

AGENDA
CASCADE CHARTER TOWNSHIP
REGULAR BOARD MEETING

Wednesday, June 28, 2017

7:00 P.M.

Cascade Branch of the Kent District Library, Wisner Center
2870 Jacksmith, S.E.

Expected Meeting Procedures

1. During public comments you may speak on any item not noted on the agenda for a public hearing.
2. Please limit comments to 3 minutes per person and the Board may or may not choose to respond.
3. Please limit your comments to a specific issue.
4. Please turn OFF cellular phones.

Article 1. Call to Order, Roll Call

Article 2. Pledge of Allegiance to the Flag

Article 3. Approval of Agenda

Article 4. Presentations

Article 5. Public Comments-Anything on the Agenda not scheduled for a public hearing. (limit comments to 3 minutes)

Article 6. Approval of Consent Agenda

- a. Receive and File Various Meeting Minutes
 1. Regular/Township Board Minutes for 6/14/17.
 2. Planning Commission Minutes for 6/5/2017.
 3. Zoning Board of Appeals Minutes for 05/09/17.
- b. Receive and File Reports
 1. Hope Network – FY17 1st Quarter Ridership Data.
- c. Receive and File Communications
 1. State of Michigan DEQ – re: Public Notice – Thornapple River Drive over Unnamed Creek.
 2. State of Michigan Department of Licensing and Regulatory Affairs - re: role with video/cable franchise.
 3. Charter Communications – re: Changes in Channel Line-up
 4. State of Michigan Public Service Commission – re: Case Nos. U-18392 and U-18381.
- d. Education Requests
 1. Susan B. Slater/ Denise M. Biegalle – MTA Clerk’s Retreat – Frankenmuth, MI – July 19-20, 2017.

Article 7. Financial Actions

- a. **Consider Approval of Pay Draw #4 and Change Order #1 for the Thornapple River Dr. Utility Extension Project.**

Article 8. Unfinished Business

- Article 9. New Business**
- 034-2017** a. **Public Hearing –Rezone Property at 5042, 5044 Cascade Rd. and 1225 Spaulding to P.U.D. to allow an independent living, assisted living and memory care complex.**
- b. **Consider Approval of an Ordinance to Amend the Cascade Charter Township Zoning Ordinance and Zoning Map to Establish the Leisure Living Planned Unit Development Project. (roll call)**
- 035-2017** **Consider Approval of Resolution to Provide a Deferment From Summer Taxes Without Penalty for Certain Taxpayers. (roll call)**
- 036-2017** **Consider Approval of Resolution to Authorize the Township Clerk to Submit a State of Michigan Grant Application for the Purchase of a New Voting System on behalf of Cascade Township. (roll call)**
- 037-2017** **Consider Approval of Appointment to the Zoning Board of Appeals.**
- Article 10. Public Comments – Any comments...whether it is on the Agenda or not. (limit comments to 3 minutes)**
- Article 11. Manager Comments**
- Article 12. Board Member Comments**
- Article 13. Adjournment**

**MINUTES OF THE
CASCADE CHARTER TOWNSHIP
REGULAR BOARD MEETING**

Wednesday, June 14, 2017

7:00 P.M.

- Article 1.** Supervisor Beahan called the meeting to order.
Present: Supervisor Beahan, Clerk Slater, Trustee Koessel, Shipley, Lewis,
Treasurer Peirce.
Absent: Trustee McDonald
Also Present: Manager Swayze, Community Development Director Peterson
and those listed in Supplement #1.
- Article 2.** Supervisor Beahan led the Pledge of Allegiance to the Flag.
- Article 3.** Motion was made by Trustee Lewis and supported by Trustee Shipley to approve
the Agenda as presented. Motion carried.
- Article 4. Presentations**
- **Kent District Library Annual Report**
Director Lance Werner was present along with Craig Wilson and Diane
Cutler to present the Annual Report to the Board.
- Article 5. Public Comments-Anything on the Agenda not scheduled for a public
hearing. (limit comments to 3 minutes)**
- Article 6. Approval of Consent Agenda**
- a. Receive and File Various Meeting Minutes
 - 1. Regular/Township Board Minutes for 5/24/17.
 - 2. Planning Commission Minutes for 5/15/2017.
 - b. Receive and File Reports
 - 1. Building Department Monthly Report for May, 2017.
 - 2. Treasurer's Monthly Report for February, 2017.
 - c. Receive and File Communications
 - 1. Memo to John Weiss, GVMC Executive Director – re: Four Corners
Study Group.
 - d. Education Requests
 - 1. Jeffery Knowles – Accident Investigation – American Government –
Columbia Southern University (on line classes).
- Motion was made by Trustee Koessel and supported by Trustee Shipley to
approve the Consent Agenda as presented. Motion carried.
- Article 7. Financial Actions**
- a. **Consider Approval of May, 2017 Payroll, Payables and Transfers.**
Motion was made by Trustee Koessel and supported by Treasurer Peirce
to approve the May, 2017 Payroll, Payables and Transfers. Motion
carried.
 - b. **Consider Approval of April/May, 2017 General/Special Funds.**
Motion was made by Trustee Lewis and supported by Trustee Koessel to
approve the April/May, 2017 General/Special Funds. Motion carried.
 - c. **Consider Approval of Pay Draw #3 for the Thornapple River Dr.
Utility Extension Project.**
Motion was made by Clerk Slater and supported by Trustee Lewis to
approve the Pay Draw #3 for the Thornapple River Dr. Utility Extension
Project. Motion carried.

Article 8. Unfinished Business

Article 9. New Business

031-2017

a. Public Hearing –Meadowbrooke PUD (5794 Broadmoor Ave. & 5201 60th St.) to allow for multifamily residential and commercial development.

Motion was made by Trustee Koessel and supported by Trustee Shipley to move into public hearing. Motion carried.

Community Development Director Peterson reviewed the request to amend the Meadowbrooke Business Park PUD.

Timothy Stoepker was present on behalf of Lacks Industries to inform the Board of their position on the PUD amendment.

Discussion followed.

Kirsten Rimes, Edward Rose & Sons was present to address the Board regarding their request.

No public comments received.

Motion was made by Trustee Lewis and supported by Trustee Koessel to reconvene into regular session. Motion carried.

b. Consider Approval of Amending the Meadowbrooke PUD (5794 Broadmoor Ave. & 5201 60th St.) to allow for multifamily residential and commercial development.

Motion was made by Trustee Koessel and supported by Clerk Slater to approve the amendment to the Meadowbrook PUD to allow for multifamily residential and commercial development and also include the recommended changes by Lacks (On page 6 and 7 of the new Ordinance). Motion carried by roll call vote.

032-2017

Consider Approval of 60th Street Watermain Acquisition.

Manager Swayze reviewed the watermain acquisition. Motion was made by Trustee Koessel and supported by Treasurer Peirce to approve the proposed Purchase Agreement for the 60th Street watermain with Caledonia Township, approve the Professional Services Proposal with Fishbeck and authorize the Design Phase of the Project. Motion carried.

033-2017

Consider Approval of the 30th St. Cemetery Schematic Design Proposal.

Manager Swayze reviewed the need for the expansion of the 30th St. Cemetery. Discussion followed. Motion was made by Trustee Koessel and supported by Trustee Shipley to approve the Professional Engineering Services Proposal from Fishbeck for the 30th Street Cemetery Expansion project and authorize the Preliminary Design Phase at a total cost of \$35,000. Motion carried.

Article 10. Public Comments – Any comments...whether it is on the Agenda or not. (limit comments to 3 minutes)

Article 11. Manager Comments

Article 12. Board Member Comments

Clerk Slater offered the following comments:

- She attended the Airport Viewing Park Grand Opening Party.

Trustee Koessel offered the following comments:

- The sign by the Drury Suites...would like all boardmembers to drive by and look at it and we will talk about it at another time.

Article 13. Adjournment

Motion was made by Treasurer Peirce and supported by Clerk Slater to adjourn.
Motion carried.

Meeting adjourned at 8:40 p.m.

Respectfully submitted,

Denise M. Biegalle
Deputy Clerk

Approved by:

Susan B. Slater, Clerk

Robert S. Beahan, Supervisor

MINUTES

Cascade Charter Township
Planning Commission
Monday, June 5, 2017
7:00 P.M.

ARTICLE 1. Chairman Waalkes called the meeting to order at 7:00 P.M.
Members Present: Katsma, Lewis, Mead, Pennington, Rissi, Robinson, Sperla and Williams
Members Absent:
Others Present: Community Development Director, Steve Peterson and those listed on the sign in sheet.

ARTICLE 2. Pledge of Allegiance.

ARTICLE 3. Approve the current Agenda.

Motion was made by Member Mead to approve the Agenda. Supported by Member Lewis. Motion carried 9 to 0.

ARTICLE 4. Approve the Minutes of the May 15, 2017 Meeting.

Motion was made by Member Lewis to approve the Minutes of May 15, 2017 as written. Supported by Member Rissi. Motion carried 9 to 0.

ARTICLE 5. Acknowledge visitors and those wishing to speak to non-agenda items.

No visitors who were present wished to speak about non-agenda items.

ARTICLE 6. Case #17:3382 Melissa Rollo

Public Hearing

Property Address: 7220 Oliver Woods Drive

Requested Action: The Applicant is requesting a Special Use Permit to install a 6 feet tall fence in the front yard.

Director Peterson stated that the Applicant is requesting a special use permit to allow for a taller fence in the front yard. The fence would be a 6 feet tall, wood, dog eared fence in the front yard along the Thornapple River Drive frontage. Applicant is allowed to have a 4 foot fence in the front yard and is looking to increase that to 6 feet, which requires a special use permit. Applicant actually has two front yards, because this is a corner lot. They are only seeking to place the taller fence for a portion of the Thornapple frontage. The rest of the fence is in the side or rear yard allowing it to be 6 feet tall.

Director Peterson recommends approval of the special use permit to install a fence 6 feet in height in the front yard as proposed.

Chairman Waalkes asked the Applicant to come forward with any comments.

Applicant did not come forward with any comments.

Motion was made by Member Mead to open the Public Hearing. Supported by Member Rissi. Motion was carried 9 to 0.

No one from the public came forward.

Motion was made by Member Rissi to close the Public Hearing. Supported by Member Mead. Motion carried 9 to 0.

Motion was made by Member Sperla to approve the Special Use Permit to allow a wood, dog eared fence, 6 feet in height in the front yard. Supported by Member Robinson. Motion carried 9 to 0.

ARTICLE 7. Case #16:3383 Andrew Popp

Public Hearing

Property Address: 1360 Briarcliff Drive

Requested Action: The Applicant is requesting a Special Use Permit to construct an accessory building in excess of 832 sq. ft.

Director Peterson stated that Applicant is requesting permission to construct a 30' x 40' accessory building (1,200 sq. ft.). The building will be 14 feet tall as measured to the midpoint. This requires a minimum 10 feet setback from the side and 25 feet from the rear property lines. The Applicant shows the nearest setback of 11 feet to the side property line. The property is on the river so they are allowed to put the building in the front yard provided they still meet the required front setback of 35 feet. They propose a setback of about 200 feet. The building will be used for personal storage.

With less than 3 acres, the property would only be allowed this one accessory building. It does appear that they have a small building on the river. They would need to choose which one they want, as they are only allowed one building.

Director Peterson recommends approval of the request to construct the new building under the following conditions:

1. That the building is not used for living space or to run a business.
2. Any outdoor light meets township regulations; and
3. Remove the existing accessory building within 30 days of completing the new building.

Chairman Waalkes asked the Applicant to come forward with any comments.

Mr. Popp came forward to address the existing accessory building. Mr. Popp stated that he might like to keep that building in addition to the new building and asked if there were any way he could keep it. Discussion followed in which it was suggested that he

seek a variance to keep the existing building, but that would mean he would not get the building permit for the new building until that happened. Mr. Popp stated that if he decided to keep the existing building, he would seek the variance understanding he could not build the new building until the variance was approved.

Motion was made by Member Mead to open the Public Hearing. Supported by Member Williams. Motion was carried 9 to 0.

No one from the public came forward.

Motion was made by Member Sperla to close the Public Hearing. Supported by Member Rissi. Motion carried 9 to 0.

Motion was made by Member Sperla to approve the Special Use Permit to construct an accessory building with the three conditions stated by Director Peterson above. If, however, Applicant applies for a variance to keep the existing accessory building, then the building permit for the new accessory building will not be issued until a decision is made on the variance. Supported by Member Robinson. Motion carried 9 to 0.

ARTICLE 8. Case #16:3316 Leisure Living LLC

Property Address: 5042, 5044 Cascade Road and 1225 Spaulding

Requested Action: Recommendation to the Township Board for approval of the P.U.D. ordinance and site plan.

Director Peterson stated that at the April 17, 2017 Planning Commission meeting, preliminary plan approval was awarded to accommodate the independent, assisted and memory care living project, with certain conditions, which the Applicant has completed, except the City of Grand Rapids issues which will be ongoing. The P.U.D. Ordinance has been reviewed by Applicant and Director Peterson believes the language addresses the Commission's approval.

Director Peterson recommended that the Planning Commission forward a positive recommendation to the Township Board for approval of the P.U.D ordinance and site plan. If a positive recommendation is given, the Township Board will then hold an additional public hearing to consider the Planning Commission's recommendation.

Motion was made by Member Mead to send a positive recommendation to the Township Board for approval of the P.U.D. ordinance and site plan. Supported by Member Rissi. Motion carried 9 to 0.

ARTICLE 9. Any other business

Chairman Waalkes announced that he will be vacating his position on the Planning Commission, effective after the June 19, 2017 meeting.

ARTICLE 10. Adjournment.

Motion was made by Member Mead to adjourn. Supported by Member Rissi. Motion carried 9 to 0. The meeting was adjourned at 7:35 p.m.

Respectfully submitted,
Scott Rissi, Secretary

MINUTES
Cascade Charter Township Zoning Board of Appeals
Tuesday, May 9, 2017
7:00 P.M.

ARTICLE 1. Chairman Berra called the meeting to order at 7:00 P.M.
Members Present: Casey, McDonald, Milliken and Pennington
Members Absent:
Others Present: Community Development Director, Steve Peterson and those listed on the sign in sheet.

ARTICLE 2. Chairman Berra led the Pledge of Allegiance.

ARTICLE 3. Approve the Agenda.

Motion was made by Member McDonald to approve the Agenda. Supported by Member Pennington. Motion carried 5 to 0.

ARTICLE 4. Approve the Minutes of the April 18, 2017 Meetings.

Motion was made by Member Casey to approve the Minutes of April 18, 2017. Supported by Member McDonald. Motion carried 5 to 0.

ARTICLE 5. Acknowledge visitors and those wishing to speak to non-agenda items.

No visitors who were present wished to speak about non-agenda items.

ARTICLE 6. Case #17:3377 YMCA

Public Hearing

Property Address: 5500 Burton St. S.E.

Requested Action: The Applicant is requesting a variance to allow an 800 sq. ft. tent.

Member McDonald stated that he is on the YMCA Board, which is a voluntary position. He feels his position on the YMCA Board will not affect his judgment on this project. The Board agreed there was no conflict of interest.

Director Peterson stated that the Applicant is requesting approval to allow for the installation of an 800 sq. ft. tent for a period of 3 months this summer. The P.U.D. Ordinance for the YMCA is limited to tents of no more than 400 sq. ft. Last year they installed two 400 sq. ft. tents, but indicated that it was not practical with all the tent tie downs.

Tents are permitted for only 3 days in the Zoning Ordinance, which was intended to address more of the special sales tents that are used in the retail area. The allowance of the tent in the YMCA project was not a matter of much discussion and I believe if asked, we would have permitted an 800 sq. ft. tent in the P.U.D. Ordinance.

Director Peterson recommends approval of the variance to allow the 800 sq. ft. tent for a period of 3 months for the summer program at the YMCA.

Chairman Berra asked if the Applicant would like to come forward.

Mr. White came forward to answer any questions the Board might have.

A brief discussion followed.

Motion was made by Member Casey to open the public hearing. Supported by Member McDonald. Motion carried 5 to 0.

No members of the public came forward.

Motion was made by Member McDonald to close the public hearing. Supported by Member Casey. Motion carried 5 to 0.

Motion was made by Member McDonald to approve the variance to all an 800 sq. ft. tent for a period of 3 months this summer. Supported by Member Milliken. Motion carried 5 to 0.

ARTICLE 7. Any other business.

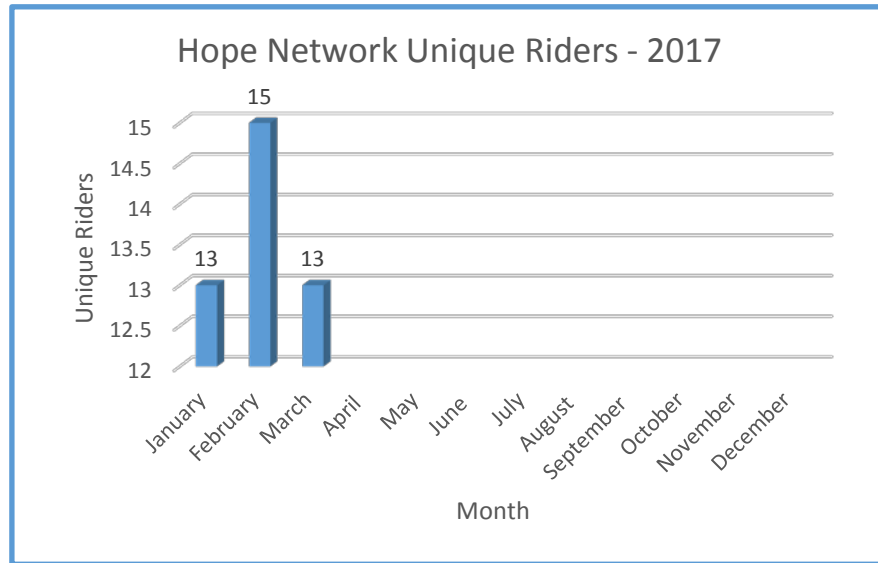
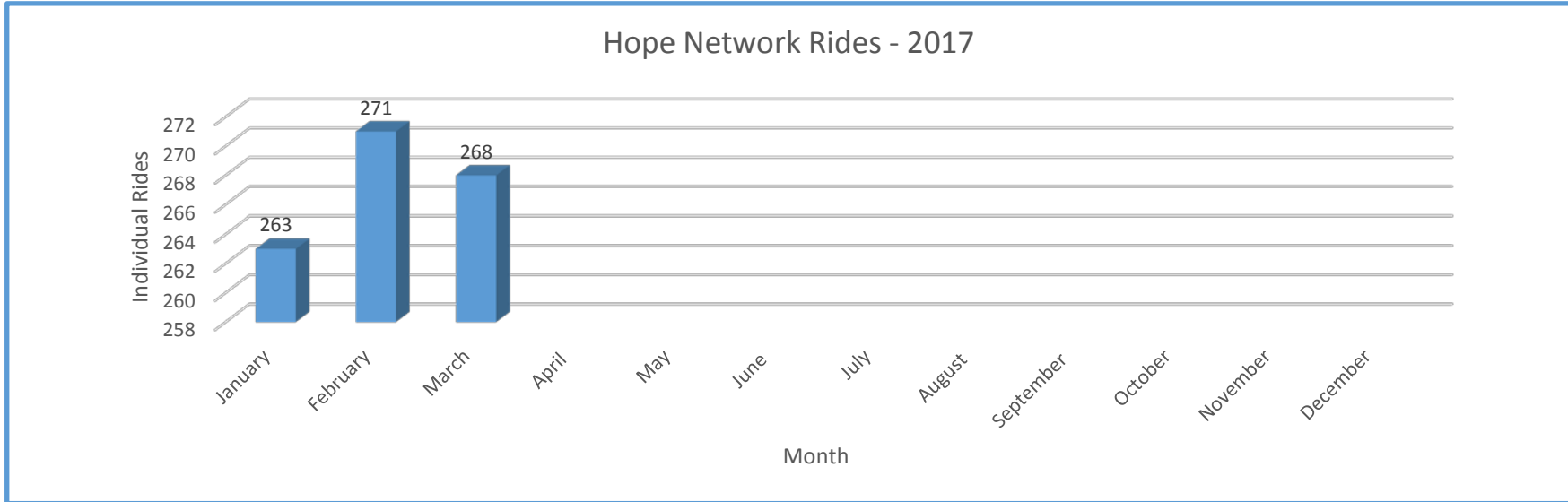
No other business was presented

ARTICLE 8. Adjournment

Motion was made by Member Pennington to adjourn. Supported by Member Casey. Motion carried 5 to 0.

Respectfully submitted,
Tom McDonald, Secretary

Hope Network - FY17 1st Quarter Ridership Data



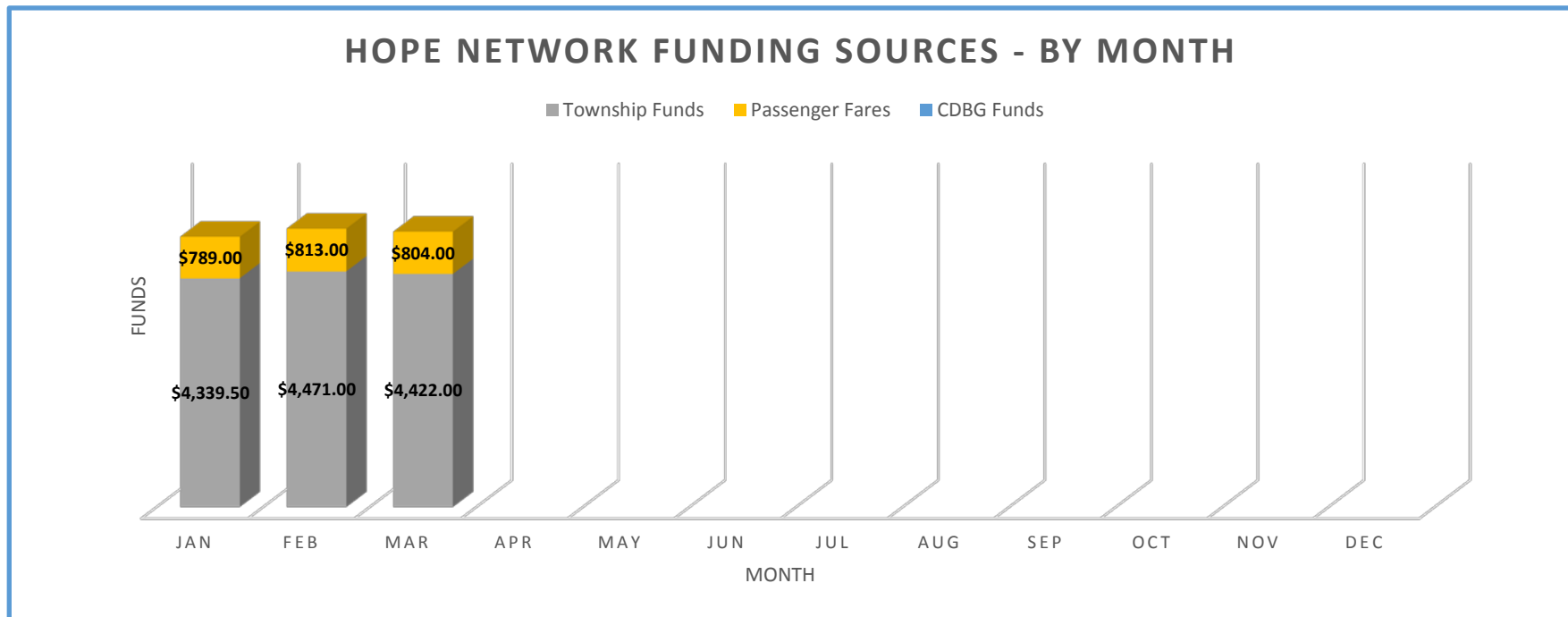
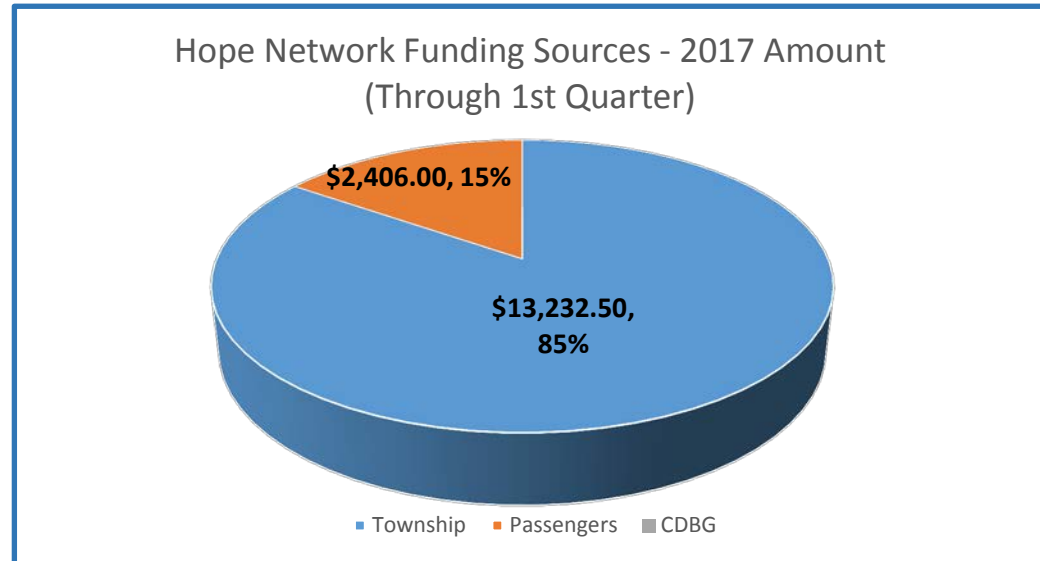
Through FY2017 1st Quarter, there have been 802 rides to Township residents provided by the Hope Network. After implimenting the GO!Bus service in February of 2016 the Township initially saw a decrease in the amount of Hope Network users, which has steadied in the past 6 months or so. The township does offer Hope Network service to Go!Bus riders if their destination is outside the Go!Bus service area.

Each month the Township is given a report that details the residents that utilize the system, as well as the rides that are taken. The Hope Network typically sees 11 unique riders that have utilized the system cosistently over the past several years. Each month the system sees an addition 2-4 users that temporarily need the service.

Hope Network - FY2017 1st Quarter Financial Data

The Hope Network Transportation Services provides specialized transportation for Cascade residents who live outside of The Rapid 3/4 mile service area. Through an agreement with the Hope Network, rides are provided at a cost of \$19.50 per ride, each way. The Township covers \$16.50 and the passenger is responsible for \$3.00.

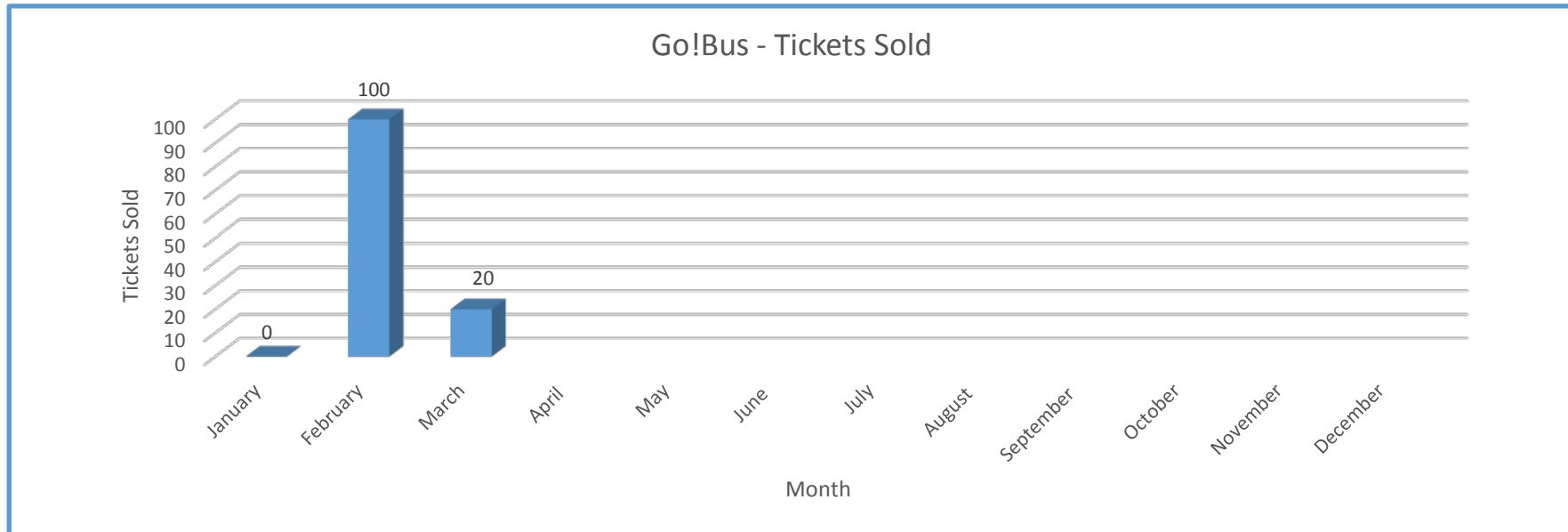
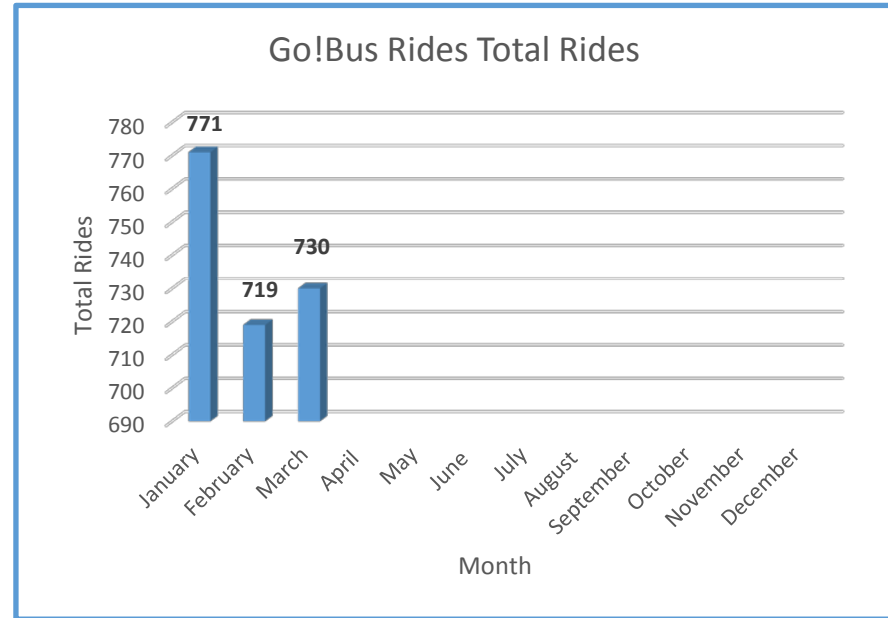
Through 1st Quarter of FY 2017, the Township has spent \$13,232.50 with Hope Network, while passengers have contributed \$2,406 and CDBG provides \$0. CDBG funding is available typically in July and August. Overall, the Township has provided 85% of the funding for this service through the 1st quarter.



