CITY OF NORTH OAKS

Regular Planning Commission Meeting
Thursday, August 31, 2023
7:00 PM, Community Meeting Room, 100 Village Center Drive

MEETING AGENDA

Remote Access - *Planning Commission members will participate in person in Council Chambers (Community Room, 100 Village Center Drive, Suite 150, North Oaks, MN) during the meeting. Members of the public are welcome to attend. Any person wishing to monitor the meeting electronically from a remote location may do so by calling the following Zoom meeting videoconference number: 1-312-626-6799, Webinar ID: 852 5803 0453 or by joining the meeting via the following link: https://us02web.zoom.us/j/85258030453.*

1. Call To Order

2. Roll Call

3. Pledge

4. Citizen Comments - *Members of the public are invited to make comments to the Planning Commission during the public comments section. Up to four minutes shall be allowed for each speaker. No action will be taken by the Commission on items raised during the public comment period unless the item appears as an agenda item for action.*

5. Approval of Agenda

6. Approval of Previous Month's Minutes

6a. Approval of Planning Commission Meeting minutes of 7.27.2023
Planning Commission Minutes_7.27.2023.pdf

7. Business Action Items

7a.Public Hearing- Consider Conditional Use Permit for property located at 12 Columbine Lane for a garage exceeding 1,500 Square feet
2023-08-31 PC Packet_12 Columbine CUP.pdf

7b.Discuss Ordinance amending Chapter 151 of the City Code Regarding Sign Definitions and Signs in the RSM-Residential Single-Family Medium Density District
2023-08-31 PC Packet_sign ordinance.pdf

7c. Discuss Ordinance amending Chapter 151 of the City Code Regarding Solar
2023-08-31 PC Packet_solar ordinance.pdf

7d. Discussion on CUP requirements for home height, and garages
zoning code cup garages, height, setbacks.pdf

7e. Discussion on touring new development sites on September 6th

8. Commissioner Report(s)

9. Adjourn - *The next meeting of the Planning Commission is Thursday, September 28, 2023.*

North Oaks Planning Commission
Meeting Minutes
City of North Oaks Community Meeting Room
July 27, 2023

1. CALL TO ORDER

Chair Cremons called the meeting to order at 7:00 p.m.

2. ROLL CALL

Present: Chair David Cremons, Commissioners Bob Ostlund, Stig Hauge, Grover Sayre III, and Joyce Yoshimura-Rank, City Council Liaison Mark Azman
Absent: Nick Sandell, Scott Weins
Staff Present: Administrator Kevin Kress, City Attorney Bridget Nason, City Planner Kendra Lindahl (via Zoom)
Others Present: Videographer Kenny Ronnan
A quorum was declared present.

3. PLEDGE OF ALLEGIANCE

Chair Cremons led the Council in the Pledge of Allegiance.

4. CITIZEN COMMENTS

There was no one present in the room, or online wishing to make comments.

5. APPROVAL OF AGENDA

MOTION by Hauge, seconded Yoshimura-Rank, to approve the agenda as submitted. Motion carried unanimously.

6. APPROVAL OF PREVIOUS MONTH'S MINUTES

a. Approval of June 22, 2023 Minutes

MOTION by Yoshimura-Rank, seconded by Hauge, to approve the Planning Commission Meeting Minutes of June 22, 2023. Motion carried unanimously.

7. BUSINESS ACTION ITEMS

a. Continued Public Hearing on amendments to City Code Chapters 34 and 151, Planning Commission composition and Comprehensive Plan. Discussion and possible action on amendments.

Chair Cremons this is a continuation of the June 22, 2023 Public Hearing regarding proposed amendment City Code Title III Chapter 34 regarding Planning Commission Composition and responsibility, and City Title 15, Chapter 151 regarding Comprehensive Plan amendment and Planning Commission actions.

The proposed amendments were reviewed and updated by a committee subgroup which consisted of Chair Cremons, Administrator Kress, Council Liaison Azman, Attorney Nason and Planner Lindall.

MOTION by Hauge, seconded by Yoshimura-Rank, to open the public hearing at 7:04 p.m. Motion carried unanimously.

There were no members of the public in the Community Room or on zoom. No comments by the public.

MOTION by Yoshimura-Rank, seconded by Hauge, to close the public hearing at 7:06 p.m. Motion carried unanimously.

- Chair Cremons noted the Chapter 34 has 1 letter changed. Chapter 151 has more significant formatting changes, not necessarily in substance.
- Attorney Nason detailed there were a number of proposed revisions made to Chapter 151. The first is to establish 3 new sections: 151.84, 151.85 and 151.86 which detail the Planning Commissions role in adoption of the Comprehensive Plan and Comp plan amendments. Added under a new heading in zoning ordinance titled Comprehensive Plan.
- There were also revisions to sections .079 and .078 to provide additional clarification for the process for requesting CUP, zoning ordinances or zoning map amendments, and appeals. It clarifies the process for those types of requests and clarifies the role of the Board of Adjustments and Appeal. It includes that City Council as the "Board of Appeals" has the ability to timely hear any appeal or dispute from a claim of an error made by the zoning administrator in the interpretation or application of that Chapter. There is also language about the notice of such hearings, and that the decision of the Board of the Appeals and Adjustments is final, subject only to judicial review in a Court of competent jurisdiction.
- Administrator Kress handed out an update to the draft ordinance to all Commissioners. The only change from what was published in the package was reorganization of items, grammatical and numbering for clarity. There is no new substantive verbiage change.
- Commissioner Ostlund felt it is important to see officially recognized that Roberts Rules of Order are to be followed during Planning Commission meetings.
- Chair Cremons noted that last month's meeting, it was thought updates may be needed in the zoning Ordinance 152. It was found the current rules address those concerns and there is no need for further revisions at this time.

MOTION by Hauge, seconded by Yoshimura-Rank, to amend Title 15, Chapter 151 ordinance as set forth in materials presented to Planning Commission. Motion carried unanimously.

Attorney Nason state the revisions to Chapter 34 seeks to clarify the following:

- PC consists of 7 voting members of the residents of the members of North Oaks
- City Council may appoint a City Council Liaison, who is a non-voting member and does not count in PC quorum

- Chapter 34.07 clarifies that if a Planning Commission member fails to attend 3 consecutive regularly scheduled meetings without being excused by the Planning Commission Chair, actions can be taken by the Planning Commission Chair to request replacement of that position by City Council.
- Clarifies the role of PC commission and what it's powers and duties are as a planning body for the City.
- Chair Cremons asked if the Planning Commission actively reviews Comprehensive plan every 2 years. Administrator Kress stated it is reviewed as needed. The Comprehensive Plan must be reviewed and adopted every 10 years. The Met Council gives notice 4 years out, with draft completed 2 years prior with goal to be adopted by 10-year mark.
- Chair Cremons asked if a Planning Commission written report requirement to Council has been completed at the end of each year. Administrator Kress stated that everything the Planning Commission does goes to the City Council and it would be redundant to submit a report. Commissioner Hauge suggested the verbiage to submit report to City Council may be unnecessary. Liaison Azman suggested the report date be changed to February of each year. In reality, City staff would likely provide this year end recap.
- Section C line 5 (Section 34.06)– adjust to state "at the request of City Council by February 1st of each year." Section D line 2 – adjust to state "at request of City Council the Planning Commission shall submit a written report of expenditures by February 1st"
- Administrator Kress noted that the City Council sees a complete list of expenditures each month. He also suggested that "City" and "Chair" be capitalized throughout.

MOTION by Hauge, seconded by Yoshimura-Rank to approve proposed amendments to City Code Title III, Chapter 34 as identified in the Planning Commission materials, with modification to 34.06 C & D to: add language regarding "at request of City Council", report due date updated from January 1 to February 1, and "City" and "Chair" to be capitalized throughout. Motion carried unanimously.

8. COMMISSIONER REPORT(S)

- Commissioner Ostlund asked if any new tours have been scheduled of development sites. Administrator Kress will follow up with the North Oaks Company to schedule a tour for Planning Commissioners.
- Commissioner Yoshimura-Rank asked if there have been any technical issues, since some of the detail in the amendments hasn't been there since 2019. Council Liaison Azman stated there is nothing in the past that they are expecting to be challenged at this point, and it is now corrected going forward.
- Chair Cremons noted they would next like to address the Conditional Use Permit (CUP) and Variance ordinances to ensure they are still serving the City well. The key issues are excess height and excess garage space CUP process, and if it is still necessary for these items to go through full Planning Commission review process which costs residents a significant amount of money and time. Septic Variances also come up frequently, however this may still be important enough they should still be coming through Planning Commission.
- Chair Cremons noted that Peace United Methodist church is looking to put in a digital sign, and Incarnation is looking to put in ground solar panel – neither of which are

currently allowed by Ordinance. Kress stated the plan is to run it through Planning Commission next month with goal end of September to be noticing for public.

- Hauge suggested that the City connect with other Cities that have already addressed these issues to see examples of how they have been addressed.
- Kress stated that a subgroup to review solar, signage, home height, garage ordinances would work well as a smaller group, and then to bring back to Planning Commission for discussion.

9. ADJOURN

Administrator Kress stated the next Planning Commission meeting would be August 31st .

MOTION by Hauge, seconded Cremons, to amend the annual calendar to move the Planning Commission meeting from August 24th to August 31st.

MOTION by Yoshimura-Rank, seconded by Ostlund, to adjourn the Planning Commission meeting at 7:35 p.m. Motion carried unanimously by roll call.

_____ _____

Kevin Kress, City Administrator David Cremons, Chair

Date approved_____

CITY OF
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PLANNING REPORT

TO: North Oaks Planning Commission

FROM: Kendra Lindahl, City Planner
Kevin Kress, City Administrator
Bridget McCauley Nason, City Attorney
Michael Nielson, City Engineer

DATE: August 31, 2023

RE: Conditional Use Permit for Combined Garage Size in Excess of 1,500 square feet at 12 Columbine Lane

Date Application Submitted	August 4, 2023
Date Application Determined Complete:	August 4, 2023
Planning Commission Meeting Date:	August 31, 2023
City Council Meeting Date:	September 14, 2023
60-day review Date:	October 3, 2023

BACKGROUND

Patrick and Pamela Henry applied for a Conditional Use Permit (CUP) to exceed the maximum combined garage size of 1,500 square feet on the property located at 12 Columbine Lane.

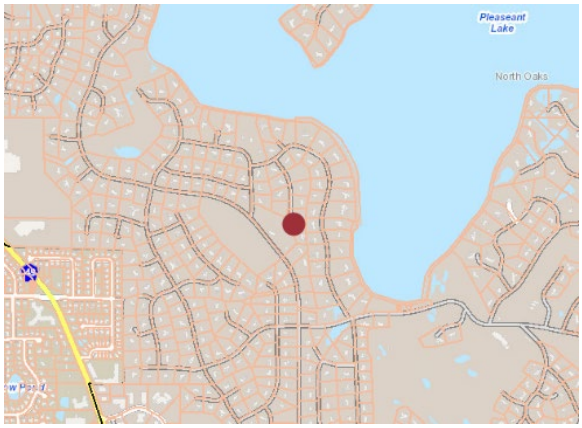


Figure 1 - Subject Parcel Location

The applicants intend to construct a 367 square foot garage addition to the existing 908 square foot attached garage. Additionally, there is a 400 square foot shed on the property. The applicant's narrative is attached, as well as the building elevations of the proposed addition.

The original home was built in 1985 and the swimming pool was built in 1987. No variances were granted for either structure, therefore, the pool is considered a legal non-conforming structure because it does not meet the 30-foot minimum setback from the east lot line.

There is an existing septic system north of the home. It appears that no secondary site was required to be shown as part of the 1985 permit. there are no records from the 1985 approval showing that two septic sites were located. This would also be a legal, non-conforming site related to the second septic location. Chapter 51 of the City Code requires "At the time of subdivision, development, or redevelopment, the developer of each lot, which will not be serviced by municipal sanitary sewer, shall identify 2 sites, each 5,000 square feet in size, for the purpose of sewage treatment and dispersal." This site is not being redeveloped and is not required to show two 5,000 square foot septic sites. The new addition is south of the home near the well and would not likely be a viable site for a second septic location regardless.

Zoning and Analysis

The property is guided Low Density residential and zoned Residential Single Family – Low Density (RSL) district. Private garages in this zoning district are not allowed to exceed 1,500 square feet in size without a CUP.

The 1.47-acre property is located east of the West Recreation Center. The majority of the parcel is also located within the Pleasant Lake Shoreland Management Area but is not a riparian lot. Pleasant Lake is classified as a recreational development lake.

PLANNING ANALYSIS

Shoreland

The property is located southwest of Pleasant Lake and is separated from the lake by multiple parcels, Evergreen Road and a public trail. All structures and septic systems must be a minimum of 75 feet from the ordinary high water level (OHWL) of the lake. The property is more than 700 feet from the edge of the lake.

A certificate of zoning compliance is required from the City Clerk prior to initiating any work in the shoreland management area.

Setbacks

The proposed garage addition exceeds the 30-foot minimum setback requirements at all property lines and street easements. The garage addition will reduce the building setback from the south property line to 72.5 feet from 87.5 feet.

Height

The applicants' plans appear to comply with the 35-foot height limit allowed by Code and they did not request any flexibility from height limits. The garage addition is slightly lower than the existing garage; however, building height must be dimensioned on the plans to confirm compliance at the time of building permit.

The Zoning Code defines building height as "the vertical distance from grade as defined herein to the top ridge of the highest roof surface." Grade is defined as "the lowest point of the finished surface of the ground as measured on each building elevation."

Garage CUP

Garage areas that exceed 1,500 square feet may be permitted after securing a conditional use permit. The applicant is requesting approval of a CUP to allow a 364 square foot addition to the existing 908 square foot attached garage; the property also has a 400 square foot detached garage. The 364 square foot garage addition would increase the total garage area on the property to 1,672 square feet from 1,308 square feet. The following CUP criteria must be met:

1. *The garage shall not exceed 3,000 square feet;*

   The plans comply. The garage addition will result in a combined garage square footage of 1,672 square feet.

2. *The garage shall be constructed in the same architectural style as the principal building or structure;*

   The garage is attached to the principal building and will have the same exterior materials and design elements as the principal building.

3. *The floor area ration shall not exceed 0.12;*

   The plans comply. The floor area ratio will be 0.085.

4. *No use of the garage shall be permitted other than for private residential noncommercial use;*

   The garage will be used by the residents of the home for typical residential uses. The applicants narrative indicates the garage addition will increase the parking capacity from three to four stalls.

In addition to the standards identified for the specific CUP request, the City must also review the garage request against the standards in Section 151.076 of the City Code. Staff has reviewed the request against those standards:

1. *The relationship of the proposed use to the Comprehensive Plan;*

   The proposed use is consistent with the uses anticipated in the Comprehensive Plan and the permitted uses in the single family zoning district.

2. *The nature of the land and adjacent land or building where the use is to be located;*

   The use is consistent with the surrounding uses. The attached garage will have the same exterior materials and design elements as the main portion of the home.

3. *Whether the use will in any way depreciate the area in which it is proposed;*

   The garage addition, which has been designed in harmony with the rest of the existing home, should not negatively impact adjacent property values.

4. *The effect upon traffic into and from the land on adjoining roads, streets and highways;*

   The proposed use will not create a traffic impact.

5. *Whether the use would disrupt the reasonable use and enjoyment of other land in the neighborhood;*

   The described use of the structure should not create a negative impact to the use and enjoyment of other land in the neighborhood.

