

**GENOA CHARTER TOWNSHIP BOARD**  
**Regular Meeting**  
**May 7, 2018**  
**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.
2. Request to Approve Minutes: April 16, 2018
3. Request to accept a proposal from Landscape Design and Associates for the cleanup of the Chilson Hills Cemetery at a cost of \$750.00.
4. Request to approve the purchase of 15 Dell laptop computers for the Clerk's office at a cost not to exceed \$8,753.91.
5. Request to appoint Marianne McCreary and re-appoint Doug Brown to three-year terms on the Planning Commission beginning on July 1, 2018 and expiring on June 30, 2019.
6. Request to re-appoint Marianne McCreary and appoint Bill Rockwell to three-year terms on the Zoning Board of Appeals beginning on July 1, 2018 and expiring on June 30, 2019.

**Approval of Regular Agenda:**

7. Consideration of a request for approval of a special use, site plan and environmental impact assessment for a proposed commercial outdoor display, sales and storage area for a new Family Farm and Home store. The property in question is located in the former TJ Maxx retail space at 3685 E. Grand River Avenue, Howell 48843. The request is petitioned by Family Farm and Home.
  - A. Disposition of Special Use Application.
  - B. Disposition of Environmental Impact Assessment (1-4-18).
  - C. Disposition of Site Plan (4-27-18).
8. Request to enter into closed session to discuss attorney-client communication pursuant to MCL 15.268(h) (Roll Call Vote).

Correspondence  
Member Discussion  
Adjournment

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

CHECK REGISTERS FOR TOWNSHIP BOARD MEETING

DATE: May 7, 2018

TOWNSHIP GENERAL EXPENSES: Thru May 7, 2018	\$95,191.48
May 4, 2018 Bi Weekly Payroll	\$92,066.93
OPERATING EXPENSES: Thru May 7, 2018	\$142,359.12
TOTAL:	<u>\$329,617.53</u>

Check Register Report For Genoa Charter Township  
 For Check Dates 05/04/2018 to 05/04/2018

Check Date	Bank	Check Number	Name	Check Gross	Physical Check Amount	Direct Deposit	Status
05/04/2018	FNBCK	EFT218	FLEX SPENDING (TASC)	1,495.77	1,495.77	0.00	Cleared
05/04/2018	FNBCK	EFT219	INTERNAL REVENUE SERVICE	21,176.93	21,176.93	0.00	Open
05/04/2018	FNBCK	EFT220	PRINCIPAL FINANCIAL	2,901.00	2,901.00	0.00	Cleared
05/04/2018	FNBCK	EFT221	PRINCIPAL FINANCIAL	982.80	982.80	0.00	Cleared
<b>Totals:</b>							
			Number of Checks: 004	26,556.50	26,556.50	0.00	
					Dir. Dep.		
			Total Physical Checks:		65,510.43		
			Total Check Stubs: 4				

\$ 92,066.93

Check Date	Check	Vendor Name	Amount
Bank FNBCK CHECKING ACCOUNT			
04/10/2018	34367	MICA CRAFTERS, INC	2,320.00
04/12/2018	34368	AT&T	326.88
04/12/2018	34369	CONSUMERS ENERGY	394.99
04/12/2018	34370	ETHICAL EXTERIORS	2,650.00
04/12/2018	34371	WELLNESS IQ	164.00
04/16/2018	34372	MARY KRENCICKI	24.63
04/16/2018	34373	LAKESIDE SERVICE COMPANY, INC	1,710.00
04/16/2018	34374	MASTER MEDIA SUPPLY	42.19
04/16/2018	34375	MICHIGAN.COM PRESS & ARGUS	160.00
04/16/2018	34376	PAULETTE SKOLARUS	178.17
04/17/2018	34377	ALLSTAR ALARM LLC	270.00
04/17/2018	34378	BLUE CROSS & BLUE SHIELD OF MI	34,069.08
04/17/2018	34379	BULLSEYE TELECOM	403.54
04/17/2018	34380	ETNA SUPPLY COMPANY	10,890.00
04/17/2018	34381	FEDERAL EXPRESS	117.07
04/17/2018	34382	ICMA	989.00
04/17/2018	34383	MICHIGAN ASSOC. OF PLANNING	650.00
04/17/2018	34384	TETRA TECH INC	1,055.00
04/17/2018	34385	US BANK EQUIPMENT FINANCE	1,765.56
04/17/2018	34386	VERIZON WIRELESS	373.31
04/18/2018	34387	COOPER'S TURF MANAGEMENT LLC	3,061.00
04/18/2018	34388	ICMA	661.60
04/18/2018	34389	MASTER MEDIA SUPPLY	92.90
04/18/2018	34390	MICHIGAN MUNICIPAL EXECUTIVES	130.00
04/20/2018	34391	CHARTER TOWNSHIP OF BRIGHTON	299.52
		Void Reason: MADE OUT TO WRONG VENDOR	
04/20/2018	34392	COMCAST	190.16
04/20/2018	34393	EHIM, INC	14,632.92
04/20/2018	34394	CHASE CARD SERVICES	299.52
04/20/2018	34395	DELTA DENTAL	3,671.32
04/20/2018	34396	GUARDIAN	2,237.08
04/24/2018	34397	AT&T	16.31
04/24/2018	34398	ETHAN MURPHY	50.00
04/24/2018	34399	MASTER MEDIA SUPPLY	34.65
04/24/2018	34400	NEOPOST USA INC	862.70
04/24/2018	34401	WAL-MART COMMUNITY	229.37
04/30/2018	34402	AMERICAN VIDEO TRANSFER INC	2,250.00
04/30/2018	34403	MICHAEL ARCHINAL	500.00
04/30/2018	34404	CEI	470.00
04/30/2018	34405	DYKEMA GOSSETT, PLLC	2,506.00
04/30/2018	34406	MICHIGAN ASSESSOR'S ASSOC	500.00
04/30/2018	34407	SEWARD PECK & HENDERSON PLLC	1,664.00
04/30/2018	34408	TERRY CROFT	235.44
04/30/2018	34409	UNEMPLOYMENT INSURANCE AGENCY	300.00
05/01/2018	34410	BRIGHTON ANALYTICAL, L.L.C.	70.00
05/01/2018	34411	LIVINGSTON CO. REGISTER OF DEEDS	60.00
05/01/2018	34412	DIANA LOWE	289.19
05/01/2018	34413	MASTER MEDIA SUPPLY	334.90
05/01/2018	34414	PERFECT MAINTENANCE CLEANING	565.00
05/01/2018	34415	TRI COUNTY SUPPLY, INC.	248.22
05/01/2018	34416	MICHIGAN STATE UNIVERSITY	110.00
05/01/2018	34417	AMY RUTHIG	307.50
05/01/2018	34418	KELLY VANMARTER	58.28

FNBCK TOTALS:

Total of 52 Checks:	95,491.00
Less 1 Void Checks:	299.52
Total of 51 Disbursements:	95,191.48

Check Register Report For Genoa Charter Township  
For Check Dates 04/20/2018 to 04/20/2018

Check Date	Bank	Check Number	Name	Check Gross	Physical Check Amount	Direct Deposit	Status
04/20/2018	FNBCK	12629	GALLERANI, LINDA L	217.00	207.78	0.00	Open
04/20/2018	FNBCK	EFT213	FLEX SPENDING (TASC)	1,495.77	1,495.77	0.00	Open
04/20/2018	FNBCK	EFT214	INTERNAL REVENUE SERVICE	20,733.37	20,733.37	0.00	Open
04/20/2018	FNBCK	EFT215	PRINCIPAL FINANCIAL	2,901.00	2,901.00	0.00	Open
04/20/2018	FNBCK	EFT216	PRINCIPAL FINANCIAL	982.80	982.80	0.00	Open
<b>Totals:</b>				26,329.94	26,320.72	0.00	
					Dir. Dep.		
Total Physical Checks:				1	64,212.05		
Total Check Stubs:				4			

**\$ 90,532.77**

Check Date	Check	Vendor Name	Amount
<b>Bank 503FN DPW-UTILITIES #503</b>			
04/11/2018	4280	LOWE'S	870.97
04/11/2018	4281	WEX BANK	2,786.77
04/11/2018	4282	WINDSTREAM	42.23
04/12/2018	4283	JENIFER KERN	71.75
04/16/2018	4284	U.S. POSTMASTER	1,439.76
04/17/2018	4285	ADVANCE AUTO PARTS	119.68
04/17/2018	4286	BELLE TIRE	895.98
04/17/2018	4287	BLACKBURN MFG. CO.	190.19
04/17/2018	4288	CHASE CARD SERVICES	5,486.17
04/17/2018	4289	FASTENAL COMPANY	6.89
04/17/2018	4290	K & J ELECTRIC, INC.	264.00
04/17/2018	4291	PORT CITY COMMUNICATIONS, INC.	226.84
04/17/2018	4292	ROYS AUTOWORKS CORP	498.40
04/17/2018	4293	SIGN WORKS	300.00
04/17/2018	4294	STAPLES CREDIT PLAN	308.54
04/17/2018	4295	HOWELL TRUE VALUE HARDWARE	205.51
04/17/2018	4296	VICTORY LANE QUICK OIL CHANGE	204.45
04/17/2018	4297	MWEA	325.00
04/17/2018	4298	ODEN TRAINING	120.00
04/20/2018	4299	VERIZON WIRELESS	1,060.81
04/30/2018	4300	SARAH BRABBS	1,550.00
04/30/2018	4301	GREG TATARA	700.00
04/30/2018	4302	TESHA HUMPHRISS	250.00

**503FN TOTALS:**

Total of 23 Checks:	17,923.94
Less 0 Void Checks:	0.00
<b>Total of 23 Disbursements:</b>	<b>17,923.94</b>

Check Date	Check	Vendor Name	Amount
<b>Bank 593FN LAKE EDGEWOOD OPERATING FUND #593</b>			
4/11/2018	3370	BRIGHTON ANALYTICAL , L.L.C.	67.00
4/12/2018	3371	CONSUMERS ENERGY	555.54
4/17/2018	3372	BRIGHTON ANALYTICAL , L.L.C.	67.00
4/17/2018	3373	BULLSEYE TELECOM	225.36
4/17/2018	3374	GENOA TOWNSHIP D.P.W. FUND	10,781.00
4/17/2018	3375	HUBBELL, ROTH & CLARK, INC	1,054.92
4/17/2018	3376	OAK POINT OPERATING	6,534.80
4/17/2018	3377	PVS NOLWOOD CHEMICALS, INC.	932.00
4/24/2018	3378	BRIGHTON ANALYTICAL , L.L.C.	67.00
4/24/2018	3379	MHOG WATER AUTHORITY	24.48
5/01/2018	3380		0.00 V
Void Reason: PRINTED REPORT ON CHECK			
5/01/2018	3381	BRIGHTON ANALYTICAL , L.L.C.	134.00

**593FN TOTALS:**

Total of 12 Checks:	20,443.10
Less 1 Void Checks:	0.00
Total of 11 Disbursements:	<u>20,443.10</u>

Check Date	Check	Vendor Name	Amount
<b>Bank 592FN OAK POINTE OPERATING FUND #592</b>			
04/06/2018	4230	DTE ENERGY	2,521.22
04/11/2018	4231	DTE ENERGY	375.68
04/12/2018	4232	AT&T	460.44
04/17/2018	4233	BRIGHTON ANALYTICAL , L.L.C.	370.00
04/17/2018	4234	BULLSEYE TELECOM	228.36
04/17/2018	4235	DUBOIS-COOPER	32,780.64
04/17/2018	4236	EJ USA, INC.	1,935.00
04/17/2018	4237	FASTENAL COMPANY	458.30
04/17/2018	4238	GENOA TOWNSHIP D.P.W. FUND	38,878.16
04/17/2018	4239	GENOA TOWNSHIP G/O NEW USER FUND	15,900.00
04/17/2018	4240	HACH COMPANY	119.37
04/17/2018	4241	KENNEDY INDUSTRIES	275.00
04/17/2018	4242	MICHIGAN CAT	293.68
04/17/2018	4243	NORTHERN PUMP & WELL	728.00
04/17/2018	4244	STATE OF MICHIGAN	288.00
04/17/2018	4245	TLS CONSTRUCTION	4,944.00
04/17/2018	4246	USA BLUEBOOK	147.91
04/17/2018	4247	UTILITIES INSTRUMENTATION SERVICE	402.00
04/17/2018	4248	WATER SOLUTIONS UNLIMITED, INC	2,310.00
04/24/2018	4249	AT&T LONG DISTANCE	40.46
04/24/2018	4250	DTE ENERGY	870.73
05/01/2018	4251	DTE ENERGY	32.17

**592FN TOTALS:**

Total of 22 Checks:	104,359.12
Less 0 Void Checks:	0.00
Total of 22 Disbursements:	<u>104,359.12</u>

## **GENOA CHARTER TOWNSHIP BOARD**

**Regular Meeting**

**April 16, 2018**

### **MINUTES**

Supervisor Rogers called the regular meeting of the Genoa Charter Township Board to order at 6:30 p.m., with the Pledge of Allegiance. The following members were present constituting a quorum for the transaction of business: Bill Rogers, Paulette Skolarus, Robin Hunt, Jim Mortensen, Terry Croft and Jean Ledford. Also present were Township Manager Michael Archinal and eleven persons in the audience.

A Call to the Public was made with no response.

#### **Approval of Consent Agenda:**

Moved by Croft and supported by Mortensen to approve all items listed under the consent agenda with the exception of the request from Evolving Technologies that will be discussed under regular agenda. The motion carried unanimously.

#### **1. Payment of Bills.**

#### **2. Request to Approve Minutes: April 2, 2018**

**3. Request to approve the purchase of five new workstations and one new monitor from Dell for a cost not to exceed \$3,407.99 in accordance with the Township's computer rotation schedule.**

**4. Request to enter into an agreement with the Livingston County Road Commission to reconstruct approximately 1.89 miles of Hughes Road from Forrest Pond Drive to Golf Club with a Township contribution of \$200,000.**

#### **Approval of Regular Agenda:**

Moved by Ledford and supported by Mortensen to approve for action all items listed under the regular agenda with the addition of Evolving Technologies. The motion carried unanimously.

**5. Request to approve a proposal from Evolving Technologies Inc. for the purchase and installation of equipment to streamline the Township's network system at a cost not to exceed \$4,082.00.**

Moved by Mortensen and supported by Croft to approve the purchase consolidating the internet with the phone system and moving from cable to fiber optics. The motion carried unanimously.

#### **6. Presentation regarding Eagle Scout project at the Genoa Township Park.**

Daniel Kehn presented a request to add benches and side tables to the Township Soccer Fields. It was the consensus of the board to support the project. Kehn will provide a cost and material bid in the near future.

**7. Request for consideration to grant a Class C Liquor License to be held by Max Austin, LLC d.b.a. Arta's Italian at 2394 Genoa Business Park Drive, Brighton, Michigan 48114.**



Moved by Skolarus and supported by Mortensen to approve the Liquor License as requested. The motion carried by roll call vote as follows: Ledford, Croft, Hunt, Mortensen, Skolarus and Rogers. Nays – None. Absent – Lowe.

**8. Consideration of a request for approval of a site plan amendment for a revised building façade design and material modifications to the previously approved Hampton Inn and Suites located on a vacant 2.56 acre site southwest of the Grand Oaks Drive and Latson Road Intersection. The request is petitioned by Bowers and Associates.**

The petitioner was not present for this request. Mortensen provided an update to the board concerning the Planning Commission recommendation for approval. Moved by Skolarus and supported by Hunt with the condition that the applicant shall confirm that no other amendments are proposed to the site plan, landscape plan or utility plan prior to the issuance of the Land Use Permit. The motion carried unanimously.

**9. Discussion regarding an addition to the Township clothing allowance policy.**

Moved by Mortensen and supported by Ledford to amend the agenda to allow for action by the Township Board. The motion carried unanimously. Moved by Mortensen and supported by Hunt to approve a \$100.00 annual clothing allowance for the Zoning Board of Appeals and the Planning Commission with no member receiving more than one allowance. The motion carried unanimously.

**10. Discussion regarding support for the Michigan Township’s Association Political Action Committee.**

No action was taken by the board. Individual members were encouraged to participate.

**Correspondence:** An invitation was received from our local chamber inviting board members to participate in a May 17, 2018 program at Lakeland Country Club. Skolarus advised the board of the necessity to upgrade election computers to coincide with new voting equipment. A request for approval Laptop computers related to the August Primary will be included on the May 7, 2018 consent agenda.

**Member Discussion:** Archinal – We are looking at three new road projects for this construction season: Earl Lake Heights, Fendt Drive and Novel Estates. Ledford inquired as to why the bus doesn’t stop in Brighton for transportation to Ann Arbor.

The regular meeting of the Genoa Charter Township Board was adjourned at 7:15 p.m.



Paulette A. Skolarus, Clerk  
Genoa Charter Township



# Proposal

Date	Proposal #
4/30/2018	830

4239 Timberview Dr., Howell, MI 48843  
734-260-2541 email: karleen@LD&A.com

Genoa Township Hall  
2911 Dorr Rd.  
Brighton, MI 48116

P.O. No.	Project

Description	Total
Cleanup of cementery, leaf debris, haul out all debris	750.00
<b>Total</b>	
	\$750.00

Phone #
8103600365

Web Site
ldanda.com



Savings	\$4,446.75
<b>Subtotal (15)</b>	<b>\$8,258.40</b>
Estimated Shipping	\$0.00
Estimated Tax	\$495.51
<b>Total</b>	<b>\$8,753.91</b>

Details

elections 2  
 Quote number#  
 1013766347894.1  
 Created May 3, 2018  
 Expires July 2, 2018  
 Created by adam@genoa.org

Billing

Order contact  
 Adam VanTassell, Genoa  
 Township  
 Dell Contract Code: 99AGZ  
 Customer agreement number:  
 MHEC-07012015  
 Phone number: (810) 227-5225  
 Additional::  
 adam@genoa.org  
 Tax exemption  
 I am not tax exempt

Shipping

Shipping information  
 Adam VanTassell, Genoa  
 Township  
 Genoa Township, Brighton, MI,  
 48116-9498  
 Phone number: (810) 227-5225  
 Additional::  
 adam@genoa.org  
 Delivery method  
 no charge delivery  
 Trade compliance  
 No, I will not be exporting

Payment method

Items

Quantity

Unit Price

Item total



Latitude 3580 - Build your own

15

\$847.01

\$12,705.15

Discounted unit price: \$550.56  
 Dell Contract Code: 99AGZ  
 Estimated Ship Date  
 Ships in 7 - 9 business days

Premier discount  
 Catalog Number: 84 / xctol358015usr

-\$4,446.75

Item total: \$8,258.40

Category	Description	Code	SKU	ID
----------	-------------	------	-----	----

Savings: \$4,446.75

**Subtotal (15): \$8,258.40**

Savings \$4,446.75

**Subtotal (15) \$8,258.40**

Estimated Shipping \$0.00

Estimated Tax \$495.51

**Total \$8,753.91**

Ultrabook, Celeron, Celeron Inside, Core Inside, Intel, Intel Logo, Intel Atom, Intel Atom Inside, Intel Core, Intel Inside, Intel Inside Logo, Intel vPro, Itanium, Itanium Inside, Pentium, Pentium Inside, vPro Inside, Xeon, Xeon Phi, Xeon Inside, and Intel Optane are trademarks of Intel Corporation or its subsidiaries in the U.S. and/or other countries.

Same day shipment subject to order size limitations, Dell standard shipping methods and payment via credit card, gift card or Dell Business Credit. Notification will be provided if there are payment delays which could impact shipping date. Electronics and accessories may ship separately.

**Smart Selection. Limited quantities. Only available for orders placed by 5:59 p.m. CT Mon.–Thurs. Systems shipped the next business day after an order is placed. Subject to order approval. Software and accessories not part of the configuration will be shipped separately and may arrive after your system. Please note that Smart Selection Configuration pricing cannot be combined with other pricing offers or discounts provided or agreed to by Dell. \*\* Orders with Custom Factory Integration might require additional processing time.**

**\*Dell Business Credit: Offered to business customers by WebBank, Member FDIC, who determines qualifications for and terms of credit. Taxes, shipping and other charges are extra and vary. Minimum monthly payments are the greater of \$15 or 3% of the new balance shown on the monthly billing statement. Dell and the Dell logo are trademarks of Dell Inc.**

**\*\*Payment solutions provided and serviced by Dell Financial Services L.L.C. or its affiliate or designee ("DFS") for qualified customers. Offers may not be available or may vary in certain countries. Where available, offers may be changed without notice and are subject to product availability, credit approval, execution of documentation provided by and acceptable to DFS, and may be subject to minimum transaction size. Offers not available for personal, family or household use. Dell and the Dell logo are trademarks of Dell Inc. Restrictions and additional requirements may apply to transactions with governmental or public entities.**

**\*Subject to applicable law and regulations.**

**ALL ORDERS ARE SUBJECT TO APPROVAL AND ACCEPTANCE BY DELL. Pricing, availability and other terms of offer may be withdrawn or changed without notice. Dell cannot be held responsible for errors in typography or photography.**

Genoa Township Officials  
Amended: February 9, 2018

**PLANNING COMMISSION (3-year term)**

Chris Grajek	06/30/20
Marianne McCreary (filling vacancy) —	X 06/30/18 <i>dk</i>
Jill Rickard	06/30/20
John McManus	06/30/19
Jim Mortensen (1-year term)	11/20/18 <i>dk</i>
Doug Brown —	X 06/30/18 <i>dk</i>
Eric Rauch	06/30/19

**ZONING BOARD OF APPEALS (3-year term)**

Bill Rockwell (filling vacancy) — <i>wtrckwck@yahoo.com X</i>	06/30/18 <i>dk</i>
Marianne McCreary —	X 06/30/18 <i>dk</i>
Jeff Dhaenens	06/30/19
Dean Tengal	06/30/20
Jean Ledford (1-year term)	11/20/18 <i>dk</i>
Greg Rassel (alternate)	06/30/21

**BOARD OF REVIEW (2-year term)**

Chris Grajek	12/31/18
Ron Matkin	12/31/18
Marianne McCreary	12/31/18
Patricia Petrat (alternate)	12/31/18

**SEMCOG**

Terry Croft	11/20/20
Paulette A. Skolarus (alternate)	11/20/20

**GENOA/OCEOLA SEWER AND WATER AUTHORITY**

Robin Hunt	11/20/20
Bill Rogers	11/20/20

**HOWELL PARKS AND RECREATION**

Diana Lowe	11/20/20
Terry Croft	11/20/20

**MHOG (Marion, Howell, Oceola and Genoa)**

Robin Hunt	11/20/20
Bill Rogers	11/20/20

**FOIA COORDINATOR**

Michael Archinal	11/20/20
------------------	----------

**BRIGHTON FIRE AUTHORITY**

Bill Rogers	11/20/20
Jim Mortensen	11/20/20

**ELECTION COMMISSION**

Diana Lowe	11/20/20
Jean Ledford	11/20/20

(Policy-officials-terms)



**MEMORANDUM**

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

**TO:** Honorable Board of Trustees  
**FROM:** Kelly VanMarter, Assistant Manager/Community Development Director  
**DATE:** May 3, 2018  
**RE:** Family Farm and Home Store – Outdoor Display, Sales & Storage

Managers Review: \_\_\_\_\_

Attached please find the project case file requesting approval for outdoor display, sales and storage for a new Family Farm and Home Store located at 3685 E. Grand River, Howell (formerly TJ Maxx). The property is within the regional commercial zoning district (RCD) and the request is petitioned by Martin Renel.

Procedurally, the Planning Commission is to make a recommendation to the Township Board on the special land use, site plan and Impact Assessment. The Township Board has the final review/approval authority over the proposal. After being tabled twice, the Planning Commission recommended conditional approval on April 9<sup>th</sup>, 2018. Please note that because of the number of meetings and reviews, the applicant will need to remit payment to cover the cost of site plan review fee exceedances. A breakdown of the fees to date is included in your packet.

