

ACME TOWNSHIP PLANNING COMMISSION MEETING
ACME TOWNSHIP HALL
6042 Acme Road, Williamsburg, MI 49690
Monday, April 14, 2014 7:00 pm.

6:30 P.M. PLANNING COMMISSIONERS EDUCATIONAL TRAINING SESSION: Infill Development

CALL TO ORDER WITH PLEDGE OF ALLEGIANCE

ROLL CALL: Wentzloff x Feringa x Finch x Forgette x Rosa x Timmins x
White x DeMarsh- Excused
Recording Secretary: Marcie Timmins
STAFF PRESENT: Lennox, Jocks (excused), Iacoangeli

- A. **LIMITED PUBLIC COMMENT:**
opened 7:02
Brian Kelley – see attached letter

- B. **APPROVAL OF AGENDA:** Motion by: Timmins 2nd by: Feringa
Vote:

- C. **INQUIRY AS TO CONFLICTS OF INTEREST:** None Noted

- D. **CONSENT CALENDAR:** The purpose is to expedite business by grouping non-controversial items together for one Board motion without discussion. A request to remove any item for discussion later in the agenda from any member of the Board, staff or public shall be granted.
 - a) **RECEIVE AND FILE:**
 - 1. Draft Unapproved Minutes of:
 - 1. Township Board minutes: 3/4/2014 and Special meeting 3/20/14
 - 2. Planning, Zoning & Administrative report: March 2014
 - b) **ACTION:**
 - 1. Draft Unapproved Minutes of:
 - 1. Planning Commission minutes: 3/10/14

- E. **ITEMS REMOVED FROM THE CONSENT CALENDAR:**
 - 1. _____
Motion to approve: Feringa 2nd. White vote Carries

- F. **CORRESPONDENCE:** Notice of intent to prepare a Master Plan from Whitewater Township
Accepted and filed

- G. **PUBLIC HEARINGS:**
 - 1. B-4 District Ordinance Amendment Opened: 7:10 closed 7:17
Discussion: Chuck Walters, Bates Rd.- wanted someone to explain the amendment to the audience, and how much outdoor storage was allowed.
John I – John I covered the differences in the old and new ordinances to the satisfaction of Mr. Walters.

Brian Kelley Ridgecrest: Inquired if right by development meant big box stores would be welcome. Was under the impression that Meijer at the GTTC Development would be the only big box in the township.

Wentzloff: Discussed 30,000 sq ft size limit and size of outdoor retail development.

John I: Clarified that 30,000 sq ft. was about the size of auto zone

If you are planning to attend and are physically challenged, requiring any special assistance, please notify Cathy Dye, Clerk, within 24 hours of the meeting at 938-1350.

closed at 7:17

H. NEW BUSINESS:

1. B-4 District Ordinance Amendment

Wentzloff -clarifies that the committee had looked at adding the 30,000 sq ft. retail limitation but it was not included in the draft in our packets, she had talked with John I. via email and had seen the version that included the 30,000 sq. limitations.

John I.- Confirmed that, it was the new draft he had sent for this meetings packets.

John I- questioned that 30,000 was a cut off # for retail space in the district, how do planning commissioners want to handle outdoor retail? A percentage would be easier to compute.

Outside storage should be no larger than the footprint of the indoor retail.

White – questioned John about Nursery size, and outdoor needs to be bigger than indoor,

Finch concurred with White's question.

Timmins- asked if we could put in language for nurseries and farm equipment sales to have a small showroom and large outdoor sales area

Maximum allowed height is 40 feet

Changes being made to the B-4 ordinance; under E. add retail establishments less than 30,000

H. Garden centers and nurseries

I. Farm equipment sales and service

Uses authorized under special use permit Section 6.10.4

E. Retail establishments where Sq. footage of enclosed outdoor sales yard is larger than the sq. footage of the primary building.

F. Structural appurtenances with similar language

G. Special building height regulations

Motion: Approve the changes to the B-4 district; E. add retail establishments less than 30,000 sq ft.

H. Garden centers and nurseries I. Farm equipment sales and service Uses authorized under special use permit Section 6.10.4 E. retail establishments where sq. footage of enclosed outdoor sales yard is larger than the sq. footage of the primary building. F. Structural appurtenances with similar language G. Special building height regulations, send it to county planning for review and recommend approval to the Township board.

By: Feringa 2nd: Timmins

Vote: Carries

2. Draft Storm Water Control Ordinance

Discussion: Wentzloff would like the planning commissioners to keep the draft ordinances from the watershed and read it while we wait for the Board to give us more direction.

No action at this time

I. OLD BUSINESS:

1. A-1 Agricultural District Ordinance

Discussion:

Lennox- County planning reviewed it only concerned that the township was compliant with GAAMPS. She did not receive any other concerns.

Wentzloff- stated there were no changes to be made at this time.

John I.- clarified that the county's concerns were in the defining of feed operations, that in section 6.11 there is language that if there is any conflict the GAAMPS should control it which is state statute

Motion: Recommend to the board the adoption of Ordinance 30 A-1 Agricultural district.

By:Timmins 2nd: Finch

Motion carries

2. Flint fields Application- for discussion: John Iacoangeli, Beckett & Raeder

Sam Porter 426 W. 8th. gives presentation – host concert Aug. 8th. Would like to continue into sat. 9th. apologized for the story being picked up by the ticker after Lyle Lovett announced his tour dates. Goal is to highlight the region, with an anchor event, feature education to have Wings of Wonder and the like there, foodie event with local food offered highlighting farms in the region. Wants to test the waters to develop a bigger highlighted event. Wants this event to highlight horses. This event to help Flint fields develop their own brand to bring future events.

Lower field concert area, other components not completely laid out as of yet. Talks about a cell span technology tent that they will be using can house from up to 20,000 people. Site is good for ADA access, water, and fire. One tent would house the artist, with 2-3 other tents for shade. Tickets are \$38. VIP tickets are \$90. Have to fine tuned details on safety and security yet. Not make any other commits to another event, but hopes after this one we could come back and see what worked and what didn't to look at what could happen in 2015. Wants to bring together; youth empowerment, local agriculture, food movement, music and art.

Lennox- questioned how many tickets will be sold for this event

Porter- Thinks they will sell about 2500, capacity could be a lot higher but that is comfortable

Timmins- questioned about the closest house behind the stage area many neighbors were there in support.

Timmins- questioned about last year during the Acme festival review someone mentioned speakers being heard in a subdivision close by, concerned about what others will hear.

Rob Evina- says you only occasionally hear speakers

Porter- amplification would be on Friday, with sound check around 2 (he will double check) then the concert starts at 7:30-10:30 at the latest, he doesn't like openers. But on another stage they may have Billy Strings or another local act playing casually to keep the flow going.

Timmins- asked about security plans to keep neighboring property safe

Porter- they are good at security, handle tougher crowds. Put biggest investment into lighting for the exit, would probably higher police for the traffic in and out.

Timmins asked if the PC was looking at this application as a whole or separate.

Timmins pointed out the time constraints put on the last S.U.P for Ag. tourism and how the other commissioners felt put the same constraints on this and creating an end time for events or this one in general.

Rosa – anticipating 2500 participants he questioned the traffic, and how long people would have to wait to leave?

Porter- used Horse Shows by the Bay and the fall festival as examples. Both having had 5000 people in attendance at one time.

Wentzloff noted that the 5000 was over a 6 hour period

Evina noted that after the rodeo and horse show up to 50% left at one time and it was smooth

Porter commented he would definitely consider Police for the traffic on M-72. Wentzloff asked if alcohol will be served?

Porter said yes they would like to pull a permit and work with charities to have local wine and beer. To pay tribute to the area.--will have a lot of parking staff, 80-100 volunteers to help keep things organized.

Rosa- Will there be heat relief for people?

Porter- there will be shade refuge, from tents

Feringa- parking on site or off site?

Porter- will be looking more at parking, believes it will mostly be on-site

Feringa- What about lighting?

Porter- will have temporary lighting, whole area will be well lit. Will use halogen low glare. Walkway on south side will be an important gate way and well lit.

Finch- can you show anything on map, like parking

Porter- points out parking

White- isn't the horse show still going on at that time?

Flint- no, the horse show is 7/2-7/27

John I- based on content of original application from 2006 it was approved as a special open space use based on equestrian use, at the time it was pushing the limits of the open space use...planning commission at the time thought it could fit in the open space as it was agriculturally related. When looking at the ordinance there is nothing that allows for this type of use. A couple ways planning commission can go; Ask the board to adopt an event ordinance, which is a police power ordinance, would go directly before the board.

Look at it more broadly and look at a planned development ordinance for this property and look at how it can be used, basically taking it out of the Ag. District. And create it as a special planned development.

Whatever the planning commission does on this property, which is zoned agricultural, and it is the unintended consequences, are setting the stage for what other people can come and ask for on their agricultural property.

Options: do nothing

Accommodate weddings under the Ag. Tourism ordinance

Ask the board to create events ordinance

Add to the zoning ordinance the planned development ordinance.

Finch – asked if we recommend an events ordinance, would that happen in time for them to have the concert, is there no option for them to have this in Aug.?

Wentzloff clarified that she can't guarantee it at this point

Wentzloff read a letter from Karin Flint explaining what she would like on her property.

Feringa – suggests that we look at asking the Township Board to look at an events ordinance, as we set a public hearing for a major amendment.

Rosa- If we go the route of the hearing are we on a slippery slope to still let others in to do other events?

John I -explains how he and Jocks will use the finding of facts to make sure things can't slip in.

Motion to consider a major amendment to SUP 2006-12p for an outdoor performance venue.

Roll call vote: Timmins Yes Wentzloff Yes Feringa Yes White Yes Rosa Yes Finch Yes Forgette Yes

Motion Carries

By: Feringa 2nd. Timmins

Motion To recommend the Acme Special events ordinance to the board for consideration.

Discussion

Motion carries

John I – on this particular property (Flint fields) do we want to consider it as a fair ground, as another option?

Wentzloff asks that we read the land development options.

PUBLIC COMMENT & OTHER BUSINESS THAT MAY COME BEFORE THE BOARD:

Open at 9:35 closed 9:37

Chuck Walters- conversation tonight didn't illustrate that we are working for the community and this event would be for the community. Feels this is the type of thing the ABA is trying to do for the community.

Noell Knoph- compliments the commissioners for trying to find away to accommodate this event.

PC Education Reports:

Bayshore Corridor final wrap up meeting for corridor overlay: Karly Wentzloff- they are looking for someone to champion it, the council of governments doesn't want to take it on. John Iacoangeli suggests we take the Lead. Wentzloff says she thinks they are looking for someone with the staff power, doesn't feel like Acme has that.

MDOT Road Construction Update: Karly Wentzloff - MDOT web site has all the upcoming construction and the dates, Lennox is posting it to the township website.

ADJOURN: Motion By: Timmins 2nd: White

From: Brian Kelley, Acme Township resident
To: Acme Township Planning Commission
April 14, 2014

While reviewing the new Master Plan, I noted that the results of the Community Survey were applied inconsistently.

In cases where the Survey results support the agenda of the Master Plan, the Survey results are cited and included.

But in cases where the Community opposed an agenda in the Master Plan, the Survey results were omitted and ignored.

The draft Master Plan contains dramatic changes from the current Master Plan, many of them much needed. However, some of those changes were opposed by the community in the Survey, in some cases strongly opposed.

That inconsistency is unacceptable, and it creates the appearance of bias. It should not occur in a Master Planning document. The community opposition must not only be cited in the document, it should also be heeded. That opposition cannot be undone with a few committee meetings. Assembling a small committee should not be sufficient to override the will of the community.

Some specific examples of priority development items in the plan that were strongly opposed by Acme residents in the survey:

Higher Density Housing (it will increase from 3 to 18 units per acre)

Public Water Infrastructure

Public Sewer Infrastructure

New Acme Town Hall

New Acme Fire Station

District Library Branch

I personally would like many of these items, or could be convinced that they are good for Acme, but my concern here regards how the Master Plan ignores the will of the community, as expressed in the Survey, when it is convenient.

Thank you,

Brian Kelley

From: Brian Kelley, Acme Township resident
To: Acme Township Planning Commission
Subject: Summary of Master Plan changes
April 14, 2014

The acme master plan includes many changes from the old plan. It obviously represents a lot of good work, and many of those changes were sorely needed.

Both the new and old documents are lengthy and complex. Few people will read both of those documents, or know what is in them.

We need a bridge document, that summarizes where we were, and where the new plan takes Acme. In a few pages it should summarize the changes in our Master Plan.

Thank you,

Brian Kelley



**ACME TOWNSHIP PLANNING COMMISSION MEETING
ACME TOWNSHIP HALL
6042 Acme Road, Williamsburg MI 49690
Monday, April 14, 2014 7:00 p.m.**

6:30 P.M. PLANNING COMMISSIONERS EDUCATIONAL TRAINING SESSION: Infill Development

CALL TO ORDER WITH PLEDGE OF ALLEGIANCE

ROLL CALL:

- A. LIMITED PUBLIC COMMENT:**
Public Comment periods are provided at the beginning and end of each meeting agenda. Members of the public may address the Board regarding any subject of community interest during these periods. Comment during other portions of the agenda may or may not be entertained at the moderator's discretion.
- B. APPROVAL OF AGENDA:**
- C. INQUIRY AS TO CONFLICTS OF INTEREST:**
- D. CONSENT CALENDAR:** The purpose is to expedite business by grouping non-controversial items together for one Board motion without discussion. A request to remove any item for discussion later in the agenda from any member of the Board, staff or public shall be granted.
- a) **RECEIVE AND FILE:**
1. **Draft Unapproved Minutes of:**
1. **Township Board minutes: 3/4/2014 and Special meeting 3/20/14**
2. **Planning, Zoning & Administrative report: March 2014**
- b) **ACTION:**
- Draft Unapproved Minutes of:**
1. **Planning Commission minutes: 3/10/14**
- E. ITEMS REMOVED FROM THE CONSENT CALENDAR:**
1. _____
2. _____
- F. CORRESPONDENCE:** Notice of intent to prepare a Master Plan from Whitewater Township
- G. PUBLIC HEARINGS:**
- 1 **Ordinance Amendment #032 B-4 District**
- H. NEW BUSINESS:**
1. **Ordinance Amendment #032 B-4 District**
2. **Draft Storm Water Control Ordinance- for discussion**
- I. OLD BUSINESS:**
1. **A-1 Agricultural District Ordinance**
2. **Flintfields Application-** for discussion: John Iacoangeli, Beckett & Raeder

PUBLIC COMMENT & OTHER BUSINESS THAT MAY COME BEFORE THE BOARD:

PC Education Reports:

Bayshore Corridor final wrap up meeting for corridor overlay: Karly Wentzloff
MDOT Road Construction Update: Karly Wentzloff

ADJOURN:

If you are planning to attend and are physically challenged, requiring any special assistance, please notify Cathy Dye, Clerk, within 24 hours of the meeting at 938-1350.



**ACME TOWNSHIP BOARD MEETING
ACME TOWNSHIP HALL
6042 Acme Road, Williamsburg MI 49690
Tuesday, March 4, 2014, 7:00 p.m.**

MEETING CALLED TO ORDER WITH THE PLEDGE OF ALLEGIANCE AT 7:00 p.m.

- Members present:** C. Dye, C. Collett, A. Jenema (arrived at 7:45 pm) G. LaPointe, P. Scott, D. White, J. Zollinger
- Members excused:** None
- Staff present:** J. Jocks, Township counsel
N. Edwardson, Recording Secretary

A. PUBLIC OPEN DISCUSSION:

B.Kelly, expressed concern about the Saylor Park Boat launch grant application. He had an issue with removing trees. Zollinger commented that we will address his concerns during the time the item appears on the agenda.

V. Tegel, 4810 Bartlett Road, commented on two recent meetings she attended. One in Leelanau County and the other, Rotary Charities. She also asked if the Board would be filling B. Carstens position on the Planning Commission.

LIMITED PUBLIC COMMENT: None

A. APPROVAL OF AGENDA:

Motion by LaPointe, seconded by White to approve the agenda as presented. Motion carried by unanimous roll call vote.

C. INQUIRY AS TO CONFLICTS OF INTEREST: None noted

D. CONSENT CALENDAR:

The purpose is to expedite business by grouping non-controversial items together for one Board motion (roll call vote) without discussion. A request to remove any item for discussion later in the agenda from any member of the Board, staff or public shall be granted.

1. RECEIVE AND FILE:

- 1. **Treasurer’s Report**
- 2. **Clerk’s Report and Balance Sheet**
- 3. **Draft Unapproved Meeting Minutes:**
 - a. **Planning Commission 02/10/14**
- 4. **Parks and Maintenance Report – Tom Henkel**
- 5. **MRPA Conference Report - Timmins**

2. ACTION – Consider approval:

- 1. **Township Board meeting minutes of 02/04/14**
- 2. **Accounts Payable Prepaid of \$3,428.52 and Current to be approved of \$120,378.23 (Recommend approval: Cathy Dye, Clerk)**

Motion by Collett seconded by LaPointe to approve the consent calendar less Item 1# 4 Parks & Maintenance report. Motion carried by unanimous roll vote.

E ITEMS REMOVED FROM THE CONSENT CALENDAR:**1. Parks and Maintenance Report - Henkel**

LaPointe pointed out in Henkel's report that Henkel had asked the Board about Bayside parking lot. He has worked with the tractor/loader and pushed back the banks as far as he could. He asked if the Board would like him to continue doing that or shut the gate until Spring. For now he will shut the gate. Scott commented that as soon as the snow started melting he wanted Henkel taking care of things.

Motion by LaPointe, seconded by White to accept the Parks and Maintenance report as presented. Motion carried by unanimous roll call vote.

F. REPORTS:**1. Sheriff's Report – Deputy: Ken Chubb****2. County Commissioner's Report – Larry Inman:**

Inman was unable to attend tonight's meeting.

3. County Road commission report – Bill Mouser

Mouser reviewed

4. Metro Emergency Services 2013 Annual Report

Chief Pat Parker was in attendance to review the annual report. Copies of the report are available for public review at the township and also on the Metro Fire website.

Parker always commented on the Grand Traverse County Emergency alerts "Code Red" Program. Parker commented that one could go to grandtraverse.org and register for emergency, community alerts and important notices.

G. PUBLIC HEARING: None**H. NEW BUSINESS;****1. Resolution for Tax collection Elk Rapids School District**

Motion by LaPointe, seconded by Collett to approve Resolution # R-2014-09 agreeing to enter into an agreement, to collect summer Taxes for Elk Rapids Schools for year July 1, 2014. Motion carried by unanimous roll call vote.

2. Hoxsie House status –Dave Hoxsie

Hoxsie, President of the Acme Heritage Society (AHS) was in attendance. He said (AHS) recently completed a community survey of township residents regarding the proposal to re-locate the historic Hoxsie house to a new site at the Grand Traverse Town Center.

Hoxsie said the re-location process is a slow and complicated move from one site to another through a piethora of overhead wires combined with the fragility of an historic structure.

The AHS estimates the total cost of moving the house, preparing a foundation and utilities at the new site at \$150,000.00. A meeting with Consumers, MDOT, Charter, AHS board and Supervisor, Zollinger is scheduled for March 19th to begin laying out the moving process.

3. Tribal 2% grant received for water-preliminary engineering

Zollinger said Acme Township received \$14,000.00 towards the preliminary engineering project to extend tribal water along the main business corridors of Acme Township.

4. Auditors for 2013/14 fiscal year selection-La Pointe

LaPointe said at last year's budget meeting concerns were issued that our annual audits were expensive. LaPointe researched what other townships were paying about a year ago and \$8,003.00 was the average. He said Acme was paying around \$20,000.00. LaPointe asked the auditors this year why our audit costs are so much. They said it was all the different funds we had. LaPointe suggested that we contact 2-3 other townships to see who they use and begin the interviewing process of who might be interested.

Motion by LaPointe, seconded by Scott, to have Dye, Collett and Zollinger begin the process of seeking out annual auditors bids to be completed and presented at the May meeting. Motion carried by unanimous roll call vote.

5. Sayler Park Boat launch Grant application – Timmins/Aukerman

Aukerman stated that Acme Township seeks to build a boat access site on township-owned Sayler Park, a 22-acre family-friendly park located in Yuba on Yuba Park Road. A preliminary plan was developed in 2008, but due to other circumstances was not acted on. The Acme Township Board has earmarked matching funds for this site and is seeking a Waterways Grant for financial and technical support.

Motion by Scott, seconded by Jenema to approve Resolution # 2014-10, to perform a Preliminary Engineering study for the construction of a boat launch on the site of Sayler Park. Motion carried by unanimous roll call vote.

6. Election wages re-classifications for Dep -Clerk

Dye said a question was raised by Collett, Treasurer, regarding election wages for the deputy clerk coming from the wrong line item. Dye said that the issue had been addressed and corrected.

7. Bayside Park

Zollinger stated that the deadline for a Trust Fund grant is April 1, 2014. We have asked our Planner, Beckett and Raeder, to prepare the application for work done on the North and South ends of the park simultaneously.

Megan Olds from the Grand Traverse Regional Land Conservancy (GTRLC), was present with a letter to the Board regarding the Board's earlier request to GTRLC for partnership services for the next phase of the shoreline park. GTRLC has committed \$50,000.00 to use as match for the grants contingent on the Township committing an equal or greater amount in match for public grants.

Motion by Scott, seconded by LaPointe, to proceed with what needs to be done to get the grant to the Trust Fund by the April 1, 2014, deadline. Motion carried by unanimous roll call vote.

Zollinger said we will probably need to call a Special meeting regarding the Bayside Park. We are tentative looking at March 20th for a day or evening meeting.

I. OLD BUSINESS:

1. Status of the latest Farmland Purchases and funds-Brian Bourdages

Bourdages said he wanted to give the Board an update on the status of the two remaining projects; one is the Sayler Family Farm purchase of an easement on 140 acres of that property and the farm behind Shoreline Fruit processing plant of 190 acres. Bourdages stated that the taxes came in more than expected but still looking to buy 130-135 acres of that property.

2. Status on RFP for Township Technology improvements-Zollinger

At the last Board meeting Zollinger was asked to draft a "RFP" for township technology improvements. Collett and Zollinger have met with one or two firms and Collett provided a spreadsheet on the information received.

Motion by Scott, seconded by Jenema, that the "RFQ/P for Computer services" be distributed as quickly as possible with a deadline of March 18, 2014, at 5:00 pm for submitting. Motion carried by unanimous roll call vote.

3. Response on e-mail from Dennis Drennan which all board members received

Collett stated that at the last Board meeting Zollinger agreed to contact Drennan, the Bookkeeper, regarding communicating by email with the Treasurer's offices. Collett stated that she does not want to work with him. Discussion followed.

Motion by Scott, seconded by Jenema, that the Clerk and Treasurer bring some resumes together for bookkeeping services at the March 20, 2014, meeting. Motion carried by a roll call vote of 6 (Dye, Jenema, LaPointe, Scott, White, Zollinger) in favor and 1 (Collett) opposed.

4. Status of Monthly Clerk /Treasurer Reconciliations: No report

J. PUBLIC COMMENT & OTHER BUSINESS THAT MAY COME BEFORE THE BOARD:

Tom and Cynthia Phillips, 2986 Wild Juniper Trail, each expressed concerns and issues with our bookkeeper, Dennis Drennan.

R. Babcock, 4261 Bartlett Rd, along with B. Kelly also expressed frustration that the issues with Dennis Drennan were still not settled and strongly encouraged the Board to settle this on going dispute.

V. Tegel, 4810 Bartlett Road, expressed gratitude to the Grand Traverse Regional Conservancy.

Meeting adjourned at 9:45 p.m. on a motion by LaPointe with support from Scott.



ACME TOWNSHIP SPECIAL BOARD MEETING
ACME TOWNSHIP HALL
6042 Acme Road, Williamsburg MI 49690
Thursday, March 20, 2014, 3:00 p.m.

MEETING CALLED TO ORDER WITH THE PLEDGE OF ALLEGIANCE AT 3:05 p.m.

Members present: C. Collett, A. Jenema (arrived at 3:15 pm) G. LaPointe, P. Scott, D. White, J. Zollinger
Members excused: C. Dye
Staff present: N. Edwardson, Recording Secretary

A. LIMITED PUBLIC COMMENT:

G. Trill, 7174 Deepwater Point Road, read into the record (attached to minutes) a prepared statement.

T. Phillips, 2986 Wild Juniper Trail, expressed his concerns regarding the internal accountant.

C. Walter, 6584 Bates Rd, took offense with Trill’s statement. He has been a resident for thirty plus years, has owned his own business and has served on the Acme Board as a Trustee for Acme Township. He believes in Zollinger’s leadership and the rest of the Board’s commitment to serve.

J. Aukerman, 4155 Huntington Dr, is very excited about the prospects for Sayler Park boat launch and Bayside Park improvements. She stated that even though we have a skeletal support staff and the budget is tight we have accomplished a lot.

Treasurer, Collett, provided a memo (attached to minutes) regarding tax collection for 2013.

B. APPROVAL OF AGENDA:

Motion by LaPointe, seconded by Scott to approve the agenda as presented. Motion carried by unanimous roll call vote.

C. INQUIRY AS TO CONFLICTS OF INTEREST: None noted

D. PUBLIC MEETING: Acme Parks Grant Application to DNR for Bayside Park - South

Marcie Timmins parks and recreation Co-Chair stated that Beckett & Raeder along with the help of Pat Salathiel and Jean Aukerman have been able to pull together about seven letters of support for the DNR Bayside Park grant application.

The Parks & Rec advisory with help from Megan Olds from the GTRLC were able to trim down the budget to fit the \$300,000.00 grant request. The grant is due April 1, 2014, with a decision coming back in December of 2014, and distribution of the funds 12-18 months later. Acme Township has made a financial commitment of \$50,000.00 to the project along with \$50,000.00 from the Grand Traverse Regional Land Conservancy.

R. Challender, 3885 Bunker Hill Road, expressed his displeasure with the taxpayer’s money that was spent on the acquisition of the Shoreline properties, when he believes it was stated none would be spent. He wants to be aware of how monies are being spent. LaPointe stated he understood what Challender was saying. The Board needs to be transparent.

Public comments:

R. Babcock, 4261 Bartlett Road, stated she has attended many meetings regarding Bayside Park and is excited about this.

P. Salathiel, 4882 Five Mile Road, commented that she has been working on the shoreline project since 1979 and would be terrible disappointed if this Board did not continue with the project.

C. Abernethy, 4312 Westridge Dr, stated that M.Timmins has done an incredible job bringing this project to fruition along with all the help from the conservancy and the donations not only from Acme Township residents, but countywide. This park is a big, big, BIG part of Acme Township.

Motion by Scott, seconded by Jenema, to pass Resolution # R-2014-11 for the support of the submission of the Bayside Park-South improvements application to the Michigan Natural Resources Trust Fund. Motion carried by unanimous roll call vote.

E. **NEW BUSINESS:** None

F. **OLD BUSINESS:**

1. **Approval of Bids received for Township Technology improvements:**

Zollinger said that a RFP went out for bids on the replacement of our present servers and office computers to five potential bidders and only three replied, North Harbor, I.T.T. services and Wyant Computer services. Collett summarized the differences between companies. Jackie Duncan from Wyant was present to answer any questions about terms of leases and warranty of equipment under purchase versus lease. Purchase has a three year coverage and lease a 5 year coverage.

LaPointe expressed tabling the issue until the board could review the information more thoroughly, he did not think we needed to make a decision before the next board meeting.

Motion by Lapointe to table

Motion failed for lack of support.

Motion by Collett, seconded by Jenema, to accept the bid submitted by Wyant Computer for the leasing of the equipment along with Gold package of services for remote monitoring. Motion carried by unanimous roll call vote.

2. **Discussion on internal accountant position:**

Zollinger stated that this issue has been discussed, on more than one occasion and he really does not know where to start. Scott felt that this issue was settled at the last meeting. The Board has hired a person to work with the clerk and the treasurer and if that person is not working out regardless of the issues he needs to be replaced. Zollinger ask Collect if this could be accomplished by the next board meeting and she thought it could.

Motion by Scott, seconded by Jenema, to dismiss the current accountant, and replace with a name yet to be determined by agreement of the clerk and treasurer. There was discussion about this.

LaPointe ask to read a prepared statement (attached to minutes) regarding the present Accountant, and proceeded to do this. Collett expressed that she objected to what LaPointe was saying. LaPointe continued. Scott asked Zollinger to stop as there was a motion on the floor.

Motion carried by a roll call vote of 5 (Collett, Jenema, Scott, White, Zollinger) in favor and 1 (LaPointe) opposing.

Scott stated after the motion passed that it's important that Clerk Dye use the training she has received with Drennan help to get her job done and meet her statutory duties as clerk.

G. **PUBLIC COMMENT & OTHER BUSINESS THAT MAY COME BEFORE THE BOARD:**

C. Collett stated she will submit her resignation to the clerk, at the April 8, 2014, meeting.

Meeting adjourned at 4:45 p.m. on a motion by LaPointe with support from Scott.



PLANNING AND ZONING
MONTHLY ADMINISTRATIVE REPORT

TO: Acme Township Board of Trustees & Planning Commission

FROM: Nikki Lennox

DATE: 03/25/2014

THE FOLLOWING IS A SUMMARY OF KEY PLANNING, ZONING & ADMINISTRATIVE ACTIVITIES UNDERWAY:
March 2014

GENERAL PLANNING & ZONING:

LAND USE PERMITS ISSUED FOR FEBRUARY: 1 total. 1 permit issued for a building addition for 6220 Railway Commons

PLANNING & ZONING PROJECTS:

1. **MASTER PLAN UPDATE:** The Master Plan has been distributed to neighboring jurisdictions for review
2. **MEDICAL MARIJUANA MORATORIUM:** The Planning Commission at its March meeting decided to take no action on this issue at this time.
3. **A-1 AGRICULTURAL ORDINANCE AMENDMENT:** (Ord. #030) The Planning Commission held a hearing in March for adoption of this ordinance; ordinance was recommended for approval to the board and sent to the County PC for review.
4. **B-4 District Amendment:** (Ord #032) An amendment to add additional uses to the B-4 District was approved for hearing at the April Planning Commission meeting.

Thank you,

Nikki Lennox



DRAFT UNAPPROVED

**ACME TOWNSHIP PLANNING COMMISSION MEETING
ACME TOWNSHIP HALL
6042 Acme Road, Williamsburg MI 49690
Monday, March 10, 2014 7:00 p.m.**

6:30 P.M. PLANNING COMMISSIONERS EDUCATIONAL TRAINING SESSION: Canceled

CALL TO ORDER WITH PLEDGE OF ALLEGIANCE

**ROLL CALL: Wentzloff x Feringa x Finch x Forgette x Rosa x Timmins_x
White x DeMarsh x**

Recording Secretary: Timmins

Staff Present: Lennox, Jocks, Iacoangeli

A. LIMITED PUBLIC COMMENT:None

Public Comment periods are provided at the beginning and end of each meeting agenda. Members of the public may address the Board regarding any subject of community interest during these periods. Comment during other portions of the agenda may or may not be entertained at the moderator's discretion.

Opened: 7:03

Closed:7:03

B. APPROVAL OF AGENDA:

Motion by: Timmins 2nd: Forgette

Motion carries

C. INQUIRY AS TO CONFLICTS OF INTEREST: none

D. CONSENT CALENDAR: The purpose is to expedite business by grouping non-controversial items together for one Board motion without discussion. A request to remove any item for discussion later in the agenda from any member of the Board, staff or public shall be granted.

a) RECEIVE AND FILE:

1. Draft Unapproved Minutes of:

1. Township Board minutes: Feb. 4, 2014

2. Planning, Zoning & Administrative report: Feb. 2014

b) ACTION:

Draft Unapproved Minutes of:

1. Planning Commission minutes: Feb 10, 2014 removed by Rosa

Motion by: Feringa 2nd: Timmins with removal of Planning Commission minutes 2/10/14

Motion carries

E. ITEMS REMOVED FROM THE CONSENT CALENDAR:

1. Planning Commission minutes 2/10/2014 - Typo 2nd.page change "Brain", to Brian & question on the Ag. Ordinance, Wentzloff clarified

2. _____

Motion to approve P.C minutes from 2/10/14 with changes

Motion by: Feringa 2nd. Timmins Motion carries

F. CORRESPONDENCE: None

G. PUBLIC HEARINGS:

1. Ordinance #030 6.11. A-1 Agricultural District Ordinance Amendment
Opened time: 7:10
Closed time:7:11

2. Ordinance #031 7.2.1 (e) Accessory Buildings Ordinance Amendment
Opened time: 7:12
Closed time:7:13

H. NEW BUSINESS:

1. Ordinance #030 6.11. A-1 Agricultural District Ordinance Amendment

Discussion: Rosa- asked about section 3d. He wondered if it deserved its own section,
John I clarified that it's under the Ag. Tourism because that's where it fits.
Wineries will change to 3 planted acres not 2
White asked about animal processing, is it allowed?
John I said he used the word crops to make sure it wouldn't include animal processing
Wentzloff suggested we allow animal processing with a S.U.P- all agreed ,
Forgette would like the words "small scale" left out.
DeMarsh stated that he understands regulating land uses but doesn't like regulating a
companies business model

Motion by: Feringa to recommend approval with changes to board and send to County Planning
for review **2nd: Finch**
7 yes 1 no (DeMarsh)
Motion carries

2. Ordinance #031 7.2.1(e) Accessory Buildings Ordinance Amendment
Motion by: Feringa to recommend approval to the board and send to County Planning
for review **2nd: DeMarsh**
Unanimous, Motion carries

3. Bates Horse Park Special Use/Site Plan request for Hearing

Lennox explained application for Bates Horse Park for many events. Some under Agri-tourism, some not. Master Plan photo had been submitted instead of a site plan. Lennox will obtain a site plan in accordance with ordinance standards.
Wentzloff commented that she felt this was major amendment not a minor one, Jocks said we don't have an ordinance for a major amendment.
Wentzloff didn't feel it was ready for planning commission to move to public hearing as many were confused as to exactly what was being asked for approval tonight. Was sent back to Flint Fields for further clarification

I. OLD BUSINESS:

1. Great Lakes Trim SUP Amendment/Site Plan Review for Addition
Motion to approve by: Feringa 2nd: Timmins
Motion carries

2. Medical Marihuana Moratorium Ordinance Amendment #028
Lennox shows maps of 100' radius area, and asked Jocks for clarification of "parks in the ordinance to see if Tart Trail would be considered a park. Discussion about counting the Tart Trail as a park, if we did that there is no other room with in the B-2 district that a dispensary can go. Presently there is one dispensary in the B-2 district. If the new law passes Jocks informed us

DRAFT UNAPPROVED

that we could choose to not allow dispensaries into the township. Rosa stated that he didn't think banning them was a good idea as some people need it as medicine and we shouldn't totally ban them. No action taken

3. B-4 District Ordinance Amendment

Discussion regarding building size,

Motion by: White to set for public hearing **2nd: Timmins**

Motion Carries

4. US-31/M-72 Business District Ordinance #029

Lennox explains comments from County Planning Commission. Beckett & Raeder implemented changes.

Motion by: Timmins to send to Twp. Board for approval **2nd: Forgette**

Motion Carries

PUBLIC COMMENT & OTHER BUSINESS THAT MAY COME BEFORE THE BOARD:

Ordinance Review Committee: Wentzloff explains that Lennox, Iacoangeli and Jocks will identify ordinances needing updating and bring to PC.

PC Education Reports: Steve Feringa- Traverse City to Charlevoix Trail update – Tart is working to identify routes and right of way, will have written report for next meeting

Wentzloff: Housing meeting-- housing cost and transportation cost are finally being taken in to consideration as one , developers are being offered incentives to build affordable housing.

Calendar Item- March 26, 5:30 p.m. County Government Building, Bayshore Corridor final wrap up meeting for corridor overlay

ADJOURN: Motion by Timmins 2nd. Feringa
Carries 9:55

WHITEWATER TOWNSHIP PLANNING COMMISSION

P.O. Box 159
5777 Vinton Road
Williamsburg MI 49690
(231) 267-5141
zoning@whitewatertownship.org

NOTICE OF INTENT TO PREPARE A TOWNSHIP MASTER PLAN

March 7, 2014

As required by the MICHIGAN PLANNING ENABLING ACT, ACT 33 OF 2008- 125.3839, SECTION 39 (2).

The Whitewater Township Planning Commission intends to prepare a TOWNSHIP MASTER PLAN and is requesting your cooperation and welcomes your comments.

All written comments can be directed to Mickey Dean, Chairman Whitewater Township Planning Commission P.O. Box 159- 5777 Vinton Road, Williamsburg MI 49690. Electronic responses can be directed to the following e-mail address- zoning@whitewatertownship.org

Local Units of Government

Antrim County Planning Commission
Elk Rapids Township
Grand Traverse County Planning Commission
Grand Traverse County Road Commission
Bay Area Transportation Authority
Acme Township
East Bay Charter Township
Union Township
Kalkaska County Planning Commission
Clearwater Township

Independent Nation

Grand Traverse Band of Ottawa and Chippewa Indians

State of Michigan

Michigan Department of Transportation

Utility Company

Michigan Consolidated Gas (DTE)
Consumers Energy
Cherryland Rural Electric
Traverse City Light & Power
AT&T
Charter Communications

Transportation

Abandoned C & O R.R.
Michigan Department of Transportation

planning review

Date: 03.04.2014

From: John R. Iacoangeli, PCP, AICP,
To: **Nikki Lennox, Zoning Administrator**
Members of the Acme Planning Commission
6042 Acme, Road
Williamsburg, MI 49690

Project: B-4 Material Processing and Distribution District

Remarks:

Please find attached a proposed reorganization of the B-4: Material Processing and Distribution District for the Acme Township Zoning Ordinance.

