY BLUE GRASS

SEED MIX SHALL BE APPLIED AT A RATE OF 200 POUNDS PER ACRE AND WEED CONTENT SHALL NOT EXCEED 1% SEED. PROVIDE A MINIMUM 4" TOP SOIL ON ALL SEEDED LAWN AREA

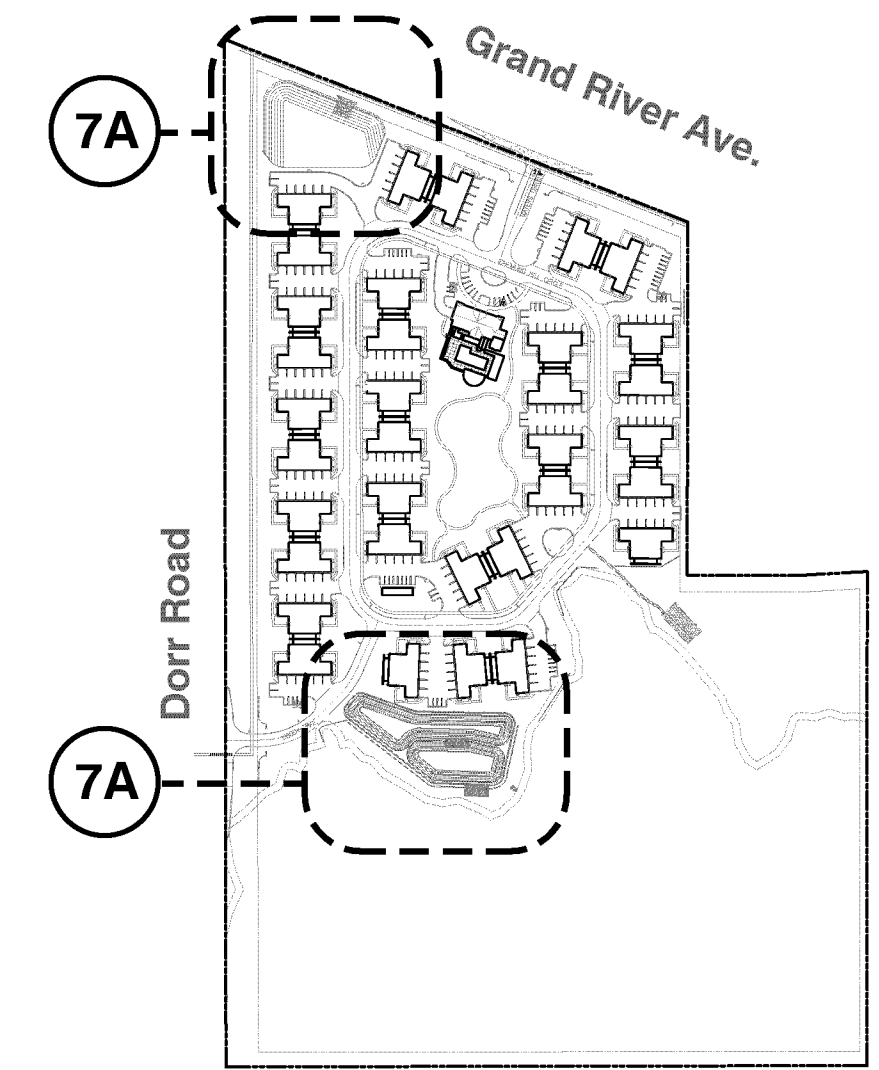
economy prairie seed mix

THIS PRAIRIE SEED MIX OFFERS AN ECONOMICAL WAY TO ESTABLISH A PRAIRIE. IN ADDITION TO NATIVE PRAIRIE GRASSES, FLOWERING SPECIES PROVIDE COLOR THROUGHOUT THE GROWING SEASON AND FOOD SOURCES FOR BIRDS AND BUTTERFLIES. ADDING SEED OR PLANT PLUGS AT A LATER DATE IS A WONDERFUL WAY TO INCREASE A PRAIRIE'S RICHNESS AND DIVERSITY. THIS SEED MIX INCLUDES AT LEAST 6 OF 7 NATIVE PERMANENT GRASS AND SEDGE SPECIES AND 10 OF 13 NATIVE FORB SPECIES. APPLY AT 40.95 PLS POUNDS PER ACRE.

BOTANICAL NAME	COMMON NAME	PLS OZ/ACRE
PERMANENT GRASSES/SEDGES		
ANDROPOGON GERARDII	BIG BLUESTEM	12.00
BOUTELOQUIA CURTIPENDULA	SIDE-OATS GRAMA	16.00
CAREX SPP.	PRAIRIE SEDGE SPECIES	3.00
ELYMUS CANADENSIS	CANADA WILD RYE	24.00
PANICUM VIRGATUM	SWITCH GRASS	2.50
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	32.00
SORGHASTRUM NUTANS	INDIAN GRASS	12.00
TOTAL		101.50

TEMPORARY COVER		
AVENA SATIVA	COMMON OAT	512.00
TOTAL		512.00

FORBS		
ASCLEPIAS SYRIACA	COMMON MILKWEED	1.00
ASCLEPIAS TUBEROSA	BUTTERFLY WEED	1.00
CHAMAECRISTA FASCICULATA	PARRTRIDGE PEA	10.00
COREOPSIS LANCEOLATA	SAND COREOPSIS	6.00
ECHINACEA PURPUREA	BROAD-LEAVED PURPLE CONEFLOWER	8.00
HELIOPSIS HELIANTHOIDES	FALSE SUNFLOWER	0.25
MONARDA FISTULOSA	WILD BERGAMOT	0.50
PENSTEMON DIGITALIS	FOXGLOVE BEARD TONGUE	1.00
RATIBIDA PINNATA	YELLOW CONEFLOWER	4.00
RUDBECKIA HIRTA	BLACK-EYED SUSAN	8.00
SOLIDAGO SPECIOSA	SHOWY GOLDENROD	0.50
SYMPHYOTRICHUM LAEVE	SMOOTH BLUE ASTER	1.00
SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	0.50
TOTAL		41.75



key reference location map
NO SCALE

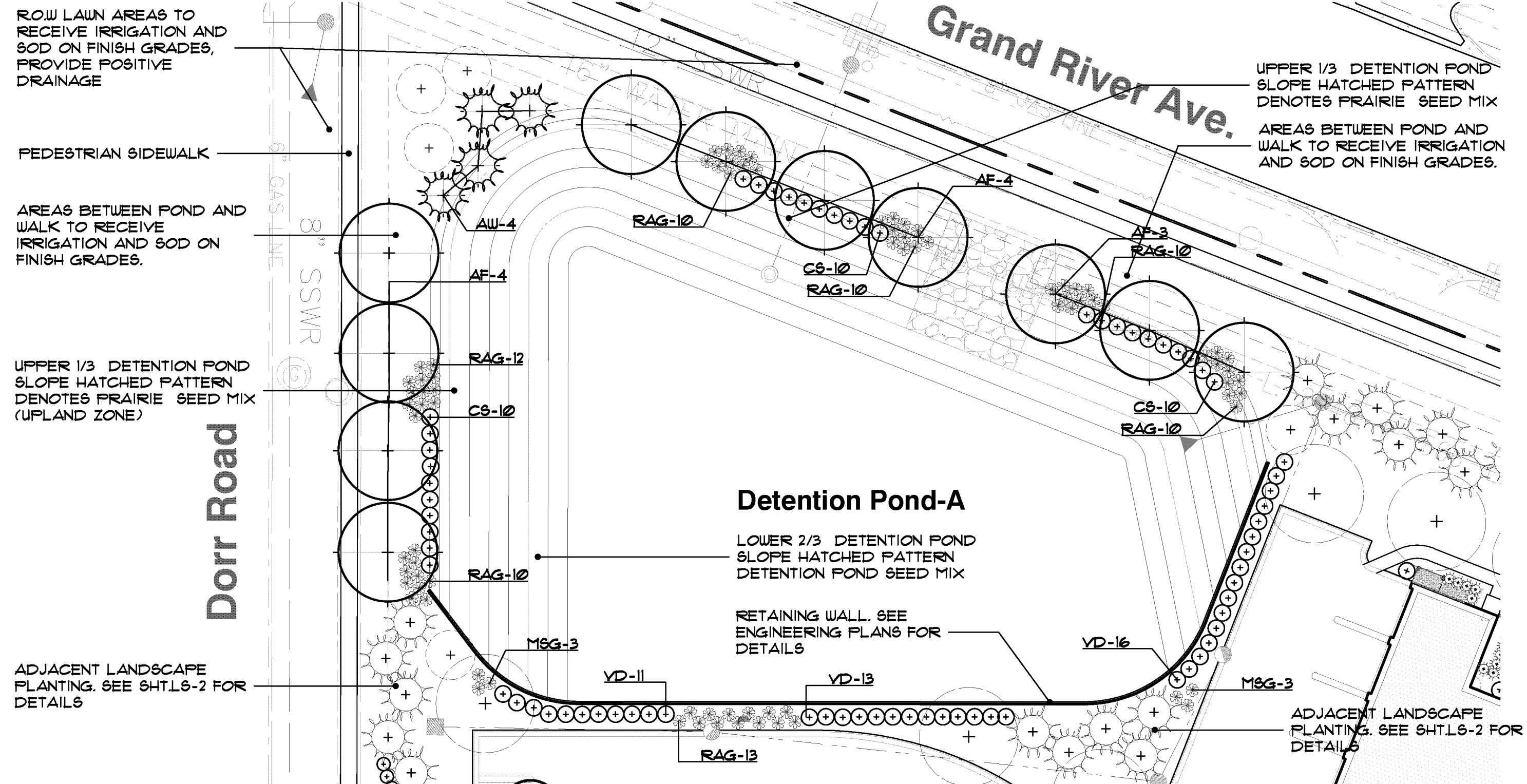
detention basin seed mix

A WETLAND SEED MIX FOR SATURATED SOILS IN A DETENTION POND OR FOR SEEDING A SATURATED BASIN. THIS MIX WILL TOLERATE HIGHLY FLUCTUATING WATER LEVELS AND POOR WATER QUALITY ASSOCIATED WITH URBAN STORMWATER WETLANDS AND PONDS. FOR DETENTION BASINS THAT EXPERIENCE LONG, DRY PERIODS, USE THE ECONOMY PRAIRIE SEED MIX IN THE UPPER THIRD TO HALF OF THE BASIN AREA IN COMBINATION WITH THIS MIX. THIS SEED MIX INCLUDES AT LEAST 10 OF 12 NATIVE PERMANENT GRASS AND SEDGE SPECIES AND 13 OF 17 NATIVE FORB SPECIES. APPLY AT 38.22 PLS POUNDS PER ACRE.

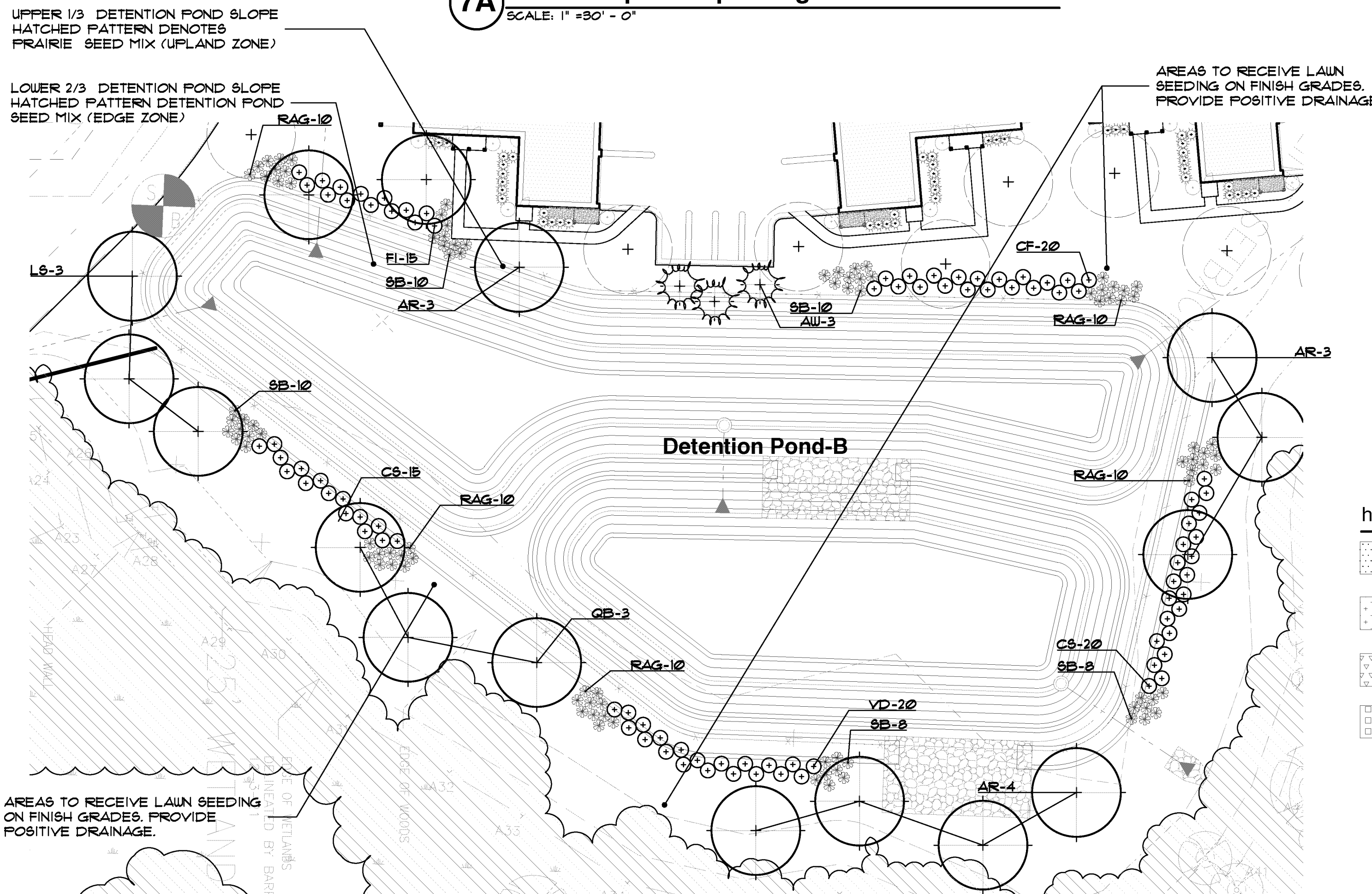
BOTANICAL NAME	COMMON NAME	PLS OZ/ACRE
PERMANENT GRASSES/SEDGES		
BOLBOSCHOENUS FLUVIATILIS	RIVER BULRUSH	1.00
CAREX CRISTATELLA	CRESTED OVAL SEDGE	0.50
CAREX LURIDA	BOTTLEBRUSH SEDGE	3.00
CAREX VULPINOIDEA	BROWN FOX SEDGE	2.00
ELYMUS VIRGINICUS	VIRGINIA WILD RYE	24.00
GLYCERIA STRIATA	FOWL MANNA GRASS	1.00
JUNCUS EFFUSUS	COMMON RUSH	1.00
LEERSIA ORYZOIDES	RICE CUT GRASS	1.00
PANICUM VIRGATUM	SWITCH GRASS	2.00
SCHOENOPLECTUS TABERNAEMONTANI	GREAT BULRUSH	3.00
SCIRPUS ATROVIRENS	DARK GREEN RUSH	2.00
SCIRPUS CYPERSINUS	WOOL GRASS	1.00
TOTAL		41.50

TEMPORARY COVER		
AVENA SATIVA	COMMON OAT	512.00
TOTAL		512.00

FORBS		
ALISMA SUBCORDATUM	COMMON WATER PLANTAIN	2.50
ASCLEPIAS INCARNATA	SWAMP MILKWEED	2.00
BIDENS SPP. BIDENS	SPECIES	2.00
EUPATORIUM PERFOLIATUM	COMMON BONESET	1.00
HELENIUM AUTUMNALE	SNEEZEWEED	2.00
IRIS VIRGINICA V. SHREVEI	BLUE FLAG	4.00
LYCOPUS AMERICANUS	COMMON WATER HOREHOUND	0.50
MMULUS RINGENS	MONKEY FLOWER	1.00
PENTHORUM SEDOIDES	DITCH STONECROP	0.50
PERSICARIA SPP.	PINKWEED SPECIES	2.00
RUDBECKIA SUBTOMENTOSA	SWEET BLACK-EYED SUSAN	1.00
RUDBECKIA TRILOBA	BROWN-EYED SUSAN	1.50
SAGITTARIA LATIFOLIA	COMMON ARROWHEAD	1.00
SENNA HEBECARPA	WILD SENNA	2.00
SYMPHYOTRICHUM LANCEOLATUM	PANICLED ASTER	0.50
SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	0.50
THALICTRUM DASYCARPUM	PURPLE MEADOW RUE	2.00
TOTAL		28.00



7A detention pond-A planting detail
SCALE: 1" = 30' - 0"



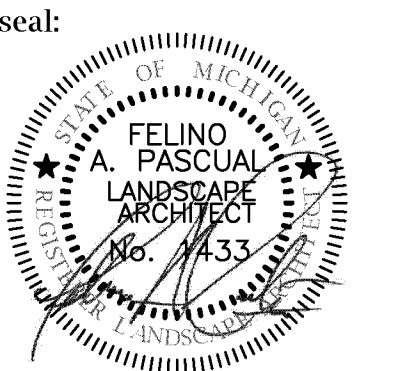
7B detention pond-B planting detail
SCALE: 1" = 30' - 0"

hatch pattern legend

- AREAS TO RECEIVE IRRIGATION AND SOD, MAINTAINED AND MOWED WEEKLY
- AREAS TO RECEIVE LAWN SEEDING
- AREAS TO RECEIVE PRAIRIE SEED MIX. (NO MOWED AREA)
- AREAS TO RECEIVE DETENTION POND SEED MIX

plant material list

key	quant.	quant.	botanical name	common name	size	comments
CANOPY AND EVERGREEN TREES						
GB	-	3	QUERCUS 'BICOLOR'	SWAMP WHITE OAK	2 1/2" BB	
AR	-	1	ACER R. 'FRANKFORD'	RED SUNSET RED MAPLE	2 1/2" BB	
AF	11	-	ACER X. 'FRESHMANII'	AUTUMN BLAZE RED MAPLE	2 1/2" BB	
LS	-	3	LIQUIDAMBAR STRACIFLUA	AMERICAN SWEETGUM	2 1/2" BB	
AW	4	3	ABIES CONCOLOR	CONCOLOR WHITE FIR	6" BB	
SHRUBS						
RAG	15	50	VIBURNUM D. 'SYNNESTVEDT'	GRG LOW FRAGRANT BUMAC	3" CONT.	42" O.C. SPACING
VD	40	20	VIBURNUM D. 'SYNNESTVEDT'	CHICAGO LUSTRE VIBURNUM	3" CONT.	60" O.C. SPACING
CS	30	35	CORNUS STOLONIFERA	REDTUIG DOGWOOD	3" CONT.	60" O.C. SPACING
CF	-	20	CORNUS FLAVIRAMEA	YELLOWTUIG DOGWOOD	3" CONT.	60" O.C. SPACING
SB	-	40	SPIRAEA X.B. BIMALDA 'GOLDFLAME'	GOLDFLAME SPIRAEA	3" CONT.	42" O.C. SPACING
FI	-	15	FORSYTHIA INTERMEDIA	BORDER FORSYTHIA	3" CONT.	60" O.C. SPACING
GRASSES						
MEG	6	-	MISCANTHUS SINENSIS 'MORNING LIGHT'	MORNING LIGHT JAPANESE SILVER GRASS	3" CONT.	48" O.C. SPACING



client:
LAUTREC
31550
Northwestern
HWY. Suite 200
Farmington Hills,
Michigan 48334

project:
**THE
LEGACY
APARTMENT
HOMES**

project location:
Genoa Township,
Michigan
Grand River Avenue &
Dorr Road

sheet title:
DETENTION LANDSCAPE
PLANTING DETAIL PLAN

job no./issue/revision date:
LS22.028.11 SPA 11-2-2022
LS23.053.05 SPA 5-1-2023

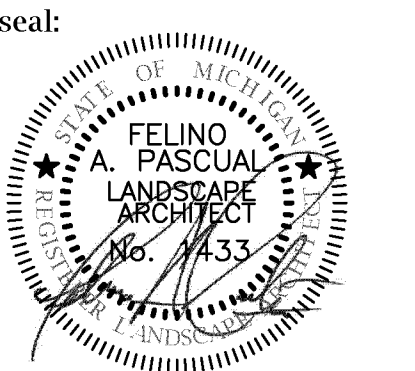
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JP, HP, DK
checked by:
FP
date:
4-15-2023

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project no:
LS23.053.05



client:
LAUTREC
 31550
 Northwestern
 HWY. Suite 200
 Farmington Hills,
 Michigan 48334

project:
**THE
 LEGACY
 APARTMENT
 HOMES**

project location:
 Genoa Township,
 Michigan
 Grand River Avenue &
 Dorr Road

sheet title:
 ENTRNCE SIGN
 MONUMENT

job no./issue/revision date:
 LS22.028.11 SPA 11-2-2022
 LS23.053.05 SPA 5-1-2023

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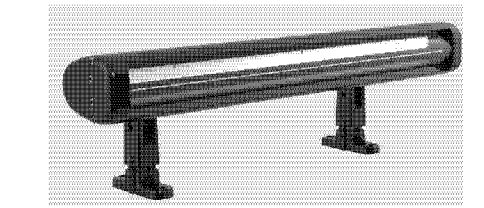
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sheet no:

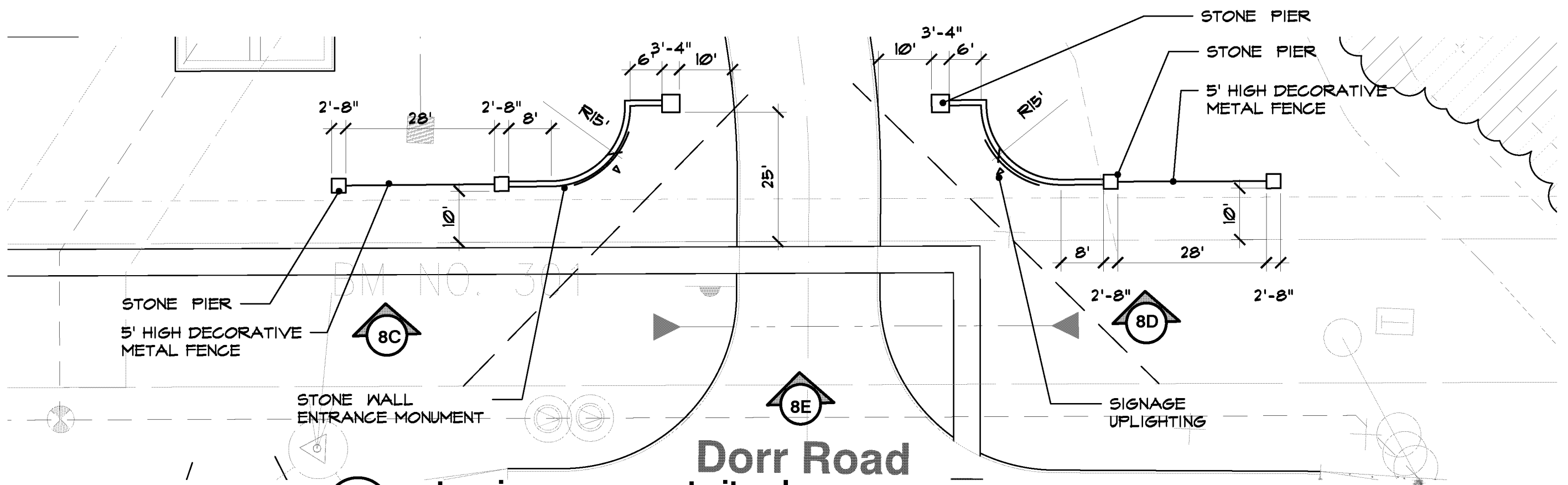
entry wall monument / pier / signage / notes:

1. LOCATE AND STAKE ALL EXISTING AND PROPOSED UTILITIES PRIOR TO CONSTRUCTION. COORDINATE ANY ADJUSTMENTS WITH LANDSCAPE ARCHITECT.
2. ALL ENTRY WALL LIGHTING SHALL BE CONTROLLED WITH A "PHOTO-EYE" SWITCH. ALL LIGHTING SHALL BE SHIELDED FROM PUBLIC ROWS AND ADJACENT PROPERTIES.
3. SEE LANDSCAPE PLAN FOR PROPOSED PLANTINGS ADJACENT TO PROPOSED ENTRY SIGN MONUMENT ON SHT. LS-2
4. VERIFY SOIL BEARING CAPACITY PRIOR TO TO ENTRY SIGN MONUMENT & PIER CONSTRUCTION. IF SOIL BEARING CAPACITY FALLS BELOW STANDARD REQUIREMENTS, CONSULT STRUCTURAL ENGINEER FOR RECOMMENDATION OF FINAL ENTRY MONUMENT & PIER FOOTING DESIGN.
5. SIGNAGE TEXT AND LOGO TO BE METAL PRISMATIC DIMENSIONAL LETTERS. PRIOR TO SIGN INSTALLATION, PERMITS TO BE OBTAINED PER GENOA TOWNSHIP REQUIREMENTS AND APPROVALS.
6. ALL INFORMATION CONTAINED HEREIN IS SUBJECT TO APPROVAL, AND PERMITS PERMITS TO BE OBTAINED PRIOR TO CONSTRUCTION.
7. FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED SOIL WITH AN ASSUMED SAFE BEARING CAPACITY OF 2000 P.S.I. IF SOIL OF THIS CAPACITY IS NOT FOUND AT THE ELEVATIONS INDICATED, FOOTINGS SHALL BE ENLARGED OR LOWERED AT THE DIRECTION OF THE ARCHITECT. VERIFY FOUNDATION SOIL BEARING PRESSURE IN FIELD BY SOILS ENGINEER.
8. MINIMUM CONCRETE STRENGTH TO BE 3000 P.S.I. • 28 DAYS, U.O.N. SLABS SHALL BE 3500 P.S.I. MIN. U.O.N. EXPOSED CONCRETE SHALL BE 4000 P.S.I. WITH 6% ± 1% ENTRAINED AIR U.O.N.
9. ALL CONCRETE WORK AND PLACEMENT SHALL CONFORM TO THE LATEST RECOMMENDATIONS OF ACI.
10. PROVIDE DOUELS INTO FOUNDATION TO MATCH SIZE AND SPACING OF VERTICAL REINFORCEMENT AT ALL WALLS, UNLESS OTHERWISE NOTED.
11. PROVIDE MINIMUM 3" CONCRETE COVER FOR REINFORCEMENT BARS BELOW GRADE AND MINIMUM 2" CONCRETE COVER FOR REINFORCEMENT BARS ABOVE GRADE.

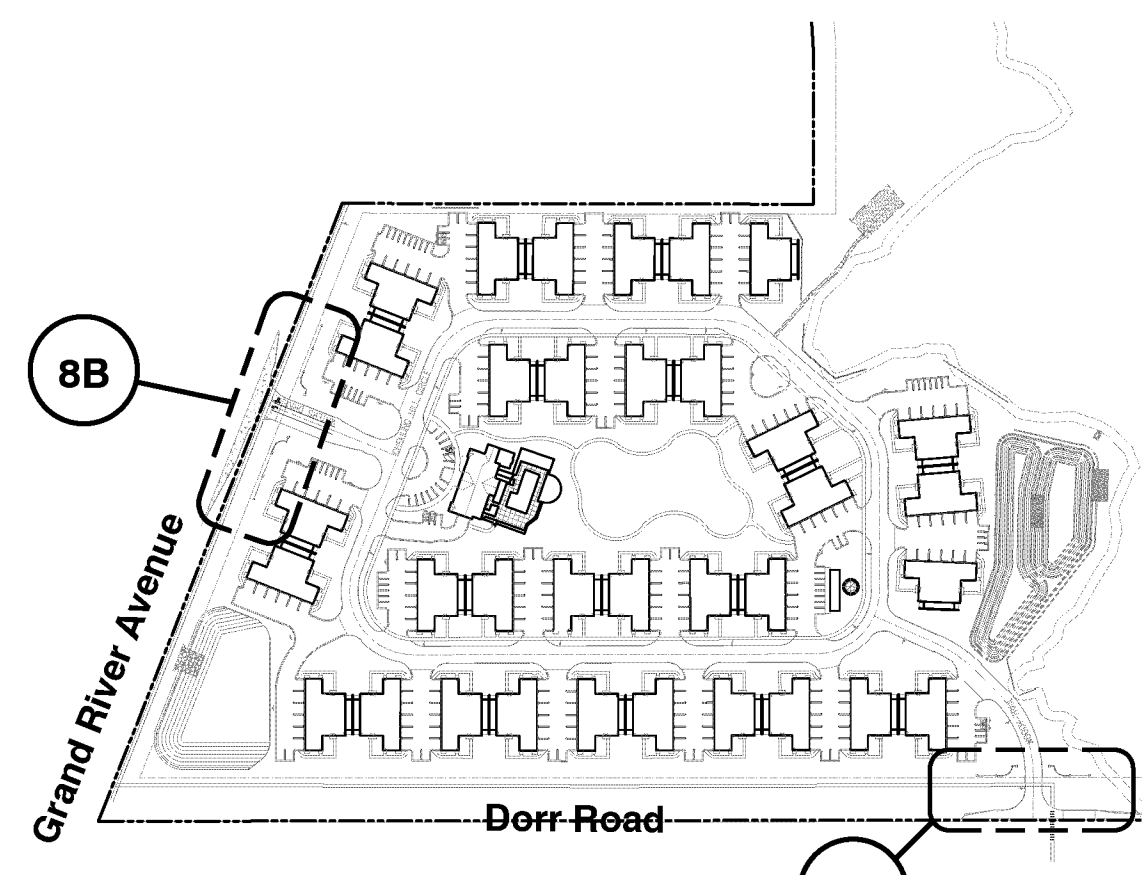


sign panel uplighting
 (4-CONDITIONS)

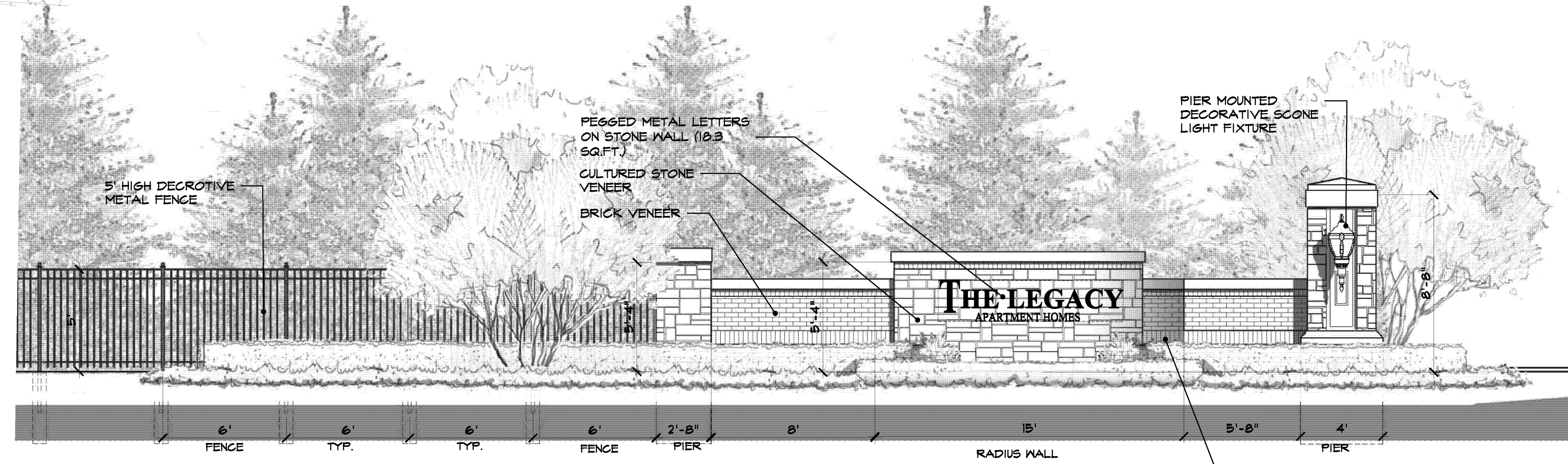
MANUFACTURER:
 ACUITY BRANDS LIGHTING
 ONE LITHONIA WAY
 CONYERS, GA 30012
 PEACHTREE, GA 30269
 PH. 770-322-9000
 BRAND: HYDREL
 MODEL: 4750SF OR EQUAL
 (LED 4000K)
 FINISH : BRONZE



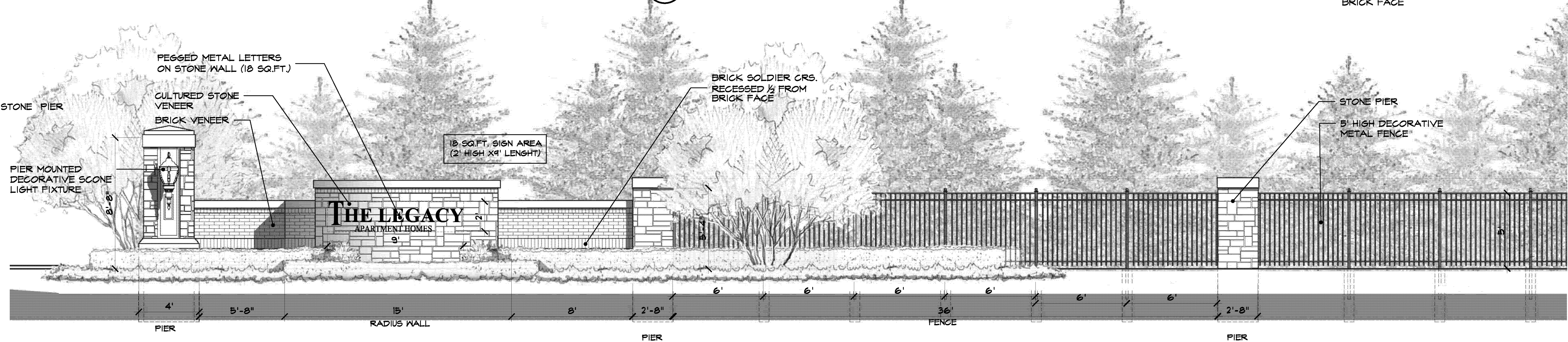
8A entry sign monument site plan
 SCALE: 1" = 20' - 0"



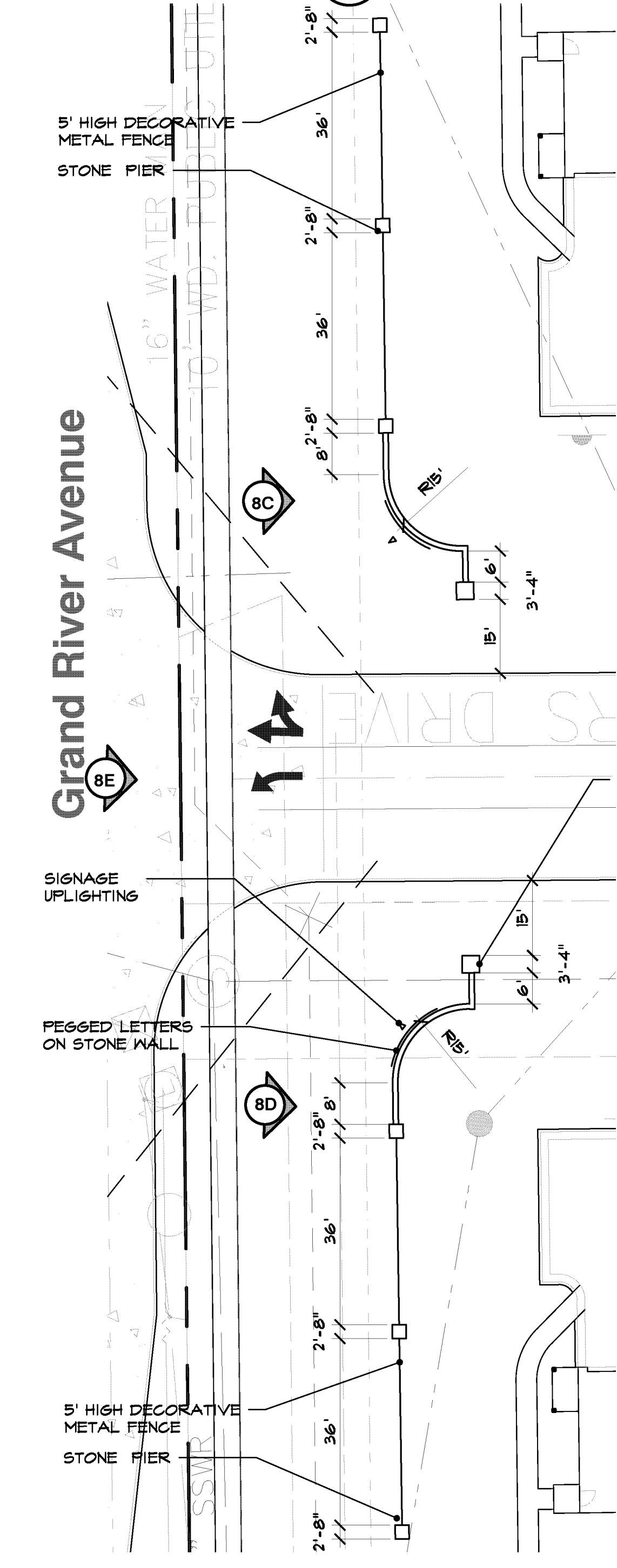
8B key reference location map
 NO SCALE



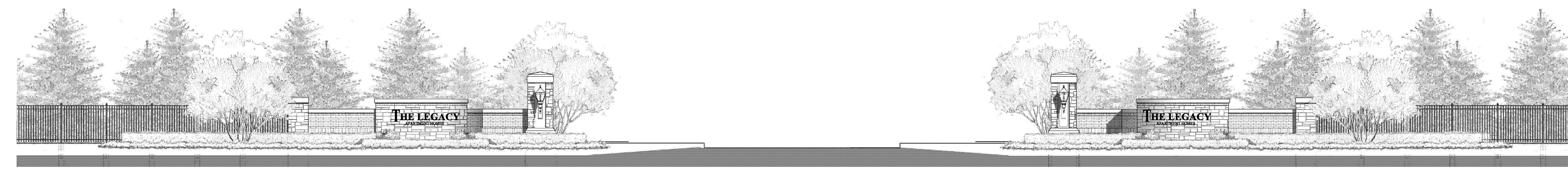
8C entry sign monument elevation
 SCALE: 1/4" = 1' - 0"



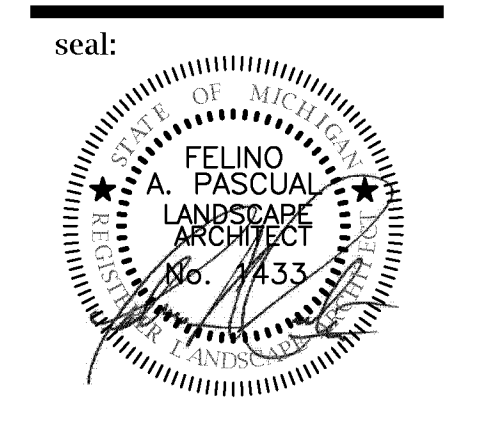
8D entry sign monument elevation
 SCALE: 1/4" = 1' - 0"



8B entry sign monument site plan
 SCALE: 1" = 20' - 0"



8E entry sign monument elevation
 SCALE: 1/8" = 1' - 0"



client:
LAUTREC
 31550
 Northwestern
 HWY. Suite 200
 Farmington Hills,
 Michigan 48334

project:
**THE
 LEGACY
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project location:
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SITE AMENITY PLAN

job no./issue/revision date:
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drawn by:
JP, HP, DK
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FP
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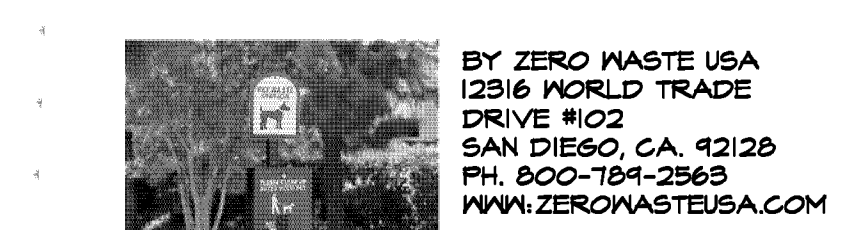
**3 WORKING DAYS
 BEFORE YOU DIG
 CALL MISS DIG
 1-800-482-7171**
 for free location of your utility lines

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 underground utilities as shown on this
 drawing are only approximate. no guarantee
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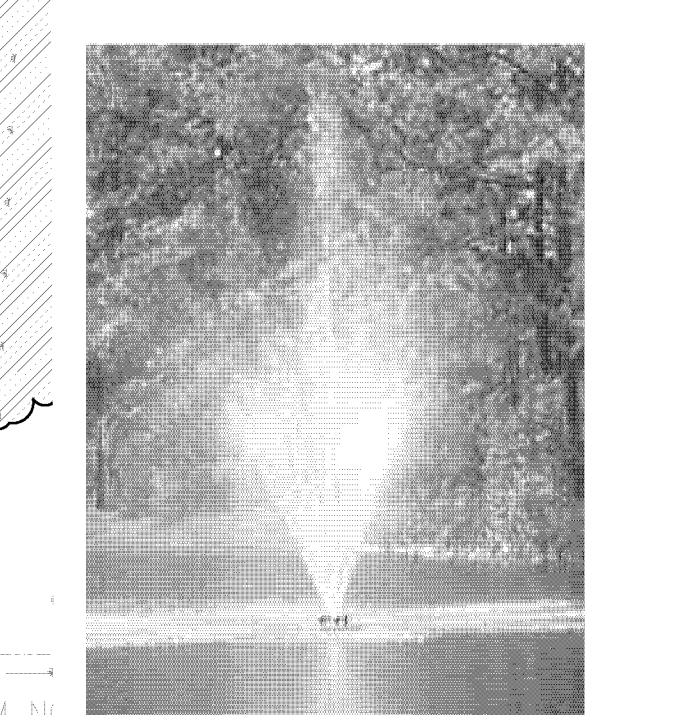
project no:
LS23.053.05
 sheet no:

site amenity key

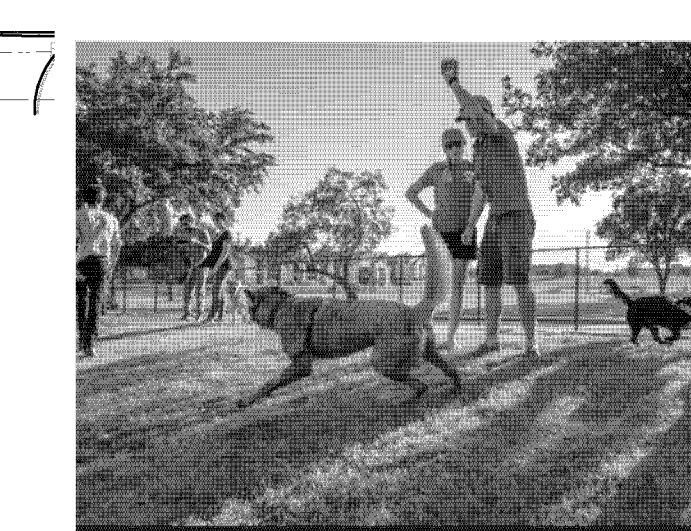
- BIKE RACK
- PARK BENCH SEAT
- BENCH SEAT
- BOLLARD LIGHT
- STREET POLE LIGHT
- GAZEBO or PERGOLA FEATURE
- PET WASTE STATION
- TRASH RECEPTACLE
- EV CHARGING STATION



K pet waste station
 TOTAL OF 5-CONDITIONS



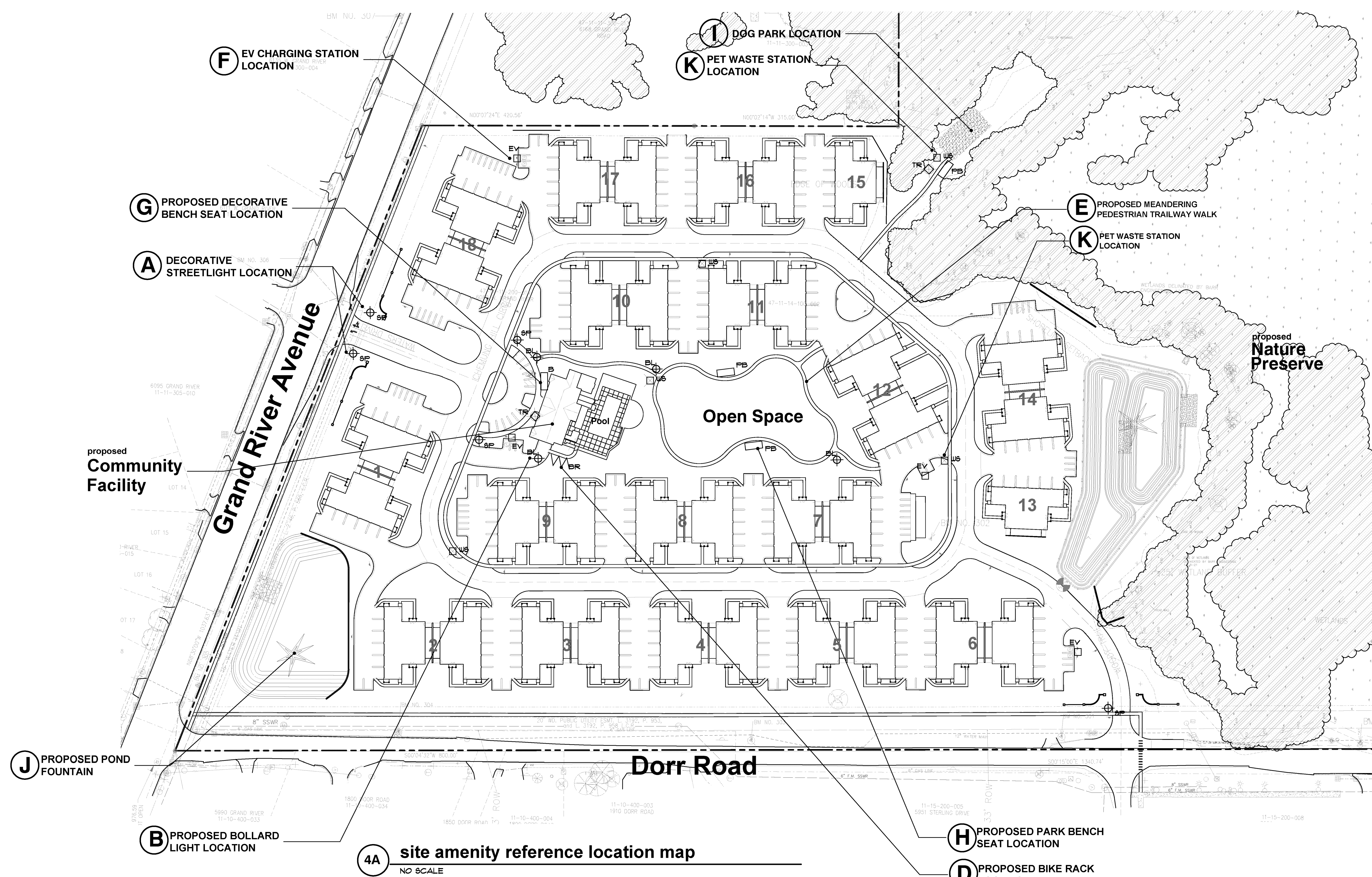
J pond fountain
 TOTAL OF 2-CONDITIONS



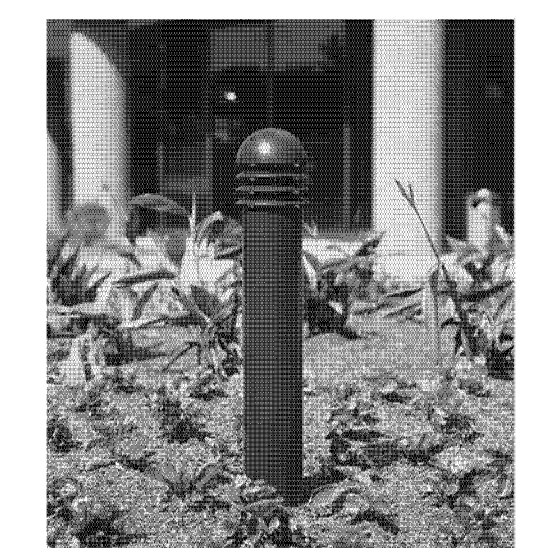
I dog park



H park bench seating
 TOTAL OF 3-CONDITIONS
 6' WIDE PARK BENCH SEAT BY DUMOR, INC.
 MODEL NO. 34-60D (5-1)
 SUPPORT: 5-1 EMBEDMENT
 FINISH: BLACK POWER-COATED



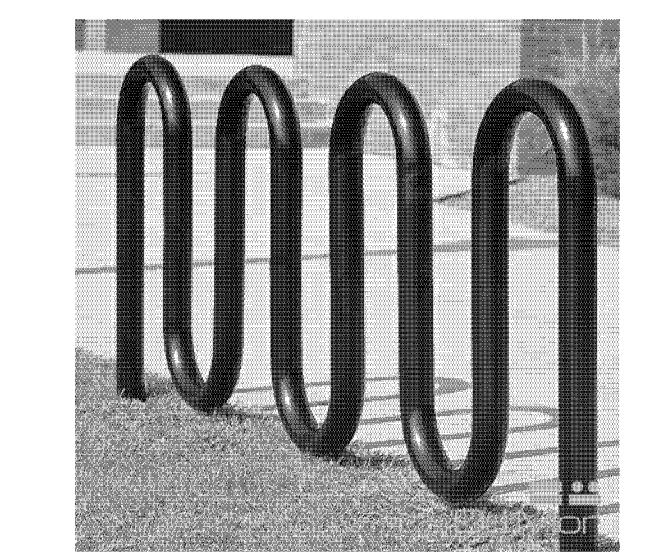
A decorative pole and light
 (5-CONDITION)
 DECORATIVE BLVD. ISLAND
 SITE FIXTURE LIGHTS AND
 ALUMINUM POLE.



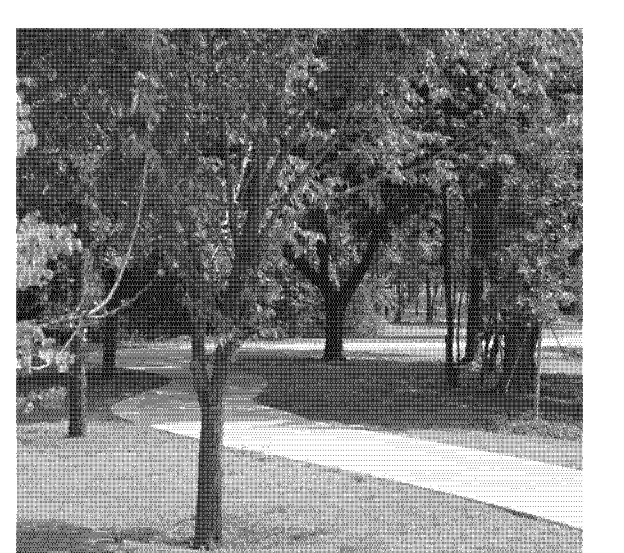
B bollard light
 BY LITHONIA LIGHTS OR
 EQUAL MODEL. DSXB LED
 (D-SERIES LED BOLLARD
 8\"/>



C trash receptacle
 (2-CONDITION)
 MANUFACTURED BY BY
 ANOVA, INC.
 WWW.ANOVAFURNISHINGS.COM
 DESCRIPTION: 52 GAL
 FINISH: TEXTURE PEPPER



D bicycle rack
 (2-CONDITIONS)
 BIKE RACK BY DUMOR, INC.
 MODEL NO. 180-20 (S-2
 SURFACE PLATE MOUNT) 2 3/8\"/>



E meandering interior pedestrian walk



F EV charging station
 TOTAL OF 4-CONDITIONS



G decorative bench seating
 TOTAL OF 1-CONDITIONS
 MANUFACTURED BY BY ANOVA, INC.
 WWW.ANOVAFURNISHINGS.COM
 MODEL NO. LEXC6
 DESCRIPTION: 6' WIDE CONTOUR BENCH
 FINISH: TEXTURE PEPPER

Notes:

Applicable Building Codes:

MICHIGAN BUILDING CODE 2015
STATE OF MICHIGAN ELECTRICAL CODE 2017 w/PART 8 AMENDMENTS
MICHIGAN MECHANICAL CODE 2015
MICHIGAN PLUMBING CODE 2015
ANSI A117.1 - 2009 ACCESSIBILITY CODE
INTERNATIONAL FIRE CODE 2015
MICHIGAN 2015 USE TYPE : R-2 (Apartments) U (Private Garages)
MICHIGAN 2015 CONSTRUCTION TYPE: II-B

Areas:

Table with 4 columns: UNIT, R-2, U, Total. Rows include UNIT "A", UNIT "B", UNIT "C", TOTAL PER QUADRANT, and TOTAL FOR HALF BUILDING.

A 2 HOUR FIRE WALL IS REQUIRED BETWEEN THE RIGHT & LEFT HALVES OF THE BUILDING.
A 1 HOUR SEPERATION WILL BE PROVIDED BETWEEN THE 2 QUADRANTS.
A 1 HOUR SEPERATION WILL PROVIDED BETWEEN THE FIRST FLOOR AND THE SECOND FLOOR
A 1 HOUR SEPERATION WILL BE PROVIDED BETWEEN THE APARTMENTS AND THE PRIVATE GARAGE AREA.
A 1 HOUR SEPERATION WILL BE PROVIDED BETWEEN THE SECOND FLOOR AREA AND THE ATTIC

Occupancies:

1 OCCUPANT PER 200 s/f OF AREA PER TABLE 1004.1.2

Table with 2 columns: UNIT, Occupancy. Rows include UNIT "A", UNIT "B", UNIT "C", TOTAL PER QUADRANT, and TOTAL PER BUILDING.

Fire Supression:

A NFPA 13-R 2010 AUTOMATIC FIRE SUPPRESSION SYSTEM SHALL BE PROVIDED THROUGHOUT ALL AREAS OF THE BUILDING INCLUDING GARAGES, BALCONIES AND GROUND FLOOR PATIOS AS PER CHAPTER 9 OF THEMBC- 2012.
SMOKE ALARMS TO BE PROVIDED AS PER SECTION 907.2.9.2 & 907.2.11.2 OF THE MBC-2012.
CARBON MONOXIDE ALARMS TO BE PROVIDED AS PER SECTION 908.7 OF THE MBC-2012.

ATTIC DRAFT STOPS:

EACH OF THE ATTICS ABOVE THE SECOND FLOOR UNITS ARE SEPERATED BY THE EXTENSION OF THE FIRE WALLS BELOW SEPERATING EACH UNIT. THESE WALLS EXTEND TO THE UNDERSIDE OF THE ROOF DECK. THE WALL SEPERATING THE RIGHT HALF OF THE BUILDING FROM THE LEFT HALF IS A 2 HOUR FIRE RATED WALL. THE WALL SEPERATING THE FRONT UNITS FROM THE REAR UNITS ARE A 1 HOUR WALL. EACH OF THE ATTIC SPACES IS LESS THAN THE MAXIMUM OF 3,000 s/f.

Seperate Submittals

- 1. SHOP DRAWINGS FOR ENGINEERED FLOOR JOIST SYSTEMS & PRE-ENGINEERED ROOF TRUSSES SYSTEMS. ALL DRAWINGS TO BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER IN THE STATE OF MICHIGAN.
2. FIRE SUPPRESSION SYSTEM DESIGN DRAWINGS. ALL DRAWINGS TO BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER IN THE STATE OF MICHIGAN.
3. ALL INTERIOR FINISHES SHALL MEET A CLASS C FLAME SPREAD INDEX 76-200 AND SMOKE-DEVELOPED INDEX 0-450. PROVIDE PRODUCT CUT SHEETS TO THE BUILDING DEPARTMENT SHOWING COMPLIANCE.

Special Inspections:

ALL SPECIAL INSPECTIONS SHALL BE DONE BY McDOWELL & ASSOCIATES
- GEOTECHNICAL TESTING
- SOIL BEARING CAPACITIES
- CONCRETE TESTING

COPIES OF ALL REPORTS TO BE SUBMITTED TO THE BUILDING DEPARTMENT OF MACOMB TOWNSHIP

Proposed New Apartments for:

M J C Avalon

Attic Areas & Ventilation Requirements

(PER MBC 2015 SEC 1203)

ATTIC AREAS

Above Unit B: 1,611 S.F.
Above Unit C: 1,726 S.F.

VENTILATION AREA REQUIRED: 1/300 ALLOWED (Per 1203.2) IF: MORE THAN 50% AND LESS THAN 80% OF REQUIRED VENTILATION TO BE LOCATED IN THE UPPER PORTION OF THE ATTIC SPACE

Unit B: 1,611 S.F. x 1/300 = 5.37 S.F.
Unit C: 1,726 S.F. x 1/300 = 5.75 S.F.

VENTILATION AREA PROVIDED:

Unit B: 36'-0" L.F. Soffit Vent @ 5 Sq. In./Ft. = 180 Sq. In.
144 Sq. In. per 36 Sq. Ft.
Unit B: (10) Style 600 Roof Vents @ 60 Sq. = 600 Sq. In.
144 Sq. In. per 36 Sq. Ft.

Unit B: Total Ventilation Area = 5.42 S.F. > 5.37 S.F. Required (77% OF VENTILATION IN UPPER PORTION OF ATTIC)

Unit C: 80'-0" L.F. Soffit Vent @ 5 Sq. In./Ft. = 400 Sq. In.
144 Sq. In. per 36 Sq. Ft.
Unit C: (11) Style 600 Roof Vents @ 60 Sq. = 660 Sq. In.
144 Sq. In. per 36 Sq. Ft.

Unit C: Total Ventilation Area = 7.36 S.F. > 5.75 S.F. Required (62% OF VENTILATION IN UPPER PORTION OF ATTIC)

- 1. ROOF VENT SPECS. PROVIDED ARE BY "LOMANCO VENTS"
2. PERFORATED SOFFIT/EAVE VENTS ARE JAMES HARDIE
3. ALUM. ROOF VENTS ARE LOMANCO - 600 SERIES

Project Professionals:

Architects:
Burmman Associates Inc.
119 W. St. Clair
Romeo, Michigan 48065
o.586-752-5010 c.586-201-1602
greatarchitects@charter.net
Richard E. Burmann R.A.
Michigan #20749

Structural Engineering:
Simpson Engineering L.L.C.
119 W. St. Clair
Romeo, Michigan 48065
o.586-752-9872 c.810-614-5696
mpsimpson1959@yahoo.com
Mark P. Simpson P.E.
Michigan #33208

Mechanical Engineering:
Beechwood Engineering, P.L.C.
3462 Beechwood
Farmington Hills, Michigan 48335
248-408-8178
krj@bcglobal.net
Kenneth R. Jenkins P.E.
Michigan #20003

Electrical Engineering:
Current Design L.L.C.
1290 Brook Lane
Rochester Hills, Michigan 48306
248-651-3681
currentdm@aol.com
Dominic A. Mocerri

SEPARATE SUBMITTAL:

CIVIL ENGINEERING DESIGN & DRAWINGS ARE DONE BY OTHERS AND ARE NOT PART OF THIS SUBMITTAL

FIRE SUPPRESSION DESIGN & DRAWINGS ARE DONE BY OTHERS AND ARE NOT PART OF THIS SUBMITTAL

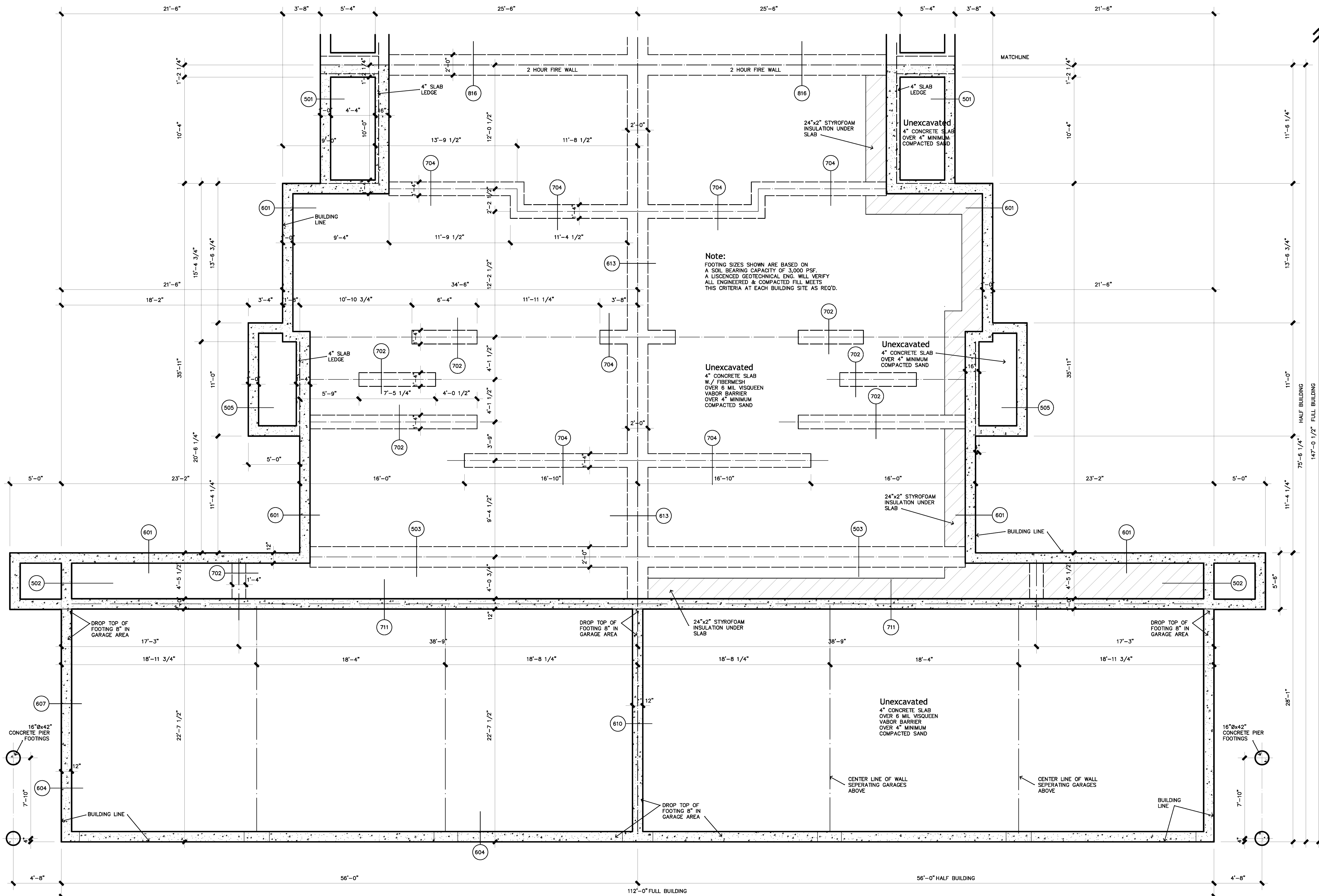
Sheet Index:

Table with 2 columns: Sheet Name, Page Number. Includes Cover Page, Foundation Plan, First Floor Plan, Second Floor Plan, Elevations, Building Sections, Wall Sections, Wall Sections & Details, Specifications, and Door Schedule.

Copyright © 2018

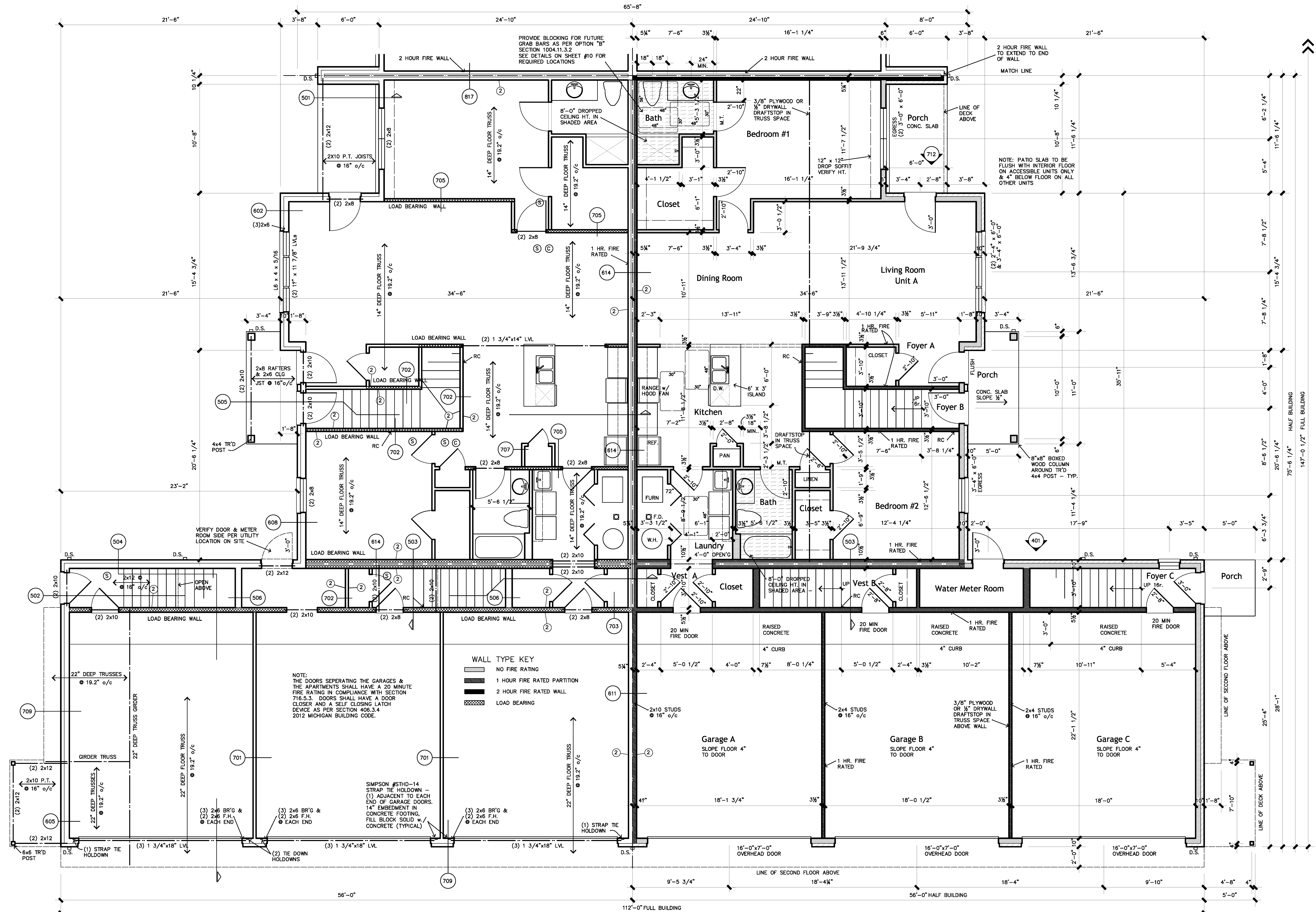
Drawings & architectural designs are copyright © 2018 Burmann Associates Inc - Architects





Foundation Plan
 Scale: 1/4" = 1'-0"

REPRODUCTION OF PRINTS IS PROHIBITED.



WALL TYPE KEY

[Symbol]	NO FIRE RATING
[Symbol]	1 HOUR FIRE RATED PARTITION
[Symbol]	2 HOUR FIRE RATED WALL
[Symbol]	LOAD BEARING

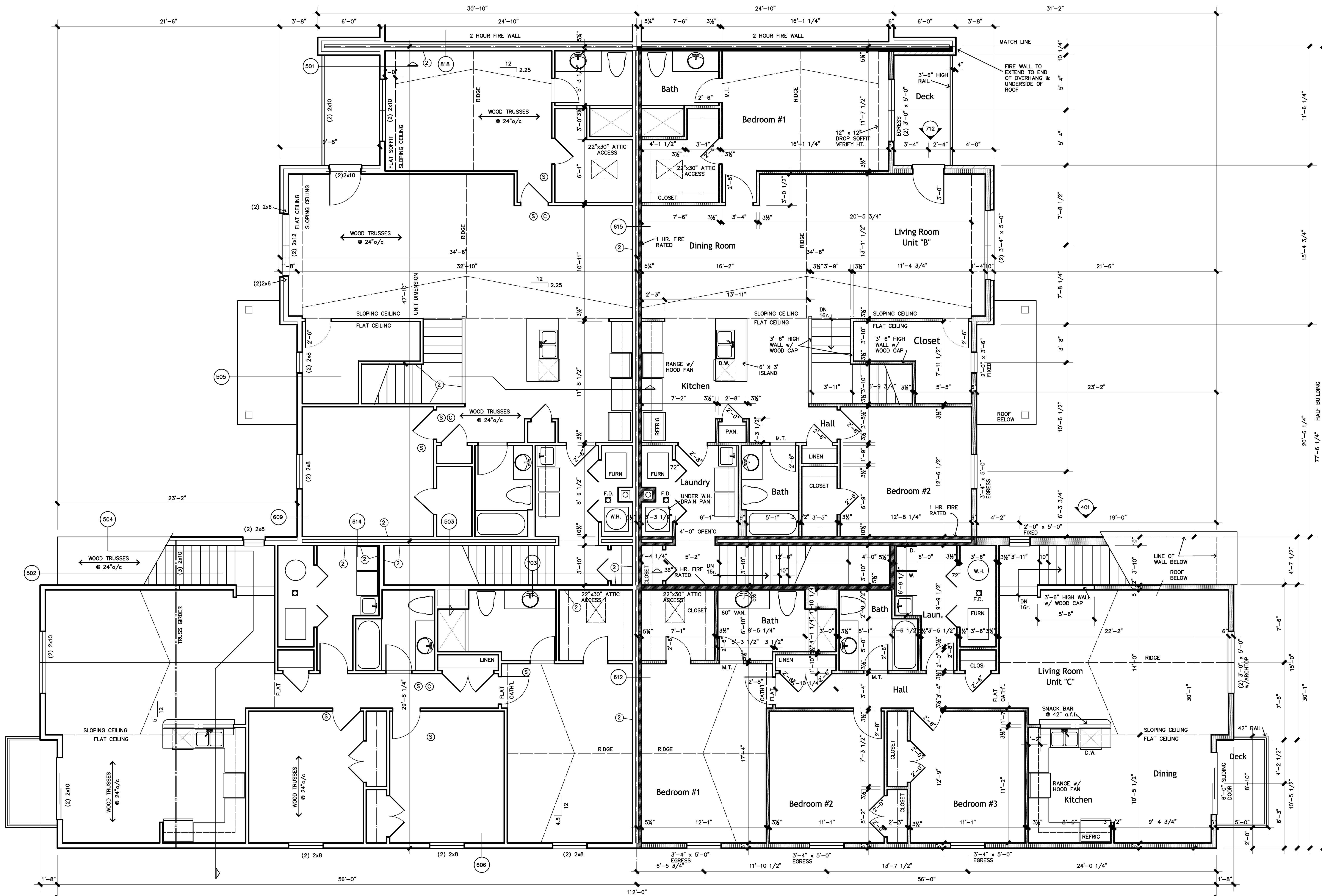
NOTE: THE DOORS SEPARATING THE GARAGES & THE APARTMENTS SHALL HAVE A 20 MINUTE FIRE RATING IN COMPLIANCE WITH SECTION 716.5.3. DOORS SHALL HAVE A DOOR CLOSER AND A SELF-CLOSING LATCH DEVICE AS PER SECTION 406.3.4 2012 MICHIGAN BUILDING CODE.

SIMPSON #5THD-14 STRAP TIE HOLDDOWN - (1) ADJACENT TO EACH END OF GARAGE DOORS. 14" EMBEDMENT IN CONCRETE FOOTING, FILL BLOCK SOLID W. CONCRETE (TYPICAL)

First Floor Plan
Scale: 1/4" = 1'-0"

Type "B" Units
ALL UNITS EXCEPT FOR: BUILDINGS #3, #4 & #9 - SEE SHEET #10 BUILDING #10 - SEE SHEET #11

REPRODUCTION OF PRINTS IS PROHIBITED.

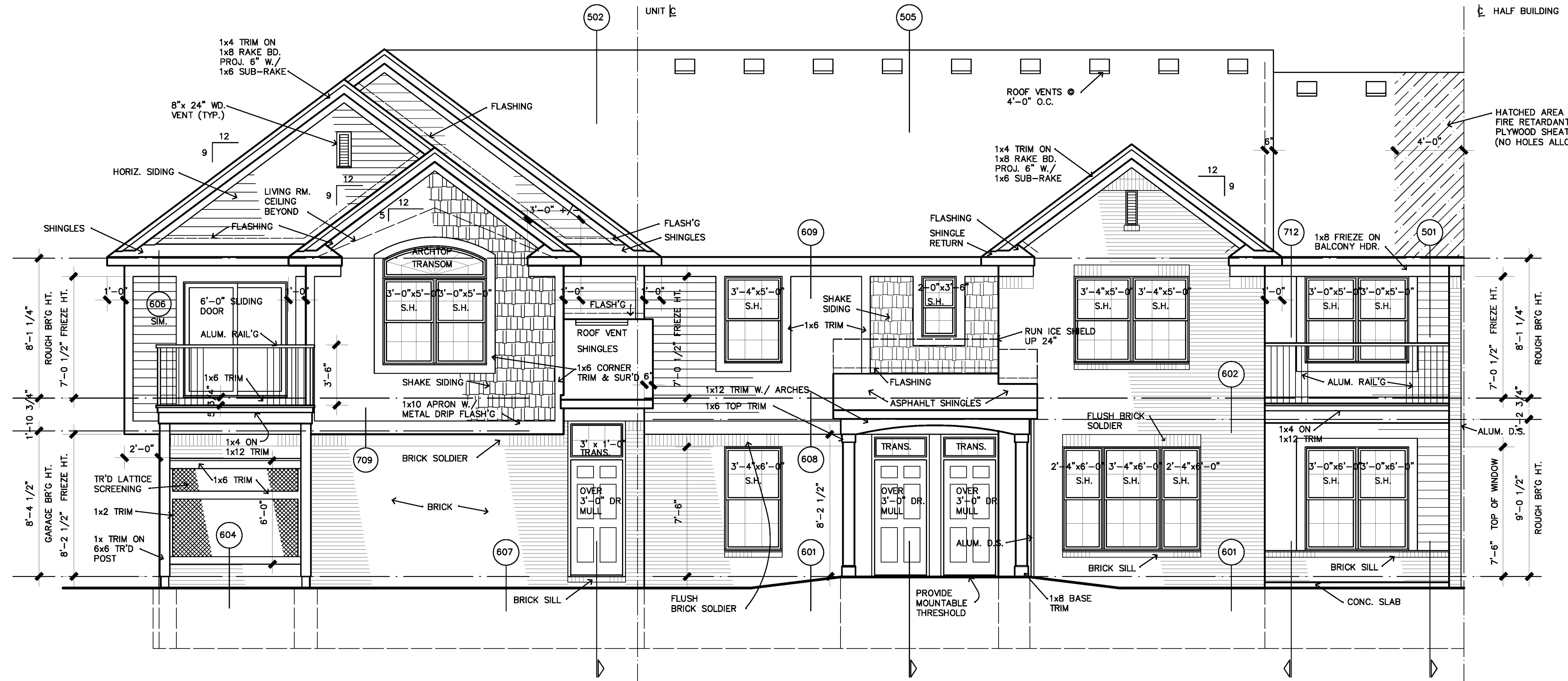


WALL TYPE KEY

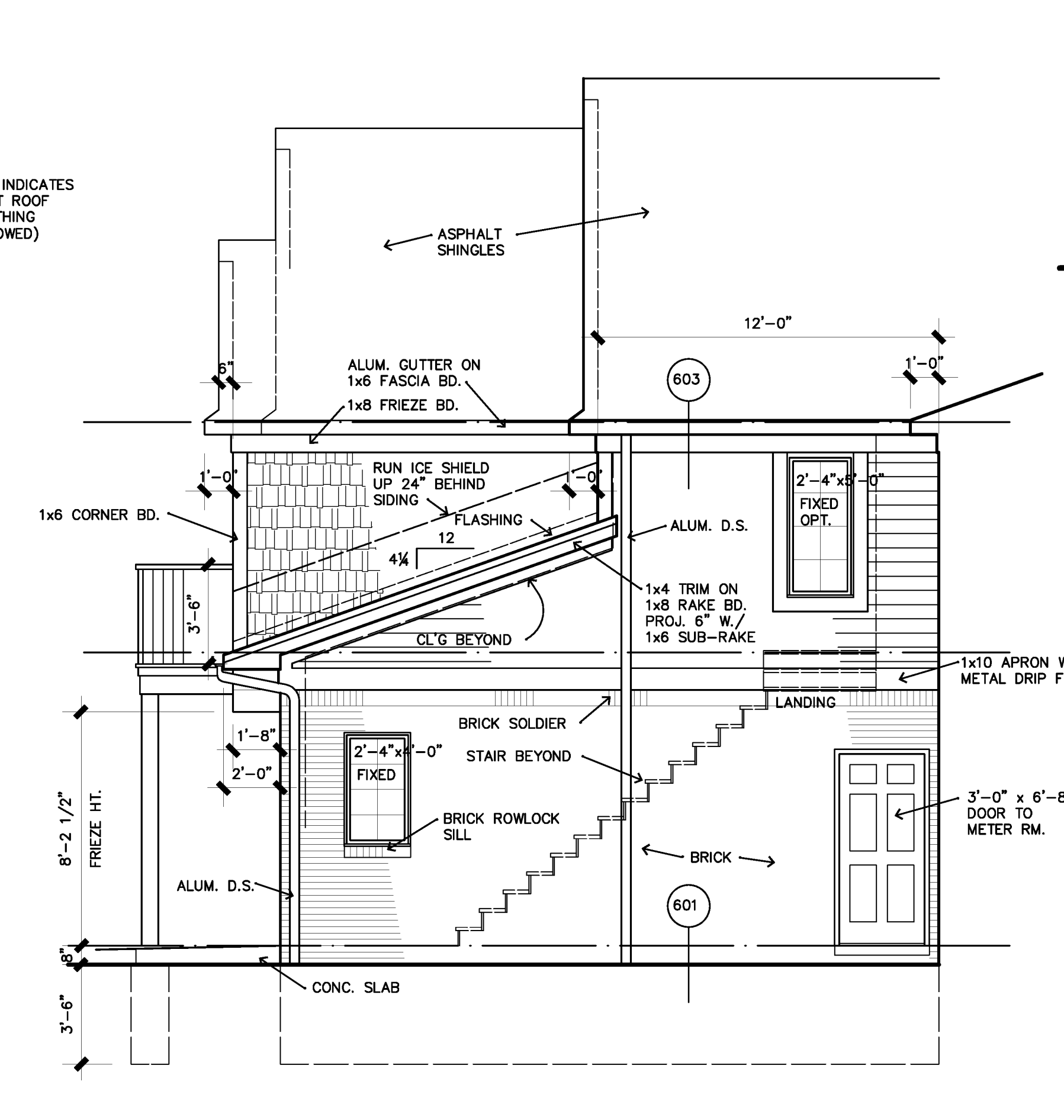
[Symbol: Dotted pattern]	NO FIRE RATING
[Symbol: Horizontal lines]	1 HOUR FIRE RATED PARTITION
[Symbol: Vertical lines]	2 HOUR FIRE RATED WALL
[Symbol: Cross-hatch]	LOAD BEARING

Second Floor Plan
 Scale: 1/4" = 1'-0"

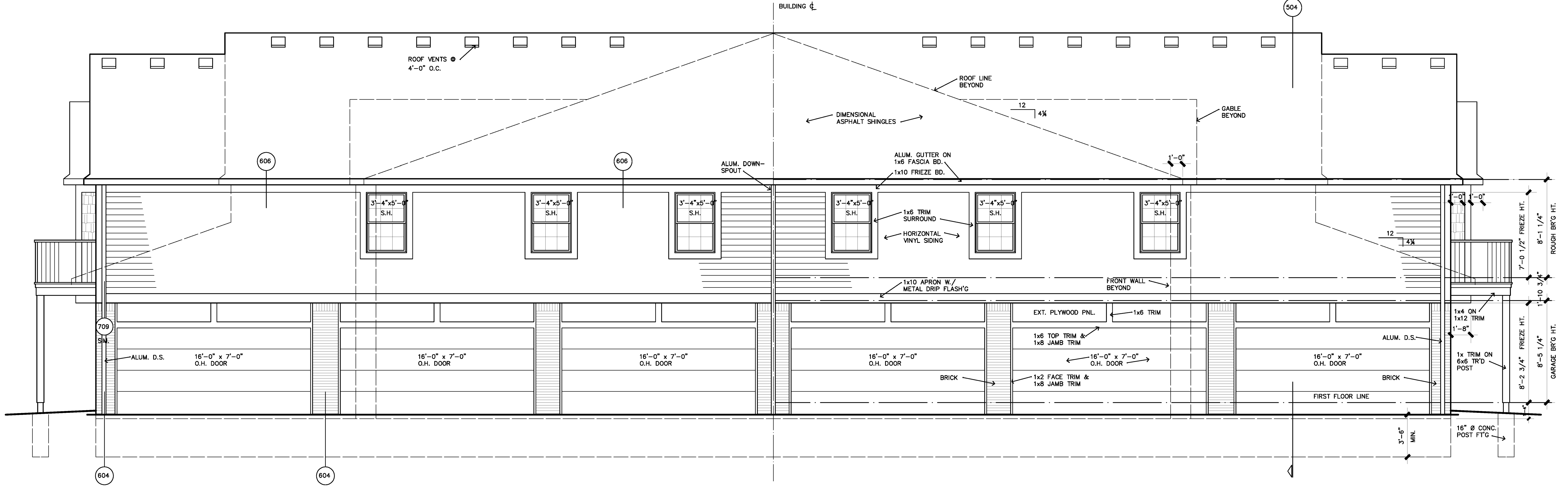
ALL UNITS "B" & "C" ARE NOT ACCESSIBLE UNITS.



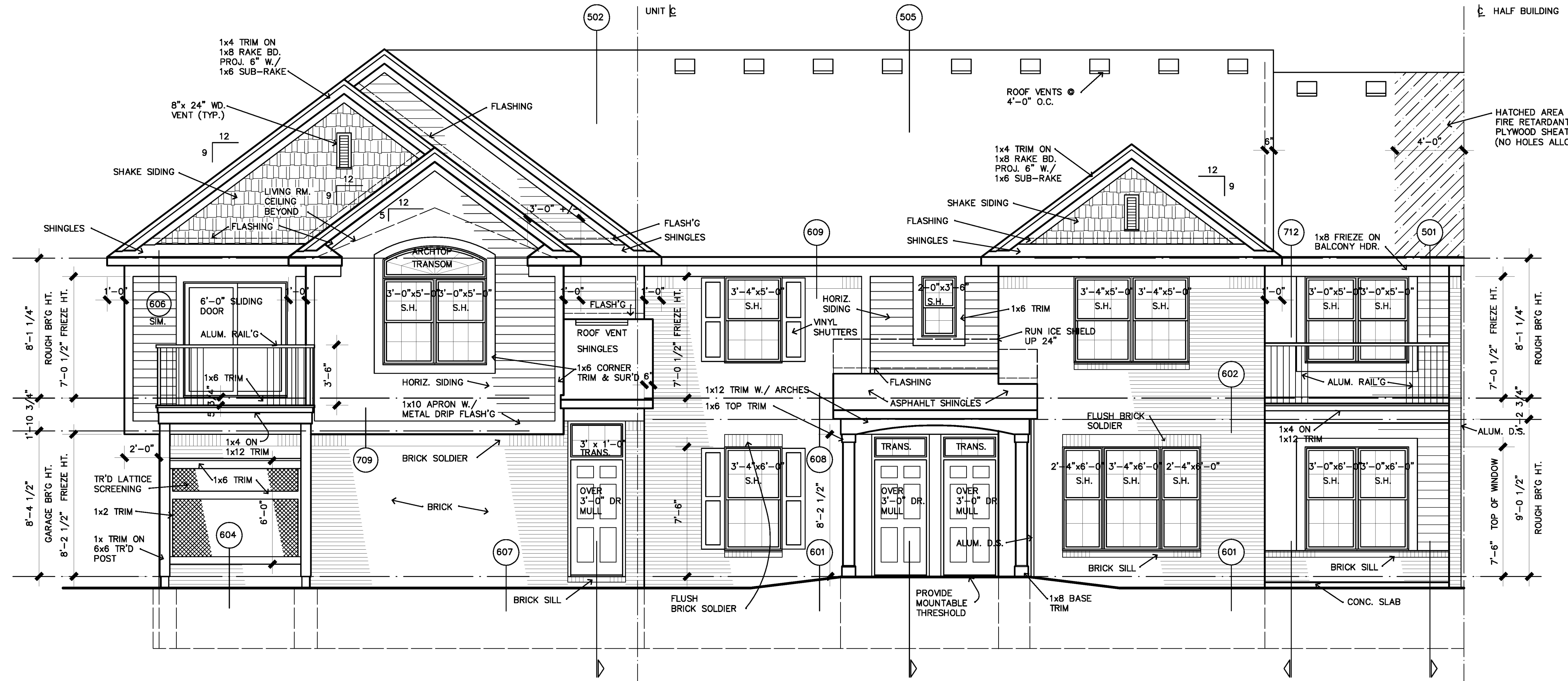
Front/Rear Elevation "A"
 Scale: 1/4" = 1'-0"



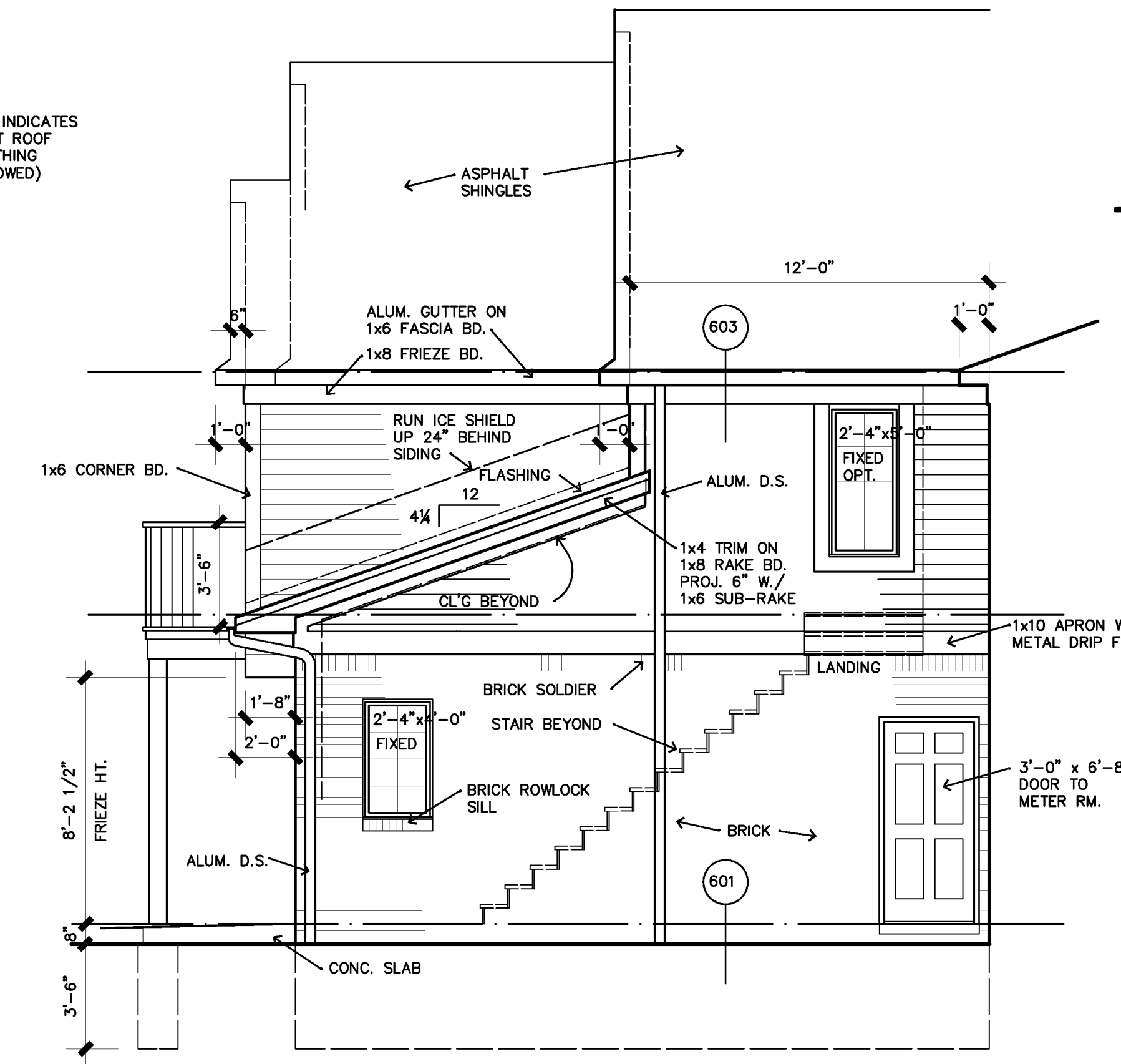
401 Partial Elevation "A"
 Scale: 1/4" = 1'-0"



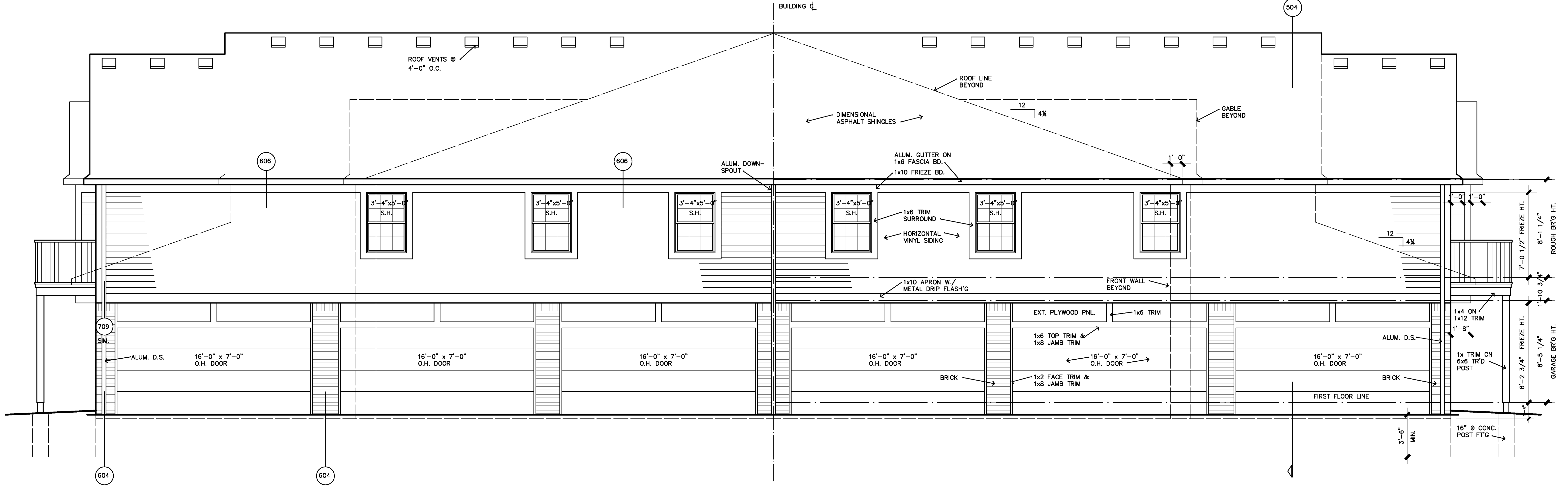
Side Elevation "A"
 Scale: 1/4" = 1'-0"



Front/Rear Elevation "B"
 Scale: 1/4" = 1'-0"



401 Partial Elevation "B"
 Scale: 1/4" = 1'-0"



Side Elevation "B"
 Scale: 1/4" = 1'-0"

Proposed Condominiums for:
MJC
 12 - Plex Condominiums

Architects • Engineers • Historic Restorations
 119 W. St. Clair • Romeo • Michigan • 48065-4655
 Office 586-752-9100 • 586-201-1602 Call
 greatarchitects@charter.net
A.I.A.
 Member of the American Institute of Architects

BURMANN
 BURMANN ASSOCIATES, INC.

Sheet Contents:
 Elevations
 Job: 18173
 Drawn by: MAK
 Date: 27JUN18
 Sheet Number:

REPRODUCTION OF PRINTS IS PROHIBITED.

General Note

- 1. SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
2. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT 0' - 0"
3. LIGHTING ALTERNATES REQUIRE NEW PHOTOMETRIC CALCULATION AND RESUBMISSION TO CITY FOR APPROVAL.

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.

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.

FOR ORDERING INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.

Table with 8 columns: Description, Symbol, Avg, Max, Min, Max/Min, Avg/Min, Avg/Max. Rows include Grade and Parking Lot Typical.

Table with 8 columns: Symbol, Label, Quantity, Manufacturer, Catalog Number, Description, Lumens Per Lamp, Light Loss Factor, Wattage. Includes items A, B, and C.

Product information for HOLOPHANE PUCL2 Utility Wall Luminaire. Includes mechanical and electrical specifications, application notes, and a key feature list.

Technical drawings for the PUCL2 luminaire, including a detailed view of the luminaire and a cutaway view showing internal components.

Product information for BEGA D-Series Size 1 LED Wall Luminaire. Includes specifications, ordering information, and application details.

Technical drawings for the BEGA luminaire, including a detailed view and a cutaway view.

Product information for BEGA D-Series Size 1 LED Wall Luminaire, including a detailed technical drawing and specifications.

Technical drawings for the BEGA luminaire, including a detailed view and a cutaway view.



Plan View Scale = 1" = 60ft

MIC LEGACY APARTMENTS PHOTOMETRIC SITE PLAN GASSER BUSH ASSOCIATES WWW.GASSERBUSH.COM



MEMORANDUM

TO: Honorable Board of Trustees

FROM: Amy Ruthig, Planning Director

DATE: July 11, 2023

RE: Summerfield Pointe PUD Amendment – Preliminary Condominium site plan
Lawson Drive, north of Grand River Avenue

In consideration of the approval recommendations by the Township Planning Commission on May 8, 2023, please find the attached proposed PUD amendment and preliminary condominium site plan, plan and impact assessment for your consideration. The applicant proposes to amend the previously approved Summerfield Pointe PUD agreement by constructing 102 detached residential site condominium units in lieu of 140 attached residential condominium units. The project also includes 12 attached units on the east of Lawson Drive. The property is located on Lawson Drive, north of Grand River Avenue.

The primary deviations of the planned development agreement include the following (please note that the specific deviations will still need to be provided in the revised PUD as previously requested):

- Modification of the horizontal minimum curve radius from 150' to 100' and curb radii from road to garage and parking driveways less than 30' radius.



SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

H. James Mortensen

Terry Croft

Diana Lowe

MANAGER

Kelly VanMarter

Procedurally, this is the last step of amending an approved PUD and conceptual condominium site plan following a recommendation by the Planning Commission. If granted conceptual approval, the applicant may then proceed to the required final phase to obtain final condominium site plan approval.

The project was heard before the Planning Commission on May 8, 2023 following multiple public hearings and was recommended for approval. Due to the number of outstanding issues at the time of approval, the applicant submitted for an additional review by the consultants. Based on that recommendation I offer the following for your consideration:

PUD AGREEMENT Moved by _____, Supported by _____ to APPROVE the amended PUD Agreement revised on June 1, 2023 with the following conditions:

1. The language and gate for the emergency access gate shall be approved by the Brighton Area Fire Authority.
2. Language shall be added to include that snow does not block the cross-access gate in the wintertime
3. The petitioner shall make all the updates to the PUD Agreement per Township Staff's markup copy

ENVIRONMENTAL IMPACT ASSESSMENT Moved by _____, Supported by _____ to APPROVE the Environmental Impact Assessment dated May 12 ,2023 with the following conditions:

1. The language for the emergency access gate shall be approved by the Brighton Area Fire Authority.
2. Traffic from construction for the site development and the homes will not use that cross access
3. Language shall be added to include that snow does not block the cross-access gate in the wintertime.

SITE PLAN Moved by _____, Supported by _____ to APPROVE the Conceptual PUD Plan dated June 1, 2023 with the following conditions:

1. Final Site Plan shall depict the proposed gate and Knox Box to block the cross access, but allow emergency access.
2. Language shall be added to include that snow does not block the cross-access gate in the wintertime
3. The petitioner shall address all comments in the planner's and engineer's letters dated June 14, 2023 and Brighton Area Fire Authority's letter dated June 9, 2023.
4. Prior to submittal for Final Condominium Plan review, site plan exceedance fees must be paid in full.

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

Best Regards,



Amy Ruthig



GENOA CHARTER TOWNSHIP APPLICATION

Planned Unit Development (PUD)

APPLICANT NAME: Healy Homes at Summerfield LLC

APPLICANT EMAIL: healyhomes@comcast.net

APPLICANT ADDRESS & PHONE: 32696 Sleeth Rd, Commerce Twp., 48362, (248) 684-1699

OWNER'S NAME: Jack Healy

OWNER ADDRESS & PHONE: 32696 Sleeth Rd, Commerce Twp., 48362, (248) 684-1699

TAX CODE(S): 4711-04-400-014; 4711-04-400-015; 4711-04-400-016

QUALIFYING CONDITIONS (To be filled out by applicant)

1. A PUD zoning classification may be initiated only by a petition.
2. It is desired and requested that the foregoing property be rezoned to the following type of PUD designation:

- Residential Planned Unit Development (RPUD)
- Planned Industrial District (PID)
- Mixed Use Planned Unit Development (MUPUD)
- Redevelopment Planned Unit Development (RDPUD)
- Non-residential Planned Unit Development (NRPUD)
- Interchange Commercial Planned Unit Development (ICPUD)
- Interchange Campus Planned Unit Development (CAPUD)

3. The planned unit development site shall be under the control of one owner or group of owners and shall be capable of being planned and developed as one integral unit.

EXPLAIN Existing Summerfield Pointe PUD, developed by Healy Homes at Summerfield, LLC.
The undeveloped portion proposed to be amended is owned by Healy Homes at Summerfield, LLC.
A portion of the original PUD property was previously deeded to Genoa Township for use as a
Nature Preserve.

4. The site shall have a minimum area of twenty (20) acres of contiguous land, provided such minimum may be reduced by the Township Board as follows:
 - A. The minimum area requirement may be reduced to five (5) acres for sites served by both public water and public sewer.
 - B. The minimum lot area may be waived for sites zoned for commercial use (NSD, GCD or RCD) where the site is occupied by a nonconforming commercial, office or industrial building, all buildings on such site are proposed to be removed or rehabilitated and a use permitted within the underlying zoning district is to be established. The Township Board shall only permit the PUD on the smaller site where it finds that the flexibility in dimensional standards is necessary to allow for innovative design

in redeveloping the site and an existing blighted situation will be eliminated. A parallel plan shall be provided showing how the site could be redeveloped without the use of the PUD to allow the Planning Commission to evaluate whether the modifications to dimensional standards are the minimum necessary to allow redevelopment of the site, while still meeting the spirit and intent of the ordinance.

C. Interchange Commercial and Campus PUDs: the Township Board may waive the minimum lot area where the design elements of a proposed development are integrated into and consistent with the broader Master Plan Latson Road Subarea Plans with compatible land uses

5. The PUD site plan shall provide one or more of the following benefits not possible under the standards of another zoning district, as determined by the Planning Commission:

- preservation of significant natural or historic features
- a complementary mixture of uses or a variety of housing types
- common open space for passive or active recreational use
- mitigation to offset impacts
- redevelopment of a nonconforming site where creative design can address unique site constraints.

6. The site shall be served by public sewer and water. The Township may approve a residential PUD that is not served by public sewer or water, provided all lots shall be at least one (1) acre in area and the requirements of the County Health Department shall be met.

Original PUD - 60.46 Acres

Size of property is 38.48 acres. Deeded to Township - 21.98 Acres

DESCRIBE BELOW HOW THE REQUESTED PUD DESIGNATION COMPLIES WITH AFOREMENTIONED MINIMUM LOT SIZE REQUIREMENTS.

The proposed PUD amendment depicts 102 detached single family residential condominium units in place of 136 of the attached single family residential condominium units. The MDR zoning district will allow construction of 131 SFR Townhouse units as depicted on the parallel plan.

STANDARDS FOR REZONING TO PLANNED UNIT DEVELOPMENT (RESPOND HERE OR WITHIN THE IMPACT STATEMENT)

1. How would the PUD be consistent with the goals, policies and future land use map of the Genoa Township Master Plan, including any subarea or corridor studies. If conditions have changed since the Master Plan was adopted, the consistency with recent development trends in the area;

The property is zoned Planned Development and the Master Plan designates Future Land Use as Medium Density Residential - 5 Units/acre. The proposed amendment will reduce the total density from 5 units/acre as approved to 4.1 units/acre, excluding the area previously deeded to Genoa Township as a Nature Preserve.

2. The compatibility of all the potential uses in the PUD with surrounding uses and zoning in terms of land suitability, impacts on the environment, density, nature of use, traffic impacts, aesthetics, infrastructure and potential influence on property values;

The existing PUD is proposed for residential use. The proposed amendment depicts reducing the total residential units within the PUD. The proposed reduction in residential density will reduce the impacts on the surrounding uses in the area.

3. The capacity of infrastructure and services sufficient to accommodate the uses permitted in the requested district without compromising the "health, safety and welfare" of the Township;

Adequate capacity is available in the existing utility infrastructure, roads and public services to support the proposed reduction in overall density. The existing storm water management system has adequate capacity for the proposed development.

4. The apparent demand for the types of uses permitted in the PUD;

Demand for detached single-family residential homes remains stronger than the demand for attached single-family residential units.

AFFIDAVIT

The undersigned says that they are the Owner (owner, lessee, or other specified interest) involved in this petition and that the foregoing answers and statements herein contained and the information herewith submitted are in all respects true and correct to the best of his/her knowledge and belief.

BY: Jack Healy

ADDRESS: 32696 Sleeth Rd, Commerce Twp., 48362

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

Jack Healy of Healy Homes at Summerfield at healyhomes@comcast.net
Name Business Affiliation E-mail

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.

PROJECT NAME: Summerfield Pointe Estates

PROJECT LOCATON & DESCRIPTION: Genoa Township

SIGNATURE: 

DATE: 9/27/22

PRINT NAME: Jack Healy

PHONE: 248-684-1699

COMPANY NAME & ADDRESS: Healy Homes at Summerfield LLC



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: Healy Homes at Summerfield LLC, 32696 Sleeth Rd, Commerce, 48362
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: Healy Homes at Summerfield LLC, 32696 Sleeth Rd, Commerce, 48362

SITE ADDRESS: Lawson Drive, North of Grand River PARCEL #(s): 4711-04-400-014; 4711-04-400-015; 4711-04-400-016

APPLICANT PHONE: (248) 684-1699 OWNER PHONE: (248) 684-1699

OWNER EMAIL: healyhomes@comcast.net

LOCATION AND BRIEF DESCRIPTION OF SITE: _____

Property is located Northwest off of Lawson Drive, North of Grand River Ave.

Property is vacant.

BRIEF STATEMENT OF PROPOSED USE: Develop 102 single-family residential homes
within a portion of the Summerfield Pointe PUD approved for 136 attached single-
family residential condominium units.

THE FOLLOWING BUILDINGS ARE PROPOSED: Proposed 102 single-family site condominium
units; and attached condominium units numbered 1 - 4, 25 - 28, and 53 - 56 as depicted
on the approved PUD plan.

**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: Jack Healy

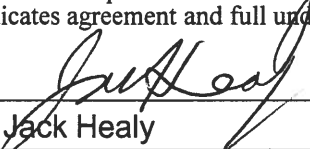
ADDRESS: 32696 Sleeth Rd, Commerce Twp., MI, 48362

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

1.) Jack Healy of Healy Homes at Summerfield LLC at healyhomes@comcast.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: 9/27/22
PRINT NAME: Jack Healy PHONE: _____
ADDRESS: 32696 Sleeth Rd, Commerce Twp., MI, 48362

GENOA TOWNSHIP
APPLICATION FOR PRIVATE ROAD
2911 Dorr Road, Brighton MI 48116 (810) 227-5225

A private road requiring approval of the Township shall be any road providing access to more than four dwelling units or two non-residential principal buildings. This does not include drives within a multiple family complex or parking lot aisles, but does include collector type roadways within such a development.

APPLICANT: Healy Homes at Summerfield LLC

OWNER ADDRESS: 32696 Sleeth Rd, Commerce Twp., 48362 (248) 684-1699

SITE ADDRESS: Lawson Drive. 1,300 ft. North of Grand River Ave. Intersection

APPLICABILITY OF PUBLIC VS. PRIVATE ROAD STANDARDS

All private roads in Genoa Township shall be constructed to the standards of the Livingston County Road Commission unless the Planning Commission and Township Board determine your road qualifies under the following ordinance criteria:

1. Explain how there will be no need for the roadway to be dedicated as a public road in the future.

SEE ATTACHED.

2. Explain how dedication of the road as a public street would not result in continuity in the public street system at the present time or in the future.

SEE ATTACHED.

3. What uses (number of lots, number of residential units, number of buildings, etc) will have access from the private road. Will the expected traffic volumes along the roadway be below three hundred vehicles per average weekday, based on accepted trip generation figures?

SEE ATTACHED.

4. Are there any significant natural features such as mature trees, natural slopes, wetlands or other water bodies would be preserved through construction and maintenance as a private road?

SEE ATTACHED.

5. What financial and administrative mechanisms will be provided to ensure maintenance of the private road?

SEE ATTACHED.

AFFIDAVIT

The undersigned says that they are the Owner (owner, lessee, or other specified interest) involved in this petition and that the foregoing answers and statements herein contained and the information herewith submitted are in all respects true and correct to the best of his/her knowledge and belief.

By: Jack Healy

Address: 32696 Sleeth Rd, Commerce Twp., 48362 Phone: (248) 684-1699

Contact Information - Review Letters and Correspondence shall be forwarded to the following: 1

1.) Jack Healy of Healy Homes at Summerfield LLC at (248) 685-3327
Name Business Affiliation Fax No.

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.

PROJECT NAME: Summerfield Pointe Estates

PROJECT LOCATON & DESCRIPTION: Lawson Drive. 1,300 ft. North of Grand River Ave.

Amendment to approved PUD plan

SIGNATURE: [Signature] DATE: 9/27/22

PRINT NAME: Jack Healy PHONE: (248) 684-1699

COMPANY NAME & ADDRESS: Healy Homes at Summerfield LLC

APPLICABILITY OF PUBLIC VS. PRIVATE ROAD STANDARDS

1. Explain how there will be no need for the roadway to be dedicated as a public road in the future. *Private roads are approved within the Summerfield Pointe PUD. Proposed private roads will connect Lawson Drive extension through Summerfield Pointe to Aster Boulevard, both private roads. All future maintenance and improvements on this road will be performed by the condominium association for the development.*

2. Explain how dedication of the road as a public street would not result in continuity in the public street system at the present time or in the future. *Private roads within the PUD are approved to provide continuity of the existing private road system from Lawson Drive in Summerfield Pointe, to Aster Blvd. within the adjacent Lakewood Knolls No. 2 PUD development. The existing connecting roads are private and the connections do not provide continuity of the public street system.*

3. What uses (number of residential units, number of buildings, etc) will have access from the private road. Will the expected traffic volumes along the roadway be below three hundred vehicles per average weekday, based on accepted trip generation figures? *Per proposed traffic impact study analysis for "Stone Edge Pointe PUD" and dated August 31, 1999, the projected peak hour traffic for the development is expected in the P.M. hours with 102 vehicles entering, and 61 vehicles exiting.*

SUMMERFIELD POINTE PRIVATE ROAD ACCESS SUMMARY				
ROAD	TYPE OF UNIT	UNIT NUMBER	No. UNITS W/1 CAR GARAGE	No. UNITS W/2 CAR GARAGE
Summer Ridge Drive (Existing)	Attached Condominium	9 - 56	48	0
Summer Ridge Drive (Proposed)	Detached Site Condos	9 - 43	0	35
$\Sigma =$			48	35
Lawson Drive (Existing)	Attached Condominium	1 - 8	8	8
Lawson Drive (Proposed)	Detached Site Condos	44 - 102	0	59
$\Sigma =$			8	67
TOTALS:			56	102

A summary of the existing and proposed condominium units is as follows: A total of 67 detached site condominium units and 8 attached condominium units will access from Lawson Drive, and 35 detached site condominium units and 48 attached condominium units will access from Summer Ridge Drive.

4. Are there any significant natural features such as mature trees, natural slopes, wetlands or others water bodies that would be preserved through construction and maintenance as a private road? *The proposed PUD amendment maintains the previously approved road layout. The overall geography of the site will be modified with as minimum fill as required to provide adequate utility*

ground cover and provide sewer service to the proposed units. Existing grades will be match at all property lines and at all construction limits of disturbance. Existing trees located outside of limits of disturbance will be preserved. No grading or modifications are proposed within the existing wetland limits on-site.

5. What financial and administrative mechanisms will be provided to ensure maintenance of the private road?

The costs of maintenance, repair, replacement and resurfacing by the Association or the neighboring condominium association for Summerfield Point shall be assessed to the Co-Owners in Summerfield Pointe Estates on a pro-rata basis based on the number of Units in Summerfield Pointe Estates and Summerfield Pointe. Co-Owners acknowledge and agree that they will be subject to assessments relating to the cost sharing with the neighboring community and as required under the PUD Agreement.

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
May 8, 2023
6:30 P.M.
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, Marianne McCreary, Eric Rauch, Tim Chouinard, Jeff Dhaenens and Glynis McBain. Also present was 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 Lowe, seconded by Commissioner Dhaenens, 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.

OLD BUSINESS:

OPEN PUBLIC HEARING # 1...Consideration of an amendment to the Summerfield Pointe Planned Unit Development Agreement, preliminary condominium site plan and environmental impact assessment to reduce the project from 140 attached condominiums to 102 single family detached homes and 12 attached condominiums. The project is located on Lawson Drive, North of Grand River Avenue. The request is petitioned by Healy Homes of Summerfield, LLC.

- A. Recommendation of PUD Agreement Amendment
- B. Recommendation of Environmental Impact Assessment (9-26-22)
- C. Recommendation of Preliminary Site Condominium Plan (9-26-22)

Mr. Wayne Perry of Desine, Inc. and Mr. Jack Healy were present. Mr. Healy stated that his PUD Agreement and the master deed of the adjoining Hampton Ridge Condominiums both state that the roads should be connected. He is proposing to connect the two roads; however, he agreed to build a gate between the two neighborhoods to allow for emergency vehicle access. He met with the Board of the condominiums and they agreed to have the roads connected if there is a gate installed.

Mr. Perry stated a revised plan was not submitted for this meeting. They will be revising it to include the connected road and the gate as well as the Knox Box details. They will also be submitted an updated PUD Agreement.

Chairman Grajek noted no new letters were received from the planner, engineer or the fire marshal.

Commissioner McBain questioned the landscaping issues that were discussed at previous meetings. Mr. Perry confirmed that the Summerfield Pointe Estates Condominium Association will be required to provide all lawn mowing and maintenance on both the privately owned unit areas as well as on all common areas. Language in the documents will be coordinated to specify this requirement.

Commissioner McCreary suggested that the Hampton Ridge Board submit a letter advising the Township that they are in favor of connecting the roads if a gate is installed.