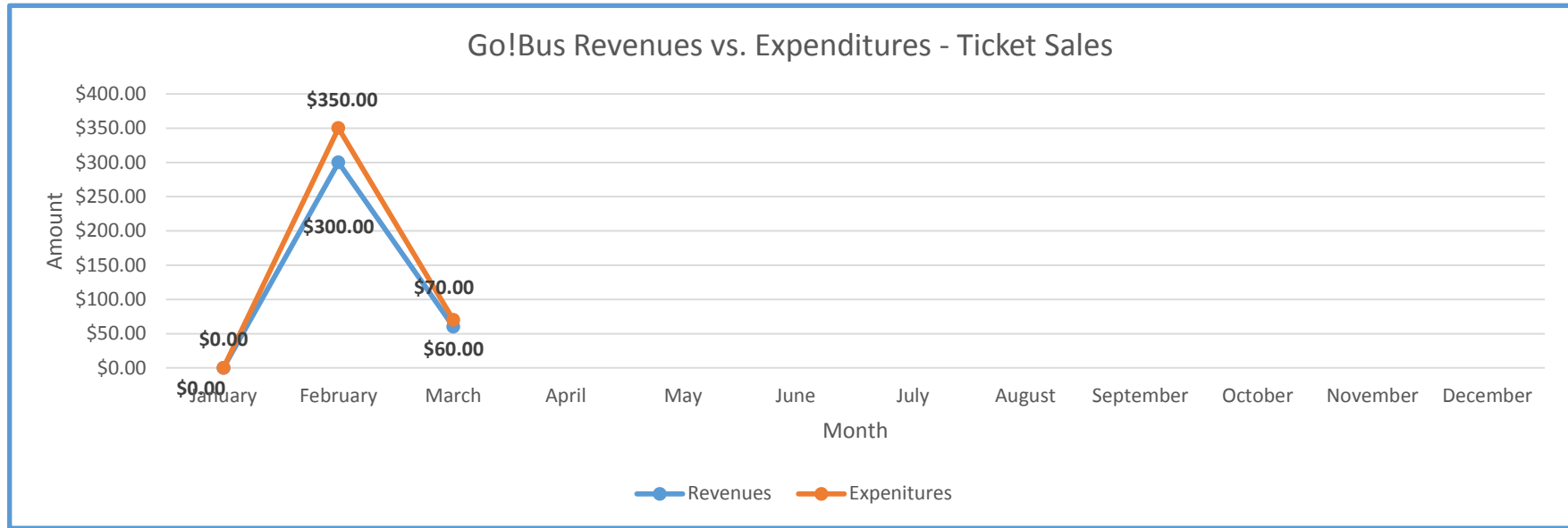
Go!Bus - FY2017 1st Quarter Ridership Data

Through FY 2017 1st Quarter , there have been 2220 Go!Bus trips that have either originated in Cascade Township or had a destination in Cascade Township. At this time, based on the data provided to us by The Rapid we are unable to tell how many of these rides are Cascade Township residents. We will be working with The Rapids to see if we can get better ridership data.

We are able to track the sale of Go!Bus tickets to Cascade Township residents. Because we offer a discount over the regular price (\$3.00 instead of \$3.50) we believe a majority of Cascade Township Go!Bus riders will purchase their tickets through our office. Through FY17 1st Quarter, we have sold 120 Go!Bus tickets. We are unable to determine whether or not those tickets have been used, only that they have been sold

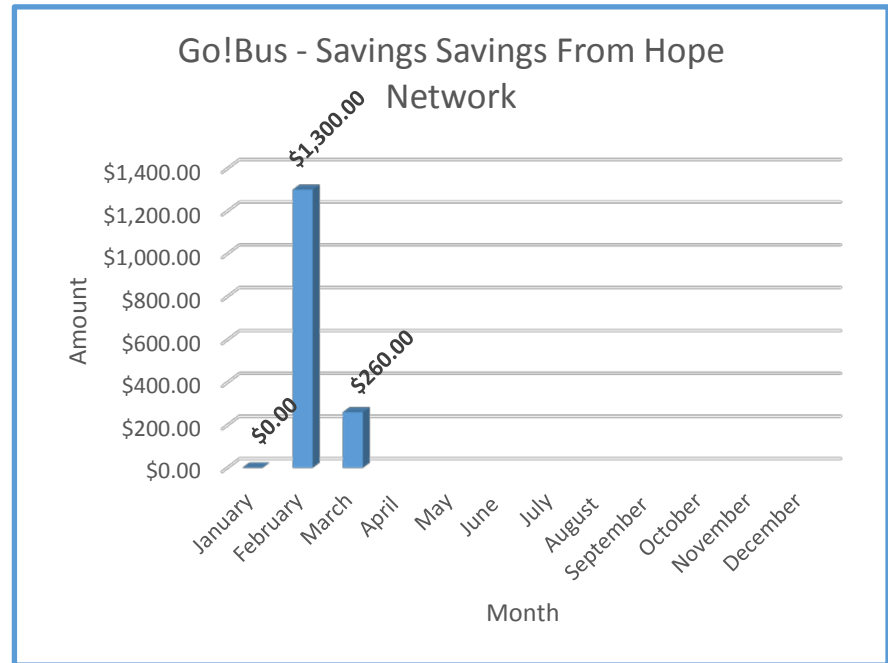


Go!Bus - FY2017 1st Quarter Financial Data



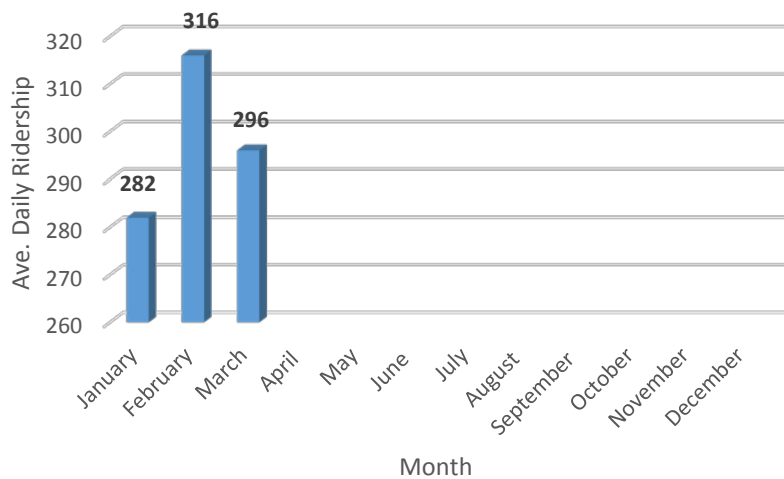
The Go!Bus is the division of The Rapid service that provides specialized transportation services to individuals that live within 3/4 miles of a Rapid bus line. Typically this service would be offered without Township contribution, however, the Township has chosen to cover \$0.50 of each ride (Cascade residents only) to keep the cost to Cascade residents equal to those that ride the Hope Network (\$3.00 per ride).

Through FY 17 1st Quarter, the Township has net expenditures of \$60 when accounting for the \$0.50 per ride subsidy. Had the riders currently utilizing the Go!Bus used the Hope Network instead, the Township would have incurred \$1,560 in expenditures to cover the \$16.50 per ride subsidy. The Go! Bus service represents a \$1,560 savings over potential Hope Network costs on Go!Bus tickets sold through 1st Quarter.



Rapid 28th Street - FY2017 1st Quarter Ridership Data

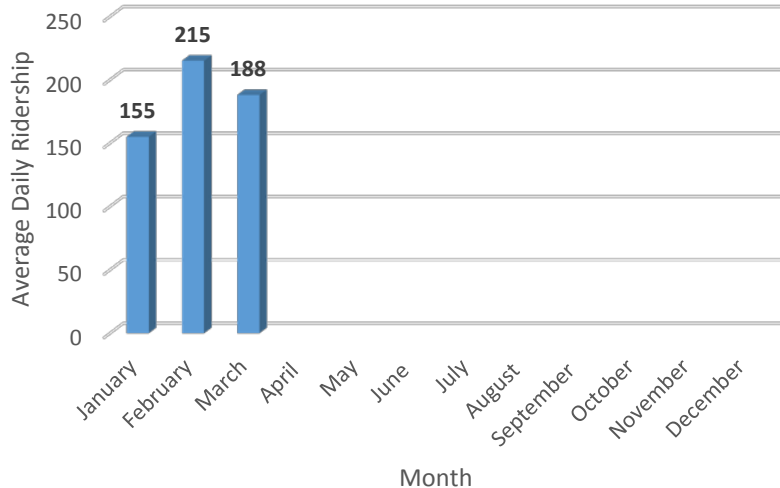
Rapid - 28th Street Weekday Ridership



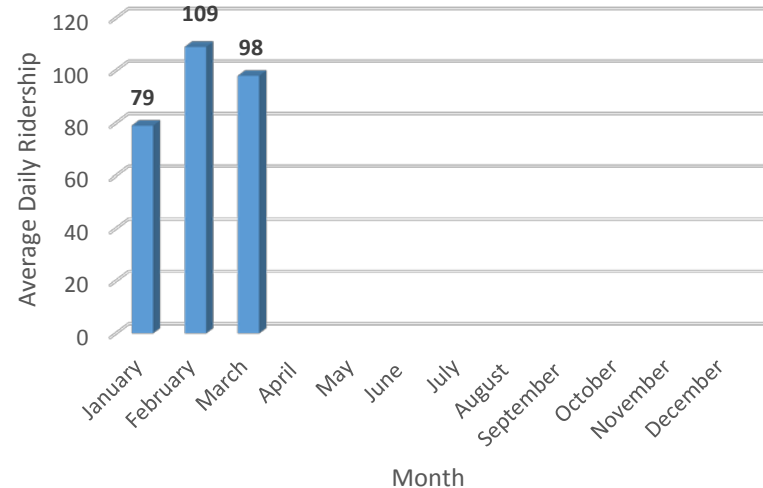
Beginning in December 2016, the Rapid began collecting realtime boarding data and no longer relies on sampling estimates. Alightings are still estimated, with one alighting estimated per boarding. The riders summary is charted on this sheet, while actual rider data is included in the back of this report. Ridership logs are available upon request.

For 1st Quarter 2017, average weekday ridership peaked in February with an average of 316 riders (one-way trips) per day. Saturday and Sunday ridership also peaked in February with 215 and 109 respective riders per day. An unseasonably mild February may help explain the uptick in riders for that month. It is expected that ridership will increase in April/May and reach peaks in June/July.

Rapid - 28th Street Saturday Ridership



Rapid - 28th Street Sunday Ridership

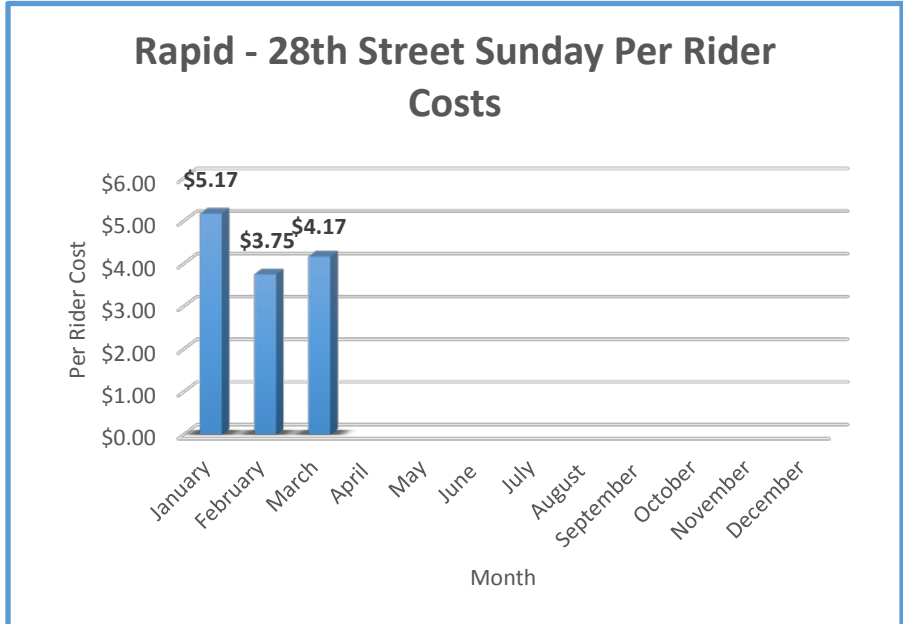
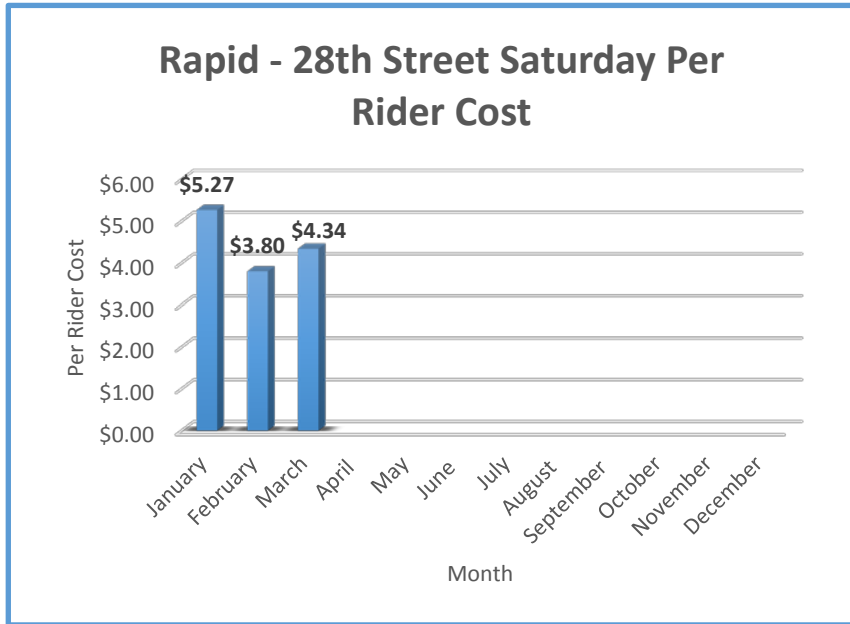
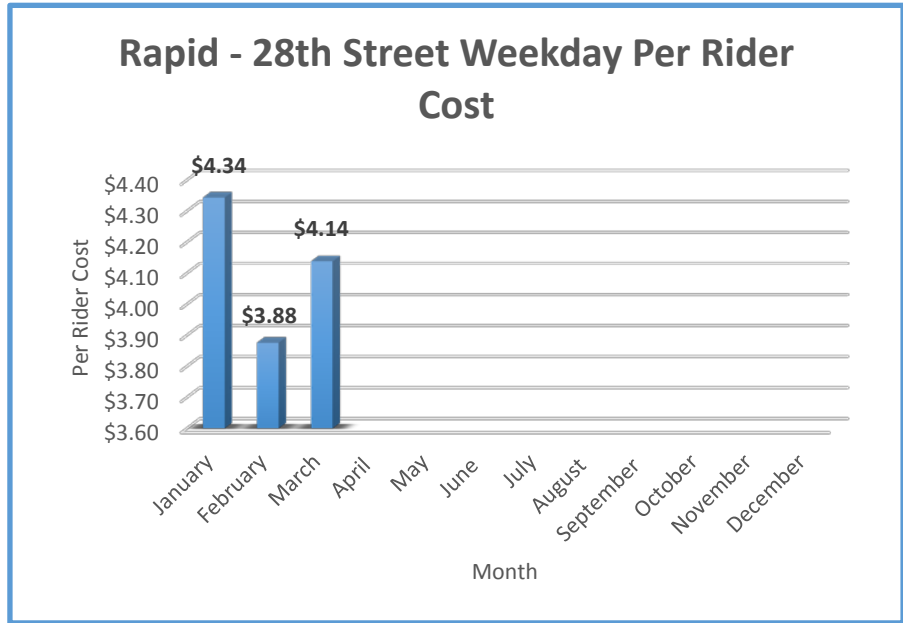


Rapid 28th Street - FY2017 1st Quarter Financial Data

Cascade Township funds the 28th Street Linehaul service on a "per service hour" formula, which is \$68.05 per service hour for the current contract. Based on the hours of service, the Township pays the following "per day" costs:

Weekday - \$1,224.90 Saturday - \$816.60 Sunday - \$408.30

Because the costs per day are fixed, the subsidy that is spent per rider is variable based on the volume of riders, the more riders that utilize the service the lower the subsidy per rider paid by the Township. During the 1st Quarter 2017 the subsidy per rider was lowest in February when the highest ridership was realized. With ridership expected to increase as the weather gets warmer it is expected that the subsidy per rider will decrease. In 2016 the per rider subsidy reached a weekday low of \$3.41 in September.



Trips Per Day

Date	Boardings	Estimated Alightings	Estimated Total Trips
1/2/2017	88	88	176
1/3/2017	157	157	314
1/4/2017	135	135	270
1/5/2017	145	145	290
1/6/2017	102	102	204
1/7/2017	66	66	132
1/8/2017	39	39	78
1/9/2017	129	129	258
1/10/2017	107	107	214
1/11/2017	177	177	354
1/12/2017	119	119	238
1/13/2017	133	133	266
1/14/2017	72	72	144
1/15/2017	34	34	68
1/16/2017	119	119	238
1/17/2017	191	191	382
1/18/2017	169	169	338
1/19/2017	186	186	372
1/20/2017	121	121	242
1/21/2017	95	95	190
1/22/2017	46	46	92
1/23/2017	140	140	280
1/24/2017	163	163	326
1/25/2017	157	157	314
1/26/2017	152	152	304
1/27/2017	125	125	250
1/28/2017	77	77	154
1/29/2017	38	38	76
1/30/2017	152	152	304
1/31/2017	131	131	262
Total	3,565	3,565	7,130

Boardings by Time of Day

Time	Number of Boardings	Average Boardings/Day	Percent of Total
6:00 AM	125	4.2	3.5
7:00 AM	203	6.8	5.7
8:00 AM	159	5.3	4.5
9:00 AM	111	3.7	3.1
10:00 AM	166	5.5	4.7
11:00 AM	154	5.1	4.3
12:00 PM	154	5.1	4.3
1:00 PM	181	6.0	5.1
2:00 PM	253	8.4	7.1
3:00 PM	384	12.8	10.8
4:00 PM	400	13.3	11.2
5:00 PM	320	10.7	9.0
6:00 PM	184	6.1	5.2
7:00 PM	118	3.9	3.3
8:00 PM	169	5.6	4.7
9:00 PM	168	5.6	4.7
10:00 PM	222	7.4	6.2
11:00 PM	94	3.1	2.6
Total	3565	119	100

Daily Average

Average Trips per weekday	282
Average Trips per Saturday	155
Average Trips per Sunday	79

Trips Per Stop

Stop	Total Boardings	Boardings/Day	Estimated Alightings/Day	Total Activity/Day	% of Total Activity
28th and Patterson	375	19.7	19.7	39.5	11.5
28th and Northern	698	36.7	36.7	73.5	21.4
2550 Patterson	35	1.8	1.8	3.7	1.1
Mary Free Bed YMCJ	17	0.9	0.9	1.8	0.5
Cascade Meijer	1128	59.4	59.4	118.7	34.5
28th and Charlevoix	587	30.9	30.9	61.8	18.0
28th and Charlevoix	115	6.1	6.1	12.1	3.5
28th and Lucerne	7	0.4	0.4	0.7	0.2
28th and Cascade Ct	5	0.3	0.3	0.5	0.2
28th and Thornhills	153	8.1	8.1	16.1	4.7
28th and Jacksmith	9	0.5	0.5	0.9	0.3
28th and Cascade Rr	138	7.3	7.3	14.5	4.2
Total		172	172	344	

Trips Per Day

Date	Boardings	Estimated Alightings	Estimated Total Trips
2/1/2017	170	170	340
2/2/2017	122	122	244
2/3/2017	141	141	282
2/4/2017	96	96	192
2/5/2017	53	53	106
2/6/2017	144	144	288
2/7/2017	141	141	282
2/8/2017	259	259	518
2/9/2017	134	134	268
2/10/2017	156	156	312
2/11/2017	96	96	192
2/12/2017	57	57	114
2/13/2017	150	150	300
2/14/2017	163	163	326
2/15/2017	150	150	300
2/16/2017	177	177	354
2/17/2017	166	166	332
2/18/2017	134	134	268
2/19/2017	64	64	128
2/20/2017	164	164	328
2/21/2017	153	153	306
2/22/2017	204	204	408
2/23/2017	161	161	322
2/24/2017	115	115	230
2/25/2017	104	104	208
2/26/2017	44	44	88
2/27/2017	148	148	296
2/28/2017	143	143	286
Total	3,809	3,809	7,618

Boardings by Time of Day

Time	Number of Boardings	Average Boardings/Day	Percent of Total
6:00 AM	124	4.4	3.3
7:00 AM	192	6.4	5.0
8:00 AM	121	4.0	3.2
9:00 AM	79	2.6	2.1
10:00 AM	134	4.5	3.5
11:00 AM	186	6.2	4.9
12:00 PM	168	5.6	4.4
1:00 PM	255	8.5	6.7
2:00 PM	384	12.8	10.1
3:00 PM	402	13.4	10.6
4:00 PM	404	13.5	10.6
5:00 PM	332	11.1	8.7
6:00 PM	205	6.8	5.4
7:00 PM	168	5.6	4.4
8:00 PM	164	5.5	4.3
9:00 PM	188	6.3	4.9
10:00 PM	193	6.4	5.1
11:00 PM	110	3.7	2.9
Total	3,809	127	100

Daily Average

Average Trips per weekday	316
Average Trips per Saturday	215
Average Trips per Sunday	109

Trips Per Stop

Stop	Total Boardings	Boardings/Day	Estimated Alightings/Day	Total Activity/Day	% of Total Activity
28th and Patterson	631	33.2	33.2	66.4	16.6
28th and Northern	790	41.6	41.6	83.2	20.7
2550 Patterson	41	2.2	2.2	4.3	1.1
Mary Free Bed YMCA	11	0.6	0.6	1.2	0.3
Cascade Meijer	1212	63.8	63.8	127.6	31.8
28th and Charlevoix	563	29.6	29.6	59.3	14.8
28th and Charlevoix Woods	57	3.0	3.0	6.0	1.5
28th and Lucerne	61	3.2	3.2	6.4	1.6
28th and Cascade Center	14	0.7	0.7	1.5	0.4
28th and Thornhills	226	11.9	11.9	23.8	5.9
28th and Jacksmith	17	0.9	0.9	1.8	0.4
28th and Cascade Rd	186	9.8	9.8	19.6	4.9
Total		200	200	401	100

Trips Per Day

Date	Boardings	Estimated Alightings	Estimated Total Trips
3/1/2017	144	144	288
3/2/2017	125	125	250
3/3/2017	142	142	284
3/4/2017	112	112	224
3/5/2017	59	59	118
3/6/2017	140	140	280
3/7/2017	164	164	328
3/8/2017	149	149	298
3/9/2017	146	146	292
3/10/2017	126	126	252
3/11/2017	65	65	130
3/12/2017	47	47	94
3/13/2017	138	138	276
3/14/2017	140	140	280
3/15/2017	145	145	290
3/16/2017	174	174	348
3/17/2017	155	155	310
3/18/2017	114	114	228
3/19/2017	50	50	100
3/20/2017	157	157	314
3/21/2017	150	150	300
3/22/2017	184	184	368
3/23/2017	144	144	288
3/24/2017	127	127	254
3/25/2017	84	84	168
3/26/2017	39	39	78
3/27/2017	136	136	272
3/28/2017	145	145	290
3/29/2017	173	173	346
3/30/2017	137	137	274
3/31/2017	158	158	316
Total	3,969	3,969	7,938

Boardings by Time of Day

Time	Number of Boardings	Average Boardings/Day	Percent of Total
6:00 AM	79	2.5	2.0
7:00 AM	154	5.0	3.9
8:00 AM	136	4.4	3.4
9:00 AM	104	3.4	2.6
10:00 AM	116	3.7	2.9
11:00 AM	180	5.8	4.5
12:00 PM	171	5.5	4.3
1:00 PM	243	7.8	6.1
2:00 PM	295	9.5	7.4
3:00 PM	454	14.6	11.4
4:00 PM	451	14.5	11.4
5:00 PM	352	11.4	8.9
6:00 PM	250	8.1	6.3
7:00 PM	166	5.4	4.2
8:00 PM	206	6.6	5.2
9:00 PM	215	6.9	5.4
10:00 PM	258	8.3	6.5
11:00 PM	139	4.5	3.5
Total	3,969	128	100

Daily Average

Average Trips per weekday	296
Average Trips per Saturday	188
Average Trips per Sunday	98

Trips Per Stop

Stop	Total Boardings	Boardings/Day	Estimated Alightings/Day	Total Activity/Day	% of Total Activity
2550 Patterson	35	1.8	1.8	3.7	0.9
28th and Cascade Center	34	1.8	1.8	3.6	0.9
28th and Cascade Rd	280	14.7	14.7	29.5	7.1
28th and Charlevoix	567	29.8	29.8	59.7	14.3
28th and Charlevoix Woods	90	4.7	4.7	9.5	2.3
28th and Jacksmith	19	1.0	1.0	2.0	0.5
28th and Lucerne	59	3.1	3.1	6.2	1.5
28th and Northern	818	43.1	43.1	86.1	20.6
28th and Patterson	553	29.1	29.1	58.2	13.9
28th and Thornhills	232	12.2	12.2	24.4	5.8
Cascade Meijer	1256	66.1	66.1	132.2	31.6
Mary Free Bed YMCA	26	1.4	1.4	2.7	0.7
Total	209	209	209	418	100



**State of Michigan
Department of Environmental Quality**

Water Resources Division
Grand Rapids District Office
350 Ottawa Ave NW, Unit 10
Grand Rapids, MI, 49503-2318
616-356-0500

Site Name: 41-CAS 27 - Thomapple River Drive over Unnamed Creek
Submission Number: HN4-VPFJ-FEGEB
Date: June 9, 2017

PUBLIC NOTICE

The Kent County Road Commission (KCRC) has applied to this office for a permit under authority of Water Resources Protection; Part 31; Part 301, Inland Lakes and Streams; Part 303, Wetlands Protection; Part 315, Dam Safety; Part 325, Great Lakes Submerged Lands, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The applicant proposes to clean out the two existing culverts and place a concrete liner in the bottom of the culverts to extend the service life. The existing culverts are 78-foot long by 11.42-foot span by 7.25-foot rise (128 square foot end area) the proposed liner will result in the culverts having a 6.92-foot rise (123.5 square foot end area). The project is located in T06N, R10W, Section 33, Cascade Township, Kent County, Michigan, in accordance with plans attached to this notice.

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 31, Part 301, 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.