The current B-4 District was recently modified to remove language regarding the 500 foot setback from M-72. However, in light of the recent changes to the other business district classifications it was decided to overhaul the B-4 to make it more functional and representative of a traditional warehousing and materials processing district.

You will note that the majority of uses are allowed as "permitted by right" which means the property owner/applicant will not have to seek a Special Use Permit which requires a public hearing. Instead these uses will only be required to have a site plan reviewed and approved by the Planning Commission. There are only six (6) uses which require special use permit approval.

I forward to your input on this district reorganization.

6.10. B-4 DISTRICT: MATERIAL PROCESSING AND WAREHOUSING DISTRICT

6.10.1 INTENT AND PURPOSE: This district is intended to accommodate those industrial uses, warehousing and storage, and related activities that generate a minimum of noise, glare, odors, dust, vibration, air and water pollution, fire and safety hazards, or any other potentially harmful or nuisance characteristics. It is designed to accommodate wholesale, warehouse, agricultural sales and service related businesses and light industrial activities whose operational and physical characteristics do not detrimentally affect any of the surrounding district.

6.10.2 USES PERMITTED BY RIGHT: Uses permitted by right require site plan review under Article VIII.

- a. Processing and distribution facilities:
 - i. Distribution and transfer centers
 - ii. Produce market terminals
 - iii. Recycling centers (no heavy machinery)
 - iv. Soda water and soft drink bottling facilities
 - v. Bakeries and confection making.
 - vi. Bottling or packaging of cleaning compounds, polishes, seeds, etc.
 - vii. Pattern-making shops
 - viii. Printing, engraving and bookbinding shops.
 - ix. Micro-brewery, distillery and wine processing and bottling operations.
- b. Storage where operations are conducted within an enclosed building:
 - i. Warehouses, indoor storage and terminal buildings
 - ii. Freezers and lockers
 - iii. Construction Storage
 - iv. Mini or self-storage; mini-warehousing facilities.
- c. High-tech uses:
 - i. Research and development centers
 - ii. Laboratories
 - iii. Telecommunications
 - iv. Data processing and computing centers
 - v. Computer electronic equipment manufacturing
 - vi. Computer programming and software development
- d. Public/quasi-public facilities
 - i. Medical laboratories
 - ii. Essential public service buildings and storage yards, municipal buildings, municipal maintenance and repair facilities, public utility buildings, telephone exchanges, electric transformer yards, substations, gas regulator stations and associated service or storage yards

- e. Retail establishments with less than 30,000 gross square feet of building area including:
 - i. Building and lumber supply stores,
 - ii. Hardware and home improvement stores;
 - iii. Farm improvement and sales centers with enclosed outdoor sale yards;
 - iv. Garden centers and nurseries; and
 - v. Wholesale stores.
- f. Automotive and Farm Equipment establishments:
 - i. Major automobile repair establishments.
 - ii. Farm equipment sales and service.
- g. Personal service:
 - i. Veterinary hospitals and kennels.
 - ii. Carpet cleaning establishments.

6.10.4 USES AUTHORIZED BY SPECIAL USE PERMIT: The following uses of land and structures may be permitted by the application for and the issuance of a special use permit, pursuant to Section 9.1.

- a. Central Dry Cleaning and Laundering Facility/Plant
- b. Contractor Establishments with outdoor storage for materials and equipment.
- c. Lumber and Planing Mills
- d. Private or non-profit indoor and outdoor recreational facilities.
- e. Structural Appurtenances: As accessory uses, the following kinds of structural appurtenances may be permitted to exceed the height limitations for the principal use: appurtenances to mechanical or structural functions, such as chimney and smoke stacks, water tanks, elevator and stairwell penthouses, ventilators, bulkheads, radio towers, aerials, fire and hose towers and cooling towers. No structural appurtenances permitted hereby shall be used for dwelling purposes.

December 4, 2013

Nikki Lennox
Zoning Administrator
Acme Township
6042 Acme Rd
Williamsburg, MI 49690



13272 S. West Bay Shore Drive
Traverse City, MI 49684
T 231.935.1514
F 231.935.3829
www.gtbbay.org

RE: Proposed Draft Stormwater Management Ordinance

Dear Nikki,

As you know, The Watershed Center Grand Traverse Bay (TWC) has been working with several townships within our watershed to draft an updated, proposed stormwater management ordinance. Following many meetings, reviews, edits, and more edits, I am pleased to provide the "final" Draft Stormwater Management Ordinance.

The primary goals of this Draft Ordinance are twofold: to provide increased flexibility to townships and developers to implement creative, effective stormwater management systems, using both traditional and Low Impact Development (LID) stormwater management methodologies; and also to address water quality in any off-site stormwater discharges. The Draft Ordinance does not change the volume of stormwater that must be managed on site (2-year, 24-hour storm event), but it does allow an applicant to reduce that volume through techniques such as rain gardens, pervious surfaces, tree canopy, and green roofs.

In addition, this Draft Ordinance distinguishes between projects that are likely to have significant stormwater impacts and therefore require more complex engineering and closer review (*e.g.*, projects already subject to site plan review), and simpler projects that are likely to have some stormwater impacts but do not warrant full-scale engineering review (*e.g.*, single-family residential project increasing impervious surface by 30% or more). Stormwater management review for the complex projects would be handled procedurally as part of Site Plan Review; review of simpler projects would be handled administratively by the Township.

Another advantage of this Draft Ordinance is its simplicity: the Draft Ordinance does not specify engineering design standards, but rather incorporates by reference key design standard manuals. It incorporates the Michigan Department of Environmental Quality's *Guidebook of BMPs for Michigan Watersheds*, and Southeast Michigan Council of Government's *Low Impact Development Manual for Michigan*, and allows for reference to other manuals that meet the standards in the Draft Ordinance. This

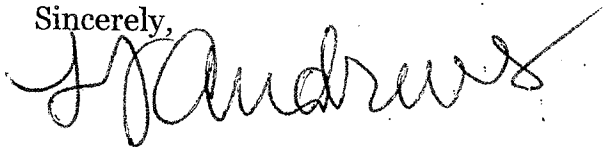
Letter to N. Lennox
December 4, 2013
Page 2 of 2

approach allows the Township and applicants to keep up with the most current stormwater engineering technologies, without amending the Stormwater Ordinance.

This Draft Ordinance anticipates an individualized process by each jurisdiction to make changes to meet the jurisdiction's unique concerns, and to ensure consistency with other Township ordinances and policies. Thus, we are providing this as "Draft." I would appreciate the opportunity to meet with you, your engineers, and your governing bodies (Planning Commission, Township Board), to discuss both individualizing and improving this Draft Stormwater Management Ordinance.

Please feel free to contact me if you have any questions. Thank you for the opportunity to work with Acme Township on this important project.

Sincerely,

A handwritten signature in black ink that reads "TJ Andrews". The signature is written in a cursive, flowing style with a long, sweeping underline that extends to the right.

Tracy Jane (TJ) Andrews
Policy Specialist

ORDINANCE NO. 2007-01
ACME TOWNSHIP
STORM WATER CONTROL ORDINANCE

Description of Purpose and Nature:

AN ORDINANCE TO PROVIDE FOR STORM WATER MANAGEMENT PRACTICES AND REVIEW OF STORM WATER MANAGEMENT PLANS IN CONFORMANCE WITH STANDARDS ADOPTED BY THE GRAND TRAVERSE COUNTY DRAIN COMMISSIONER.

Acme Township, Grand Traverse County, Michigan Ordains:

Section 1. Applicability. Except as otherwise provided in this Ordinance, any earth changes, as defined as in Part 91, 1994 PA 451, being MCL 324.9101(9), as amended, that meet any of the following criteria require a Storm Water Runoff Control Permit:

- A. Disturb 1 or more acres of land
- B. Within 500 feet of the ordinary high water mark of a lake or stream
- C. Commercial use development
- D. Mobile home park or manufactured home development
- E. Multiple family residential development or P.U.D.
- F. Site condominium or condominium developments as defined by Act 59 of the Public Acts of 1978, as amended
- G. Platted subdivision development
- H. Private roads which access 3 or more development parcels

Section 2. Design Standards. “Design standards” as used in this ordinance means the Uniform Storm Water Control Design and Installation Standards for Municipalities in Grand Traverse County and are adopted as fully set forth hereafter:

A. PREAMBLE

These standards were developed to be used in conjunction with the *Municipalities of Grand Traverse County Storm Water Runoff Control Ordinance*. These standards may be updated from time to time to reflect new technology available to deal with storm water runoff on sites within Grand Traverse County.

B. DETERMINATION OF SURFACE RUNOFF

1. METHOD

The proprietor's engineer may be required to use the curve number method or an equivalent modeling approach to generate hydrographs and perform reach and reservoir routing for large sites and/or smaller sites of sufficient complexity. However, the Rational Method of calculating storm water runoff is generally acceptable for sites less than 120 acres, and is given by the equation:

$$Q = C I A$$

Where:

Q	=	Peak Discharge (cfs)
C	=	Runoff Coefficient
I	=	Rainfall Intensity (in/hr)
A	=	Contributing Drainage Area (acres)

When applicable, a permit is required, pursuant to the Floodplain Control Section (Part 31) of Act 451, PA 1994, as amended. The Michigan Department of Environmental Quality will compute flood frequency discharges for the watercourse upon request.

Values of runoff curve number and average percent impervious for various development types for use with the curve number method are included in Table 1. Values of runoff coefficients for various development types, for use with the Rational Method, are included in Table 2.

The minimum time of concentration value shall be 15 minutes.

An antecedent moisture condition of 2, reflective of normal soil moisture, shall be used with the curve number hydrologic method.

2. DESIGN RAINFALL

The 24-hour rainfall amounts in Bulletin 71 (Appendix 8), located at the end of this section, shall be used to calculate peak runoff rates. A Type II rainfall distribution shall be used with the curve number hydrologic method. The rainfall duration-frequency table from Bulletin 71 shall be used with the Rational Method to determine a rainfall intensity for a rainfall duration equal to the time of concentration.

C. CONVEYANCE CONTROLS

1. STORM SEWERS

a. SIZING

The storm sewer system shall be designed to convey runoff from a 10-year frequency rainfall event. The effect of the 25-year storm must be evaluated to ensure no adverse increase in water elevation off the development property, or flooding of structures within the development.

Storm sewer design velocities, capacities, and friction losses shall be based on Manning's equation:

$$Q = \frac{1.49 AR^{\frac{2}{3}} S^{\frac{1}{2}}}{n}$$

Where:	Q	=	Discharge (cfs)
	A	=	Wetted Area (sft)
	R	=	Hydraulic Radius (ft)
	S	=	Slope (ft/ft)
	n	=	Manning's Coefficient

Manning's coefficients for closed conduit are included in Table 3. Acceptable slopes for circular pipe ("n" = 0.013) are included in Table 4. Minimum grade for other Manning's "n" values must be calculated based on the allowable minimum velocity of 2.5 feet per second.

Surcharging the pipe will be allowed to 1 foot below the top of casting at design flow. However, minor losses must be considered in hydraulic grade line calculations.

Storm sewer pipe shall have a minimum diameter of 12 inches.

The minimum depth of cover shall be 24 inches from finished grade to the top of pipe.

Restricted conveyance systems designed to create backflow into storm water storage facilities are not permitted.

b. END TREATMENT

Outlet protection consisting of flared end sections, riprap, or other measures shall be provided as necessary to prevent erosion.

c. MANHOLES AND CATCH BASINS

Manhole spacing shall not exceed 400 feet for sewers less than 42 inches in diameter and 600 feet for larger sewers.

Manholes shall be placed at all changes in pipe direction, pipe size, and all inlet connection locations. A catch basin or manhole shall be installed at the upstream end of the storm sewer. 48-inch- or 24-inch-diameter catch basins can be substituted for manholes at the two most upstream locations.

Pipe inverts at junctions shall be designed to minimize junction losses (e.g., match point of sewers at 80% of diameter).

Minimum inside diameter of all manholes shall be 48 inches. Minimum inside diameters for catch basins and inlet structures shall be 24 inches. Catch basins and inlet structures shall include a minimum 2-foot sump.

Inlet structures shall be placed at low points of streets and yards, and be spaced a maximum of 400 feet apart. Spacing and/or number of catch basins and inlet structures required to accommodate the design flows in streets, private drives, and parking areas shall be provided based on inlet capacity with no ponding occurring during a 10-year storm.

No more than 150 feet of street drainage will be allowed to flow around a corner.

No flow will be allowed across a street intersection.

d. MATERIAL

- i. Storm sewer pipe shall be reinforced concrete or smooth interior wall polyethylene in accordance with the current Michigan Department of Transportation (MDOT) Standard Specifications.
- ii. Pipe joints shall be designed to prevent excessive infiltration or exfiltration.
- iii. Connections to manholes shall be made with a resilient connector for pipe diameters 24 inches or less.

2. CULVERTS AND BRIDGES

a. SIZING

Crossings must meet the requirements of the Floodplain Control Section (Part31) of Act 451, PA 1994, as amended where applicable.

Bridges shall be designed to provide a 1-foot minimum freeboard to the underside (low chord) of the bridge for a 100-year flood. Footings shall extend at least 4 feet below the bottom of the channel.

Culverts not requiring a permit under Part 31 shall be designed for a minimum 10-year storm in the developed watershed with a maximum outlet velocity of 8 feet per second (ft/s). A maximum of 1 foot of inlet submergence may be permitted, if this does not backup water out of the easement.

Sizing of culverts and bridges shall include consideration for entrance and exit losses, and tail water condition.

Minimum diameter of a drive culvert shall be 12 inches.

Minimum diameter of a road crossing culvert shall be 15 inches or equivalent pipe arch.

b. END TREATMENT

Headwalls, wingwalls, and all other end treatments shall be designed to ensure the stability of the surrounding soil. MDOT, Grand Traverse County Road Commission, or manufacturer's designs may be used.

c. MATERIAL

Culverts may be reinforced concrete pipe, smooth interior wall polyethylene pipe, corrugated steel pipe, box culvert, or pipe arch in accordance with the current MDOT Standard Specifications.

3. GRASSED WATERWAYS

a. SIZING

The minimum required discharge capacity shall be for a 10-year frequency rainfall event with 0.5 foot of freeboard to top of bank.

Velocities, capacities, and friction losses shall be based on Manning's formula. Typical Manning's "n" values for open channels, swales, and ditches are included in Table 3.

A minimum "n" value of 0.035 shall be used as the roughness coefficient for open channels, unless special treatment is given to the bottom and sides (riprap, paving, mown sod).

Minimum bottom width for grassed waterways shall be 1 foot or an equivalent parabolic section.

Minimum bottom slope shall be 0.50%.

Side slopes shall be no steeper than 3:1 (horizontal:vertical[H:V]).

b. SOIL EROSION AND SEDIMENTATION CONTROL

Grassed waterway flow velocities shall be neither siltative or erosive. The minimum velocity for vegetated channels shall be 1.5 ft/s. The maximum velocity shall be 4 ft/s. Riprap protection or equivalent erosion control measures shall be used where the velocity exceeds 4 ft/s, up to maximum allowable design velocity of 8 ft/s.

Where maximum velocities are exceeded due to channel slope, rock check dams, or grade control structures shall be used to reduce overall flow velocities.

Erosion control blankets shall be used to protect bare channels.

c. LAYOUT

Outlets into the grassed waterway shall enter at an angle of 90 degrees or less with the direction of flow.

A minimum clearance of 4 feet is required between vegetated swale and ditch inverts and underground utilities unless special provisions are approved. In no case will less than 2 feet of clearance be allowed.

D. BUFFERS AND SETBACKS

Soil disturbance and removal of natural ground vegetation and tree roots within 50 feet of the ordinary high water mark of any lake or stream, or within 25 feet of a regulated wetland shall be prohibited unless approved by the Drain Commissioner. A lake or stream buffer area greater than 50 feet may be required by the Drain Commissioner, if necessary, for soil erosion control purposes. Structures, roads, parking lots, storm water facilities, and similar site improvements shall not be located within the buffer area.

E. STORM WATER FACILITIES

The three groups of urban Best Management Practices (BMPs) identified as storm water facilities, or “end-of-pipe” storage and treatment measures are as follows:

Infiltration/Retention Systems

Detention Systems (dry, wet)

Storm Water Wetlands

Performance criteria is given for each to ensure an effective and durable BMP. Performance criteria is based on eight factors:

Physical Feasibility

Design Criteria

Pre-treatment Criteria

Controls

Geometry

Public Safety

Landscaping

Maintenance

1. INFILTRATION/RETENTION SYSTEMS

An infiltration system is designed to promote percolation of storm water into the ground. The system may or may not include an outlet and/or spillway based on the adequacy of downstream conveyance systems.

A retention system is designed to completely retain storm water runoff without a low flow outlet or emergency spillway.

a. PHYSICAL FEASIBILITY

Infiltration systems will be required at all sites with soil permeability greater than 1 inch per hour.

The bottom of the infiltration system shall be a minimum of 4 feet above the highest known water table elevation.

b. DESIGN CRITERIA

i. VOLUME

The volume of the infiltration system shall be calculated by comparing the volume of runoff of the undeveloped site during a 2-year, 24-hour duration storm versus the volume of runoff from the developed site during a 25-year, 24-hour duration storm.

The infiltration system volume shall be designed to store the runoff from back-to-back 100-year, 24-hour rainfall events from the entire contributing area for retention systems or if the discharge will cause downstream flooding. Certification that an adequate outlet for infiltration systems is available shall be provided by a licensed professional engineer.

Infiltration of runoff within the basin may be used to reduce the required storage volume subject to the following provisions:

- 1) An infiltration test with a report must be done within each proposed basin to a depth of 5' below the bottom of the basin.
- 2) The infiltration test must be conducted and report prepared as detailed in Appendix 9.
- 3) The maximum allowable infiltration rate used in the calculation for runoff storage shall be 0.5 times the actual measured infiltration rate.
- 4) The most restrictive soil lens must be used in the infiltration calculation. The topsoil lens may be the most restrictive in sandy soils. If necessary specify only sandy topsoil is to be used in the basin bottom.
- 5) For basins without outlets the maximum water level must be calculated (without deduction for infiltration) and shown on the plan where areas outside of the basin will be inundated with runoff.

This is necessary to ensure buildings, roads, etc will not be flooded during frozen soil conditions. Note the basin will be sized using the allowable infiltration rate but this second calculation must be used for safety and flood control.

- 6) Maximum allowable deduction for the infiltration volume shall be based on a 24 hour period or the time of concentration – whichever was used in the total runoff volume calculation.

ii. MAXIMUM DRAIN TIME

The infiltration basin shall be designed to drain completely within 72 hours. A design infiltration rate of 0.5 times the infiltration rate determined by geotechnical investigation (not to exceed 1 in/hr for underground systems), or an infiltration rate of 0.52 in/hr, shall be used to estimate the maximum time to drain by the equation:

$$72 > 12D/I$$

Where:	72	=	Maximum allowable drain time (hours)
	12	=	Factor to convert inches to feet
	D	=	Basin depth (feet)
	I	=	Design infiltration rate (in/hr)

iii. UNDERGROUND INFILTRATION AND RETENTION SYSTEMS

Underground infiltration or retention systems are discouraged and will be allowed only when adequate space for an aboveground system is not available. The site grading shall provide for parking lot storage of excess runoff should the underground infiltration or retention system fail to function adequately.

iv. CONSTRUCTION

The contractor shall avoid compacting the soil in the infiltration or retention basin area during excavation and grading. Use of equipment with low earth pressure loading is required. The final 2 feet of depth shall be removed by excavating to finished grade.

v. SNOW STORAGE

Snow storage in the infiltration or retention system shall not displace more than 50% of the available storage volume and shall not impede drainage through the system.

c. TREATMENT CRITERIA

i. TREATMENT FOREBAY

General

A treatment forebay or equivalent storm water filter shall be used to treat storm water runoff prior to an infiltration or retention system for all sites with a significant potential of exposing storm water to oil, grease, toxic chemicals, or other polluting materials. A list of representative sites is included in Appendix 1.

- 1) A treatment forebay shall be provided for all underground infiltration or retention systems and sites with over 5 acres of parking area.
- 2) A sediment forebay or equivalent system shall be used to treat storm water runoff prior to the infiltration or retention system at all other sites.
- 3) The treatment forebay is designed to store the “first flush” of pollutants typically found in urban storm water runoff, and to capture slug pollutant loads from accidental spills of toxic materials (spill containment volume).
- 4) The treatment forebay shall be a wet basin or approved structure with an impermeable bottom and sides to the design high water level.

ii. SIZING

- 1) The treatment forebay shall be sized to store the water quality volume (V_{wq}) defined as 0.5 inch of runoff from the directly connected impervious area. This volume can be included in the overall flood control volume.

2) The minimum required water quality volume is given by the equation:

$$V_{wq} = 1815 A I$$

Where :

V_{wq}	=	Water quality volume (cft)
1815	=	0.5 inch of runoff x 3,630 to convert ac-in to cft
A	=	Contributing drainage area (ac)
I	=	Percent impervious expressed as a ratio

3) Capacity for the water quality volume shall be provided above the normal water level.

4) The overflow structure from the treatment forebay shall be sized for the peak inflow from the design rainfall event.

5) The top-of-berm elevation between the treatment forebay and the infiltration basin shall be a minimum of 1 foot below the outer berm elevation.

6) The treatment forebay shall have a minimum 1-foot-deep sump below the inlet pipe for sediment accumulation.

7) The outlet structure from the treatment forebay shall be designed to draw water from the central portion of the water column within the forebay to trap floatables and contain sediments. The top of the inlet structure shall be located a minimum of 1 foot below the normal water level, and the invert shall be a minimum of 1.5 feet above the bottom of the treatment forebay.

iii. MATERIAL

1) Treatment forebays shall be lined with impermeable materials extending up to the design high water elevation. A minimum 18-inch-thick clay layer, or an impermeable liner protected with a minimum 12 inches of soil cover are acceptable alternatives. Maximum allowable permeability shall be 1×10^7 cm/sec as determined by a geotechnical engineer for clay placement, or manufacturer's certificate for liner products.

2) Premanufactured systems for oil/gas separation and sedimentation can be used as treatment forebays for sites of less than 5 acres of paved surface. The premanufactured treatment systems shall be sized in

accordance with manufacturer's recommendations and approved by the Grand Traverse County Drain Commissioner (GTCDC).

iv. SEDIMENT FOREBAY

1) Sediment forebays or equivalent upstream treatment shall be used to provide energy dissipation and to trap and localize incoming sediment.

2) The forebay shall be a separate sump, which can be formed by grading, a compacted earthen berm, or other suitable structure.

3) The capacity of the forebay shall be equivalent to 5% of the 25-year flood control volume.

4) The length to width ratio shall be a minimum of 1.5:1 (L:W) and a maximum of 4:1.

d. CONTROLS

Detention basin design criteria for inlets and the emergency overflow shall also apply to the design of infiltration basins.

e. EROSION CONTROL

Upland construction areas shall be completely stabilized prior to final infiltration basin construction. All accumulated sediment shall be removed prior to final acceptance.

Overflow spillways shall be protected with riprap or a permanent erosion control blanket to prevent erosion of the structure.

Inlets and outlets require energy dissipation and transition from outlet to open channel based on the maximum velocities given in Section II - Grassed Waterways.

f. GEOMETRY

The floor of the infiltration basin shall be flat to encourage uniform ponding and infiltration.

The floor of the basin shall be scarified to a depth of 4 to 6 inches after final grading has been established.

g. PUBLIC SAFETY

Side slopes shall not be steeper than 3:1 (H:V).

A minimum 5-foot-wide safety ledge with a maximum slope of 6% shall be provided around the perimeter of open basins with water depths over 5 feet. The safety ledge shall be located 3 feet above the bottom of the infiltration basin at open dry basins, or 1 foot below the normal water level. Fencing to prevent unauthorized access may be provided in lieu of the safety ledge.

h. MAINTENANCE

A minimum 15-foot-wide maintenance access route from a public or private right-of-way to the basin shall be provided. The access way shall have a slope of no greater than 5:1 (H:V), and shall be stabilized to withstand the passage of heavy equipment. Direct access to the forebay, control structures, and the overflow shall be provided.

Infiltration basin maintenance plans will require that sediment be removed from the treatment forebay when it reaches a depth equal to 50% of the depth of the forebay or 12 inches, whichever is less.

2. STORM WATER WETLANDS

All of the detention basin design criteria also apply to the design of storm water wetlands. Additional criteria exclusive to storm water wetlands is presented in this section.

a. PHYSICAL FEASIBILITY

A water balance must be performed to demonstrate that a storm water wetland can withstand a 30-day drought at summer evaporation rates without completely drawing down.

b. DESIGN CRITERIA

- i. The surface area of the entire storm water wetland shall be at least 1% of the total drainage area to the facility.
- ii. At least 25% of the total water quality volume shall have a minimum depth of 4 feet (deep water). The forebay and micro pool may meet this requirement.

iii. A minimum of 35% of the total surface area shall have depth of 6 inches or less (high marsh), and at least 65% of the total surface area shall be shallower than 18 inches (low marsh).

c. PRE-TREATMENT CRITERIA

No additional criteria.

d. CONTROLS

i. A micro pool shall be located at the outlet of the storm water wetland to protect the low flow pipe from clogging and prevent sediment resuspension.

ii. The micro pool shall be 3 to 6 feet deep, and have a minimum surface area equivalent to that of the forebay.

e. GEOMETRY

i. An overall length to width ratio of 1.5:1 (length: width [L:W]) is recommended.

ii. Irregular flow paths shall be used to maximize flow length from inflow to outflow points. These paths may be achieved by constructing internal berms (high marsh wedges, rock filters).

iii. Micro topography is encouraged to enhance wetland diversity.

f. PUBLIC SAFETY

No additional criteria.

g. LANDSCAPING

i. A landscape plan shall be prepared by a qualified wetland consultant and indicate methods used to establish and maintain wetland coverage. Minimum elements of the plan include:

- 1) Delineation of pondscape zones
- 2) Selection of corresponding plant species
- 3) Planting configuration
- 4) Sequence for preparing wetland bed
- 5) Schedule for planting

- 6) Re-use of existing wetland material
- 7) Suitable (hydric) soils

h. MAINTENANCE

If a minimum coverage of 50% is not achieved in the planted wetland zone after the second growing season, a reinforcement planting will be required.

3. DETENTION SYSTEMS

Dry Detention System

Wet Detention Basin (Storm Water Pond)

a. PHYSICAL FEASIBILITY

A reliable supply of base flow is required for wet basins to prevent excessive drawdown of the permanent pool.

b. DESIGN CRITERIA

i. TREATMENT VOLUME

1) The water quality treatment volume shall be defined as the routed volume of runoff from the 1.5-year, 24-hour rainfall event (2.06 inches) with post-development conditions. The minimum required treatment volume is given by the equation:

2) Minimum Treatment Volume = 5,000 cft/impervious acre

3) The maximum release rate to detain this volume for at least 24 hours is 0.05 cfs/impervious acre.

ii. FLOOD CONTROL VOLUME

1) The flood control volume shall be sized to detain the 25-year rainfall event from the entire contributing area with a maximum release rate of 0.13 cfs/ac. The minimum storage required per acre is given in Table 6.

2) The water quality and treatment volume may be included in the flood control volume.

3) Certification that an adequate outlet is available shall be provided by a licensed professional engineer, surveyor, or architect.

iii. WET BASINS

Water quality treatment and flood control volumes must be provided above the permanent pool elevation. Any volume provided below the invert of the outlet is considered “dead storage” and will not be considered as detention volume.

iv. SNOW STORAGE

Snow storage in the detention system shall not displace more than 50% of the available storage volume and shall not impede drainage through the system.

c. PRE-TREATMENT CRITERIA

i. SEDIMENT FOREBAY

1) Sediment forebays or equivalent upstream pre-treatment shall be used to provide energy dissipation and to trap and localize incoming sediments.

2) The forebay shall be a separate sump, which can be formed by grading, a compacted earthen berm, or other suitable structure.

3) The capacity of the forebay shall be equivalent to 5% of the 25-year flood control volume.

4) The length to width ratio shall be a minimum of 1.5:1 (L:W) and a maximum of 4:1.

d. CONTROLS

i. INLET DESIGN

1) Inlet pipes shall not be fully submerged at normal pool elevations.

2) A forebay shall be provided at each inlet, unless the inlet supplies less than 10% of the total design flow into the detention basin.

ii. OUTLET DESIGN

1) The outlet may be designed using the orifice equation, rearranged to solve for area.

$$Q = cA (2gH)^{1/2}$$

Where:

- A = Required area (sft)
- Q = Required outflow (cfs)
- C = Orifice Coefficient (approx. 0.6)
- 2g = Two times the gravitation constant (g = 32.2 ft/s)
- H = Height of design high water level above center of orifice outlet

2) Other types of outlet devices shall have full design calculations provided for review.

3) The outlet shall be designed to prevent clogging.

4) Orifice plates shall have a minimum diameter of 4 inches. Perforated risers with stone filters or buried perforated piping with stone filters shall be used if the required design flow is less than the capacity of a 4-inch orifice.

5) Riser pipes with holes or slits less than 4 inches in diameter shall have a stone and gravel filter placed around the outside of the pipe.

6) Hoods and trash racks shall be placed on riser pipes. Grate openings shall be a maximum of 3 inches on center.

7) Orifices used to maintain a permanent pool shall be designed to withdraw water a minimum of 1 foot below the surface of the pond.

8) Riser pipes shall have a minimum diameter of 24 inches. Riser pipes greater than 5 feet in height shall be 48 inches in diameter.

9) Riser pipes shall be constructed of reinforced concrete or corrugated metal and be set in a concrete base. Plastic is not acceptable as a riser material.

10) Outlet control structures shall be placed near or within the embankment to facilitate maintenance access.

11) Where feasible, a drain for completely dewatering the detention system shall be installed for maintenance purposes.

iii. EMERGENCY OVERFLOW

All detention systems must have a provision for overflow at the high water level. A spillway shall be designed for the 100-year rainfall event from the fully developed watershed with a maximum flow depth of 1 foot. The spillway shall be sized using the weir equation:

$$Q = 2.6 LH^{3/2}$$

Where:	Q	=	Discharge (cfs)
	2.6	=	Coefficient of Discharge
	L	=	Length of spillway crest (ft)
	H	=	Total head measured above spillway crest (ft)

The top of berm elevation shall be a minimum of 1 foot above the design maximum water level.

iv. EROSION CONTROL

1) Upland construction areas shall be completely stabilized prior to final detention basin construction. The detention basin may be constructed first as a temporary erosion control measure during construction.

2) Overflow spillways shall be protected with riprap or a permanent erosion control blanket to prevent erosion of the structure.

3) Inlets and outlets require energy dissipation and transition from outlet to open channel based on the maximum velocities given in the Grassed Waterways section of these guidelines.

e. GEOMETRY

i. The distance between inlets and outlets shall be maximized. If possible, inlets and outlets should be offset at opposite longitudinal ends of the facility. The length of the flow path across the basin can be

maximized by increasing the length to width ratio of the entire design (a minimum length to width ratio of 3:1 shall be used unless structural measures are used to extend the flow path) and by increasing the dry weather flow path within the system to attain maximum sinuosity.

ii. The bottom of dry detention systems shall be graded to provide positive flow to the pipe outlet. For open detention systems, a minimum flow line bottom slope of 1% should be provided and cross slopes shall be 2% minimum. If continuous flow is anticipated, a low-flow channel shall be provided, with necessary crossings, and sloped to eliminate standing water.

iii. Permanent pools for wet basins shall be a minimum of 3 feet deep in the center of the basin.

iv. Storm water ponds which are wedge-shaped are preferred, narrower at the inlet and wider at the outlet where possible. Irregular shorelines are preferred.

f. PUBLIC SAFETY

i. Detention basins that have an impoundment area of 5 acres or more, and a hydraulic head of 6 feet or more, must meet the requirements of the Dam Safety Section (Part 315) of Act 451, PA 1994, as amended.

ii. Side slopes for open dry basins and wet basins shall not be steeper than 3:1 (horizontal: vertical).

iii. A minimum 5-foot-wide safety ledge with a maximum slope of 6% shall be provided around the perimeter of open basins over 5 feet deep. The safety ledge shall be located 3 feet above the bottom of open dry basins or 1 foot below the normal water level of wet basins. Fencing to prevent unauthorized access may be provided in lieu of the safety ledge.

iv. Warning signs prohibiting swimming and skating shall be posted for wet basins.

g. MAINTENANCE

i. A minimum 15-foot-wide maintenance access route from a public or private right-of-way to the basin shall be provided. The access way shall have a slope of no greater than 5:1 (H:V), and shall be stabilized to withstand the passage of heavy equipment. Direct access to the forebay, control structures, and the outlet shall be provided.

ii. Detention basin maintenance plans will require that sediment be removed when it reaches a depth equal to 50% of the depth of the forebay or 12 inches, whichever is less.

F. OPERATION AND MAINTENANCE AGREEMENTS

1. PRIVATE SYSTEMS

A legally binding maintenance agreement shall be executed before final approval is granted. The agreement shall be included in the property deed restrictions or condominium master deed documents so that it is binding on all subsequent property owners.

2. MAINTENANCE PLANS

a. Maintenance plans may be required with the construction drawings and should be included in the subdivision agreement (or for other developments, legally binding documents such as the property deed or condominium master deed). The plan should include the following information:

b. An annual maintenance budget, itemized by task. The financing mechanism shall also be described.

c. A copy of the final approved storm water management system for the development that delineates the conveyance system, storm water facilities, easements, and buffer areas.

d. A listing of tasks defined for each component of the storm water management system. A list of typical maintenance activities is included in Appendix 2.

e. The party responsible for performing each maintenance activity.

f. A detailed description of the procedures for record keeping of maintenance operations and expenditures.

g. A schedule for implementation, and a time frame for corrective measures to be taken. Language shall be included which states that if the private entity fails to act within the time frame specified, the responsible governmental entity may perform the needed maintenance and assess the costs against the property owners within the subdivision (or other development).

h. Routine maintenance inspections will be conducted at least twice a year in the spring and in the fall, including inspection of all structural elements conducted annually. Corrective action shall be completed within thirty (30) days of regularly scheduled inspection or notification that action is required.

i. Emergency inspection on an as-needed basis. Corrective action shall be completed within 36 hours of notification unless threat to public health, safety, and welfare requires immediate action.

3. DRAINAGE EASEMENTS

An easement, or release of right-of-way, not land ownership, is the approved method of providing access to, and protection of, public storm drainage facilities. Transfer of land ownership to Grand Traverse County, the Drain Commissioner, or an established Drainage District in the County is not allowed unless permitted in writing by the Drain Commissioner or other applicable authorities.

a. LOCATION

i. WITHIN THE DEVELOPMENT

All natural watercourses, drainage ditches or swales, enclosed storm drains detention or retention facilities, or established drains within the plat shall have granted easements.

1) COUNTY DRAINS

Private (exclusive) easements for county drains shall be granted to the appropriate drainage district and must be shown on the final plat. An acceptable drainage easement form is included in Appendix 4.2.

2) SURFACE DRAINAGE

Private easements for surface drainage are for the benefit of upland lots within the subdivision or upland sites that currently drain across the proposed plat. Any improper construction, development, or grading that occurs within these easements will interfere with the drainage rights of those upland lots. Private easements for surface drainage are for the continuous passage of surface water and each lot owner will be

responsible for maintaining the surface drainage system across his property. No construction is permitted within a private easement for surface drainage. This includes swimming pools, sheds, garages, patios, decks, or any other permanent structure or landscaping feature that may interfere with surface drainage.

3) YARD DRAINAGE

Private easements for yard drains are for the benefit of individual lots within the subdivision. Any improper construction that occurs with these easements will interfere with the future maintenance of the enclosed yard drain system. Provisions applying to surface drains shall apply to yard drains.

ii. OUTSIDE THE DEVELOPMENT

1) EASEMENTS

Easements will be required downstream of a development when the receiving watercourse is not an established drain and lacks sufficient capacity or grade to be of ongoing service to the plat without regular maintenance. An acceptable release of right-of-way form for drainage is included in Appendix 4.2. Easements will not be required through public rights-of-way (i.e., county roads). Recordable release of rights-of-way shall be submitted to the Drain Commissioner prior to construction. The Drain Commissioner may require downstream drain construction and/or maintenance prior to plat approval.

