

3800 Laverne Avenue North
Lake Elmo, MN 55042

(651) 747-3900
www.lakeelmo.org

NOTICE OF MEETING

The City of Lake Elmo

Planning Commission will conduct a meeting on

Wednesday October 11, 2017 at 7:00 p.m.

AGENDA

1. Pledge of Allegiance
 2. Approve Agenda
 3. Approve Minutes
 - a. September 25, 2017
 4. Public Hearings
 - a. **CONDITIONAL USE PERMIT.** A request by Eileen and Chad Bergmann for a conditional use permit to allow additional accessory structures to the maximum number and size of accessory structures permitted in the Rural Residential zoning district for the property located at 11459 60th Street N, PID #01.029.21.21.0005.
 5. Business Items
 - a. **WIND POWER ORDINANCE.** Staff is requesting that the Planning Commission provide additional feedback as to what should be included in the City's wind power ordinance.
 6. Updates
 - a. City Council Updates – 10/3/17 Meeting
 - i. Lakewood Crossing 2nd Addition Developer Agreement - passed
 - ii. ZTA, ZMA and CUP for a Commercial Boarding Facility - tabled
 - iii. Variance 8323 Deer Pond Trail - passed
 - Staff Updates
 - iv. Upcoming Meetings:
 - October 23, 2017
 - November 13, 2017
 - v. MAC CEP Report-none
 - vi. Comprehensive Plan Update
 - b. Commission Concerns
7. Adjourn

***Note: Every effort will be made to accommodate person or persons that need special considerations to attend this meeting due to a health condition or disability. Please contact the Lake Elmo City Clerk if you are in need of special accommodations.



**City of Lake Elmo
Planning Commission Meeting
Minutes of September 25, 2017**

Chairman Kreimer called to order the meeting of the Lake Elmo Planning Commission at 7:00 p.m.

COMMISSIONERS PRESENT: Kreimer, Lundquist, Hartley, Dodson, Emerson, Johnson, & Dorschner

COMMISSIONERS ABSENT: Williams & Larson

STAFF PRESENT: City Planner Becker & City Administrator Handt

Approve Agenda:

M/S/P: Lundquist/Hartley, move to accept the agenda as presented, ***Vote: 7-0, motion carried unanimously.***

Approve Minutes: September 11, 2017

M/S/P: Dodson/Hartley, move to approve the September 11, 2017 minutes as amended, ***Vote: 7-0, motion carried unanimously.***

Public Hearing Item – Comprehensive Plan Amendment and Planned Unit Development (PUD) Concept Plan.

Becker started her presentation regarding the request for a Comprehensive Plan Amendment to re-guide a portion of PID # 34.029.21.43.0003 from Urban Medium Density Residential to Urban High Density Residential along with a General Planned Unit Development (PUD) Concept Plan for a 300 unit multi-family development on a 21.60 acre parcel to be called Springs Apartments.

The Concept proposed has 15 buildings with 20 units each. There are 4 detached garages, 542 parking spaces, and a clubhouse and pool area. The development is proposed to be a fenced in community with controlled access. The apartments are proposed to be town house style, two stories in height with a ground level entrance to each unit. This development is proposed to have a density of 13.89 units per acre. The property is currently guided Medium Density Residential which allows for 4.5-7 units per acre. While the land use guidance is not currently appropriate for the proposed development, there are a number of statements in the Comprehensive Plan's City Wide

Planning Policy that indicate the city should provide a variety of housing options available to moderate income families as well as options for senior housing. The met Council reported that there currently is only 204 rental units within the City. The system statement indicated that there is a need for 508 more units of affordable households in Lake Elmo. This development could satisfy a need for both rental units and add a variety of housing options for the community.

This development is a Planned Unit Development to provide flexibility in the use of land and placement and size of the buildings in order to utilize the site features and obtain a higher quality development. They require a planned unit development as they are proposing more than one principal building on a lot and requesting larger than 1,000 foot garage. To be a Planned Unit Development, the applicant must meet the objectives outlined in code. Staff feels that the applicant meets a number of the objectives. This proposal meets the minimum requirements for a PUD for land area, open space and street layout. There are also a number of proposed amenities such as the underground parking, clubhouse, pool, etc. The City could also require additional amenities.

This development was reviewed against HDR standards, as that is the zoning that would be necessary to move forward. The developer is not proposing a park, but this development has not gone to Parks Commission yet. The developer currently shows a sidewalk, but the comprehensive trail plan calls for a trail. That would be a condition of approval. The Savona Park is within walking distance, so staff would not recommend an additional park in this development.

There were a number of engineering comments such as turn lanes would need to be installed at proposed Hudson Blvd and Junco intersection, connecting trail segment to Savona Park, consider a financial contribution to Keats/Hudson traffic light.

Becker went through the recommended conditions which include Comp Plan Amendment be approved, City Engineer Memo addressed, identify all deviations, landscape plan reviewed and approved, etc.

There were a number of concerns received prior to the public hearing notice which included 1) proposed density is almost double what is guided 2) didn't know they would be living next to apartments 3) increased use of 5th Street 4) apartments could attract young people – problems with that 5) fear of section 8 6) increased foot traffic 7) expression of support – good solid developer.

For the Comprehensive Plan amendment, recommended conditions of approval are 1) that the Comprehensive Plan Amendment be submitted to the Met Council and that review be completed and approved and 2) that the applicant obtain Preliminary Plat approval from the City for the proposed development based on the proposed Concept Plan.

Dodson asked why the PUD is necessary if it is reguided to HDR. Becker stated that the reason this development would need to be a PUD is because they are proposing more than 1 building on 1 parcel. Dodson asked if a building height has been determined yet. Becker stated that it has not been given with the Concept plan, but she believes in this zoning district it is limited to 35 feet. Dodson asked if this property was purchased and if they have, why would they not know the parkland dedication. Becker does not believe it has been purchased yet.

Hartley asked about the future road to the West. Becker stated that it would be constructed with this development. That would give the access to this development and would connect 5th Street and Hudson Blvd.

Emerson asked what the parcel to the West is guided for. Becker stated it is currently guided the same as this parcel. Top half is Medium Density Residential and bottom half is commercial.

Dorschner asked if the Comprehensive Plan goes through, how do they guarantee that this applicant is the one that will use the property. Becker stated that a recommended condition of the Comprehensive Plan Amendment is that the City approve a preliminary plat submitted by Continental 419 Fund, LLC based on this concept plan. If this Concept plan does not get preliminary plat approval, the Comprehensive Plan Amendment does not move forward.

Gwynn Wheeler, Continental Properties, stated that they have in-house management staff. She stated that they are attracted to Lake Elmo and this property because it has good access and will appeal to the people that they will market to. They looked at the other sites in Lake Elmo that are guided high density and they ruled those sites out. This is the best site for them based on their research. Wheeler presented features of development including what the clubhouse and apartments would look like. Wheeler showed some renderings of what the view from Savona would look like. Wheeler talked about the lighting for the development. She stated that they are fully aware of the City lighting criteria. The average rent of an apartment at the Springs is \$1,491.00 which is close to a monthly mortgage payment.

Hartley asked about the noise control brought up by the DOT. Wheeler stated that they feel the distance from the freeway will ensure that noise will not be a factor.

Dodson asked if there was a response to the Fire Chief's comment about the emergency access being paved. He is also wondering why Junco Road is not continued down into the development as another access point. Wheeler stated that they did not meet directly with the Fire Chief. She stated that it was their intention to have it unpaved as a further deterrent that it is not a resident access point. Dodson is also wondering why the pool is not more centrally located. Wheeler stated that it needs to be by the clubhouse which is best located at the front of the development for access control.

Dorschner stated that one of the challenges in Lake Elmo is affordable housing and this would not meet that criteria. He is wondering if there is any interest in making any of the units affordable housing. Wheeler stated that all of the Springs is market rate and affordable housing is not in their business model. Wheeler stated that the other sites that are already zoned high density are not currently available. One is already under contract and the other has no sanitary sewer available.

Public Hearing opened at 8:12 pm

Tucker Pearce, 9811 7th Street, for perspective, Savona has 310 units on 112 acres vs. 300 units on 21 acres. When residents purchased homes in Savona they did their research to make sure this land wasn't guided UHD, commercial or business park. He is asking that the City stick to the Comprehensive Plan and deny the request.

Chris Peltier, 9586 Junco Road, he is concerned about the financial impact of being located basically across the street from a 300 unit apartment building.

Ryan Atkin, 9539 Junco Rd, he is concerned about the selective data sharing by Continental to generate acceptance of this proposal. The majority of Savona neighbors oppose this development. Atkin feels the rentals are incompatible with the Savona neighborhood and there is not an adequate buffer.

Michael Kobe, 9616 Junco Road, he feels that the property is correctly zoned as Urban Medium density as there should be a buffer from single family homes and Urban High density and commercial. Kobe stated that home values would decrease by 15% because of proximity. Lake Elmo is on track to hit the required numbers without this development going in. There is a reason this requires a 4/5 vote of the City Council because the effects of this are significant.

Stefany Lorang, 9918 7th Street, when they built their home, they did their research and looked at the Comprehensive Plan to see what could be built around them. This property is guided for Medium Density. The proposed plan is for High Density and at the high range which is nearly double what it is currently guided. She is concerned about the increased traffic as traffic projections was based on the UMD density. She is concerned about the lack of buffer, light pollution, and undesirable aesthetic of 15 identical buildings. Lorang submitted a petition signed by 48 residents.

Michael Brixius, 9594 Junco Rd, lived in one of the properties owned by Continental. Some things that were not talked about was all of the moving trucks with people moving in and out. With the "pet friendly" environment comes stray cats and excess garbage.

Kyle Heller, 9684 7th Street, agrees with former speakers. Savona is a close knit neighborhood and they are a connected part of the community. The recent article

talked about Lake Elmo being the fastest growing community. Is this necessary and can we slow down? The City is on track to meet their numbers, so moving quickly is not necessary. Heller feels that the long range planning is important and the City should stick to the vision that has been set forth from the long range planning.

Email from Jacob Hafdahl, stating that they didn't buy in Savona thinking that they would be living adjacent to High Density Residential. Moved to Lake Elmo because of issues they had where they lived with adjacent High Density.

Email from Todd Williams, Planning Commission Member, does not have a problem with development, but would like to see affordable housing included in the proposal.

Letter from Eric Piekarski in support and stated that it would be a complementary addition to Lake Elmo.

Paul Rstvedt, 528 Juniper Ct N, agrees with everyone who spoke before him. He is concerned with the number of people that would be moving in. That is a lot of people in a small area.

Public Hearing closed at 8:45 pm

Dorschner thinks that if this is done with a PUD, the City has a lot more control over what goes in vs if it is left medium density residential. He thinks it is a good product, but with all of the input he has heard tonight, he hesitates to support it.

Lundquist is for the apartments, because there is nothing like that in Lake Elmo. She is not in favor of it going on this property however.

Dodson feels that if people are relying on the Comprehensive Plan when purchasing property, that should be taken into consideration. He likes the development, but feels there might be a better location for it.

Johnson thinks that along 94, there will be some sort of mix of this type of product. This use would be allowed on that property, just not at the density proposed. If not this development, than what would it be?

Dorschner would rather have high end apartments at a higher density, than lower end apartments at a lower density.

Emerson went out to site and feels that the high end apartments at a higher density would be better than low end apartments with a lower density. He doesn't think there is a different spot in Lake Elmo that could accommodate this plan.

Hartley feels that the Comprehensive Plan is a public document that people have relied on. He feels this is a case of balancing the rights of existing residents with the rights of the property owner to develop.

Dodson stated the right of the property owner to develop is according to how the Comprehensive Plan is set.