6. *Whether adequate utilities, roads, streets, and other facilities exist or will be available in the near future;*

   There are adequate utilities, roads, streets and other facilities available to the property. The septic field sites on this property will not be impacted by the proposed garage addition.

7. *Whether the proposed conditional use conforms to all of the provisions of this chapter;*

   The proposed request is compliant with the City's zoning code.

8. *The effect upon natural drainage patterns onto and from the site;*

   Finished grading is compatible with the existing drainage patterns. The City engineer has reviewed the plans and has no concerns.

9. *Whether the proposed use will be detrimental to or endanger the public health, safety, comfort, convenience or general welfare of the neighborhood or the city;*

   The use as proposed should not be detrimental to or endanger the public health, safety, comfort, convenience or general welfare of the neighborhood or the city.

10. *Whether the proposed use would create additional requirements at public cost for public facilities and services and whether or not the use will be detrimental to the economic welfare of the neighborhood or city; and*

    As proposed, the use would not create additional requirements at public cost for public facilities and services and will not be detrimental to the economic welfare of the neighborhood or city.

11. *Whether the proposed use is environmentally sound and will not involve uses, activities, processes, materials, equipment, and conditions of operation that will be detrimental to any persons, land, or the general welfare because of excessive production of traffic, noise, smoke, fumes, wastes, toxins, glare, or orders.*

    Beyond initial construction activity, and based on the erosion control requirements, the proposed activity should not be detrimental to the environment or surrounding area.

Attached for reference:

Exhibit A: Site Survey dated August 4, 2023

Exhibit B: Applicant Narrative dated August 4, 2023

Exhibit C: Building Elevations and Floor Plans dated August 4, 2023

Exhibit D: Revised FAR Calculation Spreadsheet dated August 16, 2023

STAFF RECOMMENDATION

Based on the preceding review, Staff recommends approval to allow construction of a 364 square foot garage addition and total garage area of 1672 square feet at 12 Columbine Lane, subject to the following conditions:

1. The request is approved in accordance with the application submitted on August 4, 2023, except as amended by this approval.

2. The proposed garage addition shall meet all required setbacks and other zoning standards prior to issuance of building permit:

    a. The plans shall be revised to dimension building height in accordance with City Code definitions.

3. Plans shall be approved by the Building Official prior to the commencement of construction.

4. A certificate of zoning compliance is required from the City Clerk prior to initiating any work in the shoreland management area.

5. The applicant shall comply with all applicable local, state and watershed district rules and regulations.

PLANNING COMMISSION OPTIONS

In consideration of the conditional use permit application, the Planning Commission has the following options:

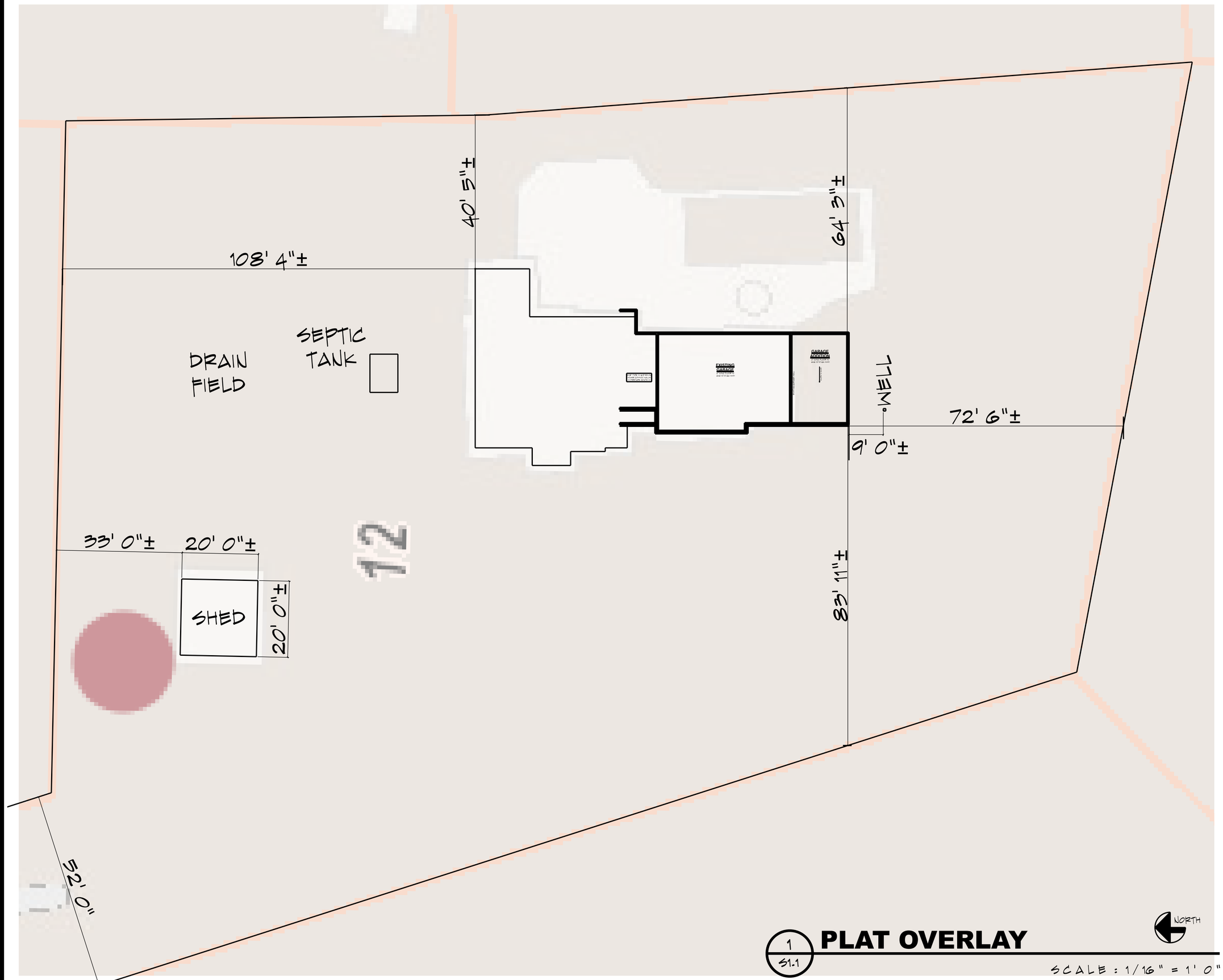
A) Recommend approval, with conditions, based on the applicant's submission, the contents of this report, public testimony and other evidence available to the Planning Commission.

- This option should be utilized if the Planning Commission finds the proposal adheres to all City Code requirements or will do so with conditions.
- Approval at this time means that, upon City Council approval, the applicant can construct the garage addition, as proposed, subject to the satisfaction of all imposed conditions.

B) Recommend denial based on the applicant's submission, the contents of City Staff report, received public testimony and other evidence available to the Planning Commission.

- This option should only be utilized if the Planning Commission can specifically identify one or more provisions of City Code that are not being met by the conditional use permit proposal.

C) Recommend continuance of the application review based on the need for more information in which to process the request.



1
S1.1

PLAT OVERLAY

SCALE: 1/16" = 1' 0"

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www.royaloaksdesign.com
West Lakeland, MN 55082

HENRY RESIDENCE
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Please scan or visit www.royaloaksdesign.com to see more of our plans or to request modifications.

Document Date:
6/7/2023
Document Date:

Drawn by: DML

ISSUE	DATE	REMARKS
01	06/05/23	PRELIM - DML
02	06/07/23	PRELIM - DML

PLAT OVERLAY

3 **S1.1** 3

16'
8'
4'
2'
0'

100% SCALE @ 18"x24"

PAT HENRY

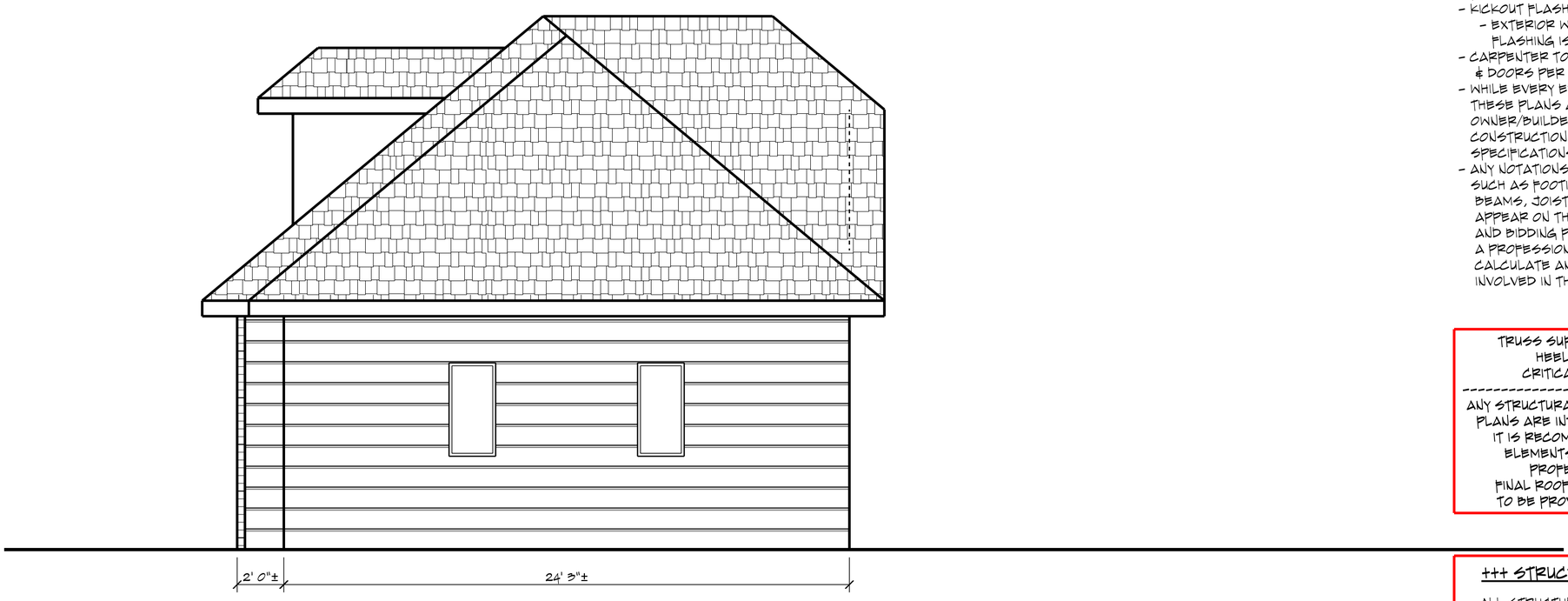
I AM REQUESTING A CONDITIONAL USE PERMIT TO EXPAND MY GARAGE TO 4 STALLS.

I CURRENTLY HAVE 1303 SQ FT OF GARAGE SPACE AND THE MAX ALLOWED IS 1500 SQ FT.

THE PROPOSED ADDITIONAL GARAGE WOULD ADD 367 SQ FT, EXCEEDING THE 1500 SQ FT BY 167.5 SQ FT

MY REQUEST IS TO EXCEED THE MAXIMUM BY 167.5

THANK YOU



RIGHT ELEVATION

2
A1.1

SCALE : 1/4" = 1' 0"

FRONT ELEVATION

1
A1.1

SCALE : 1/4" = 1' 0"

GENERAL NOTES

- ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALING OF DRAWINGS
- KICKOUT FLASHING TO BE INSTALLED AS NEEDED - EXTERIOR WALL FINISHER TO VERIFY KICKOUT FLASHING IS INSTALLED PRIOR TO FINISHING
- CARPENTER TO FLASH ALL EXTERIOR WINDOWS & DOORS PER MIN. AND IRC CODE REQUIREMENTS
- WHILE EVERY EFFORT HAS BEEN MADE TO INSURE THESE PLANS ARE ACCURATE AND COMPLETE, THE OWNER/BUILDER MUST VERIFY ALL DIMENSIONS, CONSTRUCTION METHODS, SITE CONDITIONS AND SPECIFICATIONS AND BE RESPONSIBLE FOR SAME.
- ANY NOTATIONS OF SIZES OF STRUCTURAL MEMBERS SUCH AS FOOTINGS, FOUNDATION SIZING, POSTS, BEAMS, JOISTS, RAFTERS, TRUSSES ETC. THAT APPEAR ON THESE PLANS ARE FOR DESIGN REVIEW AND BIDDING PURPOSES ONLY. IT IS RECOMMENDED A PROFESSIONAL ENGINEER BE ENGAGED TO CALCULATE AND DESIGN ALL STRUCTURAL COMPONENTS INVOLVED IN THIS STRUCTURE.

TRUSS SUPPLIER TO VERIFY ALL SPANS, PITCHES, HEEL HEIGHTS AND OTHER CONDITIONS CRITICAL TO PROPER TRUSS FABRICATION.

ANY STRUCTURAL COMPONENTS THAT MAY NOTED ON THESE PLANS ARE INTENDED FOR DESIGN/BID PURPOSES ONLY. IT IS RECOMMENDED THAT ALL STRUCTURAL DESIGN ELEMENTS BE REVIEWED BY A LOCAL LICENSED PROFESSIONAL STRUCTURAL ENGINEER. FINAL ROOF AND FLOOR TRUSS DESIGN AND LAYOUT TO BE PROVIDED BY YOUR LOCAL TRUSS SUPPLIER.

+++ STRUCTURAL NOTICE +++

ALL STRUCTURAL BEAM AND HEADER SIZES, BEARING CONDITIONS AND ANCHORING REQUIREMENTS MUST BE REVIEWED BY A STRUCTURAL ENGINEER BASED ON EXISTING SITE CONDITIONS. OWNER/BUILDER TO ASSUME ALL RESPONSIBILITY FOR ENTIRE STRUCTURE.

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Please scan or visit www.royaloaksdesign.com to see more of our plans or to request modifications.

Document Date: 6/7/2023
Document Date:

Drawn by: DML

ISSUE	DATE	REMARKS
01	06/09/23	PRELIM - DML
02	06/07/23	PRELIM - DML

EXTERIOR ELEVATIONS

1 **A1.1** 3

100% SCALE @ 18"x24"

GENERAL NOTES

- ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALING OF DRAWINGS
- DIMENSIONS ARE FROM EXTERIOR FACE OF SHEATHING OF EXTERIOR STUD WALLS AND CENTERLINE OF INTERIOR PARTITIONS (U.N.O.)
- WHILE EVERY EFFORT HAS BEEN MADE TO INSURE THESE PLANS ARE ACCURATE AND COMPLETE, THE OWNER/BUILDER MUST VERIFY ALL DIMENSIONS, CONSTRUCTION METHODS, SITE CONDITIONS AND SPECIFICATIONS AND BE RESPONSIBLE FOR SAME.
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DOOR SCHEDULE SYMBOL

2468 REPRESENTS A 2'-4" WIDE x 6'-8" HIGH DOOR

TRUSS SUPPLIER TO VERIFY ALL SPANS, PITCHES, HEEL HEIGHTS AND OTHER CONDITIONS CRITICAL TO PROPER TRUSS FABRICATION.

ANY STRUCTURAL COMPONENTS THAT MAY NOTED ON THESE PLANS ARE INTENDED FOR DESIGN/BID PURPOSES ONLY. IT IS RECOMMENDED THAT ALL STRUCTURAL DESIGN ELEMENTS BE REVIEWED BY A LOCAL LICENSED PROFESSIONAL STRUCTURAL ENGINEER. FINAL ROOF AND FLOOR TRUSS DESIGN AND LAYOUT TO BE PROVIDED BY YOUR LOCAL TRUSS SUPPLIER.