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: Michael TenBrock, KCRC, Applicant
Mark Sargent, DNR, Wildlife Division
Brian Gunderman, DNR, Fisheries Division
Kent County Clerk
Cascade Township Clerk
Kent County Drain Commissioner
Kent CEA
Kent County Conservation District

Holly Vickers, DEQ, WRD
Amanda Whitscell, DEQ, WRD
Mike Worm, DEQ, WRD
Brandie Stefanski, DEQ, WRD
State Historic Preservation Office
Adjoining Property Owners
Local Postmaster



AGENCY USE	Previous USACE File Number	Date Received	DEQ File Number	
	USACE File Number		Fee received \$	
<p>Validate that all parts of this checklist are submitted with the application package. Fill out application and additional pages as needed.</p> <p><input type="checkbox"/> All Items in Sections 1 through 9 are completed.</p> <p><input type="checkbox"/> Project-specific Sections 10 through 20 are completed.</p> <p><input type="checkbox"/> Dimensions, volumes, and calculations are provided for all impact areas.</p> <p><input type="checkbox"/> All information contained in the headings for the appropriate Sections (1-20) are addressed, and identified attachments (+) are included.</p> <p><input type="checkbox"/> Map, site plan(s), cross sections; one set must be black and white on 8 1/2 by 11 inch paper; photographs.</p> <p><input type="checkbox"/> Application fee is attached.</p>				
<p><input checked="" type="checkbox"/> Project Location Information For Latitude, Longitude, and TRS info anywhere in Michigan see www.mcgl.state.mi.us/wetlands/</p>				
Project Address (road, if no street address) <i>Near 5695 Thornapple River Drive</i>		Zip Code <i>49512</i>	Municipality (Township/Village/City) <i>Cascade Township</i>	County <i>Kent</i>
Property Tax Identification Number(s)		Latitude <i>42.86083541 N</i>		Township/Range/Section (TRS) <i>T 6N N or S; R 10W E or W;</i>
Subdivision/Plat and Lot Number		Longitude <i>- 85 4981375 W</i>		<i>Sec 32 & 33</i> OR Private Claim # _____
<p><input checked="" type="checkbox"/> Applicant and Agent Information</p>				
Owner/Applicant (individual or corporate name) <i>Kent County Road Commission</i>			Agent/Contractor (firm name and contact person) <i>Same as Owner</i>	
Mailing Address <i>1500 Scribner NW</i>			Mailing Address	
City <i>Grand Rapids</i>	State <i>MI</i>	Zip Code <i>49426</i>	City	State Zip Code
Contact Phone Number <i>616 450 9961</i>	Fax <i>616 242 6974</i>	Contact Phone Number	Fax	
Email <i>mtenbrock@kentcountyroads.net</i>			E-mail	
<p><input type="checkbox"/> No <input checked="" type="checkbox"/> 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.</p>				
Property Owner's Name (if different from applicant)			Mailing Address	
Contact Phone Number	City		State	Zip Code
<p><input checked="" type="checkbox"/> Project Description</p>				
Project Name <i>CAS 27 - Cascade Bridge No. 27</i>			Preapplication File Number <i>- - -P</i>	
Name of Water body <i>Unnamed Creek</i>			Date project staked/flagged	
<p>The proposed project is on, within, or involves (check all that apply)</p> <p><input type="checkbox"/> an inland lake (5 acres or more)</p> <p><input type="checkbox"/> a pond (less than 5 acres)</p> <p><input checked="" type="checkbox"/> a stream, river, ditch or drain</p> <p><input type="checkbox"/> a legally established County Drain Date Drain was established _____</p> <p><input type="checkbox"/> a channel/canal</p> <p><input type="checkbox"/> 500 feet of an existing water body</p>			<p>Project Use</p> <p><input type="checkbox"/> private</p> <p><input type="checkbox"/> commercial</p> <p><input type="checkbox"/> public/government</p> <p><input type="checkbox"/> project is receiving federal/state transportation funds</p> <p><input type="checkbox"/> Wetland Restoration</p> <p><input type="checkbox"/> other</p>	
<p>Indicate the type of permit being applied for: <input type="checkbox"/> General Permit <input checked="" type="checkbox"/> Minor Project <input type="checkbox"/> Individual (All other projects.) + See Appendix C.</p>				
<p>Written Summary of All Proposed Activities <i>We plan to divert flow to one of the twin culverts, remove the sediment using a vac-truck or similar device, install reinforcing steel, place concrete. Introduce flow into completed culvert and repeat the process.</i></p>				
<p>Construction Sequence and Methods <i>Please see above.</i></p>				

**2 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.

The existing culvert system is corroding. We fear if we do not complete this preventative maintenance project, the culvert will require replacement long before it's normal service life.

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.

*If we do nothing, the ultimate impacts will be fair greater, eventually requiring replacement of the culvert.***3 Locating Your Project Site** *Attach a legible black and white map with a North arrow.*Names of roads of closest intersection *Thornapple River Drive and 60th Street*Directions from main intersection to the project site, with distances from the best and nearest visible landmark and water body *Proceed north from intersection approximately 1/3 of a mile.*

Description of buildings on the site (color; 1 or 2 story, other)

Description of adjacent landmarks or buildings (address; color; etc)

How can your site be identified if there is no visible address? *The guardrail section at the roadway indicates where the crossing is located.***4 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

5 ComplianceIf a permit is issued, when will the activity begin? (M/D/Y) *07/06/2017*Proposed completion date (M/D/Y) *12/01/2017* 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

 No Yes Are you aware of any unresolved violations of environmental law or litigation involving the property?

☛ If Yes, attach explanation.

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


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

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>Tim Reminga</i>	<i>5691 Thornapple River Dr. SE</i>	<i>Grand Rapids</i>	<i>MI 49512</i>
<i>Seth & Tricia Hembree</i>	<i>5680 Thornapple River Dr. SE</i>	<i>Grand Rapids</i>	<i>MI 49512</i>



1 Applicant's Certification <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 type="checkbox"/> Agent/Contractor <input checked="" type="checkbox"/> Corp. or Public Agency / Title	Printed Name <i>Michael TenBrock,</i> <i>Project Engineer</i>	Signature 	Date <i>6/1/17</i>



16 Projects Impacting Inland Lakes, Streams, Great Lakes, Wetlands or Floodplains

- Complete only those sections A through M applicable to your project.
- If your project impacts wetlands also complete Section 12. If your project impacts regulated floodplains also complete Section 13.
- 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
- Some projects on the Great Lakes require an application for conveyance prior to Joint Permit Application completeness.
 - ➔ 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.
 - ➔ Provide tables for multiple impact areas or multiple activities such as multiple fill areas or multiple culverts. Include your calculations.

Water Level Elevation

On inland waters NGVD 29 NAVD 88 other Observed water elevation (ft) *684.82* date of observation (M/D/Y) *05/17/17*
 On a Great Lake IGLD 85 surveyed converted from observed still water elevation.

A. PROJECTS REQUIRING FILL (See All Sample Drawings)

- ➔ Attach a site plan and cross-section views to scale showing maximum and average fill dimensions with calculations.
- ➔ For multiple impact areas on a site provide a table with location, dimensions and volumes for each fill area.

Purpose bioengineered shore protection boat ramp boat well bridge or culvert crib dock
 riprap seawall swim area other

Dimensions of fill (ft)			Total volume (cubic yards)	Volume below OHWM (cubic yards)
Length	Width	Maximum Depth		
Maximum water depth in fill area (ft)			Area filled (sq ft)	Will filter fabric be used under proposed fill? <input type="checkbox"/> No <input type="checkbox"/> Yes (If Yes, type)

Fill will extend _____ feet into the water from the shoreline and upland _____ feet out of the water.

Type of clean fill peastone % sand % gravel % other

Source of clean fill commercial on-site other
 ➔ If on-site, show location on site plan.
 ➔ If other, attach description of location.

B. PROJECTS REQUIRING DREDGING OR EXCAVATION (See Sample Drawings)

- Refer to www.mi.gov/jointpermit for spoils disposal and authorization requirements.
- ➔ Attach a site plan and cross-section views to scale showing maximum and average dredge or excavation dimensions with calculations.
- ➔ For multiple impact areas on a site provide a table with location, dimensions and volumes for each dredge/excavation area.

Purpose boat ramp boat well bridge or culvert maintenance dredge
 navigation pond/basin 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 Hydraulic Mechanical other

Spoils Disposal
 Dredged or excavated spoils will be placed on-site landfill USACE confined disposal facility 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.
 For volumes less than 5,000 cu yards, has proposed dredge material been tested for contaminants within the past 10 years?
 No Yes ➔ If Yes, provide test results with a map of sampling locations.

C. PROJECTS REQUIRING RIPRAP (See Sample Drawings 2, 3, 8, 12, 14, 22, and 23)

Riprap water ward of the ordinary high water mark: dimensions (ft)				Volume(cu yd)
length	width	depth		
Riprap landward of the ordinary high water mark: dimensions (ft)				Volume(cu yd)
Type and size of riprap (inches)				Will filter fabric or pea stone be used under proposed riprap? <input type="checkbox"/> No <input type="checkbox"/> Yes, Type
<input type="checkbox"/> field stone <input type="checkbox"/> angular rock <input type="checkbox"/> other				



Bridges and Culverts Including Foot and Cart Bridges. (See EZ Guides and Sample Drawings 5, 14A, 14B, 14C, 14D.)

- Complete other applicable Sections, including 10A-C.
- A hydraulic analysis or hydrologic analysis may be required to fully assess impacts. → Attach hydraulic calculations.
- High Water Elevation - describe reference point and highest known water level above or below reference point and date of observation.
 - Attach additional sheets for multiple bridges and/or culverts.
 - Provide detailed site-specific drawings of existing and proposed Plan and Elevation View at a scale adequate for detailed review.
 - Provide all information in the boxes below; do not write in a reference to plan sheets. Show reference datum used on plans.

Stream Information	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 checked="" 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	9'
		Downstream	13'
	Cross-sectional area of primary channel (sq ft) 92 (See Sample Drawing 14C for more information)		
	The width of the stream where the water begins to overflow its banks. Bankfull width (ft) 20		
	The invert of the stream 100-feet from structure (ft)	Upstream	682.6'
	Downstream	682.91'	
Is the existing culvert perched? <input type="checkbox"/> No <input checked="" 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.			

Complete this form for each bridge / culvert location.

	Existing	Proposed	
Bridge	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)			
Culvert	Number of culverts	2	2
	Culvert type (arch, bottomless, box, circular, elliptical, etc.)	CMPA	CMPA
	Culvert material (concrete, corrugated metal, plastic, etc.)	Corrg	Corr & Conc
	Culvert length (ft)	78	78
	Culvert <input type="checkbox"/> width <input checked="" type="checkbox"/> diameter (ft)	11.42	11.42
	Culvert height prior to any burying (ft)	7.25	6.92
	Depth culvert will be buried (ft)	n/a	n/a
	Elevation of culvert crown (ft)	Upstream	691.53
		Downstream	691.18
	Higher elevation of <input type="checkbox"/> culvert invert OR <input checked="" type="checkbox"/> streambed within culvert (ft)	Upstream	684.28
	Downstream	684.26	
Complete for both Bridges and Culverts	Entrance design (mitered, projecting, wingwalls, etc.)	Proj	Proj
	Total structure waterway opening above streambed (sq ft)	128	123.5
	Total structure waterway area below the 100-year elevation (sq ft) (if known)	96	91.5
	Elevation of road grade at structure (ft)	699.88	699.88
	Elevation of low point in road (ft)	697.05	697.05
	Distance from low point of road to mid-point of bridge crossing (ft)	157	157
	Length of approach fill from edge of bridge/culvert to existing grade (ft)	100	100
	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 www.mi.gov/jointpermit page or a copy may be requested by phone, email, or mail. A hydraulic report supporting this certification may also be required.		
Is Certification Language attached? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes			

**Kent County Road Commission
CAS-27 Photos**



Thornapple River Drive at CAS-27 Looking northward. Stream flows from left to right. Photo from 2009 Inspection Archive.

**Kent County Road Commission
CAS-27 Photos**



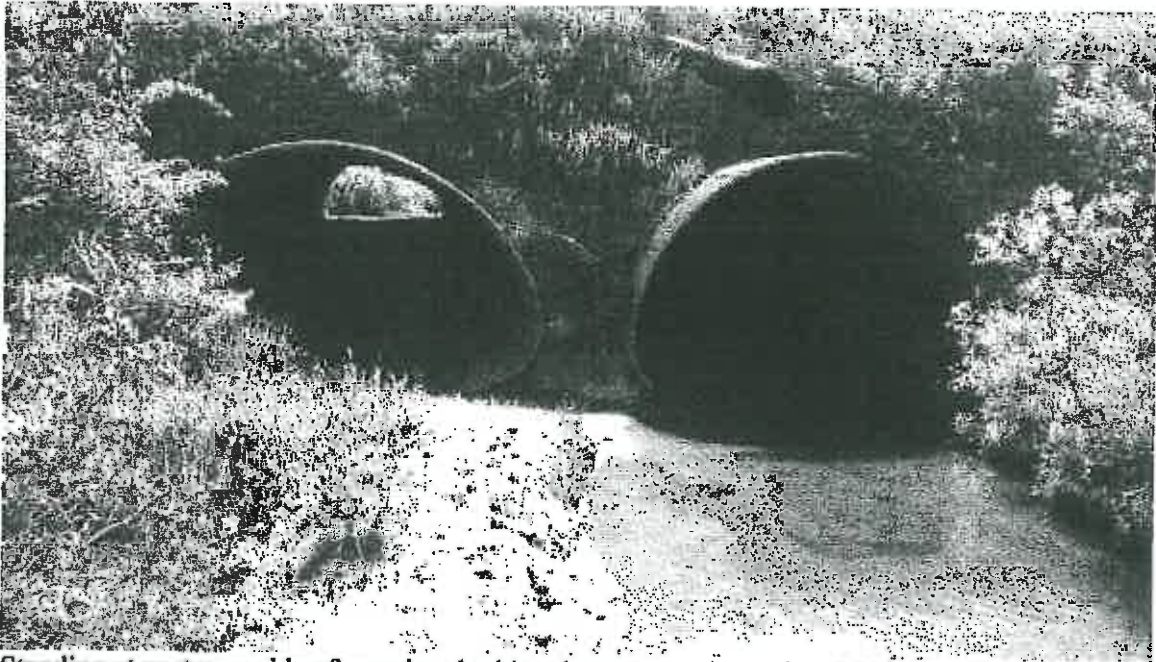
Downstream side of crossing. Photo from November 2009 Inspection Archive.

**Kent County Road Commission
CAS-27 Photos**

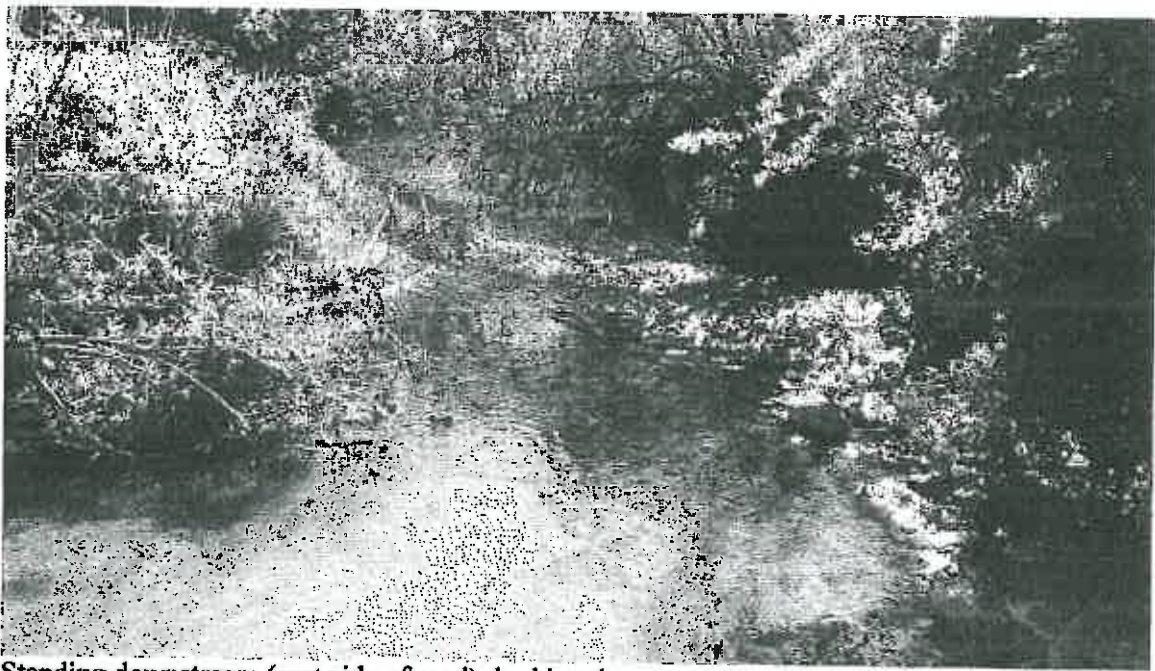


Looking upstream at upstream side of crossing (5-12-2017)

**Kent County Road Commission
CAS-27 Photos**

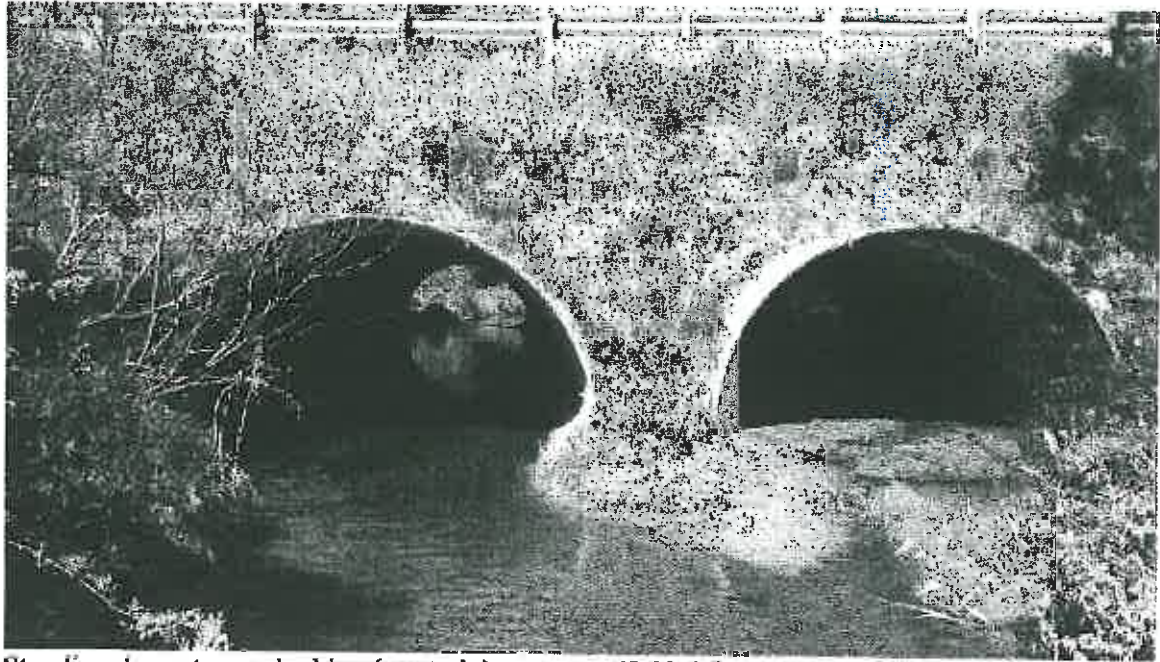


Standing at upstream side of crossing, looking downstream (easterly). 5-12-17



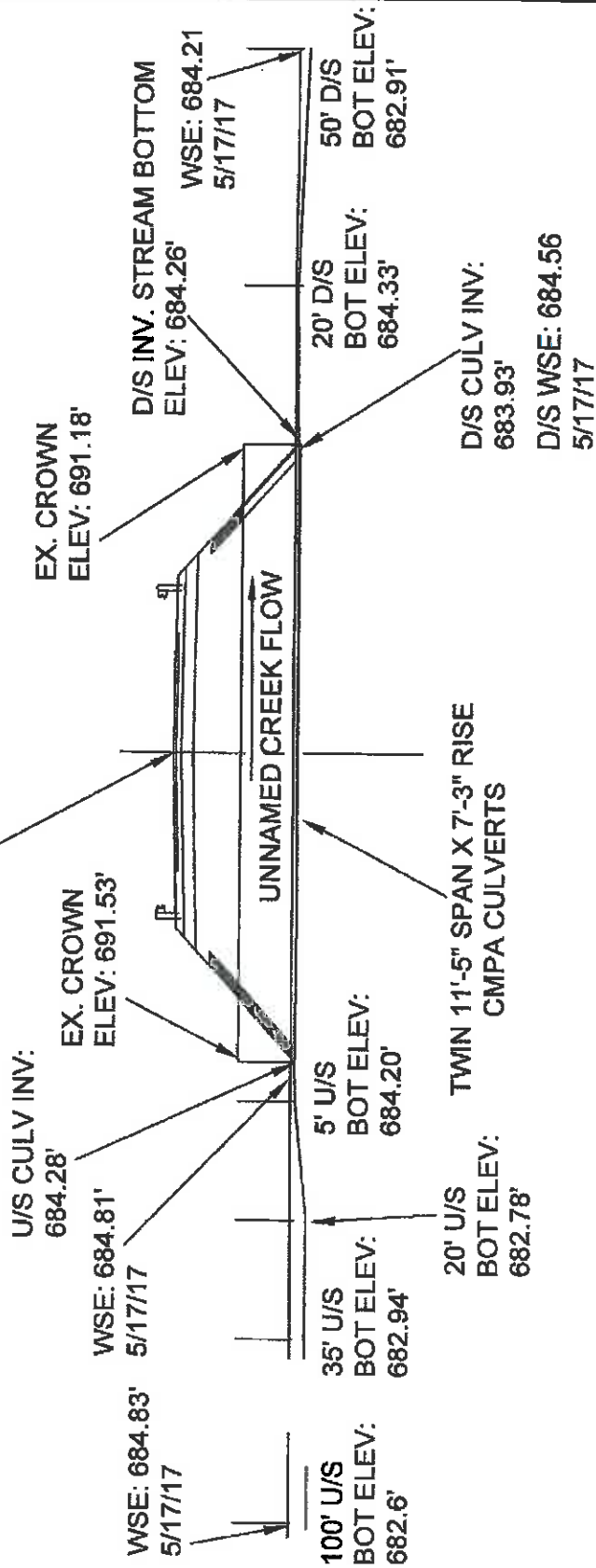
Standing downstream (east side of road), looking downstream (easterly) of crossing. 5-12-17

**Kent County Road Commission
CAS-27 Photos**



Standing downstream, looking (westerly) upstream (5-12-17)

C/L OF THORNAPPLE RIVER DRIVE: 699.88



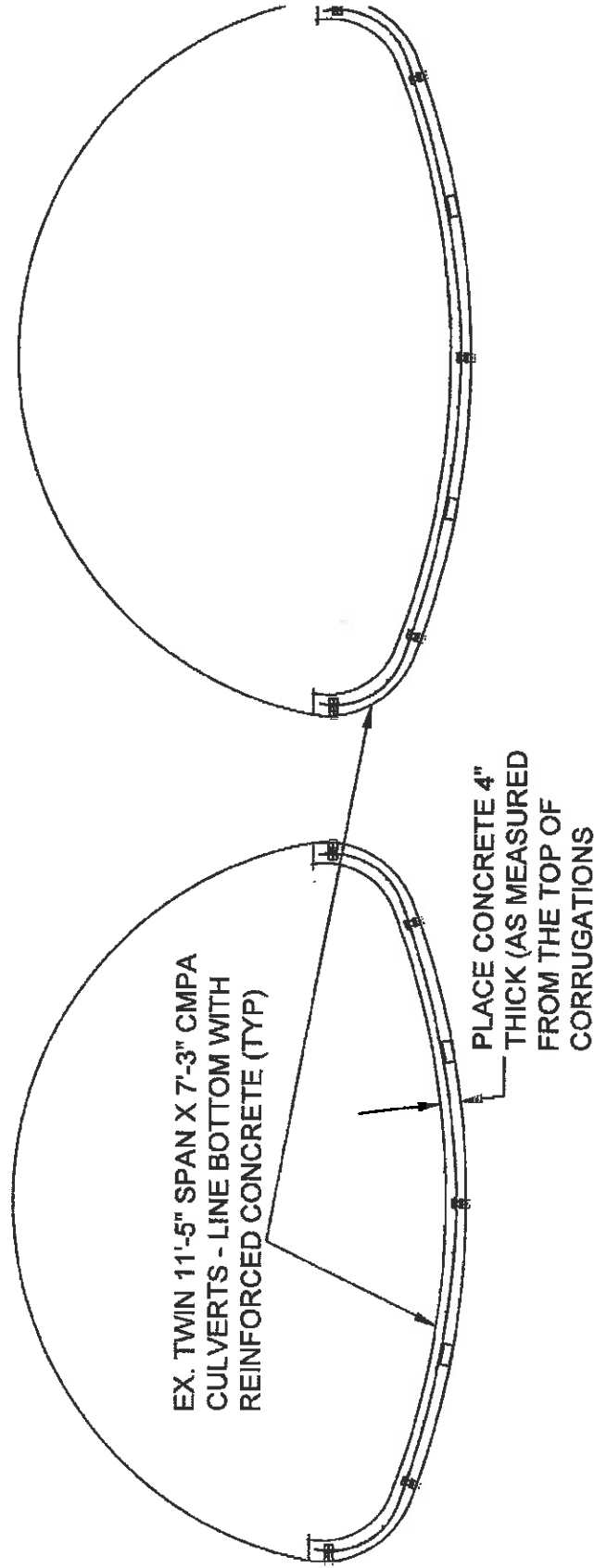
SCALE: 1" = 20'
 WHEN PRINTED ON
 8.5" X 11" PAPER

EXISTING STREAM PROFILE
CAS 27 - THORNAPPLE RIVER DRIVE OVER
UNNAMED CREEK

CULVERT LINING
 APPLICANT: KENT COUNTY ROAD COMMISSION
 WATERWAY: UNNAMED CREEK
 CASCADE TOWNSHIP
 06/01/17
 WC: 460-E00560

PROPOSED CONSTRUCTION SEQUENCE:

1. DIVERT ALL FLOW TO ONE SIDE
2. REMOVE SILT AND SAND FROM CULVERT WITH A VAC TRUCK OR SIMILAR DEVICE
3. POWER-WASH INSIDE FACE OF CULVERT TO CLEAN
4. TIE RESTEEL
5. PLACE CONCRETE
6. REPEAT FOR OTHER SIDE OF STRUCTURE



SCALE: 1" = 30'
WHEN PRINTED ON
8.5" X 11" PAPER

PROPOSED CULVERT LINING

APPLICANT: KENT COUNTY ROAD COMMISSION
WATERWAY: UNNAMED CREEK
CASCADE TOWNSHIP
06/01/17

**TYPICAL CULVERT SECTION
CAS 27 - THORNAPPLE RIVER DRIVE OVER
UNNAMED CREEK**

WC: 460-E00560



**Kent County
Road Commission**

June 2, 2017

Michigan Department of Environmental Quality
Transportation & Flood Hazard Unit
PO Box 30458
Lansing, Michigan 48909-7756

Attn: Ms. Holly Vickers

Re: Kent County Road Commission – CAS 27 – Thornapple River Drive 0.35 Mile N. of 60th Street
Section 33 – Cascade Township

Dear Holly:

The enclosed permit application is for the proposed concrete lining of twin 11'-5" span x 7'-3" rise CMPA structures. These pipes are seeing corrosion in the lower portion of each barrel and we propose to place 4 inches of reinforced concrete in the bottom and partially up the sides of the culvert to mitigate this corrosion. If we do nothing in terms of preventative maintenance to this structure, we fear we will have to replace it far sooner than we would otherwise.

We have not included a HEC-RAS analysis of this crossing, but we are certain the hydraulic capacity of the structure would be at least equivalent to what we have today despite the slight loss in cross sectional area. Also, it is worth noting that we extended the culvert ends in 1999 (permit no. 99-09-0198) and did complete the HEC-RAS model at that time. Records within the file suggest a 100 year upstream water surface elevation of 689.05 whereas the crown of the culverts are at 691.53.

We appreciate your efforts associated with this permit application. If you need additional information or wish to discuss our project further, please do not hesitate to contact me at (616) 450-9961.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Mike TenBrock".

Mike TenBrock, PE
Project Engineer

C: CAS 27 File

Working to keep Kent County moving

1500 Scribner Avenue NW, Grand Rapids, MI 49504 | (616) 242-6900 | kentcountyroads.net



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS
PUBLIC SERVICE COMMISSION
NORMAN J. SAARI
COMMISSIONER

SALLY A. TALBERG
CHAIRMAN

RACHAEL EJBANKS
COMMISSIONER

SHELLY EDGERTON
DIRECTOR

May 1, 2017

To Whom It May Concern:

The Michigan Public Service Commission (MPSC) is responsible for the implementation and oversight of Public Act 480 of 2006 - Uniform Video Services Local Franchise Act (the Act). Section 10 of the Act provides a video/cable dispute resolution process at the MPSC to be used by customers, providers, and franchise entities (municipalities). This dispute resolution process allows customers who are unable to resolve their video/cable television complaints with their provider to file a complaint with the MPSC.