As required as a condition of the Planning Commission recommendation, the applicant has submitted revised plans for review by the Township Engineer prior to submittal to the Township Board. The Township Engineer’s review letter is attached and is recommending approval with minor revisions to the plans. Based on the action of the Planning Commission and including the recommendations of the Township Engineer, I suggest Board consideration of the following action:

Moved by \_\_\_\_\_, Supported by \_\_\_\_\_ to APPROVE the Special Land Use permit because it has been found that the requested use meets the requirements of Sections 19.03 and 7.02.02(d) of the Township Ordinance with the following conditions:

- 1. All site plan application fee exceedances shall be paid prior to issuance of the Land Use Permit.
- 2. The site will remain in compliance with the environmental impact assessment.
- 3. Any materials stored outside shall be in an unopened condition as packaged by the supplier.

**SUPERVISOR**

Bill Rogers

**CLERK**

Paulette A. Skolarus

**TREASURER**

Robin L. Hunt

**TRUSTEES**

Jean W. Ledford

H. James Mortensen

Terry Croft

Diana Lowe

**MANAGER**

Michael C. Archinal

4. Five-feet of clearance shall be maintained along the front of the building to allow pedestrian circulation at all times.

**Moved by \_\_\_\_\_, Supported by \_\_\_\_\_ to APPROVE the Environmental Impact Assessment dated January 4, 2018 as submitted.**

**Moved by \_\_\_\_\_, Supported by \_\_\_\_\_ to APPROVE the site plan dated April 27, 2018 with the following conditions:**

1. The applicant shall provide a cross-access easement to the east as shown on the plans. This easement shall be approved by the Township Attorney prior to issuance of a land use permit.
2. Any signage proposed will require a permit from the Township prior to installation.
3. All requirements of the May 1, 2018 Township Engineer shall be addressed prior to issuance of the land use permit.
4. The site plan review fee exceedances shall be paid prior to issuance of a land use permit.
5. The hydrant relocation will require the review and approval of the MHOG Utility Authority. The applicant shall comply with all requirements and should note that construction plan review and permits may be required.
6. If required, the applicant shall provide easement for the hydrant relocation prior to occupancy.

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





# Genoa Township

2911 Dorr Road  
Brighton, Michigan 48116  
(810) 227-5225 fax (810) 227-3420

Invoice No. SPR18-02

## INVOICE

### Customer

Name Ashmark Construction; Martin Renel  
Address 5640 W. Maple, Suite 101  
City West Bloomfield State MI ZIP 48322  
Phone 248-855-1575

Date 4/30/2018  
Case No. 18-01  
Project Name Family Farm and Home

Qty	Description	Unit Price	TOTAL
<b><u>Additional Consultant Reviews &amp; Meeting Attendace</u></b>			
1	LSL Planning, Inc. - Third Review	\$711.16	\$711.16
1	LSL Planning, Inc. - Fourth Review	\$519.44	\$519.44
1	Tetra Tech MPS - Third Review	\$215.00	\$215.00
1	Tetra Tech MPS - Fourth Review	\$215.00	
1	Tetra Tech MPS- Review for Board Submittal	\$215.00	
<b><u>Additional Planning Commission Meetings</u></b>			
1	Second Meeting PC Member Per Diems	\$389.33	\$389.33
1	Third Meeting PC Member Per Diems	\$389.33	\$389.33
<b><u>Routing &amp; Publications</u></b>			
1	Fed Ex Routing #3	\$11.76	\$11.76
1	Fed Ex Routing #4	\$35.72	\$35.72

### Payment Details

- Cash
- Check

\_\_\_\_\_  
\_\_\_\_\_

SubTotal	\$2,271.74
Shipping & Handling	\$0.00
Taxes	
<b>TOTAL</b>	<b>\$2,271.74</b>

Office Use Only

*Payment must be made to prior to issuance of a land use permit.*



# GENOA CHARTER TOWNSHIP

## Special Land Use Application

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

APPLICANT NAME & ADDRESS: Martin Renel, ASHMARK Construction

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

APPLICANT PHONE: ( 248)855-1575

EMAIL: martin@ashmark.com

OWNER NAME & ADDRESS: ASHMARK Construction llc, 5640 West Maple Road Suite 300, West Bloomfield, MI 48322

SITE ADDRESS: 3685 E Grand River Ave

PARCEL #(s): 4711-05-400-032

OWNER PHONE: 248 855-1575

EMAIL: \_\_\_\_\_

### Location and brief description of site and surroundings:

The site is An existing shopping center known as Grand River Plaza located north of S Latson Road on Grand River Road.

The tenant wishes to improve and occupy a retail space once occupied by TJ Maxx.

### Proposed Use:

Hard scaping a side yard (7,331 SF OR .17 AC) to the south for a fenced exterior storage area, a reuse of an existing parking area as storage and the removal of a trash compactor enclosure screen fencing at the existing building entry and new loading dock door The requested outdoor fenced areas are for the purpose of storing products for sale.

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

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

This project is located in a regional commercial district which allows for outdoor storage under 7.02.02 (d) of the Genoa Township Zoning Ordinance. Further this proposal provides 8 foot and 4 foot high screen walls where storage of products are to be stored or displayed. All stored items will not be stored higher than the screen provided and will not be visible from any residential district or expressway

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

The storage area will screen all equipment and products with a fence area as proposed and is in keeping with providing retail offerings in a regional commercial district

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

There will be no change in complete access that currently exists to the site as no changes to vehicular and emergency circulation, drive isle or parking configurations is being requested.

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

No

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

Yes, this proposal fully complies with 7.02.02 (d) as required for outdoor storage areas

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

THE UNDERSIGNED Martin Renel for property ownership STATES THAT THEY ARE THE FREE OWNER OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: \_\_\_\_\_

ADDRESS: ASHMARK Construction llc, 5640 West Maple Road Suite 300, West Bloomfield, MI 48322

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

Martin Renel of ASHMARK Construction LLC at martin@ashmark.com  
Name Business Affiliation Email

**FEE EXCEEDANCE AGREEMENT**

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

SIGNATURE: \_\_\_\_\_ DATE: January 3, 2018

PRINT NAME: Martin Renel PHONE: 248 855-1575



**GENOA CHARTER TOWNSHIP**  
**Application for Site Plan Review**

**TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:**

APPLICANT NAME & ADDRESS: Family Farm and Home  
*If applicant is not the owner, a letter of Authorization from Property Owner is needed.*

OWNER'S NAME & ADDRESS: ASHMARK Construction for Family Farm and Home

SITE ADDRESS: 3685 E Grand River Ave PARCEL #(s): \_\_\_\_\_

APPLICANT PHONE: (248) 855-1575 OWNER PHONE: (\_\_\_\_\_) \_\_\_\_\_

OWNER EMAIL: martin@ashmark.com

LOCATION AND BRIEF DESCRIPTION OF SITE: The site is An existing shopping center known as Grand River Plaza located north of S Latson Road on Grand River Road. The tenant wishes to improve a retail space once occupied by TJ Maxx.

BRIEF STATEMENT OF PROPOSED USE: The building use will remain as it now exists, Mercantile / Retail No expansion of the building foot print is planned. The improvements include the renovation of the interior retail space as well as hard scaping a side yard (7,331 SF OR .17 AC) to the south for a fenced exterior storage area, a reuse of an existing parking area as storage and the removal of a trash compactor enclosure, screen fencing at the existing building entry and new loading dock door The requested outdoor fenced areas are for the purpose of storing products for sale.

THE FOLLOWING BUILDINGS ARE PROPOSED: no new buildings are proposed.

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

BY: \_\_\_\_\_

ADDRESS: ASHMARK Construction llc, 5640 West Maple Road Suite 300, West Bloomfield, MI 48322

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

1.) Martin Renel of ASHMARK Construction at martin@ashmark.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:

January 3, 2018

PRINT NAME:

Martin Renel

PHONE:

248 855-1575

ADDRESS:

5640 West Maple Road Suite 300, West Bloomfield, MI 48322

**GENOA CHARTER TOWNSHIP  
PLANNING COMMISSION  
PUBLIC HEARING  
APRIL 9, 2018  
6:30 P.M.  
MINUTES**

CALL TO ORDER: The meeting of the Genoa Charter Township Planning Commission was called to order at 6:30 p.m. Present were Chairman Doug Brown, Jim Mortensen, Eric Rauch, Chris Grajek, Jill Rickard and Marianne McCreary. Absent was John McManus. Also present was Kelly VanMarter, Community Development Director/Assistant Township Manager, Brian Borden of LSL Planning, Gary Markstrom of Tetra Tech, and an audience of 11.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

**Moved** by Commissioner Grajek, seconded by Commissioner Mortensen, to approve the agenda as presented.

CALL TO THE PUBLIC: The call to the public was made at 6:32 pm with no response.

OLD BUSINESS

**OPEN PUBLIC HEARING # 1... Review of a special use, site plan and environmental impact assessment for a proposed commercial outdoor display, sales and storage area for a new Family Farm and Home store. The property in question is located in the former TJ Maxx retail space at 3685 E. Grand River Avenue, Howell 48843. The request is petitioned by Family Farm and Home.**

Planning Commission Recommendation of Petition:

- A. Recommendation of Special Use Application.
- B. Recommendation of Environmental Impact Assessment (1-4-18).
- C. Recommendation of Site Plan (3-29-18).

Mr. Martin Renel of ASHMARK Construction and Mr. Jeff Smith, representing the property owner, were present. They believe that they have addressed all of the concerns from the last meeting. Mr. Renel reviewed the revisions that have been made.

Mr. Borden agrees that the outstanding items have been addressed, specifically the reduction in impervious surface, ensuring the sidewalk is at least seven-feet-wide between the building and the fence, and providing the cross access easement to the Meijer property to the east. He noted that the Planning Commission will have to approve the screen fencing in lieu of Buffer Zone B.

Mr. Markstrom agrees that the applicant has noted on the plans that they will provide a cross access easement for future connection to the Meijer property to the east; however, they have not provided the legal description and paperwork. He noted that since the impervious surface was reduced, the applicant's detention basin calculations will need to be revised.

Additionally, since the latest set of plans was submitted today, he has not been able to review the fire hydrant details; however, they should meet MHOG requirements. He will need to review the calculations for the change in curbing on the east side of the site to determine if they meet the turning radius requirements. He believes he can do this prior to this item being presented to the Township Board.

Chairman Brown reviewed the Brighton Area Fire Department's letter dated April 3, 2018. Mr. Renel stated he spoke with Mr. Boisvert after he received that letter and they have complied with and/or clarified his concerns and comments.

The Call to the Public was made at 6:59 pm.

Ms. Bobbi Squires, who is a resident of Genoa Township, has concerns regarding Family Farm and Home. She is concerned with the overall quality of the plaza, specifically the lighting. She would like the applicant to address the safety of the plaza due to the robbery that occurred at one of their stores in Cedar Springs where guns were stolen. She questioned if they plan to offer a competitive retail wage and asked how many employees they plan to hire. The community should welcome development; however, this plaza has a lot of problems, and the existing business owners deserve a safe plaza. There are also many other similar retailers in the area that offer the same types of products. This causes a saturation of the market. She believes the Township needs to bring different types of businesses to the area.

Commissioner Mortensen stated the only reason this item is before the Planning Commission is because the applicant would like to have outside storage. If that was not proposed, the property owner would be able to move one retailer out and another one in. He agrees with Ms. Squires' comments regarding the overall condition of the plaza; however, the Township has limited ability to require the property owner to make improvements. He believes that the proposed business is a quality company.

The call to the public was closed at 7:10 pm.

**Moved** by Commissioner Mortensen, seconded by Commissioner Rickard, to recommend to the Township Board approval of the Special Land Use Application from Family Farm and Home for outside storage at the former TJ Maxx site, subject to the following:

- Compliance with the site plan descriptions and conditions noted on the site plan dated March 2, 2018 and revised April 9, 2018, which may be subject to further modifications prior to it being presented to the Township Board of Trustees meeting.
- The conditions of the Special Land Use Permit shall be as contained in the Environmental Impact Assessment dated January 4, 2018 with the specific condition that the materials stored outside will not be in an opened condition, which means they will be as packaged by the supplier.
- This recommendation is made because the Planning Commission believes that the conditions of Sections 19.03 and 7.02.02 (d) of the Township Ordinance are met.
- The applicant will maintain a five-foot clearance along the front of the building for pedestrian circulation.

**The motion carried unanimously.**

**Moved** by Commissioner Mortensen, seconded by Commissioner Grajek, to recommend to the Township Board approval of the Environmental Impact Assessment dated January 4, 2018 from

Family Farm and Home for outside storage at the former TJ Maxx site. **The motion carried unanimously.**

**Moved** by Commissioner Mortensen, seconded by Commissioner Grajek, to recommend to the Township Board approval of the Site Plan dated March 29, 2018 from Family Farm and Home for outside storage at the former TJ Maxx site, with minor revisions made on April 9, 2018 subject to the following:

- The cross-access easement shown on the site plan will require the petitioner to develop language satisfactory to the Township Attorney regarding the easement, which will be completed prior to issuance of a land use permit.
- Any signage proposed will require the approval and a permit from the Township prior to installation.
- The location of the fire hydrant and confirmation of the location of the water main will be done with the Township Engineer and Brighton Area Fire Authority prior to it being presented to the Township Board of Trustees meeting.
- The drive aisle curve will be examined and either redesigned or confirmed that an easement on the Wendy's property exists permitting that location. If the drive aisle curve and hydrant location require minor adjustments to the site plan, it can be approved by the Township Engineer and staff prior to it being presented to the Township Board of Trustees meeting.
- A revised site plan shall be provided and revised and approved by the Township Engineer prior to it being presented to the Township Board of Trustees meeting.

**The motion carried unanimously.**

**OPEN PUBLIC HEARING #2... Review of a sketch plan for a proposed pavilion and canopy located at the existing Oak Pointe Country Club located at 4500 Club Drive, Brighton. The request is petitioned by Ventures Design.**

Planning Commission Disposition of Petition:

A. Disposition of Sketch Plan. (3-16-18)

Mr. Loch Durrant and Mr. Jacob Lubig of Ventures Design were present. Mr. Durrant stated they are proposing to build accessory structures around the pool area in Oak Point. They would like to put in covered seating, an open air pavilion, and a brick paver patio.

They have provided the fire retardant information this evening as required by the Brighton Area Fire Department.

They questioned if the 10-foot setback requirement is for the overhang or the wall. Ms. VanMarter stated it is to the building wall. It was concluded that the setback will therefore be met.

Mr. Borden stated that the concerns in his letter dated March 28, 2018 have been met.

Mr. Markstrom stated that the petitioner has not provided site drainage calculations to include the additional impervious surfaces. Mr. Durrant provided the information of how the surface water will flow on the site. Mr. Markstrom is satisfied with what Mr. Durrant has provided.

The Call to the Public was made at 7:36 pm with no response.

**Motion** by Commissioner Mortensen, seconded by Commissioner Grajek, to approve the Sketch Plan dated March 16, 2018 for a proposed pavilion and canopy located at the existing



**GENOA CHARTER TOWNSHIP  
PLANNING COMMISSION  
PUBLIC HEARING  
MARCH 12, 2018  
6:30 P.M.  
MINUTES**

CALL TO ORDER: The meeting of the Genoa Charter Township Planning Commission was called to order at 6:30 p.m. Present were Chairman Doug Brown, Jim Mortensen, Eric Rauch, Chris Grajek, Jill Rickard and Marianne McCreary. Absent was John McManus. Also present was Kelly VanMarter, Community Development Director/Assistant Township Manager, Brian Borden of LSL Planning, Gary Markstrom of Tetra Tech, and an audience of 17.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

**Moved** by Commissioner Grajek, seconded by Commissioner Mortensen, to approve the agenda as presented.

CALL TO THE PUBLIC: The call to the public was made at 6:32 pm with no response.

OLD BUSINESS

**OPEN PUBLIC HEARING #1... Review of a special use, site plan and environmental impact assessment for a proposed commercial outdoor display, sales and storage area for a new Family Farm and Home store. The property in question is located in the former TJ Maxx retail space at 3685 E. Grand River Avenue, Howell 48843. The request is petitioned by Family Farm and Home.**

Planning Commission Recommendation of Petition:

- A. Recommendation of Special Use Application.
- B. Recommendation of Environmental Impact Assessment (1/4/18).
- C. Recommendation of Site Plan (2/22/18).

Mr. Martin Renel of ASHMARK Construction and Mr. Jeff Smith, representing the property owner, were present. Mr. Renel reviewed the changes they made based on the comments from last month's meeting. They addressed the stormwater control, the dumpster enclosure, the fencing, and they added the required details to the plan, and blocks to some of the parking spaces.

Mr. Borden reviewed his letter of March 6, 2018.

They find that the general standards of the Special Land Use have been met; however, there are some items required for the use conditions have not. Specifically, the setback requirement for the proposed trailer storage area is not provided and the the trailer storage area is only

screened on three sides. He noted that the Planning Commission can allow screen fencing in place of the Buffer Zone B requirement.

Additional requirements that need to be met are:

- Impervious surface calculations must be provided. It was noted that the applicant provided this to the Township this afternoon. Mr. Borden reviewed the calculations and there is now more impervious surface being proposed.
- The amount of parking remaining after the removal of spaces meets the ordinance.
- He is suggesting a cross-access easement be provided on the subject site allowing future connection with the development to the east.
- He is recommending the applicant be required to maintain at least 5 feet of clearance along the front of the building. The plans were reviewed this evening and there is 6 feet of clearance.
- The parking blocks proposed along the south side of the 8-foot screen fencing reduce the drive aisle width below Ordinance standards and could pose problems for snow plowing.

Commissioner Rauch would vote to approve the setback requirement being waived for the trailer storage area because of its unique location. It is at the rear of a Wendy's restaurant and there is a dumpster in this area. He thanked the petitioner for altering the fencing, and adding the pillars and the screening for the trailer storage area.

Commissioner Rickard stated that the setbacks should be met. Chairman Brown agrees. There may be a time when Wendy's is no longer there and another business occupies the site.

Commissioner Mortensen does not approve of the proposed fence or the trailer storage area, which would need more fencing.

There was a discussion regarding redesigning the area to the south of the building where the trailer storage area is being proposed in order to meet the ordinance requirements that are lacking.

Mr. Smith stated they would like to receive direction from the Planning Commission tonight. It was discussed to have the Planning Commission approve the Special Land Use without approving the trailer storage. A variance would need to be obtained from the Zoning Board of Appeals. Mr. Eugene Franks from Family Farm and Home suggested the trailer storage be in the parking spaces adjacent to the building on the south side, removing the curbing for the other parking area adjacent to Wendy's property, and converting it into a 26-foot wide drive aisle. Ms. Van Marter suggested that the Fire Authority review these plans. She asked if all of the parking spaces are needed for the trailer storage. She suggested some of the spaces be left for customers wishing to park in the area if they are interested in looking at the trailers.

Commissioner Rauch brought up the issue of the cross access drive. Mr. Smith stated that the property owner would be willing to grant the easement to Meijer if they were to pay for the driveway to be constructed.

There was a discussion regarding the increase in impervious surface. The applicant will need to add green space on the site to accommodate the additional impervious area.

Commissioner Rickert would like to see the revised plans. Commissioner Mortensen agrees.

The Call to the Public was made at 7:59 pm.

Mr. Kathy Termors is one of the owners of Kolt Jewelers. She would like this project to be approved. This center needs more tenants.

Robert Huffman stated that he and his wife own BC Comix and Games. He would like this project to be approved.

The call to the public was closed at 8:01 pm.

**Moved** by Commissioner Grajek, seconded by Commissioner Mortensen, to table the request for a special use, site plan, and environmental impact assessment for a proposed commercial outdoor display, sales, and storage area for a new Family Farm and Home store located at 3685 E. Grand River Avenue, Howell 48843 until the April 9, 2018 meeting with the intention the petitioner will satisfactorily address the items discussed this evening.

## NEW BUSINESS

**OPEN PUBLIC HEARING #2... Review of site plan and environmental impact assessment for a proposed 2,254 sq. ft. addition to the existing ALDI Food Market located at 2260 E. Grand River Ave., Howell. The request is petitioned by ALDI Inc.**

Planning Commission Recommendation of Petition:

- A. Recommendation of Environmental Impact Assessment (2-23-18)
- B. Disposition of Site Plan (2-21-18)

Mr. Christopher Grzenkowicz with Desine Inc. and Mr. Sam Glennen of Aldi were present. Mr. Grzenkowicz provided a review of their proposed project. They would like to completely remodel the inside of the store and add an approximate 2,254 square foot addition to the east of the building. They will also be adding additional parking spaces, resurfacing the entire parking lot, replacing the parking lot lighting with LED lights, replacing and adding additional landscaping, and replacing the existing monument sign. They are requesting side and rear parking setback waivers for six of their spaces. He showed colored renderings and a site plan.

They will also need approval for the increase of parking spaces. Aldi's corporate standard for parking is 75 spaces at a minimum and 95 as a requirement. Mr. Borden stated the maximum allowed by ordinance is 91 spaces. The Planning Commission will need to approve the additional four spaces.

Mr. Borden reviewed his letter of February 28, 2018. The applicant has met all of the requirements of the ordinance. The only outstanding issues are Planning Commission discretionary items. As Mr. Grzenkowicz stated, the Planning Commission must approve the waiver of the side and rear parking setbacks, the approval of the four additional parking spaces, and the building elevations, materials, and colors.

Mr. Markstrom stated the applicant has addressed all of their concerns.

The call to the public was made at 8:25 pm with no response.

**Moved** by Commissioner Mortensen, seconded by Commission Rauch to recommend to the Township Board the Environmental Impact Assessment dated February 23, 2018 for a 2,254 sq. ft. addition to the existing ALDI Food Market located at 2260 E. Grand River Ave., Howell. **The motion carried unanimously**

**OPEN PUBLIC HEARING # 3... Review of a special use, site plan and environmental impact assessment for a proposed commercial outdoor display, sales and storage area for a new Family Farm and Home store. The property in question is located in the former TJ Maxx retail space at 3685 E. Grand River Avenue, Howell 48843. The request is petitioned by Family Farm and Home.**

Planning Commission Recommendation of Petition:

- A. Recommendation of Special Use Application.
- B. Recommendation of Environmental Impact Assessment (01/04/18).
- C. Recommendation of Site Plan (01/24/18).

Mr. Martin Renel of Ashmark Construction and Robert Kerr of Metro Group Architects were present.

Mr. Renel provided a review of the project and the proposed use. They would be performing minor renovations on the interior of the building. They would be adding an outdoor display area and reconstructing the dumpster enclosure.

Mr. Borden reviewed his letter of February 6, 2018.

They find that the general standards of the Special Land Use have been met.

The screening for the outdoor storage area is required to be six-feet high and the applicant is proposing four-foot high fencing. The Planning Commission can approve the difference.

He is asking for clarification for what the applicant is calling the outdoor staging area. It appears to be an additional outdoor storage area. Mr. Renel stated that since the submittal was made, they have confirmed with Family Farm and Home that this area will be storage so the fencing will need to be extended to include this, which is an additional 19 feet.

There was a discussion regarding the removal of some of the grass area and then the same amount of grass area being replaced by removing parking spaces and adding turf.

Commissioner Mortensen questioned if this would affect the parking. Ms. VanMarter stated there is sufficient parking on this site.

Commissioner Mortensen asked that the proposed white PVC fencing being redesigned. Mr. Borden noted that this fencing is also being proposed for the dumpster enclosure area and it is not an approved material. Mr. Eugene Franks of Family Farm and Home stated that there are dumpsters along the back of the building and none of them have enclosures. Mr. Renel stated they could use wood for the enclosure.