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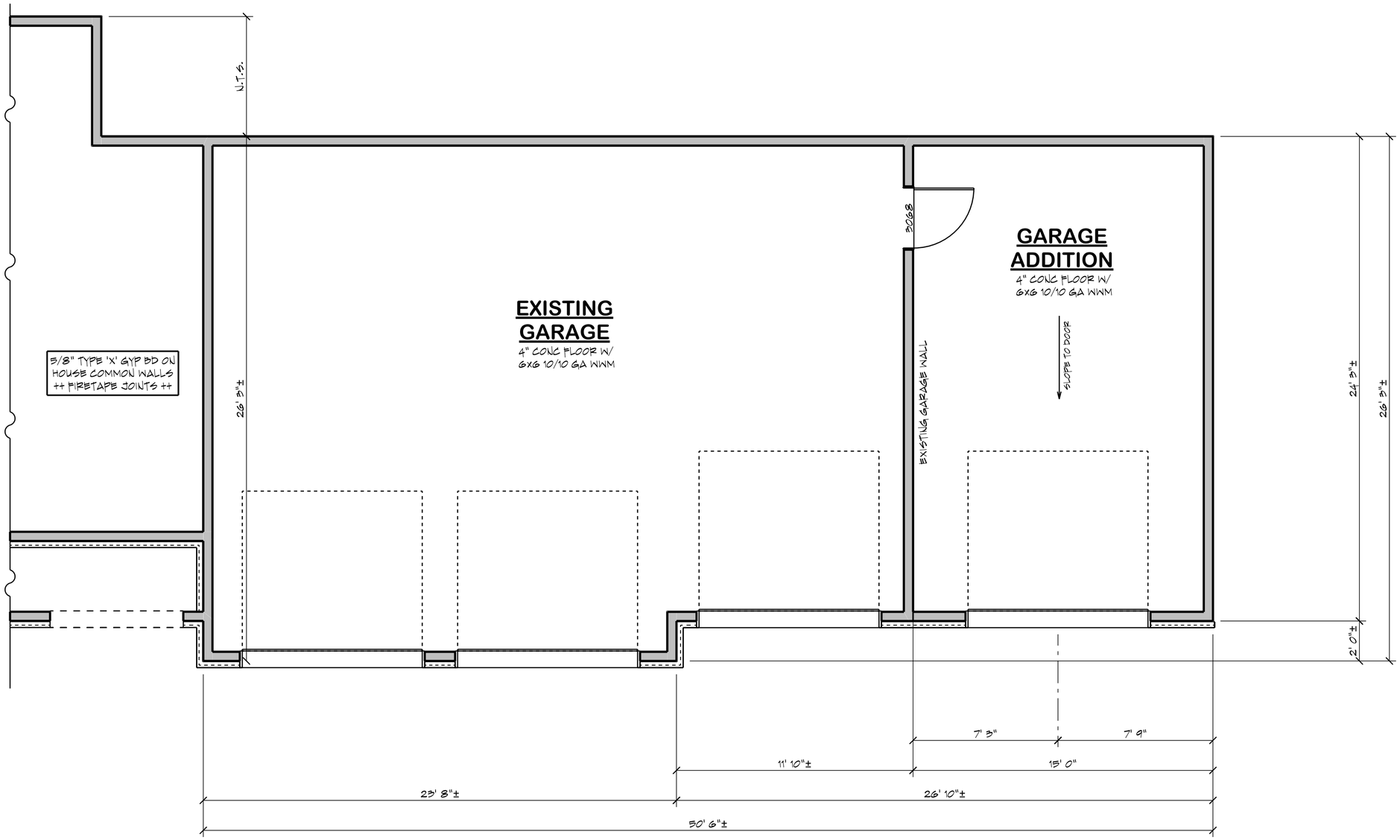

MAIN LEVEL FLOOR PLAN

1 / A2.3

SCALE: 1/4" = 1' 0"

100% SCALE @ 18"x24"

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ISSUE	DATE	REMARKS
01	06/09/23	PRELIM - DML
02	06/07/23	PRELIM - DML

MAIN LEVEL FLOOR PLAN

2 **A2.2** 3

FLOOR AREA RATIO (FAR) WORKSHEET
CITY OF NORTH OAKS

DATE	8/16/2023
PROJECT NAME	12 Columbine Garage CUP
PROJECT LOCATION	12 Columbine
PREPARED BY	Nicholas Ouellette

Instructions: Fill in the blank input boxes below

	INPUT	VALUE	UNIT
Total Lot Area	64033	64033	Sq. Ft.
Total Area of Road Easement	1700	1700	Sq. Ft.
Adjusted Total Lot Area		62333	Sq. Ft.
DNR-Designated Wetland	0	0	Sq. Ft.
Gross Lot Area		62333	Sq. Ft.
Floor Area (Existing/Proposed)			
First Floor	1715.5	1715.5	Sq. Ft.
Second Floor	1923.5	1923.5	Sq. Ft.
Basement	1491.5	1491.5	Sq. Ft.
Exposed Basement Walls	0%	0%	%
Adjusted Basement Area		0	Sq. Ft.
Garage	907.96	907.96	Sq. Ft.
Sub-Total		4546.96	Sq. Ft.
Additional Floor Area			
Additions	363.75	363.75	Sq. Ft.
Detached Accessory Buildings	400	400	Sq. Ft.
0		763.75	Sq. Ft.
Total Floor Area		5310.71	Sq. Ft.
FLOOR AREA RATIO		**8.52%**	

CITY OF
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Building on a tradition of innovation

PLANNING REPORT

TO: North Oaks Planning Commission

FROM: Kendra Lindahl, City Planner
Kevin Kress, City Administrator
Bridget Nason, City Attorney

DATE: August 24, 2023

RE: Amendment to 151 of the City Code Regarding Sign Definitions and Signs in the RSM-Residential Single-Family Medium Density District

BACKGROUND

At the July 13, 2023 City Council meeting representatives from Peace United Methodist Church at 5050 Hodson Road spoke about a request to replace their existing sign with a new electronic message sign. The property is zoned RSM.

The current sign is lit by external ground lights. They would like to install a monument sign with a digital display similar to the one at Incarnation Church. The Code prohibits moving or flashing parts on signs in the RSL district (and others), which prohibits electronic message center (ECM) signs. It is unclear how the Incarnation Church sign was permitted given these restrictions as the City has no record of a permit for that electronic message sign.

Existing Sign	Example Proposed sign
	

The City prohibits this type of sign and an ordinance amendment would be required to allow this type of sign. The Council directed staff to work with the subcommittee to draft an ordinance to allow this type of sign only in limited locations on the perimeter of the community.

A subcommittee made up of Chair Cremons, Council member Azman and staff met to develop the ordinance amendment. This draft is intended to gather Planning Commission feedback in order to schedule a public hearing in September.

ISSUES AND ANALYSIS

Signs are very limited in the residential zoning districts of the City. The church is located in the RSM zoning district. The sign standards for the RSM zoning district refer back to the RSL – Residential Single-Family Low Density district, which allows the following signs by conditional use permit:

(4) Non-neon signs and non-neon informational visual communication devices, provided that:

(a) The height of the sign or device does not exceed the height of the principal structure or the structure to which it is affixed;

(b) The architectural style and design shall not be so dissimilar to the surrounding buildings or area so as to adversely impact other land;

(c) There are no moving or flashing parts and any illumination shall be in compliance with § 151.031;

(d) The sign or device is permanently fixed to the land or to a building or structure;

(e) The sign or device is not a billboard and is associated with the principal use of the land; and

(f) Section 151.083 is complied with.

Sign ordinances must be content-neutral, meaning cities can regulate the size, style and location of signs but not content. This means the code cannot say that churches in the RSM district can have one size or type of a sign that other uses in the district cannot. Therefore, we must establish standards based on the property itself and the zoning district.

The draft ordinance was prepared using ordinances from a number of individual cities. A spreadsheet summarizing other ordinances is attached for reference. In order to allow the type of sign requested, we have revised the RSM zoning district standards and added definitions to the definitions section of the chapter. The draft ordinances show <u>underlined</u> text for the proposed additions to the City Code and ~~struck through~~ text for the deletions.

The draft ordinance allows electronic message centers (ECM) in the RSM district with a number of restrictions:

(1) The parcel is a minimum of 3.5 acres in size. This limits the number of parcels in the RSM district that would be eligible for this type of sign.

(2) The parcel has frontage on an arterial or collector roadways, as designated by the Comprehensive Plan. This further limits the parcels that are eligible to have this type of sign to those on the perimeter of North Oaks.
(3) Display messages must be held for a minimum of 8 seconds to minimize distractions to residents and drivers.
(4) Lighting standards must be met and signs are only allowed to be lit during certain hours.
(5) The total sign area is limited to 32 sq. ft. and no more than ½ of that area can be EMC.

The Planning Commission should discuss the proposed standards in the draft ordinance. We believe this language balances the church's desire for signage while protecting North Oaks residents from unnecessary lighting.

Staff notes that our review of the proposed Peace United Methodist Church request brought to our attention that there appear to be several businesses operating out of the church. Commercial operations are not permitted in the RSM zoning district and staff will be reaching out to the church to address that issue separately from the signage issue. However, we note that only the name of the principal use or address is permitted to be displayed on the non-EMC portion of the sign (the different businesses would not be permitted to be listed as shown on the concept sign). The ordinance subcommittee has discussed potentially rezoning the church and school properties to a public-institutional zoning district to more accurately reflect the uses on those parcels. However, that is not part of this proposal and could be addressed in the future.

Attached for reference:

Exhibit A:	Draft Ordinance amending Chapter 151
Exhibit B:	Zoning Map
Exhibit C:	Transportation Map
Exhibit D:	Map showing RSM parcels 3.5-acres or larger
Exhibit E:	Summary of other City Standards
Exhibit E:	Concept from Peace United Methodist Church

REQUESTED ACTION

The Planning Commission should review the draft ordinance and provide feedback for staff to make edits to the draft for a public hearing at the September meeting.

CITY OF NORTH OAKS
RAMSEY COUNTY, MINNESOTA

ORDINANCE NO. ____

AN ORDINANCE AMENDING CITY CODE TITLE XV, CHAPTER 151, REGARDING SIGN DEFINITIONS AND SIGNS IN THE RSM- RESIDENTIAL SINGLE-FAMILY MEDIUM DENSITY DISTRICT

THE CITY COUNCIL OF THE CITY OF NORTH OAKS ORDAINS AS FOLLOWS:

Section One. Title XV, Chapter 151 Amendment: Title XV, Chapter 151, of the North Oaks City Code is hereby amended as follows. The underlined text shows the proposed additions to the City Code and the ~~struck through~~ text shows the deletions:

§ 151.005 DEFINITIONS

Sign Related Definitions:

CHANGEABLE SIGN**.** A sign with the capability of content change by means of manual or remote input, including signs that are manually or electrically activated.

1) MANUALLY ACTIVATED. Changeable sign whose message copy or content can be changed manually on a display surface. Not illuminated.

2) ELECTRICALLY ACTIVATED. Changeable sign whose message copy or content can be changed by means of remote electrically energized on-off switching combinations of alphabetic or pictographic components arranged on a display surface. Illumination may be integral to the components, such as characterized by lamps or other light-emitting devices; or it may be from an external light source designed to reflect off the changeable component display. See also: Electronic Message Center.

COMMERCIAL SIGN**.** Any sign which advertises or identifies a product, business, service, event, or any other matter of a commercial nature.

ELECTRONIC MESSAGE CENTER (EMC). An electrically activated changeable sign whose variable message and/or graphic presentation capability can be electronically programmed.

FREESTANDING SIGN. A sign principally supported by a structure affixed to the ground and not supported by a building. Pylon and monument signs are types of freestanding signs.

INTERIOR SIGN. Any sign placed within a building, but not including window signs. (Interior Signs are not regulated by this ordinance).

ILLUMINATED SIGN. A sign characterized by the use of artificial light, either projecting through its surface(s) (internally or trans-illuminated); or reflecting off its surface(s) (externally illuminated).

INTERNALLY ILLUMINATED SIGN. A sign characterized by the use of artificial light projecting outward through its surface.

MONUMENT SIGN. A freestanding sign which is architecturally designed and located directly at grade where the base width dimension is 75% or more of the greatest width of the sign. Monument signs are not supported by exposed posts or poles.

NON-CONFORMING SIGN. A sign that was legally installed by permit in conformance with all municipal sign regulations and ordinances in effect at the time of its installation, but which may no longer comply with subsequently enacted laws and ordinances having jurisdiction relative to the sign.

NON-COMMERCIAL SIGN. Any sign which is not a commercial sign which expresses an opinion and which is deemed by the courts to have greater protection under the first amendment than a commercial sign.

OBSOLETE SIGN. On-premise sign that no longer advertises or identifies a use conducted on the property on which the sign is erected.

OFF-PREMISE SIGN. A sign advertising products, goods, services, or places of business or services offered at a location other than the lot upon which the sign is maintained.

ON-PREMISE SIGN. A sign used for the purpose of displaying messages pertinent to the use of, products sold on, or the sale or lease of, the property on which it is displayed.

PYLON SIGN. Any permanent, freestanding sign whose sign face is mounted upon a sign base that is less than 40 percent of the width of the face and the height exceeds six feet.

SCROLL. A mode of message transition on an Electronic Message Sign in which the message appears to move vertically across the display surface.

SIGN. A display, illustration, structure, or device containing or displaying graphic information visible from the exterior which directs attention to an object, product, place, activity, person, institution, organization, or business.

SIGN COPY. The physical sign message including any words, letters, numbers, pictures, and symbols.

SIGN AREA**.** The area of the board(s) or module(s) containing the sign message, but not including the supporting structure. The area to be calculated is the area within the smallest rectilinear perimeter that contains the entire signboard or module. The area of a sphere shall be computed as the area of a circle.

SIGN FACE. The surface upon, against or through which the sign copy is displayed or illustrated, not including structural supports, architectural features of a building or sign structure, nonstructural or decorative trim, or any areas that are separated from the background surface upon which the sign copy is displayed by a distinct delineation, such as a reveal or border.

Section Two. Title XV, Chapter 151 Amendment: Title XV, Chapter 151, of the North Oaks City Code is hereby amended as follows. The underlined text shows the proposed additions to the City Code and the ~~struck through~~ text shows the deletions:

§ 150.051 RSM - RESIDENTIAL SINGLE-FAMILY MEDIUM DENSITY DISTRICT.

(A) *Purpose*. This District is established to provide for medium density single-family detached residential dwellings and directly related complimentary uses compatible with the natural environment and conforming to the level of services available and to provide the community facilities as will enhance the quality of the area.

(B) *Permitted uses*.

(1) All uses that are permitted uses in the Residential Single-Family Low Density District in § 151.050(B); and

(2) A single-family detached dwelling, planned unit development (PUD), or a phase of a PUD which has a maximum gross density of 1 unit per 1.1 acres and which is served by a central sanitary sewer collection system.

(C) *Permitted accessory uses*. All uses that are permitted accessory uses in the Residential Single- Family Low Density District in § 151.050(C).

(D) *Conditional uses.* The following conditional uses may be permitted, but only after securing a conditional use permit in accordance with § 151.076:

(1) All uses that are permitted conditional uses in the Residential Single-Family Low Density District in § 151.050(D); and

(2) The architectural appearance and functional plan of the buildings and site shall be
   (a) compatible with the adjacent area;
   (b) Screening is provided in compliance with § 151.034;
   (c) Adequate off-street parking, loading, and service entrances are provided in compliance with § 151.028;

(d) All accessory equipment is completely enclosed in a permanent structure with no outside storage;

(e) The site of the principal use and related parking is served by a road or street of sufficient capacity to accommodate the traffic which will be generated; and

(f) Section 151.083 is complied with.