2) AGREEMENTS

When the proposed project will alter drainage patterns or increase flooding on private property (other than that owned by the developer), an agreement between the owners may be required relieving the drainage district, or municipality if there is no drainage district, of any and all responsibility for damage that might occur. An acceptable "flooding" easement form is included in Appendix 4.3. The agreement must be submitted to the Drain Commissioner prior to construction, if required.

b. WIDTH

The following minimum right-of-way widths are required within the confines of the proposed development:

i. OPEN DRAINS

Open drains and water courses shall have a minimum right-of-way equal to the extreme top width of the channel, plus 30 feet. The easement shall be centered on the centerline of the open channel or water course.

ii. ENCLOSED DRAINS

Enclosed drains shall have a minimum right-of-way of 30 feet centered on the centerline of the enclosure. The Drain Commissioner may reduce this requirement to 20 feet if it has been demonstrated that adequate space is available for maintenance.

iii. SURFACE YARD DRAINS

Surface drainage swales and enclosed yard drains located between or within lots shall have a minimum right-of-way of 20 feet centered on the swale or pipe.

iv. STORM WATER FACILITIES

A minimum 15-foot-wide maintenance access route shall be provided to all storm water facilities. Access shall be provided to the forebay, control structures, and the outlet. Adequate access for routine sediment removal shall be provided.

c. UTILITIES

If any utilities are to be located within the drainage easement of the proposed subdivision, the proprietor's engineer shall present plans detailing such utilities to the Drain Commissioner for his approval as to location. Utility plans shall be presented at the same time as drainage plans so that all details of construction and location may be checked and properly oriented with each other.

d. EXISTING EASEMENTS

The Liber and page reference of all recorded easements shall be shown on the final plat. Drainage District Easements, Private Easements for Drainage Purposes, Drainage Easements, Drainage Easements to the Drain Commissioner or the Drainage District, or other variations of these recorded subdivisions are considered exclusive easements that may be utilized by the Drain Commissioner for the purposes of accessing, maintaining, and constructing open or enclosed drains.

G. SOIL EROSION CONTROL - TEMPORARY AND PERMANENT

1. All earth changes and utilities shall be designed, constructed, and maintained in such a manner as to minimize the extent and duration of earth disruption.
2. Sedimentation control facilities shall be designed to remove sediment from storm water before the storm water leaves the site of the earth change activity.
3. Vegetative stabilization or other soil erosion control measures shall be installed and maintained throughout the development process.
4. Earth changes shall be staged to keep the exposed areas of the soil as small as practicable. Critical areas exposed during construction shall be protected with temporary vegetation, mulching, filter fences, or other methods of stabilization. A schedule and staging plan shall be included with the soil erosion control plan.
5. If lakes, ponds, streams, or wetlands are located on or near the site, both temporary and permanent erosion control measures must be provided which intercept runoff and trap sediment before runoff reaches any water body.
6. Soil disturbance and removal of natural ground vegetation and tree roots within 50 feet of the ordinary high water mark of any lake or stream, or within 25 feet of regulated wetlands shall be prohibited unless approved by the Drain Commissioner. A lake or stream buffer area greater than 50 feet may be required by the Drain Commissioner if necessary, for soil erosion control purposes. Structures, roads, parking lots, storm water facilities, and similar site improvements shall not be located within the buffer area.
7. Storm water runoff control and soil erosion control measures shall be installed before grading, filling, or removal of vegetative cover is initiated.
8. Sediment basins, desilting basins, or silt traps are required as needed for all earth changes. Basins and traps shall be sized to contain sediment-laden runoff. A minimum of 250 cf/ac capacity shall be provided in the sediment basin.
9. Sediment basins shall be designed with an overflow spillway or other design features to minimize the potential for breaching during the 100-year storm event.

10. Filter fences and other soil erosion control facilities installed at the perimeter of a development site shall be installed to allow for onsite maintenance.

11. Temporary seeding with 0.5 lb/1,000 sq.ft. of oats, barley, or annual ryegrass shall be completed within 48 hours of an earth change.

12. Erosion control blankets shall be installed in accordance with manufacturer's recommendations in all disturbed areas where concentrated runoff may occur, including ditches, swales, and open channels. Erosion control blankets shall also be placed on all steep slopes in excess of 1 vertical to 2 horizontal.

13. Permanent erosion control measures for all slopes, channels, ditches, or any disturbed land area shall be completed within 5 calendar days after final grading or the earth change has been completed. All temporary soil erosion control measures shall be maintained throughout the duration of the earth change, including the later stages of development. Maintenance activities include, but are not limited to, removal of accumulated sediment, structural repairs, and reseeding or replacement of vegetative cover.

H. List of Tables:

**Table 1? Runoff Curve Numbers For Selected Agricultural, Suburban, and Urban Land Use.
(Antecedent Moisture Condition 2 and Ia = 0.2S)**

Grand Traverse County Drain Commissioner
Soil Erosion and Storm Water Design Criteria

Land Use Description		Hydrologic Soil Group			
		A	B	C	D
Cultivated land ¹ :	Without conservation treatment	72	81	88	91
	With conservation treatment	62	71	78	81
Pasture or range land:	Poor condition	68	79	86	89
	Good condition	39	61	74	80
Meadow:	Good condition	30	58	71	78
Wood or forest land:	Thin stand, poor cover, no mulch	45	66	77	83
	Good cover ²	25	55	70	77
Open spaces, lawns, parks, golf courses, cemeteries, etc.					
Good condition:	Grass cover on 75% or more of the area	39	61	74	80
Fair condition:	Grass cover on 50% to 75% of the area	49	69	79	84
Commercial and business areas (85% impervious)		89	92	94	95
Industrial districts (72% impervious)		81	88	91	93
Residential: ³ (house + drive + lawn)					
<u>Average lot size</u>	<u>Average % Impervious⁴</u>				
1/8 acre or less	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
2 acre	25	54	70	80	85
1 acre and larger	20	51	68	79	84
Paved parking lots, roofs, driveways, etc. ⁵		98	98	98	98
Streets and roads:					
	Paved with curbs and storm sewers ⁵	98	98	98	98
	Gravel	76	85	89	91
	Dirt	72	82	87	89

¹ For a more detailed description of agricultural land use curve numbers, refer to *National Engineering Handbook*, Section 4, Hydrology, Chapter 9, Aug. 1972.

² Good cover is protected from grazing and litter and brush cover soil.

³ Curve numbers are computed assuming the runoff from the house and driveway.

⁴ The remaining pervious areas (lawn) are considered to be in good pasture condition for these curve numbers.

⁵ In some warmer climates of the country, a curve number of 95 may be used.

Source: Soil Conservation Service, 1986.

Table 2 ? Runoff CoefficientsGrand Traverse County Drain Commissioner
Soil Erosion and Storm Water Design Criteria

Type of Development	Runoff Coefficients	
	Imperviousness Low	High
Business Downtown Neighborhood	0.70 to 0.95	0.50 to 0.70
Residential Single family	0.30 to 0.50	
Multi-units (detached)	0.40 to 0.60	
Multi-units (attached)	0.60 to 0.75	
Residential (suburban)	0.25 to 0.40	
Apartment	0.50 to 0.70	
Industrial Light	0.50 to 0.80	
Heavy	0.60 to 0.90	
Park, Cemeteries	0.10 to 0.25	
Playgrounds	0.20 to 0.35	
Railroad Yard	0.20 to 0.35	
Unimproved	0.10 to 0.30	
Character of Surface		
Pavement Asphaltic and Concrete	0.98	
Brick	0.85	
Roofs	0.95	
Lawns, Sandy Soil Flat 2%	0.10	
Average 2% to 7%	0.15	
Steep 7%	0.20	
Lawns, Heavy Soil Flat 2%	0.17	
Average 2% to 7%	0.22	
Steep 7%	0.35	

Source: *Design and Construction of Sanitary and Storm Sewers*, American Society of Civil Engineers and the Water Pollution Control Federation, 1969.

Table 3 ? Manning’s Roughness Coefficients (“n”)Grand Traverse County Drain Commissioner
Soil Erosion and Storm Water Design Criteria

Conduit	Manning’s Coefficients
Closed Conduits	
Asbestos-Cement Pipe	0.011 to 0.015
Brick	0.013 to 0.017
Cast Iron Pipe Cement-lined and seal-coated	0.011 to 0.015
Concrete (Monolithic) Smooth forms	0.012 to 0.014
Rough forms	0.015 to 0.017
Concrete Pipe	0.011 to 0.015
Corrugated-Metal Pipe (½- x 2½-inch corrgrtn.) Plain	0.022 to 0.026
Paved invert	0.018 to 0.022
Spun asphalt-lined	0.011 to 0.015
Plastic Pipe (Smooth)	0.011 to 0.015
Vitrified Clay Pipes	0.011 to 0.015
Liner channels	0.013 to 0.017
Open Channels	
Lined Channels Asphalt	0.013 to 0.017
Brick	0.012 to 0.018
Concrete	0.011 to 0.020
Rubble or riprap	0.020 to 0.035
Vegetative	0.030 to 0.040
Excavated or Dredged Earth, straight and uniform	0.020 to 0.030
Earth, winding, fairly uniform	0.025 to 0.040
Rock	0.030 to 0.045
Unmaintained	0.050 to 0.140
Natural Channels (minor streams, top width at flood stage <100 feet) Fairly regular section	0.030 to 0.070
Irregular section with pools	0.040 to 0.100

Source: *Design and Construction of Sanitary and Storm Sewers*, American Society of Civil Engineers and the Water Pollution Control Federation, 1969.

**Table 4 ? Minimum Slopes For Storm Sewers
(Manning's "n" = 0.013)**

Grand Traverse County Drain Commissioner
Soil Erosion and Storm Water Design Criteria

Pipe Size	Minimum Grade (%)
12"	0.32
15"	0.24
18"	0.20
21"	0.16
24"	0.14
27"	0.12
30"	0.10
36"	0.08
42"	0.06
48"	0.06
54"	0.04
60"	0.04
66"	0.04

Table 5 ? Minimum Required Detention Basin Flood Control Volume

(For Standard Release Rate of 0.13 cfs/ac)

Grand Traverse County Drain Commissioner
Soil Erosion and Storm Water Design Criteria

Rational Formula Runoff “C”	Minimum Required Storage Volume* (cf/ac)
0.10	375
0.15	770
0.20	1,170
0.25	1,580
0.30	1,990
0.35	2,420
0.40	2,930
0.45	3,540
0.50	4,190
0.55	4,850
0.60	5,500
0.65	6,150
0.70	6,810
0.75	7,460
0.80	8,120
0.85	8,770
0.90	9,420
0.95	10,080
1.00	10,730

*Includes 1.25 safety factor.

STORM WATER POLLUTANT RISKS

The following land uses and activities present a significant risk of exposing storm water to oil, grease, toxic chemicals, or other polluting materials:

- ? Vehicle salvage yards and recycling facilities #
- ? Vehicle fueling, service, and maintenance facilities
- ? Vehicle and equipment cleaning facilities #
- ? Fleet storage areas (bus, truck, etc.) #
- ? Industrial sites
- ? Marinas (service and maintenance) #
- ? Facilities that generate or store hazardous waste materials #
- ? Commercial container nursery
- ? Other land uses and activities as designated by an appropriate review authority

indicates that the land use or activity is required to prepare a storm water pollution prevention plan under the EPA NPDES Storm Water Program.

MAINTENANCE PLAN AND BUDGET

Sample Maintenance Plan and Budge

“XYZ” Leasing Company

Storm Water Management System Maintenance Plan

1. Responsibility For Maintenance
 - a. During construction, it is the developer’s responsibility to perform the maintenance.
 - b. Following construction, it will be the responsibility of “XYZ” Company to perform the maintenance.
 - c. The Master Deed will specify that routine maintenance of the storm water facilities must be completed within ___ days of receipt of written notification that action is required, unless other acceptable arrangements are made with the (Township of _____), (Grand Traverse County Drain Commissioner) or successors. Emergency maintenance (i.e., when there is endangerment to public health, safety, or welfare) shall be performed immediately upon receipt of written notice. Should “XYZ” Company fail to act within these time frames, the (Township) (County) or successors may perform the needed maintenance and assess the costs against “XYZ” Company.
2. Source Of Financing

”XYZ” Company is required to pay for all maintenance activities on a continuing basis.
3. Maintenance Tasks And Schedule
 - a. See the charts on the next two pages: The first describes maintenance tasks during construction to be performed by the developer, the second describes maintenance tasks by “XYZ” Company.
 - b. Immediately following construction, the developer will have the storm water management system inspected by an engineer to verify grades of the detention and filtration areas and make recommendations for any necessary sediment removal.

**MAINTENANCE TASKS AND SCHEDULE DURING CONSTRUCTION
COMPONENTS**

Tasks	Storm Sewer System	Catch Basin Sumps	Catch Basin Inlet Casings	Channels	Outflow Control Structure	Riprap	Filtration Basins	Storm Detention Areas	Wetlands	Emergency Overflow	Emergency Over flow	Schedule
Inspect for sedimentation accumulation				X	X		X	X				Weekly
Removal of sediment accumulation				X	X		X	X				As needed & prior to turnover
Inspect for floatables and debris				X	X		X	X				Quarterly
Cleaning of floatables and debris				X	X		X	X				Quarterly & at turnover
Inspection for erosion				X	X		X	X				Weekly
Re-establish permanent vegetation on eroded slopes				X			X	X				As needed & prior to turnover
Replacement of stone				X	X							As needed
Mowing				X			X	X				0-2 times per year

MAINTENANCE TASKS AND SCHEDULE DURING CONSTRUCTION COMPONENTS

Tasks	Storm Sewer System	Catch Basin Sumps	Catch Basin Inlet Casings	Channels	Outflow Control Structure	Riprap	Filtration Basins	Storm Detention Areas	Wetlands	Emergency Overflow	Emergency Over flow	Schedule
Inspect structural element during wet weather and compare to as-built plans (by professional engineer reporting to the developer)				X	X		X	X				Annually and at turnover
Make adjustments or replacements as determined by pre-turnover inspection				X	X		X	X				As needed

PERMANENT MAINTENANCE TASKS AND SCHEDULE
Components

Tasks	Catch Basin Inlet Castings	Ditches & Swales	Outflow Control Structures	Riprap	Filtration Basins	Storm Detention Areas	Wetlands	Emergency Overflow	Schedule
Inspect for sediment accumulation		X	X		X	X			Annually
Removal sediment accumulation		X	X		X	X			Every 2 years as needed
Inspect for floatables and debris	X	X	X		X	X			Annually
Cleaning of floatables and debris	X	X	X		X	X			Annually
Inspection for erosion		X	X		X	X			Annually
Re-establish permanent vegetation on eroded slopes		X			X	X			As needed
Replacement of stone			X						Every 3-5 years as needed
Clean streets									Semi- Annually
Mowing		X		X	X				0-2 times per year
Inspect storm water system components during wet weather and compare to	X	X	X	X	X	X	X	X	Annually

PERMANENT MAINTENANCE TASKS AND SCHEDULE
 Components

Tasks	Catch Basin Inlet Castings	Ditches & Swales	Outflow Control Structures	Riprap	Filtration Basins	Storm Detention Areas	Wetlands	Emergency Overflow	Schedule
as-built plans (by professional engineer reporting to XYZ Co.)									

Grand Traverse County Drain Commissioner
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Appendix 2

Tasks	Catch Basin Inlet Castings	Ditches & Swales	Outflow Control Structures	Riprap	Filtration Basins	Storm Detention Areas	Wetlands	Emergency Overflow	Schedule
Make adjustments or replacements as determined by annual wet weather inspection	X	X	X	X	X	X	X	X	As Needed
Keep records of all inspection and maintenance activities and report to XYZ Co.									Annually
Keep records of all costs for inspection, maintenance, and repairs. Report to XYZ, Co.									Annually

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Appendix 2

I. Maintenance Plan And Budget

Annual inspection for sediment accumulation	\$100.00
Removal of sediment accumulation every 2 years as needed	\$500.00
Inspect for floatables and debris annually and after major storms	\$100.00
Removal of floatables and debris annually and after major storms	\$150.00
Inspect system for erosion annually and after major storms	\$100.00
Re-establish permanent vegetation on eroded slopes as needed	\$350.00
Replacement of stone	\$100.00
Mowing 0-2 times per year	\$400.00
Inspect structural elements during wet weather and compare to as-built plans every 2 years	\$150.00
Make structural adjustments or replacements as determined by inspection as needed	\$400.00
Have professional engineer carry out emergency inspections upon identification of severe problems	\$200.00
A. Total Annual Budget	\$2,550.00

Note: Maintenance plans and budgets vary widely due to the size and unique characteristics of each storm after management system proposed. Appendix 2 is intended for use as a starting point in the development of an appropriate maintenance plan specific to the size and components of each system.

CHECKLIST FOR PRELIMINARY PLATS AND DEVELOPMENTS

Development Name:	Date:
Location:	Reviewed By:
Developer/Owner:	
Developer's Engineer:	
Contact Person:	Telephone:
	Fax:
Reviewing Agency:	
Contact Person:	Telephone:
	Fax:

General	Provided Satisfactory	Comments
1. Development name/subdivision number.	_____	_____
2. Description of location (including section and fractional portion thereof, Town and Range, township, city or village, and county, Michigan)	_____	_____
3. Location map.	_____	_____
4. Name, address, and telephone number of proprietor.	_____	_____
5. Name, address, and telephone number of engineer or surveyor.	_____	_____
6. North arrow and scale.	_____	_____
Legend		
7. Development boundary.	_____	_____
8. Identification of all adjoining parcels (for sub-divisions show lot number, subdivision name, liber, and page numbers; for metes and bounds parcels show permanent parcel number).	_____	_____
9. Overall property description metes and bounds (with ties to government corner).	_____	_____
10. Lot dimensions (scaled or computed).	_____	_____
11. Lot numbers.	_____	_____
12. Building setback lines.	_____	_____

		<u>Provided</u>	
		<u>Satisfactory</u>	<u>Comments</u>
Topographical			
13.	Existing buildings (label those under construction with address).	_____	_____
14.	Existing roads (with name, ROW width, and type of surface).	_____	_____
15.	Proposed roads (with name, ROW width, and type of surface).	_____	_____
16.	Existing contours (no greater than a 2' interval inside the plat; no greater than a 10' interval outside the plat).	_____	_____
17.	Proposed contours.	_____	_____
18.	Typical lot grading plan (detail, statement, or drainage arrows).	_____	_____
19.	Available soils data, soil boring logs, and locations (include ground elevation and water table information).	_____	_____
Drainage			
20.	Offsite watershed areas (with boundaries, acreage and existing drainage courses to be shown on location map).	_____	_____
21.	All existing drainage courses and structures (with proper labeling as to type, size, and invert elevations).	_____	_____
22.	County drains (permission required to connect).	_____	_____
23.	Proposed drainage systems (clearly identify all open and enclosed portions).	_____	_____
24.	100-Year floodplain contour (existing and proposed).	_____	_____
25.	Wetlands (existing and proposed).	_____	_____
26.	Lake, stream, and wetland buffers.	_____	_____
27.	Proposed storm water facilities (detention/infiltration).	_____	_____
Storm Water Management System Design			
28.	Calculation of runoff.	_____	_____

Grand Traverse County Drain Commissioner
Storm Water Control Standards
Appendix 3.1

- | | | | |
|-----|-------------------------|-------|-------|
| 29. | Effective Layout. | _____ | _____ |
| 30. | Inlet capacity/spacing. | _____ | _____ |
| 31. | Adequate size/slopes. | _____ | _____ |

	<u>Provided</u>		
	<u>Satisfactory</u>	<u>Comments</u>	

- | | | | |
|-----|--|-------|-------|
| 32. | Pipe material. | _____ | _____ |
| 33. | Submergence. | _____ | _____ |
| 34. | Outlet erosion control. | _____ | _____ |
| 35. | High water level in relation to low top-of-casting elevation. | _____ | _____ |
| 36. | Storm water facilities appropriately selected. | _____ | _____ |
| 37. | Minimum basement floor elevations/
openings in structures adjacent to storm water facilities. | _____ | _____ |
| 38. | Ensure proper siting. | _____ | _____ |
| 39. | Required volume/release rate. | _____ | _____ |
| 40. | Pre-treatment. | _____ | _____ |
| 41. | Overflow spillway. | _____ | _____ |
| 42. | Soil erosion controls. | _____ | _____ |
| 43. | Hydraulic calculations for transfer or outlet pipe. | _____ | _____ |
| 44. | Geometry. | _____ | _____ |
| 45. | Side slopes. | _____ | _____ |

Easements

- | | | | |
|-----|--|-------|-------|
| 46. | Utility easements (with dimensions and type of utility). | _____ | _____ |
| 47. | Existing and proposed drainage easements. | _____ | _____ |

Maintenance

Grand Traverse County Drain Commissioner
Storm Water Control Standards
Appendix 3.1

48. Identification of agency proposed to assume
ownership of the storm water management system.

Fee

49. Development fee.

COMMENTS:

CHECKLIST FOR FINAL PLATS

SUBDIVISION NAME: _____
DEVELOPER: _____

LOCATION: _____ REVIEWED
BY: _____

Initial Reviews

Dates Completed

1. Preliminary plat (including site plan, grading & drainage plan, and engineering calculations) and review fees:

Submitted

Approved

2. Construction drawings:

Submitted

Approved

Prior to Construction

3. Evidence of contractor's insurance coverage.

4. Construction contract information.

5. Soil erosion and sedimentation control permit (Part 91 Act 451, P.A. 1994).

6. Inspection deposit paid.

7. Recordable rights-of-way for downstream properties, or "flooding" easement agreement submitted.

8. Certification of adequacy of existing receiving drains.

- or -

Approval has been given for any improvements required to existing county drains, and permit fees are paid.

Prior to Final Plat Approval

Dates Completed

9. Certification that county drains and storm water system have been improved in accordance with approved construction drawings (same as item no. 15).

or -

The proprietor has entered into an agreement with the Drain Commissioner and has posted surety for faithful performance of the agreement.

10. Recordable release of rights-of-way within the plat provided in the name of the drainage district.

11. A drainage district has been established (adjusted), legal descriptions and maintenance agreement provided, and maintenance deposit paid.

- or -

A letter of commitment from the local municipality, governmental agency, or association has been executed.

12. Maintenance plan submitted.

13. Copies of restrictive covenants.

14. Guarantee for repairs (repair bond) of any defects in the work for a period of one year.

Upon Completion of Construction

15. Construction record drawings.

16. Certification that county drains and storm water system have been improved in accordance with approved construction drawings (same as item no. 9).

17. Release of surety (posted per item no. 9).

1-Year After Final Completion of Construction

18. Return repair bond.

**AGREEMENT FOR THE ESTABLISHMENT OF A COUNTY DRAIN
AND COUNTY DRAINAGE DISTRICT
PURSUANT TO SECTION 433 OF ACT NO. 40 OF
THE PUBLIC ACTS OF 1956, AS AMENDED**

THIS AGREEMENT, made and entered into this _____ day of _____, 20____, by and between KEVIN P. MCELYEA, GRAND TRAVERSE COUNTY DRAIN COMMISSIONER, hereinafter referred to as "Drain Commissioner" on behalf of the proposed _____ Drain Drainage District; and _____, as owner(s) of land described in Exhibit A attached hereto, hereinafter referred to as "Landowner".

WITNESSETH:

WHEREAS, Section 433 of Act No. 40 of the Public Acts of 1956, as amended, authorizes the Drain Commissioner to enter into an Agreement with the Landowner and developer, if any, to establish a Drain which was constructed by the Landowner or developer to service an area of its own land as a County Drain; and,

WHEREAS, Landowner, pursuant to Section 433 of Act No. 40 of 1956, as amended, wishes to provide drainage service to its own lands as has requested same to be established and dedicated as a County Drain under the jurisdiction of the Grand Traverse County Drain Commissioner; and,

WHEREAS, Landowner has been advised and understands and agrees to assume the total cost of the construction of the Drain to include engineering, inspection, easement acquisition, legal, and administrative expenses and costs attendant to this Agreement; and,

WHEREAS, Landowner further understands that the Drain constructed, or to be constructed, pursuant to this Agreement, when finally accepted by the Drain Commissioner, will be known as the _____ Drain and that the land to be known as and constitutes as the _____ Drain Drainage District and will be subject to assessments, for costs of future operation, inspection, maintenance, and improvement; and,

WHEREAS, Landowner has agreed to assume and pay all costs as set forth herein; and

WHEREAS, Landowner has obtained, at its own expense, a certificate from a registered professional engineer satisfactory to the Drain Commissioner to the effect that the Drain has sufficient capacity to provide adequate drainage service without detriment to or diminution of the drainage service which the outlet currently provides. A copy of said certificate being attached hereto as Exhibit B.

NOW, THEREFORE, in consideration of the premises and covenants of each, the parties agree as follows:

1. The Landowner agrees to pay the costs of construction of said Drain and drainage facilities, including the acquisition of the necessary rights-of-way or easements, engineering, surveying, inspection, legal, and administration costs. In addition, the Landowner has deposited with the Drain Commissioner an amount of money equivalent to five (5%) percent of the costs of construction of the Drain, not to exceed Two Thousand Five Hundred and No/100 (\$2,500.00) Dollars, which monies are to be deposited in a special drain fund to be used for future maintenance of the Drain, hereinafter referred to as " _____ Drain Maintenance Fund".

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2. Landowner shall secure all necessary permits or authorizations as may be required by local, state, or federal law and provide copies to the Drain Commissioner. The Drain Commissioner shall be provided copies of all correspondence and reports involving any governmental agency with respect to the Drain.
3. The _____ Drain Maintenance Fund is agreed and understood as being for the sole benefit of the _____ Drain and use thereof may be made by the _____ Drain Drainage District at large, or part thereof, and that such payment shall not relieve the subject property from any future assessments levied pursuant to the Drain Code of 1956, as amended.
4. Landowner agrees to indemnify and hold harmless the Drain Commissioner for any and all claims, damages, lawsuits, costs, and expenses arising out of or incurred as a result of the Drain Commissioner assuming responsibility for the drain under federal, state, and/or local environmental laws and standards and specification and the administrative and judicial interpretation thereof.
5. Modification, amendments, or waivers of any provision of the agreement may be made only by the written mutual consent of the parties.

This Agreement shall be come effective upon its execution by the Landowner and the Drain Commissioner and shall be binding upon the successors and assigns of each party.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed this _____ day of _____, 20__.

WITNESSES:

sign _____
type/print

sign _____
type/print

sign _____
type/print

sign _____
type/print

LANDOWNERS:

sign _____
type/print

sign _____
type/print

DEVELOPER:

sign _____
type/print

STATE OF MICHIGAN)
) ss.
COUNTY OF _____)

Grand Traverse County Drain Commissioner
Storm Water Control Standards
Appendix 4.1

The foregoing instrument was acknowledged before me this _____ day of _____,
20____,
By _____ and _____.

_____, Notary
_____, Michigan
My commission expires:

WITNESSES:

DRAIN DRAINAGE DISTRICT:

sign

type/print

sign

Kevin P. McElyea
Grand Traverse County Drain Commissioner.

sign

type/print

STATE OF MICHIGAN)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____,
20____,
by Kevin P. McElyea, on behalf of the Drain Drainage District.

Notary Public _____ County, MI
My Commission expires _____

Prepared By _____

**APPLICATION FOR LAYING OUT AND DESIGNATING
A COUNTY DRAINAGE DISTRICT UNDER
SECTION 425 OF DRAIN CODE OF 1956
STATE OF MICHIGAN C.L. 70 280.433 (5) & (7)
AND PETITION TO LOCATE, ESTABLISH, AND CONSTRUCT A DRAIN**

TO THE COUNTY DRAIN COMMISSIONER,
COUNTY OF GRAND TRAVERSE, STATE OF MICHIGAN:

Your petitioner respectfully shows that he is the only freeholder and owner in the City or Township of _____, in the County of Grand Traverse, State of Michigan, of the lands included in this application and that the proposed Drain shall be entirely located within the City or Township of _____, that all lands to be drained by said proposed Drain are located in said City or Township of _____.

Your petitioner further respectfully shows that the person signing this petition constitutes the only freeholder and owner of land included in the application in the City or Township of _____ which said proposed Drain and the lands to be drained thereby are located and that as the owner of the land he/she is the only one liable to an assessment for the construction of the proposed Drain.

Your petitioner further makes application and hereby respectfully asks you to lay out and designate a Drainage District in the City or Township of _____, County of Grand Traverse, State of Michigan, under the provisions of Act 40 Public Acts of Michigan, 1956, as amended. The location and route of said proposed Drain is to be set forth on the attached riders.

Your petitioner agrees to pay the cost incurred by the Drain Commissioner in establishing this Drainage District.

Signed by:

Type/print

STATE OF MICHIGAN)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 20____,
By _____.

, Notary
County, Michigan
My commission

expires: _____

FLOODING EASEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 20____, for and in consideration of \$_____ and prospective benefits to be derived by reason of the construction, operating, improving, and maintaining of a certain Drain under the supervision of the Grand Traverse County Drain Commissioner as hereinafter described, _____, (the "Landowners") do hereby convey and release to Kevin P. McElyea, Grand Traverse County Drain Commissioner, on behalf of the Grand Traverse County Drainage District, (the "Drainage District") a public body corporate, of 2650 LaFranier Road, Traverse City, MI 49686, an Easement for the _____ Drain situated in the County and State aforesaid. Landowners do hereby convey and release to Drainage District a Drainage Easement with an elevation of approximately _____ feet above mean sea level, USGS datum, for drainage purposes and flood control.

WHEREAS, Landowners are the owners of lands in the aforesaid County described as:

WHEREAS, the Drainage District wishes to obtain an easement from Landowners in the event that there is an increase in the velocity or quantity of water flowing onto Landowners' property as a result of the construction, maintenance, improvement, or operation of the Drain.

NOW THEREFORE, the parties agree as follows:

1. Landowners hereby grant, convey, and release unto Drainage District as Easement over and upon their lands for the purpose of allowing for increases in velocity or quantity of water flow onto Landowners' property.
2. Said Easement is described separately as follows:
3. Landowners, their heirs, executors, administrators, successors, and assigns reserve their rights and privileges to the area encompassed by the Easement as may be used and enjoyed to include the planting and harvesting of agricultural crops so long as the use(s) do not interfere with or abridge the rights granted to and Easement hereby acquired by the Drainage District;
4. Landowners, their heirs, executors, administrators, successors, and assigns hold Drainage District harmless to all claims to damages in any way arising from or incident to the drainage and any increased flow onto said premises by reason of the Drain and maintenance or improvement thereof. During the time of maintenance and improvement of said Drain, or at any time in the future, such release for damages releases the Drainage District, its successors, and assigns from any damages whatsoever arising out of the flooding of said lands within the Easement right-of-way to any depth at any time in the future by reason of the construction of such drainage improvements and the flooding caused by such construction, or their use during the time of construction or at any time in the future;
5. This Easement may be terminated in whole or in part by written agreement of all of the parties.

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6. This conveyance shall be deemed sufficient to vest in Drainage District and Easement in said lands for the uses and purposes of any increased flow onto Landowners' property.

In witness whereof, the parties hereto have executed this Agreement the day and year first above written.

WITNESSES:

LANDOWNERS:

sign

type/print:

sign

type/print:

sign

type/print:

sign

type/print:

WITNESSES:

DRAIN DRAINAGE DISTRICT

sign

type/print:

sign

Kevin P. McElyea
Grand Traverse County Drain Commissioner.

sign

type/print:

STATE OF MICHIGAN)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of _____, 20____,
By _____.

_____, Notary
_____, County, Michigan
My commission expires: _____

STATE OF MICHIGAN)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of _____, 20____,
By _____.

Grand Traverse County Drain Commissioner
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,Notary

County, Michigan
My commission expires:_____

STATE OF MICHIGAN)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____,
20__,
by Kevin P. McElyea, Grand Traverse County Drain Commissioner, on behalf of the Drain Drainage
District.

,Notary

County, Michigan
My commission expires:_____

When Recorded Return To:
Kevin P. McElyea
Grand Traverse County Drain Commissioner
2650 LaFranier Road
Traverse City, MI 49686

DETENTION BASIN EASEMENT

NAME OF PLAT

THIS INDENTURE, entered into this ____ day of _____, 20__ by DEVELOPER, a Michigan Corporation, (hereafter referred to as the "Grantor"), and the NAME OF PLAT Drainage District, a public body corporate, 2650 LaFranier Road, Traverse City, MI 49686 (hereafter referred to as the "District")

WITNESSETH:

WHEREAS, the Grantor is developing certain property located in the CITY or TWP, County of Grand Traverse, to be known as NAME OF PLAT, and

WHEREAS, the Grantor, in order to develop said property in the manner it desires, finds it necessary to construct a storm water detention basin for the benefit of the property and to give the District certain Easement rights therein.

NOW THEREFORE, in consideration of the respective covenants contained herein, the parties agree as follows:

1. In consideration of less than One Hundred Dollars (\$100.00), the receipt of which is hereby acknowledged, the Grantor does hereby grant, warrant, and convey to the District, an Easement for storm water detention over, across, and within the following described land in the CITY or TWP, County of Grand Traverse, State of Michigan, described as follows:

LEGAL DESCRIPTION OF STORM WATER DETENTION EASEMENT

2. The Grantor agrees for itself, its heirs, administrators, successors, and assigns, that it shall be the property owner's responsibility to maintain the Easement area grounds including the removal of debris in such a manner that the proper functioning of the detention basin is not interfered with, and that the property owner will not make any changes in size, shape, capacity, rate of flow, rate of outflow, or changes in any other characteristics of the detention pond without the prior written approval of the District, which approval can only be given by the way of amendment to this instrument, properly recorded.
3. The Drainage District shall be responsible for the maintenance and control of the hydraulic functioning of the detention basin pursuant to MPA 40, DRAIN CODE OF 1956, as amended, or successor statute. Cost for maintenance by the NAME OF PLAT DISTRICT may be charged against the property owners within the plat pursuant to MPA 40, DRAIN CODE OF 1956, as amended, or its successor statute. The property owner on whose parcel the Easement rests is responsible for the turf maintenance.
4. The Grantor, its heirs, administrators, successors, and assigns, shall save and hold the District, its officers, employees, and agents harmless and indemnify the District against any claim or suit which seeks damages for an injury, death, or damage resulting from the construction, operation, and existence of the detention pond.
5. The District agrees to maintain the detention basin outlet in accordance with the provisions under MPA 40, Drain Code of 1956, as amended. It is further understood that a provision of these statutes allow the District to specially assess the property owners in the plat, if it so chooses.
6. In the event the basin grounds are not properly maintained, or changes are made to the Easement area pursuant to Paragraph 2 above, which impair the function of the detention basin or Drainage

CERTIFICATION FORM

[Development Name]
[Location]
Grand Traverse County, Michigan

“I, _____, a Licensed Professional Engineer in the State of _____,
do hereby certify that:

1. The lands to be developed naturally drain into the area served by the existing Drain, or that the existing Drain is the only reasonably available outlet for the drainage from the lands to be developed.
2. There is adequate capacity in the existing Drain to service lands to be developed without detriment or diminution of drainage service provided or to be provided in the foreseeable future to the area in the existing district.

Sign _____
Type/print

Date _____

Engineer's Seal

IRREVOCABLE COMMERCIAL LETTER OF CREDIT NO. -----

Grand Traverse County
Drain Commissioner's Office
2650 LaFranier Road
Traverse City, Michigan 49686

Dear Soil Erosion Control Officer:

We hereby establish our Irrevocable Letter of Credit No. _____ in your favor for account of (name and address of proprietor) up to an aggregate amount of (amount of letter of credit in figures and words).

We are advised that (proprietor's name) is to install structures for storm water management and for soil erosion control or provide seeding and mulching of the proposed (project) in accordance with plans and specifications approved by you or as deemed necessary by the Drain Commissioner or his authorized representative to fulfill the requirements promulgated by the Grand Traverse County Soil Erosion, Sedimentation and Storm Water Runoff Control Ordinance and Design Guidelines.

In the event (proprietor's name) shall fail to install, in the allotted time, satisfactorily, the above named erosion controls, you may draw a draft at sight on (name of bank) for amounts not exceeding in aggregate the aforesaid sum of (amount of letter of credit) when accompanied by:

"Your signed statement certifying that (proprietor) failed to install the erosion control practices and storm water management facilities in the time and quality as planned."

Upon receipt of your resolution authorizing a release in the amount you will accept under this credit, we shall issue our formal amendment reducing our liability to an amount equal to the original amount of this credit, less any amounts released by you resolution and drawings hereunder.

All drafts drawn under this credit must be marked "drawn under Letter of Credit No. _____, dated _____ of (bank)." Any amendments to the terms of this credit must be in writing over authorized signatures of this bank.

This credit is subject to the Uniform Customs and Practice of Documentary Credits (1993 revision), International Chamber of Commerce, Publication 500.

It is a condition of this Irrevocable Letter of Credit that it shall be automatically extended without amendment for additional periods of one year from the present or each future expiration date unless not less than 30 days prior to such expiration date we notify you in writing, by courier, at the above address, that we elect not to extend this Letter of Credit, provided, that under no circumstances shall this Irrevocable Letter of Credit be automatically extended without amendment for any period extending beyond the date that is eight (8) years after Issue Date listed above.

We agree with you that all drafts drawn under and in strict compliance with the terms of this credit will be duly honored by us upon presentation of your statement, as specified, at this office on or before our close of business on _____ or any automatically extended expiry date.

Very truly yours,

Authorized signature and Title
County Representative accepting
terms of Commercial Letter of Institute
Credit

Authorized Signature and Title
Representative of Financial

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REPAIR BOND

KNOWN ALL MEN BY THESE PRESENTS, that we, the undersigned,
_____, as Principle, and _____, as Surety, are held and firmly bound
onto the Grand Traverse County Drain Commissioner, Owner, in the sum of
_____dollars (\$_____) to be paid to the Owner for which payment well and
truly to be made we jointly and severally bind ourselves, our heirs, our executors, administrators, and
assigns, firmly by these presents.