The call to the public was opened at 6:43 pm.

Ms. Liz Hoover 661 Abbington Court is on the Board and they did have a video meeting with Mr. Healy. They did tell him of their concerns regarding the different lifestyles that single-family residents would bring instead of condominium owners. She stated that Mr. Healy told them the homes can be sold for more than the condominiums. They are requesting the Township reject the proposed change in housing style as it would change the outdoor living style in that area, but they would ask the Township approve the gate with the Knox Box. She stated the Board can provide a letter as suggested by Ms. McCreary.

Ms. Peggy Stewart of 4067 Kirkway Ct. does not understand why there is a need to connect the road and put a gate at Aster Boulevard. There are other roads that emergency vehicles can use to access the neighborhoods.

Ms. Joy Morten 4448 Aster Boulevard stated her condominium abuts the expansion. The trees behind her home have been removed and she can hear all the noise from the freeway. She would like the existing trees to not be taken down. She agrees with the gate being installed if the developments need to be connected.

Ms. Jeanine Gazley of 709 Abbington Court is concerned about the protection of the ponds. She also questioned what happens if the economy goes down and the homes cannot be built.

Ms. Jamie Schingeck of 4441 Aster Boulevard appreciates the response to her concern regarding the lawn care; however, she is still concerned that this can be changed. Residents in single-family homes have a different lifestyle than those in condominiums. She would like to see the changes be denied.

The call to the public was closed at 6:51 pm.

Chairman Grajek advised the public that the property owner has the right to develop the property as it was originally approved. This plan was approved prior to the adjoining condominiums being built. The developer has made changes to accommodate the neighbors' requests.

Mr. Healy advised that the financing is the reason they have changed to single-family homes. Since 2008, it is very difficult for buyers to obtain mortgages on condominiums that have not been built. He believes that the people that will buy these homes will be in favor of having their property maintained by the association instead of having to do it themselves so the landscaping rules in the Master Deed should not change. Commissioner McCreary stated that any Master Deed changes require 66 $\frac{2}{3}$ of the property owners to agree to the change. It is very difficult.

Mr. Healy stated that it will be difficult to save all the existing trees when these homes are built. The detailed landscaping plan will be developed at the time of final site plan approval.

Commissioner McCreary stated that at a previous meeting a member of the public noted that they pile their snow at the end of the dead end where the road will be connected. That will not be able to be done any longer.

Moved by Commissioner Rauch, supported by Commissioner Lowe, to recommend to the Township Board approval of the Summerfield Pointe PUD Agreement Amendment to reduce the project from 140 attached condominiums to 102 single family detached homes and 12 attached condominiums for Healy Homes of Summerfield, LLC., with the following conditions:

- Language shall be added to include the proposed gate and Knox Box to block the cross access, but allow emergency access. The language and gate shall be approved by the Brighton Area Fire Authority.
- Language shall be added to include the consolidation of lawn care to be completed by the association and performed one day a week.
- Traffic from construction for the site development and the homes will not use that cross access
- Language shall be added to include that snow does not block the cross-access gate in the wintertime
- The petitioner shall receive a letter from the Board of Hampton Ridge showing their support of the gate
- The petitioner shall make all the updates to the PUD Agreement per Township Staff's markup copy

The motion carried unanimously.

Moved by Commissioner Rauch, supported by Commissioner Dhaenens, to recommend to the Township Board approval of the Environmental Impact Assessment dated September 26, 2022 to reduce the project from 140 attached condominiums to 102 single family detached homes

and 12 attached condominiums.to reduce the project from 140 attached condominiums to 102 single family detached homes and 12 attached condominiums for Healy Homes of Summerfield, LLC, with the following conditions:

- Language shall be added to include the proposed gate and Knox Box to block the cross access, but allow emergency access. The language and gate shall be approved by the Brighton Area Fire Authority.
- Traffic from construction for the site development and the homes will not use that cross access
- Language shall be added to include that snow does not block the cross-access gate in the wintertime
- The petitioner shall receive a letter from the Board of Hampton Ridge showing their support of the gate

The motion carried unanimously.

Moved by Commissioner Rauch, supported by Commissioner Lowe, to recommend to the Township Board approval of the Preliminary Site Condominium Plan dated September 26, 2022 to reduce the project from 140 attached condominiums to 102 single family detached homes and 12 attached condominiums.to reduce the project from 140 attached condominiums to 102 single family detached homes and 12 attached condominiums for Healy Homes of Summerfield, LLC, with the following conditions:

- Final Site Plan shall depict the proposed gate and Knox Box to block the cross access, but allow emergency access.
- Language shall be added to include that snow does not block the cross-access gate in the wintertime
- The petitioner shall receive a letter from the Board of Hampton Ridge showing their support of the gate
- The petitioner shall address all comments in the planners, engineers, and Brighton Area Fire Authority's letters

The motion carried unanimously.

OPEN PUBLIC HEARING #2...Consideration of a sketch plan for a proposed camp “giant swing” and a high ropes course for the Our Lady of the Fields located at 7000 McClements Road, south side of McClements Road, between Kellogg and Euler Roads. The request is petitioned by Chaldean Catholic Church of the United States.

A. Disposition of Sketch Plan (4-10-23)

Mr. Wayne Perry of Desine, Inc., Mr. Jim Berigan of Our Lady of the Fields Campground, and Ms. Kimberly Hamman, the attorney for Our Lady of the Fields Campground, were present. Mr. Berigan stated they are requesting to build a giant swing with 36 foot high poles. They have received approval from the ZBA for the height and they are requesting sketch plan approval this evening.

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
April 10, 2023
6:30 P.M.
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, Marianne McCreary, Tim Chouinard, Jeff Dhaenens and Glynis McBain. Absent was Eric Rauch. Also present was 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 McCreary, seconded by Commissioner Lowe, 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 with no response.

OLD BUSINESS:

OPEN PUBLIC HEARING # 1...Consideration of an amendment to the Summerfield Pointe Planned Unit Development Agreement, preliminary condominium site plan and environmental impact assessment to reduce the project from 140 attached condominiums to 102 single family detached homes and 12 attached condominiums. The project is located on Lawson Drive, North of Grand River Avenue. The request is petitioned by Healy Homes of Summerfield, LLC.

- A. Recommendation of PUD Agreement Amendment
- B. Recommendation of Environmental Impact Assessment (9-26-22)
- C. Recommendation of Preliminary Site Condominium Plan (9-26-22)

Mr. Wayne Perry of Desine, Inc. stated that since the last Planning Commission meeting, they have prepared and submitted a traffic impact assessment for the connection between the two developments. The study includes recommendations, and the applicant will complete them.

They also submitted updated documents for the PUD Agreement and by-laws as requested by the township attorney.

Mr. Borden reviewed his letter dated April 6, 2023.

1. PUD Amendment:

- a. The applicant proposes to construct 102 detached residential units and 12 attached condominiums in lieu of the 140 attached units that are included in the approved PUD.
- b. Dimensional deviations are sought for lot width, lot area, and combination of side yard setbacks.
- c. The applicant must address any comments provided by Township staff and/or the Township Attorney on the draft PUD Agreement.

2. Preliminary Condominium Plan:

- a. The applicant must address any comments provided by Township staff and/or the Township Attorney on the draft condominium documents.
- b. The inconsistent phasing descriptions between the PUD Agreement and plan must be corrected.
- c. The detailed plan drawings do not identify the area where the proposed building containing Units 53-56 is located.
- d. The site data and zoning table should be included on Sheet SD as referenced on Sheet SP1).
- e. The traffic calming measures recommended by the Traffic Impact Assessment should be required as a condition of plan approval.
- f. There are minor discrepancies on the landscape plan that need to be corrected.
- g. The Master Deed should identify the open space areas as general common elements subject to maintenance and protection by the Association.
- h. The Commission should consider comments provided by the Township Engineer and/or Brighton Area Fire Authority.

His concerns with the private road can be addressed during final site plan approval.

Ms. Byrne reviewed her letter dated April 3, 2023.

1. The traffic impact assessment determined that with the increased traffic from the new development, the projected traffic volumes on Aster Boulevard will remain within what is typical for a residential neighborhood street. The assessment recommended that traffic calming measures such as lane striping, speed humps, and a raised intersection at Lawson Drive and Aster Boulevard be used. These recommended measures should be included in the proposed site plan. If there is a current issue with traffic volume, the petitioner should consider implementing traffic calming measures in the existing phases of Summerfield Pointe.
2. After final site plan approval, the petitioner will be required to submit private road construction plans to the Township for review and approval. The Petitioner should review

the private road requirements in the Genoa Township Engineering Standards and make sure all requirements are met. Engineering Design Standards allow a minimum horizontal curve radius of 150 feet for roads with a posted speed limit of twenty-five miles per hour or less. This should be addressed on the final site plan.

3. The intersection radii are currently shown as 27 feet. Genoa Township Engineering Design Standards require a minimum intersection radius of 30 feet.
4. Low spots within intersections are not allowed. More spot elevations should be used at proposed intersections to show that drainage is being carried away from the intersection.
5. After final site plan approval, the Petitioner will be required to submit construction plans to MHOG Sewer and Water Authority for review and approval.
6. The Existing and Proposed Utility Structure Inventories on UT 7 are inconsistent with the calculations and the utility plans. This should be addressed on the final site plan.
7. The proposed PUD Amendment notes in Article II, note 4, indicate that installation of drainage facilities for the future phase have been completed, and that the Developer shall have no obligation to install further stormwater drainage facilities for future phases. The Township does not have the final authority to waive improvements to the existing drainage facilities. Since the previous site plan with multi-family units was approved, the Livingston County Drain Commissioner (LCDC) has updated their design standards and may require that the future phases of this development are brought into compliance with the new updated LCDC Procedures and Design Criteria for Stormwater Management Systems.
8. The existing on-site detention basin was designed using the previous LCDC Standards. The Petitioner should work with the Drain Commissioner to determine if their existing detention pond will need to be revised to conform to the new standard. Evidence of approval from the LCDC should be provided to the Township prior to final site plan review.
9. The final site plan must include SESC measures for review and approval. SESC details should be included and should match LCDC Standards.
10. The LCDC requires that the "Land Use Summary Table" found in Appendix J of their updated LCDC Procedures and Design Criteria for Stormwater Management Systems be included on the cover sheet of the construction plans.
11. CB 132B on the storm sewer calculations is labeled as FES 303 on the utility plans.

The Brighton Area Fire Authority Fire Marshal had no outstanding issues.

The call to the public was opened at 6:42 pm.

Ms. Jamie Schingeck of 4441 Aster Boulevard is concerned with the different lifestyles of the two developments. Their association is condominiums and the proposal is for single-family homes. She does not see anything in the by-laws where the lawn maintenance will be done by the association to avoid her hearing lawn mowers on different days of the week.

Ms. Marie Graves of 4082 Hampton Ridge Blvd is on the Board of Hampton Ridge. They currently put their snow at the end of Aster Boulevard so if the road is extended, where will they

put it? Who will incur the costs of the installation of speed bumps and how will they affect the snow removal?

Ms. Chantell Farley of 4109 Hampton Ridge Blvd is concerned with the safety of the increase in traffic. If there is going to be additional police presence due to the traffic and if so, who will pay for it?

The call to the public was closed at 6:49 pm.

The commissioners asked for details of the traffic study report. Mr. Perry reviewed the results and the proposed traffic calming measures in the report. If the traffic engineer determines that there is a need for any of these, then it would be paid for by the developer.

Commissioner McBain noted that the maintenance of the calming measures will have to be paid for by the individual associations. The speed bumps will need to be replaced in 8-10 years.

Commissioner Dhaenens noted that this proposal is less dense than what was originally approved. It was always proposed to connect the two developments. Commissioner McBain stated this is a different project because the demographics of who will be purchasing these single-family homes is different than who would purchase condominiums. This will change the activities in this development and the types of traffic. She is not against this proposal, but would like these issues to be addressed.

Chairman Grajek noted that the traffic study that was recently done considered the type of residential units that are proposed.

Commissioner McBain asked to confirm that the lawn maintenance of the new development of single-family homes will be maintained by the association so it would all be mowed at the same time. She also asked about the landscape buffer between the two developments. Mr. Perry stated there is no requirement in the new association's master deed for lawn maintenance to be completed by the association. With regard to the buffer zones, there is a requirement to install a drain pipe so some existing trees will be removed. None of the trees in the buffer along the other side will be removed.

Chairman Grajek would like clarification regarding the lawn maintenance. Ms. Ruthig stated that staff and the attorney have received the documents so in order to provide clarification, the documents will have to be reviewed again.

Commissioner Dhaenens is concerned with the traffic and the proposed traffic calming measures. He understands the developer will install them, but the existing association will have to pay to maintain them. He would like this to be confirmed. Mr. Perry stated if the speed bumps are constructed out of concrete instead of asphalt, they will last longer than 8-10 years.

Ms. Ruthig will need to confirm that the Township can require the developer to make improvements on a private road. Also, the existing association will have to vote if they will allow the installation of the speed bumps.

Commissioner McBain also wants to ensure that the construction traffic does not travel through the existing development. Commissioner Chouinard agrees. Mr. Perry stated this requirement can be placed on the construction documents.

Commissioner McCreary would like to have these details resolved prior to it being approved. The questions still remain about the lawn maintenance, the cost of the traffic calming measures, etc.

Commissioner Chouinard suggested asking the Brighton Area Fire Authority if they would approve the installation of a gate between the two developments, which would eliminate the traffic issues.

There was further discussion between the Commissioners and they would like clarification on the items discussed this evening as well as the ones that are listed in Mr. Borden's letter.

Moved by Commissioner Dhaenens, seconded by Commissioner Chouinard, to postpone Public Hearing #1, an amendment to the Summerfield Pointe Planned Unit Development Agreement, preliminary condominium site plan and environmental impact assessment to reduce the project from 140 attached condominiums to 102 single family detached homes and 12 attached condominiums until the May 8, 2023 Planning Commission meeting. **The motion carried unanimously.**

NEW BUSINESS:

OPEN PUBLIC HEARING #2...Consideration of an environmental impact assessment and site plan for a proposed 7,865 sq. ft. medical office building on a vacant parcel of land (4711-13-100-046) located on the north side of Grand River Avenue, east of Euler Road. The request is petitioned by Stephen Tait.

- A. Recommendation of Environmental Impact Assessment (2-22-23)
- B. Disposition of Site Plan (3-22-23)

Mr. Scott Tousignant of Boss Engineering and Mr. Joe Chidester of Schafer Construction were present.

Mr. Tousignant provided a detailed review of the project, including the access drive, utilities, landscaping, and lighting. They agree with the township planner's comments regarding the Dumpster enclosure material. With regard to the concerns raised regarding the wall signs, they understand they would have to seek a variance. For the monument sign, they are aware there is an easement for water and sewer utilities here; however, they would like to put the monument

Commissioner McCreary questioned how vapors or odors from the chemicals will be contained so they are not toxic to the neighbors. Ms. Calloway stated most of their chemicals are completely odorless. They have 24/7 ventilation. They will be using the same system that was used by the previous building owner. Also, they are not regulated by the EPA because of the type of chemicals they use.

Moved by Commissioner Rauch, seconded by Commissioner Dhaenens, to recommend to the Township Board approval of the Special Use Application for the storage of hazardous materials for Bottcher Systems located at 1349 Grand Oaks Drive as this Commission finds that the conditions in Sections 19.03 and 19.07 of the zoning ordinance have been met. This recommendation is conditioned on the following:

- All concerns from the Township Engineer and Brighton Area Fire Marshal regarding facilities and services must be met to their satisfaction.

The motion carried unanimously.

Moved by Commissioner Rauch, seconded by Commissioner Lowe, to recommend to the Township Board approve of the Environmental Impact Assessment dated October 18, 2022, for the storage of hazardous materials for Bottcher Systems located at 1349 Grand Oaks Drive, as the applicant has demonstrated their compliance with the requirement for secondary containment. This recommendation is conditioned upon the following:

- The applicant must obtain any outside permits necessary and required for this type of operation.

The motion carried unanimously.

Moved by Commissioner Rauch, seconded by Commissioner Dhaenens, to recommend to the Township Board approval of the Sketch Plan dated August 1, 2022 for the storage of hazardous materials for Bottcher Systems located at 1349 Grand Oaks Drive, conditioned upon the following:

- The petitioner shall update the landscaping, specifically the front yard greenbelt
- The petitioner shall upgrade the lighting with wall mounted lighting fixtures.
- All repairs to impervious surfaces shall be made to the satisfaction of Township Staff, including parking space striping and correct number of barrier free spaces.
- The petitioner shall make any other miscellaneous improvements as determined by Township Staff

The motion carried unanimously.

OPEN PUBLIC HEARING # 2...Consideration of an amendment to the Summerfield Pointe Planned Unit Development Agreement, preliminary condominium site plan and environmental impact assessment to reduce the project from 140 attached condominiums to 102 single family detached homes and 12 attached condominiums. The project is located on Lawson Drive, North of Grand River Avenue. The request is petitioned by Healy Homes of Summerfield, LLC.

A. Recommendation of PUD Agreement Amendment

B. Recommendation of Environmental Impact Assessment (9-26-22)

C. Recommendation of Preliminary Site Condominium Plan (9-26-22)

Mr. Wayne Perry of Desine Engineering and Mr. Jack Healy were present. Mr. Perry provided a review of the request. The prior approval was for 192 single-family attached condominiums; however, they would like to modify the agreement from the original 56 attached single-family condominium units and 102 detached single-family condominium units. The general road network and utilities are the same as the previous plan. He presented the site plan and reviewed the proposed changes.

Mr. Borden reviewed his letter dated November 8, 2022.

1. PUD Amendment:

- A. The applicant proposes to construct 102 detached residential units in lieu of the 140 attached units that are included in the approved PUD.
- B. Dimensional deviations are sought for lot width, lot area, and combination of side yard setbacks.
- C. The applicant must address any comments provided by Township staff and/or the Township Attorney on the draft PUD Agreement.

2. Preliminary Condominium Plan:

- A. The applicant must address any comments provided by Township staff and/or the Township Attorney on the draft condominium documents.
- B. The detailed plan drawings do not identify the area where the proposed building containing Units 53-56 is located.
- C. The site data and zoning table should be included on Sheet SD. It was in the previous submittal and is currently referenced on Sheet SP1.
- D. Sidewalks are located within the site condominium units and not the roadway easement, which is relatively unusual.
- E. There are minor discrepancies on the landscape plan that need to be corrected.
- F. The Master Deed should identify the open space areas as general common elements subject to maintenance and protection by the Association.
- G. The Commission should consider comments provided by the Township Engineer and/or Brighton Area Fire Authority.

3. Private Road:

- A. The provisions to allow variation from public roadway standards do not appear to be met.
- B. The submittal does not include a Private Road Maintenance Agreement.
- C. The required easement and roadway widths are not provided; however, both are identified as dimensional deviations in the draft PUD Agreement.
- D. The plans do not identify any street signs.
- E. Design details such as AASHTO standards, pavement, curb and gutter, grades, and curves, are subject to review by the Township Engineer.

Ms. Byrne reviewed her letter dated November 9, 2022.

She noted that this is a conceptual plan and will be reviewed in more detail during the final site plan review; however, since the applicant provided a lot of detail on this plan, she provided the following comments:

The general road layout for the proposed Summerfield Pointe development is essentially the same as the previously approved version with multi-family units. We have no engineering related concerns with single family units as opposed to multi-family units.

- After final site plan approval, the petitioner will be required to submit private road construction plans to the Township for review and approval. The Petitioner should review the private road requirements in the Genoa Township Engineering Standards and make sure all requirements are met. Engineering Design Standards allow a minimum horizontal curve radius of 150 feet for roads with a posted speed limit of twenty-five miles per hour or less. This should be addressed on the final site plan.
- The intersection radii are currently shown as 27 feet. Genoa Township Engineering Design Standards require a minimum intersection radius of 30 feet.
- Low spots within intersections are not allowed. More spot elevations should be used at proposed intersections to show that drainage is being carried away from the intersection.
- After final site plan approval, the Petitioner will be required to submit construction plans to MHOG Sewer and Water Authority for review and approval.
- The Existing and Proposed Utility Structure Inventories on UT 7 are inconsistent with the calculations and the utility plans. This should be addressed on the final site plan.
- The proposed PUD Amendment notes in Article II, note 4, that installation of drainage facilities for the future phase have been completed, and that the Developer shall have no obligation to install further stormwater drainage facilities for future phases. The Township does not have the final authority to waive improvements to the existing drainage facilities. Since the previous site plan with multi-family units was approved, the Livingston County Drain Commissioner (LCDC) has updated their design standards and may require that the future phases of this development are brought into compliance with the new updated LCDC Procedures and Design Criteria for Stormwater Management Systems.
- The existing on-site detention basin was designed using the previous LCDC Standards. The Petitioner should work with the Drain Commissioner to determine if their existing detention pond will need to be revised to conform to the new standard. Evidence of approval from the LCDC should be provided to the Township prior to final site plan review.
- The final site plan must include SESC measures for review and approval. SESC details should be included and should match LCDC Standards.
- The LCDC requires that the "Land Use Summary Table" found in Appendix J of their updated LCDC Procedures and Design Criteria for Stormwater Management Systems be included on the cover sheet of the construction plans.
- CB 132B on the storm sewer calculations is labeled as FES 303 on the utility plans.

The Brighton Area Fire Authority Fire Marshal's letter dated October 19, 2022 states all outstanding issues have been met.

Commissioner McCreary asked if this would be added to the existing condominium association. Mr. Perry stated this new development would be its own association; however, they would follow the same bylaws of the existing association and after completion, they would all be under one condominium umbrella.

Commissioner Rauch stated the plan that was previously approved was 140 units. Under traditional zoning, without the PUD Agreement, it would allow 131 units. The applicant is requesting 102 detached units this evening.

Ms. VanMarter provided the public the process of this approval, noting that this could be the first of possibly four meetings and could take several months to complete.

The call to the public was opened at 7:36 pm.

Ms. Jamie Schingeck of 4441 Aster Boulevard is concerned about the difference in the HOA's. Her condominium has very strict bylaws and the new association's bylaws have differences in lawn care, pets, fireworks, etc.

Ms. Carrier Carter of 4464 Aster Boulevard stated their roads are private and they pay for them. She is concerned about construction traffic as well as safety. Cutting down the trees will affect the wildlife.

Karen of 4697 Summer Ridge Drive questioned if her condominium association could be separate from the single-family homes. She asked if they will look identical and if the Township has details of what is being built. She would like them to be the same. She questioned why it took 16 years to finish this development.

Ms. Ann Streeter who is on the Board of the Hampton Ridge HOA stated she would like this project to be redesigned so it does not connect to Aster Boulevard. Due to the new traffic light on Latson, many drivers use Aster so this new development will increase this traffic. If they still connect to Aster, her HOA would like some money to be given to them toward the purchase of speed bumps.

Ms. Lori Rowe at 4476 Aster Boulevard is concerned with the construction drive egress, which is being proposed to be Aster Boulevard. It is a shorter distance from Grand River to the development site than off of Latson.

Ms. Pat Anderson of 4280 Hampton Ridge is concerned with the density. Westbury Apartments are also being expanded. There will be a lot of people roaming through the neighborhood. There will also be mature trees that will be taken down.

Ms. Jeanine Gazley of 709 Abbington Court is one of the residents whose view will be looking directly at the new development. She is concerned that the trees will be taken down. She questioned how the two associations will work together.

Mr. Ron Watson of 4460 Aster Boulevard does not believe this project should be approved with the connection to Aster. It will be a major safety factor. Speed bumps are not a solution.

Mr. Larry Limonoff of 4363 Aster Boulevard is concerned that Aster is a private road, and they pay to maintain it and other residents will be using it.

Ms. Susan Gardner of 4355 Aster Boulevard stated that the roads are private and they are narrow. There is no on-street parking and the speed limit is very slow. It was never meant to be a throughway. Kids play on the road, people walk their dogs, they jog, etc. If fire and safety was a concern when the connection was first designed 20 years ago, the homes can have fire suppression instead of the need for two accesses.

Ms. Martha Pappas of 757 Abbington Court lives where Aster ends. There will be constant traffic on Aster Boulevard.

Gary Laundroche of 4689 Summer Ridge Drive stated they have met many times with Mr. Healey and he worked with their association to address their concerns. They will be working on how best to incorporate the single-family homes into their association. He is in support of this development.

Ms. Ruthig read the public comment letters and emails that were received after the packet was published.

- Ms. Ann Streeter who spoke this evening is against this proposal.
- Ms. Janeen Mussleman is not in favor of this project. The road connection would negatively impact their neighborhood by increasing traffic, cause backups at the traffic light at Latson Road, and cause safety issues. Their association pays for their roads. Removing the trees for this development will displace local wildlife
- Ms. Christie LePoint is not in favor of this project.
- Mary Lynn Buzzell of 741 Abbington Court is concerned with the connection to Aster Boulevard as it is a private road and maintenance is paid by the Hampton Ridge unit owners, children ride their bikes and scooters along the streets and sidewalks so it is a safety issue, and the Master Plan calls for the preservation of wooded areas and the amount of trees that will be replaced is not sufficient. She questioned because the agreement is with a different owner and is 20 years old, is it still valid.
- Sandra send an email stating her opposition to the project, stating they pay for the road, there are a lot of accidents at the light on Latson, there is a long wait at that light and she will sell if this is approved
- Ms. Susan Gardner, who spoke this evening is against this proposal.

- Mr. Charles Tinsley of 4324 Hampton Ridge is against the road connection for these communities. It will increase traffic and cause safety concerns.

The call to the public was closed at 8:03 pm

Commissioner Rauch believes the major complexity of this project is that it was conceived and began 19 years ago and a lot has changed since that time with regard to traffic. He would like a comprehensive traffic study to be done to determine if it is appropriate at this time to connect these two developments.

Commissioner Dhaenens advised the members of the public that Mr. Healey has met with the current association and has listened to and accommodated their concerns. He agrees with the need for a traffic study.

Chairman Grajek noted that this new roadway will also add a way for residents in Hampton Ridge to access Grand River by traveling onto Lawson Drive.

Mr. Perry stated he and Mr. Healey are listening to the concerns of the residents. He showed the original plan from 2002, noting that the road network is approved with 192 attached condominiums. This can be built as approved. When this was developed, the connection to Aster Boulevard was requested by the Township; however, he does agree with Commissioner Rauch that things have changed since that time. They have changed the plan by moving the roadway further away from the Hampton Ridge Development and saving more trees. They are requesting to reduce the density of an already approved project. They will do a traffic study with the approved plan and their proposed plan and it will show that the traffic will be less with the new plan than what is already approved because it is less dense. In the existing development, Mr. Healey has agreed to build the new buildings to match exactly the existing buildings. There is a large area of open space that has been given to the Township as part of the original plan. He showed it on the site plan.

Commissioner Rauch questioned if the developer can start building what was originally approved in 2002. Ms. VanMarter stated her interpretation of the ordinance is that the existing site plan is expired and the applicant would need to come back before the Planning Commission for review. Mr. Perry noted that the PUD Agreement is still in place. Ms. VanMarter agreed.

Commissioner Rauch stated that having a traffic study could provide information that could show how the connecting of these two developments could be positive.

Commissioner Chouinard does not agree with the construction traffic using Aster Boulevard. He would like the connection to be made at the end of the project. Mr. Perry stated the construction traffic can use Lawson Drive.

Mr. Perry asked for feedback regarding the deviations that they have requested. Mr. Rauch is in favor of the width of the road as it matches the existing ones. Commissioner McCreary is concerned with the private road being used by many additional vehicles.

Commissioner McBain stated the issue is this was anticipated to be all built at one time 20 years ago. She knows this will impact all of the existing residents and private roads. She reiterated the concerns of the member of the public who spoke about the differences in the restrictions in the two different condominiums. She would like the developer to investigate that portion of the by-laws.

Mr. Perry requested to have this item postponed until the next Planning Commission meeting so they can address the issues discussed this evening.

Moved by Commissioner Lowe, seconded by Commissioner Dhaenens, to postpone Open Public Hearing #2 until the next regularly-scheduled Planning Commission meeting. **The motion carried unanimously.**

OPEN PUBLIC HEARING #3...Consideration of a sketch plan for a proposed dumpster enclosure, deck and gravel drive for Image Pros located at 1910 Dorr Road, west side of Dorr Road and south of Grand River Avenue. The request is petitioned by Stephanie Konker.

A. Disposition of Sketch Plan (9-22-22)

Mr. Ken Elphinstone and Ms. Stephanie Konker were present. They have reviewed the comments from the consultants and they can remove the proposed deck. This is a small business and only cars will be accessing the gravel driveway; however, they can widen it if necessary. The gravel area is only for cars to park and bring in boxes. There are no large delivery vehicles. Having gravel instead of a hard surface will not affect the stormwater runoff.

Mr. Borden reviewed his letter dated November 9, 2022.

1. Use of gravel, instead of hard-surfacing, requires approval by the Planning Commission based on review and recommendation of the Township Engineer.
2. The proposed drive does not meet the minimum width required by Ordinance for one-way travel, and the design necessitates two-way travel.
3. We request the applicant explain the intended purpose of the 30' x 20' gravel area at the rear of the building. Mr. Borden wanted to ensure that this is not used for outdoor storage.
4. If the accessory building shown in aerial photos is still present, it must be added to the plan. The applicant noted it has been taken down.
5. The Commission may wish to request a turning template for access to/from the waste receptacle. The applicant stated they could relocate this to the other side. Mr. Borden said if that is done, the parking spaces in front of it should be marked for employee parking only.

The call to the public was closed at 7:52 pm.

Commissioner Dhaenens thanked the applicant for revisiting the traffic study and the stormwater management system. He is disappointed that Township staff did not receive the revised information from the applicant.

Moved by Commissioner Dhaenens, seconded by Commissioner Lowe, to recommend to the Township Board approval of the amended and restated PUD Agreement to construct a proposed 186,157 sq. ft. 4-story hospital addition to an existing medical building located at 7575 Grand River Avenue, north side of Grand River Avenue and west of Bendix Road, with the following conditions:

- Building heights shall be provided
- The parking calculations shall be provided
- The wetland buffer information shall be provided
- Stormwater calculations shall be provided
- All signage details shall be provided
- All additional information shall be reviewed and approved by township staff, planner, engineer, and the Brighton Area Fire Authority.

The motion carried unanimously.

Moved by Commissioner Lowe, seconded Commissioner Dhaenens, to recommend to the Township Board approval of the Environmental Impact Assessment dated March 30, 2022 to construct a proposed 186,157 sq. ft. 4-story hospital addition to an existing medical building located at 7575 Grand River Avenue, north side of Grand River Avenue and west of Bendix Road. **The motion carried unanimously.**

Moved by Commissioner Dhaenens, seconded by Commission Chouinard, to recommend to the Township Board approval of the Final PUD site plan dated 7/20/22 to construct a proposed 186,157 sq. ft. 4-story hospital addition to an existing medical building located at 7575 Grand River Avenue, north side of Grand River Avenue and west of Bendix Road, with the following conditions:

- Building heights shall be provided
- The parking calculations shall be provided
- The wetland buffer information shall be provided
- Stormwater calculations shall be provided
- All signage details shall be provided
- All additional information shall be reviewed and approved by township staff, planner, engineer, and the Brighton Area Fire Authority.

The motion carried unanimously.

OPEN PUBLIC HEARING # 2...Discussion and review of a conceptual site plan for 12 attached condominiums and 102 single family homes for the Summerfield Pointe PUD. The property in

question is located on Lawson Drive, north of Grand River Avenue. The request is petitioned by Healy Homes, LLC.

Mr. Jack Healy was present. He reviewed the history of this development. Since he was last before the Planning Commission, he has revised the plans to develop the multi-family homes on the three remaining parcels and then build single-family homes throughout the rest of the development. They will also have separate associations. This addresses the largest concern of the existing residents.

He provided each of the Commissioners with information explaining that it is difficult for people to obtain mortgages for attached condominiums. Fannie Mae will not guarantee the loans on condo projects that are under construction.

Commissioner Dhaenens thanked Mr. Healy for addressing the concerns of the existing residents, and the new proposal is more contiguous with what is currently there.

Chairman Grajek noted that the proposed homes are large on small lots. He asked what demographics are being targeted. Mr. Healy stated they will be building one-story homes for older people and then the two stories that will be for younger people with families. The price point is approximately \$400,000. They will have an association that will maintain the lawn and the landscape beds. He has built developments with these sizes homes and lots and they sell. They are very desirable.

Commissioner McBain stated having a management company responsible for maintaining the grounds will be very difficult for this many properties. She recommended Mr. Healy not do this. Mr. Healy stated that other larger associations have this and the residents like it. She reiterated her concerns regarding the traffic from this development traveling on the roads in the other three attached developments, and those residents will have to pay for the maintenance. She would like to see a shared road maintenance agreement for these different developments. Mr. Healy will do exactly what the Township would like him to do with regard to the connection. Ms. VanMarter stated that connector roads are good planning; however, she understands the concerns raised by Commissioner McBain.

Mr. Borden reviewed his letter dated June 7, 2022. He has not conducted a thorough review of the plans at this time as this is very preliminary.

1. The conceptual plan submitted is intended for discussion at this time. No action is required of the Commission.
2. The approved PUD calls for 140 attached condominium units, beyond what is already constructed.
3. The conceptual plan identifies 12 attached condominium units and 102 detached site condominium units in lieu of the approved PUD.
4. The detached units range in area from 5,934 to 10,717 square feet, with a minimum lot width of 54.5 feet. The smallest lots allowed by conventional zoning are in the MDR

District – 10,000 square feet and 75' lot width. He suggested the applicant prepare a parallel plan based on MDR lot sizes to determine the base density if this was not a PUD.

5. The Commission should consider any comments provided by the Township Engineer and/or Brighton Area Fire Authority.

Ms. Byrne reviewed her letter dated June 8, 2022. She does not have any engineering concerns. Her comments are informational for the applicant.

1. The general road layout for the proposed Summerfield Pointe development is essentially the same as the previously approved version with multi-family units. We have no engineering related concerns with single family units as opposed to multi-family units.
2. After final site plan approval, the petitioner will be required to submit private road construction plans to the Township for review and approval.
3. After final site plan approval, the petitioner will be required to submit construction plans to MHOG Sewer and Water Authority for review and approval.
4. The petitioner should provide storm sewer and detention calculations for the detention basin on the final site plan for review.

The call to the public was made at 8:29 pm.

Mr. Gary Laundroche of 3649 Summer Ridge is the president of their homeowner's association; however, he is not speaking on behalf of the Board. They had their annual meeting in May, Mr. Healy attended, and the residents spoke with him. Their main concern was having single-family homes in their condominium development. The revised plans were agreed upon by almost all of the residents. He suggests a roundabout be developed and he would like to see the connection road being installed. He would like to see the development completed.

Ms. Jamie Schingeck of 4441 Aster Blvd is concerned with the large trees being removed and how it will remove the sound barrier between their neighborhood and this development.

The call to the public was closed at 8:37 pm.

ADMINISTRATIVE BUSINESS:

Staff Report

Ms. VanMarter stated there will be two items on September's meeting agenda.

Approval of the July 11, 2022 Planning Commission meeting minutes

Needed changes were noted.

Moved by Commissioner McCreary, seconded by Commissioner Lowe, to approve the minutes of the July 11, 2022 Planning Commission Meeting as corrected. **The motion carried unanimously.**

only approximately eight acres of it are buildable. This is a site condominium and there were no outbuildings allowed. This one parcel owner will need to maintain their own property so they would like to allow this lot to have an accessory structure in addition to the home. She cited the proposed revised documents presented in the packet. They submitted forms from 21 neighbors who are in favor of allowing this for the one parcel.

Mr. Borden agrees with the request. He suggested that this would be the time for the applicant to consider amending the Master Deed and Bylaws to allow outbuildings on the other parcels. Ms. Riesterer stated they do not wish to have outbuildings allowed on the other parcels. They are not needed as the homeowner's association hires out the landscaping

Ms. Byrne stated she has no concerns with this proposal.

Commissioner McCreary questioned why the applicant cannot build an attached garage. Ms. Riesterer stated that anyone who has shown interest in this property, due to the size of the lot, has stated they would want an outbuilding for their maintenance equipment. The developer can waive this provision in the agreement; however, it was suggested to have the Township approve the change. Commissioner McCreary is concerned that the type of equipment that could be on that site and used could be loud and it is adjacent to the other residences. Commissioner McCreary wants to ensure that this does not become used for a commercial business. Ms. Riesterer stated this lot is restricted to a single-family residential use and not commercial. Ms. VanMarter stated the zoning ordinance allows for home occupation businesses. She agrees that the restriction should be put in the master deed and bylaws.

The call to the public was made at 7:41 pm with no response.

Moved by Commissioner Rauch, seconded by Commissioner Lowe, to recommend to the Township Board approval of an amendment to the master deed and bylaws for Chestnut Springs to allow a detached accessory structure on Lot 25, with the condition that additional language be added stating the accessory building for Lot 25 shall not be used for commercial purposes, including a home occupation business. **The motion carried unanimously.**

OPEN PUBLIC HEARING #5...Discussion and review of a conceptual site plan for 12 attached condominiums and 102 single family homes for the Summerfield Pointe PUD. The property in question is located on Lawson Drive, north of Grand River Avenue. The request is petitioned by Healy Homes, LLC.

Mr. Wayne Perry of Desine, Inc. stated that Mr. Healy requested to have this item on tonight's agenda; however, he is not present.

Mr. Perry stated that Mr. Healy's original application was withdrawn after it was recommended for denial by the Planning Commission. Mr. Healy then met with residents of the community as their biggest concern was developing single-family residences into a multi-family neighborhood.

They also wanted to keep their community separate from the single-family homes. Mr. Healy changed his proposal to develop multi-family homes on the three remaining parcels and then build the homes throughout the rest of the development. They will also have separate associations. The residents are satisfied with the proposal.

The changes from the original, approved plan is they are reducing the density and traffic to the surrounding neighborhood. The current market is not for attached condominiums.

Commissioner Dhaenens would like to postpone this item until a future Planning Commission meeting so Mr. Healy can speak to the Planning Commission.

Commissioner McBain is concerned that the traffic from this development will be traveling on the roads in the other three attached developments, and those residents will have to pay for the maintenance. She would like to see a shared road maintenance agreement for these different developments. Mr. Perry stated the road network is already approved and the new proposal will reduce the number of units and users. Commissioner Chouinard suggested that representatives from the abutting developments meet. Ms. VanMarter stated the road network was designed to be a benefit to all of the neighborhoods. There is pending legislation regarding special assessments that would allow for assessments to be made on properties that benefit from the road and not just those residences that are on the road. Commissioner McBain would like to continue the discussion when the item is brought back before the Planning Commission.

Commissioner Rauch noted that the density is being reduced from what is already approved. During the recent Master Plan update, there was a lot of discussion regarding affordable housing and perhaps this could meet that need. The Planning Commission discussed this and would like Mr. Healy to return and provide details of the types of homes that will be built.

Moved by Commissioner Lowe, seconded by Commissioner Rauch, to postpone this discussion to a future Planning Commission meeting when Mr. Healy is available. **The motion carried unanimously.**

ADMINISTRATIVE BUSINESS:

Staff Report

Ms. VanMarter advised there will be five items on the July 11 Planning Commission meeting agenda.

Approval of the May 9, 2022 Planning Commission meeting minutes

Needed changes were noted.

Moved by Commissioner McCreary, seconded by Commissioner Lowe, to approve the minutes of the May 23, 2022 Planning Commission Meeting as corrected. **The motion carried unanimously.**

NEW BUSINESS:

OPEN PUBLIC HEARING # 2... Consideration of an amendment to the Summerfield Pointe Planned Unit Development Agreement, preliminary condominium site plan and environmental impact assessment to convert the project from (140-units) attached condominiums to single family detached homes (108-units). The project is located on Lawson Drive, North of Grand River Avenue. The request is petitioned by Healy Homes of Summerfield, LLC.

- A. Recommendation of PUD Agreement Amendment
- B. Recommendation of Environmental Impact Assessment (3-9-22)
- C. Recommendation of Preliminary Site Condominium Plan (3-23-22)

Mr. Fernando Abudeye and Mr. Wayne Perry of Desine, Inc. and Mr. Jack Healy, the developer, were present.

Mr. Abudeye stated they would like to reduce the density of the plan approved in 2002 from 140 units to 108 units as well as change them from attached condominiums to single-family homes.

Mr. Healy stated six of the homes will have the same building materials as the existing attached condominium units they will be abutting.

Mr. Abudeye stated that because they have reduced the density, they will be able to have more common areas, which will be maintained by the homeowner's association.

Mr. Borden reviewed his letter dated April 6, 2022.

- The applicant proposes to construct 108 detached residential units in lieu of the 140 attached units that are included in the approved PUD.
- Dimensional deviations are sought for lot width, lot area, and combination of side yard setbacks. The details of these deviations are as follows:
 - The proposal identifies units ranging in area from 0.14 to 0.25-acres, with a minimum width of 55 feet.
 - The revised plan includes a table noting deviations sought from MDR lot width and area (75' and 10,000 SF, respectively).
 - The applicant also seeks to deviate from the combined side yard setback requirement, though this is stated as a spacing between buildings (14') in the draft PUD Agreement.
 - We request the applicant amend the draft Agreement to reference the combination of side yard setbacks (as opposed to building spacing) for consistency with the MDR requirements.
- The draft PUD Agreement should reference the MDR requirement for combination of side yard setbacks, as opposed to building spacing.
- The applicant must address the Township's comments on the draft PUD Agreement.
- The applicant must address any comments provided by the Township Attorney on the draft condominium documents.
- The guest parking spaces that occupy a portion of proposed Unit 6 should be removed.
- Details are needed as to what restrictions are established by the proposed conservation easement.
- Details of the southeasterly open space must be added to the plans.

- The Commission should consider comments provided by the Township Engineer and/or Brighton Area Fire Authority.
- There is insufficient information in the private road application to determine whether the Township may allow variation from public roadway standards.
- The submittal does not include a Private Road Maintenance Agreement.
- The required easement width is not provided.
- The dimensional requirements for medians do not appear to be met.
- The plans do not identify any street signs.
- Design details such as AASHTO standards, pavement, curb and gutter, grades, and curves, are subject to review by the Township Engineer.

Ms. Byrne reviewed her letter dated April 4, 2022.

- The general road layout for the proposed Summerfield Pointe development is essentially the same as the previously approved version with multi-family units. There are no engineering related concerns with single-family units as opposed to multi-family units.
- The proposed sidewalk cross section should be revised to show 6 inches of compacted CL II sand per Township standards.
- After final site plan approval, the petitioner will be required to submit private road construction plans to the Township for review and approval.
- After final site plan approval, the petitioner will be required to submit construction plans to MHOG Sewer and Water Authority for review and approval.
- The Livingston County Drain Commissioner has updated their design standards. The petitioner has noted that they are pursuing approval from the Drain Commissioner and evidence of said approval should be provided to the Township prior to final site plan approval.

The Brighton Area Fire Authority Fire Marshal's letter dated April 5, 2022 states that all of his previous comments for Phase I have been addressed.

Commissioner Mortensen is not in favor of the proposed density.

Commissioner Dhaenens stated the development has been attached condominiums for 17 years and it would be very different to put in single-family homes.

Commissioner McCreary asked if the single-family homes will have an association. Mr. Healy stated that they would be included in the association to pay for the roadway and lawn maintenance, but not the outside building maintenance. She would like to see more details as to how this will be handled. Commissioner McBain agrees. She has reviewed the Master Deed and Bylaws and they are not clear due to maintenance of the lawn, the exterior of the buildings, the irrigation, etc.

The call to the public was made at 9:12 pm.

Mr. Gerald Adler of 4726 Summer Ridge asked about the six homes that will be adjacent to the existing condominiums. They will have different rules for pools, swing sets, etc. and they will look different.

Mr. Gary Laundroche of 4689 Summer Ridge represents the Association Board. It is very odd to have single family homes in a condominium development. It would look like an afterthought. The current condominium association is self-managed and has Master Deeds and Bylaws that help them maintain their common standards. Individual homeowners will have a different association's rules and regulations. He cited sections of the Township Ordinance that address condominium associations.

Mr. Peter Garofalo of 4698 Summer Ridge stated the original PUD outlines that the area of Lawson Drive at Grand River was to be widened and it was not done until in 2020. There is no secondary egress, which is required.

Mr. Robert Webb of 4654 Summer Ridge stated the proposed density is not good for the community. If this is approved, Lawson Drive will have more traffic and there will be increased delivery and garbage trucks, etc. He suggested rerouting the roadway so that it does not go down Lawson Drive to Grand River.

Mr. Rick Giummi of 4702 Summer Ridge Drive provided a sketch plan showing where new attached condominium units should be built and they would be all part of the existing association. Any new development would be a different association. The right side of Lawson Drive should look like one development.

Ms. Irene Hursh of 973 Lawson Drive does not want single-family houses across from her home. There would also be construction traffic. There is only one way in and one way out of their subdivision. These single-family homes will increase the traffic on Lawson Drive.

Ms. Ann Streeter of 609 Abbington Court stated that if this development connects to Aster Boulevard, it will cause increased traffic on their road. These new homeowners will need to help pay for the maintenance of their roadways.

Ms. Lori Carroll of 4663 Summer Ridge Drive stated the residents in her community do not want single-family homes.

Mr. Paul Manders of 4712 Summer Ridge Drive stated that if these single-family homes are allowed, it will not look right.

Ms. Liz Hoover of 661 Abbington Court in Hampton Ridge is concerned with the 55-foot-wide lots.

Ms. Karen Dorf of 4697 Summer Ridge Drive does not believe that the building materials will be able to match the materials on the existing buildings. She is against this and hopes the Planning Commission takes into consideration what the condominium residents have said.

Ms. Bobbie Davis of 4655 Summer Ridge Drive has lived there for 16 years. The residents of this community have maintained it. She would like their circle of condominiums to be completed and keep their association separate from a new one.

The call to the public was closed at 9:42 pm.

Commissioner Dhaenens questioned why condominiums are difficult to sell. Mr. Healy stated it is difficult to obtain a mortgage for a condominium. Commissioner Dhaenens understands the need for

affordable housing in this community, but he does not want the continuity of this neighborhood to be broken.

Commissioner McBain knows that different associations can work well together and suggested the applicant propose and present complimentary architectural and building materials; however, she does not believe the single-family homes should be on the same side of Lawson as the existing condominiums. She is not in favor of the density. She agrees that these new residents will be driving down Aster Avenue and that should be addressed.

Mr. Healy stated that the density would be higher if they stayed with the original PUD of 140 units.

Chairman Grajek is not in favor of the size of the lots.

Moved by Commissioner Mortensen, seconded by Commissioner Dhaenens, to recommend to the Township Board denial of the Summerfield Point Estates PUD Agreement Amendment because the lot size and setbacks are not acceptable and do not meet the ordinance in terms of MDR zoning. Moreover, the proposed plan for single-family homes on individual lots is inconsistent with neighboring properties. **The motion carried unanimously.**

Moved by Commissioner Mortensen, seconded by Commissioner Dhaenens, to recommend to the Township Board denial of the Environmental Impact Assessment dated March 9, 2022 because the lot size and setbacks are not acceptable and do not meet the ordinance in terms of MDR zoning. Moreover, the proposed plan for single-family homes on individual lots is inconsistent with neighboring properties. **The motion carried unanimously.**

Moved by Commissioner Mortensen, seconded by Commissioner Dhaenens, to recommend to the Township Board denial of the Preliminary Site Condominium Plan for Summerfield Point Estates dated March 23, 2022 because the lot size and setbacks are not acceptable and do not meet the ordinance in terms of MDR zoning. Moreover, the proposed plan for single-family homes on individual lots is inconsistent with neighboring properties. **The motion carried unanimously.**

Moved by Commissioner Mortensen, seconded by Commissioner Dhaenens, to recommend to the Township Board denial of the private road for Summerfield Point Estates because the lot size and setbacks are not acceptable and do not meet the ordinance in terms of MDR zoning. Moreover, the proposed plan for single-family homes on individual lots is inconsistent with neighboring properties. In addition, there is insufficient information to determine whether the Township may allow variation from public roadway standards, the submittal does not include a Private Road Maintenance Agreement, the required easement width is not provided, the dimensional requirements for medians do not appear to be met, and the plans do not identify any street signs.

The motion carried unanimously.

OPEN PUBLIC HEARING #3...Consideration of a site plan and environmental impact assessment for 136 apartment units within 17 buildings located north of the intersection of Whitehorse Drive and Arundell Drive. The property is located within the Lorenzen Planned Unit Development and was previously approved for 137 apartment units. The request is petitioned by Elevate Property Partners, LLC.



June 14, 2023

Township Board of Trustees
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Amy Ruthig, Planning Director
Subject:	Summerfield Pointe Estates – Amendment to an Approved PUD and Preliminary Condominium Plan Review
Location:	Lawson Drive, north of Grand River Avenue
Zoning:	MUPUD Mixed Use Planned Unit Development

Dear Board Members:

At the Township’s request, we have reviewed the revised submittal from Healy Homes requesting an amendment to the approved PUD for Summerfield Pointe Estates, as well as review of a preliminary condominium plan (plans dated June 1, 2023).

A. Summary

1. PUD Agreement/Amendment:

- a. The applicant proposes to construct 102 detached residential units in lieu of the 140 attached units that are included in the approved PUD.
- b. Dimensional deviations are sought for lot width, lot area, and combination of side yard setbacks, as well as allowances for the private road to match the specifications of the existing roadway.
- c. There is a minor discrepancy in the phasing description of paragraph 3(c) that needs to be corrected.
- d. The revised submittal addresses previous comments, as well as the conditions included in the Planning Commission’s recommendation.
- e. The applicant must address any remaining comments from staff, the Township Attorney, and/or Brighton Area Fire Authority (related to the emergency access gate).

2. Preliminary Condominium Plan:

- a. Per the Commission’s recommendation, the applicant has included language noting that the Association is responsible for lawn care; however, it does not specify that it will be consolidated to 1 day per week (per the Commission’s condition).
- b. The applicant must address any remaining comments on the draft condominium documents from Township staff and/or the Township Attorney.
- c. The Board should consider comments provided by the Township Engineer and/or Brighton Area Fire Authority (including review of the emergency access gate/knox box).
- d. Minor edits are needed to the Environmental Impact Assessment to fully meet the conditions of the Planning Commission’s recommendation.



Aerial view of site and surroundings (looking east)

B. Proposal/Process

The applicant proposes to amend an approved PUD by constructing 102 detached residential site condominium units in lieu of 140 attached residential condominium units. The project also includes 12 attached units on the east side of Lawson Drive.

In accordance with Section 10.11, the PUD amendment requires review and recommendation by the Planning Commission, and final review/approval by the Township Board (including execution of an amended PUD Agreement).

Furthermore, condominium plans require preliminary and final review/approval, both of which go before the Planning Commission for recommendation to the Township Board.

In this instance, the Township may process the PUD amendment and preliminary condominium plan simultaneously, though two separate actions should be taken.

At their May 8, 2023 meeting, the Planning Commission put forth favorable recommendations to the Township Board on the amended PUD Agreement, Environmental Impact Assessment, and preliminary site condominium plan.

Each of these recommendations included conditions, which are included as part of this review letter.

C. PUD Amendment

The approved PUD calls for an additional 140 attached residential condominium units (beyond the 44 already constructed). At this time, the applicant seeks to amend the PUD to allow 102 detached residential site condominium units in lieu of the 140 attached units.

The plan and accompanying amendment to the PUD Agreement identify 4 phases that include construction of residential units, extension of Lawson Drive with an emergency access connection to Aster Boulevard, construction of Summer Ridge Drive, extension of necessary utilities, and open space areas.

The draft PUD Agreement includes dimensional standards and deviations sought for the proposed detached units (reduced lot widths, lot areas and setbacks from conventional MDR standards for detached units).

The draft also includes deviations needed to allow the new private roads to match existing. A separate easement and maintenance agreement has been provided for the private roads, as required.

Our only comment at this time is a minor discrepancy in the phasing description. Specifically, subsections i and ii of paragraph 3(c) reference units 68-100. These should be revised to note units 68-99.

With the minor correction noted above, the revised submittal addresses previous comments raised, as well as the conditions included in the Planning Commission's recommendation.

However, the applicant must address any remaining comments from Township staff, the Township Attorney, and/or the Brighton Area Fire Authority (related to the emergency access gate).

D. Preliminary Condominium Plan

- 1. Submittal Requirements.** The revised submittal includes draft condominium documents, as required. The revised documents include language noting that the Association is responsible for lawn care, per the Planning Commission's recommendation; however, the documents do not specify that it will be 1 day per week, as conditioned by the Commission.

Both the attached and detached residential developments will be part of newly created condominium associations (Summerfield Pointe Attached Condominiums and Summerfield Pointe Estates, respectively).

The existing 44 attached units will remain within the already established Summerfield Pointe condominium association.

The applicant must address any remaining comments on the draft condominium documents from Township staff and/or the Township Attorney.

- 2. Dimensional Requirements.** The proposal identifies units ranging in area from 5,934 square feet (Unit 23) to 10,739 square feet (Unit 80), with a minimum width of 55 feet.

The draft PUD Agreement includes a table noting deviations sought from MDR lot width and area (75' and 10,000 SF, respectively), as well as the combination of side yard setbacks.

Per our previous comment, the "site data and zoning" table has been added so Sheet SD.

- 3. Buildings.** The submittal includes elevation drawings depicting 5 different home types, including multiple variations thereof for the detached units.

The front facades are primarily brick, with horizontal siding depicted as accents. Side and rear elevations are predominantly faced with siding.

Elevation drawings are also provided for the attached units. Similar to the detached units, the front facades include brick and horizontal siding, while the side and rear elevations contain mostly siding.

- 4. Pedestrian Circulation.** The plan includes 5-foot wide concrete sidewalks throughout the proposed development; however, they are located within the confines of the site condominium units themselves, and not within the roadway easement, as is typically the case.

- 5. Vehicular Circulation.** The development includes extension of Lawson Drive, including a connection to Aster Boulevard, and construction of Summer Ridge Drive.

Summerfield Pointe Estates

Amendment to an Approved PUD and Preliminary Condominium Plan

Page 4

As discussed at length, and ultimately included as a condition of the Planning Commission's recommendation, the Aster Boulevard connection to the neighboring condominium development will be restricted to emergency access via a gate and Knox box.

As previously noted, the proposed roads will match the existing roads in terms of design. Though the proposal does not fully comply with the Township's private road standards, deviations have been requested via the PUD. Additionally, a private road easement and maintenance agreement has been provided, as required.

The Commission should consider any comments provided by the Township Engineer and/or Brighton Area Fire Authority with respect to the proposed roadway layout and design.

6. Landscaping. Section 12.02.02 requires 2 street trees (canopy trees) per unit.

The landscape plan provides for 228 canopy trees and 40 evergreen trees. Plantings are located along the roadways and within open space areas.

The landscape plan has been revised to address our previous comments.

7. Park/Open Space. The submittal identifies 5 open space areas, including an existing conservation easement over a portion of the area along the east side of the development, and a play area at the north end of the development.

The submittal includes landscaping in the open space areas, as well as a play structure within the northerly open space.

8. Grading, Drainage, and Utilities. We defer to the Township Engineer for review and comment on site engineering elements, including the Traffic Impact Assessment.

9. Environmental Impact Assessment. The submittal includes a revised Impact Assessment (dated May 12, 2023).

The document does not include language regarding the emergency access gate, snow removal around said gate, or the restrictions on construction traffic that were included as conditions to the Planning Commission's recommendation.

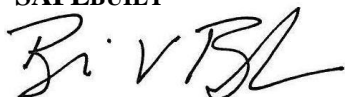
These items are addressed elsewhere in the revised submittal; however, the applicant must incorporate these items into the Impact Assessment, per the Commission's favorable recommendation.

Lastly, paragraphs B and E reference 136 units as part of the approved PUD and paragraph A notes 108 proposed single family units; however, these should be revised to note 140 attached condominium units and 102 single family units, respectively.

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



June 14, 2023

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

**Re: Summerfield Pointe Amendment
Site Plan Review No. 4**

Dear Ms. Ruthig:

Tetra Tech conducted a fourth review of the proposed Summerfield Pointe Development. The plans, last dated June 1, 2023, were prepared by Desine, Inc. on behalf of Healy Homes at Summerfield LLC. The development is located on 60 acres on the northwest side of the existing Summerfield Pointe development located on Lawson Drive. The Petitioner is proposing 102 single family units and two attached condo buildings with four units each. The proposed site includes storm sewer and on-site detention, as well as sanitary sewer and water main improvements. We offer the following comments:

GENERAL

1. The general road layout for the proposed Summerfield Pointe development is essentially the same as the previously approved version with multi-family units. We have no engineering related concerns with single family units as opposed to multi-family units.

PRIVATE ROAD

1. After final site plan approval, the Petitioner will be required to submit private road construction plans to the Township for review and approval.
2. The Petitioner has added a Knox Box gate on Aster Boulevard between Hampton Ridge and Summerfield Pointe Estates to address traffic concerns between the two developments. The Brighton Area Fire Authority provided comments on the proposed gate and associated PUD language in their letter dated June 9, 2023. These comments should be addressed prior to final site plan and PUD approval.

SANITARY AND WATER SERVICES

1. After final site plan approval, the Petitioner will be required to submit construction plans to MHOG Sewer and Water Authority for review and approval.

DRAINAGE AND GRADING

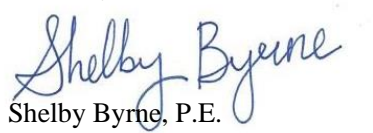
1. The existing on-site detention basin was designed using the previous LCDC Standards. The Petitioner should work with the Drain Commissioner to determine if their existing detention pond will need to be revised to conform to the new standard. Evidence of approval from the LCDC should be provided to the Township prior to final site plan review.

Ms. Amy Ruthig
Re: Summerfield Pointe Amendment
Site Plan Review No. 4
June 14, 2023
Page 2

2. The final site plan must include SESC measures for review and approval. SESC details should be included and should match LCDC Standards.
3. The LCDC requires that the “Land Use Summary Table” found in Appendix J of their updated LCDC Procedures and Design Criteria for Stormwater Management Systems be included on the cover sheet of the construction plans.

The provided site plan is adequate for the preliminary condominium plan phase. Any remaining comments should be addressed as part of the final site plan submittal.

Sincerely,

A handwritten signature in blue ink that reads "Shelby Byrne". The signature is written in a cursive, flowing style.

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

June 9, 2023

Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Summerfield Pointe Estates
Genoa Twp.

Dear Amy,

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on June 7, 2023 and are dated June 1, 2023. The project is a site plan based on completion of a previously planned residential development and reconstruction of the roadway leading to the development. The applicant is also requesting a modification from multi-family zoning to 108 single-family residential lots. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition.

This submittal amends the development documentation to include an access gate on Aster Blvd. between Hampton Ridge and Summerfield Pointe Estates. Revise as Follows:

1. Currently only the PUD addresses the installation of the gate and maintaining is clear of snow and a drivable surface by the developer. Additional language must be added to include maintenance of the gate and any associated appurtenances as the responsibility of the Developer.
2. The Master Deed does not mention the gate or maintenance of the gate and does not provide for maintaining Aster boulevard including snow removal. Add the proposed gate to the Master Deed Common Elements Section IV, and provide language for the maintenance of the gate and any associated appurtenances as the responsibility of the Association.

Revise the Gate Detail as Follows:

3. The locking mechanism for the gate is listed as a Knox Box. The Gate shall be secured with a Knox Padlock in conjunction with the Association maintenance lock so that either party is able to open the gate for access or maintenance purposes.
4. White reflective signage with Red letters a minimum of 2" tall, and need to be added to both halves and both sides of the gate. The signs must read "NO PARKING. EMERGENCY VEHICLE ACCESS ONLY".
5. The perimeter of each half of the gate shall be marked with red reflective marking tape on both sides to prevent unintended collision in darkness.
6. The gate shall provide full clear width of the roadway to the back of the curb line.



June 9, 2022

Page 2

Summerfield Pointe Estates

Genoa Twp.

Site Plan Review

7. Both sides of Aster Blvd the entire length between the developments needs to be signed as a Fire Lane with a sign every 50-feet.

Additional comments will be given when a complete submittal is provided. 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

May 9, 2023

Healy Homes
Attn: Jack Healy
3696 Sleeth Road
Commerce, Twp, MI 48382
Sent via e-mail: Jack@healyhomes.com

Re: Summerfield Pointe

Dear Mr. Healy,

This letter is to confirm that the Hampton Ridge Homeowners Association Board did have a virtual meeting with you on April 24 during which we expressed our concerns regarding the Summerfield Pointe expansion. The following agreements were reached at the May 8 Planning Commission meeting.

We were concerned about all the noise that would come from each homeowner running a lawn mower. You resolved that issue by confirming that lawn maintenance will be performed routinely by a service. The Planning Commission agreed. We are satisfied with that settlement.

We were concerned about additional traffic flowing through Hampton Ridge if our Aster Road connects to Summerfield. The Township does insist on the connection, and you agreed that a Knox Gate would be installed. The Planning Commission agreed. We are satisfied with that settlement.

We were concerned about construction traffic driving through Hampton Ridge. You agreed, as did the Planning Commission. You will take appropriate measures to ensure construction traffic does not flow through Hampton Ridge. We are satisfied with that settlement.

We were concerned about snow piling up in front of the Knox gate, possibly preventing emergency vehicles from crossing. The Planning Commission made it mandatory that the Gate be accessible. We are satisfied with that settlement.

We thank you, and Genoa Township, for hearing our concerns and taking action on them.

Sincerely,



Karen Clingingsmith

President
Hampton Ridge Homeowners Board

Cc: Amy Ruthig, Planning Director (amy@genoa.org)

From: [Ashley Bentz](#)
To: [Amy Ruthig](#)
Subject: Hampton Ridge
Date: Monday, May 8, 2023 4:11:28 PM

Hello,

I am the owner of 4057 Hampton Ridge Blvd and I am unable to make tonight's meeting.

I would like to email to express my desire to have a gate put in with the new community being built as well as anything to prevent our HOA fees increasing even further. I feel as though our HOA fees are expensive enough as they are and other projects should take priority (such as improving parking lots) instead of utilizing funding for speed bumps.

I apologize I am unable to attend, I would like to be added to the HOA email list if there is one as I only heard about this proposal from another owner in the community.

Thank you,

Ashley

From: [Mary Lynn Buzzell](#)
To: [Amy Ruthig](#)
Subject: Hampton Ridge / Summerfield Pointe
Date: Saturday, May 6, 2023 11:21:44 AM
Attachments: [image.png](#)

Dear Amy,

As a resident of Hampton Ridge, and an owner of a condo located directly behind the proposed development of Summerfield Pointe, I would like to share with you my concerns and opinions.

1) The Summerfield Pointe condominium development has been in the works for almost 20 years. The original development was paused due to economic issues, however, Healy Homes has not stopped their development of homes since 1982 and in approximately 12 locations. They have already been advertising the homes for Summerfield Pointe on their website:



The advertisement for Summerfield Pointe features a photograph of a two-story house with a brick and stone facade, a dark roof, and a two-car garage. To the right of the image is a text box with the following content:

**SUMMERFIELD
POINTE**
Genoa Township
Coming Soon!

Sales Representative:
Erika Healy
Phone: (248) 773-7572
[Email Erika](#)

Directions:
West on I-96 exit at first Howell exit (141). Continue West on Grand River ½ mile. Turn right onto Lawson Road (at red light across from Kohl's). Summerfield Pointe is located at the end of Lawson.
[Map It](#)

Below the house image are four links:

- [View Available Plans](#)
- [School Information](#)
- [View Quick Move-In Homes](#)
- [About the Area](#)
- [View Interactive Plat](#)

2) Owner(s) of Healy Homes stated that it is difficult to obtain a mortgage for condominiums, and that is one of the reasons they want to go with single family dwellings. Based on records from Genoa Township, there were 48 building permits issued between 2017 and 2020 for attached condominiums. If you drive around Howell, in any direction, you will find existing and new developments for townhomes and condominiums. This begs the question as to how difficult could it be to get a mortgage? Have they provided proof that a mortgage for a condominium cannot be obtained? I highly doubt that these developments are selling to "cash only" buyers.

3) Safety of the residents and their children with the proposed road attaching to Aster Blvd. through our development. As stated before, linking this road would create a "pass through" for any and all residents to get to Latson road for grocery stores (Meijer/Walmart) and

restaurants in this area. It was stated by the owner that residents of Hampton Ridge would likewise use their roads to access the Kohl's located at the end of Lawson Drive. Based on my own shopping habits, I would like to state that I frequent the grocery store at least 50 times more than a department store, if not more. You can do the math based on the current and proposed number of residents for this development.

4) I understand that a proposed gate could be installed and possibly used as an emergency ingress/egress for police, ambulances, fire trucks, etc. Is this something the board would consider? It would allow for flow of traffic in an emergency, but limit the number of vehicles going in either direction.

5) The roads in Hampton Ridge are already a mess and we, as a community, are working towards setting up a reserve to replace them. Additional traffic on these roads will further degrade them and residents of Summerfield Pointe will have no skin in the game for future repairs or replacement, even though they may be granted access.

6) Public use of a private facility. Although our pool is gated and locked, our playground is not. We will be held liable for any injury to trespassers if they use our playground as there is no way to stop anyone from coming over to use them.

I have grandchildren that visit and we cross Aster Blvd to take the path up to the playground and the pool. Thankfully, I taught them to stop, look, and listen before crossing Aster Blvd, even though there is rarely any traffic there. We have at least 8 small children in and around our building that play in the road and ride their bikes back and forth to the pool and playground. I have observed them crossing without a care because there really aren't any vehicles there and, as a neighborhood, we watch out for them. This will drastically change if the road is allowed to come through.

I thank you, in advance, for considering my concerns. We cannot attend these meetings in person as we winter in Florida, but we have been keeping up with this project. I would like the builder to finish the development as originally proposed and limit access through Aster Blvd. into Hampton Ridge.

Regards,

Mary Lynn Buzzell
741 Abbingdon Ct.
Howell, MI 48843

From: [Morgan Campbell](#)
To: [Amy Ruthig](#); [Kelly VanMarter](#)
Subject: Hampton Ridge Meeting 5/8
Date: Monday, May 8, 2023 5:46:40 PM

Hello,

I am emailing in regards to the the amendment Summerfield Pointe is purposing to their original PUD.

I am the owner of 4453 Aster Blvd in the Hampton Ridge condo complex. I am unable to attend tonight's meeting, but I want to express my concerns with the purposed amendment.

I believe installing a gate at Aster/Lawson Drive to separate the two neighborhoods is crucial. Speed bumps are costly, and there are many other planned projects that our HOA fees should be utilized for first (fixing road condition/parking lots). Additionally, there are many owners who take walks, walk pets, and have small children, and increasing traffic is a huge safety concern that Hampton Ridge residents should not have to be worried about in their own neighborhood.

I apologize I am unable to attend this evening, but I would love if I could be added to future email lists.

Thank you,
Morgan Campbell

From: [Sue Funk](#)
To: [Amy Ruthig](#)
Subject: Hampton Ridge & Summerfield Pointe
Date: Wednesday, May 3, 2023 8:40:03 PM

Hampton Ridge-Summerfield Point Issue

To: amy@genoa.org

My husband and I moved to Hampton Ridge in 2008 and have liked how it operates and takes care of the properties very well.

We have already talked about putting in speed bumps for an occasional speeder but have decided against them! They tend to damage the equipment used here for maintenance and cars constantly going over them! Why should WE HAVE to deal with speed bumps that we never wanted because of Summerfield Pointe?

We would prefer that you go back to the original PUD plan of attached condominiums having the same lifestyle that area neighbors live in.

Most important is installing the Knox Lock Pad Gate! With our condominiums having 257 units we already have plenty of traffic in here on our private roads plus the complex to our north, Lakewood Knoll, has their second access road running through Hampton Ridge complex since 2002 adding more traffic to our roads! We do not need or want another complex using our roads! I am sure our dues would have to increase because we will have to put in our roads more often because of the extra Summerfield Pointe traffic.

Has Summerfield Pointe thought about all the traffic that could also be using the new access to come and go to the East through their complex?

From: Suzanne Funk, 4176 Hampton Ridge Blvd. Howell, MI 48843

From: [Marisa Lutz](#)
To: [Amy Ruthig](#)
Subject: Summerfield Pointe Access to Hampton Ridge
Date: Friday, May 5, 2023 5:39:08 PM

Greetings Genoa Planning Commission,

I am a resident of Hampton Ridge. I am concerned as many in our community are, for the proposal to allow Summerfield Pointe to access our road which we pay for to keep functional. Please consider the wear and tear on our road, safety of our residents, and the financial burden we will have to endure. We are already sharing our road (Hampton Ridge Blvd) with the community next to us. I am asking you to please revisit the road access project, taking into consideration the Hampton Ridge residents' safety and additional cost responsibilities.

Respectfully,

Marisa Lutz
4133 Hampton Ridge Blvd

From: [Emily Parsons](#)
To: [Kelly VanMarter](#); [Amy Ruthig](#)
Subject: Tonight's Meeting-Hampton Ridge
Date: Monday, May 8, 2023 3:04:52 PM

Hello,

I am writing to express my support for the installation of a locked emergency gate to separate Hampton Ridge and Summerfield Pointe communities.

If the road is connected, the traffic volume will increase and it is possible that people will not follow our 15 mph limit. I have seen reckless driving on Whitehorse and I fear our street will become this way.

I want my foster children and others in the community to stay safe.

Thank you for your consideration,
Emily Parsons
4312 Hampton Ridge Blvd

From: [Carrie Carter](#)
To: [Amy Ruthig](#)
Subject: Summerfield Pointe Development
Date: Tuesday, April 4, 2023 12:07:39 PM

Good Afternoon,

I am writing as a concerned resident of Hampton Ridge Condominium Association. I live in building 17, which is near the end of the complex.

I understand that the Summerfield Pointe development plan was approved 20 years ago. My concern, again, is for the safety and well being of our community. The attachment of Aster Blvd to the development will open a thoroughfare for anyone wanting to cut through from Grand River to Latson road. I understand this opportunity is also afforded to us going back through that development. I am not worried about the residential people as much as those trying to "cut the corner."

I have a suggestion to incorporate, as a minimum, a traffic circle where Aster Blvd and the new development will meet. If anything, that would assist with slowing down the traffic as well as offering safety to the community as they use our walking path etc...

I hope to be at the meeting on April 10, but wanted to get this idea to you as soon as possible.

Thank you for your time,
Sincerely,

Carrie A Carter
4464 Aster Blvd
Howell MI 48843
701-367-9655

From: [Jamie](#)
To: [Amy Ruthig](#); [Kelly VanMarter](#)
Subject: Summerfield Pointe Estates-Hampton Ridge
Date: Thursday, April 6, 2023 12:40:31 PM
Attachments: [Summerfield PUD comparison.pdf](#)

Dear Genoa Township Planning Commissioners,

I greatly appreciate the opportunity to voice concerns and take part in the process of the Summerfield Pointe PUD amendment. As a resident of Hampton Ridge-phase 2 since 2015, the initial approval of our community, as well as Summerfield Pointe development, occurred almost 20 years ago. It was highly unlikely (future) residents of our two "neighboring" communities took part of that initial planning process, or would foresee some of the concerns we are facing today due to the extended delay in the development being complete.

As discussed at previous planning meetings in 2022, I am still having extreme concerns surrounding the difference in our way of housing lifestyles. Part of the draw and expectation of living in a condominium with the **HOA and bylaws** is knowing a **peaceful and tranquil environment surrounds us**. Our bylaws differ from single family detached homes; single family homes tend to have a bit more "freedom" in some ways, while still having some areas that require approval from the HOA. One of the major differences is outdoor space. Condominiums do not have personal yard space to gather, we have "common areas" which are maintained on a schedule with the HOA, and a landscaping company that we as residents pay for in our monthly dues.

There still seems to be discrepancy on the amended PUD for single family homes and their landscaping maintenance plan.

- August 2022 Planning meeting for conceptual proposal planning---Mr. Healy stated homes would have a separate HOA than the initial phase 1 condominiums, having a landscaping service handle all lawn care. That posed the question--Could Summerfield Pointe single family homes' HOA decide to change it from a cost standpoint years later (IE: Mr. Healy is stating the single family homes would pay dues to have a lawn maintenance company take care of all of the lawns at the same time. But what prevents this from changing years down the road when the project is complete because residents do not want to spend this additional cost of maintenance)?
- Nov 2022 Public Hearing at the Planning meeting it was mentioned again the possibility of the new HOA of homes having lawncare serviced.
- April 2023 Bylaws of new homes, Summerfield Pointe Estates: "Lawn Equipment. Lawn mowers, snow blowers, weed whackers and other gas or electric-powered lawn equipment may only be operated between the hours of 7 a.m. to dusk and in accordance with the ordinances and regulations of the Charter Township of Genoa.
- April 2023 Master deed of new homes- "Exterior Maintenance of Dwellings/Residence on Units:
 - (i) The Association shall be responsible for routine maintenance and repair,

but not replacement of the exteriors the residences built within the Units. The Developer, in the initial maintenance budget for the Association, shall be entitled to determine the nature and extent of such services and reasonable rules and regulations may be promulgated in connection therewith. As required under the Act, The Association is responsible for maintenance, repair and replacement of all General Common Elements.”

For residents of Hampton Ridge phase 2, which would back up to ~58 single family detached homes, this concern weighs heavily on quality of life and the existing peaceful living environment of our community. I would also think this would be something that existing Summerfield Pointe condominium owners would have reservations about as well, considering they bought into the expectation of living in a condominium community with the same HOA throughout the entire development and additional phases (NOT a mixed development). And while the developer can initiate the HOA for the single family homes to pay for lawn maintenance, there is risk in the future that the board and quorum of residents in that HOA could vote to discontinue that service.

Is the amended home development going to have scheduled lawn maintenance or will each individual resident be responsible for lawn care? It seems to make sense to have single family homes nestled in the center of surrounding neighboring apartment and attached condominiums communities.

The concept of the possibility of this volume of residents having the ability to operate lawn equipment any given time between 7a-dusk, 7-days a week is a noise problem and risk of nuisance for the residents in Hampton ridge. Many of our residents are retired, work from home, work nights, and we depend on knowing that the added noise of lawn care will only occur one scheduled day a week.

Unfortunately, our units at Hampton Ridge only have windows facing one direction, not on multiple sides of the unit. And the noise from the outside is not easily muted and carries inside easily, and there are no other areas our residences can move to for a quiet area besides our windowless interior bathrooms, which share walls with other adjacent units. Additionally, the site plot for the single family detached homes is very dense and small lot sizes, where backyards to homes back up to each other. Removal of the mature trees that line the edge of the property lines along buildings 18 & 19 of Hampton Ridge and the future of Summerfield Pointe Estates will not allow for any screening or buffer to dampen disturbances that would be caused by noise of this adjacent community.

If you look at the attached PDF comparison of the site plots of the initial PUD of Summerfield Pointe vs the amendment to transition to single family homes, there is not a significant difference in density. Mr. Healy has stated several times he is technically building "less" than the initial PUD. But realistically looking at what will immediately back up to Hampton Ridge and the Lawson-Aster connection, there are still ~58 single family homes replacing 15-4unit attached condominiums. All of these units, single family homes or attached condominiums, still have 2 car garages. There is only a difference of 4 vehicles if every unit/home filled the garage capacity of their residence. Attached condominiums are more likely to have smaller family sizes than single family

detached houses. At least if attached condominiums, the residents in both Summerfield Pointe and Hampton Ridge would have a shared concept of living with respect to lawn maintenance in their HOA bylaws. Attached condominiums would ensure the residents of Hampton Ridge community are not disturbed inconsistently with lawn maintenance.

When looking at the site plots of Summerfield Pointe (condominiums or houses), where would road snow plow removal go? There are only open spaces behind the sites, and one "open area" that is right against Hampton Ridge building 18 & 19. Has drainage plans been analyzed to ensure there is no risk of added flooding from snow piles melting? The initial PUD (and amended) does not show the adjacent land loss of Westbury apartments. Currently, Hampton Ridge has to have our property management plow snow into the open space of our parking lots between buildings or on grassy areas around buildings. I do not see this option in either of the site plans for Summerfield Pointe. Hampton Ridge has experienced a lot of flooding and drainage issues on sidewalks, parking lots, and open common areas, which is a budgetary expense that impacts residents' dues if it is a continuing situation. It is a concern that there may be a potential problem from this neighboring community, as a road will be extended within a close proximity of our buildings, and it does not appear that much "open space" is allocated with this risk of snow clearing and melting process in mind.

Additionally, like the majority of the community members in Hampton Ridge, we are **heavily concerned about the noise and safety concerns posed by the Aster-Lawson road connection.** The traffic impact assessment (TIA) calculated numbers that did not take into account the existing Aster connection of Lakewood Knoll and also the neighboring single family home community. We already suffer heavy road depreciation and the financial burden from use of our private road (Hampton Ridge Blvd) from those residents accessing the recent installation of the traffic signal at Latson. The added vehicles not only wear down our roads quicker with use, but they also increase our safety risk and speed concerns of our residents walking/biking/driving in our community. We have a very narrow road, and most of our buildings only have sidewalks on one side of the road. Our community speed limit is 15mph, and the amount of speeding vehicles has forced our HOA to contract the Livingston County sheriff to randomly patrol Hampton Ridge. We receive no financial contribution to help prepare for maintenance or replacement from the existing neighboring community using our private road and we do. It reciprocate use of their connected roads. It means we are already suffering from added noise and traffic of vehicles that do not reside or contribute to our HOA. Adding another community (Summerfield Pointe) would be detrimental to our residents. The calming mitegations suggested by the TIA do not provide any assurance of safety, or financial support to install them in the entirety of our affected community. It is of absolute necessity that a locked gate be installed at the Lawson-Aster connection, and no additional traffic added to our peaceful community. While it has been stated residents of Hampton Ridge would reciprocate use, and use the Lawson Drive traffic signal, it also means residents from Lakewood Knoll and those single family homes as well would likely use this connection. It does not bode well to either community to allow this added unnecessary "cut through" traffic. A Knox padlock gate accessible to the fire department and emergency service personnel would be a lot safer for both of our

communities, and would not burden one or the other for financial costs to repair roads and install calming measures.

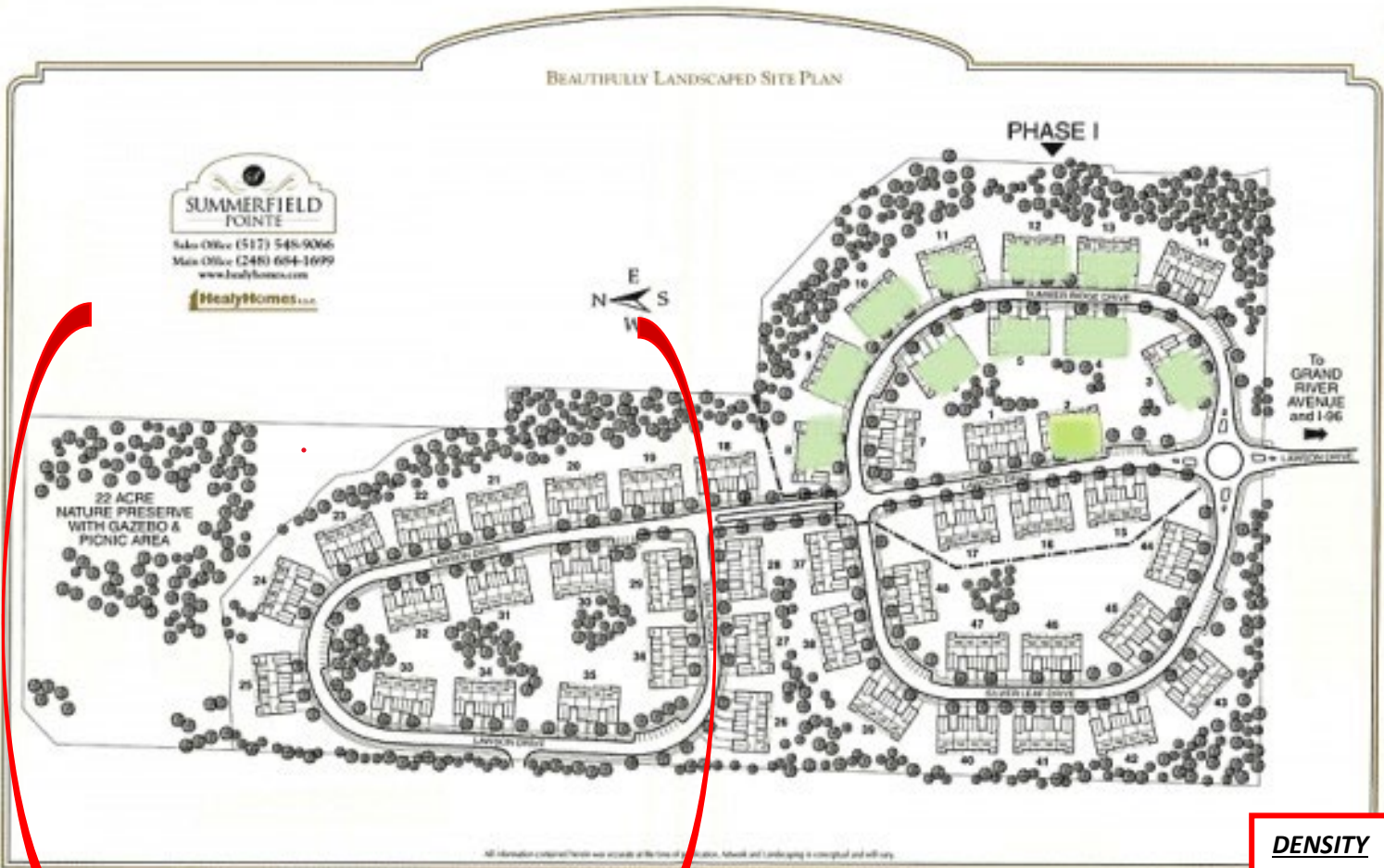
I hope you can take into consideration the concerns of the Hampton Ridge community in this process, and help find solutions that we all feel safe, and that we also can maintain a sense of security and peace in our daily lives at our residences.

Thank you so much for your time.

Best,
~Jamie
Hampton Ridge resident

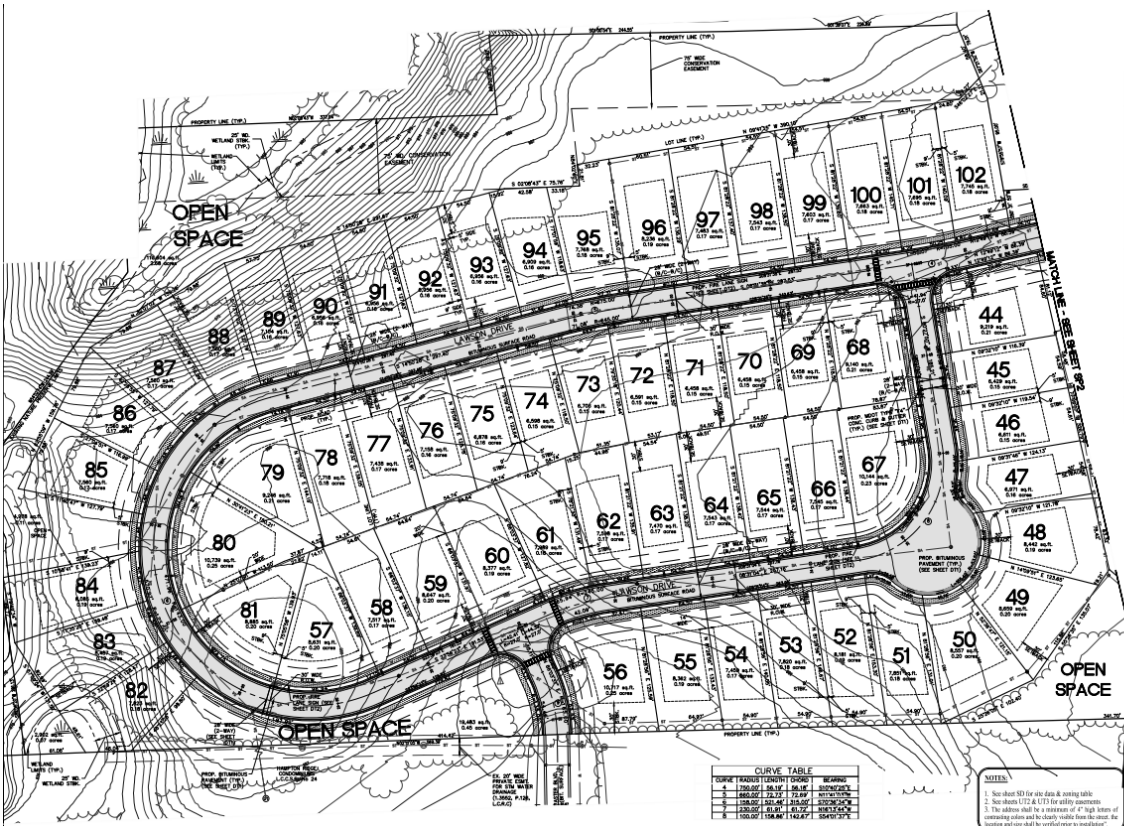


Initial PUD-Attached Condominiums:



Proposed amended PUD- (view of above section)

102 detached single family homes VS original 140 attached condominium (Densely plotted: ~59 homes in close proximity to Hampton Ridge/Latson connection, original PUD was adding 15 attached buildings in additional phases)



DENSITY
Backing up to Hampton Ridge:

58 single family homes= 116 cars (2 car garage)

15 attached condos-4 units each: 60 units= 120 cars (2 car garages)

The proposed change does not significantly lessen the density! Still same potential traffic at Latson-Lawson connection. **ADDED NOISE DISTURBANCE!**

From: [Ann Streeter](#)
To: [Amy Ruthig](#); [Kelly VanMarter](#)
Subject: Public Comments for Township Meeting April 10 regarding Summerfield Pointe Proposal
Date: Tuesday, April 4, 2023 2:15:04 PM

Dear Planning Commission Members,

I am a resident of Hampton Ridge Condominiums and would like to comment on the proposal to connect Aster Blvd to Summerfield Pointe Estates.

At the November 22 public hearing Commissioner Rauch requested a traffic study to better understand the impacts of how traffic would be affected by a connection of Aster Blvd to Summerfield Pointe Estates. The authors of the study failed to include data from traffic that flows into our Hampton Ridge community from the Lakewood Knoll subdivision and Lakewood Knoll condominium association. Lakewood Knoll communities have already impacted traffic in Hampton Ridge due to their use of our private roads in order to use the light at Latson Rd and Hampton Ridge Rd. Hampton Ridge residents do not use any of the roads in the Lakewood Knoll communities.

The HOA board of Hampton Ridge understands the use of our private roads by the Lakewood Knoll communities is due to Genoa Township ordinance in conjunction with the fire marshal. There is no change in this ordinance proposed. We have had to raise our HOA fees by \$5 each year in order to have enough money in our reserves to asphalt our private roads as they have really worn down over the years. Each time we raise our HOA our property values are affected because potential buyers do not want to pay high HOA fees.

Now Genoa Township is asking us once again to take on additional traffic without any compensation for our private roads. The township had pre approved the connection of Aster Rd to the new development in 2003. The traffic light was added in 2017. The traffic study states that we will have no more traffic than a typical residential neighborhood but the study is not based on actual data, only calculations. The traffic study does not fully represent what we experience from the Lakewood Knoll communities.

The recommendations from the traffic study indicate lane striping and speed humps are recommended to calm traffic. They also recommend a gate closure, one that is only accessible to emergency vehicles, if speed humps and lane striping do not mitigate traffic sufficiently to keep our private roads safe and maintained in good conditions.

Hampton Ridge Condominiums does not have the money to implement these recommendations. Through no fault of our own, our HOA dues would sky rocket if this burden is put on our community.

The best solution to this issue is to NOT connect Aster Rd to Lawson Rd. The next best solution is to allow for a gate closure that has a Knox box accessible to emergency vehicles.

I am hoping that the planning commission members will be fair to all sides regarding this issue. Hampton Ridge has already had to take on the burden of extra traffic for the Lakewood Knoll communities without any compensation. It is an unfair burden to ask us to do this again.

Thank you,

Ann Streeter

HOA Hampton Ridge Board Member

From: [Jamie](#)
To: [Amy Ruthig](#); [Kelly VanMarter](#)
Subject: Figurski-traffic study; Hampton Ridge-Summerfield Pointe
Date: Monday, November 14, 2022 10:02:35 PM

Hello,

Chairperson Grajek mentioned at tonight's 11/14 planning meeting agenda #2 (during the discussion of a potential traffic study), about Figurski being a cut through of Hampton Ridge residents. I am uncertain if I misunderstood or didn't hear correctly, but Figurski does not connect to Hampton Ridge and runs to the south of our property boundary. So the only access we have to Figurski is to turn left at Latson from Hampton Ridge Blvd and make an immediate left to Figurski. And obviously we can access Figurski from multiple connections along Grand River returning to our community. For many residents, it is safer and easier to stay on Latson or Grand River, as Figurski no longer has street lights at night, a pretty deep curve that usually has speeding oncoming vehicles, or risk of pedestrians in the road as there is no sidewalk.

I do see why the Chairman and other commissioners look at this point, and it supports the statements made of reciprocal benefit Hampton Ridge would have with another point of exit through Summerfield Pointe.

But an additional comment of consideration is when looking at a traffic study, Westbury apartment expansion will add traffic going to Lawson, as that is the only intersection with a traffic signal. The signal at Lawson is brief and does not have a dedicated left turn arrow/signal, and could potentially be a very congested path that might detour residents depending on the direction they need to travel leaving their respective communities. Currently, not having a dedicated left signal can at times be an issue at Latson/Hampton Ridge, and the potential of added traffic using that signal with the Aster connection will exacerbate this issue and pose safety risks—I have narrowly missed being in an accident because Meijer traffic is marked for left or right turns only in the two lanes leaving the store, and I have seen a mix of cars wanting to come straight to Hampton Ridge sit back several cars in the left turn only lane and startle me coming straight when I thought I was clear to make a left because the right turn lane was empty (which many use as the straight away to Hampton Ridge). We have to monitor two lanes of cars leaving Meijer for our safety in turning left, as well as pedestrians crossing at their signal.

With the above concerns and points, how would we seek a dedicated left turn signal at Latson/Hampton Ridge, and Lawson/Grand River with the projected increase of use at both intersections if this plan moves forward connecting communities? Or how would we get some form of traffic signal timing adjustment and better lane marking/signage? I do not understand why coming from Hampton Ridge we can go straight into Meijer from the right lane, but the traffic lanes and signs do not provide a reflection of the same return access leaving the store (a sign leaving Meijer shows a left turn lane and right turn lane only, no designated lane or markings for straight).

I want to thank you and the commissioners for all of your time and dedication to this board and Charter of Genoa Township. It is truly amazing to see the amount of detail and knowledge everyone has for agenda items, and the pure thoughtfulness and overall goal of helping our Charter of Genoa Township grow in a successful and beneficial way. Personally, I mentally get exhausted reviewing the packets and materials, and cannot imagine how you do this work so often and for such a vast variety of projects on a regular basis. You are exceptional at your roles and I hope you know how appreciative I (and many residents) are for what you do. Thank you! :)

Until next meeting, wishing you a wonderful Thanksgiving holiday! Stay well.

Best,

~Jamie Schingeck
Hampton Ridge

From: [Susan Gardner](#)
To: [Amy Ruthig](#)
Subject: Re: Tonight's public hearing regarding Hampton Ridge
Date: Tuesday, November 15, 2022 3:28:07 PM
Attachments: [image001.png](#)

Hi Amy,

I was able to attend last night after all and had a chance to speak. Thank you for a well-managed meeting. In my time on Brighton Planning Commission and City Council, I have sat on your side of the dais for many such meetings, and they can be challenging to navigate.

I'm curious to know if two points of road access is required for Summerfield Pointe and, if yes, why. When a development is being worked into areas with surrounding development, joining to an existing neighborhood is always a point of contention. The solutions I've seen is making the additional road connection but with a crash gate to address any safety and fire access, and also not making the additional connection but requiring that the homes are built with residential fire sprinkler systems.

It's unfortunate, 20 years ago when Hampton was being planned, that Aster Blvd was not made wider than it is today, and possibly even a public road. Despite how any master planning documents were drawn up, each of the related developments appears treated more as stand-alone. I'm certain the developer of Summerfield Pointe would greatly prefer to market the property with two access points vs. one, but per the comments made last night, Aster Blvd is truly not very suitable as a through-way. In fact, Hampton now has traffic enforcement, and that shows the seriousness of enforcing the speed limit of 15 MPH.

It was a great plan to table and obtain a traffic study. Is there any possibility of a traffic signal on Grand River at the access to Summerfield Pointe?

Thank you again,
Susan Gardner
810-360-3686

From: Amy Ruthig <amy@genoa.org>
Sent: Monday, November 14, 2022 6:09 PM
To: Susan Gardner <sgardner386@hotmail.com>
Subject: RE: Tonight's public hearing regarding Hampton Ridge

Thank you. I was able to supply a hardcopy of this email at the table for the Commissioner's tonight.

[Amy Ruthig](#)
Planning Director



Genoa Charter Township
2911 Dorr Road, Brighton, Michigan 48116
Office: 810-227-5225 Ext. 114 Direct: 810-224-5824
E-mail: amy@genoa.org, Url: www.genoa.org

From: Susan Gardner <sgardner386@hotmail.com>
Sent: Monday, November 14, 2022 5:45 PM
To: Amy Ruthig <amy@genoa.org>; Kelly VanMarter <Kelly@genoa.org>
Subject: Tonight's public hearing regarding Hampton Ridge

**Please read the body of this message as part of public comment. Thank you.

Ms. Ruthig and Ms. VanMarter,

I just became aware of the public hearing a few moments ago and will likely not be able to attend this evening.

In responding, I have 9 years of experience on Brighton Planning Commission and 7 years of experience on Brighton City Council. I can see this project through the eyes of someone used to looking at plans such as these. That said, **I am opposed to the proposed connection Summerfield Pointe to Aster Blvd for the following reasons.**

- Aster Blvd is a private road. The residents of Summerfield Pointe would cause wear and tear and have no responsibility to maintain or repair Aster Blvd or pay for the mill and overlay when end-of-life is reached.
- Aster Blvd is a narrow road with a reduced speed limit, which is not aligned with use as a public road.
- Having outside traffic moving through Hampton Ridge was never planned for and is potentially unsafe for the residents out jogging or walking their dogs.
- There is absolutely no upside for the residents of Hampton Ridge and this added traffic will degrade the community.

Please do not allow this connection.

Regards,
Susan L. Gardner
Owner of 4355 Aster Blvd (since built)

810-360-3686

From: [Mary Lynn Buzzell](#)
To: [Amy Ruthig](#); [Kelly VanMarter](#)
Subject: Summerfield Pointe Estates
Date: Thursday, November 10, 2022 7:00:21 PM

Dear Amy & Kelly,

I am a resident of Hampton Ridge and I reside at 741 Abbington Ct in Howell, MI. I have been made aware of the Summerfield Pointe Estates development, which will be located directly behind the building in which my husband and I reside. I did research on this project and I have a couple of concerns, which I would like to raise with you, prior to the meeting on Monday, November 14, 2022.

From what I understand, Healy Homes (Jack Healy) purchased the property from Adler Enterprises in May 2003. Since that time, the property had been partially improved and condominiums were built on this site. I read through the Genoa Township minutes and found that Mr. Healy wanted to change the second phase of this development to single family homes and is now asking for a mix of condominiums and single family homes. My understanding is that the Genoa Township board has not yet approved this land use request. Here are my concerns:

1) This development would be connected to Aster Blvd, which runs through our community. Aster Blvd is a private road and the care and maintenance of this road falls directly on the unit owners of Hampton Ridge through our association fees. In addition, it sounds as if Mr. Healy may be able to use Aster Blvd in which to bring in his construction equipment, which would further degrade our roads. After the connection is made, there is a significant possibility of increased traffic flowing from Summerfield Pointe through Hampton Ridge in an effort for their residents to get to the Meijers store, which is located directly across from our entrance at Latson Rd. My understanding is that there was discussion that people living in Hampton Ridge would equally use the Summerfield Pointe roads to gain access to the Kohl's located at the intersection of Lawson Rd and Grand River. I can assure you that the flow of traffic leading from Hampton Ridge through Summerfield Pointe would not match the traffic flow from the other direction. Would Mr. Healy be providing financial assistance to improve our roads? Would residents of Hampton Ridge be required to provide road maintenance funds to Summerfield Pointe??

2) There are many families that reside in Hampton Ridge and the children in and around our complex are used to riding their bikes and scooters along the streets and sidewalks. Many of us cross Aster from Abbington Ct to use the pool and playground located by our clubhouse. An increase in traffic poses a high risk to these children and adults alike.

3) Genoa Township has a master plan which calls for the preservation of wooded areas and yet this developer plans to remove all the trees between Hampton Ridge and Summerfield Pointe. I understand that Mr. Healy will be required to plant 10-11 trees as a barrier between our two subdivisions. This hardly seems adequate for the amount that he will be removing. Does this meet the township or county requirements for a buffer?

Is there a statute of limitations on the agreement between Genoa Township and Adler Enterprises, now owned by Healy Homes? Since the original agreement is now 20 years old and Jack Healy has claimed that the reason he didn't originally finish Summerfield Pointe was

because of bad economic times back in 2004, is the township obliged to extend him the same permissions to proceed? It has been 19 years since the original purchase and he is now coming forward with different plans to develop this property. I would like you to consider all our concerns as you proceed forward.

Thank you for your time,

Mary Lynn Buzzell
741 Abbington Ct
Howell, MI 48843

From: [Sandra](#)
To: [Amy Ruthig](#)
Subject: Using Hampton ridge to travel through
Date: Monday, November 14, 2022 1:23:54 PM
Attachments: [HamptonRidge Summerfield Pointe.pdf](#)

This idea is outrageous we already have too much flow through our community and we pay assessments for t road here .. who is liable for wear and tear. We still have accidents at light off Latson and we have to wait long times at that light to get out. I will sell if that's going through...

Sent from my iPhone

NOTICE TO ATTEND!

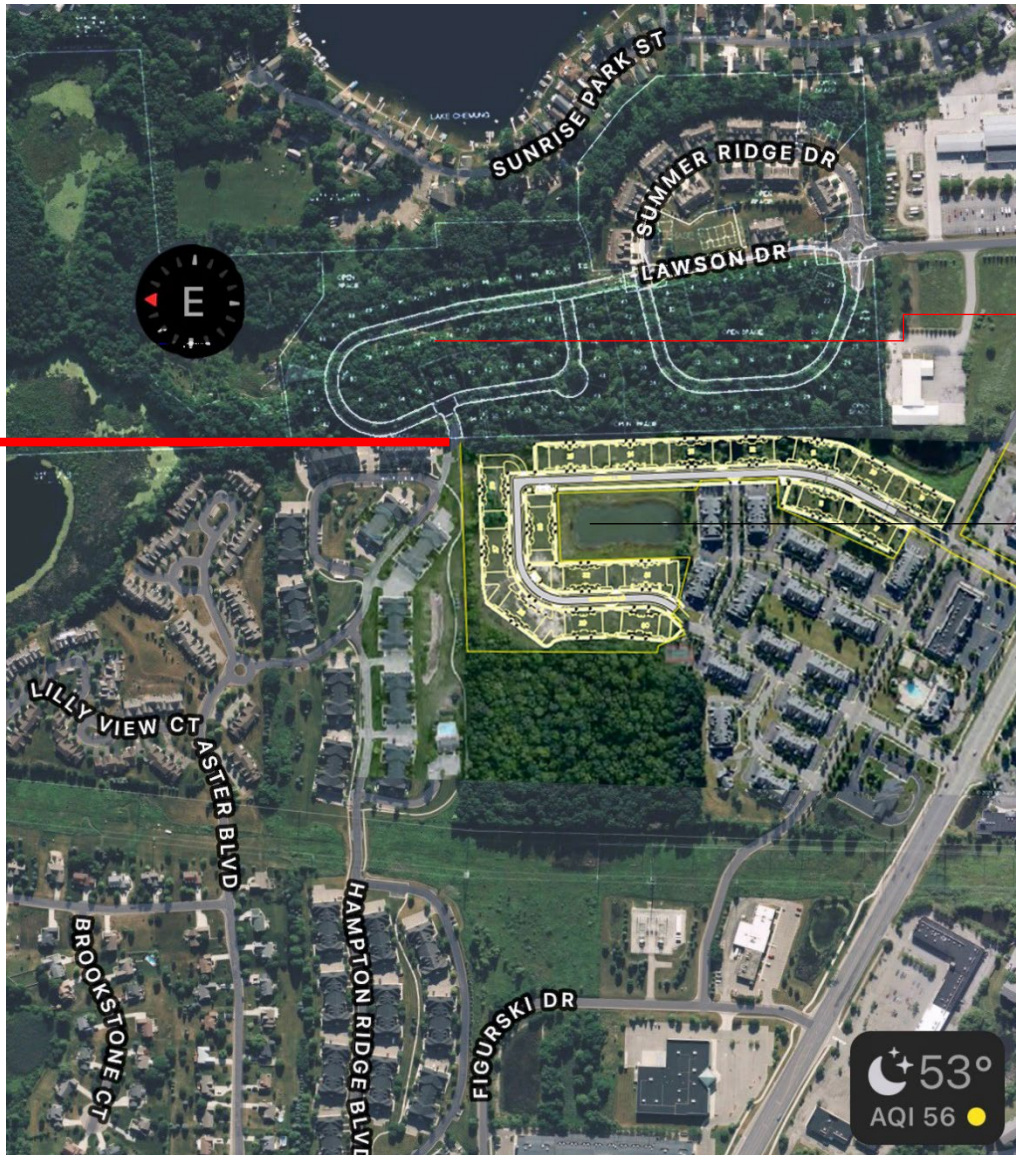
Genoa Township Public Hearing

Agenda item #2: Summerfield Pointe-Hampton Ridge

Mon. 11/14 @6:30pm at 2911 Dorr Rd, Brighton

Aster Blvd will be connected to the new expansion of Summerfield Pointe, which this development would back up to Hampton Ridge (bldg. 18 & 19)

Construction traffic and future Summerfield Pointe residents can use Hampton Ridge Blvd and travel through our community!



Proposed expansion of Summerfield Pointe: **Healy Homes** requesting amendment to PUD for additional phases to go from 140 attached condos to 102 single family homes or townhouses

Current expansion project of Westbury Apartments---Will NEVER have road access to Aster Blvd/Hampton Ridge.

Please attend this meeting to voice your concerns as a resident of Hampton Ridge, &/or email Genoa Township's planning manager- Amy Ruthig (amy@genoa.org) and township manager-Kelly VanMarter (kelly@genoa.org)

Visit genoa.org website (Go to: news→board agendas/minutes→planning commission) to find the meeting packet for more information

From: [Susan Gardner](#)
To: [Amy Ruthig](#); [Kelly VanMarter](#)
Subject: Tonight's public hearing regarding Hampton Ridge
Date: Monday, November 14, 2022 5:58:53 PM

**Please read the body of this message as part of public comment. Thank you.

Ms. Ruthig and Ms. VanMarter,

I just became aware of the public hearing a few moments ago and will likely not be able to attend this evening.

In responding, I have 9 years of experience on Brighton Planning Commission and 7 years of experience on Brighton City Council. I can see this project through the eyes of someone used to looking at plans such as these. That said, **I am opposed to the proposed connection Summerfield Pointe to Aster Blvd for the following reasons.**

- Aster Blvd is a private road. The residents of Summerfield Pointe would cause wear and tear and have no responsibility to maintain or repair Aster Blvd or pay for the mill and overlay when end-of-life is reached.
- Aster Blvd is a narrow road with a reduced speed limit, which is not aligned with use as a public road.
- Having outside traffic moving through Hampton Ridge was never planned for and is potentially unsafe for the residents out jogging or walking their dogs.
- There is absolutely no upside for the residents of Hampton Ridge and this added traffic will degrade the community.

Please do not allow this connection.

Regards,
Susan L. Gardner
Owner of 4355 Aster Blvd (since built)

810-360-3686

From: [Kristie LaPointe](#)
To: [Kelly VanMarter](#); [Amy Ruthig](#)
Subject: Summerfield Pointe - Hampton Ridge
Date: Monday, November 14, 2022 3:43:09 PM

Good Afternoon,

I'm a resident of Hampton Ridge, living in Building 18. The development of Summerfield Point and the road connecting the 2 associations is very concerning. We already share the roads with another condo group and the Knollwood subdivision. The added traffic signal just increased the number of cars in the neighborhood. which are private roads that Hampton Ridge is solely responsible for in an already expensive \$300 monthly HOA. With more traffic, how will Summerfield Pointe contribute to Road maintenance costs? Will Aster Blvd and Hampton Ridge roads become the townships responsibility to maintain?

The removal of the trees for the Westbury Apartments was very disappointing, as part of why I live in Hampton Ridge, and moved to Livingston county was to get out of the Novi area where its housing on top of housing. The constant construction for years (if all buildings/homes actually get finished is horrible for residents and resale value. no one wants to live/work in a construction zone for years!

Kristie LaPointe
749 Abbingtton Ct

ATT: Ms. Kelly VanMarter/Planning Commission

It has been brought to the attention of the Mountain View subdivision landowners that *Eisenberg Genoa LLC*. has requested rezoning of their property in Sections 23 (west of Bauer) and 24 (east of Bauer Rd.)

We are concerned about the *Eisenberg Genoa LLC*. request for the Township to rezone from Agricultural (current zoning for property west of Mountain View Sub) to medium and or high-density development.

The plot of land adjacently west to our home in Mountain View Subdivision is currently in the Township's Future Use Master Plan, to be rezoned from agricultural to low density single dwelling estates, which are one to three-quarter acre lots, consisting of one well and one septic per lot.

Upon reviewing *Eisenberg Genoa LLC*. request sent to the Township planning commission, dated March 18, 2022, for rezoning to medium/high density dwellings, and I quote:

"Considering existing adjacent land uses we believe our request has merit and meets sound community planning principles to the designated as medium and high density residential in the master plan update"

This might be applicable to section "24" possibly, but in no way does it fit the land section "23" area that is adjacent to Mountain View Subdivision. Many of us located here within the subdivision Mountain View, our current neighbors south of Challis Road as well as North of the train tracks on Bauer Road, have always been under the clear understanding that the 127 acres in question was not only zoned as agricultural, but would eventually be rezoned to low density, to match our existing subdivisions/dwellings.

Being that this is the United States of America and *Eisenberg Genoa LLC*. has every right to build on their land and profit off it. NO ONE should and or will not debate that fact!

However, if it has a potential to disrupt the current topography, that is a completely different issue. Development in areas with steep slopes, such as the area in question, could result in a significant change of the natural functions of the hillsides, whereas mechanical cutoffs and fills or removal of natural vegetation could cause massive, wetland and water runoffs issues. This plot of land in discussion clearly meets those criteria of causing massive changes to the natural topography.

Being that my family is on one of the lowest spots in our sub, spring water runoff in months of late March, April and into May, literally comes 20 feet from our existing dwelling. I reported to not only the Department of Natural Resources, but also the H.O.A. president, who has seen the water getting dangerously close to my home. The DNR referred me to the County Drain Commissioner, and after a lot of calls here and there, a gentleman came and talked with me and explained that the VERY aggressive water runoffs are critical to the natural flow of water leading into the local lakes and wetlands. Through my personal persistence with the DNR and County, I was the one that initially started the "over loading" winter run off concerns, that lead to discovery that the smaller culverts under Dorr Road were plugged which led to the 20" culverts being placed under Dorr Road.

Furthermore, if it changes, disrupts, and extinguishes the true community and character which is located within Genoa Township, then the balance between nature and recreation, yet still being close to town, is absolutely disrupted permanently and possibly even destroyed. Unfortunately, it then may no longer be a beautiful sleepy little place to raise a family and grow old!

Currently there are some of our neighbors in Mountain View subdivision, who have had to drill new wells on their property, deeper and deeper to get water already.

Another thing to consider might be, how will putting in another section of any-density dwellings affect everybody's current water table as well as the above-mentioned topography and wetland/runoff issues, traffic and many other issues pertaining to the Genoa Township area.

Ever since paving of Challis Road our traffic has doubled. We have three possibly even four autistic children playing in this area, as well as a plethora of other children playing in the streets and families walking dogs daily, and biking. The paving of Challis Road has turned grand circle drive into a turnaround for travelers by which most people drive like it is the stinking autobahn!! No one follows posted speed limits! One Mother on Challis almost had a child run over getting on a bus on Challis Road, as a speeding driver was looking at their phone, disregarding the bus's flashing "stop sign" and flashing lights, and zoomed right past. Had she not been paying attention her child would've been killed.

Another thing that I want to bring up is since the paving of Challis Road, neighbors on the south side of Catalpa Drive have stated that now, their backyards fill with water and turn the lower parts of their property adjoining with those on Challis Road into a pond any time there is a massive rain or spring thaw happens.

Rezoning from agricultural to medium/high density development is inconsistent with our adjacent neighbors, south of us across Challis Road, but also our neighbors north of the railroad tracks on Bauer Road and other surrounding areas such as the neighborhoods on Dorr Road.

I will briefly touch on the fact that these above-mentioned issues could cause massive loss to Mountain View and surrounding Neighbors property values. As hard-working Americans, nobody wants their property value to decrease due to decisions, inconsistent with current surroundings.

I understand growth, I understand a need to expand and change in society, but sometimes evolution of growth and such can be harmful and problematic in many areas.

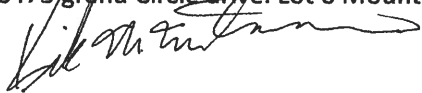
When it begins to affect something as serious as property value, some people... well... That's a major part of their lifelong investments and it gets a little unnerving.

I must respectfully request that the rezoning be denied.

Thank you for your time and consideration.

Kirk Martin Mortensen

6475 grand Circle drive. Lot 6 Mountain View Sub.



From: [janeen musselman](#)
To: [Amy Ruthig](#)
Cc: [Kelly VanMarter](#)
Subject: Meeting tonight
Date: Monday, November 14, 2022 5:20:17 PM

Good evening!

I am writing to express my concern regarding the agenda number 1 & 2 of this evening's agenda. Please note the following for consideration during this evening's meeting.

Re: Botcher America's hazardous waste.

Thank you for taking the time to consider the Hampton Ridge homeowners concerns. I am in strong opposition of the Botcher America's hazardous waste as well as Aster Blvd connection to the new expansion of Summerfield Pointe. This is a time to protect our water sources and refrain from allowing hazardous waste to be brought into our backyards. Our residents and animals will be greatly negatively impacted. Please support your residents in protecting our community and environment by voting no to allow Botcher to import hazardous materials to our neighborhood and township.

Please protect our environment and consider the impact on stormwater management local topography, soils, wildlife, woodlands, mature trees, wetlands, drainage, lakes, streams, creeks or ponds in the proposed areas.

Re: Summerfield Pointe

The road connection would greatly negatively impact our neighborhood, Hampton Ridge.

Summerfield Pointe development road would back up to Hampton Ridge, the road connection will increase neighborhood traffic as well as cause backups at our traffic light onto Latson Road. It would radically change our small quaint neighborhood rural environment into a busy traffic connection artery from multiple additional homes. I highly value safety and security. I had selected the neighborhood and township to live based on its low crime rates as well as low traffic.

Currently our road maintenance homeowners association fees address our current traffic road. The HOA fees do not take into account the structure of our roads and access to differing neighborhoods. The connection will undoubtedly have a negative and costly impact on Hampton Ridge condo owners. The road connections will negatively impact residents if the road is used by Summerfield Point residents as well as construction crews.

The additional traffic also dramatically increases the wear and tear in our roads. Our HOA fees have increased this year due to road maintenance issues.