(3) Electronic Message Center (EMC) signs accessory to a permitted use, provided that:

(a) Such signs shall be integrated into a free-standing monument sign. The non message center portion of the sign shall include the name of the principal use or address. The name shall be displayed in an individual-letter format in letters that dominate all other names and graphics on said sign.

(b) General provisions:

1. Location and Orientation. EMC signs are only permitted for lots that comply with the following standards:
    i. The parcel is a minimum of 3.5 acres in size.
    ii. The parcel has frontage on an arterial or collector roadways, as designated by the Comprehensive Plan.
    iii. The location and orientation of the sign shall be placed on the property in a manner that minimizes the visual impact on adjoining residential properties.
2. Display. The sign message shall be displayed to allow passing motorists to read the entire copy with minimal distraction. The minimum display period for any message shall be 8 seconds.
3. Audio. Audio speakers are prohibited.
4. No animation, flashing or blinking signs are permitted.
5. Brightness.
    i. Lighting. Lighting shall be set at a minimum level for which the sign is intended to be read and shielded to minimize glare.
    ii. The light level shall not exceed 0.3 foot candles above ambient light as measured from a pre-set distance depending on the sign size. Measuring distance shall be determined using the following equation; the square root of the message center sign area multiplied by 100. *Example: 12 square foot sign √(12x100) = 34.6 feet measuring distance.*
    iii. Dimmer Control. The sign must have a dimmer control that automatically adjusts the sign's brightness in direct correlation to ambient light conditions. Said sign shall be equipped with photo cell design to measure the ambient light conditions and adjust the sign brightness as needed so as to be in compliance with this ordinance.

iv. No portion of the message may flash, scroll, twirl, fade in or out in any manner to imitate movement.

v. Display of messages shall be limited to those services offered on the property and time/temperature display.

6. Only one message center sign is permitted per lot.

7. Sign area and size.

i. One freestanding sign shall be allowed per parcel.

~~i.~~ii. The sign shall not be larger than 32 square feet.

iii. No pylon signs are allowed. All freestanding signs must be ground monuments with a height no greater than 8 feet.

iv. The monument signs cannot be placed on an earthen mound or berm which would raise the bottom of the sign more than 4 feet above the normal ground level. The base for monument signs shall be built out of matching masonry work for the building it serves.

v. All freestanding signs must be set back 15 feet from the property line.

vi. Maximum Area. The area of the message center sign shall be included in the maximum sign area permitted. The area of the message center shall not exceed 50% of the total sign area for the sign on which it is displayed or 16 square feet whichever is less.

8. Hours of display. The sign shall be turned off and shall not display messages between the hours of 11:00 pm and 6:00 am.

9. Landscaping. Landscaping is required around the base of each sign consisting of shrubs, flowers, ornamental trees, and evergreens in an area no less than 6 times the area of each sign face.

(4) Non-neon signs and non-neon informational visual communication devices, provided that:

(a) The height of the sign or device does not exceed the height of the principal structure or the structure to which it is affixed;

(b) The architectural style and design shall not be so dissimilar to the surrounding buildings or area so as to adversely impact other land;

(c) There are no moving or flashing parts and any illumination shall be in compliance with § 151.031;

(d) The sign or device is permanently fixed to the land or to a building or structure;

(e) The sign or device is not a billboard and is associated with the principal use of the land; and

(f) Section 151.083 is complied with.

Section Three. Effective Date. This Ordinance shall be in full force and effect upon its adoption and publication as provided by law.

Passed in regular session of the City Council on the ____day of _____, 2023.

CITY OF NORTH OAKS

By: _____
Krista Wolter, Mayor

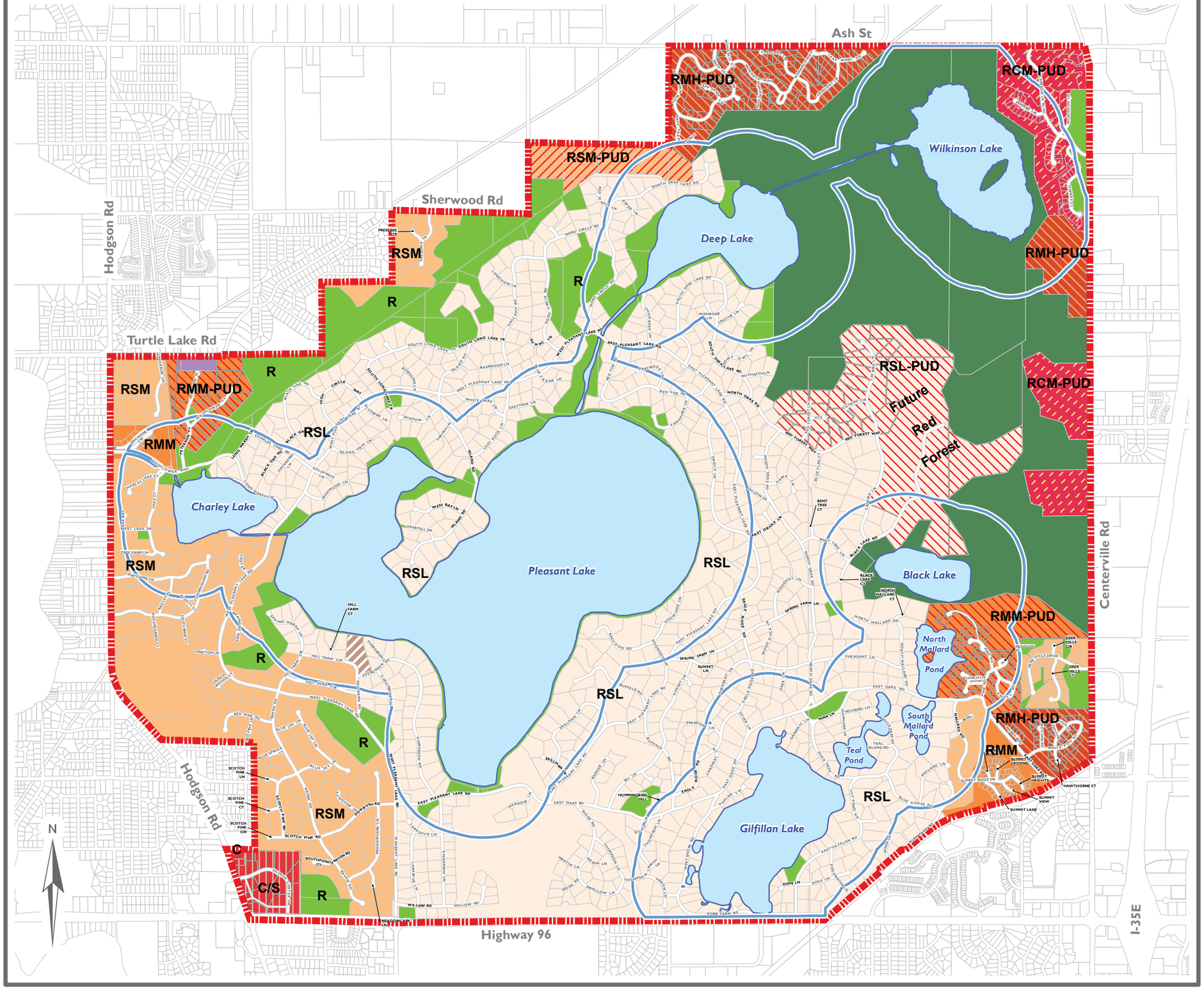
Attested:

By: _____
Kevin Kress
City Administrator/City Clerk

(Published in the Shoreview Press on _____, 2023)

MAP 8

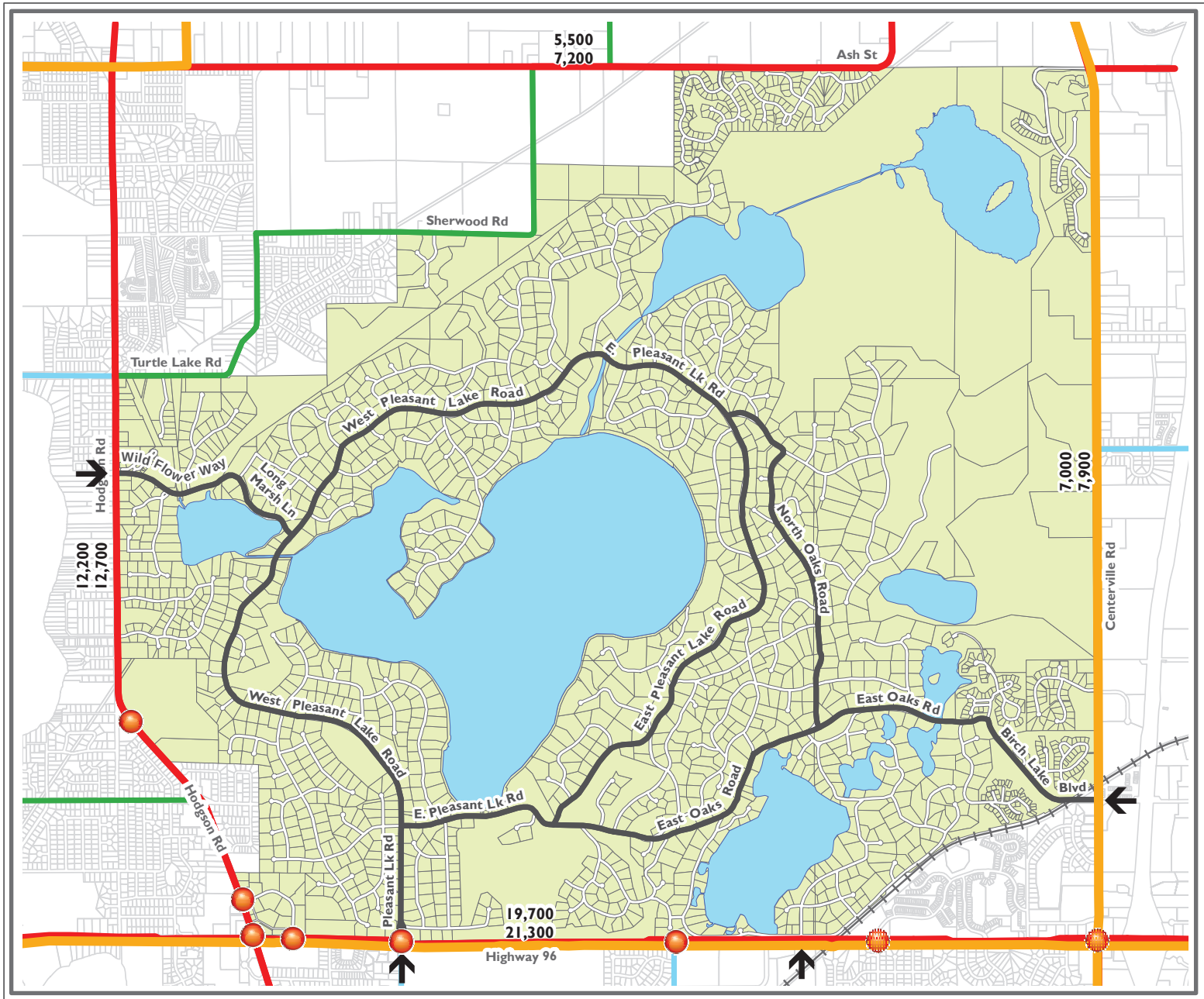
Existing Zoning Districts Map



- **OS** (Open Space)
- **RSL** (Residential Single Family - Low Density)
- **RSL-PUD** (Residential Single Family - PUD)
- **RSM** (Residential Single Family - Medium Density)
- **RSM-PUD** (Res. Single Fam. - Med. Density - PUD)
- **RMM** (Residential Multiple Family Medium Density)
- **RMM-PUD** (Residential Multiple Family Medium Density - PUD)
- **RMH-PUD** (Residential Multiple Family High Density - PUD)
- **RCM-PUD** (Residential-Commercial Mixed-PUD)
- **C** (Commercial)
- **C/S** (Commercial/Service)
- **LI** (Limited Industrial)
- **R** (Recreation)
- **HP** (Historic Preservation)
- Shoreland District Boundaries

North Oaks Boundary

Source: City Zoning Map as of 5 - 10 - 21



City of North Oaks

MAP 14

Transportation Features

- 'A' Minor Expander
- Collector
- Minor Collector
- Other Arterial
- Regional Bicycle Transportation Network (RBTN) Tier 2
- Rail Lines (Freight)
- Signalized Intersection
- Primary City Access Points

2040 Traffic Volumes

Top number = current volumes
Bottom number = 2040 projections

N

5-10-21

City of North Oaks

MAP 17

Areas Served by Municipal Sewer and Sub Surface Treatment Systems (SSTS)

Service Types

- Served by Sewer
- Future Service Area
- Not Served by Sewer
- Future Sewer
- Private sewer line
- Centerville Trunk Line
- Regional Interceptor

Alignments as shown are approximate. Please refer to record drawings for actual utility locations.

- SSTS Sites (1230)
- Sanitary Sewer Connection Points
- MetCouncilMeterLocations
- North Oaks

Updated 6/1/23
Source: Sambatek/HR Green

CITY	SIGN CODE	DYNAMIC SIGN TERMS	DYNAMIC SIGN RULES	DISTRICTS PERMITTED	SIGN TYPE	NUMBER, SIZE and OTHER REGULATIONS
Branson, MO	Article X. - Signs Sec. 94(130-141)	Electronic Message Center (EMC) Signs	Display: - Only static messages - No movement (scroll, intensity of light, or flashing) - Blank screen in case of malfunction - No audio Display Time: **- 8 sec. minimum display duration** - Instant message change - No transition effects Display Brightness: - 300 candelas per sq. meter - Auto adjust to ambient lighting - Cannot project light over property lines in residential area Incorporation: - Enclosure shall extend no less than 6 in. from EMC - EMCs shall not make up more than a certain percentage of each sign type (from 50% - 90%)	Residential	Monument (Civic/Institutional)	Monument - 1 sign - Max height 10 ft. - Max area 100 sq. ft.
				Mixed-Use Community Commercial Business Industrial	Attached: - Marquee Freestanding: - Monument* - Multi-tenant Monument - Pole (on/off premises)*	1 Marquee per street frontage - 1 per street frontage - Max height top of vertical face of marquee - Max area n/a - EMC on-premises may be up to 75% of Marquee sign area. - EMC off-premises may be up to 75% of Marquee sign area. 1 Freestanding per premises* - 1 monument per premises - Max monument height of 15 ft. and sign area of 200 sq. ft. - 1 pole sign allowed on-premises - Max on-premises pole sign height of 20 ft. - Max on-premises pole sign area of 150 sq. ft. - 1 pole sign allowed off-premises - Max off-premises pole sign height of 25 ft. - Max off-premises pole sign area of 400 sq. ft. - EMC on-premises may be up to 50% of Pole sign area. - EMC off-premises may be up to 90% of Pole sign area. - EMC on-premises may be up to 60% of Monument sign area. - EMC off-premises may be up to 75% of Monument sign area. *1 additional sign per premises per 300 linear ft. of frontage
				Entertainment	Attached: - Marquee - Roof - Wall Freestanding: - Monument* - Multi-tenant Monument - Pole (on/off premises)*	Attached: - 1 Marquee per building. - 1 Roof per building in-lieu of a freestanding sign. - Max roof sign height of 10 ft. above roof line or parapet. - Max roof sign area of 300 sq. ft. - 1 Wall - Max wall sign area up to 30% of frontage, 20% of other walls 1 Freestanding per premises - 1 monument per premises* - Max monument height of 30 ft. - Max monument sign area of 300 sq. ft. - 1 multi-tenant monument per premises - Max multi-tenant monument height of 40 ft. - Max multi-tenant monument sign area of up to 400 sq. ft. (20 sq. ft. per tenant). - 1 pole sign allowed on-premises - Max on-premises pole sign height of 25 ft. - Max on-premises pole sign area of 211 sq. ft. - 1 pole sign allowed off-premises - Max off-premises replacement pole sign height of 25 ft. - Max off-premises pole sign area of 300 sq. ft. *1 additional sign per premises per 300 linear ft. of frontage