Commissioner Rauch asked staff for their experience with other commercial businesses in the Township who have outdoor storage. Ms. VanMarter stated the Township has had continued problems with businesses that have not complied with the ordinance as it pertains to outdoor

storage for retail uses. Commissioner Rauch wants to ensure that there is sufficient screening on the front of this building so the same problem does not occur here.

Mr. Borden noted that the architectural plan and the engineering plan are not consistent.

There was a discussion regarding the completion of the cross access driveway to the property to the east. The applicant has declined to finish the driveway to connect the two properties. Ms. VanMarter stated that the connection is the responsibility of Meijer; however, at the time it was developed, they were not given an easement from Kroger. Mr. Markstrom stated there is a large grade change in this area so significant work would need to be done to connect these two properties.

Mr. Markstrom reviewed his letter dated January 30, 2018. He would like to see flow direction shown for the storm-water runoff. The trade-off of the paving and turf is a viable alternative; however, he suggested the applicant look at the entire site it could possibly be determined that there may be sufficient impervious surface so there may not be a need to remove the parking spaces.

He needs to see a complete site plan with details, such as foundation details, curbing details, etc.

Chairman Brown reviewed the Brighton Area Fire Authority letter dated February 1, 2018. The applicant has agreed to meet all of their requirements.

The call to the public was made at 8:08 pm.

Mr. Eric Unatin with Mid-American Real Estate has been working on this lease. Their experience over the past 18 months since this site has been vacant has been that Family Farm and Home has been the only company interested. He noted the discussion regarding the material for the fencing and the dumpster enclosure and stated there are costs associated for both the property owner and the tenant when a new owner moves into a space and it must be economical for both of them.

The call to the public was closed at 8:12 pm.

Commissioner McManus agrees with what Mr. Unatin said; however, the Planning Commission needs to ensure that the ordinance is met. He agrees that the proposed fencing needs to be upgraded.

**Moved** by Commissioner Mortensen, seconded by Commissioner Rauch, table the request for a special use, site plan and environmental impact assessment for a proposed commercial outdoor display, sales and storage area for a new Family Farm and Home store located at 3685 E. Grand River Avenue, Howell 48843 until the March 12, 2018 meeting.

**The motion carried unanimously.**

April 30, 2018

Genoa Charter Township  
2911 Dorr Road  
Brighton, MI 48116

ATTN: Kelly VanMarter

RE: Family Farm & Home-Special Land Use and Site Plan Approval

Dear Kelly,

Please find our below summary of changes per the attached latest submission dated 4/30/18:

**Summary**

- The plans have been completed to a “Fully Engineered” state including:
  - Exact location of all utilities including Water main. (as requested by Planning Commission)
  - Exact location of existing hydrants.
  - Full site survey and topo completed.
  - Additional demo plans and details added
- Drive at East curb changed to ensure all work remain on our property.
- Updated Detention pond basin due to the reduction on impervious area.

Please note: Easement information as labeled in plans “to follow” is being compiled; and will be incorporated into the plans within a few days,

Should you require any additional information please do not hesitate to contact me.

Sincerely,

**ASHMARK CONSTRUCTION, LLC**



Martin J. Renel  
Managing Member



May 1, 2018

Ms. Kelly VanMarter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

**Re: Family Farm and Home Site Plan Review #5**

Dear Ms. VanMarter:

Tetra Tech performed a fifth site plan review of the Family Farm and Home proposed site located at 3685 East Grand River Avenue (Grand River Plaza Shopping Center) in Howell. The petitioner is proposing to modify an existing retail outlet to meet the retail needs of a Family Farm and Home store. The submission included site plans with the latest revision date of April 27, 2018.

The petitioner has provided engineering drawings showing the improvements proposed to be made to the site to accommodate the outdoor storage area. They have also updated the storm drainage and detention calculations to reflect the actual site proposed conditions. We have reviewed the plans and have the following minor comments.

1. The area proposed for trailer storage should not be striped as shown on the site plan. Striping this area may confuse motorists of the intent of this area.
2. We suggest a protective bollard be placed on the end of the fence section of the trailer storage area to protect the fence from traffic.
3. A note should be added to the demolition plans to remove the existing tee for the hydrant being relocated and replace with a cutting in sleeve.
4. A note should be added to the new hydrant to install a tee, cutting in sleeve and valve on the existing main and to coordinate water shut offs for the work with MHOG operation staff.
5. The pipe for the new hydrant can be ductile iron Class 52.
6. On the Basin Standpipe Detail, the standpipe should be further into the bottom of the basin so the holes at the bottom of the basin are all in the gravel versus in the basin side slope.
7. The petitioner provided a note indicating the general location for a future cross-access connection with Meijer. The actual easement must be submitted as part of the land use permit process.

**Ms. Kelly VanMarter**  
**Re: Family Farm and Home Site Plan Review #5**  
**May 1, 2018**  
**Page 2**

Since our comments are fairly minor we would support approving the special use site plan with the condition that the petitioner will address the comments above prior to a land use permit being issued.

If you have any questions, please call.

Sincerely,



Gary J. Markstrom, P.E.  
Unit Vice President

Enclosure

copy: Martin Renel, Ashmark Construction



May 2, 2018

Kelly VanMarter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

RE: Family Farm & Home  
3685 E. Grand River Avenue  
Howell, MI 48843

Dear Kelly:

The Brighton Area Fire Department has reviewed the above mentioned site plan. The plans were received for review on April 30. The project is for the redevelopment of an existing 28,151 square foot Mercantile use occupancy that will changing occupant and renovating the structure to meet their needs. They are also proposing to redevelop a large greenbelt area and 19 parking spaces to be utilized as an outside storage and staging area. This review is for removal of parking for trailer storage and relocation of the drive aisle. The plan review is based on the requirements of the International Fire Code (IFC) 2018 edition.

1. The proposed relocated hydrant to the west end of the proposed drive aisle is to be relocated across the drive aisle to the North, on the corner of the new proposed area next to the trailer storage. **(Hydrant location has been addressed.)**
2. Based upon site visit and aerial imagery, the hydrant at the east end of the realigned drive aisle appears to be in the aisle, or on the immediate corner. This hydrant is not reflected on architectural or engineering drawings. Greater detail of the location of the east hydrant needs to be shown. If the hydrant remains in the landscaped or curbed area is must be provided with proper buffer (MHOG Standard) or impact protection in accordance with Chapter 312 of the fire code. **(Hydrant location has been addressed.)**
3. The new outside storage area is not shown with the egress gates on the Alpine engineering plans, but is on the architectural. Clarify whether or not this is drawing is for visual representation of the storage perimeter or construction. **(Egress gates have been addressed.)**

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,



Rick Boisvert, CFPS  
Fire Marshal



March 27, 2018

Planning Commission  
Genoa Township  
2911 Dorr Road  
Brighton, Michigan 48116

<b>Attention:</b>	Kelly Van Marter, AICP Planning Director and Assistant Township Manager
<b>Subject:</b>	Family Farm and Home – Special Land Use and Site Plan Review #4
<b>Location:</b>	3685 East Grand River Avenue – north side of Grand River, west of S. Latson Road
<b>Zoning:</b>	RCD Regional Commercial District

Dear Commissioners:

At the Township’s request, we have reviewed the revised submittal from Family Farm and Home for special land use (application dated 1/30/18) and site plan (plans dated 3/20/18 from Alpine and 3/21/18 from Metro Group) review and approval.

We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Zoning Ordinance.

**A. Summary**

1. In our opinion, the special land use standards of Section 19.03 are generally met; however:
  - a. the use conditions of Section 7.02.02(d) must be met; and
  - b. any comments provided by the Township Engineer or Fire Department must be addressed.
2. In our opinion, the use conditions of Section 7.02.02(d) are met, provided that the Planning Commission may allow screen fencing in lieu of a buffer zone B.
3. The proposal results in an impervious surface calculation slightly above that allowed by Ordinance – 76.9% vs. 75%.
4. We request the applicant confirm that the amount of parking provided (467 spaces) includes all of the spaces to be removed as part of this project.
5. We suggest a cross-access easement be provided on the subject site allowing future connection with the development to the east.
6. We recommend the applicant be required to maintain at least 7’ of clearance along the front of the building for pedestrian circulation.
7. At such time as new signage is proposed, the applicant must obtain approval and a permit from the Township prior to installation.

**B. Proposal/Process**

The project entails a new business within an existing multi-tenant commercial center (the space was formerly home to a TJ Maxx store), as well as outdoor display, sales and storage. Table 7.02 lists outdoor commercial display, sales or storage as a special land use in the RCD. Such uses are also subject to the use conditions of Section 7.02.02(d).

Procedurally, the Planning Commission is to review the special land use, site plan and impact assessment and provide a recommendation on each to the Township Board following a public hearing. (The hearing was held at the February 12, 2018 Planning Commission meeting, though the request was tabled.)



*Aerial view of site and surroundings (looking north)*

### **C. Special Land Use Review**

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

- 1. Master Plan.** The Township Master Plan identifies the subject site, as well as the adjacent properties along Grand River, as Regional Commercial. This category is intended for “higher intensity commercial uses that serve the comparison shopping needs of the entire community and the regional market.”

The description does not mention outdoor display, sales or storage, though it is worth noting that the large commercial store to the east has a somewhat similar accessory outdoor element to their business.

- 2. Compatibility.** The area is developed with a variety of commercial uses. While outdoor uses do not appear to be overly prevalent in this area, the development adjacent to the east has a similar outdoor component (as noted above). Provided the use conditions for outdoor display, sales and storage are met, the proposal is generally expected to be compatible with the character of the area.
- 3. Public Facilities and Services.** As a developed site along the main commercial corridor through the Township, we anticipate necessary public facilities and services are in place; however, the Commission should consider any comments provided by the Township Engineer and Brighton Area Fire Department.
- 4. Impacts.** The use conditions of Section 7.02.02(d) are intended to limit on- or off-site impacts of outdoor display, sales and storage. Provided those standards are met, the proposal should not create adverse impacts upon adjacent or surrounding properties and/or uses.
- 5. Mitigation.** If additional concerns arise as part of the review process, the Township may require efforts to mitigate potential adverse impacts.

**D. Use Conditions**

Commercial outdoor display, sales or storage uses are subject to the following use conditions of Section 7.02.02(d):

**1. Minimum lot area shall be one (1) acre.**

The revised plans note a total site area of 26.5 acres.

**2. Any stockpiles of soils, fertilizer or similar loosely packaged materials shall be sufficiently covered or contained to prevent dust or blowing of materials.**

The second submittal noted that any such materials will be kept in the manufacturer's packaging; thus, there will not be any loosely stored materials.

**3. All outdoor storage areas shall be paved with a permanent, durable and dustless surface and shall be graded and drained to dispose stormwater without negatively impact adjacent property. The Township Board, following a recommendation of the Planning Commission and the Township Engineer, may approve a gravel surface for all or part of the display or storage area for low intensity activities, upon a finding that neighboring properties and the environment will not be negatively impacted.**

The site plan identifies paved surfaces for each of the outdoor storage and display areas – the main storage area (south of the building), the newly proposed trailer storage area, and the display area in front of the building.

**4. No outdoor storage shall be permitted in any required yard (setback) of buildings for the district in which the outdoor display, sales or storage use is located. Any approved outdoor sales or display within a parking lot shall meet the required parking lot setback; provided the Planning Commission may require additional landscaping screening or ornamental fencing.**

Section 7.03 requires setbacks of 50 (rear) and 20 feet (side). The main storage area provides 43-foot setbacks from both the east (side) and south (side) lot lines. The display area in front of the store is also well outside of required setbacks and the proposed trailer storage has been relocated such that it provides a compliant setback of approximately 28 feet from the south side lot line.

**5. The site shall include a building of at least five hundred (500) feet of gross floor area for office use in conjunction with the use.**

The plans note that the building space for the proposed business contains 28,151 square feet of floor area.

**6. All loading and truck maneuvering shall be accommodated on-site.**

The site has existing vehicular access from Grand River and no changes are proposed. The plans show a new overhead door and loading area on the east side of the building facing north.

Sheet 2 of the Alpine Engineering submittal includes a truck turning movement diagram demonstrating that truck maneuvering can be accommodated on-site.

- 7. All outdoor storage area property lines adjacent to a residential district shall provide a buffer zone A as described in Section 12.02. A buffer zone B shall be provided on all other sides. The Planning Commission may approve a six (6) foot high screen wall or fence, or a four (4) foot high landscaped berm as an alternative.**

The areas of the site impacted are to the south, east and west and include 3 separate outdoor storage/display areas – the main storage area south of the building; the trailer storage area immediately south of the main area; and the display area along the front of the building.

None of these areas provide a full buffer zone B, but are all proposed to be screened with privacy fencing of varying heights – 8-foot for the main outdoor storage area and 4-foot for the trailer storage and display area in front of the building. The current plans also incorporate brick piers into the screen fencing to help break up the long stretches of white vinyl.

As noted under this criterion and previously discussed, the Planning Commission may allow screen fencing in lieu of a buffer zone B. (As was previously discussed, Section 12.02.13 gives the Commission the ability to allow 4-foot fencing as opposed to 6-foot.)

- 8. The height of all material and equipment stored in an outdoor storage area shall not exceed the height of any landscape screening, wall or fence. Boats and recreational vehicles may exceed the height of the fence provided that they are setback from the fence a distance equal to their height. Storage of materials up to the height of the adjacent building wall may be permitted in the rear yard if it is illustrated on the site plan, the rear yard does not abut a residential district or face an expressway, and such storage is confined to within twenty (20) feet of the building.**

The special land use application states that “all stored items will not be stored higher than the screen provided.”

## **E. Site Plan Review**

- 1. Dimensional Requirements.** The only dimensional standards affected by the request are setbacks for the outdoor storage area (addressed above) and a slight increase in impervious surface lot coverage due to the removal of the landscaped area.

In order to mitigate the new impervious area for the main outdoor storage, a bank of 9 parking spaces on the far west side of the site will be removed and converted to landscaping.

A note on the Alpine Engineering plans identifies an existing and proposed impervious surface coverage of 75%; however, the calculation for the proposed coverage actually results in 76.9%, which slightly exceeds the Ordinance limitation of 75%. This must be clarified and/or corrected for compliance.

- 2. Building Materials and Design.** The proposal includes repairs to and painting of the building. The submittal states that the repairs will match the existing building.
- 3. Parking.** The current submittal includes parking calculations noting that the site requires 428 parking spaces, while 467 will be provided. Given discrepancies between previous submittals, we request the applicant confirm that the amount of parking noted includes all of the spaces to be removed as part of this project.
- 4. Pedestrian and Vehicular Circulation.** As discussed at previous Planning Commission meetings, we suggest the owner of the subject site be required to provide a cross-access easement for a future connection to the development east of the subject site.

Additionally, the applicant must maintain a clear pedestrian area in front of the building given the presence of outdoor display. The nearest point between the screen fencing and building is 7 feet. We suggest a condition that this area will remain clear of any display/storage items.

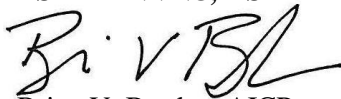
5. **Landscaping.** The submittal identifies two new planters along the south side of the outdoor storage area. The planters will each contain a 10' tall Arborvitae.
6. **Waste Receptacle and Enclosure.** The plan includes a new waste receptacle/enclosure on the east side of the building. The details on Sheet A5.1 note the use of a wooden enclosure (cedar). The current submittal also identifies the concrete base pad, as required by Section 12.04.
7. **Exterior Lighting.** The revised submittal states that existing site lighting will remain and does not identify any new lighting proposed.
8. **Signs.** Sign details are not provided, although the building elevation drawing (Sheet A5.1) identifies an area for a new wall sign.

When a new sign is desired for the business, the applicant will need to obtain approval and a permit from the Township prior to installation.

9. **Impact Assessment.** The original submittal included an Impact Assessment prepared by Ashmark Construction, LLC (not dated). In summary, the Assessment notes that the project is not anticipated to adversely impact natural features, public services/utilities, surrounding land uses or traffic.

Should you have any questions concerning this matter, please do not hesitate to contact our office. I can be reached by phone at (248) 586-0505, or via e-mail at [borden@lsplanning.com](mailto:borden@lsplanning.com).

Respectfully,  
**LSL PLANNING, A SAFE BUILT COMPANY**



Brian V. Borden, AICP  
Planning Manager

## Family Farm & Home Impact Assessment

- a. **Name(s) and address(es) of person(s) responsible for preparation** of the impact assessment and a brief statement of their qualifications.

Martin J. Renel  
Principal at ASHMARK Construction LLC  
5640 West Maple Suite 300  
West Bloomfield, MI 48322  
28 years of Commercial Development and Construction experience.

- b. **Map(s) and written description/analysis of the project site** including all existing structures, manmade facilities, and natural features. The analysis shall also included information for areas within 10 feet of the property. An aerial photograph or drawing may be used to delineate these areas.

See submitted plans by Metro Group Architects detailing these areas.

- c. **Impact on natural features:** A written description of the environmental characteristics of the site prior to development and following development, i.e., topography, soils, wildlife, woodlands, mature trees (eight-inch caliper or greater), wetlands, drainage, lakes, streams, creeks or ponds. Documentation by a qualified wetland specialist shall be required wherever the Township determines that there is a potential regulated wetland. Reduced copies of the Existing Conditions Map(s) or aerial photographs may accompany written material.

The current site is an existing shopping center; the tenant is taking over the previous TJ Maxx location. We are requesting approval of creating an outside storage area for Family, Farm & Home Store. We do not intend any impact on the existing environmental conditions.

- d. **Impact on stormwater management:** Description of measures to control soil erosion and sedimentation during grading and construction operations and until a permanent ground cover is established. Recommendations for such measures may be obtained from the Livingston County Drain Commission at (517) 546-0040.

We will install soil erosion control as required by Livingston County Drain Commission during construction activities of the exterior storage area. We will insure proper dust control during construction activities.

- e. **Impact on surrounding land used:** Description of the types of proposed uses and other man-made facilities, including any project phasing, and an indication of how the proposed use conforms or conflicts with existing and potential development patterns. A description shall be provided of any increases of light, noise or air pollution which could negatively impact adjacent properties.

We do not intend to have any impact on surrounding lands; since the use is not changing.

- f. **Impact on public facilities and services:** Describe the number of expected residents, employees, visitors, or patrons, and the anticipated impact on public schools, police protection and fire protection. Letters from the appropriate agencies may be provided, as appropriate.

The impact on public facilities and services shall be consistent with the former use.

- g. **Impact on public utilities:** Describe the method to be used to service the development with water and sanitary sewer facilities, the method to be used to control drainage on the site and from the site, including runoff control during periods of construction. For sites serviced with sanitary sewer, calculations for pre- and post development flows shall be provided in comparison with sewer line capacity. Expected sewage rates shall be provided in equivalents to a single family home. Where septic systems are proposed, documentation or permits from the Livingston County Health Department shall be provided.

Please see Alpine Engineering letter dated January 3<sup>rd</sup> 2018 stating no impact on the existing stormwater system.

- h. **Storage and handling of any hazardous materials:** A description of any hazardous substances expected to be used, stored or disposed of on the site. The information shall describe the type of materials, location within the site and method of containment. Documentation of compliance with federal and state requirements, and a Pollution Incident Prevention Plan (PIPP) shall be submitted,

Outside storage area to consist of: landscape mulch & bark, landscape products, patio stone/rock/gravel, peat/soil/earth products, Pots & Planters.

- i. **Impact on Traffic and Pedestrians:** A description of the traffic volumes to be generated based on national reference documents, such as the most recent edition of the *Institute of Transportation Engineers Trip Generation Manual*, other published studies or actual counts of similar uses in Michigan. A detailed traffic impact study shall be submitted for any site over ten (10) acres in size which would be expected to generate 100 directional vehicle trips (i.e. 100 inbound or 100 outbound trips) during the peak hour of traffic of the generator or on the adjacent streets. The contents of the detailed study shall include:

- Description of existing daily and peak hour traffic on adjacent street(s) and a description of any sight distance limitations along the right-of-way frontage of the site.

The impact on traffic and Pedestrians shall be consistent with the former use.

- Forecasted trip generation of the proposed use for the a.m. and p.m. peak hour and average daily traffic generated.

The impact on trip generation shall be consistent with the former use.

- For any project with a completion date beyond one year at the time of site plan approval, the analysis shall also include a scenario analyzing forecasted traffic at date of completion along the adjacent street network using a forecast based either on historic annual percentage increases and/or on expected development in the area.

Our Completion date will not be beyond one year of approval.

- Projected traffic generated shall be distributed (inbound v. outbound, left turn v. right turn) onto the existing street network to project turning movements at site driveways and nearby intersections. Rationale for the distribution shall be provided.

The impact on traffic (inbound/outbound, left/right turns) shall be consistent with the former use.

- Capacity analysis at the proposed driveway(s) using the procedures outlined in the most recent edition of the *Highway Capacity Manual* published by the Transportation Research Board. Capacity analyses shall be provided for all street intersections where the expected traffic will comprise at least five-percent (5%) of the existing intersection capacity.

The capacity analysis shall be consistent with the previously approved shopping center.

- Accident data for the previous three (3) years for roadway sections and intersections experiencing congestion or a relatively high accident rate, as determined by the township or staff from the Livingston County Road Commission or Michigan Department of Transportation.

N/A – Since this site has been previously approved.

- Analysis of any mitigation measures warranted by the anticipated traffic impacts. Where appropriate, documentation shall be provided from the appropriate road agency regarding time schedule for improvements and method of funding.

N/A – Since this site has been previously approved.

- A map illustrating the location and design of proposed access, including any sight distance limitations, dimensions from adjacent driveways and intersections within 250 feet of the edge of the property frontage, and other data to demonstrate that the driveway(s) will provide safe and efficient traffic operation and be in accordance with Article 15.

N/A – Since this site has been previously approved.

- j. **Special Provisions:** General description of any deed restrictions, protective covenants, master deed or association bylaws.

None required.





LOCATION MAP:  
NOT TO SCALE

**APPLICANT/CONTRACTOR**  
ASHMARK CONSTRUCTION LLC  
5640 WEST MAPLE, SUITE 101  
WEST BLOOMFIELD, MI 48332  
(248) 855-1575

**ARCHITECT**  
METRO GROUP ARCHITECTS  
PO BOX 7363  
ANN ARBOR, MI 48107  
(734) 747-8999

**ENGINEER/SURVEY**  
ALPINE ENGINEERING INC.  
46892 WEST ROAD, SUITE 109  
NOV, MI 48377  
(248) 928-3700

**SITE DATA:**

SITE AREA: 12.74 ACRES± (GROSS)  
PARCEL ID: 4711-05-400-032  
EXISTING/PROPOSED ZONING: RCD REGIONAL COMMERCIAL DISTRICT  
BUILDING AREA: 28,151 S.F. FAMILY FARM AND HOME RENOVATION  
73,706 S.F. EXISTING RETAIL  
103,857 S.F. BUILDING TOTAL

**REQUIRED PARKING:**  
1 SPACE FOR EACH 250 SQUARE FEET OF GROSS RETAIL FLOOR AREA FOR THE FIRST 50,000 SQUARE FEET. ONE FOR EACH 275 SQUARE FEET FOR THE NEXT 50,000 SQUARE FEET OF GROSS RETAIL FLOOR AREA. ONE FOR EACH 300 SQUARE FEET FOR THAT AREA IN EXCESS OF 450,000 SQUARE FEET OF GROSS RETAIL FLOOR AREA. NON-RETAIL USES SUCH AS RESTAURANTS, BARS AND THEATERS SHALL BE CALCULATED SEPARATELY BASED UPON THEIR RESPECTIVE REQUIREMENTS

50,000 S.F. (RETAIL) / 250 + 48,857 S.F. (RETAIL) / 275 + 5,000 S.F. (ASIAN FUSION) / 100 = 428

428 TOTAL PARKING SPACES REQUIRED  
467 TOTAL PARKING SPACES PROVIDED (INCLUDES 18 B.F. SPACES)

**IMPERVIOUS SURFACE CALCULATION:**  
DRAINAGE AREA: 12.74 ACRES ± = 13.76 ACRES ± = 28.50 ACRES  
IMPERVIOUS SURFACE EXISTING = 19.86 ACRES (BUILDING/PAVING) / 28.50 ACRES = 75%  
IMPERVIOUS SURFACE PROPOSED = 19.88 ACRES (BUILDING/PAVING) / 28.50 ACRES = 75%  
NOTE: THE APPLICANT PROPOSES TO ENLARGE THE EXISTING DETENTION BASIN TO ACCOMMODATE THE INCREASE IN IMPERVIOUS AREA. REFER TO THE DETENTION BASIN IMPROVEMENT PLAN.