The HOA funds paid monthly currently utilize funding to pay for the police department to patrol our neighborhood monthly. If our traffic increases, so will our need for increased HOA costs for additional patrols.

We have a quiet private pool, walking areas and clubhouse that are also at an increased risk of unintended visitors and increased neighborhood disruptions.

Our neighborhood currently houses many animals. We enjoy many birds and woodland creatures. Our neighborhood sand hill cranes are in increased danger of being hit and killed as the propensity for increased traffic climbs dramatically. It is a concern to displace local wide life for the addition of more asphalt and decreased wildlife habitat. Please protect our environment and consider the local topography, soils, wildlife, woodlands, mature trees, wetlands, drainage, lakes, streams, creeks or ponds in the proposed areas.

I chose to place my roots in Genoa township and Hampton Ridge based on the safety and tranquility for myself and my child. I have grave concern for our many neighborhood children if they should unfairly face a change to their neighborhood. It is also unfair to change the whole feel of a neighborhood by allowing drastic traffic additions if the sole purpose is to accommodate residents that don't even live in the community and don't pay for road or safety updates on the road.

Thank you for hearing my concerns.

Sincerely,

Janeen Musselman
Hampton Ridge resident

From: [Ann Streeter](#)
To: [Amy Ruthig](#); [Kelly VanMarter](#)
Cc: [Natalie Liles | Your Peace of Mind, Inc.](#); [Jamie Marie](#)
Subject: Tonight's Board Meeting to Discuss the Development of Summerfield Pointe
Date: Monday, November 14, 2022 10:53:55 AM

Hello,

My name is Ann Streeter, and I am on the board for the Hampton Ridge Condominiums. I will be at the meeting tonight and will speak during the appropriate time.

I understand that the attachment of Aster Road to the new Summerfield Pointe development is part of the planned unit development and that there is nothing that can be done to stop the attachment of the two roads. At the time of the PUD there was no traffic light at Lawson Rd and Hampton Ridge Rd. A few years back Genoa Township put up the traffic light. This has changed a lot of the traffic flow on Hampton Ridge Road as many of the residents from the neighboring Lakewood Knoll use our road because of the traffic light. When Summerfield Pointe attaches to the road this traffic will increase. It will also provide a thoroughfare for motorists who want to skip the light at Grand River and Latson. They can turn down Lawson and get to Meijers by using our private roads.

We are a very quiet community with many young children and residents who enjoy walking along our sidewalk pathways throughout the seasons. Increased traffic will become a safety issue for our residents. The HOA board members have had discussions as to how we can mitigate this pending situation. One solution would be to add speed humps to our main thoroughfare - Aster Rd to Hampton Ridge Rd.

I would like to ask Genoa Township and Summerfield Pointe to provide monetary compensation to Hampton Ridge residents for this increased traffic flow caused by the light at Latson Rd and Hampton Ridge Road. We have had to increase our HOA dues to prepare for asphaltting our roads and adding speed humps will only add to that cost. Hopefully the Genoa Township and Summerfield Pointe can mutually contribute to this additional cost to keep our community safe.

Thank you,
Ann Streeter
HOA Board Member for Hampton Ridge

From: [Charlie Tinsley](#)
To: [Amy Ruthig](#); [Kelly VanMarter](#)
Subject: Charles Tinsley - Hampton Ridge
Date: Monday, November 14, 2022 5:54:31 PM

Hello Amy and Kelly,

I am totally against having a road connection for both these communities. This will create traffic issues and safety concerns for our community. Please reject this road extension for Agenda item #2: Summerfield Pointe-Hampton Ridge.

My name is Charles Tinsley I reside at 4324 Hampton Ridge Blvd, Howell, MI 48843 as a home owner. I am aware this meeting is taking place tonight. I was just informed today about it and I am stuck at work. Please advise of anything I need to do to advocate for rejection or voice my concerns to blocking this road extension!

Thanks
Charles Tinsley
724-217-0997

**AMENDED P.U.D. PLAN
SUMMERFIELD POINTE ESTATES
Genoa Township, Michigan
Site Plan Application**

IMPACT ASSESSMENT

Owner:

Healy Homes at Summerfield, L.L.C.
3696 Sleeth Road
Commerce Township, Michigan 48382

Prepared by:

DESINE INC.
2183 Pless Drive
Brighton, Michigan 48114

A. INTRODUCTION (Sec. 18.07.01)

This impact assessment has been prepared pursuant to Article 18 – SITE PLAN REVIEW of the Zoning Ordinance for the Township of Genoa, Livingston County, Michigan. This assessment addresses the impact of the proposed amendment to construct 102 single family units and 12 attached condominium units on the surrounding community and, the economic condition and social environment of the Township.

This Impact Assessment has been prepared under the direction of Wayne Perry, P.E., DESINE INC., 2183 Pless Drive, Brighton, Michigan 48114. Mr. Perry is a licensed Civil Engineer, providing professional engineering services in Livingston County since 1988 with experience in private and municipal development including projects within Genoa Township and Livingston County.

B. SITE LOCATION / DESCRIPTION (Sec. 18.07.02)

The site is comprised of four parcels, containing a total of 38.51 acres of property, bordered on the North by a nature preserve, Summer Ridge & Sunset Park Condominiums on the East, Lawson Drive on the South and a vacant parcel zoned MUPUD to the West, as shown on Figure 1. The existing North and Southwesterly parcels are zoned “Mixed Use Planned Unit Development” (MUPUD) district, the Northwesterly Parcels are zoned “Residential Planned Unit Development” (RPUD) district, the Southeast Parcel is zoned “Industrial” (IND) district, and the East parcels being zoned “Lakeshore Resort Residential” (LRR) district.

The existing site is comprised of wooded vacant land along the West and, existing lawn areas for the central portion of the site and parcels situated on the East. Access to the site is by an existing road to the South, Lawson Drive. A new access route is proposed from Lawson Drive in the Northwest portion of the project, connecting to the existing Aster Blvd. The Existing Conditions Plan provides a detailed overview of the existing site features.

The Summerfield Pointe Estates PUD Site Plan depicts proposed site improvements to be constructed on the site. Improvements consist of 102 single family residential units in place of 140 attached condominiums provided on the approved PUD plan. These units are planned to be constructed in four (4) phases. Additionally, the site will feature access drives for each unit, open space and common yard areas, a common space for children’s playground and activities, landscaping & screening, an on-site storm water management system and related site improvements. Illumination is to be provided by each home owner following the current layout of the surrounding “Summer Ridge” condominiums.

Parking for each proposed unit is to be provided within garages. Public sanitary sewer, water utilities, electric, gas, phone and cable system services are to be provided. Utility easement plan sheets provide a detailed overview of the location and layout for the proposed easements on-site. Appurtenant features including lot lines, sidewalks and proposed access drives are also presented in the site plan.

Relevant adjacent uses include the Lake Trust Credit Union located to the Southwest and across Whitehorse Drive, a Sunoco gas station located due South and adjacent to Lawson Drive and, the DTE Service Center to the Southeast. Properties to the North, West and Southwest of the site are currently vacant. An aerial photograph depicting the proposed site improvements is provided in Figure 2 & Figure 3.

C. IMPACT ON NATURAL FEATURES (Sec. 18.07.03)

Existing soils on the property are primarily Wawasee loam. These soils are well drained soils found in till plains and moraines, with slopes of 2%-6%. Surface runoff is medium, permeability is moderately low and the soil erosion hazard is light. The Soils Map, shown in Figure 4, shows the locations of specific soil types as classified.

Soil classifications are prepared by the United States Department of Agriculture, Soil Conservation Service, and "Soil Survey of Livingston County". On-site soils consist of the following:

CONOVER LOAM (CvraaB): CONOVER LOAMS are typically somewhat poorly drained soils found on till plains and moraines, with slopes of 0%-4%. Surface runoff is slow, permeability is moderately slow, and the erosion hazard is light.

GILFORD SANDY LOAM (Gd): GILFORD SANDY LOAMS are typically poorly drained soils found on sandy drift depressions and coarse-loamy drift over sandy and gravelly outwash, with slopes of 0%-2%. Surface runoff is very slow to ponded, permeability is moderate and the soil erosion hazard is light.

HOUGHTON MUCK (Ho): HOUGHTON MUCKSS are typically nearly level soils found in depression areas of lake plains, outwash plains, glacial drainage ways, and moraines, with soil slopes of 0% -1%. Surface runoff is very slow to ponded, permeability is moderately rapid, and the erosion hazard is moderate.

WAWASEE LOAM (MoB): WAWASEE LOAMS are typically well drained soils found in till plains and moraines, with slopes of 2%-6%. Surface runoff is medium, permeability is moderately low and the soil erosion hazard is light.

WAWASEE LOAM (MoB): WAWASEE LOAMS are typically well drained soils found in till plains and moraines, with slopes of 6%-12%. Surface runoff is high, permeability is moderate and the soil erosion hazard is light.

MIAMI LOAM (MoD): MIAMI LOAMS are typically well drained soils found in till plains and moraines, with soil slopes of 12%-18%. Surface runoff is medium, permeability is moderate and the soil erosion hazard is moderate.

MIAMI LOAM (MoE): MIAMI LOAMS are typically well drained soils found in till plains and moraines, with soil slopes of 18%-25%. Surface runoff is medium, permeability is moderate and the soil erosion hazard is moderate.

MIAMI LOAM (MoF): MIAMI LOAMS are typically well drained soils found in till plains and moraines, with soil slopes of 12%-18%. Surface runoff is medium, permeability is moderate and the soil erosion hazard is moderate.

SPINX-OAKVILLE LOAMY SAND (SvB): SPINX-OAKVILLE LOAMY SANDS are typically well drained soils found on till plains, outwash plains, and moraines, with soil slopes of 0%-6%. Surface runoff is slow; permeability is moderately rapid in the Spinks soil and is rapid in the Oakville soil. The erosion hazard is light.

The property contains a variety of natural features consisting of primarily wooded upland in the northwest portion of the property, with field grasses and shrub/scrub brush areas in the southerly and easterly portions. Wooded areas within the site are comprised of hardy, native species such as Oak, Hickory, Maple and Pine. Elm, Cottonwood, Willow, Poplar, Black Locust and other less desirable tree species are also present. The proposed improvements will require removal of existing trees within upland areas to allow for construction of the proposed roads, residential homes and improvements. These areas are depicted on the development plan. Trees outside of the unit limits and areas of construction will be preserved.

Existing topography of the site is generally flat to gently sloping terrain. The elevation of the property varies from an elevation of 997 at the Southwest property corner, to approximately 983 at the North portion of the site. Surface water drainage on the property generally flows to the North.

The proposed construction and improvements will require filling and grading in the Southwest and Northwest portion of the property. Development of this project will require earthwork to construct the proposed roads, and modify site grades with useable materials from the site, requiring the export of excess soil and importing of additional structural fill material. The proposed elevations and grading of the site mesh with the existing grades at the property lines. The limits of disturbance have been depicted on the grading plan.

Surface drainage characteristics on the property will be affected by the construction of the proposed drainage swales, roads, driveways, sidewalks and single family home units. Construction of the proposed improvements will reduce the permeable area of the property, resulting in an increase in the surface water runoff generated. The existing storm water management system will be modified to collect and control the surface water runoff, reducing the discharge rate from the property and increasing the infiltration of surface water runoff. Modifications will be required to the existing control structure located in the detention basin on-site, in order to restrict the discharge rate from the property to an agricultural runoff rate. The Utility Plan sheets provide a detailed overview of the storm water management site features and conditions.

The proposed changes and modifications to the surface drainage conditions will not significantly impact local aquifer characteristics or groundwater recharge capacity. All surface water runoff from the site will be directed into the existing detention on-site.

Reduction in the surface permeability will affect onsite infiltration, surface water flow path and duration. Surface water runoff from the development will be reduced and no significant impacts to adjacent properties are anticipated from the proposed construction and development of the site.

Landscaping is proposed for the developed portion of the site to reduce the visual impact of the proposed project. All proposed landscaping areas and plantings have been designed per the requirements of Genoa Township's current Zoning Ordinance and are intended to improve the aesthetics of the property. Within the developed portion of the site, areas not otherwise covered, shall have lawn or other vegetative surface cover established.

Upland wildlife habitats on the property include primarily small woodland, field grass and shrub/scrub brush areas. Wildlife supported in these areas are generally smaller woodland creatures, field animals, and birds. Larger animals, such as deer, may traverse the site. Wetland habitats on the property support a variety of wildlife including transient waterfowl and various small wetland animals. The wetland and water habitats will remain undisturbed during construction and development of the property.

The National Wetlands Inventory Plan prepared by the United States Department of the Interior, Fish and Wildlife Service indicates that there are two (2) freshwater emergent wetlands located North & Northeast of site, and one (1) freshwater forested/shrub wetland located Northwest of site. The Wetland Inventory Map, shown in Figure 6, shows the locations of specific wetland types surrounding the site.

D. IMPACT ON STORM WATER MANAGEMENT (Sec. 18.07.04)

The existing detention basin is located on the Northwest portion of the site. Side slopes for this basin meet or exceed one-foot-vertical to five-feet-horizontal as required by the Livingston County Drain Commissioner's office. No excavation or grading is proposed for the existing storm water detention basin to accommodate these improvements. Earthwork will be required to modify the existing and construct new underground storm water conveyance pipes, and direct storm water flow into the storm water collection system. This system will discharge surface water runoff generated by the development of the property to the existing sedimentation basin and detention basin. Site grading will mesh with existing grades on adjoining properties. No adverse impact to adjacent parcels is anticipated due to the construction and grading of the property.

Surface water runoff generated from all improved areas of the site will be collected by catch basins, conveyed through a storm sewer system, and discharged to the sedimentation and detention basin located on the North side of the property. Storm water will be detained within the basin during a storm event and slowly discharged from the basin through a new control structure proposed. Design for this control structure followed the design guidelines of the Livingston County Drain Commissioner.

Soil erosion and sedimentation are controlled by the Soil Erosion Control Act No. 347 of the Public Acts of 1972, as amended and is administered by the Livingston County Drain Commissioner. Silt fencing will be installed around a majority of the site during

construction. The Contractor shall comply with all regulations including control during and after construction.

Impact on adjoining properties due to the construction of this site will be minimized by implementing soil erosion control methods. No adverse impact to adjacent properties due to surface water runoff will be created as a result of the proposed improvements.

E. IMPACT ON SURROUNDING LAND USES (Sec. 18.07.05)

Surrounding land uses to the Southwest of the site and located on the North side of White Horse Drive, are zoned Mixed-Use Planned Unit Development (MU-PUD). Current use consists of an industrial user and vacant property. Land to the Southeast is zoned Industrial (IND) and contains an industrial user "DTE Energy Howell". Properties to the East are zoned Lakeshore Resort Residential (LRR) and to the Northwest, are zoned Residential Planned Unit Development.

The proposed Site Plan deviates from the approved PUD plan. The construction of 102 single family homes in place of 140 attached condominiums reduces the overall density for the site. No adverse impact to adjacent properties is anticipated due to construction of these improvements.

Ambient noise levels on and around the property are largely generated by sporadic vehicular traffic on Lawson Drive and homeowner activities such as lawn care maintenance. Daily activities within the proposed buildings are not anticipated to create an increase in the sound level in the area.

All site lighting is proposed to match the existing conditions of the Summer Ridge Condominiums on-site. Proposed building mounted fixtures will be shielded and down directed on the site.

Four types of architectural designs will be proposed for construction. The façades along the building front side elevation will be most visible from Lawson Drive. The materials for these units will resemble the adjacent Summer Ridge condominiums on the Southeast, and the Hampton Ridge condominiums to the Northwest. Brick and mortar are proposed for the front elevation along the main access road. Vinyl siding material is proposed for the rear and side elevations. A two car garage is proposed for each unit and ample space on each driveway allows for two cars to park along the proposed driveway for visitors.

A nature preserve to the north equivalent of 22.22 Ac., a 75 ft. wide conservation easement along the East property line of 3.73 Ac. and a total of 6.53 Ac. of common yard areas between the existing Summer Ridge condominiums & the proposed Summerfield Pointe Estates PUD, allow for an overall space area on-site equivalent to 53% open space.

The best quality woodlands and wetland are concentrated to the North of the site. Proposed areas to be developed will occur in existing open areas and where non-desirable tree species are located. When possible, quality trees such as Hickory and Maple varieties will be preserved.

The proposed use of the property does not create any significant emissions of smoke, airborne solids, odors, gases, vibrations, noise or glare discernable and substantially annoying or injurious to person and/or property beyond the lot lines. No significant change in air pollution is anticipated.

The Contractor shall be responsible for initiating and maintaining adequate dust control measures during and after construction until the project site is fully stabilized and a vegetative cover established. Dust control measures used during construction may consist of site watering, mulching of completed areas, installation of windbreak fencing, and application of chemical dust control materials. The site will comply with the performance standards contained in Section 13.05 of the Township Zoning Ordinance.

Soil erosion control measures such as silt fence, geotextile silt sack filters and construction track mats will be used during construction to control siltation and sedimentation from entering the storm water system and have an adverse impact on adjacent properties.

F. IMPACT ON PUBLIC FACILITIES AND SERVICES (Sec. 18.07.06)

The Livingston County Sheriff and Michigan State Police will provide Police protection. Public safety services required to accommodate the proposed use are anticipated to be minor.

The Brighton Area Fire Department as a part of an existing governmental agreement will provide fire protection service. Two existing fire hydrants are located along Lawson Drive West curblin. One situated just North of the existing roundabout, and the second located at the north intersection of Summer Ridge & Lawson Drive. Seven fire hydrants are proposed to be constructed per the proposed site plan to provide adequate fire protection capabilities. The building addresses will be located at the front of the units to meet the Fire Departments requirements. No significant change in fire protection services are anticipated as a result of the proposed plan modifications.

The property is accessed from Lawson Drive, and connecting to Grand River Ave. providing adequate access for emergency vehicles. A gated, emergency vehicle connection to existing Aster Boulevard, on the Northwest corner of the site, will provide additional access for emergency vehicles only.

Construction traffic shall access the site from Lawson Drive only. The emergency vehicle access gate will be installed prior to construction to prevent construction traffic from accessing the property from Aster Boulevard.

The proposed plan modifications will not create any direct adverse impact on the public schools.

G. IMPACT ON PUBLIC UTILITIES (Sec 18.07.07)

The property is presently within municipal sewer & water districts and the existing Summer Ridge condominium buildings are connected to the municipal utilities.

Water service to the proposed units will be provided from a new 8” ductile iron water main extension to be constructed along the new Lawson Drive road. Domestic service leads are connected to this main to supply the service required. A total of nine (9) fire hydrants situated throughout the property will provide adequate fire suppression services on-site. Water main easement for repair, maintenance and access is provided for this extended water main on-site. Capacity is available within the existing water system to provide adequate service to this site.

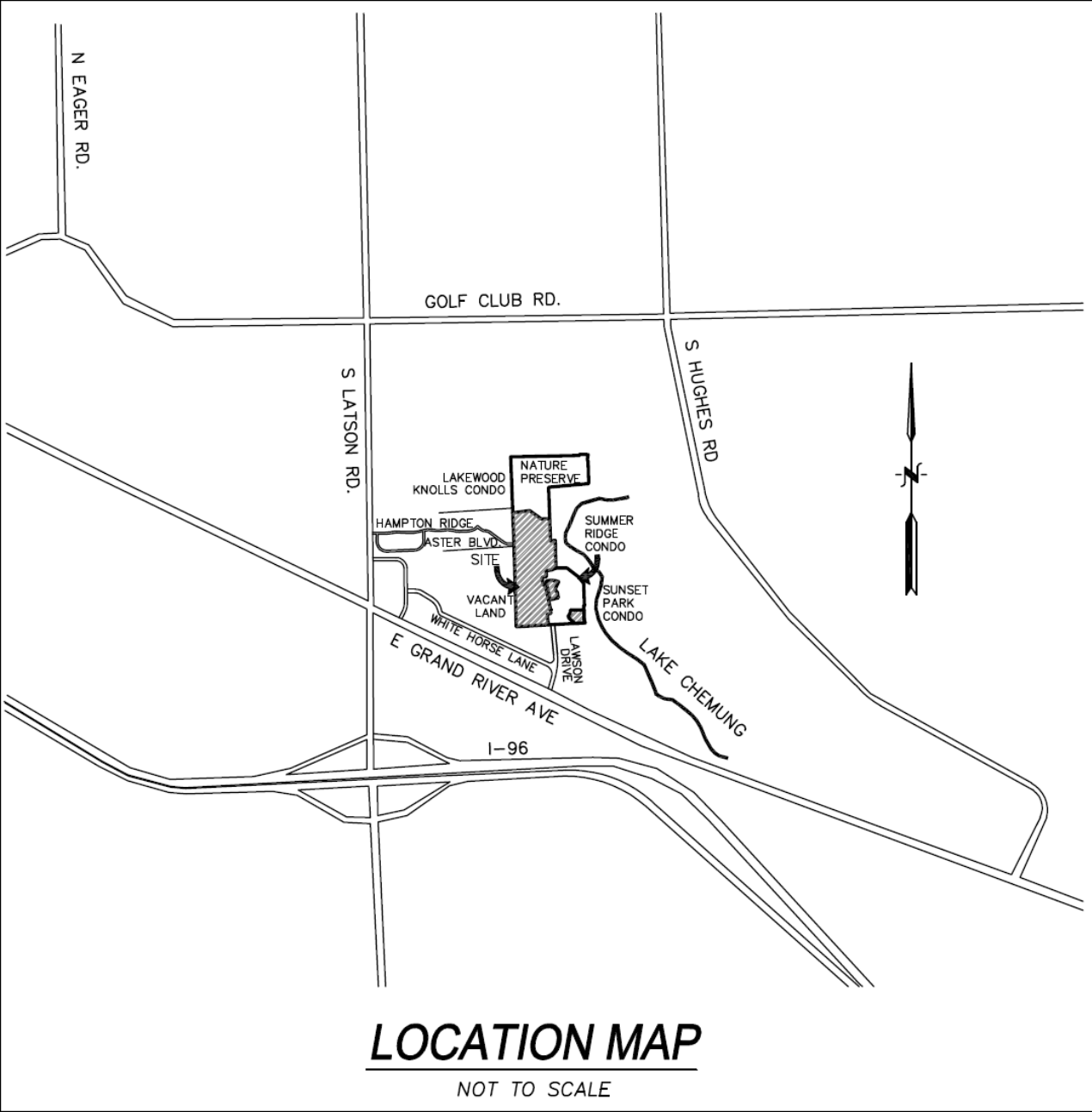
Capacity is available within the existing sanitary sewer system to provide adequate service for the site. Sanitary sewer connections for the south portion of the site will be provided by extending the existing sewer main to provide service to units 9 through 43. Sanitary sewer service to the North portion of the site will be provided by extending the existing sewer main situated on Hampton Ridge Condominiums and will provide service for units 44 through 102. Sanitary sewer easement for repair, maintenance and access is provided for the extended sewer main. The utility plans provide a detailed overview of these features.

The site is currently serviced by electric, gas, phone and cable systems located along Lawson Drive. A 10 foot wide easement for public utilities has been provided along Lawson drive in order to allow the future services required for the proposed units.

Delivery services are generally limited to parcel trucks, such as UPS, and similar single axle vehicles. These delivery service providers use available street parking temporarily while dropping off deliveries. No large vehicles accessing the site are expected for the development.

- H. STORAGE AND HANDLING OF ANY HAZARDOUS MATERIALS (Sec. 18.07.08)**
The proposed residential use within the site will not use, store, generate and/or discharge potentially polluting materials. Small quantities of material such as cleaning products and chemicals may be stored in single family homes. No adverse effect is expected due to hazardous materials on-site.
- I. TRAFFIC IMPACT STUDY (Sec. 18.07.09)**
For Traffic Impact Study, please see Municipal Partners Traffic Impact Study prepared and previously submitted under separate cover. No adverse impact on pedestrian traffic in the area is anticipated as a result of developing the proposed project.
- J. HISTORIC AND CULTURAL RESOURCES (Sec. 18.07.10)**
The existing buildings on the property do not have any major historic significance on a local, regional or state level.
- K. SPECIAL PROVISIONS**
No special provisions or requirements are currently proposed for this facility.

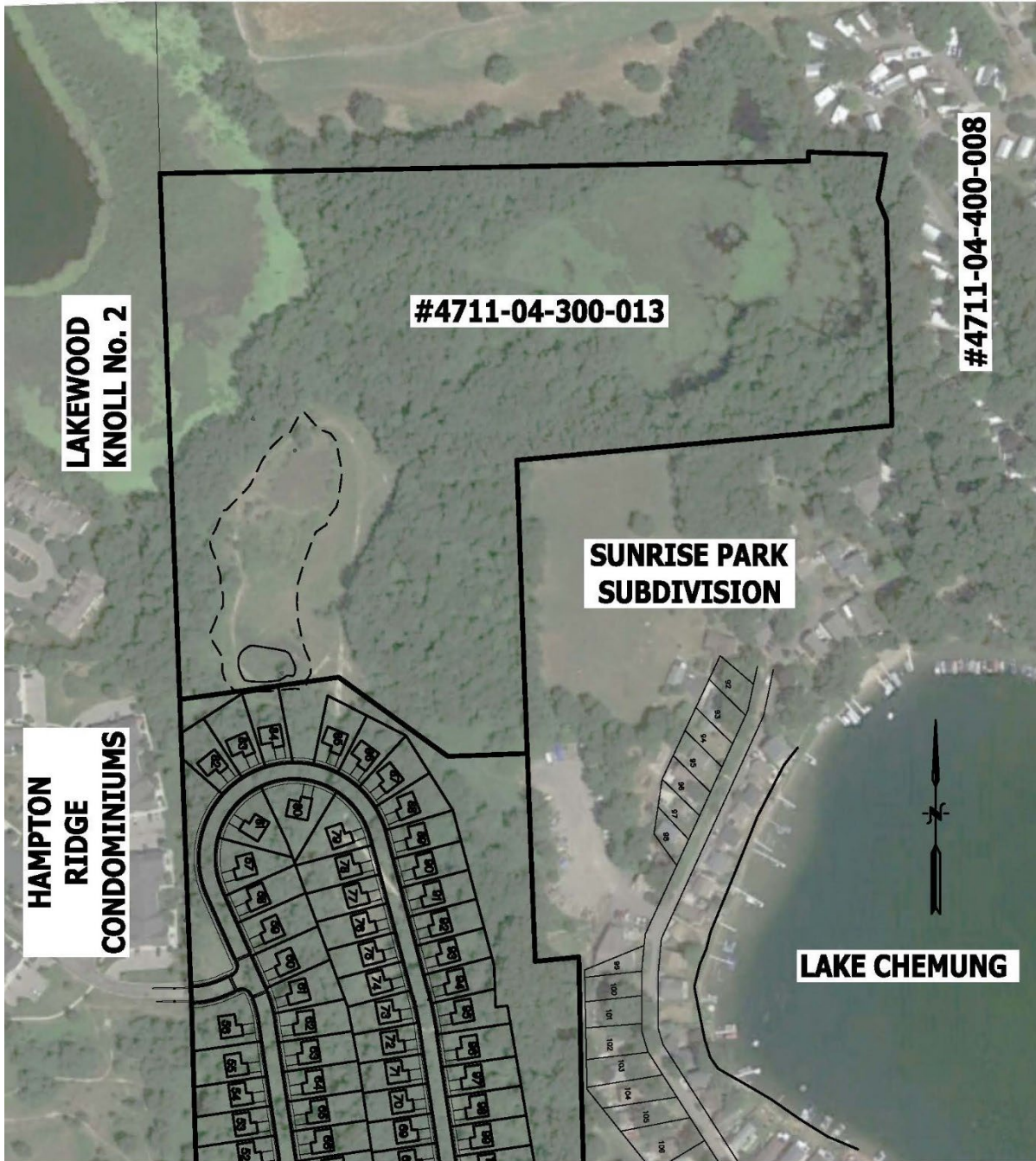
FIGURE 1



LOCATION MAP

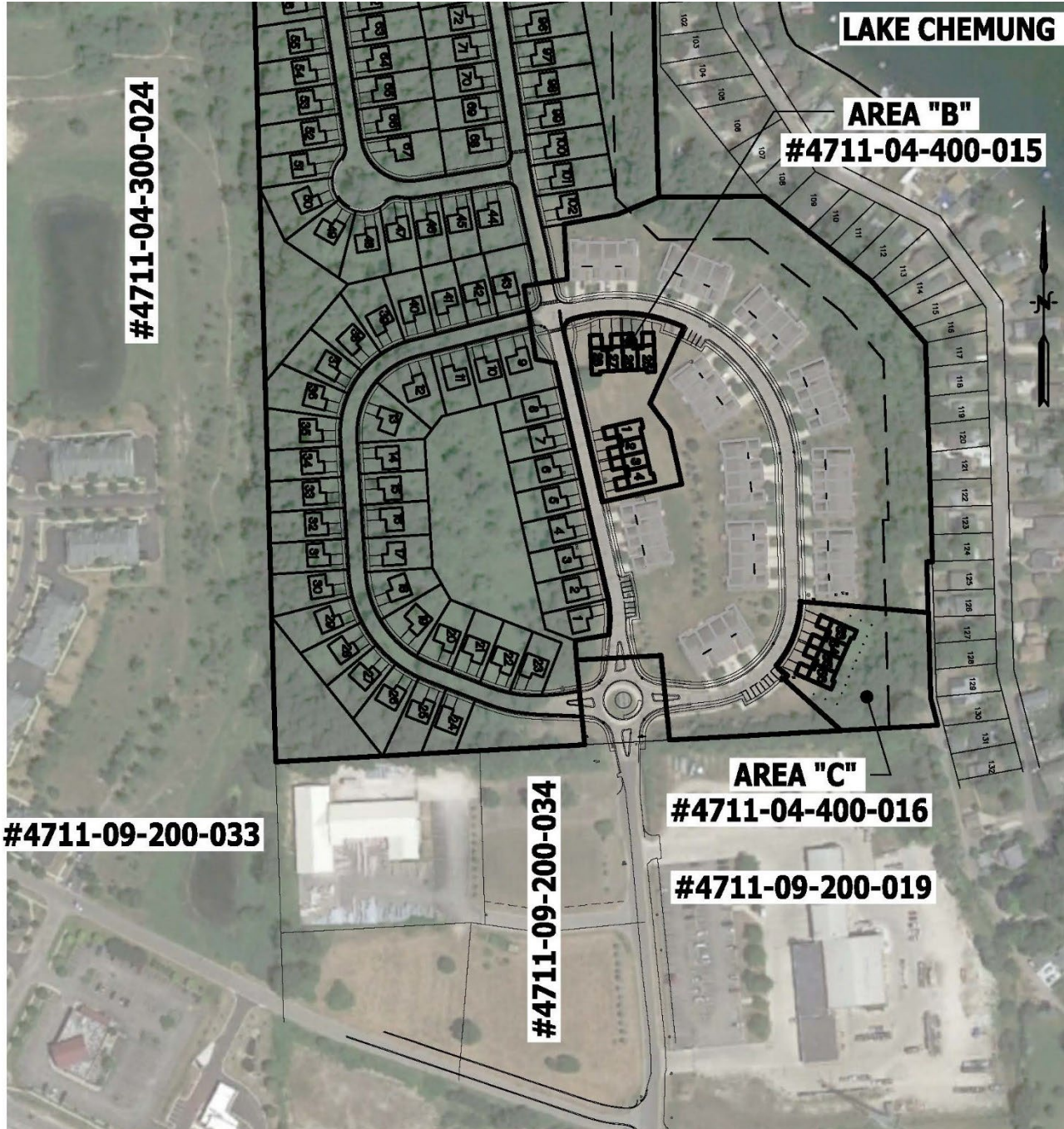
NOT TO SCALE

FIGURE 2



SITE IMPROVEMENTS (NORTH)
NOT TO SCALE

FIGURE 3



SITE IMPROVEMENTS (SOUTH)
NOT TO SCALE

FIGURE 4



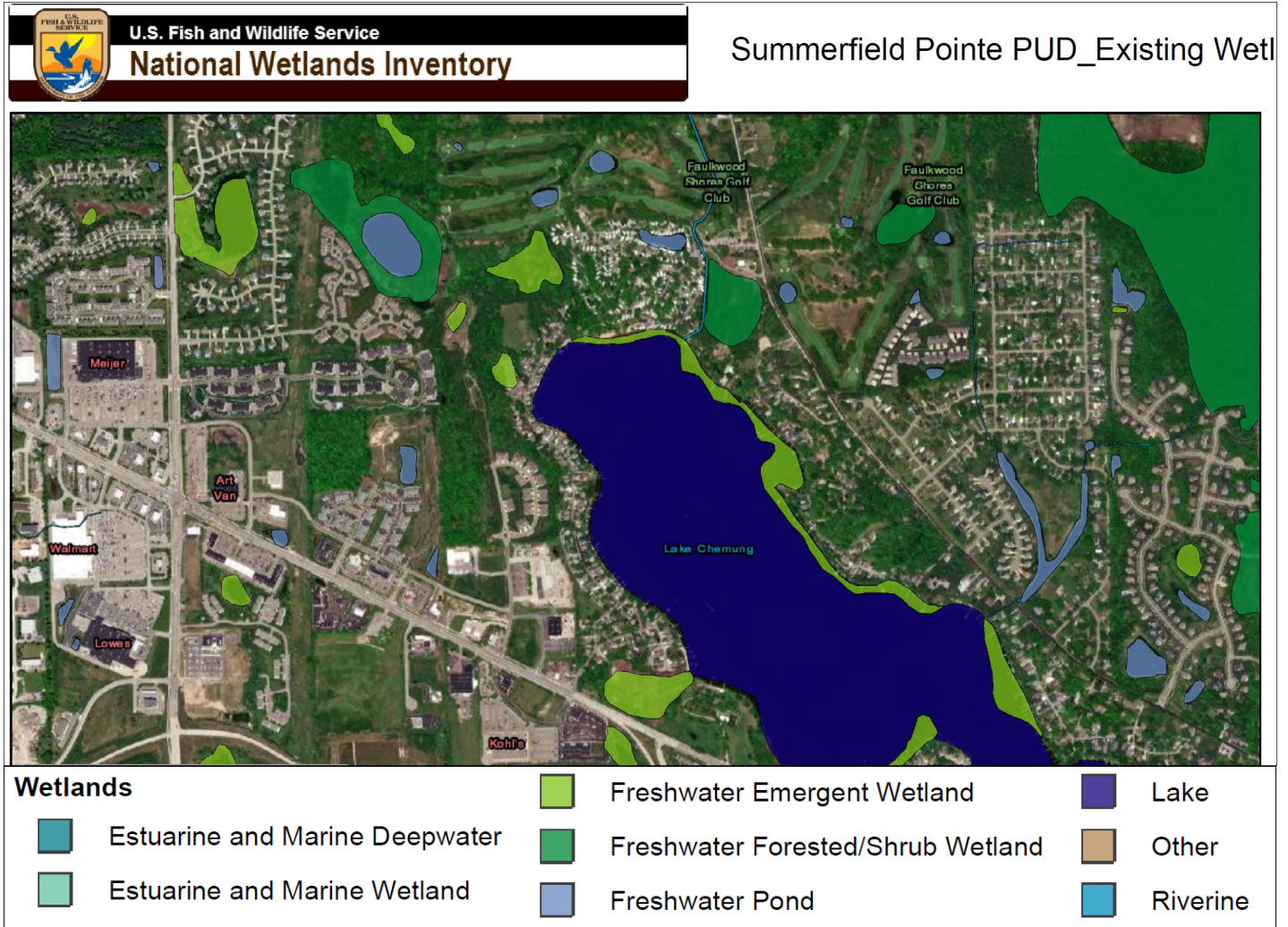
SOILS MAP
(NOT TO SCALE)

FIGURE 5

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cc	Carlisle muck, 0 to 2 percent slopes	5.0	3.2%
CvraaB	Conover loam, 0 to 4 percent slopes	3.4	2.2%
Gd	Gilford sandy loam, 0 to 2 percent slopes, gravelly subsoil	11.5	7.3%
Ho	Houghton muck, 0 to 1 percent slopes	4.3	2.7%
MoB	Wawasee loam, 2 to 6 percent slopes	62.4	39.7%
MoC	Wawasee loam, 6 to 12 percent slopes	20.0	12.7%
MoD	Miami loam, 12 to 18 percent slopes	4.9	3.1%
MoE	Miami loam, 18 to 25 percent slopes	11.7	7.4%
MoF	Miami loam, 25 to 35 percent slopes	13.3	8.5%
SvB	Spinks-Oakville loamy sands, 0 to 6 percent slopes	6.4	4.0%
W	Water	14.4	9.1%
Totals for Area of Interest		157.3	100.0%

SOILS MAP LEGEND
(NOT TO SCALE)

FIGURE 6



WETLANDS INVENTORY MAP
(NOT TO SCALE)

MEMO

VIA EMAIL waynep@desineinc.com

To: Healy Homes at Summerfield LLC

From: Jacob Swanson, PE
Salman Ahmad
Fleis & VandenBrink

Date: March 3, 2023

Re: Summerfield Pointe PUD
Genoa Township, Livingston County
Traffic Impact Assessment

1 INTRODUCTION

This memorandum presents the results of the Traffic Impact Assessment (TIA) for the proposed amendment to the existing Summerfield Pointe Planned Unit Development (PUD) in Genoa Township, Michigan. The proposed site plan includes the construction of 102 detached single-family units adjacent to Lawson Drive. The Summerfield Pointe PUD was developed in 2003, including the Summerfield Pointe condominium units to the southeast and the Hampton Ridge condominium units to the west of the proposed development, both which were previously constructed and are currently occupied, as shown on the attached **Figure 1**. Additionally, an extension of Aster Boulevard and connection to Lawson Drive was required from the original PUD agreement for Summerfield Pointe between Genoa Township and Healy Homes.

Aster Boulevard currently provides access for the existing Hampton Ridge development to the west via Latson Road and Lawson Drive currently provides access for the existing Summerfield Pointe development to the south via Grand River Avenue. The proposed Aster Boulevard connection would provide connectivity between the existing Hampton Ridge and Summerfield Pointe developments and provide access for both neighborhoods to Latson Road and Grand River Avenue. The purpose of this study is to evaluate the impact to the existing neighborhood development roadways, associated with the trip generation from the proposed development and the planned extension of Aster Boulevard. Additionally, the study provides recommendations that could be considered to provide safer operations along Aster Boulevard.

2 BACKGROUND DATA

The residents within both existing Hampton Ridge and Summerfield Pointe neighborhoods are concerned that the extension of Aster Boulevard and connection to Lawson Drive will cause significant traffic impacts and increased traffic volumes to their respective residential communities. However, the Fire Marshall requires a second point of ingress and egress for emergency vehicles for higher density developments; therefore, the impact of the proposed Aster Boulevard connection was evaluated, as this connection will provide the required secondary access for the Summerfield Pointe PUD.

In order to evaluate the potential impact on the planned Aster Boulevard extension, the trip generation for the existing Hampton Ridge and the Summerfield Pointe developments were calculated. The number of weekday peak hour (AM and PM) and daily vehicle trips generated by the existing neighborhood developments were calculated using the equations published by the Institute of Transportation Engineers (ITE) in *Trip Generation, 11th Edition*. The trip generation forecast for the existing developments is summarized in **Table 1**.

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Farmington Hills, MI 48334
P: 248.536.0080
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www.fveng.com

Table 1: Trip Generation (Existing Neighborhoods)

Land Use	ITE Code	Amount	Units	Average Daily Traffic (vpd)	AM Peak Hour (vph)			PM Peak Hour (vph)		
					In	Out	Total	In	Out	Total
Hampton Ridge Condominium	215	258	DU	1,915	40	88	128	86	65	151
Summerfield Pointe	215	44	DU	285	5	12	17	13	9	22
Total		302	DU	2,200	45	100	145	99	74	173

3 SITE TRIP DISTRIBUTION

The vehicular trips generated by the existing neighborhood developments were assigned to the study roadways based on the existing peak hour traffic patterns on the adjacent roadway network, the current site access points, the proposed Aster Boulevard connection, and the trip distribution methodologies published by ITE. In order to determine the existing peak hour traffic patterns on the adjacent roadway network, historical traffic volume data along Latson Road and along Grand River Avenue were obtained from the MDOT Traffic Data Management System (TDMS) website. To determine the global distribution for this area, it was assumed that the trips in the AM are home-to-work based trips and trips in the PM are work-to-home based. The ITE trip distribution methodology also assumes that new trips will return to their direction of origin. The site trip distributions used in the analysis are summarized in **Table 2**.

Table 2: Site Trip Distribution

To/From	Via	AM	PM
North	Latson Road	23%	22%
South	Latson Road	14%	17%
East	Grand River Ave	42%	37%
West	Grand River Ave	21%	24%
Total		100%	100%

Based on the current roadway configuration, all traffic to/from the existing Hampton Ridge condominiums will access Latson Road to the west via Aster Boulevard and all traffic to/from the existing Summerfield Pointe condominiums will access Grand River Avenue to the south via Lawson Drive. However, the proposed Aster Boulevard connection will provide connectivity and access for both neighborhoods to Latson Road and Grand River Avenue. Therefore, the following assumptions were made regarding the internal distribution of traffic volumes along Aster Boulevard and Lawson Drive:

- 100% of traffic traveling to/from the east along Grand River Avenue will utilize Lawson Drive.
- 100% of traffic traveling to/from the north along Latson Road will utilize Aster Boulevard.
- 10% of traffic traveling to/from the south and west will utilize Lawson Drive to access the existing Hampton Ridge condominiums neighborhood.
- 10% of traffic traveling to/from the south and west will utilize Aster Boulevard to access the existing Summerfield Pointe condominiums neighborhood.

Therefore, the site generated trips from the existing neighborhood developments shown in **Table 1** were distributed to the roadway network, according to the distribution shown in **Table 2** and the internal driveway distribution assumptions highlighted above. The existing traffic volume projections, with the assumed completion of the Aster Boulevard extension are shown on the attached **Figure 2**.

4 SITE TRIP GENERATION

The number of weekday peak hour (AM and PM) and daily vehicle trips for proposed Summerfield Pointe PUD amendment development were generated using the equations published by the Institute of Transportation Engineers (ITE) in *Trip Generation, 11th Edition*. The proposed development includes the construction of 102 detached single-family units adjacent to Lawson Drive, between the existing Summerfield Pointe development and the existing Hampton Ridge development. The trip generation forecast for the proposed developments is summarized in **Table 3**.

Table 3: Site Trip Generation (Proposed Development)

Land Use	ITE Code	Amount	Units	Average Daily Traffic (vpd)	AM Peak Hour (vph)			PM Peak Hour (vph)		
					In	Out	Total	In	Out	Total
Single-Family Detached Housing	210	102	DU	1,028	20	56	76	64	37	101

The site generated trips from the proposed development shown in **Table 3** were distributed to the roadway network, according to the distribution shown in **Table 2**. However, the proposed development will be located approximately equidistant from Latson Road and Grand River Avenue; therefore, it was assumed that all traffic to/from the north would utilize Aster Boulevard, all traffic to/from the east would utilize Lawson Drive, and all traffic to/from the west and to/from the south would be split evenly (50%/50%) between Aster Boulevard and Lawson Drive.

Therefore, the site-generated traffic volume projections for the proposed development are shown on the attached **Figure 2** and were combined with the existing traffic volumes shown on the attached **Figure 2**, in order to calculate the future traffic volumes. The future projected peak hour and daily traffic volumes, with the extension of Aster Boulevard and the trips generated from the proposed PUD amendment development, are shown on the attached **Figure 2**.

5 ASTER BOULEVARD EXTENSION EVALUATION

An evaluation was performed reviewing the impact of the proposed Aster Boulevard extension and the trip generation from the proposed development. **Table 4** below summarizes the existing traffic volume redistribution along the Aster Boulevard extension and depicts the increase of traffic volumes associated with the construction of the proposed development. The results of the analysis indicates that the projected traffic volumes on the proposed Aster Boulevard extension represent a typical residential neighborhood street and will be consistent with the surrounding roadways.

Table 4: Aster Boulevard Extension – Traffic Volumes (Peak Hour)

Traffic Volumes	AM			PM		
	Eastbound	Westbound	2-Way	Eastbound	Westbound	2-Way
Existing	42	22	64	30	37	67
Site Generated	9	23	32	28	16	44
Future	51	45	96	58	53	111

6 TRAFFIC CALMING MEASURES

The Institute of Transportation Engineers defines traffic calming as “the combination of measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users”. In evaluating the traffic calming mitigation measures on this corridor, guidance presented by Federal Highway Administration and Institute of Transportation Engineers (ITE), as well as the U.S. Traffic Calming Manual published by American Planning Association was reviewed. The following mitigation measures were identified for consideration on Aster Boulevard. The recommendations are categorized by Level of Impact, with Level 1 having the lowest level and Level 3 having the highest level.

6.1 Level 1

Lane Striping

Aster Boulevard does not have any existing striping on the 22-ft wide roadway, which gives the appearance to the driver of wider lanes, that can lead to higher speeds. It is possible to provide a 20-ft wide roadway striping the center line and adding edge lines. Edge lines are not typically provided on residential streets. However, since the extension of Aster Boulevard will make the roadway function as a collector between Latson Road and Lawson Drive, they could be used in combination with the existing curb and gutter. This measure also tends to help direct motorists to drive in farther from the edge of the road, which can make it more comfortable for the pedestrians and bicyclists who travel along and across Aster Boulevard. The addition of a centerline and edge line striping would allow the roadway to be visually narrowed without requiring the implementation of any infrastructure improvements.

6.2 Level 2

Speed Humps/Speed Tables

Speed humps are raised areas approximately 12 to 20 feet long and about 3 to 4 inches high and are used to slow traffic (i.e. not the narrow speed bump's like you may find in parking lots). Speed tables are similar to speed humps; however, they are longer, typically 22-ft in the direction of travel with 6-ft ramps on each end and a 10-ft flat section in the middle. Speed tables can also be implemented as raised crosswalks to enhance pedestrian visibility at intersections. Speed humps and speed tables can be designed in several ways, with more attractive, higher cost designs, that utilize brick pavers or other materials. Temporary devices are also an option to perform a trial before implementation on a permanent basis.



Typically, a series of speed humps or tables (two or more) are necessary to be effective for speed control and need to be placed in a series at 300 to 600 foot spacing. The driveway density on Aster Boulevard would need to be considered for the placement of these devices to ensure that they do not encroach upon the residential driveway approaches.

Raised Intersections

Raised intersections are flush with the sidewalk and ensure that drivers traverse the crossing slowly (Think of it as a speed table at an intersection). These are generally used to reinforce slow speeds and increase pedestrian awareness in an intersection. This mitigation measure could be considered at the intersection of Aster Boulevard and Lawson Drive.



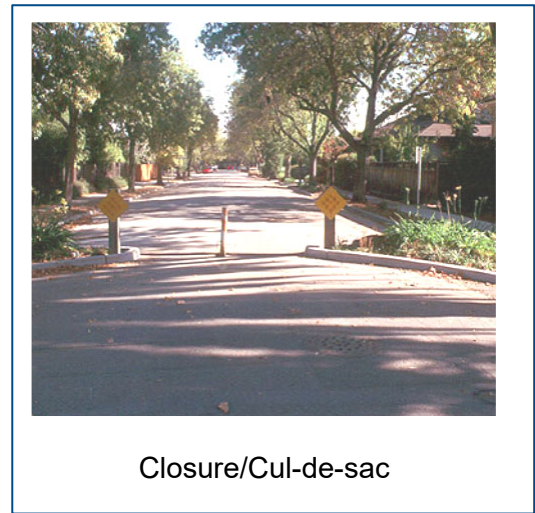
Raised Crosswalk

Raised crosswalks are ramped speed tables spanning the entire width of the roadway, often placed at midblock crossing locations. The crosswalk is demarcated with paint and/or special paving materials. These crosswalks act as traffic-calming measures that allow the pedestrian to cross at grade with the sidewalk. These can be added at the pedestrian crossing locations on Aster Boulevard.



6.3 Level 3

This level of traffic calming would have a significant impact on operations and traffic flow and would be recommended for consideration if other measures had been unsuccessful. These traffic calming measures are effective where significant cut-through traffic is the concern. These mitigation measures include placing Forced Turn Island that block the left-turn movement from all intersection approaches and placing Closure/ Cul-de-sac.



7 CONCLUSIONS

Key findings of this study are summarized below:

- The Summerfield Pointe PUD was developed in 2003, including the Summerfield Point condominiums and the Hampton Ridge condominiums, both which were previously constructed and are currently occupied.
- The proposed development includes the construction of 102 detached single-family units adjacent to Lawson Drive.
- As part of the existing PUD an extension of Aster Boulevard to Lawson Drive is proposed to be constructed. Additionally, the Fire Marshall requires a second point of ingress and egress for emergency vehicles for higher density developments. The impact of the proposed Aster Boulevard connection was evaluated, as this connection will provide the required secondary access for the Summerfield Pointe PUD.
- The trip generation for the existing neighborhood developments were projected and distributed to the roadway network, based on the planned Aster Boulevard extension connection. Additionally, the trip generation for the proposed development was distributed to the roadway network to evaluate the impact of the proposed development and roadway extension.
- The results of the analysis indicates that the projected traffic volumes on the proposed Aster Boulevard extension represent a typical residential neighborhood street and will be consistent with the surrounding roadways.
- Potential traffic calming mitigation measures were reviewed for Aster Boulevard to reduce the potential for speeding and cut-through traffic. These mitigation measures included lane striping, speed humps, raised crosswalks, raised intersections, partial road closure, and full road closure. The traffic calming mitigation measures that were identified as appropriate for implementation with the proposed development are summarized in the recommendations section.
 - The implementation of additional or higher-level traffic calming measures may be evaluated, if the identified measures are not found to adequately reduce speeds, minimize cut-through traffic, and calm traffic in the area.

8 RECOMMENDATIONS

The recommendations of this TIS are as follows:

- The following traffic calming measures were identified for implementation, associated with the proposed development and the extension of Aster Boulevard to Lawson Drive:
 - Lane striping and speed humps/tables installed along the proposed roadways.
 - Raised intersection at Aster Boulevard & Lawson Drive.
 - If the identified traffic calming measures are not adequately effective at reducing speeding and cut-through traffic, additional traffic calming measures may be provided along Aster Boulevard, Lawson Drive, and/or the proposed roadway connection.

Any questions related to this memorandum, study, analysis, and results should be addressed to Fleis & VandenBrink.



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Michigan.

Attached: Figure 1-2
Site Plan



FIGURE 1
SITE LOCATION

SUMMERFIELD POINTE TIA - GENOA TOWNSHIP, MI

LEGEND

 SITE LOCATION



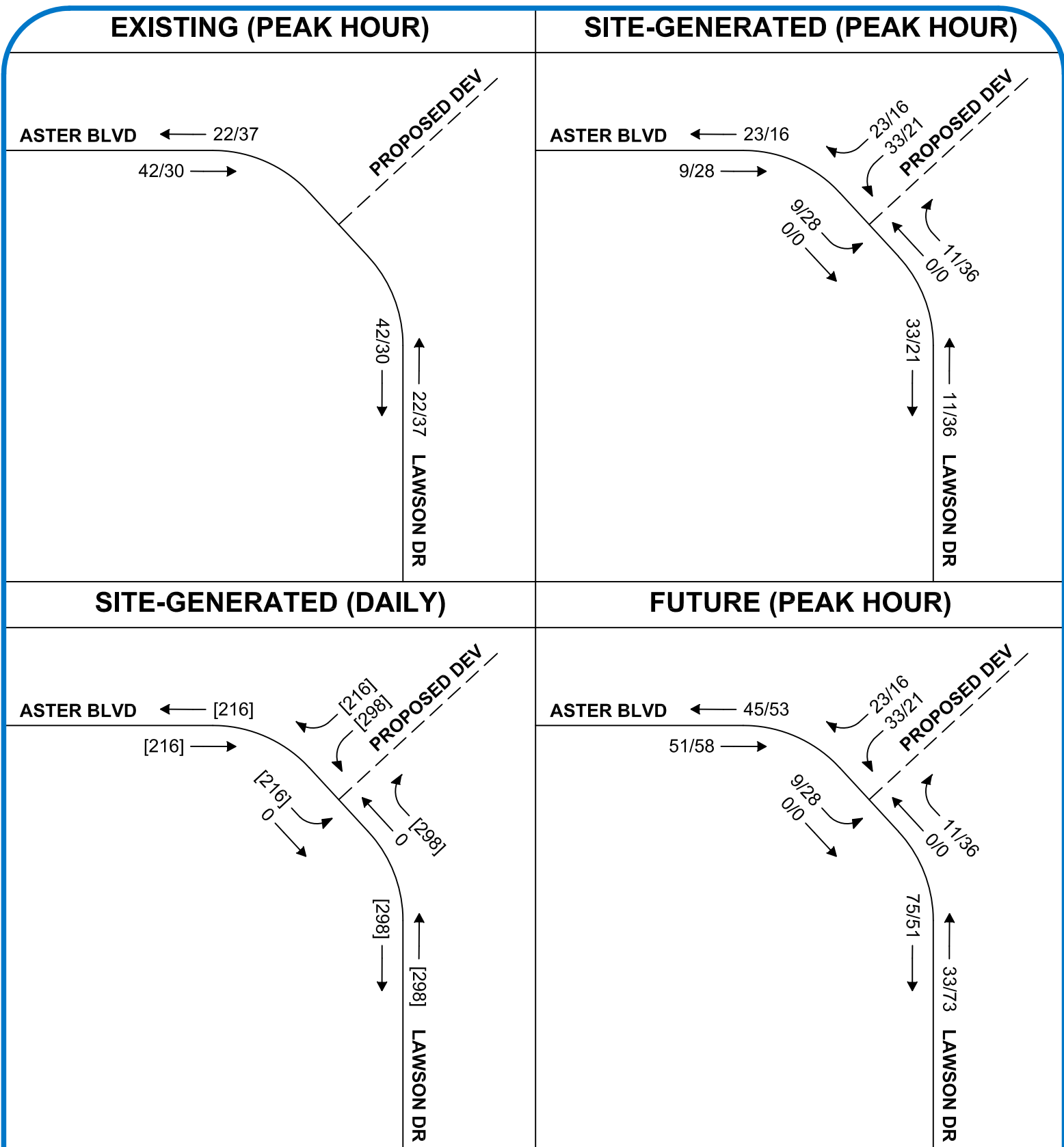
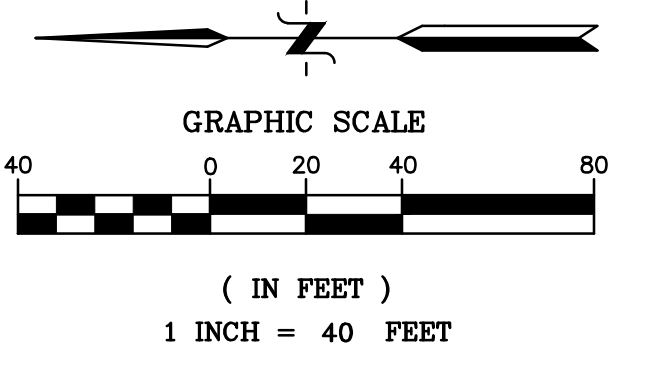


FIGURE 2 TRAFFIC VOLUMES

SUMMERFIELD POINTE TIA
GENOA TOWNSHIP, MICHIGAN

LEGEND

- ROADS
 - PROPOSED ROADS
 - TRAFFIC VOLUMES (AM/PM)
 - [777] DAILY TRAFFIC VOLUMES
- NORTH
SCALE: NOT TO SCALE



LEGEND

- 00 = MISC. STRUCTURE (AS LABELED)
- SA — SA = CONCRETE CURB (UNLESS OTHERWISE STATED)
- ST — ST = SANITARY SEWER MANHOLE W/IDENTIFIER
- ST — ST = SANITARY SEWER PIPE
- ST — ST = CLEAN OUT
- ST — ST = STORM WATER MANHOLE W/IDENTIFIER
- ST — ST = CATCH BASIN W/IDENTIFIER
- ST — ST = FLARED END SECTION
- ST — ST = STORM WATER DRAINAGE PIPE
- ST — ST = HYDRANT
- ST — ST = WATER SHUT OFF
- ST — ST = WATER VALVE
- ST — ST = WATER VALVE BOX
- ST — ST = WATER MAIN
- ST — ST = GAS SHUT OFF
- ST — ST = U/G GAS
- ST — ST = SPOT ELEVATION
- ST — ST = 1' CONTOUR
- ST — ST = 5' CONTOUR
- ST — ST = PROPERTY LINE
- SA — SA = EX. EDGE OF PAVEMENT
- ST — ST = EX. SANITARY SEWER
- ST — ST = EX. STORM SEWER
- ST — ST = EX. WATERMAIN
- ST — ST = EX. EASEMENT LINE
- ST — ST = APPROX. WETLAND LINE
- ST — ST = PROP. EDGE OF PAVEMENT
- ST — ST = PROP. CENTERLINE OF ROAD
- SA — SA = PROPOSED SANITARY SEWER
- ST — ST = PROPOSED WATER MAIN
- ST — ST = PROPOSED STORM SEWER
- ST — ST = PROPOSED STORM STRUCTURES
- ST — ST = PROPOSED CURB AND CUTTER
- ST — ST = PROPOSED CONCRETE WALK
- ST — ST = PROPOSED STANDARD DUTY BITUMINOUS PAVEMENT
- ST — ST = PROPOSED HEAVY DUTY BITUMINOUS PAVEMENT

BENCHMARKS
DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPLAT No. 2 OF "SUMMERFIELD POINTE" LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 285. DATUM REFERS TO "USGCS" NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #204 (PRIMARY)
SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE, AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88)
ELEVATION = 993.93 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #204

BENCHMARK #200
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377A FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 995.39 (NAVD 88)
ELEVATION = 995.89 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #200

BENCHMARK #201
CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 482 FEET EAST OF LAWSON DRIVE. ELEVATION = 991.29 (NAVD 88)
ELEVATION = 992.14 (PLATTED)
REF: FIELD BOOK 148, PG. 34
POINT #201

BENCHMARK #203
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 33A FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 993.88 (NAVD 88)
ELEVATION = 994.38 (PLATTED)
REF: POINT #203



CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD	BEARING
4	750.00'	56.19'	56.18'	S10°40'25"E
5	660.00'	72.73'	72.69'	N11°41'03"W
6	158.00'	521.46'	315.00'	S70°36'34"W
7	230.00'	61.91'	61.72'	N16°13'44"W
8	100.00'	158.86'	142.67'	S54°01'37"E

NOTES:

- See sheet SD for site data & zoning table
- See sheets UT2 & UT3 for utility easements
- The address shall be a minimum of 4" high letters of contrasting colors and be clearly visible from the street. The location and size shall be verified prior to installation.

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DESIGN:FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	10-25-22	REVISED PER REVIEW COMMENTS			
CHECK: JMB						

SUMMERFIELD POINTE ESTATES

DIMENSIONAL SITE PLAN (NORTH)

CLIENT: HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD. COMMERCE TOWNSHIP, MICHIGAN 48382 248-684-1699	SCALE: 1in. = 40ft. PROJECT No.: 214159 DWG NAME: 4159 SP2-3 ISSUED: OCT. 25, 2022	SP2
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FIRST AMENDMENT TO AMENDED AND RESTATED SUMMERFIELD POINTE PLANNED UNIT DEVELOPMENT AGREEMENT

THIS FIRST AMENDMENT TO SUMMERFIELD POINTE PLANNED UNIT DEVELOPMENT AGREEMENT (“Amendment”) is made and entered into this ____ day of _____, 2023 (“Effective Date”), by and between the CHARTER TOWNSHIP OF GENOA, a Michigan municipal corporation (“Township”), whose address is 2911 Dorr Road, Brighton, Michigan 48116 and HEALY HOMES AT SUMMERFIELD, LLC, a Michigan limited liability company (“Developer”), whose address is 3696 Sleeth Road, Commerce Township, Michigan 48382.

RECITALS

A. The Township and Developer’s predecessor in interest, Adler Enterprises Company, L.L.C., entered into that certain Summerfield Pointe Planned Unit Development Agreement dated April 19, 2002, and recorded on September 25, 2002 in Liber 3533, Page 0900, Livingston County Records, as amended by that certain Amended and Restated Summerfield Pointed Planned Unit Development Agreement dated April 19, 2002 and recorded on February 24, 2003 in Liber 0772, Page 0940, Livingston County Records (as amended, the “**PUD Agreement**”), pertaining to the real property described in **Exhibit A** attached hereto and incorporated herein (the “**Property**”).

B. Developer desires to reconfigure the lay-out, configuration, number and type of condominium units, and changes to related specifications and set-back, to be developed under the PUD Agreement as further described and depicted on the amended PUD Site Plan attached as **Exhibit B** to this Agreement (“**Amended PUD Site Plan**”) as it relates to a portion of the Property further described on **Exhibit C** to this Amendment (the “**Future Phases**”).

C. To facilitate the development of the Future Phases, the Township and Developer desire to amend the PUD Agreement to incorporate the Amended PUD Plan.

D. All provisions and terms of the PUD Agreement not addressed by this Amendment shall remain in full force and effect.

AMENDMENT

The PUD Agreement is amended as follows:

1. **Amended PUD Site Plan**. The PUD Site Plan defined in the PUD Agreement, as it relates to the Future Phases, is hereby amended and replaced with the Amended PUD Site Plan. The remainder of the Property shall continue to be subject to the terms and conditions of the PUD Agreement.

2. **Land Use Authorization and Standards**. Article II of the PUD Agreement is hereby amended to add the following provisions as it relates to the Future Phases:

“ARTICLE II. LAND USE AUTHORIZATION AND STANDARDS

- 2.1 The Planned Unit Development as set forth on the PUD Plan reflects the change in the zoning for the Property from Rural Residential to medium density residential (MDR) consisting of the following use:

Not more than 102 single family units and 14 Buildings of 4 units for a total of 56 attached units of which 44 have already been built.

- 2.2 The number of multi-family residential units permitted on the Property are a maximum of 56 attached condominium units for occupancy as single family residences. Also permitted on the property are 102 single family detached units.

- 2.3 **Setbacks for the attached condominium buildings are:**

<u>Perimeter Setback</u>	<u>Sidewalk Setback</u>	<u>Setback Between Building</u>	<u>Wetlands Setback</u>
North (side) 50 ft West (rear) Min 30 ft South (front) Min 34 ft East (side) 75 ft.	Min 20 ft from back of sidewalk to front of residential building improvements. 30 ft from back of curb.	Min 30 ft	Min 25 ft.

Setbacks for Single Family detached units are:

<u>Perimeter Setback</u>	<u>Front Setback</u>	<u>Rear Setback</u>	<u>Side Setback</u>
North(side) 50 ft West (rear) Min 30 ft South (front) Min 35 ft East (side) Min 75 ft	30 ft from back of curb 20 ft from back side of sidewalk	Min 30 ft	5 ft Min 9 ft other side 14 ft between houses

Proposed Dimensional Deviations from the MDR Zoning Requirements

	<u>Unit Width</u>	<u>Unit Area</u>
MDR Zoning Requirements	75'	10,000 sq ft
Deviations	20'	
Dimensions Provided	55'	6,600 sq ft (5,934 sq ft for Unit #29)

Proposed Dimensional deviations from the Private Road Requirements

	<u>Road Easement Width</u>	<u>Horizontal Curve Radius</u>	<u>Road With (B/C)</u>
Private Road Requirement	66'	150 ft	30'
Deviations	36'	50 ft	2'
Dimensions Provides	30'	100 ft	28'

- 2.4 Developer and the Developer's successors in interest, including, but not limited to the association established to operate and manage the condominium, and the future owners of units shall preserve and protect the woodlands along the perimeter setback of the property on the east side and the PUD Plan shall identify the area within the east side perimeter setback as a permanent

conservation area. The permanent conservation area shall be preserved and protected and maintained by the homeowner's association. Developer shall install signage on Lots 82 and 83 demarcating the location of the natural features wetland buffer on each respective Lot and providing that no disturbance is allowed in the wetland buffer area.

3. **Schedule of Construction.** Developer shall install and construct improvements for the Future Phases in accordance with the phasing plan set forth PUD Site Plan and as further described below:

- a. **Phase I.** The Lawson Road and Grand River road improvements and installation as required by the PUD Agreement have been completed. Developer shall be entitled to start clearing, grading, construction and installation of utilities and roads for Phase I as identified on the PUD site plan, which includes (i) single family homes, Units 1-8, inclusive, and (ii) attached single family home, Units 1-12, inclusive, attached condominium units. Developer shall be entitled to two (2) model units for both the site condominium portion and the attached condominium portion. Upon execution of this Amendment and making application for appropriate permits (including payment of related fees), and Developer complying with all agency regulations and approvals, the Township shall issue all necessary land use permits to Developer to commence clearing, grading, site work, installation and construction of Phase I. The Developer shall be entitled to Township approval for each structure it completes within Phase I, provided each structure otherwise complies with the PUD Agreement and the Zoning Ordinance in place at the time of this Agreement. Developer shall have no obligation to complete any improvements in subsequent phases prior to receiving the certificates of occupancy for Phase I, unless such development is required by a different agency in relation to such agency's approval.
- b. **Phase II.** Prior to issuance of any land use permits for any units located in Phase II, Developer shall obtain a land use permit and start construction of the portion of Lawson Drive which will serve as the connector road to Hampton Ridge. The portion of Lawson Drive which must be started by Developer is located along units 100-102, 60-67, and 44-56 (the "Connector Road"). When the Connector Road is substantially complete meaning the curbs, gutters and base layer are installed and the road may accommodate vehicle traffic, ~~then the Township shall issue~~ and the emergency vehicle access gate on Aster Boulevard near the West property line to restrict vehicular traffic between Summerfield Pointe Estates and the neighboring Hampton Ridge is constructed and approved by the Township Engineer and the Brighton Area Fire Department, ~~then the Township shall issue and~~ Developer shall be entitled to receive all required land use permits for units 100-102, 60-67, and 44-56 provided that the Developer is otherwise in compliance with the Charter Township of Genoa's ordinances and the PUD Agreement.
- c. **Phase III-IV.** Developer shall install the remainder of the improvements as follows:
 - i. Phase III: Developer shall obtain a land use permit and install the utilities and roads to service units 68-99 and 57-59 and pay any required fees to the agencies required to review and approve such utilities and roads. Upon completion of installation of such improvements, Developer shall be entitled to the issuance of all land use permits for units 68-99 and 57-59.
 - ii. Phase IV: Developer shall install the utilities and roads to service units 9-43 and pay any required fees to the agencies required to review and approve such utilities and roads. Upon completion of installation of such improvements, Developer shall be entitled to the issuance of all land use permits for units 9-43.

4. **Drainage.** Developer has completed the installation of all drainage systems required to be installed pursuant to the PUD Agreement, including all drainage facilities required for the Future Phase. Developer shall have no obligation to install further stormwater drainage facilities for the Future Phase unless

required by the Livingston County Drain Commission or the Township pursuant to County and Township requirements for such system.

5. **Utilities.** Article VIII of the PUD is amended to add the following at the following in relation to the Future Phase:

FUTURE PHASE UTILITIES

8.1 Prior to the issuance of the final certificate of occupancy for the first residential structure in each Phase, Developer shall provide and dedicate easements to the Township and/or the responsible governmental authority to allow for ingress, egress maintenance, repair and improvements of the public sanitary and public water systems.

8.2 Developer shall construct and pay the cost of the infrastructure required by the Township and the Township's consulting engineers to connect the property to the public sanitary system and the public water system.

8.3 The Township has water supply capacity and sewage disposal capacity to provide public sanitary and public water to the Property. The cost of water supply and sewage disposal to be paid by Developer will be:

- a) Forty Four Thousand One Hundred Sixty and No/100 (\$44,160.00) Dollars due upon issuance of the grading permit. Developer has already paid for grading permit;
- b) Four Thousand and No/100 (\$4,000.00) Dollars for sewer payable upon issuance of each land use permit for each single family home/unit.
- c) Three Thousand Two Hundred and No/100 (\$3,200.00) Dollars payable upon issuance of each land use permit for water tap per single family home/unit.
- d) The Developer and the Township agree that the costs imposed upon the Developer by the Township represents the amount due to the Township for the acreage assessment at 38.48 acres of developable land (excluding the Nature Preserve), 150 front feet (the front footage assessment for sewer) and 158 condominium units.

8.4 Upon Completion of construction of the above infrastructure and the approval by the Township for each Phase, the Developer shall convey the infrastructure components (the sewer, water mains and their appurtenant components) to the Township and thereafter the Township shall be responsible for maintenance, repair and replacement of the same. The Developer and its successors and assigns shall be responsible for the maintenance and repair and replacement of:

- a) The water supply leads extending from the utility/right of way easement to the buildings;
- and;
- b) The sanitary sewer leads from the utility/right of way easement to the buildings.

6. **Conflict.** In the event of a conflict between provisions of this Amendment and the provision of any ordinance or regulation of the Township, the provision of this Amendment shall prevail.

7. **Entire Agreement.** This Amendment constitutes the entire agreement between the parties with respect to the subject of this Amendment and may not be amended or its terms varied except in writing and executed by all parties.

8. Successors and Assigns. This Amendment shall run with the land and shall bind and inure to the benefit of the parties and their successors and assigns.

9. Recording. Following execution of the Amendment by the parties, this Amendment shall be recorded with the Livingston County Register of Deeds. Any amendment shall be recorded with the Livingston County Register of Deeds.

10. Counterparts. This Amendment may be executed by the parties in one or more counterparts, and, when all counterpart documents are executed, the counterparts shall constitute a single binding instrument.

11. Effect of Amendment. The PUD Agreement, as amended by this Amendment continues in full force and effect. The terms of this Amendment supersede any contrary provisions in the PUD Agreement. Undefined terms in this Amendment shall have the meaning set forth in the PUD Agreement unless the context otherwise requires. The Recitals are incorporated in this Amendment by reference.

12. Construction Traffic. All construction traffic related to the development of the Future Phases, including that portion of Lawson Road that is complete and maintained by the existing Summerfield Pointe Condominium Association established to operate and maintain the existing Summerfield Pointe, shall access the Property from Lawson Drive. All damage to the private roads contained in the neighboring Hampton Ridge development directly caused by Developer in relation to construction of the Future Phases shall be restored to the condition that existed prior to such damage. Developer shall be responsible for regularly cleaning the roads in Hampton Ridge of dirt and debris caused by Developer's construction activities.

Commented [A1]: The existing roads in the Summerfield Pointe Association should be included also

13. Emergency Access Gate. Developer shall install an emergency vehicle access gate on Aster Boulevard near the West property line to restrict vehicular traffic between Summerfield Pointe Estate and the neighboring Hampton Ridge to emergency vehicle access only. Developer shall maintain Aster Boulevard, including snow removal to ensure access by emergency vehicles. Developer shall maintain, repair and upkeep, at its sole cost and expense, the emergency vehicle access gate.

Commented [A2]: Who maintains it after the developer turns over the development to the association

14. Lawn Maintenance. The master deeds for the condominiums established on the Future Phases shall provide that the Association shall be responsible for maintaining the lawn and sprinkler system, yard area and lawn located on each Co-Owner's Unit, and the general common element lawn and landscaping. The Master Deed shall also provide that the Association shall designate one day a week for lawn mowing.

Commented [A3]: Duplicate

IN WITNESS WHEREOF, the parties have caused this Amendment to be executed as of the day and year recited above.

[signatures on the following pages]

DEVELOPER

HEALY HOMES AT SUMMERFIELD, LLC, a Michigan limited liability company

By: _____

Jack Healy

Its: Managing Member

ACKNOWLEDGEMENT

STATE OF MICHIGAN)
) ss
COUNTY OF _____)

On this _____ day of _____, 2023, before me, a notary public in and for Livingston County personally appeared Jack Healy, the Managing Member of Healy Homes at Summerfield, LLC, a Michigan limited liability company, known to be the person described in and who executed this Amendment, and who acknowledged the same to be of his free act and deed.

_____, Notary Public

_____, Michigan
My Commission expires: _____
Acting in _____ County

[signatures continue on following page]

TOWNSHIP

CHARTER TOWNSHIP OF GENOA, a Michigan municipal corporation

By: _____
Supervisor

By: _____
Clerk

ACKNOWLEDGEMENT

STATE OF MICHIGAN)
) ss
COUNTY OF LIVINGSTON)

On this _____ day of _____, 2023, before me, a notary public in and for Livingston County personally appeared _____ to me known to be the Supervisor and Clerk, of the Charter Township of Genoa, a Michigan municipal corporation, respectively, who were duly authorized by the Genoa Township Board to sign this Agreement on behalf of the Charter Township of Genoa.

_____, Notary Public

_____, Michigan
My Commission expires: _____
Acting in Livingston County

PREPARED BY

Alexandra E. Dieck
Bodman PLC
201 S. Division, Suite 400
Ann Arbor, Michigan 48103

WHEN RECORDED RETURN TO:

Nancy Willson (32620-319)
Bodman PLC
201 W. Big Beaver Road, Suite 500
Troy, Michigan 48084

EXHIBIT A
Legal Description of the Property

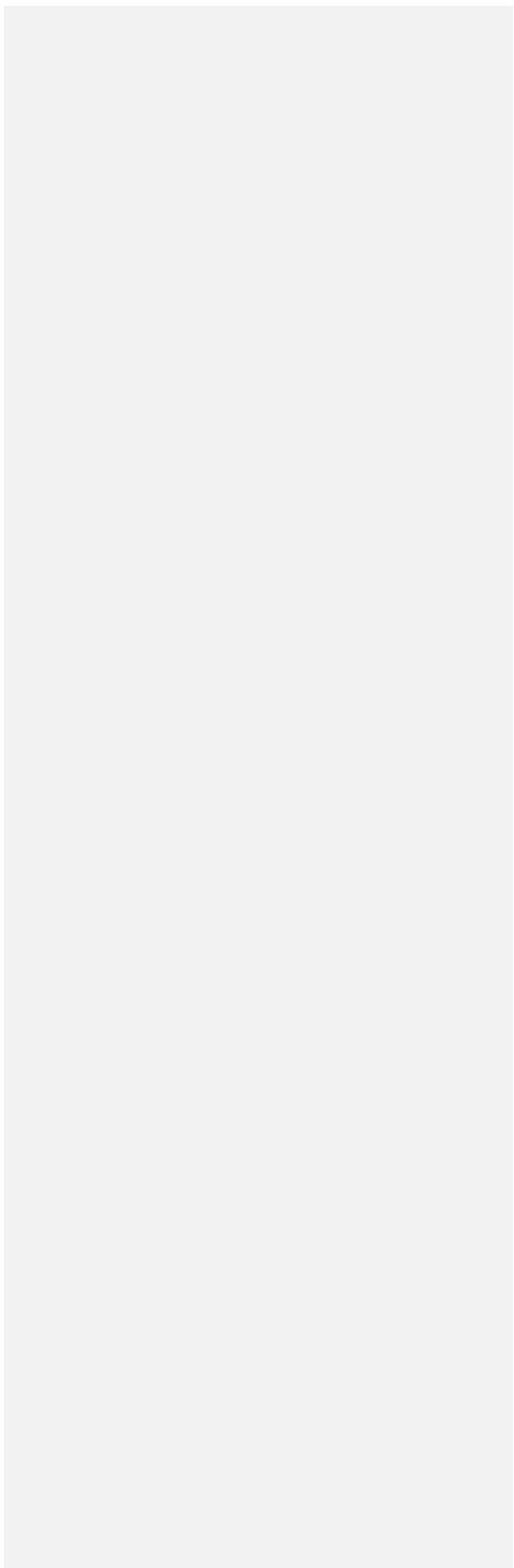


EXHIBIT B
(Amended PUD Site Plan)

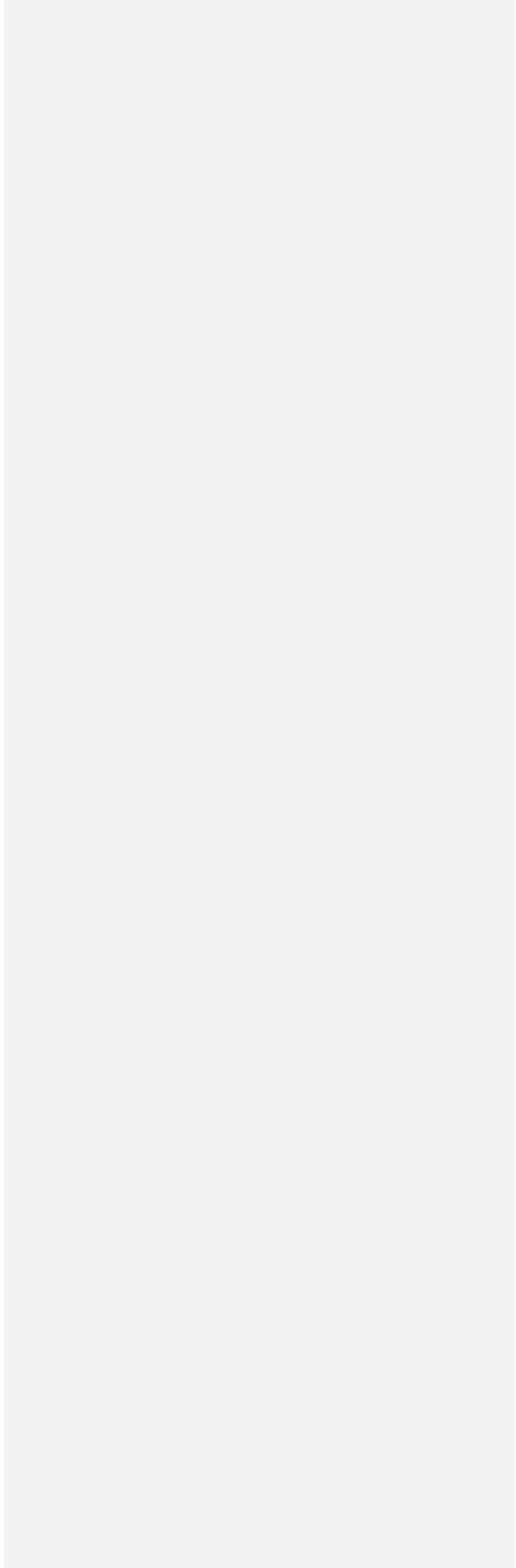
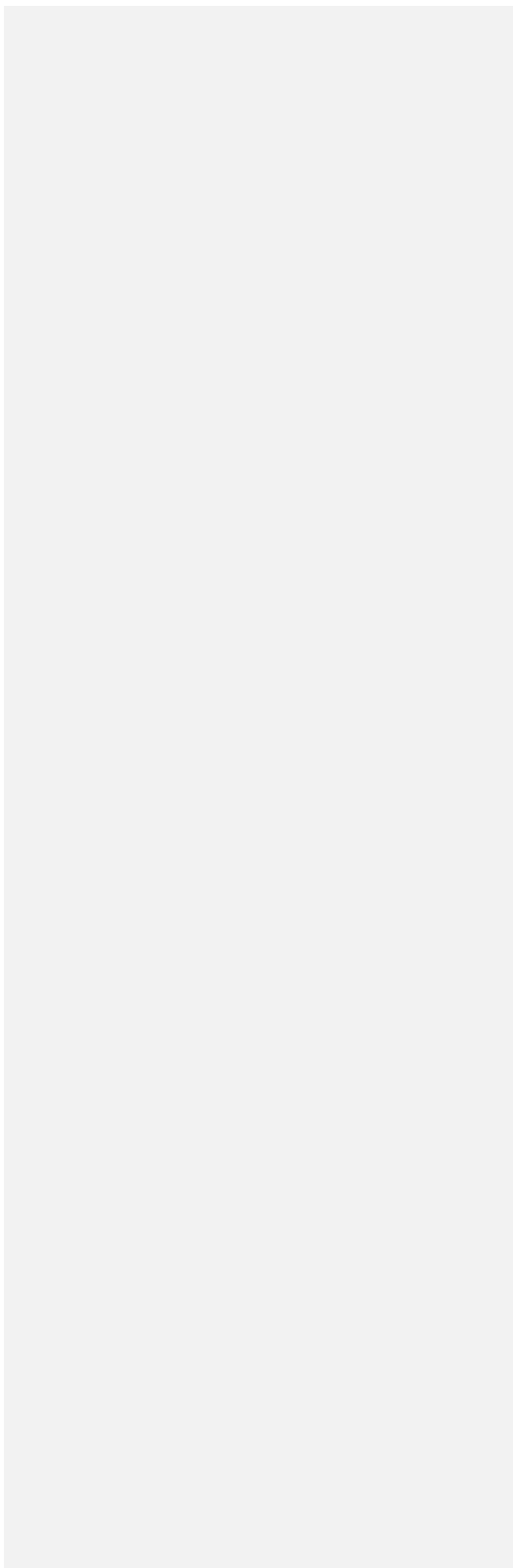


EXHIBIT C
Legal Description of the Future Phase



**MASTER DEED
SUMMERFIELD POINTE ESTATES**

This Master Deed is made and executed on this ___ day of _____, 2023, by Healy Homes of Summerfield LLC, a Michigan Limited Liability Company (the “Developer”), whose address is 3696 Sleeth Road, Commerce Township, Michigan 48382, in pursuance of the provisions of the Michigan Condominium Act (being Act 59 of the Public Acts of 1978, as amended) (the “Act”).

WHEREAS, the Developer desires by recording this Master Deed, together with the Bylaws attached hereto as Exhibit A and together with the Condominium Subdivision Plan attached hereto as Exhibit B (both of which are incorporated by reference into and made a part of this Master Deed), to establish the real property described in Article II below, together with the improvements located and to be located thereon, and the appurtenances thereto as a residential Condominium Project under the provisions of the Act.

NOW, THEREFORE, the Developer does, upon the recording hereof, establish Summerfield Pointe Estates as a Condominium Project under the Act and does declare that Summerfield Pointe Estates (the “Condominium,” the “Project” or the “Condominium Project”) shall, after such establishment, be held, conveyed, hypothecated, encumbered, leased, rented, occupied, improved, or in any other manner utilized, subject to the provisions of the Act, and to the covenants, conditions, restrictions, uses, limitations and affirmative obligations set forth in this Master Deed and the attached Exhibits A and B, all of which shall be deemed to run with the land and shall be a burden and a benefit to the Developer, its successors and assigns, and any persons acquiring or owning an interest in the Condominium Premises, and its successors and assigns. In furtherance of the establishment of the Condominium Project, it is provided as follows:

**ARTICLE I
TITLE AND NATURE**

The Condominium Project shall be known as Summerfield Pointe Estates, Livingston County Condominium Subdivision Plan No. _____. The Condominium Project is established in accordance with the Act. The Units contained in the Condominium, including the number, boundaries, dimensions and area of each, are set forth completely in the Condominium Subdivision Plan attached as Exhibit B. Each Unit is capable of individual utilization on account of having its own entrance from and exit to a Common Element of the Condominium Project. Each Co-owner in the Condominium Project shall have an exclusive right to his or her Unit and shall have undivided and inseparable rights to share with other Co-owners the General Common Elements of the Condominium Project.

**ARTICLE II
LEGAL DESCRIPTION**

The land which is submitted to the Condominium Project established by this Master Deed is described as follows:

Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:

Commencing at the South 1/4 Corner of said Section 4; thence along the North-South 1/4 line of Section 4 to following two courses: 1) N01°35'17"W (recorded as N01°50'51"E) 1366.11 feet and 2) N02°11'05"W (recorded as N01°50'51"E) 569.39 feet to the PLACE OF BEGINNING and 3) N02°11'05"W (recorded as N01°50'51"E) 955.74 feet to the center of Section 4; thence along the East-West 1/4 line of Section 4, N88°53'35"E 1177.52 feet (recorded as S87°40'06"E 1162.17 feet); thence N01°06'25"W (recorded as N02°19'54"E) 16.05 feet; thence S88°08'25"E (recorded as S84°42'06"E) 140.66 feet; thence S10°02'44"W (recorded as S13°29'03"W) 81.90 feet; thence S22°34'43"E 40.64 feet (recorded as S19°08'24"E 39.61 feet); thence S01°33'04"E 373.67 feet (recorded as S01°53'15"W 374.11 feet); thence S84°41'09"W (recorded as S88°06'46"W) 683.63 feet; thence S01°59'18"E (recorded as S01°26'28"W) 400.04 feet; thence S02°08'43"E (recorded as S01°17'41"W) 132.62 feet; thence along the East line of a Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records, the following three courses: 1) S87°51'55"W (recorded as N88°42'19"W) 144.66 feet 2) N54°02'14"W (recorded as N50°36'28"W) 244.39 feet and 3) S82°05'20"W 291.13 feet (recorded as S85°31'06"W 285.32 feet) to the Place of Beginning. Containing 22.22 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

And

Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:

BEGINNING at the South 1/4 Corner of said Section 4; thence along the North-South 1/4 line of Section 4 to following two courses: 1) N01°35'17"W 1366.11 feet and 2) N02°11'05"W 569.39 feet (*recorded as N01°50'51"E 1936.02 feet*); thence along the East line of a Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records, the following three courses: 1) N82°05'20"E 291.13 feet (*recorded as N85°31'06"E 285.32 feet*), 2) S54°02'14"E (*recorded as S50°36'28"E*) 244.39 feet and 3) N87°51'55"E (*recorded as S88°42'19"E*) 144.66 feet; thence S02°08'43"E (*recorded as S01°17'41"W*) 377.94 feet; thence N84°03'00"E (*recorded as N87°29'24"E*) 79.92 feet; thence along a line 10.00 feet West of and parallel to the Westerly line of "Sunrise Park", a subdivision recorded in Liber 2 of Plats, Page 23, Livingston County Records, S01°00'54"E 244.55 feet (*recorded as S02°21'39"W 243.95 feet*); thence S01°39'07"E 226.89 feet (*recorded as S01°45'17"W 227.42 feet*); thence S67°21'52"W 79.51 feet (*recorded as S70°51'31"W 80.28 feet*); thence S79°55'57"W (*recorded as S83°20'15"W*) 95.00 feet; thence S03°24'18"E (*recorded as S00°00'00"W*) 97.26 feet; thence S80°36'56"W (*recorded as S84°01'14"W*) 77.58 feet; thence S09°28'23"E (*recorded as S06°04'05"E*) 130.52 feet; thence S78°24'48"E 34.65 feet (*recorded as S75°00'30"E 34.93 feet*); thence S12°42'26"E 416.34 feet (*recorded as S09°16'02"E 416.23 feet*); thence Southeasterly 59.62 feet along the arc of a 200.00 foot radius curve to the right, through a central angle of 17°04'52" and having a chord bearing S04°10'00"E (*recorded as S00°43'36"E*) 59.40 feet; thence S04°22'26"W (*recorded as S07°48'50"W*) 13.56 feet; thence

S80°11'15"W (recorded as S83°37'39"W) 60.77 feet; thence S03°26'24"E (recorded as S00°00'00"W) 34.61 feet; thence along the West line of Lawson Drive, S05°38'45"E (recorded as S02°12'21"E) 150.00 feet; thence along the South line of Section 4, as previously surveyed, S86°50'35"W 546.06 feet (recorded as N89°43'06"W 546.16 feet) to the Point of Beginning.

Containing 26.25 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

ARTICLE III DEFINITIONS

Certain terms are utilized not only in this Master Deed and the attached Exhibits A and B, but are or may be used in various other instruments such as, by way of example and not limitation, the Articles of Incorporation and rules and regulations of the Summerfield Pointe Estates Home Owners Association, a Michigan non-profit corporation, and deeds, mortgages, liens, land contracts, easements and other instruments affecting the establishment of, or transfer of, interests in Summerfield Pointe Estates as a condominium. Wherever used in such documents or any other pertinent instruments, the terms set forth below shall be defined as follows:

Section 1. Act. The "Act" means the Michigan Condominium Act, being Act 59 of the Public Acts of 1978, as amended.

Section 2. Association. "Association" means Summerfield Pointe Estates Home Owners Association, which is the non-profit corporation organized under Michigan law of which all Co-owners shall be members, which corporation shall administer, operate, manage and maintain the Condominium.

Section 3. Bylaws. "Bylaws" means the attached Exhibit A, being the Bylaws setting forth the substantive rights and obligations of the Co-owners and required by Section 3(9) of the Act to be recorded as part of the Master Deed. The Bylaws shall also constitute the corporate bylaws of the Association as provided for under the Michigan Nonprofit Corporation Act.

Section 4. Common Elements. "Common Elements," where used without modification, means both the General and Limited Common Elements described in Article IV hereof.

Section 5. Condominium Documents. "Condominium Documents" means and includes this Master Deed and the attached Exhibits A and B, and the Articles of Incorporation, Bylaws and rules and regulations, if any, of the Association, as all of the same may be amended from time to time.

Section 6. Condominium Premises. "Condominium Premises" means and includes the land described in Article II above, all improvements and structures thereon, and all easements, rights and appurtenances belonging to Summerfield Pointe Estates as described above.

Section 7. Condominium Project, Condominium or Project. "Condominium Project," "Condominium" or "Project" means Summerfield Pointe Estates, as a Condominium Project established in conformity with the Act.

Section 8. Condominium Subdivision Plan. "Condominium Subdivision Plan" means the attached Exhibit B.

Section 9. Consolidating Master Deed. "Consolidating Master Deed" means the final amended Master Deed which shall describe Summerfield Pointe Estates as a completed Condominium Project and shall reflect the entire land area in the Condominium Project resulting from parcels that may

have been added to and/or withdrawn from the Condominium from time to time under Articles VI and VII of this Master Deed, and all Units and Common Elements therein, as constructed, and which shall express percentages of value pertinent to each Unit as finally readjusted. Such Consolidating Master Deed, if and when recorded in the office of the Livingston County Register of Deeds, shall supersede the previously recorded Master Deed for the Condominium and all amendments thereto.

Section 10. Co-owner or Owner. “Co-owner” means a person, firm, corporation, partnership, association, trust or other legal entity or any combination thereof who or which owns one or more Units in the Condominium Project. The term “Owner,” wherever used, shall be synonymous with the term “Co-owner.”

Section 11. Developer. “Developer” means Healy Homes of Summerfield, LLC, a Michigan Limited Liability Company, which has made and executed this Master Deed, and its successors and assigns including any successor developer(s) under section 135 of the Act. All successor developers under Section 135 of the Act shall always be deemed to be included within the term “Developer” whenever, however and wherever such terms are used in the Condominium Documents.

Section 12. Development and Sales Period. “Development and Sales Period,” for the purposes of the Condominium Documents and the rights reserved to the Developer thereunder, means the period commencing with the recording of the Master Deed until one (1) year after the Developer no longer owns a Unit in the Condominium Project. For the purposes of this Section, the term “Developer” shall also mean any successor developer(s) as defined in Section 135 of the Act.

Section 13. First Annual Meeting. “First Annual Meeting” means the initial meeting at which non-developer Co-owners are permitted to vote for the election of all Directors and upon all other matters which properly may be brought before the meeting. Such meeting is to be held (a) in the Developer’s sole discretion after 50% of the Units that may be created are sold, or (b) mandatorily within (i) 54 months from the date of the first Unit conveyance, or (ii) 120 days after 75% of the Units that may be created are sold, whichever first occurs.

Section 14. Transitional Control Date. “Transitional Control Date” means the date on which a Board of Directors of the Association takes office pursuant to an election in which the votes which may be cast by eligible Co-owners unaffiliated with the Developer exceed the votes which may be cast by the Developer.

Section 15. Unit or Condominium Unit. “Unit” or “Condominium Unit” each mean a single Unit in Summerfield Pointe Estates, as such space may be described in Article V, Section 1 of this Master Deed and on the attached Exhibit B, and shall have the same meaning as the term “Condominium Unit” as defined in the Act. All structures and improvements now or hereafter located within the boundaries of a Unit shall be owned in their entirety by the Co-owner of the Unit within which they are located and shall not, unless otherwise expressly provided in the Condominium Documents, constitute Common Elements. The Developer does not intend to and is not obligated to install any structures whatsoever within the Units or their appurtenant Limited Common Elements.

Section 16. Mailbox Fee. “Mailbox Fee” means the _____ dollar (\$ _____) mailbox installation fee paid by each initial purchaser of a Unit from Developer in Summerfield Pointe Estates at the closing of the purchase of the Unit. The Mailbox Fee is in addition to other fees and assessments to be paid to Developer at the closing of a Unit.

Section 17. PUD Agreement. “PUD Agreement” means that certain Summerfield Pointe Planned Unit Development Agreement by and between the Township and Developer’s Predecessor in

interest, dated April 19, 2002, recorded in Liber 3533, Page 0900, Livingston County Records, as amended by that certain First Amendment to Summerfield Pointe Planned Unit Development Agreement, recorded, or to be recorded in the Livingston County Records, which sets forth requirements from the Township in relation to the zoning and development of the Project. All Co-Owner's acknowledge and agree that the Condominium is subject to the terms and conditions of the PUD Agreement.

Section 18. Future Aster Boulevard Easement; Emergency Access Gate. "Future Aster Boulevard Easement" means the future easement and permission that Developer or the Association will grant to the neighboring property owner to the west of the Condominium to connect to the Roads in Summerfield Pointe via Aster Boulevard. Developer, and the Association, if after the Transitional Control Date, shall grant the Future Aster Boulevard Easement in accordance with the terms of the PUD Agreement. In the event that the road connecting Summerfield Pointe Estates and the neighboring property known as Summerfield Pointe via Aster Boulevard is installed, the co-owners of Units in in the neighboring Summerfield Pointe shall have the right to utilize the future roads to be located in Summerfield Pointe Estates. Once construction of the Future Aster Boulevard Easement is complete, the portion of Aster Boulevard located wholly within the Project will be considered part of the Roads in the Condominium and will be maintained by the Association pursuant to this Master Deed. The location of the Future Aster Boulevard Easement is shown on the Condominium Subdivision Plan attached as Exhibit B hereto. Developer shall install an emergency vehicle access gate on Aster Boulevard near the west property line to restrict vehicular traffic between Summerfield Pointe Estates and the neighboring Hampton Ridge to emergency vehicle access only. The Association shall maintain Aster Boulevard, including snow removal to ensure access by emergency vehicles. The Association for Summerfield Pointe Estates shall maintain, repair and upkeep, at its sole cost and expense, the emergency vehicle access gate the emergency vehicle access gate and related appurtenances, the cost of which will be passed down to Co-Owners via assessments in accordance with the Bylaws.

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Commented [AR2]: Language must receive Brighton Area Fire Dept. Approval

Whenever any reference herein is made to one gender, the same shall include a reference to any and all genders where the same would be appropriate; similarly, whenever a reference is made herein to the singular, a reference shall also be included to the plural where the same would be appropriate and vice versa.

ARTICLE IV COMMON ELEMENTS

The Common Elements of the Project and the respective responsibilities for maintenance, decoration, repair or replacement thereof, are as follows:

Section 1. General Common Elements. The General Common Elements are:

(a) Land. The land described in Article II above, including the roads located within the Condominium (only until dedicated to the public and if requested or required by the Charter Township of Genoa) and related emergency access improvements, including, but not limited to emergency access gate described in Article III, Section 18 above, as shown on the Exhibit B Condominium Subdivision Plan attached hereto, and other common areas, if any, not identified as Limited Common Elements.

(b) Electrical. The electrical transmission lines and transformers throughout the Project, up to the point at which service leads leave the transformer to provide connections for service of Units and dwellings.

(c) Telephone. The telephone system throughout the Project up to the point of lateral connections for Unit service.

(d) Gas. The gas distribution system throughout the Project up to the point of lateral connections for Unit service.

(e) Telecommunications. The telecommunications system, if and when any may be installed, up to the point of lateral connections for Unit service.

(f) Storm Drainage System. The storm water drainage system including detention ponds and appurtenances throughout the Project.

(g) Entrance Areas. The entrance areas to the Condominium as shown as General Common Elements as the Condominium Subdivision Plan.

(h) Sanitary Sewer System. The sanitary sewer system throughout the Project up to the point of lateral connection for service to Units and dwellings.

(i) Water Service System. The water service system and water mains throughout the project up to the point of lateral connection for service to Units and dwellings.

(j) Sprinkler System. Any sprinkler system(s), if and when installed, by the Developer to serve general common lawn areas shall be General Common Elements to be maintained, repaired and replaced by the Association.

(k) Sidewalks. The sidewalks, walking paths and bike paths within the Condominium Project are General Common Elements. The sidewalks, if any, along any public road adjoining the Project are also General Common Elements (but only to the extent that they are within the Project boundaries and not otherwise dedicated to the Township).

(l) Landscaping. All landscaping, if any, installed by the Developer on the Entrance Areas or on any other area constituting a General Common Element.

(m) Other. Such other elements of the Project not herein designated as General or Limited Common Elements which are not enclosed within the boundaries of a Unit, and which are intended for common use or are necessary to the existence, upkeep, appearance, utility or safety of the Project, including all open spaces and storm water detention facilities and appurtenances.

Section 2. Limited Common Elements. Limited Common Elements, if any, shall be subject to the exclusive use and enjoyment of the owner of the Unit to which the Limited Common Elements are appurtenant.

(a) Utility Service Leads. Any utility service leads which connect any utility lines of any sort located within the Common Elements of the Project to any dwelling shall be Limited Common Elements limited in use to the Unit(s) which they serve.

(b) Driveways and Walks. Driveways and walks are Limited Common Elements serving the Units as depicted on the Condominium Subdivision Plan are limited in use to the Units which they serve.

Section 3. Responsibilities. The respective responsibilities for the maintenance, decoration, repair and replacement of the Common Elements are as follows:

(a) Co-owner Responsibilities.

- (1) Units and Limited Common Elements. It is anticipated that separate residential dwellings will be constructed within the Units depicted on Exhibit B. Except as otherwise expressly provided with respect to exterior maintenance of dwellings, the responsibility for, and the costs of maintenance, decoration, repair and replacement of any dwelling and appurtenances to each dwelling as a Limited Common Element (such as driveways, walks, utility leads, decks, and air conditioner compressors and pads), shall be borne by the Co-owner of the Unit which is served by such Limited Common Elements; provided, however, that the exterior appearance of such dwelling, the Units and appurtenant Limited Common Elements, to the extent visible from any other dwelling, Unit or Common Element in the Project, shall be subject at all times to the approval of the Association and to reasonable aesthetic and maintenance standards prescribed by the Association in duly adopted rules and regulations.
- (2) Utility Services. All costs of electricity, water (including irrigation costs) and natural gas and any other utility services, except as otherwise specifically provided, shall be borne by the Co-owner of the Unit to which such services are furnished.
- (3) Landscaping. Each Co-owner shall be responsible for the initial installation of landscaping in his or her Unit and the yard area appurtenant to the Unit, including the planting of two street trees (canopy trees) per Unit. Co-owners shall be responsible for and bear the costs of replacement of all landscaping installed in their respective Units and yard areas, including lawns. After initial installation by the Co-Owner, the Association shall be responsible for maintaining the lawn and sprinkler system and yard area located on each Co-Owner's Unit (but the costs shall be assessed to Co-Owners as set forth in Section (b)(ii) below), including snow and ice removal from sidewalks. General Common Element landscaping installed by the Developer shall be maintained, repaired and replaced by the Association. The expense of such maintenance relating to lawn and sprinkler systems, lawn maintenance, landscaping and snow removal thereof shall be assessed to the Co-Owners as set forth in Article II of the Bylaws.

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(b) Association Responsibility for Units and Common Elements: Exterior Maintenance of Dwellings/Residence on Units.

- (i) Each Co-Owner shall be responsible for routine maintenance and repair and replacement of the exteriors the residences built within the Units. The Developer, in the initial maintenance budget for the Association, shall be entitled to determine the nature and extent of such services and reasonable rules and regulations may be promulgated in connection therewith. As required under the Act, The Association is responsible for maintenance, repair and replacement of all General Common Elements.

- (ii) Notwithstanding any other provisions of the Condominium Documents to the contrary, the responsibility for, and the costs and expense of insurance, maintenance, decoration, repair and replacement of any and all structures and improvements, including, but not limited to, the irrigation and sprinkler systems, and any fire suppression and sprinkler systems, located on each Unit, and snow and ice removal on porches, patios and decks located within or upon, or directly to the rear (outside) of a Unit, and the cost of utilities serving the Co-Owner's Unit shall be borne by the Co-Owner of the Unit. Co-Owner is responsible for the routine exterior maintenance of the dwellings or residences located on Units. The Co-Owner shall undertake exterior building maintenance, roof shingle repair and replacement (but not including underlayment sheets or other roof structural elements), exterior painting, caulking, siding maintenance. Additionally, all windows, doors, and garage door, doors, decks (if any) and patios (if any) shall be maintained, repaired and replaced by the Co-Owners of the Unit, not the Association.
- (iii) The Association shall also be responsible for maintaining Common Element open space of the Condominium Project immediately adjacent to the single family homes and lawn areas within Units. Planting beds, if any shall be installed and maintain by the Co-Owners of Units, not by the Associations.
- (iv) The Association shall undertake snow removal from walks, driveways and Roads.
- (v) The Co-owners of Units shall solely be responsible for all cost of irrigation systems located on such Co-Owner's Unit, including maintenance repair and replacement as their individual cost and expense. Each Co-Owner shall be responsible for the cost of utilities, such as water and electrical charges, serving such Co-Owner's Unit in relation to the irrigation and lawn sprinkler systems connected to and serving each Co-Owner's Unit.
- (vi) The Association shall not be responsible for maintenance, repair or replacement of and decks or patios or others landscaping hardscape on Units which are the responsibility of the Co-Owners of Units.
- (vii) The Association shall not be responsible for the costs of irrigation of lawns and landscaping on Units, provided, however, the Association shall be responsible for irrigation of the Common Elements as set forth in Section 1(j) above. Each Co-Owner shall cause the irrigation and sprinkler system connected to their Unit/structure to irrigate the lawn and landscaping on each Co-Owner's respective Unit, no less than three times per week between May 1 and September 30 each year.
- (viii) The Association's maintenance responsibilities for Units do not include the cost of insurance which is the responsibility of the individual Co-Owners of Unit.
- (ix) Notwithstanding the Association's maintenance obligations in Section 3(d) the cost of replacement of any part of the dwelling or residence and the cost of replacement (rather mere maintenance) of the landscaping shall be borne by the Co-Owners of Units as their individual responsibility and expense.

(c) Maintenance Until Dedicated; Roads. The roads referred to in Article IV, Section 1(a) above will be maintained, replaced, repaired and resurfaced as necessary by the Association or the condominium association for the neighboring Summerfield Pointe. It is the Association's responsibility to inspect and to perform preventative maintenance of the condominium roadways on a regular basis in order to maximize their useful life and to minimize repair and replacement costs until dedication occurs. The Association shall not be responsible for the maintenance, repair or replacement of the driveways which serve the Units. The costs of the foregoing maintenance, repair, replacement and resurfacing by the Association or the neighboring condominium association for Summerfield Pointe shall be assessed to the Co-Owners in Summerfield Pointe Estates on a pro-rata basis based on the number of Units in Summerfield Pointe Estates and Summerfield Pointe. Co-Owners acknowledge and agree that they will be subject to assessments relating to Article XIII and the cost sharing with the neighboring community and as required under the PUD Agreement. The Association for Summerfield Pointe Estates shall maintain, repair and upkeep, at its sole cost and expense, the emergency vehicle access gate the emergency vehicle access gate and related appurtenances described in Article III, Section 18 above.

(d) General Common Elements. The cost of maintenance, repair and replacement of all General Common Elements shall be borne by the Association, subject to any provision of the Condominium Documents expressly to the contrary.

(e) Sprinkling Systems for Entrance Ways. The Association shall be responsible for the repair, replacement and maintenance of any of the sprinkler systems within the entrance ways and the cul-de-sac islands including all electrical appliances such as (if installed) pumps, timers and controls which operate the system, if and when installed wherever they may be located.

Section 4. Utility Systems. Some or all of the utility lines, systems (including mains and service leads) and equipment, and the telecommunications described above may be owned by the local public authority or by the company that is providing the pertinent service. Accordingly, such utility lines, systems and equipment, and the telecommunications, shall be General Common Elements only to the extent of the Co-owner's interest therein, if any, and Developer makes no warranty whatsoever with respect to the nature or extent of such interest, if any. The extent of the Developer's responsibility will be to see that water, sanitary, telephone, electric and natural gas mains are installed within reasonable proximity to, but not within, the Units. Each Co-owner will be entirely responsible for arranging for and paying all costs in connection with extension of such utilities by laterals from the mains to any structures and fixtures located within the Units.

Section 5. Use of Units and Common Elements. No Co-owner shall use his or her Unit or the Common Elements in any manner inconsistent with the purposes of the Project or in any manner which will interfere with or impair the rights of any other Co-owner in the use and enjoyment of his or her Unit or the Common Elements. No Limited Common Element may be modified or its use enlarged or diminished by the Association without the written consent of the Co-owner to whose Unit the same is appurtenant.

Section 6. Open Space Areas. The open space areas, wetlands, woodland preservation areas, greenbelt areas and parks, if any, as shown on Exhibit B, together with any related improvements shown on Exhibit B or the approved final site plan for the PUD Agreement are General Common Elements of the Condominium. Except for construction, installation and maintenance of certain storm water drainage areas, utilities and other improvements and grading as shown on Exhibit B, and the approved final site plan, and access by Developer and the Association for maintenance, repair and replacement of such improvements, the Open Space Areas, including, but not limited to any wetland and woodland preservation areas contained therein, shall be perpetually preserved and maintained in their natural and undeveloped condition by the Association.

**ARTICLE V
UNIT DESCRIPTIONS, PERCENTAGES OF VALUE AND
CO-OWNER RESPONSIBILITIES**

Section 1. Description of Units. Each Unit in the Condominium Project is described in this paragraph with reference to the Condominium Subdivision Plan of Summerfield Pointe Estates, as prepared by Desine, Inc. and attached to this Master Deed as Exhibit B. As of the date of this Master Deed, there are 102 Units in the Condominium. Each Unit shall consist of the space located within Unit boundaries as shown on the attached Exhibit B and delineated with heavy outlines together with all appurtenances thereto. The plans and specifications for the Project have been filed with the Charter Township of Genoa. All dwellings must be constructed within the Units as depicted on Exhibit B.

Section 2. Percentage of Value. The percentage of value assigned to each Unit in Summerfield Pointe Estates shall be equal. The determination that percentages of value should be equal was made after reviewing the comparative characteristics of each Unit in the Project and concluding that there are no material differences among the Units insofar as the allocation of percentages of value is concerned. The percentage of value assigned to each Unit shall be determinative of each Co-owner's respective share of the Common Elements of the Condominium Project, the proportionate share of each respective Co-owner in the proceeds and the expenses of administration and the value of such Co-owner's vote at meetings of the Association. The total value of the Project is 100%.

**ARTICLE VI
EXPANSION OF CONDOMINIUM**

Section 1. Area of Future Development. In the event that any land is removed pursuant to Article VII below, the removed land is an "Area of Future Development" which may be re-incorporated pursuant to this Article 10. Any such re-incorporation or re-expansion shall be undertaken as provided under this Article 10. The Project established pursuant to the initial Master Deed consists of One Hundred and Two (102) Units. The maximum number of Units permitted in this Condominium is One Hundred and Two (102) Units in the Project.

Section 2. Increase in Number of Units. Any other provisions of this Master Deed notwithstanding, the number of Units in the Project may, at the option of Developer from time to time, with a period ending no later than six (6) years from the date of recording of this Master Deed, be increased by the addition to this Condominium of all or any portion of the Area of Future Development and the establishment of Units thereon, subject to approval by the Charter Township of Genoa. The location, nature, appearance, design (interior and exterior) and structural components of the dwellings and other improvements to be constructed within the Area of Future Development shall be determined by Developer in its sole discretion subject only to approval by the Charter Township of Genoa, but all such improvements shall be reasonably compatible with the existing Units in the Project, as determined by Developer in its sole discretion. No Unit shall be created within the Area of Future Development that is not restricted exclusive to residential use. Developer reserves the right to create easements within the initial Project for the benefit of Area of Future Development and adjacent properties.

Section 3. Expansion Not Mandatory. Developer is not obligated to enlarge the Condominium Project beyond the initial Project area established by this Master Deed and Developer may, in its discretion, establish all or a portion of the Area of Future Development, if any, as a separate condominium project (or projects) or any other form of development subject only to the terms of the Development Agreement and the final approved site plan for the Condominium. There are no restrictions on the election of Developer to expand the Project other than as explicitly set forth herein. There is no obligation on the part of Developer to add to the Condominium Project all or any portion of the Area of

Future Development described in this Article nor is there any obligation to add portions thereof in any particular order or to construct particular improvements in any specific location. Developer has reserved easements over the Project for the benefit of the property described in Section 10.1 above regardless of whether the Area of Future Development is added to the Condominium. Developer may create Common Elements within the Area of Future Development. The nature of the General or Limited Common Elements to be added is within the exclusive discretion of the Developer.

Section 4. Amendment to Master Deed and Modification of Percentages of Value. Expansion of the Condominium shall be given effect by an appropriate amendment or amendments to this Master Deed in the manner provided by law, which amendment or amendments shall be prepared by and at the discretion of Developer and shall provide that the percentages of value, to the extent appropriate, set forth in Article 5 above shall be proportionately readjusted in relation to the number of Units in order to preserve the total value of one hundred (100%) per cent for the entire Project resulting from such amendment or amendments to this Master Deed. The precise determination of such readjustment shall be in the sole judgment of Developer. Such readjustment, however, shall reflect a continuing reasonable relationship among percentages of value based upon the original method of determining percentages of value for the Project.

Section 5. Redefinition of Common Elements. Such amendment or amendments to the Master Deed shall also contain such further definitions and redefinitions of General Common Elements or Limited Common Elements and maintenance responsibilities as may be necessary adequately to describe, serve and provide access to the Project as expanded, or to the additional parcel or parcels added to the Project by such amendment and otherwise comply with agreements and requirements of applicable governmental authorities for development of the Condominium. In connection with any such amendment(s), Developer shall have the right to change the nature of any Common Element or easement previously included in the Project for any purpose reasonably necessary to achieve the purposes of this Article VI, subject to the approvals of the Charter Township of Genoa.

Section 6. Consolidating Master Deed. A Consolidating Master Deed may be recorded pursuant to the Act when the Project is finally concluded as determined by Developer in order to incorporate into one set of instruments all successive stages of development. The Consolidating Master Deed, if and when recorded, and as above provided in Section 3.9 above, shall supersede the previously recorded Master Deed and all amendments thereto.

Section 7. Consent of Interested Parties. All of the Co-Owners and mortgagees of Units and other persons interested or to become interested in the Project from time to time shall be deemed to have irrevocably and unanimously consented to such amendment or amendments to this Master Deed to effectuate the purpose and intent of Article 10 and to any proportionate reallocation of percentages of value of existing Units which Developer may determine necessary in conjunction with such amendment or amendments. All such interested persons irrevocably appoint Developer as agent and attorney for the purpose of execution of such amendment or amendments to the Master Deed and all other documents necessary to effectuate the foregoing. Such amendment may be effected without the necessity of recording the entire Master Deed or the Exhibits hereto and may incorporate by reference all or any pertinent portions of this Master Deed and Exhibits.

Section 8. Charter Township of Genoa Approval Required. Any amendments under Articles III, IV, and VI through XI of this Master Deed are subject to the approval of the Charter Township of Genoa at its discretion. The rights set forth in Articles VI through X are incorporated in this Master Deed for the purpose of providing the Developer and the Charter Township of Genoa reasonable flexibility to amend the Project Documents should appropriate circumstances arise.

Section 9. Expansion Under Section 36, Condominium Act. As provided under Section 36 of the Act, MCL 559.136, undivided interests in land may be added to the Condominium Project as common elements and with respect any such land added Co-owners may be tenants in common, joint tenants, or life tenants with other persons. A Condominium Unit shall not be situated on the lands. The Master Deed, or any amendment to Master Deed of the Condominium project shall include a legal description of the land added under this Section 6 and shall describe the nature of the Co-owners' estate in it.