Sealed with our seals and dated this _____day of _____, 20____.

WHEREAS, the above named Principle has entered into a certain written contract with the Grand
Traverse County Drain Commissioner dated _____, 20 ____, wherein the Principle agreed as
follows:

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH that by and under said
Contract, the above named Principle has agreed with the Owner, for a period of one (1) year from the date
of payment of the final estimate, to keep in good order and repair any defect in all work done under said
Contract, either by the Principle or his subcontractors, or his suppliers, that may develop during said
period due to improper materials, defective equipment, workmanship or arrangements; any other work
affected in making good such imperfections, shall also be made good, all without expense to the Owner,
excepting only such part or parts of said work as may have been disturbed without the consent or approval
of the Principle after final acceptance of the work, and that whenever directed so to do by the Owner, by
notice served in writing, either personally or by mail, on the Principle, legal representative, successor, or
on the Surety, he will at once make such repairs as directed by the Owner; and in the case of failure to do
so within one (1) week from the date of service of such notice, then the Owner shall have the right to
purchase such materials and employ such labor and equipment as may be necessary for the purpose and to
undertake to do and make such repairs, and charge the expense thereof to and receive same from said
Principle or Surety. If any repair is necessary to be made at once to protect life and property, then and in
that case, the Owner may take immediate steps to repair or barricade such defects without notice to the
Contractor. In such accounting the Owner shall not be held to obtain the lowest figure for doing of the
work or any part thereof, but all sums actually paid therefore shall be charged to the Principle or Surety.
In this connection, the judgment of the Owner is final and conclusive. If the said Principle, for a period of
one (1) year from the date of the final estimate payment, shall keep such work so constructed under the
contract in good order and repair, excepting only such part or parts of such work as may have been
disturbed without the consent or approval of said Principle after the final acceptance of the same, and
shall, whenever notice is given as herein specified, at once proceed to make repair as is said notice
directed or shall reimburse the Owner for any expense incurred by making such repairs should the
Principle or Surety fail to do as hereinbefore specified, and shall fully indemnify, defend and save
harmless the said Owner from all suits and actions for damages of every name and description brought or
claimed against it for or on account of any party or parties, by or from any of the acts or omissions or
through the negligence of said Principle, servants, or employees, in the prosecution of the work included
in the said Contract, and from any and all claims arising under the Workmen's Compensation Act, so-

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called, of the State of Michigan, then the above obligation shall be void, otherwise to remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed by their respective authorized officers this ____ day of _____, 20__ .

Signed, Sealed, and Delivered
in the presence of:

_____	_____ (L.S.)
_____	_____ (L.S.)
_____	_____ (L.S.)

**PERMIT AND REVIEW FEE SCHEDULE
GRAND TRAVERSE COUNTY DRAIN COMMISSIONER'S OFFICE**

RESIDENTIAL GRADING PERMITS

Site Evaluation	66.00
Beach Sand & Deck/Stairway Placement & Minor Permits	40.00
Beach Stabilization (Seawalls, Rip Rap, etc.)	66.00
Disturbance of 1 Acre or Less.....	73.00
Each Additional Acre (or portion of an acre).....	46.00
Residential Work Requiring an Engineered Site Plan.....	106.00

COMMERCIAL GRADING PERMITS

Site Evaluation.....	99.00
Beach Sand & Deck/Stairway Placement.....	40.00
Beach Stabilization (Seawalls, Rip Rap, etc.)	66.00
Minor Permits (No Engineering Required).....	73.00
Disturbance of 1 Acre or Less.....	178.00
Each Additional Acre (or portion of an acre).....	46.00
Preliminary Reviews (PUDs, Site Condos, Commercial, etc.).....	140.00

Commercial projects require sealed engineered site plans with runoff calculations, a signed letter of acknowledgment and an acceptable performance guarantee as determined by the Drain Commissioner. If the Drain Commissioner feels that it is necessary to have a professional consultant (engineer and/or attorney) review the plans submitted to the County, all review costs will be paid for by the developer.

UTILITIES

Underground Pipelines & Underground Cables:

Up to 1/2 Mile	178.00
Each Additional 1/2 Mile (to nearest 1/2 Mile).....	132.00

PLAT REVIEW FEES

Preliminary Plat.....	248.00
Final Plat	110.00

COMMENCEMENT OF WORK PRIOR TO RECEIVING THE APPROVED PERMIT is a municipal or state civil infraction that may subject you to a fine of not more than \$2,500.00. Knowingly violating the Soil Erosion & Sedimentation Control Act, 2000 P.A. No. 504 or knowingly making a false statement on the permit application or a soil erosion or sedimentation control plan may subject you to a civil fine of not more than \$10,000.00 for each day of the violation. In addition, knowingly violating section 9112 or 9117, relating to a determination that the work undertaken does not conform to a permit or plan or adversely affects adjacent land or waters, may be responsible for a civil fine of not less than \$2,500.00 nor more than \$25,000.00 for each day of the violation.

REFUND POLICY: The site evaluation is a non-refundable fee. Permit fees for sites that are determined, by the inspector, not to need a permit are 100% refundable. If a request is received, prior to the first site inspection, to cancel the permit, the permit fees are 100% refundable. If a request is received, after the first site inspection, to cancel the permit, the permit fees are 50% refundable. Plat fees, preliminary review fees and land split fees are non-refundable.

If there is any doubt as to whether or not a permit is required, please contact (231) 995-6042.

All recipients of Earth Change Permits shall be provided with an all weather card to be conspicuously posted where it can be seen from the highway.

**SECTIONAL MEAN FREQUENCY DISTRIBUTIONS FOR STORM PERIODS OF 5 MINUTES TO 10 DAYS
AND RECURRENCE INTERVALS OF 2 MONTHS TO 100 YEARS IN MICHIGAN
BULLETIN 71
RAINFALL FREQUENCY ATLAS OF THE MIDWEST**

Section	Duration	2-month	3-month	4-month	6-month	9-month	1-year	2-year	5-year	10-year	25-year	50-year	100-year
03	10-day	1.63	1.96	2.26	2.66	3.06	3.33	3.99	4.92	5.65	6.66	7.50	8.35
03	5-day	1.29	1.54	1.75	2.02	2.33	2.53	3.10	3.91	4.57	5.46	6.23	7.04
03	72-hr	1.09	1.27	1.44	1.67	1.92	2.09	2.62	3.36	3.96	4.86	5.56	6.35
03	48-hr	0.97	1.13	1.26	1.46	1.68	1.83	2.34	3.02	3.55	4.31	4.94	5.60
03	24-hr	0.89	1.04	1.13	1.31	1.49	1.62	2.09	2.70	3.21	3.89	4.47	5.08
03	18-hr	0.84	0.97	1.06	1.23	1.40	1.52	1.96	2.54	3.02	3.66	4.20	4.78
03	12-hr	0.78	0.90	0.99	1.14	1.30	1.41	1.82	2.35	2.79	3.38	3.89	4.42
03	6-hr	0.67	0.78	0.85	0.99	1.12	1.22	1.57	2.03	2.41	2.92	3.35	3.81
03	3-hr	0.57	0.67	0.73	0.84	0.96	1.04	1.34	1.73	2.05	2.49	2.86	3.25
03	2-hr	0.52	0.60	0.66	0.76	0.86	0.94	1.21	1.57	1.86	2.26	2.59	2.95
03	1-hr	0.42	0.49	0.53	0.62	0.70	0.76	0.98	1.27	1.51	1.83	2.10	2.39
03	30-min	0.33	0.38	0.42	0.49	0.55	0.60	0.77	1.00	1.19	1.44	1.65	1.88
03	15-min	0.24	0.28	0.31	0.36	0.40	0.44	0.56	0.73	0.87	1.05	1.21	1.37
03	10-min	0.19	0.22	0.24	0.28	0.31	0.34	0.44	0.57	0.67	0.82	0.94	1.07
03	5-min	0.10	0.12	0.13	0.15	0.17	0.19	0.25	0.32	0.39	0.47	0.54	0.61

Appendix 9 – Percolation Tests¹

PREPARATION

Bore a minimum of two (2) holes, 4” to 6” in diameter to a depth of 5’ below the bottom elevation of the proposed storm water infiltration basin. Carefully scrape all smeared soil from the side of the hole and remove. Place 2” of coarse sand or fine gravel in the bottom of the hole to prevent scouring when filling the hole with water.

SOAKING

Pour clean water into the hole to a depth of 12”. Use care in pouring to avoid scouring the sides and bottom of the hole.

For sandy soils: Add water as necessary to maintain at least 6’ water depth in the hole for one (1) hour. If the water level in the hole then drops to the bottom of the hole in the next 30 minutes, proceed with the tests.

For loamy soils: To permit saturation and swelling to occur, fill the hole with clear water to at least 12” above the gravel. Maintain this water level for a minimum of 24 hours. The percolation rate should be determined 24 hours after water was first added to the hole.

LEVELING

Place a narrow board flat on the ground, across one edge of the hole, to use as a reference mark for measuring to water surface. If the board moves to the touch, level the land surface, remove grass, or weight the board to assure its immobility. Adjust water level in the hole by adding or removing water until the water depth is 6”.

MEASUREMENT

Measure the distance from the top of the reference board to the water surface, record the measurement and record the clock time of reading. Make similar measurements, recording the measurement and time, at approximately five (5) minute intervals for a minimum of one (1) hour or longer, until a stabilized percolation rate occurs. Water may be added as required to maintain at least a water depth of 2”; record the depth and time after each refill.

STABILIZED RATE

The stabilized percolation rate is the number of minutes elapsing during which time the water level in the hole drops one inch, measured at least 60 minutes after the start of the test, in clay textured holes. To determine if the percolation rate has stabilized, compare the drop in water level for successive five (5) minute periods near the end of the hour. If the drop is approximately the same for the last several periods, stabilization has occurred.

REPORT

The field record, showing all measurements of depth to water, times of measurement, descriptions of saturation, with a statement attesting to the accuracy of the data and signed by the person who conducted the test, together with a soil sample (approximately one (1) pint) taken from the bottom of the hole before conducting the test, comprises the Percolation Test Report.

Notes: ¹ Based on Northern Michigan Health Department Regulations

Notes: ¹ Based on Northern Michigan Health Department Regulations

Percolation Test Data Form

Location: _____

Test Hole Number: _____

Test By: _____

Date of Test: _____

Depth to Bottom of Hole: _____ Diameter of Hole: _____

Depth (inches)	Soil Texture

Time	Time Interval (hr)	Measurement (inches)	Drop in Water Level (inches)	Percolation Rate (in/hr)	Remarks

Average Infiltration Rate: _____ in/hr

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Section 3. Enforcement Agent. The Grand Traverse County Drain Commissioner is authorized as the primary enforcement agent for Acme Township ("Township") for carrying out this ordinance, and may designate such agents, as the Drain Commissioner deems necessary to carry out the purposes of this ordinance. In addition, the Township, is also authorized to act as enforcement agent, and retains the discretion to enforce this Ordinance by the Township's Ordinance Enforcement Officer if, in the Township's discretion, exigent or other appropriate circumstances require the Township to enforce this Ordinance.

Section 4. Earth Change Permit.

A) **Application.** Permit applications shall be submitted to the enforcement agent. Copies of the permit application form shall be made available by the enforcement agent. Application for a permit and issuance of the permit shall be made prior to the start of any earth change requiring a permit under this ordinance. Submission of an application for permit shall constitute consent by the property owner for the enforcement agent or his designated representative to enter upon the property for purposes of inspections attendant to the application. The application shall contain, at a minimum, all of the following:

- 1) A map or maps at a scale of not more than 200 feet to the inch or as otherwise determined by the enforcement agent, including a legal description and site location sketch that includes the proximity of any proposed earth change to lakes, streams, and or wetlands; predominant land features; and contour intervals or slope description and all applicable set backs.
- 2) A soils survey or a written description of the soil types of the exposed land areas contemplated for the earth change.
- 3) A description and the location of the physical limits of each proposed earth change.
- 4) The location of all lakes, streams, and wetlands partially or completely contained within the boundaries of the site or within 50 feet of the site boundary.
- 5) A description and the location of all existing and proposed on-site storm water management and dewatering facilities.

- 6) The timing and sequence of each proposed earth change.
- 7) The location and description for installing and removing all proposed temporary soil erosion and sedimentation control measures.
- 8) A description and the location of all proposed permanent storm water control measures or devices.
- 9) The enforcement agent may require, as defined in Section 1, that the storm water runoff control plan be prepared by a State of Michigan licensed landscape architect, architect, land surveyor or professional engineer. If the enforcement agent also requires an additional professional consultant (engineer and/or attorney) to review the plans submitted, all review costs shall be paid for by the developer
- 10) The person(s) or organization(s) responsible for maintenance shall be designated in the plan. Options include :
 - a) Property owner
 - b) Homeowner's association, provided that provisions for financing necessary maintenance are included in deed restrictions or other contractual agreements
 - c) Grand Traverse County Drain Commissioner, in accordance with the Michigan Drain Code, Public Act 40 of 1956, as amended, if the storm water conveyance facilities are within a designated Drain District.

B) Sequential Application.

1. If a development on a site is so large or complex that a storm water control plan encompassing all phases of the project cannot reasonably be prepared prior to initial ground breaking, then an application for a permit for successive major incremental earth change activities may be allowed.
2. Requests for sequential applications shall be approved by the enforcement agent prior to submittal of the initial permit application. Approval of sequential applications shall take place in two phases. First, the overall conceptual plan for the entire development shall be submitted for review and approval. Second, detailed plans for sections of the total project shall be submitted for review and approval upon the request of the enforcement agent.
3. All permits processed and issued for phases of a project shall be clearly defined as to the nature and extent of work covered. Each phase of the project must be reviewed and permitted by the enforcement agent prior to construction.

- C) Permit Application Review.** Concurrent with and pursuant to the Grand Traverse County Soil Erosion Control Ordinance #25, the enforcement agent shall approve, approve with conditions, or deny an application after the completed application is submitted together with all required plans and fees. The enforcement agent shall reject any application which is incomplete.

- D) **Approval – Certification Not Required.** Approval shall be granted if the storm water control plan meets the requirements set forth in the design standards and the requirements of this ordinance.
- E) **Approval – Certification Required.** For any site requiring that a storm water control plan be prepared by a State of Michigan registered professional, the enforcement agent shall grant approval if the storm water control plan meets the requirements set forth in the design standards and upon receipt by the enforcement agent of a letter from the registered professional certifying that the storm water control plan meets all of the requirements of the design standards.
- F) **Approval with Conditions.** If the application is approved with conditions, the enforcement agent must state in writing the conditions upon which approval is based.
- G) **Denial.** The enforcement agent shall notify the applicant in writing if the application is denied and the reasons for the denial
- H) **Permit Expiration.** All permits approved by the enforcement agent shall expire upon the occurrence of project completion date provided on the application or 1 year, which ever occurs first. The enforcement agent may extend the permit for a period not to exceed one year upon good cause shown by the landowner or permit applicant. The enforcement agent may charge an additional fee to cover the cost of continued inspections, the amount of which is specified in the current permit and review fee schedule, in effect for the Grand Traverse County Drain Commissioner’s Office and may be amended by the County concurrent with and pursuant to the Grand Traverse County Soil Erosion Control Ordinance #25. All fees are to cover administrative expenses of processing the storm water control permit and the soil erosion control permit including inspections and monitoring of projects.
- I) **Permit Revocation or Suspension.** A permit issued under this ordinance may be revoked or suspended by the enforcement agent for any of the following reasons:
- 1) A violation of a condition of the permit
 - 2) Misrepresentation or failure to fully disclose relevant facts in the application
 - 3) A change in condition that requires a temporary or permanent change in the activity
 - 4) Authorized work is abandoned or suspended for a period of six months or more.
 - 5) A non-approved waiver of the buffers and setbacks established in the design standards.

Notification of a revocation or suspension shall be made in writing. The notice will specify the reason(s) for the revocation or suspension and the time for an appeal of the revocation or suspension.

Section 5. Storm Water Management Easements. All easements that are necessary to implement the approved drainage plan and to otherwise comply with this ordinance in form and substance shall be recorded with the Grand Traverse County Register of Deeds prior to issuance of a permit by the enforcement agent. The easements shall assure access for proper inspection and maintenance of storm water runoff facilities and shall provide adequate emergency overland flow-ways.

Section 6. Performance Guarantees. As a condition of issuance of a permit, the enforcement agent may require the applicant to deposit cash, a certified check, or an irrevocable letter of credit acceptable to the enforcement agent in an amount sufficient to assure the installation and completion of the storm water control plan. Irrevocable letters of credit, if used as a performance guarantee, shall extend for a minimum of one year with the option of renewal. The required security shall be held in the office of the enforcement agent, and shall be released only upon final inspection and approval of the storm water control systems.

Section 7. Final Inspection and Approval or Denial of Completed Storm Water Control Measures or Devices. Upon completion of a storm water control plan, the property owner, applicant, or other authorized representative of the property owner shall notify the enforcement agent. The enforcement agent shall conduct a final inspection within 10 days after being notified of the completion. The enforcement agent shall either approve or not approve the completed storm water control measures and devices on a form prepared by the enforcing agent within 30 days following inspection. If changes occur to the original plan during the course of construction, the enforcement agent may require final “as built” drawings before making a final inspection or in making a determination as to final approval or denial of the installed storm water control plan

A. Approval – Certification Not Required. Approval shall be granted if the storm water control measures as completed meet the requirements set forth in the storm water control plan.

B. Approval – Certification Required. For any site requiring that a storm water control plan be prepared by a registered professional, the enforcement agent shall grant approval if the storm water control measures as completed meet the requirements set forth in the storm water control plan and upon receipt by the enforcement agent of a letter from a licensed professional civil engineer certifying that all storm water measures have been completed in accordance with the storm water control plan.

C. Denial. The enforcement agent shall notify the applicant in writing if the request for closure of the permit is denied and the reasons for the denial.

Section 8. Maintenance.

A) Routine Maintenance

- 1) All storm water control plans shall be maintained according to the measures outlined in the design standards, and as approved in the permit.
- 2) The person(s) or organization(s) responsible for maintenance shall be designated in the plan. Options include
 - a) Property owner
 - b) Homeowner’s association, provided that provisions for financing necessary maintenance are included in deed restrictions or other contractual agreements
 - c) Grand Traverse County Drain Commissioner, in accordance with the Michigan Drain Code, Public Act 40 of 1956, as amended, if the storm water conveyance facilities are within a designated Drain District.

- 3) Maintenance agreements shall specify responsibilities for financing maintenance and shall be recorded with the Register of Deeds before the permit can be closed.

B) Non-Routine Maintenance. Non-routine maintenance includes maintenance activities that are expensive but infrequent, such as pond dredging or major repairs to storm water structures.

- 1) Non-routine maintenance shall be performed on an as needed basis based on information gathered during regular inspections.
- 2) If non-routine maintenance activities are not completed in a timely manner or as specified in the approved plan, the Grand Traverse County Drain Commissioner may complete the necessary maintenance at the owner's/operator's expense.

C) Maintenance Inspections

- 1) The person(s) or organization(s) responsible for maintenance shall inspect storm water control systems on a regular basis, as outlined in the plan.
- 2) Authorized representatives of the enforcement agent may enter at reasonable times to conduct on-site inspections or routine maintenance.
- 3) For storm water control systems maintained by the property owner or homeowner's association, inspection and maintenance reports shall be filed with the enforcement agent as provided in the plan.
- 4) Authorized representatives of the enforcement agent may conduct inspections to confirm the information in the reports filed under section c.

Section 9. Fees. All fees shall be paid to Grand Traverse County in accordance with the current permit and review fee schedule, in effect for the Grand Traverse County Drain Commissioner's Office and may be amended by the County concurrent with and pursuant to the Grand Traverse County Soil Erosion Control Ordinance #25. All fees are to cover administrative expenses of processing the storm water control permit and the soil erosion control permit including inspections and monitoring of projects.

Section 10. Enforcement.

A. Violations. It shall be a violation of this ordinance to do any of the following:

1. To make an earth change without first obtaining a permit as required by this ordinance
2. To provide false or misleading information in an application for permit
3. To fail to follow approved storm water control plan
4. To fail to maintain a storm water control measure or device in accordance with an approved storm water control plan

B. Notice of violation. Whenever there is a failure to comply with the provisions of this ordinance, the enforcement agent shall notify the applicant/owner that he/she has five calendar days from the receipt of the notice to temporarily correct the violation and 30 days from receipt of the notice to permanently correct the violation. The enforcement agent for good cause demonstrated by the permittee may make reasonable extensions. Notice shall be made by certified mail, return receipt requested.

C. Enforcement Actions. Should the applicant/owner fail to take the corrective actions specified in the notice of violation, the enforcement agent may take any or all of the following actions:

- 1) Issue or cause to be issued a municipal civil infraction
- 2) Take whatever remedial actions are necessary and assert a lien on the subject property in an amount equal to the costs of remedial actions. The lien shall be enforced in the manner provided or authorized by law for the enforcement of common law liens on personal property. The lien shall be recorded with the Grand Traverse County Register of Deeds and shall incur legal interest from the date of recording. The imposition of any penalty shall not exempt the offender from compliance with the provisions of this ordinance, including assessment of a lien on the property.

D. Emergency Actions . When emergency actions are necessary to moderate a nuisance, to protect the public safety, health, and welfare, and/or to prevent the loss of life, injury, or damage to property, the enforcement agent is authorized to carry out or arrange for all such emergency actions, and to enforce penalties and/or liens as described herein.

E. Cease & Desist Orders . The enforcement agent may issue a cease and desist order or revoke a permit upon the determination that there is a violation of this ordinance. A cease and desist order, when issued, shall require all earth change activities to stop immediately.

F. Injunctive Relief Notwithstanding any other remedy available under this ordinance, the enforcement agent may maintain an action in a court of competent jurisdiction for an injunction or other process against a person to restrain or prevent violations of this ordinance.

G. Fines & Penalties.

1. A violation of this ordinance is a municipal civil infraction punishable by a fine not exceeding \$500.00 per day of violation.
2. A knowing violation of this ordinance or interference with the enforcement of this ordinance by the enforcement agent or any person duly authorized to carry out the purposes of this ordinance is a misdemeanor punishable by imprisonment for up to 90 days, and/or a fine of up to \$500.00 or both.
3. An action for the violation of this ordinance shall be instituted in the 86th District Court for Grand Traverse County. Fines and costs imposed or assessed in such an action shall be distributed in accordance with section 8379 of the revised judicature act of 1961, 1961 PA 236, MCL 600.8379.

Section 11. Waiver. The enforcement agent responding to a specific earth change as provided for in Section 3 may waive certain requirements specified in the ordinance upon being provided

with demonstrable evidence of special circumstances warranting waiver, but only upon finding that both of the following requirements are met:

- A) The application of the ordinance provisions will present or cause practical difficulties for a development or development site; provided, however, that practical difficulties shall not include the need for the developer to incur additional reasonable expenses in order to comply with the ordinance; and
- B) The granting of the relief requested will not substantially prevent nor result in less effective management of storm water runoff.

Section 12. Appeals. Any person aggrieved by the action or inaction of the enforcement agent related to this ordinance may appeal to the Grand Traverse County Construction Code Board of Appeals. All requests for appeal shall be filed in writing within 30 days of the action or inaction appealed from and includes the basis of the appeal. In considering any such appeal, the Board may grant a variance from the terms of this ordinance so as to provide relief, in whole or in part, from the action being appealed, but only upon finding that both of the following requirements are met:

- A) The application of the ordinance provisions being appealed will present or cause practical difficulties for a development or development site; provided, however, that practical difficulties shall not include the need for the developer to incur additional reasonable expenses in order to comply with the ordinance; and
- B) The granting of the relief requested will not substantially prevent nor result in less effective management of storm water runoff

The filing of an appeal does not preclude other remedies available to either party, nor does it act as a stay of any order from the enforcement agent for the installation of measures or controls to reduce or eliminate storm water runoff pending the outcome of the appeal.

Section 13. Separate Causes of Action. Nothing in this ordinance impairs or precludes a separate cause of action provided by statute or common law for conduct prohibited herein.

Section 14. Other Ordinances. This ordinance shall be in addition to other ordinances of Acme Township and shall not be deemed to repeal or replace other ordinances or parts of other ordinances except to the extent that such repeal is specifically provided for in this ordinance. This ordinance is intended to work in conjunction with the Grand Traverse County Soil Erosion and Sedimentation Control Ordinance #25, other state, and federal laws affecting water and quality.

Section 15. Notice. Notice means delivery by first class mail unless otherwise specified in this ordinance.

Section 16. Severability. The provisions of this ordinance are severable and if any part is declared void or unenforceable by a court of competent jurisdiction, the remaining parts shall remain in force.

Section 17. Effective Date. This ordinance shall take effect on June 1, 2007 or 30 days after publication, whichever occurs later.

Upon roll call vote, the following voted:

YEAS: Boltres, Dunville, Kladder, Kurtz, Scott, Takayama, Zarafonitis

NAYS: None

ABSTAIN: None

ABSENT: None

DRAFT STORMWATER MANAGEMENT ORDINANCE

ARTICLE I: PURPOSE AND OBJECTIVES

Section 1.1 Purposes

The purpose of this Ordinance is to regulate and control stormwater runoff originating within (the township); to protect waterways and sensitive areas in the community; and to allow for flexible design in protecting these resources.

The constitution and laws of the state of Michigan authorize local governments to provide stormwater management services and systems that will contribute to the protection and preservation of the public health, safety and welfare of the people and to protect natural resources, including Michigan Public Act 451 of 1994.

Section 1.2 Objectives

The primary objective of this Ordinance is to manage stormwater by first limiting impervious areas and retaining topography/vegetation; second, by incorporating techniques to capture and reduce runoff; and finally, by treating the remaining runoff before its release offsite. More specifically, this Ordinance establishes minimum stormwater management requirements and controls to accomplish the following:

1. To minimize increased stormwater runoff rates and volumes, increased flooding, increased stream channel erosion, increased sediment transport and deposition, and increased nonpoint source pollutant loading to the receiving water bodies and Grand Traverse Bay caused by identified land development;
2. To minimize the deterioration of existing water courses;
3. To preserve and use the natural drainage system for receiving and conveying storm water runoff;
4. To preserve and encourage natural infiltration and the recharge of groundwater and to maintain subsurface flows which replenish lakes, streams, and wetlands;
5. To minimize the impact of development on stream channels, streambanks, and streambed stability;
6. To control non-stormwater discharges to stormwater conveyances and reduce pollutants in stormwater discharges;
7. To preserve and protect water resources by means of controlling increased flood discharges, stream erosion, and runoff pollution;
8. To protect water bodies by reducing degradation resulting from changing land use where there are insufficient stormwater management controls;
9. To assure that all storm water facilities will be properly designed, constructed and maintained to protect downstream property owners from flooding and degradation of water quality;
10. To ensure that all stormwater facilities necessary for a proposed development will have an appropriate governmental unit responsible in perpetuity for performing maintenance or for overseeing the performance of maintenance by a private entity; and
11. To provide for enforcement of this Ordinance and penalties for violations.

Comment [clj1]: Are you sure you want to have governmental unit responsible for maintenance in perpetuity?

ARTICLE II: DEFINITIONS

The following terms and phrases shall have the meaning given herein, unless the context otherwise requires:

Comment [AK2]: Ensure consistency with other Township ordinances.

APPLICANT: The property owner, or the authorized agent, for the property upon which a regulated earth change is proposed, and who has submitted an application for a Storm Water Management Plan or Engineered Site Grading Plan.

BEST MANAGEMENT PRACTICE (BMP): A stormwater management practice, or combination of practices, and design criteria that comply with the *Guidebook of BMPs for Michigan Watersheds*, published by the Michigan Department of Environmental Quality (including updates and amendments to the *MDEQ Guidebook*); the *Low Impact Development Manual for Michigan*, compiled by the Southeast Michigan Council of Governments (including updates and amendments to the *LID Manual*); or other equivalent practices and design criteria that meet the Standards in Sections 4.2 and 5.2 of this Ordinance as determined by (the township's designee). The applicant shall follow the *DEQ Guidebook*, the *LID Manual*, or similar guidance approved by the Township Designee, to calculate the benefits of the BMPs (the volume stored or retained as a result of the BMP, and the amount of sediment and pollutants removed by the BMP). A BMP may be designed to service multiple parcels, projects, and developments.

CHANNEL: The portion of a stream, which conveys normal flows of water, or a ditch or other conveyance structure, excavated for the flow of water.

CONVEYANCE FACILITY (STRUCTURE): A surface or subsurface structure, pipe, or channel that transports storm water from one location to another.

COUNTY DRAIN: Drains established and/or constructed pursuant to the Michigan Drain Code (Act 40 of 1956, as amended).

CURVE NUMBER: an empirical parameter used in hydrology for predicting direct runoff or infiltration from rainfall excess.

DESIGN STANDARD (OR ENGINEERING DESIGN STANDARD): A specification or set of specifications that prescribes the methodology for developing stormwater management facilities based upon a uniform set of standards, calculations, and procedures.

DESIGN STORM: A hypothetical rainfall event that is developed as a statistical relationship between actual rainfall intensity-duration-frequency data for modeling the effectiveness of a given drainage system.

DETENTION BASIN (POND): A structure or facility, natural or artificial, which stores storm water on a temporary basis and releases it at a controlled rate.

- a) Dry detention basin -- A detention basin that drains completely after a storm event
- b) Wet detention basin -- A detention basin that may be a body of water with a fixed minimum and maximum water elevation between runoff events.

DISCHARGE: The rate of flow of water through an outlet structure at a given point and time, typically measured in cubic feet per second (cfs) or gallons per minute (gpm).

DISTURBED AREA: An area of land subjected to erosion due to the removal of vegetative cover and/or earthmoving activities, including filling.

DRAINAGE: The interception and removal of water (groundwater or surface water) by natural or artificial means.

DOWNSTREAM PROPERTIES: Downgradient lands and waters, which receive stormwater runoff and other surface water flows from the applicant's property.

DRAINAGE SYSTEM: All facilities, channels, and areas, which serve to convey, filter, store and/or receive storm water, either on a temporary or permanent basis.

EARTH CHANGE: A human-made change in the natural cover or topography of land, including cut and fill activities and grading, which may result in or contribute to soil erosion or sedimentation of the waters of the state. The term "earth change" as used in this Ordinance shall not apply to the practice of plowing and tilling soil for the purpose of crop production.

ENGINEERED SITE GRADING PLAN: A sealed drawing or plan and accompanying text prepared by a registered engineer or registered landscape architect that shows alterations of topography, alterations of watercourses, flow directions of stormwater runoff, and proposed stormwater management and measures, having as its purpose to ensure that the Standards in Section 4.2 of this Ordinance are met.

FLOOD: An overflow of surface water onto lands not normally covered by water. Floods have these essential characteristics: the inundation of land is temporary and results from unusually heavy precipitation and the land is inundated by overflow from a lake, pond, stream, and/or wetland, or is flooded by natural runoff.

FLOODPLAIN: The area of land adjoining a lake or stream which is inundated when the flow exceeds the capacity of the normal watercourse. For mapping purposes, floodplains are designated according to the frequency of the flood event, such as the 100-year floodplain or 500-year floodplain.

GRADING: Any stripping, clearing, stumping, excavating, filling, stockpiling or any combination thereof, including the land in its excavated or filled condition. Grading that is part of agricultural production governed by the Right to Farm Act is not regulated by this ordinance.

GRUBBING: To clear ground of roots and/or stumps. Grubbing that is part of agricultural production governed by the Right to Farm Act is not regulated by this ordinance.

IMPERVIOUS AREA: Surfaces that do not readily allow rainfall to infiltrate into the soil; examples include but are not limited to: roof area, paved or gravel driveways, parking areas, roads (both asphalt and gravel), or areas of heavy clay soils.

INFILTRATION: The downward movement or seepage of water from the surface into the subsoil and/or groundwater. The infiltration rate is expressed in terms of inches per hour.

LOW IMPACT DEVELOPMENT (LID): a stormwater management approach modeled on natural stormwater management systems, which aims to mimic a site's pre-development hydrology by using design techniques that infiltrate, filter, store, evaporate, and retain runoff close to its source.

Comment [clj3]: May want to add detention basins as impervious areas as by definition they store storm water and have to have an outlet

MAINTENANCE AGREEMENT: A binding agreement between the property owner and the township, which sets forth the location and design of best management practices as well as terms and requirements for storm water and erosion management facility maintenance, recorded with the Grand Traverse County Register of Deeds.

NATURAL RESOURCES CONSERVATION SERVICE UNIT HYDROGRAPH METHOD: a method developed by the NRCS to develop a discharge hydrograph resulting from 1 inch of direct runoff distributed uniformly over the watershed resulting from a rainfall of specified duration. (Chapter 16, Hydrographs, Part 630 Hydrology, National Engineering Handbook, USDA, NRCS, 210-VI-NEH, March 2007).

OFF-SITE FACILITY: Stormwater management facility or BMP that is located partially or completely off the applicant's subject property.

ORDINARY HIGH WATER MARK: The line between upland and bottomland, which persists through successive changes in water levels, below which the presence and action of the water is so common or recurrent that the character of the land is marked distinctly from the upland and is apparent in the soil itself, the configuration of the surface of the soil and the vegetation. On an inland lake, which has a level established by law, it means the ordinary high-established level. Where water returns to its natural level as the result of the permanent removal or abandonment of a dam, it means the natural ordinary high water mark.

OUTFALL: The point where water flows out from a conduit, drain, or stream.

PEAK DISCHARGE RATE (PEAK FLOW): The maximum calculated rate of storm water flow at given point in a channel, watercourse, or conduit resulting from a predetermined frequency storm or flood, measured in cubic feet per second (cfs).

PERSON: Any individual, firm, partnership, association, public or private corporation, company, organization, or legal entity of any kind, including governmental agencies.

RETENTION BASIN: A wet or dry storm water holding area, either natural or manmade, which does not have any outlet to adjoining watercourses or wetlands other than an emergency spillway. Water is removed through infiltration and/or evaporation.

SEDIMENT: Mineral or organic particulate matter that has been removed from its site or origin by the processes of soil erosion, is in suspension in water, or is being transported.

SITE: Any tract, lot, or parcel of land or combination of tracts, lots or parcels of land proposed for development.

STOP WORK ORDER: A notice for cessation of activity issued by the [\(designee\), Township](#) to any person engaged in an activity in violation of this Ordinance including, but not limited to, grading and development activities.

STORMWATER BMP: Any facility, structure, channel, area, process or measure that serves to control stormwater runoff in accordance with the Standards in Sections 4.2 and 5.2 of this Ordinance.

STORMWATER MANAGEMENT PLAN: Maps and written information prepared by a registered engineer, which describe the way in which accelerated soil erosion and/or stormwater flows are

proposed to be controlled, both during and after construction, having as its purpose to ensure that the Standards in Section 5.2 of this Ordinance are met.

STORMWATER RUNOFF: Excess water that does not infiltrate the soil, but instead flows over the surface of the ground or is collected in channels, watercourses or conduits and transported over a given drainage area.

STREAM: A moving body of water that has definite banks, a bed, and visible evidence of a continued flow or continued occurrence of water, as defined by state law.

SWALE: Low lying grassed area with gradual slopes, which transports storm water..

TOWNSHIP DESIGNEE: The person appointed or hired by the Township to implement the Stormwater Ordinance, including review of all plans.

WATERSHED: A land area, also known as a drainage area, which collects precipitation and contributes runoff to a receiving body of water or point along a watercourse.

WETLANDS: Land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life and is commonly referred to as a bog, swamp, or marsh, as defined by state law.

ARTICLE III: REGULATED ACTIVITIES

Section 3.1 Regulated Activities

Except for activities expressly exempted in Section 3.2 below, the Earth Changes described in Section 3.3 and 3.4 below require either an Engineered Site Grading Plan or a Stormwater Management Plan.

Section 3.2 Exemptions

The following activities require neither a Stormwater Management Plan nor an Engineered Site Grading Plan:

1. Activities protected under the Right to Farm Act 93 of 1981.
2. Earth Changes on one single-family home on a lot, parcel or condominium unit where:
(a) less than 30 percent of the lot will be covered with impervious area; (b) the lot, parcel, or unit is more than 500 feet from the top of the bank of an inland lake or stream, or of Grand Traverse Bay, (c) the Earth Change will neither result in slopes greater than (15%) or change the grade of the slope by more than (10%), and (d) where site plan review is not otherwise required under the Township Zoning Ordinance.
3. The installation or removal of individual mobile homes within a mobile home park. However, this Exemption does not apply to the construction, expansion, or modification of a mobile home park.
4. Plats that received preliminary plat approval, and projects with final land use approval received prior to, the effective date of this Ordinance, where such approvals remain in effect.

Section 3.3 Requirement for an Engineered Site Grading Plan

1. An Engineered Site Grading Plan shall be submitted and reviewed in accordance with Article VI. The Engineered Site Grading Plan shall be approved by (the township's designee) prior to the issuance of any building permit or earth change permit. Approval of the plan is required prior to the start of any work activity including construction of access roads, driveways, grubbing or grading.
2. The following Earth Changes require an Engineered Site Grading Plan, unless the project is otherwise subject to site plan review under the Township Zoning Ordinance (in which case a Stormwater Management Plan is required):
 - (a) Earth changes that increase the impervious area of a lot, parcel, or unit to a total of 30 percent or more.
 - (b) Earth changes within 500 feet of the top of the bank of an inland lake or stream, or of Grand Traverse Bay.
 - (c) Earth changes on slopes of greater than (15%) or that changes the grade of the slope by more than (10%).
 - (d) Earth Changes that are not specifically exempted by this Ordinance and that do not meet the requirements for a Stormwater Management Plan in Section 3.4 below.