We encourage your community to share our information with your residents. If your community maintains a webpage, you may consider adding our information to that page as a resource for your residents to file a video/cable television complaint with our office. The video/cable webpage at the MPSC is: <http://www.michigan.gov/mpsc/0,4639,7-159-49641---,00.html>. The webpage includes information such as the complaint process, the Act, a current listing of active video/cable providers in Michigan, information for franchise entities, as well as other important information. The following link is to our Consumer Tips sheet is:

http://www.michigan.gov/documents/mpsc/video_cable_complaints_437708_7.pdf

Customers have several options for filing video/cable complaints with our office. They may file a complaint online, by telephone, fax, or mail. The below information is also found on our webpage:

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

Telephone: 800-292-9555
Fax: 517-284-8200
Online - refer to the video/cable webpage

The MPSC does not have authority regarding satellite television complaints or internet services. Customers should contact the Federal Trade Commission at (877) 382-4357 or www.ftc.gov or the Michigan Attorney General's office at (877) 765-8388 for these types of complaints.

If your community has any questions regarding the MPSC's role with video/cable franchise, please do not hesitate to contact Jennifer Boyd at boydj2@michigan.gov or (517) 284-8205. Thank you for allowing us to assist video/cable customers in your community and for considering to share our information with your residents.

Sincerely,

Ryan McAnany, Manager
Telecommunications Division



June 19, 2017

Cascade Township
2865 Thornhills Ave. SE
Grand Rapids, MI 49546

Dear Franchise Official:

This letter is to inform you of changes to our channel line-up taking effect on or after July 14, 2017.

- *Universal HD* on channel 815 will cease network operation on or after July 14, 2017.
- *Olympics Channel* will launch on Spectrum Digi Tier 1/Silver package on or after July 14, 2017. *Olympics Channel* is "Home of Team USA" on channels 245 and 698 (HD).

Charter Communications customers in your community are already receiving information regarding these changes.

Should you have any questions about this programming change, please contact me at (616) 607-2377.

Sincerely,

Marilyn Passmore

Marilyn Passmore
Director, State Government Affairs, Michigan
Charter Communications

**STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION
NOTICE OF HEARING
FOR THE ELECTRIC CUSTOMERS OF
CONSUMERS ENERGY COMPANY
CASE NO. U-18381**

- Consumers Energy Company requests Michigan Public Service Commission approval for an electric rate case self-implementation reconciliation for case no. U-17990.
- The information below describes how a person may participate in this case.
- You may call or write Consumers Energy Company, One Energy Plaza, Jackson, Michigan 49201, (800) 477-5050 for a free copy of its application. Any person may review the documents at the offices of Consumers Energy Company.
- A public hearing will be held:

DATE/TIME: **Thursday, June 29, 2017, at 9:00 a.m.**
This hearing will be a prehearing conference to set future hearing dates and decide other procedural matters.

BEFORE: Administrative Law Judge **Dennis W. Mack**

LOCATION: Michigan Public Service Commission
7109 West Saginaw Highway
Lansing, Michigan

PARTICIPATION: Any interested person may attend and participate. The hearing site is accessible, including handicapped parking. Persons needing any accommodation to participate should contact the Commission's Executive Secretary at (517) 284-8090 in advance to request mobility, visual, hearing or other assistance.

The Michigan Public Service Commission (Commission) will hold a public hearing to consider Consumers Energy Company's (Consumers Energy) May 19, 2017 application, which seeks the Commission to 1) order that the refund required pursuant to MCL 460.6a(2) with respect to the provisional rates implemented by Consumers Energy in Case No. U-17990 for the period September 1, 2016 through March 6, 2017 is \$15.602 million, plus interest; 2) direct that amount to be returned to customers during the December 2017 billing month by means of a negative surcharge added to customers' bills 3) approve the negative surcharges for the December 2017 billing month; and 4) other relief.

All documents filed in this case shall be submitted electronically through the Commission's E-Dockets website at: michigan.gov/mpscedockets. Requirements and instructions for filing can be found in the User Manual on the E-Dockets help page. Documents may also be submitted, in Word or PDF format, as an attachment to an email sent to: mpscedockets@michigan.gov. If you require assistance prior to e-filing, contact Commission staff at (517) 284-8090 or by email at: mpscedockets@michigan.gov.

Any person wishing to intervene and become a party to the case shall electronically file a petition to intervene with this Commission by June 22, 2017. (Interested persons may elect to file using the traditional paper format.) The proof of service shall indicate service upon Consumers Energy's Legal Department – Regulatory Group, One Energy Plaza, Jackson, Michigan 49201.

Any person wishing to appear at the hearing to make a statement of position without becoming a party to the case may participate by filing an appearance. To file an appearance, the individual must attend the hearing and advise the presiding administrative law judge of his or her wish to make a statement of position. All information submitted to the Commission in this matter becomes public information, thus available on the Michigan Public Service Commission's website, and subject to disclosure. Please do not include information you wish to remain private.

Requests for adjournment must be made pursuant to the Michigan Administrative Hearing System's Administrative Hearing Rules R 792.10422 and R 792.10432. Requests for further information on adjournment should be directed to (517) 284-8130.

A copy of Consumers Energy's application may be reviewed on the Commission's website at: michigan.gov/mpscedockets, and at the office of Consumers Energy Company. For more information on how to participate in a case, you may contact the Commission at the above address or by telephone at (517) 284-8090.

Jurisdiction is pursuant to 1909 PA 106, as amended, MCL 460.551 et seq.; 1919 PA 419, as amended, MCL 460.54 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; and the Michigan Administrative Hearing System's Administrative Hearing Rules, 2015 AC, R 792.10401 et seq.

**[THE MICHIGAN PUBLIC SERVICE COMMISSION MAY
APPROVE, REJECT, OR AMEND PROPOSALS MADE BY
CONSUMERS ENERGY.]**

1078-E

**STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION
NOTICE OF HEARING
FOR THE ELECTRIC CUSTOMERS OF
CONSUMERS ENERGY COMPANY CASE
NO. U-18392**

- Consumers Energy Company requests that the Michigan Public Service Commission review its application for approval of Amendment 2 of the Power Purchase Agreement with T.E.S. Filer City Station Limited Partnership.
- The information below describes how a person may participate in this case.
- You may call or write Consumers Energy Company, One Energy Plaza, Jackson, Michigan 49201, (800) 477-5050 for a free copy of its application. Any person may review the documents at the offices of Consumers Energy Company.
- A public hearing will be held:

DATE/TIME: **Tuesday, June 27, 2017 at 9:00 a.m.**
This hearing will be a prehearing conference to set future hearing dates and decide other procedural matters.

BEFORE: Administrative Law Judge **Martin D. Snider**

LOCATION: Michigan Public Service Commission
7109 West Saginaw Highway
Lansing, Michigan

PARTICIPATION: Any interested person may attend and participate. The hearing site is accessible, including handicapped parking. Persons needing any accommodation to participate should contact the Commission's Executive Secretary at (517) 284-8090 in advance to request mobility, visual, hearing or other assistance.

The Michigan Public Service Commission (Commission) will hold a public hearing to consider Consumers Energy Company's (Consumers Energy) May 8, 2017 application, which seeks Commission's approval of Amendment No. 2 of Consumers Energy's Power Purchase Agreement with T.E.S. Filer City Station Limited Partnership and specifically find that the Commission approves recovery by Consumers Energy of the payments under the amended Power Purchase Agreement, as amended by Amendment No. 2, for the kilowatt hours delivered by T.E.S. Filer City Station Limited Partnership to Consumers Energy after the Converted Plant Initial Delivery Date for the purposes of Section 6j(13)(b) of 1982 PA 304 1982, 1987 PA 81, and all other applicable law.

All documents filed in this case shall be submitted electronically through the Commission's E-Dockets website at: michigan.gov/mpscedockets. Requirements and instructions for filing can be found in the User Manual on the E-Dockets help page. Documents may also be submitted, in Word or PDF format, as an attachment to an email sent to: mpscedockets@michigan.gov. If you require assistance prior to e-filing, contact Commission staff at (517) 284-8090 or by email at: mpscedockets@michigan.gov.

Any person wishing to intervene and become a party to the case shall electronically file a petition to intervene with this Commission by June 20, 2017. (Interested persons may elect to file using the traditional paper format.) The proof of service shall indicate service upon Consumers Energy's Legal Department – Regulatory Group, One Energy Plaza, Jackson, Michigan 49201.

Any person wishing to appear at the hearing to make a statement of position without becoming a party to the case may participate by filing an appearance. To file an appearance, the individual must attend the hearing and advise the presiding administrative law judge of his or her wish to make a statement of position. All information submitted to the Commission in this matter becomes public information, thus available on the Michigan Public Service Commission's website, and subject to disclosure. Please do not include information you wish to remain private.

Requests for adjournment must be made pursuant to the Michigan Administrative Hearing System's Administrative Hearing Rules R 792.10422 and R 792.10432. Requests for further information on adjournment should be directed to (517) 284-8130.

A copy of Consumers Energy's application may be reviewed on the Commission's website at: michigan.gov/mpscedockets, and at the office of Consumers Energy Company. For more information on how to participate in a case, you may contact the Commission at the above address or by telephone at (517) 284-8090.

Jurisdiction is pursuant to 1909 PA 106, as amended, MCL 460.551 et seq.; 1919 PA 419, as amended, MCL 460.54 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; and the Michigan Administrative Hearing System's Administrative Hearing Rules, 2015 AC, R 792.10401 et seq.

**[THE MICHIGAN PUBLIC SERVICE COMMISSION MAY
APPROVE, REJECT, OR AMEND PROPOSALS MADE BY
CONSUMERS ENERGY.]**



**Cascade Charter Township
Seminar/Conference Attendance Request Form**

This form must be filled out if the employee is requesting Township payment or reimbursement for the employee's attendance to a seminar or conference.

Conditions:

1. Cascade Charter Township will reimburse employees for approved registration for work related seminars and conferences. Individual seminars and conferences must be related to the employee's current job duties or a foreseeable-future position in the organization in order to be eligible for educational assistance.
2. Some seminars/conferences that an employee may attend may be unrelated to their particular job or government in general, and are therefore not covered by this assistance policy.
3. Any request that requires an overnight stay or expenditure over \$200 requires Township Board approval before the seminar/conference is attended.
4. Under extenuating circumstances, the Township Manager may approve an overnight stay or expenditure over \$200 for a conference or seminar prior to Township Board approval. The request must be made before attendance to a seminar/conference. The Township Board will be informed of request at their next scheduled meeting.

This form must be completed by the employee and approved by the Township Manager and/or Township Board before the seminar/conference is attended.

Name: Sue Slater

Application Date: June 14, 2017

Location of Seminar/Conference: Frankenmuth, MI

Name of Proposed Seminar/Conference: Clerk's Retreat

Description of Seminar/Conference: (may also be attached) see attached.

(over)

How will the Seminar/Conference benefit the employee and the township? _____

Keeps us update on Election Updates, Legislature Updates and current issues affecting the Clerk's office.

Cost of the Seminar/Conference: (Registration) \$ 299.00/per person

(Lodging) \$ 109/night (Travel) \$ 134.82

Account #: 101-215-724-000

Your Signature: Susan B. Slattery

Approvals:

Department Head: Susan B. Slattery Date: 6/16/17

Township Manager: [Signature] Date: 6/17/17

Clerk's Signature: _____ Date: _____

(Showing Township Board approval)

Original to personnel file

1 copy to applicant

1 copy to Accounting



**Cascade Charter Township
Seminar/Conference Attendance Request Form**

This form must be filled out if the employee is requesting Township payment or reimbursement for the employee's attendance to a seminar or conference.

Conditions:

1. Cascade Charter Township will reimburse employees for approved registration for work related seminars and conferences. Individual seminars and conferences must be related to the employee's current job duties or a foreseeable-future position in the organization in order to be eligible for educational assistance.
2. Some seminars/conferences that an employee may attend may be unrelated to their particular job or government in general, and are therefore not covered by this assistance policy.
3. Any request that requires an overnight stay or expenditure over \$200 requires Township Board approval before the seminar/conference is attended.
4. Under extenuating circumstances, the Township Manager may approve an overnight stay or expenditure over \$200 for a conference or seminar prior to Township Board approval. The request must be made before attendance to a seminar/conference. The Township Board will be informed of request at their next scheduled meeting.

This form must be completed by the employee and approved by the Township Manager and/or Township Board before the seminar/conference is attended.

Name: Denise M. Biegalle

Application Date: June 14, 2017

Location of Seminar/Conference: Frankenmuth, MI

Name of Proposed Seminar/Conference: Clerk's Retreat

Description of Seminar/Conference: (may also be attached) see attached.

(over)

How will the Seminar/Conference benefit the employee and the township? _____

Keeps us update on Election Updates, Legislature Updates and current issues affecting the Clerk's office.

Cost of the Seminar/Conference: (Registration) \$ 299.00/per person

(Lodging) \$ 109/night (Travel) \$ 99.51

Account # 101-215-724-000

Your Signature: _____

Approvals:

Department Head: Susan B Slater Date: 6/16/17

Township Manager: Ben S. Date: 6/17/17

Clerk's Signature: _____ Date: _____

(Showing Township Board approval)

Original to personnel file

1 copy to applicant

1 copy to Accounting



2017 Professional Development Retreats

Join us at the Bavarian Inn Lodge in Frankenmuth for two days of intensive learning, networking—and fun!

Clerks: July 19 & 20

Supervisors: July 27 & 28

Treasurers: July 25 & 26

Trustees: August 5 & 6

Register at least two weeks before the event to take advantage of early-bird rates and save \$50!



As a leader in your township, you are expected to have solutions for a wide variety of challenges. How do you ensure you're equipped to anticipate, and develop strategies to overcome, virtually any situation that arises in your community?

Join fellow officials from across the state this summer at the **Bavarian Inn Lodge in Frankenmuth** for MTA's *Professional Development Retreats*. These events offer premier educational programming and excellent networking opportunities.

Practical techniques and valuable resources

The program is packed with informative sessions featuring topics tailored to the duties specific to your position on the township board. Take advantage of this learning opportunity and connect with others who can help make your role as a township official even more fulfilling. It's an investment worth making.

All about the education

Each retreat offers a learning experience geared to your office on concepts, trends and pressing issues in township government. These informative educational sessions are designed for elected officials at every level, and will help you develop new skills while providing you with knowledge of the statutory duties and responsibilities required of elected officials.

Detailed descriptions for each retreat's education sessions appear in registration brochures mailed to individual offices in May.

Clerks' Retreat—July 19 & 20

- Monthly financial reports and audit preparation
- What every clerk needs to know about assessing
- Elections update
- Cemetery recordkeeping
- Organizing personnel files
- Building a better board meeting
- Your role in the public eye
- Engaging your community
- State and local relationships

Treasurers' Retreat—July 25 & 26

- Understanding your township's cash flow
- Engaging your community
- What every treasurer needs to know about assessing
- Investments and banking
- Your role in the public eye
- Reconciling bank statements
- Building a better board meeting
- Generating and maintaining accurate financial reports
- State and local relationships

Supervisors' Retreat—July 27 & 28

- State and local relationships
- Building a better board meeting
- Your role in the public eye
- Contracts, agreements and handshakes ... Oh my!
- How to fund your projects
- Supervising an effective, accountable assessing department
- Evaluating programs and services
- Engaging your community
- Mitigating risk and liability

Trustees' Retreat—August 5 & 6

- Boards that speak with one voice
- What every trustee needs to know about assessing
- Engaging your community
- Your role in the public eye
- State and local relationships
- Policies, practices and your township
- Building a better board meeting
- Road rules
- Interlocal contracts and agreements

Agenda

Day one:

9:30 a.m.
Registration check-in

10 a.m.
Class

11:30 a.m.
Break

11:45 a.m.
Class

12:45 p.m.
Networking luncheon

1:45 p.m.
Class

3 p.m.
Break

3:30 p.m.
Class

5 p.m.
Networking dinner

6:30 p.m.
Bavarian Belle
Riverboat Cruise

Day two:

7:30 a.m.
Networking breakfast

8 a.m.
Class

9:15 a.m.
Break

9:45 a.m.
Class

11 a.m.
Break

11:15 a.m.
Class

12:30 a.m.
Networking luncheon

1:30 p.m.
Class

2:30 p.m.
Break

2:45 p.m.
Class

4 p.m.
Adjourn

Valuable networking

These events offer a unique opportunity for officials to gather for valuable education and networking. Your fellow officials know better than anyone the challenges you face!

Exceptional value

Officials are encouraged to register for the full program to get the most out of this educational experience. The full-program fee includes all meals and workshop materials. Bring your deputy and save \$50 off a second full-program registration! Trustees may bring a fellow trustee from the same township. Single-day rates are also available.

Cancellations & substitutions

Written cancellation requests received at the MTA office four weeks prior to the event will receive a full refund; two weeks prior will receive a 50 percent refund, no refunds will be issued thereafter. You may substitute another individual from your township for your registration without incurring a charge. Please notify MTA of the change.



Attendance at an *MTA Professional Development Retreat* is worth four (4) elective credits in the Township Governance Academy.

Evening activity

After a full day of education, we know you'll be ready for some fresh air! Leave the meeting room behind and hop aboard the Bavarian Belle riverboat. Relax, network and enjoy a one-hour historical narrated tour of the Frankenmuth area.



TOWNSHIP BOARD MEMORANDUM

To: Cascade Charter Township Board
From: Sandra Korhorn, DDA/Economic Development Director *SKK*
Subject: Consider Pay Draw #4 and Change Order #1 for the Thornapple River Dr. Utility Extension Project
Meeting Date: June 28, 2017

Attached is the contractor's application for payment #4 for the Thornapple River Dr. utility extension project. The pay application, pay estimate report and account balance are attached.

The amount due is \$236,029.49. The work completed and recommended for payment in this pay request has been reviewed and approved by FTCH.

There is also a change order included with this packet. This change order primarily covers the additional repaving work to extend the project to Thornhills Avenue. The original contract price for the project was \$623,476.50 and the contract price with all approved change orders is \$750,917.84.

Staff recommends approval of Change Order #1 and Pay Draw #4 for the Thornapple River Dr. utility extension project.

Attachments: FTCH letter
Pay Draw #4
Change Order #1



TRANSMITTAL

Ms. Sandra Korhorn
Cascade Charter Township
2865 Thornhills Avenue, SE
Grand Rapids, MI 49546-7192

June 22, 2017

Re: Cascade Charter Township
Thornapple River Drive Utility Extension

Project No. G150788CD

- FOR REVIEW
- FOR YOUR USE
- AS REQUESTED

Sent By: Michael L. Berrevoets, PE/jc2

COPIES	DATE	DESCRIPTION
1	6/22/2017	Application and Recommendation Payment No. 4
1	6/22/2017	Change Order No. 1

COMMENTS

We have reviewed the contractor's Application and Recommendation for Payment No. 4 for the period ending June 21, 2017, and find it in compliance with the work completed to date.

An executed copy of Application and Recommendation for Payment No. 4 is attached.

Please forward a copy, with payment, to the contractor, and keep a copy for your files.

Also attached is a copy of Change Order No. 1. Please sign and return to our office. We forward an executed copy to the Contractor their files.

By email

cc: Mr. Jeff Talsma - Kamminga & Roodvoets, Inc.

APPLICATION AND RECOMMENDATION FOR PAYMENT
 PAGE 1 OF 2

TO: Cascade Charter Township
 In Care of: Fishbeck, Thompson, Carr & Huber, Inc. (FTCH)
 1515 Arboretum Drive, SE
 Grand Rapids, MI 49546

FROM (Contractor): Kamminga & Roodvoets, Inc.
 3435 Broadmoor Avenue, S.E.
 Grand Rapids, MI 49512

Application No: 4
 Period From: June 5, 2017
 To: June 21, 2017

Project: Thornapple River Drive Utility Extension
 FTCH Project Number: G150788CD

APPLICATION FOR PAYMENT:

Application for Payment is made, as indicated below, in connection with the Contract. Schedule of Values sheet is attached as page 3 of 3.

1.	Original Contract Price		\$623,476.50
2.	Net change by Change Orders		\$127,441.34
3.	Current Contract Price (1 plus 2)		\$750,917.84
4.	Gross Amount Due (From Unit Price Schedule		\$649,129.65
5.	Retainage (Per Agreement)	This Estimate: (\$16,173.82)	\$15,000.00
		Total Retainage	
6.	Amount Eligible to Date (4 minus 5)		\$634,129.65
7.	Less Previous Payments		\$398,100.16
8.	Amount Due This Application (6 minus 7)		<u>\$236,029.49</u>

CHANGE ORDER SUMMARY:

Change Orders Approved by Owner	ADDITIONS	DEDUCTIONS
Change Order No. 1	\$127,441.34	
Net Change by Change Orders	\$127,441.34	

APPLICATION AND RECOMMENDATION FOR PAYMENT
PAGE 2 OF 2

CONTRACTOR'S CERTIFICATION:

The undersigned Contractor certifies that to the best of its knowledge (1) all previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior Applications for Payment; (2) title of all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to Owner at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such Liens, security interest or encumbrances); and (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Dated 6/21, 2017

Kamminga & Roodvoets, Inc.
Contractor

By _____
(Signature)

DAVID SHAWE V/P
Name and Title of Signatory

ENGINEER'S RECOMMENDATION:

To: Cascade Charter Township

In accordance with the Contract, the undersigned recommends payment to Contractor.

AMOUNT RECOMMENDED: \$236,029.49
(Attach explanation if amount recommended differs from the amount applied for.)

ENGINEER: Fishbeck, Thompson, Carr & Huber, Inc.

Dated 6/22, 2017

By Michael L. Berrevoets
(Signature)

Michael L. Berrevoets, PE
Name and Title of Signatory

This Recommendation is not negotiable. The AMOUNT RECOMMENDED is payable only to Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of Owner or Contractor under this Contract.

This recommendation for payment is based on a review of the Work performed as compared to the amount of the application. This recommendation does not imply that Engineer is reviewing construction lien documents nor does it imply that Engineer is acting as a guarantor of the property. Any review of construction lien documents by Engineer is for information purposes only.



Construction Pay Estimate Report

Fishbeck, Thompson, Carr & Huber, Inc.

6/21/2017 1:54 PM

FieldManager 5.3a

Contract: _G150788CD, Thornapple River Dr Utility Extension

Estimate Date	Estimate No.	Entered By	Estimate Type	Electronic File Created	All Contract Work Completed	Construction Started Date
06/21/2017	4	Rhiannon M Finkler	Semi-Monthly	No		3/6/2017
Prime Contractor Kammaing & Roodvoets, Inc.				Managing Office Fishbeck, Thompson, Carr & Huber, Inc.		

Item Usage Summary

Item Description	Item Code	Prop. Line	Project	Category	Project Line No.	Item Type	Mod. No.	Quantity	Dollar Amount
_ Check Dam	2047050	0064	G150788CD	0001	0288	SA	001	2.000	\$440.00
_ Clay Plug	7157050	0060	G150788CD	0001	0284	SA	001	2.000	\$1,270.00
_ Flared End Section, 15-inch	3077050	0057	G150788CD	0001	0281	SA	001	1.000	\$720.00
_ Grading and Compacting Existing Agg	6027011	0059	G150788CD	0001	0283	SA	001	7,140.000	\$11,067.00
Aggregate Base, 6-inch	_3622046	0046	G150788CD	0001	0230	00	000	376.945	\$3,015.56
Asphalt Driveway Approach, 3-inch	_3622051	0051	G150788CD	0001	0255	00	000	55.486	\$4,716.31
Bituminous Pavement, 3C (2.0")	_3622047	0047	G150788CD	0001	0235	00	000	1,233.630	\$80,185.95
Bituminous Pavement, 5E1 (1.5")	_3622048	0048	G150788CD	0001	0240	00	000	959.244	\$65,228.59
Cold Milling HMA Surface	5010002	0058	G150788CD	0001	0282	SA	001	7,140.000	\$18,207.00
Concrete Driveway Approach, 6-inch	_3622050	0050	G150788CD	0001	0250	00	000	366.000	\$1,372.50
Dr Structure, Tap, 6 inch	4030306	0063	G150788CD	0001	0287	SA	001	1.000	\$270.00
Maintaining Traffic	_3622003	0003	G150788CD	0001	0015	00	000	0.500	\$6,450.00
Pavement Markings	_3622052	0052	G150788CD	0001	0260	00	000	13,848.000	\$5,400.72
Remove Pavement	_3622005	0005	G150788CD	0001	0025	00	000	43.611	\$87.22
Remove, Salvage and Place Street Sign	_3622009	0009	G150788CD	0001	0045	00	000	3.000	\$195.00
Riprap, Plain	8130010	0065	G150788CD	0001	0289	SA	001	24.440	\$1,344.20
Soil Erosion and Sedimentation Control	_3622004	0004	G150788CD	0001	0020	00	000	0.250	\$812.50
Storm Sewer, 12-inch	_3622039	0039	G150788CD	0001	0195	00	000	40.000	\$1,600.00
Storm Sewer, 15-inch	_3604063	0062	G150788CD	0001	0286	SA	001	8.000	\$460.00
Structure Casting, Adjust	_3622042	0042	G150788CD	0001	0210	00	000	2.000	\$1,000.00
Subbase	_3622045	0045	G150788CD	0001	0225	00	000	118.871	\$950.97
Subbase Underdrain, 6-inch	_3622043	0043	G150788CD	0001	0215	00	000	75.000	\$300.00
Subbase Underdrain, 6-inch 10' Deep	_3622043	0061	G150788CD	0001	0285	SA	001	524.000	\$9,353.40
Turf Establishment	_3622053	0053	G150788CD	0001	0265	00	000	2,605.830	\$3,908.75



Construction Pay Estimate Report

Fishbeck, Thompson, Carr & Huber, Inc.

6/21/2017 1:54 PM

FieldManager 5.3a

Item Usage Summary

Item Description	Item Code	Prop. Line	Project	Category	Project Line No.	Item Type	Mod. No.	Quantity	Dollar Amount
Turf Reinforcement Mat	_3622054	0054	G150788CD	0001	0270	00	000	500.000	\$1,500.00
Total Estimated Item Payment:								\$219,855.67	

Time Charges

Site	Site Description	Site Method	Days Charged	Liq. Damages
00	Overall Contract Site	Completion Date		\$0
Total Liquidated Damages:				\$0

Pre-Voucher Summary

Project	Voucher No.	Item Payment	Stockpile Adjustment	Dollar Amount
G150788CD, Thornapple River Dr Utility Extension	0004	\$219,855.67	\$0.00	\$219,855.67
Voucher Total:				\$219,855.67

Summary

Current Voucher Total:	\$219,855.67	Earnings to date:	\$649,129.65
-Current Retainage:	(\$16,173.82)	- Retainage to date:	\$15,000.00
-Current Liquidated Damages:	\$0.00	- Liquidated Damages to date:	\$0.00
-Current Adjustments:	\$0.00	- Adjustments to date:	\$0.00
Total Estimated Payment:	\$236,029.49	Net Earnings to date:	\$634,129.65
		- Payments to date:	\$398,100.16
		Net Earnings this period:	\$236,029.49

Estimate Certification

Kevin Kietzman, PE (Project Engineer)

(Date)

(Construction Engineer)

(Date)



Construction Pay Estimate Amount Balance Report

Estimate: 4

6/21/2017 1:54 PM

Fishbeck, Thompson, Carr & Huber, Inc.