ARTICLE VII CONTRACTION OF CONDOMINIUM

Section 1. Right to Contract. As of the date this Master Deed is recorded, the Developer intends to establish a Condominium Project consisting of One Hundred and Two (102) Units on the land described in Article II, all as shown on the Condominium Subdivision Plan. Developer reserves the right, however, to establish a Condominium Project consisting of fewer Units than described above and to withdraw from the Project all or some portion of the land described in Article II, except that in no event may the Project consist of fewer than two (2) Units, being Units 1 and 2 as they are depicted on Exhibit B attached hereto. Furthermore, any land re-incorporated added under Article VI above shall be deemed to be part of the contractible area under Article VII (the "contractible area").

Therefore, any other provisions of this Master Deed to the contrary notwithstanding, the number of Units in this Condominium Project may, at the option of the Developer from time to time, within a period ending no later than six (6) years from the date of recording this Master Deed, be contracted to any number determined by the Developer in its sole judgment and without the consent of the Co-Owners, but in no event shall the number of Units be less than two. There is no obligation on the part of the Developer to withdraw from the Condominium all or any portion of the contractible area described in this Article VII, nor is there any obligation to withdraw portions thereof in any particular order.

Section 2. Withdrawal of Land. In connection with such contraction, the Developer unconditionally reserves the right to withdraw from the Condominium Project such portion or portions of the land described in this Article VII as is not reasonably necessary to provide access to or otherwise serve the Units included in the Condominium Project as so contracted. Developer reserves the right to use the portion of the land so withdrawn to establish, in its sole discretion, a rental development, a separate condominium project (or projects) or any other form of development. Developer further reserves the right, subsequent to such withdrawal but prior to six (6) years from the date of recording this Master Deed, to expand the Project as so reduced to include all or any portion of the land so withdrawn.

Section 3. Consent Not Required. The consent of any Co-Owner shall not be required to contract the Condominium or to dedicate the roads and road right-of-ways to public use except as set forth in the last sentence of Section 9.1. All of the Co-Owners and mortgagees and other persons interested or to become interested in the Condominium from time to time shall be deemed to have irrevocably and unanimously consented to contraction of the Condominium and any amendment or amendments to this Master Deed to effectuate the contraction. All such interested persons irrevocably appoint the Developer or its successors, as agent and attorney for the purpose of execution of such amendment or amendments to the Master Deed and all other documents necessary to effectuate the foregoing. Such amendments may be effected without the necessity of re-recording an entire Master Deed or the Exhibits thereto and may incorporate by reference all or any pertinent portions of this Master Deed and the Exhibits hereto. These provisions give notice to all Co-Owners, mortgagees and other persons acquiring interests in the Condominium that such amendments of this Master Deed may be made and recorded, and no further notice of such amendment shall be required.

Section 4. Redefinition of Common Elements. The amendment or amendments to the Master Deed contracting the Condominium shall also contain such further definitions and redefinition of General Common Elements or Limited Common Elements and maintenance responsibilities as may be necessary adequately to describe, serve and provide access to the Project as reduced and otherwise comply with agreements and requirements of applicable governmental authorities for development of the Condominium. In connection with any such amendment(s), Developer shall have the right to change the nature of any Common Element or easement previously included in the Project for any purpose reasonably necessary to achieve the purposes of this Article 9.

Section 5. Reservation of Rights Under Section 67. The Developer further reserves all contraction rights provided under Section 67 of the Act, as amended by the Public Act 379 of 2000.

ARTICLE VIII CONVERTIBLE AREAS

Section 1. Designation of Convertible Areas. All Units and Common Elements are hereby designated on the Condominium Subdivision Plan as Convertible Areas within which the Units and Common Elements may be modified or created.

Section 2. The Developer's Right to Modify Units and Common Elements. The Developer reserves the right, in its sole discretion and without the consent of Co-Owners, during a period ending no later than six (6) years from the date of recording this Master Deed, to modify the size, location, design or elevation of Units and/or General or Limited Common Elements appurtenant or geographically proximate to such Units within the Convertible Areas designated for such purpose on the Condominium Subdivision Plan, so long as such modifications do not unreasonably impair or diminish the appearance of the Project or the view, privacy or other significant attribute or amenity of any Unit which adjoins or is proximate to the modified Unit or Common Element, including the creation or elimination of Units or Common Elements.

Section 3. Restrictions on Conversion. All improvements constructed or installed within the Convertible Areas described above shall be restricted exclusively to those compatible with residential use. There are no other restrictions upon such improvements except as stated in this Article and those which are imposed by state law, local ordinances or building authorities. The extent to which any change in the Convertible Areas is compatible with the original Master Deed is not limited by this Master Deed but lies solely within the discretion of Developer, subject only to the requirements of local ordinances and building authorities, including the Charter Township of Genoa.

Section 4. Consent Not Required. The consent of any Co-Owner shall not be required to convert the Convertible Areas except as provided in Section 8.2 above. All of the Co-Owners and mortgagees and other persons interested or to become interested in the Condominium from time to time shall be deemed to have irrevocably and unanimously consented to such conversion of the Convertible Areas and any amendment or amendments to this Master Deed to effectuate the conversion and to any reallocation of Percentages of Value of existing Units which Developer may determine necessary in connection with such amendment or amendments. All such interested persons irrevocably appoint the Developer or its successors, as agent and attorney for the purpose of execution of such amendment or amendments to the Master Deed and all other documents necessary to effectuate the foregoing. Such amendments may be effected without the necessity of re-recording the entire Master Deed or the Exhibits thereto and may incorporate by reference all or any pertinent portions of this Master Deed and the Exhibits hereto. Nothing herein contained, however, shall in any way obligate Developer to convert the Convertible Areas. These provisions give notice to all Co-Owners, mortgagees and other persons acquiring interests in

the Condominium that such amendments of this Master Deed may be made and recorded, and no further notice of such amendments shall be required.

Section 5. Amendment to Master Deed. All modifications to Units and Common Elements made pursuant to this Article shall be given effect by appropriate amendments to this Master Deed in the manner provided by law, which amendments shall be prepared by and at the discretion of the Developer and in which the percentages of value set forth in Article 5 hereof shall be proportionately readjusted in relation to the number of Units in the Condominium, if the Developer deems it to be applicable, in order to preserve a total value of 100% for the entire Condominium resulting from such amendments to this Master Deed. The precise determination of the readjustments in percentages of value shall be made within the sole judgment of Developer. Such readjustments, however, shall reflect a continuing reasonable relationship among percentages of value based upon the original method and formula described in Article 5 of this Master Deed. Such amendments to the Master Deed shall also contain such further definitions and redefinition of General or Limited Common Elements as may be necessary to adequately describe and service the Units and Common Elements being modified by such amendments. In connection with any such amendments, Developer shall have the right to change the nature of any Common Element previously included in this Condominium for any purpose reasonably necessary to achieve the purposes of this Article.

ARTICLE X OPERATIVE PROVISIONS

Subject to Article VII, Section 8, any expansion, contraction or conversion in the Project pursuant to Articles VI, VII or VIII above shall be governed by the provisions as set forth below.

Section 1. Amendment of Master Deed and Modification of Percentages of Value. Such expansion, contraction or conversion of this Condominium Project shall be given effect by appropriate amendments to this Master Deed in the manner provided by law, which amendments shall be prepared by and at the discretion of the Developer and in which the percentages of value set forth in Article V hereof shall be proportionately readjusted in relation to the number of Units in the Condominium, when applicable in order to preserve a total value of 100% for the entire Project resulting from such amendments to this Master Deed. The precise determination of the readjustments in percentages of value shall be made within the sole judgment of the Developer. Such readjustments, however, shall reflect a continuing reasonable relationship among percentages of value based upon the original method of determining percentages of value for the Project.

Section 2. Redefinition of Common Elements. Such amendments to the Master Deed shall also contain such further definitions and redefinitions of General or Limited Common Elements as may be necessary to adequately describe, serve and provide access to the additional parcel or parcels being added to (or withdrawn from) the Project by such amendments. In connection with any such amendments, the Developer shall have the right to change the nature of any Common Element previously included in the Project for any purpose reasonably necessary to achieve the purposes of this Article, including, but not limited to, the connection of roadways and sidewalks in the Project to any roadways and sidewalks that may be located on, or planned for the area of future development or the contractible area, as the case may be, and to provide access to any Unit that is located on, or planned for the area of future development or the contractible area from the roadways and sidewalks located in the Project.

Section 3. Right to Modify Units; Plans. The Developer further reserves the right to amend and alter the Units described in the Condominium Subdivision Plan attached hereto as long as any Unit so altered has not been sold at the time the alteration is made. The nature and appearance of all such altered Units shall be determined by the Developer in its sole judgment; but, subject to approval of the Charter Township of Genoa. All improvements shall be reasonably compatible with the existing improvements in

the Project, as determined by the Developer in its sole discretion. No Unit shall be created within the area of future development that is not restricted exclusively to residential use.

Section 4. Consolidating Master Deed. A Consolidating Master Deed shall be recorded pursuant to the Act when the Project is finally concluded as determined by the Developer in order to incorporate into one set of instruments all successive stages of development. The Consolidating Master Deed, when recorded, shall supersede the previously recorded Master Deed and all amendments thereto.

Section 5. Consent of Interested Persons. All of the Co-owners and mortgagees of Units and other persons interested or to become interested in the Project from time to time shall be deemed to have irrevocably and unanimously consented to such amendments to this Master Deed as may be proposed by the Developer to effectuate the purposes of Articles VI, VII and VIII above and to any proportionate reallocation of percentages of value of existing Units which the Developer may determine necessary in conjunction with such amendments. All such interested persons irrevocably appoint the Developer as agent and attorney for the purpose of execution of such amendments to the Master Deed and all other documents necessary to effectuate the foregoing. Such amendments may be effected without the necessity of re-recording the entire Master Deed or the Exhibits hereto and may incorporate by reference all or any pertinent portions of this Master Deed and the Exhibits hereto.

**ARTICLE XI
SUBDIVISION, CONSOLIDATION
AND OTHER MODIFICATIONS OF UNITS**

Although it is recognized that at the time of the recording of this Master Deed, the size of the Units may make it impractical to subdivide, consolidate, or modify the boundaries of Units, notwithstanding any other provision of the Master Deed or the Bylaws, Units in the Condominium may be subdivided, consolidated, modified and the boundaries relocated, in accordance with Sections 48 and 49 of the Act, applicable zoning laws and regulations in effect in the Charter Township of Genoa at the time, and this Article and only with the approval of the Charter Township of Genoa and any required review process. Such changes in the affected Unit or Units shall be promptly reflected in a duly recorded amendment or amendments to this Master Deed.

Section 1. By Developer. Subject to the approval of Charter Township of Genoa, if required under local ordinances, Developer reserves the sole right during the Development and Sales Period and without the consent of any other Co-owner or any mortgagee of any Unit to take the following action:

(a) Subdivide Units. Subdivide or resubdivide any Units which it owns and in connection therewith to install utility conduits and connections and any other improvements reasonably necessary to effect the subdivision, any or all of which may be designated by the Developer as General or Limited Common Elements; such installation shall not disturb any utility connections serving Units other than temporarily. Such subdivision or resubdivision of Units shall be given effect by an appropriate amendment or amendments to this Master Deed in the manner provided by law, which amendment or amendments shall be prepared by and at the sole discretion of Developer, its successors or assigns.

(b) Consolidate Contiguous Units. Consolidate under single ownership two or more Units. Such consolidation of Units shall be given effect by an appropriate amendment or amendments to this Master Deed in the manner provided by Law, which amendment or amendments shall be prepared by and at the sole discretion of the Developer, its successors or assigns.

(c) Relocate Boundaries. Relocate any boundaries between adjoining Units, separated only by Unit perimeters or other Common Elements not necessary for the reasonable use of Units other than those subject to the relocation. The relocation of such boundaries shall be given effect by an appropriate amendment or amendments to this Master Deed in the manner provided by law, which amendment or amendments shall be prepared by and at the sole discretion of the Developer, its successors or assigns.

(d) Amend to Effectuate Modifications. In any amendment or amendments resulting from the exercise of the rights reserved to Developer above, each portion of the Unit or Units resulting from such subdivision, consolidation or relocation of boundaries shall be separately identified by number. Such amendment or amendments to the Master Deed shall also contain such further definitions of General or Limited Common Elements as may be necessary to adequately describe the Units in the Condominium Project as so modified. All of the Co-owners and mortgagees of Units and other persons interested or to become interested in the Project from time to time shall be deemed to have irrevocably and unanimously consented to such amendment or amendments of this Master Deed to effectuate the foregoing and to any proportionate reallocation of percentages of value of Units which Developer or its successors may determine necessary in conjunction with such amendment or amendments. All such interested persons irrevocably appoint Developer or its successors as agent and attorney for the purpose of execution of such amendment or amendments to the Master Deed and all other documents necessary to effectuate the foregoing. Such amendments may be effected without the necessity of re-recording an entire Master Deed or the Exhibits hereto.

Section 2. By Co-owners. Subject to the approval of the Charter Township of Genoa, if required under local ordinances, one or more Co-owners may undertake:

(a) Subdivision of Units. The Co-owner of a Unit may subdivide his Unit upon request to and approval by the Association and the Developer during the Development and Sales Period and further subject to the applicable zoning regulations then in effect in Charter Township of Genoa. Upon receipt of such request and submission of evidence that the Charter Township of Genoa has approved of the proposed division, the president of the Association shall present the matter to the Board of Directors for review and, if approved by the Board, cause to be prepared an amendment to the Master Deed, duly subdividing the Unit, separately identifying the resulting Units by number or other designation, designating only the Limited or General Common Elements in connection therewith, and reallocating the percentages of value (if necessary) in accordance with the Co-owner's request. The Co-owner requesting such subdivision shall bear all costs of such amendment. Such subdivision shall not become effective, however, until the amendment to the Master Deed, duly executed by the Association, has been recorded in the office of the Livingston County Register of Deeds.

(b) Consolidation of Units; Relocation of Boundaries. Co-owners of adjoining Units may relocate boundaries between their Units or eliminate boundaries between two or more Units upon written request to and approval by the Association. Upon receipt of such request and submission of evidence that the proposed consolidation of Units has been approved by the Charter Township of Genoa, the president of the Association shall present the matter to the Board of Directors for review and, if approved by the Board, cause to be prepared an amendment to the Master Deed duly relocating the boundaries, identifying the Units involved, reallocating percentages of value if necessary, and providing for conveyancing between or among the Co-owners involved in relocation of boundaries. The Co-owners requesting relocation of boundaries shall bear all costs of such amendment. Such relocation or elimination of boundaries shall not

become effective, however, until the amendment to the Master Deed has been recorded in the office of the Livingston County Register of Deeds.

Section 3. Limited Common Elements. Limited Common Elements shall be subject to assignment and reassignment in accordance with Section 39 of the Act and in furtherance of the rights to subdivide, consolidate or relocate boundaries described in this Article X.

ARTICLE XII EASEMENTS

Section 1. Easement for Maintenance of Encroachments and Utilities. In the event of any encroachments due to shifting, settling or moving of an improvement, or due to survey errors, or construction deviations, reciprocal easements shall exist for the maintenance of such encroachment for so long as such encroachment exists, and for maintenance thereof after rebuilding in the event of any destruction. There shall be easements to, through and over those portions of the land, structures, buildings and improvements for the continuing maintenance, repair, replacement, enlargement of or tapping into all utilities in the Condominium. The Developer and the Association also hereby reserve easements within General Common Elements for the purpose of construction and maintenance of entry markers or signs identifying the Condominium by name. The size, design and precise location of such markers or signs shall be at the sole discretion of the Developer and the Association shall be responsible for the maintenance, repair and replacement thereof, and in accordance with the existing ordinances of the Charter Township of Genoa.

Section 2. Easements and Right to Dedicate Retained by Developer.

(a) Roadway Easements. Developer reserves for the benefit of itself, its successors and assigns, and all future owners of the land described in Articles VI and VII or any portion or portions thereof, perpetual easements for the unrestricted use of all main service roads in the Condominium designated as such on the Condominium Subdivision Plan, as amended from time to time, for the purposes of further development and construction by it or its successors and assigns and also for purposes of access to any adjoining land which may now be owned by the Developer and to other residential projects within the area of future development by the owners and occupants thereof and their invitees, successors and assigns. In order to achieve the purposes of this Article, and of Articles VI and VII of this Master Deed, the Developer shall have the right to alter any General Common Element areas existing between any of said main service roads and any portion of said area of future development or any adjoining land which may be owned by Developer by installation of curb cuts, paving and roadway connections at such locations on and over said General Common Elements as the Developer may elect from time to time. In the event Developer disturbs any area of the Condominium Premises adjoining such curb cuts, paving or roadway connections in connection with the installation thereof, the Developer shall, at its expense, restore such disturbed areas to substantially their condition existing immediately prior to such disturbance. The Co-owners shall be responsible from time to time for payment of a proportionate share of the above expenses with respect to each main service road which shall be determined by multiplying such expenses times a fraction the numerator of which is the number of completed dwelling Units in this Condominium and the denominator of which is comprised of the number of such Units plus all other completed dwelling units in developments utilize such main service road for access. Except as otherwise prohibited by Article VI, Section 4, and Article IX, Section 6, Developer may, by a subsequent instrument, prepared and recorded in its discretion, without consent from any interested party, specifically define by legal description the easements of access reserved hereby, if Developer deems it necessary or desirable to do so.

(b) Dedication to the Public. The Developer reserves the right at any time during the Development and Sales Period to dedicate to the public a right-of-way of such width as may be required by the local public authority over any or all of the roadways in Summerfield Pointe Estates, shown as General Common Elements in the Condominium Subdivision Plan. Any such right-of-way dedication may be made by the Developer without the consent of any Co-owner, mortgagee or other person and shall be evidenced by an appropriate amendment to this Master Deed and to the Condominium Subdivision Plan hereto, recorded in the Livingston County Records. All of the Co-owners and mortgagees of Units and other persons interested or to become interested in the Project from time to time shall be deemed to have irrevocably and unanimously consented to such amendment or amendments of this Master Deed to effectuate the foregoing right-of-way dedication. While contemplated, the decision to accept dedication is in the discretion of the Road Commission of Livingston County and the Developer cannot guarantee acceptance by the Road Commission. Any such right-of-way dedication shall be evidenced by an appropriate amendment to the Master Deed and to the attached Exhibit B, recorded in Livingston County Register of Deeds. ALL CO-OWNERS SHOULD TAKE NOTE THAT NOTWITHSTANDING THE PROVISIONS STATED HERE ACCEPTANCE OF A DEDICATION IS A DECISION SOLELY WITHIN THE DISCRETION OF THE PUBLIC BODY WITH JURISDICTION OVER ROADS AND THE REQUIREMENTS OF THE LOCAL PUBLIC AUTHORITIES. It is very unlikely the roads will be accepted by Livingston County Road Commission.

(c) Utility Easements. The Developer also hereby reserves for the benefit of itself, its successors and assigns, and all future owners of the land described in Articles VI and VII and any adjoining land thereof, perpetual easements to utilize, tap, tie into, extend and enlarge all utility mains located in the Condominium, including, but not limited to, water, gas, storm and sanitary sewer mains. In the event Developer, its successors or assigns, utilizes, taps, ties into, extends or enlarges any utilities located in the Condominium, it shall be obligated to pay all of the expenses reasonably necessary to restore the Condominium Premises to their state immediately prior to such utilization, tapping, tying-in, extension or enlargement. All expenses of maintenance repair and replacement of any utility mains referred to in this Section shall be shared by this Condominium and any developed portions of the land described in Articles VI and VII and any adjoining land which may be owned by the Developer which are served by such mains. The Co-owners of this Condominium shall be responsible from time to time for payment of a proportionate share of said expenses which share shall be determined by multiplying such expenses times a fraction, the numerator of which is the number of dwelling Units in this Condominium, and the denominator of which is comprised of the numerator plus all other dwelling Units in the land described in Articles VI and VII and any adjoining land which may be owned by Developer that are served by such mains.

(d) Granting of Utility Easements. The Developer reserves the right at any time during the Development and Sales Period to grant easements for utilities over, under and across the Condominium to appropriate governmental agencies or public utility companies and to transfer title of utilities to governmental agencies or to utility companies. Any such easement or transfer of title may be conveyed by the Developer without the consent of any Co-owner, mortgagee or other person and shall be evidenced by an appropriate amendment to this Master Deed and to the attached Exhibit B, recorded in the Livingston County Records. All of the Co-owners and mortgagees of Units and other persons interested or to become interested in the Project from time to time shall be deemed to have irrevocably and unanimously consented to such amendments to this Master Deed as may be required to effectuate the foregoing grant of easement or transfer of title.

Section 3. Grant of Easements by Association. The Association, acting through its lawfully constituted Board of Directors (including any Board of Directors acting prior to the Transitional Control

Date) shall be empowered and obligated to grant such reasonable easements (including dedication of the sidewalks), licenses, rights-of-entry and rights-of-way over, under and across the Condominium Premises for utility purposes or other lawful purposes, as may be necessary for the benefit of the Condominium subject to the approval of the Developer so long as the Development and Sales Period has not expired. No easements created under the Condominium Documents may be modified, nor may any of the obligations with respect thereto be varied, without the consent of each person benefited or burdened thereby. Developer, or the Association, if after the Transitional Control Date, shall have the right to grant the Future Aster Boulevard Easement. All Co-Owners acknowledge and agree that the Roads in Summerfield Pointe shall connect to the neighboring property and the neighboring property may utilize the Roads in Summerfield Pointe.

Section 4. Association Right to Dedicate Public Rights-of-Way; Make Other Dedications, and Act Upon Special Assessment Proceeding. The Association, upon expiration of the Development and Sales Period, acting through its lawfully constituted Board of Directors shall be empowered to dedicate to the public a right-of-way of such width as may be required by the local public authority over any or all of the roadways or sidewalks in Summerfield Pointe Estates, shown as General Common Elements in the Condominium Subdivision Plan provided that such dedication meets all of the requirements of the local public authority. Furthermore the Association has the right to make any and all other public dedications which are required by any local Unit of government having jurisdiction over the Condominium Project. There is no promise that any such dedication will ever take place, notwithstanding the reservation of this right. Any such right-of-way dedication shall be evidenced by an appropriate amendment to the Master Deed and to the attached Exhibit B, recorded in Livingston County Register of Deeds. The Association shall further be empowered, at any time, to execute petitions for and to act on behalf of all Co-owners in any statutory proceedings regarding special assessment improvements of the roadways or drainage systems in the Condominium. Consistent with Section 131 of 1978 Public Act 59 as amended (MCL 559.231) the Association shall be vested with the power to sign petitions requesting establishment of a special assessment district pursuant to any provisions of applicable Michigan statutes for improvements of public roads within or adjacent to the condominium premises upon approval by and affirmative vote of not less fifty-one percent (51%) of the Co-owners of that own Units within the special assessment district. All of the Co-owners and mortgagees of Units and other persons interested or to become interested in the Project from time to time shall be deemed to have irrevocably and unanimously consented to such amendment or amendments of this Master Deed to effectuate the foregoing right-of-way dedication. ALL CO-OWNERS SHOULD TAKE NOTE THAT NOTWITHSTANDING THE PROVISIONS STATED HERE ACCEPTANCE OF ANY DEDICATION IS A DECISION SOLELY WITHIN THE DISCRETION OF THE PUBLIC BODY WITH JURISDICTION OVER ROADS.

Section 5. Association Easements for Maintenance, Repair and Replacement. The Developer, the Association and all public or private utilities shall have such easements over, under, across and through the Condominium Premises, including all Units and Common Elements, as may be necessary to fulfill any responsibilities of maintenance, repair, decoration, replacement or upkeep which they or any of them are required or permitted to perform under the Condominium Documents or by law or to respond to any emergency or common need of the Condominium including without limitation an easement over all Units for maintenance, repair and replacement of lawn sprinkling systems and related controls, clocks, meters and valves; provided, however, that the easements granted hereunder shall not entitle any person other than the Co-Owner thereof to gain entrance to the interior of any dwelling or garage located within a Unit. While it is intended that each Co-owner shall be solely responsible for the performance and costs of all maintenance, repair and replacement of and decoration of the residence and all other appurtenances and improvements constructed or otherwise located within his or her Unit unless otherwise provided herein, it is nevertheless a matter of concern that a Co-owner may fail to properly maintain the exterior of his or her Unit or any Limited Common Elements appurtenant thereto in a proper manner and in accordance with the standards set forth in this Master Deed, the Bylaws and any rules and regulations promulgated by the

Association. Therefore, in the event a Co-owner fails, as required by this Master Deed, the Bylaws or any rules and regulations of the Association, to properly and adequately maintain, decorate, repair, replace or otherwise keep his or her Unit or any improvements or appurtenances located therein or any Limited Common Elements appurtenant thereto, the Association (and/or the Developer during the Development and Sale Period) shall have the right, and all necessary easements in furtherance thereof, (but not the obligation) to take whatever action or actions it deems desirable to so maintain, decorate, repair or replace the Unit (including the exteriors of any structures located therein), its appurtenances or any of its Limited Common Elements, all at the expense of the Co-owner of the Unit. Neither the Developer nor the Association shall be liable to the Owner of any Unit or any other person, in trespass or in any other form of action, for the exercise of rights pursuant to the provisions of this Section or any other provision of the Condominium Documents which grant such easements, rights of entry or other means of access. Failure of the Association (or the Developer) to take any such action shall not be deemed a waiver of the Association's (or the Developer's) right to take any such action at a future time. All costs incurred by the Association or the Developer in performing any responsibilities which are required, in the first instance to be borne by any Co-owner, shall be assessed against such Co-owner and shall be due and payable with his or her monthly assessment next falling due; further, the lien for non-payment shall attach as in all cases of regular assessments and such assessments may be enforced by the use of all means available to the Association under the Condominium Documents and by law for the collection of regular assessments including, without limitation, legal action, foreclosure of the lien securing payment and imposition of fines.

Section 6. Telecommunications Agreements. The Association, acting through its duly constituted Board of Directors and subject to the Developer's approval during the Development and Sales Period, shall have the power to grant such easements, licenses and other rights-of-entry, use and access and to enter into any contract or agreement, including wiring agreements, right-of-way agreements, access agreements and multi-unit agreements and, to the extent allowed by law, contracts for sharing of any installation or periodic subscriber service fees as may be necessary, convenient or desirable to provide for telecommunications, videotext, broad band cable, satellite dish, earth antenna and similar services (collectively "Telecommunications") to the Project or any Unit within the Project. Notwithstanding the foregoing, in no event shall the Board of Directors enter into any contract or agreement or grant any easement, license or right of entry or do any other act or thing which will violate any provision of any federal, state or local law or ordinance. Any and all sums paid by any telecommunications or other company or entity in connection with such service, including fees, if any, for the privilege of installing same or sharing periodic subscriber service fees, shall be receipts affecting the administration of the Condominium Project within the meaning of the Act and shall be paid over to and shall be the property of the Association.

Section 7. Emergency Vehicle and Public Services Access Easement. There shall exist for the benefit of the Charter Township of Genoa, any emergency service agency and the United States Postal Service ("USPS"), an easement over all roads in the Condominium for use by Charter Township of Genoa service providers, USPS, garbage collection and/or emergency vehicles. Said easement shall be for purposes of ingress and egress to provide, without limitation, fire and police protection, ambulance and rescue services and other lawful governmental or private emergency services to the Condominium Project and Co-owners thereof. This grant of easement shall in no way be construed as a dedication of any streets, roads or driveways to the public.

**ARTICLE XIII
AMENDMENT**

This Master Deed and the Condominium Subdivision Plan may be amended with the consent of 66-2/3% of the Co-owners, except as hereinafter set forth:

Section 1. Modification of Units or Common Elements. No Unit dimension may be modified in any material way without the consent of the Co-owner of such Unit nor may the nature or extent of Limited Common Elements or the responsibility for maintenance, repair or replacement thereof be modified in any material way without the written consent of the Co-owner of any Unit to which the same are appurtenant.

Section 2. Mortgagee, Mortgage Insurer and Mortgage Guarantor Consent. Whenever a proposed amendment would materially alter or change the rights of mortgagees generally, mortgagee insurers or mortgage guarantors, then such amendments shall require the approval of 66-2/3% of all first mortgagees, insurers of the first mortgagee and guarantors of the first mortgages of record allocating only one vote for each mortgage held. No more than one vote may be cast per first mortgage, regardless of the number of mortgagees, insurers and guarantors having such an interest in the first mortgage.

Section 3. By Developer. Prior to one year after expiration of the Development and Sales Period, the Developer may, without the consent of any Co-owner or any other person, amend this Master Deed and the Condominium Subdivision Plan attached as Exhibit B in order to correct survey or other errors made in such documents and to make such other amendments to such instruments and to the Bylaws attached hereto as Exhibit A as do not materially affect any rights of any Co-owners or mortgagees in the Project, or the Charter Township of Genoa.

Section 4. Change in Percentage of Value. The value of the vote of any Co-owner and the corresponding proportion of common expenses assessed against such Co-owner shall not be modified without the written consent of such Co-owner and his or her mortgagee, nor shall the percentage of value assigned to any Unit be modified without like consent; thus, any change in such matters shall require unanimity of action of all Co-owners.

Section 5. Termination, Vacation, Revocation or Abandonment. The Condominium Project may not be terminated, vacated, revoked or abandoned without the written consent of the Developer and 80% of non-Developer Co-owners and mortgagees, allocating one vote for each unit on which a mortgage is held.

Section 6. Developer Approval. During the Development and Sales Period, the Condominium Documents shall not be amended nor shall the provisions thereof be modified in any way without the written consent of the Developer.

Section 7. Amendment by Association Board of Directors. The right is further reserved to the Board Directors of the Association, after the Construction and Sales Period ends, to make amendments to the Master Deed and Bylaws without the consent of mortgagees or the Co-owners as long as the amendments do not materially change the rights of the Co-owners and subject only to the provisions of Section 90(1) of the Act. For the purpose of this Section 7, an amendment that does not materially change the rights of a co-owner or mortgagee includes, but is not limited, to modifications of Common Elements and appurtenant Limited Common Elements, provisions related to insurance, reconstruction, maintenance, repair and replacement, fines, fees, and changes or additions related to health, safety and welfare of the Co-owners and occupants, or the operation and administration of the Condominium Project generally, and by accepting title to a Unit a Co-owner agrees that all such amendments do not materially change a Co-owner's rights.

Section 8. Approvals by Municipality; Open Space and General Common Elements. No amendment may be made to the Master Deed which affects any approvals granted by the Charter Township of Genoa unless the proposed amendment has been approved in writing by the Charter Township of Genoa and the approval is indicated on the amendment as recorded. The open space areas and General Common

Elements as set forth on the approved site plan, shall not be modified by the Developer without the prior written consent of the Charter Township of Genoa granted or withheld on its sole consent.

Section 9. Developer Responsibility. The Developer shall remain responsible for maintenance of General Common Elements until either responsibility is assumed by the Road Commission for Livingston County, as may be applicable, or until the Transitional Control Date.

Section 10. Open Space Preserved. General Common Element open spaces set forth on the Condominium Subdivision Plan and as approved by the Charter Township of Genoa shall remain as open spaces and may be developed only as provided in the approved site plan.

**ARTICLE XIV
ASSIGNMENT**

Any or all of the rights and powers granted or reserved to the Developer in the Condominium Documents or by law, including the power to approve or disapprove any act, use or proposed action or any other matter or thing, may be assigned, in whole or part, by it to any other entity or entities or to the Association. Any such assignment or transfer shall be made by appropriate instrument in writing duly recorded in the office of the Livingston County Register of Deeds.

ARTICLE XIII

ADJOINING SUMMERFIELD POINTE CONDOMIMUM

Section 1. Easement Rights. The Condominium Project benefits from certain access and utility easement rights granted pursuant to the Article X, Section 2 of the Master Deed of Summerfield Pointe as recorded in Liber 4218, Page 874, Livingston County Records, Livingston County Condominium Subdivision Plan No. 295

Section 2. Joint Maintenance of Summer Ridge Drive and Lawson Road. The Condominium Project adjoins Summerfield Pointe and the two condominium projects jointly use certain roads such as Summer Ridge Drive East and the portion of Lawton Road which is not dedicated to the public. Summerfield Pointe Association, the administrator of Summerfield Pointe, is generally responsible for the maintenance, repair and replacement of those roads and Summerfield Pointe Estates Association shall reimburse Summerfield Pointe Association for a proportionate share of the reasonable costs of maintenance, repair and replacement, such as snow removal, pavement repair and replacement, and maintenance of associated berms, open space and roundabout infrastructure ("Road Maintenance Costs"). However Summerfield Pointe Estates and Summerfield Point Estate Association shall not otherwise other share in the expenses of administration of Summerfield Pointe's common elements or project administration and likewise Summerfield Pointe and Summerfield Point Association shall not share in the expenses associated with the common elements and administration of Summerfield Pointe Estates. Each condominium project will be otherwise responsible for maintenance of the common elements within their respective condominium projects. Developer shall install an emergency vehicle access gate on Aster Boulevard near the west property line to restrict vehicular traffic between Summerfield Pointe Estates and the neighboring Hampton Ridge to emergency vehicle access only. The Association for Summerfield Pointe Estates shall maintain, repair and upkeep, at its sole cost and expense, the emergency vehicle access gate the emergency vehicle access gate and related appurtenances.

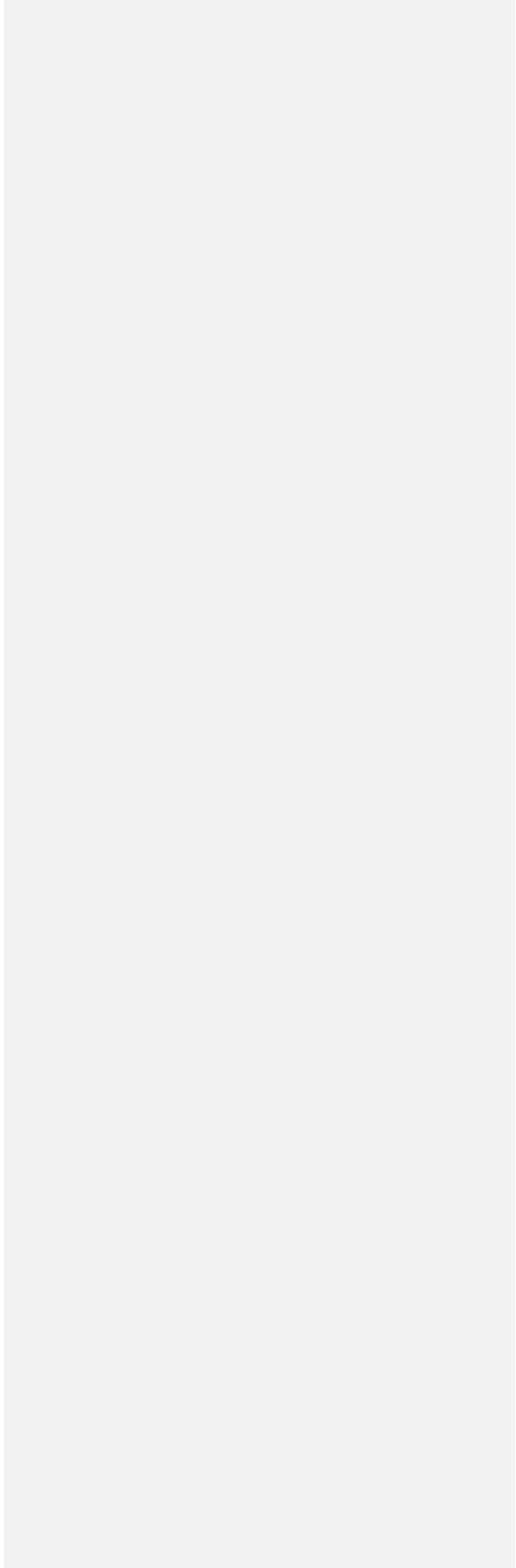
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Section 3. Expense Percentage. Summerfield Pointe Associations shall pay 27% of the Road Maintenance Costs as its proportionate share. The proportionate share of the Road Maintenance Costs shall be and expense of administration of the Condominium Project.

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[Signature on Following Page]



DEVELOPER:

HEALY HOMES AT SUMMERFIELD LLC,
a Michigan limited liability company

By: _____
Jack Healy
Its: Manager and Member

STATE OF MICHIGAN)
) SS
COUNTY OF OAKLAND)

On this ____ day of _____, 2023 this Master Deed was acknowledged before me by Jack Healy,
the Manager of Healy Homes of Summerfield LLC, on behalf of the Michigan limited liability company.

_____, Notary Public
_____, County, Michigan
My Commission Expires: _____
Acting in Livingston County

DRAFT BY AND RETURN TO:

Gregory J. Gamalski, Esq.
Bodman PLC
201 West Big Beaver Road, Suite 500
Troy, MI 48084

EXHIBIT A
SUMMERFIELD POINTE ESTATES
BYLAWS

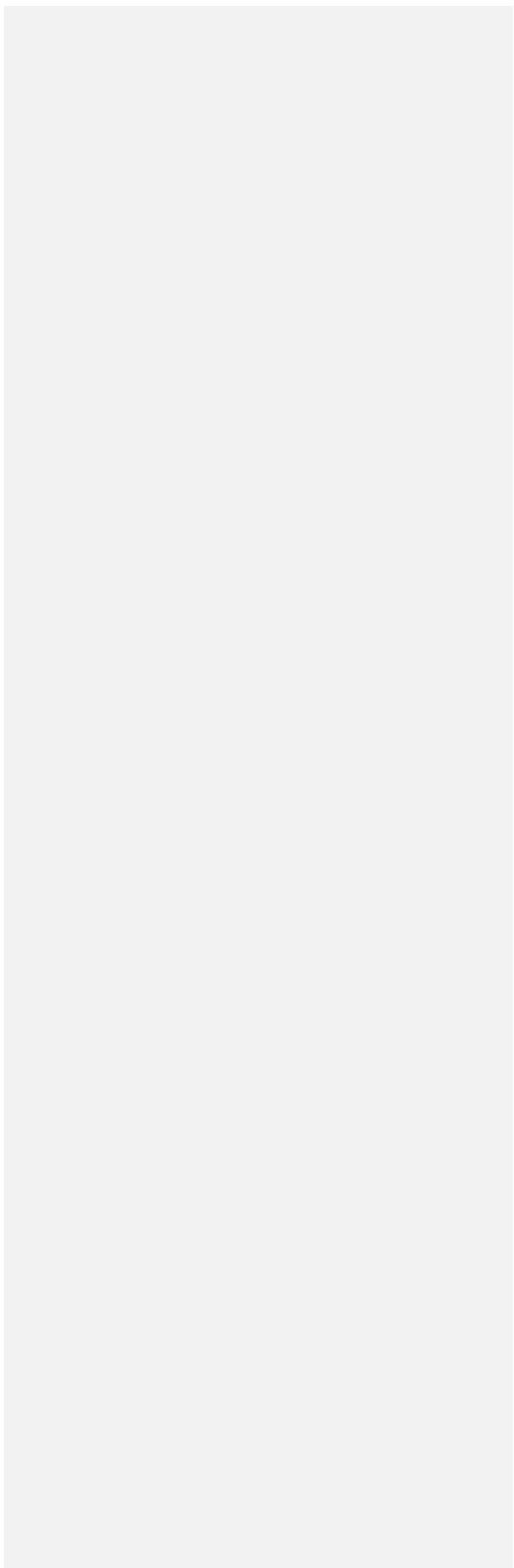


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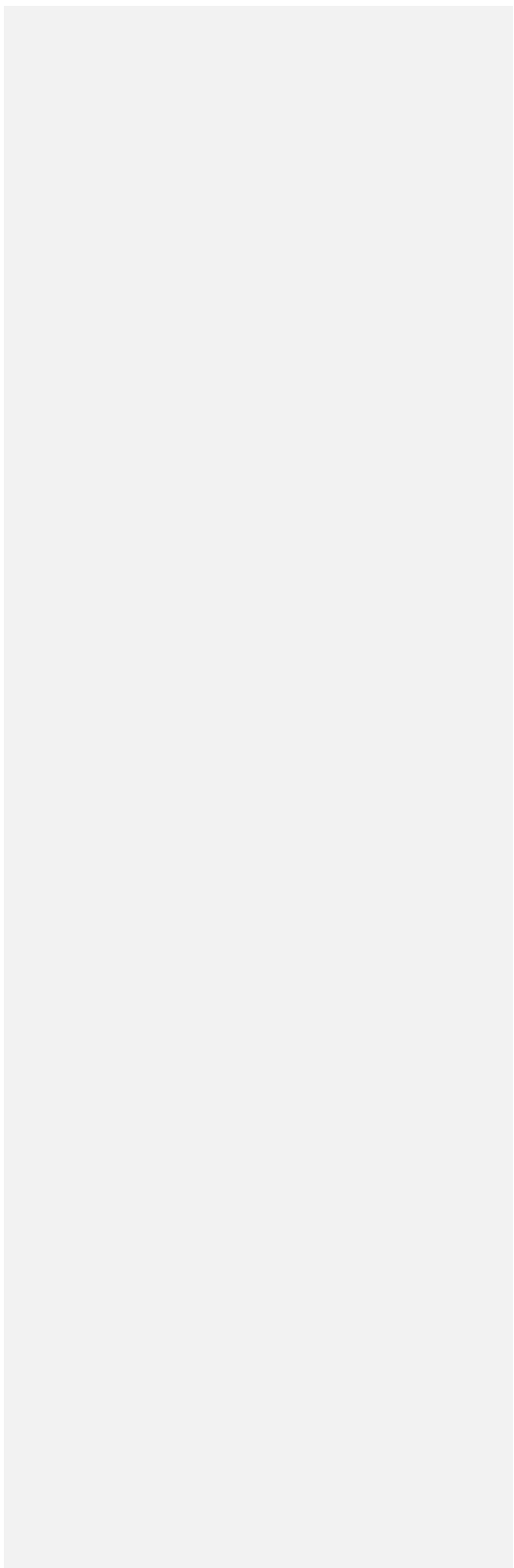
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**ARTICLE I
ASSOCIATION OF CO-OWNERS**

Summerfield Pointe Estates, a residential Condominium Project located in the Charter Township of Genoa, Livingston County, Michigan, shall be administered by an Association of Co-Owners which shall be a non-profit corporation (the "Association"), organized under the applicable laws of the State of Michigan, and responsible for the management, maintenance, operation and administration of the Common Elements, easements and affairs of the Condominium Project in accordance with the Condominium Documents and the laws of the State of Michigan. These Bylaws shall constitute both the Bylaws referred to in the Master Deed and required by Section 3(8) of the Act and the Bylaws provided for under the Michigan Nonprofit Corporation Act. Each Co-Owner shall be entitled to membership and no other person or entity shall be entitled to membership. The share of a Co-Owner in the funds and assets of the Association cannot be assigned, pledged or transferred in any manner except as an appurtenance to his or her Unit. The Association shall keep current copies of the Master Deed, all amendments to the Master Deed, and other Condominium Documents for the Condominium Project available at reasonable hours to Co-Owners, prospective purchasers, mortgagees and prospective mortgagees of Units in the Condominium Project. All Co-Owners in the Condominium Project and all persons using or entering upon or acquiring any interest in any Unit therein or the Common Elements thereof shall be subject to the provisions and terms set forth in the Condominium Documents.

**ARTICLE II
ASSESSMENTS**

All expenses arising from the management, administration and operation of the Association in pursuance of its authorizations and responsibilities as set forth in the Condominium Documents and the Act shall be levied by the Association against the Units and the Co-Owners thereof in accordance with the following provisions:

Section 1. Assessments for Common Elements. All costs incurred by the Association in satisfaction of any liability arising within, caused by, or connected with the Common Elements or the administration of the Condominium Project shall constitute expenditures affecting the administration of the Project, and all sums received as the proceeds of, or pursuant to, any policy of insurance securing the interest of the Co-Owners against liabilities or losses arising within, caused by, or connected with the Common Elements or the administration of the Condominium Project shall constitute receipts affecting the administration of the Condominium Project within the meaning of Section 54(4) of the Act. All Co-Owners acknowledge and agree that assessment shall include any charges related to the cost-sharing with the neighboring communities as further described in Article XIII of the Master Deed.

Section 2. Determination of Assessments. Assessments shall be determined in accordance with the following provisions:

(a) Budget; Regular Assessments. The Board of Directors of the Association shall establish an annual budget in advance for each fiscal year and such budget shall project all expenses for the forthcoming year which may be required for the proper operation, management and maintenance of the Condominium Project, including a reasonable allowance for contingencies and reserves. An adequate reserve fund for maintenance, repairs and replacement of those Common Elements that must be replaced on a periodic basis shall be established in the budget and must be funded by regular payments as set forth in Section 2(c) below rather than by special assessments. At a minimum, the reserve fund shall be equal to ten (10%) percent of the Association's current annual budget on a noncumulative basis. Since the minimum standard required by this subparagraph may prove to be inadequate for this particular Project, the Association of Co-Owners should carefully analyze the Condominium Project to determine if a greater

amount should be set aside or if additional reserve funds should be established for other purposes from time to time. Upon adoption of an annual budget by the Board of Directors, copies of the budget shall be delivered to each Co-Owner and the assessment for said year shall be established based upon said budget. The annual assessments as so determined and levied shall constitute a lien against all Units as of the first day of the fiscal year to which the assessments relate. Failure to deliver a copy of the budget to each Co-Owner shall not affect or in any way diminish such lien or the liability of any Co-Owner for any existing or future assessments. Should the Board of Directors at any time decide, in the sole discretion of the Board of Directors: (1) that the assessments levied are or may prove to be insufficient (a) to pay the costs of operation and management of the Condominium, (b) to provide replacements of existing Common Elements, (c) to provide additions to the Common Elements not exceeding three thousand (\$3000.00) dollars annually for the entire Condominium Project, or (2) that an emergency exists, the Board of Directors shall have the authority to increase the general assessment or to levy such additional assessment or assessments as it shall deem to be necessary. The Board of Directors also shall have the authority, without Co-Owner consent, to levy assessments pursuant to the provisions of Article V, Section 3 hereof. The discretionary authority of the Board of Directors to levy assessments pursuant to this subparagraph shall rest solely with the Board of Directors for the benefit of the Association and the members thereof, and shall not be enforceable by any creditors of the Association or of the members thereof.

(b) Special Assessments. Special assessments, in addition to those required in subsection (a) above, may be made by the Board of Directors from time to time and approved by the Co-Owners as hereinafter provided to meet other requirements of the Association, including, but not limited to: (1) assessments for additions to the Common Elements of a cost exceeding three thousand (\$3000.00) dollars for the entire Condominium Project per year, (2) assessments to purchase a Unit upon foreclosure of the lien for assessments described in Section 5 hereof, (3) assessments for any other appropriate purpose not elsewhere herein described. Special assessments referred to in this subsection (b) (but not including those assessments referred to in subsection 2(a) above, that shall be levied in the sole discretion of the Board of Directors) shall not be levied without the prior approval of more than sixty (60%) percent of all Co-Owners. The authority to levy assessments pursuant to this subsection is solely for the benefit of the Association and the members thereof and shall not be enforceable by any creditors of the Association or of the members thereof.

(c) Assessment as Security for Association Indebtedness. A special assessment approved above may be used by the Association as security for loan approved by the Board of Directors and 60% of all of the Co-Owners in number and in value and may be pledged to creditor for the purposes of securing such a loan. The creditor in that instance may enforce that assessment by collecting individually (not jointly and may exercise such rights as the Association may have to collect the assessment under this Section 2(c).

(d) Apportionment of Assessments. All assessments levied against the Co-Owners to cover expenses of administration shall be apportioned among and paid by the Co-Owners in accordance with each Co-Owner's proportionate share of the expenses of administration as provided in Article V, Section 2 of the Master Deed and without increase or decrease for the existence of any rights to the use of Limited Common Elements appurtenant to a Unit except as otherwise specifically provided in the Master Deed. Annual assessments as determined in accordance with Article II, Section 2(a) above shall be payable by Co-Owners in periodic installments, commencing with acceptance of a deed to or a land contract vendee's interest in a Unit, or with the acquisition of fee simple title to a Unit by any other means.

Section 3. Developer's Responsibility for Assessments. During the Development and Sales Period as defined in the Master Deed, the Developer of the Condominium, even though a member of the Association, shall not be responsible for payment of the monthly Association assessment. The Developer, however, shall, during the Development and Sales Period, pay a proportionate share of the Association's

current maintenance expenses, (limited to grass cutting and snow plowing only), including administration costs actually incurred from time to time based upon the ratio of Units owned by Developer at the time the expense is incurred to the total number of Units in the Condominium. In no event shall Developer be responsible for payment, during the Development and Sales Period, of any assessments for deferred maintenance, reserves for replacement, for capital improvements or other special assessments, except with respect to Occupied Units owned by it. Developer shall not be responsible at any time for payment of said monthly assessments or payment of any expenses whatsoever with respect to Units not completed, notwithstanding the fact that such Units not completed may have been included in the Master Deed. Further, the Developer shall in no event be liable for any assessment levied in whole or in part to purchase any Unit from the Developer, to finance any litigation or other claims against the Developer, any cost of investigating and preparing such litigation or claim, or any similar or related costs, or other claims against the Developer, its directors, officers, agents, principals, assigns, affiliates and/or the first Board of Directors of the Association or any directors of the Association appointed by the Developer, or any cost of investigating and preparing such litigation or claim, or any similar or related costs. "Occupied Unit" shall mean a Unit with a structure used as a residence on it. A model home is not to be considered as an "Occupied Unit." "Completed Unit" shall mean a Unit with a dwelling constructed upon it that has been issued a final certificate of occupancy by the Livingston County Building Department.

Section 4. Penalties for Default. The payment of an assessment shall be in default if any installment thereof is not paid to the Association in full on or before the due date for such installment. A late charge not to exceed fifty (\$50.00) dollars per installment may be assessed automatically by the Association upon each installment in default for ten (10) or more days until paid in full. The Association may, pursuant to Article XIX, Section 4 and Article XX of these Bylaws, levy fines for late payment of assessments in addition to such late charge. Each Co-Owner (whether one (1) or more persons) shall be and remain personally liable for the payment of all assessments (including interest, late charges and fines for late payment and costs of collection and enforcement of payment) pertinent to his or her Unit that may be levied while such Co-Owner is the owner thereof, except a land contract purchaser from any Co-Owner, including Developer, shall be so personally liable and such land contract seller shall not be personally liable for all such assessments levied up to, and including, the date upon which such land contract seller actually takes possession of the Unit following extinguishment of all rights of the land contract purchaser in the Unit. Each installment in default for ten (10) or more days may bear interest from the initial due date thereof at the rate of seven (7%) percent per annum until each installment is paid in full. Payments on account of installments of assessments in default shall be applied as follows: first, to costs of collection and enforcement of payment, including reasonable attorney fees; second, to any interest, late charges and fines for late payment on such installments; and third, to installments in default in order of their due dates. A Co-Owner in default of his or her monetary obligations to the Association shall not be eligible to run for the Board of Directors or to be appointed as an officer. Any officers or Directors in default of a payment obligation to the Association may be removed from their office, failure to pay dues being deemed just cause for removal.

Section 5. Liens for Unpaid Assessments. Sums assessed to the Association that remain unpaid, including, but not limited to, regular assessments, special assessments, interest, fines and late charges, shall constitute a lien upon the Unit or Units in the Project owned by the Co-Owner at the time of the assessment(s) and upon the proceeds of sale thereof. Any such unpaid sum(s) shall constitute a lien against the Unit as of the first day of the fiscal year to which the assessment, interest, fine or late charge relates and shall be a lien prior to all claims except real property taxes and first mortgages of record. All charges that the Association may levy against any Co-Owner shall be deemed to be assessments for purposes of this Section and Section 108 of the Act.

Section 6. Waiver of Use or Abandonment of Unit. No Co-Owner may exempt himself or herself from liability for his or her contribution toward the expenses of administration by waiver of the use or enjoyment of any of the Common Elements or by the abandonment of his or her Unit.

Section 7. Enforcement.

(a) Remedies. In addition to any other remedies available to the Association, the Association may enforce collection of delinquent assessments by a suit at law for a money judgment or by foreclosure of the statutory lien that secures payment of assessments. In the event of default by any Co-Owner in the payment of any installment of the annual assessment levied against his or her Unit, the Association shall have the right to declare all unpaid installments of the annual assessment for the pertinent fiscal year immediately due and payable. The Association may also discontinue the furnishing of any utilities or other services to a Co-Owner in default upon seven (7) days' written notice to such Co-Owner of its intention to do so. A Co-Owner in default shall not be entitled to utilize any of the General Common Elements of the Project and shall not be entitled to vote at any meeting of the Association so long as such default continues; provided, however, this provision shall not operate to deprive any Co-Owner of ingress or egress to and from his or her Unit. In a judicial foreclosure action, a receiver may be appointed to collect a reasonable rental for the Unit from the Co-Owner or any persons claiming under the Co-Owner. The Association may also assess fines for late payment or non-payment of assessments in accordance with the provisions of Article XIX, Section 4 and Article XX of these Bylaws. All of these remedies shall be cumulative and not alternative.

(b) Foreclosure Proceedings. Each Co-Owner, and every other person who from time to time has any interest in the Project, shall be deemed to have granted to the Association the unqualified right to elect to foreclose the lien securing payment of assessments either by judicial action or by advertisement. The provisions of Michigan law pertaining to foreclosure of mortgages by judicial action and by advertisement, as the same may be amended from time to time, are incorporated in these Bylaws by reference for the purposes of establishing the alternative procedures to be followed in lien foreclosure actions and the rights and obligations of the parties to such actions. Further, each Co-Owner and every other person who from time to time has any interest in the Project, shall be deemed to have authorized and empowered the Association to sell or to cause to be sold the Unit with respect to which the assessment(s) is or are delinquent and to receive, hold and distribute the proceeds of such sale in accordance with the priorities established by applicable law. Each Co-Owner of a Unit in the Project acknowledges that at the time of acquiring title to such Unit, he or she was notified of the provisions of this subsection and that he or she voluntarily, intelligently and knowingly waived notice of any proceedings brought by the Association to foreclose by advertisement the lien for non-payment of assessments and a hearing on the same prior to the sale of the subject Unit.

(c) Notice of Action. Notwithstanding the foregoing, neither a judicial foreclosure action nor a suit at law for a money judgment shall be commenced, nor shall any notice of foreclosure by advertisement be published, until the expiration of ten (10) days after mailing, by first class mail, postage prepaid, addressed to the delinquent Co-Owner(s) at the last known address of Co-Owner(s), a written notice that one (1) or more installments of the annual assessment levied against the pertinent Unit is or are delinquent and that the Association may invoke any of its remedies hereunder if the default is not cured within ten (10) days after the date of mailing. Such written notice shall be accompanied by a written affidavit of an authorized representative of the Association that sets forth (i) the affiant's capacity to make the affidavit, (ii) the statutory and other authority for the lien, (iii) the amount outstanding (exclusive of interest, late charges, fines, costs, attorney's fees and future assessments), (iv) the legal description of the subject Unit(s), and (v) the name(s) of the Co-Owner(s) of record. Such affidavit shall be recorded in the office of the Livingston County Register of Deeds prior to commencement of any foreclosure proceeding, but it need not have been recorded as of the date of mailing. If the delinquency is not cured within the ten-

day period, the Association may take such remedial action as may be available to it hereunder or under Michigan law. In the event the Association elects to foreclose the lien by advertisement, the Association shall so notify the delinquent Co-Owner and shall inform him or her that he or she may request a judicial hearing by bringing suit against the Association.

(d) Expenses of Collection. The expenses incurred in collecting unpaid assessments, including interest, late charges, fines, costs, actual attorney's fees (not limited to statutory fees) and advances for taxes or other liens paid by the Association to protect its lien, shall be chargeable to the Co-Owner in default and shall be secured by the lien on his or her Unit.

Section 8. Statement as to Unpaid Assessments. The purchaser of any Unit may request a statement of the Association as to the amount of any unpaid Association assessments thereon, whether regular or special. Upon written request to the Association, accompanied by a copy of the executed purchase agreement pursuant to which the purchaser holds the right to acquire a Unit, the Association shall provide a written statement of such unpaid assessments as may exist or a statement that none exist, which statement shall be binding upon the Association for the period stated therein. Upon the payment of that sum within the period stated, the Association's lien for assessments as to such Unit shall be deemed satisfied; provided, however, that the failure of a purchaser to request such statement at least five (5) days prior to the closing of the purchase of such Unit shall render any unpaid assessments and the lien securing the same fully enforceable against such purchaser and the Unit itself to the extent provided by the Act. The Association may charge a reasonable fee for providing the statement, not to exceed \$100.00, plus any fee charged by the management agent.

Section 9. Liability of Mortgagee. Notwithstanding any other provisions of the Condominium Documents, the holder of any first mortgage covering any Unit in the Project that comes into possession of the Unit pursuant to the remedies provided in the mortgage or by deed (or assignment) in lieu of foreclosure, or any purchaser at a foreclosure sale, shall take the property free of any claims for unpaid assessments or charges against the mortgaged Unit that accrue prior to the time such holder receives a Sheriff's Deed. Such mortgagee or the purchaser of the Unit at the foreclosure sale shall be obligated for assessments as of the date of the Sheriff's Deed or deed in lieu of foreclosure. However parties foreclosing, (or taking deeds in lieu of foreclosure) of second or other junior mortgages DO NOT take title or possession free of any unpaid assessments or charges and the holder of second and other junior mortgages are responsible for all Associations assessments if they foreclose or take deed in lieu of foreclosure. The Association may, in its discretion, notify any mortgagee of a Co-Owner's default under the Condominium Documents.

Section 10. Property Taxes and Special Assessments. All property taxes and special assessments levied by any public taxing authority shall be assessed in accordance with Section 131 of the Act.

Section 11. Personal Property Tax Assessment of Association Property. The Association shall be assessed as the person or entity in possession of any tangible personal property of the Condominium owned or possessed in common by the Co-Owners, and personal property taxes based thereon shall be treated as expenses of administration.

Section 12. Construction Lien. A construction lien otherwise arising under Act No. 497 of the Michigan Public Acts of 1980, as amended, shall be subject to Section 132 of the Act.

**ARTICLE III
ALTERNATIVE DISPUTE RESOLUTION; CIVIL ACTIONS**

In the event of a dispute between the Association and a Co-Owner other than the Developer, or a dispute or any claims or grievance between the Co-Owners related to the application or enforcement of any Condominium Documents, any party to the dispute may demand the dispute be resolved arbitration as provided under Section 54(8) of the Act (“Alternative Dispute Resolution” or “ADR”).

Section 1. Demand and Election.

(a) Section 54(8) of the Act provides in part:

“The Bylaws shall contain a provision providing that arbitration of disputes, claims and grievances arising out of or relating to the interpretation of the application of the condominium document or arising out of disputes among or between Co-Owners shall be submitted to arbitration and that parties to the dispute claim or grievance shall accept the arbitrator decision as final and binding...”

(b) If the demand for Alternative Dispute Resolution is made, no lawsuit may be commenced in any court.

Section 2. Rules. The commercial arbitration rules of the American Arbitration Association (or any recognized successor or equivalent of the American Arbitration Association should it no longer exist) shall govern arbitration proceedings if arbitration is elected. The rules of a qualified mediation service shall govern mediation proceedings, including mediation conducted by a mediator not affiliated with such a service.

Section 3. Attorney Fees and Costs. Unless the mediation or arbitration rules specifically provide to the contrary, the prevailing party, as determined by the mediator or arbitrator, shall be reimbursed for its actual costs and attorney fees as part of any award.

Section 4. Enforcement. The decision made in any Alternative Dispute Resolution forum shall be enforceable in circuit court (or district court if a monetary award is below the circuit court jurisdictional amount).

Section 5. Lien Claims Not Subject to ADR Election; Not Applicable to Developer. Disputes related to assessments and liens for assessments may not be subjected to the provisions of this Article, including contests of the lien or any subsequent foreclosure proceedings, except with the consent of the Association, which may be withheld in the Association’s absolute and sole discretion. The consent of the Association in that circumstance must be in writing. The provisions of Sections 1 through 4 above shall not apply to disputes between the Association and the Developer or between a Co-Owner and the Developer unless the Developer has consented to be subject to these provisions in writing.

Section 6. Co-Owner Approval for Civil Actions Against Developer; Election of Remedies.

(a) Any civil action proposed by the Board of Directors on behalf of the Association to be initiated against the Developer, its agents or assigns, and/or the First Board of Directors of the Association or other Developer-appointed directors, for any reason, shall be subject to approval by a vote of sixty-six and two-thirds (66 2/3%) percent of all Co-Owners and notice of such proposed action must be given in writing to all Co-Owners in accordance with Section 8 through 19 below. Such vote may only be

taken at a meeting of the Co-Owners and no proxies or absentee ballots shall be permitted to be used, notwithstanding the provisions of Article VIII, Section 5.

(b) Election by the parties to any such disputes, claims or grievances to submit such disputes, claims or grievances to arbitration shall preclude such parties from litigating such disputes, claims or grievances in the Court.

Section 7. Not Applicable to Title Claims. Questions involving or affecting the claim of title of any person to any fee or life estate in real estate are not subject to this Article.

Section 8. Actions on Behalf of or Against Co-Owners. Actions on behalf of and against Co-Owners shall be brought in the name of the Association. Subject to the express limitations on actions in these Bylaws and in the Association's Articles of Incorporation, the Association may assert, defend or settle claims on behalf of all Co-Owners in connection with the Common Elements of the Condominium.

Section 9. Commencement of Civil Actions. Other than lawsuits against the Developer covered by Article II, Section 6 above requiring consent of 66 2/3% of the Co-Owners, as provided in the Articles of Incorporation of the Association, the commencement of any civil action (other than one to enforce these Bylaws or collect delinquent assessments) shall require the approval of a 60% in number and in value of the Co-Owners, and shall be governed by the requirements of this Article. The requirements of this Article are intended to ensure that the Co-Owners are fully informed regarding the prospects and likely costs of any civil action the Association proposes to engage in, as well as the ongoing status of any civil actions the Association proposes to engage in, as well as the ongoing status of any civil actions actually filed by the Association. These requirements are imposed in order to reduce both the cost of litigation and the risk of improvident litigation, and in order to avoid the waste of the Association's assets in litigation where reasonable and prudent alternatives to the litigation exist. Each Co-Owner shall have standing to sue to enforce the requirements of this Article. The following procedures and requirements apply to the Association's commencement of any civil action other than an action to enforce these Bylaws or to collect delinquent assessments.

Section 10. Board of Directors' Recommendation to Co-Owners. The Association's Board of Directors shall be responsible in the first instance for recommending to the Co-Owners that a civil action be filed and supervising and directing any civil actions that are filed.

Section 11. Litigation Evaluation Meeting. Before an attorney is engaged for purposes of filing a civil action on behalf of the Association, the Board of Directors shall call a special meeting of the Co-Owners ("litigation evaluation meeting") for the express purpose of evaluating the merits of the proposed civil action. The written notice to the Co-Owners of the date, time and place of the litigation evaluation meeting shall be sent to all Co-Owners not less than twenty (20) days before the date of the meeting and shall include the following information copied onto 8 1/2" x 11" paper:

(a) A certified resolution of the Board setting forth in detail the concerns of the Board giving rise to the need to file a civil action and further certifying that:

- (1) it is in the best interest of the corporation to file a lawsuit;
- (2) that at least one (1) Board member has personally made a good faith effort to negotiate a settlement with the putative defendant(s) on behalf of the corporation, without success;
- (3) litigation is the only prudent, feasible and reasonable alternative; and

(4) the Board's proposed attorney for the civil action is of the written opinion that litigation is the corporation's most reasonable and prudent alternative.

(b) A written summary of the relevant experience of the attorney ("litigation attorney") the Board recommends be retained to represent the corporation in the proposed civil action, including the following information:

(1) the number of years the litigation attorney has practiced law; and

(2) the name and address of every condominium and homeowner association for which the attorney has filed a civil action in any court, together with the case number, county and court in which each civil action was filed.

(c) The litigation attorney's written estimate of the amount of the corporation's likely recovery in the proposed lawsuit, net of legal fees, court costs, expert witness fees and all other expenses expected to be incurred in the civil action.

(d) The litigation attorney's written estimate of the cost of the civil action through a trial on the merits of the case ("total estimated cost"). The total estimated cost of the civil action shall include the litigation attorney's expected fees, court costs, expert witness fees and all other expenses expected to be incurred in the action.

(e) The litigation attorney's proposed written fee agreement.

(f) The amount to be specifically assessed against each Unit in the Condominium to fund the estimated cost of the civil action in both total and on a monthly per Unit basis, as required by this subsection.

Section 12. Independent Expert Opinion. If the lawsuit relates to the condition of any of the Common Elements of the Condominium, the Board of Directors shall obtain a written independent expert opinion as to reasonable and practical alternative approaches to repairing the problems with the Common Elements which shall set forth the estimated costs and expected viability of each alternative. In obtaining the independent expert opinion required by the preceding sentence, the Board shall conduct its own investigation as to the qualifications of any expert and shall not retain any expert recommended by the litigation attorney or any other attorney with whom the Board consults. The purpose of the independent expert opinion is to avoid any potential confusion regarding the condition of the Common Elements that might be created by a report prepared as an instrument of advocacy for use in a civil action. The independent expert opinion will ensure that the Co-Owners have a realistic appraisal of the condition of the Common Elements, the likely cost of repairs to or replacement of the same, and the reasonable and prudent repair and replacement alternatives. The independent expert opinion shall be sent to the Co-Owners with the written notice of the litigation evaluation meeting.

Section 13. Fee Agreement with Litigation Attorney. The corporation shall have a written fee agreement with the litigation attorney and any other attorney retained to handle the proposed civil action. The corporation shall not enter into any fee agreement that is a combination of the retained attorney's hourly rate and a contingent fee arrangement unless the existence of the agreement is disclosed to the Co-Owners in the text of the corporation's written notice to the members of the litigation evaluation meeting.

Section 14. Co-Owner Vote Required. At the litigation evaluation meeting, the Co-Owners shall vote on whether to authorize the Board of Directors to proceed with the proposed civil action and whether the matter should be handled by the proposed litigation attorney. Furthermore, the commencement

of any civil action by the corporation (other than a suit to enforce the Condominium Bylaws or collect delinquent assessments) shall require the approval of 66 2/3% in value of members of the corporation. Any proxies to be voted at the litigation evaluation meeting must be signed at least seven (7) days prior to the litigation evaluation meeting.

Section 15. Litigation Special Assessment. All legal fees incurred in pursuit of any civil action that is subject to Section 8 through 18 of this Article shall be paid by special assessment of the Co-Owners ("litigation special assessment"). The litigation special assessment shall be approved at the litigation evaluation meeting (or at any subsequent duly called and noticed meeting) by a majority in number and in value of all Co-Owners in the amount of the estimated total cost of the civil action. If the litigation attorney proposed by the Board of Directors is not retained, the litigation special assessment shall be in an amount equal to the retained attorney's estimated total cost of the civil action. The litigation special assessment shall be apportioned to the Co-Owners in accordance with their respective percentage of value interests in the Condominium and shall be collected from the Co-Owners on a monthly basis. The total amount of the litigation special assessment shall be collected monthly over a period not to exceed twenty-four (24) months.

Section 16. Attorney's Written Report. During the course of any civil action authorized by the Co-Owners pursuant to this Article, the retained attorney shall submit a written report ("attorney's written report") to the Board of Directors every thirty (30) days setting forth:

(a) The attorney's fees, the fees of any experts retained by the attorney, and all other costs of litigation during the 30-day period immediately preceding the date of the attorney's written report ("reporting period");

(b) All actions taken in the civil action during the reporting period, together with copies of all pleadings, court papers and correspondence filed with the court or sent to opposing counsel during the reporting period;

(c) A detailed description of all discussions with opposing counsel during the reporting period, written and oral, including, but not limited to, settlement discussions;

(d) The costs incurred in the civil action through the date of the written report, as compared to the attorney's estimated total cost of the civil action;

(e) Whether the originally estimated total cost of the civil action remains accurate.

Section 17. Board Meetings. The Board shall meet monthly during the course of any civil action to discuss and review:

(a) the status of the litigation;

(b) the status of settlement efforts, if any; and

(c) the attorney's written report.

Section 18. Changes in the Litigation Special Assessment. If at any time during the course of a civil action the Board of Directors determines that the originally estimated total cost of the civil action or any revision thereof is inaccurate, the Board of Directors shall immediately prepare a revised estimate of the total cost of the civil action. If the revised estimate exceeds the litigation special assessment previously approved by the Co-Owners, the Board shall call a special meeting of the Co-Owners to review the status

of the litigation and to allow the Co-Owners to vote on whether or not to continue the civil action and increase the litigation special assessment. The meeting shall have the same quorum and voting requirements as a litigation evaluation meeting.

Section 19. Disclosure of Litigation Expenses. The attorneys' fees, court costs, expert witness fees and all other expenses of any civil action filed by the Association ("litigation expenses") shall be fully disclosed to the Co-Owners in the Association's annual budget. The litigation expenses for each civil action filed by the Association shall be listed as a separate line item captioned "litigation expenses" in the Association's annual budget.

ARTICLE IV INSURANCE

Section 1. Extent of Coverage. The Association shall, to the extent appropriate in light of the nature of the General Common Elements of the Project, carry fire insurance, extended coverage, vandalism and malicious mischief endorsements, liability insurance (in a minimum amount to be determined by the Developer or the Association in its discretion, but in no event less than \$1,000,000 per occurrence) and including the Charter Township of Genoa endorsed as an additional named insured, officers' and directors' liability insurance, and workers' compensation insurance, if applicable, and any other insurance the Association may deem applicable, desirable or necessary pertinent to the ownership, use and maintenance of the Common Elements of the Condominium, Fidelity Bond coverage for the members of the Board and any management agent who has access to and authority over any monies received by or payable to the Association, Directors and Officers Liability coverage, and such other insurance as the Board of Directors deems advisable, and all General Common Elements, and such insurance shall be carried and administered in accordance with the following provisions:

(a) Responsibilities of Association. All such insurance shall be purchased by the Association for the benefit of the Association, the Developer and the Co-Owners and their mortgagees as their interests may appear, and provision shall be made for the issuance of certificates of mortgagee endorsements to the mortgagees of Co-Owners.

(b) Insurance of Common Elements. All General Common Elements of the Condominium Project shall be insured against fire (if appropriate) and other perils covered by a standard extended coverage endorsement, if applicable and appropriate, in an amount equal to the current insurable replacement value, excluding foundation and excavation costs, as determined annually by the Board of Directors of the Association. The Association shall not be responsible, in any way, for maintaining insurance with respect to Limited Common Elements.

(c) Premium Expenses. All premiums on insurance purchased by the Association pursuant to these Bylaws shall be expenses of administration.

(d) Proceeds of Insurance Policies. Proceeds of all insurance policies owned by the Association shall be received by the Association, held in a separate account and distributed to the Association and the Co-Owners and their mortgagees as their interests may appear; provided, however, whenever repair or reconstruction of the Condominium shall be required as provided in Article V of these Bylaws, the proceeds of any insurance received by the Association as a result of any loss requiring repair or reconstruction shall be applied to such repair or reconstruction, and in no event shall hazard insurance proceeds be used for any purpose other than for repair, replacement or reconstruction of the Project unless all of the institutional holders of first mortgages on Units in the Project have given their prior written approval.

Section 2. Authority of Association to Settle Insurance Claims. Each Co-Owner, by ownership of a Unit in the Condominium Project, shall be deemed to appoint the Association as his or her true and lawful attorney-in-fact to act in connection with all matters concerning the maintenance of fire insurance, extended coverage, vandalism and malicious mischief endorsements, liability insurance and workers' compensation insurance, if applicable, pertinent to the Condominium Project and the General Common Elements appurtenant thereto, with such insurer as may, from time to time, provide such insurance for the Condominium Project. Without limitation on the generality of the foregoing, the Association as said attorney shall have full power and authority to purchase and maintain such insurance, to collect and remit the insurance premiums, to collect proceeds and to distribute them to the Association, the Co-Owners and their respective mortgagees, as their interests may appear (subject always to the Condominium Documents), to execute releases of liability and to execute all documents and to do all things on behalf of the Co-Owners and the Condominium as shall be necessary or convenient to the accomplishment of the foregoing.

Section 3. Responsibilities of Co-Owners. Each Co-Owner shall be obligated and responsible for obtaining fire insurance, extended coverage, and vandalism and malicious mischief endorsements with respect to the building and all other improvements constructed or to be constructed within the perimeter of his or her Condominium Unit and its appurtenant Limited Common Elements and for his or her personal property located therein or thereon or elsewhere in the Condominium Project. There is no responsibility on the part of the Association to insure any of such improvements whatsoever. All such insurance shall be carried by each Co-Owner in an amount equal to the maximum insurable replacement value, excluding foundation and excavation costs. Each Co-Owner shall deliver certificates of insurance to the Association not less than annually to evidence the continued existence of all insurance required to be maintained by the Co-Owner hereunder. In the event of the failure of a Co-Owner to obtain such insurance or to provide evidence thereof to the Association, the Association may obtain such insurance (but is under no obligation whatsoever to do so) on behalf of such Co-Owner and the premiums therefor shall constitute a lien against the Co-Owner's Unit which may be collected from the Co-Owner in the same manner that Association assessments may be collected in accordance with Article II hereof. Each Co-Owner also shall be obligated to obtain insurance coverage for his or her personal liability for occurrences within the perimeter of his or her Unit and affecting appurtenant Limited Common Elements or the improvements located thereon (naming the Association and the Developer as insureds), and also for any other personal insurance coverage that the Co-Owner wishes to carry. Such insurance shall be carried in such minimum amounts as may be specified by the Association (and as specified by the Developer during the Development and Sales Period) and each Co-Owner shall furnish evidence of such coverage to the Association or the Developer annually.

The Association shall, under no circumstances, have any obligation to obtain any of the insurance coverage described in this Section 3 or any liability to any person for failure to do so. The Association may elect, however, through its Board of Directors, to undertake the responsibility for obtaining the insurance described in this Section 3, or any portion thereof, exclusive of insurance covering the contents located within a Co-Owner's residence, and the cost of the insurance shall be included as an expense item in the Association budget. All Co-Owners shall be notified of the Board's election to obtain the insurance at least sixty (60) days prior to its effective date, which notification shall include a description of the coverage and the name and address of the insurer. Each Co-Owner shall also be provided a certificate of insurance as soon as it is available from the insurer. Co-Owners may obtain supplementary insurance, but in no event shall any such insurance coverage undertaken by a Co-Owner permit a Co-Owner to withhold payment of the share of the Association assessment that relates to the equivalent insurance carried by the Association. The Association also shall not reimburse Co-Owners for the cost of premiums resulting from the early cancellation of an insurance policy. To the extent a Co-Owner does or permits anything to be done or kept on his or her Unit that will increase the rate of insurance each Co-Owner shall pay to the

Association, the increased cost of insurance premiums resulting from any such activity or the maintenance of any such condition shall be charged to the Co-Owner responsible for such activity or condition.

Section 4. Waiver of Right of Subrogation. The Association and all Co-Owners shall use their best efforts to cause all property and liability insurance carried by the Association or any Co-Owner to contain appropriate provisions whereby the insurer waives its right of subrogation as to any claims against any Co-Owner or the Association.

Section 5. Indemnification. Each individual Co-Owner shall indemnify and hold harmless every other Co-Owner, the Developer and the Association for all damages and costs, including attorneys' fees, which such other Co-Owners, the Developer or the Association may suffer as a result of defending any claim arising out of an occurrence on or within such individual Co-Owner's Unit and shall carry insurance to secure this indemnity if so required by the Association (or the Developer during the Development and Sales Period). This Section 5 shall not be construed to give any insurer any subrogation right or other right or claim against any individual Co-Owner, however.

ARTICLE V RECONSTRUCTION OR REPAIR

Section 1. Responsibility for Reconstruction or Repair. If any part of the Condominium Premises shall be damaged, the determination of whether or not it shall be reconstructed or repaired, and the responsibility therefor, shall be as follows:

(a) General Common Elements. If the damaged property is a General Common Element the damaged property shall be rebuilt or repaired subject to the requirements of all applicable zoning, building and regulatory requirements.

(b) Unit or Improvements on the Unit. If the damaged property is within a Unit, is a Limited Common Element or any improvements thereon, the Co-Owner of such Unit alone shall determine whether to rebuild or repair the damaged property, subject to the rights of any mortgagee or other person or entity having an interest in such property, and such Co-Owner shall be responsible for any reconstruction or repair that he or she elects to make. The Co-Owner shall in any event remove all debris and restore his or her Unit and the improvements thereon to a clean and slightly condition satisfactory to the Association and in accordance with the provisions of Article VI hereof as soon as reasonably possible following the occurrence of the damage. In the event that a Co-Owner has failed to repair, restore, demolish or remove the improvements on the Co-Owner's Unit under this Section, the Association shall have the right (but not the obligation) to undertake reasonable repair, restoration, demolition or removal and shall have the right to place a lien on the Unit for the amounts expended by the Association for that purpose which may be foreclosed as provided for in these Bylaws.

Section 2. Repair in Accordance with Master Deed, Etc. Any such reconstruction or repair shall be substantially in accordance with the Master Deed and the original plans and specifications for any damaged improvements located within the Unit unless the Co-Owners shall unanimously decide otherwise.

Section 3. Association Responsibility for Repair. Immediately after the occurrence of a casualty causing damage to property for which the Association has the responsibility of maintenance, repair and reconstruction, the Association shall obtain reliable and detailed estimates of the cost to place the damaged property in a condition as good as that existing before the damage. If the proceeds of insurance are not sufficient to defray the estimated cost of reconstruction or repair required to be performed by the Association, or if at any time during such reconstruction or repair, or upon completion of such

reconstruction or repair, the funds for the payment of the cost thereof are insufficient, assessment shall be made against all Co-Owners for the cost of reconstruction or repair of the damaged property in sufficient amounts to provide funds to pay the estimated or actual cost of repair. This provision shall not be construed to require replacement of mature trees and vegetation with equivalent trees or vegetation.

Section 4. Timely Reconstruction and Repair. If damage to the General Common Elements adversely affects the appearance of the Project, the Association shall proceed with replacement of the damaged property without delay.

Section 5. Eminent Domain. The following provisions shall control upon any taking by eminent domain:

(a) Taking of Unit or Improvements Thereon. In the event of any taking of all or any portion of a Unit or any improvements thereon by eminent domain, the award for such taking shall be paid to the Co-Owner of such Unit and the mortgagee thereof as their interests may appear, notwithstanding any provision of the Act to the contrary. If a Co-Owner's entire Unit is taken by eminent domain, such Co-Owner and his or her mortgagee shall, after acceptance of the condemnation award therefore, be divested of all interest in the Condominium Project.

(b) Taking of General Common Elements. If there is any taking of any portion of the General Common Elements, the condemnation proceeds relative to such taking shall be paid to the Co-Owners and their mortgagees in proportion to their respective interests in the Common Elements and the affirmative vote of more than fifty (50%) percent of the Co-Owners shall determine whether to rebuild, repair or replace the portion so taken or to take such other action as they deem appropriate.

(c) Continuation of Condominium After Taking. In the event the Condominium Project continues after taking by eminent domain, then the remaining portion of the Condominium Project shall be resurveyed and the Master Deed amended accordingly, and, if any Unit shall have been taken, then Article V of the Master Deed shall also be amended to reflect such taking and to proportionately readjust the percentages of value of the remaining Co-Owners based upon the continuing value of the Condominium of one hundred (100%) percent. Such amendment may be effected by an officer of the Association duly authorized by the Board of Directors without the necessity of execution or specific approval thereof by any Co-Owner.

(d) Notification of Mortgagees. In the event any Unit in the Condominium, or any portion thereof, or the Common Elements or any portion thereof, is made the subject matter of any condemnation or eminent domain proceeding or is otherwise sought to be acquired by a condemning authority, the Association promptly shall so notify each institutional holder of a first mortgage lien on any of the Units in the Condominium.

(e) Applicability of the Act. To the extent not inconsistent with the foregoing provisions, Section 133 of the Act shall control upon any taking by eminent domain.

Section 6. Priority of Mortgagee Interests. Nothing contained in the Condominium Documents shall be construed to give a Co-Owner or any other party priority over any rights of first mortgagees of Condominium Units pursuant to their mortgages in the case of a distribution to Co-Owners of insurance proceeds or condemnation awards for losses to or a taking of Condominium Units and/or Common Elements.

Section 7. Notification of FHLMC, FNMA, Etc. In the event any mortgage in the Condominium is held by the Federal Home Loan Mortgage Corporation ("FHLMC"), Federal National

Mortgage Association ("FNMA"), Government National Mortgage Association ("GNMA"), the Michigan State Housing Development Authority ("MSHDA"), or insured by the Veterans Administration ("VA"), Department of Housing and Urban Development ("HUD"), Federal Housing Association ("FHA") or any private or public mortgage insurance program, then the Association shall give the aforementioned parties written notice, at such address as they may from time to time direct, of any loss to or taking of the Common Elements of the Condominium if the loss or taking exceeds Ten Thousand (\$10,000.00) Dollars in amount or damage to a Condominium Unit or dwelling covered by a mortgage purchased, held or insured by them exceeds One Thousand (\$1,000.00) Dollars. Furthermore, the Association may, but is not obliged to, inform any such lender of such damages or condemnation actions.

Section 8. Co-Owner Maintenance of Unit and Limited Common Elements. Each Co-Owner shall maintain his Unit and any Limited Common Elements appurtenant thereto for which he has maintenance responsibility in a safe, clean and sanitary condition. Each Co-Owner shall also use due care to avoid damaging any of the Common Elements, including, but not limited to, the telephone, water, gas, plumbing, electrical, cable TV or other utility conduits and systems and any other Common Elements in any Unit which are appurtenant to or which may affect any other Unit. Each Co-Owner shall be responsible for damages or costs to the Association resulting from damage to or misuse of any of the Common Elements by him, or his family, guests, agents or invitees, or by casualties and occurrences, whether or not resulting from Co-Owner negligence, involving items or common elements which are the responsibility of the Co-Owner to maintain, repair and replace, unless such damages or costs are covered by insurance carried by the Association, in which case there shall be no such responsibility (unless reimbursement to the Association is excluded by virtue of a deductible provision, in which case the responsible Co-Owner shall bear the expense to the extent of the deductible amount.) Any costs or damages to the Association may be assessed to and collected from the responsible Co-Owner in the manner provided in Article II hereof. Each individual Co-Owner shall indemnify the Association and all other Co-Owners against such damages and costs, including attorneys' fees, and all such costs or damages to the Association may be assessed to and collected from the responsible Co-Owner in the manner provided in Article II hereof. The Co-Owners shall have the responsibility to report to the Association any Common Element which has been damaged or which is otherwise in need of maintenance, repair or replacement.

Section 10. Future Aster Boulevard Easement; Emergency Access Gate. "Future Aster Boulevard Easement" means the future easement and permission that Developer or the Association will grant to the neighboring property owner to the west of the Condominium to connect to the Roads in Summerfield Pointe via Aster Boulevard. Developer, and the Association, if after the Transitional Control Date, shall grant the Future Aster Boulevard Easement in accordance with the terms of the PUD Agreement. In the event that the road connecting Summerfield Pointe Estates and the neighboring property known as Summerfield Pointe via Aster Boulevard is installed, the co-owners of Units in in the neighboring Summerfield Pointe shall have the right to utilize the future roads to be located in Summerfield Pointe Estates. Once construction of the Future Aster Boulevard Easement is complete, the portion of Aster Boulevard located wholly within the Project will be considered part of the Roads in the Condominium and will be maintained by the Association pursuant to the Master Deed. The location of the Future Aster Boulevard Easement is shown on the Condominium Subdivision Plan attached as Exhibit B hereto. Developer shall install an emergency vehicle access gate on Aster Boulevard near the west property line to restrict vehicular traffic between Summerfield Pointe Estates and the neighboring Hampton Ridge to emergency vehicle access only. The Association shall maintain Aster Boulevard, including snow removal to ensure access by emergency vehicles. The Association for Summerfield Pointe Estates shall maintain, repair

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and upkeep, at its sole cost and expense, the emergency vehicle access gate the emergency vehicle access gate and related appurtenances.

ARTICLE VI ARCHITECTURAL, BUILDING SPECIFICATIONS AND USE RESTRICTIONS

All of the Units in the Condominium shall be held, used and enjoyed subject to the following limitations and restrictions and Charter Township of Genoa ordinances. The Condominium Project is an expandable project which may contain up to 102 Units, fully expanded.

Section 1. Residential Use. Condominium Units shall be used exclusively for residential occupancy, and no Unit or appurtenant Common Element shall be used for any purpose other than that of a single family residence or purposes incidental to residential use. Home occupations conducted entirely within the residence and participated in solely by members of the immediate family residing in the residence that do not generate unreasonable traffic by members of the general public and do not change the residential character of the Unit or neighborhood, are permitted as incidental to primary residential uses subject to complying with the ordinances of the Charter Township of Genoa. No building intended for other uses, and no apartment house, rooming house, day care facility, foster care residence, or other commercial and/or multiple-family dwelling of any kind shall be erected, placed, or permitted on or within any Unit.

Section 2. Leasing and Rental.

(a) Right to Lease. A Co-Owner may lease his or her Unit for the same purposes set forth in Section 1 of this Article VI; provided that written disclosure of such lease transaction is submitted to the Board of Directors of the Association in the manner specified in subsection (b) below. With the exception of a lender in possession of a Unit following a default of a first mortgage, foreclosure or deed or other arrangement in lieu of foreclosure, no Co-Owner shall lease less than an entire Unit in the Condominium and no tenant shall be permitted to occupy said Unit except under a lease, the initial term of which is at least one (1) year (however, this one-(1) year restriction on the length of the lease shall only apply after the Development and Sales Period has ended), unless specifically approved in writing by the Association. The terms of all leases, occupancy agreements and occupancy arrangements shall incorporate, or be deemed to incorporate, all of the provisions of the Condominium Documents. The Developer may lease any number of Units in the Condominium in its discretion.

(b) Leasing Procedures. The leasing of Units in the Project shall conform to the following provisions:

(1) A Co-Owner desiring to rent or lease a Unit shall supply the Association with a copy of the exact lease form for its review for its compliance with the Condominium Documents. If the Developer desires to rent Units before the Transitional Control Date, it shall notify either the Advisory Committee or each Co-Owner in writing.

(2) Tenants and non-owner occupants shall comply with all of the conditions of the Condominium Documents and all leases and rental agreements shall so state.

(3) If the Association determines that the tenant or non-owner occupant has failed to comply with the conditions of the Condominium Documents, the Association shall take the following action:

- (i) The Association shall notify the Co-Owner by certified mail of the alleged violation by the tenant.
- (ii) The Co-Owner shall have fifteen (15) days after receipt of such notice to investigate and correct the alleged breach by the tenant or advise the Association that a violation has not occurred.
- (iii) If, after fifteen (15) days, the Association believes that the alleged breach is not cured or may be repeated, it may institute on its behalf, or derivatively by the Co-Owners on behalf of the Association if it is under the control of the Developer, an action for eviction against the tenant or non-owner occupant and simultaneously for money damages in the same action against the Co-Owner and tenant or non-owner occupant for breach of the conditions of the Condominium Documents. The relief provided for in this subparagraph may be by summary proceeding. The Association may hold both the tenant or non-owner occupant and the Co-Owner liable for any damages to the Common Elements caused by the Co-Owner or tenant or non-owner occupant in connection with the Unit or Condominium Project.

(4) When a Co-Owner is in arrears to the Association for assessments, the Association may give written notice of the arrearage to a tenant or non-owner occupant occupying a Co-Owner's Unit under a lease or rental agreement and the tenant or non-owner occupant, after receiving the notice, shall deduct from rental payments due the Co-Owner the arrearage and future assessments as they fall due and pay them to the Association. The deductions shall not constitute a breach of the rental agreement or lease by the tenant or non-owner occupant.

Section 3. Drainage. The grade of any Unit in the Condominium may not be changed from the Grading Plan prepared by the Developer and approved by the Livingston County Drain Commissioner. The Grading Plan may be subsequently amended from time to time as conditions require and subsequently approved by the Livingston County Drain Commissioner. It shall be the responsibility of each Co-Owner to maintain the surface drainage grades of his or her Unit as established by the Developer. Each Co-Owner covenants that he or she will not change the surface grade of his or her Unit in a manner that will materially increase or decrease the storm water flowing onto or off of his or her Unit and will not block, pond or obstruct surface water. The Board of Directors of the Association shall enforce this covenant and shall charge the costs of the correction to the Co-Owner and such costs shall be a lien upon the Unit.

Section 4. Alterations and Modifications; Exterior Colors. No Co-Owner shall make any alterations in the exterior appearance of his or her dwelling or make changes in any of the Common Elements, limited or general, without the express written approval of the Association (and the Developer during the Development and Sales Period). Exterior No Co-Owner shall in any way restrict access to or tamper with any pump, plumbing, waterline, waterline valves, water meter, sprinkler system valves or any other element that must be accessible to service other Units, the Common Elements or which affects an Association responsibility in any way. Should access to any facilities of any sort be required, the Association may remove any coverings or attachment of any nature that restricts such access and it will have no responsibility for repairing, replacing or reinstalling any materials that are damaged in the course of gaining such access.

Section 5. Activities. No immoral, improper, unlawful or offensive activity shall be carried on in any Unit or upon the Common Elements, nor shall anything be done that may be or become an annoyance or a nuisance to the Co-Owners of the Condominium. No unreasonably noisy activity shall occur in or on the Common Elements or in any Unit at any time, and disputes among Co-Owners arising as a result of this provision that cannot be amicably resolved shall be arbitrated by the Association. No Co-Owner shall do or permit anything to be done or keep or permit to be kept in his or her dwelling, on his or her Unit or on the Common Elements anything that will increase the rate of insurance on the Condominium without the written approval of the Association, and each Co-Owner shall pay to the Association the increased cost of insurance premiums resulting from any such activity or the maintenance of any such condition even if approved. Activities that are deemed offensive and are expressly prohibited include, but are not limited to, the following: any activity involving the use of firearms, air rifles, pellet guns, B-B guns, bows and arrows, or other similar dangerous weapons, projectiles or devices.

Section 6. Architectural Control. All residences in the Summerfield Pointe Estates Condominium shall conform to the Architectural and General Site Design Guidelines and no construction may take place prior to obtaining required permits and approvals from the Charter Township of Genoa and the Livingston County Building Department. Further, the Developer shall establish an Architectural Control Committee to review any plans and specifications, and to make recommendations regarding the proposed construction. Following the conclusion of the Development and Sales Period, the members of the Architectural Control Committee shall be appointed by the Board of Directors of the Association. No residence, building, structure or other improvement, including but not limited to decks and patios, shall be constructed within a Condominium Unit or elsewhere within the Condominium Project, nor shall any exterior modification be made to any existing residences, buildings, structure or improvement, unless plans and specifications therefore, containing such detail as the Developer and the Architectural Control Committee may reasonably request, have been first approved in writing by the Developer during the Development and Sales Period, and by the Architectural Control Committee thereafter. The Developer, or Association, as applicable, shall have the right to refuse to approve any such plans or specifications, color and/or material specifications, grading or landscaping plans, or building location plans which are not suitable or desirable in its opinion for aesthetic or other reasons, and in passing upon such plans and specifications it shall have the right to take into consideration the suitability of the proposed structure, improvement or modification, the site upon which it is proposed to be constructed, the proposed location within the Unit and the location of structures within adjoining Units and the degree of harmony thereof with the Condominium as a whole.

Section 2. No liability. In no event shall either the Developer or the Association have any liability whatsoever to anyone for their approval or disapproval of plans, drawings, specifications, elevations of the dwellings, fences, walls, or other structures subject thereto, whether such alleged liability is based on negligence, tort, express or implied contract, fiduciary duty or otherwise. By way of example but not limitation, there shall be no liability to the Developer or the Association for approval of plans, drawings, specifications, elevations or the residences, fences, walls, or other structures which are not in conformity with the provisions of the Condominium Documents, or for disapproving plans, drawings, specifications, elevations or the residences, fences, walls, or other structures which are arguably in conformity with the provisions hereof.

Section 3. Architectural and General Site Design Guidelines. The following Architectural and General Site Design Guidelines:

- (a) Minimum Dwelling Unit Size. The minimum size of dwellings shall be as follows:
 - (1) Units 1-8, inclusive, shall be 1200 square feet for a ranch and 1500 square feet for a 2-story or 1.5-story bungalow;

(2) Units 9-102, inclusive, shall be 1200 square feet for a ranch and 1500 square feet for a 2-story or 1.5-story bungalow.

(b) Setbacks. Setbacks for residences on Units are as follows:

(1) The following setbacks are applicable for Units 1-102, inclusive:

(i) Front yard: 20 feet from back of sidewalk;

(ii) Side yard: minimum 9 feet one side and 5 feet on other side

(iii) Minimum 14 feet between residences.

(iv) Rear yard setback of 30 feet.

(c) Height. Building height will not exceed 25 feet, measured as specified in the Zoning Ordinance (the vertical distance measured from the established grade to the average height between the eaves and ridge for a gable roof).

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(d) Exterior Materials. The materials used on exterior walls of all residences shall be a combination of brick, stone, wood, composite siding, vinyl siding. Aluminum gutters, downspouts and flashing shall be permitted as well as copper roofing materials on bays. Texture T 1-11 and aluminum siding are prohibited. Window and house trim shall be wood, vinyl clad wood, aluminum clad or vinyl. Exposed foundations are allowed.

(e) Driveways and Sidewalks. Driveways shall be constructed of asphalt, brick pavers or concrete. Sidewalks shall be constructed of brick pavers or concrete. Sidewalks located along the Roads shall be concrete.

(f) Exterior Colors. Unit 1-8 elevations and exterior colors shall be harmonious with the two neighboring condominium developments known as Summerfield Pointe and Summerfield Pointe Attached Condominiums.

(1) Exterior colors must be natural and subdued. Proposed stain colors shall be submitted to the Developer for approval prior to application.

(2) Units 1-8 exterior color. The exterior colors of Units 1-8 are to match existing attached condominiums in Summerfield Pointe as close as possible subject to availability of materials: (1) Brick Kingsmill Cadillac Queens; (2) shingle Weatherwood by Landmark; (3) trim Navajo White; (4) vinyl siding Sunset Tan by Hamilton; and (5) windows: beige.

(3) Units 1-8 Elevations. The front elevations of Units 1-8 shall be generally harmonious and architecturally reasonably compatible with the existing attached housing units located in the adjoining Summerfield Pointe Condominium, subject to current code requirements, the Charter Township of Genoa ordinance and availability of materials. And exact match is not required.

(4) Garage lights Unit 1-8. Units 1-8 must have lights on front of garage to act as street lights and be on photo sensor maintained by homeowner.

(g) Units 1-8 and Adjoining Condominium Requirements. The following requirements relate to Units 1-8 only and are imposed to create and maintain a generally harmonious appearance between residences on Units 1-8 and the units in the existing adjoining attached condominium project called Summerfield Pointe.

(1) As provide for in Article IV, Section of the Master Deed for Summerfield Pointe Estates, the Summerfield Pointe Estates Association will be responsible for be for outside maintenance, repair and replacement of each dwelling constructed on the including exterior painting, roofs, caulking, siding, grass, shrubs and sidewalks of those Units (only).

(2) Units 1-8 shall comply with the adjoining Summerfield Pointe Condominium Guidelines Matrix which generally allow the following, however Co-owners are solely responsible for inquiring about Guidelines currently in effect and the following list is not exhaustive and may change:

(i) Allowed items with approval:

- a) Portable basketball backboard
- b) Awnings
- c) Bird bath feeders in rear yard
- d) Decks or patios
- e) Invisible fence
- f) Flags
- g) Grills
- h) Holiday decorations
- i) Landscaping can be changed
- j) Satellite dish
- k) Storm doors

- j) Window treatments or wreaths
- m) Flowers hanging baskets or on patios, porches or decks

(ii) Items not allowed.

- a) Basketball backboards attached to house or driveway
- b) Any storage building
- c) No swimming pools
- d) Fences
- e) Gazebo
- f) Fire pits detached from house
- g) Play structures
- h) Sheds, shutters, statues

(h) Guidelines for Units 9 through 102.

(1) Items allowed with approval

- i. Play structures (in rear yard only)

- ii. Swimming pools
- iii. Fire pits
- iv. Satellite dishes.
- v. Holiday decorations,
- vi. Decks and Patios.
- vii. Portable basketball backboard.
- viii. Awnings.
- ix. Flowers in hanging baskets (off deck).
- x. Landscaping can be changed with approval.
- xi. Bird feeder in rear yard.
- xii. Storm doors.

(2) Items not allowed.

- i. Fences
- ii. Out buildings and sheds.

(i) Fences. No fences or walls shall be permitted, including without limitation privacy, outside screening, chain link and perimeter fences along property boundaries, except for fences enclosing in-ground swimming pools and required by applicable law, are allowed. Fencing of wrought iron type or similar may be allowed for pools. Notwithstanding anything herein to the contrary, all fences shall be subject to (i) the Charter Township of Genoa's approval and (ii) Developer approval, so long as the Developer owns any unit during the Development and Sales Period and thereafter the Association.

(j) Garages. All garages shall be attached to the dwelling. All garages shall be two, three or four car garages. In relation to Units 1-8, inclusive, and 9-102, inclusive, all garages shall be front entrance garages. Garage doors shall be either panelized steel, panelized aluminum or wood. Garage doors may face the road. Owners are responsible for maintenance and painting of garage doors, entrance doors, and windows.

(k) Roof Material and Pitch. Roof material shall be at least 25-year three- tab architectural/dimensional asphalt shingles. No single-level flat roofs shall be permitted on the main body of any dwelling or other structure, except that flat roofs may be installed for Florida rooms, porches or patios if they are architecturally compatible with the rest of the dwelling unit. The roof pitch shall have a minimum pitch of 6 on 12 or steeper. No roofing materials may be installed without the prior written approval of the Developer and the Architectural Control Committee during the Development and Sales Period, and of the Association thereafter.

(l) Air Conditioners. No window or wall-mounted air conditioners are permitted. All exterior air conditioner equipment shall be located so as to minimize noise to adjacent homes and shall be screened by landscaping or other material if approved by the Developer and must also comply with Township ordinance requirements. Generators may be installed consistent with the standards for installation of air conditioning units set forth in this Section.

Section 9. Use and Occupancy Restrictions. In addition to the general requirements of Article VI, Sections 1 through 8, the use of the Project and its Common Elements by any Co-Owner shall be subject to the following specific restrictions:

(m) Common Areas. The Common Elements shall be used only by the Co- owners of Units in the Condominium Project and by their agents, tenants, family members, invitees, and

licensees for access, ingress to, and egress from the respective Units, and for other purposes incidental to use of the Units; provided, that any parking areas, storage facilities, or other Common Elements designed for a specific purpose shall be used only for those purposes or other uses approved by the Board. The use, maintenance, and operation of the Common Elements shall not be obstructed, damaged, or unreasonably interfered with by any Co-Owner, and shall be subject to any lease or easement presently in existence or entered into by the Board at some future date that affects all or any part of the Common Elements.

(n) Basketball Hoops / Backboards. Basketball hoops and backboards may **NOT** be attached to the home or garage. Ground mounted posts must be located at least twenty (20) feet from the curb of the road adjacent to the Unit and at least one (1) foot from the side lot line of the Unit. Ground mounted posts shall be painted black and the backboard of the basketball hoop shall be transparent. Portable and/or removable hoops must be kept well maintained and enclosed in the garage when not in use.

(o) Birdbaths and Birdfeeders. Birdbaths and birdfeeders shall only be permitted in the landscaped areas of the rear yard of the Unit.

(p) Bug Lights / Zappers. No attachment, appliance or other item may be installed which is designed to kill or repel insects or other animals by light or electrical current, or which emits a humanly audible sound.

(q) Exterior Changes. No Co-Owner shall make any additions, alterations, or modifications to any of the Common Elements, nor make any changes to the exterior appearance or structural elements of the Unit without the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter. Alterations or structural modifications that would jeopardize or impair the soundness, safety, or appearance of the Project shall be prohibited. Any Co-Owner may not make alterations, additions or improvements within the Co-Owner's Unit without such prior approval, but the Co-Owner shall be responsible for any damage to other Units, the Common Elements, or the property resulting from such alterations, additions, or improvements. Any re-painting or re-staining of the Unit or any part thereof (including doors, shutters and trim) shall require such prior approval, unless it reasonably conforms to the original colors.

(r) Exterior Lighting. Other than exterior light fixtures required by the Condominium Documents, exterior lighting shall be permitted only with the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter, subject to the limitations in this paragraph. The color of any lighting, lamps or illumination shall be typical material colors or, if not, specifically approved in writing by the Developer or after the end of the Development and Sales Periods ends, the Association thereafter. Any approved lighting shall be compatible with the intensity and style of existing lighting throughout the Condominium Premises. Horizontal distribution lights such as wall packs and floodlights are not permitted. Lighting shall be focused downward, except as follows: low-voltage lighting may be permitted to upwardly illuminate the front facade of homes and landscaping provided that any element being up-lighted shall be focused and controlled to minimize spill light. Lights aimed at architectural structures shall be shielded and baffled so that the majority of the light will fall on the architectural surface. Landscape up-lights shall be focused so that the majority of the light shall fall on the trunk, structure or canopy of the trees. The majority of light shall be defined as 75% of the center beam candle power falling upon the surface. Notwithstanding anything herein to the contrary, the foregoing provision shall not be construed to prohibit lighting at the project entranceway, which shall be permitted in conformance with all applicable ordinances and subject to prior Township approval.

Each house shall have one light on front of house or front of garage with photo cell or timer to be on from dusk to dawn.

(s) Firearms and Weapons. No Co-Owner shall use, or permit the use by any occupant, agent, tenant, invitee, guest, or member of the Co-Owner's family of any firearms, air rifles, pellet guns, B-B guns, bows and arrows, illegal fireworks or other dangerous weapons, Projectiles, or devices anywhere on or about the property.

(t) Flagpoles and Flags. Flagpoles shall be permitted with the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter. Approved flagpoles must remain within the Unit or Limited Common Elements of the applicable Unit or mounted on the garage door jamb trim, and shall not exceed 72" in length or 3/4" in diameter. Flag pole holders so-mounted shall be cast brass. Flags shall not exceed 3' by 5' in size, and shall be maintained in good repair by the Co-Owner. Subject to the foregoing restrictions regarding the installation of flagpoles and the size of approved flags, each Co-Owner shall otherwise have the right to display a single United States flag anywhere on the exterior of the Co-Owner's Unit pursuant to MCL 559.156a.

(u) Holiday Decorations. Co-Owners may not place holiday decorations on the Common Elements. Holiday decorations may be installed within two (2) weeks before a holiday and must be removed within two (2) weeks after the holiday. Christmas and Hanukah decorations may be installed at any time on or after Thanksgiving and must be removed within two (2) weeks after New Year's Day. Holiday lawn decorations are discouraged, may be subject to future rules and regulations and are one the less subject to approval by the Developer during the Development and Sales Period and the Association thereafter.

(v) Garage / Yard Sales. No garage sales or yard sales shall be permitted, except any community sale to be organized by the Association.

(w) Grills. Propane, natural gas or electric grills shall be allowed on the rear deck or patio. Such grills may also be used in the driveway appurtenant to a Unit, provided that the grills must be stored in the garage when not in use, subject to all applicable ordinances.

(x) Lawn Equipment. Lawn mowers, snow blowers, weed whackers and other gas or electric-powered lawn equipment may only be operated between the hours of 7 a.m. to dusk and in accordance with the ordinances and regulations of the Charter Township of Genoa. All lawn and snow removal equipment must be operated in accordance with the Township's Noise Ordinance. The Association shall designate one day a week for mowing of lawns and all lawns and yard areas shall be mowed by the Association on such day.

(y) Mailboxes. Each Unit shall have the same mailbox determined by the Developer and Association. No Co-Owner shall alter or modify in any way the mailbox appurtenant to their Unit without the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter. Co-Owner shall pay for the Mailbox Fee at Closing.

(z) Nuisances. No nuisances shall be permitted on the property nor shall any use or practice be permitted that is a source of annoyance to, or that interferes with the peaceful possession or proper use of the Project by the Co-Owners. No Unit shall be used in whole or in part for the storage of rubbish or trash, nor for the storage of any property or thing that may cause the Unit to appear in an unclean or untidy condition. No substance or material shall be kept on a Unit that will emit foul or obnoxious odors, or that will cause excessive noise that will or might disturb the peace,

quiet, comfort, or serenity of the occupants of surrounding Units. No rubbish, trash, leaves, grass clippings or other landscaping materials may be burned outside of a Unit.

(aa) Outdoor Hot Tubs / Spas. Outdoor hot tubs/ spas shall be permitted, subject to the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter. All such hot tubs/spas must be located in the rear yard of the Unit. All hot tubs/spas areas shall be visually screened with landscaping and all mechanical equipment shall be concealed from view and must comply with Charter Township of Genoa ordinances and all building codes.

(bb) Outdoor Playsets. For Units 1-8, outdoor playsets are prohibited. For all other Units, Outdoor playsets shall be permitted with the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter. Only one swing set or other play structure shall be permitted in any rear yard. No swing sets or playground equipment shall be placed in front or side yards. Play sets are also subject to any applicable Charter Township of Genoa ordinances.

(cc) Personal Property. No Co-Owner shall display, hang, or store any clothing, sheets, blankets, laundry, or other articles of personal property outside a residence. This restriction shall not be construed to prohibit a Co-Owner from placing and maintaining outdoor furniture and accoutrements and decorative foliage of a customary nature and appearance on a patio, deck, or balcony appurtenant to a Unit; provided, that no such furniture or other personal property shall be stored from November 1 through March 30, inclusive, on any open patio, deck, or balcony that is visible from another Unit or from the Common Elements of the Project, unless such furniture or other personal property is covered with appropriate and traditional furniture covers. The use of couches, car seats or other non-traditional outdoor furniture shall be prohibited.

(dd) Pets and Animals. No animals of any kind may be kept or maintained in any Unit, except for two common domestic pets (such as cats and dogs), without the prior written consent of the Association, which consent, if given, may be revoked at any time by the Association. The Association shall have the right to require all pets to be registered with the Association. No exotic, savage, or dangerous animal shall be kept on the property, and no animal may be kept or bred for commercial purposes. Dangerous, aggressive or oversized dogs such as, but not limited to Rottweilers, Great Danes, German Shepherds, and pit bulls as determined by the Developer and the Association, are prohibited from being kept on the property. No chickens, other fowl or livestock shall be allowed. Common household pets permitted under the provisions of this subsection shall be kept only in compliance with the rules and regulations promulgated by the Board of Directors from time to time, and must at all times be kept under care and restraint so as not to be obnoxious on account of noise, odor, or unsanitary conditions. No animal shall be permitted to run loose upon the Common Elements, and must remain leashed and attended by a responsible person. The owner of each pet shall be responsible for the collection and disposition of all fecal matter deposited by any pet maintained by such Co-Owner. Dog kennels and dog runs are prohibited. Invisible electronic fences shall be allowed with the prior consent of the Association. Small non dangerous, non-barking dogs may run inside an area enclosed by an invisible fence.

Dogs must be maintained indoors if they are a nuisance or dangerous to other people such as barking or aggressive behavior. The Association may charge a Co-Owner maintaining animals a reasonable supplemental assessment if the Association determines that such an assessment is necessary to defray additional maintenance costs to the Association of accommodating animals within the Condominium. The Association may also promulgate rules and regulations providing for the imposition of reasonable fines against offending Co-Owners, and/or, without liability to the

owner of the pet, remove or cause any animal to be removed from the condominium that it determines to be in violation of the restrictions imposed by this Section. Any Co-Owner or other person who causes or permits any animal to be brought to or kept on the condominium property shall indemnify and hold the Association harmless from any loss, damage, or liability that the Association may sustain as a result of the presence of such animal on the condominium property.

(ee) Temporary parking located at neighboring Summerfield Pointe is for the use by Co-Owners of Units in Summerfield Pointe, exclusively. Co-Owners of Units in Summerfield Pointe Estates and their guests and visitors are prohibited from using the temporary parking located on Summerfield Pointe. Co-Owners of Units in Summerfield Pointe Estates, or their guests and invitees who park in the parking area located in Summerfield Pointe shall be subject to towing and car removal by the Summerfield Pointe Condominium Association.

(ff) Prohibited Uses. No immoral, improper, offensive, or unlawful use shall be conducted on the property, and nothing shall be done or kept in any Unit or on the Common Elements that will increase the rate of insurance for the Project without the prior written consent of the Association. No Co-Owner shall permit anything to be done or kept in the Co-Owner's Unit or elsewhere on the Common Elements that will result in the cancellation of insurance on any Unit or any part of the Common Elements, or that will be in violation of any law.

(gg) Rubbish Removal. If the Association has a mandatory rubbish removal and waste recycling program, each Co-Owner shall participate in such program and shall be billed separately by the Association for such services. If the Association does not have a mandatory rubbish removal and recycling program, each Co-Owner, at the Co-Owner's sole expense, shall contract for rubbish removal and/or waste recycling.

(hh) Rubbish Receptacles. Trash, garbage or other waste shall be kept only in closed, sanitary containers and shall be promptly disposed of so that it will not be objectionable to neighboring Co-Owners. Co-Owners shall provide their own trash receptacles, which must be rigid, with a lid. The burning or incineration of rubbish, trash, leaves, construction materials or other waste within the Condominium is strictly prohibited. No outside storage for refuse or garbage is allowed. Containers shall be maintained in the garage at all times and shall not be permitted to remain elsewhere on the Common Elements except for such short periods of time as may be reasonably necessary to permit periodic collection of trash.

(ii) Satellite Dishes, Antennae and Aerials. A Co-Owner may install a satellite dish, antennae or aerial on the roof of said Co-Owner's Unit, subject to the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter, as to size, location, color, and screening. Notwithstanding anything herein to the contrary, no such satellite dish, antennae or aerial shall be permitted that penetrates the roof of the applicable Unit. To the extent required by applicable federal law, the Association's regulations shall not unreasonably impair a Co-Owner's installation, maintenance, or use of the satellite dish. Dishes are not to be seen from the road.

(jj) Signs. One "for sale" sign, not exceeding six (6) square feet in area advertising a Unit for sale, may be displayed so long as it conforms to the rules and regulations of the Association with regard to size, shape, color, placement and such other criteria as the Association may deem appropriate, as well as with the ordinances of the Charter Township of Genoa. Signs, including, but not limited to, "for rent" and "garage sale" type of signs are not allowed. "Open House" signs, not exceeding six (6) square feet in area, may be displayed on the day and during the times that the home is being held open. One "political" or "election" type of sign, not exceeding six (6) square

feet in area, may be displayed on or in the front yard of each Unit during election periods and then only consistent with Township codes and ordinances. Developer may have as many signs and size of sign as it wants as long as the ordinances of Charter Township of Genoa are maintained during the sales and construction period. Developer may permit each residential builder in Summerfield Pointe Estates to maintain signage as approved in advance by Developer during the construction and sales period and subject to Township Ordinance.

(kk) Signs - Off Site. Open House signs are permitted during actual time house is open, and must comply with the ordinances of the Charter Township of Genoa.

(ll) Statues and Lawn Ornaments. Statues and other lawn ornaments shall only be permitted with the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter.

(mm) Storm Doors. Storm doors may be installed with the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter. Approved doors must be full lite, without ornamentation and must match the color of the frame. Co-Owners may not install on either the interior or the exterior of the storm door, any bars or other similar visible security protection devices.