Comment [AK4]: There should be a "catch all" category so projects don't fall between the definitions. The catch-all may be in the Exempt, ESGP, or SMP Section, and that standard will then apply to those sorts of projects.

Section 3.4 Requirement for a Stormwater Management Plan

1. A Stormwater Management Plan shall be submitted and reviewed in accordance with requirements of Article IV for all Earth Changes that require site plan review under the Township Zoning Ordinance. Approval of final development plans, site plans, and final preliminary subdivision and condominium plans shall not be granted prior to approval of the Stormwater Management Plan.
2. In addition to those requiring site plan review, the following Earth Changes require a Stormwater Management Plan:
 - (a) Earth Changes resulting in greater than a 10% increase of existing impervious area in existence on (effective date), or 4,356 square feet of additional impervious area as compared to impervious area in existence on (effective date), whichever is less. The entire development shall be subject to Stormwater Management Plan requirements, not only the additional impervious area. The total amount of impervious area must be considered for projects phased over time.
 - (b) Subdivision developments and plat proposals as defined by Section 102 of Public Act 288 of 1967, as amended.
 - (c) Site condominium developments or condominium developments as defined by Public Act 59 of 1978, as amended, Section 559.101 et seq. of the Michigan Compiled Laws.
 - (d) A mobile home park, manufactured housing development, or campground.
 - (e) Public and private roads and driveways, which (a) provide access to five (5) or more parcels or, (b) are more than five hundred (500) feet in length, or (c) have a grade of ten percent (10%) or greater.
 - (f) Any development on property divided by land division where more than three parcels of less than one acre are created.
 - (g) Any proposal to mine, excavate, clear and grade, compact, landscape, or otherwise develop one acre or more of land, for purposes other than single-family residential landscaping and gardening.

Comment [T5]: Where any of the following are subject to site plan review, they should be removed from this list, to avoid confusion and redundancy.

Section 3.5 Review fees

The developer shall pay application and other fees in an amount set by the Township.

ARTICLE IV: ENGINEERED SITE GRADING PLAN PROCEDURES

Section 4.1 Engineered Site Grading Plan Contents

1. (Number) copies of Engineered Site Grading Plans shall be submitted by the applicant to the Township.
2. The Engineered Site Grading Plan shall include the following information:
 - (a) A plan showing the layout of the area intended to be developed will be submitted by the applicant or their representative. This plan will be prepared under the direction of, and sealed by, a registered professional engineer or a registered landscape architect, and shall fit on a sheet of paper that does not exceed 24" by 36", drawn to a standard engineering scale not less than 1" = 50'.
 - (b) The legal property description and a north indicator.
 - (c) Existing grades on a 50-foot grid to a minimum of 50 feet beyond the site property line and sufficient intermediate grades to determine such things as ditches, swales, adjacent pavement, buildings, and other pertinent features.
 - (d) Location of any watercourses, wetlands, woodlands, lakes, ponds and other environmental features on the site.
 - (e) Existing easements.
 - (f) Existing utilities, manholes, and culverts.
 - (g) Road rights-of-way, existing and proposed.
 - (h) Proposed topography of the site.
 - (i) Location and description of any existing and proposed stormwater management and soil erosion control measures.
 - (j) Flow direction(s) of stormwater runoff onto and from the site before and after development, including the direction of overland flow.
 - (k) Proposed elevations shall be underlined or boxed in to differentiate from existing elevations. It is expected that all elevations shall be in hundredths of a foot.
 - (l) A location map.
 - (m) The general stormwater management scheme for the proposed development indicating how stormwater management will be provided and where drainage will outlet.
 - (n) A description of the off-site outlet and evidence of its adequacy. If no adequate watercourse exists to effectively handle a concentrated flow of water from the proposed development, discharge will be reduced to sheet flow prior to exiting the site, and cannot exceed the allowable outlet rate defined in the Engineering Design Standards. Additional volume controls may be required in such cases and/or acquisition of rights-of-way from downstream property owners receiving the storm water flow.
 - (o) Any on-site and/or off-site stormwater management facilities and appropriate easements, dedicated to the entity that will be responsible for future maintenance.
 - (p) Any drainage originating outside of the development limits that flows onto or across the development. In general, drainage from off-site shall not be passed through on-site stormwater BMPs.
 - (q) Any natural watercourses and county drains that traverse or abut the property.

Comment [clj6]: Think this could eliminate the wording of a 50 foot grid, as on-site just requires 2 foot or 1 foot contouring (5.1.7(c)(1) Should also require elevations be to NAVD88 datum same as referenced in 5.1.7(c)(1)

Section 4.2 Engineered Site Grading Plan Review Procedures and Standards

1. The following standards shall be met by applicant:

- (a) The increased volume of water discharged from a development shall not create adverse impacts to downstream property owners, wetlands and watercourses (e.g., flooding; excessive soil saturation; crop damage; erosion; degradation in water quality or habitat).
 - (b) Natural topography and site drainage shall be preserved and site grading shall be minimized to the maximum extent reasonably achievable considering the nature of the development.
 - (c) Watercourses shall not be deepened, widened, dredged, cleared of vegetation, straightened, stabilized, or otherwise altered without applicable permits or approvals from the township, relevant county agencies and the applicable State of Michigan Department(s).
 - (d) The Engineered Site Grading Plan shall be designed with sufficient BMPs to result in no net increase in runoff from storm events up to the 2-year 24-hour event from conditions as of the date of the adoption of this Ordinance, unless the Township Designee determines, based on local information and analysis, that managing a lesser volume is adequate to meet the Objectives of this Ordinance.
 - (e) The Engineered Site Grading Plan shall be designed with sufficient BMPs to remove 80% of the total suspended solids from the net increase in volume runoff from impervious surfaces following a 2-year 24-hour storm event from conditions as of the date of this Ordinance, before such runoff from impervious surfaces exits the property.
 - (f) Management of stormwater shall be required throughout the entire development process, including all earth changes and all phases of construction.
2. The following review procedures shall apply:
- (a) Engineered Site Grading Plans shall be subject to review and approval by the Township Designee to assure compliance with this Article.
 - (b) Engineered Site Grading Plans shall be reviewed and approved by the Township Designee prior to the issuance of a building permit.
 - (c) Construction plans shall be reviewed by the Township Designee and the appropriate building department to ensure that the construction plan conforms with the approved Engineered Site Grading Plan.

ARTICLE V: STORMWATER MANAGEMENT PLAN PROCEDURES

Section 5.1 Stormwater Management Plan Content

- 1. A pre-application conference may be requested by the applicant prior to the submittal of a stormwater management plan. The purpose of the pre-application conference is to exchange provide information about plan submittal requirements and township regulations.
- 2. Through plans, illustrations, reports, and calculations, the Stormwater Management Plan shall display the required information specified in subsection (7) below.
- 3. The Stormwater Management Plan shall be sufficiently detailed to specify the type, location, and size of stormwater management facilities and BMPs, using preliminary calculations.
- 4. If an applicant proposes to develop a project in two or more phases, the Stormwater Management Plan shall be prepared and submitted for the total project.
- 5. The Stormwater Management Plan shall be stamped by a registered [civil](#)-engineer.
- 6. The Stormwater Management Plan shall be drawn to a reasonable engineering scale to show the details on 24 x 36 drawings. For parcels one acre or less a scale of 1"=20' is required. For sites larger than once acre, the plans shall not exceed 1"=50' with an overall plan for the entire development not being smaller than 1"=200' in scale.
- 7. The Stormwater Management Plan shall include the following information:

Comment [T7]: This may be redundant of what's already required for Site Plan Review. The Twp may want to eliminate redundancy, or leave it in so the stormwater ordinance "stands alone".

- (a) The location by means of a small location map, drawn to a scale no less than 1" = 2000'.
- (b) Zoning classification of applicant's parcel and all abutting parcels.
- (c) The location and description of all on-site features and all adjacent off-site features within (50) feet, and all other off-site features that may be impacted in determining the overall requirements for the development, including:
 - (1) Existing site topography with contours at two-foot intervals or less based on the NAVD88 datum, unless the site has less than four feet in vertical elevation change, which will require one foot contours.
 - (2) Adjoining roads and developments
 - (3) Railroads
 - (4) High tension power lines or underground transmission lines
 - (5) Cemeteries
 - (6) Parks
 - (7) Natural and artificial watercourses, wetlands and wetland boundaries, environmental feature boundaries, 100-year floodplains and 500-year floodways as defined by FEMA, lakes, bays, existing stormwater storage facilities, conveyance swales (natural or artificial) with identification of permanent water elevations
 - (8) Location of woodlands
 - (9) Designated natural areas
 - (10) Any proposed environmental mitigation features
 - (11) Drains, sanitary and storm sewers, and water mains
 - (12) Existing and proposed easements
 - (13) A Scaled map, at the U.S.G.S. scale, showing the drainage boundary of the proposed development and its relationship with existing drainage patterns
 - (14) Boundaries of any off-site drainage area contributing flow to the development
 - (15) Any watercourse passing through the development, along with the following:
 - i. Area of upstream watershed and current zoning.
 - ii. Preliminary calculations of runoff from the upstream area for both the 100-year and two-year 24-hour design storms, for fully developed conditions according to the current land use plan for the area.
 - (16) Soil borings may be required at various locations including the sites of proposed retention/detention and infiltration facilities, and as needed in areas where high groundwater tables or bedrock near the surface exist
 - (17) Proposed site improvements including lot divisions and building footprints
 - (18) Preliminary stormwater BMP information including:
 - i. Location of all stormwater BMPs.
 - ii. Identification of stormwater quality and quantity treatment facilities and method of stormwater conveyance.
 - iii. Preliminary sizing calculations for stormwater quality and quantity, including preliminary estimates of runoff volume captured by BMPs, e.g., infiltration losses, for treatment facilities.
 - iv. Preliminary tributary area map for all stormwater management facilities indicating total size and average runoff coefficient for each subarea.
 - v. Analysis of existing soil conditions and groundwater elevation and bedrock depth (including submission of soil boring logs) as required for proposed retention and infiltration facilities.
 - (19) Preliminary landscaping plan for stormwater BMPs
 - (20) Preliminary easements for stormwater management facilities

Comment [clj8]: Drawings should also include spot elevations

Comment [clj9]: Not sure what this is? Is idea to have applicant use a USGS map to show drainage areas?

- (21) Required natural features setbacks
- (22) Drinking water wells, public wellheads, Wellhead Protection Areas (WHPAs), underground storage tanks, and brownfields
- (23) Any areas of unique geological formations (i.e. karst)

Section 5.2 Standards for Stormwater Management Plan

1. All Earth Changes requiring a Stormwater Management Plan shall be designed, constructed, and maintained to prevent flooding, minimize stream channel impacts, protect water quality, achieve the Objectives of this Ordinance, as stated above, and meet the Standards detailed below.
2. The design of stormwater management facilities must take into consideration the natural features, upland areas, wetlands, and watercourses on the site; the potential for on-site and off-site adverse stormwater impacts, water pollution, and erosion; and the size of the site.
3. The Stormwater Management Plan shall meet the following standards to manage stormwater on-site:
 - (a) Natural topography and site drainage shall be preserved and site grading shall be minimized to the maximum extent reasonably achievable considering the nature of the development.
 - (b) The preferred conveyance strategy is to transport wherever possible, untreated and treated runoff in conveyance facilities open to the atmosphere, e.g. swales, vegetated buffer strips, and energy-dissipating structures, rather than through enclosed pipes, so as to decrease runoff velocity, allow for natural infiltration, allow suspended sediment particles to settle, and remove pollutants.
 - (c) Watercourses shall not be deepened, widened, dredged, cleared of vegetation, straightened, stabilized, or otherwise altered without applicable permits or approvals from the township and the applicable State of Michigan Department(s).
 - (d) The following volume/channel protection criteria shall be met. No net increase in runoff from storm events up to the two-year, 24-hour event from conditions as of the date of the adoption of this Ordinance, unless the Township determines, based on local information and analysis, that managing a lesser volume is adequate to meet the Objectives of this Ordinance.
 - (1) This volume shall be retained on-site through infiltration within 72 hours, through storage and reuse, through evapotranspiration or a combination. This does not preclude the use of off-site volume controls in accordance with Section 5.5 to achieve volume control for storm events that are the same or greater.
 - (2) Those granted a waiver under Section 5.6 shall detain the runoff from impervious surfaces for storm events up to the one-year, 24-hour event, and shall release over 24-36 hours.
 - (e) The following peak rate/flood control criteria shall be met. The peak discharge rate from all storms up to the 100-year, 24-hour event shall not be greater than discharge rates existing at the time of the adoption of this Ordinance. Where the runoff volume from impervious surfaces is not increased from the conditions as of the date of the adoption of this Ordinance, the peak rate corresponding to the same storms is considered controlled. If specific watershed conditions require additional peak rate control, the Township may:
 - (1) restrict the peak discharge from the 100-year, 24 hour event to a fixed release rate of 0.2 cfs/acre; or
 - (2) require additional runoff volume reduction up to the 2 back to back 100 year, 24-hour storms.

- (f) The following water quality criteria shall be met.
- (1) For developments on lots, parcels, or units where there was not existing development as of the date of this Ordinance: The Stormwater Management Plan shall be designed with sufficient BMPs to remove 80% of the total suspended solids from the net increase in volume of runoff from impervious surfaces following a 2-year 24-hour storm event from conditions as of the date of this Ordinance, before such runoff from impervious surfaces exits the property.
 - (2) For projects that propose Earth Changes that would change or re-develop a lot, parcel, or unit on which there was already development as of the date of this Ordinance: The Stormwater Management Plan shall be designed with sufficient BMPs to remove 80% of the total suspended solids from the greater of the following: *either* the first ½" of runoff from impervious surfaces following a 2-year 24 hour storm event, *or* the net increase in volume of runoff from impervious surfaces following a 2-year 24-hour storm from conditions as of the date of this Ordinance, before such runoff from impervious surfaces exits the property.
 - (3) Without limiting the BMPs available to an applicant, the following BMPs have been identified to improve runoff water quality:
 - (a) Constructed wetlands/wetland forebays.
 - (b) Retention ponds/extended detention ponds.
 - (c) Filters (sand-peat, underground sand, perimeter sand filter, organic sand, pocket sand filter, gravel, others).
 - (d) Grassed/vegetated swales and channels.
 - (e) Vegetated filter strips.
 - (f) Bioretention BMPs.
 - (g) Commercial water quality devices (e.g., hydrodynamic separators).
- (g) The Township may impose additional restrictions on stormwater discharges as follows:
- (1) Peak discharge may be further restricted when it can be shown that a probable risk to downstream structures or unique natural areas exists or that existing severe flooding problems could be further aggravated.
 - (2) Measures shall be imposed to protect against ground or surface water pollution where the nature of a stormwater management structure constitutes substantial risk of contamination. Special provisions to be followed in these cases will be provided by the Township Designee.
 - (3) Where groundwater yields are very low or where a groundwater supply already is heavily used, the Township Designee may require that the entire volume of the two-year, 24-hour rainfall event be retained. If substantial irrigation needs are anticipated, portions of stored stormwater may be re-used for irrigation purposes.
 - (4) If the Stormwater Management Plan proposes to direct stormwater to a stream, wetland, or lake, the Township Designee may require additional measures to improve water quality of stormwater before it reaches the water body.
4. The method used for determining estimated runoff volumes shall be one that is acceptable by the Township Designee. The runoff curve number method, also referred to as TR55, is an acceptable method for estimating runoff volumes.
 5. The Natural Resources Conservation Service (NRCS) Unit Hydrograph Method shall be used for calculating the peak rate of runoff for conditions as of the date of the adoption of

this Ordinance and undisturbed areas. Other methodologies are acceptable with the approval of the Township Designee.

6. *Rainfall Frequency Atlas of the Midwest* (Huff and Angel, 1992) shall be used for all applicable stormwater calculations. Other rainfall sources are acceptable with the approval of the Township Designee.
7. Management of stormwater shall be required throughout the entire development process, including all Earth Changes and all phases of construction.

Section 5.3 Credits for Stormwater Management Facilities

In calculating the volume of runoff that must be managed to meet the standards in Section 5.2 above, an applicant may credit all stormwater management features, facilities, BMPs, and practices incorporated into or utilized at the site, which result in reduced stormwater run-off volumes from impervious surfaces, including (without limit) the following:

- (a) Minimizing soil compaction;
- (b) restoring soil;
- (c) retaining tree canopy within 25' of impervious cover;
- (d) vegetative swales;
- (e) green roof;
- (f) capture and reuse;
- (g) reforestation activities to increase tree canopy within 25' of impervious cover;
- (h) vegetated riparian buffers; and
- (i) sheetflow directed to vegetated buffer.
- (j) [pervious pavement](#)

Section 5.4 Special Provisions for Land Uses Concentrating Pollutants for On-site Stormwater Management

1. For all those projects involving land uses considered to be high pollutant as listed below, additional water quality requirements may be imposed by the Township Designee in addition to those included in Section 5.2(f) in order to remove potential pollutant loadings from entering either groundwater or surface water systems. These pre-treatment requirements are included in the table below.
2. Table of Pre-Treatment Options for Land Uses Concentrating Pollutants in Stormwater:

Land Uses Concentrating Pollutants	Minimum Pre-Treatment Options
Vehicle Maintenance and Repair Facilities	A, E, F, G
Vehicle Fueling Stations	A, D, G
"Fast Food" Restaurants	B, C, D, I, K
Convenience Stores	B, C, D, I, K
Outdoor Chemical Mixing or Handling	G, H
Outdoor Storage of Liquids	G
Commercial Nursery Operations	I, J, L
Other Uses or Activities Designated by Appropriate Authority	As Required

Minimum Pre-Treatment Options Defined

- A Oil/Water Separators / Hydrodynamic Separators
- B Sediment Traps/Catch Basin Sumps
- C Trash/Debris Collectors in Catch Basins
- D Water Quality Inserts for Inlets
- E Use of Drip Pans and/or Dry Sweep Material under Vehicles/Equipment

- F Use of Absorbent Devices to Reduce Liquid Releases
- G Spill Prevention and Response Program
- H Diversion of Stormwater away from Potential Contamination Areas
- I Vegetated Swales/Filter Strips
- J Constructed Wetlands
- K Stormwater Filters (Sand, Peat, Compost, etc.)
- L Stormwater Collection and Reuse (especially for irrigation)

Section 5.5 Off-site Stormwater Management

1. In combination with, or in lieu of, managing stormwater on-site, an applicant may propose to manage stormwater off-site. Off-site stormwater management shall comply with all standards applicable to on-site stormwater management.
2. Off-site stormwater management areas may be shared with other property owners provided the terms of the proposal are approved by the Township and Township Attorney.
3. Adequate provision and agreements providing for maintenance and inspection of stormwater management facilities shall be made, and the documents, in recordable form, must be approved by the Township.
4. All provisions for performance guarantees, inspections, maintenance and enforcement shall apply to off-site stormwater management facilities.

Section 5.6 Waiver from Retention Criteria for On-site Stormwater Management

1. A waiver from retaining the volume criteria in Section 5.2.3(e) must be based on demonstration by the applicant on the items listed below, which could include that existing soil, bedrock, water table, and/or other natural constraints are pervasive at the site, such that conditions as of the date of the adoption of this ordinance generate substantially increased volumes of stormwater runoff before the proposed development occurs. Such site constraints existing at the time of adoption of this Ordinance would also make infiltration-oriented BMPs to be used for volume control extremely difficult or potentially a hazard to apply at the site.
2. Waiver requests shall be submitted with the Stormwater Management Plan. Those submissions granted a waiver shall meet the standards set forth in Sections 5.2.3(d)(2) and (f). To be considered for a waiver, the applicant must submit the following:
 - (a) Extent of site area with seasonal high water table (less than two feet to water table): As extent of site areas with seasonal high water table increases, predevelopment runoff volume increases, and feasibility for volume/infiltration BMPs decreases, given the inability of infiltration to occur when water table is high.
 - (b) Extent of site area with less than two feet to bedrock: As extent of site areas with shallow depth to bedrock increases, predevelopment runoff volume increases, and feasibility for volume/infiltration BMPs decreases, given the inability of infiltration to occur.
 - (c) Extent of site area with less than 0.25 inch/hour permeability: Sites with extremely “heavy” soils in situ, regardless of soil survey designations, indicate greater predevelopment runoff volumes with lesser infiltration volumes. Soil permeability must be tested onsite. Preferred permeability rate after recommended soil testing should be 0.25 inch per hour (can be reduced to 0.10 inch per hour or projects where low density is being proposed and large site areas are available for infiltration). Sites entirely classified as Hydrologic Soil Group (HSG) D may be assumed to be infeasible without recommended soil testing. Soils testing shall be based on the soil testing protocol included in the State of Michigan LID Manual.

Comment [clj10]: Do not believe any areas of bedrock exist in Acme Township and this waiver would not be needed and could be eliminated

(d) Extent of the site area constrained by foundation or required setbacks: Setbacks must be established between infiltration stormwater BMPs and the following structures:

- (1) Basement foundations (10 feet up gradient, 50 feet down gradient),
- (2) On-site septic systems/drainfields (50 feet),
- (3) Wells (100 feet), and
- (4) Other building elements, which could be affected by infiltration systems.

Comment [clj11]: Unclear to me that basement foundation is to located up or down gradient from storm basin

(e) Extent of size of site: Generally, the larger the site, the more flexibility and opportunity for accommodating runoff volume/infiltration BMPs; as site size increases, waiver requirements grow more stringent. Size of site relates also to the extent of proposed building/impervious area. The more intense (both in terms of building coverage and total impervious area) the proposed building program, the more difficult accommodating the required runoff volume becomes.

Comment [clj12]: Question if this section is required.

Section 5.7 Stormwater Management Plan Review Procedures

1. (Number) copies of the Stormwater Management Plan shall be submitted by the applicant to the Township.
2. Compliance with the requirements of this Article does not eliminate the need for the property owner to obtain required permits and approvals from county and state agencies.
3. Compliance with the requirements of this Article does not eliminate the need for the property owner to comply with other applicable township ordinances and regulations.
4. Upon submission, the Stormwater Management Plan shall be forwarded to the Township Planner and the Township Designee for review and recommendation to the Planning Commission. If the site plan, subdivision plat, or other plan is revised, then the Stormwater Management Plan shall also be revised and reviewed again by the Township Planner and Township Designee to ensure continued compliance with all applicable Ordinances.
5. All Stormwater Management Plans, including waiver submissions, shall be reviewed.
6. If the proposed plan is not sufficient as originally submitted, the Township Designee will notify the applicant in writing, setting forth the reasons for withholding a recommendation for approval, and will state the changes necessary to obtain approval.
7. Planning Commission Review:
 - (a) The Planning Commission shall, following recommendation by the township staff, Township Designee and consultants, review Stormwater Management Plans, including waiver submissions in conjunction with the submitted site plan or subdivision plat.
 - (b) If the Planning Commission determines that all of the required information has not been received, the applicant may request that the matter be tabled to allow for the submittal of the required information.
 - (c) If all the required information has been received, the Planning Commission shall approve, approve with conditions, or deny approval of the Stormwater Management Plan, including waiver submissions.
 - (d) Recommendations for action on the stormwater management plan can be part of the action on the site plan or subdivision plat.
 - (e) If the Stormwater Management Plan is approved, the Township will require the following as a condition of approval:
 - (1) Before approval of the final plan, copies of all necessary Wetland, Floodplain, Inland Lakes and Streams, Erosion Control or other needed state, federal, or local permits relating to stormwater management have been provided by the applicant for the Township's file.

Comment [clj13]: These two seem to be the same of very close and could be combined.

- (2) A satisfactory agreement that assures long-term maintenance of all drainage improvements will be in place before submission of the final plan. Documentation of maintenance agreement will be supplied to the Township and approved by the Township Board.
- (3) The applicant will post cash or a letter of credit in an amount not less than 10 percent of the cost of the stormwater management facilities for projects, but in no event less than \$5,000. This deposit will be held for one year after the date of completion of construction and final inspection of the stormwater facilities, or until construction on all phases in the development are completed, whichever time period is longer.
- (4) This deposit will be returned to the applicant (in the case of cash) or allowed to expire (in the case of a letter of credit), as provided above, provided all stormwater management facilities are clean, unobstructed, and in good working order, as determined by the township staff or designee.
- (5) Electronic files of the as-built storm drains and stormwater BMPs will be submitted by the applicant to the Township along with the final plan, or upon completion of system construction.
- (6) Complete development agreements (including deed restrictions) must be submitted for the Township's review and approval prior to recording.

Comment [clj14]: Section 1.2.10 states "perpetuity"

Comment [clj15]: How are costs determined? Engineer estimate (if so may want to base deposit based on 125 to 150 percent of estimate) or based on bid cost?

Comment [clj16]: Would require these items to be completed before escrow funds are released.

Section 5.8 Stormwater BMP Construction Plan Review and Approval Procedures

1. The applicant will submit (number) copies of final construction plans for stormwater BMPs incorporated into an approved Stormwater Management Plan, with a letter of transmittal submitted to the township with the final site plan /subdivision plan review. Construction or building permits shall not be issued until approval of the construction plans.
2. The construction plans shall be drawn to a scale no smaller than 1" = 50', and on sheets no larger than 24" x 36". The scales used shall be standard engineering scales and shall be consistent throughout the plans. When plans have been completed with computer aided design technology, locations should be geo-referenced and a copy of the electronic file shall also be provided. The construction plans shall include:
 - (a) Proposed stormwater management facilities (plan and profile).
 - (b) Proposed storm drains including rim and invert elevations.
 - (c) Proposed open channel facilities including slope, cross section detail, bottom elevations, and surface material.
 - (d) Final sizing calculations for stormwater quality and quantity treatment facilities and stormwater conveyance facilities.
 - (e) Storage provided by one (1) foot elevation increments.
 - (f) Tributary area map for all stormwater management facilities indicating total size and average run-off coefficient for each sub-area.
 - (g) Analysis of existing soil conditions and groundwater elevation (including submission of soil boring logs) as required for proposed retention and infiltration facilities.
 - (h) Details of all stormwater BMPs including but not limited to:
 - (1) Outlet structures.
 - (2) Overflow structures and spillways.
 - (3) Riprap.
 - (4) Manufactured treatment system.
 - (5) Underground detention cross section and product details.
 - (6) Cross section of infiltration and/or bioretention facilities.
 - (i) Final landscaping plan and details.
 - (j) Final easements for storm water management facilities.

- (k) Maintenance plan and agreement.
3. Construction drawings and engineering specifications shall be subject to review and approval by the Township Designee to ensure that the construction plan conforms with the approved Stormwater Management Plan and that adequate storm drainage will be provided and that the proposed stormwater management system provides adequately for water quantity and quality management to ensure protection of property owners and watercourses both within the proposed development and downstream.
 4. A construction/building permit shall not be issued unless the detailed engineering drawings and specifications meet the standards of this article, applicable township ordinances, engineering standards and practices, and any applicable requirements of other government agencies. Additionally, the following information is required to be submitted:
 - (a) A soil erosion permit under the Michigan Soil Erosion and Sedimentation Control Act, P.A. 451, Part 91 Public Acts of 1994 as amended, will be obtained from the appropriate agency prior to any construction.
 - (b) The applicant will make arrangements acceptable to the township for inspection during construction and for final verification of the construction by a registered professional engineer prior to approving Certificate of Occupancy.
 - (c) Review of construction plans by the Township will not proceed until site plan approval has been granted.
 - (d) Approval of construction plans by the Township is valid for one calendar year. If an extension beyond this period is needed, the applicant will submit a written request for an extension. The township may grant one year extensions of the approval, and may require updated or additional information if needed. Township action under this provision may be taken administratively provided that no changes to the plans and/or standards have occurred. In the event one or more such changes have occurred, township action under this provision shall be taken by the final reviewing body.
 - (e) For site condominiums, complete Master Deed documents (including "Exhibits" drawings) must be submitted for township review and approval prior to recording.

Section 5.9 As-Built Certification

An as-built certification for stormwater BMPs as part of an approved Stormwater Management Plan must be submitted to the Township prior to final approval of the development. The certification shall include the following:

1. A plan view of all detention basins, retention basins, and/or sediment forebays detailing the proposed and final as-built elevation contours. Sufficient spot elevations should be provided on each side of the basin, the bottom of the basin, and along the emergency spillway(s).
2. Detention basin, retention basin, and/or sediment forebay calculations along with corresponding volumes associated with the as-built elevations. The proposed volume and final as-built volume should be indicated.
3. Final as-built invert elevations for all inlet pipes and all associated outlet structure elevations, riser pipe hole sizes, and number of holes should be included. Invert elevations of the final outlet pipe to the receiving water and elevation of the final overflow structure should also be provided.
4. The side slopes of all stormwater basins should be identified and must meet minimum safety requirements.
5. The certification should be signed and sealed by a registered professional engineer

ARTICLE VI: EASEMENTS, MAINTENANCE AGREEMENTS AND INSPECTIONS

Section 6.1 Stormwater Management Easements

1. Stormwater management easements shall be provided in a form required by the Township staff and Township Attorney, and recorded as directed as part of the approval of the Township Board to assure
 - (a) access for inspections;
 - (b) access to stormwater BMPs for maintenance purposes; and
 - (c) preservation of primary and secondary drainageways needed to serve stormwater management needs of other properties.
2. The property owner shall obtain easements assuring access to all areas used for off-site stormwater management, including undeveloped or undisturbed lands.
3. Easements shall be recorded with the Grand Traverse County Register of Deeds according to county requirements.
4. The applicant must provide the Township with evidence of the recording of the easement prior to final subdivision plat or condominium approval or other applicable final construction approval.

Section 6.2 Maintenance Agreement

1. The purpose of the maintenance agreement is to provide the means and assurance that maintenance of stormwater BMPs shall be undertaken.
2. A maintenance agreement shall be submitted to the Township for review by Township staff, the Township Designee, and the Township Attorney, for all development, and shall be subject to approval in accordance with Stormwater Management Plan.
3. Maintenance agreements shall be approved by the Township Board prior to final subdivision plat or condominium approval, as applicable, and prior to construction approval in other cases.
4. The maintenance agreement shall include a plan for routine, emergency, and long-term maintenance of all stormwater BMPs, with a detailed annual estimated budget for the initial three years, and a clear statement that only future maintenance activities in accordance with the maintenance agreement plan shall be permitted without the necessity of securing new permits. Written notice of the intent to proceed with maintenance shall be provided by the party responsible for maintenance to the township at least 14 days in advance of commencing work.
5. The maintenance agreement shall be binding on all subsequent owners of land served by the stormwater BMPs and shall be recorded in the office of the Grand Traverse County Register of Deeds prior to the effectiveness of the approval of the township board.
6. If it has been found by the Township Board, following notice and an opportunity to be heard by the property owner, that there has been a material failure or refusal to undertake maintenance as required under this ordinance and/or as required in the approved maintenance agreement as required hereunder, the Township shall then be authorized, but not required, to hire an entity with qualifications and experience in the subject matter to undertake the monitoring and maintenance as so required, in which event the property owner shall be obligated to advance or reimburse payment (as determined by the township) for all costs and expenses associated with such monitoring and maintenance, together with a reasonable administrative fee. The maintenance agreement required under this ordinance shall contain a provision spelling out this requirement and, if the applicant objects in any respect to such provision or the underlying rights and obligations, such objection shall be resolved prior to the commencement of construction of the proposed development on the property.

Section 6.3 Inspections

The Township shall have the right to conduct on-site inspections of the stormwater management facilities to verify compliance with the requirements of this ordinance. Inspections may take place before, during, or after any earth change activities have occurred after written consent from the property owner. Submission of an Engineered Site Grading Plan, a Stormwater Management Plan or a Maintenance Agreement shall be deemed as providing written consent for the Township to conduct on-site inspections.

ARTICLE VII ENFORCEMENT

Section 7.1 Sanctions for Violations

1. Any person violating any provision of this article shall be responsible for a municipal civil infraction and subject to a fine of not less than \$500 for each offense, plus costs, damages, expenses, and other sanctions as authorized under Chapter 87 of the Revised Judicature Act of 1961 and other applicable laws, including, without limitation, equitable relief. Each day such violation occurs or continues shall be deemed a separate offense and shall make the violator liable for the imposition of a fine for each day. The rights and remedies provided for in this section are cumulative and in addition to any other remedies provided by law. An admission or determination of responsibility shall not exempt the offender from compliance with the requirements of this article.
2. Any person who neglects or fails to comply with a stop work order issued under section 7.2, shall, upon conviction, be guilty of a misdemeanor, punishable by a fine of not more than \$500 or imprisonment in the county jail for not more than 93 days, or both such fine and imprisonment, and such person shall also pay such costs as may be imposed in the discretion of the court.
3. Any person who aids or abets a person in a violation of this ordinance shall be subject to the sanctions provided in this article.

Section 7.2 Stop Work Order

Where there is work in progress that causes or constitutes in whole or in part, a violation of any provision of this Ordinance, the Township is authorized to issue a stop work order so as to prevent further or continuing violations or adverse effects. All persons to whom the stop work order is directed, or who are involved in any way with the work or matter described in the stop work order shall fully and promptly comply therewith. The township may also undertake or cause to be undertaken, any necessary or advisable protective measures so as to prevent violations of this ordinance or to avoid or reduce the effects of noncompliance herewith. The cost of any such protective measures shall be the responsibility of the property owner upon which the work is being done and the responsibility of any person carrying out or participating in the work, and such cost shall be a lien upon the property.

Section 7.3 Failure to Comply

In addition to any other remedies, should any owner fail to comply with the provisions of this article, the township may, after the giving of reasonable notice and opportunity for compliance, have the necessary work done, and the owner shall be obligated to promptly reimburse the township for all costs of such work.

Section 7.4 Emergency measures

When emergency measures are necessary to moderate a nuisance, to protect public safety, health and welfare, and/or to prevent loss of life, injury or damage to property, the township is authorized to carry out or arrange for all such emergency measures. Property owners shall be responsible for the cost of such measures made necessary as a result of a violation of this article, and shall promptly reimburse the township for all of such costs.

**GRAND TRAVERSE COUNTY PLANNING COMMISSION
MASTER PLAN/ZONING REVIEW**

Pursuant to Section 307 of Public Act 110 of 2006, a township shall submit for review and recommendation the proposed zoning ordinance or zoning ordinance amendment to the county. The county will have waived its right for review and recommendation of an ordinance if the recommendation of the county planning commission has not been received by the township within 30 days from the date the proposed ordinance is received by the county.

TOWNSHIP: Acme Township
AMENDMENT #: 30
DATE RECEIVED: March 11, 2014
PUBLIC HEARING: March 10, 2014
PRELIMINARY REVIEW:

MASTER PLAN:
ZONING ORDINANCE:
TEXT: **MAP:**
MAP ATTACHED:
PUBLIC HEARING MINUTES:

CHANGE: Amendment to the Agricultural District Ordinance to allow for small wineries, wineries, microbreweries, breweries, distilleries, commercial kitchens, agricultural processing, aquaculture, aquaponics, food research and development facility, food storage, bulk, production facilities for value added farm products, tasting rooms

TOWNSHIP PLANNING COMMISSION RECOMMENDED TO TOWNSHIP BOARD:
Approval on March 10, 2014

COUNTY PLANNING STAFF COMMENTS:
Staff recommends approval.

COUNTY PLANNING COMMISSION ACTION: The County Planning Commission, at its March 18, 2014 meeting, concurred with the Township Planning Commission recommendation of approval.

COMMENTS FROM CPC ACTION: The Township may want to ensure production of food products is in accordance with GAAMPS and other state agriculture and health requirements.

RETURNED TO TOWNSHIP (DATE/RECOMMENDATION): 3-19-14 via email

PLANNING & ZONING REVIEW

TO: ACME TOWNSHIP PLANNING COMMISSION
FROM: NIKKI LENNOX, ZONING ADMINISTRATOR
SUBJECT: ORDINANCE #030 A-1 Agricultural Ordinance
DATE: 04/08/2014

ORDINANCE #030 A-1 Agricultural Ordinance

Background:

In 2013 the Acme Planning Commission took on the task of reviewing and updating the zoning districts. A joint committee of planning commissioners, agriculture property owners and interested residents was formed. Several meetings were held, inviting the agricultural community to participate in the update.

Modifications to the A-1: Agriculture District ordinance include recent advances in food processing, packaging and distribution, agri-tourism and provisions regarding large and small wine makers, distilleries, microbreweries, and breweries defined and regulated by the Michigan Liquor Control Commission (MLLC).

A component of the ordinance also favors the use of crops and grains produced in Acme Township and the State of Michigan.

In March 2014 the Planning Commission held a hearing and recommended approval of the A-1 Agricultural District Ordinance to the Township Board and to the County Planning Commission for review.

On March 18th the County Planning Commission reviewed the ordinance and concurred with the Acme Planning Commission's recommendation for approval to the Township Board and offered the following comment; The Township may want to ensure production of food products is in accordance with GAAMPS and other state agriculture and health requirements.