CITY	SIGN CODE	DYNAMIC SIGN TERMS	DYNAMIC SIGN RULES	DISTRICTS PERMITTED	SIGN TYPE	NUMBER, SIZE and OTHER REGULATIONS
Anoka	Article VIII. - Signs Sec. 78-(511-523)	Electronic Variable Message Sign (EVM)	- Changes at reasonable intervals - Solid, colorless background - Engineered for legibility - Glare reducing screens and contact light level EVMs are permitted which provide public service information or advertise activities conducted on the premises on which the sign is located.	Residential	Canopy/Awning Freestanding EVM signs restricted to churches, schools, universities, colleges, sanitariums, clubs, libraries, apartment building complexes or other similar uses	1 Identification sign not to exceed 32 sq. ft. in area
				B-1 Highway Business District	Wall Business Nameplate Freestanding Integral roof signs Illuminated, no flashing	For office buildings, business sign not exceeding 40 sq. ft. or 4% of wall area (whichever is greater). For multi-tenant centers, freestanding nameplate not exceeding 60 sq. ft. in area. For single-tenant uses, limited to 200 sq. ft. in area, with not more than 150 sq. ft. of signage attached to the building, and not more than 60 sq. ft. of ground sign.
				B-2 Shopping Center Business District	Freestanding Business Nameplate - Marquee or covered walkway	Freestanding: - Shopping centers are permitted 2 signs not more than 200 sq. ft. in area. Nameplate: - Not to exceed the sum of 3 sq. ft. for each linear ft. of frontage.
				B-3 General Business District	Business Nameplate	Business signs: The total surface area shall not exceed the sum of 4 sq. ft. per linear foot of lot frontage. Nameplate Sign: - Surface area shall not exceed 200 sq. ft.
				B-4 Limited Business District	Wall Freestanding Ground-mounted	Wall signs limited to 40 sq. ft. or 4% of wall size, whichever is greater. Freestanding: - 60 sq. ft. for projects containing more than one building on sites greater than 1 acre. - Business signs which consolidate all tenants are restricted to 40 sq. ft. in area. - Any establishment may have 1 freestanding sign not exceeding 40 sq. ft. in area.
				M-1 Light Industrial District	Business Nameplate Monument	Business/Nameplate: - 2 sq. ft. per linear foot of frontage. - Wall signs not to exceed 4% of wall space or 100 sq. ft. (whichever is less) Monument: - 1 per business site. - No greater than 60 sq. ft. of building area.
				M-2 General Industrial District	Business Nameplate Billboards	Business Signs: - Total surface area not to exceed 3 sq. ft. for each linear foot of lot frontage. - No business sign shall exceed 200 sq. ft. of surface area. Monument/Pylon: - Each business site shall be permitted one sign not to exceed 80 sq. ft. in area. Billboards: - Prohibited within 200 ft. of parks or residential structures. - Shall not exceed 300 sq. ft. of area.

CITY	SIGN CODE	DYNAMIC SIGN TERMS	DYNAMIC SIGN RULES	DISTRICTS PERMITTED	SIGN TYPE	NUMBER, SIZE and OTHER REGULATIONS
Champlin	Chapter 118 - SIGNS Sec. 118-(1-11)	Electronic Message Sign	Electronic message signs are **only permitted by conditional use permit in commercial or** **industrial districts or in residential districts occupied by a church or school**, subject to the following standards: (condensed) - May not constitute a traffic hazard (interferes with traffic signs/lights, distracted drivers) - **Minimum display duration of 10 seconds** - Brightness level based on ambient light conditions - Not to exceed 3,500 Nits between sunrise and sunset, not to exceed 500 Nits between sunset and sunrise - Must be 100 ft from any residential district boundary - Electronic message signs shall not exceed 40% of allowable sign area for a given wall or freestanding sign - Electronic signs must be placed below a minimum of 20 sq. ft. of permanent nonelectric signage on freestanding signs. - No more than 1 electronic sign may be permitted per property, except for gas/convenience stores are allowed one additional sign - Church and school electronic signs may only be illuminated from 7AM-9PM	Commercial (Single Tenant)	Monument Marquee Wall	For all buildings: - 1 wall sign per public street frontage not to exceed two wall signs. - Wall signs shall not exceed 10% of front building facade and 5% of any other facade to which it is attached. For buildings less than 50,000 sq. ft.: - 1 freestanding monument sign, max height of 14 ft., max area of 80 sq. ft., minimum 10 ft. setback. For buildings between 50,000-100,000 sq. ft.: - 1 freestanding monument sign, max height of 20 ft., max area of 160 sq. ft., minimum 10 ft. setback. For buildings greater that 100,000 sq. ft.: - 1 freestanding monument , max height of 25 ft., max area of 250 sq. ft., minimum 10 ft. setback.
				Commercial (Multiple Tenant)	Monument Marquee Wall	Wall signs for all buildings: - End-cap tenants allowed wall signs on 3 building elevations. - Internal tenants allowed wall signs on 2 building elevations. - Wall signs not to exceed 10% of the front facade and 5% of any other facade to which it is attached. Buildings less than 50,000 sq. ft: - One monument sign, max height of 20 ft. and 100 sq. ft. in area. - One monument sign allowed at each frontage, aggregate surface area not to exceed 100 sq. ft. Buildings greater than 50,000 sq. ft.: - One monument sign, max height of 25 ft. and 100 sq. ft. in area. - One monument sign allowed at each frontage, aggregate surface area not to exceed 200 sq. ft.
				Industrial	Monument Wall	Single tenant building: - One monument sign not to exceed 80 sq. ft. in area. - One wall sign not to exceed 10% of the building façade of 200 sq. ft., whichever is less. Multiple tenant building: - One monument sign not to exceed 100 sq. ft. in area. - Individual tenants may have wall signs, the aggregate surface area of the signs is not to exceed 10% of the building facade of 200 sq. ft., whichever is less/
				Residential - Electronic signs allowed only for church/school	Monument	1 Permanent Monument - Max area is 80 sq. ft. - Allowed only for churches/schools

CITY	SIGN CODE	DYNAMIC SIGN TERMS	DYNAMIC SIGN RULES	DISTRICTS PERMITTED	SIGN TYPE	NUMBER, SIZE and OTHER REGULATIONS
Chanhassen	Article XXVI. - SIGNS Sec. 20-(1251-1304)	Electronic Message Center (EMC) Signs	(Condensed) - No EMC may interfere with traffic signals and signs or constitute a traffic hazard. - EMC space used on a sign shall not exceed the following display area: (a) Sign area of 0-24 sq. ft./EMC display area 50% (b) Sign area of 25-64 sq. ft./EMC display area 45% (c) Sign area of 65-84 sq. ft./EMC display area 40% - 5,000 Nits allowed between sunrise and sunset, 500 Nits allowed between sunset and sunrise. - Shall not cause glare or distraction due to excessive brightness. - Nits to be provided at time of application. - No EMC within 50 ft. of a street intersection. - No EMC within 125 ft. of a residential district. - No EMC in Agricultural or Residential districts. - EMC within 500 ft. of single-family residential homes limited to use between 6:00AM and 10:00PM.	Neighborhood Business Fringe Business Office and Institutional	Ground Wall Monument	Ground: - 1 low profile sign not to exceed 24 sq. ft. in area and 5 ft. in height. Wall: - One sign permitted on the street frontage for each business occupant within a building. - Total wall mounted sign area shall not exceed: (a) 15% of a wall 0-600 sq. ft. in area (b) 13% of a wall 601-1,200 sq. ft. in area (c) 11% of a wall 1,201-1,800 sq. ft. in area (d) 9% of a wall 1,801-2,400 sq. ft. in area (e) 7% of a wall 2,401-3,200 sq. ft. in area (f) 5% of a wall 3,201-4,500 sq. ft. in area (g) 3%, max of 275 sq. ft., of a wall 4,500+ sq. ft. in area Monument: - 1 monument sign for each frontage, not to exceed 8 ft. in height and 120 sq. ft. in area. - restricted to public/community signs on property owned/leased and operated by a governmental unit.
				Highway General Business Central Business	Ground Wall Pylon	Ground: - 8 ft. in height and 64 sq. ft. in area allowed for a structure less than 50,000 sq. ft. in area. - 10 ft. in height and 80 sq. ft. in area allowed for a structure greater than 50,000 sq. ft. in area. Wall: - Same as wall standards above. Pylon: - 16 ft. in height and 64 sq. ft. in area allowed for a structure less than 50,000 sq. ft. in area. - 20 ft. in height and 80 sq. ft. in area allowed for a structure greater than 50,000 sq. ft. in area.
				Industrial Office Park	Pylon Ground Wall	Pylon: - 1 pylon sign not to exceed 20 ft. in height and 80 sq. ft. in area. Ground: - 1 sign per site for each street frontage. - Not to exceed 8 ft. in height and 64 sq. ft. in area. Wall: - Same as wall standards above.

CITY	SIGN CODE	DYNAMIC SIGN TERMS	DYNAMIC SIGN RULES	DISTRICTS PERMITTED	SIGN TYPE	NUMBER, SIZE and OTHER REGULATIONS
Corcoran	Chapter 84: SIGNS	Dynamic Display	84.04 (7) - 1 dynamic display sign allowed per lot. - Only allowed on freestanding signs. - Dynamic display may occupy no more than 60% of sign area. - **6 second minimum time display.** - Instant or faded image transition allowed. - Must be equipped to freeze screen in one position if malfunction occurs. - Must comply with brightness standards in this section.	RSF-1 (Single Fam.) RSF-2 (Single Fam.) RSF-3 (Single & Two Fam.) RMF-1 (Medium Density) RMF-2 (Mixed Residential) RMF-3 (High Density) TCR (Transitional Rural Commercial)	Freestanding	Freestanding: - 1 freestanding sign allowed - Max sign area of 32 sq. ft. - Max sign height of 6 ft.
				MP (Manufactured Home Park)	Freestanding	Freestanding: - 1 freestanding sign allowed - Max sign area of 32 sq. ft. - Max sign height of 6 ft.
				CR (Rural Commercial) C-1 (Neighborhood Commercial) C-2 (Community Commercial) GMU (General Mixed Use)	Freestanding (Non-residential use)	Freestanding: - 1 freestanding sign allowed - Max sign area of 64 sq. ft. - Max sign height of 16 ft.
				P-I (Public/Institutional) BP (Business Park) I (Indistrial)	Freestanding	Freestanding: - 1 freestanding sign allowed - Max sign area of 64 sq. ft. - Max sign height of 16 ft.
Elk River	ARTICLE VI. - ZONING DIVISION 5 SUBDIVISION II. - SIGNS	Digital Changeable Copy Signs	Section 30-864 - Changeable Copy Signs: - **Any sign larger than 30 sq. ft. requires a CUP**. - May only display advertising information for on-site businesses, public service announcements, or non-commercial copy. Digital Changeable Copy Signs: - Must be static, and the transition from static display to another must be no more than 2 seconds. The images and messages displayed must be complete in themselves and without continuation in content to the next image, message, or any other sign. **- May not change more often than every 8 seconds.** - Displays must be equipped with automatic dimming technology based on ambient light conditions. - Display must be equipped to freeze the device in one position if a malfunction occurs.	C-1 Central Business	Wall Freestanding Changeable Copy	Wall: - Not to exceed 15% of facade area. - Not permitted on any façade directly adjacent to a residential zone. Freestanding: - One, not to exceed 64 sq. ft. in area and 20 ft. in height. - The area of freestanding signs may be increased by 25% if the sign is constructed as a monument sign. Pre-order Board for Drive-Thrus - One, not to exceed 20 sq. ft. in area.
				C-2 Office District	Wall Monument Changeable Copy	Wall: - Not to exceed 15% of facade area. - Not permitted on any façade directly adjacent to a residential zone. Monument: - One, not to exceed 40 sq. ft. and 7 ft. in height.

CITY	SIGN CODE	DYNAMIC SIGN TERMS	DYNAMIC SIGN RULES	DISTRICTS PERMITTED	SIGN TYPE	NUMBER, SIZE and OTHER REGULATIONS
				C-3 Highway Commercial	Wall Freestanding On-Premises Menu & Pre-Order Board Changeable Copy Advertising (Billboards)	Wall: - Not to exceed 15% of facade area. - Not permitted on any façade directly adjacent to a residential zone. Freestanding: - One, not to exceed 150 sq. ft. in area and 30 ft. in height. - One sign permitted for every 300 ft. of street frontage along a single street. - The area of freestanding signs may be increased by 25% if the sign is constructed as a monument sign. Menu-Boards: - One menu board per drive-up or walk-up lane. - Max area allowed is 32 sq. ft. each. - One pre-order board is allowed, up to 20 sq. ft. Billboards: - Prohibited by proximity to highway ROW and other billboards. - Shall be erected with a single pole or mono-pole and wired underground. - Shall not exceed 400 sq. ft. in area and 35 ft. in height. - Shall be considered the principal use of the property until it is devoted to another principal use. - Only allowed in property adjacent to ROWs for Highways 10 and 169.
				C-4 Community Commercial	Wall Monument Changeable Copy	Wall: - Not to exceed 15% of facade area. - Not permitted on any façade directly adjacent to a residential zone. Monument: - One, not to exceed 125 sq. ft. and 10 ft. in height along collector streets and 20 ft. in height along arterial streets.
				DD Downtown District	Wall Monument Changeable Copy	Wall: - One wall sign per each primary façade and one secondary façade. - One sq. ft. of sign area per linear foot of unit width allowed. Monument: - One sign permitted for each multi-tenant facility. - Height limited to one half the average height of the primary structure, not to exceed 20 ft. - Sign area shall be limited to, in sq. ft., one-third of the primary structure width, not to exceed 80 sq. ft.
				I-1 Light Industrial I-2 Medium Industrial I-3 General Industrial	Wall Freestanding Advertising (Billboard) Changeable Copy	Wall: - Not to exceed 15% of facade area. - Not permitted on any façade directly adjacent to a residential zone. Freestanding: - One, not to exceed 150 sq. ft. in area and 30 ft. in height. - One sign permitted for every 300 ft. of street frontage along a single street. - The area of freestanding signs may be increased by 25% if the sign is constructed as a monument sign. Billboards: - Prohibited by proximity to highway ROW and other billboards. - Shall be erected with a single pole or mono-pole and wired underground. - Shall not exceed 400 sq. ft. in area and 35 ft. in height. - Shall be considered the principal use of the property until it is devoted to another principal use. - Only allowed in property adjacent to ROWs for Highways 10 and 169.