**SITE PLAN GENERAL NOTES:**

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF GENOA TOWNSHIP, LIVINGSTON COUNTY, AND/OR THE STATE OF MICHIGAN.
2. THE CONTRACTOR SHALL NOTIFY "MISS DIG" AT LEAST THREE (3) WORKING DAYS PRIOR TO START OF CONSTRUCTION.
3. CONTRACTOR TO FIELD VERIFY LOCATION, ELEVATION, AND SIZE OF EXISTING UTILITIES.
4. PROPOSED SITE IMPROVEMENTS UTILIZE PORTIONS OF THE EXISTING BUILDING. CONTRACTOR TO COORDINATE AND VERIFY EXACT BUILDING LOCATION WITH THE ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION.
5. CONTRACTOR TO VERIFY LOCATION OF THE FENCE AND FENCE GATES PRIOR TO INSTALLATION. LOCATION OF THE FENCE CANNOT CONFLICT WITH MINIMUM CLEAR DISTANCE REQUIREMENTS FOR ADA. IF A CONFLICT IS APPARENT, THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT AND BUILDING INSPECTOR AS NECESSARY.
6. CONTRACTOR TO PLACE BOLLARDS PER THE ARCHITECTURAL DRAWINGS. LOCATION OF THE BOLLARDS CANNOT CONFLICT WITH MINIMUM CLEAR DISTANCE REQUIREMENTS FOR ADA. IF A CONFLICT IS APPARENT, THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT AND BUILDING INSPECTOR AS NECESSARY.
7. CONTRACTOR SHALL FIELD VERIFY EXACT LIMITS OF PAVEMENT (INCLUDING CURB AND WALK) REMOVAL AND REPLACE AS NECESSARY TO MEET SLOPE REQUIREMENTS.
8. PAVING CONTRACTOR SHALL TAKE EXTRA CARE TO ENSURE 1% MINIMUM PAVEMENT SLOPE IS ACHIEVED.
9. ALL STRIPING TO BE APPLIED PER THE MANUFACTURER'S RECOMMENDATIONS.

**NOTE:**

CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

**NOTE:**

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.

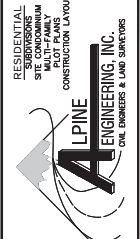
**SHEET INDEX**

- 1 SITE PLAN
- 2 TOPOGRAPHIC SURVEY AND DEMOLITION PLAN
- 3 ENGINEERING PLAN
- 4 TRUCK CIRCULATION PLAN
- 5 DETENTION BASIN IMPROVEMENT PLAN
- A MHOG SEWER AND WATER AUTHORITY STANDARD DETAILS



COMMERCIAL SURVEYING  
BOUNDARY SURVEYS  
TOPOGRAPHIC SURVEYS  
PARCEL SURVEYS  
MULTI-FAMILY UNIT CONSTRUCTION LAYOUT

RESIDENTIAL SURVEYING  
SITE CONSTRUCTION LAYOUT  
MULTI-FAMILY UNIT CONSTRUCTION LAYOUT



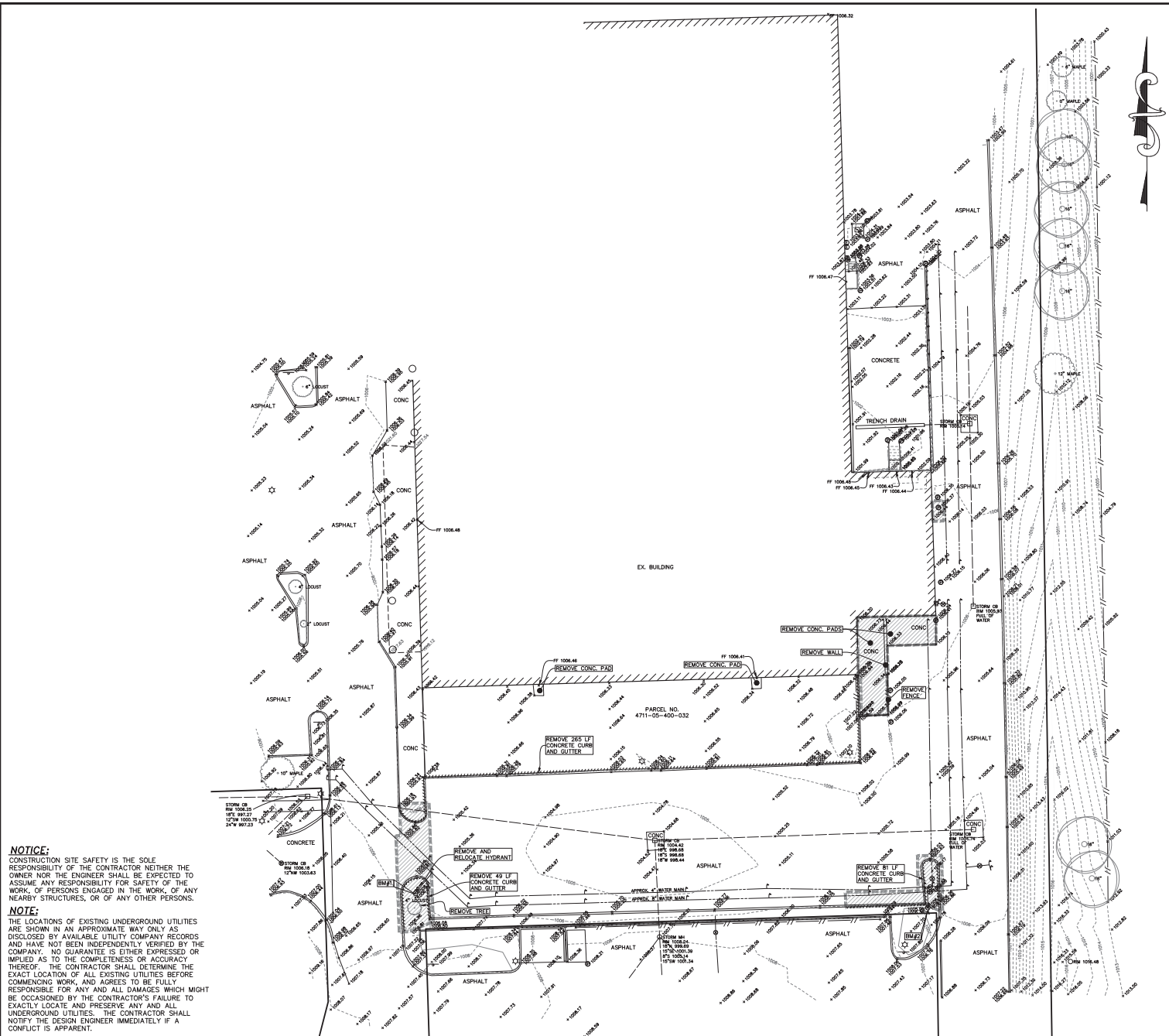
CLIENT: ASHMARK CONSTRUCTION, LLC

**SITE PLAN**

FAMILY FARM AND HOME - 3685 E. GRAND RIVER AVE.  
SECTION: 5 E  
TOWNSHIP: 5  
LIVINGSTON COUNTY MICHIGAN

REVISED
2018-02-22 REVISION PER CLIENT
2018-03-20 REVISION PER CLIENT
2018-03-29 REVISION PER CLIENT
2018-04-09 REVISION PER CLIENT
2018-04-10 REVISION PER CLIENT
2018-04-27 TOWNSHIP BOARD

DATE: 2018-01-23
DRAWN BY: TG
CHECKED BY: TG/SD
SCALE: 1" = 60' FT.
17-516



- DEMOLITION NOTES:**
1. DEMOLITION PLAN IS FOR GENERAL INFORMATION PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND COORDINATING WITH OWNER TO DETERMINE DETAILED DEMOLITION REQUIREMENTS.
  2. CONTRACTOR TO COORDINATE WITH FRANCHISE UTILITY COMPANIES AND/OR CITY AND COUNTY DEPARTMENTS FOR REMOVAL AND/OR RELOCATION OF METER BOXES, UTILITY POLES, UNDERGROUND LINES, ABOVE GROUND LINES, ETC., AS NECESSARY.
  3. REMOVE EXISTING BUILDING WALLS, FLOOR SLABS, AND/OR FOUNDATIONS AS DIRECTED BY THE GEOTECHNICAL ENGINEER. BACKFILL THE OPENING WITH SUITABLE MATERIAL TO CARRY BUILDING/PARKING LOT LOADS.
  4. REMOVE OR GROUT IN PLACE, AS DIRECTED BY THE FIELD INSPECTOR, EX. SEWERS AND/OR MAINS TO BE ABANDONED AS NECESSARY.
  5. CONTACT OWNER FOR ENVIRONMENTAL REPORT FOR ANY ENVIRONMENTAL CONCERNS.
  6. CONTRACTOR IS RESPONSIBLE FOR DOING AN EARTHWORK CALCULATION FOR CUT AND FILL REQUIREMENTS, AND IS RESPONSIBLE FOR INCLUDING REPORT AND EXPORT OF MATERIALS IN THEIR BID. ALL EXCESS MATERIAL (INCLUDING TOPSOIL, CLEAN FILL, AND WASTE MATERIAL) SHALL BE REMOVED FROM THE SITE.
  7. CONTRACTOR TO PROTECT EX. WELLS, POSTS, CONDUITS, PAVEMENT, CURBS, GUTTER, WALLS, BUILDINGS, UTILITIES, FENCES, LANDSCAPING, TREES, ETC. TO REMAIN DURING CONSTRUCTION. CONTRACTOR TO COORDINATE REPLACEMENT OF LANDSCAPING, ETC. WITH THE OWNERS.
  8. PRIOR TO THE REMOVAL OR ABANDONMENT OF ANY EX. UNDERGROUND UTILITY OR BUILDING SERVICE LINES CALLED FOR ON THE PLANS OR DISCOVERED DURING EXCAVATION, THE CONTRACTOR MUST DETERMINE IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE. IF THE UTILITY LINE OR BUILDING SERVICE IS TO BE USED/ACTIVE THE CONTRACTOR MUST TAKE ALL THE NECESSARY STEPS TO GUARANTEE THAT THE UTILITY LINE OR BUILDING SERVICE IS RECONNECTED WITHOUT AN INTERRUPTION IN SERVICE. THE RECONNECTION OF THE UTILITY LINE OR BUILDING SERVICE MUST BE IN ACCORDANCE WITH THE STANDARDS AND THE REQUIREMENTS OF THE APPROPRIATE GOVERNMENTAL AGENCY OR PRIVATE UTILITY COMPANY.
  9. CONTRACTOR TO COORDINATE WITH THE ADJACENT LAND OWNERS AS REQUIRED.
  10. PROVIDE POSITIVE DRAINAGE AT ALL LOCATIONS TO ENSURE NO STANDING WATER WITHIN PAVEMENT OR GREEN AREAS. PRIOR TO CONSTRUCTION, FIELD VERIFY EXISTING PAVEMENT AND CURB ELEVATIONS WHERE PROPOSED PAVEMENT AND CURB MEETS EXISTING PAVEMENT AND CURB. PAVING CONTRACTOR SHALL TAKE EXTRA CARE TO ENSURE 1% MINIMUM PAVEMENT SLOPE IS ACHIEVED AND SHALL CONTACT DESIGN ENGINEER PRIOR TO CONSTRUCTION IF A CONFLICT IS APPARENT.
  11. CONTRACTOR TO FIELD VERIFY EXISTING IRRIGATION LOCATIONS AND REMOVE OR RELOCATE EXISTING IRRIGATION AS NECESSARY TO FACILITATE CONSTRUCTION.
  12. REMOVE AND REPLACE ADDITIONAL PAVEMENT AS NECESSARY TO FACILITATE LIGHT POLE, SIGNAGE AND IRRIGATION CONSTRUCTION. COORDINATE REMOVALS WITH LIGHTING SIGNAGE AND IRRIGATION PLANS, IF ANY.
  13. CONTRACTOR TO ESTABLISH NEW BENCHMARKS, AS NECESSARY PRIOR TO DEMOLITION WORK.
  14. CONTRACTOR TO ADJUST RIM ELEVATIONS AND/OR HYDRANT FINISH GRADES AS NECESSARY.
  15. A PORTION OF THE DEMOLITION WORK IS LOCATED AWAY FROM THE SURVEYED AREA. CONTRACTOR TO CUT AND REMOVE PAVEMENT/CURB AS NECESSARY. BACKFILL WITH SUITABLE TOP SOIL AND SEDIMENTATION.
  16. PROPOSED SITE IMPROVEMENTS UTILIZE PORTIONS OF THE EXISTING BUILDING. CONTRACTOR TO COORDINATE WITH THE ARCHITECTURAL DRAWINGS AND FIELD VERIFY LOCATION OF FENCES, GATES, DOORS, DUMPSTER ENCLOSURE, ETC. PRIOR TO START OF CONSTRUCTION.

- NOTES:**
1. CONTRACTOR TO FIELD VERIFY LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.
  2. THE ELEVATION, LOCATION, AND LAYOUT OF EXISTING UNDERGROUND UTILITIES ARE SHOWN BASED ON A FIELD SURVEY AND AVAILABLE UTILITY COMPANY/CITY RECORDS. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY OF THE RECORDS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.
  3. TITLEWORK WAS NOT PROVIDED. EASEMENTS HAVE NOT BEEN SHOWN.

**LEGEND**

⊙ BENCHMARK	— EX. SIGN
□ EX. CATCH BASIN	⊙ EX. POST/BOLLARD
⊙ EX. STORM MANHOLE	⊙ EX. FLAGPOLE
⊙ EX. SANITARY MANHOLE	⊙ EX. MAILBOX
⊙ EX. CLEANOUT	⊙ EX. MONITOR WELL
⊙ EX. WATER GATE VALVE	⊙ EX. AIR CONDITIONER
⊙ EX. HYDRANT	— EX. SANITARY SEWER
⊙ EX. WATER VALVE	— EX. STORM SEWER
⊙ EX. WATER SHUTOFF	— EX. WATER MAIN
⊙ EX. GAS SHUTOFF	— EX. GAS MAIN
⊙ EX. GAS VENT	— EX. ELECTRIC
⊙ EX. HANGHOLE	— EX. FENCE
⊙ EX. PEDESTAL	⊙ EX. DECIDUOUS TREE
⊙ EX. TRANSFORMER	⊙ EX. CONIFEROUS TREE
⊙ EX. LIGHTPOLE	— EX. GUY ANCHOR
⊙ EX. UTILITY POLE	— EX. COMMUNICATION MANHOLE
⊙ EX. GUY ANCHOR	— EX. GENERIC MANHOLE
⊙ EX. COMMUNICATION MANHOLE	
⊙ EX. GENERIC MANHOLE	

APPROXIMATE AREA OF (CONTRACTOR TO COORDINATE WITH OWNER FOR EXACT LIMITS OF DEMOLITION WORK)

**TAX DESCRIPTION:**  
 SEC 8 12N 45E CORN AT SOUTH 1/4 COR TH N20°05'57"W 1927.04 FT S64°46'02"E 710.00 FT TO POB TH N25°13'58"E 145.60 FT TH N20°28'47"W 225.55 FT TH S27°03'19"W 24 FT TH N25°45'41"W 551.41 FT TH S27°03'19"E 632.01 FT TH S22°02'30"E 1250.29 FT TH N20°06'06"W 143.10 FT TH N25°14'17"E 169.26 FT TH N20°02'30"W 21.01 FT TH N27°03'19"W 225.17 FT TH S22°04'41"E 60 FT TH S13°16'24"W 81.74 FT TH S24°52'47"W 152.00 FT TH N26°00'06"W 53 FT TH N24°53'34"E 132.27 FT TH N11°43'57"E 70.42 FT TH N20°56'41"E 241.44 FT TH S27°03'19"W 246.83 FT TH S22°04'41"E 36.62 FT TH S25°13'58"W 145.60 FT TH N24°46'02"W 21 FT TO POB PAK F 12.74 AC

**BENCHMARKS:**  
 BM#1 - ARROW ON HYDRANT, 8108' SOUTH-SOUTHEAST OF THE SOUTHEAST CORNER OF BUILDING ELEVATION 1008.50 NAVD88 (GPS DERIVED)  
 BM#2 - ARROW ON HYDRANT, 831' SOUTH OF THE SOUTHWEST CORNER OF BUILDING ELEVATION 1008.11 NAVD88 (GPS DERIVED)

**NOTICE:**  
 CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

**NOTE:**  
 THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.

ASHMARK CONSTRUCTION, LLC  
 CLIENT: **FAMILY FARM AND HOME - 3685 E. GRAND RIVER AVE.**  
 SECTION: 5 E  
 TOWNSHIP: 5  
 COUNTY: LIVINGSTON COUNTY MICHIGAN

REVISIONS:  
 2018-04-09 REVISED PER CLIENT  
 2018-04-10 REVISED PER CLIENT  
 2018-04-27 TOWNSHIP BOARD

BENCHMARKS:  
 DATE: 2018-01-23  
 DRAWN BY: TC  
 CHECKED BY: TC/SD

SCALE: HOR 1"=20' FT  
 VER 1"=5' FT

2

17-516

COMMERCIAL SURVEYING SITE ENGINEERING TOPOGRAPHIC SURVEYS INDUSTRIAL SURVEYS MULTIFAMILY CONSTRUCTION LAYOUT

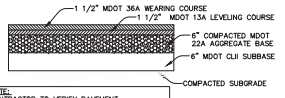
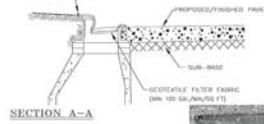
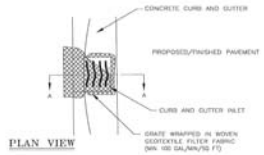
RESIDENTIAL SURVEYING SITE ENGINEERING TOPOGRAPHIC SURVEYS INDUSTRIAL SURVEYS MULTIFAMILY CONSTRUCTION LAYOUT

ALPINE ENGINEERING, INC.  
 ONE, THUNDER & LANE DRIVERS  
 46982 WEST ROAD SUITE 119  
 NOV, MICHIGAN 49377  
 (248) 262-2750 (TOLL FREE) (248) 292-2750 (FAX) WWW.ALPINE-INC.NET

811 Know what's below Call before you dig.

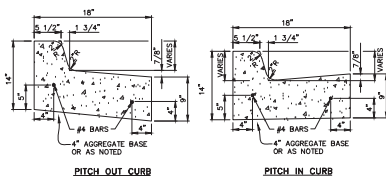
**GEOTEXTILE FABRIC CURB AND GUTTER INLET FILTER**  
STANDARD NON-WINTER USE

NOT FOR USE IN WINTER MONTHS OR IN AREAS THAT MAY BECOME A SAFETY HAZARD DUE TO FLOODING OR FREEZING



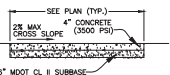
NOTE: CONTRACTOR TO VERIFY PAVEMENT CROSS-SECTION WITH GEOTECHNICAL ENGINEER AND OWNER PRIOR TO START OF CONSTRUCTION.

**BITUMINOUS PAVEMENT CROSS-SECTION**  
NOT TO SCALE



NOTE: CONTRACTOR TO FIELD VERIFY CURB CROSS-SECTION AGAINST EXISTING PRIOR TO START OF CONSTRUCTION.

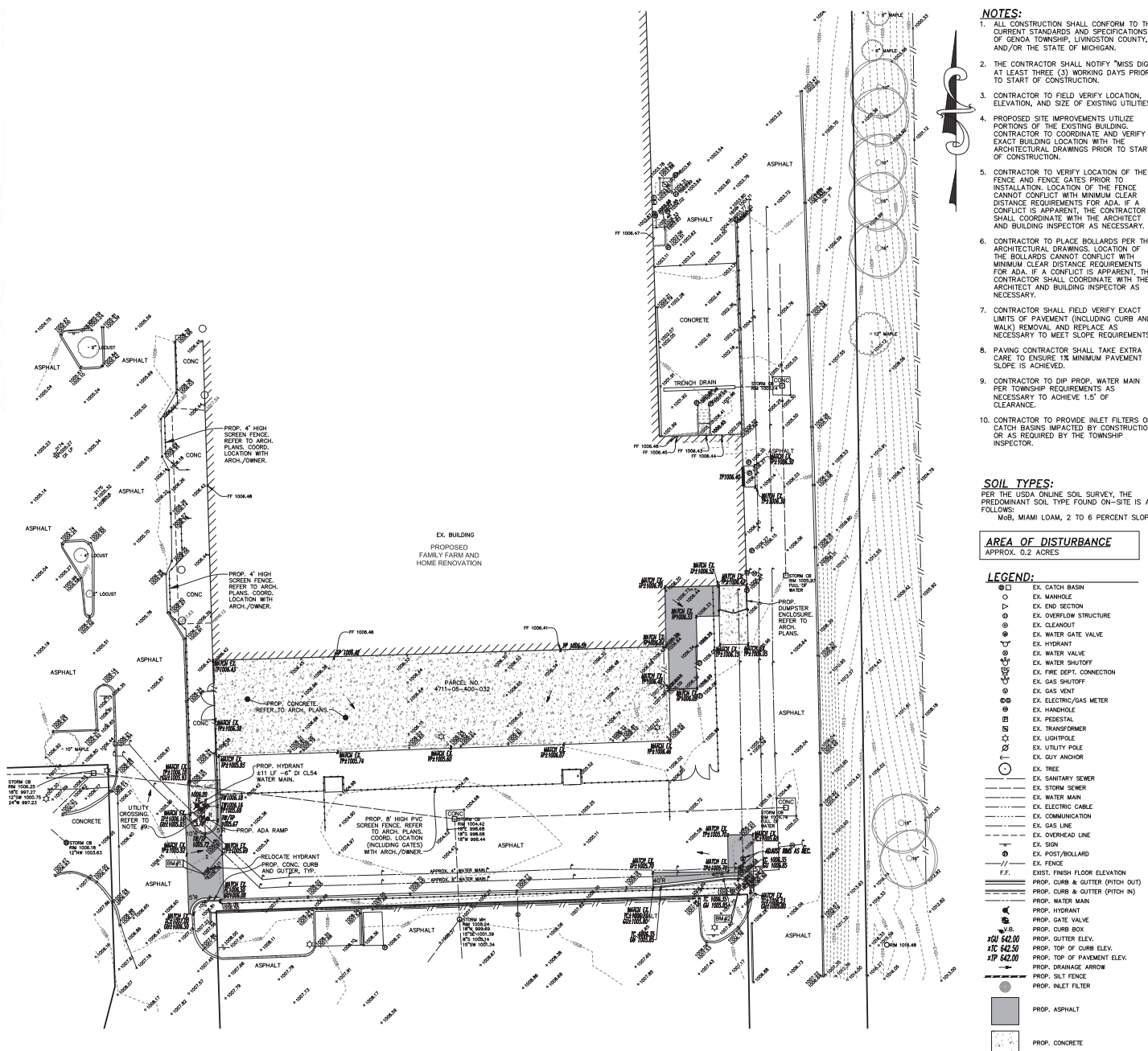
**CONCRETE CURB & GUTTER - ON-SITE**  
NOT TO SCALE



**CONCRETE SIDEWALK DETAIL**  
NOT TO SCALE

**NOTICE:**  
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

**NOTE:**  
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.



- NOTES:**
1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF GENOA TOWNSHIP, LIVINGSTON COUNTY, AND/OR THE STATE OF MICHIGAN.
  2. THE CONTRACTOR SHALL NOTIFY "MISS DIG" AT LEAST THREE (3) WORKING DAYS PRIOR TO START OF CONSTRUCTION.
  3. CONTRACTOR TO FIELD VERIFY LOCATION, ELEVATION, AND SIZE OF EXISTING UTILITIES.
  4. PROPOSED SITE IMPROVEMENTS UTILIZE PORTIONS OF THE EXISTING BUILDING. CONTRACTOR TO COORDINATE AND VERIFY EXACT BUILDING LOCATION WITH THE ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION.
  5. CONTRACTOR TO VERIFY LOCATION OF THE FENCE AND FENCE GATES PRIOR TO INSTALLATION. LOCATION OF THE FENCE CANNOT CONFLICT WITH MINIMUM CLEAR DISTANCE REQUIREMENTS FOR ADA. IF A CONFLICT IS APPARENT, THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT AND BUILDING INSPECTOR AS NECESSARY.
  6. CONTRACTOR TO PLACE BOLLARDS PER THE ARCHITECTURAL DRAWINGS. LOCATION OF THE BOLLARDS CANNOT CONFLICT WITH MINIMUM CLEAR DISTANCE REQUIREMENTS FOR ADA. IF A CONFLICT IS APPARENT, THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT AND BUILDING INSPECTOR AS NECESSARY.
  7. CONTRACTOR SHALL FIELD VERIFY EXACT LIMITS OF PAVEMENT (INCLUDING CURB AND WALK) REMOVAL AND REPLACE AS NECESSARY TO MEET SLOPE REQUIREMENTS.
  8. PAVING CONTRACTOR SHALL TAKE EXTRA CARE TO ENSURE 1% MINIMUM PAVEMENT SLOPE IS ACHIEVED.
  9. CONTRACTOR TO DIP PROP. WATER MAIN PER TOWNSHIP REQUIREMENTS AS NECESSARY TO ACHIEVE 1.5' OF CLEARANCE.
  10. CONTRACTOR TO PROVIDE INLET FILTERS ON CATCH BASINS IMPACTED BY CONSTRUCTION OR AS REQUIRED BY THE TOWNSHIP INSPECTOR.