FieldManager 5.3a

Contract: _G150788CD, Thornapple River Dr Utility Extension

Item Description	Item Code	Prop. Line	Project	Category	Authorized Quantity	Quantity This Estimate	Qty. Paid To Date	Total Qty. Placed	% Cpt	Unit Price	Dollar Amt. Paid To Date
Mobilization (5% Maximum of Total Bid)	_3622001	0001	G150788CD	0001	1.000		1.000	1.000	100%	31,100.00000	\$31,100.00
Cash Allowances - Testing	_3622002	0002	G150788CD	0001	15,000.000		4,148.990	4,148.990	28%	1.00000	\$4,148.99
Maintaining Traffic	_3622003	0003	G150788CD	0001	1.000	0.500	1.000	1.000	100%	12,900.00000	\$12,900.00
Soil Erosion and Sedimentation Control	_3622004	0004	G150788CD	0001	1.000	0.250	0.750	0.750	75%	3,250.00000	\$2,437.50
Remove Pavement	_3622005	0005	G150788CD	0001	3,800.000	43.611	3,213.611	3,213.611	85%	2.00000	\$6,427.22
Remove Concrete Drive Approach	_3622006	0006	G150788CD	0001	140.000		57.680	57.680	41%	7.00000	\$403.76
Remove Tree, 6-inch to 18-inch Diameter	_3622007	0007	G150788CD	0001	47.000		47.000	47.000	100%	295.00000	\$13,865.00
Remove Tree, 19-inch to 36-inch Diameter	_3622008	0008	G150788CD	0001	12.000		12.000	12.000	100%	550.00000	\$6,600.00
Remove, Salvage and Place Street Sign	_3622009	0009	G150788CD	0001	3.000	3.000	3.000	3.000	100%	65.00000	\$195.00
6" Water Main (DI CL53)	_3622010	0010	G150788CD	0001	45.000		30.000	30.000	67%	65.00000	\$1,950.00
8" Water Main (DI CL53)	_3622011	0011	G150788CD	0001	435.000		0.000			80.00000	
12" Water Main (DI CL53)	_3622012	0012	G150788CD	0001	1,025.000		1,028.000	1,028.000	100%	89.00000	\$91,492.00
6" Valve and Box	_3622013	0013	G150788CD	0001	4.000		3.000	3.000	75%	1,250.00000	\$3,750.00
8" Valve and Box	_3622014	0014	G150788CD	0001	4.000		0.000			1,500.00000	
12" Valve and Box	_3622015	0015	G150788CD	0001	2.000		2.000	2.000	100%	2,400.00000	\$4,800.00
5" Hydrant	_3622016	0016	G150788CD	0001	4.000		3.000	3.000	75%	2,500.00000	\$7,500.00
Hydrant Extension	_3622017	0017	G150788CD	0001	4.500		4.500	4.500	100%	550.00000	\$2,475.00
8"x8"x6" Tee	_3622018	0018	G150788CD	0001	1.000		0.000			750.00000	
8"x8"x8" Tee	_3622019	0019	G150788CD	0001	2.000		0.000			800.00000	
12"x12"x6" Tee	_3622020	0020	G150788CD	0001	3.000		3.000	3.000	100%	1,100.00000	\$3,300.00
6" 90 Degree Bend	_3622021	0021	G150788CD	0001	1.000		1.000	1.000	100%	450.00000	\$450.00
8" 22.5 Degree Bend	_3622022	0022	G150788CD	0001	2.000		0.000			575.00000	
8" 45 Degree Bend	_3622023	0023	G150788CD	0001	2.000		0.000			600.00000	



Construction Pay Estimate Amount Balance Report

Estimate: 4

6/21/2017 1:54 PM

Fishbeck, Thompson, Carr & Huber, Inc.

FieldManager 5.3a

Item Description	Item Code	Prop. Line	Project	Category	Authorized Quantity	Quantity This Estimate	Qty. Paid To Date	Total Qty. Placed	% Cpt	Unit Price	Dollar Amt. Paid To Date
12" 11.25 Degree Bend	_3622024	0024	G150788CD	0001	3.000		3.000	3.000	100%	825.00000	\$2,475.00
8" Sleeve	_3622025	0025	G150788CD	0001	2.000		0.000			1,250.00000	
12" Sleeve	_3622026	0026	G150788CD	0001	1.000		1.000	1.000	100%	2,000.00000	\$2,000.00
8" Plug	_3622027	0027	G150788CD	0001	2.000		0.000			425.00000	
12" Plug	_3622028	0028	G150788CD	0001	1.000		1.000	1.000	100%	600.00000	\$600.00
1" water service	_3622029	0029	G150788CD	0001	475.000		402.000	402.000	85%	33.00000	\$13,266.00
Tap for 1" water service, including corporation stop	_3622030	0030	G150788CD	0001	14.000		11.000	11.000	79%	300.00000	\$3,300.00
Curb Stop and box on 1" water service	_3622031	0031	G150788CD	0001	14.000		11.000	11.000	79%	450.00000	\$4,950.00
Valve Box	_3622032	0032	G150788CD	0001	1.000		0.000			300.00000	
10" Sanitary Sewer D-2680	_3622033	0033	G150788CD	0001	1,046.000		1,046.000	1,046.000	100%	80.00000	\$83,680.00
4' Dia. Sanitary manhole, per Detail S-1	_3622034	0034	G150788CD	0001	7.000		7.000	7.000	100%	3,100.00000	\$21,700.00
6" Sanitary Sewer Lateral (PVC SDR 23.5)	_3622035	0035	G150788CD	0001	455.400		455.400	455.400	100%	38.00000	\$17,305.20
6" tee/wye on 10" Sanitary Sewer	_3622036	0036	G150788CD	0001	13.000		13.000	13.000	100%	400.00000	\$5,200.00
Core and Boot 10" Sewer into Manhole or Sewer	_3622037	0037	G150788CD	0001	1.000		1.000	1.000	100%	1,100.00000	\$1,100.00
Storm Sewer, 8-inch	_3622038	0038	G150788CD	0001	80.000		77.000	77.000	96%	50.00000	\$3,850.00
Storm Sewer, 12-inch	_3622039	0039	G150788CD	0001	175.000	40.000	200.000	200.000	114%	40.00000	\$8,000.00
Catch Basin, 2-foot Diameter	_3622040	0040	G150788CD	0001	1.000		1.000	1.000	100%	1,750.00000	\$1,750.00
Flared End Section, 12-inch	_3622041	0041	G150788CD	0001	10.000		10.000	10.000	100%	600.00000	\$6,000.00
Structure Casting, Adjust	_3622042	0042	G150788CD	0001	2.000	2.000	2.000	2.000	100%	500.00000	\$1,000.00
Subbase Underdrain, 6-inch	_3622043	0043	G150788CD	0001	2,160.000	75.000	1,873.000	1,873.000	87%	4.00000	\$7,492.00
Roadway Grading	_3622044	0044	G150788CD	0001	11.000		10.790	10.790	98%	2,075.00000	\$22,389.25
Subbase	_3622045	0045	G150788CD	0001	1,380.000	118.871	1,328.356	1,328.356	96%	8.00000	\$10,626.85
Aggregate Base, 6-inch	_3622046	0046	G150788CD	0001	4,325.000	376.945	4,057.057	4,057.057	94%	8.00000	\$32,456.46
Bituminous Pavement, 3C (2.0")	_3622047	0047	G150788CD	0001	1,233.630	1,233.630	1,233.630	1,233.630	100%	65.00000	\$80,185.95

Contract: _G150788CD

Estimate: 4

Page 2 of 3



Construction Pay Estimate Amount Balance Report

Estimate: 4

6/21/2017 1:54 PM

Fishbeck, Thompson, Carr & Huber, Inc.

FieldManager 5.3a

Item Description	Item Code	Prop. Line	Project	Category	Authorized Quantity	Quantity This Estimate	Qty. Paid To Date	Total Qty. Placed	% Cpt	Unit Price	Dollar Amt. Paid To Date
Bituminous Pavement, 5E1 (1.5")	_362204	0048	G150788CD	0001	959.244	959.244	959.244	959.244	100%	68.00000	\$65,228.59
Subgrade Undercutting	_362204	0049	G150788CD	0001	500.000		0.000			9.00000	
Concrete Driveway Approach, 6-inch	_362205	0050	G150788CD	0001	1,350.000	366.000	366.000	366.000	27%	3.75000	\$1,372.50
Asphalt Driveway Approach, 3-inch	_362205	10051	G150788CD	0001	150.000	55.486	55.486	55.486	37%	85.00000	\$4,716.31
Pavement Markings	_362205	0052	G150788CD	0001	3,600.000	13,848.000	13,848.000	13,848.000	385%	0.39000	\$5,400.72
Turf Establishment	_362205	0053	G150788CD	0001	5,600.000	2,605.830	2,605.830	2,605.830	47%	1.50000	\$3,908.75
Turf Reinforcement Mat	_362205	0054	G150788CD	0001	2,200.000	500.000	500.000	500.000	23%	3.00000	\$1,500.00
Miscellaneous Work Allowance	_362205	0055	G150788CD	0001	5,000.000		0.000			1.00000	
Temporary Gravel	_362205	0056	G150788CD	0001	1.000		1.000	1.000	100%	750.00000	\$750.00
_ Flared End Section, 15-inch	3077050	0057	G150788CD	0001	1.000	1.000	1.000	1.000	100%	720.00000	\$720.00
Cold Milling HMA Surface	5010002	0058	G150788CD	0001	7,140.000	7,140.000	7,140.000	7,140.000	100%	2.55000	\$18,207.00
_ Grading and Compacting Existing Agg	6027011	0059	G150788CD	0001	7,140.000	7,140.000	7,140.000	7,140.000	100%	1.55000	\$11,067.00
_ Clay Plug	7157050	0060	G150788CD	0001	2.000	2.000	2.000	2.000	100%	635.00000	\$1,270.00
Subbase Underdrain, 6-inch 10' Deep	_362204	0061	G150788CD	0001	524.000	524.000	524.000	524.000	100%	17.85000	\$9,353.40
Storm Sewer, 15-inch	_360406	0062	G150788CD	0001	8.000	8.000	8.000	8.000	100%	57.50000	\$460.00
Dr Structure, Tap, 6 inch	4030306	0063	G150788CD	0001	1.000	1.000	1.000	1.000	100%	270.00000	\$270.00
_ Check Dam	2047050	0064	G150788CD	0001	2.000	2.000	2.000	2.000	100%	220.00000	\$440.00
Riprap, Plain	8130010	0065	G150788CD	0001	24.440	24.440	24.440	24.440	100%	55.00000	\$1,344.20

Percentage of Contract Completed(curr): 86%
 (total paid to date / total of all authorized work)

Total Amount Paid This Estimate: \$219,855.67

Total Amount Paid To Date: \$649,129.65

CHANGE ORDER

PAGE 1 OF 2

CONTRACT FOR:	Thornapple River Drive Utility Extension
OWNER:	Cascade Charter Township
CONTRACTOR:	Kammaing & Roodvoets, Inc. 3435 Broadmoor, SE Grand Rapids, MI 49512
ENGINEER:	Fishbeck, Thompson, Carr & Huber, Inc.
ATTACHMENTS:	NA
Contractor shall indicate approval of Change Order through signing of this document and returning to Engineer. Engineer will forward to Owner, who shall indicate approval of Change Order through signing of this document and returning to Engineer. Upon receipt of fully executed (all signatures) Change Order, Engineer will distribute to all parties.	
YOU ARE DIRECTED TO MAKE THE FOLLOWING CHANGES IN THE CONTRACT DOCUMENTS:	
This Change Order primarily covers the additional repaving work to extend the project to Thornhills Avenue.	

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:
Original Contract Price:	Original Contract time: 10 Weeks
<u>\$623,476.50</u>	Substantial Completion: <u>June 17, 2017</u>
	Ready for final payment: <u>July 1, 2017</u>
Previous Change Order No.:	Net change from previous Change Orders:
<u>\$0.00</u>	<u>NA</u>
Contract Price prior to this Change Order:	Contract Time prior to this Change Order:
<u>\$623,476.50</u>	Substantial Completion: <u>June 17, 2017</u>
	Ready for final payment: <u>July 1, 2017</u>
Net Change of this Change Order:	Net Change of this Change Order:
<u>\$127,441.34</u>	<u>NA</u>
Contract Price with all approved Change Orders:	Contract Time with all approved Change Orders:
<u>\$750,917.84</u>	Substantial Completion: <u>June 17, 2017</u>
	Ready for final payment: <u>July 1, 2017</u>

RECOMMENDED	APPROVED	APPROVED
By: <u>Michael J. Berrevoets</u>	By: <u>[Signature]</u>	By: _____
Engineer	Contractor	Owner
Michael L. Berrevoets, PE Project Manager	<u>DAVID SHAVE VA</u>	
Name and Title of Signatory	Name and Title of Signatory	Name and Title of Signatory
Date: <u>6/21/2017</u>	Date: <u>6/21/17</u>	Date: _____



Contract Modification

Fishbeck, Thompson, Carr & Huber, Inc.

6/21/2017 11:57 AM

FieldManager 5.3a

Contract: _G150788CD, Thornapple River Dr Utility Extension

Cont. Mod. Number 1	Revision Number	Cont. Mod. Date 6/21/2017	Electronic File Created No	Net Change \$127,441.34	Awarded Contract Amount \$623,476.50
Route		Managing Office Fishbeck, Thompson, Carr & Huber, Inc.		District 0	Entered By Rhiannon M Finkler
Contract Location Cascade Charter Township					

Short Description

New items and balancing tree removal, water and sanitary sewer items.

Description of Changes

12" Flared End Section at Sta. 10+50 needs to be adjusted to 15" Flared End Section.
Balancing water and sanitary sewer items, and tree removals.
Cold milling and grading and compacting for extra County work approved by the Township.
Various new items.

Increases / Decreases

Item Description	Item Code	Prop. Line	Proj. Line	Project	Catg.	Item Type	Quantity Change	Unit	Unit Price	Dollar Value
Remove Tree, 6-inch to 18-inch Diameter	_3622007	0007	0035	G150788CD	0001	Original	7.000	Ea	295.00000	\$2,065.00
Remove Tree, 19-inch to 36-inch Diameter	_3622008	0008	0040	G150788CD	0001	Original	-2.000	Ea	550.00000	\$-1,100.00
Hydrant Extension	_3622017	0017	0085	G150788CD	0001	Original	1.500	Ft	550.00000	\$825.00
10" Sanitary Sewer D-2680	_3622033	0033	0165	G150788CD	0001	Original	-4.000	Ft	80.00000	\$-320.00
6" Sanitary Sewer Lateral (PVC SDR 23.5)	_3622035	0035	0175	G150788CD	0001	Original	-24.600	Ft	38.00000	\$-934.80
Flared End Section, 12-inch	_3622041	0041	0205	G150788CD	0001	Original	-1.000	Ea	600.00000	\$-600.00

Reason: Required 15" instead.



Contract Modification

Fishbeck, Thompson, Carr & Huber, Inc.

6/21/2017 11:57 AM

FieldManager 5.3a

Increases / Decreases

Item Description	Item Code	Prop. Line	Proj. Line	Project	Catg.	Item Type	Quantity Change	Unit	Unit Price	Dollar Value
Bituminous Pavement, 3C (2.0")	_3622047	0047	0235	G150788CD	0001	Original	793.630	Ton	65.00000	\$51,585.95
Reason: Extra County work approved by the Township.										
Bituminous Pavement, 5E1 (1.5")	_3622048	0048	0240	G150788CD	0001	Original	629.244	Ton	68.00000	\$42,788.59
Reason: Extra County work approved by the Township.										
Miscellaneous Work Allowance	_3622055	0055	0275	G150788CD	0001	Original	-10,000.000	Dir	1.00000	\$-10,000.00
Reason: Individual items added instead of using miscellaneous work allowance.										

Total Dollar Value: \$84,309.74

New Items

Item Description	Item Code	Prop. Line	Proj. Line	Project	Catg.	Item Type	Proposed Quantity	Unit	Unit Price	Dollar Value
_ Flared End Section, 15-inch	3077050	0057	0281	G150788CD	0001	Extra	1.000	Ea	720.00000	\$720.00
Reason: 12" Flared End Section at Sta. 10+50 needs to be adjusted to 15" Flared End Section.										
Cold Milling HMA Surface	5010002	0058	0282	G150788CD	0001	Extra	7,140.000	Syd	2.55000	\$18,207.00
Reason: Extra County work approved by Township.										
_ Grading and Compacting Existing Agg	6027011	0059	0283	G150788CD	0001	Extra	7,140.000	Syd	1.55000	\$11,067.00
Reason: Extra County work approved by the Township.										
_ Clay Plug	7157050	0060	0284	G150788CD	0001	Extra	2.000	Ea	635.00000	\$1,270.00
Reason: In 2 lateral trenches on the river side of TRD roughly 4'x6'x8'.										
Subbase Underdrain, 6-inch 10' Deep	_3622049	0061	0285	G150788CD	0001	Extra	524.000	Ft	17.85000	\$9,353.40
Reason: In the sanitary sewer trench roughly 10' deep/1' above sanitary.										



Contract Modification

Fishbeck, Thompson, Carr & Huber, Inc.

6/21/2017 11:57 AM

FieldManager 5.3a

New Items

Item Description	Item Code	Prop. Line	Proj. Line	Project	Catg.	ItemType	Proposed Quantity	Unit	Unit Price	Dollar Value
Storm Sewer, 15-inch	_3604062	0062	0286	G150788CD	0001	Extra	8.000	LF	57.50000	\$460.00
Reason: Extended 8 feet.										
Dr Structure, Tap, 6 inch	4030306	0063	0287	G150788CD	0001	Extra	1.000	Ea	270.00000	\$270.00
Reason: To tie underdrain into 2' basin at low end.										
_ Check Dam	2047050	0064	0288	G150788CD	0001	Extra	2.000	Ea	220.00000	\$440.00
Reason: 6+00 and 7+30										
Riprap, Plain	8130010	0065	0289	G150788CD	0001	Extra	24.440	Syd	55.00000	\$1,344.20
Reason: Placed at 3+00 to 1+45, 7+30 left, and 6+50 left.										

Total Dollar Value: \$43,131.60

Project / Category Summary

Project/Catg	Project/Category Description	Federal Number	Project Status	Finance System	Control Section	Dollar Value
G150788CD	Thornapple River Dr Utility Extension	0	CNST			
0001	Thornapple River Dr Utility Extension					\$127,441.34
Total:						\$127,441.34

Total Net Change Amount: \$127,441.34

Prime Contractor: Kamminga & Roodvoets, Inc. <hr/> Signature _____ Date _____	Cascade Charter Township <hr/> Signature _____ Date _____
Project Engineer: Kevin Kietzman, PE <hr/> Signature _____ Date _____	<hr/> Signature _____ Date _____

STAFF REPORT

TO: Cascade Charter Township Board
FROM: Steve Peterson, Community Development Director
REPORT DATE: June 20, 2017
MEETING DATE: June 28, 2017
CASE: #16-3316/ Leisure Living

GENERAL INFORMATION

- A. **Applicant:** Leisure Living LLC
3196 Kraft Ave
Grand Rapids MI 49512

- B. **Status of Applicant:** Developer

- C. **General Location:** West side of Spaulding Ave just south of Cascade Rd.

- D. **Requested Action:** Rezone property at 5042, 5044 Cascade Rd and 1225 Spaulding to P.U.D. to allow an independent living, assisted living and memory care complex.

- E. **Existing Zoning on Subject Parcels:** ARC and R1.

- F. **Zoning on Adjoining Parcels:**

N – Office P.U.D (Ada Township)
S –ARC/R-1
E – R-1
W – Residential PUD

- G. **Parcel Size:** Approximately 18 acres

- H. **Existing Land Use on Subject Parcel:** Vacant

- I. **Adjacent Area Land Uses:**
North - Office
East - Vacant/Commercial
South - MDOT wetland mitigation
West - open space portion of PUD

STAFF ANALYSIS

- A. The applicant is requesting final approval in order to construct 138 new units for independent living, assisted living and memory care. The breakdown would be:
- Assisted Living – 50 units
 - Memory Care – 28 units
 - Independent Living - 60 units
- B. This development would be restricted to people receiving care. Other similar uses in the Township are; Sentinel Point, Emerald Meadows and Sunrise.
- C. The project consists of three different properties totaling about 18 acres. The two properties to the west are zoned ARC and have had numerous different uses over the years. The third property along Spaulding is zoned R1 and had a home on it.
- D. The current Master Plan designation for this property is Community Residential. This designation is a reflection of the transitional area between the residential uses to the south and the office and commercial areas to the north. We specifically mention attached and detached assisted living as a housing type in this master planned area. The density is planned at 4-6 units per acre for community residential. That density would allow for 108 units. This type of use would be much less intense and would seem appropriate for the parcel. The planned density is about 7.6 units per acre and would be similar the allowed density in our mixed-use areas. It is also well under the density of the other similar uses with similar surroundings:
1. Sunrise 17.2 units per acre
 2. Sentinel Pointe 9.6 units per acre
 3. Emerald meadows 14.5 units per acre
- E. The applicant has submitted a traffic study for this project. This study has provided the following:
- 1) Evaluate any needed improvements to the intersection of Cascade Rd and Spaulding Ave
 - 2) Evaluate the location of the drive location on Spaulding
 - 3) Evaluate the need for improvements to Spaulding Ave as a result of this project.
 - 4) Provide a traffic generation estimate.
- F. The study has indicated that the KCRC will be making some improvements to the area that will address the issues in the traffic study. The study has identified the following improvements that are occurring:
- 1) KCRC is already planning on constructing a northbound right turn lane in 2018.
 - 2) KCRC has agreed to monitor the signal for the most efficient operation for all movements.
- G. In addition the KCRC is also studying the intersection at Burton and Spaulding for future improvements regardless of this project.
- H. The project is located along the pedestrian path and the project has provided a connection to the pathway to allow for internal connections to the development. This is another objective in the Master plan.

- I. The storm water design for the site has been reviewed and approved by the Township Engineer. They will be required to enter execute the storm water maintenance agreement for the project.
- J. The developer has also been working on plans to address sewer and water to accommodate the project. This is what caused the biggest delay in the review of the project. Once the neighbors in the eastmont meadows decided that they would not give an easement to loop the water system the city of Grand Rapids allowed for a connection to Ada Township.
- K. Because of the residential uses to the NW and West we have asked the developer to provide some perspective drawing to show what the buildings will look like. They have provided the drawing as well as some additional landscaping to address their concerns.
- L. The lighting plan that has been submitted meets our lighting regulations.
- M. Any outdoor dumpster must be fully shielded as required by the zoning ordinance.
- N. As with all of our residential projects they will have to provide a written discloser about being near the airport.
- O. The planning commission held a public hearing on this matter at the April 17 meeting and recommended approval of the project at the June 5 meeting with the following conditions:

Standards

Section 16.03 of the Zoning Ordinance requires that a Planned Unit Development must demonstrate that:

Standard	Staff Comment
Granting of the Planned Unit Development rezoning will result in a recognizable and substantial benefit to the ultimate users of the project and to the community, where such benefit would otherwise be unfeasible or unlikely to be achieved.	The property has been the subject of code enforcement issues in the past. Developing the properties together will help address the code enforcement issues as well as tie them all in together. The PUD will also help recognize the uniqueness of the use.
In relation to underlying zoning, the proposed type and density of use shall not result in a material increase in the need for public services, facilities and utilities, and shall not place a material burden upon the subject or surrounding land or property owners and occupants or the natural environment	The type of use and density is consistent with the master plan would not result in a material increase in the need for public services. This type of use would be less intense that would otherwise could have occurred even with the additional density.
The proposed development shall be compatible with the General Development	The project is consistent with the master plan

Plan of the Township, and shall be consistent with the intent and spirit of this Chapter	
In relation to underlying zoning, the proposed development shall not result in an unreasonable negative economic impact upon surrounding properties	The community residential area recognizes that this is a transition area and while changing, it is compatible with the surrounding uses both commercial and residential.
The proposed development shall contain at least as much green area and usable open space as would otherwise be required by this Ordinance with respect to the most dominant use in the development	Although we don't require landscape buffers of residential projects. The have provided a landscape buffer nearest the surrounding residential uses.
The proposed development shall be under single ownership or control such that there is a single person or entity having responsibility for completing the project in conformity with this Ordinance. This provision shall not prohibit a transfer of ownership or control, upon due notice to the Planning Director of the Township	met.

Staff Recommendation

Staff recommends approval of the PUD Ordinance and plans as submitted.

ATTACHMENTS:

- APPLICATION
- SITE PLAN
- TRAFFIC STUDY
- TOWNSHIP ENGINEER REPORT
- MASTER PLAN EXCERPTS
- PROPOSED PUD ORDINANCE



CASCADE CHARTER TOWNSHIP

2865 Thornhills SE Grand Rapids, Michigan
49546-7140

PLANNING & ZONING APPLICATION

APPLICANT: Name: Leisure Living, LLC
Address: 3196 Kraft Ave SE Suite 200
City & Zip Code Grand Rapids, MI 49512
Telephone: 616-745-2220
Email Address: ckraay@leisure-living.com

OWNER: * (If different from Applicant)
Name: 5042-5044 Cascade Rd LLC & Lewis Brown (1255 Spaulding)
Address: 7507 Red Osier Dr & 4301 Canal Ave
City & Zip Code: Byron Center, MI 49315 & Grandville, MI 49418
Telephone: 437-7020 & 259-8213
Email Address: drew.miller@cbre-gr.com & ericolsen@kw.com

NATURE OF THE REQUEST: (Please check the appropriate box or boxes)

- | | | | |
|--------------------------|-----------------------------|-------------------------------------|---------------------------------|
| <input type="checkbox"/> | Administrative Appeal | <input type="checkbox"/> | Administrative Site Plan Review |
| <input type="checkbox"/> | Deferred Parking | <input checked="" type="checkbox"/> | P.U.D. - Rezoning * |
| <input type="checkbox"/> | P.U.D. - Site Condominium * | <input type="checkbox"/> | Rezoning |
| <input type="checkbox"/> | Site Plan Review * | <input type="checkbox"/> | Sign Variance |
| <input type="checkbox"/> | Special Use Permit | <input type="checkbox"/> | Subdivision Plat Review * |
| <input type="checkbox"/> | Zoning Variance | <input type="checkbox"/> | Other: _____ * |

* Requires an initial submission of 5 copies of the completed site plan

BRIEFLY DESCRIBE YOUR REQUEST:**

PRELIMINARY DEVELOPMENT PLAN REVIEW FOR PROPOSED
CONGREGATE CARE FACILITY WHICH INCLUDES INDEPENDENT
LIVING, ASSISTED LIVING & MEMORY CARE.

(**Use Attachments if Necessary)

-SEE OTHER SIDE-

LEGAL DESCRIPTION OF PROPERTY**:

SEE ATTACHMENT

(**Use Attachments if Necessary)

PERMANENT PARCEL (TAX) NUMBER: 41-19-06-126-005, -002, -003

ADDRESS OF PROPERTY: 5042 CASCADE ROAD SE, 5044 CASCADE RD, 1225 SPAULDING AVE.

PRESENT USE OF THE PROPERTY: Various Commercial Landscaping Practices

NAME(S) & ADDRESS(ES) OF ALL OTHER PERSONS, CORPORATIONS, OR FIRMS HAVING A LEGAL OR EQUITABLE INTEREST IN THE PROPERTY:

Name(s)	Address(es)
_____	_____
_____	_____

SIGNATURES

I (we) the undersigned certify that the information contained on this application form and the required documents attached hereto are to the best of my (our) knowledge true and accurate. I (we) also agree to reimburse the Cascade Charter Township for all costs, including consultant costs, to review this request in a timely manner. I (we) understand that these costs may also include administrative reviews which may occur after the Township has taken action on my (our) request.

I (we) the undersigned also acknowledge that the proposed project does not violate any known property restrictions (i.e. plat restrictions, deed restrictions, covenants, etc.)

Arthur Bott Sr. for 5042--5044 Cascade Rd.
Lewis Brown for 1255 Spaulding Ave.

Owner - Print or Type Name
(*If different from Applicant)

Leisure Living Management Inc.