CITY	SIGN CODE	DYNAMIC SIGN TERMS	DYNAMIC SIGN RULES	DISTRICTS PERMITTED	SIGN TYPE	NUMBER, SIZE and OTHER REGULATIONS
Hopkins	ARTICLE XXI. - SIGNS Sec. 102-729 Dynamic Signs	Dynamic Signs	Location - must be used on the site of the use identified or advertised by the sign. Orientation - must be positioned to limit impact on adjacent residential uses. Type - Limited to ground signs. Text size and legibility - dependent on speed limit of adjacent road: - 25-34 MPH = 7 in. text size - 35-44 MPH = 9 in. text size - 45-54 MPH = 12 in. text size - 55+ MPH = 15 in. text size Mode - only allowed to operate in static mode. Size and Number - size shall not exceed the maximum sign area of a single sign applicable to the zoning district in which the sign is placed. Minimum display time - The minimum display time shall be 20 minutes before changing. Time, temperature, and date are allowed to change more frequently. Brightness - shall not exceed a maximum illumination of 5,000 nits during daylight hours and 500 nits during dusk to dawn. Color - multiple colors allowed, provided they are not a distraction or hazard to public safety.	B-1 B-2	Dynamic Ground Sign	Dynamic signs must be located along a principal arterial or minor reliever road as designated by the comprehensive plan. Max sign area of 60 sq. ft.
				B-3 B-4	Dynamic Ground Sign	Dynamic signs must be located along a principal arterial or minor reliever road as designated by the comprehensive plan. Max sign area of 80 sq. ft.
				I-1 I-2	Dynamic Ground Sign	Dynamic signs must be located along a principal arterial or minor reliever road as designated by the comprehensive plan. Max sign area of 250 sq. ft.
				Institutional	Dynamic Ground Sign	Dynamic signs must be located along a principal arterial or minor reliever road as designated by the comprehensive plan. Max sign area of 60 sq. ft.
Ramsey	Chapter 117 ARTICLE II. - ZONING DIVISION 8. - SIGNS	Dynamic Display	Sec. 117-463 General Restrictions (f) Dynamic Display and Illumination Regulations. Dynamic displays on signs are subject to the following conditions: (a) Size. On-premise signs may include dynamic displays. Dynamic display signs shall not exceed the size allowed by this chapter. Dynamic displays are not in addition to the size allowed for static signs. (b) Frequency of display change. A dynamic display may not change more often than once every three seconds, and no part of the display may include flashing or scrolling text. The images display must be static, and the transition from one display to another must be instantaneous without special effects. The dynamic display shall not be allowed to project full-motion video. Subtle transition animations shall be allowed. (c) Brightness. No sign may be brighter than is necessary for clear and adequate visibility, or that it interferes with the effectiveness of a traffic sign or signal, or that it distracts a driver from motor vehicle operation. (d) Troubleshooting. Dynamic displays must be designed and equipped to freeze the device in one position if a malfunction occurs. The display must also be equipped with a means to immediately discontinue the display if it malfunctions, and the sign owner must immediately stop the dynamic display when notified by the city that it is not complying with the standards of this section.		Temporary Signs	Temporary signs may consist of dynamic display, provided all the standards of section 117-463(f) are complied with.
					Unified Development Signs	A unified development is a development that consists of multiple parcels of similar zoning district and bound by major roadways consisting of arterial or collector designation or higher. Signs for multi-tenant commercial and employment developments may be erected to include off-premise copy under the following conditions: (1) The sign must identify the development at the top of the sign and may include provisions for individual users within the development. (2) The sign must be located within 500 ft. of the development and may not be separated from the development by an arterial road. (3) The sign must not exceed 250 square ft. per face (500 square ft. aggregate) and 30 ft. in height. (4) The sign may include dynamic display not to exceed 100 square ft. per face (200 square ft. aggregate). (5) The sign will not be included in the total signage permitted for the property in which it is located. (6) The general location of area identification signs for commercial and employment districts must be approved by the planning commission as part of a master sign plan approved as part of site plan approval.
				Residential	Area Identification Temporary	Area Identification: - 1 sign per vehicle access to a development, not to exceed 32 sq. ft. in area. Temporary signs permitted in accordance with section 117-465

CITY	SIGN CODE	DYNAMIC SIGN TERMS	DYNAMIC SIGN RULES	DISTRICTS PERMITTED	SIGN TYPE	NUMBER, SIZE and OTHER REGULATIONS
				Business	Wall, Canopy, or Marquee Ground Fuel Pump Island Menu Board Shopping Center Signs	Wall, Canopy, or Marquee - Sign area may not exceed 15% of the front building façade. - Sign height shall not exceed the top parapet wall, or height of eaves in absence of a parapet. Ground signs - 1 sign for each parcel or per road frontage on one parcel not to exceed 2 signs. - Gross surface area of 100 sq. ft. for each exposed face. - For parcels with 2 signs, the second sign shall not exceed 509 sq. ft. for each exposed face. - Max height of 12.5 ft. allowed. Menu Board: - 50 sq. ft. of total signage for walk-up or drive-in businesses. Shopping Center Signs - Developer to submit sign plan for approval.
				E-1 and E-2 Employment Districts	Wall, Canopy, or Marquee Ground Window	Wall, Canopy, or Marquee - Sign area may not exceed 15% of the front building façade. - Sign height shall not exceed the top parapet wall, or height of eaves in absence of a parapet. Ground signs - 1 sign for each parcel or per road frontage on one parcel not to exceed 2 signs. - Gross surface area of 100 sq. ft. for each exposed face. - For parcels with 2 signs, the second sign shall not exceed 509 sq. ft. for each exposed face. - Max height of 12.5 ft. allowed. Window - Window signs shall not exceed 30% of the area of the window in which the sign is proposed to be displayed.
				Business and Industrial Parks	Wall Ground	All Business and Industrial Park signs shall be wall or ground signs. Park Identification Sign - Not more than 1 sign for each point of vehicular access to the office or industrial park. - Gross area of 1 sign shall not exceed 100 sq. ft. and gross surface area for each exposed face shall not exceed an aggregate of 200 sq. ft. - Ground signs may not project higher than 10 ft as measured from the base of the sign or grade of adjacent roadway, whichever is higher. Park Member Identification Signs - 1 wall sign for each principal building or tenant or use within a building. - 1 sign allowed for, and to be oriented to, each abutting street. - 1 ground sign allowed for each building. - Gross surface area of a wall sign not to exceed 15% of the occupants proportionate share of the building wall to which the sign is affixed. - Gross surface area of a ground sign shall not exceed 100 sq. ft. per face or gross aggregate surface area of 200 sq. ft. - Ground signs may not project higher than 10 ft as measured from the base of the sign or grade of adjacent roadway, whichever is higher.

CITY	SIGN CODE	DYNAMIC SIGN TERMS	DYNAMIC SIGN RULES	DISTRICTS PERMITTED	SIGN TYPE	NUMBER, SIZE and OTHER REGULATIONS
Vadnais Heights	CHAPTER 38 ARTICLE VI. - SIGNS	Animated Sign Dynamic Sign	(i) Dynamic signs. (1) The signs are maintained as prescribed in this article. (2) The sign does not have displays which move, rotate, stream, scroll, flash or contain movement, or the appearance of movement, unless specifically provided for under subsections (i)(7) and (8) of this section. (3) The sign illumination levels are reasonable and compatible with the adjacent properties. (4) The signs do not create distractions which are considered detrimental to the public health, welfare and safety. (5) The signs comply with the height, size, arrangement, setback, location, and other applicable provisions of this article and the district in which the sign is located. (6) The signs may be used as the principal business sign or for tenant signs within the districts, where permitted, provided that the sign display element changes in its entirety and does not change more frequently than once every 24 hours. (7) A portion of the principal sign or a separate subsidiary sign to the principal business or tenant signs within the districts, where permitted, may be used as a temporary single or multiple message board only, provided that the **temporary message sign display element does not change more frequently than once every 15 seconds**. A change in dynamic sign means any alteration, addition, or deletion to any part of the text or graphics. (8) A portion of a dynamic sign used as the principal sign or a separate subsidiary sign to the principal business or tenant signs within the districts, where permitted, may be allowed as a moving or streaming text message board sign as set forth under section 38-693(dd), and only if specifically allowed by the underlying zoning district.	C-1 and C-1A (Neighborhood Commercial) C-2 and C-2A (Community Commercial) O (Office) OB (Office-Business) I (Industrial)	Dynamic Sign (Permitted)	Sec. 38-693 includes general regulations by sign type.
				CC (City Center)	Dynamic Sign (CUP required)	
				C-2 (Community Commercial) C-3 (Commercial Three) I (Industrial) O (Office)	Dynamic Billboard Sign	Billboard - Max allowable size is 700 sq. ft. - Max allowable height is 35 ft. - Minimum distance allowed between billboards is 1,500 ft. - Billboards 700 sq. ft. or larger must be 100 ft. away from any building. Setback reduced by 10 ft. for every 100 sq. ft. less of sign area. - No moving parts or flashing lights. Dynamic Sign Billboard Additional Requirements: - No animation or moving parts. **- Minimum duration of an image is 8 seconds.** - Image must contain complete message. - Shall provide to the city a minimum of 5 hours per month per dynamic display sign in the city for community and public service messages at such times as shall be determined by the city.

CITY	SIGN CODE	DYNAMIC SIGN TERMS	DYNAMIC SIGN RULES	DISTRICTS PERMITTED	SIGN TYPE	NUMBER, SIZE and OTHER REGULATIONS
Rogers	Chapter 113 - Signs	Dynamic Signs Flashing Signs	<u>Section 113-11 Special Sign Types:</u> (e) *Dynamic signs* . Electronically or other technologically controlled signs where the message is formed by electronic or other digital or dynamic media, and when not static for more than one hour are considered flashing signs, except when used to provide primarily time and temperature or other public service information and **not to exceed 25 percent of the area of the sign face when located as an on-premises sign**. **On-premises dynamic signs may not change more than once per hour, except as required to update time, temperature and public service announcements.** Transition between time, temperature and public service announcements must be instantaneous and have no special effects of any kind. <u>Section 113-6 Prohibited Signs:</u> (2) Flashing signs, except when used to provide primarily time and temperature or other public service information and not to exceed 25% of the area of the sign face.	<u>CB Community Business</u> - All properties zoned B-1 and fronting on CR 81 or located between CR 81 and I-94.	Wall Freestanding	Dynamic Display allowed per regulations in Section 113-11(e). Wall - Max Area: 2 sq. ft. per linear ft. up to a max. of 100 sq. ft. - Max Height: N/A - Lighting: Internal/External - For parcels with frontage on more than one street, the permitted wall sign area shall be allowed on each wall fronting on a street. Freestanding: - Max Area: 60 sq. ft. - Max Height: 12 ft. - Lighting: Internal/External - One sign permitted on any site. - Setback must be 1 ft. from property line - Signage on a single pole is prohibited. - Signs with bottoms less than 10 ft. off the ground must be located so as to preserve clear vision of approaching traffic. - Parcels that abut Interstate 94 may construct freestanding signs to a max. height of 30 ft. The sign may only be located in the yard which directly abuts the freeway or frontage road.
				<u>RB Regional Business</u> - All properties zoned B-1, B-2, B-3, or B-C and located north of I-94.	Wall Freestanding	Dynamic Display allowed per regulations in Section 113-11(e). Wall - Max Area: 2 sq. ft. per linear ft. up to a max. of 80 sq. ft. - Max Height: N/A - Lighting: Internal/External - For parcels with frontage on more than one street, the permitted wall sign area shall be allowed on each wall fronting on a street. Freestanding - Max Area: 100 sq. ft. - Max Height: 15 ft. - Lighting: Internal/External - Special provision: All freestanding signs in this district must be designed to be ground signs. - One sign permitted on any site. - Setback must be 1 ft. from property line - Signage on a single pole is prohibited. - Signs with bottoms less than 10 ft. off the ground must be located so as to preserve clear vision of approaching traffic. - Parcels that abut Interstate 94 may construct freestanding signs to a max. height of 30 ft. The sign may only be located in the yard which directly abuts the freeway or frontage road.

CITY	SIGN CODE	DYNAMIC SIGN TERMS	DYNAMIC SIGN RULES	DISTRICTS PERMITTED	SIGN TYPE	NUMBER, SIZE and OTHER REGULATIONS
				<u>RMI Multifamily and Institutional</u> - All properties zoned AG or AG-PUD; and all nonresidential uses in any R-2 through R-4 zoning districts; and all residential properties zoned R-3 and R-4 and all city parks and facilities.	Wall Freestanding	Dynamic Display not permitted except for Institutional uses fronting on County Roads (CSAH), Highway 101 and Interstate 94. Wall - Max Area: 60 sq. ft. - Max Height: External - Lighting: (blank) - For parcels with frontage on more than one street, the permitted wall sign area shall be allowed on each wall fronting on a street. Freestanding - Max Area: 36 sq. ft. - Max Height: 8 ft. - Lighting: External - Special provision: All freestanding signs in this district must be designed to be ground signs. - One sign permitted on any site. - Setback must be 1 ft. from property line - Signage on a single pole is prohibited. - Signs with bottoms less than 10 ft. off the ground must be located so as to preserve clear vision of approaching traffic. - Parcels that abut Interstate 94 may construct freestanding signs to a max. height of 30 ft. The sign may only be located in the yard which directly abuts the freeway or frontage road.

Peace UMC
5050 Hodgson Road
North Oaks, MN 55126

Sign Design_1
May – 2023


PEACE
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SUNDAY SERVICES | 10:00AM | WWW.PEACEUMC.COM
reconciling & growing for everyone
Musical Montessori Preschool and Childcare
Hmong Faith Fellowship
Redeemer Salvation
Body Mind Circle Yoga
Yoga Hot Dish
Cynthia Dance
Boy Scout Troup 9625


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SUNDAY MORNINGS at 10:00am | www.peaceumc.com
Musical Montessori
Shaila Dance
Hiyala Yoga
Prayer Labyrinth


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Body Mind Circle Yoga
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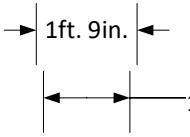
Boy Scout Troop 9625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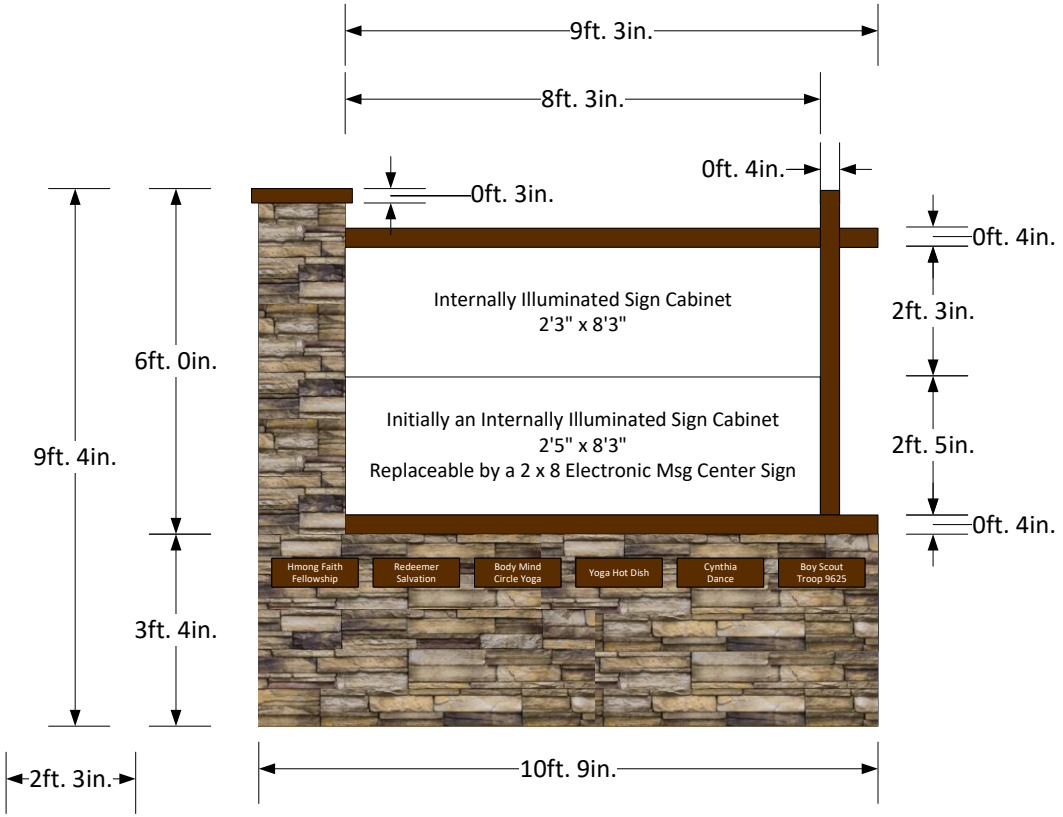
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0ft. 4in.
6ft. 0in.
9ft. 4in.
3ft. 4in.
Internally Illuminated Sign Cabinet
2'3" x 8'3"
Initially an Internally Illuminated Sign Cabinet
2'5" x 8'3"
Replaceable by a 2 x 8 Electronic Msg Center Sign
Hmong Faith Fellowship
Redeemer Salvation
Body Mind Circle Yoga
Yoga Hot Dish
Cynthia Dance
Boy Scout Troop 9625
2ft. 3in.
10ft. 9in.