Kreimer helped plan the I-94 Corridor and they set out to have a good transition from low density and transitioning to higher density and commercial as it gets closer to 94. He does not like that it is jumping to high density here. However, the plan feels more like a medium density because of the lower buildings and it is a nice plan. He is not comfortable with it being at the top of the high density. It is difficult, but until something is built, things can change. Kreimer is not sure he can support this plan as is, but could get there with changes.

M/S/P: Dodson/Dorschner, move to add condition #10 that the buildings be built to add sound abatement materials, **Vote: 7-0, motion carried unanimously.**

Hartley asked what the highest density of Medium density is. Becker stated it is 7 units per acre, and this could be increased to 8.4 units per acre with a PUD.

M/S/P: Kreimer/Emerson, move to add condition #11 that extensive screening be added above and beyond City requirements along 5th Street, **Vote: 7-0, motion carried unanimously.**

M/S/P: Kreimer/Lundquist, move to add condition #12 that Park Commission input be given regarding a tot lot, **Vote: 7-0, motion carried unanimously.**

M/S/P: Dorschner/Lundquist, move to add condition #13 to limit the height of the building to 2 stories not to exceed 32 feet, **Vote: 7-0, motion carried unanimously.**

M/S/P: Dodson/Dorschner, move to recommend denial of a Comprehensive Plan Amendment re-guiding a portion of PID # 34.029.21.43.0003 from Urban Medium Density Residential to Urban High Density Residential as requested by Continental 419 Fund LLC subject to recommended conditions of approval, **Vote: 7-0, motion carried unanimously.**

M/S/P: Dorschner/Dodson, move that if the City Council approves the Comprehensive Plan Amendment, that they follow the Planning Commission recommendations on conditions of approval for the Concept PUD Plan as amended, **Vote: 7-0, motion carried unanimously.**

Public Hearing Item – Variance request for 8130 Hill Trail N.

Becker started her presentation regarding the request for 8130 Hill Trail North to allow installation of a new septic system which does not meet setback standards and expansion of a non-conforming structure within the Shoreland district. The existing drainfield has been there since 1981. The proposed drainfield is much more conforming to existing standards than the existing.

The type of septic system being proposed is a Multi-Flo system. There is an aerobic tank which filters over 95% of contaminants before entering the drainfield. It is required to be serviced 2 times a year with reports being sent.

The application was sent to Washington Public Health and the DNR for review and no comments were received back.

The applicant is replacing the existing septic to expand their existing home which is mostly in the required setback from OHWL. With all of the proposed improvements, the impervious is decreasing from 27% to 25%.

Soil borings taken by septic designer determined that there is no other acceptable place to put the septic. The applicant is trying not to increase the non-conformity of the property.

There are 2 recommended conditions of approval for the septic variance 1) the sewage system should be serviced and inspected every 2 years and 2) The existing tanks shall be abandoned, pumped and filled with soil and a tank abandonment report shall be completed.

There are 2 recommended conditions of approval for the expansion of a Non-conforming structure 1) the applicant remove the existing gravel driveway and re-sod the proposed site plan and 2) the maximum allowable impervious surface coverage on the property shall not exceed the proposed 25%.

Hartley asked if there was any information from an independent engineering company. Becker stated that there is no information from an independent engineering company and they have not heard from Washington County.

Peter Pavcek, 8130 Hill Trail, stated this is an improvement to what is already there. Chris LeClaire was on-site when the soil borings were done and it was determined this was the appropriate site for the septic.

Public Hearing opened at 10:00 pm

Dean Dwarak, 8114 Hill Trail, is in support of the variance as it is an improvement to the septic system as well as the house. These improvements will increase property values for the neighborhood.

Edward Gwiazdon, 8164 Hill Trail, they are in full support of the variance to improve the property and keep the lake safer.

There were 2 emails received in support of the variance.

Public Hearing closed at 10:04 pm

M/S/P: Hartley/Dorschner, move to add a condition that a Washington County septic permit be obtained, **Vote: 7-0, motion carried unanimously.**

M/S/P: Lundquist/Johnson, move to recommend approval of the request from Peter and Adrienne Pavek for a variance from the required setbacks for a septic system from property lines, shoreland bluff line, Ordinary High Water Level and non-occupied structure, subject to recommended conditions of approval as amended, **Vote: 7-0, motion carried unanimously.**

M/S/P: Dorschner/Lundquist, move to recommend approval of the request from Peter and Adrienne Pavek for a variance to allow expansion of a non-conforming structure not meeting the required setback from the Ordinary High Water Level or minimum lot size required within the Rural Single Family zoning district, subject to recommended conditions of approval, **Vote: 7-0, motion carried unanimously.**

Public Hearing Item – Variance request for 8323 Deer Pond Trail N.

Becker started her presentation of a request from Ben Ostarello for a variance from the minimum front setback standards for the Rural Single Family zoning district in order to add an additional stall to an existing attached garage on the property at 8323 Deer Pond Trail.

The house was built in 1973 and is constructed at an angle which makes adding on difficult. The character of the locality is not affected.

Ben Ostarello, 8323 Deer Pond Tr, they have 2 small children and need the space to expand. He feels this variance will increase the value of his home.

Public Hearing opened at 10:22 pm

2 letters were received both in favor of the variance.

Public Hearing closed at 10:22 pm

M/S/P: Lundquist/Hartley, move to recommend approval of the request from Ben Ostarello for a variance from the City's Rural Single Family minimum front yard setback

requirements for the property located at 8323 Deer Pond Trail N, ***Vote: 7-0, motion carried unanimously.***

City Council Updates – September 19, 2017 Meeting

- i) Royal Golf Development Agreement – passed
- ii) Northport Development Agreement – passed
- iii) Hidden Meadows Final Plat Extension Denial- passed

Staff Updates

- 1. Upcoming Meetings
 - a. October 11, 2017
 - b. October 23, 2017
- 2. MAC CEP Report

Commission Concerns

Hartley found it a little disturbing that the developer was conducting neighborhood meetings. It is concerning that the minutes are prepared and presented by the developer. He had zero confidence in them.

Lundquist stated that they have a right to submit whatever they choose and it is up to the Planning Commission to be discerning when they read the information.

Kreimer stated that they have no way of knowing who attended the meetings. There could have been a different group of people that were in favor that didn't come to the Planning Commission meeting.

Meeting adjourned at 10:27 pm

Respectfully submitted,

Joan Ziertman
Planning Program Assistant

Emily Becker

From: Jacob Hafdahl <jacob.hafdahl@gmail.com>
Sent: Saturday, September 23, 2017 4:50 PM
To: Emily Becker
Subject: Public comment for planning commission public meeting on 9/25

Greetings Emily,

We would like to submit the following as a public comment for the planning commission meeting on Monday, September 25th.

Thanks,
Jacob & Diana Hafdahl

*H.D.
Drdnt buy thinking H.D.
Moved due to
issues w/ adjacent
H.D.*

Greetings Planning Commission members,

We would like to submit a public comment regarding the property for sale south of 5th Street N and Junco Rd N. We will be having our first child on Monday September 25th, and though we wanted to attend the meeting in person, we will be instead attending to our new bundle of joy.

It has been brought to our attention there is a proposal from Continental Properties to develop and operate a high density multi-unit apartment community on this lot. Our understanding upon the purchase of our home was that this property is zoned for a medium density residential or light commercial build. The proposal from Continental Properties, therefore, would require re-classification of this lot to accommodate high density residential.

We would like to share with you our concerns of such re-classification and the reasons behind them. We moved here from our first home which we built in a similar scenario of low to medium density zoning on all adjacent parcels. We loved our previous home and the first couple years went by with no issues. After two years of living there an adjacent parcel was rezoned to high density and subsequently had a large apartment complex built on it. Our experience quickly went downhill once the apartment complex was completed. There was a significant rise in crime ranging from burglary of open garages, packages being stolen from doorsteps, litter on common areas, on private single family properties and on community parks, as well as a generally higher police presence than we had in the previous years. Our home value also stagnated below market increases for the first time in 4 years (the neighborhood was already 2 years established). Unfortunately our former neighborhood no longer felt like a quiet, safe place to raise a family and within a couple years experienced high turnover from our neighbors (some of which actually built here in Savona).

Needless to say, when we initially built our home here in Lake Elmo, which was a very large investment, it was a high priority for us to not have high density housing adjacent to our new home. As such when we found out that the parcel directly across 5th Street from our home was zoned medium density residential and light commercial we were relieved and continued the process with Lennar to build our new home and become residents of Lake Elmo. Since then we have become pregnant with our first child and were shocked to learn that what we thought our neighborhood would be, and researched for it to be, is in danger. It was and still is our goal to call Lake Elmo home for decades to come as we raise our family.

The intersection of 5th Street N and Junco Rd N is directly across from our home. In fact, it is the view from our front yard. We understand there are currently 2 areas along 5th street that have already been zoned urban

From: [Kristina Handt](#)
To: [Emily Becker](#)
Subject: FW: Regarding Lake Elmo Comp Plan Amendment Proposal & Continental Properties
Date: Friday, September 22, 2017 1:53:46 PM
Attachments: [image002.png](#)

FYI

From: Stefany Lorang [mailto:avaverona@gmail.com]
Sent: Friday, September 22, 2017 1:33 PM
To: Gwyn Wheeler <GWHEELER@cproperties.com>
Cc: Christine Nelson <CNelson@lakeelmo.org>; Jill Lundgren <JLundgren@lakeelmo.org>; Julie Fliflet <JFliflet@lakeelmo.org>; Justin Bloyer <jbloyer@lakeelmo.org>; Mike Pearson <MPearson@lakeelmo.org>; Kristina Handt <KHandt@lakeelmo.org>
Subject: Re: Regarding Lake Elmo Comp Plan Amendment Proposal & Continental Properties

Hi Gwyn,

Thank you for the informative presentation last evening and the opportunity to have some of our questions answered. It was nice to meet you. I do have to say that the Springs is a unique product and would be welcome in Lake Elmo (in the areas guided UHD). However, I still do not believe this is the appropriate location for it. My concern all along has been the extreme density, and that still remains a concern. 300 units is a lot for 21.6 acres that are adjoining a low density neighborhood. The entire Savona neighborhood once build out is 310 units, but that is spread over 112 acres. With 2 people allowed per bedroom at The Springs, there is the potential for a lot of people in a small area.

I do have a few follow-up questions.

1. What will differentiate the 15 buildings from each other? Different color schemes? If so, how many do you have? Looking at the plans submitted with the Land Use App, it says "Color Scheme. Color: Beige with white trim and brick. Palette A, B." Surely you have more than 2 different colors?
2. What is the footprint or size of the 15 buildings? I was also unable to locate this in the Land Use App. I'm trying to get an idea of how large these buildings will be, especially in comparison to the existing town homes.
3. You had a slide in your presentation last night comparing Lake Elmo requirements for UMD to UHD to The Springs proposal. That was very interesting, and I would like to review it further. Can you send me a copy?
4. Could adjustments be made to make it less dense (less buildings? less units per building?) and fit the UMD the area is already guided?

Thanks again,

Stefany Lorang
9918 7th St N

On Wed, Sep 6, 2017 at 1:49 PM, Gwyn Wheeler <GWHEELER@cproperties.com> wrote:

Hello Stefany,

I'm sorry you weren't able to make our open house on August 2nd. I appreciate you reaching out to me about our proposal. I would really like to sit down with you to discuss the project and address your concerns. I am working on scheduling meetings with a couple other Savona residents but nothing is confirmed just yet. Would you have any availability to meet next week between the 12th & 14th? Let me know.

Thanks,

Gwyn Wheeler

Development Director

CONTINENTAL
PROPERTIES

Continental Properties Company, Inc.