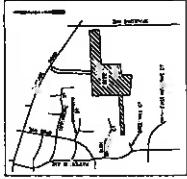
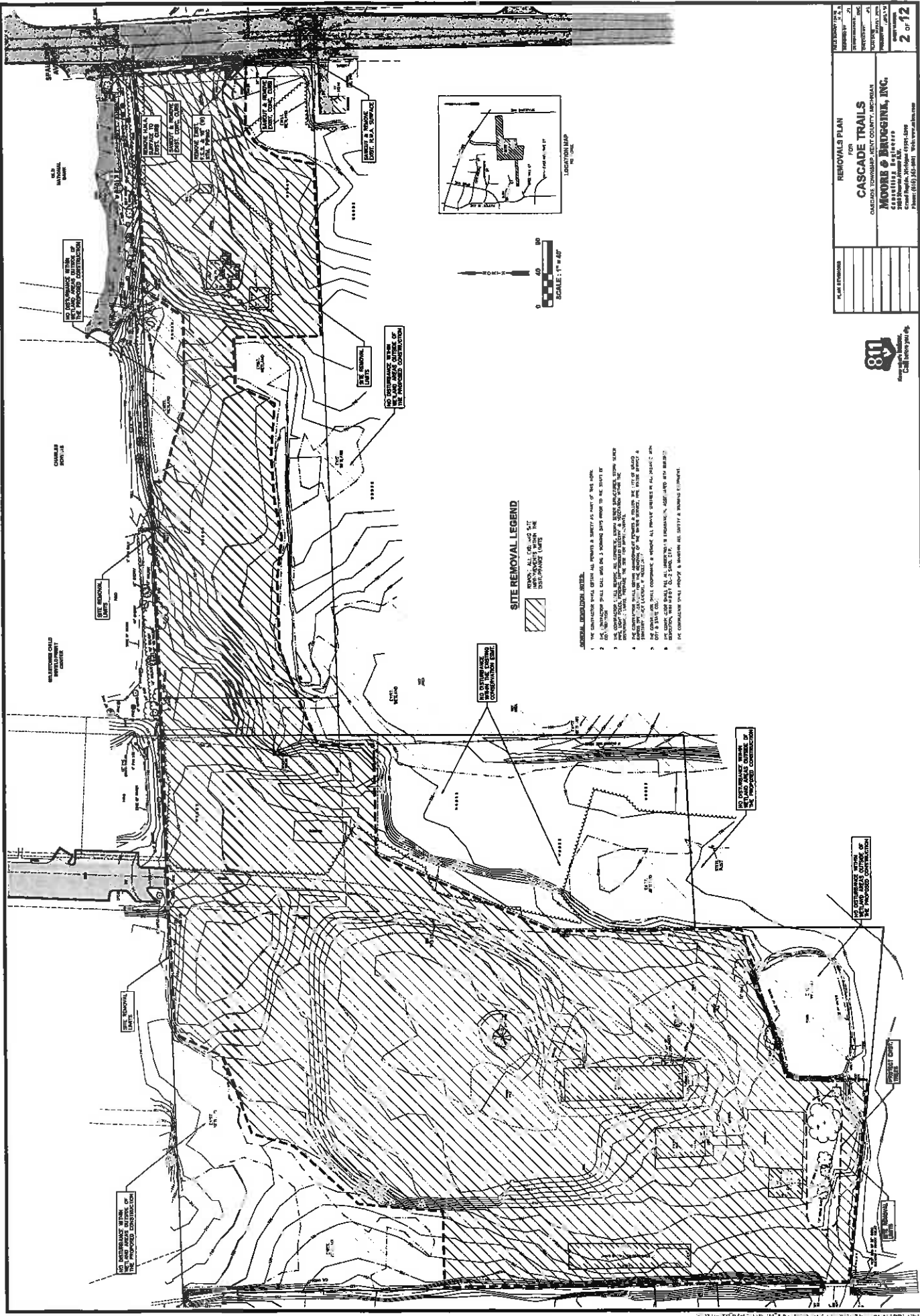
Applicant - Print or Type Name

See attached Purchase Agreement Signature Pages

Owner's Signature & Date
(*If different from Applicant)

[Signature] - President & CEO
Applicant's Signature & Date 6/16/10

PLEASE ATTACH ALL REQUIRED DOCUMENTS NOTED IN THE PROCESS REVIEW SHEET - THANK YOU



SITE REMOVAL LEGEND

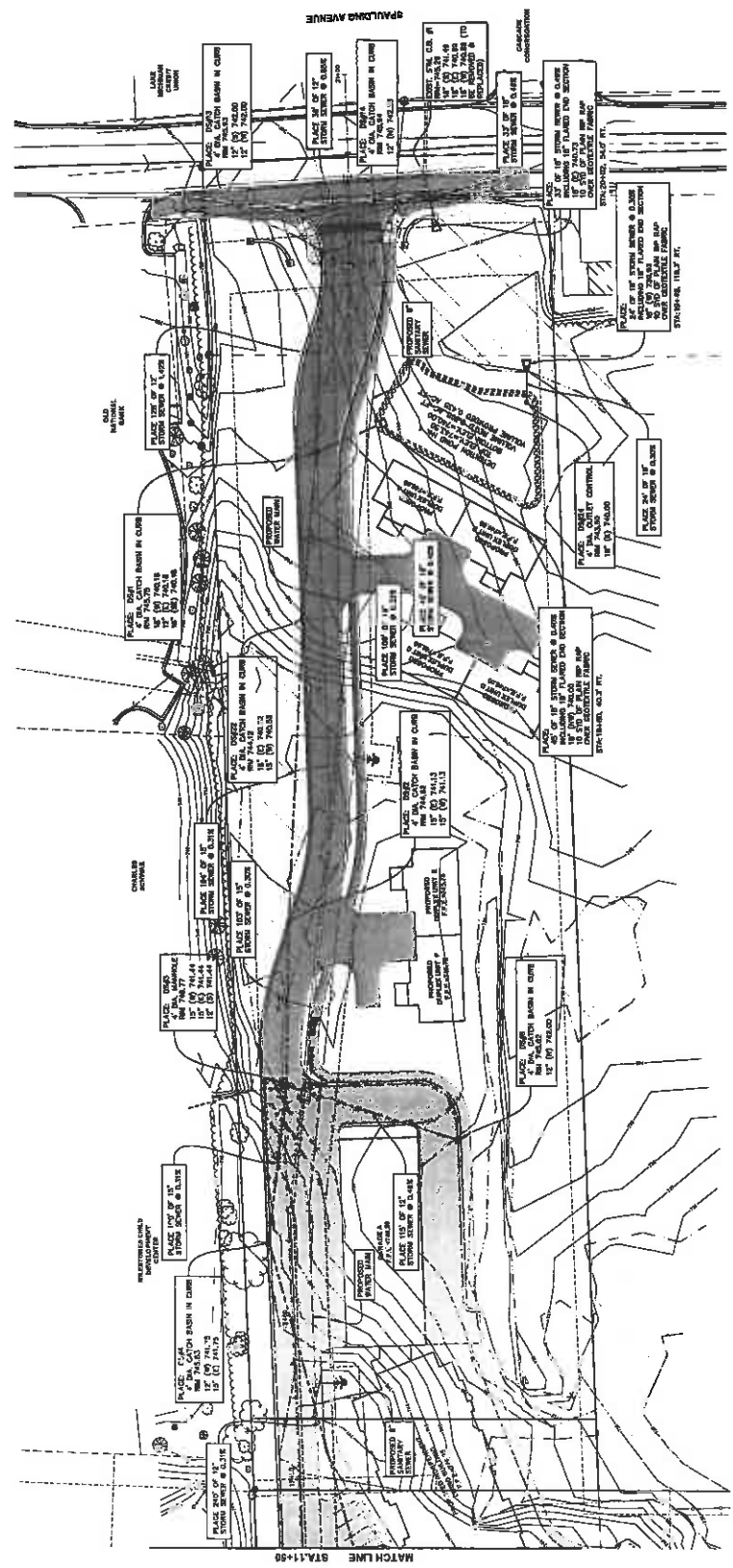
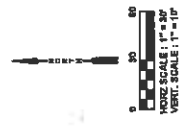
- REMOVAL OF ALL EXISTING AND SITE-PLANNED UNITS
- NO DISTURBANCE TO EXISTING CONSTRUCTION

- GENERAL REMOVAL NOTES:**
1. THE CONTRACTOR SHALL OBTAIN ALL PERMITS & ORDINANCES IN ADVANCE OF THIS WORK.
 2. ALL EXISTING UTILITIES SHALL BE LOCATED AND DELETED PRIOR TO THE START OF ANY CONSTRUCTION.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, ORDINANCES, AND APPROVALS FROM ALL APPLICABLE AGENCIES, INCLUDING BUT NOT LIMITED TO: CITY OF SEASIDE, CALIFORNIA, AND THE STATE OF CALIFORNIA.
 4. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES TO REMAIN UNLESS OTHERWISE SPECIFIED.
 5. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES TO REMAIN UNLESS OTHERWISE SPECIFIED.
 6. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES TO REMAIN UNLESS OTHERWISE SPECIFIED.
 7. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES TO REMAIN UNLESS OTHERWISE SPECIFIED.

PROJECT NO.	2012-001
DATE	08/15/12
PROJECT NAME	CASCADE TRAILS
CLIENT	MOORE & BRUGGINA, INC.
DESIGNER	MOORE & BRUGGINA, INC.
PROJECT LOCATION	SEASIDE, CALIFORNIA
SCALE	1" = 40'
SHEET NO.	2 OF 12



REMOVALS PLAN
FOR
CASCADE TRAILS
 CASCADE TOWNSHIP, SEASIDE, CALIFORNIA
MOORE & BRUGGINA, INC.
 Consulting Engineers
 1000 S. Main Street, Suite 100
 Seaside, CA 94138
 Phone: (415) 345-0011 | Web: www.mbr.com



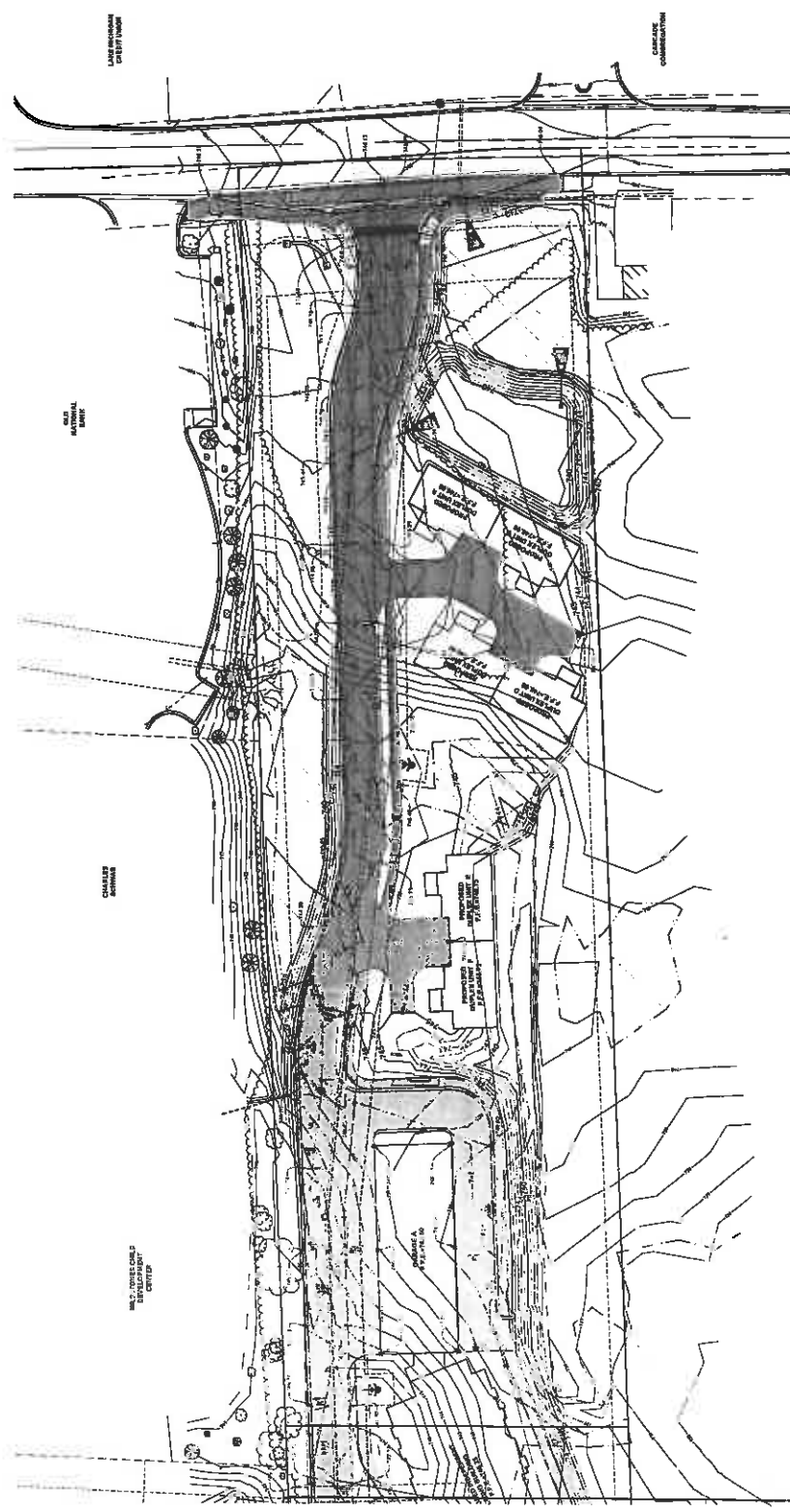
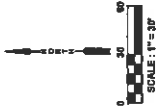
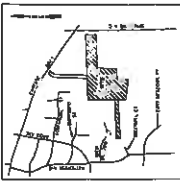
MATCH LINE STA. 1+50

STORM SEWER PLAN
 FOR
CASCADE TRAILS
 CASCADE TOWNSHIP, WEST COUNTY, MICHIGAN

MOORE & BRUCEWELL, INC.
 Consulting Engineers
 2000 West Park, Jackson, Michigan 49201-5272
 Phone: (517) 342-1648 Fax: (517) 342-1649

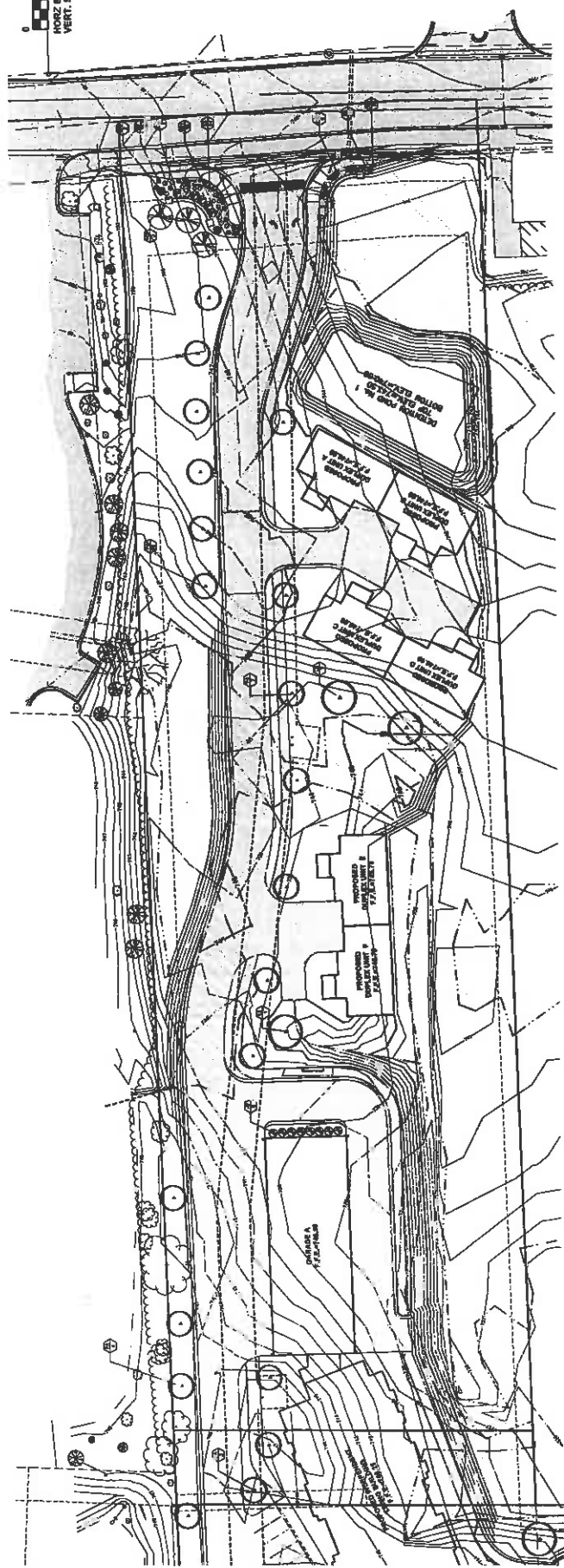
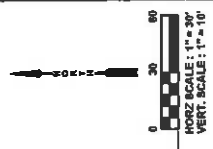
DATE: 11/11/03
 DRAWN BY: JAC
 CHECKED BY: JAC
 PROJECT NO.: 03-001
 SHEET NO.: 5 OF 12





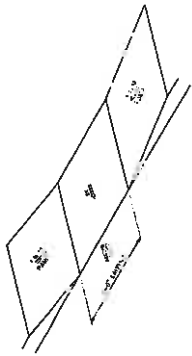
SITE GRADING PLAN FOR CASCADE TRAILS CASCADE TOWNSHIP, WEST COUNTY, INDIANA MOORE & BRUGGENT, INC. 2403 Newberry Avenue, S.E. Tallahassee, Florida 32310 Phone: (904) 555-0001 FAX: (904) 555-0002		SHEET NO. 12 OF 12
DATE: 08/11/09	SCALE: 1" = 30'	
PROJECT NO. 09-001		
CLIENT: MOORE & BRUGGENT, INC.		
DESIGNER: MOORE & BRUGGENT, INC.		
CHECKED BY: [Signature]		
APPROVED BY: [Signature]		



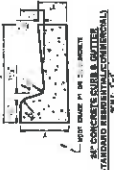


MOORE & BRUGGINK, INC. Landscape Architecture 2000 Grand Rapids, Michigan 49504-4298 Phone: (616) 393-3911, Web: www.mbr.com		PROJECT NO.: 1000000000 DATE: 08/01/2012	SHEET NO.: 10 OF 12
MOORE & BRUGGINK, INC. Landscape Architecture 2000 Grand Rapids, Michigan 49504-4298 Phone: (616) 393-3911, Web: www.mbr.com		PROJECT NO.: 1000000000 DATE: 08/01/2012	SHEET NO.: 10 OF 12
MOORE & BRUGGINK, INC. Landscape Architecture 2000 Grand Rapids, Michigan 49504-4298 Phone: (616) 393-3911, Web: www.mbr.com		PROJECT NO.: 1000000000 DATE: 08/01/2012	SHEET NO.: 10 OF 12
MOORE & BRUGGINK, INC. Landscape Architecture 2000 Grand Rapids, Michigan 49504-4298 Phone: (616) 393-3911, Web: www.mbr.com		PROJECT NO.: 1000000000 DATE: 08/01/2012	SHEET NO.: 10 OF 12





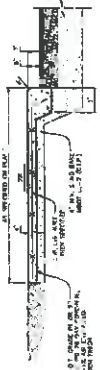
STORMWATER MANAGEMENT SYSTEM PLAN VIEW



3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



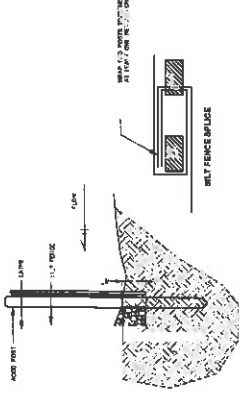
3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



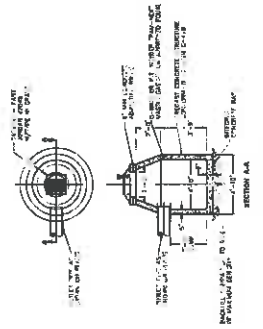
CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



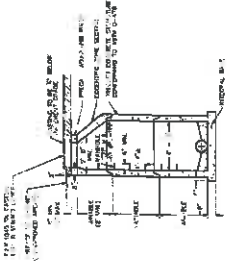
STORMWATER CATCH BASIN
STANDARD SECTION - COMMERCIAL



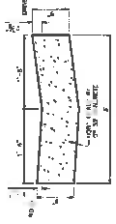
STORMWATER CATCH BASIN
QUANTITY SECTION - COMMERCIAL



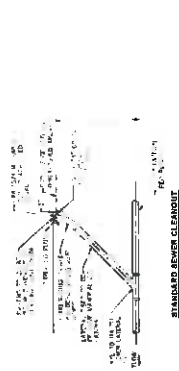
STORMWATER CATCH BASIN
STANDARD SECTION - COMMERCIAL



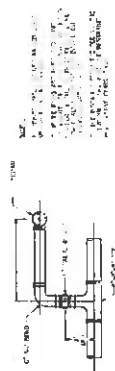
STORMWATER CATCH BASIN
QUANTITY SECTION - COMMERCIAL



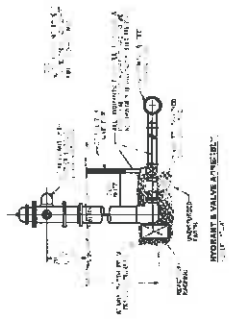
STORMWATER CATCH BASIN
STANDARD SECTION - COMMERCIAL



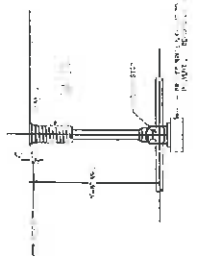
STORMWATER CATCH BASIN
STANDARD SECTION - COMMERCIAL



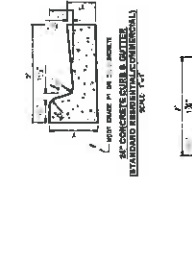
STORMWATER CATCH BASIN
QUANTITY SECTION - COMMERCIAL



STORMWATER CATCH BASIN
STANDARD SECTION - COMMERCIAL



STORMWATER CATCH BASIN
QUANTITY SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



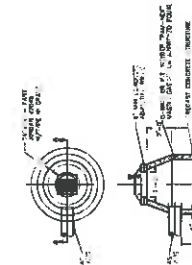
3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



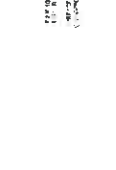
3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



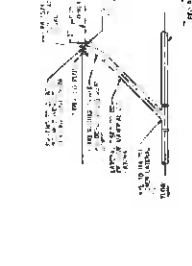
3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



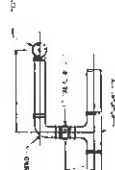
3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



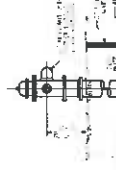
3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



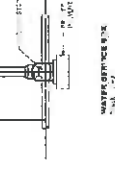
3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
STANDARD SECTION - COMMERCIAL



3/4" CONCRETE CURB & GUTTER
QUANTITY SECTION - COMMERCIAL

SCALE	AS SHOWN
DATE	11/12
PROJECT	MOORE & BRUGGINE, INC.
CLIENT	CASCADE TRAILS
LOCATION	CASCADE TRAILS, WEST COAST, MICHIGAN
DESIGNER	MOORE & BRUGGINE, INC.
PROJECT NO.	00000000000000000000
DATE	11/12
SCALE	AS SHOWN
PROJECT	MOORE & BRUGGINE, INC.
CLIENT	CASCADE TRAILS
LOCATION	CASCADE TRAILS, WEST COAST, MICHIGAN
DESIGNER	MOORE & BRUGGINE, INC.
PROJECT NO.	00000000000000000000
DATE	11/12



THIS DOCUMENT IS THE PROPERTY OF JVISSER HOME DESIGN. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF JVISSER HOME DESIGN.

DATE	DESCRIPTION	BY	CHKD BY

LEISURE LIVING

IL
CASCADE

PLAN AND ELEVATIONS

A-1

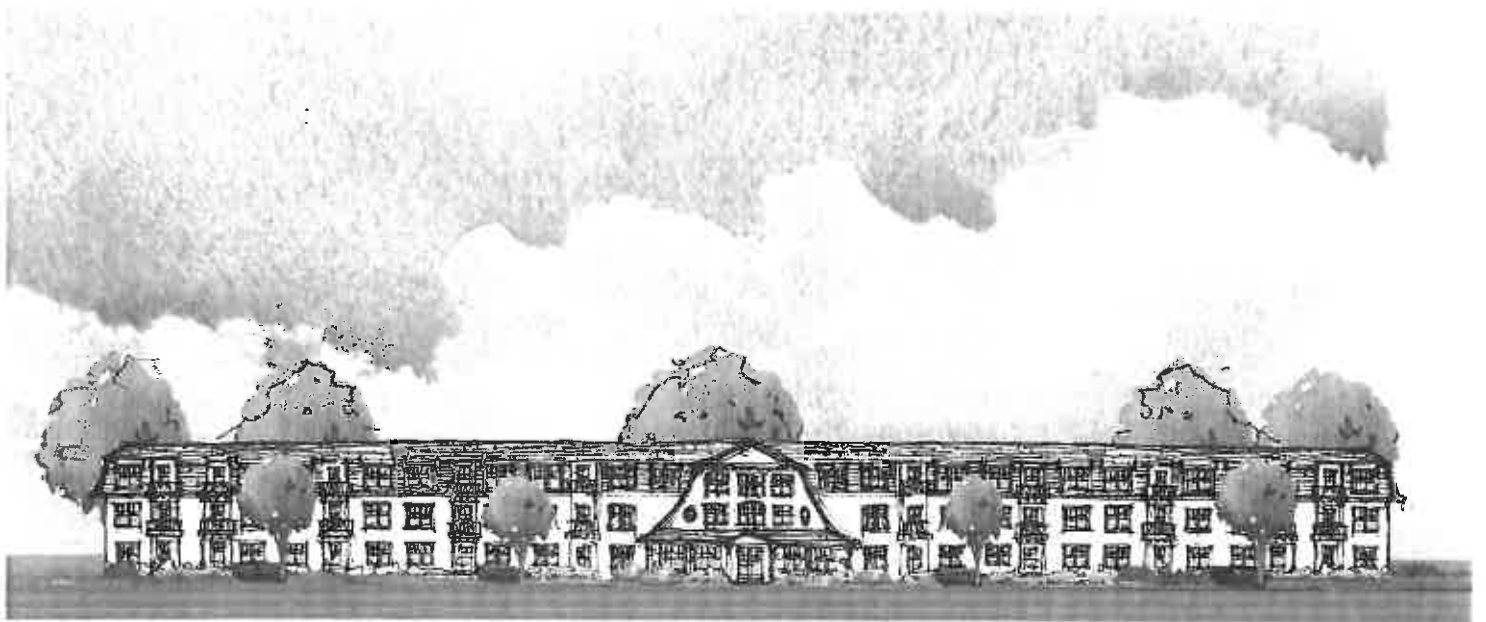
REAR ELEVATION
SCALE: 1/8" = 1'-0"

LEFT ELEVATION
SCALE: 1/8" = 1'-0"

RIGHT ELEVATION
SCALE: 1/8" = 1'-0"

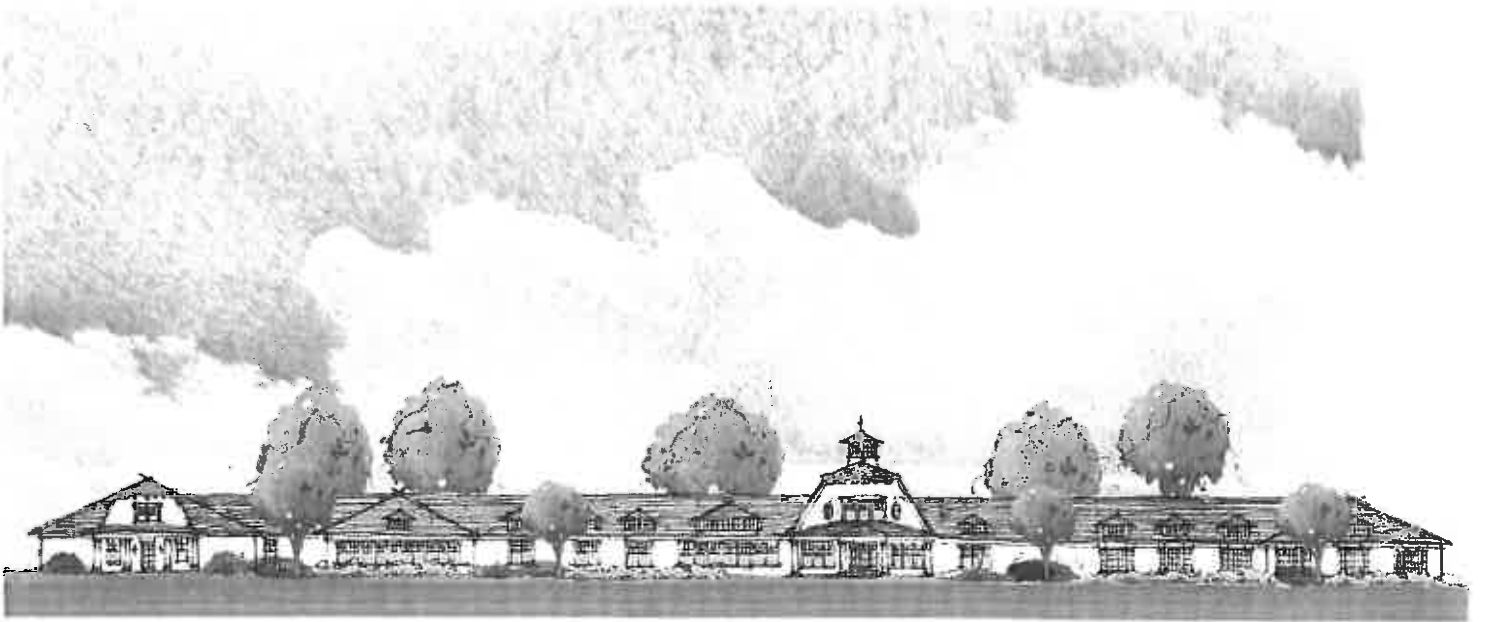
FRONT ELEVATION
SCALE: 1/8" = 1'-0"

OPTION 'C' FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"



Leisure Living
MANAGEMENT

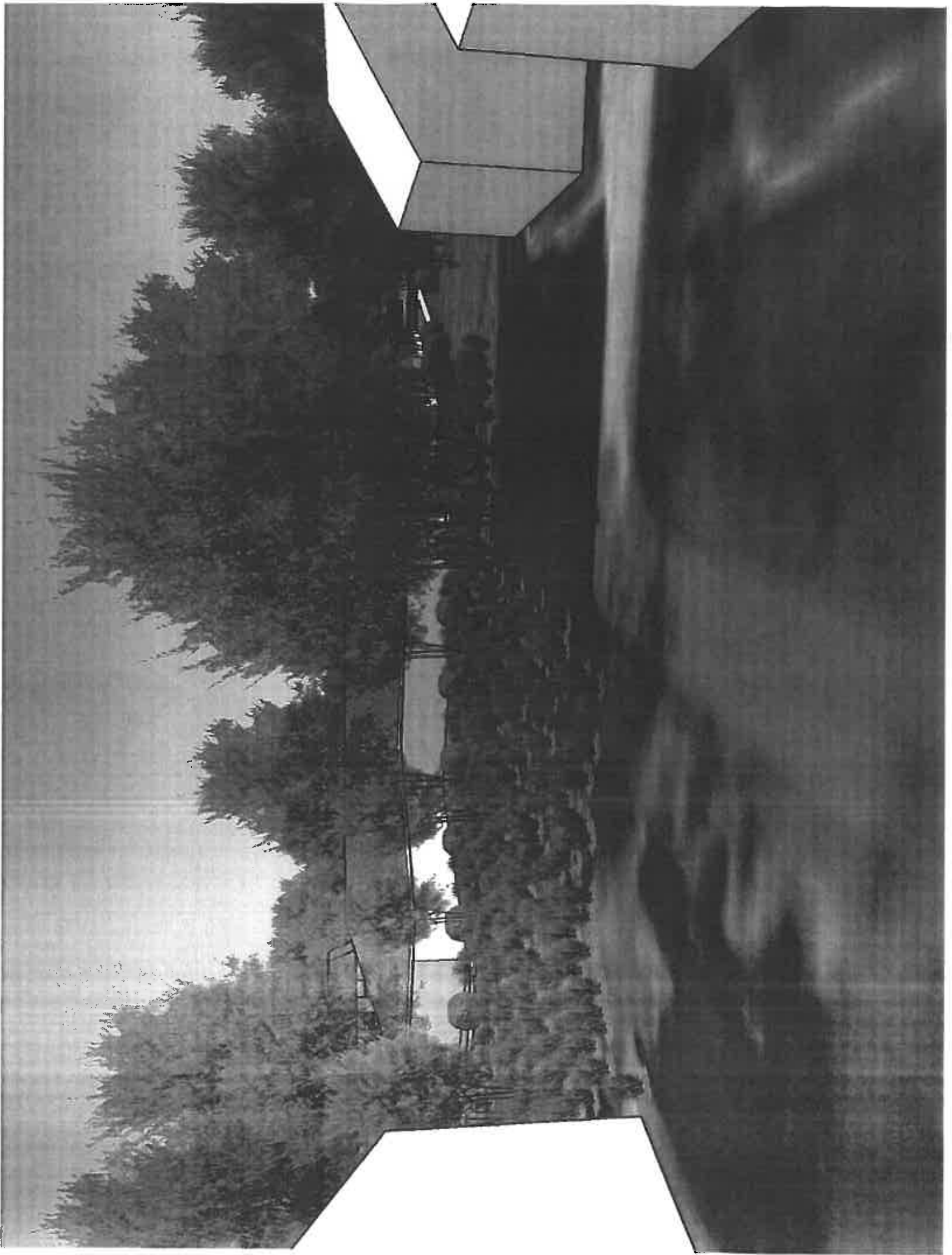
VISSER




Leisure Living
MANAGEMENT


JVISSE





THIS DOCUMENT IS THE PROPERTY OF JVISSER DESIGN. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. ANY REUSE OR MODIFICATION OF THIS DOCUMENT WITHOUT THE WRITTEN PERMISSION OF JVISSER DESIGN IS STRICTLY PROHIBITED. THE USER ASSUMES ALL LIABILITY FOR THE USE OF THIS DOCUMENT.