Suggested Action for the Planning Commission:

- Motion to recommend adoption of Ordinance Amendment #030 to the Township Board

ORDINANCE #30**6.11 A-1: AGRICULTURAL DISTRICT:**

6.11.1 INTENT AND PURPOSE: This District is intended to preserve, enhance, and stabilize areas within the Township which are presently used predominantly for farming purposes or areas which, because of their soil, drainage, or natural flora characteristics, should be preserved for low intensity land uses. It is the further purpose of this District to promote the protection of the existing natural environment, preserve the essential characteristics and economical value of these areas as agricultural lands, provide increased market opportunities for local and regional producers by clustering supporting operations such as processing, packaging, distributing, buying, and, research and development that complement and add value to the agricultural sector, and provide opportunities for agricultural-related entrepreneurial ventures. Generally accepted agricultural and management practices which may generate noise, dust, odors, and other associated conditions may be used and are protected by the Michigan Right to Farm Act. It is explicitly the purpose of this zone to preserve a suitable long term working environment for farming operations while minimizing conflicts between land uses. It is the further purpose of this District to promote the protection of the existing natural environment, and to preserve the essential characteristics and economical value of these areas as agricultural lands.

6.11.2 USES PERMITTED BY RIGHT:

- a. Agricultural and Farm Related Operations listed below:
 - 1. Field crop and fruit farming, truck gardening, horticulture, aviaries, hatcheries, apiaries, greenhouses, tree nurseries, and similar agricultural enterprises.
 - a. Raising and keeping poultry and rabbits.
 - b. Raising and keeping of livestock, such as cattle, hogs, horses, ponies, sheep, goats, and similar livestock upon a lot having an area not less than five acres.
 - 2. Farmer's Roadside Stands selling products grown by the owner of the property on which the stand is located, PROVIDED that contiguous space for the parking of customers' vehicles is furnished off the public right-of-way at a ratio of one parking space for each fifteen square feet of roadside stand floor area.
 - 3. Agricultural Tourism: Subject to the following parking requirements; parking facilities may be located on a grass or gravel area for seasonal uses such as road side stands, u-pick operations and agricultural mazes. All parking areas shall be defined by either gravel, cut lawn, sand or other visible marking.
 - a. Seasonal U-Pick fruits and vegetables operations
 - b. Seasonal outdoors mazes of agricultural origin such as straw bales or corn
 - c. Agricultural Festivals

- d. Agricultural or agriculturally-related uses permitted by right in the A-1 zoning district may include any or all of the following ancillary agriculturally related uses and some non-agriculturally related uses so long as the general agricultural character of the farm or agricultural operation is maintained.
 1. Value-added agricultural products of activities such as education tours or processing facilities, etc.
 2. Bakeries selling baked goods containing produce grown primarily on site.
 3. Playgrounds or equipment typical of a school playground, such as slides, swings, etc. (not including motorized vehicles or rides).
 4. Petting farms, animal display, and pony rides.
 5. Wagon, sleigh, and hayrides.
 6. Nature trails.
 7. Open air or covered picnic area with restrooms.
 8. Educational classes, lectures, seminars.
 9. Historical agricultural exhibits.
 10. Kitchen facilities, processing/cooking items for sale on or off premises.
 11. Gift shops for the sale of agricultural products and agriculturally related products.
 12. Gift shops for the sales of non-agriculturally related products such as antiques or crafts-.
4. Agricultural processing. Activities which involve a variety of operations after harvest of crops to prepare them for market, or further processing and packaging at a distance from the agricultural area. Included activities are cleaning, milling, pulping, drying, roasting, hulling, storing, packaging, selling, and other similar activities. Also included are the facilities or buildings related to such activities.
5. Aquaculture. The cultivation of aquatic animals, in a recirculating environment to produce whole fish that are distributed to retailers, restaurants, and consumers.
6. Aquaponics. The combination of aquaculture and hydroponics to grow crops and fish together in a recirculating system without any discharge or exchange of water.
7. Community kitchen. A facility licensed as a food manufacturer that may be used by licensed businesses for commercial purpose. A community kitchen may also be an unlicensed kitchen that is used by community members for cooking non-commercial or exempt foods or for cooking classes and/or other related activities.
8. Food research and development facility. Research, development, and testing laboratories that do not involve the mass manufacture, fabrication, processing, or sale of food products.

9. Food storage, bulk. The holding or stockpiling on land of food products where such storage constitutes no more than 40 percent of the developed site area and storage area is at least one acre, and where at least three of the following criteria are met by the storage activity: (1) in a bulk form or in bulk containers; (2) under protective cover to the essential exclusion of others of the same space due to special fixtures or exposed to the elements; (3) in sufficient numbers, quantities, or spatial allocation of the site to determine and rank such uses as the principal use of the site; (4) the major function is the collection and/or distribution of the material and/or products rather than processing; and (5) the presence of fixed bulk containers or visible stockpiles for a substantial period of a year.
10. Production Facilities for Value Added Farm Products. Any product processed by a producer from a farm product, such as baked goods, jams and jellies, canned vegetables, dried fruit, syrups, salsas, salad dressings, flours, coffee, smoked or canned meats or fish, sausages, or prepared foods.
11. Warehouse. Facilities. Warehousing associated with the production and/or processing of agricultural products, but not involved in manufacturing or production.
12. Small Wine Maker as defined and regulated by the Michigan Liquor Control Commission (MLCC) on a parcel at least 10 acres in size with 3 acres planted in wine fruits where 5% of the fruits used in their production are grown in Acme Township and 75% of the fruits used in the production are grown in the State of Michigan. A Small Distiller as defined and regulated by the Michigan Liquor Control Commission (MLCC) can concurrently occupy the same parcel as long as the property owner has a Small Wine Maker license. There is a onetime waiver of the local production requirement for the first three years of operation commencing on the date that the license was issued by MLCC.
13. Small Distiller as defined and regulated by the Michigan Liquor Control Commission (MLCC) on a parcel at least 10 acres in size with 5 acres planted in farm products used in the distillery process and where 5% of the farm products used in their production are grown in Acme Township and 75% of the farm products used in the production are grown in the State of Michigan. There is a onetime waiver of the local production requirement for the first three years of operation commencing on the date that the license was issued by MLCC.
14. Microbrewery as defined and regulated by the Michigan Liquor Control Commission (MLCC) on a parcel at least 10 acres in size with 5 acres planted in farm products used in the brewing process and where 5% of the farm products used in their production are grown in Acme Township and 75% of the farm products used in the production are grown in the State of Michigan. There is a onetime waiver of the local production requirement for the first

three years of operation commencing on the date that the license was issued by MLCC.

15. Tasting Room subject to the requirements of the Michigan Liquor Control Commission.

b. Non-Agricultural Uses listed below:

1. Single-family detached dwellings

2. Open Space Preservation Developments containing only Single-Family Detached Dwellings: Subject to the provisions of Article XI.

3. State licensed residential facilities

4. Family child care homes

5. Cemeteries: public or private.

6. Tenant house as part of farm property for full-time farm employees associated with the principal use and subject to the same height and setback requirements as the principal dwelling.

7. Public areas and public parks such as recreation areas, forest preserves, game refuges, and similar public uses of low-intensity character.

8. Public and private conservation areas and structures for the conservation of water, soils, open space, forest and wildlife resources.

9. Accessory uses: Customary accessory uses and buildings incidental to the permitted principal use of the premises.

10. Home Occupations in accord with the requirements of Section 7.7.

11. Manufactured homes, subject to the following requirements:

a. Each home shall bear a label required by Section 3282.362(c)(2) of the Federal Mobile Home Procedural and Enforcement Regulations.

b. Each home shall be installed pursuant to the manufacturer's setup instructions and shall be secured to the premises by an anchoring system or device complying with any applicable requirements of the Michigan Mobile Home Commission.

c. Within ten days following installation, all towing mechanisms shall be removed from each home. No home shall have any exposed undercarriage or chassis.

d. Each home shall have a permanent perimeter wall of conventional building materials which shall prevent the

- entrance of rodents, control heat loss and contribute to aesthetic compatibility with surrounding structures.
- e. Each home shall have a full concrete slab within the perimeter wall. This space may be used as a crawl space for storage purposes.
 - f. All construction and all plumbing, electrical apparatus and insulation within and connected to each home shall be of a type and quality conforming to the "Mobile Home Construction and Safety Standards" as promulgated by the United States Department of Housing and Urban Development, being 24 CFR Section 3280, as from time to time amended. Additionally, all dwellings shall meet or exceed all applicable roof snow load and strength requirements.
 - g. Exterior Finish; Light Reflection: Any materials that are generally acceptable for housing built on the site may be used for exterior finish if applied in such a manner as to be similar in appearance, PROVIDED, however, that reflection from such exterior shall not be greater than from siding coated with clean, white, gloss, exterior enamel.
 - h. Each home shall be aesthetically compatible in design and appearance with other residences in the adjacent area, particularly with regard to foundation treatment, siding and roofing material and perimeter wall. Compatible materials such as siding, screen wall, etc. may be added to assure aesthetic compatibility with other structures.
 - i. The compatibility of design and appearance shall be determined by the Acme Township Zoning Administrator. The Acme Township Zoning Administrator shall base his or her decision on the character, design and appearance of residential dwellings in adjacent areas of the Township.
 - j. To the extent that any of these provisions conflicts with any provision of the Mobile Home Commission Act or its administrative rules as applied to a mobile home in a residential neighborhood, the Mobile Home Commission Act provision will control.

12. Public Uses: Essential: Buildings associated with Essential Public Services require Special Use Permit approval, pursuant to Section 9.1. *[ADDED BY AMENDMENT 017, ADOPTED 07/03/12 EFFECTIVE 07/18/12.]*

6.11.3 USES PERMITTED BY SPECIAL USE PERMIT: The following uses of land and structures may be permitted in by the application for and issuance of a special use permit, subject to Section 9.1.

- a. Campgrounds: Subject also to the requirements of Section 9.4
- b. Institutional Uses: Subject also to the requirements of Section 9.5
- c. Greenhouses and nurseries selling at retail on the premises
- d. Riding Stables and livestock auction yards

- e. Raising of fur bearing animals for profit
- f. Game or hunting preserves operated for profit
- g. Veterinary hospitals, clinics and kennels.
- h. Sawmills
- i. Public Uses: Critical, Supporting: *CHANGED BY AMENDMENT 017, ADOPTED 07/03/12 EFFECTIVE 07/18/12.*
- j. Airports and Airfields
- k. Planned Agricultural Units: Subject also to the requirements of Section 9.8.
- l. Special Open Space Uses: Subject also to the requirements of Section 9.16.
- m. Sand or Gravel Pits, Quarries: Subject also to the requirements of Section 9.17.
- n. Farmer's Roadside Market: Subject also to the requirements of Section 9.18.
- o. Sewage Treatment and Disposal Installations: Subject also to the requirements of Section 9.15.
- p. Historic Parks: Subject also to the requirements of Section 9.23.
- q. Bed and Breakfast Establishments: Subject also to the requirements of Section 9.24.
- r. Livestock processing which is regulated by state and federal agencies.
- s. Conversion of a Single-Family Dwelling to a Duplex: Conversion of existing single-family dwellings where such existing single-family dwelling is of sufficient size to meet minimum floor area requirements of a duplex, and such an expanded capacity is a clear necessity for satisfaction of this particular housing demand, and adequate off-street parking space can be provided.
- t. Single Family Dwelling on Less than Five Acres: A lot with a minimum size of one acre containing a single family dwelling may be created subject to the following requirements:
 - 1. The single family dwelling existed prior to the enactment of this Ordinance;
 - 2. The single family dwelling was part of an agricultural use and subsequently, through consolidation of farms or other actions, became no longer necessary as a farm-related residence;

3. The lands that would otherwise be required to be part of the lot for the single family dwelling would be lost from production should the smaller minimum lot size not be allowed; and
 4. Continue to be actively farmed along with the balance of the farm.
- u. Conservation Development: Subject also to the requirements of Section 9.3.
- v. Structural Appurtenances: As accessory uses, the following kinds of structural appurtenances may be permitted to exceed the height limitations for the principal use: appurtenances to mechanical or structural functions, such as chimney and smoke stacks, water tanks, elevator and stairwell penthouses, ventilators, bulkheads, radio towers, aerials, fire and hose towers and cooling towers. No structural appurtenances permitted hereby shall be used for dwelling purposes.
- w. The following agricultural tourism uses are permitted by special use permit:
1. Small-scale entertainment (e.g., fun houses, haunted houses, or similar) and small mechanical rides.
 2. Organized meeting space for use by weddings, birthday parties, corporate picnics, and other similar events.
[SECTION 6.11.3.x ADDED BY AMENDMENT 018 ADOPTED 05/01/2012 EFFECTIVE 05/13/2012.]
- x. Winery with Food Service subject to the following requirements:
1. The winery kitchen, food preparation, and production areas must be licensed by the Grand Traverse County Health Department.
 2. Parking lots shall be screened from adjacent properties.
 3. Outdoor lighting shall comply with Acme Township standards.
- y. Wine Maker as defined and regulated by the Michigan Liquor Control Commission (MLCC) on a parcel over 10 acres where 5% of the fruits used in their production are grown in the Acme Township and 75% of the fruits used in their production are grown in the State of Michigan. There is a onetime waiver of the local production requirement for the first three years of operation commencing on the date that the license was issued by MLCC.
- z. Distilleries as defined and regulated by the Michigan Liquor Control Commission (MLCC) on a parcel over 10 acres where 5% of the farm products used in their production are grown in the Acme Township and 75% of the farm products used in their production are grown in the State of Michigan. There is a onetime waiver of the local production requirement for the first three years of operation commencing on the date that the license was issued by MLCC.

- aa. Breweries as defined and regulated by the Michigan Liquor Control Commission (MLCC) on a parcel over 10 acres where 5% of the farm products used in their production are grown in the Acme Township and 75% of the farm products used in their production are grown in the State of Michigan. There is a onetime waiver of the local production requirement for the first three years of operation commencing on the date that the license was issued by MLCC.

6.11.4 RIGHT TO FARM: As to any specific property on which commercial farm products are produced within the meaning of MCL 286.472(a), if any applicable Generally Accepted Agricultural Management Practice (GAAMP) approved by the Michigan Department of Agriculture conflicts with any provision below, the GAAMP shall control.

planning review

Date: 04.08.2014

From: John Iacoangeli
To: **Karly Wentzloff, Chairperson**
ACME TOWNSHIP PLANNING COMMISSION
6042 Acme Road
Traverse City, MI 49690

Project: Bates Horse Park, LLC
Amendment to SUP 2006-12P
2014

Request: Amendment to Special Use Permit

Applicant: Bates Horse Park, LLC

Parcel Address: 6535 Bates Road
Williamsburg, MI

Parcel Number: 28-1-014-009-00 and 28-01-014-008-00

General Description:

The Applicant, Karin Flint, is requesting an amendment to SUP 2006-12P for the following additions to the Bates Horse Park. is requesting to expand the use of the facility for weddings, pond hockey (winter), car shoes, concerts, and outdoor movies.

1. The facility was originally approved as a Special Use Permit (SUP 2006-12P) for use as an equestrian facility under the A-1: Agricultural District Section 6.11.3 (l.) Special Open Space Uses based on the site standards in Section 9.16..
2. In 2012 the Applicant applied and was granted an amendment to the SUP to:
 - a. Change the temporary campground to a permanent campground status.
 - b. Allow the use of a Special Transitory Food Unit (STFU).
 - c. Allow the use of portable flush toilet trailers.
 - d. Allow the future installation of a 34 x 64 square foot food pavilion over the existing 30x60 concrete pad.

The 2012 minor amendment requested to expand the use of the facility for polo events, weddings, pond hockey (winter), car shoes, concerts, and outdoor movies but was asked to come back with a formal request to the Planning Commission at a later time for a major amendment to the SUP due to the change of character of the events proposed.

The Planning Commission also considered and approved a request from the owner and the Acme Business Association (ABA) to allow the facility to be used for the ABA sponsored community events.

ASSESSMENT OF THE REQUEST

The initial Special Use Permit was approved as an "equestrian-competition facility" consistent with the intent and character of the zoning district and the surrounding properties. This request before the Planning Commission begins to expand the use of the property into a year-round outdoor entertainment venue. Unfortunately, there is no one provision in the zoning ordinance which addresses all of the activities proposed.

The Special Open Space provision (Section 9.16) defines open space as "uses such as public beaches, bath houses, private resorts, recreational camps, and other open space uses operated for profit." The equestrian-competition facility was approved under the pretense that it was a short-duration activity occurring in the summer over a 4-6 week period. Clearly, some the proposed activities such as outdoor concerts and winter sports activities are not considered open space activities due to their intensity (ie.parking, lighting, sound systems, etc.) However, weddings would be allowed as a Special Use under the Ag-Tourism provisions of the current zoning ordinance and the proposed A-1 zoning district.

RECOMMENDATION

The Planning Commission has several options to consider:

1. Do Nothing. Inform the Applicant that the proposed uses are inconsistent with the Intent of the A-1 Zoning District and the previous Special Use permits and amendments granted.
2. Consider the request to hold outdoor weddings and receptions under the provisions of the Ag-Tourism ordinance.
3. Consider the adoption of an Events Ordinance which would allow a variety of uses subject to review and approval by the Township. (examples provided)
4. Consider the adoption of a Planned Development ordinance which would allow the Applicant and Planning Commission to develop a master plan for the property with a list of activities and uses specific to the property. (example provided).

If the Planning Commission wishes to pursue options #3 or #4 the timeframe will likely take four (4) to five (5) months to have a workable ordinance which includes the Planning Commission preparation and public hearing process, Grand Traverse County Planning Commission review and Township Board approval. After formal approval the Applicant can then fill an Application under the new provisions for Planning

planning review

Commission review and approval. Depending on the option and the cache of uses proposed the Planning Commission review process could take another two (2) months to conclude. As a result, the request to repurpose the property for a variety of events could take until November 2014 to resolve.

In light of other requests to use agricultural zoned property for non-agricultural and event-oriented operations the Planning Commission should proceed in a thoughtful and deliberate manner on this issue.

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planning review

Date: 07.16.2012

From: John Iacoangeli
To: **Sharon Vreeland**
ACME TOWNSHIP
6042 Acme Road
Traverse City, MI 49690

Project: Bates Horse Park, LLC
Amendment to SUP 2006-12P
2012

Request: Minor Amendment to Special Use Permit

Applicant: Bates Horse Park, LLC

Parcel Address: 6535 Bates Road
Williamsburg, MI

Parcel Number: 28-1-014-009-00 and 28-01-014-008-00

Summary and Recommendation:

A majority of the Applicant's request should be considered favorably by the Planning Commission as a minor amendment to the original Special Use Permit (SUP 2006-12P) under Section 8.1.5 (b). However, a portion of the request should be reviewed under Section 8.1.5 (c) which requires a formal application and public hearing.

General Description:

The Applicant, Karin Flint, is requesting an amendment to SUP 2006-12P for the following additions to the Bates Horse Park.

1. The facility, originally classified as a Temporary Campground, will be upgraded to a "Permanent" status which requires a Type II well, dump station and enlarged drainage field. These facilities are noted with the letter A on the attached drawing. The expansion of these facilities will accommodate the siting of portable bathroom trailer with flush toilets.
2. To provide more efficient food handling a Special Transitory Food Unit (STFU) will be used on the premises. The STFU will be housed in a retrofitted 12x36 trailer. The Applicant plans to park next to the STFU a Sysco trailer which will provide the needed refrigeration depending on attendance levels.

3. Utilization of a portable flush toilet trailer adjacent to the office. These facilities will be connected to a new set of septic tanks.
4. The Applicant has agreements with adjacent property owners to provide for overflow services such as parking and horse amenities. The agreement are with the Walter's (6584 Bates Road) and Herman family (6623 Bates Road). Both parties provide support parking for trailers, tractor-trailors, and horse pens.
5. The Applicant is proposing to construct, at a later time, a 34x64 food pavilion over the existing 30x60 concrete pad.
6. Lastly, the Applicant is requesting to expand he use of the facility for polo events, weddings, pond hockey (winter), ABA Fall festival, car shoes, concerts, and outdoor movies.

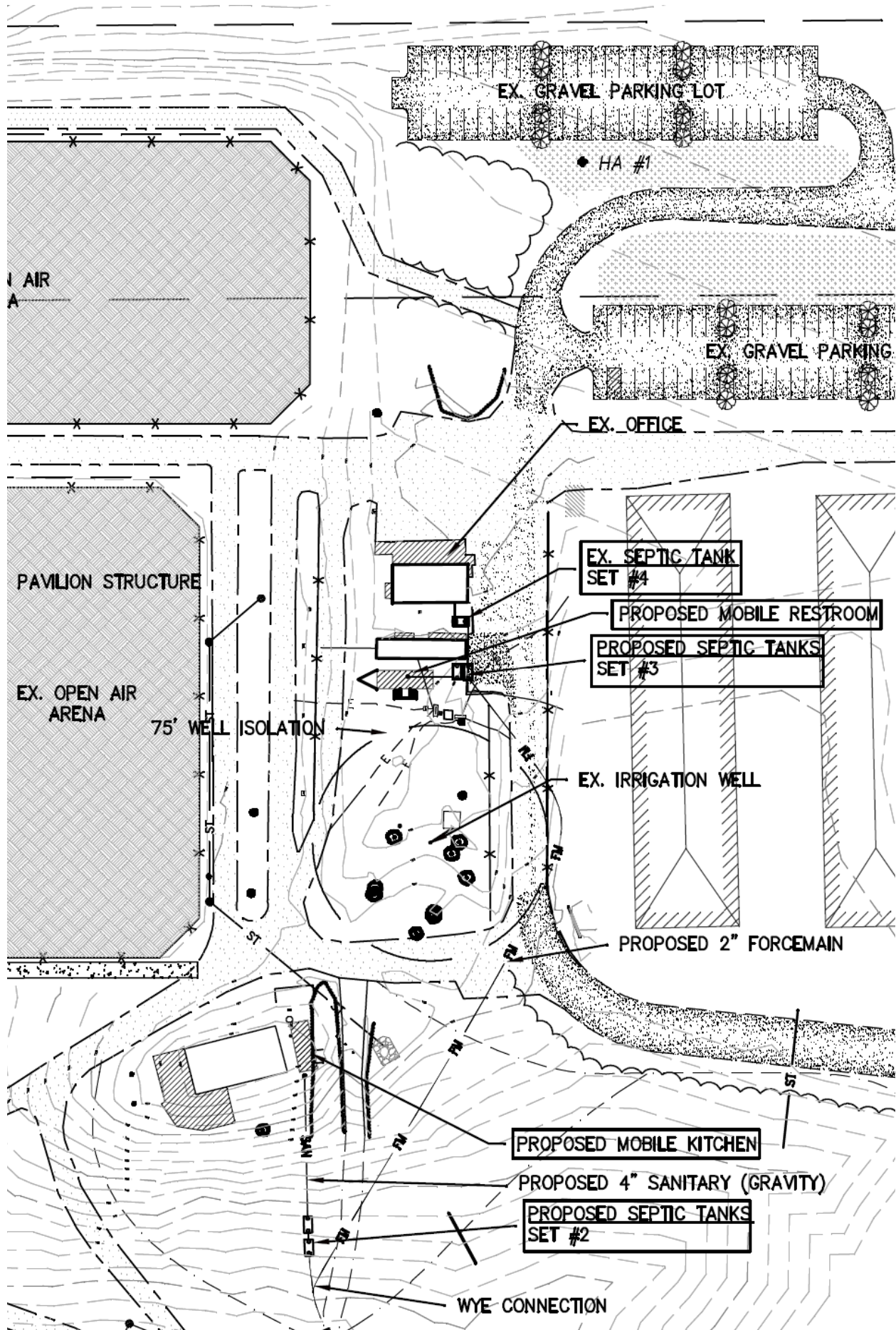
ASSESSMENT OF THE REQUEST

The initial Special Use Permit was approved as an "equestre-competition facility" on property located at 6535 Bates Road. The request for the minor amendment to the original SUP includes additional support facilities for existing operations and uses which expand the offerings at the facility to include non-equestre related uses, such as, pond hockey, car shows, movies, weddings, and festivals.

In additon, it appears the duration of the operation is expanding along with offerings.

RECOMMENDATION

1. Approve items #1, #2, #3, #4, and #5 as a minor amendment to SUP 2006-12P with the condition that the leases/agreements in place for the Walter's and Herman properties are provided to the Township.
2. Remit item #6 for a Special Use Approval under the Ag-Tourism ordinance.



EX. GRAVEL PARKING LOT

HA #1

EX. GRAVEL PARKING

EX. OFFICE

EX. SEPTIC TANK SET #4

PROPOSED MOBILE RESTROOM

PROPOSED SEPTIC TANKS SET #3

EX. IRRIGATION WELL

PROPOSED 2" FORCEMAIN

PROPOSED MOBILE KITCHEN

PROPOSED 4" SANITARY (GRAVITY)

PROPOSED SEPTIC TANKS SET #2

WYE CONNECTION

AIR

PAVILION STRUCTURE

EX. OPEN AIR ARENA

75' WELL ISOLATION

July 10, 2012

John R. Iacoangeli, AICP, PCP, LEED AP
Principal
Beckett & Raeder, Inc.
535 W. William St. Suite 101
Ann Arbor, MI 48103

**RE: Request for Amendment to SUP 2006-12P
Bates Horse Park, LLC, 6535 Bates Road**

Dear John:

On behalf of Karin Flint, Owner of Bates Horse Park, LLC and site of Horseshows by the Bay equestrian event, we are proposing amendments to the Special Use Permit #2006-12P.

The amendments are as follows:

1. RV/Travel Trailer site

The original SUP approval stated that the RV and camping area is intended for the competitors and staff only and that spectators will not be allowed to camp. The proposed amendment does not request a change to this.

Due to growing duration of the event, the timeline does not permit this to operate under the Temporary Campground permit. Temporary Campgrounds are allowed to operate for 2 weeks and are allowed one 2 week extension. Since the event through the course of the season exceeds 4 weeks, the campground license has been upgraded to a permanent campground. The site currently has 33 sites with water and electric service. As part of the upgrade to permanent status, the well designation required a change to Type II and a dump station and drainfield was added. This work was completed in the Fall of 2011.

Provisions have been made for siting a portable bathroom trailer with flush toilets and/or a trailer mounted shower unit. Review of the SUP Findings of Fact, 8.4.2(4) classifies these as incidental uses to the RV park. These portable units are connected to the same drainfield mentioned above.

We currently possess and operate under a Permanent Campground License issued by the State.

2. Food Preparation Trailer

In an effort to provide a more efficient food preparation area, a 12x36 house trailer was retrofitted with kitchen equipment. This trailer is licensed by the Grand Traverse County Health Department and the USDA as a Special Transitory Food Unit (STFU). The trailer is located adjacent to the concrete pad in the center of the park. During the events, a Sysco trailer may be staged immediately adjacent to this trailer to provide additional cooler space in the event that capacity within the STFU is insufficient for the projected attendance.

The STFU is serviced by a new set of tanks to handle the sewage needs. These tanks are to be eventually hooked to the drainfield system following a two year study whereby daily flow estimations can be derived. During these two years, the tanks are acting as holding tanks and being pumped

routinely. This program is under the authority of the Grand Traverse County Environmental Health Department.

3. Portable Flush Toilet Trailer

Demand by competitors has culminated in the need to add flush toilets at the event. Multiple portajohns are situated throughout the park during events. In previous years, a portable restroom was brought in but became problematic as the on-board holding tanks would not work properly. A portable flush toilet trailer was retrofitted into a 12x36 house trailer (FEMA trailer). This trailer is equipped with a mens and ladies restroom, each with multiple flush toilets, sinks and lavatory essentials.

The trailer will be located adjacent to the office in the center of the park. A new set of septic tanks has been installed and connects with the office. Like the STFU, the restroom trailer is part of a water study and will eventually be tied to a drainfield.

4. Off-Site Parking

Agreements have been made with adjacent property owners to provide area for overflow services such as parking and horse amenities.

a. Walter's (6584 Bates Road)

The Walter's property is located immediately across Bates Road from the park and has been rented to Bates Horse Park to provide overflow parking for the support vehicles that provide service to the competitors. This includes tractor-trailers, vehicles and the like. Vehicles that park at the Walter's are considered long-term relative to the duration of the event. This freed up the parking areas within the site to better accommodate the competitor's and spectator's vehicles that regularly arrive and depart from the show.

b. Herman (6623 Bates Road)

The Herman property is vacant land that abuts the horse park along the north property line near Bates Road. The Herman property is primarily used for the horse pens that were originally depicted near the main entrance. The pens were deemed to be in contrast with the overall vision as spectators drove into the park. The Herman property also serves as a staging area for the various essentials to caring for horses.

5. Food Pavilion

The existing concrete slab that serves as the location of the dining area for the event has previously been protected via a heavy-gauge tent structure. Health codes are directing that a permanent pavilion structure be erected. At this time, no plans have been developed for this pavilion but it will be approximately 34x64 since the existing concrete pad is 30x60.

The timeline for constructing this pavilion has not been dictated but it is our desire to seek approval for this at this time. We have included a photo of the existing pavilions that are located elsewhere on the property and it is the intent that the new pavilion will match in scale and architecture.

6. Expanded Use of the Facility

The current schedule of use for the facility is one week in June for Dressage, 4 weeks in July for the Hunter/Jumper competition, and one week in August for Reiners. The expense of maintaining this facility has led to discussions about expanding the usage. The popularity and success of this equestrian event has sparked interest in hosting other events.

- a. Polo
- b. Weddings
- c. Pond Hockey

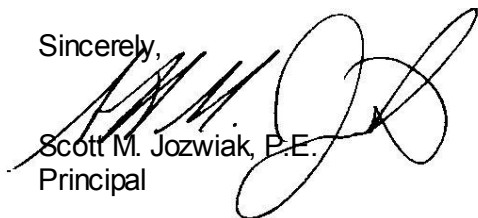
- d. Acme Business Association Fall Festival
- e. Car show
- f. Concerts
- g. Outdoor movies

It is our understanding that many of these events will be permitted within the AG district following implementation of the Agri-Tourism ordinance.

It is the owner's desire to continue to make this a park focused primarily on equestrian events but have the ability extend the usage of the facility.

We look forward to presenting the amendments at the July 30th Planning Commission meeting. Please advise us of any support information that you feel would be beneficial.

Sincerely,



Scott M. Jozwiak, P.E.
Principal

Cc: Karin Flint, Owner Bates Horse Park LLC (via email)
Sharon Vreeland, Manager, Acme Township (via email)



Planning & Zoning

To: Acme Township Board of Trustees
From: John Hull, Zoning Administrator
CC:
Date: 12/05/2006
Re: **Review, Application #2006-12P
Horse Sports by the Bay**

Township Planning and Zoning staff has performed a review of Application #2006-12P, proposed development of an equestrian competition facility, and the Acme Township Planning Commission has held a public hearing on this application..

Application history: This application is similar to a 2005 application by the same entity. The intention is to purchase land in Acme Township and create a permanent home for a competitive equestrian event during the summer. The original request was on the Highpoint golf-course property, this request is on Bates Rd., just a little north of the half-way point between M-72 and Brackett Rd. I am including the staff report from the previous application and the minutes from the previous preliminary hearing for insight into what sort of concerns were raised at that time. I have spoken to the applicant's engineer, and Elmer's is well aware of the concerns raised for the previous application.

I contacted the Garfield Township zoning administrator by telephone and confirmed that Horse Sports by the Bay had indeed been conducted in that township. I asked if there were problems, e.g., traffic, and he said that there had been no problems and that they had been "a pleasure to work with."

GENERAL INFORMATION

Permit/File Number: 2006-12P

Parcel Number: 28-01-014-009-00, 28-01-014-008-00

Legal Description: SE 1/4, NW 1/4 EXC SCHOOL LOT IN SE COR 208.7' SQ. SEC 31 T28N R9W; and SW FRL 1/4 OF NW 1/4 SEC 31 T28N R9W

Parcel Address/Location: 6535 Bates Road

Applicant: Alex Rheinheimer
801 S Garfield Ave #317
Traverse City MI 49686

Applicant's Status: Option to purchase.

Parcel Size/Disposition: 83.68 acres; the land is undeveloped

Zoning/Existing Use(s): A-1, Agricultural.

Existing Natural Features: The property is reasonably flat, having an elevation change of about 34' in the extreme. It is partially wooded, partially open land.

Adjacent Zoning/Use(s):

North: A-1 Agricultural; (Robert & Wendy Ichard, residential; Raymond & Carolene Herman, undeveloped)

South: A-1 Agricultural; (GT Resort, undeveloped; Rev. Wing Family Living Trust, residential; Bates Missionary Church)

West: A-1 Agricultural (Walter Wistrand Trust, undeveloped)

East: A-1 Agricultural; (Carol A Walter Trust, residential/agricultural)

Relevant Sections of Zoning Ordinance:

- Section 6.10.4, Uses Permitted by Special Use Permit [agricultural district]
- Section 8.4 Travel Trailer Parks
- Section 8.17, Special Open Space Uses
- Section 6.11.1, Schedule of Regulations
- Section 7.5, Off-Street Parking and Loading Requirements
- Section 7.5.4, Off-Street Parking Site Development Requirements
- Section 7.5.5, Off-Street Loading and Unloading Requirements
- Section 7.5.6, Landscaping
- Article VIII, Uses Authorized by Special Use Permit

STAFF FINDINGS OF FACT

Staff findings appear in bold, italicized text.

SECTION 6.10 A 1, AGRICULTURAL DISTRICT:

SECTION 6.10.1 INTENT AND PURPOSE: This District is intended to preserve, enhance, and stabilize areas within the Township which are presently used predominantly for farming purposes or areas which, because of their soil, drainage, or natural flora characteristics, should be preserved for low intensity land uses. It is the further purpose of this District to promote the protection of the existing natural environment, and to preserve the essential characteristics and economical value of these areas as agricultural lands. Agricultural zone areas may be subject to noise, chemical spray and other hazards which might normally disrupt a residential environment. It is explicitly the purpose of this zone, therefore, to preserve a suitable working environment for farming operations without conflict with residential and other uses. ***Satisfied: the applicant intends to establish a site for hosting English equestrian events. The project is to include some temporary travel-trailer dwelling.***

SECTION 6.10.4 USES PERMITTED BY SPECIAL USE PERMIT: The following uses of land and structures may be permitted in any agricultural district by the application for and issuance of a special use permit when all the procedural requirements specified in Article VIII, 8.1, "Uses Authorized by Special Use" are met, and the additional Permit:

"General Standards and Requirements" are satisfied together with any applicable requirements as outlined in the particular Articles and Sections cited.

- (1) Travel Trailer Parks subject to all requirements of Article VIII, Section 8.4.
- (12) Special Open Space Uses: Subject to Article VIII, Section 8.17.

See §6.10.1 above.

SECTION 6.10.7 SUPPLEMENTAL REGULATIONS: In addition to the general regulations set forth in this Article the following Sections should be referred to as supplemental regulations.

- (1) Miscellaneous Regulation, Section 7.1. ***N/A or under county control***
- (2) Supplemental Use and Area Regulations, Section 7.2. ***N/A***
- (3) Supplemental Height Regulations, Section 7.3. ***N/A***
- (4) Sign Requirements, Section 7.4. ***Sign must comply to receive sign permit***
- (5) Off Street Parking and Loading Requirements, Section 7.5. ***See below***
- (6) Supplementary Shoreland, Stream, Wetland and Flood Plain Controls, Section 7.6. ***N/A***

SECTION 8.4 TRAVEL TRAILER PARKS:

SECTION 8.4.1 STATEMENT OF INTENT: Because of Acme Township's proximity to scenic and natural features which attract resort and recreational facilities, it is the intent of this Section to provide for recreational vehicle parks under controlled conditions which will protect the public welfare. Such parks are intended to accommodate only tents, travel trailers, self-propelled homes or vehicles designed primarily for living or sleeping or used to carry units so designed with or without basis. A special use permit may be issued for the construction and occupancy of a travel trailer park within A-1 Districts, PROVIDING the requirements of this Section can be complied with. ***This particular land-use designation is included because the equestrian competitions will often occur over a period of weeks, and some of the competitors or staff may stay onsite in travel trailers. The applicant explicitly denies spectators will be camping onsite.***

SECTION 8.4.2 SITE DEVELOPMENT REQUIREMENTS: Site developments shall comply with the provisions of Act 171, 1970, as amended, and with the following requirements:

- (1) No travel trailer parks shall be located except with direct access to a major thoroughfare, with a minimum lot width of not less than fifty (50) feet for the portion used for entrance and exit. No entrance or exist shall be through a residential district or shall require movement of traffic from the park through a residential district. ***Satisfied.***
- (2) The minimum lot area per park shall be ten (10) acres with a maximum of one hundred (100) acres. ***Satisfied.***

- (3) Spaces in travel parks used by travel trailers and tenters may be rented by the day or week or for indefinite periods as sold for permanent use PROVIDED however, that no site shall be occupied as a permanent or principal residence. **Satisfied.**
- (4) Management headquarters, recreational facilities, toilets, showers, laundry facilities and other uses and structures customarily incidental to the operation of a travel trailer park are permitted as accessory uses PROVIDED that:
 - a. Such establishments and the parking area primarily related to their operations shall not occupy more than ten percent (10%) of the area of the park. **Satisfied.**
 - b. Such establishments shall be restricted in their use to occupants of the park. **Satisfied.**
 - c. Such establishments shall present no visible evidence of their commercial character which would attract customers other than occupants of the park. **Satisfied: The travel trailer portion of the application is incidental to the primary use: equestrian competitions.**
- (5) No space shall be so located that any part intended for occupancy for sleeping purposes shall be within one hundred (100) feet of the right-of-way line of any public road or highway. Setback spaces shall be occupied by plant materials and appropriately landscaped. Plant materials shall be of sufficient size when installed to assure immediate and effective screening of the park from adjacent roads and properties. The plans, specifications and proposed arrangement of such plantings shall be prepared by a registered landscape architect. **Travel-trailer portion screened by Norway spruce trees.**
- (6) The travel trailer site plan shall be subject to the review and approval of the Grand Traverse-Leelanau-Benzie counties Health Department. **Satisfied**

SECTION 8.17 SPECIAL OPEN SPACE USES, such as public beaches, bath houses, private resorts, recreational camps, and other open space uses operated for profit within the A 1, Agricultural District.