(nn) Swimming Pools; Pool Fences. For Units 1-8, inclusive, pools are prohibited. For all other Units, only in-ground, aesthetically pleasing pools are permitted, subject to the prior written approval of the Developer during the Development and Sales Period, and of the Association thereafter. All such pools must be located in the rear yard of the Unit. All pool areas shall be visually screened with landscaping and all mechanical equipment shall be concealed from view. Fencing is allowed around pool areas (only). Pool area fences may not be chain link fences and must be of wrought iron or other similar decorative style and material. Pool fencing is limited to the pool area; entire yards may not be fenced. All pool fences must be approved by the Association during the Development and Sales Period and the Board of Directors thereafter, and subject to all zoning, building and regulatory requirements.

(oo) Temporary Structures. No trailer, mobile home, motor home, van, tent, garage or structure of a temporary character shall be used at any time as a temporary or permanent residence, nor shall any basement be used for such purposes; provided, however, that the foregoing restriction shall not apply to any activities by Developer or any builder, developer or real estate company during the Development and Sales Period.

(pp) Unit Rental. No portion of a Unit may be rented, and no transient tenants may be accommodated in any building; provided, that this restriction shall not prevent the rental or sublease of an entire Unit together with its appurtenant Limited Common Elements for residential purposes in the manner permitted by these Bylaws.

(qq) Vehicles. No vehicles, boats, trailers, mobile homes, buses, boat trailer, air craft, motor homes, motorcycle, recreational vehicles, commercial or inoperative vehicle and no commercial vehicle with commercial advertising signage or logos or graphics (including so-called "body wrap" vinyl graphics, etc.) shall be parked or stored anywhere on the property, except within a closed garage, without the written approval of the Developer during the Development and Sales Period and thereafter the Association. No snowmobile, all-terrain vehicle, or other motorized recreational vehicle shall be operated on the property. No maintenance or repair shall be performed on any boat or vehicle except within a garage or residence where totally isolated from public view. This does not apply to Developer/Builder. No commercial vehicle lawfully upon any Unit shall

remain on such Unit except in the ordinary course of business and in conformity with all applicable laws and/or ordinances. A motor home or camping vehicle may be parked temporarily in the Co-Owner's driveway for a period up to forty eight (48) hours for the purpose of loading and unloading prior to and following its use. A non-operational vehicle (including expired license plates and flat tires) shall not be parked or stored within the Condominium except within a garage or residence where totally isolated from public view. The Association may cause vehicles parked in violation to be removed. The cost of removal shall be collected from the Co-Owner of the Unit responsible for the presence of the vehicle without liability to the Association. Each Co-Owner shall, if the Association requires, register all vehicles with the Association. The Association may make reasonable rules and regulations in implementation of this Section. Pick-up trucks without company information and without ladder racks or other equipment or storage racks are permitted; otherwise such vehicles must be parked inside garages. The purpose of this Section is to accommodate reasonable Co-Owner parking but to avoid unsightly conditions which may detract from the appearance of the Condominium as a whole.

(rr) Window Treatments. All window treatments must be harmonious to the residence and neighborhood. Co-Owners may not install, on either the interior or the exterior of the windows, any bars or other similar visible security protection devices.

(ss) Fireworks. No Co-Owner shall use, or permit the use by any occupant, employee, invitee, guest or member of his or her family of any firework or projectile in the Condominium.

(tt) Animals. No animals or fowl (except household pets) shall be kept or maintained on any Unit. Any pets kept in the Project shall have such care and restraint as not to be obnoxious on account of noise, odor or unsanitary conditions. No savage or dangerous animal shall be kept. No animal may be permitted to run loose upon the Common Elements, and any animal shall at all times be attended by a responsible person while on the Common Elements. Any person who causes or permits an animal to be brought or kept on the Condominium shall indemnify and hold harmless the Association for any loss, damage or liability which the Association may sustain as a result of the presence of such animal in the Condominium.

(uu) Each Co-Owner shall pay to maintain, repair, and replace the residential structure located of such Co-Owner's respective Unit, including, but not limited to, repainting the exterior surfaces of the structures and all maintenance, repair and replacement of the roof.

Section 7. Application of Restrictions. Unless there is an election to arbitrate pursuant to these Bylaws, a dispute or question as to whether a violation of any specific regulation or restriction contained in this Section has occurred shall be submitted to the Board, which shall conduct a hearing and render a decision in writing; the decision shall be binding upon all Co-owners and other parties having an interest in the Project.

Section 8. Landscaping.

(a) Conformance with the Approved Landscape Plan. The Developer will install landscaping in accordance with the Landscape Plan approved by the Charter Township of Genoa. To ensure consistency with the approved Landscape Plan, modifications of types and specific locations of plantings shall require the approval of the Charter Township of Genoa. Modifications and additional details may be required by the Charter Township of Genoa at the time of site plan review to adapt the landscaping to the site plan or condominium plan approved by the Charter Township of Genoa. Structures located on Units 82-83 are not allowed to encroach into the 25-foot natural features setback from the wetlands.

Commented [AR3]: Language should be added: "No mowing, cutting, construction, filling, applications of chemicals, or dredging allowed within 25 feet of the designated wetlands areas."

(b) Installation by Co-Owners. Except for landscaping installed by Developer which is hereby specifically approved, no Co-Owner shall perform any landscaping or plant any trees, shrubs or flowers or place any ornamental materials upon the Common Elements, Limited or General, without the prior written approval of the Association and, during the Development and Sales Period, the Developer as applicable. For Units 1-8, inclusive, installation of gardens is prohibited. In addition and subject to the foregoing approval(s), at minimum each Co-Owner shall be responsible for the installation and expense of the following:

(c) Planting Material Sizes. Planting materials are to be of a high quality and substantial size to provide a degree of maturity to the appearance of the landscaping immediately upon installation. Evergreen trees shall be nursery-grown and a minimum of five (5') feet in height, and canopy trees should have a minimum caliper of two (2") inches.

(d) Lawn Areas. All areas of a Unit (i.e., front, side and rear yards) not landscaped with plant materials or hard surfaces or kept as natural wooded areas shall be established as lawn areas by sodding. Preservation of wooded rear yard areas in their natural condition is strongly encouraged. No structures, except as provided in Section 21(b) are permitted in the rear yards of Units 1-8, inclusive.

(e) Edging and Mulching Materials. The use of natural cut sod edging to define planting beds is strongly encouraged. Edging materials made of steel, aluminum or plastic may be used to define planting beds.

(f) Boulders. The creation of landscaped berms, boulder outcroppings, raised beds and other creative landscape design is strongly encouraged.

(g) Irrigation. Co-Owners are obligated to install underground sprinkler systems must be installed in the front, side and rear yards of each Unit. If a unit is adjacent to open space, the sprinkler system must address and service the open space also. The Association shall maintain, repair and replace the underground sprinkler systems once installed, with the costs of such maintenance, repair and replacement being assessed to the Co-Owners. Each Co-Owner shall be responsible for the cost of utilities, such as water and electrical charges, serving such Co-Owner's Unit in relation to the irrigation and lawn sprinkler systems connected to and serving each Co-Owner's Unit. The utility costs associated with each irrigation and lawn sprinkler system shall be billed separately to each Unit Owner by the applicable utility company

(h) Maintenance. Co-owners shall be responsible for and bear the costs of replacement of all landscaping installed in their respective Units and yard areas, including lawns. After initial installation by the Co-Owner, the Association shall be responsible for maintaining the lawn and sprinkler system, yard area and lawn and located on each Co-Owner's Unit, including snow and ice removal from sidewalks. The Association shall designate a day for mowing of lawns and shall mow Co-Owners lawns on such designated day. Co-Owners shall be responsible, in their sole cost and expense, for the maintenance, repair and replacement of any foundational plantings, landscaping, bushes, trees and shrubs located on its Unit, provided, however, that that Association shall have the right to replace such foundational plantings, landscaping and shrubs, at such Co-Owner's expense in event that the Co-Owner fails to maintain, repair and replace such plantings in accordance with this Section. The Association shall maintain the irrigation and sprinkler systems in accordance the Master Deed.

(i) Other. Any and all other landscaping required by the Developer and/or Residential Builder of the respective Unit as a condition of sale. Each Co-Owner acknowledges and agrees

Commented [AR4]: duplicate

that such requirements may vary or be more restrictive from those described in this Article VI. In such event, the requirements of the Developer and/or Residential Builder shall supersede these requirements and govern the Co-Owner's responsibilities.

(j) Completion of Landscaping. Installation of landscaping prior to occupancy is strongly encouraged. The cost of landscaping can usually be included in the mortgage of the home. Landscape installation shall be completed, meaning finish-graded and suitably planted, within six (6) months after the exterior of the residence has been substantially completed, weather permitting, including the area tying between the sidewalk and the road, except such portion thereof as is used for driveways and walks.

(k) Approval. Each Co-Owner acknowledges and agrees that the Developer or Residential Builder as applicable, reserves the right to determine, in its sole discretion, whether the Co-Owner's landscaping complies with these requirements or any requirements imposed by the Developer or Residential Builder as a condition of sale.

The following are minimal landscape planting required for each unit.

- (1) Prior to issuance of a certificate of occupancy, street trees are required as a landscape approved by Genoa Township for Summerfield Pointe Estates.
- (2) An approved mix of perennial bushes and shrubs.
- (3) Sod and sprinklers.

(l) Security Deposit. In order to insure the compliance of all contractors, subcontractors and laborers with these Bylaws, and as a security deposit against damage to the Property, before commencing any site work or construction on any Unit, the Association may require a security deposit in the amount of \$5,000.00. Upon completion of construction of approved improvements on the Unit in accordance with the approved site plan for the Unit, completion of the landscaping on the Unit in accordance with the approved landscape plan, and restoration and repair of all Common Elements damaged or disturbed by construction activity on the Unit, the security deposit will be returned, less amounts necessary to reimburse the Association or Developer for expenses incurred by them in repairing or restoring any portions of the Common Elements or any Unit damaged or disturbed by that construction activity. All interest, if any, earned by the Association on the security deposit shall belong to the Association.

(m) Limitations. Notwithstanding anything herein to the contrary, the terms and provisions of this Article VI shall not apply to the Developer, nor to any Residential Builder who acquires the right to develop the entire Project or the entire balance of the Project, and may be selectively waived by the Developer or such Residential Builder in its sole and absolute discretion without the necessity of obtaining the prior written consent from the Association or any Co-Owner, mortgagee or other private person or entity, subject only to approval of the local public authority and to the express limitations contained in any applicable Condominium Documents. Developer shall be allowed to store construction material, supplies, ports johns, and trailers on vacant lots.

Section 9. Reserved Rights of Developer. The purpose of this Section is to assure the continued maintenance of the Property and the Project as a beautiful and harmonious residential development and shall be binding upon the Association and upon all Co-Owners. The Developer may construct any improvements upon the Property that it may, in its sole discretion, elect to make, without the necessity of obtaining the prior written consent from the Association or any Co-Owner,

mortgagee or other private person or entity, subject only to approval of the local public authority and to the express limitations contained in any applicable Condominium Documents.

Section 10. Potable Water and Public Health Requirements. The provisions hereinafter set forth have been required by the Michigan Department of Public Health and the Livingston County Health Division. Subject to availability, the project shall connect to the MHOG Sewer and Water Utilities' public water service. Such system for distribution of potable water shall be constructed to serve all users on the Property, and connection shall require payment of all applicable fees, charges and assessments.

Section 11. Non-Disturbance of Wetland Areas. The wetlands must be preserved pursuant to the requirements of any applicable MDEQ permit governing the Condominium Project as well as the ordinances of the Charter Township of Genoa. No mowing, cutting, construction, filling, applications of chemicals, or dredging allowed within 25 feet of the designated wetlands areas and all requirements of the MDEQ permit must be observed by Co-Owner. Units 82 and 83, as well as any Common Element containing protected wetlands shall contain signage demarcating the location of preserved wetland.

The Michigan Department of Environmental Quality and the Charter Township of Genoa must approve any modification, interference, or improvements to the wetland areas in writing.

Section 12. Open Spaces, Recreation Facilities and Paths. Common open spaces and paths shall be provided as proposed on the plans.

Section 13. Rules of Conduct. Additional rules and regulations ("rules and regulations") consistent with the Act, the Master Deed, and these Bylaws concerning the use of Units and Common Elements may be promulgated and amended by the Board. Copies of such rules and regulations must be furnished by the Board to each Co-Owner at least 10 days prior to their effective date, and may be revoked at any time by the affirmative vote of 60 percent or more of all Co-Owners.

Section 14. Enforcement by Developer. The Project shall at all times be maintained in a manner consistent with the highest standards of a private residential community, used and occupied for the benefit of the Co-Owners and all other persons interested in the condominium. If at any time the Association fails or refuses to carry out its obligations to maintain, repair, replace, and landscape in a manner consistent with the maintenance of such standards, the Developer, or any person to whom it may assign this right may, at its option, elect to maintain, repair, and/or replace any Common Elements or to do any landscaping required by these Bylaws and to charge the cost to the Association as an expense of administration. The Developer shall have the right to enforce these Bylaws throughout the development and sales period, which right of enforcement shall include (without limitation) an action to restrain the Association or any Co-Owner from any prohibited activity.

Section 15. Co-Owner Enforcement. An aggrieved Co-Owner will also be entitled to compel enforcement of the Condominium Documents by action for injunctive relief and/or damages against the Association, its officers, or another Co-Owner in the Project.

Section 16. Remedies on Breach. In addition to the remedies granted by these Bylaws for the collection of assessments, the Association shall have the right, in the event of a violation of the restrictions on use and occupancy imposed by this Section, to enter the Unit and to remove or correct the cause of the violation. Such entry will not constitute a trespass, and the Co-Owner of

the Unit will reimburse the Association for all costs of the removal or correction. Failure to enforce any of the restrictions contained in this Section will not constitute a waiver of the right of the Association to enforce restrictions in the future.

Section 17. Reserved Rights of Developer. The restrictions contained in this Article shall not apply to the commercial activities of the Developer, nor to any Residential Builder who acquires the right to develop the entire Project or the entire balance of the Project, during the Development and Sales Period. The Developer shall also have the right to maintain a sales office, advertising display signs, storage areas, and reasonable parking areas and spaces incident to its sales efforts and such access to, from, and over the property as may be reasonable to enable development and sale of the entire Project or any other Project owned by the Developer or an affiliate.

Section 18. Accessory Buildings and Structures.

(a) Accessory buildings such as sheds, barns, storage buildings, kennels, dog runs and outbuildings are prohibited on Units 1-102, inclusive.

(b) Decorative or entertainment structures or hardscape such as, but not limited to, gazebos, fire pits, swimming pool cabanas, patios and decks are subject to prior written approval by the Developer in its sole discretion during the Development and Sales Period and by the Board of Directors thereafter, subject to all zoning, building and regulatory requirements.

Section 19. Rules and Regulations. Reasonable rules and regulations consistent with the Act, the Master Deed and these Bylaws, concerning the operation and the use of the Common Elements may be made and amended from time to time by any Board of Directors of the Association, including the First Board of Directors (or its successors elected by the Developer) prior to the First Annual Meeting of the entire Association held as provided in these Bylaws. Copies of all such rules and regulations, and amendments thereto, shall be furnished to all Co-Owners and shall become effective thirty (30) days after mailing or delivery of such rules and regulations, and amendments thereto, to the designated voting representative of each Co-Owner. Any such rule, regulation or amendment may be revoked at any time by the affirmative vote of more than fifty (50%) percent of all Co-Owners, except that the Co-Owners may not revoke any rule, regulation or amendment prior to said First Annual Meeting of the entire Association.

Section 20. Right of Access of Association. The Association, or its duly authorized agents, shall have access to each Unit (but not any dwelling) and any Common Elements appurtenant thereto from time to time, during reasonable working hours, upon notice to the Co-Owner thereof, as may be necessary for the maintenance, repair or replacement of any of the Common Elements. The Association, or its agents, shall also have access to each Unit and any Common Elements appurtenant thereto at all times without notice as may be necessary to make emergency repairs to prevent damage to the Common Elements or to another Unit or dwelling. It shall be the responsibility of each Co-Owner to provide the Association means of access to his or her Unit and any Common Elements appurtenant thereto during all periods of absence, and in the event of the failure of such Co-Owner to provide means of access, the Association may gain access in such manner as may be reasonable under the circumstances and shall not be liable to such Co-Owner for any necessary damage to his or her Unit and/or any Common Elements appurtenant thereto. The Association shall also have a right of access to any Unit for the purpose of assuring compliance with the Condominium Documents. This provision shall not, however, entitle the Association to access a dwelling built upon a Unit, except with reasonable notice to the Unit Owner.

Section 21. Landscaping.

(a) No Co-Owner shall perform any landscaping or plant any trees, shrubs or flowers, or place any ornamental materials upon the General Common Elements without the prior written approval of the Association. Any landscaping installed by the Co-Owner pursuant to this Section shall be maintained by the Co-Owner and the Association shall have no responsibility for its maintenance. Prior to issuance of a certificate of occupancy, each Co-Owner shall install two street trees on each Unit.

(b) Lawns shall be installed by the Co-Owner within six (6) months after completion of construction or later, depending on weather.

(c) Foundation plantings shall be installed by the Co-Owner within six (6) months after completion of construction or later, depending on weather.

Section 22. Reserved Rights of Developer.

(a) Developer's Rights in Furtherance of Development and Sales. Subject to the requirements and restrictions set forth in the Charter Township of Genoa ordinances, Developer, and its successors and/or assigns, shall have the right to maintain a sales office, a business office, construction offices, model units, storage areas and reasonable parking incident to the foregoing and such access to, from and over the Project as may be reasonable to enable development and sale of the entire Project by Developer and/or its successors and/or assigns; and may continue to do so during the entire Development and Sales Period. Developer shall restore the areas so utilized to habitable status upon termination of use.

(b) Enforcement of Bylaws. The Condominium Project shall at all times be maintained in a manner consistent with the highest standards of a beautiful, serene, private, residential community for the benefit of the Co-Owners and all persons interested, or to become interested from time to time in the Condominium. If at any time the Association fails or refuses to carry out its obligation to maintain, repair, replace and/or landscape in a manner consistent with the maintenance of such high standards, then Developer, or any entity to which it may assign this right, at its option, may elect to maintain, repair and/or replace any Common Elements and/or to do any landscaping required by these Bylaws and to charge the cost thereof to the Association as an expense of administration. The Developer shall have the right to enforce these Bylaws throughout the Development and Sales Period, notwithstanding that it may no longer own a Unit in the Condominium, which right of enforcement shall include (without limitation) an action to restrain the Association or any Co-Owner from any activity prohibited by these Bylaws. Additionally, the Charter Township of Genoa shall have the right to enforce the Bylaws and Condominium Documents as set forth in the Condominium Documents

Section 23. NO WARRANTY ON EXISTING TREES AND VEGETATION. THE DEVELOPER MAKES NO WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO ANY NATIVE TREES OR VEGETATION WITHIN THE CONDOMINIUM PROJECT. ALSO, VEGETATION AND TREES NATIVE TO THE SITE ARE BEING DELIVERED TO THE CO-OWNERS IN AN "AS IS" AND "WHERE AS" CONDITION. THE DEVELOPER SHALL USE BEST REASONABLE EFFORTS TO PRESERVE AND PREVENT DAMAGE TO THE EXISTING TOPOGRAPHY, NATURE, VEGETATION AND TREES IN THE CONDOMINIUM PROJECT. DEVELOPER SHALL ENSURE THAT ALL LANDSCAPING WILL BE COMPLETED IN A HEALTHY CONDITION AS REQUIRED BY THE CHARTER

TOWNSHIP OF GENOA AND AS INDICATED ON THE SITE PLAN APPROVAL BY THE CHARTER TOWNSHIP OF GENOA.

Section 24. Tree Removal; Woodlands Preservation. No trees shall be removed, except for diseased or dead trees and trees needing to be removed to promote the growth of other trees or for safety reasons, unless approved by the Association. No such removal shall occur within a woodlands area which is regulated by the Charter Township of Genoa or other public agency without obtaining the proper permit from the Charter Township of Genoa or other public agency with jurisdiction over such matters prior to removal.

Section 25. Disposition of Interest in Unit by Sale or Lease.

(a) Notice to Association: Co-Owner to Provide Condominium Documents to Purchaser or Tenant. A Co-Owner intending to make a sale or lease of a Unit in the Condominium, or any interest therein, shall give written notice of such intention delivered to the Association at its registered office and shall furnish the name and address of the intended purchaser or lessee and such other information as the Association may reasonably require. Prior to the sale or lease of a Unit, the selling or leasing Co-Owner shall provide a copy of the Condominium Master Deed (including Exhibits "A" and "B" thereto) and any amendments to the Master Deed, the Articles of Incorporation and any amendment there, and the rules and regulations, as amended, if any, to the proposed purchaser or lessee. In the event a Co-Owner shall fail to notify the Association of the proposed sale or lease or in the event a Co-Owner shall fail to provide the prospective purchaser or lessee with a copy of the Master Deed and other documents referred to above, such Co-Owner shall be liable for all costs and expenses, including attorney fees, that may be incurred by the Association as a result thereof or by reason of any noncompliance of such purchaser or lessee with the terms, provisions and restrictions set forth in the Master Deed; provided, however, that this provision shall not be construed so as to relieve the purchaser or lessee of his obligations to comply with the provisions of the Condominium Documents.

(b) Developer and Mortgagees not Subject to Section. The Developer shall not be subject to this Section as to the sale or, except to the extent provided in Article VI, Section 2(b), the lease of any Unit in the Condominium which it owns, nor shall the holder of any mortgage which comes into possession of a Unit pursuant to the remedies provided in the mortgage, or foreclosure of the mortgage, or deed in lieu of foreclosure, be subject to the provisions of this Section 16.

Section 26. Foreclosed Units; Title, Fee Procedures.

(a) Ownership Commences Upon Date of Sheriff's Deed. For the purposes of defining when a grantee becomes a Co-Owner or Owner of a Unit in the Condominium, a winning bidder at a foreclosure sale shall be deemed to have become a Co-Owner, with all rights, privilege and obligations of a Co-Owner or Owner, on the date of the sheriff's deed and have all obligations, rights and duties as any other Co-Owner as of that date, even though the grantee under the sheriff's deed may not be entitled to actual possession and notwithstanding the expiration (or not) of any redemption rights held by the mortgagee. The grantee, under the Sheriff's Deed, may include any Association assessments paid by the grantee in any amount due from the mortgagee in order to redeem.

(b) Transfer Fees When Title Acquired by Sheriff's Deed. The Association incurs added costs, legal fees, insurance costs and expenses dealing with title transfers of Units after foreclosures and those expenses do not directly benefit the other Co-Owners or mortgagees whose

mortgages are in good standing. Furthermore, the Association cannot reasonably budget for those expenses. Those added costs and expenses should not be subsidized by Co-Owners of Units whose mortgages are not in default and those costs adversely affect Co-Owners who are otherwise current on their dues. The Board of Directors, as fiduciaries, has a duty to assure Co-Owners who are not otherwise in default of obligations to the Association are not unduly burdened by expenses which occur due to mortgagees' foreclosures. It is in the best interest of the Association and its members that a reasonable fee for title transfer by mortgagees who become Co-Owners after foreclosure is \$2,500.00 per transfer to defray those costs, expenses and risks and Association shall charge a transfer fee of \$2,500.00 on any Unit which is resold by the foreclosing mortgagee and for which the prior mortgage was in default for less than six months. If the Board reasonably determines that the mortgage was in default for more than six months, the transfer fee will be increased by an amount equal to monthly Association dues for each month beyond the six months that the mortgage which was foreclosed was in default. This charge is also immediately a lien on the Unit as of the date of the sheriff's deed. This charge will be deemed to only have accrued after the date of the sheriff's deed and not before.

(c) Insurance Service Fee Accruing After Foreclosure; Vacant Unit Fee; Unit Marketing Fee; Other Fees. Because of the added administrative costs and risks associated with absentee institutional ownership, insurance fees and burdens imposed by the Association in dealing with such owners when Units are foreclosed and because of the blight and loss of value which vacant Units bring to the Condominium Project, the following surcharges are to be levied on any Units where the Co-Owner took title by foreclosure and commencing with the date of the sheriff's deed. These charges only apply to the grantee under a sheriff's deed and do not apply to a mortgagee in its capacity as a secured party. These charges are not intended to impair mortgagee rights and these charges cannot accrue before the sheriff's sale occurs. The fees are:

- (1) An Insurance Administration and Vacant Unit Risk Surcharge of \$100.00 per Unit, per month.
- (2) An Association Vacant or Sheriff's Deed Unit Administration Fee equal to the then current monthly Association fee per month for the added costs the Association incurs in dealing with vacant foreclosed Units.
- (3) A marketing fee of \$25.00 per month for the privilege of advertising a Unit for sale and posting a sign on the premises offering the Unit for sale, whether or not a sign is placed.
- (4) A mortgage advertisement posting fee of \$200.00 for the privilege of projecting a foreclosure notice or judicial sale notice in the Project.
- (5) A Legal Services Fee of \$250.00 per Unit when the Unit is ultimately sold by the grantee under the Sheriff's Deed.
- (6) A Dues Statement Fee of \$200.00 shall be charged to the grantee under the Sheriff's Deed for a dues statement letter along with any charges for Association dues liens to be released.
- (7) Some or all of the fees in the preceding subsection, may be waived in the discretion of the Board of Directors if the mortgagee who became grantee under the Sheriff's Deed included the Association dues in the redemption amount and has remitted those dues to the Association.

Section 27. Potential Future Special Assessment for Road Improvements; Dedication Rights.

At some time subsequent to the initial development, it may become necessary to re-pave or improve some or all of the roads within or adjacent to the Condominium Project premises. The improvement may be financed, in whole or part, by the creation of a special assessment district or districts which may include the Condominium Project. The acceptance of a conveyance or execution of a land contract by a Co-Owner or purchaser of a condominium Unit shall constitute the agreement by such Co-Owner or purchaser, his or her heirs, executors, administrators or assigns, that the Board of Directors of the Association shall be vested with the full power and authority to obligate all Co-Owners to participate in a special assessment district, sign petitions requesting such special assessment, and consider and otherwise act on all special assessment issues on behalf of the Association and all Co-Owners; provided prior to signature by the Association on a petition for improvements of such roads, the desirability of said improvements shall be approved by and affirmative vote of not less than fifty-one percent (51%) of the Co-Owners that own Units within the special assessment district. No consent of mortgagees shall be required for approval of such road improvement. There is no promise that any road dedications will ever take place, notwithstanding the reservation of this right, however at some time subsequent to the initial development it may become necessary. All Co-Owners should take note that notwithstanding the provisions stated here acceptance of a dedication is a decision solely within the discretion of the public body with jurisdiction over roads and is unlikely to occur because of the physical characteristics of the project and the requirements of the local public authorities and while dedication is expected to occur final acceptance is within the discretion of the Livingston County Road Commission.

Section 28. Foreclosed Units; Title, Fee Procedures. Ownership Commences Upon Date of Sheriff's Deed.

For the purposes of defining when a grantee becomes a Co-Owner or Owner of a Unit in the Condominium, a winning bidder at a foreclosure sale shall be deemed to have become a Co-Owner, with all rights, privilege and obligations of a Co-Owner or Owner, on the date of the Sheriff's Deed and have all obligations, rights and duties as any other Co-Owner as of that date, even though the grantee under the Sheriff's Deed may not be entitled to actual possession and notwithstanding the expiration (or not) of any redemption rights held by the mortgagee. The grantee, under the Sheriff's Deed, may include any Association assessments paid by the grantee in any amount due from the mortgagee in order to redeem.

ARTICLE VII MORTGAGES

Section 1. Notice to Association. Any Co-Owner who mortgages his or her Unit shall notify

the Association of the name and address of the mortgagee, and the Association shall maintain such information in a book entitled "Mortgagees of Units." The Association may, at the written request of a mortgagee of any such Unit, report any unpaid assessments due from the Co-Owner of such Unit. The Association shall give to the holder of any first mortgage covering any Unit in the Project written notification of any default in the performance of the obligations of the Co-Owner of such Unit that is not cured within 60 days. The Association may charge a reasonable fee to the mortgagee for that service not to exceed \$150.00 per notice which shall be due upon mailing and which if not shall absolve the Association from the obligation to provide and further such notices. Failure of a Co-Owner to notify the Association of the existence of a mortgage absolves the Association from any notice responsibilities to a mortgagee unless the mortgage has otherwise requested to be provided such notice by so stating in writing to the Association. Second and other junior mortgagees are not entitled to any notice from the Association unless they have both made written request of the Associations to receive notices and paid an annual junior mortgage notice fee of 100.00 for each mortgage held. Owner of such Unit that is not cured within sixty (60) days.

Section 2. Insurance. The Association shall notify each mortgagee appearing in said book of

the name of each company insuring the Condominium against fire, perils covered by extended coverage and vandalism and malicious mischief, and the amounts of such coverage.

Section 3. Notification of Meetings. Upon request submitted to the Association, any institutional holder of a first mortgage lien on any Unit in the Condominium shall be entitled to receive written notification of every meeting of the members of the Association a Section 4. Waiver of Notice of Amendment. By taking a mortgage on a Unit all mortgagees agree that the waiver notice of any nonmaterial amendment to the Condominium Documents as materiality is defined under Section 90 and 90(a) of the Act.

Section 4. Mortgage Consent; Notice. If a mortgagee consent is required for any amendment or other action or if a mortgagee is required to receive notice of a matter related to the Condominium Project, Association or Condominium Documents: (a) notice to a mortgagee shall be deemed effective if sent to the address set forth in the mortgage (or any recorded assignment of mortgage); (b) mortgagees will be deemed to have consented to any actions if they fail to affirmatively object in writing. By accepting a grant of mortgage on a Unit in the Condominium Project all mortgagees are deemed to have agreed to this provision and all other provisions of the Act and expressly waive any provisions of the Act to the contrary including but not limited to provisions related to mortgagee rights under Section 90 and Section 90(a), MCL 559.190 and MCL 559.190(a) and to designate a representative to attend such meeting.

ARTICLE VIII VOTING

Section 1. Vote. Except as limited in these Bylaws, each Co-Owner shall be entitled to one (1) vote for each Condominium Unit owned.

Section 2. Eligibility to Vote. No Co-Owner, other than the Developer, shall be entitled to vote at any meeting of the Association until he or she has presented evidence of ownership of a Unit in the Condominium Project to the Association. Except as provided in Article XI, Section 2 of these Bylaws, no Co-Owner, other than the Developer, shall be entitled to vote prior to the date of the First Annual Meeting of members held in accordance with Section 2 of Article IX hereof. The vote of each Co-Owner may be cast only by the individual representative designated by such Co-Owner in the notice required in Section 3 below, or by a proxy given by such individual representative. The Developer shall be the only person entitled to vote at a meeting of the Association until the First Annual Meeting of members and shall be entitled to vote during such period notwithstanding the fact that the Developer may own no Units in the Project at some time or from time to time during such period. At and after the First Annual Meeting the Developer shall be entitled to one (1) vote for each Unit which it owns and for which it is paying Association maintenance expenses. If, however, the Developer elects to designate a director (or directors) pursuant to its rights under Article XI, Section 2(c)(i) or (ii) hereof, it shall not then be entitled to also vote for the non-developer directors.

Section 3. Designation of Voting Representative. Each Co-Owner shall file a written notice with the Association designating the individual representative who shall vote at meetings of the Association and receive all notices and other communications from the Association on behalf of such Co-Owner. Such notice shall state the name and address of the individual representative designated, the number or numbers of the Condominium Unit or Units owned by the Co-Owner, and the name and address of each person, firm, corporation, partnership, association, trust or other entity who is the Co-Owner. Such notice shall be signed and dated by the Co-Owner. The individual representative designated may be changed by the Co-Owner at any time by filing a new notice in the manner herein provided.

Section 4. Quorum. The presence in person or by proxy of thirty-five (35%) percent of the Co-Owners qualified to vote shall constitute a quorum for holding a meeting of the members of the Association, except for voting on questions specifically required by the Condominium Documents to require a greater quorum. The written vote of any person furnished at or prior to any duly called meeting,

at which meeting said person is not otherwise present in person or by proxy, shall be counted in determining the presence of a quorum with respect to the question upon which the vote is cast.

Section 5. Voting. Votes may be cast only in person or by a writing duly signed by the designated voting representative not present at a given meeting in person or by proxy. Proxies and any written votes must be filed with the Secretary of the Association at or before the appointed time of each meeting of the members of the Association. Cumulative voting shall not be permitted.

Section 6. Majority. A majority, except where otherwise provided herein, shall consist of more than fifty (50%) percent of those qualified to vote and present in person or by proxy (or written vote, if applicable) at a given meeting of the members of the Association. Whenever provided specifically herein, a majority may be required to exceed the simple majority hereinabove set forth of designated voting representatives present in person or by proxy, or by written vote, if applicable, at a given meeting of the members of the Association.

ARTICLE IX MEETINGS

Section 1. Place of Meeting. Meetings of the Association shall be held at the principal office of the Association or at such other suitable place convenient to the Co-Owners as may be designated by the Board of Directors. Meetings of the Association shall be conducted in accordance with Sturgis' Code of Parliamentary Procedure, Roberts Rules of Order or some other generally recognized manual of parliamentary procedure when not otherwise in conflict with the Condominium Documents (as defined in the Master Deed) or the laws of the State of Michigan. Electronic participation shall not be allowed generally (such as by email, telephone, "Face-Time", Skype, etc.) unless the Board of Directors establishes rules and regulations for that purpose.

Section 2. First Annual Meeting. The First Annual Meeting of members of the Association may be convened only by Developer and may be called at any time after more than fifty (50%) percent of the Units that may be created in Summerfield Pointe Estates have been conveyed and the purchasers thereof qualified as members of the Association. In no event, however, shall such meeting be called later than 120 days after the conveyance of legal or equitable title to non-developer Co-Owners of seventy-five (75%) percent of all Units that may be created, or 54 months after the first conveyance of legal or equitable title to a non-developer Co-Owner of a Unit in the Project, whichever first occurs. Developer may call meetings of members for informative or other appropriate purposes prior to the First Annual Meeting of members, and no such meeting shall be construed as the First Annual Meeting of members. The date, time and place of such meeting shall be set by the Board of Directors, and at least ten (10) days' written notice thereof shall be given to each Co-Owner. The phrase "Units that may be created" as used in this Section and elsewhere in the Condominium Documents refers to the maximum number of Units which the Developer is permitted under the Condominium Documents to include in the Condominium.

Section 3. Annual Meetings. Annual meetings of members of the Association shall be held on any business day during the second or third week of April each succeeding year after the year in which the First Annual Meeting is held, at such time and place as shall be determined by the Board of Directors; provided, however, that the second annual meeting shall not be held sooner than eight (8) months after the date of the First Annual Meeting. At such meetings there shall be elected by ballot of the Co-Owners a Board of Directors in accordance with the requirements of Article XI of these Bylaws. The Co-Owners may also transact at annual meetings such other business of the Association as may properly come before them. The decision(s) of the Co-owners at an annual meeting shall rule over the Board of Directors for the next year. Co-owners may bring issues to be voted on at annual meeting.

Section 4. Special Meetings. It shall be the duty of the President to call a special meeting of the Co-Owners as directed by resolution of the Board of Directors or upon a petition signed by one-third (1/3) of the Co-Owners presented to the Secretary of the Association. Notice of any special meeting shall state the time and place of such meeting and the purposes thereof. No business shall be transacted at a special meeting except as stated in the notice.

Section 5. Notice of Meetings. It shall be the duty of the Secretary (or other Association officer in the Secretary's absence) to serve a notice of each annual or special meeting, stating the purpose thereof as well as the date, time and place where it is to be held, upon each Co-Owner of record, at least ten (10) days but not more than sixty (60) days prior to such meeting. The mailing, postage prepaid, of a notice to the representative of each Co-Owner at the address shown in the notice required to be filed with the Association by Article VIII, Section 3 of these Bylaws shall be deemed notice served. Any member may, by written waiver of a notice signed by such member, waive such notice, and such waiver, when filed in the records of the Association, shall be deemed due notice.

Section 6. Adjournment. If any meeting of Co-Owners cannot be held because a quorum is not in attendance, the Co-Owners who are present may adjourn the meeting to a time not less than forty-eight (48) hours from the time the original meeting was called.

Section 7. Order of Business. The order of business at all meetings of the members shall be as follows: (a) roll call to determine the voting power represented at the meeting; (b) proof of notice of meeting or waiver of notice; (c) reading of minutes of preceding meeting; (d) reports of officers; (e) reports of committees; (f) appointment of inspectors of election (at annual meetings or special meetings held for the purpose of electing directors or officers); (g) election of directors (at annual meeting or special meetings held for such purpose); (h) unfinished business; and (i) new business. Meetings of members shall be chaired by the most senior officer of the Association present at such meeting. For purposes of this Section, the order of seniority of officers shall be President, Vice President, Secretary and Treasurer.

Section 8. Action Without Meeting. Any action that may be taken at a meeting of the members (except for the election or removal of directors) may be taken without a meeting by written ballot of the members. Ballots shall be solicited in the same manner as provided in Section 5 above for the giving of notices of meetings of members. Such solicitations shall specify (a) the number of responses needed to meet the quorum requirements; (b) the percentage of approvals necessary to approve the action; and (c) the time by which ballots must be received in order to be counted. The form of written ballot shall afford an opportunity to specify a choice between approval and disapproval of each matter and shall provide that, where the member specifies a choice, the vote shall be cast in accordance therewith. Approval by written ballot shall be constituted by receipt, within the time period specified in the solicitation, of (i) a number of ballots which equals or exceeds the quorum that would be required if the action were taken at a meeting; and (ii) a number of approvals which equals or exceeds the number of votes that would be required for approval if the action were taken at a meeting at which the total number of votes cast was the same as the total number of ballots cast.

Section 9. Consent of Absentees. The transactions at any meeting of members, either annual or special, however called and noticed, shall be as valid as though made at a meeting duly held after regular call and notice, if a quorum is present either in person or by proxy; and if, either before or after the meeting, each of the members not present in person or by proxy, signs a written waiver of notice, or a consent to the holding of such meeting, or an approval of the minutes thereof. All such waivers, consents or approvals shall be filed with the corporate records or made a part of the minutes of the meeting.

Section 10. Minutes; Presumption of Notice. Minutes or a similar record of the proceedings of meetings of members, when signed by the President or Secretary, shall be presumed truthfully to

evidence the matters set forth therein. A recitation in the minutes of any such meeting that notice of the meeting was properly given shall be prima facie evidence that such notice was given.

ARTICLE X ADVISORY COMMITTEE

Within one (1) year after conveyance of legal or equitable title to the first Unit in the Condominium to a purchaser, or within one hundred twenty (120) days after conveyance to purchasers of one-third (1/3) of the total number of Units that may be created, whichever first occurs, the Developer shall cause to be established an Advisory Committee consisting of at least three (3) non-developer Co-Owners. The Committee shall be established and perpetuated in any manner the Developer deems advisable, except that if more than fifty (50%) percent of the non-developer Co-Owners petition the Board of Directors for an election to elect the Advisory Committee, then an election for such purpose shall be held. The purpose of the Advisory Committee shall be to facilitate communications between the temporary Board of Directors and the other Co-Owners and to aid in the transition of control of the Association from the Developer to purchaser Co-Owners. The Advisory Committee shall cease to exist automatically when the non-developer Co-Owners have the voting strength to elect a majority of the Board of Directors of the Association. The Developer may remove and replace at its discretion at any time any member of the Advisory Committee who has not been elected thereto by the Co-Owners.

ARTICLE XI BOARD OF DIRECTORS

Section 1. Number and Qualification of Directors. The Board of Directors shall initially be comprised of five (5) members and shall continue to be so comprised until enlarged to five members in accordance with the provisions of Section 2 hereof. Thereafter, the affairs of the Association shall be governed by a Board of five Directors, all of whom must be members of the Association or officers, partners, trustees, employees or agents of members of the Association, except for the first Board of Directors. Directors shall serve without compensation.

Section 2. Election of Directors.

(a) First Board of Directors. The first Board of Directors, or its successors as selected by the Developer, shall manage the affairs of the Association until the appointment of the first non-developer Co-Owners to the Board. Immediately prior to the appointment of the first non-developer Co-Owners to the Board, the Board shall be increased in size from three persons to five persons. Thereafter, elections for non-developer Co-Owner directors shall be held as provided in subsections (b) and (c) below.

(b) Appointment of Non-developer Co-Owners to Board Prior to First Annual Meeting. Not later than one hundred twenty (120) days after conveyance of legal or equitable title to non-developer Co-Owners of twenty-five (25%) percent of the Units that may be created, one (1) of the five (5) directors shall be selected by non-developer Co-Owners. Not later than one hundred twenty (120) days after conveyance of legal or equitable title to non-developer Co-Owners of fifty (50%) percent of the Units that may be created, two (2) of the three (3) directors shall be elected by non-developer Co-Owners. When the required percentage of conveyances have been reached, the Developer shall notify the non-developer Co-Owners and convene a meeting so that the Co-Owners can elect the required director or directors, as the case may be. Upon certification by the Co-Owners to the Developer of the director or directors so elected, the Developer shall then immediately appoint such director or directors to the Board to serve until the First Annual Meeting of members unless he or she is removed pursuant to Section 7 of this Article or he or she resigns or becomes incapacitated.

(c) Election of Directors at and After First Annual Meeting.

(1) Not later than one hundred twenty (120) days after conveyance of legal or equitable title to non-developer Co-Owners of seventy-five (75%) percent of the Units that may be created, and before conveyance of ninety (90%) percent of such Units, the non-developer Co-Owners shall elect all directors on the Board, except that the Developer shall have the right to designate at least one (1) director as long as the Units that remain to be created and conveyed equal at least ten (10%) percent of all Units that may be created in the Project. Whenever the seventy-five (75%) percent conveyance level is achieved, a meeting of Co-Owners shall be promptly convened to effectuate this provision, even if the First Annual Meeting has already occurred.

(2) Regardless of the percentage of Units which have been conveyed, upon the expiration of fifty-four (54) months after the first conveyance of legal or equitable title to a non-developer Co-Owner of a Unit in the Project, the non-developer Co-Owners have the right to elect a number of members of the Board of Directors equal to the percentage of Units they own, and the Developer has the right to elect a number of members of the Board of Directors equal to the percentage of Units that are owned by the Developer and for which maintenance expenses are payable by the Developer. This election may increase, but shall not reduce, the minimum election and designation rights otherwise established in subsection (i) below.

(3) If the calculation of the percentage of members of the Board of Directors that the non-developer Co-Owners have the right to elect under subsections (b) and (c)(1), or if the product of the number of members of the Board of Directors multiplied by the percentage of Units held by the non-developer Co-Owners under subsection (c)(2) results in a right of non-developer Co-Owners to elect a fractional number of members of the Board of Directors, then a fractional election right of 0.5 or greater shall be rounded up to the nearest whole number, which number shall be the number of members of the Board of Directors that the non-developer Co-Owners have the right to elect. After application of this formula, the Developer shall have the right to elect the remaining members of the Board of Directors. Application of this subsection shall not eliminate the right of the Developer to designate one (1) director as provided in subsection (c)(1) above.

(4) At the First Annual Meeting, three (3) directors shall be elected for a term of two (2) years and two (2) directors shall be elected for a term of one (1) year. At such meeting all nominees shall stand for election as one slate and the three (3) persons receiving the highest number of votes shall be elected for a term of two (2) years and the two (2) persons receiving the next highest number of votes shall be elected for a term of one (1) year. At each annual meeting held thereafter, either two (2) or three (3) directors shall be elected depending upon the number of directors whose terms expire. After the First Annual Meeting, the term of office (except for two (2) of the directors elected at the First Annual Meeting) of each director shall be two (2) years. The directors shall hold office until their successors have been elected and hold their first meeting.

(5) Once the Co-Owners have acquired the right hereunder to elect a majority of the Board of Directors, annual meetings of Co-Owners to elect directors and conduct other business shall be held in accordance with the provisions of Article IX, Section 3 hereof.

Section 3. Powers and Duties. The Board of Directors shall have the powers and duties necessary for the administration of the affairs of the Association and may do all acts and things as are not prohibited by the Condominium Documents or required thereby to be exercised and done by the Co-Owners.

Section 4. Other Duties. In addition to the foregoing duties imposed by these Bylaws, or any further duties which may be imposed by resolution of the members of the Association, the Board of Directors shall be responsible specifically for the following:

- (a) To manage and administer the affairs of and to maintain the Condominium Project and the Common Elements thereof.
- (b) To levy and collect assessments from the members of the Association and to use the proceeds thereof for the purposes of the Association.
- (c) To carry insurance and collect and allocate the proceeds thereof.
- (d) To rebuild improvements after casualty.
- (e) To contract for and employ persons, firms, corporations or other agents to assist in the management, operation, maintenance and administration of the Condominium Project.
- (f) To acquire, maintain and improve; and to buy, operate, manage, sell, convey, assign, mortgage or lease any real or personal property (including any Unit in the Condominium, easements, rights-of-way and licenses) on behalf of the Association in furtherance of any of the purposes of the Association.
- (g) To borrow money and issue evidences of indebtedness in furtherance of any or all of the purposes of the Association, and to secure the same by mortgage, pledge, or other lien on property owned by the Association; provided, however, that any such action shall also be approved by affirmative vote of seventy-five (75%) percent of all of the members of the Association.
- (h) To make rules and regulations in accordance with Article VI, Section 9 of these Bylaws.
- (i) To establish such committees as it deems necessary, convenient or desirable and to appoint persons thereto for the purpose of implementing the administration of the Condominium and to delegate to such committees any functions or responsibilities that are not by law or the Condominium Documents required to be performed by the Board of Directors.
- (j) To enforce the provisions of the Condominium Documents.

Section 5. Management Agent. The Board of Directors may employ for the Association a professional management agent (which may include the Developer or any person or entity related thereto) at reasonable compensation established by the Board to perform such duties and services as the Board shall authorize, including, but not limited to, the duties listed in Sections 3 and 4 of this Article, and the Board may delegate to such management agent any other duties or powers that are not by law or by the Condominium Documents required to be performed by or have the approval of the Board of Directors or the members of the Association. In no event shall the Board be authorized to enter into any contract with a professional management agent, or any other contract providing for services by the Developer, sponsor or builder, in which the maximum term is greater than three (3) years or which is not terminable by the Association upon ninety (90) days' written notice thereof to the other party, and no such contract shall violate the provisions of Section 55 of the Act. **THE DEVELOPER HAS THE RIGHT TO DISAPPROVE ANY DECISION BY THE BOARD OF DIRECTORS TO SELF-MANAGE THE PROJECT WITHOUT THE BENEFIT OF A PROFESSIONAL MANAGEMENT SERVICE. THE DISAPPROVAL RIGHT SHALL END WHEN THE DEVELOPMENT AND SALES PERIOD EXPIRES.**

Section 6. Vacancies. Vacancies in the Board of Directors that occur after the Transitional Control Date, caused by any reason other than the removal of a director by a vote of the members of the Association, shall be filled by vote of the majority of the remaining directors, even though they may constitute less than a quorum, except that the Developer shall be solely entitled to fill the vacancy of any director whom it is permitted in the first instance to designate. Each person so elected shall be a director until a successor is elected at the next annual meeting of the members of the Association. Vacancies among non-developer Co-Owner elected directors that occur prior to the Transitional Control Date may be filled only through election by non-developer Co-Owners and shall be filled in the manner specified in Section 2(b) of this Article.

Section 7. Removal. At any regular or special meeting of the Association duly called with due notice of the removal action proposed to be taken, any one (1) or more of the directors may be removed with or without cause by the affirmative vote of more than fifty (50%) percent of all of the Co-Owners and a successor may then and there be elected to fill any vacancy thus created. The quorum requirement for the purpose of filling such vacancy shall be the normal thirty-five (35%) percent requirement set forth in Article VIII, Section 4. Any director whose removal has been proposed by the Co-Owners shall be given an opportunity to be heard at the meeting. The Developer may remove and replace any or all of the directors selected by it at any time or from time to time in its sole discretion. Likewise, any director selected by the non-developer Co-Owners to serve before the First Annual Meeting may be removed before the First Annual Meeting in the same manner set forth in this section for removal of directors generally.

Section 8. First Meeting. The first meeting of a newly elected Board of Directors shall be held within ten (10) days of election at such place as shall be fixed by the directors at the meeting at which such directors were elected, and no notice shall be necessary to the newly elected directors in order to legally constitute such meeting, providing a majority of the whole Board shall be present.

Section 9. Regular Meetings. Regular meetings of the Board of Directors may be held at such times and places as shall be determined from time to time by a majority of the directors, but at least two (2) such meetings shall be held during each fiscal year. Notice of regular meetings of the Board of Directors shall be given to each director personally, by mail, telephone or telegraph, at least ten (10) days prior to the date named for such meeting.

Section 10. Special Meetings. Special meetings of the Board of Directors may be called by the President on three (3) days' notice to each director given personally, by mail, telephone or telegraph, which notice shall state the time, place and purpose of the meeting. Special meetings of the Board of Directors shall be called by the President or Secretary in like manner and on like notice on the written request of two (2) directors.

Section 11. Waiver of Notice. Before or at any meeting of the Board of Directors, any director may, in writing, waive notice of such meeting and such waiver shall be deemed equivalent to the giving of such notice. Attendance by a director at any meetings of the Board shall be deemed a waiver of notice by him or her of the time and place thereof. If all the directors are present at any meeting of the Board, no notice shall be required and any business may be transacted at such meeting.

Section 12. Quorum. At all meetings of the Board of Directors, a majority of the directors shall constitute a quorum for the transaction of business, and the acts of the majority of the directors present at a meeting at which a quorum is present shall be the acts of the Board of Directors. If, at any meeting of the Board of Directors, there be less than a quorum present, the majority of those present may adjourn the meeting to a subsequent time upon twenty-four (24) hours' prior written notice delivered to all directors not present. At any such adjourned meeting, any business that might have been transacted at the meeting as originally called may be transacted without further notice. The joinder of a director in the action of a

meeting by signing and concurring in the minutes thereof, shall constitute the presence of such director for purposes of determining a quorum.

Section 13. First Board of Directors. The actions of the first Board of Directors of the Association, or any successors thereto selected or elected before the Transitional Control Date, shall be binding upon the Association so long as such actions are within the scope of the powers and duties that may be exercised generally by the Board of Directors as provided in the Condominium Documents.

Section 14. Fidelity Bonds. The Board of Directors shall require that all officers and employees of the Association handling or responsible for Association funds shall furnish adequate fidelity bonds. The premiums on such bonds shall be expenses of administration.

Section 15. Electronic, Digital and Telephonic Participation. The Board may conduct its meetings by telephonic or other electronic or digital means of communication. Board votes may also be conducted by digital, electronic, or telephone communications.

ARTICLE XII OFFICERS

Section 1. Officers. The principal officers of the Association shall be a President, who shall be a member of the Board of Directors, a Vice President, a Secretary and a Treasurer. The directors may appoint an Assistant Treasurer, an Assistant Secretary, and such other officers as in their judgment may be necessary. Any two (2) offices except that of President and Vice President may be held by one (1) person.

(a) President. The President shall be the chief executive officer of the Association. He or she shall preside at all meetings of the Association and of the Board of Directors. He or she shall have all of the general powers and duties which are usually vested in the office of the President of an association, including, but not limited to, the power to appoint committees from among the members of the Association from time to time as he or she may, in his or her discretion, deem appropriate to assist in the conduct of the affairs of the Association.

(b) Vice President. The Vice President shall take the place of the President and perform his or her duties whenever the President shall be absent or unable to act. If neither the President nor the Vice President is able to act, the Board of Directors shall appoint some other member of the Board to so do on an interim basis. The Vice President shall also perform such other duties as shall from time to time be imposed upon him or her by the Board of Directors.

(c) Secretary. The Secretary shall keep the minutes of all meetings of the Board of Directors and the minutes of all meetings of the members of the Association; he or she shall have charge of the corporate seal, if any, and of such books and papers as the Board of Directors may direct; and he or she shall, in general, perform all duties incident to the office of the Secretary.

(d) Treasurer. The Treasurer shall have responsibility for the Association's funds and securities and shall be responsible for keeping full and accurate accounts of all receipts and disbursements in books belonging to the Association. He or she shall be responsible for the deposit of all monies and other valuable effects in the name and to the credit of the Association, and in such depositories as may, from time to time, be designated by the Board of Directors.

Section 2. Election. The officers of the Association shall be elected annually by the Board of Directors at the organizational meeting of each new Board and shall hold office at the pleasure of the Board.

Section 3. Removal. Upon affirmative vote of a majority of the members of the Board of Directors, any officer may be removed either with or without cause, and his or her successor elected at any regular meeting of the Board of Directors, or at any special meeting of the Board called for such purpose. No such removal action may be taken, however, unless the matter shall have been included in the notice of such meeting. The officer who is proposed to be removed shall be given an opportunity to be heard at the meeting.

Section 4. Duties. The officers shall have such other duties, powers and responsibilities as shall, from time to time, be authorized by the Board of Directors.

ARTICLE XIII SEAL

The Association may (but need not) have a seal. If the Board determines that the Association shall have a seal, then it shall have inscribed thereon the name of the Association, the words "corporate seal" and "Michigan."

ARTICLE XIV FINANCE AND RECORDS

Section 1. Records. The Association shall keep detailed books of account showing all expenditures and receipts of administration, and which shall specify the maintenance and repair expenses of the Common Elements and any other expenses incurred by or on behalf of the Association and the Co-Owners. Such accounts and all other Association records shall be open for inspection by the Co-Owners and their mortgagees during reasonable working hours. The Association shall prepare and distribute to each Co-Owner at least once a year a financial statement, the contents of which shall be defined by the Association. The books of account shall be audited at least annually by qualified independent auditors; provided, however, that such auditors need not be certified public accountants, nor does such audit need to be a certified audit. Any institutional holder of a first mortgage lien on any Unit in the Condominium shall be entitled to receive a copy of such annual audited financial statement within ninety (90) days following the end of the Association's fiscal year upon request therefor. The costs of any such audit and any accounting expenses shall be expenses of administration.

Section 2. Fiscal Year. The fiscal year of the Association shall be an annual period commencing on such date as may be initially determined by the directors. The commencement date of the fiscal year shall be subject to change by the directors for accounting reasons or other good cause.

Section 3. Bank. Funds of the Association shall be initially deposited in such bank or savings association as may be designated by the directors and shall be withdrawn only upon the check or order of such officers, employees or agents as are designated by resolution of the Board of Directors from time to time. The funds may be invested from time to time in accounts or deposit certificates of such bank or savings association as are insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation and may also be invested in interest-bearing obligations of the United States Government.

Section 4. Co-Owner Access to Books and Records; Procedures. Each Co-Owner has the right to review the books and records of the Association. The following procedures are to be followed regarding such requests.

(a) In order to review the books and records, including a request for balance sheet, statement of income and statement of sources and uses of funds (if actually prepared), the requesting Co-

Owner must submit a request in writing to the Board of Directors, in care of the management agent (or if there is not management agent to the Secretary of the Association).

(1) The request must state which books and/or records the Co-Owner seeks to review.

(2) The request must state whether the Co-Owner will require copies of the records that are requested.

(3) The request must have the name, address and telephone number of the requesting party.

(b) Upon receipt of the request from a Co-Owner to review the records, the management agent (or Secretary of the Association if there is no management agent) will advise the Board of Directors of the Association of the request. The management agent (or Secretary if there is no management agent) will then inform the Co-Owner of a convenient time, place and date where the requested records may be reviewed. The Co-Owner shall be advised of the time, place and date within five (5) business working days of the receipt of the Co-Owners' initial request. The Co-Owner shall be advised at that time of the following:

(1) The Co-Owner will be responsible for payment of the actual costs of all reproductions or copies of the requested documents. The Co-Owner shall be informed of the per-page copying cost before copies are made.

(2) The Co-Owner shall be responsible for payment for time spent by management agent personnel at the rate set by the management contract or otherwise reasonably established by the Developer or Association, Developer office personnel, and/or Association employees, in applicable.

(c) Each Co-Owner may make only one (1) such request per calendar quarter. (d) No right of inspection exists if the Board of Directors determines in its reasonable discretion that allowing the inspection would impair the privacy or free association rights of members or the lawful purpose of the Association.

(d) These procedures shall also apply to requests for copies of books and records made by mortgagees of Units.

**ARTICLE XV
INDEMNIFICATION OF OFFICERS AND DIRECTORS;
OFFICERS' AND DIRECTORS' INSURANCE**

Section 1. Indemnification of Officers and Directors. No volunteer director or officer, as that term is defined in Act 162, Public Acts of 1982, as amended ("Act"), shall be personally liable to the Association or its members for monetary damages for breach of fiduciary duty as a director or officer, provided that the foregoing shall not eliminate the liability of a director or officer for any of the following: (i) breach of the director's or officer's duty of loyalty to the Association or its members; (ii) acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law; (iii) a violation of Section 551(1) of the Act; (iv) a transaction from which the director or officer derived an improper personal benefit; or (v) an act or omission that is grossly negligent. If the act hereafter is amended to authorize the further elimination or limitation of the liability of directors or officers, then the liability of a director or officer of the Association, in addition to the limitation on personal liability contained herein, shall be limited to the fullest extent permitted by the amended Act. No amendment or repeal of this Article

XV shall apply to or have any effect on the liability of any director or officer of the Association for or with respect to any acts or omissions of such director or officer occurring prior to such amendment or repeal.

As provided under MCL 450.2209, and 1996 Public Act 397, the Association will assume liability for all acts or omissions of a volunteer director, volunteer officer or other volunteer which occurred after the date of the filing of the Articles of Incorporation of the Association if all of the following conditions are met: (i) the volunteer was acting or reasonably believed he or she was acting within the scope of his or her authority; (ii) the volunteer was acting in good faith, (iii) the volunteer's conduct did not amount to gross negligence or willful and wanton misconduct; (iv) the volunteer's conduct was not an intentional tort; and (v) the volunteer's conduct was not a tort arising out of the ownership, maintenance or use of a motor vehicle for which tort liability may be imposed as provided in Section 3135 of the Insurance Code of 1956, 1956 Public Act 218, being MCL 500.3135.

Every director and officer of the Association (including the first Board of Directors and any other directors and/or officers of the Association appointed by the Developer) shall be indemnified by the Association against all expenses and liabilities, including actual and reasonable attorney fees and amounts paid in settlement, incurred by or imposed upon him or her in connection with any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative, or investigative, and whether formal or informal, including actions by or in the right of the Association, to which he or she may be a party or in which he or she may become involved by reason of his or her being or having been a director or officer of the Association, whether or not he or she is a director or officer at the time such expenses are incurred, except as otherwise prohibited by law; provided, that in the event of any claim for reimbursement or indemnification hereunder based upon a settlement by the director or officer seeking such reimbursement or indemnification, the indemnification herein shall apply only if the Association (with the director seeking reimbursement abstaining) approves such settlement and reimbursement as being in the best interest of the Association. The foregoing right of indemnification shall be in addition to and not exclusive of all other rights to which such director or officer may be entitled. At least ten (10) days prior to payment of any indemnification that it has approved, the Association shall notify all Co-Owners thereof.

Section 2. Directors' and Officers' Insurance. The Association shall/may provide liability insurance for every director and every officer of the Association for the same purposes provided above in Section 1 and in such amounts as may reasonably insure against potential liability arising out of the performance of their respective duties. With the prior written consent of the Association, a director or an officer of the Association may waive any liability insurance for such director's or officer's personal benefit, or other applicable statutory indemnification. No director or officer shall collect for the same expense or liability under Section 1 above and under this Section 2; however, to the extent that the liability insurance provided herein to a director or officer was not waived by such director or officer and is inadequate to pay any expenses or liabilities otherwise properly indemnifiable under the terms hereof, a director or officer shall be reimbursed or indemnified only for such excess amounts under Section 1 hereof or other applicable statutory indemnification.

ARTICLE XVI AMENDMENTS

Section 1. Proposal. Amendments to these Bylaws may be proposed by the Board of Directors of the Association acting upon the vote of the majority of the directors or may be proposed by one-third (1/3) or more of the Co-Owners by instrument in writing signed by them.

Section 2. Meeting. Upon any such amendment being proposed, a meeting for consideration of the same shall be duly called in accordance with the provisions of these Bylaws.

Section 3. Voting. These Bylaws may be amended by the Co-Owners at any regular annual meeting or a special meeting called for such purpose by an affirmative vote of not less than sixty-six and two-thirds (66 2/3%) percent of all Co-Owners. As long as Developer owns at least one unit, Developer must approve any amendment also. No consent of mortgagees shall be required to amend these Bylaws unless such amendment would materially alter or change the rights of such mortgagees, in which event the approval of sixty-seven (67%) percent of the mortgagees shall be required, with each mortgagee to have one (1) vote for each first mortgage held.

Section 4. By Developer. Prior to the end of the Development and Sales Period, these Bylaws may be amended by the Developer without approval from any other person so long as any such amendment does not materially alter or change the right of a Co-Owner or mortgagee, or affect any approval of municipality.

Section 5. When Effective. Any amendment to these Bylaws shall become effective upon recording of such amendment in the office of the Livingston County Register of Deeds.

Section 6. Binding. A copy of each amendment to these Bylaws shall be furnished to every member of the Association after adoption; provided, however, that any amendment to these Bylaws that is adopted in accordance with this Article shall be binding upon all persons who have an interest in the Project, irrespective of whether such persons actually receive a copy of the amendment.

Section 7. Amendments: Township Approval. Amendments to these Bylaws are subject to the prior review and approval of the Charter Township of Genoa.

ARTICLE XVII COMPLIANCE

The Association and all present or future Co-Owners, tenants, future tenants, or any other persons acquiring an interest in or using the Project in any manner are subject to and shall comply with the Act, as amended, and the mere acquisition, occupancy or rental of any Unit or an interest therein or the utilization of or entry upon the Condominium Premises shall signify that the Condominium Documents are accepted and ratified. In the event the Condominium Documents conflict with the provisions of the Act, the Act shall govern.

ARTICLE XVIII DEFINITIONS

All terms used herein shall have the same meaning as set forth in the Master Deed to which these Bylaws are attached as an Exhibit or as set forth in the Act.

ARTICLE XIX REMEDIES FOR DEFAULT

Any default by a Co-Owner shall entitle the Association or another Co-Owner or Co-Owners to the following relief:

Section 1. Legal Action. Failure to comply with any of the terms or provisions of the Condominium Documents shall be grounds for relief, which may include, without intending to limit the same, an action to recover sums due for damages, injunctive relief, foreclosure of a lien (if default in payment of assessment(s)) or any combination thereof, and such relief may be sought by the Association or, if appropriate, by an aggrieved Co-Owner or Co-Owners.

Section 2. Recovery of Costs. In any proceeding arising because of an alleged default by any Co-Owner, the Association, if successful, shall be entitled to recover the costs of the proceeding and such reasonable attorney fees (not limited to statutory fees) as may be determined by the court, but in no event shall any Co-Owner be entitled to recover such attorney fees.

Section 3. Removal and Abatement. The violation of any of the provisions of the Condominium Documents shall also give the Association or its duly authorized agents, the right, in addition to the rights set forth above, to enter upon the Common Elements or onto any Unit, where reasonably necessary, and summarily remove and abate, at the expense of the Co-Owner in violation, any structure, thing or condition existing or maintained contrary to the provisions of the Condominium Documents. The Association shall have no liability to any Co-Owner arising out of the exercise of its removal and abatement power authorized herein.

Section 4. Assessment of Fines. The violation of any of the provisions of the Condominium Documents by any Co-Owner shall be grounds for assessment by the Association, acting through its duly constituted Board of Directors, of monetary fines for such violations in accordance with Article XX of these Bylaws. No fine may be assessed unless rules and regulations establishing such fine have first been duly adopted by the Board of Directors of the Association and notice thereof given to all Co-Owners in the same manner as prescribed in Article IX, Section 5 of these Bylaws.

Section 5. Non-waiver of Right. The failure of the Association or of any Co-Owner to enforce any right, provision, covenant or condition that may be granted by the Condominium Documents shall not constitute a waiver of the right of the Association or of any such Co-Owner to enforce such right, provision, covenant or condition in the future.

Section 6. Cumulative Rights, Remedies and Privileges. All rights, remedies and privileges granted to the Association or any Co-Owner or Co-Owners pursuant to any terms, provisions, covenants or conditions of the aforesaid Condominium Documents shall be deemed to be cumulative and the exercise of any one (1) or more shall not be deemed to constitute an election of remedies, nor shall it preclude the party thus exercising the same from exercising such other and additional rights, remedies or privileges as may be available to such party at law or in equity.

Section 7. Enforcement of Provisions of Condominium Documents. A Co-Owner may maintain an action against the Association and its officers and directors to compel such persons to enforce the terms and provisions of the Condominium Documents. A Co-Owner may maintain an action against any other Co-Owner for injunctive relief or for damages or any combination thereof for non-compliance with the terms and provisions of the Condominium Documents or the Act.

ARTICLE XX ASSESSMENT OF FINES

Section 1. General. The violation by any Co-Owner, occupant or guest of any of the provisions of the Condominium Documents, including any duly adopted rules and regulations, shall be grounds for assessment by the Association, acting through its duly constituted Board of Directors, of monetary fines against the involved Co-Owner. Such Co-Owner shall be deemed responsible for such violations whether they occur as a result of his or her personal actions or the actions of his or her family, guests, tenants or any other person admitted through such Co-Owner to the Condominium Premises.

Section 2. Procedures. Upon any such violation being alleged by the Board of Directors, the following procedures will be followed:

(a) Notice. Notice of the violation, including the Condominium Document provision violated, together with a description of the factual nature of the alleged offense set forth with such reasonable specificity as will place the Co-Owner on notice as to the violation, shall be sent by first class mail, postage prepaid, or personally delivered to the representative of said Co-Owner at the address as shown in the notice required to be filed with the Association pursuant to Article VIII, Section 3 of these Bylaws.

(b) Opportunity to Defend. The offending Co-Owner shall have an opportunity to appear before the Board of Directors and offer evidence in defense of the alleged violation. The appearance before the Board of Directors shall be at its next scheduled meeting, but in no event shall the Co-Owner be required to appear less than ten (10) days from the date of the notice.

(c) Default. Failure to respond to the notice of violation constitutes a default.

(d) Hearing and Decision. Upon appearance by the Co-Owner before the Board of Directors and presentation of evidence of defense, or, in the event of the Co-Owner's default, the Board shall, by majority vote of a quorum of the Board, decide whether a violation has occurred. The Board's decision is final.

Section 3. Amounts. Upon violation of any of the provisions of the Condominium Documents, and after default of the offending Co-Owner or upon the decision of the Board as recited above, the following fines shall be levied:

(a) First Violation. No fine shall be levied.

(b) Second Violation. Fifty (\$50.00) Dollar fine.

(c) Third Violation. One Hundred (\$100.00) Dollar fine.

(d) Fourth Violation and Subsequent Violations. One Hundred Fifty (\$150.00) Dollar fine.

Section 4. Collection. The fines levied pursuant to Section 3 above shall be assessed against the Co-Owner and shall be due and payable together with the regular Condominium assessment on the first of the next following month. Failure to pay the fine will subject the Co-Owner to all liabilities set forth in the Condominium Documents, including, without limitation, those described in Article II and Article XIX of these Bylaws.

Section 5. Rights Under Condominium Act As to Tenants; Land Contract Vendees. Any violations of the Condominium Documents by tenants or land contract vendees, including the Rules and Regulations, shall entitle the Association acting through its Board of Directors to evict any tenant, occupant or land contract vendee under summary proceedings statutes. By taking occupancy or possession of a Unit all land contract vendees, tenants and occupants are deemed to have presumptively agreed to this right of the Association, even if they have not been provide actual notice of this right by the landlord or vendor of a Unit.

ARTICLE XXI RIGHTS RESERVED TO DEVELOPER

Any or all of the rights and powers granted or reserved to the Developer in the Condominium Documents or by law, including the right and power to approve or disapprove any act, use, or proposed

action or any other matter or thing, may be assigned by it to any other entity or to the Association. Any such assignment or transfer shall be made by appropriate instrument in writing in which the assignee or transferee shall join for the purpose of evidencing its acceptance of such powers and rights, and such assignee or transferee shall thereupon have the same rights and powers as herein given and reserved to the Developer. Any rights and powers reserved or granted to the Developer, or its successors and/or assigns, shall terminate, if not sooner assigned to the Association, at the conclusion of the Development and Sales Period as defined in Article III of the Master Deed. The immediately preceding sentence dealing with the termination of certain rights and powers granted or reserved to the Developer is intended to apply, insofar as the Developer is concerned, only to the Developer's rights to approve and control the administration of the Condominium and shall not, under any circumstances, be construed to apply to or cause the termination of any real property rights granted or reserved to the Developer, or its successors and/or assigns, in the Master Deed or elsewhere (including, but not limited to, access easements, utility easements and all other easements created and reserved in such documents that shall not be terminable in any manner hereunder and that shall be governed only in accordance with the terms of their creation or reservation and not hereby).

ARTICLE XXII SEVERABILITY/CONSTRUCTION

Section 1. Severability. In the event that any of the terms, provisions or covenants of these Bylaws or the Condominium Documents are held to be partially or wholly invalid or unenforceable for any reason whatsoever, such holding shall not affect, alter, modify or impair in any manner whatsoever any of the other terms, provisions or covenants of such documents or the remaining portions of any terms, provisions or covenants held to be partially invalid or unenforceable.

Section 2. Rules of Construction.

(a) In the event of a conflict between the Act, the Master Deed, the Articles of Incorporation, Bylaws and Rules and Regulations, the Act shall control.

(b) In the event of a conflict between the Articles of Incorporation, the Master Deed, the Bylaws, or Rules and Regulations, the Articles of Incorporation shall control.

(c) In the event of a conflict between the Master Deed, the Bylaws or Rules and Regulations, the Master Deed shall control.

(d) In the event of a conflict between the Bylaws and the Rules and Regulations, the Bylaws shall control.

**This agreement should be between Summerfield Pointe Association
developer since the Summerfield Pointe Estates Association is not
established yet.**

AGREEMENT FOR USE AND MAINTENANCE OF PRIVATE ROADS

THIS AGREEMENT FOR USE AND MAINTENANCE OF PRIVATE ROADS (“Agreement”) is made this ____ day of _____, 2023 (“Effective Date”), by and between the CHARTER TOWNSHIP OF GENOA, a Michigan municipal corporation (“Township”), whose address is 2911 Dorr Road, Brighton, Michigan 48116 and HEALY HOMES AT SUMMERFIELD, LLC, a Michigan limited liability company (“Developer), whose address is 3696 Sleeth Road, Commerce Township, Michigan 48382.

RECITALS

A. Developer is the owner of real property located in the Township of Genoa, Livingston County, Michigan, described on attached Exhibit A (the “Property”).

B. Developer intends to develop the Property as two residential condominiums to be known as Summerfield Pointe Attached Condominium and Summerfield Pointe Estates (together, the “Development”), and to establish separate condominium associations (each an “Association” and together, the “Associations”) to manage and administer the affairs of each respective condominium in the Development.

C. The Development will include interior private roadways described on attached Exhibit B (“Private Roads”).

D. Developer also wishes to provide for maintenance of the Private Roads by the owners of the units in the Development through assessments by the Association.

NOW THEREFORE, in consideration of less than \$100 and the mutual promises contained herein, the parties hereto agree as follows:

1. Access. This Agreement is subject to any easements and restrictions of record and the terms of the two master deeds to be recorded for the Development to be recorded by the Developer. Each master deed for the respective condominiums (each a “Master Deed”) shall contain the following language:

“There shall exist for the benefit of the Township or any emergency service agency, an easement over all the Roads in the Development, as depicted on the Condominium Subdivision Plan attached as Exhibit B to this Mater Deed, for use by the Township and emergency vehicles for purposes of ingress and egress to provide fire and police protection, ambulance and rescue services and other lawful governmental or private emergency services to the Development and Co-Owners. The Association shall be responsible

for maintenance of road signs in accordance with the Michigan Manual of Uniform Traffic Control Devices, and the Township or County of Livingston shall have the authority to enforce all applicable traffic codes and regulations on the Roads of the Condominium.”

2. Maintenance. The Associations established to operate and maintain Summerfield Pointe Attached Condominiums and Summerfield Pointe Estates shall maintain, repair, replace and insure the Private Roads, with the costs of such maintenance, repair, replacement and insurance to be assessed to all future owners of units in Summerfield Pointe. The emergency vehicle access gate on Aster Boulevard near the West property line to restrict vehicular traffic between Summerfield Pointe Estates and the neighboring Hampton Ridge will be maintained by the Association for Summerfield Pointe Estates, at its sole cost and expense.

3. Master Deed Language Regarding Maintenance. The Master Deeds shall provide that the Roads in the Development (including, but not limited to, any gates, bollards or other similar temporary structures located thereon), are private Roads to be maintained, repaired, replaced and insured by the Association with the costs of the foregoing to be assessed to the Unit Owners as described in Article 2 of the Bylaws. Further, the Master Deeds shall provide that the owners of Units in the Development shall be responsible for and shall be assessed a share of the costs of insurance, maintenance, repair and replacement of the Roads through the Association as set forth in the Bylaws. The Associations shall establish a plan for regular maintenance, repair and replacement of the private roads in a safe and useable condition and shall assess all Unit Owners for the cost thereof in accordance with the Bylaws.

4. Relocation. Developer will have the right, from time to time, to relocate, at Developer’s sole cost and expense, the Private Roads (or any portion(s) thereof), upon Developer’s receipt of the prior written consent of the Township. In the event of any such relocation of the Private Roads, Developer will, simultaneously with the relocation of the Private Roads, grant or cause to be granted to the Township a new easement for the relocated Private Roads and Township will release the Easement granted under this Agreement with respect to the portion of the Private Roads, which is relocated.

5. Other Uses. Nothing contained in this Agreement shall be construed as restricting or prohibiting Developer from (i) granting any additional rights, privileges or easements over the Property or the Private Roads to any other person or entity, including without limitation for purposes of public and private utilities, or (ii) using or allowing the use of the ground below and/or the air space above the Private Roads for any purpose, including without limitation for purposes of public and private utilities. All such easements or uses shall be consistent with the terms of the Summerfield Pointe Planned Unit Development Agreement, or any amendment thereof.

6. Successors and Assigns. This Agreement shall constitute restrictions and covenants running with the Property. This Agreement shall be binding upon and benefit the parties and their respective transferees, successors and assigns.

7. Recording. This Agreement shall be recorded at the Livingston County Register of Deeds.

TOWNSHIP

CHARTER TOWNSHIP OF GENOA, a Michigan
municipal corporation

By: _____
Supervisor

By: _____
Clerk

ACKNOWLEDGEMENT

STATE OF MICHIGAN)
) ss
COUNTY OF LIVINGSTON)

On this _____ day of _____, 2023, before me, a notary public in and for Livingston County personally appeared _____ to me known to be the Supervisor and Clerk, of the Charter Township of Genoa, a Michigan municipal corporation, respectively, who were duly authorized by the Genoa Township Board to sign this Agreement on behalf of the Charter Township of Genoa.

_____, Notary Public
_____ County, Michigan
My Commission expires: _____
Acting in Livingston County

[signatures continue on following page]

HEALY HOMES AT SUMMERFIELD, LLC, a Michigan limited liability company

By: _____
Jack Healy
Its: Managing Member

STATE OF MICHIGAN)
) ss.
COUNTY OF _____)

Acknowledged before me on _____, 2023, by Jack Healy, Managing Member of Healy Homes at Summerfield, LLC, a Michigan limited liability company, on behalf of the company.

Notary Public _____ County, Michigan
Acting in _____ County, Michigan
My Commission Expires: _____

**DRAFTED BY AND WHEN
RECORDED RETURN TO:**
Alexandra Dieck
Bodman PLC
201 S. Division Street, Suite 400
Ann Arbor, MI 48104

EXHIBIT A TO AGREEMENT FOR USE AND MAINTENANCE OF PRIVATE ROADS

PROPERTY

(see attached)

LAND SITUATED IN THE TOWNSHIP OF GENOA, COUNTY OF LIVINGSTON STATE OF MICHIGAN, DESCRIBED AS FOLLOWS:

Tax Parcel:

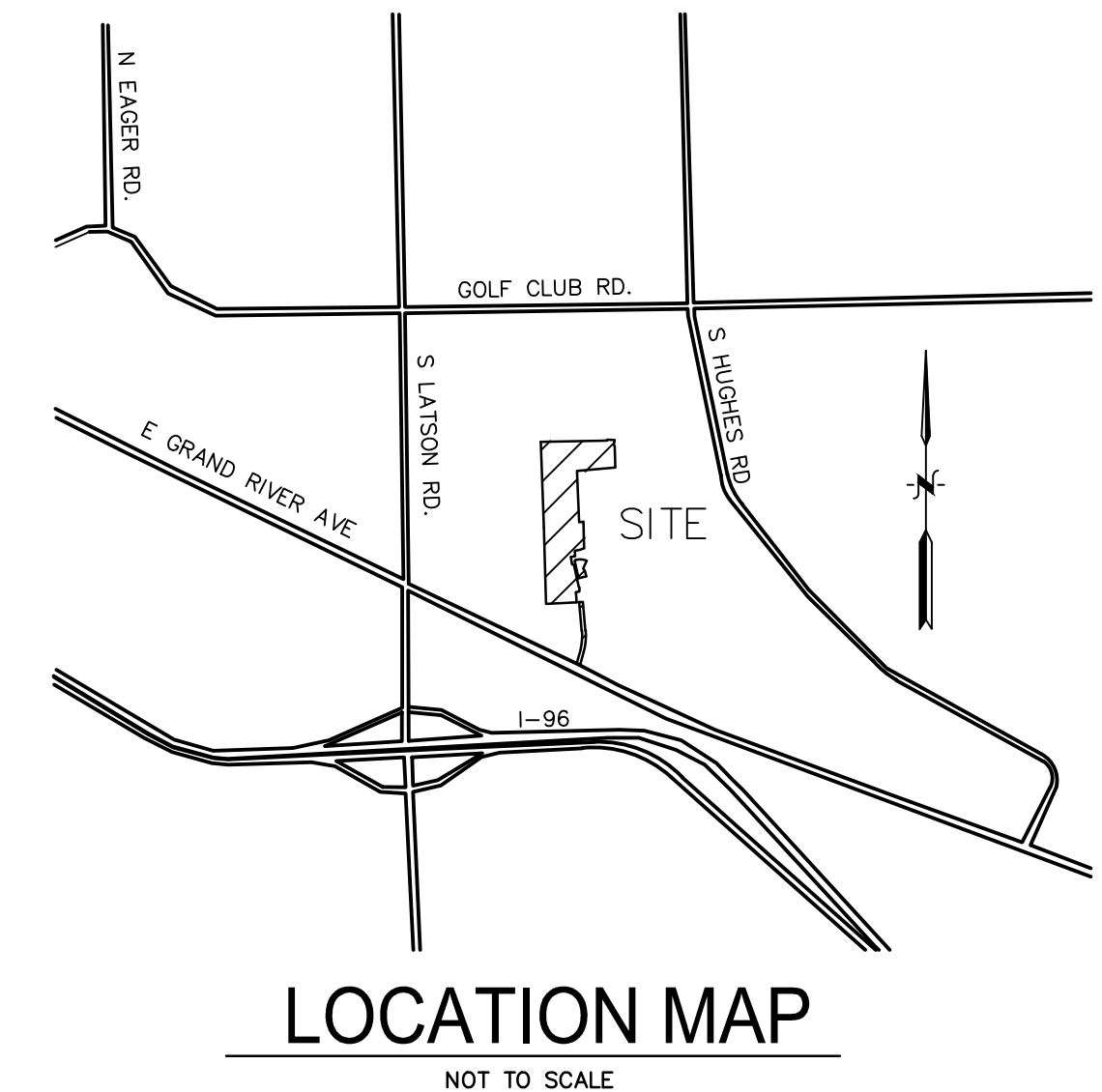
EXHIBIT B TO AGREEMENT FOR USE AND MAINTENANCE OF PRIVATE ROADS

INTERIORS ROADS

(see attached)

AMENDED P.U.D. PLAN FOR SUMMERFIELD POINTE PLANNED UNIT DEVELOPMENT

A PART OF THE SOUTHEAST 1/4 OF SECTION 4
T2N, R5E, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN



SUMMERFIELD POINTE P.U.D.
OVERALL PARCEL: 163.734 Acres
(Parcels 4711-04-400-013, 014, 015, 016 and "Summerfield Pointe" Replat #2 Combined)
Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:
BEGINNING at the South 1/4 Corner of said Section 4;
thence along the North-South 1/4 line of Section 4 to following two courses:
1) N01°35'17"W 1366.11 feet and
2) N02°11'05"W 1525.13 feet
(recorded as N01°50'51"E 2890.65 feet) to the center of Section 4;
thence along the East-West 1/4 line of Section 4, N88°53'35"E 1177.52 feet (recorded as S87°40'06"E 1162.17 feet);
thence N01°06'25"W (recorded as N02°19'54"E) 16.05 feet; thence S88°08'25"E (recorded as S84°42'06"E) 140.66 feet;
thence S10°02'44"W (recorded as S13°29'03"W) 81.90 feet; thence S22°34'43"E 40.64 feet (recorded as S19°08'24"E 39.61 feet);
thence S01°33'04"E 373.67 feet (recorded as S01°53'15"W 374.11 feet); thence S84°41'09"W (recorded as S88°06'46"W) 683.63 feet;
thence S01°59'18"E (recorded as S01°26'28"W) 400.04 feet; thence S02°08'43"E 510.56 feet (recorded as S01°17'41"W 510.39 feet);
thence N84°03'00"E (recorded as N87°29'24"E) 79.92 feet; thence along a line 10.00 feet West of and parallel to the Westerly line of "Sunrise Park", a subdivision recorded in Liber 2 of Plats, Page 23, Livingston County Records, S01°00'54"E 244.55 feet (recorded as S02°21'39"W 243.95 feet); thence S01°39'07"E 226.89 feet (recorded as S01°45'17"W 227.43 feet); thence N89°34'14"E (recorded as S87°01'22"E) 186.47 feet; thence along the West line of said "Sunrise Park" the following three courses:
1) S51°44'32"E (recorded as S48°20'09"E) 240.00 feet;
2) S41°02'02"E 145.55 feet (recorded as S37°31'38"E 145.14 feet) and
3) S01°47'25"E 385.18 feet (recorded as S01°42'54"W 386.00 feet);
thence S88°43'10"W 10.00 feet (recorded as N88°17'06"W 10.00 feet); thence along a line 10 feet West of and parallel to the West line of said "Sunrise Park" the following two courses:
1) S01°43'30"E 241.29 feet (recorded as S14°25'47"W 241.14 feet) and
2) S14°28'55"E 48.77 feet (recorded as S11°13'33"E 48.86 feet);
thence along the South line of said Section 4, as previously surveyed, S88°50'35"W (recorded as N89°43'06"W) 473.99 feet; thence along a line coincident with Lawson Drive the following three courses:
1) N05°38'45"W (recorded as N02°12'21"W) 150.00 feet;
2) S86°50'35"W (recorded as N89°43'06"W) 150.00 feet and
3) S05°38'45"E (recorded as S02°12'21"E) 150.00 feet;
thence along the South line of said Section 4, as previously surveyed, S86°50'35"W 546.06 feet (recorded as N89°43'06"W 546.16 feet) to the Point of Beginning, Containing 60.73 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

NATURE PRESERVE
PARCEL 4711-04-400-013 22.225 Acres
(Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records)
Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:
Commencing at the South 1/4 Corner of said Section 4; thence along the North-South 1/4 line of Section 4 to following two courses:
1) N01°35'17"W (recorded as N01°50'51"E) 1366.11 feet and
2) N02°11'05"W (recorded as N01°50'51"E) 569.39 feet to the **PLACE OF BEGINNING** and
3) N02°11'05"W (recorded as N01°50'51"E) 855.74 feet to the center of Section 4;
thence along the East-West 1/4 line of Section 4, N88°53'35"E 1177.52 feet (recorded as S87°40'06"E 1162.17 feet); thence N01°06'25"W (recorded as N02°19'54"E) 16.05 feet; thence S88°08'25"E (recorded as S84°42'06"E) 140.66 feet; thence S10°02'44"W (recorded as S13°29'03"W) 81.90 feet; thence S22°34'43"E 40.64 feet (recorded as S19°08'24"E 39.61 feet); thence S01°33'04"E 373.67 feet; thence S01°53'15"W 374.11 feet; thence S84°41'09"W (recorded as S88°06'46"W) 683.63 feet; thence S01°59'18"E (recorded as S01°26'28"W) 400.04 feet; thence S02°08'43"E (recorded as S01°17'41"W) 132.62 feet; thence along the East line of a Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records, the following three courses:
1) S05°38'45"W (recorded as N02°12'21"W) 150.00 feet;
2) N54°02'14"W (recorded as N03°36'28"E) 244.39 feet and
3) S82°05'20"W 291.13 feet (recorded as S85°31'06"W 285.32 feet) to the Place of Beginning.
Containing 22.22 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

SITE PLAN DESCRIPTIONS
PARCEL 4711-04-400-014 26.255 Acres
(Part of Possible Expansion/Future Development Area "A")
(Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records)
Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:
BEGINNING at the South 1/4 Corner of said Section 4;
thence along the North-South 1/4 line of Section 4 to following two courses:
1) N01°35'17"W 1366.11 feet and
2) N02°11'05"W 569.39 feet
(recorded as N01°50'51"E 1936.02 feet);
thence along the East line of a Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records, the following three courses:
1) N82°05'20"E 291.13 feet (recorded as N85°31'06"E 285.32 feet);
2) S54°02'14"E (recorded as S50°36'28"E) 244.39 feet and
3) N87°51'55"E (recorded as S88°42'19"E) 144.66 feet;
thence S02°08'43"E (recorded as S01°17'41"W) 377.94 feet;
thence N84°03'00"E (recorded as N87°29'24"E) 79.92 feet;
thence along a line 10.00 feet West of and parallel to the Westerly line of "Sunrise Park", a subdivision recorded in Liber 2 of Plats, Page 23, Livingston County Records, S01°00'54"E 244.55 feet (recorded as S02°21'39"W 243.95 feet); thence S01°39'07"E 226.89 feet (recorded as S01°45'17"W 227.42 feet); thence S07°21'52"W 79.51 feet (recorded as S70°51'19"W 80.28 feet); thence S79°50'37"W (recorded as S83°57'15"W) 95.00 feet; thence S03°24'16"E (recorded as S00°00'00"W) 97.26 feet; thence S80°36'56"W (recorded as S84°01'14"W) 77.58 feet; thence S09°28'23"E (recorded as S06°04'05"E) 130.52 feet; thence S78°24'48"E 34.65 feet (recorded as S78°00'30"E 34.93 feet); thence S12°42'20"E 416.34 feet (recorded as S09°16'02"E 416.23 feet); thence Southeastly 59.62 feet along the arc of a 200.00 foot radius curve to the right, through a central angle of 17°04'52" and having a chord bearing S04°10'00"W (recorded as S04°33'36"E) 59.40 feet; thence S04°22'26"W (recorded as S07°48'50"W) 13.56 feet; thence S80°11'15"W (recorded as S83°37'39"W) 60.77 feet; thence S02°26'24"E (recorded as S00°00'00"W) 34.61 feet; thence along the West line of Lawson Drive, S05°38'45"E (recorded as S02°12'21"E) 150.00 feet; thence along the South line of Section 4, as previously surveyed, S86°50'35"W 546.06 feet (recorded as N89°43'06"W 546.16 feet) to the Point of Beginning.
Containing 26.25 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

PARCEL No. 4711-04-400-015 1.132 Acres
(Possible Expansion/Future Development Area "B")
Part of the Southeast 1/4 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:
Commencing at the South 1/4 Corner of said Section 4; thence along the South line of Section 4, as previously surveyed, N86°50'35"E 546.06 feet (recorded as S89°43'06"E 546.16 feet); thence along the West line of Lawson Drive, N05°38'45"W (recorded as N02°12'21"W) 150.00 feet; thence N03°28'24"W (recorded as N00°00'00"E) 34.61 feet; thence N87°11'15"E (recorded as N83°37'39"E) 60.77 feet;
thence N04°22'26"E (recorded as N07°48'50"E) 13.56 feet; thence Northwestly 59.62 feet along the arc of a 200.00 foot radius curve to the left, through a central angle of 17°04'52" and having a chord which bears N04°10'00"W (recorded as N00°43'36"W) 59.40 feet; thence N12°42'26"W (recorded as N09°16'02"W) 159.13 feet; thence N77°18'10"E (recorded as N80°43'58"E) 27.00 feet to the **POINT OF BEGINNING**; thence N12°42'26"W (recorded as N09°16'02"W) 306.30 feet; thence Northwestly 30.26 feet along the arc of a 200.00 foot radius curve to the right, through a central angle of 86°41'20" (recorded as 86°41'37") and having a chord bearing N30°27'50"E (recorded as N34°04'44"E) 27.46 feet; thence Southeastly 201.82 feet along the arc of a 289.00 foot radius curve to the right, through a central angle of 40°00'52" (recorded as 40°00'44") and having a chord bearing S80°10'33"E (recorded as S82°34'07"E) 197.75 feet; thence S05°59'50"W (recorded as S27°59'14"W) 147.43 feet; thence S88°38'45"E (recorded as S33°10'21"E) 58.47 feet; thence S12°42'26"E (recorded as 09°16'02"E) 97.80 feet; thence S77°17'34"W (recorded as S80°43'58"W) 143.83 feet to the Point of Beginning.
Containing 1.13 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

PARCEL No. 4711-04-400-016 1.142 Acres
(Possible Expansion/Future Development Area "C")
Part of the Southeast 1/4 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; described as:
Commencing at the South 1/4 Corner of Section 4; thence along the South line of Section 4, N86°50'35"E (recorded as S89°43'06"E) 546.06 feet to the **POINT OF BEGINNING**;
thence N48°02'05"W (recorded as N44°35'46"W) 135.18 feet; thence N41°10'45"E (recorded as N44°37'04"E) 9.00 feet; thence N50°03'17"W (recorded as N46°36'58"W) 27.00 feet; thence Northeastly 123.38 feet along the arc of a 182.00 foot radius curve to the left, through a central angle of 38°50'28" (recorded as 38°50'33") and having a chord bearing N23°31'27"E (recorded as N23°57'49"E) 121.03 feet;
thence S84°58'30"E 227.08 feet (recorded as S81°32'11"E 227.01 feet); thence along a line 10.00 feet West of and parallel to the Westerly line of said "Sunrise Park" the following two courses:
1) S01°43'30"E 151.43 feet (recorded as S01°42'54"W 151.38 feet) and
2) S14°28'55"E 48.77 feet (recorded as S11°13'33"E 48.86 feet);
thence along the South line of Section 4, S86°50'35"W 170.37 feet (recorded as N89°43'06"W 170.47 feet) to the Point of Beginning.
Containing 1.14 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

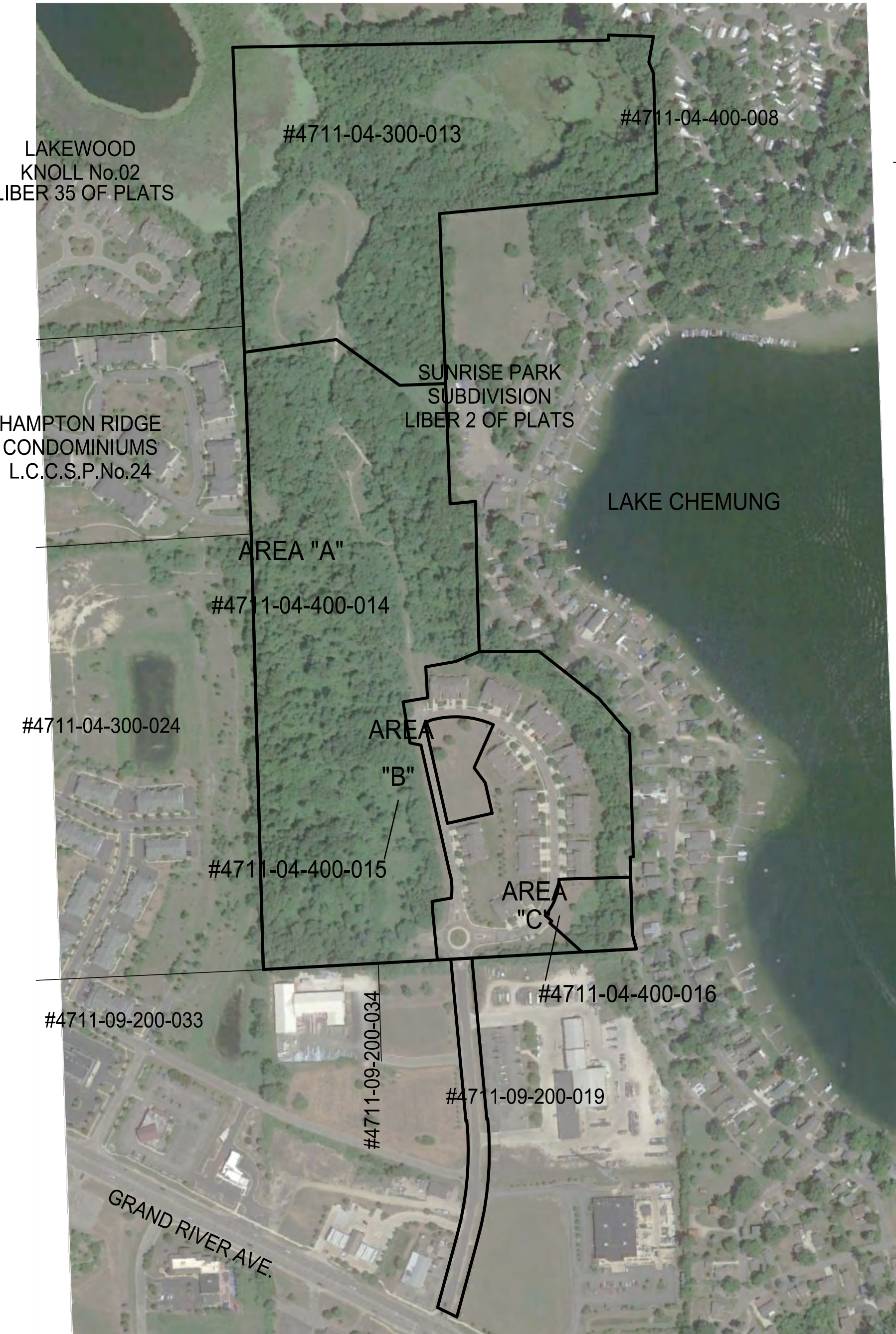
SUMMERFIELD POINTE P.U.D. UTILITIES QUANTITY

8" CL54 D.I. Watermain	3,331	LF.
6" CL54 D.I. Watermain	80	LF.
8" Gate Valve in Well (5' Dia.)	5	Each
Hydrant + Valve Assembly	8	Each
8"x8"x8" Tee	2	Each
8"x8"x6" Tee	8	Each
8" Tapping Sleeve & Valve in Well	1	Each
8" Valve In Well	4	Each
8"-11.25° Bend	16	Each
8"-22.25° Bend	7	Each
8"-45° Bend	2	Each
6" 90° Bend	6	Each
2" Copper Water Lead	4,668	LF.
Water Shutoff	102	Each

8" SDR_26 PVC Sanitary Sewer Main	3,987	LF.
6" SDR_26 PVC Sanitary Sewer Lead	3,120	LF.
Sanitary Cleanouts	102	Each
4" Dia. Concrete Manhole w/solid Manhole Cover	22	Each

Land Use Summary
must be included on the O&M Plan Sheet for all site plans

Characteristic	Proposed Conditions	
	Existing Conditions	Proposed Conditions
Total Development Area (ac)	38.58	38.58
Impervious Area (ac)	3.62	12.42
Total Pervious Area (ac)	34.96	26.16
Pervious Area Breakdown by Cover Type		
Meadow/Grass/natural areas (non-vegetated)	0.85	0
Predominant NRCS Soil Type (A, B, C, or D)	B	B
Improved areas (roof, grass, hardscape, new trees)	5.26	18.66
Predominant NRCS Soil Type (A, B, C, or D)	B	B
Wooded Area	28.00	7.50
Predominant NRCS Soil Type (A, B, C, or D)	B	B
CPRC Volume Calculated (cubic feet)		77,439
CPRC Volume Provided (cubic feet)		0
CPRC Volume Provided (cubic feet)		84,914



AERIAL PHOTOGRAPH
SCALE: 1" = 300ft.

AERIAL PHOTOGRAPHY BY:
Google maps
Aerial photographic underlay is an unrectified image and is orientated to the engineering line work within reasonable accuracy and precision, and may not accurately depict current site conditions.

PLAN DISTRIBUTION LIST

DATE OF APPLICATION	CONST. SET DATE	AGENCY	CONTACT NAME	DESCRIPTION	STATUS
	Sept. 26, 2022	Genoa Twp.	Kelly VanMarter	PUD / Site Plan Review	

PERMITTING AGENCY LIST

AGENCY	PERMIT
Genoa Township	P.U.D. Amendment, Site Plan, Land Use, Construction
M.H.O.G.	Water & Sanitary Sewer
Livingston County Drain Commission	Drain & Soil Erosion
Livingston County Building Department	Building
Livingston County Road Commission	Roads

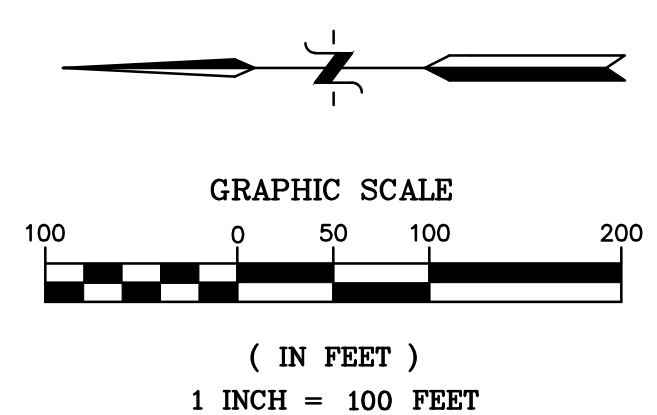
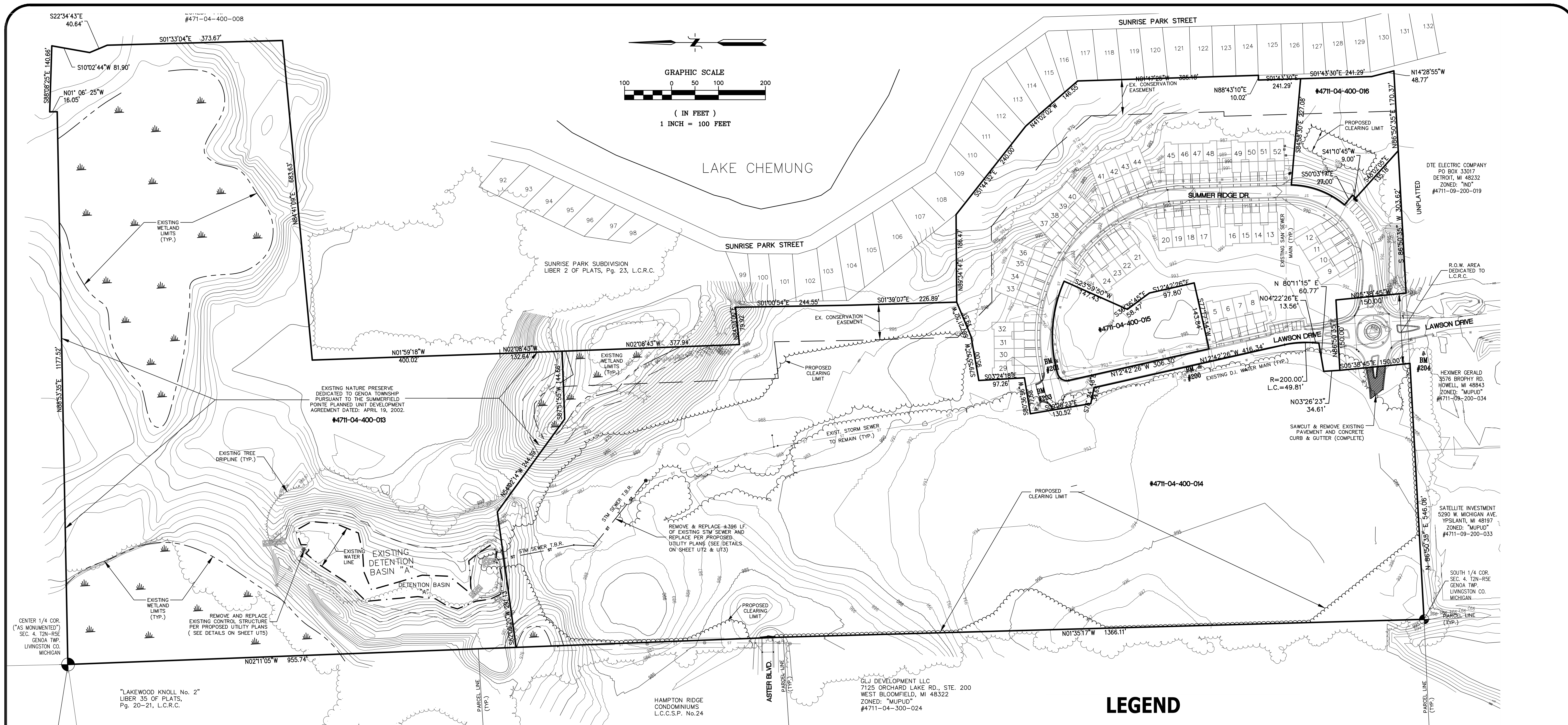
ENGINEER/SURVEYOR
DESINE INC.
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114
PHONE: (810) 227-9533

OWNER / DEVELOPER
HEALY HOMES AT SUMMERFIELD LLC
3696 SLEETH ROAD
COMMERCE TWO, MICHIGAN 48382

LANDSCAPE ARCHITECT
ALLEN DESIGN
557 CARPENTER
NORTHVILLE, MI 48167
PHONE: (248) 467-4668



REVISED	SCALE: 1"=300'
SEPT. 26, 2022	PROJECT No.: 214159
OCT. 25, 2022	DWG NAME: 4159-COV
JUNE 1, 2023	PRINT: JULY 10, 2023



DEMOLITION NOTES:

- The demolition specifications of the Local Municipality are a part of this work. Refer to the General Notes on the project plans for additional requirements.
- Contractor shall contact the 811 Underground Public Utility Locating System or other appropriate local underground utility locating Agency, a minimum of three (3) working days prior to performing demolition work. Existing utility information on the project plans may be from information disclosed to this firm by the Utility Companies, Local, County or State Agencies, and/or various other sources. No guarantee is given as to the completeness or accuracy thereof. Prior to construction, locations and depths of all existing utilities (in possible conflict with the proposed improvements) shall be verified in the field.
- Contractor shall contact the appropriate Agencies to coordinate disconnect of the electric, gas, phone, cable and other public utilities as necessary prior to performing demolition work.
- Contractor shall contact the appropriate Agencies to coordinate removal and/or relocation of any underground and/or overhead public utility lines as necessary prior to performing demolition work.
- Contractor shall recycle and/or dispose of all demolition debris in accordance with the appropriate Local, County, State and Federal regulations.
- All bituminous and concrete pavement to be removed shall be saw cut at the limits of removal to provide for a clean straight edge for future abutment.
- All existing irrigation lines to be removed shall be terminated at the limits of demolition or as necessary to allow for construction of the proposed site improvements. Ends of pipe shall be capped and the location marked for future connection.
- All existing water main and sanitary sewer to be removed shall be terminated at the limits of demolition or as indicated on the project plans. Temporary plugs shall be installed in the ends of pipe in accordance with the appropriate Agency and the locations of marked for future connection. Permanent plugs shall be installed in the ends of pipe in accordance with the appropriate Agency. The Contractor shall record the location of all permanent plugs and provide the location information to the appropriate Agency.
- All existing storm sewer to be removed shall be terminated at the limits of demolition or as indicated on the project plans. Temporary plugs shall be installed in the ends of pipe in accordance with the appropriate Agency and the locations of marked for future connection. Permanent bulkheads shall be installed in the ends of pipe and/or openings in terminating structures in accordance with the appropriate Agency. The Contractor shall record the location of all permanent bulkheads and provide the location information to the appropriate Agency.
- All existing light sources to be removed shall have their power cables removed up to the power source or properly terminated for future connection at the limits of demolition or as necessary to allow for construction of the proposed site improvements. Removal and termination of power cables shall be performed in accordance with local electric codes.
- All existing utility meters to be removed shall be properly removed to allow for reuse. Any existing utility meters that are not to be reused as a part of this project shall be returned to the appropriate Agency.
- All trenches and/or excavations resulting from the demolition of underground utilities, building foundations, etc., that are located within the 1 on 1 influence zone of proposed structures, paved areas and/or other areas subject to vehicular traffic shall be backfilled with MDOT Class III granular material (or better) to the proposed subgrade elevation. Backfill shall be placed using the controlled density method (12" maximum lifts, compacted to 95% maximum unit weight, modified proctor).

BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPLAT No. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.G.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATED ELEVATION.

BENCHMARK #204 (PRIMARY)
SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88) ELEVATION = 993.93 (PLATED) REF: FIELD BOOK 1483, PG. 34 POINT #204

BENCHMARK #200
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377A FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 995.39 (NAVD 88) ELEVATION = 995.89 (PLATED) REF: FIELD BOOK 1483, PG. 34 POINT #200

BENCHMARK #203
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 338 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 993.28 (NAVD 88) ELEVATION = 993.78 (PLATED) REF: FIELD BOOK 1483, PG. 34 POINT #203

LEGEND

- = PROPERTY LINE
- - - = EX. EDGE OF PAVEMENT
- - - = EX. EASEMENT LINE
- - - = APPROX. WETLAND LINE
- = UTILITY POLE W/GUY WIRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = EXISTING TREE DRIP LINE
- = EDGE OF GRAVEL
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
- = SANITARY SEWER PIPE
- = SANITARY SEWER MANHOLE W/IDENTIFIER
- = STORM WATER DRAINAGE PIPE
- = STORM WATER MANHOLE W/IDENTIFIER
- = CATCH BASIN W/IDENTIFIER
- = FLARED END SECTION
- = WATER MAIN
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = U/G GAS
- = GAS SHUT OFF
- = 1' CONTOUR
- = 5' CONTOUR

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

3 WORKING DAYS BEFORE YOU DIG
CALL 811 OR 1-800-482-7171 (TOLL FREE)
OR VISIT CALL811.COM

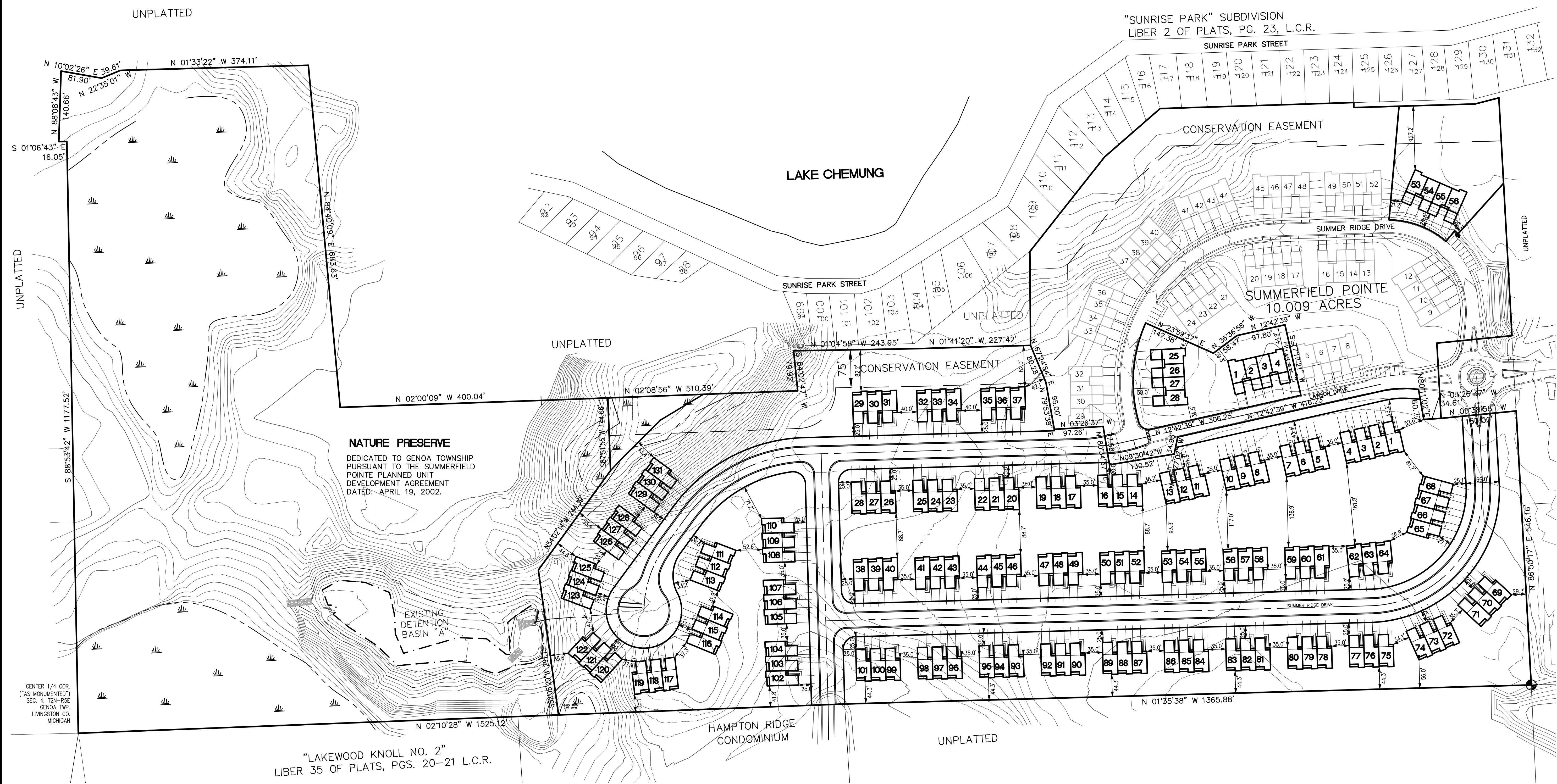
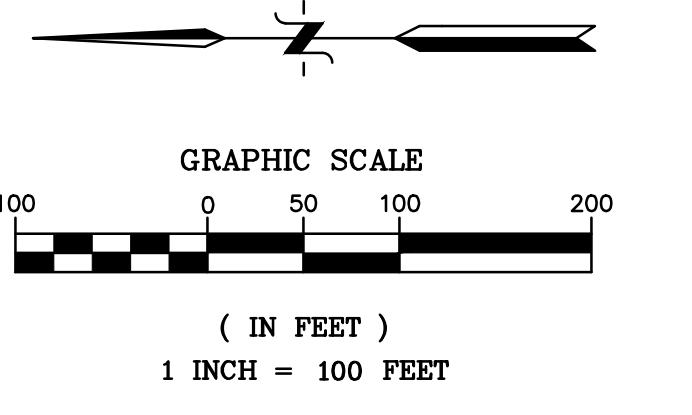
DESIGN INC
(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

DESIGN:WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

**SUMMERFIELD
POINTE PUD**

**EXISTING CONDITIONS
&
DEMOLITION PLAN**

CLIENT: HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD, COMMERCE TOWNSHIP, MICHIGAN 48382 248-684-1699	SCALE: 1in. = 100ft. PROJECT No.: 214159 DWG NAME: 4159 EX ISSUED: JULY 10, 2023	EX
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NATURE PRESERVE
 DEDICATED TO GENOA TOWNSHIP
 PURSUANT TO THE SUMMERFIELD
 POINTE PLANNED UNIT
 DEVELOPMENT AGREEMENT
 DATED: APRIL 19, 2002.