W134 N8675 Executive Parkway

Menomonee Falls, WI 53051-3310

Direct: (262) 532-9352

Cell: (414) 659-7990

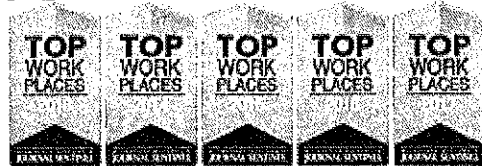
Fax: (262) 502-5522

gwheeler@cproperties.com

www.cproperties.com



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From: Stefany Lorang [mailto:avaverona@gmail.com]

Sent: Wednesday, September 06, 2017 1:01 PM

To: Gwyn Wheeler <GWHEELER@cproperties.com>

Cc: cnelson@lakeelmo.org; jlundgren@lakeelmo.org; jfliflet@lakeelmo.org;

jbloyer@lakeelmo.org; mpearson@lakeelmo.org; khandt@lakeelmo.org

Subject: Regarding Lake Elmo Comp Plan Amendment Proposal & Continental Properties

Good afternoon Gwyn,

I am writing as a resident of Lake Elmo and the Savona neighborhood to express my displeasure with Continental's concept plan for an urban high density (UHD) apartment

complex just south of 5th Street in Lake Elmo. I was unable to attend your informational meeting in early August, but recently had the opportunity to review your application which one of my neighbors shared.

This area is currently guided UMD, which allows for 4.5-7 units per acre. UHD allows for 7.5-15 units per acre. Continental's plan is for 13.89 units per acre. Therefore, not only is your company's plan double what this land is currently guided for, but it's also on the high end for UHD. I feel this kind of density is completely inappropriate next to a ULD neighborhood.

When looking to build in Lake Elmo, my husband and I did our research into what the future land use of this site could be. UMD is very different than UHD. We would not have considered this neighborhood if it had been guided UHD.

I respectfully request that you modify your proposal to fit the UMD land use in the 2030 Lake Elmo Comp plan. There are multiple other locations in the city, south of 10th Street, that are designated UHD. Please consider those areas instead.

Thank you for your time.

Stefany Lorang
9918 7th St N
Lake Elmo

CC: Lake Elmo Mayor and City Council, City Administrator

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For more information please visit <http://www.mimecast.com>

Emily Becker

From: Todd Williams <toddwilli@comcast.net>
Sent: Wednesday, September 20, 2017 6:44 PM
To: Emily Becker; 'Tom Kreimer'
Subject: Comp Plan amendment request

I have read the request from Continental LLC for a change in our Comp Plan from MDR to HDR for property along Hudson Blvd. Please include the following comments in the public hearing.

The proposal is for 300 units of market rate apartments of various sizes. This is proposed as a luxury development, with high end furnishings, gated access, etc. In general, I have no problem with this request and development. However, here we are faced with a high density, multifamily development with no provision for affordable housing. We all know the need for affordable housing. It is most fitting in high density residential areas. When are we going to insist on it?

I suggest a condition of approval be included for this proposed Comp Plan amendment and development that at least 10% of the units be "affordable", as defined by the current Met Council standards. Realize that a family of four cannot reasonably fit into a studio apartment, but needs at least a one-bedroom, and preferably a two-bedroom, place.

Such a condition is like a tradeoff in a PUD: more density for affordable housing. It would be up to Continental to provide the affordable units and still make a profit. Some suggestions might be to accept a lower profit on those units, use laminate counter tops instead of granite in those units, etc. I am sure they can figure it out.

If the PC decides to recommend approval of this request, please include some provision for affordable housing. Thank you.

Todd Williams

*No problems w/ request
- Affordable
But wants*



September 20, 2017

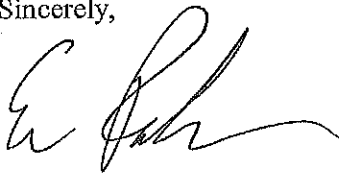
Gwyn Wheeler
Continental Properties Company, Inc.
W134 N8675 Executive Parkway
Menomonee Falls, WI 53051

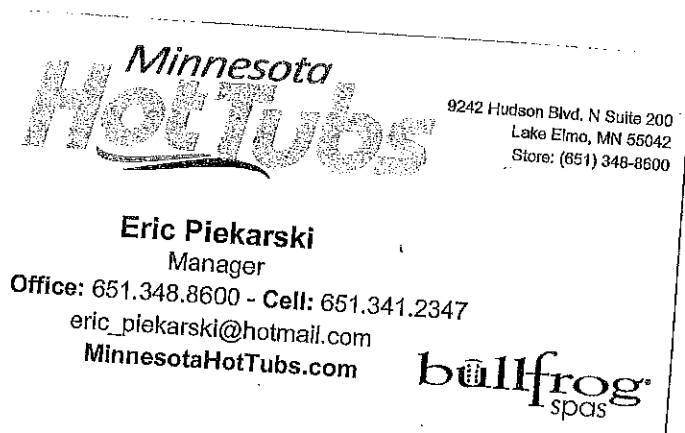
Dear Ms. Wheeler:

I am writing on behalf of Minnesota Hot Tubs to express strong support for the Springs apartment community proposed by Continental Properties Company, Inc. We have reviewed the site plan and elevations, and feel that the project will be a complementary addition to the City of Lake Elmo.

We believe that Continental's considerations for a high-quality rental community will greatly benefit the community and attract new retailers and restaurants, creating vitality within the neighborhood. For these reasons, we fully support the project.

Sincerely,

 9/21/17



- Support
- Complementary
addition to CE

Lake Elmo City Hall

3800 Laverne Ave. N.

Lake Elmo, MN 55042

Attn: Emily Becker

Re: Setback Variance Request

PID # 09.029.21.34.0002

Benjamin Ostarello

8323 Deer Pond Tr. N.

Lake Elmo, MN 55042

No objection

Dear Emily,

I have received a "Notice of Public Hearing" regarding the above referenced request for a building setback variance from the current building code.

I reside on the property immediately to the south of the referenced property requesting the variance. Access to my property is from Lake Jane Tr. N.

The property at 8323 Deer Pond Tr. N. is accessed from Deer Pond tr. N. and the variance request is for the north side of the building. The variance point is not in any line of sight from my location and therefore I do not have any objection to approval of the variance request.

From what I understand the request is for a minimal encroachment of approximately 8ft into the setback and that will still leave 32ft to the roadway. I do not feel that little distance difference would be noticeable or create an objectionable appearance to the development. If I were an adjoining east or west property from 8323 Deer Pond TR. N. I would also not have any objection to approval of the variance request.

If you have any questions or comments please contact me.

Thank You,

Charles Walek

8360-Lake Jane Tr. N.

Lake Elmo, MN 55042

651-770-6152

From: emily brenengen

brenengenemily@hotmail.com

Subject: Variance request

Date: Sep 20, 2017, 9:07:48 PM

To: Emily Becker ebecker@lakeelmo.com

I'm writing on behalf of the request by the Benjamin Osterollo family for variance in their front yard number 09.029.21.34.0002.

The Osterello family is a welcome addition to Deer Pond Trail. It's energizing to us to see this young family take pride in their yard and their home and making positive improvements. All the improvements they have made enhance the property value for the rest of us. John and I have been a residence here since 1981. We intend to stay because of fine neighbors like the Osterollos.

Sincerely,

Emily and John Brenengen

Emily Brenengen



STAFF REPORT

DATE: 10/11/17

REGULAR

ITEM#: 4A – PUBLIC HEARING

MOTION

TO: Planning Commission

FROM: Emily Becker, Planning Director

AGENDA ITEM: Conditional Use Permit Request from the Maximum Number and Size of Accessory Structures Allowed within Rural Districts

REVIEWED BY: Joan Ziertman, Planning Program Assistant

BACKGROUND:

The City has received a request from Richard, Eileen and Chad Bergmann for a conditional use permit to allow additional accessory buildings beyond those allowed in the Rural Residential zoning district for the property located at 11459 60th Street North (PID# 01.029.21.21.0005).

ISSUE BEFORE COMMISSION:

The Commission is being asked to hold a public hearing, review and make recommendation on the above mentioned request.

REVIEW/ANALYSIS:

Existing Land Use/Zoning: Single-family detached residential home/Rural Residential

Surrounding Land Use/Zoning: Surrounded by single family homes and guided for Rural Residential

History: The property has long been used as a single-family detached dwelling.

Deadline for Action: Application Complete – 8/30/2017
60 Day Deadline – 10/29/2017
Extension Letter Mailed – N/A
120 Day Deadline – N/A

Applicable Regulations: Article V - Zoning Administration and Enforcement
Section 154.406 – Accessory Structures, Rural Districts

PROPOSAL DETAILS/ANALYSIS:

History. In 2006, the applicant was granted a variance which allowed an additional accessory structure than would be allowed by the Zoning Code at that time. The variance was subject to the condition that a minor subdivision be approved by Council. The minor subdivision was ultimately

not approved by Council, however, as the City Attorney at that time explained that the resultant parcel would be considered non-conforming, as it did not meet the minimum size standard of ten acres. It has been verified with the current City Attorney, however, that a lot line adjustment would be appropriate in this case, as Section 153.09: Exceptions to Platting of the Municipal Code states the following:

- (1) Each resultant parcel, when combined with an abutting parcel through a Tax Parcel Consolidation Procedure approved by Washington County, equals or exceeds the minimum lot dimension requirements and public road frontage requirements for the zoning district in which the property is located;

Lot Line Adjustment Request. Prior to application for a conditional use permit, the applicant had requested a lot line adjustment, which would increase the size of the subject property. The reason for the lot line adjustment request was to include an existing barn on the same parcel as the homestead. The barn and homestead are both served by the same well and electricity source. The original property was 60 acres, and was subdivided around 1970 to create 11459 60th St N or PID# 01.029.21.21.0005. For some reason, the subdivision caused the barn to be separate from the homestead. Later, additional acreage was subdivided from the original property (PID# 01.029.21.21.0007) and sold to the Sanctuary Development.

While a lot line adjustment can be processed administratively by Staff, a lot line adjustment must result in two resultant parcels that are more conforming than would be prior to the lot line adjustment, and as explained below, the number and size of accessory structures that would exist on the resultant parcel exceeds the maximum amount allowed, adding a nonconformity. Therefore, the applicant is requesting a conditional use permit to allow more accessory structures than permitted by Code, thereby eliminating this nonconformity.

Size and Number Standards. Section 154.406 of the Zoning Code limits the number of accessory structures on properties within rural districts based on the size of a parcel. The proposed lot line adjustment will increase the parcel size to 6.66 acres. A parcel of such size is limited to two accessory structures with a maximum square footage of 2,000. The existing accessory structures on the site total 2700 square feet.

Need for Conditional Use Permit. While, as previously mentioned, the applicant was previously granted a variance, the variance was conditioned on the minor subdivision being approved. Because the minor subdivision was not approved, and because the Zoning Code states that variances shall expire if work does not commence (the work in this case being recording of the minor subdivision) within twelve (12) months of the date of granting such variance, the variance is no longer valid.

The Zoning Code has, since the time of the granted variance, been amended to allow additional accessory buildings beyond two total buildings in the Agricultural and Rural Residential zoning districts with a conditional use permit, as long as the buildings are agricultural buildings by definition or clearly serve an agricultural purpose in the judgment of the City. A barn would be considered an agricultural building, and so it is appropriate for a conditional use permit to be granted in this case.

Review by Minnesota Department of Transportation (MNDOT). The proposed lot line adjustment was sent to MNDOT, which did not have any comment regarding the proposed adjustment. It has been verified by our City Attorney that the City cannot require right-of-way with this application, as the proposed lot line adjustment is simply moving lot lines. Right-of-way can only be required with a proposed subdivision or platting process.