- a. The proposed site shall be at least two (2) acres in area. **Satisfied: The site is approximately 83.68 acres.**
- b. The proposed site shall have at least one (1) property line abutting a major thoroughfare as classified on the Comprehensive Development Plan of Acme Township. **The township does not actually have a Comprehensive Development Plan; however, the Master Plan designates this section of Bates Road as "farm-to-market." Given that this section is relevant only for 15 travel-trailer spots for a few weeks out of the year, and that the primary use of the property is not as a travel-trailer park, this project appears within the spirit of the regulation.**
- c. All buildings and structures shall be set back at least two hundred (200) feet from any property or street line. Whenever the installation abuts upon

property within a residential district, this two hundred (200) foot setback shall be landscaped with trees, grass, and structural screens of a type approved by the Board of Appeals to effectively screen the installation from surrounding residential properties. **Satisfied.**

d. No more than twenty five percent (25%) of the gross site shall be covered by buildings. **Satisfied: Percentage covered by buildings:**

Existing Structures on site = 5,200 s.f.

Stables = 182,160 s.f.

Pavilion Tents = 10,800 s.f.

Office = 1,200 s.f.

Food Pavilion = 2,500 s.f. (includes deck)

Total = 20,860 s.f. = 4.63 acres on 83.68 acres = 5.5%

Note: the vendor area is not proposed as a tent is is only an area for vendors to park.

Section 6.11.1, Schedule of Regulations:

1. Setbacks: **Satisfied.**
2. Height requirement. **Satisfied.**

Section 7.5: Off-Street Parking and Loading Requirements:

§7.5.1(2): Location of off street parking for other than residential use shall be either on the same lot or within three hundred (300) feet of the building it is intended to serve, measured from the nearest point of the building to the nearest point of the off street parking lot. Ownership shall be shown of all lots or parcels intended for use as parking by the applicant. **Satisfied.**

§7.5.3(1)d.: Two spaces for each travel trailer. **Satisfied: 210 spaces while there are only 15 RV spaces.**

§7.5.3(2)k: One space for every three spectator seats. **Satisfied: 100 spaces for an expected maximum of 300 spectators**

§7.5.4(1): "All parking lots must be constructed in the rear or side yards. Parking areas shall not be constructed within the front yard unless otherwise approved by the Planning Commission and Township Board." **Satisfied.**

§7.5.4(2)a. Parking space minimum width: eight feet, six inches; parking space minimum length: twenty feet. **Satisfied.**

§7.5.4(2)b. All parking spaces shall be provided access by means of maneuvering lanes. Backing directly onto a street shall be prohibited. **Satisfied**

§7.5.4(2)c. Adequate ingress and egress to the parking lot by means of clearly defined drives shall be provided for all vehicles. Ingress and egress to a parking lot lying in an area zoned for other than single family residential use shall not be across land zoned for single family residential use. **Satisfied**

§7.5.4(2)d. Each entrance and exit to and from any off street parking lot located in an area zoned for other than single family residential use shall be at least twenty five

(25) feet distant from adjacent property located in any single family residential district. **Satisfied**

§7.5.4(2)e. Except for single-family and two-family residential lots, all parking areas, including parking spaces and maneuvering lanes, shall be surfaced with seal coat, blacktop or equivalent material that shall provide a durable, and dustless surface; and shall be graded and drained to dispose of all collected surface water. The Planning Commission may allow the installation of partially pervious parking areas provided such parking areas will be constructed so as to provide a durable and dustless surface. **Parking area to be gravel. Given the nature and duration of the events, the Planning Commission can allow the choice of gravel if it is to remain durable and dustless.**

§7.5.4(2)f. Except for single family and two family residential lots, all parking areas with a capacity of four (4) or more vehicles shall provide adequate lighting throughout the hours when the parking area is in operation. All lighting shall be from high pressure sodium light sources with shielded down lighting and non-projecting lens and shall be installed as to be confined and directed into the parking area only. All exterior light and lighting fixtures shall be subject to review and approval of the Acme Township Planner. **Satisfied**

§7.5.4(2)g. A no building buffer strip not less than ten (10) feet wide shall be required on the perimeter of all parking lots, except as provided in Section 7.5.6(4). Said buffer strip shall be used for landscaping, screening or drainage as required herein. **Satisfied**

§7.5.4(2)h. Accessible parking for handicappers shall be located as close as possible on the most direct route to barrier free building entrances. Signs shall be provided to indicate the direction of travel to barrier free building approaches when the barrier free entrance is not visible from the accessible parking space or spaces. **Satisfied**

§7.5.4(2)i. Signs on each accessible parking space shall be individually signed with the symbol of compliance. The sign shall be a minimum of twelve inches (12) by eighteen inches (18) in height and the bottom edge of the sign shall be located not less than six feet (6) eight inches (8) above grade. **Satisfied.**

§7.5.4(2)j. Each accessible parking space shall have not more than a three percent (3%) nominal grade and be not less than twelve feet (12) wide or be not less than eight feet (8) wide and be adjacent to an accessible aisle which is not less than five (5) feet wide and which is not a traffic lane. The parking space surface shall be stable and firm. There shall be a barrier free route of travel from accessible parking spaces to the nearest barrier free building approach. **Satisfied.**

§7.5.4(2)k. Eight barrier-free spaces required. **Satisfied.**

§7.5.4(3)a. Right-of-Way Screening: Vehicular use areas shall have the following landscaping and screening along all vehicular rights-of-way: **N/A**

§7.5.4(3)b. Interior Landscape Areas: In order to break up the expanse of pavement, vehicular use areas with more than five (5) parking spaces shall contain protected landscape areas located entirely within the edges of the vehicular use area. Such landscape areas shall meet the following interior landscaping requirements:

§7.5.4(4): Whenever a development requiring off street parking has parking areas containing over twenty seven hundred (2700) square feet or more, provision shall be made for on site snow storage area in addition to the required parking lot area. Snow storage shall be provided on the ratio of fifteen (15) square feet per one hundred (100) square feet of parking lot surface area. Snow storage areas shall be located in such manner that when utilized they do not interfere with clear visibility of traffic or adjacent streets and highways and the landscaping required in Section 7.5.4 (3) is protected from damage. ***Not applicable, unless the applicant intends to engage in winter operations.***

§7.5.6 **SECTION 7.5.6 LANDSCAPING:** All development applications for Special Use Permits, Planned Unit Developments, mixed use developments or subdivisions (plat or site condominium) requiring Site Plan Review shall be subject to the requirements of this Section.

§7.5.6(2)a.-f.: [Plan requirements] ***Plan submitted***

§7.5.6(3)a., b.: [Plant requirements] ***Not applicable until plants are purchased***

§7.5.6(3)c.: [Plant requirements] ***Satisfied.***

§7.5.6(3)d.: [Plant requirements]

§7.5.6(3)e.: All landscaping shall be sprinkled by an automatic sprinkling system. ***Satisfied.***

§7.5.6(3)f.: Berm may have no less than three feet (3') horizontal run for every one foot (1') of vertical rise; must have at least two feet (2') of flat width on top; must be protected against erosion. ***Not applicable.***

§7.5.6(4) Buffers and Screening: All developments abutting R-1, R-2, R-3, R-1MH and A-1 districts shall provide a landscaped buffer. Such buffer shall meet the following minimum requirements. ***N/A.***

§7.5.6(5) Right-of-Way Landscaping: ***Satisfied.***

Section 8.1.2: Special Use Permit Procedures: An application for a special use permit for any land or structure use permitted under this Article shall be submitted and processed under the following procedures:

(1) Submission of Application:

Application has been submitted on required form

(2) Data Required:

a. The special form supplied by the Township Zoning Administrator filled out in full by the applicant, including a statement of supporting evidence showing compliance with the requirements of Section 8.1.3.

The application form has been completed as required, a narrative is included.

b. Site plan, plot plan, or development plan, drawn to scale (preferably 1" = 50') of total property involved showing the location of all abutting streets, the location of all existing and proposed structures and their uses, and the

location and extent of all above ground development, both existing and proposed.

Provided

- c. Preliminary plans and specifications of the proposed development.

Provided

- d. The Planning Commission and Town Board may require a written Impact Assessment to include the following information: ***Has not been required by the Planning Commission.***

Section 8.1.3 – Basis for Determinations: Before approving or disapproving a special use permit application, the Planning Commission and Township Board shall establish that the following general standards, as well as the specific standards outlined in each application section of this Article, shall be satisfied.

- (1) **General Standards:** The Planning Commission shall review each application for the purpose of determining that each proposed use meets the following standards, and in addition, shall find adequate evidence that each use on the proposed location will:
 - a. Be designed, constructed, operated and maintained so as to insure that public services and facilities affected by a proposed land use or activity will be capable of accommodating increased service and facility loads caused by the land use or activity to protect the natural environment and conserve natural resources and energy to insure compatibility with adjacent uses of land, and to promote the use of land in a socially and economically desirable manner.
 - c. Be designed to protect natural resources, the health, safety and welfare and the social and economic well being of those who will use the land use or activity under consideration, residents and landowners immediately adjacent to the proposed land use or activity, and the community as a whole.
 - d. Be related to the valid exercise of the police power, and purposes which are affected by the proposed use or activity.
 - e. Be necessary to meet the intent and purpose of the zoning ordinance, be related to the standards established in the ordinance for the land use or activity under consideration, and be necessary to insure compliance with those standards.
 - f. Meet the standards of other governmental agencies where applicable, and that the approval of these agencies has been obtained or is assured. The applicant shall have the plan reviewed and approved by the Grand Traverse Metro Fire Department prior to the review by the Planning Commission.

The plans and narrative indicate the project is compatible with the zoning district and the neighborhood

- (2) **Conditions and Safeguards:** The Town Board may impose additional conditions and safeguards deemed necessary for the general welfare, for the

protection of individual property rights, and for insuring that the intent and objectives of this Ordinance will be observed. The breach of any condition, safeguard or requirement shall automatically invalidate the permit granted.

- (3) Specific Requirements: The general standards and requirements of this Section are basic to all uses authorized by special use permit. The specific and detailed requirements set forth in the following Sections relate to particular uses and are requirements which must be met by those uses in addition to the foregoing general standards and requirements where applicable.
- (4) Standards for Review: In reviewing an impact assessment and site plan, the Township Board and the Planning Commission shall consider the following standards:
 - a. That the applicant may legally apply for site plan review.
Satisfied.
 - b. That all required information has been provided
Satisfied.
 - c. That the proposed development conforms to all regulations of the zoning district in which it is located.
Satisfied
 - d. That the plan meets the requirements of Acme Township for fire and police protection, water supply, sewage disposal or treatment, storm, drainage, and other public facilities and services.
Satisfied
 - e. That the plan meets the standards of other governmental agencies where applicable, and that the approval of these agencies has been obtained or is assured.
Satisfied
 - f. That natural resources will be preserved to a maximum feasible extent, and that areas to be left undisturbed during construction shall be so indicated on the site plan and at the site per se.
Satisfied.
 - g. That the proposed development property respects floodways and flood plains on or in the vicinity of the subject property.
Does not appear to be applicable
 - h. That the soil conditions are suitable for excavation and site preparation, and that organic, wet or other soils which are not suitable for development will either be undisturbed, or modified in an acceptable manner.
Satisfied
 - i. That the proposed development will not cause soil erosion or sedimentation problems.
Satisfied

- j. That the drainage plan for the proposed development is adequate to handle anticipated storm water runoff, and will not cause undue runoff onto neighboring property or overloading of water courses in the area.
Satisfied
- k. That grading or filling will not destroy the character of the property or the surrounding area, and will not adversely affect the adjacent or neighboring properties.
Satisfied
- l. That structures, landscaping, landfills or other land uses will not disrupt air drainage systems necessary for agricultural uses.
Satisfied: as a warm-weather operation, cold microclimates should not be an issue.
- m. That phases of development are in a logical sequence, so that any one (1) phase will not depend on a subsequent phase for adequate access, public utility services, drainage or erosion control.
No phasing
- n. That the plan provides for the proper expansion of existing facilities such as public streets, drainage systems, and water and sewage facilities.
Satisfied
- o. That landscaping, fences, or walls may be required by the Township Board and Planning Commission in pursuance of the objectives of this Ordinance.
Satisfied.
- p. That parking layout will not adversely affect the flow of traffic within the site, or to and from the adjacent streets.
Satisfied.
- q. That vehicular and pedestrian traffic within the site, and in relation to streets and sidewalks serving the site, shall be safe and convenient.
Satisfied.
- r. That outdoor storage of garbage and refuse is contained, screened from view, and located so as not to be a nuisance to the subject property or neighboring properties.
Satisfied
- s. That the proposed site is in accord with the spirit and purpose of this Ordinance, and not inconsistent with, or contrary to, the objectives sought to be accomplished by this Ordinance and the principles of sound planning.
The project appears to be perfectly in line with the intent of the ATZO.

STAFF COMMENTS AND RECOMMENDATIONS

Both staff and the Planning Commission find this project to be in line with the letter and spirit of the ATZO. The Planning Commission has recommended this project be approved.

Acme Township Special Use Permit

Permit No.: **2006-12P**

To: Alex Rheinheimer
801 S Garfield Ave #317
Traverse City MI 49686

WHEREAS, Application having been made by the above named Applicant for Special Use Permit and Site Plan approval, **to construct and occupy an equestrian-competition facility** on property located at **6535 Bates Road, Williamsburg MI 49690**, currently zoned **A-1, Agricultural**, in Acme Township, Grand Traverse County, Michigan, more fully described as follows:

SE 1/4, NW 1/4 EXC SCHOOL LOT IN SE COR 208.7' SQ. SEC 31 T28N R9W; and SW FRL 1/4 OF NW 1/4 SEC 31 T28N R9W

Parcel Nos. 28-01-014-009-00 and 28-01-014-008-00

Due notice has been given and public hearings have been held on the Application for the Special Use Permit and Site Plan Approval, and the Acme Township Board has determined that the requested Special Use Permit and Site Plan Approval as recommended by the Acme Township Planning Commission, are appropriate and in the best interest of Acme Township. The Acme Township Board does hereby approve the Site Plan and this Special Use Permit subject to the following:

1. The representations that have been made by the Applicant and the Applicant's representatives at the meetings of the Acme Township Planning Commission and the Acme Township Board on the record and in the minutes and as reflected in the Site Plan dated **November 28, 2006** are incorporated herein by reference as the plan presented to the Acme Township Board on the published hearing date. The Applicant agrees to comply with and be bound by all representations made by the Applicant and the Applicant's representative(s) at the meeting(s). The Site Plan shall be attached hereto and incorporated herein as Exhibit A.

2. All exterior lighting shall be from high pressure sodium light sources with shielded down lighting and non-projecting lens. All exterior light and lighting fixtures shall be subject to review and approval of the Acme Township Planner or Zoning Administrator.

Permit No. 2006-12P

3. The landscaping plan shall be attached to this Special Use Permit and is included in Exhibit A, with plant species to be appropriate for existing soils, the size, location and number to be approved by the Landscape Committee. All landscaping shall be sprinkled by an automatic sprinkling system. Any change in the landscaping plan shall be approved by the Landscape Committee on the Acme Township Planning Commission. The drainage plan shall be attached to this Special Use Permit and is included in Exhibit A.

4. Any waste receptacle placed on the property shall be screened, and the location approved by the Acme Township Planner or Zoning Administrator.

5. The elevations shall be as on the Site Plan, with the final grade consistent with adjoining developed properties.

6. Parking shall meet all of the requirements of the Acme Township Zoning Ordinance.

7. There shall be no outside storage or sales.

8. The Applicant must obtain all necessary permits, including soil erosion, and Department of Natural Resource permits, and/or approvals.

9. The signage shall meet all of the requirements of the sign provisions of the Acme Township Zoning Ordinance, without variance.

10. If there is or will be an on-site sewage disposal system on the Applicant's property which requires a permit under the authority of Act 98 of the Public Acts of 1913 as amended (MCL 325.210 et seq.) the Applicant agrees to allow Acme Township to accept ownership and responsibility for the operation of the on-site sewage disposal system and extensions to the on-site sewage disposal system and the Applicant agrees to execute a Sewerage Agreement in a form acceptable to Acme Township's Attorney.

11. If there is or will be a water system on the Applicant's property which requires the approval of the Michigan Department of Health pursuant to the Michigan Safe Water Drinking Act (MCL 325.1001 et seq.) the Applicant agrees to allow Acme Township to accept ownership and responsibility for the operation of the water system and extensions to the water system and the Applicant agrees to execute a Water System Agreement in a form acceptable to Acme Township's Attorney.

13. The Developer shall provide a Bond, Letter of Credit or Cash Surety in a form and amount acceptable and approved by the Acme Township Planner or Zoning Administrator, for completion of the development, including landscaping, paving, lighting and irrigation.

14. The development shall be subject to all applicable restrictions and requirements as set forth in the Acme Township Zoning Ordinance of 1979, as amended. The development is also subject to all of the requirements of this Special Use Permit. Any violation of these conditions or requirements shall serve as grounds for revocation of this Special Use Permit by

Permit No. 2006-12P

the Acme Township Board. In the event of any such violation, Acme Township shall give written notice to the Applicant, by ordinary mail addressed to the Applicant at the last address furnished to Acme Township by the Applicant. The notice shall state that unless the violation is corrected or resolved, to the satisfaction of the Acme Township Board, within thirty (30) days from the date of the notice, then the Acme Township Board may revoke this Special Use Permit after a hearing. In the event a hearing becomes necessary, the Acme Township Board shall establish the notice requirements and such other conditions with respect to the hearing as the Acme Township Board may deem appropriate. After the hearing, if the Acme Township Board revokes this Special Use Permit, then enforcement of the violation may be made by an application for appropriate relief in the Grand Traverse County Circuit Court. The Applicant agrees that Acme Township may recover all of its costs, including attorney fees, associated with, or resulting from, such violation.

15. The rights set forth in this Special Use Permit are in addition to those granted to Acme Township by the Township Rural Zoning Act and other appropriate statutes and laws, including the Acme Township Zoning Ordinance. The applicant agrees that it accepts the conditions imposed under this Special Use Permit. In any action brought to enforce Acme Township's rights under this Special Use Permit the Applicant shall pay for and reimburse Acme Township for all costs incurred by Acme Township, including attorney fees.

The undersigned hereby certifies that he is the Acme Township Supervisor, Grand Traverse County, Michigan, and that this Special Use Permit was approved by the Acme Township Board on **December 5, 2006**. The undersigned certifies that a quorum was present at said meeting and that said meeting complied with all applicable laws and regulations.

William Kurtz, Supervisor

Approved by a 7-0 vote of the
Acme Township Board on December 5, 2006.

Subscribed and sworn to before
me on this _____ day of _____ 2007.

, Notary Public

The applicant hereby acknowledges receipt of this Special Use Permit. The Applicant has read and understands all of the terms and conditions of the Special Use Permit. The Applicant agrees to comply with all of the terms and conditions of this Special Use Permit. The Applicant further agrees that all of the terms and conditions of the Special Use Permit shall be binding upon all other owners, occupants, assigns and successors of the subject property.

Permit No. 2006-12P

Alex Reinheimer

Subscribed and sworn to before
me this _____ day of _____ 2007.

, Notary Public

Permit is authorized, the necessary
plans/documents have been filed with me
and are attached to this Special Use Permit.

John S. Hull
Zoning Administrator
Date: _____

LAND DEVELOPMENT OPTIONS

The purpose of the Land Development Options Section is to preserve large tracts of open space land in order to maintain the rural and agricultural landscape and environmental resources of Acme Township by allowing the use and application of flexible development standards. Provisions outlined in this Section are adopted pursuant to Public Act 110 of 2006, known as the Michigan Zoning Enabling Act.

The Township encourages the use of land development options to conventional developments because they promote the location of dwelling units to be sited on those portions of a property most suitable for development, while leaving substantial portions as undeveloped open space. These developments also may include a variety of lot sizes ranging from large farm or estate lots to small village lots resulting in the preservation of contiguous open space and important environmental resources, while allowing compact development and more walkable neighborhoods.

Subject to the "Conditions and Qualifications" of this section property owners can utilize either the cluster housing, Conservation Subdivision, or planned development provisions to develop their property as residential. Planned development provisions may also be used for non-residential developments pursuant to the provisions of this section.

Definitions

- a. Cluster Housing: A compact residential development of detached or attached dwelling units on a parcel while preserving 50% or more of the property as open space pursuant to Section 506 of Public Act 110 of 2006. This provision allows for design flexibility to encourage the retention of open space areas for recreation and preservation of natural features and agricultural land.
- b. Conservation Subdivision: A housing development in a rural setting that is characterized by compact lots and common open space, and where the natural features of the land are maintained to the greatest extent possible.
- c. Planned development: A specific parcel of land or several contiguous parcels of land, for which a comprehensive physical plan, establishing functional use areas, density patterns, a fixed network of streets (where necessary) provisions for public utilities, drainage and other essential services will be developed under the approved plan.

CLUSTER HOUSING - OPEN SPACE PROVISION

The intent of this section is to permit development of single-family residential subdivisions allowing for a reduction in lot area and bulk requirements, provided there is no increase in the number of lots permitted under a conventional subdivision and fifty percent (50%) of the resultant land area will remain perpetually in an undeveloped state by means of a conservation easement, plat dedication, or other legal means that runs with the land, as prescribed by the Township. To do this, change to the one-family residential standards, as outlined in Section 6.11.1 may be permitted in R-1, R-2, R-3, and A-1 districts.

Conditions And Qualifications

- a. The Township may approve the clustering or attaching of buildings on parcels of land under single ownership and control, which have characteristics that would make sound physical development under the normal subdivision approach impracticable because of parcel size, shape or dimension or the site has natural characteristics that are worth preserving or that make platting difficult. In approving an area for cluster development,

the subject property shall meet all of the following "Conditions," and the Township shall find at least two (2) or more of the following "Qualifications" to exist:

Conditions:

- (1) The land is zoned at a density equivalent to 2 or fewer dwelling units per acre or, if the land is served by a public sewer system, 3 or fewer dwelling units per acre.
- (2) A percentage of the land area specified in the zoning ordinance, but not less than 50%, will remain perpetually in an undeveloped state by means of a conservation easement, plat dedication, restrictive covenant, or other legal means that runs with the land, as prescribed by the zoning ordinance.
- (3) The development does not depend upon the extension of a public sewer or public water supply system, unless development of the land without the exercise of the option provided by this subsection would also depend upon the extension.

Qualifications:

- (1) The parcel contains floodplain or wetland soil conditions that result in most of the total area of the parcel being unbuildable.
 - (2) The parcel contains natural assets that would be preserved by using cluster development. Such assets may include natural stands of large trees, land that serves as a habitat for wildlife, wildlife corridors, unique topographic features or other natural assets that should be preserved.
 - (3) The parcel has water frontage which would be preserved and improved by the clustering of housing units.
 - (4) The parcel is shaped in such a way the angles formed by its boundaries make a subdivision difficult to achieve.
 - (5) The parcel has a substantial portion of the parcels' perimeter bordered by land that is located in nonresidential districts.
 - (6) To promote sustainable development especially on parcels with active farmland and orchards as defined by MCL 324.36201 (h)..
 - (7) To serve as a land use transition buffer between residential developments and agricultural operations.
 - (8) Development of the parcel will not promote sprawl and is consistent with the intent of the Acme Township Master Plan and Future Land Use Map.
- b. To qualify a parcel for development for cluster housing, the Township shall determine the parcel has meet the "Conditions" and "Qualifications" as stated above and the request shall be supported by written and graphic documentation, prepared by a landscape architect, engineer, professional community planner, or architect. Such documentation shall include as appropriate: soil test borings, floodplain map, topographic map of maximum two foot contour level, wetland boundaries, and inventory of site flora and fauna.

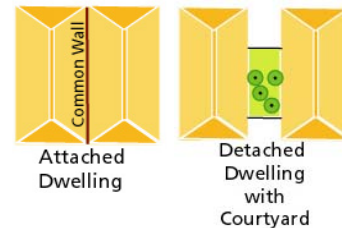
Permitted Densities

- a. The number of dwelling units within the cluster housing development shall not exceed the permitted number of dwelling units if developed as a conventional subdivision pursuant to applicable local, state and federal regulations.
- b. Up to fifty (50%) percent of water bodies within the parcel may be included in the calculation of gross site acreage provided the land bordering to the water is substantially left as open space.
- c. Parcel(s) where 50% or more of the land will remain as active farmland or orchard, as defined by MCL 324.36201 (h), would be entitled to a dwelling unit bonus of 20%.

Development Standards And Requirements

In areas meeting the criteria of this section, the minimum yard setback and minimum lot sizes per unit as required in Article VII may be waived and one-family dwelling units attached to one to another may be permitted when the homes are attached by one of the following:

- a. With an architectural wall detail that does not form unusable interior room space;
- b. Through adjoining garage party walls;
- c. The number of units attached in this manner shall not exceed four.



Siting Criteria

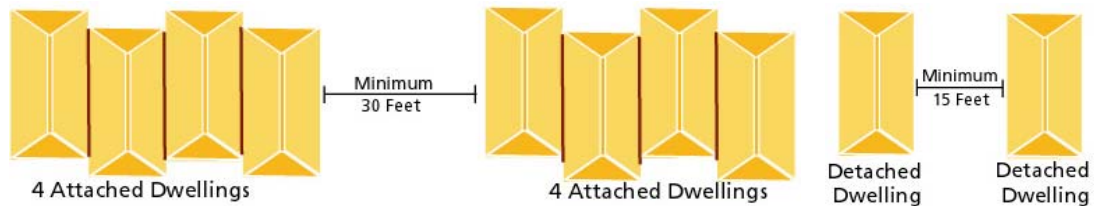
Diversity and originality in parcel layout shall be encouraged to achieve the best possible relationship between Buildable and Open Space (defined as open space, active agricultural and/or orchard areas). The Planning Commission shall evaluate proposals to determine whether the proposed site plan meet the following site design and layout objectives:

- a. Protects and preserves all beach contiguous to a lake or stream, wetland, flood plain, existing public utility easements, existing public rights-of-way, waterfront setback areas, and slopes over 25 percent. (including a buffer area around such areas) from clearing, grading, filling, and construction, and complies with Section 7.6 "Supplemental Shoreland, Stream Environment and Wetland Regulations," of the Acme Township Zoning Ordinance.
- b. As practical, preserves and maintains existing fields, meadows, crop land, pastures, and orchards and creates sufficient buffer areas to minimize conflicts between residential and agricultural/forestry uses.
- c. Minimizes impacts on large woodlands (greater than five acres).
- d. Leaves scenic views and vistas unblocked and uninterrupted, particularly as seen from adjacent roads and surface water.
- e. Avoids siting new construction on hilltops or ridge lines, by taking advantage of lower topographic features or by siting in forested areas. However, attention shall be given to the site design so that air drainage areas (airsheds) are not obstructed.
- f. Protects wildlife habitat areas and wildlife corridors.

- g. Designs around and preserves sites of historic, archaeological, or cultural value, insofar as needed to safeguard the character of the feature.
- h. Protects rural roadside character and improves public safety and vehicular carrying capacity by avoiding development fronting directly onto existing public roads. Establishes buffer zones along the scenic corridor of rural roads with historic buildings, stone walls, hedgerows, and so on.

Yard Requirements

- a. Spacing between groups of attached buildings or between each group of four unattached buildings shall be equal to at least thirty (30) feet measured between the nearest points of adjacent buildings. The minimum distance between any single detached unit and any adjacent building shall be fifteen (15) feet.



- b. Building setbacks from public streets shall be equal to the front yard setback of the district, unless waived by the Planning Commission.
- c. Buildings shall not be closer than twenty-five (25) feet to the pavement edge of interior private drives or private roads, unless waived by the Planning Commission.

Open Space And Transition

- a. The area in open space (including recreation areas and water as mentioned above) accomplished by using one-family cluster development shall represent at least fifty (50%) percent of the total parcel area. Providing walks, trails, and recreation facilities is required within the open space areas and designed to assure that pedestrians can walk safely and easily on the site, between parcels, activity areas, special features, and contiguous developments.
- b. To provide an orderly transition of density, where the parcel proposed for use as a cluster development adjoins a one-family residential district, the Township shall decide when the adjoining one-family district is effectively buffered with one of the following within the cluster development:
 - (1) Single-family lots subject to the standards of the schedule of regulations.
 - (2) Detached one-family buildings with setbacks as required by the schedule of regulations for the applicable residential district.
 - (3) Open or recreation space not less than one hundred (100) feet in-depth.
 - (4) A planted buffer not less than fifty (50) feet in-depth sufficient to provide an orderly transition between uses and districts.

- c. Ownership of open space may remain with the owner of the parent parcel, a homeowners association made up of parcel owners in the development, the township, or a recognized non-profit land conservancy.
 - (1) A perpetual conservation easement restricting development of the open space land and allowing use only for agriculture, forestry, recreation, protection of natural resources, or similar conservation purposes, pursuant to MCL 324.2140 - 2144, shall be granted to the Township, with the approval of the Township Board, or to a qualified not-for-profit conservation organization acceptable to the Township Board. Such conservation easement shall be approved by the Township Board and shall be required as a condition of approval. The Township Board may require that the conservation easement be enforceable by the Township if the Township is not the holder of the conservation easement. The conservation easement shall be recorded in the office of the Register of Deeds prior to or simultaneously with the recording of any Plat or Master Deed in the office of the Register of Deeds.
 - (2) The conservation easement shall prohibit residential, industrial, or commercial use of open space land (except in connection with agriculture, forestry, and recreation). Access roads, driveways, water supply wells, septic waste disposal facilities, local utility distribution lines, trails, temporary structures for outdoor recreation, and agricultural structures shall be permitted on preserved open space land, provided that they do not impair the conservation value of the land.

Preliminary Site Plan Cluster Approval

- a. A preliminary site plan shall be submitted to the Township Planning Commission and Township Board.
- b. The Planning Commission shall review the preliminary site plan at a public hearing.
- c. In submitting a proposed layout under this section, the applicant of the development shall include, with the site plan, typical building elevations and floor plans, topography drawn at two foot contour intervals, all calculations about acreage and density, a preliminary grading plan, and any other details that will assist in reviewing the plan.
- d. Site plans presented under this option shall include information sufficient for the Planning Commission and Township Board to make an informed decision. The Township will provide the applicant with a checklist outlining the contents for the site plan submission.
- e. The Planning Commission shall give notice of the Public Hearing under provisions of Section 8.1.2 (3).
- f. If the Planning Commission is satisfied the proposal meets the letter and spirit of the zoning ordinance and should be approved, it shall set forth any conditions on which such recommended approval is based. If the Planning Commission is not satisfied the proposal meets the letter and spirit of this ordinance, or finds that approval of the proposal would be harmful to existing development in the general area and should not be approved, it shall record the reasons therefore in the minutes of the Planning Commission meeting. Notice of recommendation of approval or disapproval of the proposal with copies of all layouts and other relevant information shall be forwarded to the Township Board.
- g. The Township Board shall review the recommendation of the Planning Commission with relevant material presented by the applicant. The Township Board shall take action to

approve or disapprove the preliminary plan or may refer such plan back to the Planning Commission with direction for further review.

Final Site Plan

- a. After approval of a preliminary plan and cluster option, a final site plan shall be submitted.
- b. If the final site plan is approved such plan shall be submitted to the Township for the preparation of agreements setting forth the conditions on which the approval is based. Such agreement shall be completed and approved by the Township Board before the issuance of any building permits.
- c. As a condition for the approval of the final site plan and open space plan, the applicant may be required to deposit cash, irrevocable letters of credit, or escrows, for the estimated cost of the proposed improvements within a time to be set by the Township Board. Development of the open space shall be carried out concurrently with the construction of dwelling units. The Township may require landscape improvement for the entire site frontage where such site adjoins public streets as an initial site improvement even though such frontage is not part of any early stage of project development.

CONSERVATION SUBDIVISION

Purpose

The purpose of a Conservation Subdivision is to promote preservation of open space in A-1, R-1, R-2, and R-3 districts while allowing a reduction in lot sizes in instances where the decrease would be compatible with lot sizes existing in the surrounding area. In reviewing a conservation subdivision plan, the Planning Commission and Township Board shall consider the following objectives:

- a. To encourage proper relationships in orientation and size of yards and open spaces with other developed parcels in the area.
- b. To provide a more desirable living environment by preserving the natural character of wetlands, stands of trees, brooks, hills, and similar natural assets;
- c. To encourage developers to use a more creative approach building residential areas;
- d. To encourage open space within reasonable distance of all lot development of the subdivision and to further encourage development of recreational facilities or preservation of natural environmental assets and to lessen the impact on existing park and open space available in the Township.
- e. To encourage a more efficient, aesthetic, and desirable use of open area while recognizing a decrease in development costs and by allowing the developer to bypass natural obstacles on the site.
- f. Development of the parcel will not promote sprawl and is consistent with the intent of the Acme Township Master Plan and Future Land Use Map.

Modification to Standards

- a. Modifications of the standards as outlined in Section 6.11.1 may be made in the R-1, R-2, R-3, and A-1 districts when the following conditions are met:
 - (1). Lot dimensions may be reduced under the following schedule, provided the number of residential lots shall be no greater than if the land area to be subdivided was developed in the minimum square foot lot areas as required for each one-family and agricultural district under Section 6.11.1. All calculations of density for residential development shall be predicated on the one-family and agricultural districts having the following gross densities (including roads):

Districts	Dwellings Per Acre	<i>Not Less Than</i>	
		Lot Width	Lot Depth
R-1 (Utilities)	1.0	105	215
R-2	2.2	80	170
R-2 with Public Sewer	2.9	65	140
R-3	2.2	80	170
R-3 with Public Sewer	2.9	65	140
A-1	0.2	150	290

- (2) For each square foot of land gained under the provisions above within a residential subdivision, through the reduction of lot sizes below the minimum requirements as outlined above, equal amounts of land, shall be dedicated in a manner approved by the Township.

- (3) The land area necessary to meet the minimum requirements of the intensity and dimensional standards above shall not include bodies of water or wetlands which would make land unsuitable for recreation purposes, except that lakes or ponds, when landscaped and maintained as portions of larger open space areas within the development, may be included in density calculations. All land reserved for recreation shall keep its natural drainage and may be located in a floodplain.
- (4) A parcel to be dedicated for the common use of the subdivision shall be in no instance be fewer than five acres, unless approved by the Township Board, and shall be in a location and shape approved by the Township, provided, a parcel divided by a road or stream shall be considered as one parcel.
- (5) Access shall be provided to areas dedicated for the common use of the subdivision for those lots not bordering on such dedicated areas with streets or pedestrian access ways.
- (6) Under this subdivision open space approach, the owner shall dedicate enough park area so each final plat is within maximum density requirements; provided, however, the entire park area within a single block shall be dedicated as a whole.
- (7) Application for approval of the subdivision open space plan shall be filed with the submission of the preliminary subdivision plat for approval as required by the Township.

Ownership, Improvement and Maintenance of Open Space Areas.

- a. A plan for the open space areas shall be submitted and shall include a cost estimate of improvements to be made within the open space.
- b. Whenever a developer or owner employs the terms of this Section, provision shall be made for the incorporation of a conservation easement as defined in section 2140 of the natural resources and environmental protection act, 1994 PA 451, MCL 324.2140, plat dedication or equivalent or some other means of insuring that the amount of resultant open space remains in perpetuity. Further, maintenance of the open space can be carried out through a lien on the properties of the subdivision if the open space is not maintained in manner satisfactory to the Township.
- c. Information shall be presented to the Township Attorney who shall review the proposed subdivision open space plan and give an opinion on:
 - (1) The proposed manner of holding title to the open land;
 - (2) The proposed manner of payment of taxes;
 - (3) The proposed method of regulating the use of the open land;
 - (4) The proposed method of maintenance of property and financing;
 - (5) Any other reason related to the legal or practical problems of ownership, use and maintenance of the open land.

Preliminary Site Plan Review Procedures

If the Planning Commission is satisfied the proposed subdivision open space plan meets the letter and spirit of the Zoning Ordinance and Community Master Plan and should be approved, it shall give tentative approval to the plan with the conditions on which such approval should be based. Conditions shall include, but not be limited to, time frame for development, technique and mechanism to protect natural features and open space, landscaping requirements, and site design amenities (lighting, signage, etc.).