**SOIL TYPES:**  
PER THE USDA ONLINE SOIL SURVEY, THE PREDOMINANT SOIL TYPE FOUND ON-SITE IS AS FOLLOWS:  
MoB, MIAMI LOAM, 2 TO 6 PERCENT SLOPES

**AREA OF DISTURBANCE**  
APPROX. 0.2 ACRES

**LEGEND:**

- EX. CATCH BASIN
- EX. MANHOLE
- △ EX. END SECTION
- EX. OVERFLOW STRUCTURE
- EX. CLEANOUT
- EX. WATER GATE VALVE
- EX. HYDRANT
- EX. WATER VALVE
- EX. WATER SHUTOFF
- EX. FIRE DEPT. CONNECTION
- EX. GAS SHUTOFF
- EX. GAS VENT
- EX. ELECTRIC/GAS METER
- EX. HANDHOLE
- EX. FEDESTAL
- EX. TRANSFORMER
- EX. LIGHTPOLE
- EX. UTILITY POLE
- EX. GUY AND/OR
- EX. TREE
- EX. SANITARY SEWER
- EX. STORM SEWER
- EX. WATER MAIN
- EX. ELECTRIC CABLE
- EX. COMMUNICATION
- EX. GAS LINE
- EX. OVERHEAD LINE
- EX. SIGN
- EX. POST/BOLLARD
- EX. FENCE
- EX. FINISH FLOOR ELEVATION
- PROP. CURB & GUTTER (PITCH OUT)
- PROP. CURB & GUTTER (PITCH IN)
- PROP. WATER MAIN
- PROP. HYDRANT
- PROP. GATE VALVE
- PROP. CURB BOX
- PROP. GUTTER ELEV.
- PROP. TOP OF CURB ELEV.
- PROP. TOP OF PAVEMENT ELEV.
- PROP. DRAINAGE ARROW
- PROP. SILT FENCE
- PROP. INLET FILTER
- PROP. ASPHALT
- PROP. CONCRETE

CLIENT: ASHMARK CONSTRUCTION, LLC

ENGINEERING PLAN

FAMILY FARM AND HOME - 3685 E. GRAND RIVER AVE.  
SECTION: 5 E  
TOWNSHIP: 5  
LIVINGSTON COUNTY MICHIGAN

REVISIONS:

2018-04-09	REVISED PER CLIENT
2018-04-10	REVISED PER CLIENT
2018-04-27	TOWNSHIP BOARD

DATE: 2018-01-23

DRAWN BY: TC

CHECKED BY: TC/SD

SCALE: HOR 1"=20' FT. VER 1"=4' FT.

3

17-516

COMMERCIAL SURVEYING SITE ENGINEERING TOPOGRAPHIC SURVEYS INDUSTRIAL SURVEYS MULTI-FAMILY CONSTRUCTION LAYOUT

RESIDENTIAL SURVEYING SITE ENGINEERING TOPOGRAPHIC SURVEYS INDUSTRIAL SURVEYS MULTI-FAMILY CONSTRUCTION LAYOUT

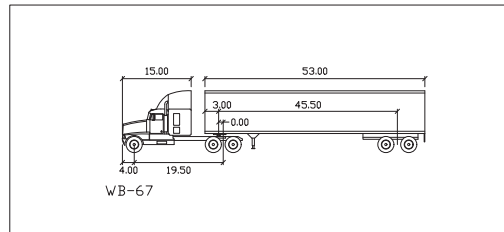
ALPINE ENGINEERING, INC.  
ONE, BUSINESS & LAND SERVICES

4682 W. HEE ROAD  
SATE L19  
NOV, MICHIGAN 48377

811  
Know what's below  
Call before you dig.



**TRUCK CIRCULATION PLANS:**  
SCALE: 1" = 60 FEET



**NOTICE:**  
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

**NOTE:**  
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.

- NOTES:**
1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF GENOA TOWNSHIP.
  2. THE CONTRACTOR SHALL NOTIFY "MISS DIG" AT LEAST THREE (3) WORKING DAYS PRIOR TO START OF CONSTRUCTION.
  3. CONTRACTOR TO FIELD VERIFY LOCATION, ELEVATION, AND SIZE OF EXISTING UTILITIES.
  4. TRUCK/GAR TURNING MOVEMENTS WERE CREATED WITH AUTOTURN TO SOFTWARE. ACTUAL TURNING MOVEMENTS MAY DIFFER UNDER REAL WORLD CONDITIONS.

COMMERCIAL  
SURVEYING  
SITE ENGINEERING  
INDUSTRIAL & MULTIFAMILY  
CONSTRUCTION LAYOUT

RESIDENTIAL  
SURVEYING  
BOUNDARY SURVEYS  
TOPOGRAPHIC SURVEYS  
MULTIFAMILY  
CONSTRUCTION LAYOUT

ALPINE  
ENGINEERING, INC.  
ONE, PARKWAY & LIND STREETS  
HOWLAND, MICHIGAN 49377

46952 WEST ROAD  
SUITE 109  
HOWLAND, MICHIGAN 49377

(248) 225-2751 (BUS)  
(248) 225-2750 (CELL)  
WWW.ALPINE-INC.NET

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

CLIENT: ASHMARK CONSTRUCTION, LLC

**TRUCK CIRCULATION PLAN**

FAMILY FARM AND HOME - 3685 E. GRAND RIVER AVE.  
SECTION: 5 E  
TOWNSHIP: 5  
COUNTY: LIVINGSTON COUNTY  
MICHIGAN

REVISED:  
2018-04-09 REVISED PER CLIENT  
2018-04-10 REVISED PER CLIENT  
2018-04-27 TOWNSHIP BOARD

DATE: 2018-01-23  
DRAWN BY: TG  
CHECKED BY: TG/SD

SCALE: HORIZONTAL: 1" = 60 FT  
VERTICAL: 1" = 10 FT

4

17-516

**OUTLET CALCULATIONS**

**OUTLET SIZING FOR BANKFULL FLOOD**  
RELEASE BANKFULL FLOOD VOLUME OVER A PERIOD NO MORE THAN 40 HOURS.

CALCULATE THE AVERAGE RELEASE RATE WHICH WILL SATISFY THIS REQUIREMENT:  
 $Q_{outlet} = V_{100} / 144,000 = 1.069 \text{ cfs}$

CALCULATE AVERAGE HEAD:  
 $h_{avg} = 0.667 * (Z_{in} - Z_{out}) = 0.667 * (991.9 - 988.0) = 2.59 \text{ ft}$

DETERMINE THE ORIFICE AREA NEEDED BASED ON THE ORIFICE EQUATION:  
 $A = (Q_{outlet} / (0.62 * \sqrt{2 * 32.2 * h_{avg}})) = 0.136 \text{ ft}^2$

DETERMINE # OF ORIFI REQUIRED BASED ON AN ORIFICE DIAMETER OF 1" A<sub>o</sub> = 0.00545 ft<sup>2</sup>

REQUIRED # OF ORIFI: = 25

CALCULATE ACTUAL AVERAGE RELEASE RATE THROUGH THE ORIFI:  
 $Q_{outlet} = 0.62 * A * \sqrt{2 * 32.2 * h_{avg}} = 1.063 \text{ cfs}$

CALCULATE THE ACTUAL HOLDING TIME FOR THE BANKFULL VOLUME:  
 $T_h = (V_{100} / (Q_{outlet} * 3600)) = 40.0 \text{ hours, approximately } 40.0 \text{ hours}$

**OUTLET SIZING FOR 100 YEAR FLOOD**  
PER THE DETENTION BASIN VOLUME CALCULATIONS, THE MAXIMUM ALLOWABLE RELEASE RATE AT THE DESIGN WATER LEVEL OF Z<sub>out</sub> IS: = 5.30 cfs

CALCULATE MAXIMUM HEAD USING UPSTREAM CROWN ELEV OF PIPE AT Z<sub>2</sub>, ASSUMING PIPE IS DESIGNED TO FLOW FULL:

ASSUME RISER OUTLET PIPE DIAMETER = 12 inch  
 $Z_{top} = 988.0 + 0.5 = 988.5 \text{ ft}$   
 $h_{max} = (Z_{top} - Z_{out}) = 4.55 \text{ ft}$   
 $A = (Q_{max}) / (0.62 * \sqrt{2 * 32.2 * h_{max}}) = 0.499 \text{ ft}^2$

DETERMINE DIAMETER OF RISER OUTLET PIPE: PROVIDE A 10" DIA HOLE IN THE END CAP ON THE VERTICAL RUN OF THE OUTLET TEE, A<sub>o</sub> = 0.5454 ft<sup>2</sup>

CALCULATE ACTUAL AVERAGE RELEASE RATE:  
 $Q_{max} = 0.62 * A * \sqrt{2 * 32.2 * h_{max}} = 5.79 \text{ cfs} > 5.3 \text{ cfs}$  but within 10% ok

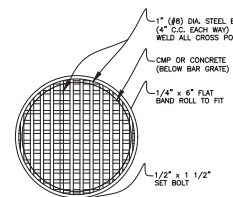
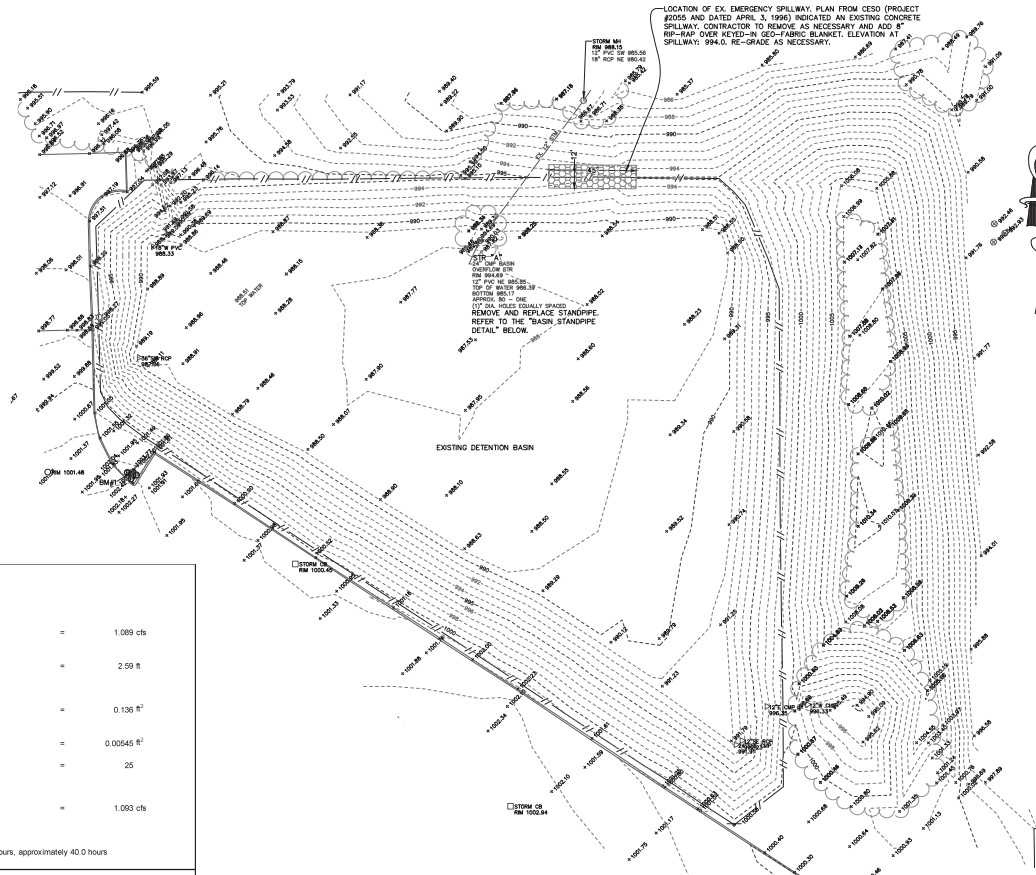
DETERMINE THE RISER OUTLET PIPE SLOPE MANNINGS CONSTANT (n) = 0.012 PVC  
 PIPE DIAMETER = 12 inch  
 $R_{hydraulic} = 0.250 \text{ ft}$   
 $A_{hydraulic} = 0.7854 \text{ ft}^2$   
 $Slope (ft/ft) = ((Q * n) / (1.486 * A * R^{2/3}))^2 = 1.90 \%$

CALCULATE VELOCITY AT FULL PIPE FLOW CONDITION  $V = Q / A = 6.8 \text{ ft/s}$

**OVERLAND OVERFLOW SPILLWAY**  
(SIZE SECONDARY OVERFLOW TO ACCOMMODATE 10-YEAR STORM FLOW IN THE EVENT THAT THE OVERFLOW STR GETS CLOGGED)

ASSUME HEAD = 0.5 ft  
 ASSUME INTENSITY, I = 151.6 (1+19.9) T = 35 MIN  
 ASSUMED 10-YEAR FLOW = C<sub>o</sub>K<sub>a</sub>I = 0.73x3.04x26.5  
 WIER LENGTH = 43.0 ft

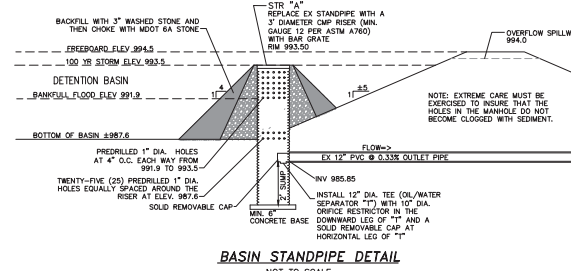
CALCULATE CAPACITY USING WEIR EQUATION  $Q = 3.367 * L * H^{3/2} = 53.57 \text{ cfs}$



**BAR GRATE DETAIL**  
NOT TO SCALE

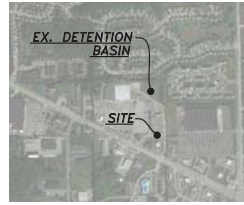


**OIL/WATER SEPARATOR "T"**  
NOT TO SCALE  
(SEE BASIN STANDPIPE DETAIL FOR LOCATION)



**BASIN STANDPIPE DETAIL**  
NOT TO SCALE

- NOTES:**
1. ALL WORK TO CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE TOWNSHIP AND/OR COUNTY.
  2. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.
  3. CLEAN OUT DEBRIS AS NECESSARY.
  4. CONTRACTOR TO INSTALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AS NECESSARY. REFER TO THE COUNTY DETAILS.
  5. PERMANENT SOIL EROSION CONTROL MEASURES (SEED AND MULCH) FOR AREAS IMPACTED BY CONSTRUCTION WITHIN 5 CALENDAR DAYS AFTER FINAL GRADING.
  6. TITLEWORK WAS NOT PROVIDED. EASEMENTS HAVE NOT BEEN SHOWN. A BOUNDARY SURVEY WAS NOT PERFORMED.



**LOCATION MAP:**  
NOT TO SCALE

**PROPOSED RUN-OFF COEFFICIENT (C)**

LAND USE	AREA (A) (acres)	RUNOFF COEFFICIENT (C)
PAVEMENT/BLDG	19.88	0.90
GRASS	6.62	0.20
AREA	26.50	

**BENCHMARKS:**

BM#1: prop. Impervious area percentage = 75.0%  
 ARROW ON HYDRANT  
 ELEV. 1003.81  
 C<sub>o</sub>SUM (A x C) / A = (19.884 x 0.90) + (6.618 x 0.20) / 26.500 = 0.73

BM#2: STORM CB RIM  
 ELEV. 999.22

**REQUIRED VOLUME**

DESIGN VARIABLES:

Tributary Area (A)	=	26.50 acres
Weighted C Coefficient	=	0.73
Design Constant (K <sub>1</sub> ) = A'C	=	19.21
Allowable Outflow Rate (Q <sub>2</sub> )	=	5.300 cfs

1	2	3	4	5	6	7
Duration (Minutes)	Duration (Seconds)	Intensity (100 yr Storm) (in/hr)	Col. #2 x Col. #3 Inches	Inflow Volume = Col. 4 x K <sub>1</sub> (Cu. Ft)	Outflow Volume Col. 2 x Q <sub>2</sub> (Cu. Ft)	Storage Volume Col. 5 - Col. 6 (Cu. Ft)
5	300	9.17	2.751	52.654	1.560	51.264
10	600	7.86	4.716	90.609	3.180	87.426
15	900	6.88	6.182	116.904	4.770	114.194
20	1,200	6.11	7.332	140.866	6.360	134.505
30	1,800	5.00	9.000	172.913	9.540	163.373
60	3,600	3.34	11.584	224.085	19.080	205.015
90	5,400	2.39	12.906	247.957	28.620	219.337
120	7,200	1.90	13.680	262.827	38.160	224.667
180	10,800	1.34	14.472	278.043	57.240	220.803
240	14,400	1.04	14.976	287.726	76.320	211.406
300	18,000	0.85	15.300	293.951	95.400	198.551
360	21,600	0.71	15.336	294.643	114.480	180.163

**STORAGE VOLUME REQUIRED**

TOTAL = V<sub>100</sub> = 224,667 cf

**BANKFULL VOLUME REQUIRED**

TOTAL = V<sub>100</sub> = 8,160 x Acreage x the relative impervious factor, C = 156,774 cf

**FIRST FLUSH VOLUME REQUIRED**

TOTAL = V<sub>100</sub> = 1,815 x Acreage x the relative impervious factor, C = 34,871 cf

**PROVIDED VOLUME**

100-YEAR BASIN VOLUME PROVIDED

ELEVATION (ft)	AREA (ft <sup>2</sup> )	AVG. AREA (ft <sup>2</sup> )	HEIGHT (ft)	CUMULATIVE VOLUME (cf)
988.0	6,500			
989.0	35,531	21,219	1.0	21,219
990.0	45,119	40,325	1.0	61,544
991.0	50,783	47,951	1.0	109,495
992.0	55,481	53,132	1.0	162,627
993.0	59,304	57,303	1.0	220,020
994.0	63,197	61,251	1.0	281,271
995.0	FREEBOARD			

**STORAGE ELEVATIONS DETENTION BASIN**

V <sub>100</sub> = 34,871 cf is provided at Z <sub>in</sub> = 988.0
V <sub>100</sub> = 156,774 cf is provided at Z <sub>in</sub> = 989.9
V <sub>100</sub> = 224,667 cf is provided at Z <sub>in</sub> = 993.1 USE 993.5
AND THEREFORE 293,707 cf is provided at Z <sub>in</sub> = 993.5

**NOTICE:**

CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK OF PERSONS ENGAGED IN THE WORK OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

**NOTE:**

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.

COMMERCIAL SURVEYING  
 BOUNDARY SURVEYS  
 TOPOGRAPHIC SURVEYS  
 INDUSTRIAL SURVEYS  
 MULTIFAMILY SURVEYS  
 CONSTRUCTION LAYOUT

RESIDENTIAL SURVEYING  
 BOUNDARY SURVEYS  
 MULTIFAMILY SURVEYS  
 CONSTRUCTION LAYOUT

ALPINE ENGINEERING, INC.  
 Civil, Structural & Land Services

4682 WEST ROAD  
 SUITE 110  
 NORTON, MICHIGAN 48777  
 (517) 255-7765 (BUS)  
 (517) 255-7765 (FAX)  
 (248) 925-3765 (CELL)  
 WWW.ALPINE-INC.NET

ASHMARK CONSTRUCTION, LLC

REVISED  
 2018-04-10 REVISED PER CLIENT  
 2018-04-27 TOWNSHIP BOARD

DATE: 2018-04-02  
 DRAWN BY: SD  
 CHECKED BY: TG/SD

CH#: 243  
 CDR: JRF

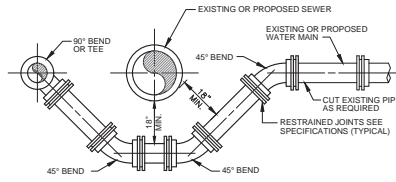
SCALE: HOR 1" = 30' FT  
 VER 1" = 10' FT

5

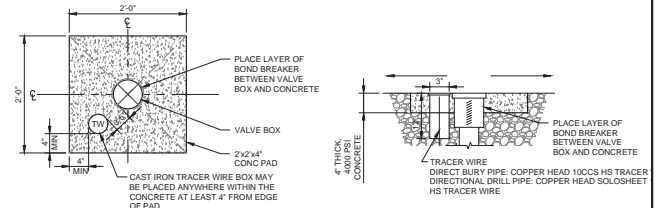
17-516

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



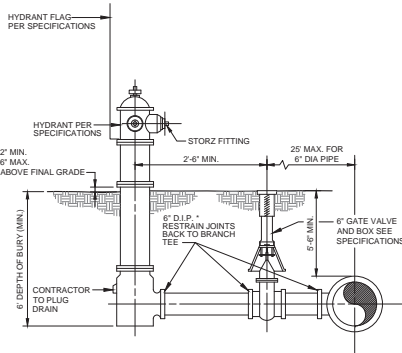
WATER MAIN UTILITY OFFSET



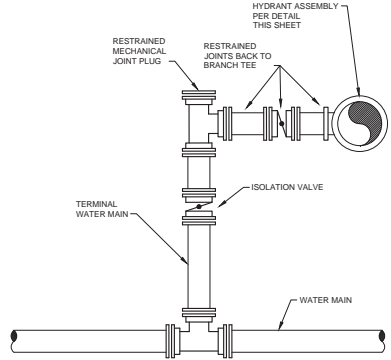
- NOTE: ALL BOXES & ADJOINING T/W BOXES SHALL BE ENCASED IN A CONG. PAD UNLESS OTHERWISE DETERMINED BY MHOG.
- NOTE:
- TRACER WIRE BOXES LOCATED WITHOUT A VALVE BOX ONLY REQUIRE AN 18" X 18" CONCRETE PAD.
  - TRACER WIRE BOX SHALL HAVE A LOCKING LID WITH STANDARD AWWA PENTAGON KEY.
  - TRACER WIRE BOX SHALL BE COPPER HEAD RIB41TP IN ASPHALT INSTALLATIONS AND CD141TP FOR ALL OTHER INSTALLATIONS.