Recommended Findings. An applicant must establish and demonstrate compliance with the variance criteria set forth in Lake Elmo City Code Section 154.017 before an exception or

modification to city code requirements can be granted. These criteria are listed below, along with comments from Staff regarding applicability of these criteria to the applicant's request.

- 1) The proposed use will not be detrimental to or endanger the public health, safety, comfort, convenience, or general welfare of the neighborhood or the city.

FINDINGS: *The accessory structures already exist, and a lot line adjustment to include more than the permitted number of accessory structures on one parcel will not affect any of the aforementioned.*

- 2) The use or development conforms to the City of Lake Elmo Comprehensive Plan. The plight of the landowner is due to circumstances unique to the property not created by the landowner.

FINDINGS: *The proposal is consistent with the Comprehensive Plan in that the property is guided for Rural Area Development. The Comprehensive Plan proclaims that "existing operating agricultural uses and qualifying alternative uses that preserve the open space within the community shall be supported. These uses shall be encouraged to continue operations and to retain large land holdings that contribute to the operating efficiency...the City shall affirmatively establish and pursue specific strategies and seek resources to assist existing agricultural uses in remaining a viable alternative to urbanization for landowners, consistent with the concept of a 'right to farm.'"*

- 3) The proposed use or development is compatible with the existing neighborhood.

FINDINGS: *The barn, homestead and additional accessory structures already exist, and so the proposed use will in no way alter the property's compatibility with the existing neighborhood.*

- 4) The proposed use meets all specific development standards for such use listed in Article 7 of this Chapter.

FINDING: *There are no specific development standards for additional accessory structures listed in Article 7. The existing structures meet setback requirements.*

- 5) If the proposed use is within a floodplain management or shoreland area, the proposed use meets all the specific standards for such use listed in Section 154.800: Shoreland Management Overlay District of the Zoning Code and Chapter 152: Flood Plain Management of the Municipal Code.

FINDINGS: *The property is not located within a floodplain management or shoreland area.*

- 6) The proposed use will be designed, constructed, operated and maintained so as to be compatible in appearance with the existing or intended character of the general vicinity and will not change the essential character of that area.

FINDINGS: *The barn and other additional accessory structures already exist and are compatible in appearance with the existing character of the general vicinity.*

- 7) The proposed use will not be hazardous or create a nuisance as defined under this Chapter to existing or future neighboring structures.

FINDINGS: *The proposed use will not be hazardous or create a nuisance.*

- 8) The proposed use will be served adequately by essential public facilities and services, including streets, police and fire protection, drainage structures, refuse disposal, water and sewer systems and schools or will be served adequately by such facilities and services provided by the persons or agencies responsible for the establishment of the proposed use.

FINDINGS: *The proposed use will be served adequately by the aforementioned.*

- 9) The proposed use will not create excessive additional requirements at public cost for public facilities and services and will not be detrimental to the economic welfare of the community.

FINDINGS: *The proposed use will not create excessive additional requirements.*

- 10) The proposed use will not involve uses, activities, processes, materials, equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare because of excessive production of traffic, noise, smoke, fumes, glare or odors.

FINDINGS: *The proposed use will not in any way be detrimental.*

- 11) Vehicular approaches to the property, where present, will not create traffic congestion or interfere with traffic on surrounding public thoroughfares.

FINDINGS: *The proposed use will not increase traffic.*

- 12) The proposed use will not result in the destruction, loss or damage of a natural or scenic feature of major importance.

FINDINGS: *The proposed use will allow an existing barn to be located on the same property as an existing homestead, thereby helping to preserve an existing feature.*

FISCAL IMPACT:

The requested conditional use permit is not predicted to have any fiscal impact on the community.

OPTIONS:

The Planning Commission may:

- Recommend granting the proposed conditional use permit subject to Staff conditions.
- Amend Staff-recommended conditions of approval and recommend approval based on amended conditions of approval.
- Recommend denial of the conditional use permit, citing recommended findings of fact for denial.

RECOMMENDATION:

Staff recommends that the Planning Commission recommend approval of the request for a variance from the maximum number and size of accessory structures allowed within a rural district for the property located at 11459 60th Street North, based on the following conditions:

Conditions:

- 1) A lot line adjustment, based on the survey dated August 5, 2017 must be approved by Staff and recorded with the County, with proof of recording being provided to the City within 60 days of approval.

“Move to recommend approval of the request from Richard, Eileen and Chad Bergmann for a conditional use permit to allow an excess of the permitted two accessory structures and accessory structure size requirements in the Rural Residential zoning district for the property located at 11459 60th Street North subject to recommended condition of approval.”

ATTACHMENTS:

- 1) Conditional use permit application
- 2) Site Plan showing existing accessory structures

ORDER OF BUSINESS:

- IntroductionPlanning Staff
- Report by StaffPlanning Staff
- Questions from the Commission Chair & Commission Members
- Open the Public HearingChair
- Close the Public Hearing.....Chair
- Discussion by the Commission Chair & Commission Members
- Action by the Commission..... Chair & Commission Members

Date Received: _____
Received By: _____
Permit #: _____



651-747-3900
3800 Laverne Avenue North
Lake Elmo, MN 55042

LAND USE APPLICATION

- ☐ Comprehensive Plan ☐ Zoning District Amend ☐ Zoning Text Amend ☒ Variance*(see below) ☐ Zoning Appeal
- ☐ Conditional Use Permit (C.U.P.) ☐ Flood Plain C.U.P. ☐ Interim Use Permit (I.U.P.) ☐ Excavating/Grading
- ☐ Lot Line Adjustment ☐ Minor Subdivision ☐ Residential Subdivision Sketch/Concept Plan
- ☐ PUD Concept Plan ☐ PUD Preliminary Plan ☐ PUD Final Plan ☐ Wireless Communications

Applicant: Richard & Eileen Bergmann
Address: 5500 Lake Elmo Ave. N. Lake Elmo Mn. 55042
Phone #: 651-468-8393
Email Address: _____

Fee Owner: Richard & Eileen Bergmann
Address: _____
Phone #: W 1
Email Address: _____

Property Location (Address): 11459 60th St. Stillwater, Mn. 55042
(Complete (long) Legal Description): _____

PID#: _____

Detailed Reason for Request: Homestead of house is 4.567 acres & would like to put the old barn with the homestead and ~~add more~~ ~~amalgam~~ a lot line adjustment and thus that process the maximum size of structures on the resulting parcel will be exceeded. Also electric well is runs homestead + barn

*Variance Requests: As outlined in Section 301.060 C. of the Lake Elmo Municipal Code, the applicant must demonstrate practical difficulties before a variance can be granted. The practical difficulties related to this application are as follows:

The buildings were existing when I purchased property & would like to put in back.

In signing this application, I hereby acknowledge that I have read and fully understand the applicable provisions of the Zoning ordinance and current administrative procedures. I further acknowledge the fee explanation as outlined in the application procedures and hereby agree to pay all statements received from the City pertaining to additional application expense.

Signature of applicant: Eileen Bergmann Date: 8/30/17

Signature of fee owner: Eileen Bergmann Date: 8/30/17
Chad B... 8/30/17



STAFF REPORT

DATE: 10/11/17

REGULAR

ITEM #:5a

MOTION

TO: Planning Commission
FROM: Emily Becker, Planning Director
AGENDA ITEM: Wind Power Ordinance
REVIEWED BY: Ben Prchal, City Planner

BACKGROUND:

Wind power ordinance is an item on the 2017 Planning Commission Work Plan. Staff is requesting that the Commission provide additional feedback as to what should be included in the City's wind power ordinance.

ISSUE BEFORE COMMISSION:

The Planning Commission is being asked to clarify what should be included in the requested wind power ordinance.

PROPOSAL DETAILS/ANALYSIS:

What's currently in the City Code Regarding Wind Generators?

Definition. Section 11.01: Definitions sets forth the following definition for Wind Generator:
A machine which generates power from the wind and is extended from a horizontal shaft.

Location. Current language regulating wind generators is in Chapter 150: General Provisions. Because it is not currently in the Zoning Code, any change to this *ordinance* would not require a public hearing.

Zoning Districts Allowed. The ordinance indicates that wind generators are allowed in the Rural Residential (RR) and Agricultural (AG) Zoning District.

Permit Required. The ordinance indicates that wind generators are allowed upon issuance of a wind generator permit. The following is required to submit an application:

1. A report from a professional engineer describing the proposed wind generator and certifying the safety of the device;
2. A site plan of the applicant's property drawn to a scale of 1 inch equals 100 feet and illustrating the location of the wind generator and all other buildings or structures located within 300 feet of the base of the wind generator; and

3. A statement indicating that the proposed wind generator is in compliance with all applicable regulations of the Federal Aviation Agency where appropriate.

Application Review.

- Reviewed by Building Official.
- Public hearing at City Council.

Conditions of Approval. Conditions outlined but does not require a Conditional Use Permit.

- Expire upon sale or subdivision of the land and are reviewed annually.
- May be revoked if not compliant with conditions of permit.

Why Add Additional Wind Generator Standards to the Zoning Code?

Not in the Zoning Code. Currently, one would not be able to tell by looking at the Zoning Code that wind generators were a permitted or conditional primary or accessory use within the RR or A zoning districts. It may be beneficial to incorporate this ordinance in to the Zoning Code and set forth the standards in Site Design and Development Standards for this specific use within the Rural Districts Article.

Setbacks. Other city ordinances regarding wind generators be set back much further from the property line than what is required in the current ordinance.

No Engineering Review Specified. While Staff would feel it necessary the application be reviewed by the City Engineer, the ordinance does not specify this nor does it provide engineering standards.

Other Cities' Examples. Staff has provided examples of other cities' wind generator energy ordinances. Additionally, the Distributed Wind Energy Association (DWEA) has a model ordinance. A summary table is attached for reference and comparison.

FISCAL IMPACT:

None.

OPTIONS:

The Commission may wish to:

- Specify desired amendments or additions to the Zoning Code wind generators.
- Recommend not amending current or adding new standards.

ATTACHMENTS:

- Current wind generator ordinance.
- Other cities' wind generator ordinances and comparison table.

Print

Lake Elmo, MN Code of Ordinances

WIND GENERATORS

§ 150.090 INTENT.

(A) Wind generators offer an alternative method of providing electrical power.

(B) It is the intent of the city to regulate the facilities in order to protect the safety and welfare of residents of the city and in order to prevent wind generators from becoming a nuisance.

(1997 Code, § 1385.01)

§ 150.091 LOCATION.

Wind generators are permitted in the Rural Residential (RR) and Agricultural (AG) Zoning District upon issuance of a wind generator permit.

(1997 Code, § 1385.03)

§ 150.092 APPLICATION.

(A) Applicants for a wind generator permit shall complete application forms as provided by the City Administrator.

(B) The application shall include the following:

(1) A report from a professional engineer describing the proposed wind generator and certifying the safety of the device;

(2) A site plan of the applicant's property drawn to a scale of 1 inch equals 100 feet and illustrating the location of the wind generator and all other buildings or structures located within 300 feet of the base of the wind generator; and

(3) A statement indicating that the proposed wind generator is in compliance with all applicable regulations of the Federal Aviation Agency where appropriate.

(1997 Code, § 1385.04) Penalty, see § 10.99

§ 150.093 APPLICATION REVIEW.

(A) The completed application shall be forwarded to the Building Inspector for review and recommendation. Within 30 days of the receipt of the completed application, the City Administrator shall schedule a public hearing before the City Council to review the application.

The public hearing shall be preceded by 10-days mailed notice to all residents within 350 feet of the perimeter of the applicant's property.