"LAKEWOOD KNOLL NO. 2"
 LIBER 35 OF PLATS, PGS. 20-21 L.C.R.

CENTER 1/4 COR.
 ("AS MONUMENTED")
 SEC. 4, T2N-R5E
 GENOA TWP.
 LIVINGSTON CO.
 MICHIGAN

DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT:						
CHECK: WMP						

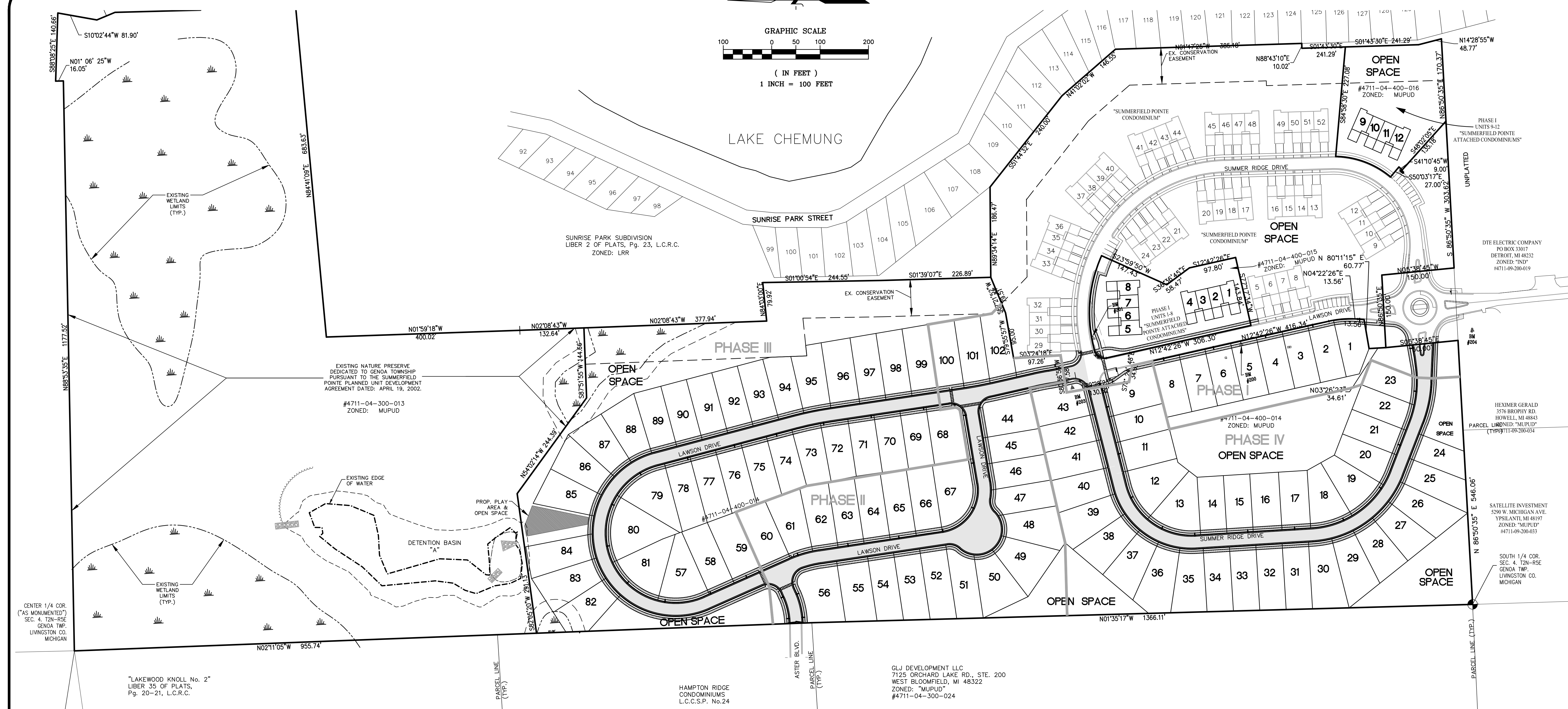
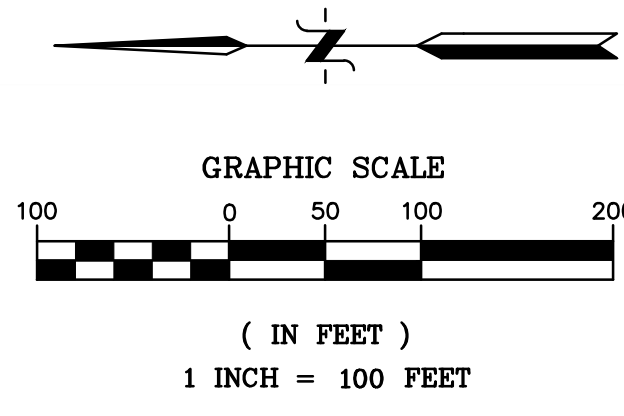
**SUMMERFIELD
 POINTE PUD**

**PARALLEL PLAN
 TOWNHOUSE
 SINGLE FAMILY RESIDENTIAL**

CLIENT: HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD. COMMERCE TOWNSHIP, MICHIGAN 48382 248-684-1699	SCALE: 1in. = 100ft. PROJECT No.: 214159 DWG NAME: 4159 B ISSUED: JULY 10, 2023
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PP

DESIGN INC
 (810) 227-9533
 CIVIL ENGINEERS
 LAND SURVEYORS
 2183 PLESS DRIVE
 BRIGHTON, MICHIGAN 48114



SITE DATA & ZONING TABLE

Project / Owner: Summerfield Pointe PUD / Healy Homes of Summerfield
 Location: Genoa Township, Michigan
 Address: Summerfield Pointe Residential Development
 Tax ID Numbers: #4711-04-400-014, 015 & 016
 Zoning: MU-PUD-Mixed Use Planned Unit Development (Article 10)

OVERALL SITE DATA	REQUIRED	COMMENTS
Setbacks:		
Front Building Setback = 30 ft		
Side Building Setback = 14 ft Max. / 5 ft Min.		See Plan Sheets SP1 & SP2 for Details
Rear Building Setback = 30 ft		
Road Right of Way = 30 ft Min.		
Buildings:		
Max. Building Height = 2 Story		
Max. Building Height = 35 ft		
Units with Basement = Yes		
Min. Building Footprint = 1,400 sf		Single Family Homes Attached Condominiums
6,606 sf		
Site Area & Coverage:		
Gross Site Area = 26.30 Ac.		#4711-04-400-014
		#4711-04-400-015
		#4711-04-400-016
		Combined Site Area
		28.64 Ac.
Nature Preserve Area = 22.21 Ac.		#4711-04-400-013 Dedicated to Genoa Twp.
Open Space Area = 7.30 Ac.		
% Open Space Area = 25.5%		25% Min
% Lot Coverage = 12.6%		35% Max. (Building Footprint)
Bituminous Pavement Area = 2.0 Ac.		Private
Concrete Sidewalk Area = 0.97 Ac.		Private
% Impervious Surface = 10.4%		50% Max.

BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPLAT No. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.G.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #200
 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377± FEET NORTH OF SILVER LEAF DRIVE.
 ELEVATION = 995.39 (NAVD 88)
 ELEVATION = 995.89 (PLATTED)
 REF: FIELD BOOK 14B3, PG. 34
 POINT #200

BENCHMARK #204 (PRIMARY)
 SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE."
 ELEVATION = 993.43 (NAVD 88)
 ELEVATION = 993.93 (PLATTED)
 REF: FIELD BOOK 14B3, PG. 34

BENCHMARK #203
 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 33± FEET NORTH OF SILVER LEAF DRIVE.
 ELEVATION = 993.88 (NAVD 88)
 ELEVATION = 994.38 (PLATTED)
 REF: POINT #203

- LEGEND**
- = PROPERTY LINE
 - = EX. EDGE OF PAVEMENT
 - - - = EX. EASEMENT LINE
 - · - · - = APPROX. WETLAND LINE
 - (with symbol) = UTILITY POLE W/GUY WIRE
 - (with symbol) = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - (with symbol) = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - (with symbol) = EXISTING TREE DRIP LINE
 - (with symbol) = EDGE OF GRAVEL
 - (with symbol) = CONCRETE CURB (UNLESS OTHERWISE STATED)
 - (with symbol) = PROPOSED CURB AND GUTTER
 - (with symbol) = PROPOSED CONCRETE WALK
 - (with symbol) = PROPOSED BITUMINOUS PAVEMENT

SUMMERFIELD POINTE ESTATES
 PHASE I UNITS 1-8
 PHASE II UNITS 44-56, 60-67, 100-102
 PHASE III UNITS 57-59, 68-99
 PHASE IV UNITS 9-43

3 WORKING DAYS BEFORE YOU DIG
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 OR VISIT CALL811.COM

(810) 227-9533
 CIVIL ENGINEERS
 LAND SURVEYORS
 2183 PLESS DRIVE
 BRIGHTON, MICHIGAN 48114

DESIGN/JHG	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	10-25-22	REVISED PER REVIEW COMMENTS			
CHECK: JMB	2	06-01-23	REVISED PER GENOA TOWNSHIP PLANNING COMMISSION RECOMMENDATION			

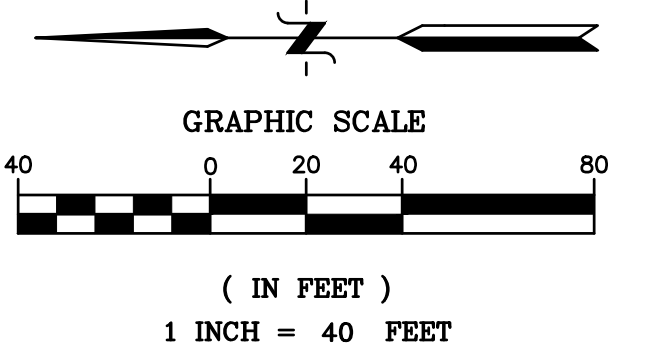
SUMMERFIELD POINTE PUD

REVISED SITE DEVELOPMENT PLAN

CLIENT: HEALY HOMES AT SUMMERFIELD LLC
 3696 SLEETH RD.
 COMMERCE TOWNSHIP, MICHIGAN 48382
 248-684-1699

SCALE: 1in. = 100ft.
 PROJECT No.: 214159
 DWG NAME: 4159 SD
 ISSUED: JULY 10, 2023

SD



LEGEND

- PROPERTY LINE
- EX. EDGE OF PAVEMENT
- EX. EASEMENT LINE
- - - APPROX. WETLAND LINE
- UTILITY POLE W/50' WIRE
- OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- EXISTING TREE DRIP LINE
- EDGE OF GRAVEL
- CONCRETE CURB (UNLESS OTHERWISE STATED)
- SANITARY SEWER PIPE
- SANITARY SEWER MANHOLE W/IDENTIFIER
- STORM WATER DRAINAGE PIPE
- STORM WATER MANHOLE W/IDENTIFIER
- CATCH BASIN W/IDENTIFIER
- FLARED END SECTION
- WATER MAIN
- HYDRANT
- WATER SHUT OFF
- WATER VALVE
- WATER VALVE BOX
- U/G GAS
- GAS SHUT OFF
- 1' CONTOUR
- 5' CONTOUR
- PROPOSED UNIT LINE
- PROPOSED BUILDING SETBACK
- PROPOSED EASEMENT LINE
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY MANHOLE
- PROPOSED WATER MAIN
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED STORM SEWER
- PROPOSED STORM STRUCTURES
- PROPOSED CURB AND GUTTER
- PROPOSED CONCRETE WALK
- PROPOSED BITUMINOUS PAVEMENT

BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPLAT No. 2 OF "SUMMERFIELD POINTE" LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 255. DATUM REFERS TO "U.S.G.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #204 (PRIMARY) SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE, AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (PLATTED) ELEVATION = 993.93 (PLATTED) REF: FIELD BOOK 1483, PG. 34 POINT #204

BENCHMARK #200 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377A FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 995.39 (NAVD 88) ELEVATION = 995.89 (PLATTED) REF: FIELD BOOK 1483, PG. 34 POINT #200

BENCHMARK #201 CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 482 FEET EAST OF LAWSON DRIVE. ELEVATION = 991.29 (NAVD 88) ELEVATION = 992.14 (PLATTED) REF: FIELD BOOK 148, PG. 34 POINT #201

BENCHMARK #203 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 33A FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 993.88 (NAVD 88) ELEVATION = 994.38 (PLATTED) REF: POINT #203



CURVE TABLE				
CURVE	RADIUS	LENGTH	CHORD	BEARING
4	750.00'	56.19'	56.18'	S10°40'25"E
5	660.00'	72.73'	72.69'	N11°41'03"W
6	158.00'	521.46'	315.00'	S70°36'34"W
7	230.00'	61.91'	61.72'	N16°13'44"W
8	100.00'	158.86'	142.67'	S54°01'37"E

NOTES:

- See sheet SD for site data & zoning table
- See sheets UT4 & UT5 for utility easements
- The address shall be a minimum of 4" high letters of contrasting colors and be clearly visible from the street. The location and size shall be verified prior to installation.

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CIVIL ENGINEERS
LAND SURVEYORS
2183 PLEEVES RD
BRIGHTON, MICHIGAN 48114

DESIGN: FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	10-25-22	REVISED PER REVIEW COMMENTS			
CHECK: JMB	2	06-01-23	REVISED PER GENOA TOWNSHIP PLANNING COMMISSION RECOMMENDATION			
	3	07-10-23	REVISED PER REVIEW COMMENTS			

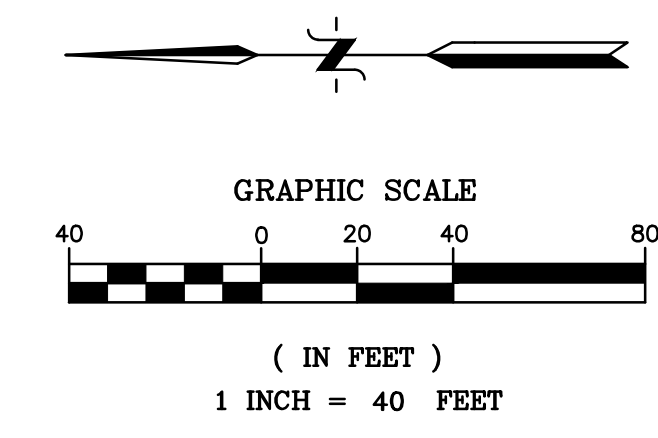
SUMMERFIELD POINTE PUD

DIMENSIONAL SITE PLAN (NORTH)

CLIENT: HEALY HOMES AT SUMMERFIELD LLC
3696 SLEETH RD.
COMMERCE TOWNSHIP, MICHIGAN 48382
248-684-1699

SCALE: 1in. = 40ft.
PROJECT NO.: 214159
DWG NAME: 4159 SP2-3
ISSUED: JULY 10, 2023

SP2



LEGEND

- = PROPERTY LINE
- - -= EX. EDGE OF PAVEMENT
- - -= EX. EASEMENT LINE
- - -= APPROX. WETLAND LINE
- = UTILITY POLE W/GUY WIRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = EXISTING TREE DRIP LINE
- = EDGE OF GRAVEL
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
- = SANITARY SEWER PIPE
- = SANITARY SEWER MANHOLE W/IDENTIFIER
- = STORM WATER DRAINAGE PIPE
- = STORM WATER MANHOLE W/IDENTIFIER
- = CATCH BASIN W/IDENTIFIER
- = FLARED END SECTION
- = WATER MAIN
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = U/G GAS
- = GAS SHUT OFF
- = 1' CONTOUR
- = 5' CONTOUR
- = PROPOSED UNIT LINE
- = PROPOSED BUILDING SETBACK
- = PROPOSED EASEMENT LINE
- = PROPOSED SANITARY SEWER
- = PROPOSED SANITARY MANHOLE
- = PROPOSED WATER MAIN
- = PROPOSED HYDRANT
- = PROPOSED WATER VALVE
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER

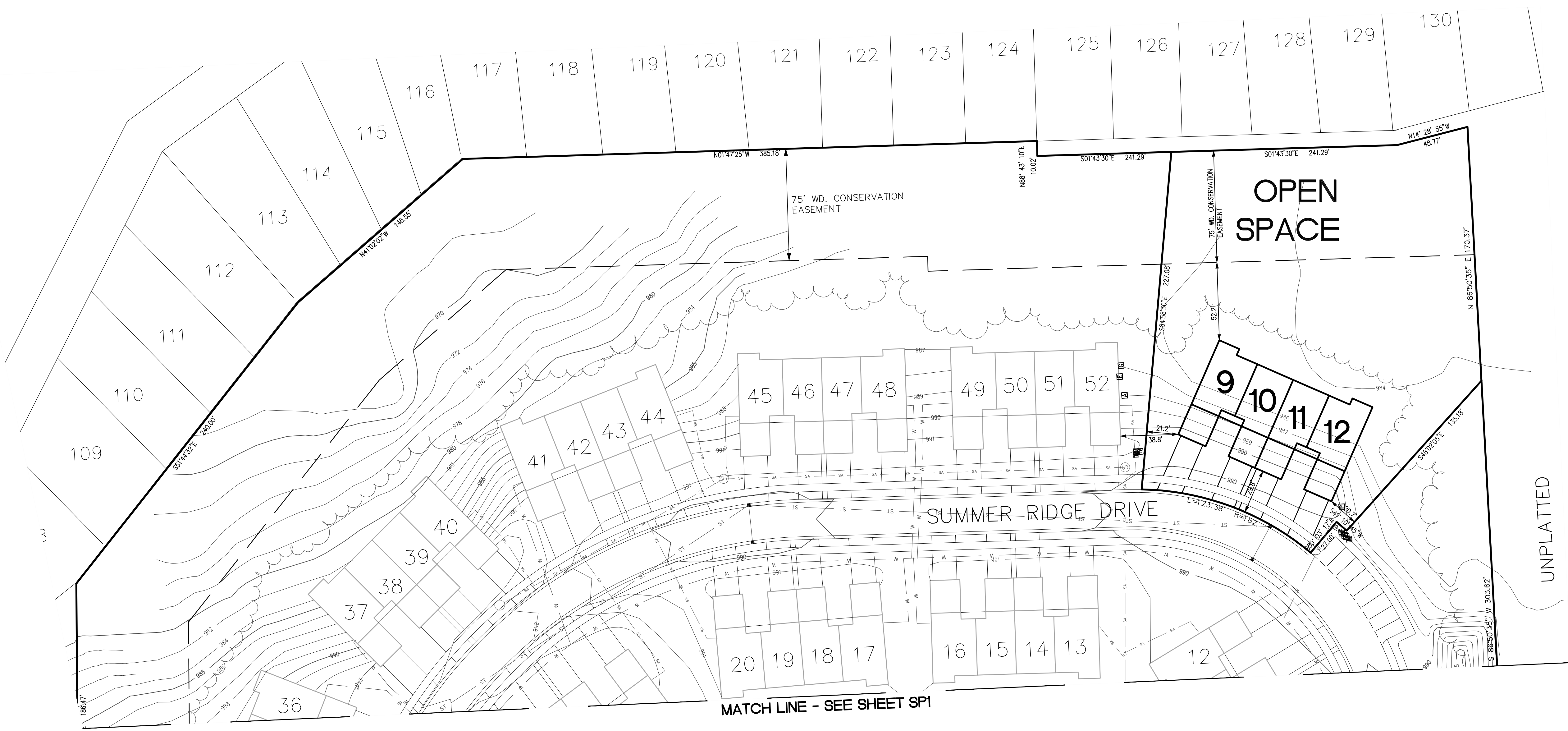
BENCHMARKS
 DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPLAT No. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "N.A.S.L.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #204 (PRIMARY)
 SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88) ELEVATION = 993.93 (PLATTED) REF: FIELD BOOK 1485, PG. 34 POINT #204

BENCHMARK #200
 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377.5 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 995.39 (NAVD 88) ELEVATION = 995.89 (PLATTED) REF: FIELD BOOK 1485, PG. 34 POINT #200

BENCHMARK #201
 CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 486 FEET EAST OF LAWSON DRIVE. ELEVATION = 991.29 (NAVD 88) ELEVATION = 992.14 (PLATTED) REF: FIELD BOOK 148, PG. 34 POINT #201

BENCHMARK #203
 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 332 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 993.88 (NAVD 88) ELEVATION = 994.38 (PLATTED) REF: POINT #203



NOTES:

- See sheet SD for site data & zoning table
- See sheets UT4 & UT5 for utility easements
- The address shall be a minimum of 4" high letters of contrasting colors and be clearly visible from the street, the location and size shall be verified prior to installation".

DESIGN:FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	10-25-22	REVISED PER REVIEW COMMENTS			
CHECK: JMB	2	06-01-23	REVISED PER GENOA TOWNSHIP PLANNING COMMISSION RECOMMENDATION			

SUMMERFIELD
 POINTE PUD

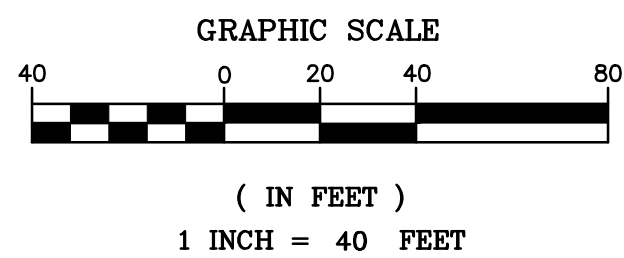
DIMENSIONAL
 SITE PLAN (EAST)

CLIENT:
 HEALY HOMES AT SUMMERFIELD LLC
 3696 SLEETH RD.
 COMMERCE TOWNSHIP, MICHIGAN 48382
 248-684-1699

SCALE: 1in. = 40ft.
 PROJECT No.: 214159
 DWG NAME: 4159 SP2-3
 ISSUED: JULY 10, 2023

SP3

MATCH LINE - SEE SHEET UT3



LEGEND

- = PROPERTY LINE
- = EX. EDGE OF PAVEMENT
- = EX. EASEMENT LINE
- = APPROX. WETLAND LINE
- = UTILITY POLE W/GUY WRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = EXISTING TREE DRIP LINE
- = EDGE OF GRAVEL
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
- = SANITARY SEWER PIPE
- = SANITARY SEWER MANHOLE W/IDENTIFIER
- = STORM WATER DRAINAGE PIPE
- = STORM WATER MANHOLE W/IDENTIFIER
- = CATCH BASIN W/IDENTIFIER
- = FLARED END SECTION
- = WATER MAIN
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = U/G GAS
- = GAS SHUT OFF
- = 1' CONTOUR
- = 5' CONTOUR
- = PROPOSED UNIT LINE
- = PROPOSED BUILDING SETBACK
- = PROPOSED EASEMENT LINE
- = PROPOSED SANITARY SEWER
- = PROPOSED SANITARY MANHOLE
- = PROPOSED WATER MAIN
- = PROPOSED HYDRANT
- = PROPOSED WATER VALVE
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER

STRUCTURE INVENTORY

- SAN SEWER MH-03
RM 991.83
N 8" PVC 981.48
W 8" PVC 981.48
S 8" PVC 981.43
- SAN SEWER MH-04
RM 992.58
N 8" PVC 982.58
E 8" PVC 982.68
S 8" PVC 982.49
- SAN SEWER MH-05
RM 990.79
N 8" PVC 983.90
W 8" PVC 983.94
- SAN SEWER MH-12
RM 993.95
N 8" PVC 984.15
S 8" PVC 984.05
- SAN SEWER MH-14
RM 993.67
SE 8" PVC 985.42
- SAN SEWER MH #20640 (OFFSITE)
RM 989.00
W 8" PVC 971.30
- STORM CATCH BASIN CB-01
RM 990.86
E 12" RCP 984.96
FLARED END SECTION FES-100B
S 36" RCP 970.35
- STORM CATCH BASIN CB-02 (T.B.R.)
RM 990.81
INVERTS
W 12" RCP 984.61
N 15" RCP 984.56
- STORM MANHOLE MH-02B
EX. RM 987.40
PROP. RM 989.22
SE 36" RCP 972.50
NW 36" RCP 970.35
- STORM CATCH BASIN CB-04
RM 990.92
SW 12" RCP 982.62
S 21" RCP 981.12
NW 21" RCP 981.02
- STORM CATCH BASIN CB-05
RM 990.97
W 18" RCP 981.27
S 21" RCP 980.87
SE 24" RCP 978.37
NW 27" RCP 977.07
- STORM CATCH BASIN CB-06
EX. RM 989.39
PROP. RM 991.25
SE 27" RCP 976.81
N 30" RCP 976.64
- STORM CATCH BASIN CB-07
EX. RM 989.53
PROP. RM 991.11
S 30" RCP 976.63
N 30" RCP 973.72
- STORM CATCH BASIN CB-08
EX. RM 986.78
PROP. RM 987.93
S 30" RCP 973.26
N 30" RCP 973.26
- STORM CATCH BASIN CB-17
RM 988.64
INVERTS
W 12" RCP 981.74
S 21" RCP 979.59
NW 21" RCP 979.54
- STORM CATCH BASIN CB-21
RM 991.04
W 18" RCP 981.61
E 18" RCP 981.50
- STORM CATCH BASIN CB-39
RM 985.74
N 12" RCP 981.44

NOTES:

- See sheets UT4 & UT5 for proposed utility easement plan.
- 1. See sheets UT6 & UT7 for control structure, detention basin, storm sewer, & sanitary sewer calculations.
- 2. A permit from MHOG is required for sanitary & water main connections.

Structure	Diameter (ft.)	Casting Type
Storm Sewer structures:		
Manholes	4'	EJW 1040, Type "A" Solid Cover
Curb Catch Basin	2', 4' & 6'	EJW 7065-T1-M1 (Flat Grate & Roll Back)
Yard Basin	2' & 4'	EJW 1020, Type-01 (Beehive Grate)
Roof Drain	---	EJW 1578Z-A
Sanitary Sewer structures:		
Manholes	4'	EJW 1040 (Sanitary Watertight)
Cleanout	---	EJW 1574 A

- BENCHMARKS**
- DATUM BASED ON PREVIOUS BENCHMARK AS DESCRIBED ON REPEAT NO. 2 OF "SUMMERFIELD POINTE", LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.G.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.
- BENCHMARK #201 (PRIMARY)
SPRINKLE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE".
ELEVATION = 993.43 (NAVD 88)
REF: FIELD BOOK 1483, PG. 34
POINT #204
- BENCHMARK #202 (PRIMARY)
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377.2 FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 995.59 (NAVD 88)
ELEVATION = 995.89 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #200
- BENCHMARK #203
CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 48.4 FEET EAST OF LAWSON DRIVE.
ELEVATION = 991.29 (NAVD 88)
ELEVATION = 992.14 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #201
- BENCHMARK #204
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 33.2 FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 993.88 (NAVD 88)
ELEVATION = 994.38 (PLATTED)
REF: POINT #203

DESIGNER	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
WMP	1	10-25-22	REVISED PER REVIEW COMMENTS			
JHG	2	06-01-23	REVISED PER GENOA TOWNSHIP PLANNING COMMISSION RECOMMENDATION			

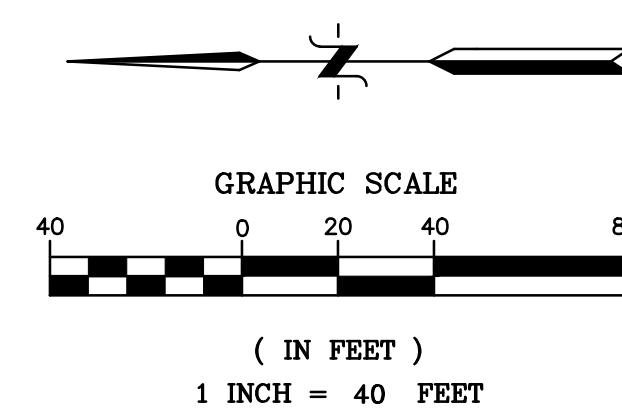
**SUMMERFIELD
POINTE PUD**

**UTILITY PLAN
SOUTH**

CLIENT:
HEALY HOMES AT SUMMERFIELD LLC
3696 SLEETH RD.
COMMERCE TOWNSHIP, MICHIGAN 48382
248-684-1699

SCALE: 1in. = 40ft.
PROJECT No.: 214159
DWG NAME: 4159 UT
ISSUED: JULY 10, 2023

UT1



LEGEND

- = PROPERTY LINE
- = EX. EDGE OF PAVEMENT
- = EX. EASEMENT LINE
- = APPROX. WETLAND LINE
- = UTILITY POLE W/GUY WIRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
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- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = U/G GAS
- = GAS SHUT OFF
- = 1' CONTOUR
- = 5' CONTOUR
- = PROPOSED UNIT LINE
- = PROPOSED BUILDING SETBACK
- = PROPOSED EASEMENT LINE
- = PROPOSED SANITARY SEWER
- = PROPOSED SANITARY MANHOLE
- = PROPOSED WATER MAIN
- = PROPOSED HYDRANT
- = PROPOSED WATER VALVE
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER

BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPEAT NO. 2 OF "SUMMERFIELD POINTE" LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "N.A.S.T." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #201
 CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 48± FEET EAST OF LAWSON DRIVE.
 ELEVATION = 991.29 (NAVD 88)
 REF: FIELD BOOK 1481, PG. 34
 POINT #201

BENCHMARK #204 (PRIMARY)
 SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE".
 ELEVATION = 993.43 (NAVD 88)
 REF: FIELD BOOK 1481, PG. 34
 POINT #204

BENCHMARK #200
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 ELEVATION = 995.89 (PLATTED)
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 POINT #200

BENCHMARK #203
 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 33± FEET NORTH OF SILVER LEAF DRIVE.
 ELEVATION = 993.38 (NAVD 88)
 ELEVATION = 994.38 (PLATTED)
 REF: POINT #203

STRUCTURE INVENTORY

STORM MANHOLE MH-01A
 RM 993.04
 S 18" RCP 983.41
 N 21" RCP 981.74

STORM CATCH BASIN CB-03
 RM 990.88
 W 15" RCP 984.28
 S 15" RCP 984.28
 N 18" RCP 984.08
 N 30" RCP 973.26

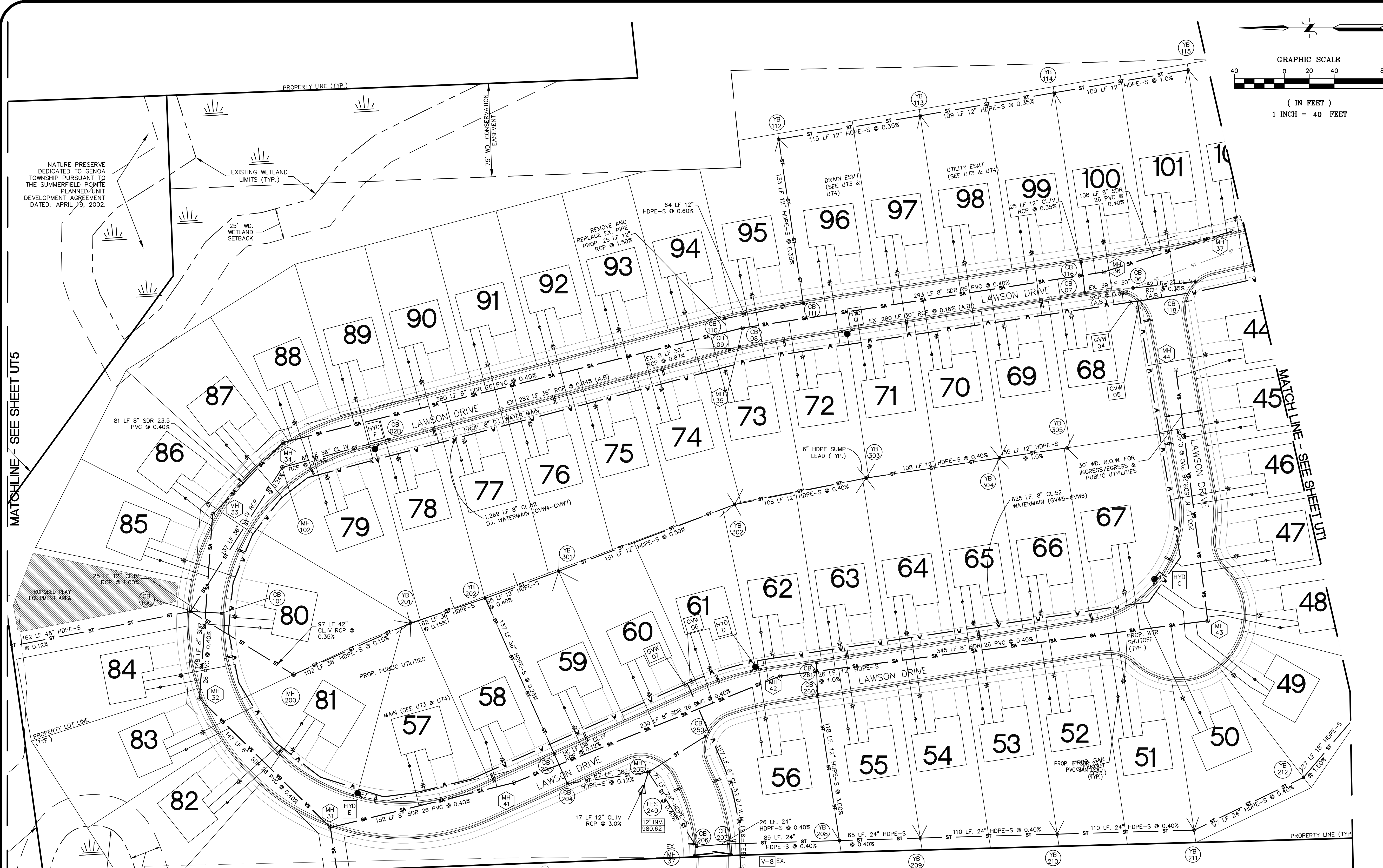
STORM CATCH BASIN CB-09
 EX. RM 986.97
 PROP. RM 987.93
 E 12" RCP 978.19
 S 30" RCP 973.19
 N 36" RCP 973.19

STORM CATCH BASIN CB-10 (T1)
 RM 985.12
 SE 36" RCP 970.69
 N 36" RCP 970.59

STORM CATCH BASIN CB-11 (T1)
 RM 985.33
 S 36" RCP 970.63
 NW 36" RCP 970.53

STORM CATCH BASIN CB-12
 RM 991.08
 W 12" RCP 985.88

STORM CATCH BASIN CB-13
 RM 991.07
 SW 12" RCP 985.07



- NOTES:**
- See sheets UT4 & UT5 for proposed utility easement plan.
 - See sheets UT6 & UT7 for control structure, detention basin, storm sewer, & sanitary sewer calculations.
 - A permit from MHOG is required for sanitary & water main connections.

UTILITIES STRUCTURE / CASTING SCHEDULE

Structure	Diameter (ft.)	Casting Type
Storm Sewer structures:		
Manholes	4'	EJIIW 1040, Type "A" Solid Cover
Curb Catch Basin	2', 4' & 6'	EJIIW 7065-T1-M1 (Flat Gate & Roll Back)
Yard Basin	2' & 4'	EJIIW 1020, Type-01 (Beehive Grate)
Roof Drain	---	EJIIW 1578Z-A
Sanitary Sewer structures:		
Manholes	4'	EJIIW 1040 (Sanitary Watertight)
Cleanout	---	EJIIW 1574 A

SUMMERFIELD POINTE P.U.D. UTILITIES QUANTITY

Water Main		
8" CL54 D.I. Watermain	3,331	LF.
6" CL54 D.I. Watermain	80	LF.
6" Gate Valve in Well (5' Dia.)	5	Each
Hydrant + Valve Assembly	8	Each
8"x8"x8" Tee	2	Each
8"x8"x6" Tee	8	Each
8" Tapping Sleeve & Valve in Well	1	Each
8" Valve in Well	4	Each
8"-11.25" Bend	16	Each
8"-22.25" Bend	7	Each
8"-45" Bend	2	Each
6" 90° Bend	6	Each
2" Copper Water Lead	4,668	LF.
Water Shutoff	102	Each
Sanitary Sewer		
8" SDR, 26 PVC Sanitary Sewer Main	3,987	LF.
6" SDR, 26 PVC Sanitary Sewer Lead	3,120	LF.
Sanitary Cleanouts	102	Each
4" Dia. Concrete Manhole w/solid Manhole Cover	22	Each

DESIGN:WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	10-25-22	REVISED PER REVIEW COMMENTS			
CHECK: WMP	2	06-01-23	REVISED PER GENOA TOWNSHIP PLANNING COMMISSION RECOMMENDATION			

SUMMERFIELD POINTE PUD

UTILITY PLAN NORTH

CLIENT: HEALY HOMES AT SUMMERFIELD LLC
 3696 SLEETH RD.
 COMMERCE TOWNSHIP, MICHIGAN 48382
 248-684-1699

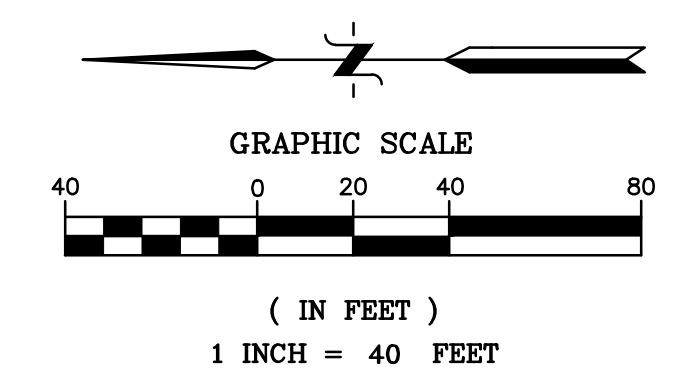
SCALE: 1in. = 40ft.
 PROJECT No.: 214159
 DWG NAME: 4159 UT
 ISSUED: JULY 10, 2023

UT2

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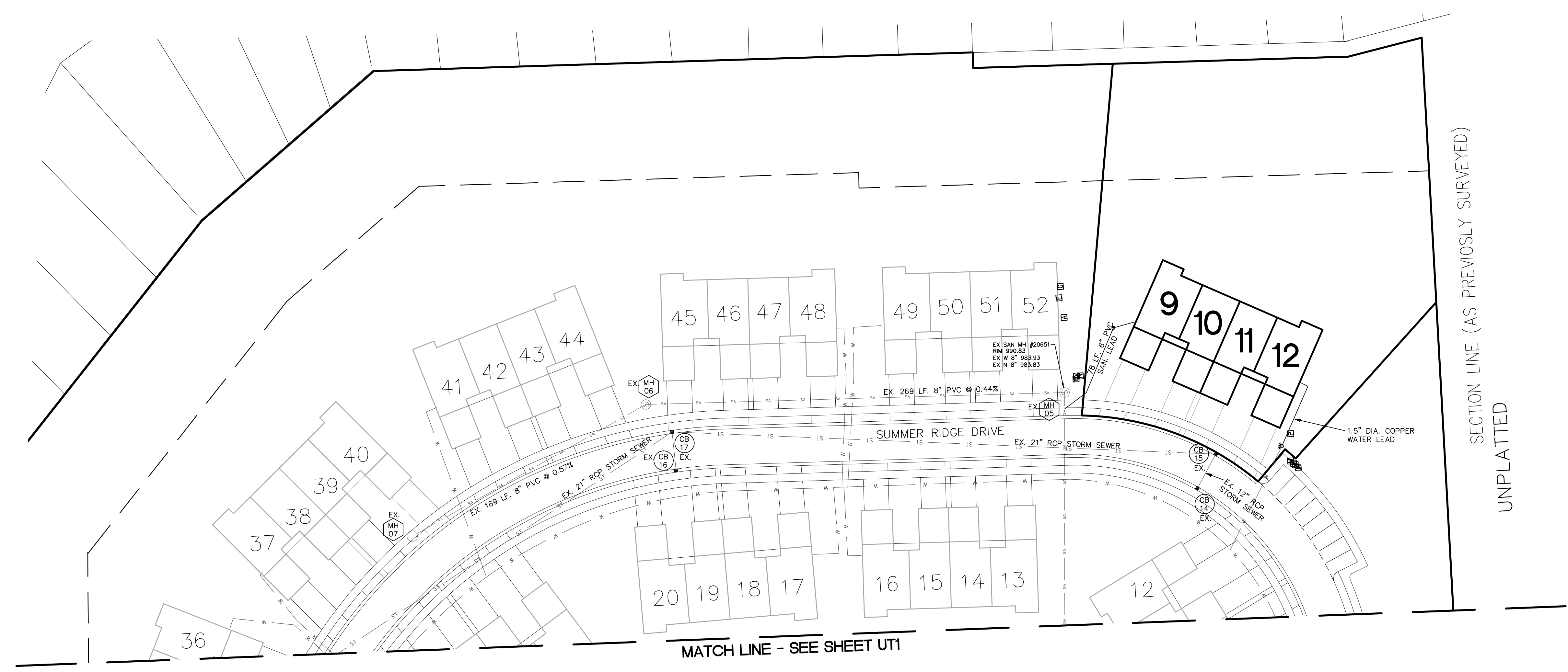
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LEGEND

- = PROPERTY LINE
- - - = EX. EDGE OF PAVEMENT
- - - = EX. EASEMENT LINE
- - - = APPROX. WETLAND LINE
- ⊕ ⊖ ⊗ ⊙ = UTILITY POLE W/CUY WIRE
- ⊕ ⊖ ⊗ ⊙ = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- ⊕ ⊖ ⊗ ⊙ = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- ⊕ ⊖ ⊗ ⊙ = EXISTING TREE DRIP LINE
- = EDGE OF GRAVEL
- SA — SA = CONCRETE CURB (UNLESS OTHERWISE STATED)
- SA — SA = SANITARY SEWER PIPE
- ST — ST = SANITARY SEWER MANHOLE W/IDENTIFIER
- ST — ST = STORM WATER DRAINAGE PIPE
- ST — ST = STORM WATER MANHOLE W/IDENTIFIER
- ST — ST = CATCH BASIN W/IDENTIFIER
- ST — ST = FLARED END SECTION
- W — W = WATER MAIN
- W — W = HYDRANT
- W — W = WATER SHUT OFF
- W — W = WATER VALVE
- W — W = WATER VALVE BOX
- GAS — GAS = U/G GAS
- GAS — GAS = GAS SHUT OFF
- 000 — 000 = 1' CONTOUR
- 000 — 000 = 5' CONTOUR
- = PROPOSED UNIT LINE
- = PROPOSED BUILDING SETBACK
- = PROPOSED EASEMENT LINE
- SA — SA = PROPOSED SANITARY SEWER
- W — W = PROPOSED SANITARY MANHOLE
- W — W = PROPOSED WATER MAIN
- W — W = PROPOSED HYDRANT
- W — W = PROPOSED WATER VALVE
- ST — ST = PROPOSED STORM SEWER
- ST — ST = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER



SECTION LINE (AS PREVIOUSLY SURVEYED)
UNPLATTED

MATCH LINE - SEE SHEET UT1

BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPEAT NO. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.C.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #201 CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 485 FEET EAST OF LAWSON DRIVE. ELEVATION = 991.29 (NAVD 88) ELEVATION = 992.14 (PLATTED) REF: FIELD BOOK 148, PG. 34 POINT #201	BENCHMARK #203 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 334 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 993.43 (NAVD 88) ELEVATION = 993.93 (PLATTED) ELEVATION = 993.88 (NAVD 88) ELEVATION = 994.38 (PLATTED) REF: POINT #203
BENCHMARK #204 (PRIMARY) SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88) ELEVATION = 993.93 (PLATTED) REF: FIELD BOOK 148, PG. 34 POINT #204	BENCHMARK #200 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377 1/2 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 995.39 (NAVD 88) ELEVATION = 996.89 (PLATTED) REF: FIELD BOOK 148, PG. 34 POINT #200

STRUCTURE INVENTORY

SAN SEWER MH-05 RM 990.79 N 8" PVC 983.90 W 8" PVC 983.94	SAN SEWER MH-06 RM 990.92 NE 8" PVC 985.12 S 8" PVC 985.12	SAN SEWER MH-07 RM 991.89 SE 8" PVC 986.09
STORM CATCH BASIN CB-14 RM 988.59 SE 12" RCP 982.79	STORM CATCH BASIN CB-15 RM 988.62 NW 12" RCP 982.67 N 21" RCP 980.02	STORM CATCH BASIN CB-16 RM 988.92 E 12" RCP 982.07
STORM CATCH BASIN CB-17 RM 988.64 INVERTS: W 12" RCP 981.74 S 21" RCP 979.59 NW 21" RCP 979.54		

- NOTES:**
- See sheets UT4 & UT5 for proposed utility easement plan.
 - See sheets UT6 & UT7 for control structure, detention basin, storm sewer, & sanitary sewer calculations.
 - A permit from MHOG is required for sanitary & water main connections.

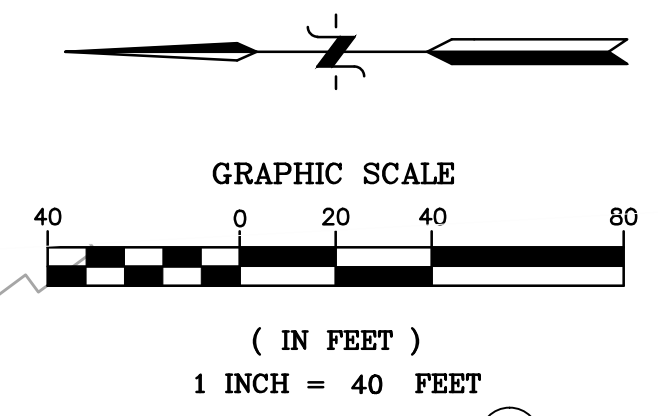
DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
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**SUMMERFIELD
POINTE PUD**

**UTILITY PLAN
EAST**

CLIENT: HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD. COMMERCE TOWNSHIP, MICHIGAN 48382 248-684-1699	SCALE: 1in. = 40ft. PROJECT No.: 214159 DWG NAME: 4159 UT ISSUED: JULY 10, 2023
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UT3



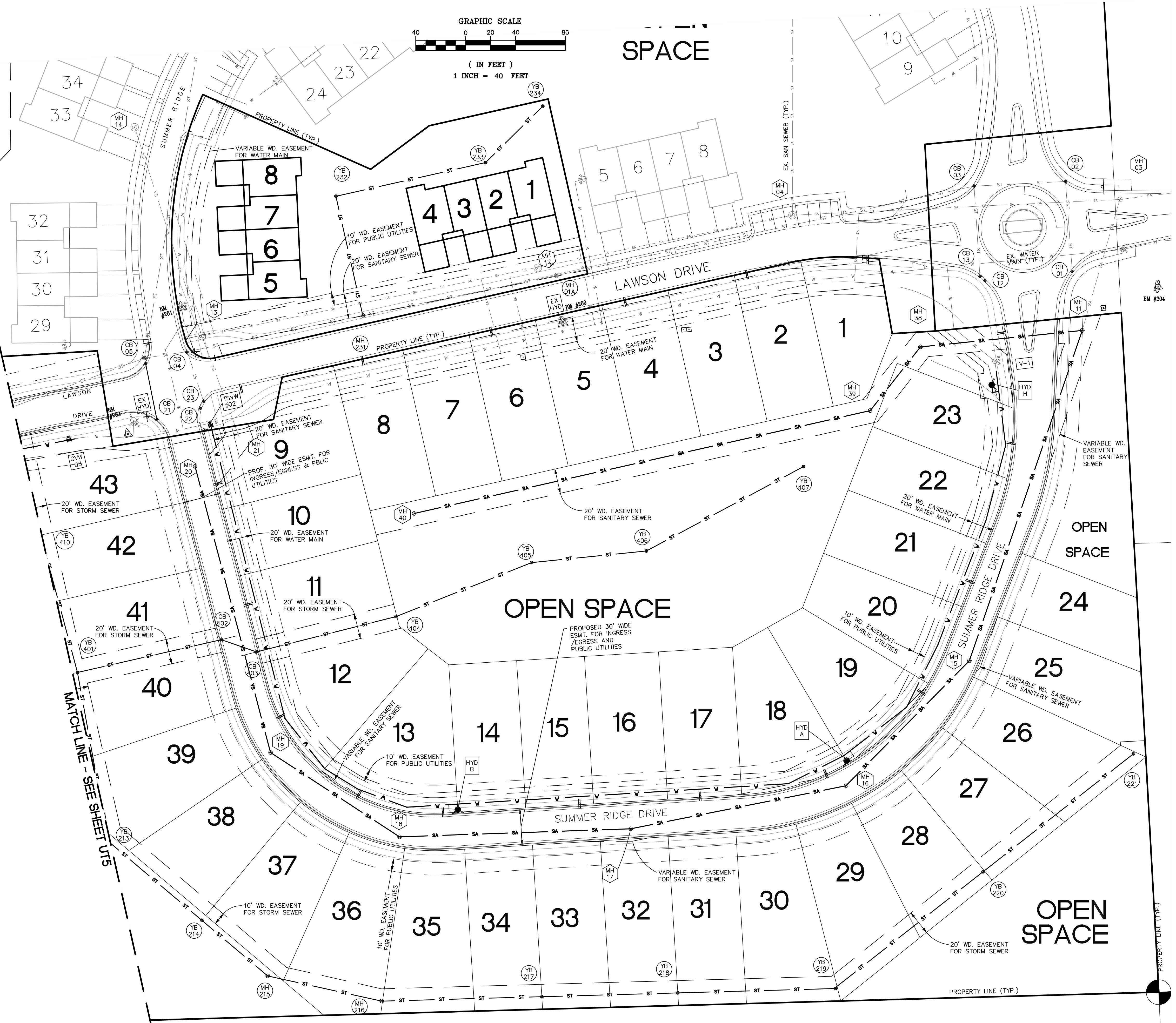
LEGEND

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- = STORM WATER MANHOLE W/IDENTIFIER
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- = FLARED END SECTION
- = WATER MAIN
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = U/G GAS
- = GAS SHUT OFF
- = 1' CONTOUR
- = 5' CONTOUR
- = PROPOSED UNIT LINE
- = PROPOSED BUILDING SETBACK
- = PROPOSED EASEMENT LINE
- = PROPOSED SANITARY SEWER
- = PROPOSED SANITARY MANHOLE
- = PROPOSED WATER MAIN
- = PROPOSED HYDRANT
- = PROPOSED WATER VALVE
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER

- NOTES:**
- See sheets UT6 & UT7 for control structure, detention basin, storm sewer, & sanitary sewer calculations.
 - A permit from MHOOG is required for sanitary & water main connections.

Summerfield Pointe Estates

Unit #	Garage	Setbacks	
		Left'	Right'
1	Right	9	5
2	Left	9	5
3	Left	9	5
4	Left	9	5
5	Left	9	5
6	Left	9	5
7	Left	9	5
8	Left	9	5
9	Left facing North	30 to b/c corner	9
10	Right	5	9
11	Right	5	10
12	Left	10	5
13	Left	9	5
14	Left	9	5
15	Left	9	5
16	Left	9	5
17	Right	5	9
18	Right	5	9
19	Right	5	9
20	Right	5	9
21	Right	5	9
22	Right	5	9
23	Left	5	9
24	Right	9	5
25	Left	9	5
26	Left	9	5
27	Left	9	5
28	Left	9	5
29	Left	9	5
30	Left	9	5
31	Left	9	5
32	Left	9	5
33	Left	9	5
34	Left	9	5
35	Left	9	5
36	Left	9	5
37	Left	9	5
38	Left	9	5
39	Left	9	5
40	Left	9	10
41	Left	5	9
42	Right	10	9
43	Right	5	9
44	Right facing South	5	30



BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON RE-PLAT NO. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN NO. 295. DATUM REFERS TO "U.S.C.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #201
CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 485 FEET EAST OF SUMMER RIDGE DRIVE.
ELEVATION = 991.29 (NAVD 88)
ELEVATION = 992.14 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #201

BENCHMARK #204 (PRIMARY)
SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE."
ELEVATION = 993.43 (NAVD 88)
ELEVATION = 993.93 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #204

BENCHMARK #203
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 334 FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 993.88 (NAVD 88)
ELEVATION = 994.38 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #203

BENCHMARK #200
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 374 FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 995.39 (NAVD 88)
ELEVATION = 995.89 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #200

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DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	10-25-22	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

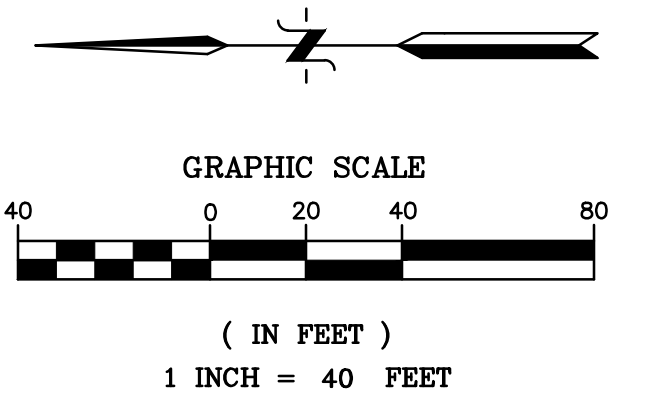
SUMMERFIELD
POINTE PUD

UTILITY EASEMENT PLAN
SOUTH

CLIENT:
HEALY HOMES AT SUMMERFIELD LLC
3696 SLEETH RD.
COMMERCE TOWNSHIP, MICHIGAN 48382
248-684-1699

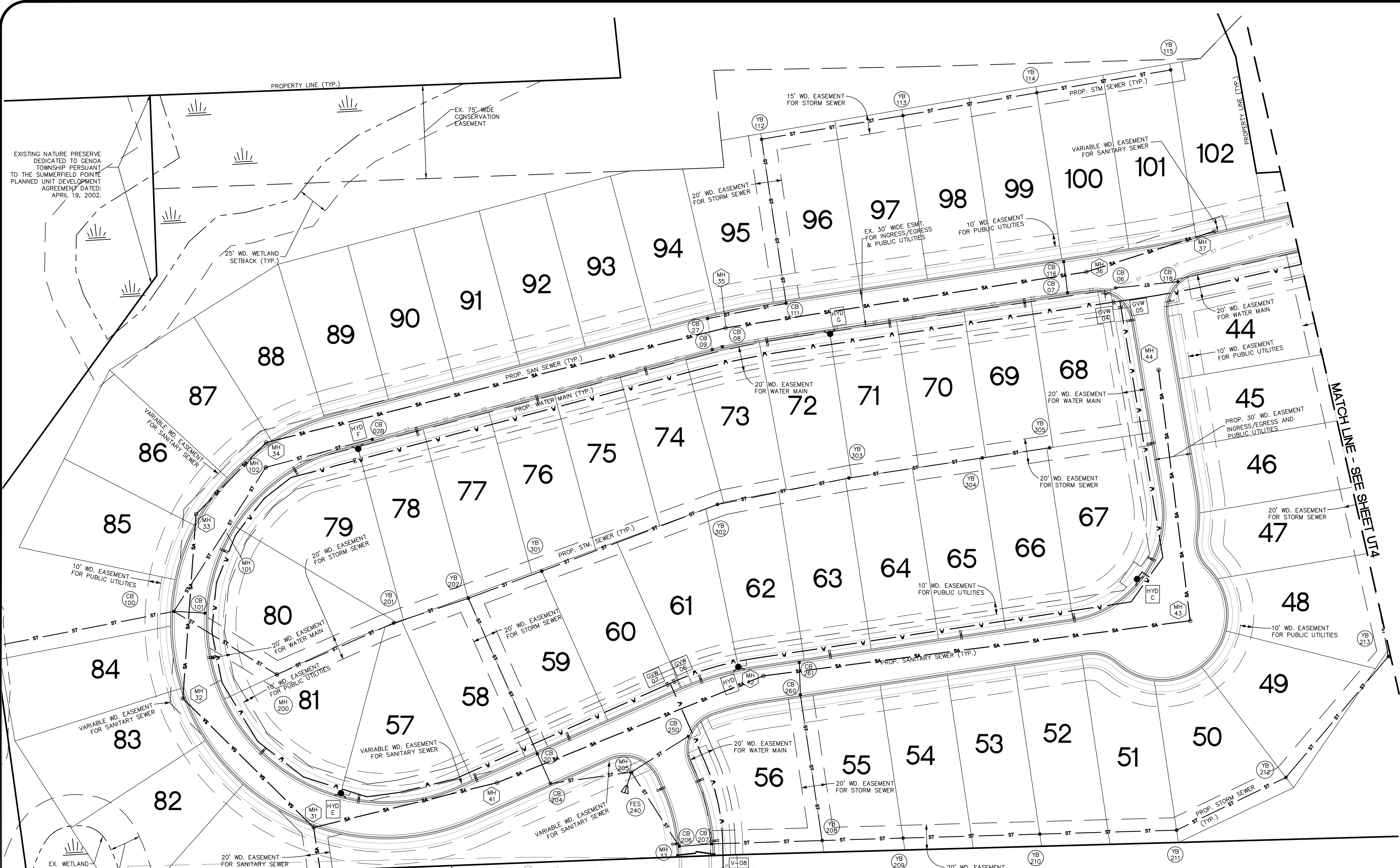
SCALE: 1in. = 40ft.
PROJECT No.: 214159
DWG NAME: 4159 UT4-5
ISSUED: JULY 10, 2023

UT4



LEGEND

- = PROPERTY LINE
- - - = EX. EDGE OF PAVEMENT
- - - = EX. EASEMENT LINE
- - - = APPROX. WETLAND LINE
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- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = EXISTING TREE DRIP LINE
- = EDGE OF GRAVEL
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
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- = SANITARY SEWER MANHOLE W/IDENTIFIER
- = STORM WATER DRAINAGE PIPE
- = STORM WATER MANHOLE W/IDENTIFIER
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- = FLARED END SECTION
- = WATER MAIN
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = U/G GAS
- = GAS SHUT OFF
- = 1' CONTOUR
- = 5' CONTOUR
- = PROPOSED UNIT LINE
- = PROPOSED BUILDING SETBACK
- = PROPOSED EASEMENT LINE
- = PROPOSED SANITARY SEWER
- = PROPOSED SANITARY MANHOLE
- = PROPOSED WATER MAIN
- = PROPOSED HYDRANT
- = PROPOSED WATER VALVE
- = PROPOSED STORM SEWER
- = PROPOSED CURB AND GUTTER



BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPEAT No. 2 OF "SUMMERFIELD POINTE" LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.G.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #201
CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 48± FEET EAST OF LANSON DRIVE.
ELEVATION = 991.29 (NAVD 88)
ELEVATION = 992.14 (PLATTED)
REF: FIELD BOOK 148, PG. 34
POINT #201

BENCHMARK #204 (PRIMARY)
SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LANSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE".
ELEVATION = 993.43 (NAVD 88)
ELEVATION = 993.93 (PLATTED)
REF: FIELD BOOK 148, PG. 34
POINT #204

BENCHMARK #203
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LANSON DRIVE, 33± FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 993.88 (NAVD 88)
ELEVATION = 994.38 (PLATTED)
REF: POINT #203

BENCHMARK #200
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LANSON DRIVE, 37± FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 995.39 (NAVD 88)
ELEVATION = 995.89 (PLATTED)
REF: FIELD BOOK 148, PG. 34
POINT #200

NOTES:

- See sheets UT6 & UT7 for control structure, detention basin, storm sewer, & sanitary sewer calculations.
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2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

Summerfield Pointe Estates

Unit #	Garage	Left'	Right'	Unit #	Garage	Left'	Right'
44	Left	5	5	69	Left	5	5
45	Left	5	5	70	Left	5	5
46	Left	5	5	71	Left	5	5
47	Left	5	5	72	Left	5	5
48	Left	5	5	73	Left	5	5
49	Left	5	5	74	Left	5	5
50	Left	5	5	75	Left	5	5
51	Left	5	5	76	Left	5	5
52	Left	5	5	77	Left	5	5
53	Left	5	5	78	Left	5	5
54	Left	5	5	79	Left	5	5
55	Left	5	5	80	Left	5	5
56	Right	5	5	81	Right	5	5
57	Right	5	5	82	Right	5	5
58	Right	5	5	83	Right	5	5
59	Right	5	5	84	Right	5	5
60	Right	5	5	85	Right	5	5
61	Right	5	5	86	Right	5	5
62	Right	5	5	87	Right	5	5
63	Right	5	5	88	Right	5	5
64	Right	5	5	89	Right	5	5
65	Right	5	5	90	Right	5	5
66	Right	5	5	91	Right	5	5
67	Right	5	5	92	Right	5	5
68	Right	5	5	93	Right	5	5
69	Right	5	5	94	Right	5	5
70	Right	5	5	95	Right	5	5
71	Right	5	5	96	Right	5	5
72	Right	5	5	97	Right	5	5
73	Right	5	5	98	Right	5	5
74	Right	5	5	99	Right	5	5
75	Right	5	5	100	Right	5	5
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77	Right	5	5	102	Right	5	5
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82	Right	5	5				
83	Right	5	5				
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91	Right	5	5				
92	Right	5	5				
93	Right	5	5				
94	Right	5	5				
95	Right	5	5				
96	Right	5	5				
97	Right	5	5				
98	Right	5	5				
99	Right	5	5				
100	Right	5	5				
101	Right	5	5				
102	Right	5	5				

DESIGN:WMP	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	10-25-22	REVISED PER REVIEW COMMENTS
CHECK: WMP			

REVISION #	DATE	REVISION-DESCRIPTION

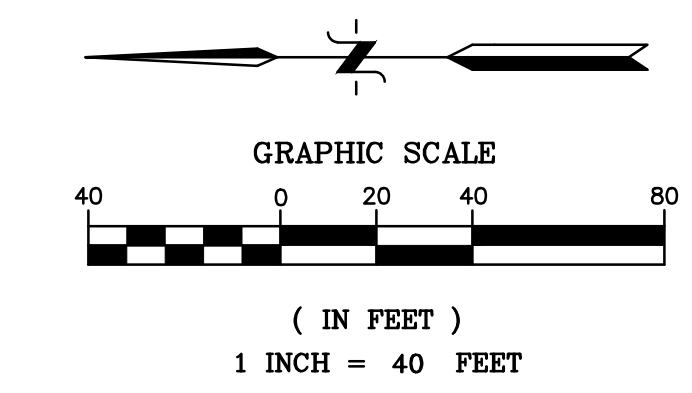
SUMMERFIELD POINTE PUD

UTILITY EASEMENT PLAN NORTH

CLIENT: HEALY HOMES AT SUMMERFIELD LLC
3696 SLEETH RD.
COMMERCE TOWNSHIP, MICHIGAN 48382
248-684-1699

SCALE: 1in. = 40ft.
PROJECT NO: 214159
DWG NAME: 4159_UT4-5
ISSUED: JULY 10, 2023

UT5



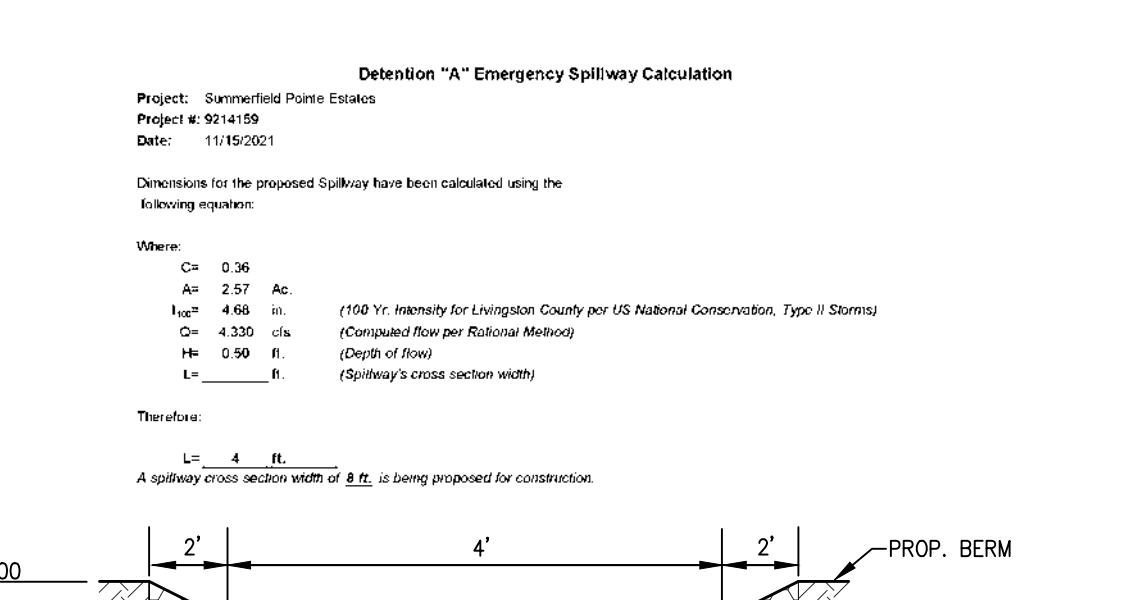
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- = EDGE OF CURB
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- = WATER VALVE BOX
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- = PROPOSED WATER MAIN
- = PROPOSED HYDRANT
- = PROPOSED WATER VALVE
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER

Duration (Minutes)	Duration (Seconds)	Intensity (100-yr Storm) (in/hr)	Col 2 * Col 3 (inches)	Inflow Volume = Col 4 * K1 (Cubic Feet)	Outflow Volume = Col 2 * Qo (Cubic Feet)	Storage Volume = Col 5 - Col 6 (Cubic Feet)
1	60	1.75	105	105	0	105
2	120	1.50	180	180	0	180
3	180	1.35	270	270	0	270
4	240	1.25	360	360	0	360
5	300	1.18	450	450	0	450
6	360	1.12	540	540	0	540
7	420	1.08	630	630	0	630
8	480	1.04	720	720	0	720
9	540	1.01	810	810	0	810
10	600	0.98	900	900	0	900
15	900	0.88	1350	1350	0	1350
20	1200	0.81	1800	1800	0	1800
30	1800	0.70	2700	2700	0	2700
60	3600	0.50	5400	5400	0	5400
90	5400	0.40	8100	8100	0	8100
120	7200	0.35	10800	10800	0	10800
180	10800	0.30	16200	16200	0	16200
240	14400	0.28	21600	21600	0	21600

Triangular Area	Compound Runoff Coefficient	Critical Flow Coefficient	Allowable Outflow Rate	100 Year Flood Volume	Bankfull Flood Volume	First Flush Volume	LWL	First Flush Elevation	Bankfull Flood Elevation	Using Proposed 100 Yr Flood Elevation
A = 33.54 Acres	C = 0.52	c = 0.6	Qa = 6.71 CFS	V100 = 189,135 CF	V50 = 79,911 CF	VFF = 28,003 CF	LWL = 970.85 (CS #301 Outlet (E))	XFF = 973.50	XBF = 973.99	X100 = 975.97

POND DEPTH (FT)	ELEV.	CONTOUR AREA (SF)	INCREMENTAL VOLUME (CF)	TOTAL VOLUME (CF)
BOTTOM	971.00	11,751	0	0
1	972.00	18,927	15,197	15,197
2	973.00	32,024	25,467	40,664
3	974.00	46,082	39,150	79,814
4	975.00	55,441	50,689	130,503
5	976.00	65,353	60,328	190,831
FREEBOARD	977.00	74,437	69,845	260,676



EMERGENCY SPILLWAY ELEVATION
NOT TO SCALE

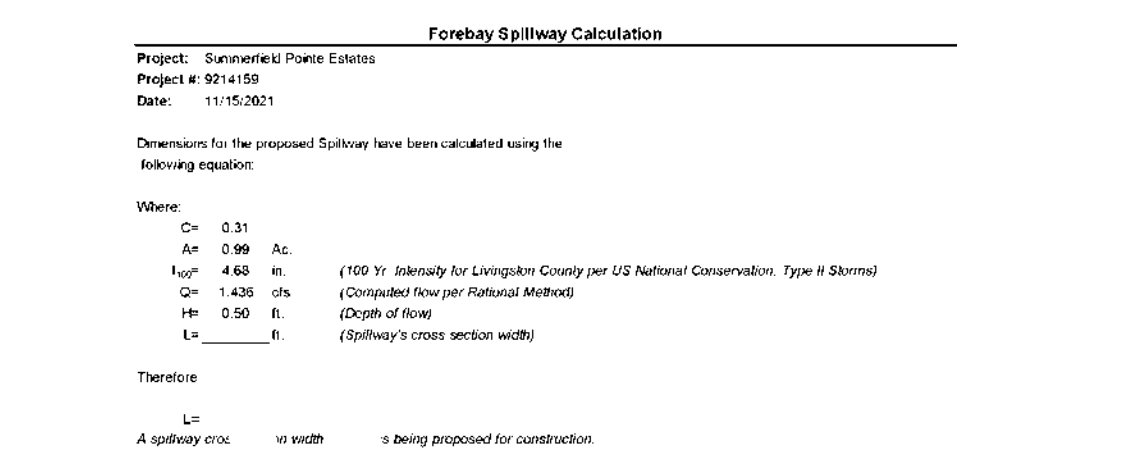
Project: Summerfield Pointe Estates
Project #: 2014159
Date: 11/15/2021

Dimensions for the proposed Spillway have been calculated using the following equation:

Values:
C = 0.36
A = 2.57 Ac.
K1 = 4.66 in.
C = 4.350 in.
H = 0.50 ft.
L = 8 ft.

Therefore:
L = 8 ft.

A spillway cross section width of 8 ft. is being proposed for construction.



FOREBAY SPILLWAY ELEVATION
NOT TO SCALE

Project: Summerfield Pointe Estates
Project #: 2014159
Date: 11/15/2021

Dimensions for the proposed Spillway have been calculated using the following equation:

Values:
C = 0.31
A = 0.99 Ac.
K1 = 4.66 in.
C = 1.436 in.
H = 0.50 ft.
L = 8 ft.

Therefore:
L = 8 ft.

A spillway cross section width of 8 ft. is being proposed for construction.

* Allowable outflow rate Qo is computed by one of the following cases:
Case 1: Qo = Approved Discharge
Case 2: Qo = q * A where q = Permissible discharge rate per acre of tributary area = 0.20 cfs / Acre

Note: Figures in Columns (3) and (4) are computed by the formula $1 = 275 / (1 + 28)$ (i.e. 100-yr Curve).

Bankfull Volume: (5,160)(A)(C) = 79,911 cf
First Flush Volume: (1,815)(A)(C) = 28,003 cf
Forebay Volume (5% of 100 year Volume): = 9,457 cf

POND DEPTH (FT)	ELEV.	CONTOUR AREA (SF)	INCREMENTAL VOLUME (CF)	TOTAL VOLUME (CF)
BOTTOM	970.00	1,365	0	0
1	971.00	2,133	1,842	1,842
2	972.00	2,700	2,440	4,282
3	973.00	4,459	3,594	7,876
SPILLWAY	973.40	5,476	1,992	9,868

Q1 + Q2 =	Q1 + Q2 =	H100 =	A100 needed =	N100 needed =
1.33 CFS	5.38 CFS	1.58 FT	0.794 SF	19.27 (1-3/4" Holes)

Use N100 = 19 2-3/4" Holes at CL Elevation = 974.11

POND DEPTH (FT)	ELEV.	CONTOUR AREA (SF)	INCREMENTAL VOLUME (CF)	TOTAL VOLUME (CF)
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SPILLWAY	973.40	5,476	1,992	9,868

Use N100 = 7 1-1/2" Holes at CL Elevation = 972.57

Q1 + Q2 =	Q1 + Q2 =	H100 =	A100 needed =	N100 needed =
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Q1 + Q2 =	Q1 + Q2 =	H100 =	A100 needed =	N
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Project: Summerfield Pointe PUD
 Location: Genoa Township, Livingston County, MI.
 Design Criteria: 10 year event (I = 1754 + 25)

RCP n= 0.013 HDPE n= 0.011 SLOPP n= 0.010 CMP n= 0.022 = EXISTING STORM SEWER Date: 8-Mar-23

Design M#	From M#	To M#	Pipe Material	Area	Eqv. Area	Total Area	T Time	I Inch	Q (CIA)	Dia. of pipe	Slope	Slope H.G.	Length of line	Vel. Flow	Time of flow	Cap of pipe	H.G. Elev. upper end	Ground Elev. Upper end	Ground Elev. Lower end	Invert Elev. Upper end	Invert Elev. Lower end	Cover Upper end	Cover Lower end	
1	2		RCP	0.78	0.66	0.52	0.52	15.0	4.38	2.26	12	0.49	0.40	72	3.16	0.4	2.48	986.98	990.86	990.81	984.96	984.61	4.71	5.01
2	3		RCP	0.05	0.66	0.03	0.55	15.4	4.33	2.38	15	0.38	0.14	73	3.26	0.4	4.00	986.69	990.81	990.88	984.56	984.28	4.81	5.16
12	13		RCP	0.65	0.67	0.44	0.44	15.0	4.38	1.90	12	13.50	0.29	6	16.65	0.0	13.09	986.79	991.08	991.07	985.88	985.07	4.01	4.81
13	3		RCP	0.43	0.73	0.32	0.75	15.1	4.36	3.27	15	0.26	0.26	72	2.70	0.4	3.32	986.78	991.07	990.88	984.47	984.28	5.16	5.16
3	01A		RCP	0.59	0.71	0.42	1.72	15.8	4.29	7.36	18	0.20	0.49	342	4.17	1.4	4.65	986.59	990.88	993.04	984.08	983.41	5.09	7.92
01A	231		RCP	0.00	0.00	0.00	1.72	17.1	4.15	7.13	21	0.20	0.20	159	2.96	0.9	7.11	983.60	993.04	993.10	981.74	981.42	9.32	9.70
234	232		HDPE-S	0.13	0.42	0.05	0.05	15.0	4.38	0.24	12	0.35	0.00	64	3.17	0.3	2.49	984.00	993.50	992.50	983.22	982.99	9.09	8.32
233	232		HDPE-S	0.25	0.42	0.11	0.16	15.3	4.34	0.69	12	0.35	0.03	123	3.17	0.6	2.49	983.50	992.50	992.50	982.89	982.46	8.42	8.85
232	231		HDPE-S	0.43	0.44	0.19	0.35	16.0	4.27	1.49	12	0.35	0.17	98	2.68	0.6	2.11	983.44	992.50	993.10	982.36	982.02	8.95	9.89
231	4		RCP	0.00	0.00	0.00	2.06	18.0	4.07	8.39	21	0.21	0.28	144	3.49	0.7	7.23	983.27	993.10	990.92	981.42	981.12	9.70	7.62
22	23		RCP	0.22	0.68	0.15	0.15	15.0	4.38	0.66	12	0.50	0.03	7	10.14	0.0	7.96	986.99	991.07	991.12	986.27	984.92	4.61	5.01
23	4		RCP	0.38	0.57	0.22	0.37	15.0	4.37	1.60	12	5.32	0.20	41	10.46	0.1	8.21	983.70	991.12	990.92	984.80	982.62	5.13	7.11
4	5		RCP	0.60	0.64	0.38	2.81	18.7	4.00	11.26	21	0.43	0.51	35	4.68	0.1	10.37	982.80	990.92	990.97	981.02	980.87	7.92	8.12
14	15		RCP	1.56	0.57	0.89	0.89	15.0	4.38	3.89	12	0.52	1.19	23	4.95	0.1	2.57	984.14	988.59	988.52	982.79	982.67	4.61	4.66
15	17		RCP	0.88	0.73	0.64	1.53	15.1	4.37	6.67	21	0.12	0.18	349	2.77	2.1	5.56	983.87	988.52	988.64	980.02	979.59	7.06	7.61
16	17		RCP	1.22	0.51	0.63	0.63	15.0	4.38	2.75	12	1.43	0.59	23	5.43	0.1	4.27	983.39	988.92	988.64	982.07	981.74	5.66	5.71
17	3A		RCP	0.79	0.72	0.67	2.72	17.2	4.15	11.30	21	0.18	0.51	267	4.70	0.9	6.79	983.50	988.64	992.50	979.54	979.05	7.12	11.47
3A	5		RCP	0.42	0.80	0.34	3.06	18.1	4.06	12.42	24	0.24	0.30	262	3.95	1.1	11.09	981.89	992.50	990.97	979.00	978.37	11.25	10.35
21	5		RCP	0.32	0.62	0.20	0.20	15.0	4.38	0.87	18	0.47	0.01	49	4.07	0.2	7.19	982.77	991.04	990.97	981.50	981.27	7.83	7.99
5	6		RCP	0.52	0.76	0.39	6.47	19.2	3.96	25.58	27	0.10	0.68	264	6.43	0.7	9.72	981.10	990.97	991.25	977.07	976.81	11.38	11.92
118	6		RCP	0.55	0.62	0.34	0.34	15.0	4.38	1.48	12	0.35	0.17	42	2.68	0.3	2.11	979.37	991.30	991.25	977.99	977.84	12.12	12.22
6	7		RCP	0.16	0.79	0.13	6.93	19.9	3.90	27.00	30	0.03	0.43	39	5.50	0.1	6.57	979.30	991.25	991.11	976.64	976.63	11.82	11.69
116	7		RCP	0.28	0.62	0.17	0.17	15.0	4.38	0.76	12	0.35	0.05	25	2.68	0.2	2.11	977.87	991.11	991.11	975.01	974.92	14.91	15.00
7	8		RCP	0.04	0.75	0.03	7.13	20.0	3.89	27.33	30	0.16	0.46	280	5.65	0.8	16.62	977.86	991.11	991.11	973.72	973.26	14.60	11.88
8	9		RCP	0.32	0.62	0.20	7.33	20.9	3.82	27.93	30	0.87	0.47	8	7.81	0.0	38.35	987.93	987.93	973.26	973.19	11.88	11.95	
115	114		HDPE-S	0.25	0.42	0.11	0.11	15.0	4.38	0.46	12	1.00	0.01	109	5.36	0.3	4.21	985.81	990.80	989.50	985.89	984.80	3.72	3.51
114	113		HDPE-S	0.30	0.40	0.12	0.23	15.3	4.34	0.95	12	0.35	0.05	109	3.17	0.6	2.49	985.38	989.50	988.50	984.70	984.32	3.61	2.99
113	112		HDPE-S	0.28	0.41	0.11	0.34	15.9	4.28	1.45	12	0.35	0.12	115	3.17	0.6	2.49	984.95	988.50	988.50	984.22	983.81	3.09	3.50
112	111		RCP	0.33	0.39	0.13	0.47	16.5	4.22	1.87	12	0.35	0.11	133	2.68	0.8	2.11	984.66	988.50	988.50	983.71	983.25	3.60	4.06
111	110		RCP	0.24	0.65	0.16	0.62	17.3	4.13	2.58	12	0.60	0.52	64	3.51	0.3	2.76	984.10	988.50	987.93	983.15	982.77	4.16	3.97
110	9		RCP	0.53	0.70	0.37	1.00	17.6	4.10	4.09	12	1.50	1.32	25	5.55	0.1	4.36	983.62	987.93	982.67	982.29	4.07	4.45	
9	2B		RCP	0.26	0.62	0.16	8.49	20.9	3.81	32.39	36	0.24	0.24	282	4.67	1.0	32.98	976.55	987.93	989.22	973.19	972.50	11.39	13.37
2B	102		RCP	0.06	0.60	0.05	8.54	21.9	3.73	31.87	36	0.24	0.23	88	4.62	0.3	32.66	976.88	987.93	987.93	972.31	972.10	13.56	13.19
102	100		RCP	0.00	0.00	0.00	8.54	22.2	3.71	31.66	36	0.24	0.23	137	4.62	0.5	32.66	976.68	988.64	987.25	972.00	971.67	13.29	12.23
221	220		HDPE-S	0.45	0.40	0.18	0.18	15.0	4.38	0.79	12	1.00	0.03	153	5.36	0.5	4.21	989.75	994.50	995.00	990.23	988.70	3.08	5.11
220	219		HDPE-S	0.66	0.35	0.23	0.41	15.5	4.32	1.76	12	0.35	0.18	162	3.17	0.8	2.49	989.33	995.00	995.00	988.60	988.07	5.21	5.74
219	218		HDPE-S	0.35	0.39	0.14	0.54	16.3	4.24	2.30	12	0.35	0.30	126	3.17	0.7	2.49	988.90	995.00	995.00	987.97	987.52	5.84	6.29
218	217		HDPE-S	0.26	0.42	0.11	0.65	16.9	4.17	2.72	12	0.55	0.42	109	3.97	0.5	3.12	988.90	995.00	995.00	987.42	986.82	6.39	7.79
217	216		HDPE-S	0.24	0.43	0.10	0.75	17.4	4.13	3.11	12	0.55	0.54	128	3.97	0.5	3.12	987.72	995.80	997.20	986.72	986.02	7.89	9.99
216	215		HDPE-S	0.00	0.00	0.00	0.75	17.9	4.08	3.07	12	0.55	0.53	89	3.97	0.4	3.12	986.90	997.20	995.80	985.41	984.11	10.09	10.20
215	214		HDPE-S	0.00	0.00	0.00	0.75	18.3	4.04	3.04	12	0.55	0.52	69	3.97	0.3	3.12	986.30	995.80	995.80	985.11	984.94	10.30	8.37
214	213		HDPE-S	0.49	0.40	0.20	0.95	18.6	4.01	3.81	18	0.25	0.09	98	3.51	0.5	6.20	985.88	994.50	992.50	984.54	984.29	8.34	6.50
410	401		HDPE-S	0.44	0.45	0.20	0.20	15.0	4.38	0.86	12	1.00	0.04	113	5.36	0.4	4.21	985.74	992.20	992.20	985.82	984.69	5.19	6.32
407	406		HDPE-S	1.19	0.41	0.49	0.49	15.0	4.38	2.13	12	0.30	0.26	143	2.94	0.8	2.31	988.92	992.20	992.20	987.98	987.55	3.03	3.46
406	405		HDPE-S	0.62	0.38	0.24	0.72	15.8	4.29	3.10	12	0.60	0.54	93	4.15	0.4	3.26	988.40	992.20	992.20	987.45	986.90	3.56	4.11
405	404		HDPE-S	0.82	0.38	0.31	1.03	16.2	4.25	4.39	18	0.25	0.13	117	3.15	0.6	6.20	987.85	992.20	992.20	986.50	986.20	3.99	4.59
404	403		RCP	1.07	0.42	0.45	1.49	16.7	4.19	6.23	18	0.40	0.35	115	3.76	0.5	6.64	987.55	992.50	993.77	986.10	985.64	4.69	6.42
403	402		RCP	0.49	0.63	0.31	1.79	17.3																

EXISTING UTILITY STRUCTURE INVENTORY

PROPOSED UTILITY STRUCTURE INVENTORY

SANITARY SEWER MANHOLE #01 RIM 986.49 NORTH 6" SDR 978.69 SOUTH 6" SDR 978.64	END SECTION #15 (TO BE REMOVED) 24" RCP 980.11	SAN SEWER MH-03 RIM 991.83 N 8" PVC 981.48 W 8" PVC 981.48 S 8" PVC 981.43	STORM CATCH BASIN CB-06 EX. RIM 989.39 PROP. RIM 991.25 SE 27" RCP 976.81 N 30" RCP 976.64
SANITARY SEWER MANHOLE # 02 EXIST. RIM 984.51 PROP. RIM 986.00 NORTH 6" SDR 976.91 SOUTH 6" SDR 976.81	INLET #16 (TO BE REMOVED) 12" CMP 979.06	SAN SEWER MH-04 RIM 992.58 N 8" PVC 982.58 E 8" PVC 982.68 S 8" PVC 982.48	STORM CATCH BASIN CB-07 EX. RIM 989.53 PROP. RIM 991.11 S 30" RCP 976.63 N 30" RCP 973.72
SANITARY SEWER MANHOLE #03 EXIST. RIM 985.52 NORTH 8" SDR 975.77 NORTHWEST 8" SDR 974.67 SOUTHEAST 8" SDR 974.72	END SECTION #17 12" CMP 978.40	SAN SEWER MH-05 RIM 990.79 N 8" PVC 983.90 W 8" PVC 983.94	STORM CATCH BASIN CB-08 EX. RIM 986.78 PROP. RIM 987.93 S 30" RCP 973.26 N 30" RCP 973.26
YARD BASIN #04 EXIST. RIM 983.87 PROP. RIM 985.00 NORTHWEST 24" RCP 980.24 SOUTHEAST 24" RCP 980.37	INLET #18 12" RCP 977.46	SAN SEWER MH-06 RIM 990.92 NE 8" PVC 985.12 S 8" PVC 985.12	STORM CATCH BASIN CB-09 EX. RIM 986.97 PROP. RIM 987.93 E 12" RCP 978.19 S 30" RCP 973.19 N 36" RCP 973.19
SANITARY SEWER MANHOLE #05 RIM 988.79 NORTHWEST 8" PVC 976.19 SOUTHEAST 8" PVC 975.99	STORM MANHOLE #19 RIM 981.83 NORTH 12" RCP "NOT FIELD VERIFIED" NORTHWEST 12" RCP 976.08 SOUTHWEST 12" RCP 974.88 SOUTHEAST 18" RCP 974.78 <i>NOTED: EXISTING NORTH 12" RCP RESTRICTED BY TWO (2) ORIFICES LOCATED IN CONCRETE CROUT.</i>	SAN SEWER MH-07 RIM 991.89 SE 8" PVC 986.09	STORM CATCH BASIN CB-10 (T.B.R.) RIM 985.12 SE 36" RCP 970.69 N 36" RCP 970.59
CATCH BASIN #06 RIM 992.07 NORTH 24" RCP 987.47 NORTHWEST 24" RCP 987.37 SOUTHEAST 24" RCP 987.17	CATCH BASIN #21 RIM 980.52 NORTH 6" CPP 977.97 SOUTHEAST 12" RCP 976.17	SAN SEWER MH-11 RIM 993.95 N 8" PVC 984.15 S 8" PVC 984.05	STORM CATCH BASIN CB-11 (T.B.R.) RIM 985.33 S 36" RCP 970.63 NW 36" RCP 970.53
SANITARY SEWER MANHOLE #07 RIM 992.21 NORTH 6" PVC 985.31 NORTHWEST 8" PVC 978.56 SOUTHEAST 8" PVC 978.61	INLET #22 15" CMP 984.95	SAN SEWER MH-12 RIM 993.95 N 8" PVC 984.15 S 8" PVC 984.05	STORM CATCH BASIN CB-12 RIM 991.08 W 12" RCP 985.88
STORM MANHOLE #08 RIM 992.63 NORTHEAST 12" RCP 988.53 SOUTHWEST 8" SDR 988.43 NORTHWEST 24" RCP 988.33 SOUTHEAST 24" RCP 988.28	OUTLET #23 15" CMP 984.83	SAN SEWER MH-14 RIM 993.67 SE 8" PVC 985.42	STORM CATCH BASIN CB-13 RIM 991.07 SW 12" RCP 985.07 W 12" RCP 984.52 E 15" RCP 984.47
CATCH BASIN #09 RIM 988.13 NORTHWEST 12" RCP 984.53 EAST 15" RCP 984.43	INLET #24 18" RCP 985.99	SAN SEWER MH #20640 (OFFSITE) RIM 989.00 W 8" PVC 971.30	STORM CATCH BASIN CB-14 RIM 988.59 SE 12" RCP 982.79
CATCH BASIN #10 RIM 987.50 SOUTHEAST 12" RCP 985.90	OUTLET #24 18" RCP 985.99	STORM CATCH BASIN CB-01 RIM 990.86 E 12" RCP 984.96	STORM CATCH BASIN CB-15 RIM 988.62 NW 12" RCP 982.67 N 21" RCP 980.02
END SECTION #11 12" RCP 983.80	INLET #25 12" CMP 985.49	STORM MANHOLE MH-01A RIM 993.04 S 18" RCP 983.41 N 21" RCP 981.74	STORM CATCH BASIN CB-16 RIM 988.92 E 12" RCP 982.07
CATCH BASIN #12 RIM 988.75 NORTHWEST 24" RCP 984.25 SOUTHEAST 24" RCP 984.15	OUTLET #26 12" CMP 985.31	FLARED END SECTION FES-100B S 36" RCP 970.35	STORM CATCH BASIN CB-17 RIM 988.64 INVERTS W 12" RCP 981.74 S 21" RCP 979.59 NW 21" RCP 979.54
STORM MANHOLE #13 RIM 987.45 NORTH 12" RCP 983.20 NORTHWEST 24" RCP 982.00 SOUTHEAST 24" RCP 981.85	INLET #27 12" CMP 984.74	STORM CATCH BASIN CB-02 (T.B.R.) RIM 990.81 INVERTS W 12" RCP 984.61 N 15" RCP 984.56	STORM CATCH BASIN CB-18 RIM 988.64 INVERTS W 12" RCP 981.74 S 21" RCP 979.59 NW 21" RCP 979.54
CATCH BASIN #14 RIM 985.24 NORTHWEST 24" RCP 981.14 SOUTHEAST 24" RCP 980.89 (REPLACE CASTING)	OUTLET #28 12" CMP 984.35	STORM MANHOLE MH-02B EX. RIM 987.40 PROP. RIM 989.22 SE 36" RCP 972.50 NW 36" RCP 970.35	STORM CATCH BASIN CB-21 RIM 991.04 W 18" RCP 981.61 E 18" RCP 981.50
	INLET #29 12" CMP 985.60	STORM CATCH BASIN CB-03 RIM 990.88 W 15" RCP 984.28 S 15" RCP 984.28 N 18" RCP 984.08	STORM CATCH BASIN CB-22 RIM 991.07 SE 12" RCP 985.27
	OUTLET #30 12" CMP 985.39	STORM MANHOLE #03A RIM 992.50 SE 21" RCP 979.05 NW 24" RCP 979.00	STORM CATCH BASIN CB-23 RIM 991.12 NW 12" RCP 984.92 E 12" RCP 984.80
	INLET #32 15" CMP 985.54	STORM CATCH BASIN CB-04 RIM 990.92 SW 12" RCP 982.62 S 21" RCP 981.12 NW 21" RCP 981.02	STORM CATCH BASIN CB-27 RIM 986.36 W 12" RCP 978.90
	OUTLET #33 15" CMP 985.52	STORM CATCH BASIN CB-05 RIM 990.97 W 18" RCP 981.27 S 21" RCP 980.87 SE 24" RCP 978.37 NW 27" RCP 977.07	STORM MANHOLE MH-37 RIM 984.31 N 24" RCP 979.36 SW 12" RCP 980.56
	INLET #34 15" CMP 985.73		STORM CATCH BASIN CB-38 RIM 985.74 NE 12" RCP 981.14 S 12" RCP 981.04
	OUTLET #35 15" CMP 985.48		STORM CATCH BASIN CB-39 RIM 985.74 N 12" RCP 981.44
	INLET #36 12" CMP 986.43		

STORM CATCHBASIN CB-100 N. 8817.21, E. 3157.32 6" DIA. RIM 987.25 12" S. 982.17 36" SE. 971.67 42" SW. 971.27 48" N. 970.87 SUMP 988.87	STORM MANHOLE MH-200 N. 8734.64, E. 3106.66 6" DIA. RIM 987.80 36" SE. 973.61 42" NE. 971.61	STORM YARD BASIN YB-210 N. 8122.35, E. 2978.66 4" DIA. RIM 987.30 24" S. 979.86 24" N. 979.76 SUMP 977.76	STORM CATCHBASIN CB-260 N. 8314.51, E. 3090.27 4" DIA. RIM 988.80 12" E. 983.40 12" W. 983.30 SUMP 981.30	STORM YARD BASIN YB-401 N. 7867.25, E. 3256.52 4" DIA. RIM 992.20 12" E. 984.69 18" S. 984.94 18" W. 984.29 SUMP 982.29
STORM CATCHBASIN CB-101 N. 8792.25, E. 3155.91 2" DIA. RIM 987.25 12" N. 982.42 SUMP 980.42	STORM YARD BASIN YB-201 N. 8641.06, E. 3147.88 5" DIA. RIM 984.50 36" SE. 975.47 36" NW. 973.77 SUMP 971.77	STORM YARD BASIN YB-211 N. 8012.61, E. 2982.83 4" DIA. RIM 991.80 24" SE. 980.40 24" N. 980.30 SUMP 978.30	STORM CATCHBASIN CB-261 N. 8315.391, E. 3116.43 2" DIA. RIM 988.85 12" W. 983.66 SUMP 981.66	STORM YARD BASIN YB-410 N. 7896.44, E. 3365.64 2" DIA. RIM 992.20 12" W. 985.82 SUMP 983.82
STORM CATCHBASIN CB-110 N. 8388.97, E. 3392.16 4" DIA. RIM 987.93 12" S. 982.77 12" W. 982.67 SUMP 980.67	STORM MANHOLE MH-102 N. 8743.54, E. 3272.82 5" DIA. RIM 988.64 36" S. 972.10 36" NW. 972.00	STORM YARD BASIN YB-212 N. 7924.87, E. 3024.08 4" DIA. RIM 994.50 18" SE. 981.19 24" NW. 980.79 SUMP 978.79	STORM YARD BASIN YB-301 N. 8522.08, E. 3189.54 4" DIA. RIM 984.50 12" SE. 978.19 12" NW. 978.09 SUMP 976.09	STORM CATCHBASIN CB-402 N. 7751.88, E. 3282.83 4" DIA. RIM 993.57 18" SW. 985.38 18" N. 985.28 SUMP 983.28
STORM CATCHBASIN CB-111 N. 8325.94, E. 3404.45 4" DIA. RIM 988.50 12" E. 983.25 12" N. 983.15 SUMP 981.15	STORM YARD BASIN YB-112 N. 8345.67, E. 3536.03 4" DIA. RIM 988.50 12" S. 983.81 12" W. 983.71 SUMP 981.71	STORM YARD BASIN YB-213 N. 7842.66, E. 3121.16 4" DIA. RIM 992.50 36" SW. 984.29 18" E. 983.19 18" NW. 983.09 SUMP 981.09	STORM YARD BASIN YB-302 N. 8381.08, E. 3243.05 4" DIA. RIM 986.00 12" SE. 980.85 12" NW. 978.95 SUMP 976.95	STORM CATCHBASIN CB-403 N. 7723.60, E. 3273.01 4" DIA. RIM 993.77 18" S. 985.64 18" NE. 985.54 SUMP 983.54
STORM YARD BASIN YB-113 N. 8232.22, E. 3591.62 4" DIA. RIM 988.50 12" S. 984.32 12" N. 984.22 SUMP 982.22	STORM MANHOLE MH-205 N. 8450.18, E. 3028.36 5" DIA. RIM 986.00 12" SE. 981.23 12" NW. 980.36 36" NE. 977.73 36" N. 977.63	STORM YARD BASIN YB-214 N. 7767.52, E. 3057.67 4" DIA. RIM 994.50 18" SW. 984.94 18" NE. 984.54 SUMP 982.54	STORM YARD BASIN YB-303 N. 8275.56, E. 3264.28 4" DIA. RIM 987.00 12" SE. 981.38 12" NW. 981.28 SUMP 979.28	STORM YARD BASIN YB-404 N. 7611.81, E. 3301.33 4" DIA. RIM 992.50 18" S. 986.20 18" N. 986.10 SUMP 984.10
STORM YARD BASIN YB-114 N. 8124.76, E. 3573.34 4" DIA. RIM 989.50 12" S. 984.80 12" N. 984.70 SUMP 982.70	STORM MANHOLE MH-215 N. 7714.71, E. 3013.04 4" DIA. RIM 986.80 12" S. 985.41 12" NE. 985.31	STORM MANHOLE MH-216 N. 7623.23, E. 2992.81 4" DIA. RIM 992.00 12" S. 896.02 12" N. 985.92	STORM YARD BASIN YB-304 N. 8168.55, E. 3280.41 4" DIA. RIM 986.50 12" SE. 981.91 12" NW. 981.81 SUMP 979.81	STORM YARD BASIN YB-405 N. 7503.01, E. 3344.68 4" DIA. RIM 992.20 12" S. 986.90 18" N. 986.50 SUMP 984.50
STORM YARD BASIN YB-115 N. 8017.28, E. 3591.62 2" DIA. RIM 990.80 12" N. 985.89 SUMP 983.89	FES-240 N. 8455.49, E. 3011.86 INV. 981.04	STORM CATCHBASIN CB-250 N. 8404.62, E. 3059.22 2" DIA. RIM 986.69 12" N. 981.78 SUMP 979.78	STORM YARD BASIN YB-305 N. 8114.51, E. 3288.52 2" DIA. RIM 987.50 12" NW. 982.46 SUMP 980.46	STORM YARD BASIN YB-406 N. 7410.92, E. 3353.97 4" DIA. RIM 992.20 12" S. 987.55 12" N. 987.45 SUMP 985.45
STORM CATCHBASIN CB-116 N. 8103.18, E. 3437.85 2" DIA. RIM 991.25 12" W. 975.01 SUMP 973.01	STORM CATCHBASIN CB-207 N. 8385.80, E. 2970.80 5" DIA. RIM 985.73 36" S. 978.05 36" N. 977.95 SUMP 975.95	STORM YARD BASIN YB-208 N. 8297.02, E. 2973.51 5" DIA. RIM 984.50 12" E. 979.76 24" S. 978.96 36" N. 978.16 SUMP 976.16	STORM YARD BASIN YB-306 N. 7494.78, E. 2996.38 4" DIA. RIM 995.00 12" S. 986.82 12" N. 986.72 SUMP 984.72	STORM YARD BASIN YB-407 N. 7284.97, E. 3421.70 2" DIA. RIM 992.20 12" N. 987.98 SUMP 985.98
STORM CATCH BASIN CB-118 N. 8012.76, E. 3421.70 2" DIA. RIM 991.30 12" N. 977.99 SUMP 975.99	STORM YARD BASIN YB-209 N. 8232.10, E. 2975.48 4" DIA. RIM 985.20 24" S. 979.32 24" N. 979.22 SUMP 977.22	STORM YARD BASIN YB-210 N. 7141.00, E. 3096.56 4" DIA. RIM 995.00 12" SE. 988.70 12" NW. 988.60 SUMP 986.60	STORM YARD BASIN YB-307 N. 7020.36, E. 3191.23 2" DIA. RIM 994.50 12" NW. 990.23 SUMP 988.23	

DESIGN:WMP	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	06-01-23	REVISED PER GENOA TOWNSHIP PLANNING COMMISSION RECOMMENDATION
CHECK: WMP			

REVISION #	DATE	REVISION-DESCRIPTION

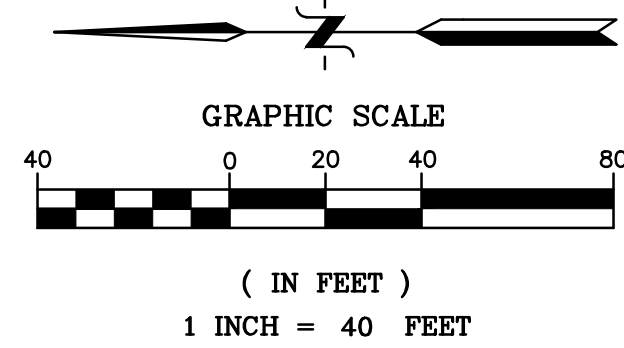
**SUMMERFIELD
POINTE PUD**

**EXISTING & PROPOSED
UTILITY STRUCTURE
INVENTORY**

CLIENT: HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD. COMMERCE TOWNSHIP, MICHIGAN 48382 248-684-1699	SCALE: NOT TO SCALE PROJECT No.: 214159 DWG NAME: 4159 UT ISSUED: JULY 10, 2023
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UT8





LEGEND

- = PROPERTY LINE
- = EX. EDGE OF PAVEMENT
- = EX. EASEMENT LINE
- = APPROX. WETLAND LINE
- = UTILITY POLE W/GUY WIRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = EXISTING TREE DRIP LINE
- = EDGE OF GRAVEL
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
- SA — SA = SANITARY SEWER PIPE
- ST — ST = SANITARY SEWER MANHOLE W/IDENTIFIER
- ST — ST = STORM WATER DRAINAGE PIPE
- ST — ST = STORM WATER MANHOLE W/IDENTIFIER
- ST — ST = CATCH BASIN W/IDENTIFIER
- ST — ST = FLARED END SECTION
- W — W = WATER MAIN
- W — W = WATER MAIN
- W — W = HYDRANT
- W — W = WATER SHUT OFF
- W — W = WATER VALVE
- W — W = WATER VALVE BOX
- W — W = U/G GAS
- W — W = GAS SHUT OFF
- W — W = 1' CONTOUR
- W — W = 5' CONTOUR
- = PROPOSED UNIT LINE
- = PROPOSED BUILDING SETBACK
- = PROPOSED EASEMENT LINE
- = PROPOSED SANITARY SEWER
- = PROPOSED SANITARY MANHOLE
- = PROPOSED WATER MAIN
- = PROPOSED HYDRANT
- = PROPOSED WATER VALVE
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER
- = PROPOSED CONCRETE WALK
- = PROPOSED 5' CONTOUR
- = PROPOSED 1' CONTOUR
- = PROPOSED DRAINAGE FLOW ARROW

NOTES:

- All sidewalk ramps shall be constructed in accordance with M.D.O.T. standards for barrier free ramps at the time of construction (see sheet DT1 for details).

FLOOR ELEVATION TABLE (SOUTH)						
Unit Number	Garage	1st Floor Elevation (feet)	2nd Floor Elevation (feet)	Basement Floor Elevation (feet)	Garage Floor Elevation (feet)	Grinder Pump Required for Basement (Y/N)
1	Right	996.75	987.25	986.33	996.00	Y
2	Right	996.25	987.25	986.33	995.00	Y
3	Right	995.75	986.85	986.85	994.50	Y
4	Right	995.75	986.85	986.85	994.50	Y
5	Left Facing West	995.75	986.85	986.85	994.50	Y
6	Right	995.75	986.85	986.85	994.50	Y
7	Right	995.75	986.85	986.85	994.50	Y
8	Left	995.75	986.85	986.85	994.50	Y
9	Left	995.75	986.85	986.85	994.50	Y
10	Left	995.75	986.85	986.85	994.50	Y
11	Left	995.75	986.85	986.85	994.50	Y
12	Left	995.75	986.85	986.85	994.50	Y
13	Left	995.75	986.85	986.85	994.50	Y
14	Left	995.75	986.85	986.85	994.50	Y
15	Left	995.75	986.85	986.85	994.50	Y
16	Left	995.75	986.85	986.85	994.50	Y
17	Left	995.75	986.85	986.85	994.50	Y
18	Left	995.75	986.85	986.85	994.50	Y
19	Left	995.75	986.85	986.85	994.50	Y
20	Left	995.75	986.85	986.85	994.50	Y
21	Left	995.75	986.85	986.85	994.50	Y
22	Left	995.75	986.85	986.85	994.50	Y
23	Left	995.75	986.85	986.85	994.50	Y
24	Left	995.75	986.85	986.85	994.50	Y
25	Left	995.75	986.85	986.85	994.50	Y
26	Left	995.75	986.85	986.85	994.50	Y
27	Left	995.75	986.85	986.85	994.50	Y
28	Left	995.75	986.85	986.85	994.50	Y
29	Left	995.75	986.85	986.85	994.50	Y
30	Left	995.75	986.85	986.85	994.50	Y
31	Left	995.75	986.85	986.85	994.50	Y
32	Left	995.75	986.85	986.85	994.50	Y
33	Left	995.75	986.85	986.85	994.50	Y
34	Left	995.75	986.85	986.85	994.50	Y
35	Left	995.75	986.85	986.85	994.50	Y
36	Left	995.75	986.85	986.85	994.50	Y
37	Left	995.75	986.85	986.85	994.50	Y
38	Left	995.75	986.85	986.85	994.50	Y
39	Left	995.75	986.85	986.85	994.50	Y
40	Left	995.75	986.85	986.85	994.50	Y
41	Left	995.75	986.85	986.85	994.50	Y
42	Left	995.75	986.85	986.85	994.50	Y
43	Right Facing South	995.75	986.85	986.85	994.00	Y

BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPEAT NO. 2 OF "SUMMERFIELD POINTE, LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN NO. 295. DATUM REFERS TO "11.5-G.5" NO DATUM SPECIFIED. SITE ADJUSTED TO NAD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #201 (PRIMARY)
SPRINKLER IN THE EAST SIDE OF LAWSON DRIVE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88)
REF: FIELD BOOK 1483, PG. 34
POINT #201

BENCHMARK #204 (PRIMARY)
SPRINKLER IN THE EAST SIDE OF LAWSON DRIVE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.88 (NAVD 88)
REF: FIELD BOOK 1483, PG. 34
POINT #204

BENCHMARK #203
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 336 FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 993.14 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #203

BENCHMARK #200
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 372 FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 995.39 (NAVD 88)
ELEVATION = 995.89 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #200

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2183 PLYERS DRIVE
BRIGHTON, MICHIGAN 48114

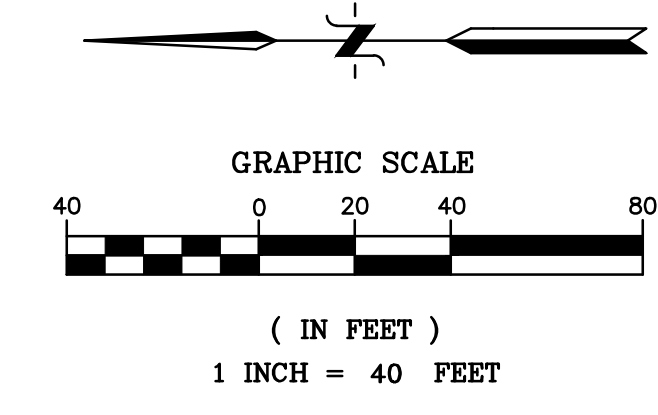
DESIGN: FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: OM	1	10-25-22	REVISED PER REVIEW COMMENTS			
CHECK: FAF	2	06-01-23	REVISED PER GENOA TOWNSHIP PLANNING COMMISSION RECOMMENDATION			

SUMMERFIELD POINTE PUD

GRADING PLAN (SOUTH)

CLIENT:	HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD. COMMERCE TOWNSHIP, MICHIGAN 48382 248-684-1699	SCALE:	1in. = 40ft.
PROJECT NO.:	214159	DWG NAME:	4159 GR
ISSUED:	JULY 10 2023		

GR1



LEGEND

- = PROPERTY LINE
- - - = EX. EDGE OF PAVEMENT
- - - = EX. EASEMENT LINE
- - - = APPROX. WETLAND LINE
- = UTILITY POLE W/GUY WIRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = EXISTING TREE DRIP LINE
- = EDGE OF GRAVEL
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
- = SANITARY SEWER PIPE
- = SANITARY SEWER MANHOLE W/IDENTIFIER
- = STORM WATER DRAINAGE PIPE
- = STORM WATER MANHOLE W/IDENTIFIER
- = CATCH BASIN W/IDENTIFIER
- = FLARED END SECTION
- = WATER MAIN
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = U/G GAS
- = GAS SHUT OFF
- = 1' CONTOUR
- = 5' CONTOUR
- = PROPOSED UNIT LINE
- = PROPOSED BUILDING SETBACK
- = PROPOSED EASEMENT LINE
- = PROPOSED SANITARY SEWER
- = PROPOSED SANITARY MANHOLE
- = PROPOSED WATER MAIN
- = PROPOSED HYDRANT
- = PROPOSED WATER VALVE
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER
- = PROPOSED CONCRETE WALK
- = PROPOSED 5' CONTOUR
- = PROPOSED 1' CONTOUR
- = PROPOSED DRAINAGE FLOW ARROW

BENCHMARKS

- DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPEAT No. 2 OF "SUMMERFIELD POINTE" LANSING COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.C.S." NO DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.
- BENCHMARK #201
CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 488 FEET EAST OF LAWSON DRIVE.
ELEVATION = 991.29 (NAVD 88)
ELEVATION = 992.14 (PLATTED)
REF: FIELD BOOK 148, PG. 34
POINT #201
 - BENCHMARK #204 (PRIMARY)
SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE".
ELEVATION = 993.43 (NAVD 88)
ELEVATION = 993.93 (PLATTED)
REF: FIELD BOOK 148, PG. 34
POINT #204
 - BENCHMARK #203
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 336 FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 993.88 (NAVD 88)
ELEVATION = 994.38 (PLATTED)
REF: POINT #203
 - BENCHMARK #200
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 373 FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 995.39 (NAVD 88)
ELEVATION = 995.89 (PLATTED)
REF: FIELD BOOK 148, PG. 34
POINT #200

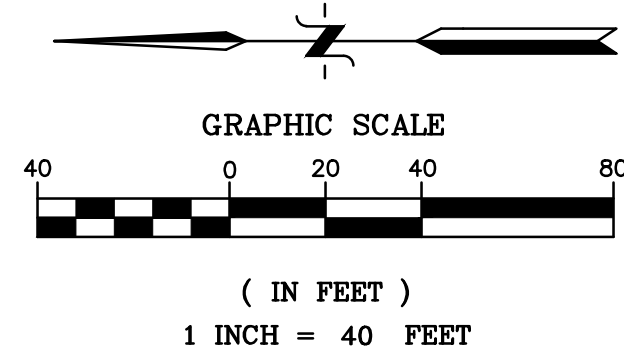
NOTES:

- All sidewalk ramps shall be constructed in accordance with M.D.O.T. standards for barrier free ramps at the time of construction.