DATE	DESCRIPTION	BY / DATE	CHKD / DATE

PROJECT: 2010-001
SHEET: 101

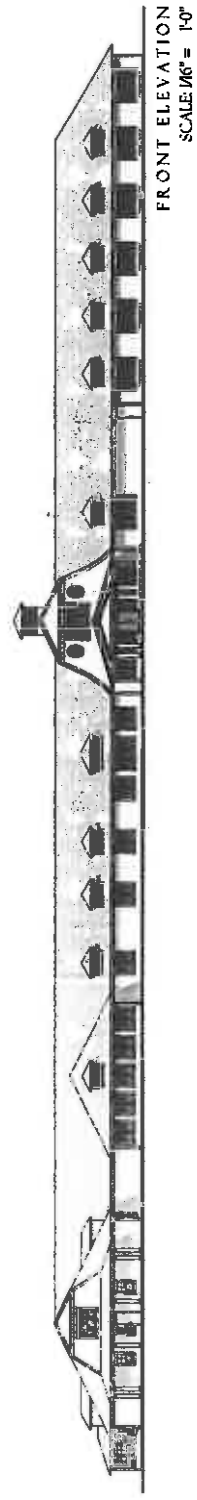
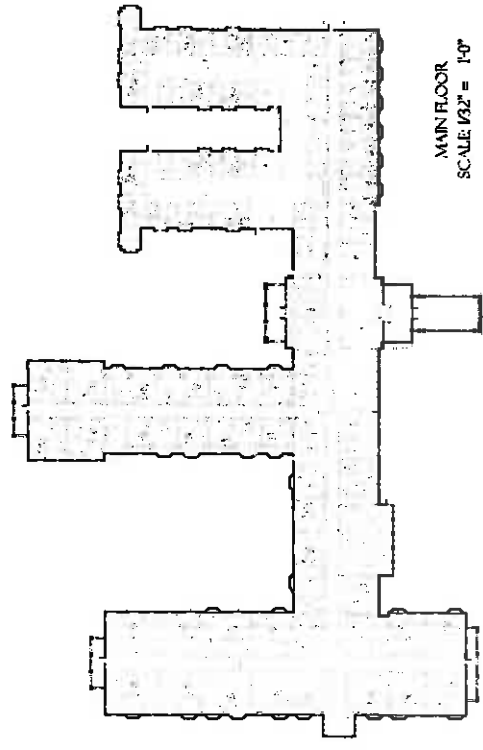
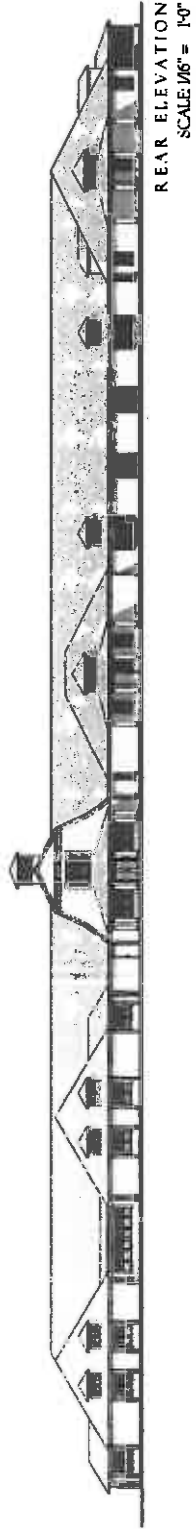
BUILDER:

LEISURE LIVING
ASSISTED LIVING

CASCADE

MAIN FLOOR
PLAN

A-1



A.I.I.

LEISURE LIVING MANAGEMENT

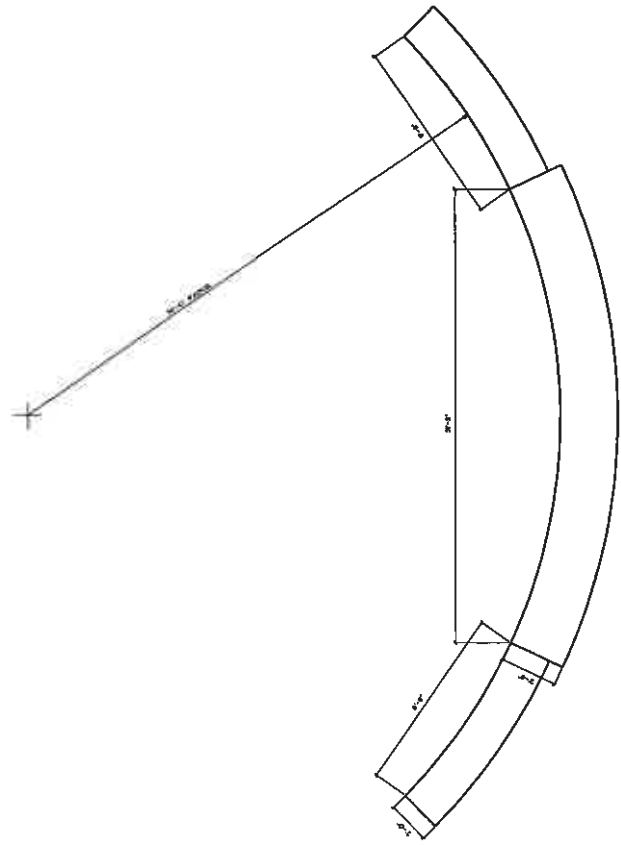
CASCADE TRAILS - SENIOR LIVING

KENT COUNTY, MICHIGAN

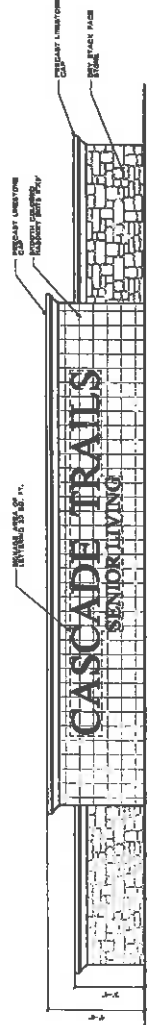
ARCHITECTS
SIDDELL
ARCHITECTS

DATE	1/22/11
DESIGNED BY	T.L.M.
CHECKED BY	T.L.M.
PROJECT NO.	11-011

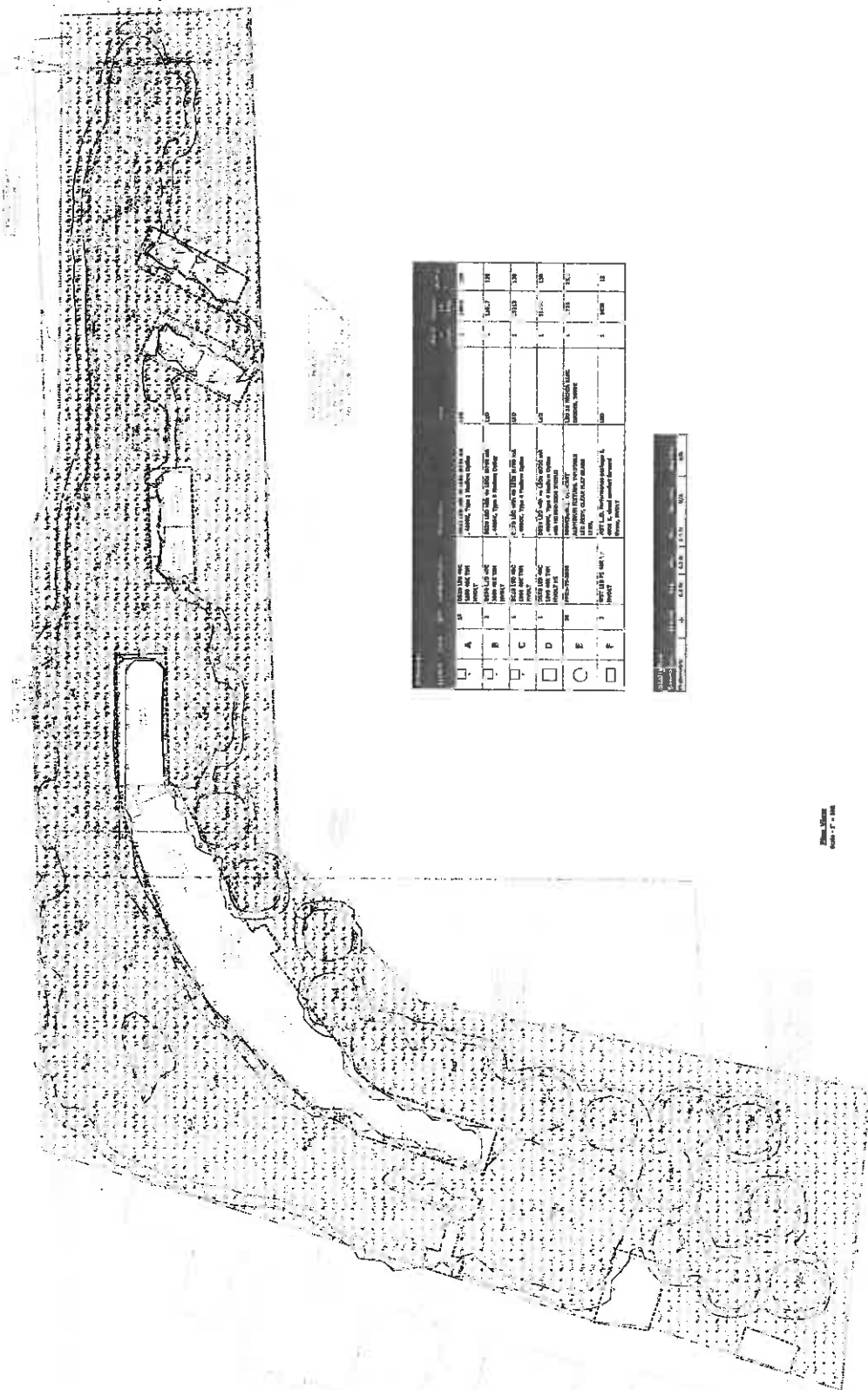
DATE	1/22/11
DESIGNED BY	T.L.M.
CHECKED BY	T.L.M.
PROJECT NO.	11-011



PLAN VIEW
SCALE: 3/8" = 1'-0"



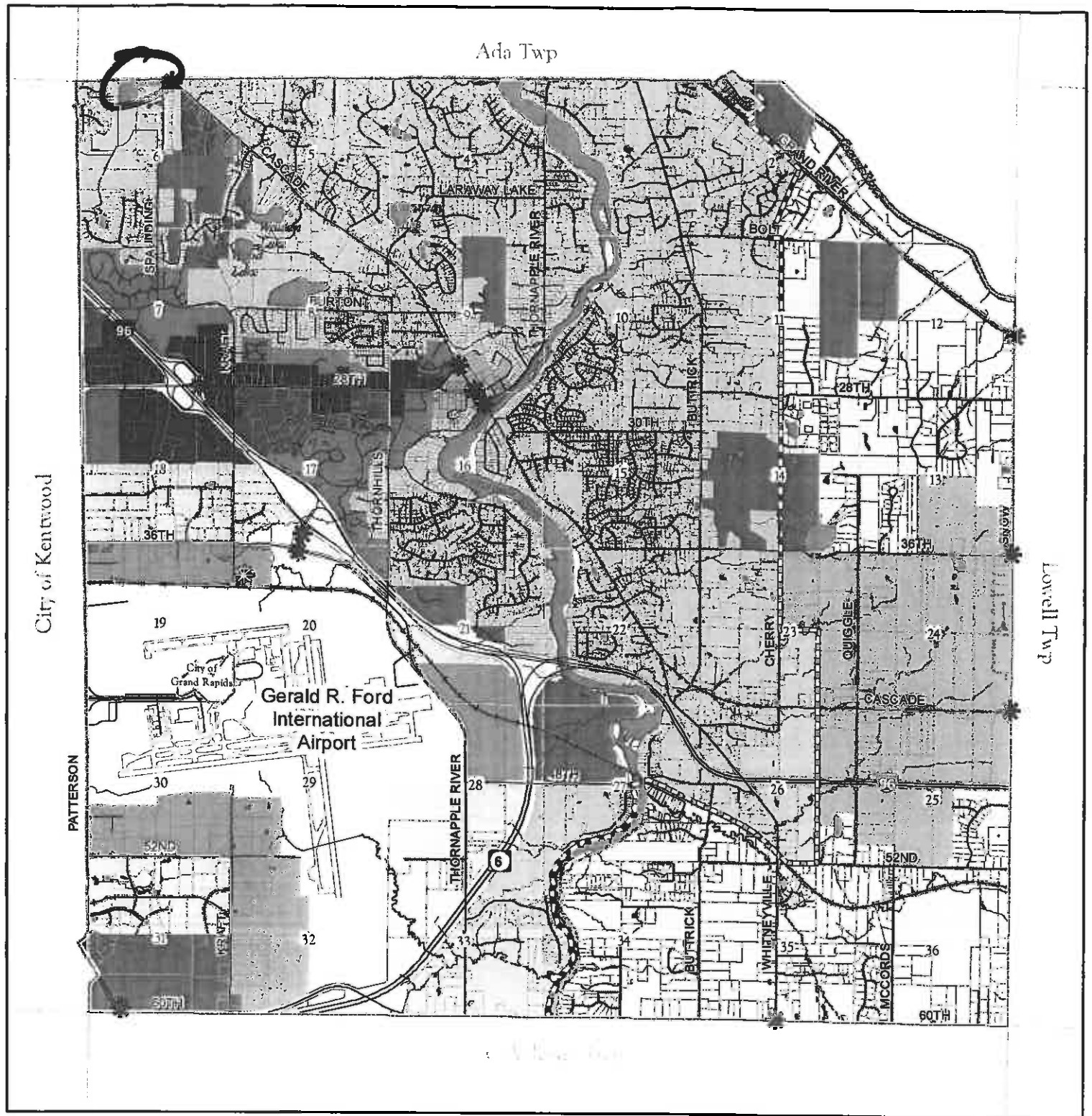
FRONT ELEVATION
SCALE: 3/8" = 1'-0"



Symbol	Area	Footcandle	Notes
□	A	10	Area A: 1000 sq ft, 1000 ft x 1000 ft
□	B	15	Area B: 1500 sq ft, 1500 ft x 1500 ft
□	C	20	Area C: 2000 sq ft, 2000 ft x 2000 ft
□	D	25	Area D: 2500 sq ft, 2500 ft x 2500 ft
○	E	30	Area E: 3000 sq ft, 3000 ft x 3000 ft
□	F	35	Area F: 3500 sq ft, 3500 ft x 3500 ft



Scale: 1" = 100'



Cascade Charter
Township
Kent County, Michigan

Map 15
Future Land Use

Legend

- Gateway Feature
- Park 'n' Ride
- Rail Station
- Utility Service Area

- Farmland Preservation
- Rural Residential
- Suburban Residential
- Community Residential
- Village Commercial
- General Commercial
- Highway Commercial
- Mixed Use
- Heavy Industrial
- Light Industrial
- Community Facility/ Golf Course



WPC
© 1994 WPC. All Rights Reserved.
This map and any related digital document
is a product of WPC, Inc. It is a graphic
representation of geographic information
and is not intended to be used as a
legal document. No warranty is made
by WPC, Inc. for any use of this map
other than for the purpose intended.
WPC, Inc. is not responsible for any
errors or omissions.

Williams & Works
419.234.1998 phone • 419.234.1881 fax
540 Ottawa Avenue NW • Grand Rapids, MI 49503

April 22, 2009

neighborhoods is a primary concern and measures should be taken periodically to assure proper coverage of these services. Private roads should be considered under certain circumstances, such as for the preservation of large stands of trees, or to preserve steep slopes, where drainage and run-off is a concern, or where important natural features have been identified in the Natural Feature Inventory.



COMMUNITY RESIDENTIAL

Description: The community residential land use designation is intended for attached or detached single family and multi-family housing. A project should be designed and developed to provide attractive, up-scale master planned living environments with amenities such as open spaces, walking paths, street trees, street lighting and attractive architectural style. Buildings and structures should be designed to minimize bulk and massing of attached living units.

Location: The community residential land use area primarily serves as a transition from commercial/mixed use and suburban residential uses along 28th Street. However, there are two areas where this use is proposed along the south side of Cascade Road north of Burton.

Desired Uses and Densities: Uses may include attached and detached residential dwellings, including projects that incorporate a variety of housing options, as well as assisted living and retirement communities. Master-planned retirement communities may also incorporate low-impact commercial uses internal and integrated within the development such as personal service establishments (barber shop or hair salon), post office, financial institution and other necessary uses for the convenience of the residents but not available for use by the general public. Development within the community residential area should include a walking system that connects to any existing or planned non-motorized pathway. The Township desires for the community residential areas to be served by mass transit in the future. Water and sewer must be available for new development or redevelopment in this land use category. Additionally, any natural features should be preserved and protected in projects located in the community residential land use area. Only public roads would be permitted in the community residential land use category. Allowable densities would range between 4-6 dwelling units to the acre.

VILLAGE COMMERCIAL

Description: This land use designation is intended to foster a pedestrian-scale, local shopping district confined to the parcels currently zoned for commercial use. It is not the intent of this land use plan to expand commercial uses either north or south along Cascade Road.

1811 4 Mile Road NE
Grand Rapids, MI 49525
phone 616.361.2664
fax 616.361.1493
progressiveae.com

September 19, 2016

Justin Longstreth, PE
Moore & Bruggink, Inc.
2020 Monroe Avenue NW
Grand Rapids, MI 49505

Re: Proposed Cascade Trails Senior Living Development
Traffic Impact Assessment

Dear Mr. Longstreth:

Progressive AE has completed the requested traffic impact assessment for the above proposed senior living development. The findings and conclusions drawn from the various analyses completed during the assessment are summarized in the following sections.

INTRODUCTION

Current plans call for the construction of a mix of senior living facilities totaling approximately 138 various units within a +/- 17-acre site located off the west side of Spaulding Avenue just south of Cascade Road. As proposed, access to/from the site would be provided to Spaulding Avenue.

Although earlier traffic-related submittals defined the very low traffic generating characteristics of the proposed project, it is our understanding that there are still concerns regarding the future operation of the nearby Cascade Road/Spaulding Avenue with the project in place and fully occupied. Therefore, this study focuses on identifying the projected before and after peak-hour traffic conditions at that intersection.

Before the start of the study, staff from the Kent County Road Commission (KCRC) were contacted to obtain additional background information regarding study scope, available traffic count data, traffic signal timing data, and background growth patterns in the area.

EXISTING CONDITIONS

Morning and afternoon peak-hour turning movement data was provided by the KCRC for the Cascade Road/Spaulding Avenue intersection. That data indicated that the peak hours occur from 7:15 AM–8:15 AM and 4:45 PM–5:45 PM. Those volumes are illustrated on Figure 1 on the next page.



Intersection "level of service" calculations were completed to evaluate the current operational efficiency of the Cascade/ Spaulding intersection. These calculations were completed using techniques outlined in the 2010 Highway Capacity Manual by the Transportation Research Board. Level of service (LoS) at signalized intersections relates to the delay, traffic volumes, and intersection geometry. Levels of service (LoS) are expressed in a range from "A" to "F", with "A" denoting the highest or best operating conditions. Generally, a Level of Service D is considered the minimum "acceptable" service level for signalized and unsignalized intersections in suburban areas such as this.

The existing peak hours were analyzed at the Cascade/Spaulding intersection. The results of the level of service analyses are also shown on Figure 1 (next to the volume data for each movement). Copies of the computer analyses are included in the separate appendix.

As shown, all of the movements at the intersection currently operate acceptably during both morning and afternoon peak hours with levels of service of "D" or better with one exception. That is the combined northbound through/right turn lane where a Level of Service F was calculated for the afternoon peak hour. Subsequent model simulations confirm these findings, with only the above noted movement experiencing short term queuing issues.

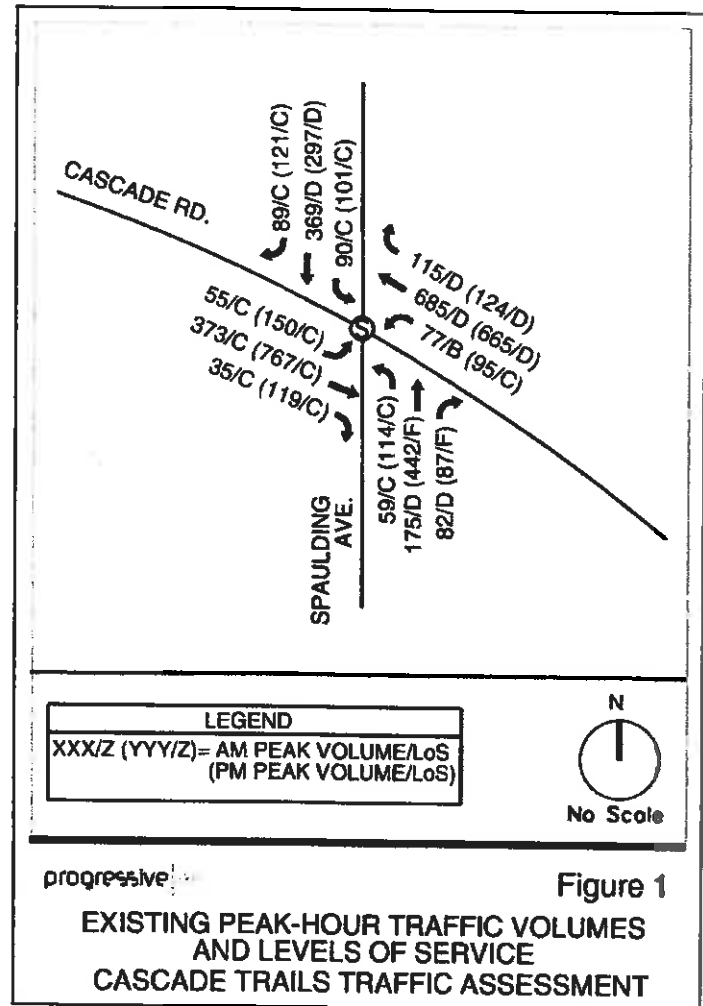


Figure 1
 EXISTING PEAK-HOUR TRAFFIC VOLUMES
 AND LEVELS OF SERVICE
 CASCADE TRAILS TRAFFIC ASSESSMENT

PROJECTED FUTURE 2018 CONDITIONS

Several key elements were taken into account to help define projected 2018 peak-hour conditions at the Cascade/Spaulding intersection. Those are:

- Inclusion of a 1% annual background traffic volume growth factor per KCRC input;
- Addition of project traffic per earlier data; 25 morning peak-hour trips (15 inbound/8 outbound), 40 afternoon peak-hour trips (20 inbound/20 outbound);
- Distributing 85% of those trips through the Cascade/Spaulding intersection; and
- Inclusion of the planned exclusive northbound right turn lane on Spaulding (2018 construction).

Figure 2, on the next page, illustrates the projected 2018 traffic volumes with the background traffic growth and the relatively small amount of project traffic included.

Intersection level of service calculations were again completed to evaluate the projected operational efficiency of the Cascade/Spaulding intersection with that traffic and the planned northbound right-turn lane in place. The results of the level of service analyses are also shown on Figure 2. Copies of the computer analyses are included in the separate appendix.

As shown, all of the movements that currently operate within acceptable levels are expected to still do so under the 2018 conditions. The one exception appears to be the northbound through movement during the afternoon peak hour with a calculated LoS of F.

Discussion—2018 Road Improvements

The above result indicates that the planned northbound right-turn lane will help with the overall performance of the intersection, but will not alone solve the whole current or future northbound capacity issue. However, subsequent iterative tests of fine tuning the signal operations indicates that this one calculated deficient movement could be improved to a borderline LoS D/E with minor shifts in green time. That can be done without creating deficient conditions at the other intersection movements.

We should note that the proposed project is projected to add only two to three vehicles to this northbound through movement during the entire afternoon peak hour, so in itself is not expected to create any perceivable impact to those operations.

SUMMARY

Based upon the results of the analyses completed for this study, we can make the following conclusions:

- The Cascade/Spaulding intersection currently functions acceptably with the exception of the combined northbound through/right-turn lane during the afternoon peak hour;
- Under projected 2018 conditions, with the proposed project in place and the northbound right turn lane added, the intersection is expected to still function within acceptable levels except for the northbound through lane; and
- The intersection should be monitored and re-evaluated in 2018 for potential additional signal operation improvements to help it provide the most efficient operation possible for all movements.

Please let me know if you or others have any questions regarding the above findings and conclusions.