(B) Wind generator permits shall be issued subject to the following conditions.

(1) The minimum lot size requirement shall be 40 acres. The site must also be large enough to contain within its boundaries any debris resulting from tower failure and/or falling ice.

(2) The wind generator structure shall not exceed 125 feet in height.

(3) The wind generator and guy wires shall have a minimum setback of 150 feet from any property line.

(4) Fencing may be required if the structure poses a safety hazard to residents.

(5) Accessory buildings and guy wires must meet the setback requirements for the underlying zoning district.

(6) No lighting is allowed on the wind generator.

(7) Wind generators are prohibited in the Lake Elmo Airport Safety Zones.

(8) There shall be at least 1,000 feet between wind generators.

(9) If the applicant's property is subdivided into parcels of less than 40 acres, the wind generator shall be removed as a condition of the subdivision approval.

(10) Wind generator permits are not transferable. Upon sale of the property, purchaser must apply for a new wind generator permit or remove the wind generator from the property.

(1997 Code, § 1385.05) Penalty, see § 10.99

§ 150.094 DURATION AND REVIEW.

(A) Wind generator permits shall expire upon sale or subdivision of the property as provided above, but shall be reviewed annually.

(B) Wind generator permits may be revoked by an affirmative vote of 3 Council members for noncompliance with the conditions of the permit.

(1997 Code, § 1385.06)

Wind Energy Conversion System (WECS): A wind energy conversion system is defined as one (1) tower with rotors and motors with one conversion generator.

2.27 Wind Energy Conversion Systems (WECS)

- (1) Purpose and Intent - The purpose is to establish regulations for wind energy conversion systems. A wind energy conversion system is defined as one (1) tower with rotors and motors with one (1) conversion generator.
- (2) Required Permits - A conditional use permit is required for a wind energy conversion system in all zoning districts.
- (3) Other Requirements - Wind energy conversion systems shall comply with all rules and regulations of Federal, State, County, and local agencies.
- (4) Performance Standards - Wind energy conversion systems must comply with the following standards:
 - (A) The parcel on which a wind energy conversion system is proposed to be located must be at least ten (10) acres in size.
 - (B) One (1) wind energy conversion system is permitted on a parcel.
 - (C) The maximum at height of a wind energy conversion system shall be one hundred (100) feet in all zoning districts. The system height shall be measured from the base of the tower to the highest possible extension of the rotor.
 - (D) No lights, flashers, reflectors, or any other illuminated devices shall be affixed to the wind energy conversion system.
 - (E) The wind energy conversion system shall be located so as to have the least impact on adjoining parcels.
 - (F) No wind energy conversion system shall be located within any required setback and shall have a minimum setback from any property line a distance equal to twice the height of the tower.
 - (G) Rotors shall not exceed 26 feet in diameter and shall have a clearance of 30 feet over any tree or structure. Each wind energy conversion system shall be equipped with both a manual and automatic braking device capable of stopping the wind energy conversion system in high winds (40 MPH or greater).

- (H) All State, County, and local noise standards must be met. Applicable electrical permits/inspections must be obtained.
- (I) To prevent unauthorized climbing, wind energy conversion system towers must comply with one of the following provisions:
 - 1. Tower climbing apparatus shall not be located within 12 feet of the ground.
 - 2. A locked anti-climb device shall be installed on the tower.
 - 3. A protective fence at least six (6) feet in height.
 - 4. The color of the structure shall be either gray or off-white.
- (J) In the event of permit revocation or if the wind generator is abandoned, the wind generator must be removed and the site restored to its original condition within one hundred and twenty (120) days, at the property owner's expense.
- (K) The WECS shall be grounded to protect against natural lightning strikes.
- (L) WECS shall have one (1) sign not to exceed two (2) square feet, posted at the base of the tower, containing the following information: Warning/High Voltage, manufacturer's name, emergency telephone number, and emergency shutdown procedures.
- (M) Drawings and engineering calculations shall be certified by a registered engineer.]
- (N) Ornamental or historic windmills are exempt from this Ordinance, if total height is less than twenty-five (25) feet.

Sec. 78-1379. - Alternative energy systems.

- (a) *Scope.* Section 78-1379 applies to alternative energy systems in all zoning districts.
- (b) *Purpose and intent.* The purpose and intent of this section is to establish standards and procedures by which the installation and operation of alternative energy systems shall be regulated within the city. The city finds that it is in the public interest to encourage alternative energy systems that have a positive impact on energy production and conservation while not having an adverse impact on the community.
- (c) *Definitions.* For the purpose of section 78-1379, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

(1) *General definitions.*

Accessory. A system designed as a secondary use to existing buildings or facilities, wherein the power generated is used primarily for on-site consumption.

Alternative energy system. A ground source heat pump, wind energy conversion system, hydronic furnace or solar energy system.

(2) *Ground source heat pump system definitions.*

Closed loop ground source heat pump system. A system that circulated a heat transfer fluid, typically food-grade antifreeze, through pipes or coils buried beneath the land surface or anchored to the bottom of a body of water.

Ground source heat pump system. A system that uses the relatively constant temperature of the earth or a body of water to provide heating in the winter and cooling in the summer. System components include open or closed loops of pipe, coils or plates; fluid that absorbs and transfers heat; and a heat pump unit that processes heat for use or disperses heat for cooling; and an air distribution system. Also sometimes referred to as a geothermal system.

Heat transfer fluid. A non-toxic and food grade fluid such as potable water, aqueous solutions of propylene glycol not to exceed 20 percent by weight or aqueous solutions of potassium acetate not to exceed 20 percent by weight.

Horizontal ground source heat pump system. A closed loop ground source heat pump system where the loops or coils are installed horizontally in a trench or series of trenches no more than 20 feet below the land surface.

Open loop ground source heat pump system. A system that uses groundwater as a heat transfer fluid by drawing groundwater from a well to a heat pump and then discharging the water over land, directly in a water body or into an injection well.

Vertical ground source heat pump system. A closed loop ground source heat pump system where the loops or coils are installed vertically in one or more borings below the land surface.

(3) *Solar energy systems definitions.*

Building-integrated solar energy system. A solar energy system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of the building including, but not limited to, photovoltaic or hot water solar systems contained within roofing materials, windows, skylights and awnings.

Flush-mounted solar energy system. A roof-mounted system mounted directly abutting the roof. The pitch of the solar collector may exceed the pitch of the roof up to five percent but shall not be higher than ten inches above the roof.

Passive solar energy system. A system that captures solar light or heat without transforming it to another form of energy or transferring the energy via a heat exchanger.

Photovoltaic system. A solar energy system that converts solar energy directly into electricity.

Solar energy system. A device or structural design feature, a substantial purpose of which is to provide daylight for interior lighting or provide for the collection, storage and distribution of solar energy for space heating or cooling, electricity generation or water heating.

(4) *Wind energy conversion systems definitions.*

Horizontal axis wind turbine. A wind turbine design in which the rotor shaft is parallel to the ground and the blades are perpendicular to the ground.

Hub. The center of a wind generator rotor, which holds the blades in place and attaches to the shaft.

Hub height. The distance measured from natural grade to the center of the turbine hub.

Monopole tower. A tower constructed of tapered tubes that fit together symmetrically and are stacked one section on top of another and bolted to a concrete foundation without support cables.

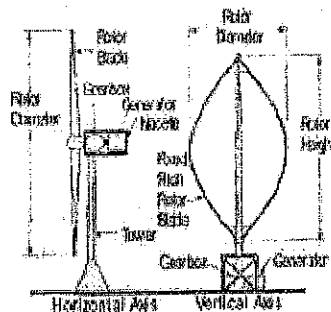
Small wind energy conversion system (SWECS). A WECS of 5,000 kW nameplate generating capacity or less.

Total height. The highest point above natural grade reached by a rotor tip or any other part of a wind turbine.

Vertical axis wind turbine. A type of wind turbine where the main rotor shaft runs vertically.

Wind energy conversion system (WECS). An electrical generating facility that consists of a wind turbine, feeder line(s), associated controls and may include a tower.

Wind turbine. Any piece of electrical generating equipment that converts the kinetic energy of blowing wind into electrical energy through the use of airfoils or similar devices to capture the wind.



Wind Turbine Configurations

(5) *Hydronic furnace definitions.*

Hydronic furnace. An outdoor wood boiler that provides heating or hot water using a firebox surrounded by a water jacket enclosed within an insulated shed. A fire is started inside the firebox, and the water temperature is controlled by a thermostatically actuated damper.

(d) *Ground source heat pump systems.*

- (1) *Zoning districts.* Ground source heat pump systems in accordance with the standards in this section are allowed as a permitted accessory use in all zoning districts.
- (2) *Standards.*
 - a. *System requirements.*
 1. Only closed loop ground source heat pump systems utilizing heat transfer fluids as defined in section 78-1379(3) are permitted. Open loop ground source heat pump systems are not permitted.
 2. Ground source heat pump systems in water bodies owned or managed by the City of Orono are not permitted.
 3. Ground source heat pump systems in private ponds constructed within uplands and that are not protected wetlands are permitted.
 - b. *Setbacks.*
 1. All components of ground source heat pump systems including pumps, borings and loops shall be set back at least five feet from interior side and rear lot lines, at least ten feet from front lot lines, and maintain all State-mandated isolation distances.
 2. Above-ground equipment associated with ground source heat pumps shall not be installed in the front yard of any lot or the side yard of a corner lot adjacent to a public right-of-way and shall meet all required accessory structure setbacks for the applicable zoning district.
 - c. *Construction.*
 1. All access shall be over the owner's land and due care shall be taken to avoid hazard, inconvenience or damage to public streets and nearby public or private property.
 2. Necessary precautions shall be taken in stockpiling excavated materials to avoid erosion, dust or other infringements upon adjacent property.
 3. All wiring, installation of pipes, grading and all other installations and construction shall be subject to inspection.
 4. Disturbed land shall be restored to its prior condition after completion of construction.
 - d. *Easements.* Ground source heat pump systems shall not encroach on public drainage, utility, roadway or trail easements.
 - e. *Noise.* Ground source heat pump systems shall comply with Minnesota Pollution Control Agency standards outlined in Minnesota Rules Chapter 7030 as amended.
 - f. *Screening.* Ground source heat pumps are considered mechanical equipment and are subject to the screening requirements of the applicable zoning district.
- (3) *Safety.* Ground source heat pumps shall be certified by Underwriters Laboratories, Inc. and meet the requirements of the State Building Code.
- (4) *Abandonment.* If the ground source heat pump system remains nonfunctional or inoperative for a continuous period of one year, the system shall be deemed to be abandoned and shall constitute a public nuisance. The owner shall remove the abandoned system at their expense after a demolition permit has been obtained in accordance with the following:
 - a. The heat pump and any external mechanical equipment shall be removed.
 - b. Pipes or coils below the land surface shall be filled with grout to displace the heat transfer fluid. The heat transfer fluid shall be captured and disposed of in accordance with applicable regulations. The top of the pipe, coil or boring shall be uncovered and grouted.
 - c. Private pond ground source heat pump systems shall be completely removed from the bottom of the body of water.

- (5) *Permits.* A city building permit and any other required agency permits shall be obtained for any ground source heat pump system prior to installation. Borings for vertical systems are subject to approval from the Minnesota Department of Public Health.

(e) *Solar energy systems.*

- (1) *Zoning districts.* Solar energy systems in accordance with the standards in this section are allowed as a permitted accessory use in all zoning districts.