PLAN  
VALVE/TRACER WIRE BOX IN CONCRETE DETAIL  
NO SCALE

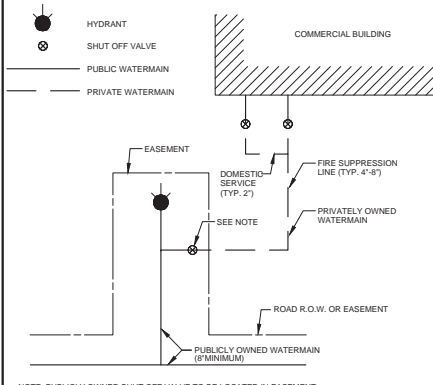
SECTION



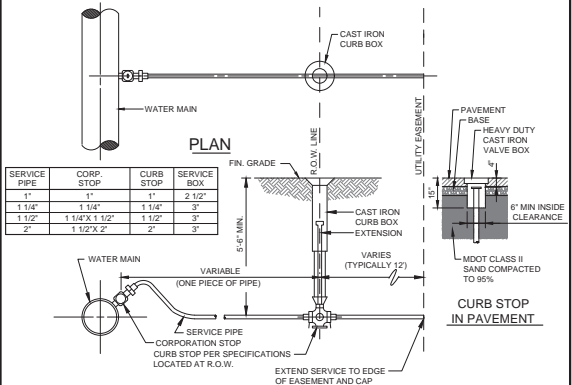
FIRE HYDRANT ASSEMBLY



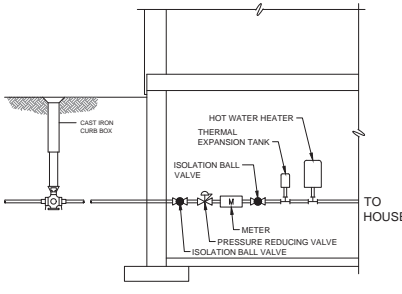
TERMINAL HYDRANT DETAIL



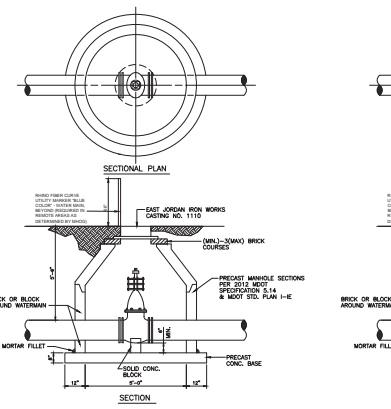
COMMERCIAL BUILDING WATER SERVICE LAYOUT



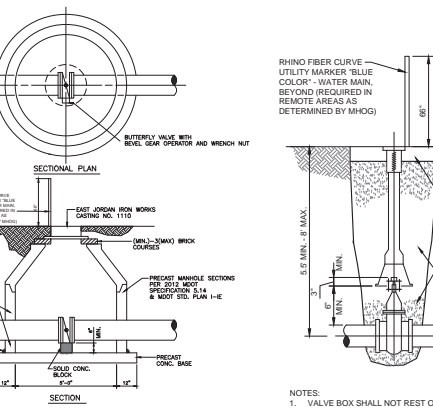
SECTION  
WATER SERVICE LATERAL



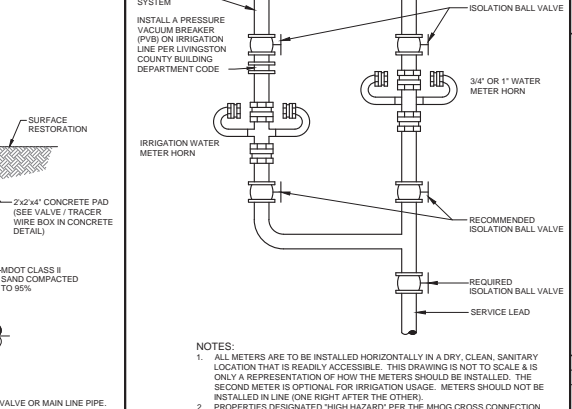
PRIVATE RESIDENCE  
PRESSURE REDUCING VALVE (PRV)



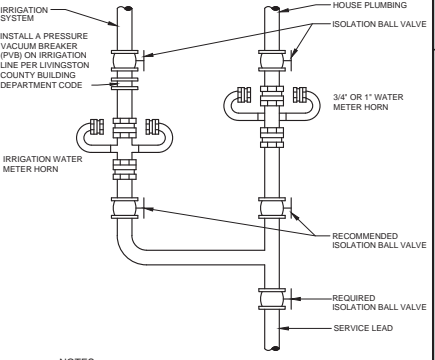
GATE VALVE AND WELL



BUTTERFLY VALVE AND WELL



GATE VALVE AND BOX



- NOTES:
- 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 IRIGATION USAGE. METERS SHOULD NOT BE INSTALLED IN LINE (ONE RIGHT AFTER THE OTHER).
  - 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

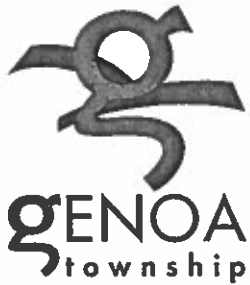


MARION HOWELL OCEOLA GENOA  
Sewer and Water Authority

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

STANDARD DETAILS

# **Board Correspondence**



April 17, 2018

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

State of Michigan  
Department of Environmental Quality  
Water Resources Division  
Lansing District Office  
525 West Allegan Street, 1<sup>st</sup> Floor, South Tower  
Lansing, MI 48933

Site Name: 47-645 Lucy Road- Howell  
Submission Number: HN5-KZWY-TSV8F  
Date: April 16, 2018

To Whom It May Concern;

Genoa Charter Township is in receipt of your recent correspondence regarding the above referenced site. While this property is no longer in our jurisdiction due to a land transfer agreement with the City of Howell, we do have concerns with regard to a permit being issued to this petitioner. Our Township Planner, Kelly VanMarter, has reviewed this application. It appears that the petitioner desires an easy access to this site while going around the seasonal weight restriction along Lucy Road. Your permit would put the existing wetlands at additional risk while this property has already suffered contamination. An alternate solution to this request might be an improvement to Lucy Road.

Your response and final determination will be appreciated.

Sincerely,

Paulette A. Skolarus, Clerk  
Genoa Charter Township

CC: Kelly VanMarter  
City of Howell, Clerk  
Genoa Township Board

**SUPERVISOR**

Bill Rogers

**CLERK**

Paulette A. Skolarus

**TREASURER**

Robin L. Hunt

**TRUSTEES**

Jean W. Ledford

H. James Mortensen

Terry Croft

Diana Lowe

**MANAGER**

Michael C. Archinal



**State of Michigan  
Department of Environmental Quality**

**Water Resources Division  
Lansing District Office  
525 West Allegan Street, 1st Floor, South Tower  
Lansing, Michigan 48933  
517-284-6665**

**Site Name: 47-645 Lucy Road-Howell  
Submission Number: HN5-KZWY-TSV8F  
Date: April 16, 2018**

**PUBLIC NOTICE**

Mr. Vern Brockway, 645 Lucy Road, Howell, Michigan 48843, has applied to this office for a permit under authority of Part 301, Inland Lakes and Streams, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The applicant proposes to place approximately 40 cubic yards of clean fill in 286 square feet of wetland, and install three (3) 24-inch diameter, 32-foot long corrugated metal pipe culverts, buried 4.8 inches below the bed, for the purpose of constructing a 32-foot wide access road through 8.5 feet of wetland. Project will impact a total of 0.007 acre of wetland. The project is located at 645 Lucy Road, in T02N, R05E, Section 06, Genoa Township, Livingston County, Michigan.

**THIS NOTICE IS NOT A PERMIT**

The proposed project may also be regulated by one or more additional parts of the NREPA that are administered by the Department of Environmental Quality (DEQ), Water Resources Division (WRD). The requirements of all applicable parts are considered in determining if a permit can be issued. When a permit application is received requesting authorization to work in or over the inland waters of the State of Michigan, pursuant to Part 303, of the NREPA, the NREPA provides that the DEQ submit copies for review to the department of public health; the city, village, or township and county where the project is to be located; the local soil conservation district; and any local watershed council organized under Part 311, Local River Management, of the NREPA. Additional notification is provided to certain persons as required by statute or determined by the DEQ.

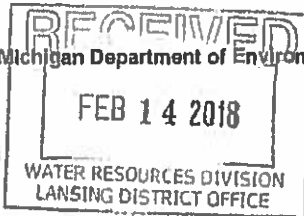
Those persons wanting to make comments on the proposed project shall furnish this office with their written comments no later than 20 days from the date of this notice. Written comments will be made part of the record and should reference the above application number. Objections must be factual, specific, and fully describe the reasons upon which any objection is founded. Unless a written request is filed with the DEQ within the 20-day public comment period, the DEQ may make a decision on the application without a public hearing. The determination as to whether a permit will be issued or a public hearing held will be based on an evaluation of all relevant factors, including the public comments received and the effect of the proposed work on the public trust or interest, including navigation, fish, wildlife, and pollution. The specific permit decision criteria can be found in the parts of the NREPA applicable to this application and listed above. Copies of these parts of the NREPA are available on the public notice Web site. Public comments received will also be considered.

Public Notice: Mr. Vern Brockway  
Site Name: 47-645 Lucy Road-Howell  
Submission Number: HN5-KZWY-TSV8F  
Page 2  
April 16, 2018

The entire copy of the public notice package may be viewed at the WRD's district office listed on the top of this public notice or online at:  
<https://miwaters.deq.state.mi.us/miwaters/external/publicnotice/search>. To access the public notice page online, search for the public notice by location or applicant name, and view by clicking on the "Documents" tab. Comments may be sent electronically by clicking on the "Add Comment" tab. A hard copy of the public notice may be requested by calling the above number.

cc:

Mr. Vern Brockway, Applicant  
Ms. Julie Oakes, DNR, Wildlife Division  
Mr. Jim Baker, DNR, Fisheries Division  
Livingston County Clerk  
Genoa Township Clerk  
Livingston County Drain Commissioner  
Livingston County Health Department  
Livingston County Conservation District  
Local Postmaster  
Livingston County CEA  
Mr. Daniel Brockway  
Mr. David Miechiels  
Lucy Road Resources II, LLC  
AMICO Holdings, LLC  
Livingston County Clerks Office  
Michigan Department of Transportation  
Ms. Chris Kunkle, BWA Consulting



AGENCY USE	Previous USACE File Number
	USACE File Number

Date Received

DEQ File Number <b>HN5-KZWY-TSV8F</b>
Fee received \$

Validate that all parts of this checklist are submitted with the application package. Fill out application and additional pages as needed.

All items in Sections 1 through 9 are completed.

Project-specific Sections 10 through 20 are completed.

Dimensions, volumes, and calculations are provided for all impact areas.

All information contained in the headings for the appropriate Sections (1-20) are addressed, and identified attachments (➔) are included.

Map, site plan(s), cross sections; one set must be black and white on 8 1/2 by 11 inch paper; photographs.

Application fee is attached.

**1 Project Location Information** For Latitude, Longitude, and TRS info anywhere in Michigan see [www.mcql.state.mi.us/wetlands/](http://www.mcql.state.mi.us/wetlands/)

Project Address (road, if no street address) <b>645 Lucy Rd</b>	Zip Code <b>48843</b>	Municipality (Township/Village/City) <b>Howell</b>	County <b>Livingston</b>
Property Tax Identification Number(s) <b>4717-06-100-005, 4717-06-100-002</b>	Latitude <b>42.58840729700091</b> N	Township/Range/Section (TRS) T <b>2N</b> N or S; R <b>5E</b> E or W;	
Subdivision/Plat and Lot Number <b>NA</b>	Longitude <b>-83.91403920646553</b> W	Sec# OR Private Claim #	

**2 Applicant and Agent Information**

Owner/Applicant (individual or corporate name) <b>Lucy Road Resources LLC c/o Vern Brockway</b>	Agent/Contractor (firm name and contact person) <b>Chris Kunkle, BWA Consulting</b>
Mailing Address <b>645 Lucy Road</b>	Mailing Address <b>10110 Tennyson Dr.</b>
City <b>Howell</b> State <b>MI</b> Zip Code <b>48843</b>	City <b>Plymouth</b> State <b>MI</b> Zip Code <b>48170</b>
Contact Phone Number <b>517-546-3820</b> Fax	Contact Phone Number <b>248-622-0014</b> Fax
Email <b>regalrecycling@gmail.com</b>	E-mail <b>ckunkle@bwawetlands.com</b>

No  Yes Is the applicant the sole owner of all property on which this project is to be constructed and all property involved or impacted by this project? ➔ If no, attach letter(s) of authorization from all property owners including the owner of the disposal site.

Property Owner's Name (If different from applicant) <b>Vern Brockway</b>	Mailing Address
Contact Phone Number <b>517-546-3820</b>	City State Zip Code

**3 Project Description**

Project Name <b>Lucy Road Wetland Crossing</b>	Preapplication File Number <b>NA - - -P</b>
Name of Water body <b>unnamed wetland</b>	Date project staked/flagged <b>6.9.17</b>

The proposed project is on, within, or involves (check all that apply) <input type="checkbox"/> an inland lake (5 acres or more) <input type="checkbox"/> a Great Lake or Section 10 Waters <input type="checkbox"/> a pond (less than 5 acres) <input checked="" type="checkbox"/> a wetland <input type="checkbox"/> a stream, river, ditch or drain <input type="checkbox"/> a 100-year floodplain <input type="checkbox"/> a legally established County Drain <input type="checkbox"/> a dam Date Drain was established <input type="checkbox"/> a designated high risk erosion area <input type="checkbox"/> a channel/canal <input type="checkbox"/> a designated critical dune area <input type="checkbox"/> 500 feet of an existing water body <input type="checkbox"/> a designated environmental area	Project Use <input checked="" type="checkbox"/> private <input checked="" type="checkbox"/> commercial <input type="checkbox"/> public/government <input type="checkbox"/> project is receiving federal/state transportation funds <input type="checkbox"/> Wetland Restoration <input type="checkbox"/> other
--	--

Indicate the type of permit being applied for:  General Permit  Minor Project  Individual (All other projects.) ➔ See Appendix C.

Written Summary of All Proposed Activities  
*Place approximately 40 cubic yards of fill within a 0.007 acre (288 SF) wetland area to construct a truck access road between two parcels of land owned by applicant. (The proposed crossing total dimensions crossing uplands and wetlands are approximately 28' wide x 90' long by ave. 3.75' deep)*

*The area to be impacted is a shallow linear emergent wetland with scrub-shrub fringe. Dominant wetland vegetation includes reed canary grass (Phalaris arundinacea), broadleaf cattail (Typha latifolia), black willow (Salix nigra), and orange jewelweed (Impatiens capensis). Wetland hydrology is indicated by shallow standing water and soils saturated at the surface. Hydric soils are present within the wetland boundaries. The upland vegetation includes black locust (Robinia pseudoacacia), box elder (Acer negundo), and amur*



honeysuckle (*Lonicera maackii*).

**Construction Sequence and Methods** *Sequence of construction will be: install soil erosion control measures, install 3 culverts, install bunker block retaining walls, fill roadbed between retaining walls, install crushed limestone road bed, finish grade areas adjacent to road crossing, seed and plant to stabilize the site, maintain all temporary and permanent control measures daily and as needed based on site inspections, notify the permitting agency for a final inspection when the project is completed*



**4 Project Purpose, Use and Alternatives** *Attach additional sheets as necessary.*

Describe the purpose of the project and its intended use; include any new development or expansion of an existing land use.  
*Construct an access road crossing a wetland area to provide truck access between 2 parcels of land owned by the applicant. The access road is necessary to allow for expansion of the existing recycling facility onto land immediately adjacent to it but separated by a wetland. Internal access between the 2 properties is necessary as there is no other viable truck access between them.*

Describe the alternatives considered to avoid or minimize resource impacts. Include factors such as, but not limited to, alternative locations, project layout and design, and construction technologies. For utility crossings include alternative routes and construction methods.  
*The proposed wetland truck access crossing is necessary to provide access between two parcels northern and southern owned by the applicant that are separated by a linear wetland. The southern parcel supports a recycling facility that has been active for over 50 years. The adjacent northern parcel was purchased by the applicant specifically to meet expansion needs of the existing recycling facility. The applicant needs an internal truck access road for transporting scrap metal materials between the two parcels for processing and storage. The expanded recycling operations will involve the frequent movement of heavy trucks between the two parcels. As the recycling facility operates year-round, seasonal gross weight loading restrictions for Lucy Road preclude the use of this public access between the two properties. Therefore, an internal access point is essential for the continued operation and necessary expansion of the recycling facility.*

*The proposed crossing is to be located at the narrowest portion of the wetland and will incorporate concrete bunker block retaining walls on either side to minimize lateral fill. Three (3) 24" dia. x 32' long CMPs, buried 20% in existing wetland below crossing, is also proposed to provide for a natural substrate within the corridor to facilitate for fauna movement.*

**5 Locating Your Project Site** *Attach a legible black and white map with a North arrow.*

Names of roads of closest intersection  
*Lucy Road and E Grand River*

Directions from main intersection to the project site, with distances from the best and nearest visible landmark and water body *The project site is situated on the east side of Lucy Road, approximately half of a mile south of East Grand River Ave. The proposed location of the crossing is approximately 400' east of Lucy Road, near the southern boundary of parcel 4717-08-100-005 and the northern boundary of parcel 4717-08-100-002.*

Description of buildings on the site (color; 1 or 2 story, other) <i>Regal Recycling sign on 2 story brown/green brick building</i>	Description of adjacent landmarks or buildings (address; color; etc) <i>NA</i>
--	---

How can your site be identified if there is no visible address? *Regal Recycling sign on 2 story brown/green brick building*

**6 Easements and Other Permits**

No  Yes Is there a conservation easement or other easement, deed restriction, lease, or other encumbrance upon the property?  
 ➔ If yes, attach a copy. Provide copies of court orders and legal lake levels if applicable.

List all other federal, interstate, state, or local agency authorizations including required assurances for Critical Dune Area projects.

Agency	Type of Approval	Number	Date Applied	Date approved /denied	Reason for denial
<i>Livingston Co.</i>	<i>SESC</i>		<i>ASAP</i>		

**7 Compliance**

If a permit is issued, when will the activity begin? (M/D/Y) *ASAP* Proposed completion date (M/D/Y) *ASAP*

No  Yes Has any construction activity commenced or been completed in a regulated area?  
 ➔ If Yes, identify the portion(s) underway or completed on drawings or attach project specifications and give completion date(s).

No  Yes Were the regulated activities conducted under a DEQ and/or USACE permit?  
 ➔ If Yes, list the permit numbers *NA*

No  Yes Are you aware of any unresolved violations of environmental law or litigation involving the property?  
 ➔ If Yes, attach explanation.


**8 Adjoining Property Owners** *Provide current mailing addresses. Attach additional sheets/labels for long lists.*

<input type="checkbox"/> Established Lake Board <input type="checkbox"/> Lake Association	Contact Person	Mailing Address	City	State and Zip Code
	<i>NA</i>			

List all adjoining property owners.  
 If you own the adjoining lot, provide the requested information for the first adjoining parcel that is not owned by you.

Property Owner's Name	Mailing Address	City	State and Zip Code
<i>see attached</i>			



<b>9 Applicant's Certification</b> <i>Read carefully before signing.</i>			
<p>I am applying for a permit(s) to authorize the activities described herein. I certify that I am familiar with the information contained in this application; that it is true and accurate; and, to the best of my knowledge, that it is in compliance with the State Coastal Zone Management Program. I understand that there are penalties for submitting false information and that any permit issued pursuant to this application may be revoked if information on this application is untrue. I certify that I have the authority to undertake the activities proposed in this application. By signing this application, I agree to allow representatives of the DEQ, USACE, and/or their agents or contractors to enter upon said property in order to inspect the proposed activity site before and during construction and after the completion of the project. I understand that I must obtain all other necessary local, county, state, or federal permits and that the granting of other permits by local, county, state, or federal agencies does not release me from the requirements of obtaining the permit requested herein before commencing the activity. I understand that the payment of the application fee does not guarantee the issuance of a permit.</p>			
<input type="checkbox"/> Property Owner <input checked="" type="checkbox"/> Agent/Contractor <input type="checkbox"/> Corp. or Public Agency / Title	Printed Name <b>Chris Kunkle</b>	Signature 	Date <b>2.8.18</b>