Sincerely,

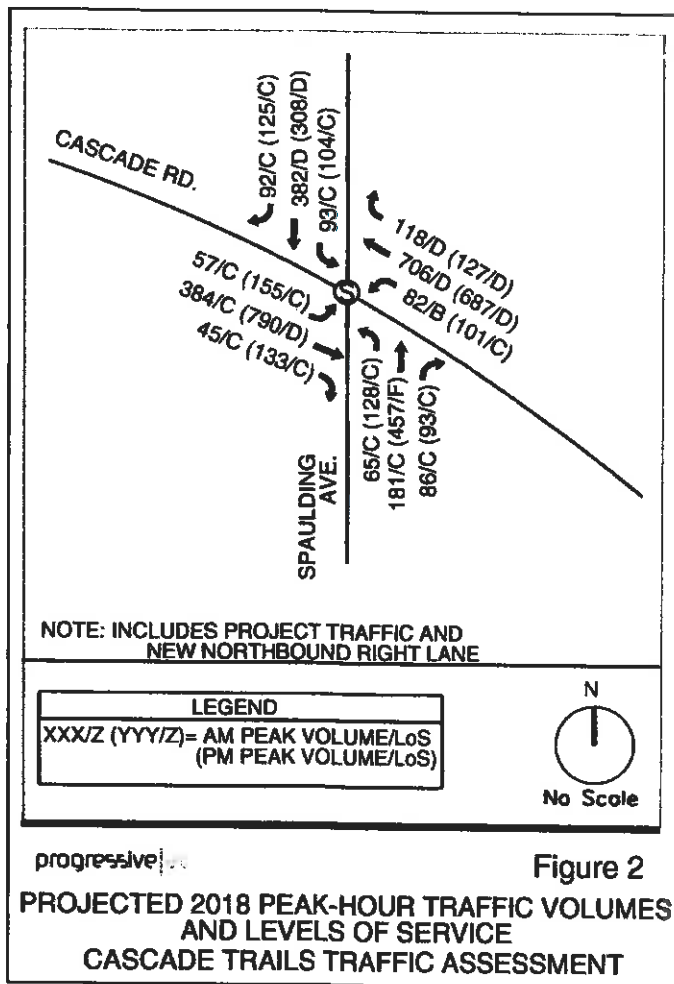
Progressive AE



Peter C. LaMourie, PE, PTOE
Lead Civil Engineer

Phone: 616.361.2664
Email: peter.lamourie@progressiveae.com

PROGRESSIVE AE, INC. 1811 4 Mile Road NE, Grand Rapids, MI 49525-1100





April 13, 2017
Project No. G080322

Mr. Steve Peterson
Cascade Charter Township
2865 Thornhills Avenue, SE
Grand Rapids, MI 49546-7192

Re: Cascade Trails
Site Plan Review

Dear Steve:

We have reviewed the site plan for Cascade Trails, located at 1225 Spaulding Avenue, prepared by Moore & Bruggink, Inc. The current site plan and the basis of this review is dated March 20, 2017. The proposed project is a senior living center located on 18 acres encompassing three separate parcels. The site plan includes the proposed buildings and associated parking lots, driveways, and utilities. The proposed development is located in the Plaster Creek watershed, sub-drainage district Cascade West.

Stormwater and Drainage

Flood Control

The proposed project is a new development, so all improvements shall comply with the requirements of the Cascade Charter Township (Township) Stormwater Ordinance (SWO). The site is located in Stormwater Management Zone B, which requires detention of the 25-year storm event and a direct connection (overland or underground) for all stormwater runoff that will be discharged from and through the development site in a 100-year storm event. The SWO also requires the first 0.5-inch of stormwater runoff be detained and released over a 24-hour period.

The proposed stormwater management design includes two stormwater detention basins designed to collect runoff from all impervious areas of the site for the 25-year storm event. The detention basins discharge through outlet control structures at 0.13 cfs/acre to areas of existing wetlands located onsite. The detention basins are design to drain dry.

Water Quality Control

The SWO requires the first 0.5-inch of stormwater runoff be detained and released over a 24-hour period. The stormwater detention basins outlet structure is designed to meet this requirement. The applicant provided calculations and design details for the detention basins and outlet structures and they were found to be in accordance with the SWO.

Stormwater Runoff

The applicant provided stormwater calculations to size the onsite detention basins. All stormwater runoff from the impervious areas of the site will discharge to the basins. Therefore, the site will not see an increase in rate of stormwater leaving the site.

Drainage Plan

The applicant has submitted drawings, calculations, and additional documentation as required in the SWO Section 2.03, Drainage Plan. Please refer to the included checklist for items and comments on each item. Please note a maintenance agreement is required before construction begins. The agreement should be submitted to the Township for review. The maintenance agreement and plan should include at a minimum, cleaning of catch basin sumps, sediment and debris removal from the detention basin, and landscape maintenance of the detention basin to maintain the design volume and ensure the system is operating as it was designed.

Z:\2008\080322\WORK\CORR\LT_PETERSON_CASCADETRAILS_2017_0413.DOCX

1515 Arboretum Drive, SE
Grand Rapids, Michigan 49546

616.575.3824
www.ftch.com

Fishbeck, Thompson, Carr & Huber, Inc.
engineers | scientists | architects | constructors



Utilities

New water main and sanitary sewer main is required for the site. Public water main is owned and operated by the City of Grand Rapids (City) and the public sanitary sewer in Spaulding Avenue is owned and operated by Ada Township which is a wholesale customer of the City.

The original and preferred water main alignment was to connect to an existing water main in Spaulding Avenue, run it through the site, and connect to an existing water main in Patterson Avenue, located west of the site. The Patterson Avenue connection would require the water main to traverse an undeveloped property owned by the Michigan Department of Transportation and an existing wetland area located in a neighborhood on Patterson Avenue. The applicant pursued this route; however, the neighborhood association voted to not grant an easement that would allow the Patterson Avenue connection.

Therefore, without the Patterson Avenue connection, the City will require the developer to put in an emergency loop to Ada Township's water system with a double valve configuration. This would be for emergency purposes only and would require both Ada Township and the City to open the valves. Ada Township is aware of the proposed plan and is in agreement. Design details will be worked out at a later date during the City review and check set process. A City permit will be required for the public water main prior to construction taking place.

Ada Township will need to review and accept the sanitary sewer design.

Soil Erosion and Sedimentation Control

Soil Erosion and Sedimentation Control (SESC) measures are provided on the plan drawings. The applicant has included silt fence along the limits of clearing and grading, silt sacks in catch basins, and seeding with mulch at all disturbed areas of the site. SESC falls under the review and approval of the Kent County Road Commission (KCRC) and a permit is required before construction can begin. The SESC measures indicated on the drawings appear appropriate given the expected work.

Summary

The proposed stormwater design meets the Township SWO requirements for new developments. The applicant will need to apply for and obtain a number of permits (SESC, water from the City, Sanitary sewer from Ada Township, KCRC for the new driveway) prior to beginning construction. We recommend approval of the site plan from an engineering standpoint.

If you have any questions or require additional information, please contact me at 616.464.3786 or nrtorrey@ftch.com.

Sincerely,

FISHBECK, THOMPSON, CARR & HUBER, INC.

A handwritten signature in black ink, appearing to read "N. Torrey", is positioned above the name of the signatory.

Nathan R. Torrey, PE

jc2

Attachment

By email

cc: Michael L. Berrevoets, PE – FTCH



Cascade Charter Township

Storm Water Ordinance, Ordinance 7 of 2002, as amended by Ordinance No. 2 of 2008, 5/14/2008

Reviewing Engineer Comments are Italicized

OK – Received and Acceptable

NA – Not Applicable

NR – Not Received, Needs Follow-up, See Comments

Cascade Trails

Drainage Plan Checklist

- OK (1) Location of the development site and water bodies that will receive storm water runoff
All stormwater runoff from the site is collected in two detention basins that discharge to existing wetlands located onsite.
- OK (2) Existing and proposed topography of the development site, including the alignment and boundary of the natural drainage courses, with contours having a maximum interval of one foot (using USGS datum). The information shall be superimposed on the pertinent Kent County soil map
Existing and proposed contours have been provided.
- OK (3) Development tributary area to each point of discharge from the development
A drainage plan was provided by the applicant and included tributary areas for the site.
- OK (4) Calculations for the final peak discharge rates
Applicant provided calculations in design of the detention basins and outlet control structures.
- OK (5) Calculations for any facility or structure size and configuration
Stormwater runoff calculations were provided by the applicant.
- OK (6) Drawing showing all proposed storm water runoff facilities with existing and final grades
The applicant provided a utility plan showing all proposed stormwater runoff facilities with existing and proposed grades.
- OK (7) The sizes and locations of upstream and downstream culverts serving the major drainage routes flowing into and out of the development site. Any significant off-site and on-site drainage outlet restrictions other than culverts should be noted on the drainage map
The applicant did not indicate any significant offsite drainage patterns into the site.
- OK (8) An implementation plan for construction and inspection of all storm water runoff facilities necessary to the overall drainage plan, including a schedule of the estimated dates of completing construction of the storm water runoff facilities shown on the plan and an identification of the proposed inspection procedures to ensure that the storm water runoff facilities are constructed in accordance with the approved drainage plan
A construction schedule was included on the plans.
- OK (9) Plan to ensure the effective control of construction site storm water runoff and sediment track-out onto roadways
SESC falls under the review and approval of the KCRC and a permit is needed before construction can begin. The SESC measures indicated on the drawings appear appropriate given the expected work.



- OK (10) Drawings, profiles, and specifications for the construction of the storm water runoff facilities reasonably necessary to ensure that storm water runoff will be drained, stored, or otherwise controlled in accordance with this ordinance
The applicant provided calculations and design details for construction of the onsite storm sewer system.
- NR (11) Maintenance agreement, in form and substance acceptable to the Township, for ensuring maintenance of any privately owned storm water runoff facilities. The maintenance agreement shall include the developer's written commitment to provide routine, emergency, and long-term maintenance of the facilities and, in the event that the facilities are not maintained in accordance with the approved drainage plan, the agreement shall authorize the Township to maintain any on-site storm water runoff facility as reasonably necessary, at the developer's expense
Maintenance agreement was not provided and is required.
- OK (12) Name of the engineering firm and the registered professional engineer that designed the drainage plan and that will inspect final construction of the storm water runoff facilities
- NA (13) All design information must be compatible for conversion to Grand Valley Regional Geographic Information System (REGIS)
This is a privately owned system and will not be uploaded to REGIS.
- OK (14) Other information necessary for the Township to verify that the drainage plan complies with the Township's design and performance standards for drains and storm water management systems

CASCADE CHARTER TOWNSHIP

Ordinance # of 2017

**AN ORDINANCE TO AMEND THE CASCADE CHARTER TOWNSHIP ZONING
ORDINANCE AND ZONING MAP TO ESTABLISH THE
LEISURE LIVING
PLANNED UNIT DEVELOPMENT PROJECT.**

Cascade Charter Township Ordains:

Section I. An Amendment to The Cascade Charter Township Zoning Ordinance.

The application received from Cascade Trails Senior Living LLC, or its assigns (hereinafter referred to as the "Developer"), to amend the Planned Unit Development designation for the Leisure Living Planned Unit Development Project (herein after referred to as the "Project") was recommended by the Cascade Charter Township Planning Commission for approval on _____. The Project is recommended for amendment to the Planned Unit Development permitting 138 units for independent living, assisted living and memory care. This action requires an amendment to the Cascade Charter Township Zoning Ordinance and Zoning Map to incorporate the Planning Commission's recommendation and the Cascade Charter Township Board of Trustees' action on _____.

Section II. Legal Description.

The legal description of the Project is as follows:

5042 Cascade Rd

PART OF NWFRL 1/4 COM 1402.50 FT S 86D 50M 47S W ALONG N SEC LINE FROM N 1/4 COR TO NE COR OF EASTMONT MEADOWS NO.2 TH S 1D 56M 02S E ALONG E LINE OF SD PLAT 577.87 FT TO SE COR OF SD PLAT TH S 85D 46M 24S W ALONG S LINE OF SD PLAT 842.28 FT TH S 7D 05M 47S E 76.60 FT TH N 85D 46M 24S E 835.38 FT TO A LINE WHICH IF EXT SLY WOULD INT S LINE OF NWFRL 1/4 AT A PT 1365.0 FT WLY ALONG SD S LINE FROM CEN OF SEC TH S 1D 56M 02S E ALONG SD LINE 165.29 FT TH S 85D 08M 54S E 435.23 FT TH N 1D 16M 48S W 234.05 FT TH N 85D 46M 26S E 235.81 FT TO W LINE OF E 40 A. OF NWFRL 1/4 TH N 1D 06M 27S W ALONG SD W LINE 433.42 FT TO S LINE OF N 208.71 FT OF NWFRL 1/4 TH S 86D 50M 47S W ALONG SD S LINE 208.71 FT TH N 1D 06M 27S W 208.71 FT TO N SEC LINE TH S 86D 50M 47S W ALONG N SEC LINE 471.18 FT TO BEG * SEC 6 T6N R10W 12.51 A.

5044 Cascade Rd

PART NWFRL 1/4 COM AT NW COR OF E 40 A. OF NWFRL 1/4 TH W ALONG N SEC LINE 208.71 FT TH S PAR WITH W LINE OF SD E 40 A. 208.71 FT TH E PAR WITH N SEC LINE TO W LINE OF SD E 40 A. TH N TO BEG * SEC 6 T6N R10W 1.00 A.

1225 Spaulding Ave

N 220 FT OF E 40 A. OF NWFL 1/4 ALSO N 220 FT OF THAT PART OF NEFL 1/4 LYING W OF CL OF SPAULDING AVE * SEC 6 T6N R10W 4.31 A.

Section III. General Provisions.

The following provisions shall hereby apply to the Project, in addition to those Provisions outlined in Chapter 16 of the Cascade Charter Township Zoning Ordinance (Ordinance No. 11 of 1988, as amended).

Section IV. Purpose.

The Project occupies approximately 18 acres of land. The project is proposed to be developed containing a total of 138 new units for independent living, assisted living and memory care. The regulations contained herein are established to define the procedures necessary to insure high quality development in the Project. Additionally, they are designed to achieve integration of this development with adjacent land uses.

Section V. Approval Limitations.

- A. The provisions of this Ordinance are not intended as a substitute for the Cascade Charter Township Zoning Ordinance and the General Development Plan, nor do they in any way relieve the Developer from obtaining all approvals and permits required by the township, except as otherwise expressly provided herein. In the event that a development issue or site plan element is not addressed by this Ordinance, the specifications and requirements of the Cascade Charter Township Zoning Ordinance shall be enforced. Furthermore, all other applicable Cascade Charter Township ordinances shall still govern the Project where applicable.
- B. Except as otherwise provided herein, the Developer and his assigns must meet all applicable provisions and regulations of Cascade Charter Township, as well as federal and state law, and must obtain all necessary approvals from state and county governmental agencies that are required for construction, operation or use.
- C. If any condition imposed herein is determined to be illegal or contrary to law as a result of a successful legal challenge by the Developer or its assigns, or any other party, the Township reserves the right to review the entire Project under the PUD provisions of the Cascade Charter Township Zoning Ordinance and further, to withdraw its approval of this PUD if it finds that, absent the effect of any condition imposed herein, the PUD no longer meets the standards for PUD approval contained in the Zoning Ordinance.
- D. If constructed, the Project must be constructed and operated, and all properties therein used, in strict compliance with the PUD approval (including this Ordinance and the final approved site plan), and no deviations can occur without prior formal written approval by the Township. So-called minor deviations shall not occur unilaterally by the Developer or its successors,

tenants or assigns but may be authorized by the Township in accordance with Section 16.12 and Section 21.04 of the Zoning Ordinance. Any deviation without prior formal written approval by the Township will constitute a violation of this Ordinance and the Cascade Charter Township Zoning Ordinance.

E. This approval document shall be recorded with the Kent County Register of Deeds by the Developer prior to construction occurring on site and shall run with and bind the lands involved. Copies of this recorded document shall be supplied by the Developer to the Cascade Charter Township Clerk before any construction occurs on site.

F. Failure to comply with the site plan or any condition of approval herein shall be deemed to be both a nuisance per se and a violation of the Cascade Charter Township Zoning Ordinance.

G. Prior to recording a copy of this document as specified in Section V(E) hereof, the Developer shall type the following statement onto the end of this document (or add an additional page to the document) as follows:

Cascade Trails Senior Living LLC, has fully read the above PUD ordinance amendment, understand its provisions and fully agree with all requirements and conditions contained in the same, on behalf of myself and my assigns, successors and transferees in and to the property involved."

H. The Gerald R. Ford International Airport.

The Developer shall expressly disclose to the tenants of the project in writing that the Project is located in the vicinity of the Gerald R. Ford International Airport and that there may be noise, vibration, and property valuation impacts associated with such location.

Section VI. Documents and Plans.

A. The Project shall be developed in accordance with the site plan approved and signed by the Township. The site plan shall indicate where each unit will be located and provide appropriate measurements demonstrating compliance with Section 16.11(2) of the Zoning Ordinance. Engineering plans and documents relating to utilities, topography, drainage, and the survey of the Project shall be reviewed and approved by the Township Engineer. Approval of these documents shall be based upon their meeting the requirements of Section 16.11(4) of the Zoning Ordinance and meeting recognized, acceptable engineering standards and practices. Once it has been determined that the plans have met Township requirements, the Township Engineer shall sign and mark these plan documents as "Approved", and forward them to the Developer. Only approved plan documents shall be recorded with the appropriate county and state agencies.

- B. The number of building sites may be reduced or consolidated within the Project upon review and approval of the Township Planning Department. The proposed changes to the site / survey plan to reduce or consolidate building sites shall be reviewed by the Planning Department to insure compliance with the Cascade Charter Township Zoning Ordinance and this PUD Ordinance. Once approved by the Planning Department, the amended site / survey shall then be recorded with the Kent County Register of Deeds Office and the appropriate State agencies by the Developer at his cost. A copy of the recorded site / survey plan shall be forwarded to the Planning Department, so that accurate files regarding the development can be maintained.
- C. The Project shall be limited to a maximum of 138 units. The number of building sites within the Project shall not be increased by the Township Board.

Section VII. Permitted Uses.

The permitted uses for the Leisure Living PUD as approved by the Township Board on _____ are as follows:

- A. Assisted Living – 50 units
- B. Memory Care – 28 units
- C. Independent Living - 60 units
- D. Signs. Provided all signs for the Project shall conform with this ordinance or Section 6.02 of the Cascade Charter Township Sign Ordinance (Ordinance 14 of 1997, as amended).
- E. Exterior Lighting. Lighting shall be consistent with the approved lighting plan dated _____.

Section VIII. Design Guidelines, Requirements and Limitations.

The Project shall be developed in accordance with the site plan approved by the Township dated October 14, 2013. No alterations, expansions or additions may take place to the Project without an amendment to this Ordinance, unless authorized otherwise herein.

- A. The Project shall be limited to a maximum of 138 units.
- B. Maximum Building or Structure Height; no more than 35 feet from grade to midpoint.
- C. Setback Requirements- All buildings and structures shall meet the following minimum setback requirements:
 - a. Front - 35 feet
 - b. Rear – 25 feet

- c. Side 25 feet total no one side less than 10 feet
- D. Minimum Parking Requirements
 - a. A minimum of 152 parking spaces
 - i. 104 standard
 - ii. 48 garage parking.
- E. Landscaping shall be consistent with the approved landscape plan dated_____.
- F. If the developer chooses to install two ground mounted entry signs on the Spaulding entrance, each sign will be limited to 32 sq ft as shown on the sign plan dated _____.

Section IX. Private Street Development.

- A. The Developer has elected to establish private streets to serve the Project provided the roads are constructed in accordance with the "Cascade Charter Township Engineering Design Requirements and Standards for Private Streets" and the following specifications:
 - 1. All grades shall be as required by the Cascade Charter Township Engineering Design Requirements and Standards for Private Streets and shall not exceed the grades shown on the approved site plan.
 - 2. The private streets shall be posted with signs stating the street names. These signs shall be consistent with Kent County Road Commission standards and requirements and shall be installed at the Developer's cost.
 - 3. A clear vision triangle shall be established by the Developer to insure safe turning movements from the private streets onto the public roads. This clear vision triangle shall be developed to the specifications established by the Kent County Road Commission.
 - 4. Any private street shall intersect any public road at a 90 degree angle.
 - 5. Copies of any permits required by the Kent County Road Commission to connect the private street to any public road shall be provided to the Township Planning Department by the Developer.
- B. The Developer shall submit a street construction inspection report to ensure that the roads are built according to the approved plans. These reports are required prior to occupancy of any apartment buildings. The developer has

also agreed to establish a private escrow account for the long term maintenance of the private roads. Developer shall draft a maintenance plan for the private roads and record it after approval of such provisions by the Cascade Charter Township Planning Department.

- C. In accordance with Section I of the "Cascade Charter Township Engineering Design Requirements and Standards for Private Streets", it shall be the responsibility of the Developer and its successors to fully maintain and keep the private access streets in good repair at all times and to ensure that snow and ice is removed in a timely fashion during the winter.
- D. No combustible building materials may be erected on the Project until a temporary access road is constructed to within 100 feet of the furthest point of a structure. Such road shall be a minimum 18 feet wide and be able to support 20 tons on a single axle with dual wheels and standard road tires.

Section X. Temporary Buildings.

No structure of a temporary nature; trailer, tent or construction shack shall be constructed, placed or maintained within the Project except accessory to and during construction of any building or infrastructure improvement.

Section XI. Utilities.

- A. Sewer and Water – This project will be served by municipal water and municipal Sanitary Sewer.
- B. Stormwater Drainage - All proposed stormwater drainage facilities shall be reviewed and approved by the Township Engineer, and the Kent County Drain Commissioner's office, and the Michigan Department of Environmental Quality (if it has jurisdiction) prior to the development of the Project. The Developer shall provide the Township Planning Department with copies of all correspondence and permits received from the Kent County Drain Commissioner and the Michigan Department of Environmental Quality regarding stormwater disposal.
- C. The Developer shall provide all necessary easements within the Project for telephone, electricity, gas and cable television to the appropriate utility provider without cost. Said easements shall be recorded with the Kent County Register of Deeds and provided to each utility provider for their records.

Section XII. Soil Erosion Control Requirements.

The Developer shall submit a soil erosion control plan showing all temporary and permanent soil erosion control measures to be taken before, during, and after construction on the Project. This plan shall be reviewed and approved by the Township Engineer prior to commencing any excavation on the site. Developer shall comply with any and all licenses, approvals or permits issued regarding soil erosion control requirements and measures.

Section XIII. Performance Guarantee.

To ensure compliance with this Ordinance and any conditions herein, Cascade Township may require reasonable performance guarantees, as authorized under the Township Rural Zoning Enabling Act to insure completion of improvements such as, but not limited to, landscaping, drainage, lighting, roads, and utilities. The Township Board, Engineer, or Planning Department may require such guarantees at any time they deem necessary to ensure completion of the improvements. If a guarantee is required, the amount shall be based on an engineer's estimate of cost prepared by the Project Engineer, and approved by the Township. Said guarantee(s) may include a bank letter of credit, loan holdback, or other such instrument. Guarantee(s) shall be partially released upon completion, inspection, and approval of required site improvements. Said release shall be issued by the Township within 10 days of a request to modify by the Developer.

Section XIV. Consistency With Planned Unit Development (PUD) Standards.

The rezoning to Planned Unit Development will result in a recognizable benefit to the ultimate users of the Project and to the community. Current and future residents will recognize the benefits of a planned development.

In relation to the underlying zoning (ARC and R1) the Township finds the Project will not result in a material increase in the need for public services, facilities and utilities and will not place a material burden upon the subject property and the surrounding properties. The Project is not anticipated to cause undo impact to the stormwater drainage of the surrounding area. All stormwater and soil erosion control plans have been approved by the Township Engineer and the appropriate County and State agencies.

The Project has been determined by the Township to be compatible with the Comprehensive Plan of the Township and with the spirit and intent of the Planned Unit Development Chapter of the Zoning Ordinance. The Project has been determined to be a transition use, which is consistent with the Cascade Township Comprehensive Plan.

The Township finds the Project will not result in an unreasonable negative economic impact upon surrounding properties.

The Township finds the Project to have at least the same amount of green areas and usable open space than would typically be required by the Township Zoning Ordinance.

Finally, the Township recognizes the Project is under single ownership or control.

Section XV. Effective Date.

This Ordinance shall become effective upon publication of the ordinance, or a summary thereof, in The Grand Rapids Press, a newspaper of general circulation within Cascade Charter Township.

The foregoing Ordinance was offered by Board Member _____, supported by Board Member _____. The roll call vote being as follows:

YEAS:
NAYS: None
ABSENT: None

Cascade Charter Township Clerk

CERTIFICATION

I hereby certify the foregoing to be a true copy of an Ordinance adopted at a Regular Meeting of the Cascade Charter Township Board on the ____ day of _____, 2017.

Cascade Charter Township Clerk

DEVELOPER'S CERTIFICATION

"I, _____, have fully read the above PUD ordinance amendment, understand its provisions and fully agree with all requirements and conditions contained in the same, on behalf of myself and my assigns, successors and transferees in and to the property involved."

Cascade Trails Senior Living LLC

RESOLUTION NO.
CHARTER TOWNSHIP OF CASCADE
KENT COUNTY, MICHIGAN

WHEREAS, Public Act 108 of 1976 as amended by PA 97 of 1992 provides a
deferment from summer taxes without penalty for certain taxpayers, and

WHEREAS, said Public Act requires local approval, and

WHEREAS, qualifying taxpayers must file an application with the local treasurer
certifying that they meet the requirement of the act, and

WHEREAS, certain other taxpayers with properties involved in splits, M.T.T. decisions
and 2017 July and 2017 December Boards of Review pending decisions
should also be deferred without penalty for a 30 day period,

BE IT THEREFORE RESOLVED, that the Honorable Cascade Charter Township
Board hereby agrees to defer without penalty summer tax payment to the
above named qualifying taxpayers.

The foregoing Resolution was offered by Board Member _____ supported by Board
Member _____ and the vote being as follows:

YEAS:

NAYS:

ABSENT:

Resolution declared _____ June 28, 2017

Susan B. Slater, Clerk
Cascade Charter Township

C E R T I F I C A T I O N

I hereby certify the foregoing to be a true copy of a Resolution adopted at a Regular
Meeting of the Cascade Charter Township Board, held on June 28, 2017.

Susan B. Slater, Clerk
Cascade Charter Township

INTEROFFICE MEMORANDUM

TO: TOWNSHIP BOARD
FROM: SUSAN B. SLATER, CLERK
SUBJECT: NEW VOTING SYSTEM GRANT
DATE: JUNE 21, 2017
CC: DENISE M. BIEGALLE

The State of Michigan has authorized the purchase of new voting systems for the entire State. The current voting system is 12 years old and lacking current technology.

The new system will be fully funded by the State (*except for what is noted below), which will include a combination of Federal Help America Vote Act (HAVA) and State-appropriated funds.

The State procured (3) vendors for each County in the State to select from. The Kent County Clerk's office opted for the Dominion Voting System which is being represented by a local company Election Source. Cascade Township will be receiving the following equipment:

- (10) ICP Tabulators with Ballot Boxes
- (10) ICX-BMD-A Accessible Ballot Marking Devices and Printers
- * (1) G1130 High Speed Absentee Ballot Counter (Optional equipment- will be partially funded by the Township)

The attached Resolution will allow the Clerk to authorize the grant application on behalf of the Township. This grant application will allow the County to proceed with the purchase of the new voting system.

**RESOLUTION # /2017
CASCADE CHARTER TOWNSHIP
KENT COUNTY, MICHIGAN**

At a regular meeting of Cascade Charter Township, held on the 28th day of June, 2017 the following resolution was offered by Trustee _____ and seconded by Trustee _____

WHEREAS, the Cascade Charter Township Board wishes to apply to the Secretary of State for a grant to purchase a new voting system from Dominion Voting, which includes precinct tabulators, Absentee Voter Counting Board (AVCB) tabulators (if applicable), accessible voting devices for use by individuals with disabilities, and related Election Management System (EMS) software; and

WHEREAS, full funding for the new voting system will be provided by the State, and will include a combination of Federal Help America Vote Act (HAVA) and State-appropriated funds. Local funding obligations, if any, are detailed in the Dominion quote; and

WHEREAS, Cascade Charter Township plans to begin implementation of the new voting system in 2017; and

NOW, THEREFORE BE IT RESOLVED, that the Cascade Charter Township Clerk is authorized to submit this grant application on behalf of Cascade Charter Township, Kent County on this 28th day of June, 2017.

YEAS:

NAYS:

ABSENT:

Resolution declared adopted June 28, 2017

Susan B. Slater
Cascade Charter Township Clerk

CERTIFICATION

I hereby certify the foregoing to be a true copy of a Resolution adopted at a Regular Meeting of the Cascade Charter Township Board held on June 28, 2017.

Susan B. Slater
Cascade Charter Township Clerk



CASCADE CHARTER TOWNSHIP

2865 Thornhills SE Grand Rapids, Michigan 49546-7140

Date: June 28th, 2017
To: Cascade Charter Township Board
From: Supervisor Rob Beahan
Subject: Appointment to Zoning Board of Appeals

I ask that the Township Board confirm the following appointment to the Boards and Commissions of Cascade Charter Township:

Zoning Board of Appeals

Jennifer A. Puplava – Jennifer will be filling the currently vacant ZBA alternate position. The role of the ZBA alternate is to fill a spot on the board only in the case that one or more of the regular ZBA members are unable to attend. Jennifer is currently an attorney with Mika Meyers PLC in Grand Rapids where she specializes in the areas of intellectual property law and technology law. Jennifer received her law degree from Indiana School of Law (cum laude) in 1998 and her undergraduate degree from Saint Mary's College (magna cum laude) in 1995. In addition to serving on the Zoning Board of Appeals, Jennifer also serves the Township Downtown Development Authority and serves on the Cascade Community Foundation.