- a. The Planning Commission shall give notice of the Public Hearing under provisions of Section 8.1.2 (3).
- b. If the Planning Commission is satisfied the proposal meets the letter and spirit of the Zoning Ordinance and should be approved, it shall set forth any conditions on which such recommended approval is based. If the Planning Commission is not satisfied the proposal meets the letter and spirit of this Zoning Ordinance, or finds that approval of the proposal would be harmful to existing development in the general area and should not be approved, it shall record the reasons therefore in the minutes of the Planning Commission meeting. Notice of recommendation of approval or disapproval of the proposal with copies of all layouts and other relevant information shall be forwarded to Township Board.
- c. Township Board shall review the recommendation of the Planning Commission with relevant material presented by the applicant. Township Board shall take action to approve or disapprove the preliminary plan or may refer such plan back to the Planning Commission with direction for further review. .

PLANNED DEVELOPMENT

- a. The Planned Development (PD) option is intended to allow, with Township approval, private or public development which is substantially in accord with the goals and objectives of the Township Master Plan and Future Land Use Map.
- b. The development allowed under this chapter shall be considered as an optional means of development only on terms agreeable to the Township.
- c. Use of the PD option will allow flexibility in the control of land development by encouraging innovation through an overall development plan to provide variety in design and layout; to achieve economy and efficiency in the use of land, natural resources, energy and in the provision of public services and utilities; to encourage useful open spaces suited to the needs of the parcel in question; and provide proper housing including workforce housing, employment, service and shopping opportunities suited to the needs of the residents of the Township.
- d. It is further intended the Planned development may be used to allow nonresidential uses of residentially zoned areas; to allow residential uses of nonresidential zoned areas; to permit densities or lot sizes which are different from the applicable district and to allow the mixing of land uses that would otherwise not be allowed; provided other community objectives are met and the resulting development would promote the public health, safety and welfare, reduce sprawl, and be consistent with the Acme Township Community Master Plan and Future Land Use Plan Map.
- e. It is further intended the development will be laid out so the various land uses and building bulk will relate to one another and to adjoining existing and planned uses in such a way that they will be compatible, with no material adverse impact of one use on another.
- f. The number of dwelling units for the PD development shall not exceed the number of dwelling units allowed under the underlying zoning district, unless there is a density transfer approved by the Township.

Definitions

The term "Planned development" (PD) means a specific parcel of land or several contiguous parcels of land, for which a comprehensive physical plan meeting the requirements of this Section, establishing functional use areas, density patterns, a fixed network of streets (where necessary) provisions for public utilities, drainage and other essential services has been approved by the Township Board which has been, is being, or will be developed under the approved plan.

Criteria for Qualifications

To qualify for the Planned development option, it must be demonstrated that all the following criteria will be met:

- a. The properties are zoned R-1, R-2, R-3, A-1, B-2, B-3 and B-4 Districts.
- b. The use of this option shall not be for the sole purpose of avoiding the applicable zoning requirements. Any permission given for any activity or building or use not normally allowed shall result in an improvement to the public health, safety and welfare in the area affected.
- c. The PD shall not be used where the same land use objectives can be carried out by the application of conventional zoning provisions or standards. Problems or constraints presented by applicable zoning provisions shall be identified in the PD application.

- d. The Planned development option may be effectuated only when the proposed land use will not materially add service and facility loads beyond those considered in the Township Master Plan, and other public agency plans, unless the proponent can prove to the sole satisfaction of the Township that such added loads will be accommodated or mitigated by the proponent as part of the Planned development.
- e. The PD shall not be allowed solely as a means of increasing density or as a substitute for a variance request; such objectives should be pursued through the normal zoning process by seeking a zoning change or variance.
- f. The Planned development must meet, as a minimum, three (3) of the following objectives of the Township:
 - (1) To permanently preserve open space or natural features because of their exceptional characteristics or because they can provide a permanent transition or buffer between land uses.
 - (2) To permanently establish land use patterns which are compatible or which will protect existing or planned uses.
 - (3) To accept dedication or set aside open space areas in perpetuity.
 - (4) To provide alternative uses for parcels which can provide transition buffers to residential areas.
 - (5) To promote the goals and objectives of the Township Master Plan.
 - (6) To foster the aesthetic appearance of the Township through quality building design and site development, provide trees and landscaping beyond minimum requirements; the preservation of unique and/or historic sites or structures; and the provision of open space or other desirable features of a site beyond minimum requirements.
 - (7) To bring about redevelopment of sites where an orderly change of use or requirements is determined to be desirable.
 - (8) To promote the use of smart growth designs such as Traditional Neighborhood Design (TND) consistent with the principles of the Congress for New Urbanism and the US-31 and M-72 Business District form based code.
 - (9) To promote sustainable development especially on parcels with active farmland and orchards as defined by MCL 324.36201 (h).

Type of Planned development by Location

The type and intensity of the planned development will be determined on the land use classifications included in the Acme Township Future Land Plan Map, unless waived by the Township Board. The type and location of planned developments are as follows:

Planned Unit Development Type	ZONING DISTRICTS									
	A-1	R-1	R-2	R-3	R-1MH	B-1S	B-1P	B-2	B-3	B-4
Residential	■	■	■	■						
Residential: Limited Commercial (1)				■						
Residential: Limited Commercial (2)	■									
Mixed Use Development								■	■	
Commercial									■	
Industrial										■

- (1) Commercial Area is than Less 5% of Gross Square Footage.
- (2) Commercial Area is less Less 5% of Gross Square Footage and the commercial uses sell predominately agricultural related produce and products

- a. Residential Planned development: A development where all of the land uses and buildings are developed for residential purposes only.
- b. Residential: Limited Commercial Planned development: A development where ninety-five percent (95%) or more of the square footage is used for residential purposes, and where no more than five percent (5%) of the total square footage can be used for commercial purposes including neighborhood businesses, professional offices, agricultural-related businesses such as produce markets and wine tasting and sales outlets. This form of PD in an Agricultural (A-1) District must predominately sell agricultural produce and products.
- c. Mixed Use Planned development: A development containing more than one type of use in a building or set of buildings. In zoning terms, this can mean some combination of residential, commercial, industrial, office, institutional, or other uses, however, non-residential uses shall not exceed sixty percent (60%) of the total square footage of the overall PD development.
- d. Commercial Planned development: A development where all of the land uses and buildings are developed for commercial, retail, and office land uses and buildings.
- e. Industrial Planned development: A development where all of the land uses and buildings are developed for industrial and warehouse land uses and buildings.

Uses Permitted

- a. A land use plan shall be proposed for the area to be included within the PD. The land use plan shall be defined by the zoning ordinance districts that are most applicable to the various land use areas of the PD.
- b. Uses permitted and uses permitted subject to special approval in this Ordinance may be allowed within the districts identified on the PD plan, except that some uses may be specifically prohibited from districts designated on the PD plan. Alternatively, the Township may allow uses not permitted in the district if specifically noted on the PD plan. Conditions applicable to uses permitted subject to special approval shall be used as guidelines for design and layout but may be varied by the Planning Commission provided such conditions are indicated on the PD plan.

Height, Bulk, Density and Area Standards

The standards about height, bulk, density, and setbacks of each district shall be applicable within each district area designated on the plan except as specifically modified and noted on the PD plan.

Density Transfer

Acme Township encourages flexibility in the location and layout of development, within the overall density standards of this Ordinance. The Township therefore will permit residential density to be transferred from one parcel (the "sending parcel") to another (the "receiving parcel"), as provided below. For purposes of this Section, all sending parcel(s) and receiving parcel(s) shall be considered together as one planned development parcel.

- a. All density transfers require Special Use Approval from the Township Board, upon recommendation from the Planning Commission as part of a PD application. A Special Use Permit application for a density transfer shall be signed by the owners (or their authorized representatives) of the sending and receiving parcels. The Special Use Permit application shall show a proposed development plan for the receiving parcel (subdivision and/or Site Plan) as well as density calculations for both the sending and receiving parcels. In reviewing an application for density transfer, the Township shall first determine the number of allowable residential dwelling units permitted on the receiving parcel including any density bonuses allowed under this Ordinance. The Township shall then determine the number of residential dwelling units available to transfer from the sending parcel(s). The Township Board, upon recommendation from the Planning Commission, may then grant a Special Use Permit allowing the transfer to the receiving parcel of some or all of the allowable residential dwelling units from the sending parcel(s). The sending parcel may not contain more than 10% wetlands.

- b. The Township Board, upon recommendation from the Planning Commission shall not approve any residential density transfer unless it finds that:
 - (1) All requirements for the granting of a Special Use Permit have been satisfied.
 - (2) The addition of the transferred dwelling units to the receiving parcel will not increase the maximum allowable density by more than 50% and will not adversely affect the area surrounding the receiving parcel.
 - (3) The density transfer will benefit the Township by protecting developable land with conservation value on the sending parcel(s).
 - (4) The density transfer will be consistent with the sending and receiving zones designated on the Township Zoning Map.
 - (5) The parcel receiving the density transfer will not exceed the land development build out (buildings, parking, set backs, open space, etc.) prescribed by the zoning district of the property unless waived by the Planning Commission and Board of Trustees.
 - (6) Sending parcel(s) satisfying the requirements this section shall be executed and recorded in the office of the Register of Deeds, reducing the number of dwelling units allowed to be constructed on the sending parcel(s) by the number of dwelling units transferred. This reduction in density shall not prevent the owner of the sending parcel from developing the remaining allowable dwelling units under either an open space or conventional development plan, provided that all open space requirements are satisfied. The land area subject to the land transfer will remain perpetually in an undeveloped state by means of a conservation easement, plat dedication, or other legal means that runs with the land, as prescribed by the zoning ordinance, and approved by the Township.

Submittal and Request for Qualification

- a. Any person owning or controlling land in the Township may make application for consideration of a Planned development. Such application shall be made by presenting a request for a preliminary determination to whether a parcel qualifies for the PD option.
- b. A request shall be submitted to the Township. The submission shall include the information required below.
- c. Based on the documentation presented, the Planning Commission shall make a preliminary determination about whether a parcel qualifies for the PD option under the Criteria for Qualification. The submittal must include :
 - (1) Proof the criteria set forth in the Criteria for Qualification section above, are or will be met.
 - (2) A schematic land use plan containing enough detail to explain the role of open space; location of land use areas, streets providing access to the site, pedestrian and vehicular circulation within the site; dwelling unit density and types; and buildings or floor areas contemplated, as applicable.
 - (3) A plan to protect natural features or preservation of open space or greenbelts.
 - (4) The Planning Commission shall review the applicant's request for qualification. If approved, the applicant may then continue to prepare a PD Plan on which a final determination will be determined.

Submittal of the PD Plan and Application Materials

The application, reports, and drawings shall be filed in paper and digital format. All drawings shall be provided to the Township in the most recent release of AutoCad™. Other graphics and exhibits, text and tabular information shall be provided in Adobe Acrobat™ "pdf" format. All digital submittals shall be provided to the Township on CD disc format.

- a. Submittal of Proposed PD Plan. An application shall be made to the Township for review and recommendation by the Planning Commission of the following:
 - (1) A boundary survey of the exact acreage prepared by a registered land surveyor or civil engineer (scale not smaller than one inch equals one hundred (100) feet or less if approved by the Township.
 - (2) A topographic map of the entire area at a contour interval of not more than two feet. This map shall show all major stands of trees, bodies of water, wetlands and unbuildable areas (scale: not smaller than one inch equals one hundred (100) feet or less if approved by the Township.
 - (3) A proposed development plan showing the following at a scale no smaller than one-inch equals one hundred (100) feet or less if approved by the Township, including, but not limited to the following:
 - (a) Land use areas represented by the zoning districts listed as A-1, R-1, R-2, R-3, B1S, B-2, B-3, and B-4 of this Ordinance.
 - (b) Vehicular circulation including major drives and location of vehicular access including cross sections of public streets or private places.

- (c) Transition treatment, including minimum building setbacks to land adjoining the PD and between different land use areas within the PD.
 - (d) The general location of nonresidential buildings and parking areas, estimated floor areas, building coverage and number of stories or height.
 - (e) The general location of residential unit types and densities and lot sizes by area.
 - (f) Location of all wetlands, water and watercourses, proposed water detention areas and depth to groundwater.
 - (g) The boundaries of open space areas that are to be preserved or reserved and an indication of the proposed ownership.
 - (h) A schematic landscape treatment plan for open space areas, streets and border/transition areas to adjoining properties.
 - (i) A preliminary grading plan, showing the extent of grading and delineating any areas, which are not to be graded or disturbed.
 - (j) A public or private water distribution, storm and sanitary sewer plan.
 - (k) A written statement explaining in detail the full intent of the applicant, showing dwelling units types or uses contemplated and resultant population, floor area, parking and supporting documentation, including the intended schedule of development.
- (4) A market study, traffic impact study, and /or environmental impact assessment, if requested by the Planning Commission or Board of Trustees.
 - (5) A pattern book or design guidelines manual if requested by the Planning Commission or Board of Trustees.

Preliminary Approval of Planned development

- (1) Planning Commission Review of Proposed PD Plan:
 - (a) The Planning Commission shall hold a public hearing on the PD plan and shall give notice as provided in Section 8.1.2 (3).
 - (b) After the public hearing, the Planning Commission shall report its findings and recommendation to the Board. The Planning Commission shall review the proposed PD plan and make a determination about the proposal's qualification for the PD option and for adherence to the following objectives and requirements:
 - 1. The proposed PD adheres to the conditions for qualification of the PD option and promotes the land use goals and objectives of the Township.
 - 2. All applicable provisions of this Chapter shall be met. If any provision of this Chapter shall be in conflict with the provisions of any other section of this chapter, the provisions of this Section shall apply to the lands embraced within a PD area.

3. There will be at the time of development, an acceptable means of disposing of sanitary sewage and of supplying the development with water and the road network, storm water drainage system, and other public infrastructure and services are satisfactory.

Final Approval of Planned development

- a. On receiving the report and recommendation of the Planning Commission, and after a public hearing, the Board shall review all findings. If the Board shall decide to grant the application, it shall direct the Township attorney to prepare a contract setting forth the conditions on which such approval is based. Once the contract is prepared it shall be signed by the Township and the applicant.
- b. The agreement shall become effective on execution after its approval. The agreement shall be recorded at the Grand Traverse County Register of Deeds office.
- c. Once an area has been included with a plan for PD and the Board has approved such plan, no development may take place in such area nor may any use of it be made except under such plan or under a Board-approved amendment, unless the plan is terminated.
- d. An approved plan may be terminated by the applicant or the applicant's successors or assigns, before any development within the area involved, by filing with the Township and recording in the County records an affidavit so stating. The approval of the plan shall terminate on such recording.
- e. No approved plan shall be terminated after development begins except with the approval of the Board and of all parties in interest in the land.
- f. Within one year following approval of the PD contract by the Board, final plats or site plans for an area embraced within the PD must be filed as provided. If such plats or plans have not been filed within the one-year period, the right to develop under the approved plan may be terminated by the Township.

Submission of Final Plat, Site Plans; Schedule for Completion of PD

Before any permits are issued for the PD, final plats or site plans and open space plans for a project area shall be submitted to the Township for review and approval by the Planning Commission, and where applicable the Township Board, of the following:

- a. Review and approval of site plans shall comply with Article VIII as well as this Section except as otherwise modified in the approved plan. Review and approval of plats shall comply with Section 5.7 of Article V of the Township Ordinance as well as the requirements of this Section.
- b. Before approving of any final plat or plan, the Planning Commission shall decide that:
 - (1) All portions of the project area shown on the approved plan for the PD for use by the public or the residents of lands within the PD have been committed to such uses under the PD contract;
 - (2) The final plats or site plans are in conformity with the approved contract and plan for the PD;

- (3) Provisions have been made under the PD contract to provide for the financing of any improvements shown on the project area plan for open spaces and common areas which are to be provided by the applicant and that maintenance of such improvements is assured under the PD contract.
 - (4) If development of approved final plats or site plans is not substantially completed in three years after approval, further final submittals under the PD shall stop until the part in question is completed or cause can be shown for not completing same.
- c. The applicant shall be required, as the planned development is built, to provide the Township with "as built" drawings in both paper and digital format.

Fees

Fees for review of PD plans under this Section shall be established by resolution of the Township Board.

Interpretation of Approval

Approval of a PD under this Section shall be considered an optional method of development and improvement of property subject to the mutual agreement of the Township and the applicant.

Amendments to PD Plan

Proposed amendments or changes to an approved PD plan shall be presented to the Planning Commission. The Planning Commission shall decide whether the proposed modification is of such minor nature as not to violate the area and density requirements or to affect the overall character of the plan, and in such event may approve or deny the proposed amendment. If the Planning Commission decides the proposed amendment is material in nature, the Planning Commission and Township Board shall review the amendment under the provisions and procedures of this Chapter as they relate to final approval of the Planned development.

ACME SPECIAL EVENT ORDINANCE

1. **Definitions.**

- a. Applicant means a person that submits an application for a special event.
- b. Lot means any parcel of real property in Acme Township that has a Tax Identification Number.
- c. Person means any individual, partnership, limited liability company, or corporation.
- d. Special Event means any temporary use of a lot or Acme Township property for purposes other than its already permitted use.
- e. Temporary means no longer than three days.

2. **License Required.** No person shall hold a special event in Acme Township without first obtaining a license pursuant to this Ordinance.

3. **Application for Special Event License.**

- a. An applicant shall submit to the Zoning Administrator a completed application, on a form furnished by the Township.
- b. The application shall include all of the following information:
 - i. The full and complete name and current address of the applicant.
 - ii. A written statement describing the proposed special event, including the nature and purpose of the activity.
 - iii. The days and hours of the special event.
 - iv. The anticipated number of workers and event presenters.
 - v. The anticipated number of attendees.
 - vi. The lot or lots upon which the special event is proposed to take place.
 - vii. A sketch, drawn to scale, showing the placement, number and location of the proposed parking, signage, sanitary facilities, cooking facilities, and all structures to be used and/or erected and how each will be used.
 - viii. Acknowledgment and permission of the lot owner if the applicant is not the lot owner. If the proposed special event is on Acme Township Property the application shall state that it is also a request to Acme Township to use Acme Township Property.

- ix. Written evidence of all bonds and insurance if required by other parts of this Ordinance.

4. **License Fee.** The fee for a special event license shall be \$100.00.

5. **Application Review.**

- a. The Zoning Administrator shall review a special event application and approve the application if it meets the standards for approval. If the event is to be held on Acme Township Property the standards contained in the Acme Township Parks Ordinance, as amended, shall apply.
- b. The Zoning Administrator shall forward all special event applications for review by:
 - i. Grand Traverse County Sheriff
 - ii. Grand Traverse Metro Emergency Services
 - iii. Grand Traverse Health Department
 - iv. Michigan Department of Transportation
 - v. Grand Traverse County Road Commission

6. **Standards for Approval.**

Each application for a special event shall meet the following standards for approval:

- a. The application is complete and the application fee is paid in full.
- b. The applicant has provided written evidence that he or she owns or leases the lot upon which the special event will be held, or that the applicant has permission to hold the special event upon which the special event will be held.
- c. The location of the special event does not negatively impact the public health, safety and welfare, including but not limited to traffic flow, parking, lighting, hours, signage and noise.
- d. If the application is for a special event on Acme Township Property, the applicant shall maintain insurance (demonstrated with a certificate of insurance) and shall name Acme Township as an additional insured for general liability insurance coverage in the amount of at least \$1,000,000.00. No cancellation or reduction in coverage may occur during the special event.
- e. If the application is for a special event on Acme Township Property, the applicant shall either issue a bond or deposit cash in the amount of \$1,000.00 to Acme Township. Said bond or cash deposit shall be returned to the applicant within ten (10) days of the Zoning Administrator confirming that the Acme Township Property

has been completely cleared of equipment, structures, debris, and has been left in the same condition as the Acme Township Property was prior to the special event. If the Acme Township Property is not found to be in the same condition as it was prior to the special event, the bond or cash deposit shall be used to remove equipment structures and/or debris and to restore the property to its prior condition. If additional costs are required to remove equipment structures and/or debris and to restore the property to its prior condition then such costs shall be submitted by the applicant within ten (10) days of notification to the applicant. If the applicant fails to submit such costs then Acme Township shall collect such costs in any manner allowed by law and the applicant agrees to pay for all costs and attorney fees required to collect such costs.

7. Restrictions.

- a. No license shall be issued to:
 - i. An applicant who has been convicted or found responsible for a violation of any federal, state or local law involving moral turpitude, fraud, theft, violence, or controlled substances.
 - ii. An applicant who is in default to Acme Township.
 - iii. An applicant that has previously received a special events license under which the Applicant violated any of the restrictions or requirements of that license.
 - iv. An applicant that has previously received a special events license which resulted in substantial and material complaints to Acme Township for the activities that resulted from that special events license.
- b. No privately owned lot may have more than five special events in one calendar year.
- c. The hours of operation for any special event shall be limited to the hours between 9 a.m. and 11 p.m., except athletic events that require an earlier start and meet all other requirements of this ordinance.

8. Revocation of License. The Zoning Administrator may immediately revoke a special event licence if the applicant violates any of this Ordinance’s provisions, or for other good cause.

9. Violations and Penalties.

- a. A violation of this Ordinance is a Municipal Civil Infraction subject to Acme Township’s Municipal Civil Infraction Ordinance.

**EAST BAY CHARTER TOWNSHIP
TRANSIENT ACTIVITIES AND BUSINESS ORDINANCE**

ORDINANCE NO.: ___ OF 2010

AN ORDINANCE TO REGULATE TRANSIENT ACTIVITIES AND BUSINESSES; PROVIDE FOR THE PURPOSE AND FINDINGS; PROVIDE FOR DEFINITIONS OF KEY TERMS; PROVIDE FOR PERMITTING REQUIREMENTS FOR TRANSIENT ACTIVITIES AND BUSINESSES; PROVIDE FOR FEES; PROVIDE FOR INSPECTION REQUIREMENT; PROVIDE FOR THE EXPIRATION OF PERMITS; PROVIDE THE SUSPENSION OF PERMITS; PROVIDE FOR THE REVOCATION OF PERMITS; PROVIDE FOR COORDINATION WITH ZONING STANDARDS; PROVIDE FOR STANDARDS OF OPERATION; PROVIDE FOR ADDITIONAL REGULATIONS PERTAINING TO CERTAIN TYPES OF TRANSIENT ACTIVITIES AND BUSINESSES; PROVIDE FOR THE PROHIBITION OF CERTAIN CONDUCT; PROVIDE FOR THE PENALTY FOR VIOLATION; PROVIDE AN APPEALS BOARD; PROVIDE FOR THE REPEAL OF CONFLICTING ORDINANCES AND THE SAVINGS OF ALL PENDING MATTERS; PROVIDE FOR THE EFFECTIVE DATE HEREOF.

THE CHARTER TOWNSHIP OF EAST BAY ORDAINS:

Section 1. TITLE AND PURPOSE

- 1.1 A. This ordinance shall be known as the East Bay Charter Township Transient Activities and Business Ordinance.
- B. It is the purpose of this Ordinance to regulate Transient Activities in order to promote the health, safety, and general welfare of the citizens of the Township, and to establish reasonable and uniform regulations to prevent the deleterious effects of Transient Activities within the Township while allowing and encouraging appropriate social, community and business activities that strengthen the community and its economy.
- C. The East Bay Charter Township further states in support of the purpose behind the ordinance the following:
- Transient Activities, whether sponsored by private individuals, community organizations, churches or businesses, can provide important benefits to the residents of the community. Such benefits may include services, entertainment, community-building, as well as products and services.
- i. Transient Activities can generate such negative impacts as increased parking demand, public sanitation requirements, noise control, traffic management, refuse removal, heightened public safety and/or demand

for other public services.

- ii. By their very transitory nature, Transient Activities can be a short-lived disruption of normal community routine, but may offer benefits that outweigh potential negative impacts, if those impacts are properly mitigated.
- iii. Such negative effects constitute a harm which the Township has a substantial government interest in minimizing, preventing and/or abating while establishing an appropriate regulatory structure to encourage and enable Transient Activities to serve the community.

Section 2. DEFINITIONS

- 2.1 A. **“ESTABLISH”** means and includes any of the following:
- i. The opening or commencement of Transient Activities;
 - ii. The conversion of an existing business to serve, provide or offer Transient Activities as defined herein,
 - iii. The addition of Transient Activities as defined herein to any other existing Business, organization or institution; or
 - iv. The relocation of Transient Activities.
- B. **“PERSON”** means a person in whose name a Permit to operate a Transient Activity has been issued, as well as the individual listed as an applicant on the application for a permit.
- C. **“PERMITTEE”** means an individual, firm, corporation, association, partnership, Limited Liability Company or other legal entity.
- D. **“RUMMAGE SALE or FLEA MARKET”** shall mean an event or establishment engaged in the sale of used or surplus merchandise extending for more than seven (7) days in any sixty (60) day period.
- E. **“TRANSIENT ACTIVITY”** means any outdoor activity that is temporary, intermittent or recurrent in nature and which offers products, goods or services, including entertainment services; and which depends on attracting the attention and patronage of the public and businesses; whether or not conducted for fees or profit, or without fees; and which are not so commonly associated with any other use or activity as to be considered a permanent accessory use under Section 221 of the Zoning Ordinance. Without limiting the applicability of the foregoing definition and except as qualified below, the following are examples of Transient Activities:
- Rummage sales or flea markets, as defined herein.

- Art, music, ethnic, food, or other festivals providing lawful entertainment,
- Carnivals, fairs, circuses or similar events,
- Sporting events and competitions,
- Outdoor excursions and/or product demonstrations,
- Peddling, hawking, and door-to-door soliciting, other than the activities excluded from regulation as provided in this section below,
- Temporary stands offering services, goods, food products or entertainment.

PROVIDED, HOWEVER, that, for the purposes of this ordinance, the following activities or businesses **shall not** be considered a Transient Activity:

- Farm stands or home garden produce stands,
- Christmas trees and greenery sales or similar seasonal sales activities operated by an existing business on the property of that business for periods of not more than thirty (30) days,
- Door-to-door solicitations sponsored by school or community organizations and lasting no more than ten days,
- An individual garage sale lasting no more than seven (7) days, or if recurring, conducted no more frequently than one (1) time in any sixty (60) day period in accordance with the Zoning Ordinance and completely on the property of the party selling private merchandise,
- Social gatherings, family reunions, receptions, picnics, gatherings and related events lasting no more than 48 hours if all events are conducted on private property or a public park with any permits required for the use of facilities and/or pavilions from the Township,
- Sporting events or competitions held at established athletic facilities such as stadiums, arenas, playfields and/or educational sponsored or related activities.

Section 3. PERMIT APPLICATION AND REQUIREMENT

- 3.1 A. An application for a permit to conduct Transient Activities shall be made not less than thirty (30) days prior to the proposed Transient Activity, by a Person on a form provided by the Township. A Transient Activities permit shall only be issued to a Person as defined in this Ordinance.
- B. All applicants must be qualified according to the provisions of this Ordinance. An application shall be considered complete when it contains the information and/or items required in subsection “C” hereof.
- C. Permit. A complete application for a Transient Activities permit shall contain the following information and shall be accompanied by the following documents:

- i. The applicant's legal name and any aliases including proof that he/she is eighteen (18) years of age; as well as residential address and telephone number.
- ii. If the applicant intends to operate the Transient Activity under a name other than that of the applicant; he or she must state the proposed name and the proposed form of business organization, such as corporation, proprietorship, partnership, DBA, or other legal entity.
- iii. Whether the applicant has ever applied for or held a previous permit under this Ordinance. If so, the application shall indicate the dates of permit and then whether any such permit was denied, suspended, revoked.
- iv. Whether the applicant holds any other permits under this Ordinance.
- v. A complete disclosure and description of the nature of the Transient Activity the applicant intends to operate including, but not limited to:
 - a. The proposed duration,
 - b. The hours of operation,
 - c. The nature of the activity,
 - d. Description of any products or services to be provided or sold to the public,
 - e. Procedures to manage parking, traffic and circulation,
 - f. Procedure and facilities to manage sanitation,
 - g. Procedures for crowd control,
 - h. Description of any food or beverages to be sold or provided without charge including a disclosure of whether consumption of alcohol is anticipated.
- vi. The location of the proposed Transient Activity, including the street address, and the telephone number(s), if any. For activities, businesses or gatherings that may attract more than five (5) customers or attendees at any one time, a sketch plan of the site or facility shall be provided indicating the location of parking, sanitation, events or sales area, refuse containers and other materials or facilities. The application shall be accompanied by documentation of the status of all local or county authority approvals for sanitation, traffic control, public safety, or other approval standards.
- vii. A signed acknowledgment by the applicant that any inaccurate or erroneous information on the application form or any failure to abide by any requirements of this Ordinance including any conditions that may apply to the permit shall be grounds for the suspension and/or revocation of the Transient Activities Permit as provided in Section 9 hereof.

- viii. A certificate of liability insurance naming East Bay Charter Township as an additional insured party, with coverage limits as determined by Township Attorney, if required by the Zoning Administrator or Deputy Zoning Administrator.
- ix. A Transient Activities Permit application shall be accompanied by a nonrefundable permit fee and escrow deposit as determined necessary by the Zoning Department for any professional services such as Engineering, Attorney etc..

Section 4. ISSUANCE OF PERMIT

- 4.1 A. Issuance. The Township Zoning Administrator or the Township Deputy Zoning Administrator, or designee shall issue a Transient Activities Permit when he/she finds:
- i. An applicant is at least eighteen (18) years of age;
 - ii. An applicant is not delinquent in payment to the Township of taxes, fees, fines, or penalties assessed against or imposed upon him/her in relation to property owned by the applicant in the Township;
 - iii. An applicant has truthfully provided all information required by this Ordinance for issuance of the permit;
 - iv. An applicant and/or permittee under this ordinance has not within the preceding twelve (12) months had a Transient Activities Permit revoked.
 - v. The permit fee and/or escrow deposit has been paid and maintained as required;
 - vi. All local or county authority approvals required are complete and any such approvals or other permits have been issued and are otherwise in order.
 - vii. Based on the permit application and the representations of the applicant, there is a reasonable expectation that the proposed Transient Activity will be conducted without negative impact on the health, safety or welfare of residents or businesses.
- B. Permit Issuance and Conditions. The Permit, if granted, shall state its type, the name of the Permittee to whom it is granted, and the expiration date. The Township Zoning Administrator, or Township Deputy Zoning Administrator or designee shall have the authority to place reasonable conditions on the issuance of a Transient Activities Permit and on the operation of the permitted activity, provided such conditions have as their primary purpose the protection of the health, safety and welfare of the persons and property. A Transient Activities Permit shall be posted in a conspicuous place at the permitted event or, in the case of door-to-door solicitation, shall be copied and provided to, and carried on the person of,

any and all solicitors participating. The Permit shall clearly state that East Bay Charter Township, in granting the permit, does not endorse any cause or event supported by the Transient Activity.

- C. Renewal. A Transient Activities Permit shall be subject to review as required by Section 6 of this Ordinance. A Transient Activities Permit shall not be renewed if a previous Permit has been revoked or suspended pursuant to this Ordinance. The renewal of the Permit shall be subject to the payment of a renewal fee as established by the Township Board from time to time.

Section 5. INSPECTION

- 5.1 An applicant and/or Permittee as a condition of the issuance of a permit under this Ordinance shall allow the Zoning Administrator, Deputy Zoning Administrator or an otherwise authorized representative of East Bay Charter Township to inspect the site of a Transient Activity for the purpose of ensuring compliance with the regulations of this Ordinance and any conditions applicable to the permit issued under this Ordinance as well as all other applicable ordinances and regulations of East Bay Charter Township.

Section 6. EXPIRATION OF PERMIT

- 6.1 A. Each permit shall include a firm expiration date which shall be based on the proposed duration of the event or business activity, as evaluated by the Township Zoning Administrator, or Township Deputy Zoning Administrator or designee.

Section 7. REVOCAION OF PERMIT

- 7.1 The Township shall immediately revoke a permit issued under this Ordinance if the Township Zoning Administrator, or Township Zoning Administrator or designee determines that the Permittee has:
 - A. Knowingly violated any section of this Ordinance or the conditions of a Transient Activities Permit; or
 - B. Refused to allow an inspection of the Transient Activity as authorized by this Ordinance.
 - C. Permittee has failed to abide by the requirements of any other East Bay Charter Township Ordinance, state or local code, and/or state or federal statute.

Section 8. TRANSFERS PROHIBITED

- 8.1 A Transient Activities Permit issued hereunder shall not be transferable from one

applicant to another.

Section 9. VIOLATIONS AND PENALTY

- 9.1 **Municipal Civil Infraction.** Any person and/or permittee who violates any provision of this Ordinance shall be responsible for a municipal civil infraction as defined in Public Act 12 of 1994, amending Public Act 236 of 1961, being section 600.101-600.9939 of the Michigan Compiled Laws, and shall be subject to a fine of not more than \$500. Each day this Ordinance is violated shall be considered a separate violation.
- 9.2 **Enforcement Official.** The Township Supervisor, Township Zoning Administrator, Deputy Township Zoning Administrator, Zoning Inspector and the Grand Traverse County Sheriff Department and/or Deputies are hereby designated as the authorized township officials to issue municipal civil infractions citations directing alleged violators of this Ordinance to appear in court.
- 9.3 **Nuisance per se.** A violation of this Ordinance is hereby declared to be a nuisance per se and is declared to be offensive to the public health, safety and welfare.
- 9.4 **Civil remedies.** In addition to enforcing this Ordinance through the use of a municipal civil infraction proceeding, the Township reserves the right to initiate proceedings in the circuit court to abate or eliminate the nuisance per se or any other violation of this Ordinance.

Section 10. SEVERABILITY

If any portion of this Ordinance or the application thereof, to any person or circumstances is found to be invalid by any court of competent jurisdiction, such invalidity shall not affect the remaining portions or applications of this Ordinance which can be given effect without the invalid portion or application, provided such remaining portions are not determined by the court to be inoperable, and, to this end, this Ordinance is declared to be severable.

Section 12. REPEAL

All other ordinances or parts of ordinances in conflict with the provisions of this Ordinance, except as herein provided, are hereby repealed only to the extent necessary to give this Ordinance full force and effect.

Section 13. EFFECTIVE DATE

This Ordinance shall become effective 30 days after being published in a newspaper of general circulation within the Township.

Glen Lile, Township Supervisor

Susanne Courtade, Township Clerk

EAST BAY CHARTER TOWNSHIP

(OFFICE OF PLANNING & ZONING)

1965 Three Mile Rd N.

TRAVERSE CITY, MI 49686-8501

Direct Line (231)947-8681

Email: lcoururier@eastbaytpw.org

Fax (231)922-2094

APPLICATION FOR TRANSIENT ACTIVITY PERMIT

(Please type or print in ink)

Health Dept. Permit # _____ State Liquor Comm. License # _____ Metro Review _____

Grand Traverse County Sheriff Review _____ Road Commission Review _____ Ambulance Review _____

Applicant's Name _____ Phone # (____) _____

Address _____ Is Applicant 18 or older? _____

Owner (if different from above) _____

Owner Address _____ Phone # (____) _____

Activity Parcel ID #: 28-03-_____ - _____ - _____

PROPOSED ACTIVITY & GENERAL INFORMATION

Has the applicant ever had a Transient Activity permit ____Yes ____No Dates _____

Was the permit _____denied _____suspended _____ revoked?

Does the applicant hold any other Transient Activity Permits at the time of this application? _____ Date _____

Dates of Activity _____

Hours of Operation _____

Nature of the activity _____

Number of Participants Anticipated _____ Number of Parking Spaces Provided _____

Location of the Activity (address) _____

Address _____

Phone # (____) _____ Liability Insurance: ____Yes ____No (please attach a copy)

Liquor License Provide (if applicable) ____Yes ____No (please attach copy)

ADDITIONAL INFORMATION

Please provide on a separate sheet of paper, a complete disclosure and description of the following:

- Description of any products or services to be provided or sold to the public
- Procedures to manage parking, traffic & circulation
- Procedure and facilities to manage sanitation
- Procedures for crowd control
- Description of any food or beverages to be sold or provided without charge including a disclosure of whether consumption of alcohol is anticipated.

For activities, businesses or gatherings that may attract more than five (5) customers or attendees at any one time, **a sketch plan of the site or facility shall be provided, on a separate sheet of paper**, indicating the location of parking, sanitation, events or sales are, refuse containers and other materials or facilities. The application shall be accompanied by documentation of the status of all local or county authority approvals for sanitation, traffic control, public safety, or other approval standards.

A signed acknowledgement by the applicant that any inaccurate or erroneous information on the application form or any failure to abide by any requirements of this Ordinance including any conditions that may apply to the permit shall be grounds for the suspension and/or revocation of the Transient Activities Permit as provided in Section 9 hereof.

I hereby depose and say, under the penalties of perjury, that all of the statements and/or information contained herein or submitted with this application are true. If any statements and/or information are found at a later date to be false, this permit shall become null and void.

- **Signature of Owner/Applicant** _____
- **Approved by** _____
- **Comments** _____

-- for office use only--

Date Application Was Received ____ / ____ / ____ **Fee Paid** _____ **Ck. #** _____

Transient Activity Permit # PTA _____

Escrow Amount (if needed) _____ **Paid** _____ **Ck. #** _____

Date Issued ____ / ____ / ____ **Expiration Date** ____ / ____ / ____

Date Insp. (if indicated) ____ / ____ / ____ **Initial** _____

Sketch/Site Plan Provided? ____ **Yes** ____ **No** ____

Property Taxes Paid? ____ **Yes** ____ **No** **Treasurer's Initials** _____