LINE	Garage	Main Floor	1st Basement	2nd Basement	Basement Floor	Garage Floor	Grinder Room
Number	Elevation (Feet)	Elevation (Feet)	Elevation (Feet)	Elevation (Feet)	Elevation (Feet)	Elevation (Feet)	Required for Elevation (F.T.)
44	South	991.25	987.25	983.25	989.25	992.00	Y
45	South	991.25	987.25	983.25	989.25	992.00	Y
46	South	991.25	987.25	983.25	989.25	992.00	Y
47	South	991.25	987.25	983.25	989.25	992.00	Y
48	South	991.25	987.25	983.25	989.25	992.00	Y
49	South	991.25	987.25	983.25	989.25	992.00	Y
50	South	991.25	987.25	983.25	989.25	992.00	Y
51	South	991.25	987.25	983.25	989.25	992.00	Y
52	South	991.25	987.25	983.25	989.25	992.00	Y
53	South	991.25	987.25	983.25	989.25	992.00	Y
54	South	991.25	987.25	983.25	989.25	992.00	Y
55	South	991.25	987.25	983.25	989.25	992.00	Y
56	South	991.25	987.25	983.25	989.25	992.00	Y
57	South	991.25	987.25	983.25	989.25	992.00	Y
58	South	991.25	987.25	983.25	989.25	992.00	Y
59	South	991.25	987.25	983.25	989.25	992.00	Y
60	South	991.25	987.25	983.25	989.25	992.00	Y
61	South	991.25	987.25	983.25	989.25	992.00	Y
62	South	991.25	987.25	983.25	989.25	992.00	Y
63	South	991.25	987.25	983.25	989.25	992.00	Y
64	South	991.25	987.25	983.25	989.25	992.00	Y
65	South	991.25	987.25	983.25	989.25	992.00	Y
66	South	991.25	987.25	983.25	989.25	992.00	Y
67	South	991.25	987.25	983.25	989.25	992.00	Y
68	South	991.25	987.25	983.25	989.25	992.00	Y
69	South	991.25	987.25	983.25	989.25	992.00	Y
70	South	991.25	987.25	983.25	989.25	992.00	Y
71	South	991.25	987.25	983.25	989.25	992.00	Y
72	South	991.25	987.25	983.25	989.25	992.00	Y
73	South	991.25	987.25	983.25	989.25	992.00	Y
74	South	991.25	987.25	983.25	989.25	992.00	Y
75	South	991.25	987.25	983.25	989.25	992.00	Y
76	South	991.25	987.25	983.25	989.25	992.00	Y
77	South	991.25	987.25	983.25	989.25	992.00	Y
78	South	991.25	987.25	983.25	989.25	992.00	Y
79	South	991.25	987.25	983.25	989.25	992.00	Y
80	South	991.25	987.25	983.25	989.25	992.00	Y
81	South	991.25	987.25	983.25	989.25	992.00	Y
82	South	991.25	987.25	983.25	989.25	992.00	Y
83	South	991.25	987.25	983.25	989.25	992.00	Y
84	South	991.25	987.25	983.25	989.25	992.00	Y
85	South	991.25	987.25	983.25	989.25	992.00	Y
86	South	991.25	987.25	983.25	989.25	992.00	Y
87	South	991.25	987.25	983.25	989.25	992.00	Y
88	South	991.25	987.25	983.25	989.25	992.00	Y
89	South	991.25	987.25	983.25	989.25	992.00	Y
90	South	991.25	987.25	983.25	989.25	992.00	Y
91	South	991.25	987.25	983.25	989.25	992.00	Y
92	South	991.25	987.25	983.25	989.25	992.00	Y
93	South	991.25	987.25	983.25	989.25	992.00	Y
94	South	991.25	987.25	983.25	989.25	992.00	Y
95	South	991.25	987.25	983.25	989.25	992.00	Y
96	South	991.25	987.25	983.25	989.25	992.00	Y
97	South	991.25	987.25	983.25	989.25	992.00	Y
98	South	991.25	987.25	983.25	989.25	992.00	Y
99	South	991.25	987.25	983.25	989.25	992.00	Y
100	South	991.25	987.25	983.25	989.25	992.00	Y
101	South	991.25	987.25	983.25	989.25	992.00	Y
102	South	991.25	987.25	983.25	989.25	992.00	Y

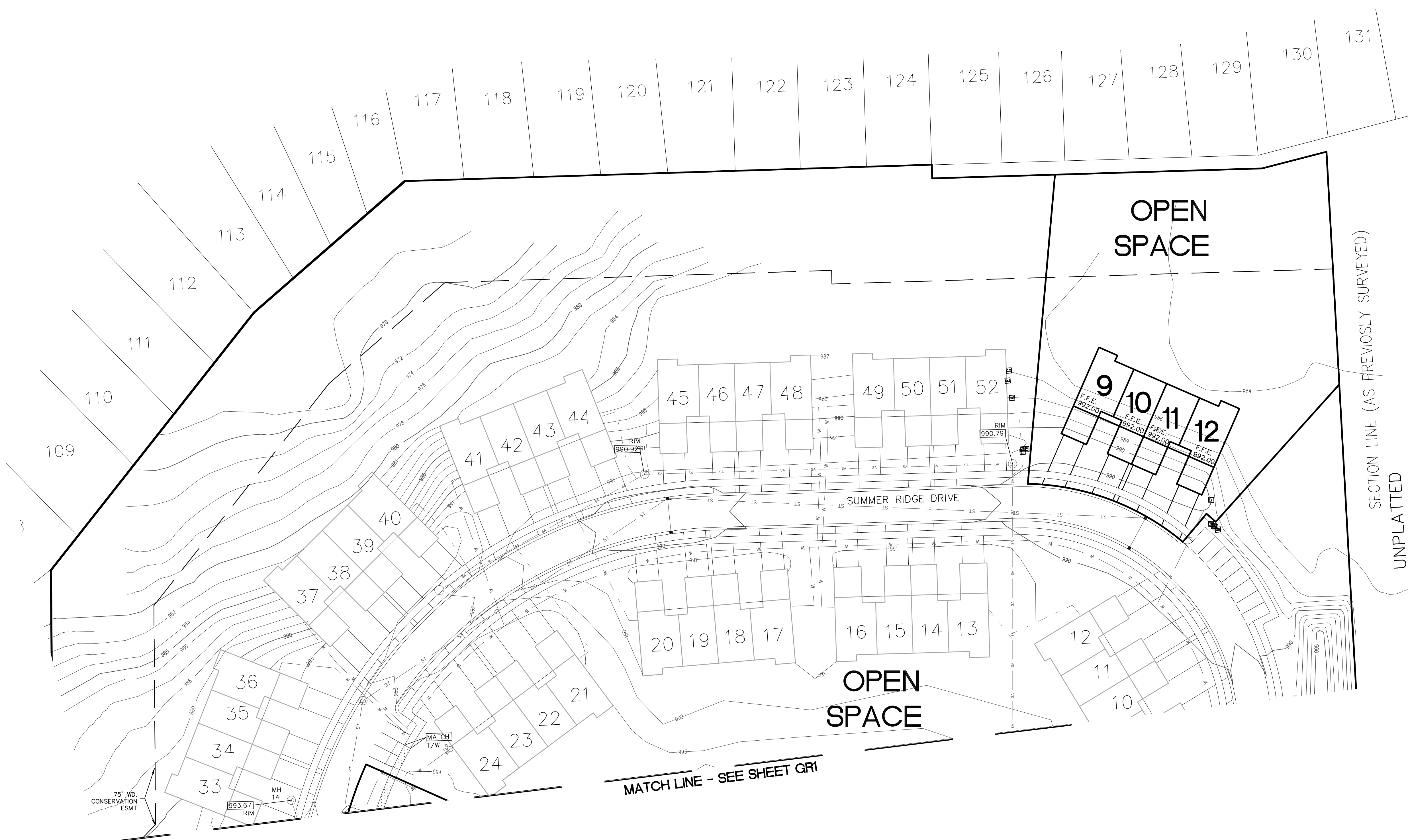
LINE	Garage	Main Floor	1st Basement	2nd Basement	Basement Floor	Garage Floor	Grinder Room
Number	Elevation (Feet)	Elevation (Feet)	Elevation (Feet)	Elevation (Feet)	Elevation (Feet)	Elevation (Feet)	Required for Elevation (F.T.)
44	South	991.25	987.25	983.25	989.25	992.00	Y
45	South	991.25	987.25	983.25	989.25	992.00	Y
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49	South	991.25	987.25	983.25	989.25	992.00	Y
50	South	991.25	987.25	983.25	989.25	992.00	Y
51	South	991.25	987.25	983.25	989.25	992.00	Y
52	South	991.25	987.25	983.25	989.25	992.00	Y
53	South	991.25	987.25	983.25	989.25	992.00	Y
54	South	991.25	987.25	983.25	989.25	992.00	Y
55	South	991.25	987.25	983.25	989.25	992.00	Y
56	South	991.25	987.25	983.25	989.25	992.00	Y
57	South	991.25	987.25	983.25	989.25	992.00	Y
58	South	991.25	987.25	983.25	989.25	992.00	Y
59	South	991.25	987.25	983.25	989.25	992.00	Y
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64	South	991.25	987.25	983.25	989.25	992.00	Y
65	South	991.25	987.25	983.25	989.25	992.00	Y
66	South	991.25	987.25	983.25	989.25	992.00	Y
67	South	991.25	987.25	983.25	989.25	992.00	Y
68	South	991.25	987.25	983.25	989.25	992.00	Y
69	South	991.25	987.25	983.25	989.25	992.00	Y
70	South	991.25	987.25	983.25	989.25	992.00	Y
71	South	991.25	987.25	983.25	989.25	992.00	Y
72	South	991.25	987.25	983.25	989.25	992.00	Y
73	South	991.25	987.25	983.25	989.25	992.00	Y
74	South	991.25	987.25	983.25	989.25	992.00	Y
75	South	991.25	987.25	983.25	989.25	992.00	Y
76	South	991.25	987.25	983.25	989.25	992.00	Y
77	South	991.25	987.25	983.25	989.25	992.00	Y
78	South	991.25	987.25	983.25	989.25	992.00	Y
79	South	991.25	987.25	983.25	989.25	992.00	Y
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83	South	991.25	987.25	983.25	989.25	992.00	Y
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LINE	Garage	Main Floor	1st Basement	2nd Basement	Basement Floor	Garage Floor	Grinder Room
Number	Elevation (Feet)	Elevation (Feet)	Elevation (Feet)	Elevation (Feet)	Elevation (Feet)	Elevation (Feet)	Required for Elevation (F.T.)
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51	South	991.25	987.25	983.25	989.25	992.00	Y
52	South	991.25	987.25	983.25	989.25	992.00	Y
53	South	991.25	987.25	983.25	989.25	992.00	Y



LEGEND

- = PROPERTY LINE
- - - = EX. EDGE OF PAVEMENT
- - - = EX. EASEMENT LINE
- - - = APPROX. WETLAND LINE
- = UTILITY POLE W/GUY WIRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = EXISTING TREE DRIP LINE
- = EDGE OF GRAVEL
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
- SA SA = SANITARY SEWER PIPE
- ST 00 = SANITARY SEWER MANHOLE W/IDENTIFIER
- ST 00 = STORM WATER DRAINAGE PIPE
- ST 00 = STORM WATER MANHOLE W/IDENTIFIER
- ST 00 = CATCH BASIN W/IDENTIFIER
- ST 00 = FLARED END SECTION
- W W = WATER MAIN
- W W = HYDRANT
- W W = WATER SHUT OFF
- W W = WATER VALVE
- W W = WATER VALVE BOX
- GAS GAS = U/G GAS
- GAS GAS = GAS SHUT OFF
- 000 = 1' CONTOUR
- 000 = 5' CONTOUR
- - - = PROPOSED UNIT LINE
- - - = PROPOSED BUILDING SETBACK
- - - = PROPOSED EASEMENT LINE
- SA SA = PROPOSED SANITARY SEWER
- SA SA = PROPOSED SANITARY MANHOLE
- W W = PROPOSED WATER MAIN
- W W = PROPOSED HYDRANT
- W W = PROPOSED WATER VALVE
- ST ST = PROPOSED STORM SEWER
- ST ST = PROPOSED STORM STRUCTURES
- ST ST = PROPOSED CURB AND GUTTER



BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPLAT No. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.G.S." NO DATUM SPECIFIED.

BENCHMARK #201: CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 488 FEET EAST OF LAWSON DRIVE. ELEVATION = 991.29 (NAVD 88)

BENCHMARK #202: ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 334 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 993.88 (NAVD 88)

BENCHMARK #203: ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 372 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 995.39 (NAVD 88)

BENCHMARK #204: SPRING IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88)

REF: FIELD BOOK 1483, PG. 34
POINT #204

3 WORKING DAYS BEFORE YOU DIG CALL 811 OR 1-800-482-7171 (TOLL FREE) OR VISIT CALL811.COM

(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

**SUMMERFIELD
POINTE PUD**

GRADING PLAN (EAST)

CLIENT: HEALY HOMES AT SUMMERFIELD LLC
3696 SLEETH RD.
COMMERCE TOWNSHIP, MICHIGAN 48382
248-684-1699

SCALE: 1in. = 40ft.
PROJECT No.: 214159
DWG NAME: 4159 GR
ISSUED: JULY 10, 2023

GR3

SUMMERFIELD POINTE P.U.D.

OVERALL PARCEL 60.736 Acres
(Parcels 4711-04-400-013, 014, 015, 016 and "Summerfield Pointe" Replat #2 Combined)
Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as:

BEGINNING at the South 1/4 Corner of said Section 4;
thence along the North-South 1/4 line of Section 4 to following two courses:
1) N01°35'17"W 1366.11 feet and
2) N02°11'05"W 1525.13 feet, (recorded as N01°50'51"E 2890.65 feet) to the center of Section 4;
thence along the East-West 1/4 line of Section 4, N88°53'35"E 1177.52 feet (recorded as S87°40'08"E 1162.17 feet);
thence N01°06'25"W (recorded as N02°19'54"E) 16.05 feet; thence S88°08'25"E (recorded as S84°42'06"E) 140.66 feet;
thence S10°02'44"W (recorded as S13°29'03"W) 81.90 feet; thence S22°34'43"E 40.64 feet (recorded as S19°08'24"E) 39.61 feet; thence S01°33'04"E 373.87 feet (recorded as S01°53'17"W 374.11 feet); thence S84°41'00"W (recorded as S88°06'46"W) 683.63 feet; thence S01°59'18"E (recorded as S01°28'28"W) 400.04 feet; thence S02°08'43"E 510.56 feet (recorded as S01°17'41"W 510.39 feet); thence N04°03'00"E (recorded as N01°29'24"E) 79.92 feet; thence along a line 10.00 feet West of and parallel to the Westerly line of "Sunrise Park", a subdivision recorded in Liber 2 of Plats, Page 23, Livingston County Records, S01°00'54"E 244.55 feet (recorded as S02°21'39"W 243.95 feet); thence S01°30'01"E 228.89 feet (recorded as S01°45'17"W 227.42 feet); thence N80°34'14"E (recorded as S87°01'22"E) 186.47 feet; thence along the West line of said "Sunrise Park" the following three courses:
1) S51°14'30"E (recorded as S48°20'08"E) 240.00 feet;
2) S41°02'02"E 146.55 feet (recorded as S37°37'38"E 146.14 feet) and
3) S01°47'25"E 385.18 feet (recorded as S01°42'54"W 386.00 feet);
thence S88°43'10"W 10.00 feet (recorded as N88°17'05"W 10.00 feet) thence along a line 10 feet West of and parallel to the West line of said "Sunrise Park" the following two courses:
1) S01°43'30"E 241.29 feet (recorded as S1°42'54"W 241.14 feet) and
2) S14°28'55"E 48.77 feet (recorded as S11°13'33"E 48.86 feet);
thence along the South line of said Section 4, as previously surveyed, S88°50'35"W (recorded as N89°43'06"W) 473.98 feet;
thence along a line coincident with Lawson Drive the following three courses:
1) N05°38'45"W (recorded as N02°12'21"W) 150.00 feet;
2) S80°50'35"W (recorded as N89°43'06"W) 150.00 feet and
3) S05°38'45"E (recorded as S02°12'21"E) 150.00 feet;
thence along the South line of said Section 4, as previously surveyed, S80°50'35"W 546.06 feet (recorded as N89°43'06"W 546.16 feet) to the Point of Beginning, Containing 60.73 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

NATURE PRESERVE

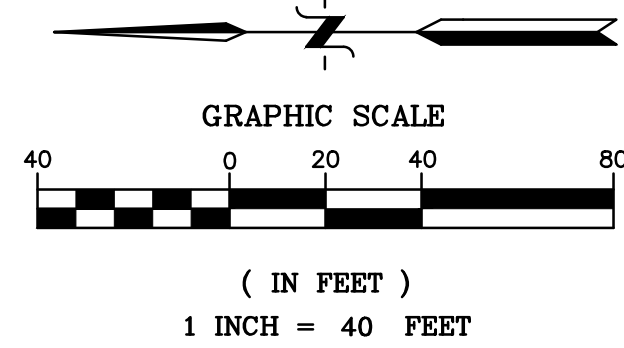
PARCEL 4711-04-400-013 22.222 Acres
(Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records)
Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as:
Commencing at the South 1/4 Corner of said Section 4; thence along the North-South 1/4 line of Section 4 to following two courses:
1) N01°35'17"W (recorded as N01°50'51"E) 1366.11 feet and
2) N02°11'05"W (recorded as N01°50'51"E) 569.39 feet to the PLACE OF BEGINNING and
3) N01°06'25"W (recorded as N02°19'54"E) 16.05 feet; thence S88°08'25"E (recorded as S84°42'06"E) 140.66 feet; thence S10°02'44"W (recorded as S13°29'03"W) 81.90 feet; thence S22°34'43"E 40.64 feet (recorded as S19°08'24"E) 39.61 feet; thence S01°33'04"E 373.87 feet (recorded as S01°53'17"W 374.11 feet); thence S84°41'00"W (recorded as S88°06'46"W) 683.63 feet; thence S01°59'18"E (recorded as S01°28'28"W) 400.04 feet; thence S02°08'43"E (recorded as S01°17'41"W) 510.56 feet; thence along the East line of a Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records, the following three courses:
1) S87°51'55"W (recorded as N88°42'19"W) 144.66 feet and
2) N54°02'14"W (recorded as N01°36'28"W) 244.39 feet and
3) S82°02'20"W 291.13 feet (recorded as S85°31'06"E 285.32 feet) to the Place of Beginning, Containing 22.22 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

SITE PLAN DESCRIPTIONS

PARCEL 4711-04-400-014 26.285 Acres
(Part of Possible Expansion/Future Development Area "A")
Part of the East 1/2 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as:
BEGINNING at the South 1/4 Corner of said Section 4;
thence along the North-South 1/4 line of Section 4 to following two courses:
1) N01°35'17"W 1366.11 feet and
2) N02°11'05"W 569.39 feet;
(recorded as N01°50'51"E 1936.02 feet);
thence along the East line of a Nature Preserve as recorded in Liber 3772, Page 940, Livingston County Records, the following three courses:
1) N82°05'20"E 291.13 feet (recorded as N85°31'06"E 285.32 feet);
2) S54°02'14"E (recorded as S50°36'28"E) 244.39 feet and
3) N87°51'55"E (recorded as S88°42'19"W) 144.66 feet;
thence S02°08'43"E (recorded as S01°17'41"W) 510.56 feet;
thence N84°03'00"E (recorded as N87°29'24"E) 79.92 feet;
thence along a line 10.00 feet West of and parallel to the Westerly line of "Sunrise Park", a subdivision recorded in Liber 2 of Plats, Page 23, Livingston County Records, S01°00'54"E 244.55 feet (recorded as S02°21'39"W 243.95 feet); thence S01°30'01"E 228.89 feet (recorded as S01°45'17"W 227.42 feet); thence N80°34'14"E (recorded as S87°01'22"E) 186.47 feet; thence S88°50'35"W (recorded as N89°43'06"W) 473.98 feet; thence S01°43'30"E 241.29 feet (recorded as S1°42'54"W 241.14 feet); thence S14°28'55"E 48.77 feet (recorded as S11°13'33"E 48.86 feet); thence S88°43'10"W 10.00 feet (recorded as N88°17'05"W 10.00 feet); thence S01°47'25"E 385.18 feet (recorded as S01°42'54"W 386.00 feet); thence S80°50'35"W (recorded as N89°43'06"W) 150.00 feet; thence S05°38'45"E (recorded as S02°12'21"E) 150.00 feet; thence S80°50'35"W (recorded as N89°43'06"W) 546.06 feet (recorded as N89°43'06"W 546.16 feet) to the Point of Beginning, Containing 26.285 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

PARCEL No. 4711-04-400-015 1.132 Acres
(Possible Expansion/Future Development Area "B")
Part of the Southeast 1/4 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as:
Commencing at the South 1/4 Corner of said Section 4; thence along the South line of Section 4, as previously surveyed, N88°50'35"E 546.06 feet (recorded as S89°43'06"E 546.16 feet); thence along the West line of Lawson Drive, N05°38'45"W (recorded as N02°12'21"W) 150.00 feet; thence N03°38'45"W (recorded as N00°00'00"E) 34.61 feet; thence N01°11'15"E (recorded as N83°37'39"E) 60.77 feet; thence N04°22'26"E (recorded as N07°48'50"E) 13.56 feet; thence Northwesterly 59.62 feet along the arc of a 200.00 foot radius curve to the left, through a central angle of 17°04'50"; and having a chord bearing N04°10'00"E (recorded as N09°16'02"W) 159.13 feet; thence N77°18'10"E (recorded as N80°43'28"E) 27.00 feet to the POINT OF BEGINNING; thence N12°42'26"W (recorded as N09°16'02"W) 306.30 feet; thence Northwesterly 30.20 feet along the arc of a 20.00 foot radius curve to the right, through a central angle of 86°41'26"; and having a chord bearing N30°27'50"E (recorded as N34°04'44"E) 27.46 feet; thence Southwesterly 201.82 feet along the arc of a 280.00 foot radius curve to the right, through a central angle of 40°09'52"; (recorded as S07°04'47"E) and having a chord bearing S88°00'33"E (recorded as S82°34'07"E) 197.75 feet; thence S3°59'50"W (recorded as S27°26'14"W) 147.43 feet; thence S36°36'45"E (recorded as S33°10'21"E) 58.47 feet; thence S21°42'02"E (recorded as S01°00'00"E) 51.80 feet; thence S71°17'34"W (recorded as S80°43'58"W) 143.83 feet to the Point of Beginning.
Containing 1.13 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.

PARCEL No. 4711-04-400-016 1.142 Acres
(Possible Expansion/Future Development Area "C")
Part of the Southeast 1/4 of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as: Commencing at the South 1/4 Corner of said Section 4; thence along the South line of Section 4, N88°50'35"E (recorded as S89°43'06"E) 599.68 feet to the POINT OF BEGINNING; thence N48°02'05"W (recorded as N44°35'46"W) 135.18 feet; thence N41°10'45"E (recorded as N44°37'04"E) 8.00 feet; thence N50°03'17"W (recorded as N46°36'56"W) 27.00 feet; thence Northwesterly 123.38 feet along the arc of a 182.00 foot radius curve to the left, through a central angle of 38°50'28"; (recorded as S8°50'33"E) and having a chord bearing N20°31'27"E (recorded as N23°57'46"E) 121.03 feet; thence S84°58'30"E 227.08 feet (recorded as S81°32'11"E 227.01 feet); thence along a line 10.00 feet West of and parallel to the Westerly line of said "Sunrise Park" the following two courses:
1) S01°43'30"E 151.43 feet (recorded as S01°42'54"W 151.38 feet) and
2) S14°28'55"E 48.77 feet (recorded as S11°13'33"E 48.86 feet);
thence along the South line of Section 4, S88°50'35"W 170.37 feet (recorded as N89°43'06"W 170.47 feet) to the Point of Beginning.
Containing 1.14 acres of land, more or less. Subject to and together with all easements and restrictions affecting title to the above described premises.



LEGEND

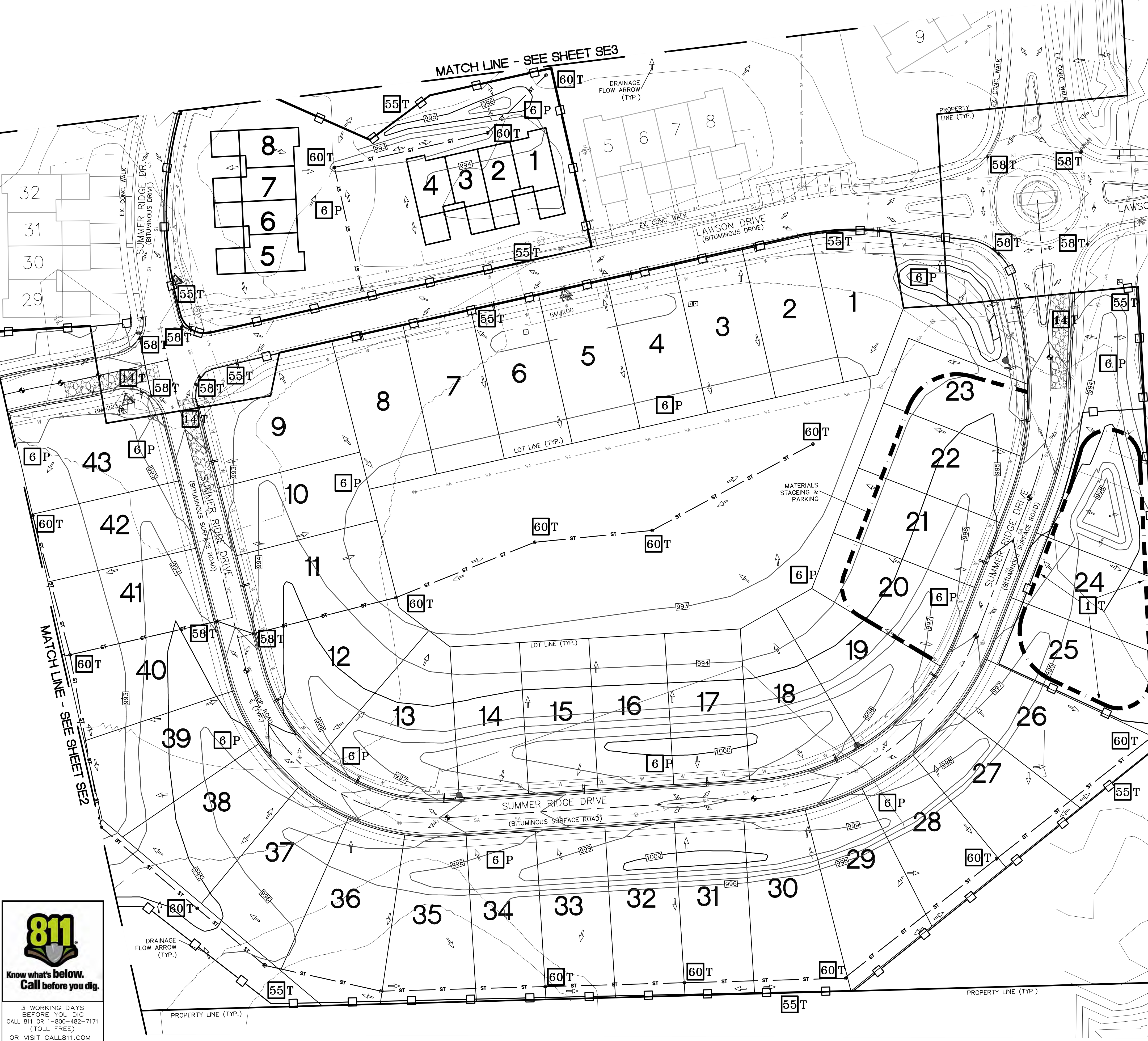
- = PROPERTY LINE
- = EX. EDGE OF PAVEMENT
- = EX. EASEMENT LINE
- - - = APPROX. WETLAND LINE
- = UTILITY POLE W/GUY WIRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = EXISTING TREE DRIP LINE
- = EDGE OF GRAVEL
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
- SA = SANITARY SEWER PIPE
- SA = SANITARY SEWER MANHOLE W/IDENTIFIER
- ST = STORM WATER DRAINAGE PIPE
- ST = STORM WATER MANHOLE W/IDENTIFIER
- = CATCH BASIN W/IDENTIFIER
- = FLARED END SECTION
- W = WATER MAIN
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = U/G GAS
- = GAS SHUT OFF
- = 1' CONTOUR
- = 5' CONTOUR
- = PROPOSED UNIT LINE
- = PROPOSED BUILDING SETBACK
- = PROPOSED EASEMENT LINE
- = PROPOSED SANITARY SEWER
- = PROPOSED SANITARY MANHOLE
- = PROPOSED WATER MAIN
- = PROPOSED HYDRANT
- = PROPOSED WATER VALVE
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER
- = PROPOSED 5' CONTOUR
- = PROPOSED 1' CONTOUR
- = PROPOSED DRAINAGE FLOW ARROW

SOIL EROSION CONTROL LEGEND

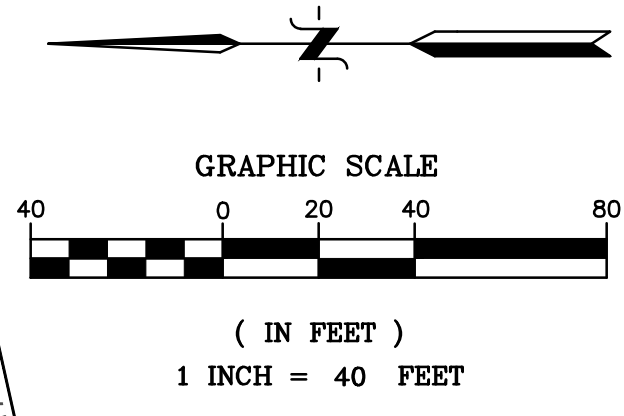
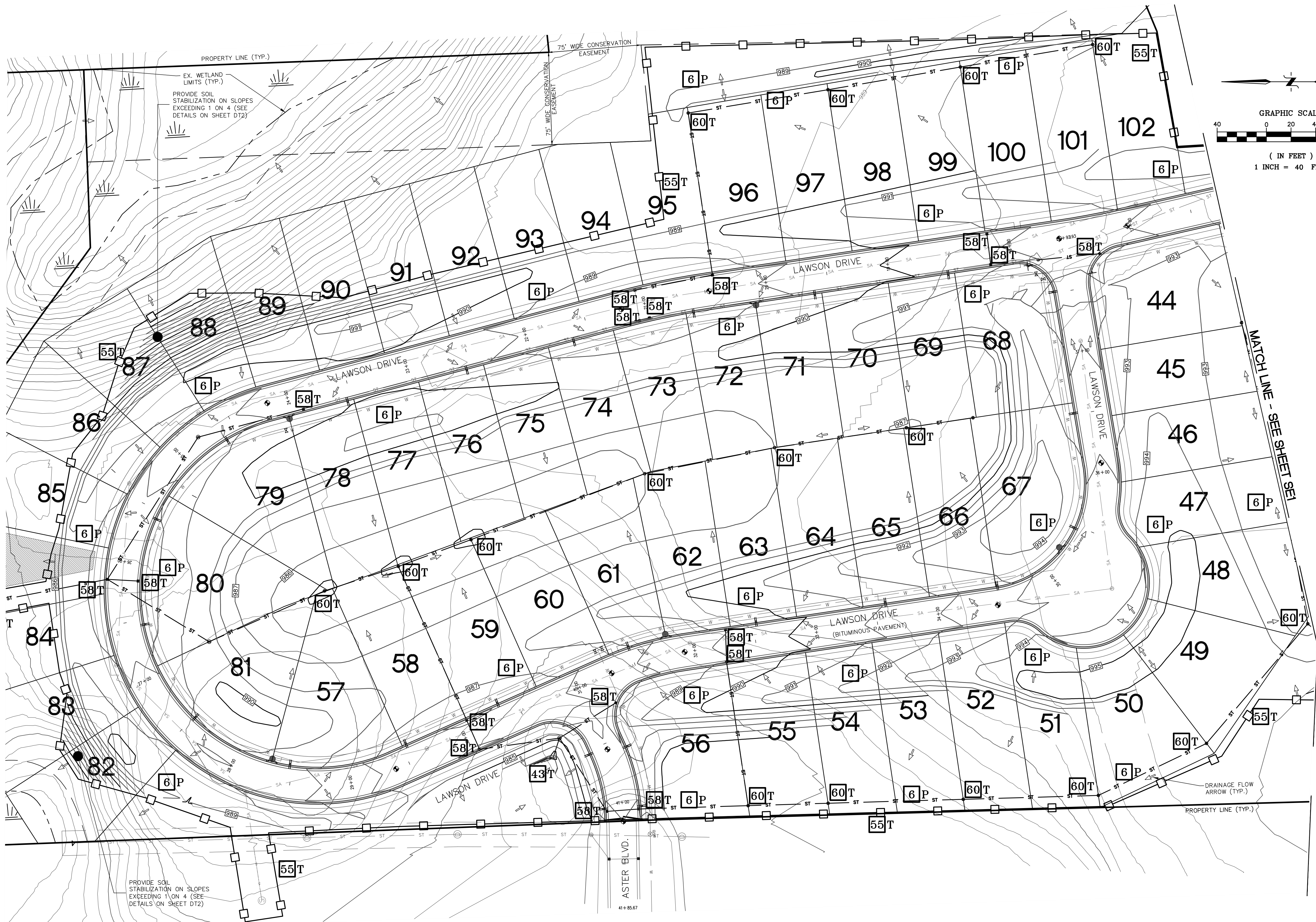
- | | | |
|----|---------------------------------|--|
| 1 | STOPPING & STOCKPILE TOPSOIL | STOPPING MAY BE STOCKPILED HERE BEFORE AREAS TO ACT AS A EROSION STOCKPILE SHOULD BE TEMPORARILY SEED |
| 6 | SEEDING WITH MULCH AND/OR SWATH | FACILITATES ESTABLISHMENT OF VEGETATIVE COVER EFFECTIVE FOR DRAINAGES WITH LOW VELOCITY. SEEDS PLACED IN SMALL QUANTITIES BY REVERSE CONSTRUCTION SHOULD INCLUDE PREPARED TOPSOIL BED. |
| 13 | RRPAP, RUBBLE, CARBONS | USED WHERE VEGETATION IS NOT EASILY ESTABLISHED. ATTENTION FOR HIGH VELOCITIES OR HIGH CONCENTRATION PROMOTE RAINFALL TO INFLUENCE SOIL. |
| 14 | AGRICULTURE COVER | STABILIZES SOIL SURFACE, THIS MINIMUM EROSION CONTROL CONSTRUCTION TYPICAL IN WINDY WEATHER MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS. |
| 43 | COLLECTOR SEWER TRAP | EASY TO INSTALL AT INLET. KEEPS COLLECTOR CLEAN AND FREE FLOWING. MAY BE CONSTRUCTED OF LUMBER OR LOGS. |
| 55 | DEVELOPER SELF FINISH | USES GEOTEXTILE AND POSTS OR PILES. MAY BE CONSTRUCTED OF PREPARED. EASY TO CONSTRUCT AND LOCATE AS NECESSARY. |
| 58 | INLET SEWER FILTER | USES PREPACKAGED GEOTEXTILE SOCKS. FILTERS SEDIMENT FROM RAINFALL AT CATCH BASIN INLET. EASY TO INSTALL AND MAINTAIN. |
| 60 | INLET PILE CASE | PROMOTES SEDIMENT FROM ENTERING STORM SYSTEM AT STRUCTURES. EASY TO INSTALL AND MAINTAIN. SELF FINCE CAN NOT BE USED. |

BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS SHOWN ON REPEAT No. 2 OF "SUMMERFIELD POINTE", LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.C.S." NO. DATUM SPECIFIED.
SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATED ELEVATION.
BENCHMARK #201: CENTERING OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 482 FEET EAST OF LAWSON DRIVE. ELEVATION = 991.29 (NAVD 88)
BENCHMARK #202 (PLATTED): REF. FIELD BOOK 1483, PG. 34. ELEVATION = 993.43 (NAVD 88)
BENCHMARK #203 (PLATTED): REF. FIELD BOOK 1483, PG. 34. ELEVATION = 993.88 (NAVD 88)
BENCHMARK #204 (PLATTED): REF. FIELD BOOK 1483, PG. 34. ELEVATION = 994.38 (PLATTED)
BENCHMARK #205 (PLATTED): REF. FIELD BOOK 1483, PG. 34. ELEVATION = 995.39 (NAVD 88)
BENCHMARK #206 (PLATTED): REF. FIELD BOOK 1483, PG. 34. ELEVATION = 995.89 (NAVD 88)
BENCHMARK #207: ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377.7 FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 993.14 (NAVD 88)
BENCHMARK #208 (PLATTED): REF. FIELD BOOK 1483, PG. 34. ELEVATION = 994.38 (PLATTED)
BENCHMARK #209: REF. FIELD BOOK 1483, PG. 34. ELEVATION = 995.89 (NAVD 88)
BENCHMARK #210: REF. FIELD BOOK 1483, PG. 34. ELEVATION = 995.89 (NAVD 88)



DESIGN: FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION	<p>SUMMERFIELD POINTE PUD</p> <p>SOIL EROSION AND SEDIMENTATION CONTROL PLAN (SOUTH)</p>	CLIENT:	SCALE:	PROJECT No.:	<p>SE1</p>
DRAFT: OM								HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD. COMMERCE TOWNSHIP, MICHIGAN 48382 248-684-1699	1in. = 40ft.	214159	
CHECK: FAF								ISSUED: JULY 10 2023	DWG NAME: 4159 SE		



- ### LEGEND
- = PROPERTY LINE
 - = EX. EDGE OF PAVEMENT
 - = EX. EASEMENT LINE
 - - - = APPROX. WETLAND LINE
 - O — = UTILITY POLE W/GUY WIRE
 - O — = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - O — = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - = EXISTING TREE DRIP LINE
 - = EDGE OF GRAVEL
 - SA — SA = CONCRETE CURB (UNLESS OTHERWISE STATED)
 - ST — ST = SANITARY SEWER PIPE
 - ST — ST = SANITARY SEWER MANHOLE W/IDENTIFIER
 - ST — ST = STORM WATER DRAINAGE PIPE
 - ST — ST = STORM WATER MANHOLE W/IDENTIFIER
 - ST — ST = CATCH BASIN W/IDENTIFIER
 - ST — ST = FLARED END SECTION
 - W — W = WATER MAIN
 - W — W = HYDRANT
 - W — W = WATER SHUT OFF
 - W — W = WATER VALVE
 - W — W = WATER VALVE BOX
 - GAS — GAS = U/G GAS
 - GAS — GAS = GAS SHUT OFF
 - 00 — 00 = 1' CONTOUR
 - 00 — 00 = 5' CONTOUR
 - = PROPOSED UNIT LINE
 - = PROPOSED BUILDING SETBACK
 - = PROPOSED EASEMENT LINE
 - SA — SA = PROPOSED SANITARY SEWER
 - SA — SA = PROPOSED SANITARY MANHOLE
 - W — W = PROPOSED WATER MAIN
 - W — W = PROPOSED HYDRANT
 - W — W = PROPOSED WATER VALVE
 - ST — ST = PROPOSED STORM SEWER
 - ST — ST = PROPOSED STORM STRUCTURES
 - ST — ST = PROPOSED CURB AND GUTTER
 - = PROPOSED CONCRETE WALK
 - = PROPOSED 5' CONTOUR
 - = PROPOSED 1' CONTOUR
 - = PROPOSED DRAINAGE FLOW ARROW

BENCHMARKS

DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPLAT No. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.C.S." 140 DATUM SPECIFIED. SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.

BENCHMARK #201
CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 48± FEET EAST OF LAWSON DRIVE.
ELEVATION = 991.29 (NAVD 88)
ELEVATION = 992.14 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #201

BENCHMARK #204 (PRIMARY)
SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88)
ELEVATION = 993.93 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #204

BENCHMARK #203
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 33± FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 993.88 (NAVD 88)
ELEVATION = 994.38 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #203

BENCHMARK #200
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 377± FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 995.39 (NAVD 88)
ELEVATION = 995.89 (PLATTED)
REF: FIELD BOOK 1483, PG. 34
POINT #200

3 WORKING DAYS BEFORE YOU DIG
CALL 811 OR 1-800-482-7171 (TOLL-FREE)
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BRIGHTON, MICHIGAN 48114

DESIGN:WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

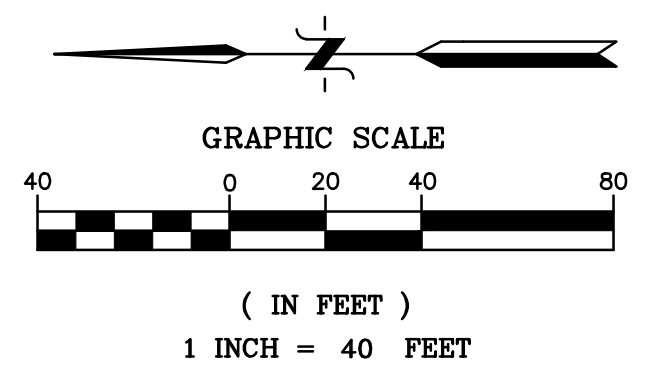
SUMMERFIELD
POINTE PUD

SOIL EROSION AND
SEDIMENTATION CONTROL
PLAN (NORTH)

CLIENT: HEALY HOMES AT SUMMERFIELD LLC
3696 SLEETH RD.
COMMERCE TOWNSHIP, MICHIGAN 48382
248-684-1699

SCALE: 1in. = 40ft.
PROJECT No.: 214159
DWG NAME: 4159 SE
ISSUED: JULY 10, 2023

SE2



LEGEND

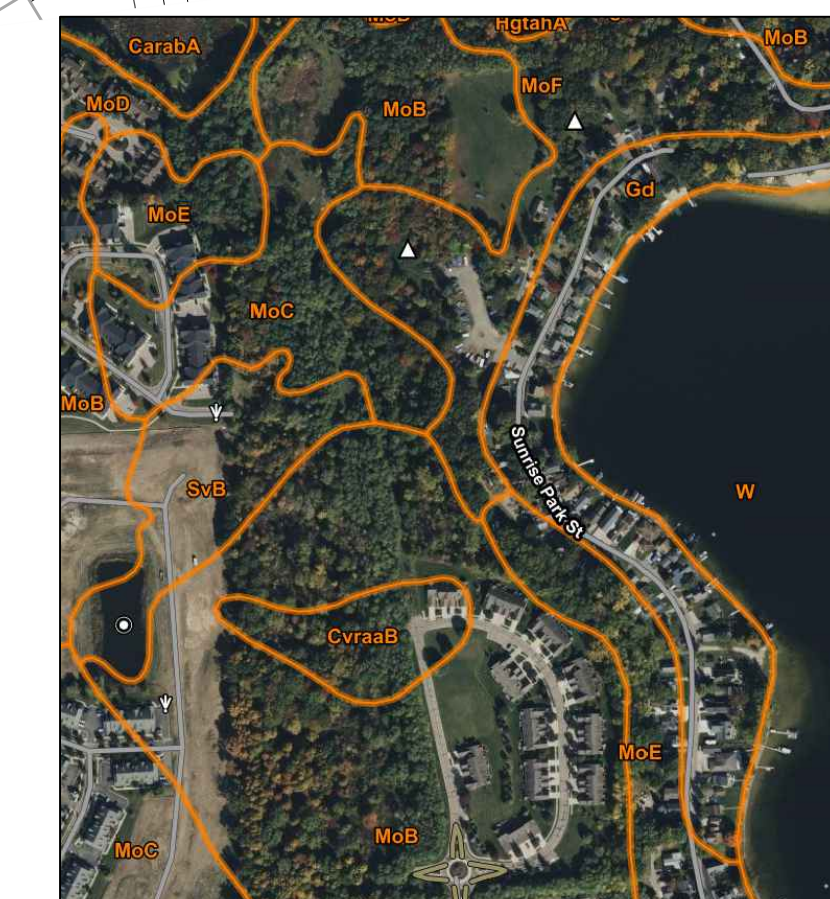
- = PROPERTY LINE
- - - = EX. EDGE OF PAVEMENT
- - - = EX. EASEMENT LINE
- - - = APPROX. WETLAND LINE
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- ST --- ST = STORM WATER MANHOLE W/IDENTIFIER
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- W --- W = WATER MAIN
- W --- W = HYDRANT
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- W --- W = WATER VALVE BOX
- GAS --- GAS = U/G GAS
- GAS --- GAS = GAS SHUT OFF
- 000 --- 000 = 1' CONTOUR
- 000 --- 000 = 5' CONTOUR
- = PROPOSED UNIT LINE
- = PROPOSED BUILDING SETBACK
- = PROPOSED EASEMENT LINE
- = PROPOSED SANITARY SEWER
- = PROPOSED SANITARY MANHOLE
- W --- W = PROPOSED WATER MAIN
- W --- W = PROPOSED HYDRANT
- W --- W = PROPOSED WATER VALVE
- ST --- ST = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER

- NOTES:**
- The permit is not for individual building units. It is required that temporary stabilization of the entire site be completed and approval from the Livingston County Drain Commissioner's office be obtained prior to the issuance of permits for individual building units.
 - Any dewatering required shall have a dewatering plan submitted prior to starting any activity that may require EGLE approval.
 - Construct Retention/Detention and Sedimentation Basins, including associated spillways, in accordance with the project plans. Finish grade, top soil, seed and mulch in Retention/Detention and Sedimentation Basins, tacked and ringed with silt fence prior to massive earth disruption. Install temporary Soil Erosion Control Measures as necessary to stabilize Retention/Detention and Sedimentation Basins.

AREA OF DISTURBANCE = 23.14ac.

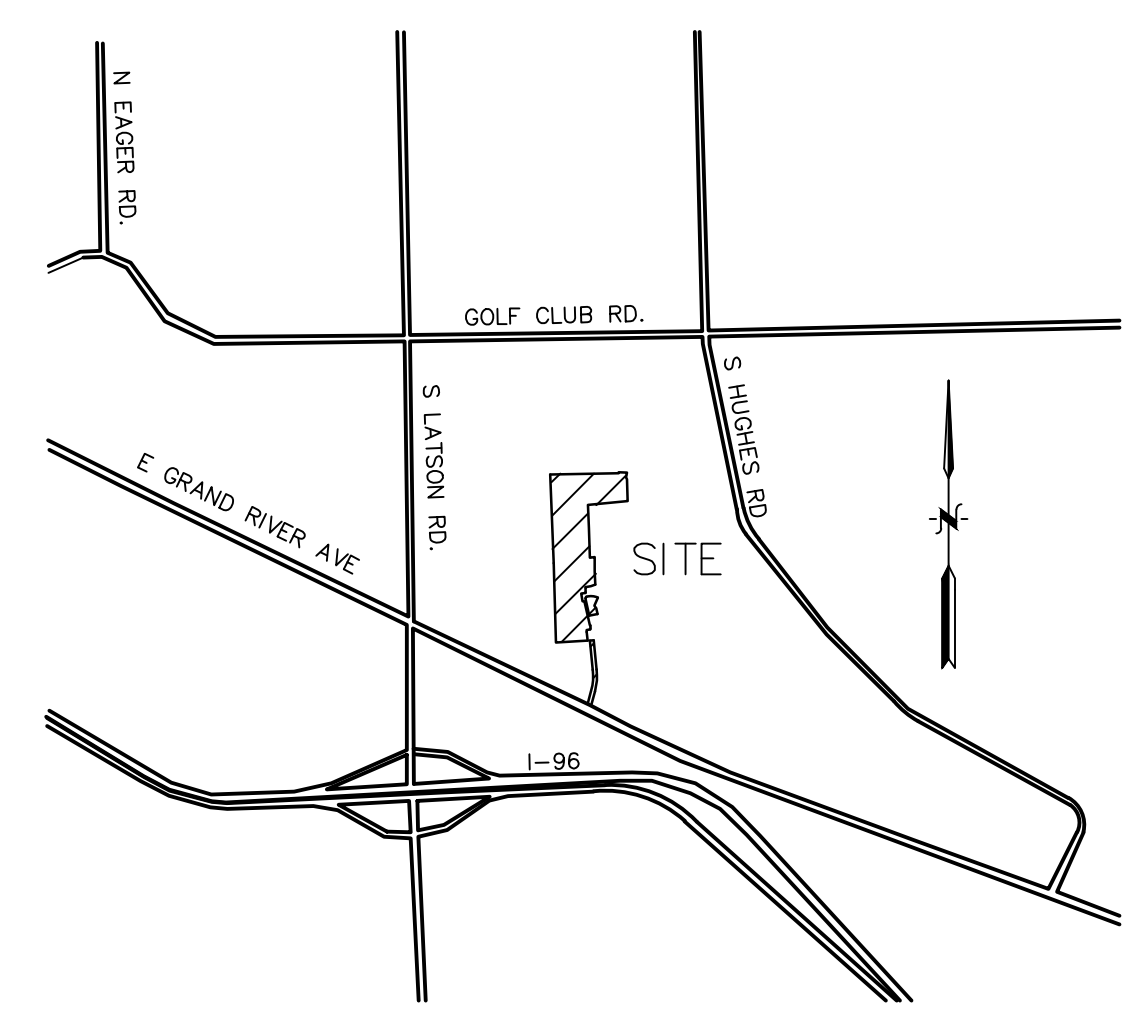
BENCHMARKS

- DATUM BASED ON PREVIOUS BENCHMARK AS DEPICTED ON REPEAT No. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.G.S." NO DATUM SPECIFIED.
- BENCHMARK #201
CENTERLINE OF GATE VALVE, LOCATED NEAR SOUTH SIDE OF SILVER LEAF DRIVE, 488 FEET EAST OF LAWSON DRIVE.
ELEVATION = 991.29 (NAVD 88)
SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION.
REF: FIELD BOOK 148, PG. 34
POINT #201
- BENCHMARK #204 (PRIMARY)
SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88)
REF: FIELD BOOK 148, PG. 34
POINT #204
- BENCHMARK #203
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 338 FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 993.88 (NAVD 88)
ELEVATION = 994.38 (PLATTED)
REF: POINT #203
- BENCHMARK #200
ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 372 FEET NORTH OF SILVER LEAF DRIVE.
ELEVATION = 995.39 (NAVD 88)
ELEVATION = 995.89 (PLATTED)
REF: FIELD BOOK 148, PG. 34
POINT #200



Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CarabA	CarabA musk, 0 to 2 percent slopes	2.5	1.8%
CvsraB	CvsraB loam, 0 to 4 percent slopes	3.4	2.4%
Gsl	GslB sandy loam, 0 to 2 percent slopes, gravelly subsoil	12.2	8.6%
HglaA	HglaA musk, 0 to 1 percent slopes	0.3	0.2%
MoB	MoB loam, 2 to 6 percent slopes	49.5	34.9%
MoC	MoC loam, 6 to 12 percent slopes	16.4	11.6%
MoD	MoD loam, 12 to 18 percent slopes	3.2	2.3%
MoE	MoE loam, 18 to 25 percent slopes	10.6	7.5%
MoF	MoF loam, 25 to 35 percent slopes	13.4	9.5%
Svb	SvbD silty loamy sands, 0 to 6 percent slopes	6.7	4.7%
W	Water	23.4	16.5%
Totals for Area of Interest		141.9	100.0%

SOILS MAP & LEGEND
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

SOIL EROSION CONTROL AND CONSTRUCTION SEQUENCE:

- Obtain all necessary Soil Erosion and Sedimentation Control related permits from the appropriate Local, County and/or State Agencies. Refer to the General Notes on the project plans for additional requirements.
- Prior to commencement of any earth disruption install Silt Fence and Mud Tracking Control Device(s) in accordance with the Soil Erosion and Sedimentation Control Plan.
- Construct Retention/Detention and Sedimentation Basins, including associated spillways, in accordance with the project plans. Finish grade and establish vegetative growth in Retention/Detention and Sedimentation Basins prior to massive earth disruption. Install temporary Soil Erosion Control Measures as necessary to stabilize Retention/Detention and Sedimentation Basins.
- Strip and stockpile topsoil. Perform mass grading and land balancing. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Install proposed underground utilities, (i.e., storm and sanitary sewer, water main, etc.) Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Construct roadways and/or parking areas. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Finish grade all disturbed areas outside of pavement. Perform final restoration, including placement of topsoil and establishment of vegetative growth outside of pavement.
- Following establishment of sufficient vegetative ground cover and receipt of approval from the Permitting Agency, remove all temporary Soil Erosion Control Measures, clean all storm sewer structures and repair all permanent Soil Erosion Control Measures.

TIME LINE OF SOIL EROSION CONTROL AND CONSTRUCTION SEQUENCE

CONSTRUCTION & WORK CATEGORIES*	CONSTRUCTION PERIOD								
	Month	1	2	3	4	5	6	7	8
1. OBTAIN PERMITS									
2. INSTALL INITIAL SESC MEASURES									
3. INSPECT & MAINTAIN SESC MEASURES									
4. DEMOLITION WORK									
5. EARTH WORK									
6. UNDERGROUND UTILITY WORK									
7. SITE LIGHTING WORK									
8. CURB, SIDEWALK & PAVEMENT WORK									
9. BACKFILL & FINISH GRADE WORK									
10. TOPSOIL, SEED & MULCH									
11. LANDSCAPE WORK									
12. REMOVE TEMPORARY SESC MEASURES									

*REFER TO THE MAJOR WORK ITEMS OUTLINED IN THE SOIL EROSION CONTROL AND CONSTRUCTION SEQUENCE NOTES.

DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

**SUMMERFIELD
POINTE PUD**

**SOIL EROSION AND
SEDIMENTATION CONTROL
PLAN (EAST)**

CLIENT: HEALY HOMES AT SUMMERFIELD LLC
3696 SLEETH RD.,
COMMERCE TOWNSHIP, MICHIGAN 48382
248-684-1699

SCALE: 1in. = 40ft.
PROJECT No.: 214159
DWG NAME: 4159 SE
ISSUED: **JULY 10, 2023**

SE3

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LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

PARCEL 13 16.22± Acres
Land in the Township of Putnam, County of Livingston, State of Michigan, described as follows:
Commencing at the South 1/4 Corner of Section 34, Town 2 North, Range 4 East, Marion Township, Livingston County, Michigan; thence N89°09'57"E 27.61 feet along then North line of fractional Section 3, Town 1 North, Range 4 East, Putnam Township, Livingston County, Michigan; thence continuing N89°09'57"E 1384.30 feet along said North line of fractional Section 3 to the PLACE OF BEGINNING, said point being distant 1230.56 feet N89°09'57"E to the Southeast 1/4 Corner of Section 34, Town 2 North, Range 4 East, Marion Township, Livingston County, Michigan;
thence along the nominal centerline of Schaefer Road (33-foot wide 1/2 Right-of-Way) the following three courses:
1) Easterly 240.43 feet along the arc of a 679.97' radius curve to the left, through a central angle of 20°15'32" and having a chord bearing N69°33'30"E 239.18 feet, 2) N59°25'44"E 163.32 feet and 3) Easterly 303.67 feet along the arc of a 305.78-foot radius curve to the right, through a central angle of 56°54'00" and having a chord bearing N52°44"E 291.34 feet;
thence S12°53'11"E 1076.17 feet to the centerline of a 66-foot wide private easement for ingress, egress and public utilities (Egans Hills Drive); thence along said centerline the following four courses:
1) Westerly 25.21 feet along the arc of a 200-foot radius curve to the right, through a central angle of 05°09'34" and having a chord bearing S74°32'23"W 25.20 feet, 2) S77°07'10"W 102.49 feet, 3) Southwesterly 138.20 feet along the arc of a 300-foot radius curve to the left, through a central angle of 28°23'47" and having a chord bearing S55°52'20"W 136.98 feet and 4) S59°43'30"W 57.03 feet to the center point of a 75-foot wide cul-de-sac; thence N38°23'57"E 223.46 feet, thence N74°51'33"E 362.18 feet; thence N09°12'23"W 737.34 feet to a point said nominal centerline of Schaefer Road to the Place of Beginning.
Being a part of the Northeast 1/4 of fractional Section 3, Town 1 North, Range 4 East, Putnam Township, Livingston County, Michigan and a part of the Southeast 1/4 of fractional Section 34, Town 2 North, Range 4 East, Marion Township, Livingston County, Michigan. Containing 16.22 acres of land, more or less, of land more or less. Subject to the rights of the public over Schaefer Road (33-foot wide 1/2 Right-of-Way) as occupied thereto, also subject to a 6-foot wide easement to The Detroit Edison Company as recorded in Liber 510, Page 84, Livingston County Records, also subject to and together with a 66-foot wide private easement for ingress, egress and public utilities (Egans Hills Drive) as described below, also subject to a 12-foot wide private easement for public utilities lying adjacent to and exterior of said 66-foot wide easement for ingress, egress and public utilities as described below, also subject to a 10-foot wide easement to The Detroit Edison Company as recorded in Document No. 2022R-021512, Livingston County Records, also subject to and together with all easements and restrictions affecting title to the above described premises.

PARCEL 15 15.48± Acres
Land in the Township of Putnam, County of Livingston, State of Michigan, described as follows:
Commencing at the South 1/4 Corner of Section 34, Town 2 North, Range 4 East, Marion Township, Livingston County, Michigan; thence N89°09'57"E 27.61 feet along then North line of fractional Section 3, Town 1 North, Range 4 East, Putnam Township, Livingston County, Michigan; thence continuing N89°09'57"E 1384.30 feet along said North line of fractional Section 3, said point being distant 1230.56 feet N89°09'57"E to the Southeast 1/4 Corner of Section 34, Town 2 North, Range 4 East, Marion Township, Livingston County, Michigan; thence along the nominal centerline of Schaefer Road (33-foot wide 1/2 Right-of-Way) the following three courses:
1) Easterly 240.43 feet along the arc of a 679.97' radius curve to the left, through a central angle of 20°15'32" and having a chord bearing N69°33'30"E 239.18 feet, 2) N59°25'44"E 163.32 feet and 3) Easterly 303.67 feet along the arc of a 305.78-foot radius curve to the right, through a central angle of 56°54'00" and having a chord bearing N52°44"E 291.34 feet;
thence S12°53'11"E 1076.17 feet to the centerline of a 66-foot wide private easement for ingress, egress and public utilities (Egans Hills Drive) as described below; thence S36°07'10"E 750.00 feet to a point on the exterior line of said easement; thence S02°11'15"E 758.06 feet; thence N88°33'55"W 628.75 feet; thence N1°26'05"E 290.29 feet; thence N19°24'55"W 536.87 feet; thence N43°59'47"E 383.24 feet to the Place of Beginning.
Being a part of the Northeast 1/4 of fractional Section 3, Town 1 North, Range 4 East, Putnam Township, Livingston County, Michigan. Containing 15.48 acres of land, more or less, of land more or less. Subject to a 10-foot wide easement for The Detroit Edison Company as recorded in Document No. 2006R-02549 and recorded in Document No. 2006R-02413, Livingston County Records, also subject to and together with a 66-foot wide private easement for ingress, egress and public utilities (Egans Hills Drive) as described below, also subject to a 12-foot wide private easement for public utilities lying adjacent to and exterior of said 66-foot wide easement for ingress, egress and public utilities as described below, also subject to a 10-foot wide easement to The Detroit Edison Company as recorded in Document No. 2022R-021512, Livingston County Records, also subject to and together with all easements and restrictions affecting title to the above described premises.

PARCEL 16 85.15± Acres
Land in the Township of Putnam, County of Livingston, State of Michigan, described as follows:
Commencing at the South 1/4 Corner of Section 34, Town 2 North, Range 4 East, Marion Township, Livingston County, Michigan; thence N89°09'57"E 27.61 feet along then North line of fractional Section 3, Town 1 North, Range 4 East, Putnam Township, Livingston County, Michigan; thence continuing N89°09'57"E 1384.30 feet along said North line of fractional Section 3, said point being distant 1230.56 feet N89°09'57"E to the Southeast 1/4 Corner of Section 34, Town 2 North, Range 4 East, Marion Township, Livingston County, Michigan; thence along the nominal centerline of Schaefer Road (33-foot wide 1/2 Right-of-Way) the following three courses:
1) Easterly 240.43 feet along the arc of a 679.97' radius curve to the left, through a central angle of 20°15'32" and having a chord bearing N69°33'30"E 239.18 feet, 2) N59°25'44"E 163.32 feet and 3) Easterly 303.67 feet along the arc of a 305.78-foot radius curve to the right, through a central angle of 56°54'00" and having a chord bearing N52°44"E 291.34 feet;
thence S12°53'11"E 1076.17 feet to the centerline of a 66-foot wide private easement for ingress, egress and public utilities (Egans Hills Drive) to the PLACE OF BEGINNING;
thence S27°39'35"E 1227.76 feet; thence N71°10'11"E 596.05 feet; thence S18°49'49"E 99.30 feet; thence S56°10'08"E 441.66 feet; thence S63°22'13"W 591.39 feet; thence S14°36'57"W 165.07 feet; thence S26°15'31"W 593.00 feet; thence S03°15'00"E 497.37 feet; thence S74°13'21"W 128.09 feet; thence N14°15'14"W 1557.16 feet; thence N01°20'05"E 599.47 feet; thence S88°33'55"E 628.75 feet; thence N09°12'23"W 738.06 feet to a point on a 75-foot wide cul-de-sac; thence said 66-foot wide private easement for ingress, egress and public utilities; thence N36°07'10"W 750.00 feet to the center point of said 75-foot wide cul-de-sac;
thence along the centerline of said easement the following four courses: 1) N59°43'30"E 57.03 feet, 2) Northeasterly 138.20 feet along the arc of a 300-foot radius curve to the right, through a central angle of 28°23'47" and having a chord bearing N63°52'07"E 136.98 feet, 3) N77°07'10"E 102.49 feet and 4) Easterly 25.21 feet along the arc of a 200-foot radius curve to the left, through a central angle of 05°09'34" and having a chord bearing N74°32'23"W 25.20 feet to the Place of Beginning.
Being a part of the Northeast 1/4 of fractional Section 3, Town 1 North, Range 4 East, Putnam Township, Livingston County, Michigan. Containing 85.15 acres of land, more or less, of land more or less. Subject to and together with a 66-foot wide private easement for ingress, egress and public utilities (Egans Hills Drive) as described below, also subject to a 12-foot wide private easement for public utilities lying adjacent to and exterior of said 66-foot wide easement for ingress, egress and public utilities as described below, also subject to a 10-foot wide easement for ingress, egress and public utilities as described below, also subject to and together with all easements and restrictions affecting title to the above described premises.

PARCEL 17 11.01± Acres
Land in the Township of Putnam, County of Livingston, State of Michigan, described as follows:
Commencing at the Southwest 1/4 Corner of Section 35, Town 2 North, Range 4 East, Marion Township, Livingston County, Michigan; thence N88°37'43"E 30.63 feet along the North line of fractional Section 3, Town 1 North, Range 4 East, Putnam Township, Livingston County, Michigan to the Northeast Corner of said fractional Section 3, same being the Northwest Corner of fractional Section 2, Town 1 North, Range 4, Putnam Township, Livingston County, Michigan;
thence continuing N88°37'43"E 758.00 feet along the North line of said fractional Section 2, said point being distant 1837.47 feet N88°37'43"E to the South 1/4 Corner of said Section 35; thence S01°22'20"E 103.85 feet; thence Southwesterly 392.49 feet along the arc of a 310-foot radius curve to the right, through a central angle of 72°32'31" and having the chord bearing S54°53'36"W 366.80 feet; thence S71°10'11"W 526.33 feet; thence Westerly 111.68 feet along the arc of a 310-foot radius curve to the left, through a central angle of 19°23'27" and having chord bearing S01°32'28"W 111.65 feet to the PLACE OF BEGINNING;
thence S23°30'33"E 1380.97 feet; thence S71°10'11"W 321.02 feet; thence N27°29'35"W 1227.76 feet to the center point of a 66-foot wide private easement for ingress, egress and public utilities; thence N12°53'11"W 401.19 feet; thence Northeasterly 80.93 feet along the arc of a 200-foot radius curve to the left, through a central angle of 19°19'07" and having a chord bearing N61°26'10"E 80.94 feet; thence N51°40'44"E 328.38 feet to the Place of Beginning.
Being a part of the Northeast 1/4 of fractional Section 3 and part of the Northwest 1/4 of fractional Section 2, Town 1 North, Range 4 East, Putnam Township, Livingston County, Michigan. Containing 11.01 acres of land, more or less, of land more or less. Subject to and together with a 66-foot wide private easement for ingress, egress and public utilities (Egans Hills Drive) as described below, also subject to a 12-foot wide private easement for public utilities lying adjacent to and exterior of said 66-foot wide easement for ingress, egress and public utilities as described below, also subject to a 10-foot wide easement for ingress, egress and public utilities as described below, also subject to and together with all easements and restrictions affecting title to the above described premises.

PARCEL 18 10.62± Acres
Land in the Township of Putnam, County of Livingston, State of Michigan, described as follows:
Commencing at the Southwest 1/4 Corner of Section 35, Town 2 North, Range 4 East, Marion Township, Livingston County, Michigan; thence N88°37'43"E 30.63 feet along the North line of fractional Section 3, Town 1 North, Range 4 East, Putnam Township, Livingston County, Michigan to the Northeast Corner of said fractional Section 3, same being the Northwest Corner of fractional Section 2, Town 1 North, Range 4, Putnam Township, Livingston County, Michigan;
thence continuing N88°37'43"E 758.00 feet along the North line of said fractional Section 2, said point being distant 1837.47 feet N88°37'43"E to the South 1/4 Corner of said Section 35; thence S1°22'20"E 103.85 feet; thence Southwesterly 392.49 feet along the arc of a 310-foot radius curve to the right, through a central angle of 72°32'31" and having the chord bearing S54°53'36"W 366.80 feet; thence S71°10'11"W 526.33 feet; thence Westerly 111.68 feet along the arc of a 310-foot radius curve to the left, through a central angle of 19°23'27" and having chord bearing S01°32'28"W 111.65 feet to the PLACE OF BEGINNING;
thence S23°30'33"E 1380.97 feet; thence S71°10'11"W 321.02 feet; thence N27°29'35"W 1227.76 feet to the center point of a 66-foot wide private easement for ingress, egress and public utilities; thence N12°53'11"W 401.19 feet; thence Northeasterly 80.93 feet along the arc of a 200-foot radius curve to the left, through a central angle of 19°19'07" and having a chord bearing N61°26'10"E 80.94 feet; thence N51°40'44"E 328.38 feet to the Place of Beginning.
Being a part of the Northeast 1/4 of fractional Section 3 and part of the Northwest 1/4 of fractional Section 2, Town 1 North, Range 4 East, Putnam Township, Livingston County, Michigan. Containing 10.62 acres of land, more or less, of land more or less. Subject to and together with a 66-foot wide private easement for ingress, egress and public utilities (Egans Hills Drive) as described below, also subject to a 12-foot wide private easement for public utilities lying adjacent to and exterior of said 66-foot wide easement for ingress, egress and public utilities as described below, also subject to a 10-foot wide easement for ingress, egress and public utilities as described below, also subject to and together with all easements and restrictions affecting title to the above described premises.

PARCEL 19 11.51± Acres
Land in the Township of Putnam, County of Livingston, State of Michigan, described as follows:
Commencing at the Southwest 1/4 Corner of Section 35, Town 2 North, Range 4 East, Marion Township, Livingston County, Michigan; thence N88°37'43"E 30.63 feet along the North line of fractional Section 3, Town 1 North, Range 4 East, Putnam Township, Livingston County, Michigan to the Northeast Corner of said fractional Section 3, same being the Northwest Corner of fractional Section 2, Town 1 North, Range 4, Putnam Township, Livingston County, Michigan;
thence continuing N88°37'43"E 758.00 feet along the North line of said fractional Section 2 to the PLACE OF BEGINNING;
thence continuing N88°37'43"E 37.43 feet along said North line of fractional Section 2, said point being distant 1700.04 feet N88°37'43"E to the South 1/4 Corner of said Section 35; thence S01°22'17"E 103.85 feet; thence S71°10'11"W 526.33 feet; thence N18°49'49"W 99.30 feet; thence N71°10'11"E 248.21 feet; thence Northerly 392.49 feet along the arc of a 310-foot radius curve to the right, through a central angle of 72°32'31" and having a chord bearing N54°53'36"W 366.80 feet; thence N01°22'20"E 103.85 feet to the Place of Beginning.
Being a part of the Northeast 1/4 of fractional Section 3 and part of the Northwest 1/4 of fractional Section 2, Town 1 North, Range 4 East, Putnam Township, Livingston County, Michigan. Containing 11.51 acres of land, more or less, of land more or less. Subject to the rights of the public over Schaefer Road (33-foot wide 1/2 Right-of-Way) as occupied thereto, also subject to and together with a 66-foot wide private easement for ingress, egress and public utilities (Egans Hills Drive) as described below, also subject to a 12-foot wide private easement for public utilities lying adjacent to and exterior of said 66-foot wide easement for ingress, egress and public utilities as described below, also subject to a 10-foot wide easement for ingress, egress and public utilities as described below, also subject to and together with all easements and restrictions affecting title to the above described premises.

MAINTENANCE NOTES FOR SOIL EROSION CONTROL MEASURES:
The Construction Site and all Soil Erosion Control Measures shall be inspected periodically in accordance with the appropriate local municipality/authority and the MDEQ/NDES rules and regulations. At a MINIMUM, inspections shall be performed once a week and within 24 hours following a storm event resulting in 1" of rainfall or greater. Inspections shall be performed throughout the duration of the construction process and until the site is completely stabilized. Following construction, the owner (or its assignee) shall periodically inspect all permanent soil erosion control measures to ensure proper operation.

MUD TRACKING CONTROL DEVICE / CONSTRUCTION ACCESS: Mud tracking control devices shall be inspected for significant mud accumulation and to ensure the access is not eroding into public rights of way or drainage features. Add additional layers of stone or remove and replace stone each time the stone becomes covered with mud. All sediment dropped or eroded onto public rights of way shall be removed immediately. Sweeping of the public rights of way and/or paved access road shall be performed as necessary to maintain the access route free of sediment and debris.

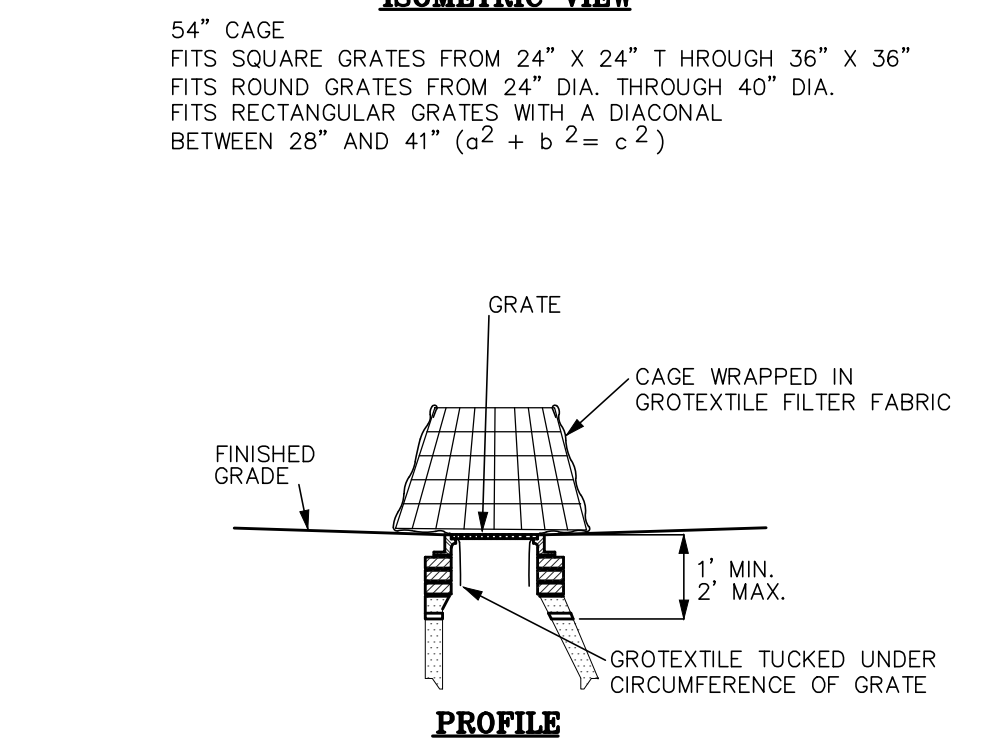
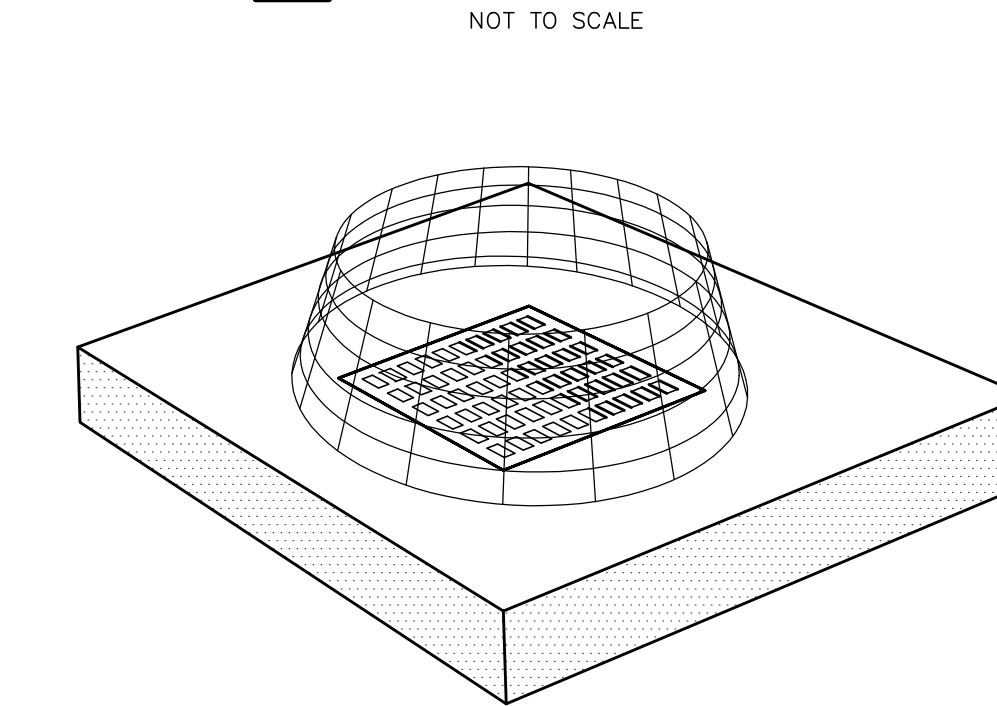
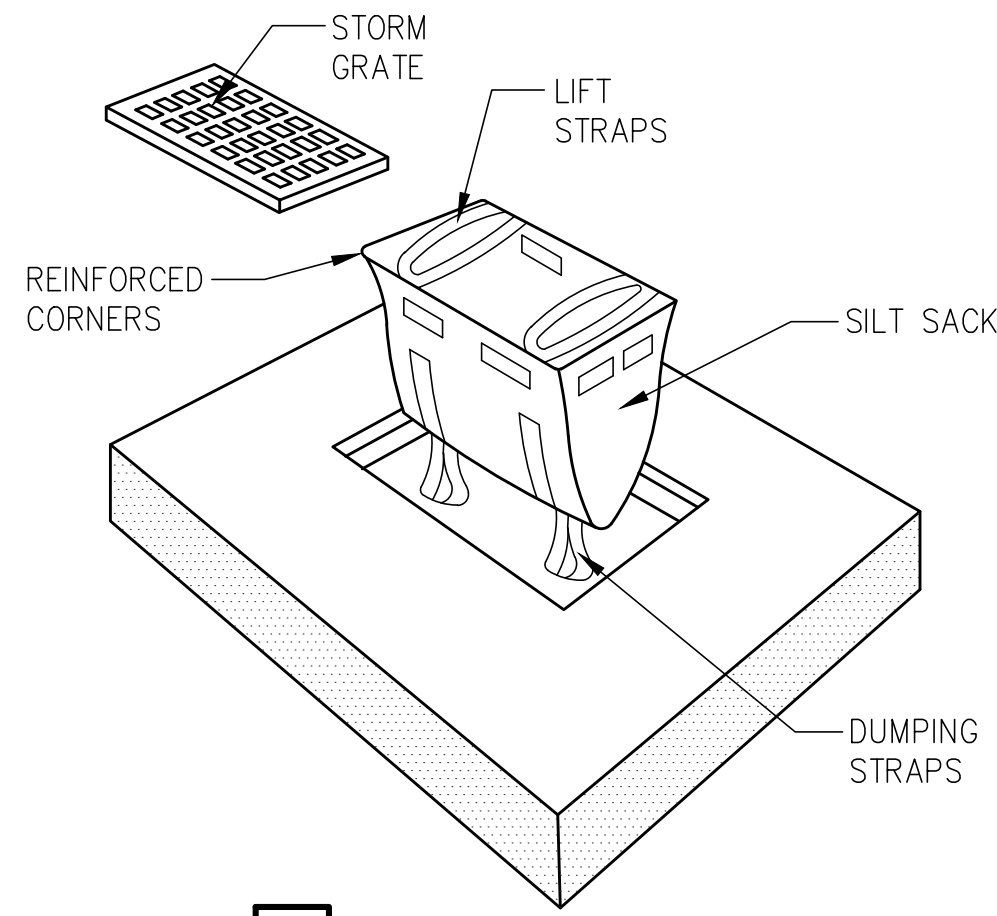
RETENTION BASIN: Retention basins shall be inspected to ensure erosion is not occurring along the inlet locations, banks and/or bottom of the basin and for sediment accumulation. Regular maintenance of the basin includes routine mowing of the buffer/filtration strip, side slopes and basin floor and removal of litter and debris accumulation. Address vegetation and/or erosion concerns as soon as weather permits. Sediment accumulation shall be removed at least once a year. Sediment shall be removed only when the surface is dry and "mud-cracked". Light equipment must be used to avoid compacting of soils. After removal of sediment, the infiltration area shall be deep tilled to ensure infiltration rates. More frequent tilling may be necessary in areas where soils are only marginally permeable. Sediment that is removed shall be disposed of off-site or at an upland area and stabilized so that it does not re-erode the drainage course.

SEEDING: Newly seeded areas shall be inspected until substantial vegetative growth is obtained. Seeded areas shall be inspected to ensure erosion is not occurring in the seeded area and vegetative growth is promoted. Eroded areas shall be finish graded as necessary to remove erosion channels or gullies and new seed placed as soon as weather permits.

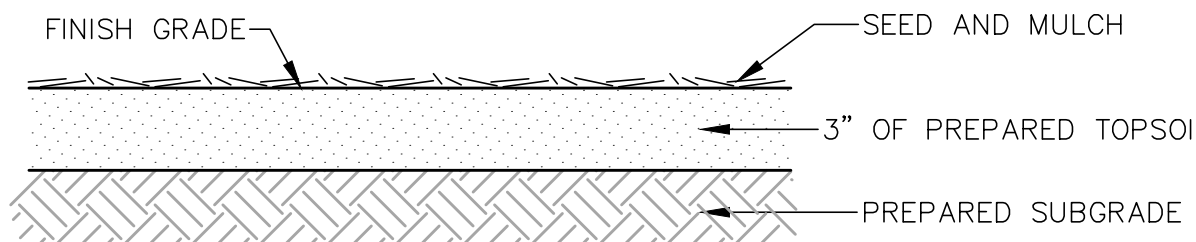
SILT FENCE: Silt fencing shall be inspected for soil accumulation/clogging, undercutting, overtopping and sagging. Soil accumulation shall be removed from the face of the silt fence each time it reaches half the height of the fence. Removed sediment shall be disposed of in a stable upland site or added to a spoils stockpile. When undercutting occurs, grade out areas of concentrated flow upstream of the silt fence to remove channels and/or gullies and repair or replace silt fence ensuring proper trenching techniques are utilized. Silt fencing, which sags, falls over or is not staked in shall be repaired or replaced immediately. Silt fencing fabric, which decomposes or becomes ineffective, shall be removed and replaced with new fabric immediately. Silt fencing shall be removed once vegetation is well established and the up-slope area is fully stabilized.

STOCKPILES: Temporary and permanent topsoil and spoils stockpiles shall be seeded to promote vegetative growth. Stockpiles shall be inspected to ensure excessive erosion has not occurred. When runoff or wind erosion is evident, reduce the side slopes of the stockpile or stabilize the stockpile with pieces of stacked soil laid perpendicular to the slope. When silt fencing is used around a stockpile, the fencing shall be inspected to ensure piping has not occurred under the fencing and to ensure the fencing has not collapsed due to soil slippage or access by construction equipment. Repair or replace damaged fencing immediately. Berms at the base of stockpiles, which become damaged, shall be replaced.

STANDPIPE: Prior to project completion and approval by Livingston County Drain Commissioner's office, stone around the standpipe structure shall be refreshed with clean stone.



1. INLET PROTECTION SHALL BE INSTALLED AT THE TIME OF THE STRUCTURE IS SET.
2. TO INSTALL: TUCK FABRIC UNDER GRATE.
3. REMOVE SEDIMENT IF IT ACCUMULATES TO ONE HALF THE HEIGHT OF THE CAGE.
4. THE AREA AROUND THE CAGE SHOULD BE AS FLAT AS POSSIBLE TO INCREASE EFFECTIVENESS AND REDUCE MAINTENANCE REQUIREMENTS.
5. AS WITH ALL INLET PROTECTION DEVICES, CHECK TO SEE HOW DEEP THE WATER COULD RISE IF THE INLET WERE BLOCKED ENTIRELY.
6. DO NOT INSTALL IN LOCATIONS THAT COULD CAUSE PROPERTY DAMAGE OR POSE A SAFETY HAZARD TO TRAFFIC.



SEEDING DETAIL

NOT TO SCALE

1. Seed mixture shall consist of:
10% - Kentucky Blue Grass
20% - Perennial Ryegrass
30% - Hard Fescue
40% - Creeping Red Fescue

Seed shall be uniformly applied at a rate of 210 pounds per acre.

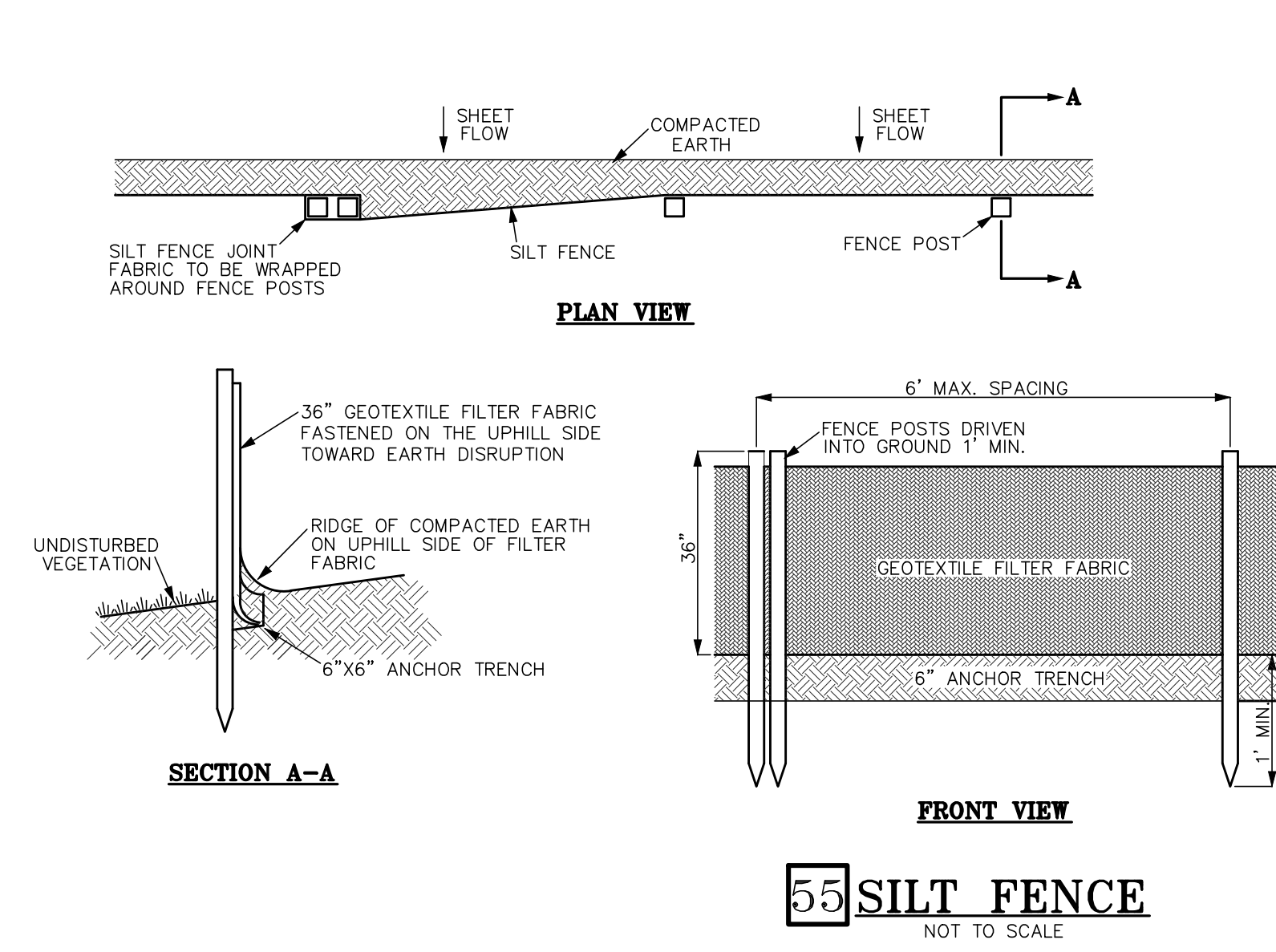
2. Topsoil shall be a dark, organic, natural surface soil free of clay lumps, peat or muck, subsoil, noxious weeds or other foreign matter such as roots, sticks, rocks over 1/2" in diameter and not frozen or muddy. Material shall meet with approval of the Engineer.

3. Straw mulching shall be a minimum depth of 3" applied at a rate of 1.5 to 2 tons per acre. All mulching must have it down, such as tackifier, net binding, etc.

4. Fertilizer shall be evenly applied at a rate which will provide 150 pounds per acre of chemical fertilizer nutrients, in equal portions, (10-10-10), of Nitrogen, Phosphoric Acid and Potash.

5. Hydroseeding is not acceptable for slopes exceeding 1%. In such cases, stabilization shall be done with seed and straw mulch with a tackifier.

6. The earthen areas to receive topsoil shall be at the required grade and properly trimmed. Topsoil shall be spread on the prepared areas to a depth of 3 inches. After spreading, any large clods and lumps of topsoil shall be broken up and pulverized. Stones and rocks over 1/2" in diameter, roots, litter, and all foreign matter shall be raked up and disposed of by the contractor. Place topsoil only when it can be followed within a reasonable time by seeding operations.



- NOTES:**
1. REPAIR AND REPLACE SILT FENCE AS NEEDED, INCIDENTAL.
 2. FIELD LOCATE SILT FENCE TO FOLLOW CONSTANT CONTOUR ELEVATIONS.
 3. OVERLAP FENCES AT JOINTS.
 4. INSTALL FILTER BERM AT LOW POINTS WHERE INDICATED ON PLANS.

MIN. RIP RAP DIMENSIONS

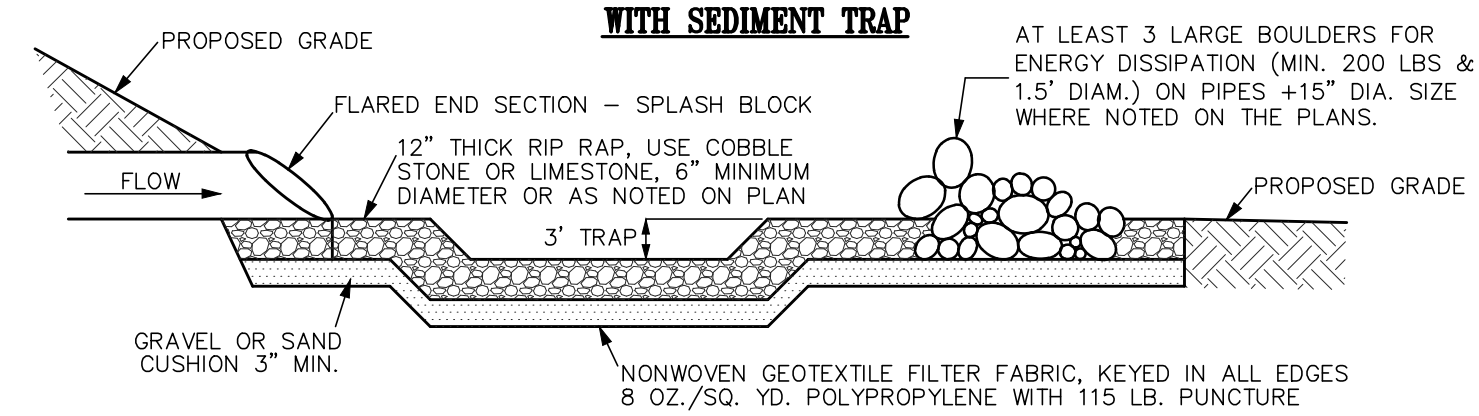
PIPE DIAMETER (inch)	APRON LENGTH (feet)	(1) APRON WIDTH (feet)		(2) ALTERNATE WIDTH (feet)	
		15'	20'	15'	20'
12	15	15	16	15	16
15	15	15	20	15	20
18	18	15	24	15	24
21	21	15	28	15	28
24	24	16	32	16	32
30	30	20	40	20	40
36	36	24	48	24	48
42	42	28	56	28	56

UNLESS SHOWN OTHERWISE ON PLANS. May be varied to match natural features; is when meeting ditch, apron width to match channel bottom extending up sides to a depth of 1/2 pipe dia.

- (1) APRON WIDTH FOR USE IN DITCHES AND SWALES
- (2) APRON WIDTH FOR USE IN FLAT AREAS WHERE SHEET FLOW DESIRED

13 RIP RAP PLAN

NOT TO SCALE



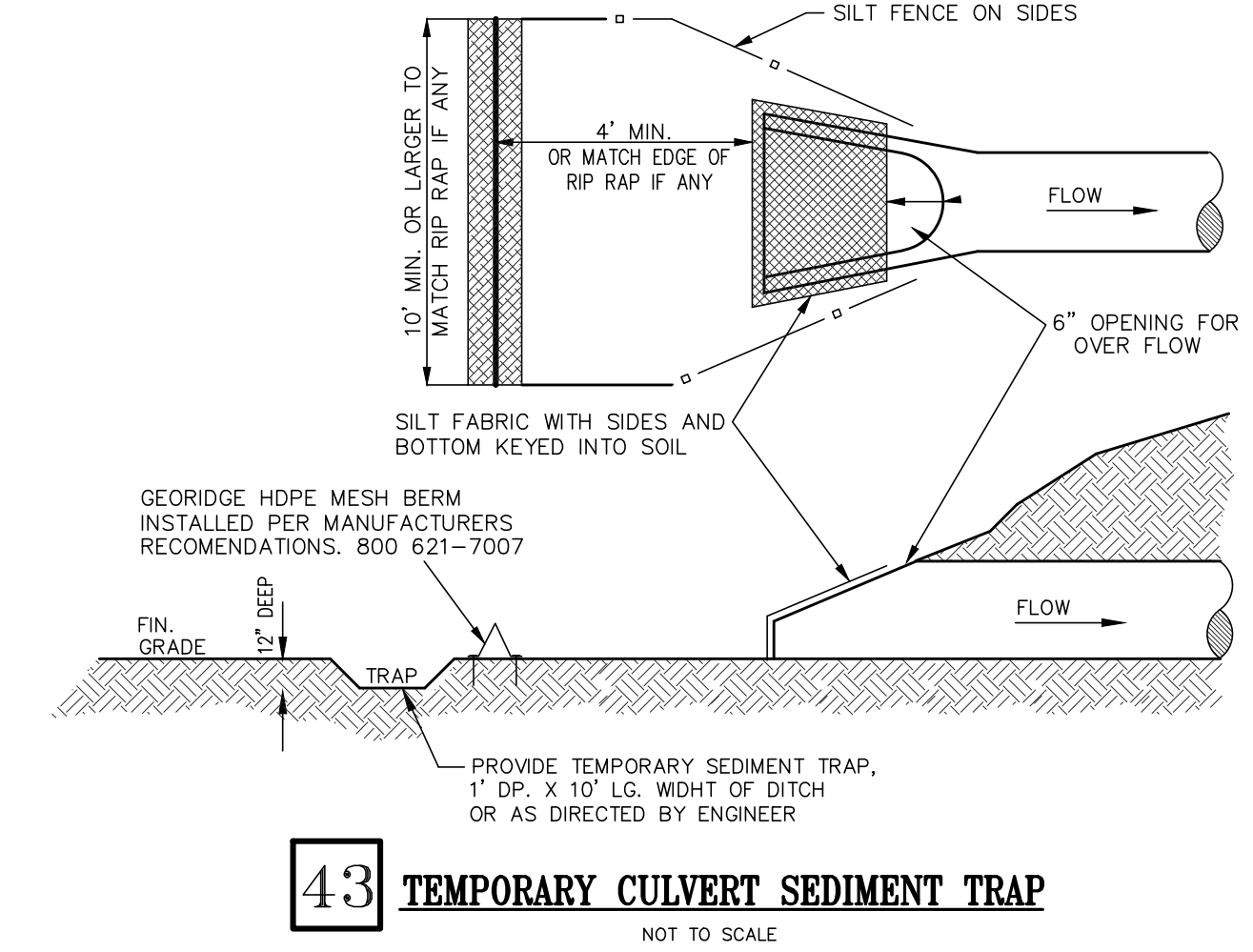
13 RIP RAP CROSS SECTION

NOT TO SCALE

NOTES:

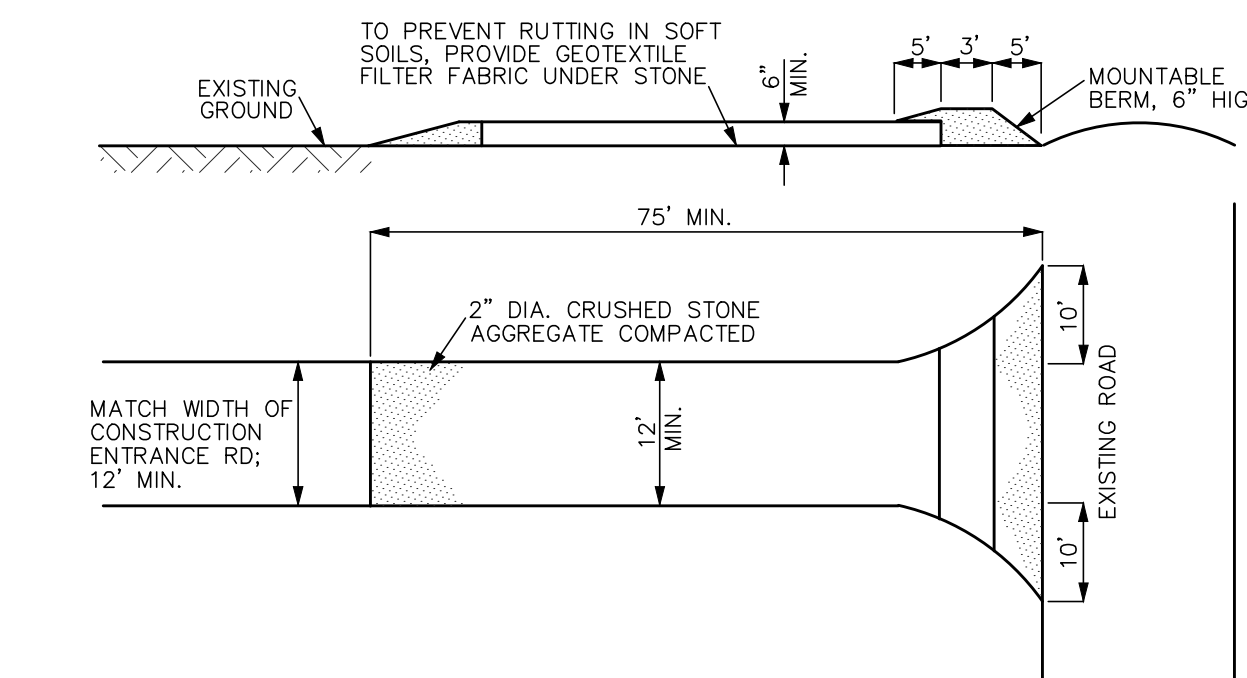
NOTES:

1. GROUT RIP-RAP WITH A 6" THICK CEMENT SLURRY FOR SLOPES STEEPER THAN 20%; 5 ON 1.
2. PROVIDE ANIMAL GUARDS ON ALL STORM SEWER 15" DIA. OR GREATER, INCIDENTAL TO FES PIPE.
3. STORM DRAIN OUTLETS THAT DO NOT EMPTY INTO THE DETENTION BASIN SHALL HAVE INSTALLED A TEMPORARY SEDIMENT TRAP AT THE TERMINATION OF THE STORM SEWER (5'x10'x3' TYP.). UPON COMPLETION OF THE STABILIZATION WORK, THE SUMP AREA SHALL BE FILLED AND RIP-RAPPED.



43 TEMPORARY CULVERT SEDIMENT TRAP

NOT TO SCALE



14 MUD TRACKING CONTROL DEVICE

NOT TO SCALE

NOTE: WHEN ACCEPTABLE TO ENGINEER, CONTRACTOR MAY INSTALL STONE BELOW THE SUBGRADE ELEVATION; THIS STONE MAY BE LEFT IN PLACE BELOW PAVEMENT.

DESIGN:WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

SUMMERFIELD
POINTE PUD

SOIL EROSION AND
SEDIMENTATION CONTROL
NOTES & DETAILS

CLIENT:
HEALY HOMES AT SUMMERFIELD LLC
3696 SLEETH RD,
COMMERCE TOWNSHIP, MICHIGAN 48382
248-684-1699

SCALE: AS NOTED
PROJECT No.: 214159
DWG NAME: 4159 SE
ISSUED: JULY 10, 2023

SE4

DESIGN INC
(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLYERS DRIVE
BRIGHTON, MICHIGAN 48114

SUMMERFIELD POINTE ESTATES P.U.D.

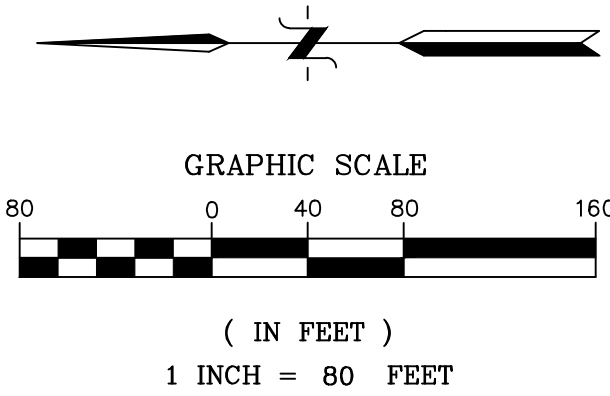
Project: Summerfield Pointe
Location: Genoa Township, Livingston County, MI
Date: 03/08/2023

"Area"	PROPOSED STORM WATER RUN-OFF CALCULATIONS					Area	"C" Factor
	0.80 Pavement	0.80 Gravel	0.80 Building	1.00 Lawn	1.00 Water		
CB-01	0.47	0.00	0.00	0.31	0.00	0.78	0.66
CB-02	0.00	0.00	0.00	0.00	0.00	0.00	0.68
CB-02B	0.04	0.00	0.00	0.04	0.00	0.08	0.60
CB-03	0.34	0.00	0.07	0.18	0.00	0.59	0.71
MH-02A	0.00	0.00	0.42	0.00	0.00	0.42	0.89
CB-04	0.34	0.00	0.00	0.20	0.00	0.60	0.64
CB-05	0.28	0.00	0.14	0.10	0.00	0.52	0.78
CB-06	0.13	0.00	0.00	0.03	0.00	0.16	0.78
CB-07	0.03	0.00	0.00	0.01	0.00	0.04	0.75
CB-08	0.17	0.00	0.00	0.15	0.00	0.32	0.62
CB-09	0.14	0.00	0.00	0.12	0.00	0.28	0.62
CB-12	0.40	0.00	0.00	0.25	0.00	0.65	0.67
CB-13	0.31	0.00	0.00	0.12	0.00	0.43	0.73
CB-14	0.41	0.00	0.35	0.80	0.00	1.56	0.57
CB-15	0.39	0.00	0.28	0.21	0.00	0.88	0.73
CB-16	0.32	0.00	0.14	0.76	0.00	1.22	0.61
CB-17	0.32	0.00	0.28	0.19	0.00	0.79	0.72
CB-21	0.17	0.00	0.00	0.15	0.00	0.32	0.62
CB-22	0.14	0.00	0.00	0.08	0.00	0.22	0.68
CB-23	0.17	0.00	0.00	0.13	0.00	0.28	0.67
CB-110	0.23	0.00	0.15	0.15	0.00	0.53	0.70
CB-100	0.30	0.00	0.28	0.14	0.00	0.72	0.74
CB-101	0.21	0.00	0.00	0.17	0.00	0.38	0.63
CB-111	0.14	0.00	0.00	0.10	0.00	0.24	0.65
CB-112	0.00	0.00	0.06	0.27	0.00	0.33	0.39
YB-113	0.00	0.00	0.06	0.22	0.00	0.28	0.41
YB-114	0.00	0.00	0.06	0.24	0.00	0.30	0.40
YB-115	0.00	0.00	0.06	0.19	0.00	0.25	0.42
CB-116	0.15	0.00	0.00	0.13	0.00	0.28	0.62
CB-118	0.29	0.00	0.00	0.28	0.00	0.56	0.62
YB-201	0.00	0.00	0.13	0.44	0.00	0.57	0.41
YB-202	0.00	0.00	0.10	0.26	0.00	0.36	0.44
CB-203	0.28	0.00	0.00	0.24	0.00	0.50	0.61
CB-204	0.15	0.00	0.00	0.04	0.00	0.19	0.77
CB-206	0.03	0.00	0.00	0.00	0.00	0.03	0.60
CB-207	0.04	0.00	0.00	0.00	0.00	0.04	0.60
YB-208	0.00	0.00	0.05	0.25	0.00	0.29	0.38
YB-209	0.00	0.00	0.06	0.21	0.00	0.27	0.41
YB-210	0.00	0.00	0.06	0.22	0.00	0.28	0.41
YB-211	0.00	0.00	0.06	0.22	0.00	0.28	0.41
YB-213	0.00	0.00	0.10	0.46	0.00	0.56	0.39
YB-214	0.00	0.00	0.10	0.39	0.00	0.49	0.40
YB-217	0.00	0.00	0.06	0.20	0.00	0.24	0.43
YB-218	0.00	0.00	0.06	0.20	0.00	0.26	0.42
YB-219	0.00	0.00	0.06	0.29	0.00	0.35	0.39
YB-220	0.00	0.00	0.06	0.60	0.00	0.66	0.35
YB-221	0.00	0.00	0.09	0.36	0.00	0.45	0.40
YB-232	0.00	0.00	0.12	0.31	0.00	0.43	0.44
YB-233	0.00	0.00	0.08	0.19	0.00	0.25	0.42
YB-234	0.00	0.00	0.03	0.10	0.00	0.13	0.42
FES-240	0.01	0.00	0.00	0.22	0.00	0.23	0.33
CB-250	0.18	0.00	0.00	0.21	0.00	0.39	0.58
CB-260	0.30	0.00	0.00	0.18	0.00	0.48	0.68
CB-281	0.19	0.00	0.00	0.15	0.00	0.34	0.64
YB-301	0.00	0.00	0.10	0.56	0.00	0.65	0.38
YB-302	0.00	0.00	0.13	0.33	0.00	0.46	0.44
YB-303	0.00	0.00	0.13	0.25	0.00	0.38	0.47
YB-304	0.00	0.00	0.08	0.19	0.00	0.24	0.43
YB-305	0.00	0.00	0.06	0.21	0.00	0.27	0.41
YB-401	0.00	0.00	0.13	0.33	0.00	0.46	0.44
CB-402	0.31	0.00	0.00	0.20	0.00	0.50	0.63
CB-403	0.27	0.00	0.00	0.22	0.00	0.49	0.63
YB-404	0.00	0.00	0.26	0.81	0.00	1.07	0.42
YB-405	0.00	0.00	0.13	0.69	0.00	0.82	0.38
YB-406	0.00	0.00	0.10	0.52	0.00	0.62	0.38
YB-407	0.00	0.00	0.26	0.93	0.00	1.19	0.41
YB-410	0.00	0.00	0.13	0.31	0.00	0.44	0.45
FOREBAY	0.00	0.00	0.00	0.90	0.14	1.04	0.39
BASIN	0.00	0.00	0.00	2.00	0.53	2.53	0.45

TOTAL AREA = 33.58
RUN-OFF COEFFICIENT = 0.53

LEGEND

- = PROPERTY LINE
- - - = EX. EDGE OF PAVEMENT
- - - = EX. EASEMENT LINE
- - - = APPROX. WETLAND LINE
- = UTILITY POLE W/GUY WIRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = EXISTING TREE DRIP LINE
- = EDGE OF GRAVEL
- = CONCRETE CURB (UNLESS OTHERWISE STATED)
- = SANITARY SEWER PIPE
- = SANITARY SEWER MANHOLE W/IDENTIFIER
- = STORM WATER DRAINAGE PIPE
- = STORM WATER MANHOLE W/IDENTIFIER
- = CATCH BASIN W/IDENTIFIER
- = FLARED END SECTION
- = WATER MAIN
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = U/G GAS
- = GAS SHUT OFF
- = 1' CONTOUR
- = 5' CONTOUR
- = PROPOSED UNIT LINE
- = PROPOSED BUILDING SETBACK
- = PROPOSED EASEMENT LINE
- = PROPOSED SANITARY SEWER
- = PROPOSED SANITARY MANHOLE
- = PROPOSED WATER MAIN
- = PROPOSED HYDRANT
- = PROPOSED WATER VALVE
- = PROPOSED STORM SEWER
- = PROPOSED STORM STRUCTURES
- = PROPOSED CURB AND GUTTER



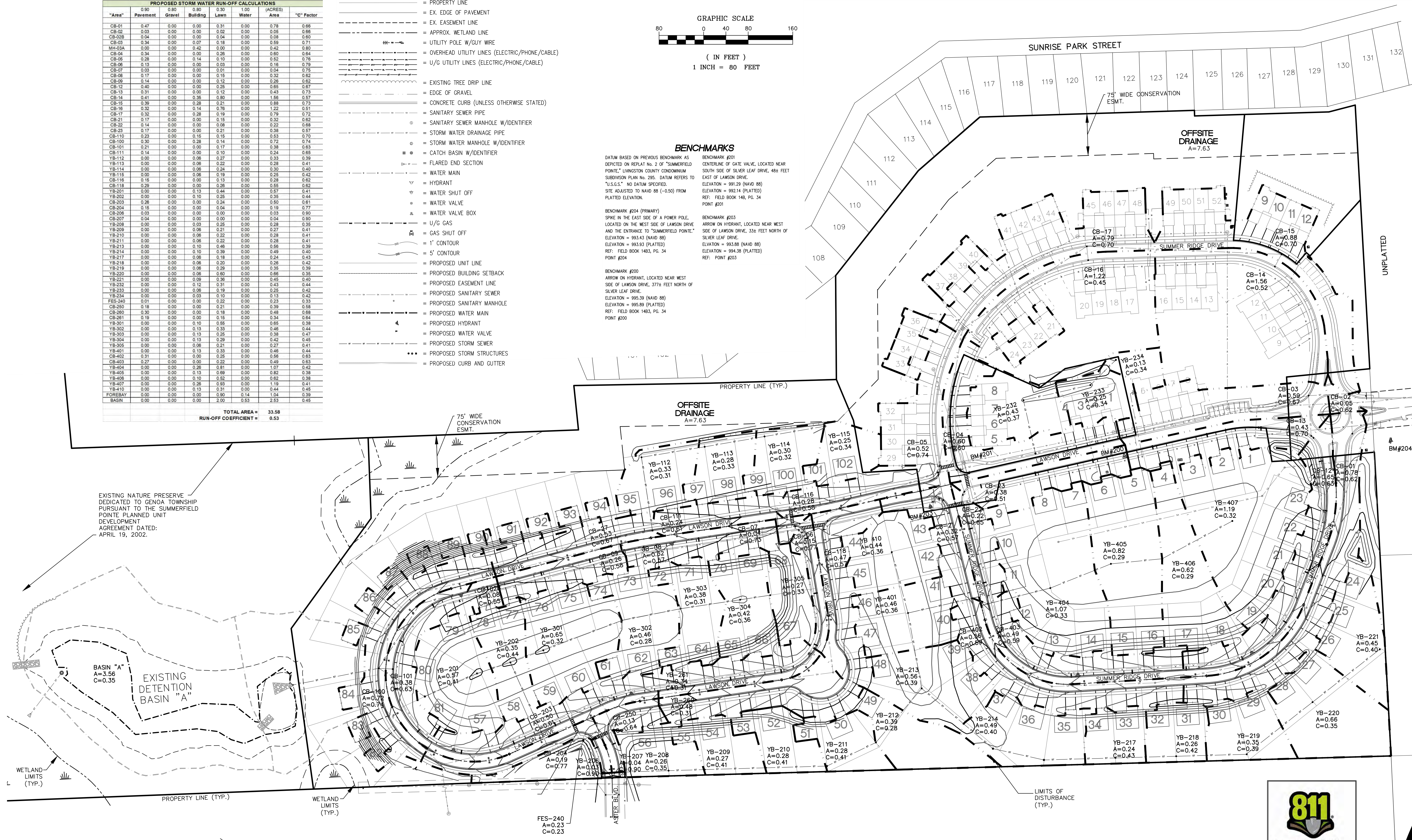
BENCHMARKS

BENCHMARK #201
 DATUM BASED ON PREVIOUS BENCHMARK AS SPECIFIED ON REPEAT No. 2 OF "SUMMERFIELD POINTE," LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN No. 295. DATUM REFERS TO "U.S.G.S." NO DATUM SPECIFIED. ELEVATION = 992.14 (PLATTED) SITE ADJUSTED TO NAVD 88 (-0.50) FROM PLATTED ELEVATION. REF: FIELD BOOK 148, PG. 34 POINT #201

BENCHMARK #204 (PRIMARY)
 SPIKE IN THE EAST SIDE OF A POWER POLE, LOCATED ON THE WEST SIDE OF LAWSON DRIVE AND THE ENTRANCE TO "SUMMERFIELD POINTE." ELEVATION = 993.43 (NAVD 88) REF: FIELD BOOK 148, PG. 34 POINT #204

BENCHMARK #203
 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 31+ FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 993.88 (NAVD 88) REF: FIELD BOOK 148, PG. 34 POINT #203

BENCHMARK #200
 ARROW ON HYDRANT, LOCATED NEAR WEST SIDE OF LAWSON DRIVE, 37+ FEET NORTH OF SILVER LEAF DRIVE. ELEVATION = 995.39 (NAVD 88) REF: FIELD BOOK 148, PG. 34 POINT #200



EXISTING NATURE PRESERVE DEDICATED TO GENOA TOWNSHIP PURSUANT TO THE SUMMERFIELD POINTE PLANNED UNIT DEVELOPMENT AGREEMENT DATED: APRIL 19, 2002.

BASIN "A"
 A=3.56
 C=0.35

EXISTING DETENTION BASIN "A"

TOTAL AREA OF DISTURBANCE = 23.0 AC.