(2) *Standards.*

- a. *Exemption.* Passive or building-integrated solar energy systems are exempt from the requirements of this section and shall be regulated as any other building element.
- b. *Roof-mounted systems allowed.* The only solar energy systems allowed in the city are those that are roof-mounted,
- c. *Height.* Roof-mounted solar energy systems shall comply with the maximum height requirements in the applicable zoning district.
- d. *Setbacks.* Roof-mounted solar energy systems shall comply with all building setbacks in the applicable zoning district and shall not extend beyond the exterior perimeter of the building on which the system is mounted.
- e. *Roof mounting.* Roof-mounted solar collectors shall be mounted parallel to the surface of the roof and within three feet of the roof surface, unless manufacturer's documentation is provided indicating that collectors must be angled to provide optimum performance. No portion of the collectors or their mounting system shall extend above the peak or ridge height of a pitched roof. On a flat roof, collectors and their mounting systems shall not extend more than 5 feet above the roof surface.
- f. *Easements.* Solar energy systems shall not encroach on public drainage, utility, roadway or trail easements.
- g. *Screening.* Solar energy systems shall be screened from view to the extent possible without impacting their function.
- h. *Maximum area.* In all residential zoning districts, the collector and mounting system of a roof-mounted solar energy system shall cover no more than 70 percent of the roof to which it is affixed.
- i. *Aesthetics.* All solar panels shall be designed, installed, positioned and constructed of materials so as not to cause any glare or reflective sunlight onto neighboring properties or structures, nor toward vehicular traffic on land or on a lake, and so as to not obstruct views. Reflection angles from collector surfaces shall be oriented away from neighboring windows. Where necessary, screening may be required to address glare.
- j. *Feeder lines.* The electrical collection system shall be placed underground within the interior of each parcel. The collection system may be placed overhead near substations or points of interconnection to the electric grid.

(3) *Safety.*

a. *Standards and certification.*

1. *Certification.* Solar energy systems shall be certified by Underwriters Laboratories, Inc. and the National Renewable Energy Laboratory, the Solar Rating and Certification Corporation or other body as determined by the building official. The city reserves the right to deny a building permit for proposed solar energy systems deemed to have inadequate certification.
2. The equipment or device must be designed and constructed in compliance with all applicable building and electrical codes, and (if for co-generation) must be in compliance with all state and federal regulations regarding co-generation of energy.

- b. *Utility connection.* All grid connected systems shall have an agreement with the local utility prior to the issuance of a building permit. A visible external disconnect must be provided if required by the utility.
- (4) *Abandonment.* If the solar energy system remains nonfunctional or inoperative for a continuous period of one year, the system shall be deemed to be abandoned and shall constitute a public nuisance. The owner shall remove the abandoned system at their expense after a demolition permit has been obtained. Removal includes the entire structure including transmission equipment.
- (5) *Permits.* A building permit shall be obtained for any solar energy system prior to installation.
- (f) *Wind energy conversion systems.*
 - (1) *Zoning districts.* Small wind energy conversion systems (SWECS) in accordance with the standards in this section are permitted accessory uses on lots at least ten acres in gross area within the RR-1A and RR-1B Rural Residential zoning districts. SWECS in accordance with the standards in this section are allowed as a conditional use on lots at least five acres in gross area and subject to conditional use permit approval in the following commercial or industrial districts: B-1 Retail Sales; B-4 Office and Professional; B-6 Highway Commercial; B-6 PUD; and I Industrial.
 - (2) *Standards for SWECS in residential zoning districts.*
 - a. *Number.* No more than one SWECS is permitted per parcel.
 - b. *Height.* In the RR-1A and RR-1B zoning districts, a maximum hub height of 30 feet is allowed as a permitted accessory use.
 - c. *Blade length.* A maximum blade length of 15 feet is permitted.
 - d. *Clearance.* The minimum distance from the ground for the lowest point of a blade or any other moving part shall be 12 feet.
 - e. *Roof mounting.* Roof or wall mounted SWECS are not permitted.
 - f. *Setbacks.* The base of the SWECS tower shall be set back at least 100 feet from all property lines. SWECS shall not be installed in the front yard of any lot or in the side yard of a corner lot adjacent to a public right-of-way. SWECS shall not be located more than 100 feet from the principal structure on the property.
 - g. *Easements.* SWECS shall not encroach on public drainage, utility, roadway or trail easements.
 - h. *Noise.* SWECS shall comply with Minnesota Pollution Control Agency standards outlined in Minnesota Rules Chapter 7030 at all property lines.
 - i. *Screening.* SWECS are exempt from the screening requirements for the district in which they are located.
 - j. *Aesthetics.* All portions of the SWECS shall be a nonreflective surface, subject to the approval of the city administrator or his/her designee. Only monopole towers are permitted. The appearance of the turbine, tower and any other related components shall be maintained throughout the life of the SWECS pursuant to industry standards. Systems shall not be used for displaying any advertising, nor for other uses including but not limited to cell phone antennas, flags, ham radio antennas, etc. No components unnecessary to the operation of the SWECS shall be allowed. Systems shall not be illuminated.
 - k. *Feeder lines.* The electrical collection system shall be placed underground within the interior of each parcel.
 - l. *Vibration.* No wind energy conversion system shall produce vibrations through the ground that are perceptible beyond the property on which it is located.

- m. *Location.* No SWECS shall be allowed within the Shoreland Overlay District. SWECS shall be setback a distance at least equal to the height of the SWECS from a floodplain, pond or wetland.

(3) *Standards for SWECS in commercial and industrial zoning districts.*

- a. *Number.* No more than one SWECS is permitted per parcel.
- b. *Height.* In commercial and industrial zoning districts, a maximum hub height of 30 feet is allowed.
- c. *Blade length.* A maximum blade length of 15 feet is permitted.
- d. *Clearance.* The minimum distance from the ground for the lowest point of a blade or any other moving part shall be 12 feet.
- e. *Roof mounting.* Roof or wall mounted SWECS are not permitted.
- f. *Setbacks.* The base of the SWECS tower shall be set back at least 100 feet from all property lines. SWECS shall not be installed in the front yard of any lot or in the side yard of a corner lot adjacent to a public right-of-way. SWECS shall not be located more than 100 feet from the principal structure on the property.
- g. *Easements.* SWECS shall not encroach on public drainage, utility, roadway or trail easements.
- h. *Noise.* SWECS shall comply with Minnesota Pollution Control Agency standards outlined in Minnesota Rules Chapter 7030 at all property lines.
- i. *Screening.* SWECS are exempt from the screening requirements for the district in which they are located.
- j. *Aesthetics.* All portions of the SWECS shall be a nonreflective surface, subject to the approval of the city administrator or his/her designee. Only monopole towers are permitted. The appearance of the turbine, tower and any other related components shall be maintained throughout the life of the SWECS pursuant to industry standards. Systems shall not be used for displaying any advertising, nor for other uses including but not limited to cell phone antennas, flags, ham radio antennas, etc. No components unnecessary to the operation of the SWECS shall be allowed. Systems shall not be illuminated.
- k. *Feeder lines.* The electrical collection system shall be placed underground within the interior of each parcel.
- l. *Vibration.* No SWECS shall produce vibrations through the ground that are humanly perceptible beyond the property on which it is located.
- m. *Location.* No SWECS shall be allowed within the Shoreland Overlay District. WECS shall be setback a distance equal to the height of the WECS from a floodplain, pond or wetland.

(4) *Safety.*

a. *Standards and certification.*

- 1. *Standards.* SWECS shall meet minimum standards such as International Electrotechnical Commission (IEC) 61400-2 or the American Wind Energy Association's (AWEA) Small Wind Turbine Performance and Safety Standard or other standards as determined by the city administrator or his/her designee.
- 2. *Certification.* SWECS shall be certified by Underwriters Laboratories, Inc. and the National Renewable Energy Laboratory, the Small Wind Certification Council or other body as determined by the city administrator or his/her designee. The city reserves the right to deny a building permit for proposed SWECS deemed to have inadequate certification or testing for operation in a severe winter climate.

3. *Maintenance.* SWECS shall be maintained under an agreement or contract by the manufacturer or other qualified entity. The owner of the SWECS shall once every two years have the SWECS inspected by a licensed qualified professional and submit to the city a report on the status and condition of the SWECS.
- b. *Utility connection.* All grid connected systems shall have an agreement with the local utility prior to the issuance of a building permit. A visible external disconnect must be provided if required by the utility.
- (5) *Abandonment.* If the SWECS remains nonfunctional or inoperative for a continuous period of one year, the system shall be deemed to be abandoned and shall constitute a public nuisance. The owner shall remove the abandoned system at their expense after a demolition permit has been obtained. Removal includes the entire structure including foundations to below natural grade and transmission equipment.
- (6) *Permits.* A building permit shall be obtained for any SWECS prior to installation.
- (7) *Power distribution.* The power produced from a SWECS shall only be used for on-site consumption except if connected to the local utility power grid per the provisions of this section.
- (g) *Hydronic furnaces.* Hydronic furnaces are not an allowed use or structure within any zoning districts in the city.

(Ord. No. 119 3rd series, § 1, 12-9-2013; Ord. No. 142 3rd series, §§ 1, 2, 4-13-2015)

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CHAPTER 25: ZONING

ARTICLE 24. ALTERNATIVE ENERGY SOURCES AND SYSTEMS

Sec. 25-253 Purpose and Intent

The purpose of this Section is to promote the safe, effective and efficient use of alternative energy sources and systems as the technology becomes available.

The purpose of this Section is also to establish predictable and balanced regulations for the establishment of commercial and noncommercial WECS in the locations and circumstances under which the use may be established without detriment to the public health, safety and welfare of the neighboring property owners and occupants.

Sec. 25-254 Definitions

- 1) **Wind Energy Conversion System:** Any device such as a wind charger, windmill, or wind turbine, which converts wind energy to a form of usable energy.
- 2) **WESC Height:** The height of the tower/pole plus the rotor radius.
- 3) **External solid fuel-fired heating device:** External solid fuel-fired heating device also known as "outdoor furnaces" means any equipment, device or apparatus, or any part thereof, which is installed, affixed or situated outdoors for the primary purpose of combustion of fuel to produce heat or energy used as a component of a heating system providing heat for any interior space. It is the intent of this section to regulate exterior freestanding solid fuel-fired devices that are contained within a structure primarily designed or used to house the solid fuel device.

Sec. 25-255 General Standards

- (1) No more than one Wind Energy Conversion System (WECS) shall be permitted per lot.
- (2) The setback shall be at least the following distances:
 - a. From the nearest dwelling, school, business or other habitable structure: 300 feet or 1.5 times the height of the WECS, whichever is greater.
 - b. From the nearest public right-of-way: 300 feet or 1.5 times the height of the WECS, whichever is greater.
 - c. From the nearest property line: 300 feet or 1.5 times the height of the WECS, whichever is greater. In no instance shall any portion of the WECS extend over any property line, including the full arc area created by any blades used in the system.
 - d. From recreational fields: 300 feet or 1.5 times the height of the WECS, whichever is greater. However, in no instance shall any portion of the WECS extend over any recreational field, including the full arc area created by any blades used in the system.

- e. No portion of the WECS, including the full arc area created by any blades used in the system, shall extend over any aboveground power line or drainage and utility easement.
- (3) Blade arcs created by the WECS shall have a minimum of 30 feet of clearance over any accessory structure or tree within the full arc area created by any blades used in the system.
- (4) The WECS shall be equipped with both a manual and an automatic braking device capable of stopping the WECS operation in high winds.
- (5) The WECS, including the blades, shall be grounded and shielded to protect against natural lightning strikes in conformance with the National Electrical Code.
- (6) The WECS shall not include tower-climbing apparatus within twelve (12) feet of the ground.
- (7) The WECS shall display a sign posted at the base of the tower, not to exceed two (2) square feet in area. The sign shall contain the following information:
 - a. A warning of high voltage,
 - b. The manufacturer's name,
 - c. An emergency telephone number,
 - d. The emergency shutdown procedures

Additional signs may be required on the basis of individual applications as safety needs dictate.