<b>10 Projects Impacting Inland Lakes, Streams, Great Lakes, Wetlands or Floodplains</b>															
<ul style="list-style-type: none"> <li>Complete only those sections A through M applicable to your project.</li> <li>If your project impacts wetlands also complete Section 12. If your project impacts regulated floodplains also complete Section 13.</li> <li>To calculate volume in cubic yards (cu yd), multiply the average length in feet (ft) times the average width (ft) times the average depth (ft) and divide by 27. Example: (25 ft long x 10 ft wide x 2 feet deep) / 27 = 18.5 cubic yards</li> <li>Some projects on the Great Lakes require an application for conveyance prior to Joint Permit Application completeness. <ul style="list-style-type: none"> <li>Provide a black and white overall site plan, with cross-section and profile drawings. Show existing lakes, streams, wetlands, and other water features; existing structures; and the location of all proposed structures, land change activities and soil erosion and sedimentation control measures. Review Appendix B and EZ Guides for aid in providing complete site-specific drawings.</li> <li>Provide tables for multiple impact areas or multiple activities such as multiple fill areas or multiple culverts. Include your calculations.</li> </ul> </li> </ul>															
<b>Water Level Elevation</b>															
On inland waters <input type="checkbox"/> NAVD 88 <input checked="" type="checkbox"/> other <i>observed</i> Observed water elevation (ft) .5' date of observation (M/D/Y) 6.9.17															
On a Great Lake <input type="checkbox"/> IGLD 85 <input type="checkbox"/> surveyed <input type="checkbox"/> converted from observed still water elevation.															
<input checked="" type="checkbox"/> <b>A. PROJECTS REQUIRING FILL (See All Sample Drawings)</b>															
<ul style="list-style-type: none"> <li>Attach a site plan and cross-section views to scale showing maximum and average fill dimensions with calculations.</li> <li>For multiple impact areas on a site provide a table with location, dimensions and volumes for each fill area.</li> </ul>															
<table border="0"> <tr> <td>Purpose</td> <td><input type="checkbox"/> bioengineered shore protection</td> <td><input type="checkbox"/> boat ramp</td> <td><input type="checkbox"/> boat well</td> <td><input type="checkbox"/> bridge or culvert</td> <td><input type="checkbox"/> crib dock</td> </tr> <tr> <td></td> <td><input type="checkbox"/> riprap</td> <td><input type="checkbox"/> seawall</td> <td><input type="checkbox"/> swim area</td> <td><input checked="" type="checkbox"/> other <i>soil</i></td> <td></td> </tr> </table>				Purpose	<input type="checkbox"/> bioengineered shore protection	<input type="checkbox"/> boat ramp	<input type="checkbox"/> boat well	<input type="checkbox"/> bridge or culvert	<input type="checkbox"/> crib dock		<input type="checkbox"/> riprap	<input type="checkbox"/> seawall	<input type="checkbox"/> swim area	<input checked="" type="checkbox"/> other <i>soil</i>	
Purpose	<input type="checkbox"/> bioengineered shore protection	<input type="checkbox"/> boat ramp	<input type="checkbox"/> boat well	<input type="checkbox"/> bridge or culvert	<input type="checkbox"/> crib dock										
	<input type="checkbox"/> riprap	<input type="checkbox"/> seawall	<input type="checkbox"/> swim area	<input checked="" type="checkbox"/> other <i>soil</i>											
Dimensions of fill (ft)		Total volume (cubic yards)	Volume below OHWM (cubic yards)												
Length 32' Width 8.5' Maximum Depth 3.75'		40	5.3												
Maximum water depth in fill area (ft) 0.5'		Area filled (sq ft) 288	Will filter fabric be used under proposed fill? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (If Yes, type)												
Fill will extend 4' feet into the water from the shoreline and upland 25 feet out of the water.															
Type of clean fill <input type="checkbox"/> peastone % <input type="checkbox"/> sand % <input type="checkbox"/> gravel % <input checked="" type="checkbox"/> other <i>on site soils</i>															
Source of clean fill <input type="checkbox"/> commercial <input checked="" type="checkbox"/> on-site <input type="checkbox"/> other															
<ul style="list-style-type: none"> <li>If on-site, show location on site plan.</li> <li>If other, attach description of location.</li> </ul>															
<input type="checkbox"/> <b>B. PROJECTS REQUIRING DREDGING OR EXCAVATION (See Sample Drawings)</b>															
<ul style="list-style-type: none"> <li>Refer to <a href="http://www.mi.gov/jointpermit">www.mi.gov/jointpermit</a> for spoils disposal and authorization requirements.</li> <li>Attach a site plan and cross-section views to scale showing maximum and average dredge or excavation dimensions with calculations.</li> <li>For multiple impact areas on a site provide a table with location, dimensions and volumes for each dredge/excavation area.</li> </ul>															
<table border="0"> <tr> <td>Purpose</td> <td><input type="checkbox"/> boat ramp</td> <td><input type="checkbox"/> boat well</td> <td><input type="checkbox"/> bridge or culvert</td> <td><input type="checkbox"/> maintenance dredge</td> </tr> <tr> <td></td> <td><input type="checkbox"/> navigation</td> <td><input type="checkbox"/> pond/basin</td> <td><input type="checkbox"/> other</td> <td></td> </tr> </table>				Purpose	<input type="checkbox"/> boat ramp	<input type="checkbox"/> boat well	<input type="checkbox"/> bridge or culvert	<input type="checkbox"/> maintenance dredge		<input type="checkbox"/> navigation	<input type="checkbox"/> pond/basin	<input type="checkbox"/> other			
Purpose	<input type="checkbox"/> boat ramp	<input type="checkbox"/> boat well	<input type="checkbox"/> bridge or culvert	<input type="checkbox"/> maintenance dredge											
	<input type="checkbox"/> navigation	<input type="checkbox"/> pond/basin	<input type="checkbox"/> other												
Dimensions (ft)		Total volume (cu yds)	Volume below OHWM (cu yds)												
Length Width Maximum Depth															
Has this same area been previously dredged?		<input type="checkbox"/> No <input type="checkbox"/> Yes	If Yes, provide date and permit number:												
Will the previously dredged area be enlarged?		<input type="checkbox"/> No <input type="checkbox"/> Yes	If Yes, when and how much?												
Is long-term maintenance dredging planned?		<input type="checkbox"/> No <input type="checkbox"/> Yes	If Yes, how often?												
Dredge or Excavation Method <input type="checkbox"/> Hydraulic <input type="checkbox"/> Mechanical <input type="checkbox"/> other															
Spoils Disposal	Dredged or excavated spoils will be placed <input type="checkbox"/> on-site <input type="checkbox"/> landfill <input type="checkbox"/> USACE confined disposal facility <input type="checkbox"/> other upland off-site														
	<ul style="list-style-type: none"> <li>For disposal, provide a Detailed spoils disposal area location map and site plan with property lines.</li> <li>Letter of authorization from property owner of spoils disposal site, if disposed off-site.</li> </ul>														
For volumes less than 5,000 cu yards, has proposed dredge material been tested for contaminants within the past 10 years? <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> If Yes, provide test results with a map of sampling locations.															
<input type="checkbox"/> <b>C. PROJECTS REQUIRING RIPRAP (See Sample Drawings 2, 3, 8, 12, 14, 22, and 23)</b>															
Riprap water ward of the ordinary high water mark: dimensions (ft) length width depth			Volume(cu yd)												
Riprap landward of the ordinary high water mark: dimensions (ft) length width depth			Volume(cu yd)												
Type and size of riprap (inches)		Will filter fabric or pea stone be used under proposed riprap?													
<input type="checkbox"/> field stone <input type="checkbox"/> angular rock <input type="checkbox"/> other		<input type="checkbox"/> No <input type="checkbox"/> Yes, Type													



**12 Activities That May Impact Wetlands** (See Sample Drawings 8 & 9). Complete other Sections as applicable.

- Locate your site and wetland information with the DEQ Wetlands Map Viewer at [www.mcq.state.mi.us/wetlands/](http://www.mcq.state.mi.us/wetlands/)
- For information on the DEQ's Wetland Identification Program (WIP) visit [www.mi.gov/wetlands](http://www.mi.gov/wetlands).
  - ➔ Provide a detailed site plan with labeled property lines, upland and wetland areas, and dimensions and volumes of wetland impacts.
  - ➔ Complete the wetland dredge and wetland fill dimension information below for each impacted wetland area.
  - ➔ Attach tables for multiple impact areas or activities.
  - ➔ Attach at least one cross-section for each wetland dredge and/or fill area; show wetland and upland boundaries on the cross-section.

Has the DEQ conducted a wetland assessment for this parcel?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	➔ If Yes, provide a copy or WIP number: <i>NA</i>		
Has a professional wetland delineation been conducted for this parcel?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	➔ If Yes, provide a copy with data sheets		
Is there a recorded DEQ easement on the property?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	➔ If Yes, provide the easement number <i>NA</i>		
Did the applicant purchase the property before October 1, 1980?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	➔ If Yes, provide documentation.		
Is any grading or mechanized land clearing proposed?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	➔ If Yes, label the locations on the site plan.		
Has any of the proposed grading or mechanized land clearing been completed?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	➔ If Yes, label the locations on the site plan		
Proposed Activity	<input type="checkbox"/> boardwalk or deck (Section 10I) <input type="checkbox"/> dewatering <input type="checkbox"/> fences (Section 10L) <input type="checkbox"/> septic system	<input checked="" type="checkbox"/> bridges and culverts (Section 14) <input type="checkbox"/> draining surface water <input checked="" type="checkbox"/> fill or dredge <input type="checkbox"/> stormwater discharge (Section 10J)	<input type="checkbox"/> designated environmental area <input checked="" type="checkbox"/> driveway / road <input type="checkbox"/> restoration <input type="checkbox"/> other	
<b>FILL</b>	Dimensions maximum length (ft) <i>32.0'</i> maximum width (ft) <i>8.5'</i>	Area <input type="checkbox"/> acres <input checked="" type="checkbox"/> sq ft <i>286</i>	Average depth (ft) <i>3.75</i>	Volume (cu yd) <i>40</i>
<b>DREDGE</b>	Dimensions maximum length (ft) maximum width (ft)	Area <input type="checkbox"/> acres <input type="checkbox"/> sq ft	Average depth (ft)	Volume (cu yd)
<b>Spills Disposal</b>	Dredged or excavated spoils will be placed <input type="checkbox"/> on-site <input type="checkbox"/> landfill <input type="checkbox"/> USACE confined disposal facility <input type="checkbox"/> other upland off-site			
	For disposal, provide a ➔ Detailed spoils disposal area location map and site plan with property lines. ➔ Letter of authorization from property owner of spoils disposal site, if disposed off-site.			
<b>Septic System</b>	The proposed project will be serviced by: <input checked="" type="checkbox"/> public sewer <input type="checkbox"/> private septic system ➔ Show system on plans.		If a private septic system is proposed, has an application for a permit been made to the County Health Department? <input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, has a permit been issued? <input type="checkbox"/> No <input type="checkbox"/> Yes ➔ Provide a copy of the permit.	
	Describe the wetland impacts, the proposed use or development, and the alternatives considered: <i>Place approximately 40 cubic yards of fill within a 0.007 acre ( 286 SF) wetland area to construct a truck access road between two parcels of land owned by applicant.</i>  <i>Construct an access road crossing a wetland area to provide truck access between 2 parcels of land owned by the applicant. The access road is necessary to allow for expansion of the existing recycling facility onto land immediately adjacent to it but separated by a wetland. Internal access between the 2 properties is necessary as there is no other viable truck access between them.</i>  <i>The proposed wetland truck access crossing is necessary to provide access between two parcels northern and southern owned by the applicant that are separated by a linear wetland. The southern parcel supports a recycling facility that has been active for over 50 years. The adjacent northern parcel was purchased by the applicant specifically to meet expansion needs of the existing recycling facility. The applicant needs an internal truck access road for transporting scrap metal materials between the two parcels for processing and storage. The expanded recycling operations will involve the frequent movement of heavy trucks between the two parcels. As the recycling facility operates year-round, seasonal gross weight loading restrictions for Lucy Road preclude the use of this public access between the two properties. Therefore, an internal access point is essential for the continued operation and necessary expansion of the recycling facility.</i>			
Does the project impact more than 1/3 acre of wetland? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ➔ If Yes, submit a Mitigation Plan with the type and amount of mitigation proposed. For more information go to <a href="http://www.mi.gov/wetlands">www.mi.gov/wetlands</a>				





Describe how impacts to waters of the United States will be avoided and minimized:

*The proposed crossing is to be located at the narrowest portion of the wetland and will incorporate concrete bunker block retaining walls on either side to minimize lateral fill. Three (3) 24" dia. x 32' long CMPs, buried 20% in existing wetland below crossing, is also proposed to provide for a natural substrate within the corridor to facilitate for fauna movement.*

Describe how the impact to waters of the United States will be compensated. OR Explain why compensatory mitigation should not be required for the proposed impacts.

*As the proposed impacts are well below the typical 1/3 acre minimum, we are asking for a waiver of the mitigation requirement.*



<b>14 Bridges and Culverts including Foot and Cart Bridges. (See EZ Guides and Sample Drawings 5, 14A, 14B, 14C, 14D.)</b>				
<ul style="list-style-type: none"> <li>Complete other applicable Sections, including 10A-C.</li> <li>A hydraulic analysis or hydrologic analysis may be required to fully assess impacts. Attach hydraulic calculations.</li> <li>High Water Elevation - describe reference point and highest known water level above or below reference point and date of observation.               <ul style="list-style-type: none"> <li>Attach additional sheets for multiple bridges and/or culverts.</li> <li>Provide detailed site-specific drawings of existing and proposed Plan and Elevation View at a scale adequate for detailed review.</li> <li>Provide all information in the boxes below; do not write in a reference to plan sheets. Show reference datum used on plans.</li> </ul> </li> </ul>				
<b>Stream Information</b>	The site has a high water elevation (ft) <input type="checkbox"/> above or <input type="checkbox"/> below the Reference Point of _____ Date observed _____			
	Reference datum used <input type="checkbox"/> NGVD 29 <input type="checkbox"/> NAVD 88 <input type="checkbox"/> IGLD 85 (Great Lakes coastal areas) <input type="checkbox"/> other _____			
	Average stream width (ft) at the ordinary high water mark (OHWM) outside the influence of any ponding or scour holes around the structure		Upstream _____ Downstream _____	
	Cross-sectional area of primary channel (sq ft) _____ (See Sample Drawing 14C for more information)			
	The width of the stream where the water begins to overflow its banks. Bankfull width (ft) _____			
	The invert of the stream 100-feet from structure (ft)		Upstream _____ Downstream _____	
	Is the existing culvert perched? <input type="checkbox"/> No <input type="checkbox"/> Yes If Yes, provide a profile of the channel bottom at the high and low points for a distance of 200 feet upstream and downstream of the culvert.			
<b>Complete this form for each bridge / culvert location.</b>				
<b>Bridge</b>			<b>Existing</b>	<b>Proposed</b>
	Number of bridge spans			
	Bridge type (concrete box beam, concrete I-beam, timber, etc.)			
	Bridge span (length perpendicular to stream) (ft)			
	Bridge width (parallel to stream) (ft)			
	Bottom of bridge beam (ft)		Upstream _____ Downstream _____	
	Stream invert elevation at bridge (ft)		Upstream _____ Downstream _____	
Bridge rise from bottom of beam to streambed (ft)				
<b>Culvert</b>	Number of culverts		0	3
	Culvert type (arch, bottomless, box, circular, elliptical, etc.)		NA	<i>circular</i>
	Culvert material (concrete, corrugated metal, plastic, etc.)		NA	<i>CMP</i>
	Culvert length (ft)		NA	32'
	Culvert <input type="checkbox"/> width <input checked="" type="checkbox"/> diameter (ft)		NA	24"
	Culvert height prior to any burying (ft)		NA	24"
	Depth culvert will be buried (ft)		NA	4.8"
	Elevation of culvert crown (ft)		Upstream NA Downstream NA	98.0' 97.0'
	Higher elevation of <input checked="" type="checkbox"/> culvert invert OR <input type="checkbox"/> streambed within culvert (ft)		Upstream NA Downstream NA	98.0' 95.0'
	Entrance design (mitered, projecting, wingwalls, etc.)		NA	<i>projecting</i>
Total structure waterway opening above streambed (sq ft)		NA	15.1	
Total structure waterway area below the 100-year elevation (sq ft) (if known)		NA	NA	
Elevation of road grade at structure (ft)		NA	99.0'	
Elevation of low point in road (ft)		NA	99.0'	
Distance from low point of road to mid-point of bridge crossing (ft)		NA	NA	
Length of approach fill from edge of bridge/culvert to existing grade (ft)		NA	NA	
<p>A Licensed Professional Engineer may certify that your project will not cause a harmful interference for a range of flood discharges up to and including the 100-year flood discharge. The "Required Certification Language" is found under "forms" on the "maps, forms and documents" link from the <a href="http://www.mi.gov/jointpermil">www.mi.gov/jointpermil</a> page or a copy may be requested by phone, email, or mail. A hydraulic report supporting this certification may also be required.</p> <p>Is Certification Language attached? <input type="checkbox"/> No <input type="checkbox"/> Yes</p>				
<b>Complete for both Bridges and Culverts</b>				

**Lucy Road Resources LLC**  
645 Lucy Road  
Howell, MI 48843  
Phone 517-546-3820  
[regalrecycling@gmail.com](mailto:regalrecycling@gmail.com)

February 7, 2018

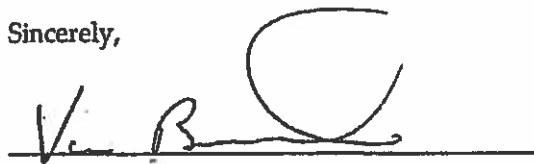
**Don Berninger**  
BWA Consulting  
10110 Tennyson Drive  
Plymouth, MI 48393

**RE: MDEQ Wetland Permit Application: Subm. Ref. # HN5-KZWY-TSV8F**  
645 Lucy Rd, Howell, Michigan 48843 – ID 4717-06-100-005, 4717-06-100-002  
17-561 Lucy Road Wetland Crossing

Dear Mr. Berninger:

As the owner of property ID #4717-06-100-005, 4717-06-100-002 this letter will serve as authorization for BWA Consulting to act as my agent for the purpose of submitting correspondence and permit applications to the Michigan Department of Environmental Quality (MDEQ) and the City of Howell. Further, this letter authorizes the MDEQ and the City of Howell to access my parcel, upon notification and in the company of a representative of BWA Consulting and/or myself.

Sincerely,

A handwritten signature in black ink, appearing to read "Vern Brockway", is written over a horizontal line. The signature is stylized with a large, circular flourish at the end.

Mr. Vern Brockway  
Property Owner and Applicant



10110 Tennyson Drive  
 Plymouth, Michigan 48170  
 (248) 916-8688

**Lucy Road Wetland Crossing Project**  
**MDEQ Wetland Permit Application: Subm. Ref. # HN5-KZWY-TSV8F**

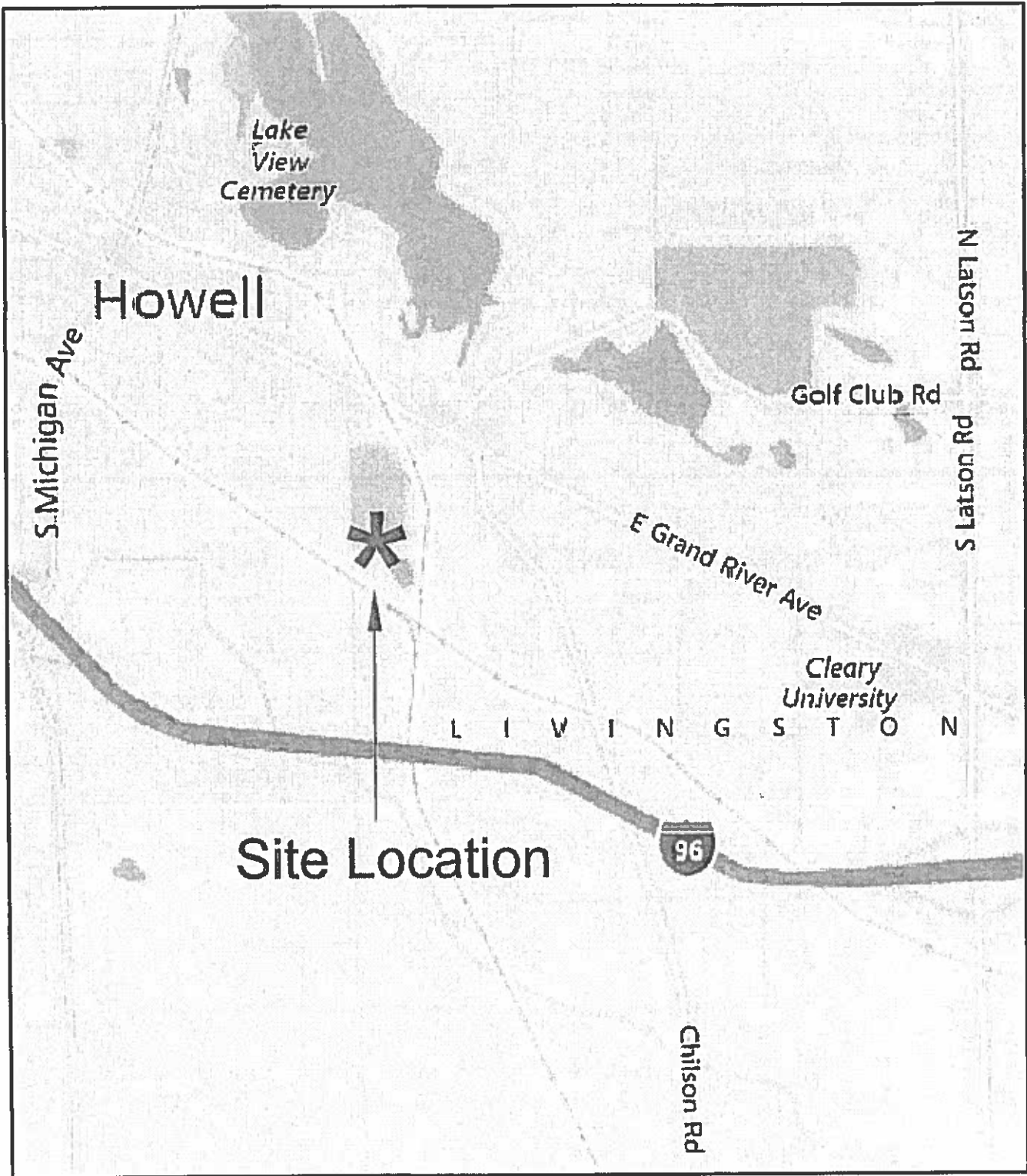
**Adjacent, Riparian or Impacted Property Owners**

<u>PIN</u>	<u>Owner Name</u>	<u>Address</u>	<u>City</u>	<u>State</u>	<u>ZIP</u>
4717-01-200-004	MARION TOWNSHIP	2877 W COON LAKE RD	HOWELL	MI	48843
4717-06-100-003	CITY OF HOWELL	611 E GRAND RIVER	HOWELL	MI	48843
4710-01-200-004	BROCKWAY DANIEL E & HOLMES BRADLEY	386 LUCY RD	HOWELL	MI	48843
4710-01-200-016	MIECHIELS DAVID L & JANET	405 S NATIONAL ST	HOWELL	MI	48843
4717-06-100-006	LUCY ROAD RESOURCES II LLC	645 LUCY RD	HOWELL	MI	48843
4717-06-101-001	AMICO HOLDINGS LLC	PO BOX 2099	BRIGHTON	MI	48116
4711-06-100-039	LIVINGSTON COUNTY CLERK'S OFFICE	200 E GRAND RIVER	HOWELL	MI	48843
4717-06-300-005	MICHIGAN DEPARTMENT OF TRANSPORTATION	PO BOX 30050	LANSING	MI	48909

**Impact Summary Table**

The proposed project involves construction of a wetland crossing on property owned by Lucy Road Resources. This involves limited impacts to State regulated wetlands.