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

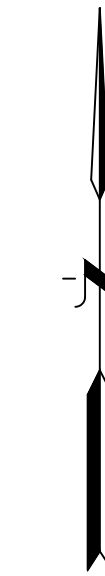
3 WORKING DAYS BEFORE YOU DIG
 CALL 811 OR 1-800-482-7171 (TOLL FREE)
 OR VISIT CALL811.COM

DESIGN INC
 (810) 227-9533
 CIVIL ENGINEERS
 LAND SURVEYORS
 2183 PLESS DRIVE
 BRIGHTON, MICHIGAN 48114

DESIGN:WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION	SUMMERFIELD POINTE PUD		WATERSHED PLAN		CLIENT:	SCALE:	PROJECT No.:	WS1
DRAFT: JHG											HEALY HOMES AT SUMMERFIELD LLC	1in. = 80ft.	214159	
CHECK: WMP											3696 SLEETH RD, COMMERCE TOWNSHIP, MICHIGAN 48382	DWG NAME: 4159 WS	ISSUED: JULY 10, 2023	

MAP LEGEND

- Area of Interest (AOI)**
- Area of Interest (AOI)
- Soils**
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points
- Special Point Features**
- ⊖ Blowout
- ⊞ Borrow Pit
- ⊞ Clay Spot
- ◇ Closed Depression
- ◇ Gravel Pit
- ⊞ Gravelly Spot
- ⊞ Landfill
- ⊞ Lava Flow
- ⊞ Marsh or swamp
- ⊞ Mine or Quarry
- ⊞ Miscellaneous Water
- ⊞ Perennial Water
- ⊞ Rock Outcrop
- ⊞ Saline Spot
- ⊞ Sandy Spot
- ⊞ Severely Eroded Spot
- ⊞ Sinkhole
- ⊞ Slide or Slip
- ⊞ Sodic Spot
- ⊞ Spoil Area
- ⊞ Stony Spot
- ⊞ Very Stony Spot
- ⊞ Wet Spot
- ⊞ Other
- ⊞ Special Line Features
- Water Features**
- Streams and Canals
- Transportation**
- +++ Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads
- Background**
- Aerial Photography



NATURE
PRESERVE AREA
#4711-04-300-013

AREA "A"
#4711-04-400-014

EXISTING SUMMERFIELD
POINTE CONDOMINIUM AREA

AREA "B"
#4711-04-400-015

AREA "C"
#4711-04-400-016

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cc	Carlisle muck, 0 to 2 percent slopes	6.1	3.5%
CvraaB	Conover loam, 0 to 4 percent slopes	3.4	2.0%
Gd	Gilford sandy loam, 0 to 2 percent slopes, gravelly subsoil	11.2	6.6%
Ho	Houghton muck, 0 to 1 percent slopes	4.5	2.7%
MoB	Wawasee loam, 2 to 6 percent slopes	70.9	41.5%
MoC	Wawasee loam, 6 to 12 percent slopes	23.6	13.8%
MoD	Miami loam, 12 to 18 percent slopes	5.8	3.4%
MoE	Miami loam, 18 to 25 percent slopes	11.9	7.0%
MoF	Miami loam, 25 to 35 percent slopes	13.1	7.6%
SvB	Spinks-Oakville loamy sands, 0 to 6 percent slopes	6.7	3.9%
W	Water	13.7	8.0%
Totals for Area of Interest		171.0	100.0%

EXISTING SOILS MAP
NOT TO SCALE

DESIGN: FAF	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: OM						
CHECK: WMP						

SUMMERFIELD
POINTE PUD

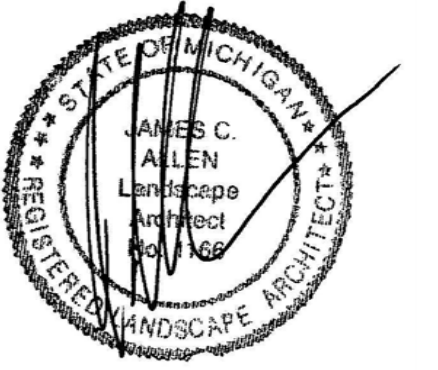
EXISTING
SOILS MAP

CLIENT: HEALY HOMES AT SUMMERFIELD LLC
3696 SLEETH RD,
COMMERCE TOWNSHIP, MICHIGAN 48382
248-684-1699

SCALE: NOT TO SCALE
PROJECT No.: 214159
DWG NAME: 4159 WS2
ISSUED: JULY 10, 2023

WS2

Seal: _____



Title:
Landscape Plan

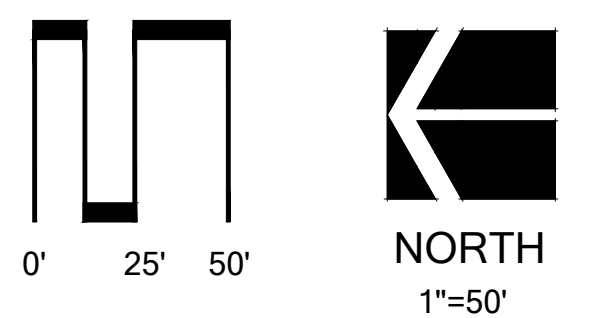
Project:
**Summerfield Point Estates
 Genoa Township, Michigan**

Prepared for:
**Healy Homes, LLC
 3696 Sleeth Road
 Commerce Township, Michigan 48382**

Revision: _____ Issued: _____
 Review October 5, 2022
 Revised May 30, 2023

Job Number:
 21-068

Drawn By: _____ Checked By: _____
 jca jca



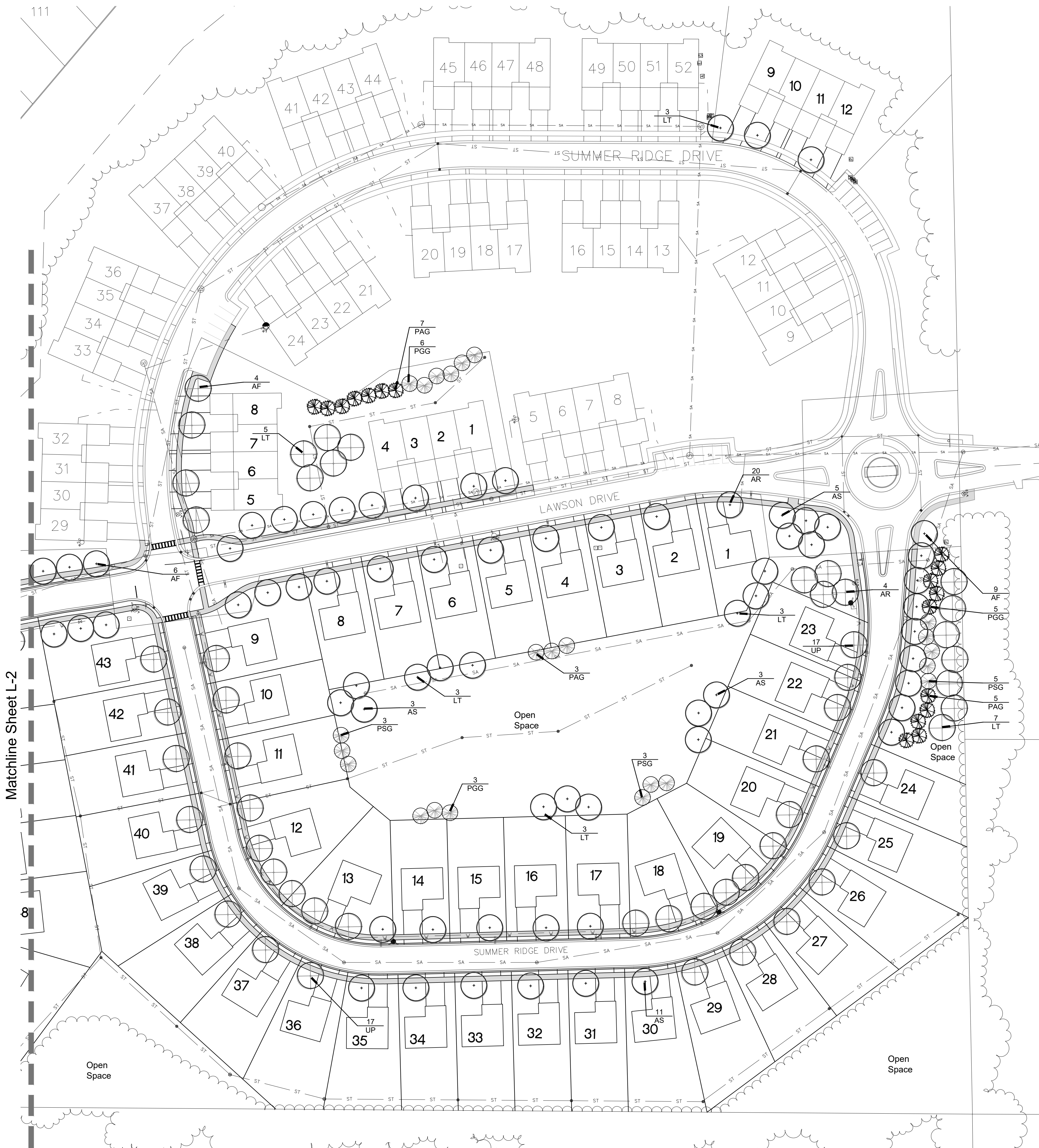
Sheet No. _____

Landscape Summary

Street Trees - Attached	12 Units
Units Shown	24 Trees (2 per Unit)
Street Trees Required	24 Trees
Street Trees Provided	24 Trees
Street Trees - Lots	
Lots Shown	102 Lots
Street Trees Required	204 Trees (102 x 2)
Street Trees Provided	204 Trees

Plant List - This Sheet

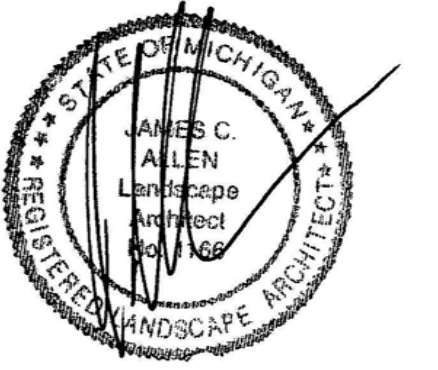
sym.	qty.	botanical name	common name	caliper	spacing	root	height
Street Trees							
AF	19	Acer x. freemanii 'Autumn Blaze'	Autumn Blaze Maple	2.5"	as shown	B&B	
AR	24	Acer rubrum 'October Glory'	October Glory Red Maple	2.5"	as shown	B&B	
AS	22	Acer saccharum 'Green Mountain'	Green Mountain Sugar Maple	2.5"	as shown	B&B	
LT	24	Liriodendron tulipifera	Tulip Tree	2.5"	as shown	B&B	
UP	34	Ulmus 'Pioneer'	Pioneer Elm	2.5"	as shown	B&B	
	123	Trees Provided					
General Plantings							
PAG	15	Picea abies	Norway Spruce		as shown	B&B	6'
PGG	14	Picea glauca var. densata	Black Hills Spruce		as shown	B&B	6'
PSG	11	Pinus strobus	White Pine		as shown	B&B	6'



Matchline Sheet L-2



Seal: _____



Title: _____
Landscape Plan

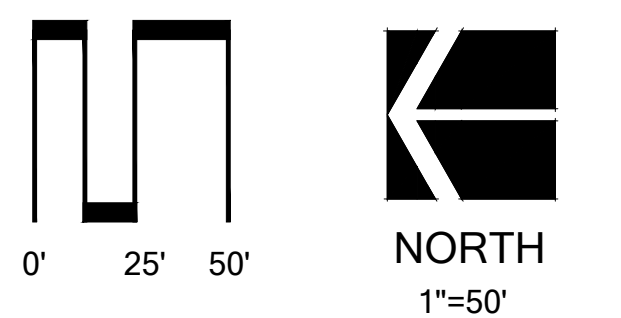
Project: _____
Summerfield Point Estates
 Genoa Township, Michigan

Prepared for: _____
 Healy Homes, LLC
 3696 Sleeth Road
 Commerce Township, Michigan 48382

Revision: _____ Issued: _____
 Review October 5, 2022
 Revised May 30, 2023

Job Number: _____
 21-068

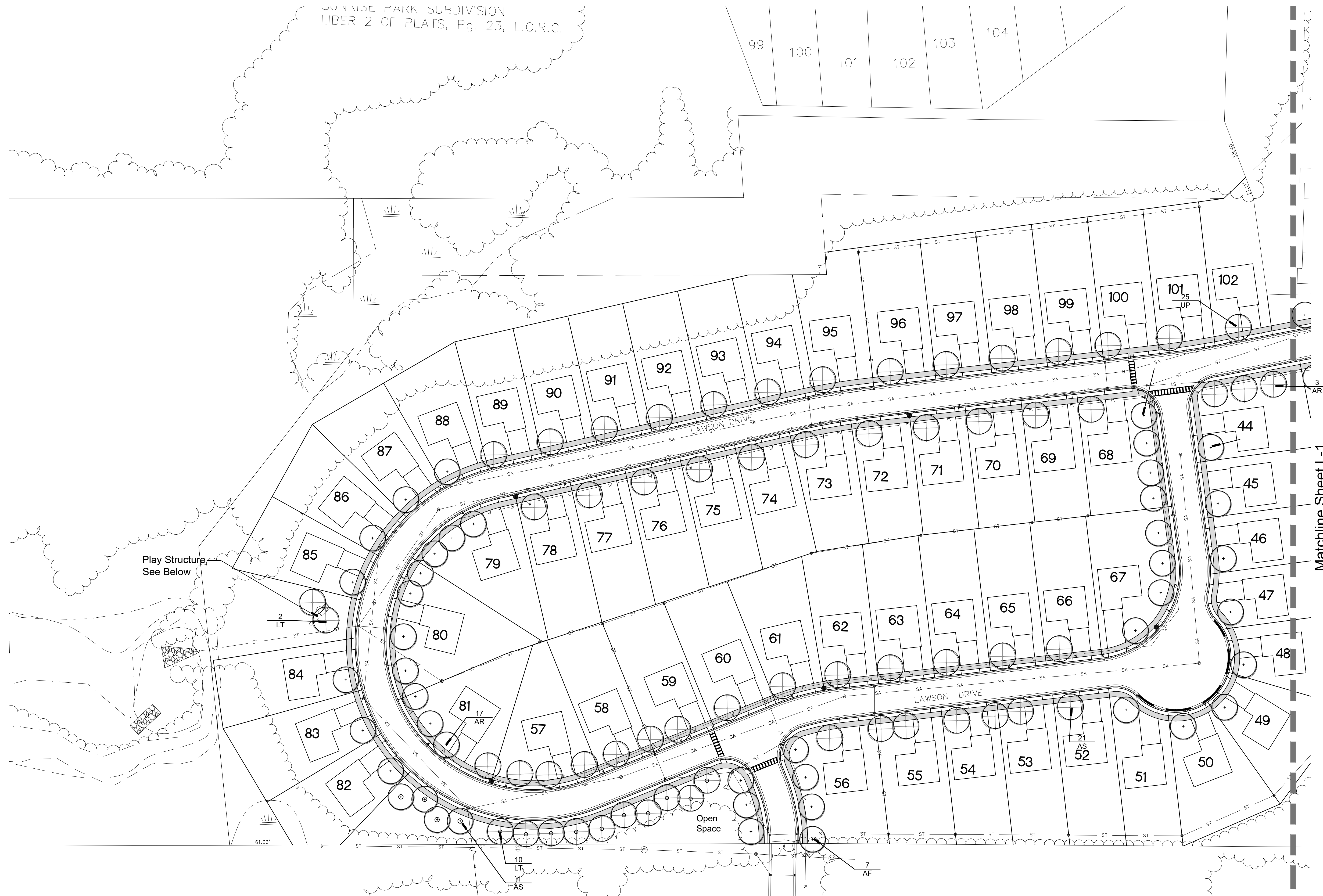
Drawn By: _____ Checked By: _____
 jca jca



Sheet No. _____



L-2



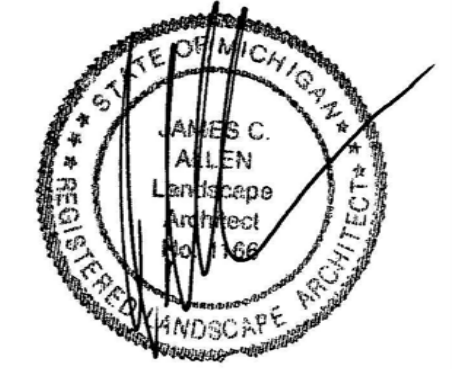
Plant List - This Sheet

sym.	qty.	botanical name	common name	caliper	spacing	root	height
Street Trees							
AF	23	Acer x. freemanii 'Autumn Blaze'	Autumn Blaze Maple	2.5"	as shown	B&B	
AR	20	Acer rubrum 'October Glory'	October Glory Red Maple	2.5"	as shown	B&B	
AS	25	Acer saccharum 'Green Mountain'	Green Mountain Sugar Maple	2.5"	as shown	B&B	
LT	12	Liriodendron tulipifera	Tulip Tree	2.5"	as shown	B&B	
UP	25	Ulmus 'Pioneer'	Pioneer Elm	2.5"	as shown	B&B	
105		Trees Provided					

Play Structure



Port Liberty Play Structure
 by Playgroundequipment.com



Seal:

Title:

Landscape Details

Project:

Summerfield Point Estates
Genoa Township, Michigan

Prepared for:

Healy Homes, LLC
3696 Sleeth Road
Commerce Township, Michigan 48382

Revision:

Review
Revised

Issued:

October 5, 2022
May 30, 2023

Job Number:

21-068

Drawn By:

jca

Checked By:

jca

Sheet No.

L-3

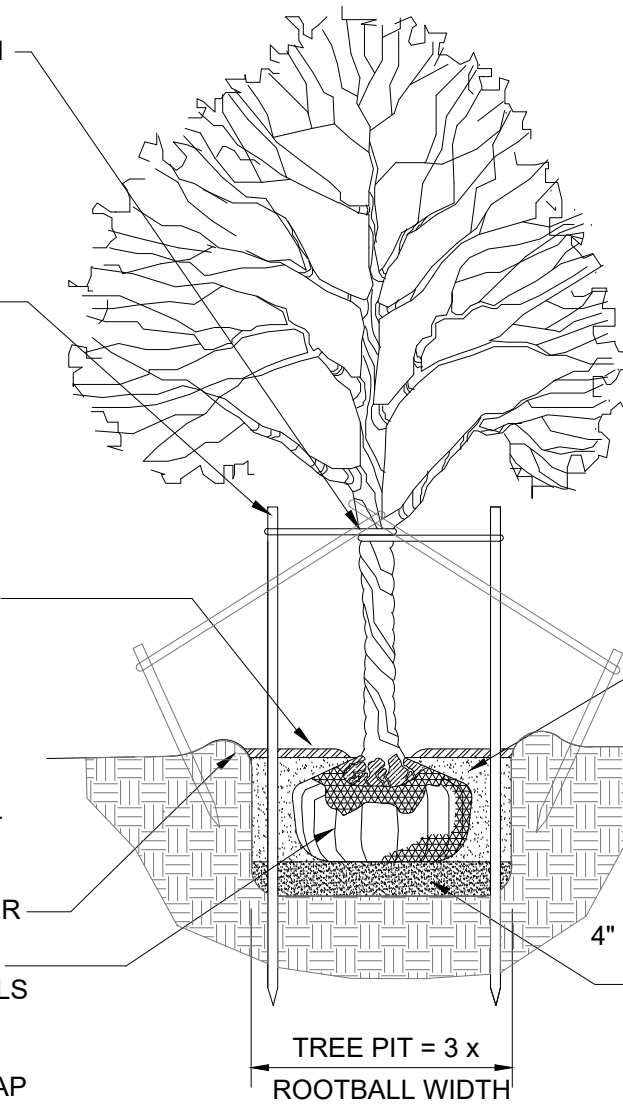
NOTE:
GUY DECIDUOUS TREES ABOVE
3" CAL. STAKE DECIDUOUS
TREES BELOW 3" CAL.

STAKE TREES AT FIRST BRANCH
USING 2"-3" WIDE BELT-LIKE
NYLON OR PLASTIC STRAPS.
ALLOW FOR SOME MINIMAL
FLEXING OF THE TREE.
REMOVE AFTER ONE YEAR.

2" X 2" HARDWOOD STAKES,
MIN. 36" ABOVE GROUND FOR
UPRIGHT, 18" IF ANGLED. DRIVE
STAKES A MIN. 18" INTO
UNDISTURBED GROUND
OUTSIDE ROOTBALL. REMOVE
AFTER ONE YEAR.

MULCH 4" DEPTH WITH
SHREDDED HARDWOOD BARK,
NATURAL IN COLOR. LEAVE 3"
CIRCLE OF BARE SOIL AT BASE
OF TREE TRUNK. PULL ANY
ROOT BALL DIRT EXTENDING
ABOVE THE ROOT FLARE AWAY
FROM THE TRUNK SO THE ROOT
FLARE IS EXPOSED TO AIR.

MOUND EARTH TO FORM SAUCER
REMOVE ALL
NON-BIODEGRADABLE MATERIALS
COMPLETELY FROM THE
ROOTBALL. CUT DOWN WIRE
BASKET AND FOLD DOWN BURLAP
FROM TOP 1/2 OF THE ROOTBALL.



NOTE:
TREE SHALL BEAR SAME
RELATION TO FINISH GRADE AS
IT BORE ORIGINALLY OR
SLIGHTLY HIGHER THAN FINISH
GRADE UP TO 6" ABOVE GRADE,
IF DIRECTED BY LANDSCAPE
ARCHITECT FOR HEAVY CLAY
SOIL AREAS.

DO NOT PRUNE TERMINAL
LEADER. PRUNE ONLY DEAD OR
BROKEN BRANCHES.

REMOVE ALL TAGS, STRING,
PLASTICS AND OTHER
MATERIALS THAT ARE
UNSIGHTLY OR COULD CAUSE
GIRDLING.

PLANTING MIXTURE:
AMEND SOILS PER
SITE CONDITIONS
AND REQUIREMENTS
OF THE PLANT
MATERIAL.

SCARIFY SUBGRADE
AND PLANTING PIT
SIDES. RECOMPACT
BASE OF TO 4"
DEPTH.

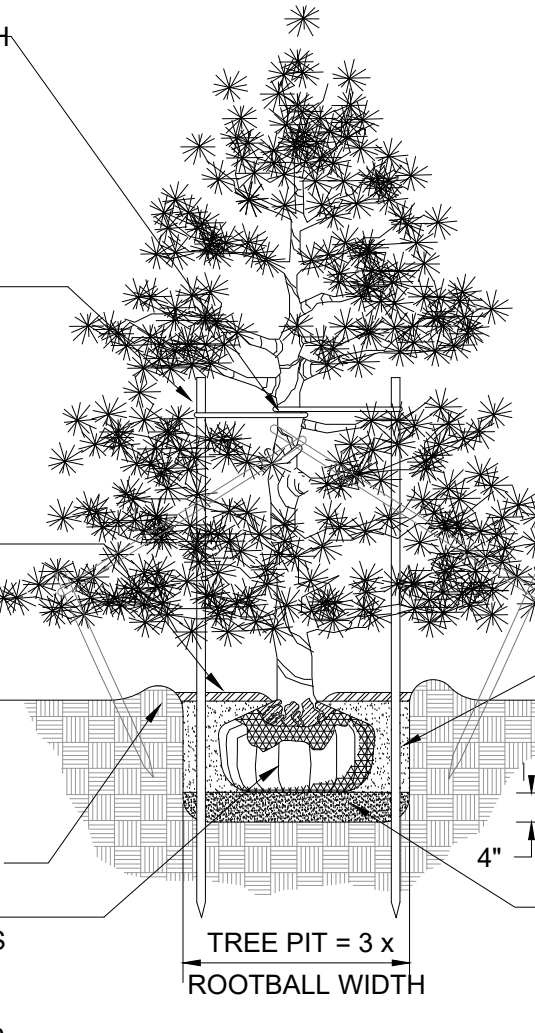
NOTE:
GUY EVERGREEN TREES ABOVE
12' HEIGHT. STAKE EVERGREEN
TREE BELOW 12' HEIGHT.

STAKE TREES AT FIRST BRANCH
USING 2"-3" WIDE BELT-LIKE
NYLON OR PLASTIC STRAPS.
ALLOW FOR SOME MINIMAL
FLEXING OF THE TREE.
REMOVE AFTER ONE YEAR.

2" X 2" HARDWOOD STAKES,
MIN. 36" ABOVE GROUND FOR
UPRIGHT, 18" IF ANGLED. DRIVE
STAKES A MIN. 18" INTO
UNDISTURBED GROUND
OUTSIDE ROOTBALL. REMOVE
AFTER ONE YEAR.

MULCH 4" DEPTH WITH
SHREDDED HARDWOOD BARK,
NATURAL IN COLOR. LEAVE 3"
CIRCLE OF BARE SOIL AT BASE
OF TREE TRUNK. PULL ANY
ROOT BALL DIRT EXTENDING
ABOVE THE ROOT FLARE AWAY
FROM THE TRUNK SO THE ROOT
FLARE IS EXPOSED TO AIR.

MOUND EARTH TO FORM SAUCER
REMOVE ALL
NON-BIODEGRADABLE MATERIALS
COMPLETELY FROM THE
ROOTBALL. CUT DOWN WIRE
BASKET AND FOLD DOWN BURLAP
FROM TOP 1/2 OF THE ROOTBALL.



NOTE:
TREE SHALL BEAR SAME
RELATION TO FINISH GRADE AS
IT BORE ORIGINALLY OR
SLIGHTLY HIGHER THAN FINISH
GRADE UP TO 6" ABOVE GRADE,
IF DIRECTED BY LANDSCAPE
ARCHITECT FOR HEAVY CLAY
SOIL AREAS.

DO NOT PRUNE TERMINAL
LEADER. PRUNE ONLY DEAD OR
BROKEN BRANCHES.

REMOVE ALL TAGS, STRING,
PLASTICS AND OTHER
MATERIALS THAT ARE
UNSIGHTLY OR COULD CAUSE
GIRDLING.

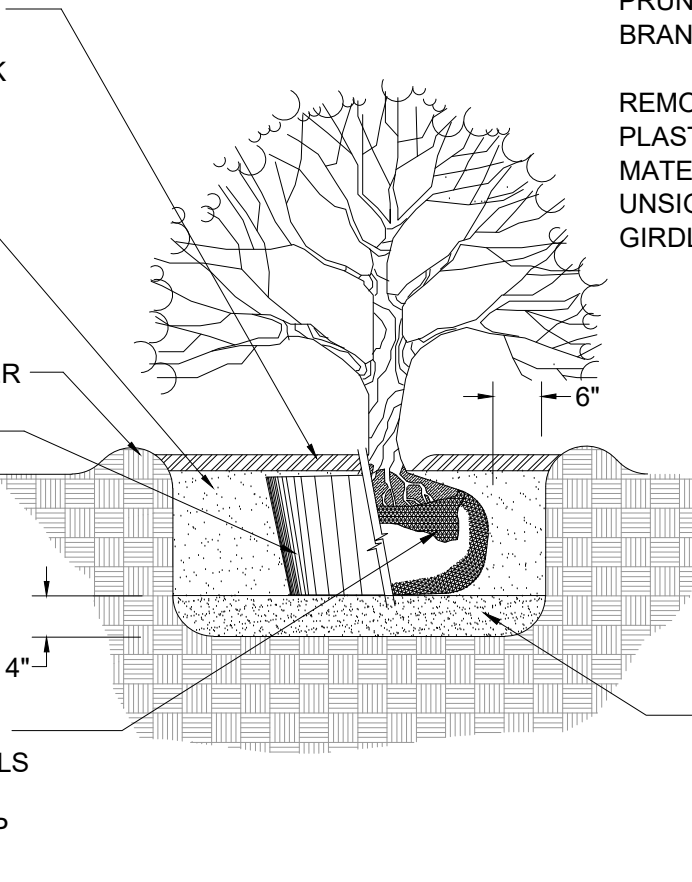
PLANTING MIXTURE:
AMEND SOILS PER
SITE CONDITIONS
AND REQUIREMENTS
OF THE PLANT
MATERIAL.

SCARIFY SUBGRADE
AND PLANTING PIT
SIDES. RECOMPACT
BASE OF TO 4"
DEPTH.

MULCH 3" DEPTH WITH
SHREDDED HARDWOOD BARK,
NATURAL IN COLOR. PULL BACK
3" FROM TRUNK.

PLANTING MIXTURE:
AMEND SOILS PER
SITE CONDITIONS
AND REQUIREMENTS
OF THE PLANT
MATERIAL.
MOUND EARTH TO FORM SAUCER

REMOVE ALL
NON-BIODEGRADABLE MATERIALS
COMPLETELY FROM THE
ROOTBALL. FOLD DOWN BURLAP
FROM TOP 1/2 OF THE ROOTBALL.



NOTE:
TREE SHALL BEAR SAME
RELATION TO FINISH GRADE AS
IT BORE ORIGINALLY OR
SLIGHTLY HIGHER THAN FINISH
GRADE UP TO 4" ABOVE GRADE,
IF DIRECTED BY LANDSCAPE
ARCHITECT FOR HEAVY CLAY
SOIL AREAS.

PRUNE ONLY DEAD OR BROKEN
BRANCHES.

REMOVE ALL TAGS, STRING,
PLASTICS AND OTHER
MATERIALS THAT ARE
UNSIGHTLY OR COULD CAUSE
GIRDLING.

SCARIFY SUBGRADE
AND PLANTING PIT
SIDES. RECOMPACT
BASE OF TO 4"
DEPTH.

DECIDUOUS TREE PLANTING DETAIL

Not to scale

EVERGREEN TREE PLANTING DETAIL

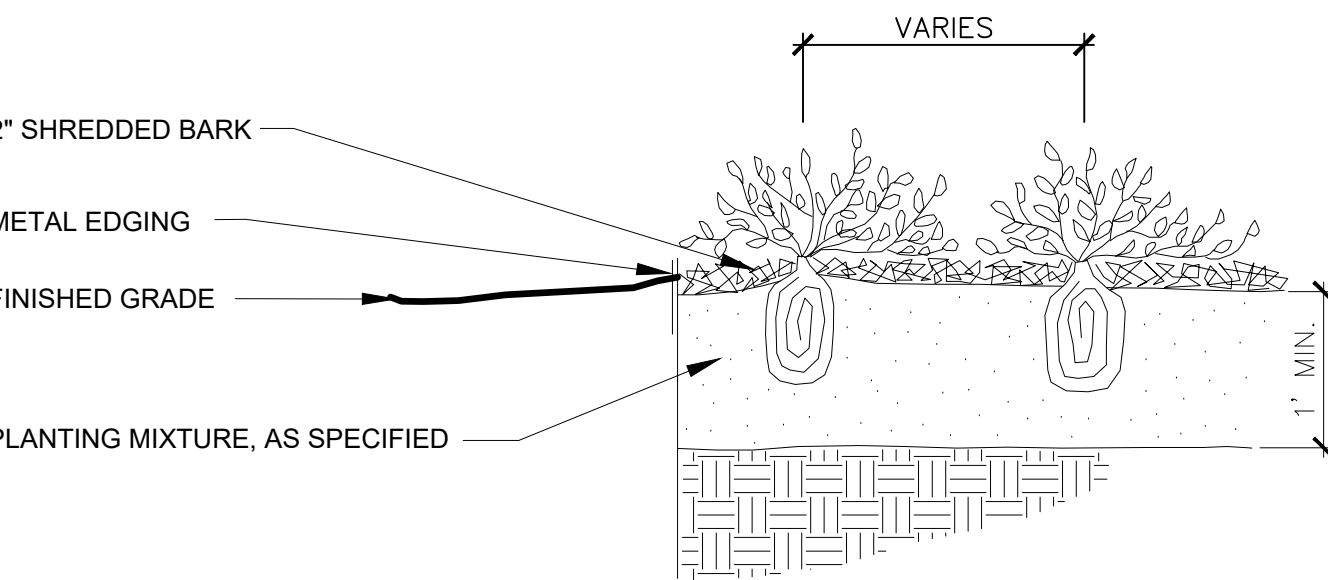
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SHRUB PLANTING DETAIL

NOT TO SCALE

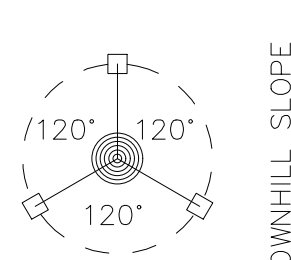
LANDSCAPE NOTES

- All plants shall be north Midwest American region grown, No. 1 grade plant materials, and shall be true to name, free from physical damage and wind burn.
- Plants shall be full, well-branched, and in healthy vigorous growing condition.
- Plants shall be watered before and after planting is complete.
- All trees must be staked, fertilized and mulched and shall be guaranteed to exhibit a normal growth cycle for at least two (2) full years following Township approval.
- All material shall conform to the guidelines established in the most recent edition of the American Standard for Nursery Stock.
- Provide clean backfill soil, using material stockpiled on site. Soil shall be screened and free of any debris, foreign material, and stone.
- "Agriform" tabs or similar slow-release fertilizer shall be added to the planting pits before being backfilled.
- Amended planting mix shall consist of 1/3 screened topsoil, 1/3 sand and 1/3 peat, mixed well and spread to the depth as indicated in planting details.
- All plantings shall be mulched per planting details located on this sheet.
- The Landscape Contractor shall be responsible for all work shown on the landscape drawings and specifications.
- No substitutions or changes of location, or plant types shall be made without the approval of the Landscape Architect.
- The Landscape Architect shall be notified in writing of any discrepancies between the plans and field conditions prior to installation.
- The Landscape Contractor shall be responsible for maintaining all plant material in a vertical condition throughout the guaranteed period.
- The Landscape Architect shall have the right, at any stage of the installation, to reject any work or material that does not meet the requirements of the plans and specifications, if requested by owner.
- Contractor shall be responsible for checking plant quantities to ensure quantities on drawings and plant list are the same. In the event of a discrepancy, the quantities on the plans shall prevail.
- The Landscape Contractor shall seed and mulch or sod (as indicated on plans) all areas disturbed during construction, throughout the contract limits.
- A pre-emergent weed control agent, "Preen" or equal, shall be applied uniformly on top of all mulching in all planting beds.
- All landscape areas shall be provided with an underground automatic sprinkler system.
- Sod shall be two year old "Baron/Cheriadelph" Kentucky Blue Grass grown in a sod nursery on loam soil.



PERENNIAL PLANTING DETAIL

Not to scale

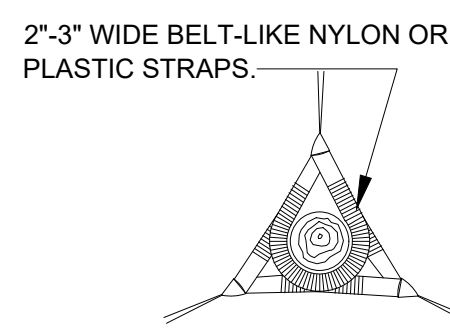


DOWNHILL SLOPE
OR
PREVAILING WIND

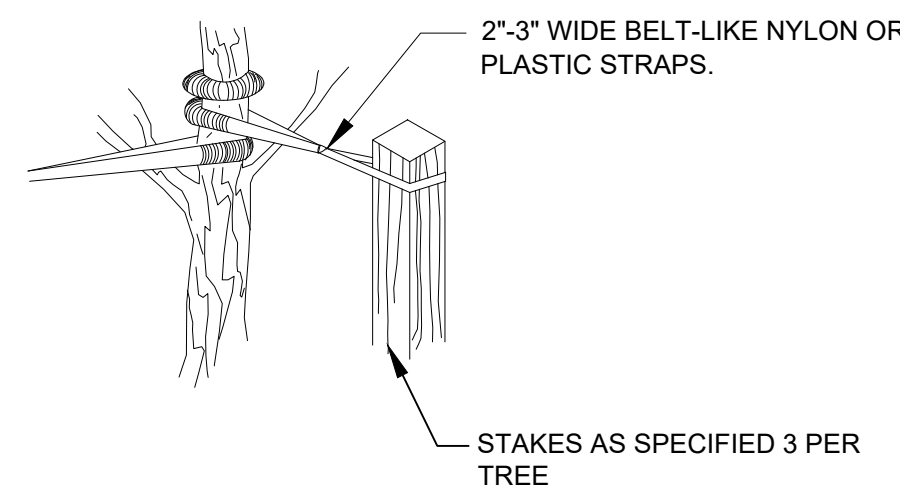
NOTE:
ORIENT STAKING/GUYING TO PREVAILING
WINDS, EXCEPT ON SLOPES GREATER
THAN 3:1 ORIENT TO SLOPE.

USE SAME STAKING/GUYING
ORIENTATION FOR ALL PLANTS WITHIN
EACH GROUPING OR AREA

STAKING/GUYING LOCATION



GUYING DETAIL

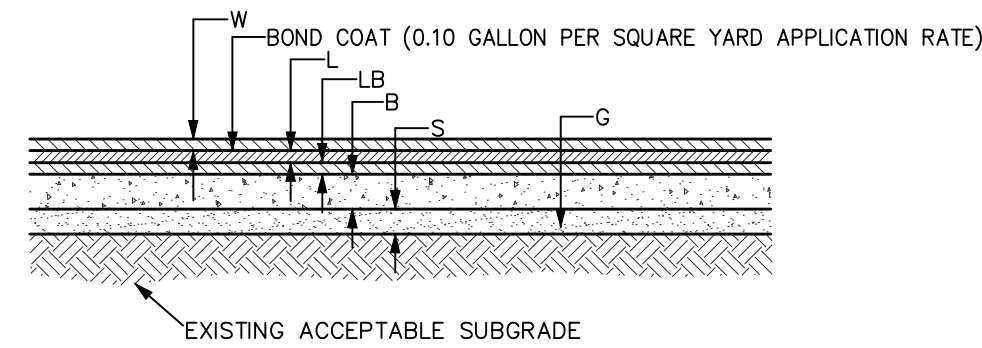


STAKING DETAIL

TREE STAKING DETAIL

Not to scale



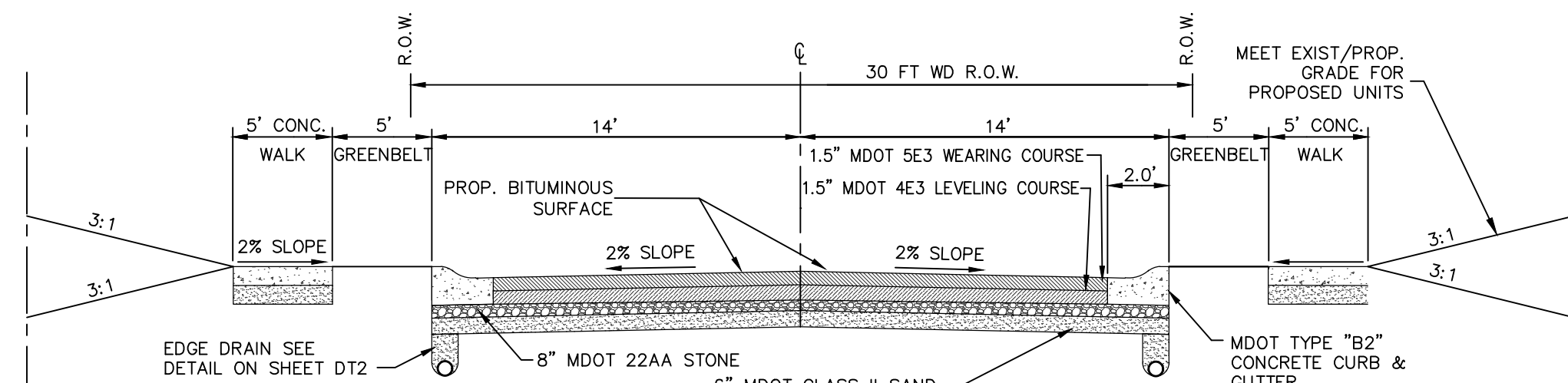


LAWSON ROAD BITUMINOUS PAVEMENT CROSS SECTION
NOT TO SCALE

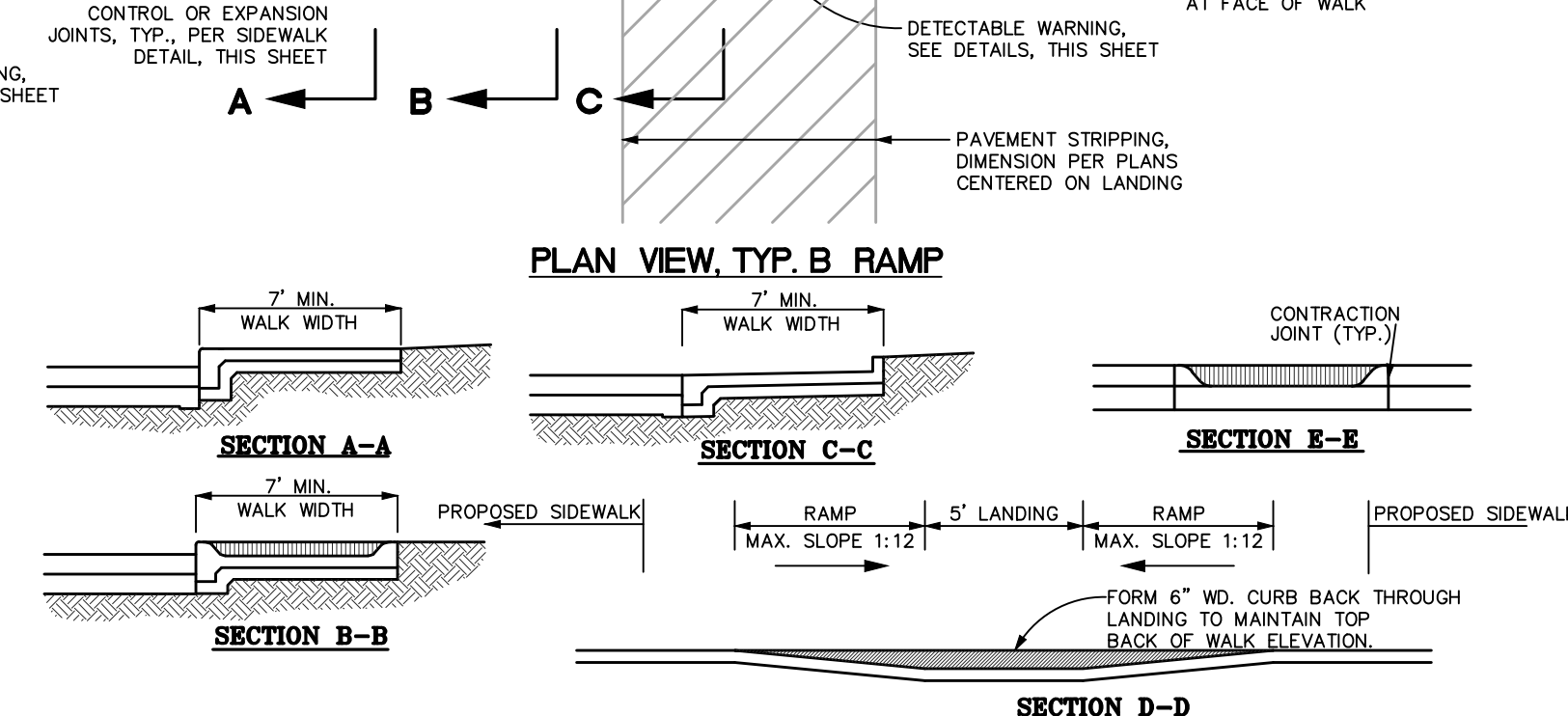
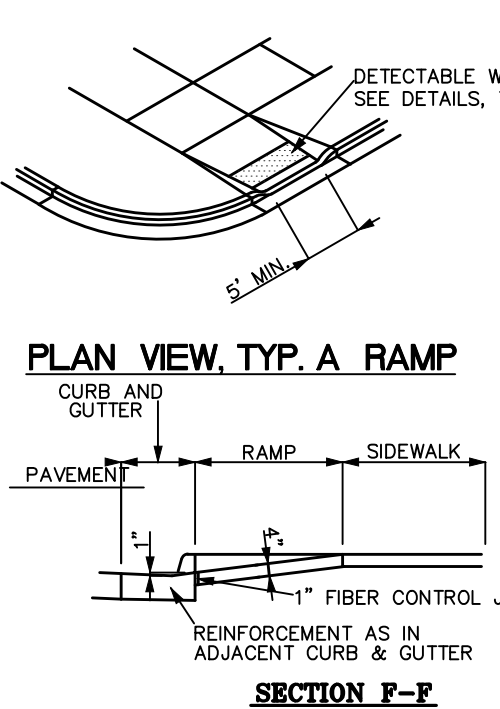
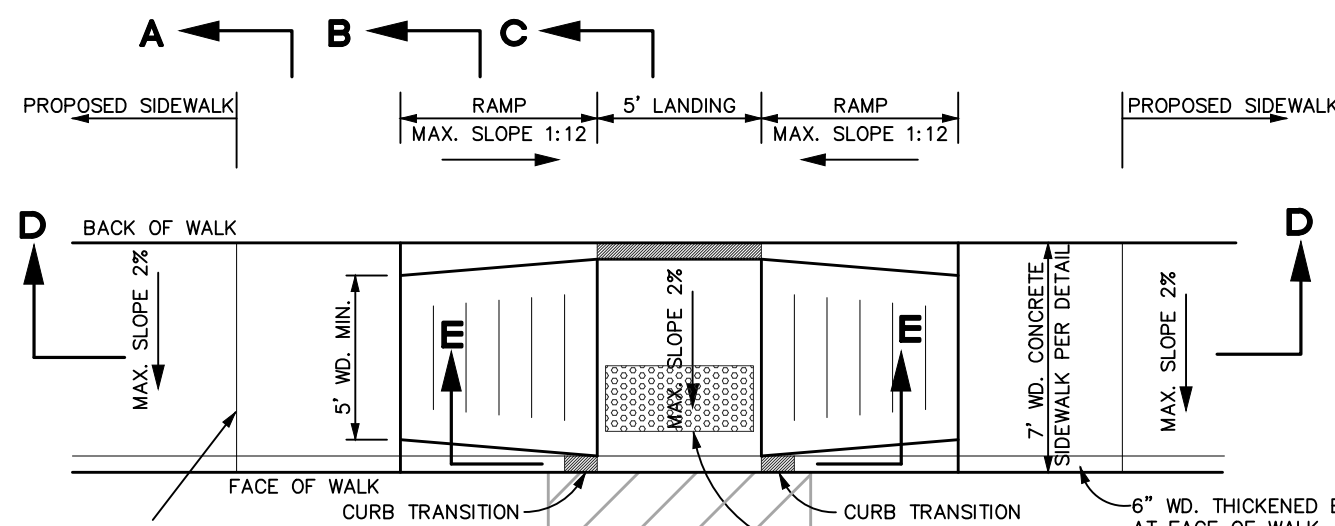
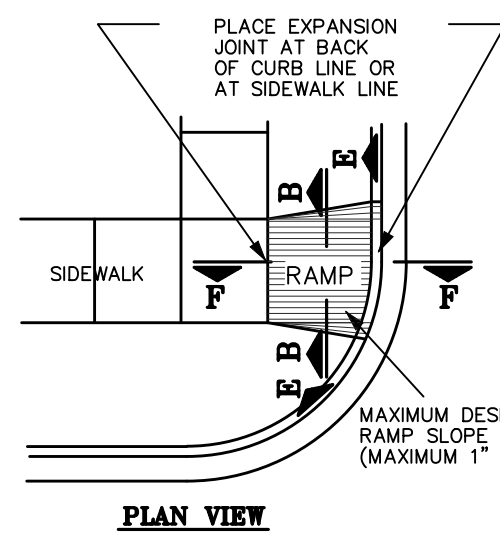
KEY	DESCRIPTION	MATERIAL SPECIFICATION	MINIMUM COMPACTED THICKNESS
W	WEARING COURSE	MDOT 5E3	1.5"
L	LEVELING COURSE	MDOT 4E3	1.5"
LB	LEVELING BASE COURSE	MDOT 3E3	N/A
B	AGGREGATE BASE	MDOT 22AA	8"
S	GRANULAR SUBBASE	MDOT CLASS II	6"
G	GEOGRID	N/A	N/A

PAVEMENT NOTES:

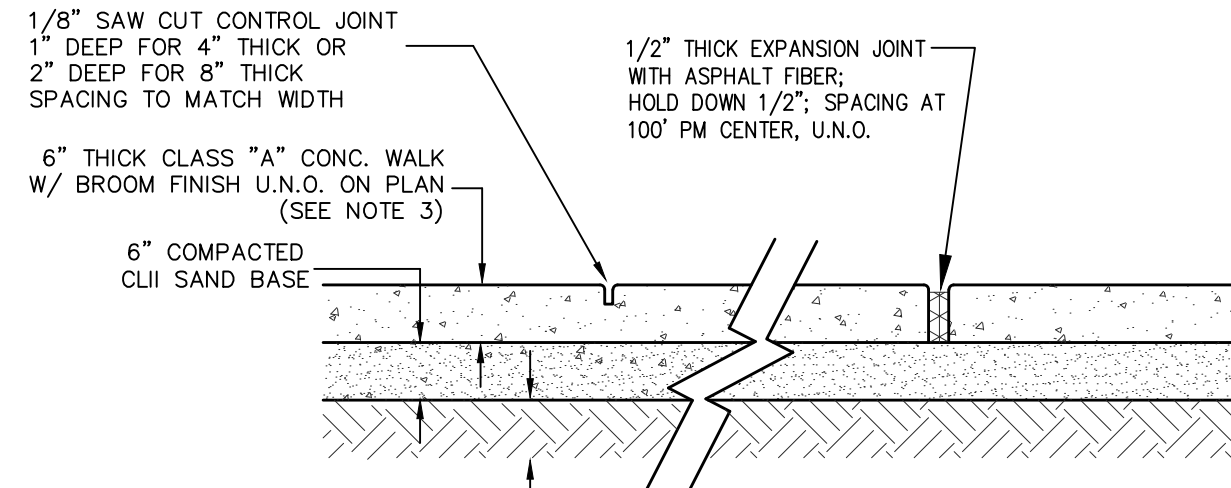
- ABOVE CROSS SECTION APPLICABLE TO PROPOSED PRIVATE PAVEMENT WITHIN PROPOSED LAWSON DR. RIGHT OF WAY.
- THE RECOMMENDED PG BINDER FOR THIS REGION IS PG 64-28 BASED ON MDOTS HMA SELECTION GUIDELINES.
- UNSUITABLE SOILS SUCH AS MUCK, PEAT, MARL, TOPSOIL, SILT OR OTHER UNSTABLE MATERIALS SHALL BE UNDERCUT AND REPLACED WITH COMPACTED SAND SUBBASE.
- AREAS OF FILL SHALL BE CONSTRUCTED TO GRADE USING 6" THICK LIFTS OF COMPACTED SAND SUBBASE.



TYPICAL CROSS SECTION FOR LAWSON DRIVE & SUMMER RIDGE DRIVE PRIVATE ROADS
NOT TO SCALE

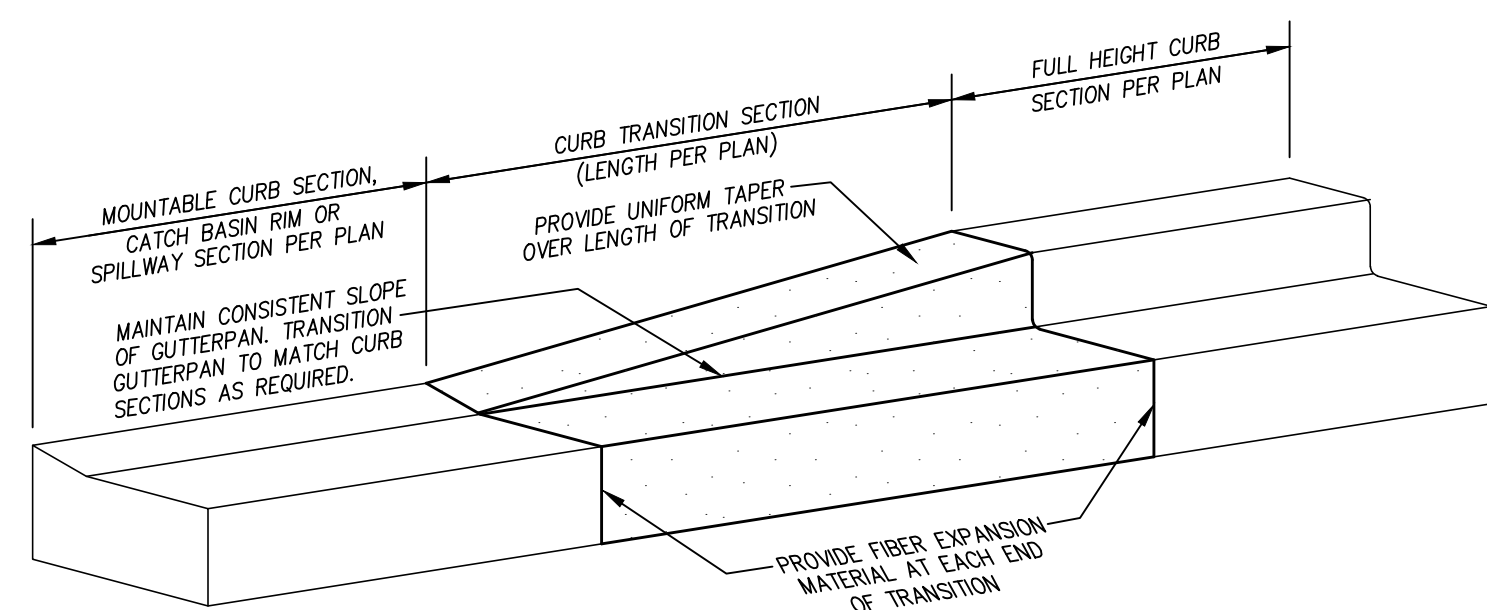


BARRIER FREE RAMP DETAILS
NOT TO SCALE



SIDEWALK CROSS SECTION
NOT TO SCALE

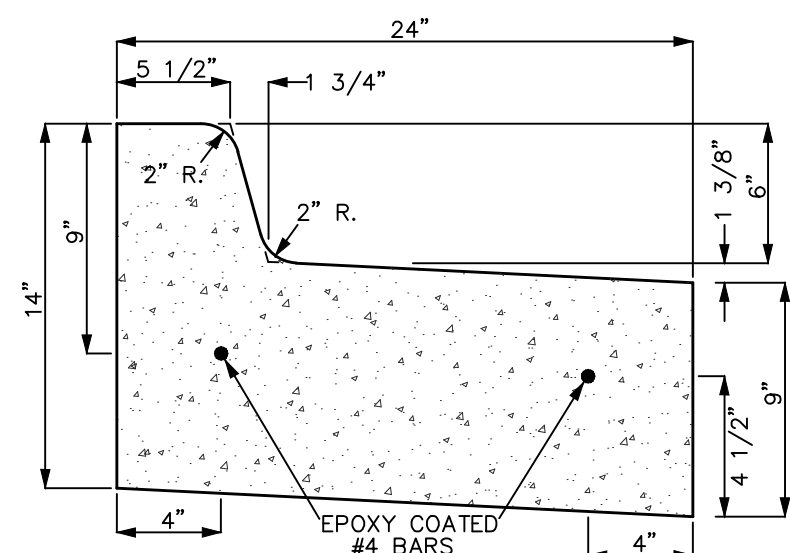
- SEE PLAN FOR WIDTH OF SIDEWALK.
- PROVIDE CONCRETE TYPE PER LOCAL CODE. (3500 PSI AIR ENTRAINED)
- 6" THICK CLASS "A" CONC. SHALL BE PROVIDED AT ALL DRIVEWAY ACCESS CROSSINGS.



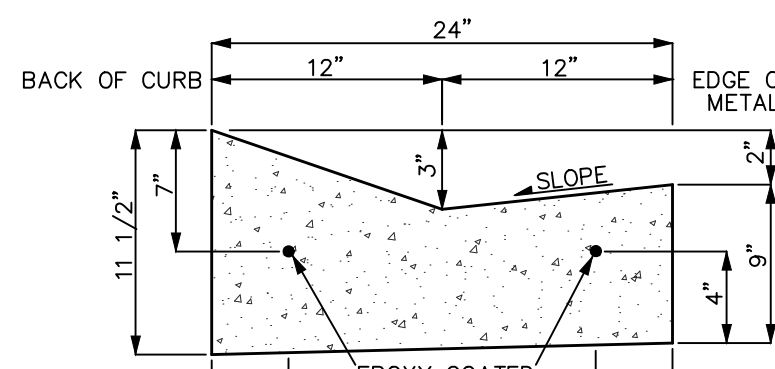
CURB TRANSITION DETAIL
NOT TO SCALE

- CURB TRANSITIONS SHALL BE SMOOTH. PROVIDE SPECIAL FORMING AND LABOR IF NEEDED. CURB TRANSITIONS ARE INCIDENTAL TO CURB WORK.
- CONTRACTOR SHALL ADJUST THE ELEVATION OF THE TOP OF CURB AS NEEDED TO MAINTAIN THE GUTTER LINE AT A CONSTANT SLOPE BETWEEN THE DIFFERENT CURB CROSS SECTIONS.
- WHEN PRESENT, THE CURB TRANSITION MAY BEGIN AT A CATCH BASIN OR PAVED SPILLWAY SECTION.

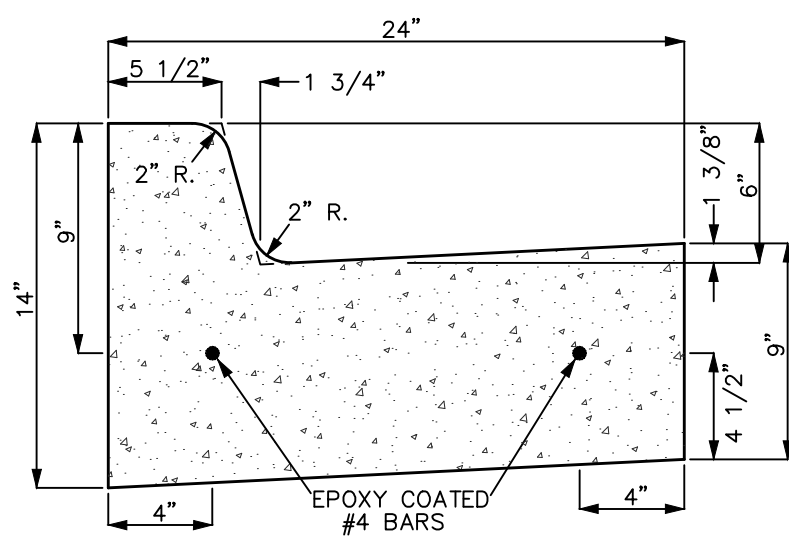
GUTTER PAN DETAIL FOR TYPE F4 CURB
NOT TO SCALE



MDOT TYPE F4 CURB REVERSE PITCH
NOT TO SCALE



3\"/>



MDOT TYPE F4 CURB
NOT TO SCALE

DETECTABLE WARNING DETAILS

NOTES:

DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION, RECONSTRUCTION, OR ALTERATION OF STREETS, CURBS, OR SIDEWALKS IN THE PUBLIC RIGHT OF WAY.

SIDEWALK RAMPs ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

RAMPs SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPs SHALL ALSO BE PROVIDED AT MARKED AND/OR STABILIZED WID-BLOCK CROSSINGS.

SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COARSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.

SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE RAMP, WHERE CONDITIONS PERMIT. IT IS DESIRABLE THAT THE SLOPE OF THE RAMP BE IN ONLY ONE DIRECTION, PARALLEL TO THE DIRECTION OF TRAVEL.

RAMP WIDTH SHALL BE INCREASED, IF NECESSARY, TO ACCOMMODATE SIDEWALK SNOW REMOVAL EQUIPMENT NORMALLY USED BY THE MUNICIPALITY.

WHEN 5' MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 4' AND LANDINGS TO NOT LESS THAN 4' x 4'.

CURB RAMPs WITH A RUNNING SLOPE LESS DO NOT REQUIRE A TOP LANDING. HOWEVER, ANY CONTINUOUS SIDEWALK OR PEDESTRIAN ROUTE CROSSING THROUGH OR INTERSECTING THE CURB RAMP MUST INDEPENDENTLY MAINTAIN A CROSS SLOPE, NOT GREATER THAN 2% PERPENDICULAR TO ITS OWN DIRECTION(S) OF TRAVEL.

DETECTABLE WARNING SURFACE COVERAGE IS 24" MINIMUM IN THE DIRECTION OF RAMP/PATH TRAVEL, AND THE FULL WIDTH OF THE RAMP/PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2" MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADII.

FOR NEW ROADWAY CONSTRUCTION, THE RAMP CROSS SLOPE MAY NOT EXCEED 2.0%. FOR ALTERATIONS TO EXISTING ROADWAYS, THE CROSS SLOPE MAY BE TRANSITIONED TO MEET AN EXISTING ROADWAY GRADE. THE CROSS SLOPE TRANSITION SHALL BE APPLIED UNIFORMLY OVER THE FULL LENGTH OF THE RAMP.

THE MAXIMUM RUNNING SLOPE OF 8.5% IS RELATIVE TO A FLAT (0% REFERENCE). HOWEVER, IT SHALL NOT REQUIRE ANY RAMP OR SERIES OF RAMPs TO EXCEED 15 FEET IN LENGTH NOT INCLUDING LANDINGS OR TRANSITIONS.

DRAINAGE STRUCTURES SHOULD NOT BE PLACED IN LINE WITH RAMPs. THE LOCATION OF THE RAMP SHOULD TAKE PRECEDENCE OVER THE LOCATION OF THE DRAINAGE STRUCTURE. WHERE EXISTING DRAINAGE STRUCTURES ARE LOCATED IN THE RAMP PATH OF TRAVEL, USE A MANUFACTURER'S ADA COMPLIANT GRATE. OPENINGS SHALL NOT BE GREATER THAN 1/2" ELONGATED OPENINGS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.

THE TOP OF THE JOINT FILLER FOR ALL RAMP TYPES SHALL BE FLUSH WITH THE ADJACENT CONCRETE.

CROSSWALK AND STOP LINE MARKINGS, IF USED, SHALL BE SO LOCATED AS TO STOP TRAFFIC SHORT OF RAMP CROSSINGS. SPECIFIC DETAILS FOR MARKING APPLICATIONS ARE GIVEN IN THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

FLARED SIDES WITH A SLOPE OF 10% MAXIMUM, MEASURED ALONG THE PROPOSED CURB LINE, SHALL BE PROVIDED WHERE AN UNRESTRICTED CIRCULATION PATH LATERALLY CROSSES THE SIDEWALK RAMP. FLARED SIDES ARE NOT REQUIRED WHERE THE RAMP IS BORDERED BY LANDSCAPING, UNPAVED SURFACE OR PERMANENT FIXED OBJECTS. WHERE THEY ARE NOT REQUIRED, FLARED SIDES CAN BE CONSIDERED IN ORDER TO AVOID SHARP CURB RETURNS AT RAMP OPENINGS.

DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND/OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR
SIDEWALK RAMP AND DETECTABLE WARNING DETAILS
12-11-2007
R-28-J
SHEET 1 OF 1

CONCRETE CURB NOTES:

- Refer to the project plans for the proposed locations of the specific curb types.
- The construction specifications of the appropriate Local Municipality are a part of this work. Refer to the Private Road Construction Notes and/or Driveway and Parking Lot Construction Notes and the General Notes on the project plans for additional requirements.
- Concrete material shall meet or exceed the specification requirements of the appropriate Local Municipality. Unless specified otherwise by the Local Municipality, concrete material shall be air-entrained and shall have a minimum 28-day class design strength of 3500 psi. Contractor shall submit concrete mix design and aggregate mechanical analysis report to the Local Municipality and Engineer for review and approval prior to use.
- Install transverse expansion control joints in accordance with the Local Municipality requirements. If not specified by the Local Municipality, then install transverse expansion control joints in curb with 1" minimum depth at 10' on center. Tool joints in fresh concrete or saw cut within 8 hours.
- Install transverse expansion control joints in accordance with the Local Municipality requirements. If not specified by the Local Municipality, then install transverse expansion control joints in curb as follows: 300' maximum on center, at spring points of intersecting streets and within 10' on each side of catch basins. Transverse expansion control joints shall be 1" thick asphalt fiber joint filler matching entire curb cross section.
- Provide 0.5" asphalt fiber control joint between back of curb and all other concrete structures, such as concrete sidewalks and concrete driveways.
- Curb Contractor shall provide final adjustment of catch basin castings in curb line. Castings shall be tucked pointed to structure water tight with concrete or mortar inside and outside of casting.
- Install curb cuts for all existing and proposed sidewalks and pedestrian ramps in accordance with the American Disabilities Act and the Barrier Free Design requirements of the appropriate Local, County and/or State Agency. Install curb cuts for all existing and proposed vehicular ramps and drives as noted on the project plans.

GENERAL NOTES:

- Contractor shall perform the work in accordance with the requirements of the appropriate Local, County and State Agencies and all other Government and Regulatory Agencies with jurisdiction over the project. Contractor shall notify the appropriate Agencies in advance of each stage of work in accordance with each Agency's requirements.
- Contractor shall comply with all permit, insurance, licensing and inspection requirements associated with the work. Prior to construction, Contractor and Owner/Developer shall determine who is responsible for obtaining each required permit. Contractor shall verify that the each required permit has been obtained prior to commencement of the stage of work associated with the required permit(s).
- Contractor shall furnish liability insurance and property damage insurance to save harmless the Owner, Developer, Architect, Engineer, Surveyor and Government Agencies for any accident occurring during the construction period. Refer to the appropriate Local, County and State Agencies for additional requirements. Copies of insurance certifications shall be made available to the Owner/Developer.
- Contractor shall conduct and perform work in a safe and competent manner. Contractor shall perform all necessary measures to provide for traffic and pedestrian safety from the start of work and through substantial completion. Contractor shall determine procedures and provide safety equipment such as traffic controls, warning devices, temporary pavement markings and signs as needed. Contractor shall comply with the safety standards of the State Department of Labor, the occupational health standards of the State Department of Health and safety regulations of the appropriate Local, County, State and Federal Agencies. Refer to the safety specifications of the appropriate Regulatory Agencies. The Contractor shall designate a qualified employee with complete job site authority over the work and safety precautions; said designated employee shall be on site at all times during the work.
- Contractor shall coordinate scheduling of all work in the proper sequence, including work by Subcontractors. Additional costs due to improper planning by Contractor or work done out of sequence as determined by standard acceptable construction practices, shall be Contractor's responsibility.
- Contractor shall contact the MISS DIG locating system, or other appropriate local underground utility locating Agency, a minimum of three (3) working days prior to construction. Existing utility information on the project plans may be from information disclosed to this firm by the Utility Companies, Local, County or State Agencies, and/or various other sources. No guarantee is given as to the completeness or accuracy thereof. Prior to construction, locations and depths of all existing utilities (in possible conflict with the proposed improvements) shall be verified in the field.
- Contractor shall coordinate scheduling a Pre-Construction Meeting with Engineer prior to commencement of work.
- The Local Municipality, County and/or State in which the project is located may require an Engineer's Certification of construction of the proposed site improvements. Contractor shall verify the certification requirements with Engineer prior to commencement of work. Contractor shall coordinate construction staking, testing, documentation submittal and observation with the appropriate Agency. Surveyor and/or Engineer as required for Engineer's Certification and Government Agency Acceptance. All materials used and work done shall meet or exceed the requirements of certification and acceptance, the contract documents and the material specifications noted on the project plans. Any materials used or work done that does not meet said requirements, contract documents and/or specifications shall be replaced and/or redone at Contractor's expense. The Owner/Developer may wait for test results, certifications and/or Agency reviews prior to accepting work.
- Engineer may provide subsurface soil evaluation results, if available, to Contractor upon request. Subsurface soil evaluation results, soils maps and/or any other documentation does NOT guarantee existing soil conditions or that sufficient, acceptable on-site granular material is available for use as structural fill, pipe bedding, pipe backfill, road subbase or use as any other granular material specified on the project plans. On-site granular material that meets or exceeds the material specifications noted on the project plans may be used as structural fill, pipe bedding, pipe backfill and/or road subbase material. On-site granular material shall be stockpiled and tested as acceptable to the appropriate Agency and/or Engineer prior to use.
- During the performance of their work, Contractor shall be solely responsible for determining soil conditions and appropriate construction methods based on the actual field conditions. Contractor shall furnish, install and maintain sheeting, shoring, bracing and/or other tools and equipment and/or construction techniques as needed for the safety and protection of the workers, pedestrians and vehicular traffic and for protection of adjacent structures and site improvements.
- Contractor shall install temporary and permanent soil erosion and sedimentation control devices at the appropriate stages of construction in accordance with the appropriate regulatory Agencies. Refer to Soil Erosion and Sedimentation Control Plans and Notes on the project plans.
- Structural fill shall be placed as specified on the project plans and within the 1 on 1 influence zone of all structures, paved areas and other areas subject to vehicular traffic. Structural fill shall be placed using the controlled density method (12" maximum lifts, compacted to 95% maximum unit weight, modified proctor). Fill material shall meet or exceed the specifications noted on the project plans or as directed by Engineer when not specified on the project plans.
- All existing monuments, property corners, ground control and benchmarks shall be protected and preserved; and if disturbed by Contractor, shall be restored at Contractor's expense. Contractor shall notify Surveyor of any conflicts between existing monuments, property corners, ground control and/or benchmarks and the proposed site improvements.
- Contractor shall notify Owner/Developer and Engineer immediately upon encountering any field conditions, which are inconsistent with the project plans and/or specifications.
- When noted on the project plans for demolition and/or removal, Contractor shall remove existing structures, building and debris and recycle and/or dispose of in accordance with Local, County, State and Federal regulations.
- Contractor shall remove excess construction materials and debris from site and perform restoration in accordance with the project plans and specifications. Disposing of excess materials and debris shall be performed in accordance with Local, County, State and Federal regulations.
- Construction access to the site shall be located as acceptable to the Owner/Developer and to the appropriate Local, County and/or State Agency with jurisdiction over the road(s) providing access to the site. Construction access shall be maintained and cleaned in accordance with the appropriate Local, County and/or State Agencies and as directed by Owner/Developer and/or Engineer.
- Contractor shall take necessary precautions to protect all site improvements from heavy equipment and construction procedures. Damage resulting from Contractor actions shall be repaired at Contractor's expense.

DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	10-25-22	REVISED PER REVIEW COMMENTS
CHECK: WMP			

REVISION #	DATE	REVISION-DESCRIPTION

SUMMERFIELD POINT PUD

SUMMERFIELD IMPROVEMENTS PAVEMENT NOTES & DETAILS

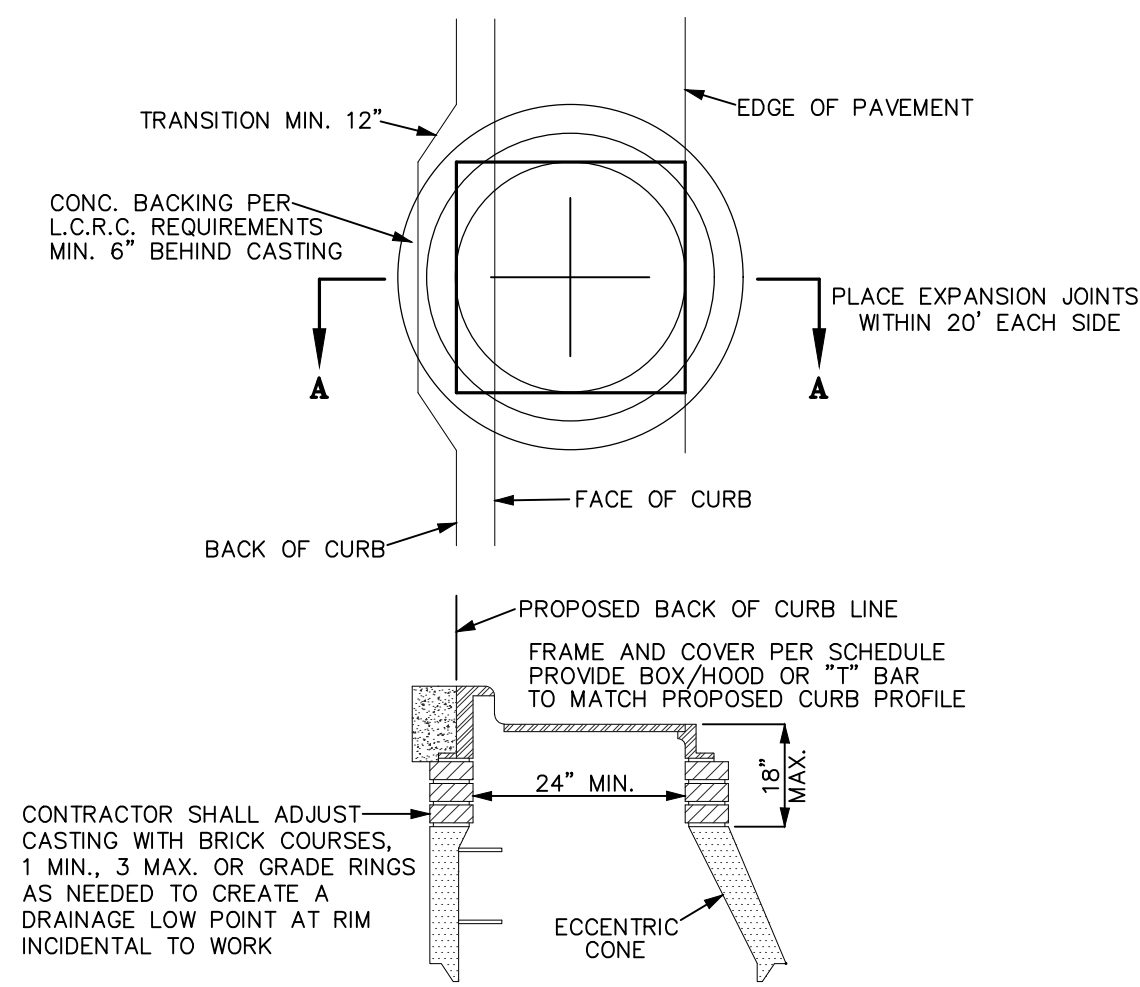
CLIENT: HEALY HOMES AT SUMMERFIELD LLC
3696 SLEETH RD, COMMERCE TOWNSHIP, MI 48382
(248) 684-1699

SCALE: AS NOTED
PROJECT NO.: 214159
DWG NAME: 4159 DT
ISSUED: JULY 10, 2023

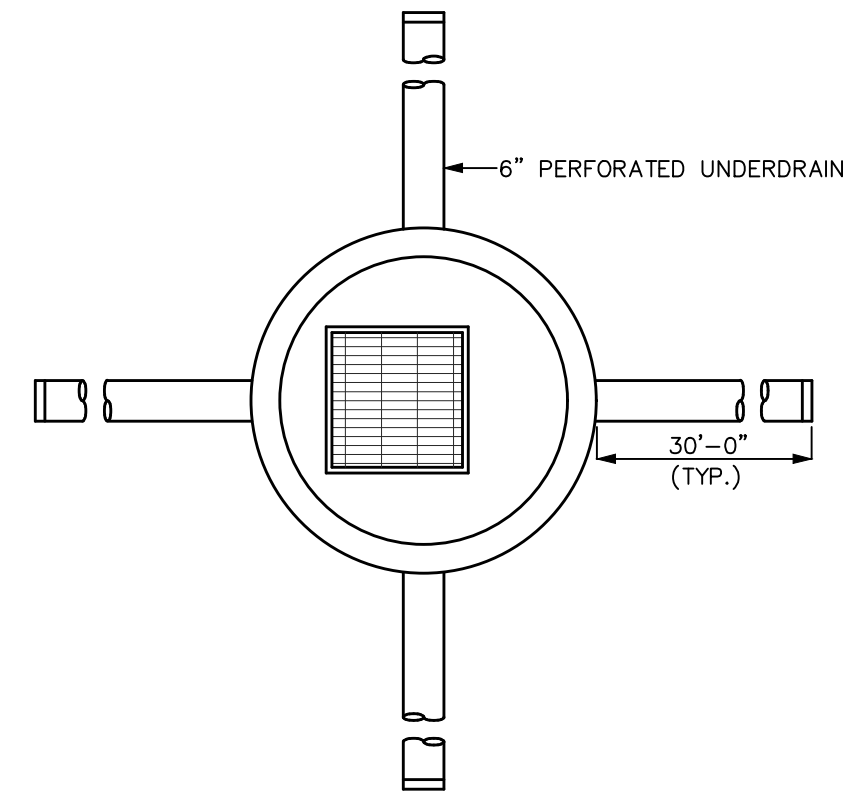
811
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CALL 811 OR 1-800-482-7171 (TOLL-FREE)
OR VISIT CALL811.COM

DESIGN INC.
(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

DT1



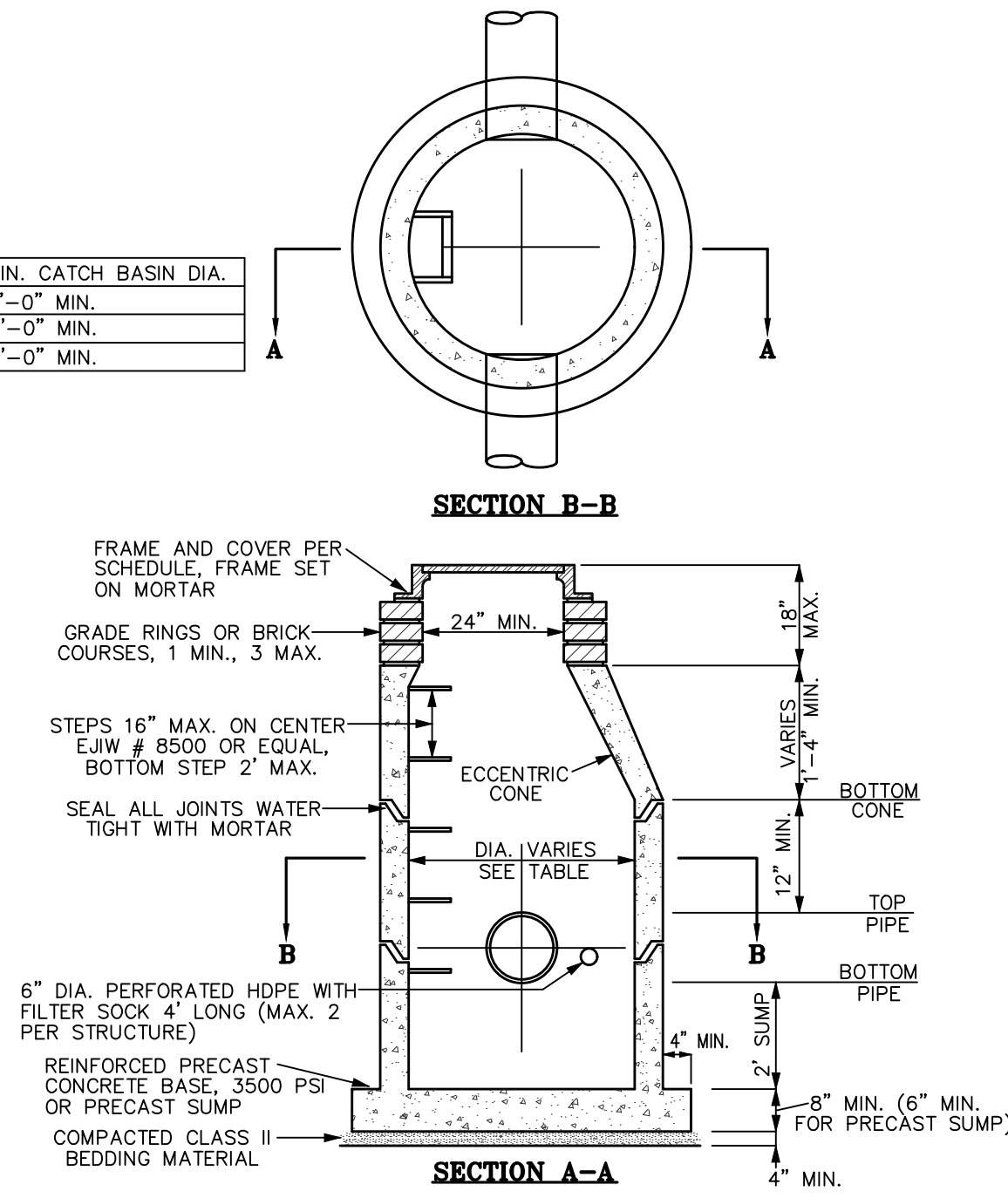
CURB LINE CASTING DETAIL
NOT TO SCALE



UNDER DRAIN CONNECTION DETAIL
NOT TO SCALE

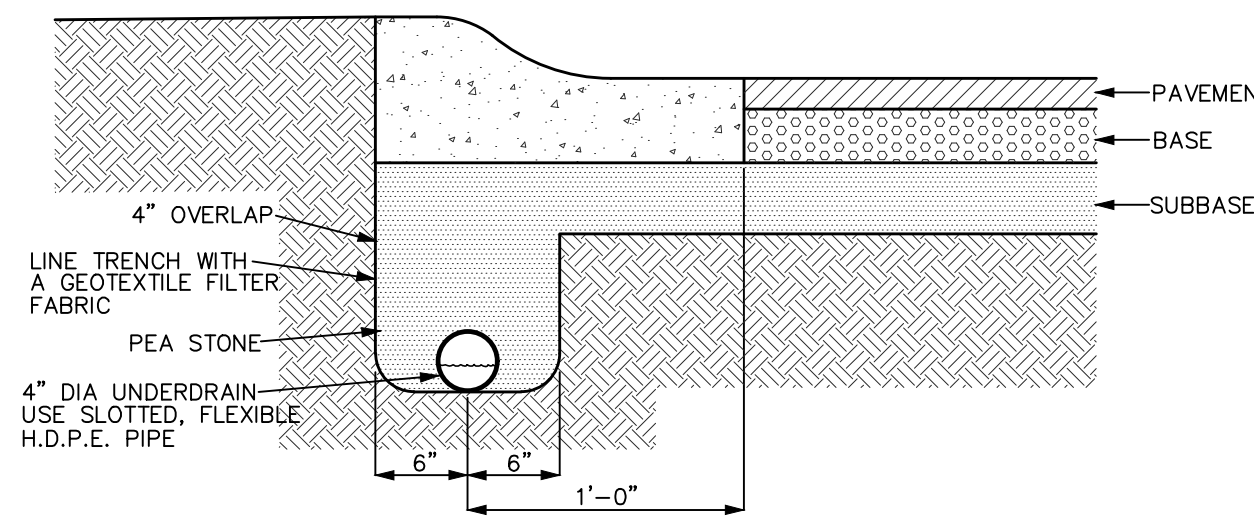
UNDERDRAIN NOTES:
FINGER DRAIN TO BE 6" DIA. PERFORATED PLASTIC PIPE LAID AT 1.0% SLOPE WITH UPSTREAM ENDS PLUGGED. POROUS STONE (PEA STONE) SHALL EXTEND FROM 4" BELOW UNDERDRAIN TO THE UNDERSIDE OF PAVEMENT SUBGRADE FOR THE LENGTH OF THE UNDERDRAIN. PROTECT ALL FROM HEAVY TRAFFIC AFTER INSTALLATION.

PIPE SIZE	MIN. CATCH BASIN DIA.
12"-24"	4'-0" MIN.
24"-36"	5'-0" MIN.
42"-48"	6'-0" MIN.



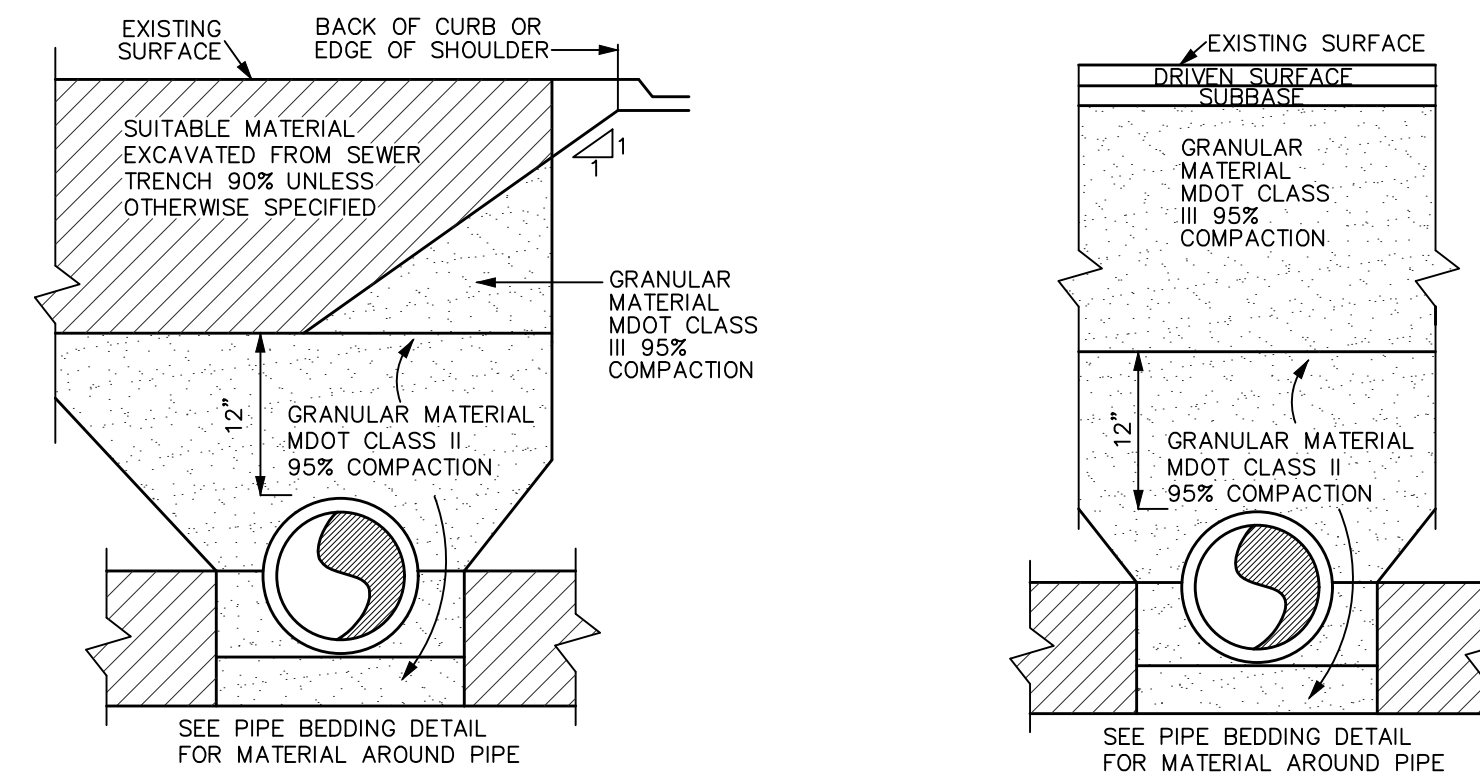
CATCH BASIN
NOT TO SCALE

NOTES:
1. FURNISH LARGER STRUCTURE DIAMETER AS NEEDED TO MAINTAIN 6" MIN. CLEAR BETWEEN PIPE OPENINGS.
2. FURNISH LOW PROFILE STRUCTURE ONLY WHEN NECESSARY TO MAINTAIN PROPER CLEARANCE ABOVE PIPES.



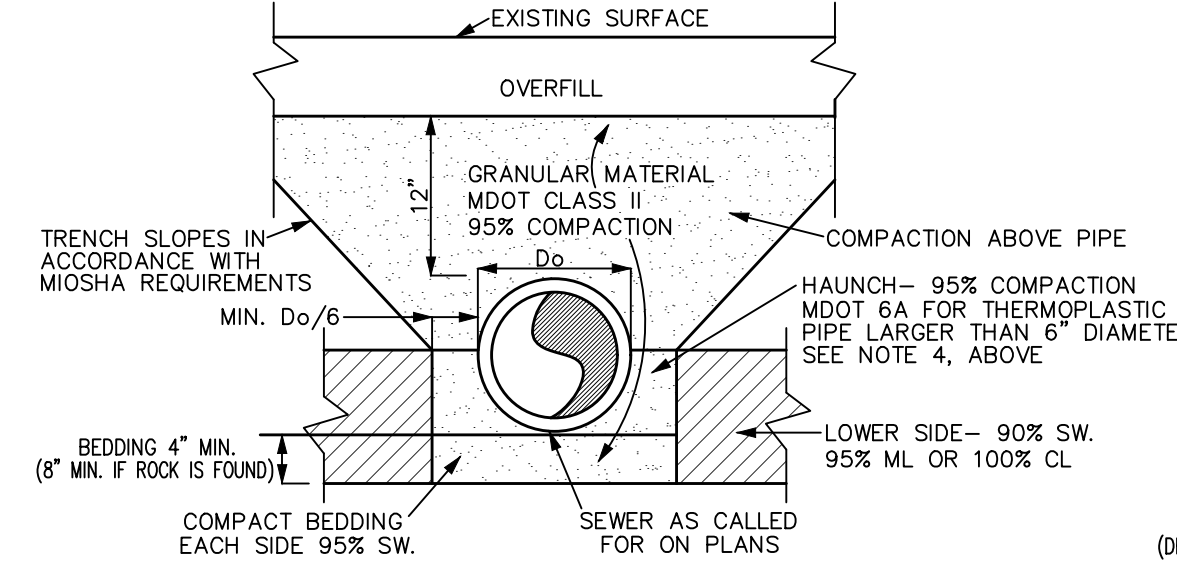
UNDERDRAIN DETAIL
NOT TO SCALE

NOTE:
CONNECT DOWN STREAM PIPE END TO CATCH BASIN, AND PLUG UP STREAM PIPE END WITH PLASTIC CAP.



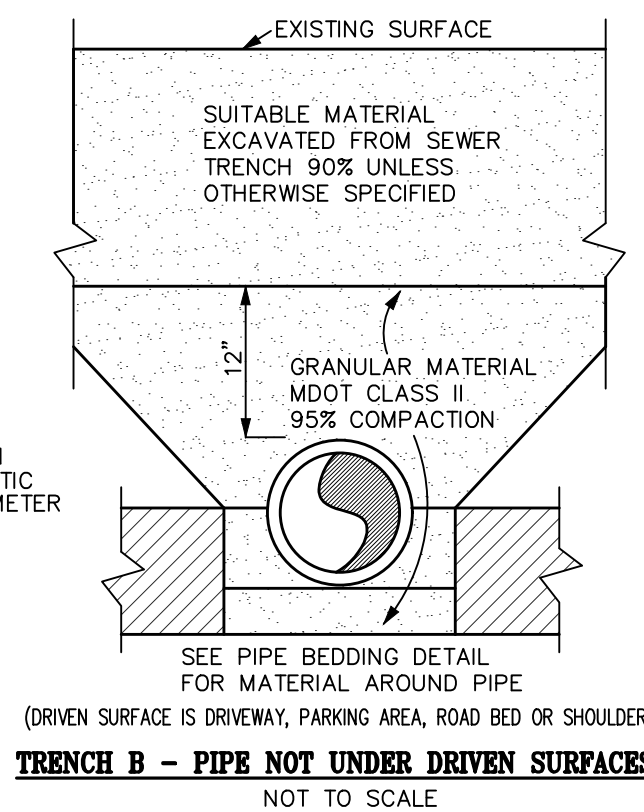
TRENCH A - PIPE UNDER OR WITHIN INFLUENCE OF DRIVEN SURFACE
NOT TO SCALE

NOTES:
1. COMPACTION PRESENTED AS STANDARD PROCTOR VALUES.
2. SOIL TYPES AASHTO DESIG.
GRAVEL SANDY (SW) A1, A3
SANDY SILTY (ML) A2, A4
SILTY CLAY (CL) A5, A6, A7
3. SOIL IN HAUNCH AND LOWER SIDE ZONES OUTSIDE OF D_o/6 FROM SPRING LINE SHALL BE COMPACTED TO AT LEAST THE SAME COMPACTION AS THE SOIL IN THE OVERFILL ZONE.
4. MATERIALS AROUND THERMO. PLASTIC PIPE WITH DIAMETER 6 INCHES SHALL PASS 0.5 INCH SIEVE. MATERIALS AROUND OTHER PIPES SHALL PASS 1.5 INCH SIEVE.

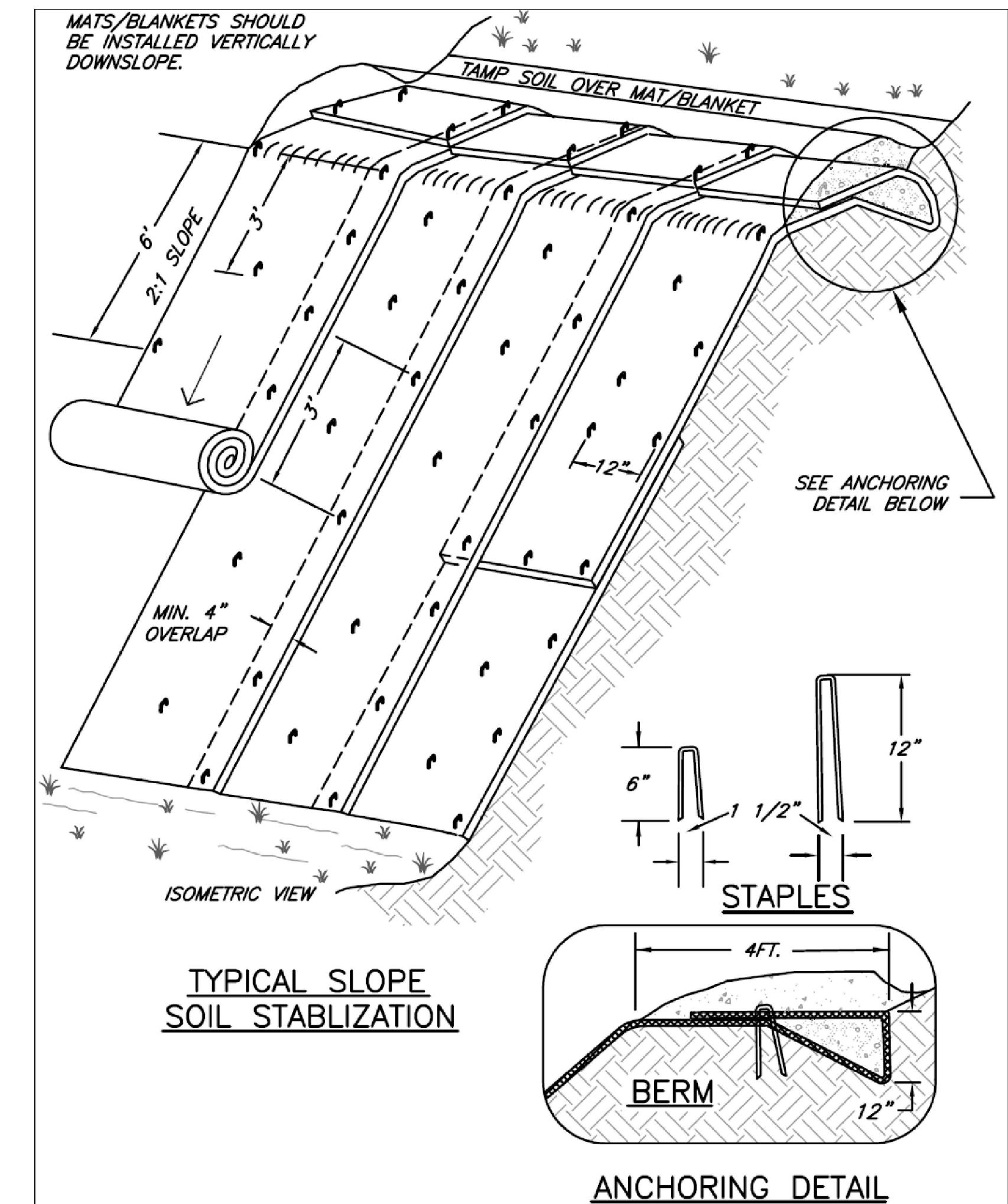


PIPE BEDDING DETAIL
NOT TO SCALE

TRENCH DETAILS
NOT TO SCALE



TRENCH B - PIPE NOT UNDER DRIVEN SURFACES
NOT TO SCALE



SOIL STABILIZATION NOTES:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS & GRASS. MATS/BANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BANKETS.
3. LAY BANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
4. SOIL STABILIZATION BANKETS SHALL BE USED FOR SLOPES EXCEEDING 1 ON 4. SEE SHEET GR2 OF PLANS FOR PROPOSED LOCATIONS.



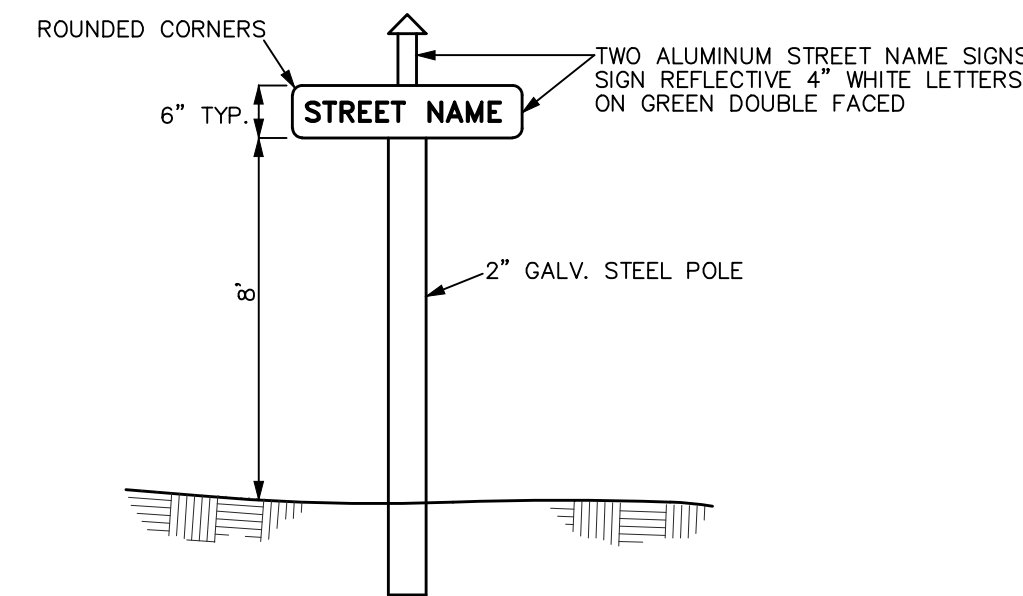
DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

SUMMERFIELD
POINTE PUD

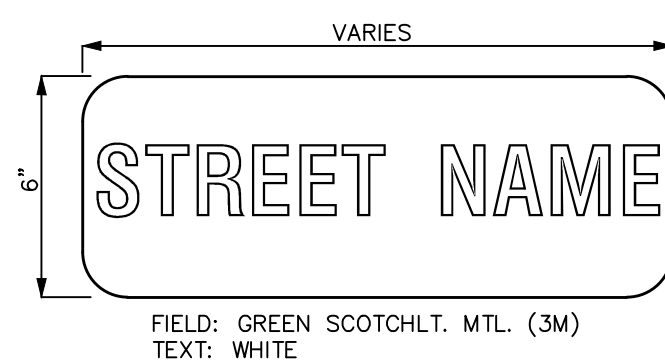
SOIL STABILIZATION, SIGNAGE
AND STORM SEWER
NOTES & DETAILS

CLIENT: HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD. COMMERCE TOWNSHIP, MI 48382 (248) 684-1699	SCALE: AS NOTED PROJECT No.: 214159 DWG NAME: 4159 DT ISSUED: JULY 10, 2023
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DT2

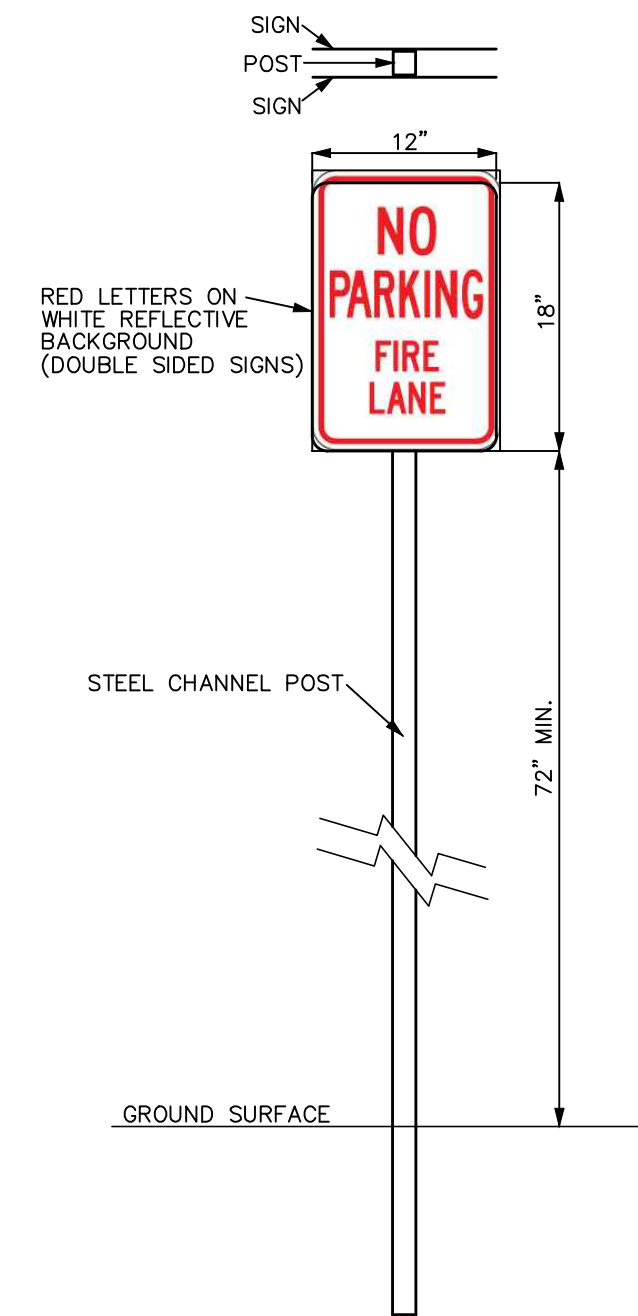


STREET NAME SIGN DETAIL
NOT TO SCALE



SIGN PANEL DETAIL
NOT TO SCALE

- NOTES:
- SIGN PANEL TO BE 12 GA. SINGLE FACE. MOUNT W/2 1/4" SOCKET HEAD BOLTS AND CEMENT ANCHORS, IF WALL MOUNTED.
 - ALL SIGNS TO BE SHOP FABRICATED, PRIMED AND PAINTED PRIOR TO SHIPMENT. TEXT TYPE FACE TO BE HELVETICA REG. CONDENSED. SIGN PANELS PAINTED WITH 2-PART EPOXY ENAMEL; 2 COATS PAINT 1-COAT PRIMER, COLOR AS INDICATED. FRONT AND BACK PRIOR TO SCOTCHLIT.
 - PROVIDE GREEN STEEL SIGN POLE AND HARDWARE AS NEEDED FOR COMPLETE INSTALLATION. SEE SITE PLAN FOR QUANTITY AND LOCATION.

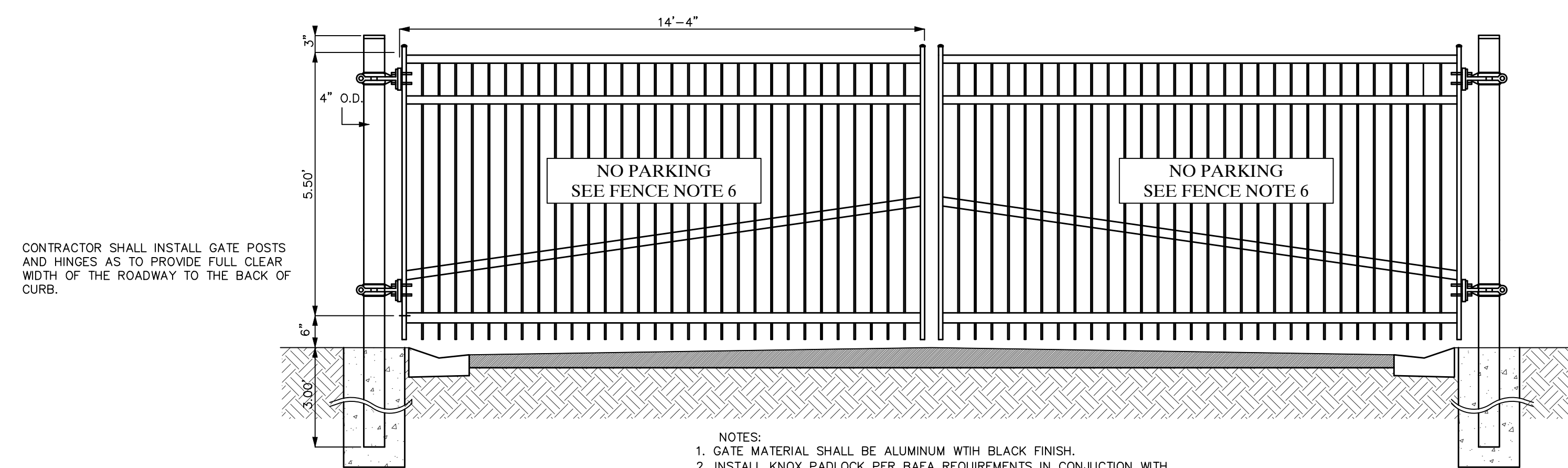


FIRE LANE SIGN POST DETAIL
NOT TO SCALE

SIGN SCHEDULE

SIGN	KEY	SIZE (W x H)	TYPE OR MOUNT	MOUNTING HEIGHT	QUANTITY
	FIRE LANE	12' x 18'	POST MOUNTED	6'-0"	38
	RI-1	30' x 30'	POST MOUNTED	7'-0"	3
	WI4-2	30' x 30'	POST MOUNTED	7'-0"	1

- ADDITIONAL FIRE LANE SIGNAGE MAY BE REQUIRED BY THE LOCAL FIRE DEPARTMENT AUTHORITY.
•SEE SHEETS SP1 AND SP2 OF PLANS FOR FIRE LANE SIGN LOCATIONS.



EMERGENCY ACCESS GATE DETAIL
NOT TO SCALE

FENCE NOTES:

- The fence shall be a decorative commercial grade 3-rail aluminum fence with square posts, rectangular rails and square pickets.
- The fence finish shall be black powder coat or E-coat applied by the fence Manufacturer.
- All hardware shall either stainless steel or hot dipped galvanized with a black finish matching the fence components.
- The fence shall be maintenance free and shall be provided with a Manufacturer's warranty that covers the structural components and the finish of the fence for a period of not less than 20 years.
- The fence shall be assembled and installed in accordance with the Manufacturer's Specifications including proper coating and/or refinishing of drilled components.
- White reflective signage the Red letters a minimum of 2" tall, shall be affixed to both sides of both halves of the gate. The signs must read "NO PARKING, EMERGENCY VEHICLE ACCESS ONLY"
- The perimeter of each half of the gate shall be marked with red reflective marking tape on both sides to prevent unintended collisions in darkness.

CONTRACTOR SHALL INSTALL GATE POSTS AND HINGES AS TO PROVIDE FULL CLEAR WIDTH OF THE ROADWAY TO THE BACK OF CURB.

- NOTES:
- GATE MATERIAL SHALL BE ALUMINUM WITH BLACK FINISH.
 - INSTALL KNOX PADLOCK PER BAFA REQUIREMENTS IN CONJUNCTION WITH THE MAINTENANCE LOCK.



DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	7-10-23	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

SUMMERFIELD
POINTE PUD

SIGNAGE AND GATE
DETAILS

CLIENT:	SCALE: AS NOTED
HEALY HOMES AT SUMMERFIELD LLC 3696 SLEETH RD. COMMERCE TOWNSHIP, MI 48382 (248) 684-1699	PROJECT No.: 214159 DWG NAME: 4159 DT ISSUED: JULY 10, 2023

DT3



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: July 12, 2023
RE: McNamara Road Improvement Project – Resolution #5 Amendment

The final costs for the McNamara Subdivision Road Improvement Project exceeded the original estimate by \$6,835 (3.7% increase). According to the contractor, the original estimate was prepared in 2022 and the overage is a result of material cost increases between 2022 and 2023. Public Act 188 permits increases to assessments when construction costs exceed estimates (MCL 41.724). Please see attached amendment to Resolution #5 to reflect the increased cost. Since the first installment was levied in the Summer 2023 tax, the increase will be applied for the remaining 9 years. The cost increase per parcel for the remaining 9 years of the district is \$100.50 total or \$11.17 per year plus interest.

Please note this item requires a roll call vote.

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

H. James Mortensen

Terry Croft

Diana Lowe

MANAGER

Kelly VanMarter

**Amendment to Resolution No. 5 – McNamara Subdivision Road Improvement
Project (Summer 2023)**

GENOA CHARTER TOWNSHIP

At a regular meeting of the Township Board of the Genoa Charter Township, Livingston County, Michigan, (the “Township”) held at the Township Hall on July 17, 2023 at 6:30 p.m., there were:

PRESENT:

ABSENT:

The following preamble and resolutions were offered by _____ and seconded by _____:

Amendment to Resolution Confirming Special Assessment Roll

WHEREAS, the Board of Trustees of the Township (“Township Board”) has determined to proceed with the McNamara Subdivision Road Improvement Project (Summer Tax 2023) within the Township (the “Project”) and in accordance with Act No. 188, Michigan Public Acts of 1954, as amended;

WHEREAS, the Township Board adopted its Resolution confirming Special Assessment Roll on February 20, 2023, approving the Special Assessment Roll for the McNamara Subdivision Road Improvement Project (Summer 2023) (the “Roll”); and

WHEREAS, the Special Assessment Roll for the McNamara Subdivision Road Improvement project was assessed over 10 years beginning on the Summer 2023 tax roll; and

WHEREAS, the actual project costs exceeded the original estimate by \$6,835 due to material cost increases;

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Amended Roll Confirmed. In accordance with Act No. 188, Michigan Public Acts of 1954, as amended, and the laws of the State of Michigan, the Township Board hereby confirms the Amended Special Assessment Roll for the McNamara Subdivision Road Improvement Project as described in Exhibit A (the “Revised Project”).
2. Future Installments – Principal. The Township Board determines that the future special assessments may be paid in the remaining 9 installments for the completed McNamara Road Improvement Project which will now be amended with the revised total assessment per parcel in the amount of \$2,872.80 for the remaining 9 years.
3. Future Installments – Interest. All unpaid installments shall bear 2% interest.

4. Inconsistent Prior Resolutions. All previously adopted resolutions that are in conflict with this resolution are repealed to the extent of such conflict.

A vote on the foregoing resolution was taken and was as follows:

YES:

NO:

ABSENT:

CLERK'S CERTIFICATE

The undersigned, being the duly qualified and acting Clerk of the Township, hereby certifies that (1) the foregoing is a true and complete copy of a resolution duly adopted by the Township Board at the July 17, 2023 meeting of the Township Board, at which meeting a quorum was present and remained throughout; (2) the original thereof is on file in the records in the Township Manager's office; (3) the meeting was conducted, and public notice thereof was given, pursuant to and in full compliance with the Open Meetings Act (Act No. 267, Public Acts of Michigan, 1976, as amended); and (4) minutes of such meeting were kept and will be or have been made available as required thereby.

Paulette A. Skolarus, Genoa Charter Township Clerk

EXHIBIT A

**MCNAMARA SUBDIVISION ROAD IMPROVEMENT PROJECT (SUMMER 2023)
REVISED DESCRIPTION OF PROJECT
**A TEN-YEAR SPECIAL ASSESSMENT DISTRICT
 WITH ~~PROJECTED~~ COSTS AS FOLLOWS:****

- Total final construction cost of the project: ~~\$185,850~~ \$192,685
- Total number of parcels: 51
- Homeowners representing over 50% of property have signed petitions.
- The Township is contributing ~~\$46,462~~ \$48,171.25 which is 25% of the project cost since this project will improve a public roadway in accordance with established policy.
- The interest charged for the district is 2% and the administrative cost is \$2,000.
- Total Project Cost:

McNAMARA ROADS 2023	
PROJECT COST	\$185,850 <u>\$192,685</u>
ADMININISTRATION FEES	\$2,000
TOWNSHIP 25% CONTRIBUTION	-\$46,462 <u>-\$48,171.25</u>
TOTAL PROJECT COST:	<u>\$141,388</u> <u>\$146,513.75</u>

- Total Cost Per Parcel: \$2,872.80

2023
Previously
Levied

	YEAR	PAYMENT	TO INTEREST	TO PRINCIPAL	OUTSTANDING
1	2023	\$332.68	\$55.45	\$277.23	\$2,595.57
2	2024	<u>\$340.31</u>	<u>\$51.91</u>	<u>\$288.40</u>	<u>\$2,307.17</u>
3	2025	<u>\$334.54</u>	<u>\$46.14</u>	<u>\$288.40</u>	<u>\$2,018.79</u>
4	2026	<u>\$328.77</u>	<u>\$40.38</u>	<u>\$288.40</u>	<u>\$1,730.39</u>
5	2027	<u>\$323.01</u>	<u>\$34.61</u>	<u>\$288.40</u>	<u>\$1,441.99</u>
6	2028	<u>\$317.24</u>	<u>\$28.84</u>	<u>\$288.40</u>	<u>\$1,153.59</u>
7	2029	<u>\$311.47</u>	<u>\$23.07</u>	<u>\$288.40</u>	<u>\$865.20</u>
8	2030	<u>\$305.70</u>	<u>\$17.30</u>	<u>\$288.40</u>	<u>\$576.80</u>
9	2031	<u>\$299.93</u>	<u>\$11.54</u>	<u>\$288.40</u>	<u>\$288.40</u>
10	2032	<u>\$294.16</u>	<u>\$5.77</u>	<u>\$288.40</u>	<u>\$0.00</u>
		<u>\$3,187.81</u>	<u>\$315.00</u>	<u>\$2,872.80</u>	

- The project (the "Project") will consist of:
 - Milling of existing 3" to 4" depth asphalt, haul off and disposal of millings
 - Fine grade and compact existing aggregate base
 - Install 2" 4E1 leveling course asphalt and compact, apply a tack of coat for adhesion
 - Install 1.5" 5E1 wearing course asphalt and compact