- (8) No WECS shall have affixed or attached lights, reflectors, flashers or any other illumination, except for those devices required by the Federal Aviation Administration.
- (9) The WECS shall be filtered, shielded or otherwise designed and constructed so as not to cause electrical, radio frequency, television, and other communication signal interference.
- (10) All obsolete and unused towers and equipment shall be removed within twelve (12) months of cessation of operation at the site, unless the Zoning Administrator grants an exemption.
- (11) Each WECS shall require a conditional use permit.
- (12) WECS may be an allowed conditional use subject to the regulations and requirements of this Section in areas zoned Community Commercial (C-2), General Industrial (G-I), or in conjunction with such special uses as listed in Article 5, Sec. 25-21.
- (13) WECS installed in accordance with the requirements of this Section shall not generate power as a commercial enterprise as defined by the Public Utilities Commission.
- (14) No building permit shall be issued for the construction of a WECS until and unless the applicant for the building permit deposits with the City Clerk a policy of liability insurance indemnifying the applicant from liability for personal injury or property damage in the sum of at least \$500,000.00. The policy of insurance so deposited shall contain a clause obligating the company issuing the same to give at least thirty (30) days written notice to the City before cancellation thereof, the conditional use and building permits to be automatically revoked upon the lapse or termination of said policy.

- (15) Noise emitted from the WECS shall not exceed standards set forth in Chapter 19 of the Code of Ordinances.

Sec. 25-256 Purpose and Intent

The purpose of this section is to establish and impose restrictions upon the construction, installation, and operation of outdoor furnaces within the limits of the City of Oakdale for the purpose of securing and promoting the public health, safety, comfort, convenience, and welfare of the City and its inhabitants. It is generally recognized that the types of fuel used, and the scale and duration of the burning by such furnaces can create noxious and hazardous smoke, soot, fumes, odors, air pollution, particles, and other combustion that can be detrimental to citizens' health, and can deprive neighboring residents of the enjoyment of their property or premises.

Sec. 25-257 General Regulations:

- a) All external solid fuel-fired heating devices used, installed, or purchased within the city limits of Oakdale, Minnesota, are required to meet emission standards currently required by the Environmental Protection Agency (EPA) and Underwriters Laboratories (UL) listing or equivalent accredited agency. No person shall use an external solid fuel-fired device in violation of this paragraph.
- b) All outdoor wood-burning units or external solid fuel-fired devices operated or installed within the city limits are subject to regulation as public nuisances as described in this ordinance.
- c) Any dense smoke, noxious fumes, gas and soot, or cinders, in unreasonable quantities, or any use of an external solid fuel-fired heating device to burn solid fuels other than those solid fuels for which the external solid fuel-fired heating device was designed, is declared a public nuisance.
- d) Every solid fuel-fired device shall have a minimum chimneystack height of twenty (20) feet from ground level and be a minimum of two (2) feet above the roofline of the highest structure within two hundred feet. A freestanding outdoor furnace must be setback a minimum of 75-feet from all property lines, be located on a lot of not less than one acre, and be a minimum of 10 feet from any principal or accessory structure. Construction of all stacks or chimneys must be of masonry or insulated metal with a minimum of six-inch (6") flue and be constructed to withstand wind and snow loads per the current Minnesota Building Code. No person shall use an external solid fuel-fired heating device in violation of this paragraph.
- e) Only wood or other fuels designed for burning in an external solid fuel-fired heating device may be burned. No garbage may be burned in an external solid fuel-fired device. No person shall use an external solid fuel-fired heating device in violation of this paragraph.
- f) An outdoor furnace shall not be used between April 15 and October 15 of each year.
- g) The City of Oakdale requires any person to obtain a building permit for any external solid fuel-fired heating device that is sold or purchased after the date this ordinance becomes effective.
- h) Any violation of this ordinance is a misdemeanor.

Sec. 25-258 to 276 Reserved.

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- (e) Permits. A building permit shall be obtained for any ground source heat pump system prior to installation. Borings for vertical systems are subject to approval by the Minnesota Department of Public Health.
- 3. Wind Energy Systems.
 - (a) Zoning District Allowance. Small wind turbine systems in accordance with the standards in this Section are allowed as a permitted accessory use in all zoning districts.
 - (b) General Standards. The following standards shall be applicable to small wind turbine systems in all zoning districts:
 - i. Number. No more than one wind energy system is permitted per parcel.
 - ii. Setbacks. The base of the wind turbine tower shall be set back from all property lines a distance equal to the highest possible extension of the system apparatus.
 - iii. Roof Mounting. Roof mounted wind turbines shall be permitted only when a determination is made by the City Building Official that the underlying roof structure will support such system and all applicable building standards are satisfied.
 - iv. Rotor Clearance. No part of a rotor blade shall be located within thirty (30) feet of the ground and within twenty (20) feet of the nearest tree, structure or aboveground utility facility.
 - v. Noise. Wind energy systems shall comply with Minnesota Pollution Control Agency noise standards outlined in Minnesota Rules Ch. 7030, as amended, at all property lines.
 - vi. Screening. Wind energy systems shall be screened from view to the extent possible without impacting their function.
 - vii. Aesthetics. All portions of the wind energy system shall be a non-reflective, non-obtrusive color, subject to the approval of the Zoning Administrator. Only monopole towers are permitted. The appearance of the turbine, tower and any other related components shall be maintained throughout the life of the wind energy system pursuant to industry standards. Systems shall not be used for displaying any advertising. Systems shall not be illuminated.
 - viii. Feeder Lines. The electrical collection system shall be placed underground within the interior of each parcel. The collection system may be placed overhead near substations or points of interconnection to the electric grid.
 - ix. Standards and Certification.
 - A. Standards. Wind energy systems shall meet minimum standards such as International Electrotechnical Commission (IEC) 61400-2 or the American Wind Energy Association's (AWEA) Small Wind Turbine Performance and Safety Standard or other standards as determined by the City Building Official.
 - B. Certification. Wind energy systems shall be certified by Underwriters Laboratories, Inc., and the National Renewable Energy Laboratory, the Small Wind Certification Council or other body as determined by the City. The City reserves the right to deny a building permit for proposed wind energy systems deemed to have inadequate certification or testing for

operation in a severe winter climate.

C. Maintenance. Wind energy systems shall be maintained. A yearly certificate of inspection and maintenance shall be supplied to the Zoning Administrator. Such inspection shall be from a qualified engineer or other body determined to be acceptable by the Zoning Administrator.

D. Utility Connection. All grid connected systems shall have an agreement with the local utility prior to the issuance of a building permit. A visible external disconnect shall be provided if required by the utility.

x. Abandonment. If a wind energy system remains nonfunctional or inoperative for a continuous period of one (1) year, the system shall be deemed to be abandoned and shall constitute a public nuisance. The owner shall remove the abandoned system at their expense after a demolition permit has been obtained. Removal includes the entire structure including foundations to below natural grade and transmission equipment.

xi. Permits. A building permit shall be obtained for any wind energy system prior to installation.

(c) Residential District Standards.

- i. Mounting. All wind turbine systems shall be roof mounted. Ground mounted systems are not permitted.
- ii. Height. Wind energy systems shall not extend more than six (6) feet above the highest point of the roof.

(d) Mixed-Use District Standards.

- i. Mounting. Subject to the requirements of this Section, wind energy systems may either be roof mounted or ground mounted.
- ii. Height.
 - A. Wind turbine systems shall conform to the maximum height requirements for communication structures standards of the applicable Mixed-Use zoning district.
 - B. Wind turbine system heights in excess of the maximum height requirement of the applicable zoning district may be permitted by Conditional Use Permit provided that:
 1. The system height, as measured from the base of the tower for ground mounted systems, or base of the building for roof mounted systems, to the highest possible extension of the system apparatus shall not exceed seventy-five (75) feet.
 2. The additional system height is required to allow for the improved operation of the wind energy system.
 3. The additional wind energy system height results in a net energy gain.
 4. The wind energy system does not adversely affect solar access to adjacent properties.
 5. The wind energy system complies with all other engineering, building, safety, and fire regulations.
 6. The wind energy system is found to not have any

adverse impacts on the area, including the health, safety, and general welfare of occupants of neighboring properties and users of public rights-of-way.

7. The criteria and applicable standards of this Section are considered and determined to be satisfied.

iii. Ground Mounted Systems.

- A. Ground mounted wind energy systems shall not be installed in the front yard of any lot or in the side yard of a corner lot adjacent to a public right-of-way.
- B. Only monopole towers are permitted.
- C. System height shall be measured from the base of the tower to the highest possible extension of the system apparatus.
- D. Ground located wind energy systems shall not encroach on public drainage, utility roadway or trail easements.

iv. Blade Length. A maximum blade length of fifteen (15) feet is permitted.

4. Solar Energy Systems.

(a) Zoning District Allowance. Solar energy systems in accordance with the standards in this chapter are allowed as a permitted accessory use in all zoning districts.

(b) General Standards.

- i. Exemption. Passive or building integrated solar energy systems are exempt from the requirements of this Section and shall be regulated as any other building element.
- ii. Height. Roof mounted solar energy systems shall comply with the maximum height requirements in the applicable zoning district. Ground mounted solar energy systems shall not exceed fifteen (15) feet in height.
- iii. Location. In residential zoning districts, ground mounted solar energy systems shall be limited to the rear yard. In nonresidential districts, ground mounted solar energy systems may be permitted in front yards, side yards adjacent to public rights-of-way and rear yards.
- iv. Setbacks. Ground mounted solar energy systems shall comply with all accessory structure setbacks in the applicable zoning district. Roof mounted systems shall comply with all building setbacks in the applicable zoning district and shall not extend beyond the exterior perimeter of the building on which the system is mounted.
- v. Roof Mounting. Roof mounted solar collectors may be flush mounted or bracket mounted. Bracket mounted collectors shall be permitted only when a determination is made by the City Building Official that the underlying roof structure will support apparatus, wind, and snow loads and all applicable building standards are satisfied.
- vi. Easements. Solar energy systems shall not encroach on public drainage, utility roadway or trail easements.
- vii. Screening. Solar energy systems shall be screened from view to the extent possible without impacting their function.
- viii. Maximum Area. Ground mounted solar energy systems shall be limited in size to the maximum area requirement allowed for accessory

Distributed Wind Energy Association Distributed Wind Model Zoning Ordinance

Permitted Use Regulation for Distributed Wind Turbines

Section 1 Purpose

It is the purpose of this regulation to promote the safe, effective and efficient use of Distributed Wind Energy Systems that are installed to reduce the on-site consumption of utility-supplied electricity.

Section 2 Findings

The [city, town or county] recognizes the common good of distributed wind systems and finds that wind energy is an abundant, renewable, and nonpolluting energy resource. Its conversion to electricity will reduce our dependence on nonrenewable energy resources, encourage stewardship and conservation of our non-renewable energy resources for future generations and decrease the air and water pollution that results from the use of conventional energy sources. Distributed wind energy systems enhance the reliability and power quality of the electrical grid, reduce peak power demands, and help diversify the State's energy supply portfolio. Distributed wind systems also make the electricity supply market more competitive by promoting customer choice, as well as fostering economic stability through job creation which encourages the growth of local, small businesses.

The State of _____ has enacted a number of laws and programs to encourage the use of distributed renewable energy systems including rebates, net metering, property tax exemptions, feed-in-tariffs, and solar easements [as appropriate]. However, many existing zoning ordinances contain restrictions that do not adequately address the installation of distributed wind turbines and substantially increase the time and costs required to obtain necessary zoning and/or construction permits.