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Musical Montessori Preschool and Childcare
Hmong Faith Fellowship
Redeemer Salvation
Body Mind Circle Yoga
Yoga Hot Dish
Cynthia Dance
Boy Scout Troop 9625


9ft. 4in.
2ft. 0in.


PEACE
A UNITED METHODIST COMMUNITY
2 X 8 Full Color
Message Center
Hmong Faith Fellowship
Redeemer Salvation
Body Mind Circle Yoga
Yoga Hot Dish
Cynthia Dance
Boy Scout Troop 9625

CITY OF
NorthOaks
Building on a tradition of innovation

PLANNING REPORT

TO: North Oaks Planning Commission

FROM: Kendra Lindahl, City Planner
Kevin Kress, City Administrator
Bridget Nason, City Attorney

DATE: August 24, 2023

RE: Amendment to 151 of the City Code Regarding Solar

BACKGROUND

At the July 13, 2023 City Council meeting representatives from Incarnation Lutheran Church spoke about the potential of installing a solar array in the northeast corner of their existing parking lot at 4880 Hodgson Road. The property is zoned RSM.

A subcommittee made up of Chair Cremons, Council member Azman and staff met to develop the ordinance amendments. This draft is intended to gather Planning Commission feedback in order to schedule a public hearing in September.

ISSUES AND ANALYSIS

Solar arrays are not currently permitted in the City. Section 151.022 of the City Code states that “In any zoning district whenever a use is neither specifically permitted nor denied, the use shall be considered prohibited.”

City staff have allowed building mounted solar arrays as part of a building permit because it is part of the structure. However, the Zoning Ordinance would need to be amended to allow this type of freestanding solar array. The City Council discussed this issue and directed staff to prepare an ordinance amendment for consideration in the RSM zoning district. The Council indicated that they supported this type of use as a conditional use accessory to a principal use if adequate screening can be provided.

The draft ordinance was prepared using information from the Minnesota Solar Model Ordinance and a number of individual cities. The model ordinance and a spreadsheet summarizing other ordinances is attached for reference. The ordinance formalizes the approval process for building-mount solar (which has been permitted) and adds ground-mount solar arrays as a conditional use.

The draft ordinances show <u>underlined</u> text for the proposed additions to the City Code and ~~struck through~~ text for the deletions.

The draft ordinance allows accessory ground-mount solar in the RSM zoning district only in the side or rear yard. The parcels zoned RSM are located generally on the perimeter of the City. The Commission may wish to discuss whether additional locational criteria are required to limit where the solar arrays may be located. This could be accomplished by establishing additional locational requirements such as only allowing on parcels 3.5 acres or larger or only on parcels adjacent to Expander or Collector streets. The Commission should discuss.

The subcommittee intentionally left the landscape requirements less prescriptive so that the screening and buffering requirements could be evaluated on a case-by-case basis.

Attached for reference:

Exhibit A:	Draft Ordinance amending Chapter 151
Exhibit B:	Zoning Map
Exhibit C:	Transportation Map
Exhibit D:	Map showing RSM parcels 3.5-acres or larger
Exhibit E:	MN Solar Model Ordinance
Exhibit F:	Summary of Other City Standards
Exhibit G:	Concept from Incarnation Lutheran Church

REQUESTED ACTION

The Planning Commission should review the draft ordinance and provide feedback for staff to make edits to the draft for a public hearing at the September meeting.

CITY OF NORTH OAKS
RAMSEY COUNTY, MINNESOTA

ORDINANCE NO. ____

AN ORDINANCE AMENDING CITY CODE TITLE XV, CHAPTER 151, REGARDING SOLAR ORDINANCE

THE CITY COUNCIL OF THE CITY OF NORTH OAKS ORDAINS AS FOLLOWS:

Section One. Title XV, Chapter 151 Amendment: Title XV, Chapter 151, of the North Oaks City Code is hereby amended as follows. The underlined text shows the proposed additions to the City Code and the ~~struck through~~ text shows the deletions:

§151.035 Solar Ordinance

(A) **Purpose.** North Oaks has adopted this regulation to regulate the placement, construction and modification of solar energy systems in order to protect the health, safety and welfare of the public, while not unreasonably interfering with the development of the solar energy systems in the City. Specifically, the purposes of this Ordinance are:

(1) To meet the goals of the Comprehensive Plan and preserve the health, safety and welfare of the community by promoting the safe, effective and efficient use of solar energy systems.

(2) To regulate the location of solar energy systems.

(3) To protect residential areas and land uses from potential adverse impacts of solar energy systems.

(4) To minimize adverse visual impacts of solar energy systems and facilities through design, siting, landscaping, and screening.

(5) To avoid adverse impacts to adjacent properties caused by solar energy systems by ensuring that those structures are soundly and carefully designed, constructed, modified, maintained and promptly removed when no longer used.

(6) To ensure that solar energy systems are compatible with surrounding land uses.

(B) **Definitions.**

Building-integrated Solar Energy Systems – 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. Building-integrated systems include, but are not limited to, photovoltaic or hot water solar energy systems that are contained within roofing materials, windows, skylights, and awnings.

Grid-intertie Solar Energy System – A photovoltaic solar energy system that is connected to an electric circuit served by an electric utility company.

Ground-mount – A solar energy system mounted on a rack or pole that rests or is attached to the ground. Ground-mount systems are accessory to the principal use by conditional use permit.

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

Roof-mount – A solar energy system mounted on a rack that is fastened to or ballasted on a structure roof. Roof-mount systems are accessory to the principal use.

Solar Access – Unobstructed access to direct sunlight on a lot or building through the entire year, including access across adjacent parcel air rights, for the purpose of capturing direct sunlight to operate a solar energy system.

Solar Collector – The panel or device in a solar energy system that collects solar radiant energy and transforms it into thermal, mechanical, chemical, or electrical energy. The collector does not include frames, supports, or mounting hardware.

Solar Energy – Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.

Solar Energy System – A device, array of devices, or structural design feature, the purpose of which is to provide for generation or storage of electricity from sunlight, or the collection, storage and distribution of solar energy for space heating or cooling, daylight for interior lighting, or water heating.

(C) **Permitted Accessory Use.**

(1) Roof-mount and Building-integrated Solar Energy Systems are a permitted accessory use in all zoning districts where structures of any sort are allowed subject to the following standards:

(a) Such systems must adhere to Building Code Ordinance 95 (codified as Chapter 155) and current City ordinances, regulations, and governing rules.

(b) Building- or roof-mounted solar energy systems shall not exceed the maximum allowed height in any zoning district.

(2) Solar energy collector devices, less than two (2) square foot in area and generally used for garden decoration, exterior accent lighting, lawns, and flagpoles, are exempt from the requirements of this section.

(D) **Ground-mounted solar.** Accessory ground-mount solar may be permitted by conditional use, subject to the following standards:

(1) Location.

(a) The property is in the RSM zoning district.

(b) Ground-mount systems must be located entirely in the side or rear yard.

(c) Ground-mount solar may be located within the parking lot provided the applicant can provide evidence that adequate on-site parking is available to serve the property and will not disrupt parking lot spaces or drive aisles.

(2) **Setback.** Ground-mount solar energy systems must meet the 30-foot minimum structure setback from all property lines. Ground-mounted solar energy systems may not extend into the side or rear yard setback when oriented at minimum design tilt.

(3) **Height.** Ground-mount solar energy systems shall not exceed 12 feet in height. Height shall be measured from the top of the grade to the highest point of the structure at its maximum designed height.

(4) **Visibility.** Solar energy systems shall be designed to minimize visual impacts from the public right-of-way and adjacent property.

(5) **Glare.** All solar energy systems shall minimize glare affecting adjacent or nearby properties. Where necessary, screening may be required to address glare.

(6) **Lot Coverage.** Ground-mount systems total collector area shall not exceed half the building footprint of the principal structure.

(a) Ground-mount systems shall be exempt from lot coverage limitations if the soil under the collector is maintained in vegetation and not compact as described in D(7).

(b) Ground-mounted systems shall not count toward accessory structure limitations.

(7) **Landscaping**.

(a) Where possible, a mix of pollinator and native groundcover mix should be provided beneath panel arrays to provide native perennial vegetation and foraging habitat beneficial to gamebirds, songbirds, and pollinators and reduces stormwater runoff and erosion at the solar generation site, subject to the standards of Minnesota State Statutes §216B.1642.

(b) A mix of deciduous and evergreen trees and shrubs shall be provided to buffer the panels from adjacent properties. Natural looking and effective screening is desired, however, as part of the conditional use permit, the City may permit fences in addition to or in lieu of landscaping to provide appropriate screening from adjacent public rights-of-way and neighboring properties.

(8) **Conditional Use**. The conditional use permit shall be subject to the procedures and standards in Section 151.076 (Conditional Use Permits) of the City Code.

(E) **Plan Approval Required.** All solar energy systems requiring a building permit or other permit from North Oaks shall provide a site plan for review.

(1) **Plan Applications.** Plan applications for solar energy systems shall be accompanied by to-scale horizontal and vertical (elevation) drawings. The drawings must show the location of the system on the building or on the property for a ground-mount system, including the property lines.

(2) **Plan Approvals.** Applications for building-mount or building-integrated systems that meet the design requirements of this ordinance shall be granted administrative approval by the zoning official and shall not require Planning Commission review. Ground-mount systems shall require a conditional uses permit subject to standards in this ordinance and §151.076. Plan approval does not indicate compliance with Building Code or Electric Code.

(3) **Approved Solar Components.** Electric solar energy system components must have a UL or equivalent listing and solar hot water systems must have an SRCC rating.

(4) **Compliance with Building Code.** All solar energy systems shall meet approval of local building code officials, consistent with the State of Minnesota Building Code, and solar thermal systems shall comply with HVAC-related requirements of the Energy Code.

(5) **Compliance with State Electric Code.** All photovoltaic systems shall comply with the Minnesota State Electric Code.

(6) **Compliance with State Plumbing Code.** Solar thermal systems shall comply with applicable Minnesota State Plumbing Code requirements.

(7) **Utility Notification.** All grid-intertie solar energy systems shall comply with the interconnection requirements of the electric utility. Off-grid systems are exempt from this requirement.

(8) **Expiration.** If any solar energy system remains nonfunctional or inoperative for a continuous period of twelve (12) months, the system must be deemed to be abandoned and shall constitute a public nuisance. The owner must remove the abandoned system at their expense after any required permits have been obtained. Removal includes the entire structure, including transmission equipment and footings.

(F) **Solar Easements Allowed.** North Oaks allows solar easements to be filed, consistent with Minnesota State Code 500. Any property owner can purchase an easement across neighboring properties to protect access to sunlight. The easement can apply to buildings, trees, or other structures that would diminish solar access.

Section Two. Effective Date. This Ordinance shall be in full force and effect upon its adoption and publication as provided by law.

Passed in regular session of the City Council on the ____day of _____, 2023.

CITY OF NORTH OAKS

By: _____

Krista Wolter, Mayor

Attested:

By: _____

Kevin Kress
City Administrator/City Clerk

(Published in the Shoreview Press on _____, 2023)

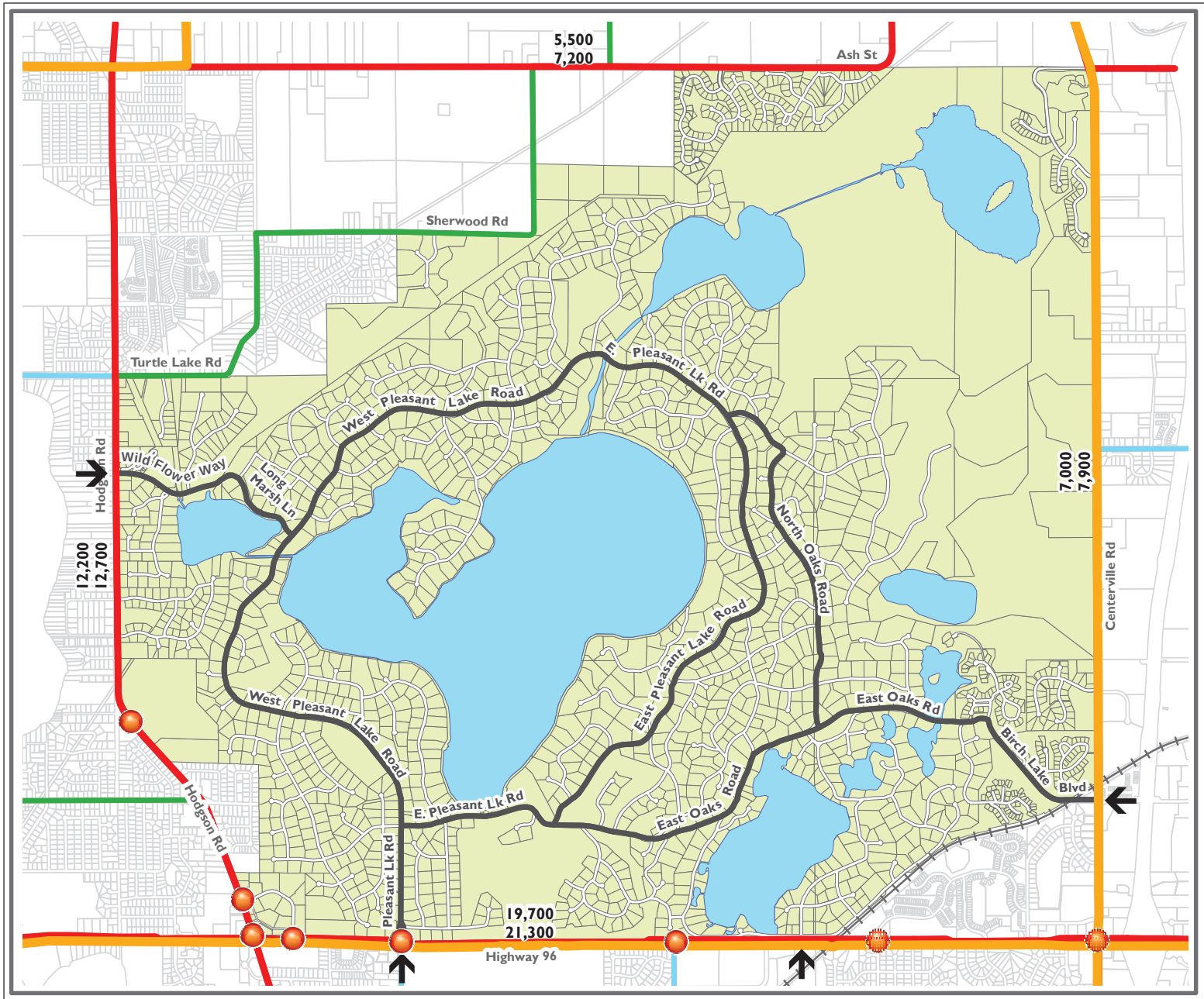
MAP 8

Existing Zoning Districts Map

- **OS** (Open Space)
- **RSL** (Residential Single Family - Low Density)
- **RSL-PUD** (Residential Single Family - PUD)
- **RSM** (Residential Single Family - Medium Density)
- **RSM-PUD** (Res. Single Fam. - Med. Density - PUD)
- **RMM** (Residential Multiple Family Medium Density)
- **RMM-PUD** (Residential Multiple Family Medium Density - PUD)
- **RMH-PUD** (Residential Multiple Family High Density - PUD)
- **RCM-PUD** (Residential-Commercial Mixed-PUD)
- **C** (Commercial)
- **C/S** (Commercial/Service)
- **LI** (Limited Industrial)
- **R** (Recreation)
- **HP** (Historic Preservation)
- Shoreland District Boundaries

North Oaks Boundary

Source: City Zoning Map as of 5 - 10 - 21



City of North Oaks

MAP 14

Transportation Features

- 'A' Minor Expander
- Collector
- Minor Collector
- Other Arterial
- Regional Bicycle Transportation Network (RBTN) Tier 2
- Rail Lines (Freight)
- Signalized Intersection
- Primary City Access Points

2040 Traffic Volumes

Top number = current volumes
Bottom number = 2040 projections

N

5-10-21

City of North Oaks

MAP 17

Areas Served by Municipal Sewer and Sub Surface Treatment Systems (SSTS)

Service Types

- Served by Sewer
- Future Service Area
- Not Served by Sewer
- Future Sewer
- Private sewer line
- Centerville Trunk Line
- Regional Interceptor

Alignments as shown are approximate. Please refer to record drawings for actual utility locations.