<b>CUT &amp; FILL SUMMARY</b>				
<b>IMPACT AREA</b>	<b>AREA (S.F.)</b>	<b>FILL VOL. (C.Y.)</b>	<b>CUT VOL. (C.Y.)</b>	<b>AVG. DIMENSIONS</b>
WL #1	286	40	0	32' x 8.5' x 3.75'
<b>Tot. WL Impact:</b>	<b>286</b>	<b>40</b>	<b>0</b>	



Site Location

**Lucy Road Wetland Crossing**

City of Howell

Livingston County, MI

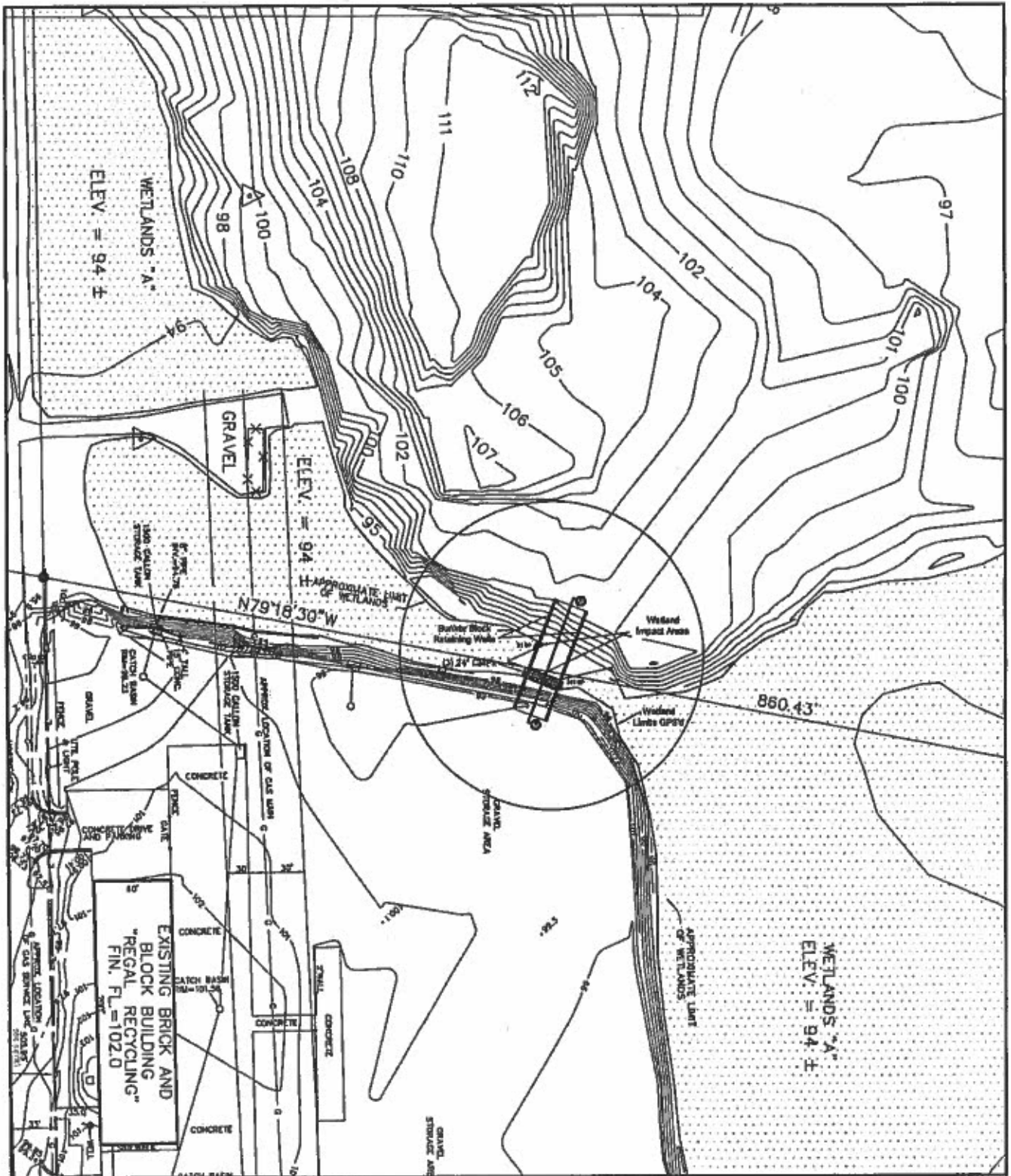


**BWA CONSULTING**  
 10110 TENNYSON DRIVE  
 PLYMOUTH, MI 48170  
 (248) 916-8688

DATE  
2.8.18

PROJECT NUMBER  
17-561

FIGURE  
1



Site Plan

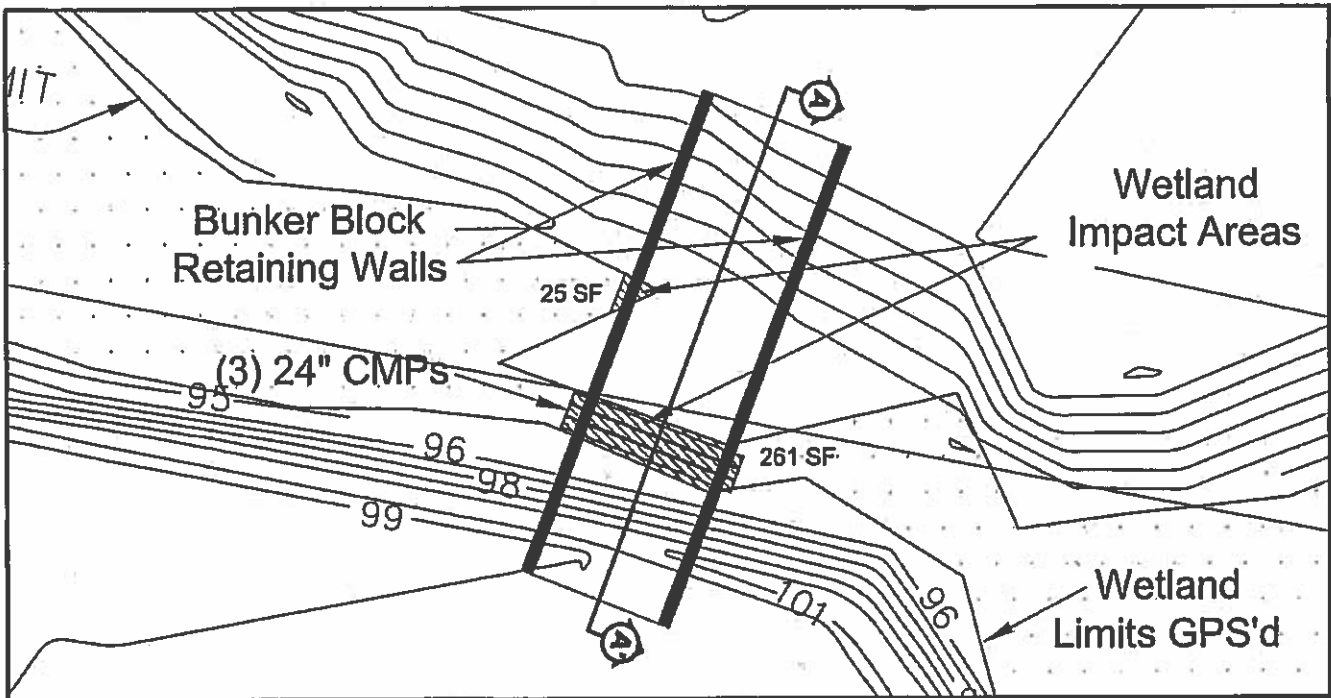
**Lucy Road Wetland Crossing**

City of Howell Livingston County, MI

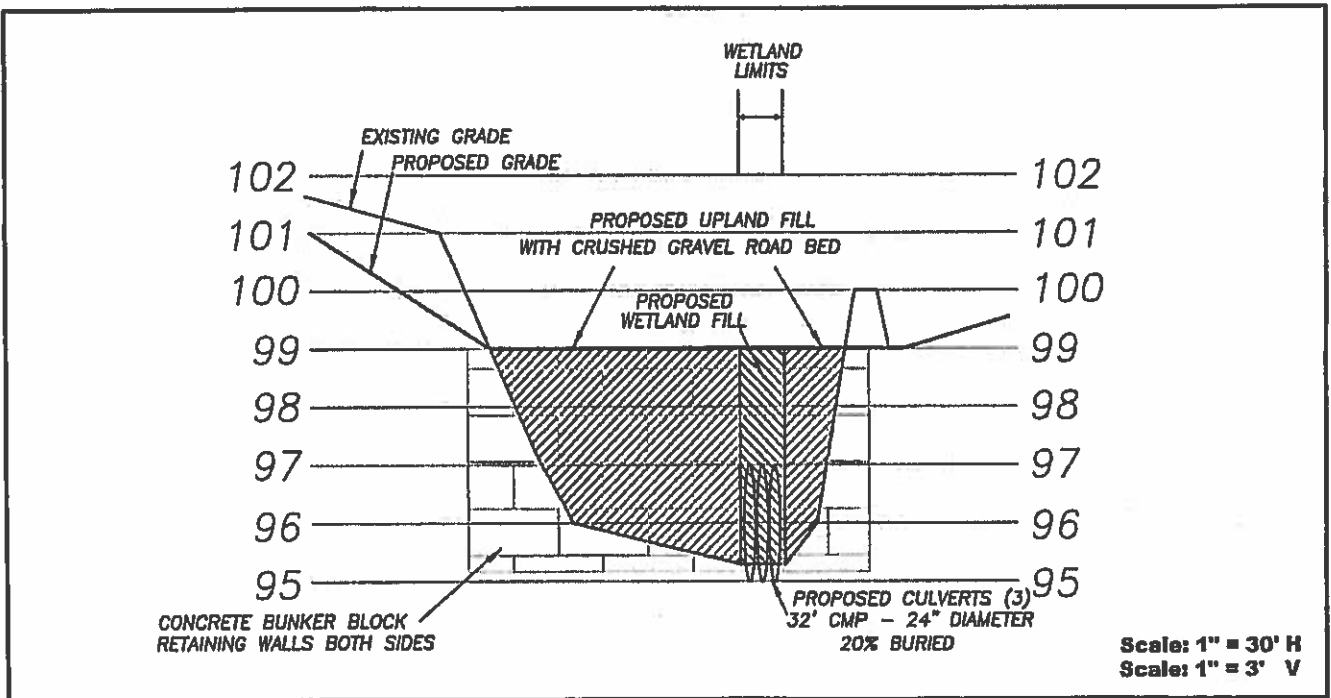


**BWA CONSULTING**  
 10110 Television Drive  
 PLYMOUTH, MI 48170  
 (248) 916-8688

DATE 2.8.18
PROJECT NUMBER 17-561
FIGURE 2



Plan View 1" = 30'



Plan View H 1" = 30', V 1" = 3'

**Impact Area # 1**

**Lucy Road Wetland Crossing**

City of Howell Livingston County, MI



**BWA CONSULTING**  
 10110 Emerson Drive  
 PLYMOUTH, MI 48170  
 (248) 916-8686

DATE 2.8.18
PROJECT NUMBER 17-561
FIGURE 3

**WETLAND DETERMINATION DATA FORM – Midwest Region**

Project/Site: Lucy Road Crossing City/County: Howell/Livingston Sampling Date: 9 June 2017  
 Applicant/Owner: Varn Brockway State: MI Sampling Point: 1A  
 Investigator(s): Chris Kunkle Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_  
 Slope (%): \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Carlisle Muck NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>x</u> No _____ Hydric Soil Present? Yes <u>x</u> No _____ Wetland Hydrology Present? Yes <u>x</u> No _____	Is the Sampled Area within a Wetland? Yes <u>x</u> No _____
Remarks: _____ _____ _____	

**VEGETATION – Use scientific names of plants.**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Salix nigra</u>	_____	_____	OBL	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. <u>Populus deltoides</u>	_____	_____	FAC	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
=Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
=Total Cover				
Herb Stratum (Plot size: _____)				<b>Hydrophytic Vegetation Indicators:</b> _____ 1 - Rapid Test for Hydrophytic Vegetation _____ 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 <sup>1</sup> _____ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Typha latifolia</u>	_____	_____	OBL	
2. <u>Impatiens capensis</u>	_____	_____	FACW	
3. <u>Carex hystericina</u>	_____	_____	OBL	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
=Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>x</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
=Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.) _____ _____				



**SOIL**

Sampling Point: 1A

**Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)**

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR 2/1						Muck	
10-16	10YR 2/2						Muck	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators:</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input checked="" type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) <input type="checkbox"/> Redox Depressions (F8)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks)
--	--

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (Inches): _____	Hydric Soil Present?      Yes <input checked="" type="checkbox"/> No _____
---	--

**Remarks:**  
 This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. ([http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_051293.docx](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx))

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Gauge or Well Data (D9) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)	

<b>Field Observations:</b> Surface Water Present?      Yes <input checked="" type="checkbox"/> No _____      Depth (Inches): <u>3</u> Water Table Present?      Yes <input checked="" type="checkbox"/> No _____      Depth (Inches): _____ Saturation Present?      Yes <input checked="" type="checkbox"/> No _____      Depth (Inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present?      Yes <input checked="" type="checkbox"/> No _____
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

**Remarks:**

**SOIL**

Sampling Point: 18

**Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of Indicators.)**

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-9	10YR 4/2						Loamy/Clayey	
8-16	10YR 5/3						Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- 2 cm Muck (A10)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F8)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

**Remarks:**

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. ([http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_051293.docx](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx))

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No x

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

**Remarks:**

To Board 5/1/18



April 26, 2018

Ms. Polly Skolarus, Clerk  
Township of Genoa  
2911 Dorr Rd.  
Brighton, MI 48116

RE: International Channel Package Launch

Dear Ms. Skolarus:

We are pleased to share another enhancement we are making to our Xfinity TV offerings.

Comcast will launch up to 42 international channels and up to 31 international packages beginning around May 30, 2018. This launch will give customers access to more international content such as Bollywood movies, Brazilian telenovelas and Chinese news, to name a few.

Xfinity TV customers who would like to purchase these new international offerings will need the necessary equipment to access this cable programming, e.g. X1 or the Xfinity Beta App on Roku.

When these new international channels and packages launch, we will have a dedicated landing page - [xfinity.com/moreinternational](http://xfinity.com/moreinternational), which will provide additional information once the international channel package launch occurs.

Also, effective June 1, 2018, MGM HD, FSN Prime Ticket OOM and FSN Sun OOM will no longer be carried on Xfinity TV.

We know you may have questions about these changes. If I can be of any further assistance, please contact me at 734-254-1557.

Sincerely,

Kyle V. Mazurek  
Manager of External Affairs  
Comcast, Heartland Region  
41112 Concept Drive  
Plymouth, MI 48170



Thank You!!!  
MIKE, JOOIE



I can't say it enough,

Thanks Again!

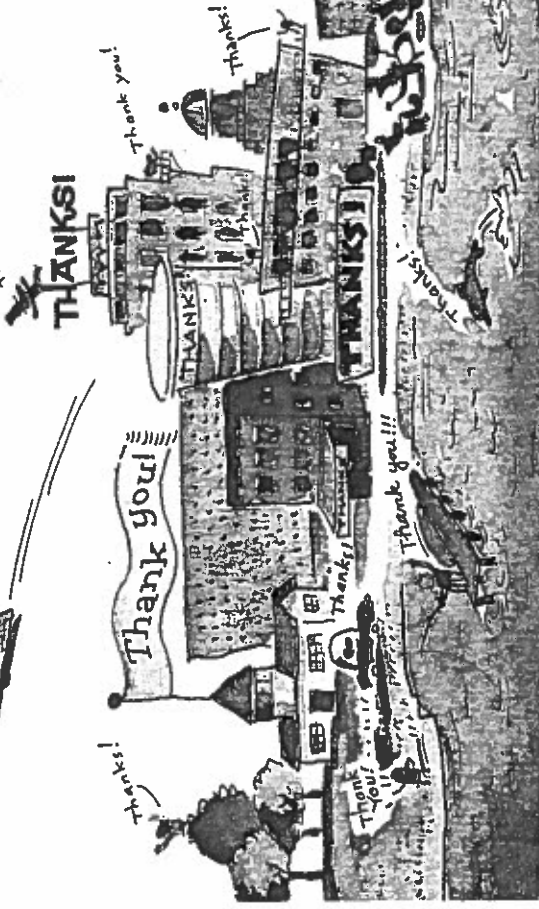
MIKE

THANK YOU FOR TAKING THE TIME TO TALK ABOUT SOUTH HUGHES ROAD & GOLF CLUB GUARD RAIL PAVEMENT. THANK YOU FOR SOLVING THIS CONCERN WITH MY HOUSE. IT WILL BE NICE TO ENJOY MY HOUSE AGAIN WITHOUT TACMORS AS TRUCKS, TRAILERS, SCHOOL BUSES ETC, HAVE TO DRIVE OVER THE POT HOLES. LOOK FORWARD TO NEW PAVEMENT,

P.S. I HOPE I SPELLED YOUR NAME CORRECTLY JOOIE!

Thank you!!!

THANKS!



To Board 5/27/18

# Livingston County Health Department

## Annual Report 2017



To protect, preserve,  
and promote the health  
and safety of the people of  
Livingston County.

### Personal/Preventive Health

- 398 Communicable disease cases
- 22 Tests for HIV/AIDS
- 430 Sexually transmitted disease cases
- 391 Tuberculin skin tests
- 547 Families enrolled in Children's Special Health Care Services
- 6,485 Hearing and 10,465 vision screenings
- 827 Individuals immunized
- 1,696 WIC clients served
- 1,627 Unique dental patients served in 3,603 visits

### Health Promotion

- 19 Press releases sent to local media
- 15 Community events attended as an exhibitor
- 22 Health promotion/education presentations to classrooms and community groups
- 2 Professional conference presentations
- 178 New Facebook page 'likes'
- 12 Employee newsletters
- 3 Employee wellness activities
- 75 Prescription for Health participants
- 1,891 Individuals impacted by nutrition guidelines at food pantries

### Emergency Preparedness

- 3 Emergency activations for highly communicable diseases
- 1 Human service collaboration plan created for at-risk residents
- 11 Workshops & exercises
- 17 Training events
- 7 Community events attended as an exhibitor
- 900 MRC volunteer hours worth approximately \$29,000
- 14 MRC trained to be SAY LiveReady instructors
- 8 MRC trained to be CPR/First Aid instructors
- 75 Go-kits distributed to seniors
- 1 Storyboard on Reunification Support presented at the 2017 Preparedness Summit

## AT A GLANCE

### Environmental Health

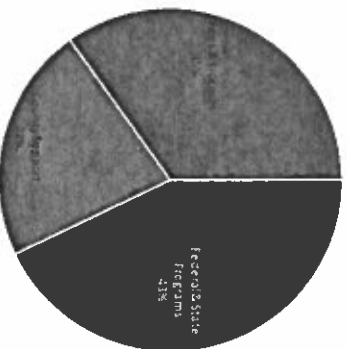
- 1,264 Food service inspections
- 50 Food service complaints investigated
- 566 Well permits issued
- 450 Septic system permits issued
- 64 Public swimming pools regulated
- 16 Public beaches regulated
- 45 General complaints investigated
- 381 Non-community public water supplies regulated
- 21 Campgrounds inspected

Photo credit: Matt Bolang

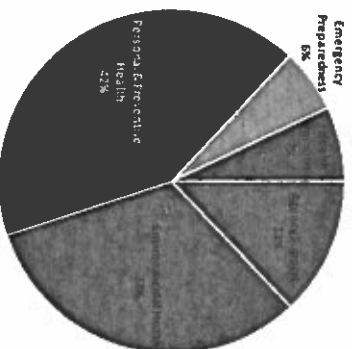
# Financial Overview

## 2016-2017

Revenue By Source



Expenses By Division



## Expanding Chronic Disease Prevention Efforts

Livingston County Health Department continues to focus on preventing and managing chronic disease through the continuation of the Prescription for Health and Building Healthy Communities programs, and the addition of a grant-funded Worksite Wellness program.

Prescription for Health is a fruit and vegetable prescription program that gives participants \$100 in tokens to spend at local farmers markets to reduce their incidence of chronic disease. This is the second year of the program in Livingston County thanks to funding from St. Joseph Mercy Health System. Community Health Workers provide health education to participants and connect them to valuable community resources throughout Livingston County.

Building Healthy Communities is financed through a Michigan Department of Health and Human Services (MDHHS) grant with Washtenaw County Health Department (WCHD). Year one of the grant (2016-2017) promoted healthy food service guidelines and healthy food choices through product placement and promotion in local food pantries, while year two (2017-2018) is focusing efforts on a walking campaign to increase physical

*"LCHD is continuing to prioritize the health of Livingston County residents by seeking out grant opportunities that address chronic disease and make it easier for those who live, work, and play in Livingston to live healthier lives."*

activity in Livingston County via using the stairs and taking to the county's many trails.

Worksite Wellness, a new program at LCHD, is financed through an MDHHS grant with WCHD. This grant allows LCHD to partner with six Livingston County businesses in 2017-2018 to assess the status of their worksite wellness efforts and improve/expand upon those efforts. The goals of the program is to increase healthy behaviors and decrease obesity and tobacco use. Each of the participating businesses receives a \$1,000 stipend to use to implement specific strategies designed to improve the health and wellness of their employees.

~Chelsea Lantto, Health Promotion Coordinator

LCHD looks forward to continuing chronic disease prevention in Livingston County.

## Hepatitis A Outbreak Response

Communicable Disease (CD) is a state-funded (mandated) program for local health departments, which means that LCHD is required to investigate/ follow-up on reported communicable diseases based on the Communicable Disease Rules. Public health officials and the Michigan Department of Health and Human Services (MDHHS) noticed an increase in hepatitis A cases starting in August 2016 and continued to see an elevated number of hepatitis A cases in the state during 2017.

Hepatitis A is a serious, highly contagious liver disease caused by the hepatitis A virus. Illness can appear 15-50 days after exposure and can cause a person to be sick for several weeks. MDHHS responded to this outbreak with additional funding to assist in a coordinated public health response in outbreak affected areas of the state. The public health response included increased healthcare awareness efforts, public notification and education, and outreach with vaccination clinics for high-risk populations.

In 2017, LCHD received six hepatitis A case reports. Livingston county averages less than two cases per year. Since many of these cases were linked to the outbreak, LCHD began a public awareness

*"This outbreak has been challenging because no common sources of food, beverages, or drugs have been identified as a potential source of infection, and the hospitalization rate is high. As a result, our relationships with community partners who work with high risk groups have been crucial to our response."*

*~Elaine Brown,  
PHS Director/  
Deputy Health  
Officer*

campaign focusing on food service establishments/workers and planning vaccination clinics for high-risk populations. LCHD hired Medical Reserve Corps members to assist with follow-up calls to food service establishments, to staff walk-in/ extended clinic hours, and to provide vaccinations at off-site clinics to high risk groups. Additionally, LCHD is continuing to work with community partners to reach those at highest risk for this disease. Those with history of injection and non-injection drug use, homelessness or transient housing, and incarceration are thought to be at greater risk in this outbreak setting.

Our efforts will continue into 2018 as the outbreak continues to unfold.

## Mosquito Surveillance

This past summer, the Environmental Health Division participated in a grant funded Zika virus mosquito surveillance program led by the Michigan Department of Health and Human Services-Emergency and Zoonotic Infectious Diseases Division. The purpose of this program was to determine if mosquito species (i.e. aedes albopictus and aedes aegypti) that carry the Zika virus were present in Livingston County. Five mosquito traps that are designed to attract these species of mosquito were placed two nights a week at sixteen different businesses and/or residences throughout the County.

In summary, the mosquitos that carry the Zika virus were not identified in the County. However, thirteen other species were, with 79% of them being aedes triseriatus, culex pipiens, and coquillettidia perturbans mosquitos. These mosquitos are often associated with diseases such as Dog Heartworm, St. Louis Encephalitis, and West Nile Virus. To date, only Wayne County has documented the identification of aedes albopictus which is also known as the Asian Tiger mosquito, but there is no evidence of Zika-virus-infected mosquitoes in the state at this time.

## Greetings from Our Health Officer

On behalf of the Livingston County Health Department, I am pleased to present our 2017 annual report that highlights efforts being made to keep our families safe and healthy and our environment clean. Our services and programs are designed to improve the overall health status of our residents by engaging the community and collaborating with many partners. A special thank-you to the Livingston County Board of Commissioners and County Administration who provide their support of the department and value having a strong and competent workforce for the delivery of our services.

Some of the highlights from 2017 I wish to share include the opening of the Livingston Dental Center, which provides dental care for the underserved in the community. We also had a confirmed measles case in the spring reminding the community of the importance for proper immunization against vaccine preventable diseases. We were awarded a Certificate of Quality by the State Accreditation Board and successfully met all of our minimum program requirements during Cycle 7 State Accreditation review. We also submitted documentation to the Public Health Accreditation Board in anticipation of becoming nationally accredited in the near future.

There are so many more accomplishments that occurred in 2017 and on behalf of the dedicated employees of LCHD, I wish to share the highlights within this report with the community and invite you to contact me should you have any questions.

Sincerely,  
Dianne McCormick, Director/Health Officer



### Livingston County Health Department

Dianne McCormick  
Health Officer

Dr. Donald Lawrenchuk  
Medical Director

Matt Bolang  
Environmental Health Director

Elaine Brown  
Personal/Preventive Health Director  
Deputy Health Officer

2300 East Grand River Ave.  
Suite 102  
Howell, Michigan 48843

For more information visit:  
[www.lchd.org](http://www.lchd.org)



## Emergency Preparedness Builds Resilience

In 2017, the Emergency Preparedness program and Livingston County Medical Reserve Corps focused on increasing community resiliency by strengthening emergency preparedness partnerships and promoting a preparedness and wellness mindset in our senior and youth population. Key highlights include: engaging in a reunification training workshop and full-scale exercise with 42 of our local response and community partners, providing preparedness and wellness outreach and free emergency go-kits to 75 seniors in our county, and forming a county Volunteer Management Committee to address the multiagency coordination required to organize and mobilize volunteers during an emergency. We also partnered with other human service agencies to create the Livingston County Plan for Provision of Emergency Services to People with Access and Functional Needs to aid at-risk individuals during a response. Additionally, we responded to two real communicable disease events in our county – measles and hepatitis A – and worked collaboratively with our partners to ensure the needs of the public were met. Our departmental staff and MRC volunteers train, exercise, plan and prepare for public health emergency events routinely. It is our goal to continue to build and strengthen our partnerships to meet the needs of our community and to empower individuals to be prepared.