Therefore, we find it necessary to standardize and streamline the proper issuance of zoning and building permits for Distributed Wind Energy Systems so that this clean, renewable energy resource can be utilized in a cost-effective, responsible and timely manner.

Section 3 Definitions

- 3.1 Wind Energy System: A wind energy conversion system consisting of a wind turbine, tower and associated control or conversion electronics.
- 3.2 Distributed Wind Energy System: A Wind Energy System serving a local electric load.
- 3.3 Distributed Wind Energy System Up to and Including 100 kW: A Distributed Wind Energy System which has a Rated Power Output of 100 kW or less.
- 3.4 Distributed Wind Energy System Larger than 100 kW: A Distributed Wind Energy System which has a Rated Power Output greater than 100 kW.

NOTE: The above definitions are for the specific purpose of creating useful definitions in this Model Zoning Ordinance. Industry consensus is that all projects are simply defined as Distributed Wind.

- 3.5 Total System Height: The height above grade of the fixed portion of the Tower, plus the wind turbine and extending to the uppermost reach of the rotor.
- 3.6 Rated Power Output: The power output of a Distributed Wind Energy System at a constant Hub Height wind speed of 11 m/s (25 mph).

- 3.7 Tower: A guyed or freestanding structure, anchors and foundation that is specifically engineered to support a wind turbine.
- 3.8 Hub Height: For horizontal axis wind turbines, Hub Height is the height of the center of the wind turbine rotor above the terrain surface. For vertical axis wind turbines, the Hub Height is the height of the horizontal centerline of the rotor above the terrain.
- 3.9 Obstruction: Anything that interferes with the laminar (straight, smooth) flow of wind, causing a level of turbulence that could interfere with the proper function and/or productivity of a wind turbine.
- 3.10 Swept Area: projected area perpendicular to the wind direction that a rotor will describe during one complete rotation.

Section 4 Permitted Use and Administrative Reviews

- 4.1 Distributed Wind Energy Systems Up to and Including 100 kW shall be a permitted use in all zoning classifications where structures of any sort are allowed.
- 4.2 Distributed Wind Energy Systems Larger than 100 kW shall be a permitted use in non-residential zoning classifications and will be subject to a standardized administrative review [if already in use by the zoning authority, or else Conditional Use Permit review] and approval by the authority having jurisdiction.
- 4.3 All Distributed Wind Energy Systems are subject to certain requirements as set forth below.
 - 4.3.1 System Height: Wind turbine systems shall be allowed to be tall enough to facilitate proper function. Specifically, they shall adhere to the industry standard that the entire wind turbine should be at least 30' above both (a) any Obstruction within a 500' radius, and (b) the surrounding tree height.
 - 4.3.2 Minimum System Height: In no case shall the Hub Height be less than 60'. In cases where the manufacturer's minimum Hub Height recommendation is higher than 60', that recommendation shall be used as the minimum allowable Hub Height.
 - 4.3.3 Maximum System Height: There is no limitation on system height, except as imposed by FAA regulations and the required setbacks.
 - 4.3.4 Building-Mounted Systems: Wind turbines mounted on buildings are required to follow the industry standard that the entire wind turbine should be 30' above all Obstructions within a 500' radius of the turbine, including the structure to which it is mounted, and the surrounding tree height.
- 4.4 Setback: Local building and zoning ordinances for structures shall be followed with the express provision that that no part of the wind system structure, including guy wire anchors or any other appurtenance may extend closer than ten (10) feet to any property boundary line. No setback requirement from a property line shall exceed the Total System Height as measured to the center of the base of the Tower.
 - 4.4.1 Neighboring inhabited dwelling: A Distributed Wind Energy System shall be located at least the Total System Height from any existing neighboring inhabited dwelling.
 - 4.4.2 Neighboring property line: Distributed Wind Energy Systems shall follow all setbacks, unless written permission is obtained from the existing owner of the affected adjoining property at the time of application.

- 4.4.3 Overhead power lines and other setbacks: Wind turbines shall follow existing ordinances for structures in regard to setback from overhead utility lines, roads, easements public buildings and other utilities, provided the setback requirement shall not exceed the Total System Height.
- 4.4.4 Multiple wind turbines: Applications for multiple wind turbines on a single property shall follow manufacturer or installer recommendations regarding minimum separation between turbines.
- 4.5 Access: To prevent unauthorized climbing, climbing pegs shall be removed from the lower ten (10) feet of the Tower, or ladder access shall be restricted. Fences shall not be required as they deny critical access to the Tower base.
- 4.6 Signage: A "Danger, High Voltage" sign shall be installed where it is clearly visible by persons standing near the tower base.
- 4.7 Sound: During normal operation, Distributed Wind Energy Systems shall not exceed (a) the sound levels allowed in existing zoning ordinances for the township or municipality; or if no clause exists, (b) five (5) dBA over ambient sound as measured at the closest neighboring inhabited dwelling that exists or is permitted for construction at the time of permit application for the wind energy system. This sound level may be exceeded during short-term events, such as utility outages and storms. Complainant shall bear the burden of proof until and unless the wind turbine system has been proven to be out of compliance with the ordinance.
- 4.8 Turbine Standards
 - 4.8.1 Distributed wind turbines with a rotor Swept Area of up to 200m² shall be certified to the most current version of AWEA 9.1 Small Wind Turbine Performance and Safety Standard by the Small Wind Certification Council or an accredited certification agency. Applications for provisionally certified or non-certified turbines with Swept Areas up to 200m² may be considered on a case-by-case basis, but shall, in all cases, include a description of the safety features, a power curve complying with IEC 61400-12-1 or AWEA 9.1. and an acoustic test report complying with IEC61400-11 or AWEA 9.1.
 - 4.8.2 Distributed wind turbines with rotor Swept Areas greater than 200m² shall comply with the following:
 - 4.8.2.1 Carry up-to-date certifications to IEC 61400-12 (2005 or future versions) and IEC 61400-11 (2006 or future versions), by an accredited certification agency; and
 - 4.8.2.2 Either (4.8.2.2.1) or (4.8.2.2.2) below:
 - 4.8.2.2.1 Carry an up-to-date Design Evaluation certification to IEC 61400-1 (2005 or future version), by an accredited certification agency,
 - 4.8.2.2.2 Evidence of extensive operational history (all of the requirements below)
 - 1. At least 500,000 hours of fleet operation
 - 2. At least 25 operating wind turbines

3. At least 2 years of operation from 5 wind turbines

- 4.9 Compliance with Building Codes: Permit applications for Distributed Wind Energy Systems shall comply with all applicable state and local building codes.
- 4.9.1 Tower and foundation drawings provided by the manufacturer or the project developer shall be submitted with the application. Independent engineering review and wet-stamped drawings shall not be required for Distributed Wind Energy System Up to and Including 100 kW, but may be required for all other Distributed Wind Energy Systems.
- 4.9.2 Applications for roof-mounted (or other non-traditionally mounted) turbines shall include a wet-stamped structural engineering analysis for the turbine mounting system and for the suitability of the building to which the turbine is to be mounted.
- 4.10 Compliance with FAA Regulations: Distributed Wind Energy Systems must comply with applicable FAA regulations, including any necessary approvals for installations close to airports.
- 4.11 Compliance with National Electrical Code (NEC): The installation of a Distributed Wind Energy System shall comply with section 694 (or the most-current applicable section, if updated) of the NEC. Applications must be accompanied by a single-line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the NEC. Wet-stamped drawings shall not be required for Distributed Wind Energy System Up to and Including 100 kW.
- 4.12 Utility Notification: No grid-tied Distributed Wind Energy System shall be installed until evidence has been submitted that the applicant's utility company has been informed of the customer's intent to install an interconnected customer-owned generator.
- 4.13 Antennas: Wind turbine Towers installed under this ordinance may also be used to host antennas, so long as the structure is shown to meet the state and local structural code requirements.
- 4.14 Fee: The building permit fee for a Distributed Wind Energy System shall follow the existing fee structure for permits required of other structures in the appropriate district. In the absence of such fee structure, the permit fee for a Distributed Wind Energy System shall not exceed \$20 per kW of Rated Power Output or a maximum of \$1500. Additional charges for inspections shall apply at the standard rate used for other structures.
- 4.15 Decommissioning: A Distributed Wind Energy System that has reached the end of its useful life shall be removed within 6 months of such determination. A Distributed Wind Energy System is considered to have reached the end of its useful life when it has been inoperable for 12 consecutive months. Time extensions are allowed when good faith efforts to repair the turbine can be demonstrated. Foundations need not be removed.

City	Term	Zoning	Min. Lot Size	Set-back	Max. Height	Lighting	Other Standards
Lake Elmo	Wind Generator	A and RR	40 acres	125 ft.	150 ft.	<ul style="list-style-type: none"> No light-ing 	<ul style="list-style-type: none"> Fencing required if determined safety risk Accessory building standards No lighting 1,000 ft between wind generators
DWEA Model	Wind Energy System	<100kW all zoning districts >100 kW non-residential zoning districts		Meet zoning set-backs and Total Sys-tem Ht. from neighboring dwelling	FAA regs. and min. ht. must be above obstruction	<ul style="list-style-type: none"> Determined by FAA regulations Typically not lit 	<ul style="list-style-type: none"> Decommissioning required Shall be tall enough to allow proper function Must follow local code Typically, unless the proposed structure is within 3.8 miles of a commercial runway over 3,200 feet long, any structure under 200' in height above ground level does not require FAA notification or lighting. (from 2013 pdf) If an emergency worker were to become injured while attempting to climb over a municipality-mandated fence to get to a tower, the municipality may find themselves at the receiving end of legal action. If the permitting authority required the fence, then they will likely bear a legal liability to both the injured party and the landowner that was required to install the fence. In the end, fences simply have not been found to offer any additional protection to the turbine owner, neighbors, or the municipality.

Oakdale	Wind Energy Conversion System WECS	CUPs in Cmty. Commercial, Gen. Ind.	None specified in ordinance	300 ft. or 1.5 X the ht., whichever is greater	None specified in ordinance	No lights except those required by FAA	<ul style="list-style-type: none"> Standards on blade clearance Require manual and automatic braking device Grounded and protected against lightning strikes No tower climbing apparatus Warning sign required Requires removal w/in 12 months of cessation of operation Liability insurance required Shall not generate power as a commercial enterprise
Orono	Small Wind Energy Conversion System SWECS	Permitted Accessory Uses in RR; CUPs in Commercial and Ind.	10 acres – RR 5 acres – for others	100 ft.	30ft With a 12ft clearance to ground	None found	<ul style="list-style-type: none"> Standards on blade clearance Blade length limited to 15 ft. Roof or wall mounted SWECS not permitted Exempt from screening requirements Aesthetic standards Feeder lines underground Sets forth standards, certification requirements and maintenance requirements Requires removal w/in 12 months of cessation of operation
Stillwater Township	WECS Wind Energy Conversion System	Conditional use Permit required for all zones	10 acres per parcel	Twice the height of the mill (150-200)	75ft- Transition zone 100ft-all other	None allowed	<ul style="list-style-type: none"> Must be grey or off white Rotors cannot exceed 26ft in diameter 30ft clearance over trees Must be grounded to protect against lightning strikes Manual and automatic braking system required If out of use for 1yr-must be removed and ground restored
North St. Paul	Wind Energy Systems	Permitted accessory use (all districts)	Determined by zone	Distance equal to the highest possible extension	75ft 100ft max with conditional use permit	None allowed	<ul style="list-style-type: none"> Rotors 30ft off the ground and more than 20ft from nearest tree Standard-International Electrotechnical commission (IEC) 15ft rotor length max Yearly certificate inspection Not installed in front or side yard