- SSTS Sites (1230)
- Sanitary Sewer Connection Points
- MetCouncilMeterLocations

North Oaks

Updated 6/1/23
Source: Sambatek/HR Green

Wilkinson Lake
Deep Lake
Charley Lake
Pleasant Lake
Black Lake
North Mallard Pond
South Mallard Pond
Teal Pond
Gilfillan Lake
SHOREVIEW INTERCEPTOR
FOREST LAKE INTERCEPTOR
N

Minnesota Solar Model Ordinance

Photo by Katharine Chute

Prepared by Great Plains Institute with support from Sunshot and the Energy Foundation

GREAT PLAINS INSTITUTE | Better Energy. Better World.

Model Solar Ordinance – Minnesota

Introduction

Minnesota's solar energy resources are high quality and cost effective—as good as many states to our south and consistently available across the entire state. As solar energy system components have become more efficient and less costly, an increasing number of solar energy systems have been installed in Minnesota. Market opportunities for solar development have dramatically increased in Minnesota over the last five years, such that communities must now address solar installations as land use and development issues. Solar energy components continue to improve in efficiency and decline in price; large-scale solar energy is expected to become the least expensive form of electric energy generation within a few years, surpassing wind energy and natural gas in levelized cost of energy.

Model Solar Energy Standards

This ordinance is based on the model solar energy ordinance originally created for Solar Minnesota, under a Million Solar Roofs grant from the U.S. Department of Energy. It has been substantially updated several times to reflect address additional issues and opportunities for Minnesota communities and the evolving solar industry, last updated May 2020

But solar energy is much more than just low-cost energy generation. Households and businesses seeking to reduce their carbon footprint see solar energy as a strong complement to energy efficiency. Agricultural producers see their solar energy as an economic hedge against price volatility in commodity crops. Utilities see solar's declining cost, high reliability, and free fuel as a means to put downward pressure on electric rates. Corporate, institutional, and municipal buyers are actively acquiring carbon-free solar generation to meet climate and clean energy goals. And innovative solar site designs are capturing habitat and water quality co-benefits by using solar with habitat-friendly ground cover to restore eco-system functions.

Solar Energy Issues

Local governments in Minnesota are seeing increasing interest by property owners in solar energy installations and are having to address a variety of solar land uses in their development regulation. Given the continuing cost reductions and growing value of clean energy, solar development will increasingly be a local development opportunity, from the rooftop to the large-scale solar farm. Three primary issues tie solar energy to development regulations:

1. *Land use conflicts and synergies.* Solar energy systems have few nuisances. But solar development can compete for land with other development options, and visual impacts and perceived safety concerns sometimes create opposition to solar installations. Good design and attention to aesthetics can address most concerns for rooftop or accessory use systems. Good siting and site design standards for large- and community-scale solar can similarly resolve conflicts and create co-benefits from solar development, such as restoring habitat, diversifying agricultural businesses, and improving surface and ground waters.

2. *Protecting access to solar resources.* Solar resources are a valuable component of property ownership. Development regulations can inadvertently limit a property owner's ability to access their solar resource. Communities should consider how to protect and develop solar resources in zoning, subdivision, and other development regulations or standards.

3. *Encouraging appropriate solar development.* Local government can go beyond simply removing regulatory barriers and encourage solar development that provides economic development, climate protection, and natural resources co-benefits. Local governments have a variety of tools to encourage appropriately sited and designed solar development to meet local goals.

Components of a Solar Standards Ordinance

Solar energy standards should:

1. *Create an as-of-right solar installation path for property-owners.* Create a clear regulatory path (an as-of-right installation) to solar development for accessory uses and - if appropriate - for principal uses such as large-scale solar and ground-mount community shared solar installations.

2. *Enable principal solar uses.* Define where community- and large-solar energy land uses are appropriate as a principal or primary use, set development standards and procedures to guide development, and capture co-benefit opportunities for water quality, habitat, agriculture.

3. *Limit regulatory barriers to developing solar resources.* Ensure that access to solar resources is not unduly limited by height, setback, or coverage standards, recognizing the distinct design and function of solar technologies and land uses for both accessory and principal uses.

4. *Define appropriate aesthetic standards.* Retain an as-of-right installation pathway for accessory uses while balancing design concerns in urban neighborhoods and historic districts. Set reasonable aesthetic standards for solar principal uses that are consistent with other principal uses that have visual impacts.

5. *Address cross-property solar access issues.* Consider options for protecting access across property lines in the subdivision process and in zoning districts that allow taller buildings on smaller (urban density) lots.

6. *Promote "solar-ready" design.* Every building that has a solar resource should be built to seamlessly use it. Encourage builders to use solar-ready subdivision and building design.

7. *Include solar in regulatory incentives.* Encourage desired solar development by including it in regulatory incentives: density bonuses, parking standards, flexible zoning standards, financing/grant programs, promotional efforts.

Different Community Types and Settings

The model ordinance language addresses land use concerns for both urban and rural areas, and thus not all the provisions may be appropriate for every community. Issues of solar access and nuisances associated with small or accessory use solar energy systems are of less consequence in rural areas, where lot sizes are almost always greater than one acre. Large-scale and community- scale solar (principal solar land uses) are much more likely to be proposed in rural areas rather than developed cities. However, urban areas should consider where community- or large-scale solar can add value to the community and enable economic development of a valuable local resource. Rural communities should address rooftop and accessory ground-mount development, although the standards used in this model are designed more for the urban circumstances.

Solar development is not one thing

Communities would not apply the same development and land use standards to an industrial facility and a single family home, merely because both are buildings. Community and large-scale solar development is a completely different land use than rooftop or backyard solar. Standards that are appropriate for large-scale solar may well be wholly inappropriate for rooftop solar and may unnecessarily restrict or stymie solar development opportunities of homes and business owners.

This ordinance includes language addressing solar energy as an accessory use to the primary residential or commercial use in an urban area and language for principal solar uses more typically seen in rural communities. Communities should address both types of solar development.

Model Ordinance

I. Scope - This article applies to all solar energy installations in Model Community.

II. Purpose - Model Community has adopted this regulation for the following purposes:

A. Comprehensive Plan Goals - To meet the goals of the Comprehensive Plan and preserve the health, safety and welfare of the community by promoting the safe, effective and efficient use of solar energy systems. The solar energy standards specifically implement the following goals from the Comprehensive Plan:

1. **Goal** – Encourage the use of local renewable energy resources, including appropriate applications for wind, solar, and biomass energy.

2. **Goal** – Promote sustainable building design and management practices to serve current and future generations.

3. **Goal** – Assist local businesses to lower financial and regulatory risks and improve their economic, community, and environmental sustainability.

4. **Goal** – Implement the solar resource protection element required under the Metropolitan Land Planning Act.

Comprehensive Plan Goals

Tying the solar energy ordinance to Comprehensive Plan goals is particularly important for helping users (both Planning Commission and community members) understand why the community is developing and administering regulation.

The language here provides examples of different types of Comprehensive Plan goals, and other policy goals that the community may have that are served by enabling and encouraging solar development. The community should substitute its policy goals for these examples.

If the Comprehensive Plan does not include goals supporting local solar development), the community should consider creating a local energy plan or similar policy document to provide a policy foundation for solar development regulation (as noted in II.B) .

B. Climate Change Goals - Model Community has committed to reducing carbon and other greenhouse gas emissions. Solar energy is an abundant, renewable, and nonpolluting energy resource and its conversion to electricity or heat reduces dependence on nonrenewable energy resources and decreases the air and water pollution that results from the use of conventional energy sources.

C. Infrastructure - Distributed solar photovoltaic systems will enhance the reliability and power quality of the power grid and make more efficient use of Model Community's electric distribution infrastructure.

D. Local Resource - Solar energy is an underused local energy resource and encouraging the use of solar energy will diversify the community's energy supply portfolio and reduce exposure to fiscal risks associated with fossil fuels.

Metropolitan Land Planning Act

Minnesota local governments subject to the Metropolitan Land Planning Act are required in their comprehensive plans to plan for the protection and development of solar resources. Communities must then incorporate Plan goals in their local controls. This ordinance implements that required Comprehensive Plan element.

E. Improve Competitive Markets - Solar energy systems offer additional energy choice to consumers and will improve competition in the electricity and natural gas supply market.

III. Definitions

Agrivoltaics – A solar energy system co-located on the same parcel of land as agricultural production, including crop production, grazing, apiaries, or other agricultural products or services.

Building-integrated Solar Energy Systems – 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. Building-integrated systems include, but are not limited to, photovoltaic or hot water solar energy systems that are contained within roofing materials, windows, skylights, and awnings.

Solar Definitions

Not all these terms are used in this model ordinance, nor is this a complete list of solar definitions. As a community develops its own development standards for solar technology, many of the concepts defined here may be helpful in meeting local goals. For instance, solar daylighting devices may change the exterior appearance of the building, and the community may choose to distinguish between these devices and other architectural changes.

Community-Scale Solar Energy System – A commercial solar energy system that converts sunlight into electricity for the primary purpose of serving electric demands off-site from the facility, either retail or wholesale. Community-scale systems are principal uses and projects typically cover less than 20 acres.

Community Solar Garden – A solar energy system that provides retail electric power (or a financial proxy for retail power) to multiple community members or businesses residing or located off-site from the location of the solar energy system, consistent with Minn. Statutes 216B.1641 or successor statute. A community solar garden may be either an accessory or a principal use.

Differentiating Solar Uses by Size

Community-scale and Large-scale systems are defined here as occupying less than 20 acres and greater than 20 acres respectively. Some communities will use a lower number (ten acres) and some a higher number (up to 50 acres). An ex-urban city would use a lower number and a rural county could use a higher number. Community-scale is generally a size that can fit into the land use fabric of the community without assembly of separate parcels. Some communities have chosen not to distinguish between community- and large-scale, but use a single large-scale designation.

Grid-intertie Solar Energy System – A photovoltaic solar energy system that is connected to an electric circuit served by an electric utility company.

Ground-mount – A solar energy system mounted on a rack or pole that rests or is attached to the ground. Ground-mount systems can be either accessory or principal uses.

Large-Scale Solar Energy System – A commercial solar energy system that converts sunlight into electricity for the primary purpose of wholesale sales of generated electricity. A large-scale solar energy system will have a project size greater than 20 acres and is the principal land use for the parcel(s) on which it is located.

Off-grid Solar Energy System – A photovoltaic solar energy system in which the circuits energized by the solar energy system are not electrically connected in any way to electric circuits that are served by an electric utility company.

Passive Solar Energy System – A solar energy 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.

Renewable Energy Easement, Solar Energy Easement – An easement that limits the height or location, or both, of permissible development on the burdened land in terms of a structure or vegetation, or both, for the purpose of providing access for the benefited land to wind or sunlight passing over the burdened land, as defined in Minn. Stat. 500.30 Subd. 3 or successor statute.

Roof-mount – A solar energy system mounted on a rack that is fastened to or ballasted on a structure roof. Roof-mount systems are accessory to the principal use.

Roof Pitch – The final exterior slope of a roof calculated by the rise over the run, typically but not exclusively expressed in twelfths such as 3/12, 9/12, 12/12.

Solar Access – Unobstructed access to direct sunlight on a lot or building through the entire year, including access across adjacent parcel air rights, for the purpose of capturing direct sunlight to operate a solar energy system.

Solar Carport – A solar energy system of any size that is installed on a carport structure that is accessory to a parking area, and which may include electric vehicle supply equipment or energy storage facilities.

Solar Collector – The panel or device in a solar energy system that collects solar radiant energy and transforms it into thermal, mechanical, chemical, or electrical energy. The collector does not include frames, supports, or mounting hardware.

Solar Daylighting – Capturing and directing the visible light spectrum for use in illuminating interior building spaces in lieu of artificial lighting, usually by adding a device or design element to the building envelope.

Solar Energy – Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.

Solar Energy System – A device, array of devices, or structural design feature, the purpose of which is to provide for generation or storage of electricity from sunlight, or the collection, storage and distribution of solar energy for space heating or cooling, daylight for interior lighting, or water heating.

Solar Hot Air System (also referred to as Solar Air Heat or Solar Furnace) – A solar energy system that includes a solar collector to provide direct supplemental space heating by heating and re-circulating conditioned building air. The most efficient performance includes a solar collector to preheat air or supplement building space heating, typically using a vertically-mounted collector on a south-facing wall.

Solar Hot Water System – A system that includes a solar collector and a heat exchanger that heats or preheats water for building heating systems or other hot water needs, including residential domestic hot water and hot water for commercial processes.

Solar Mounting Devices – Racking, frames, or other devices that allow the mounting of a solar collector onto a roof surface or the ground.

Solar Resource – A view of the sun from a specific point on a lot or building that is not obscured by any vegetation, building, or object for a minimum of four hours between the hours of 9:00 AM and 3:00 PM Standard time on all days of the year, and can be measured in annual watts per square meter.

Solar Resource

Understanding what defines a "solar resource" is foundational to how land use regulation affects solar development. Solar energy resources are not simply where sunlight falls. A solar resource has minimum spatial and temporal characteristics, and needs to be considered not only today but also into the future. Solar energy systems are economic only if the annual solar resource (measured in annual watts per square meter) are sufficiently high to justify the cost of installation. The resource is affected by the amount of annual shading, orientation of the panel, and typical atmospheric conditions. Solar resources on a particular site can be mapped and quantified, similar to quantifying other site resources that enhance property value; mineral resources, prime soils for agriculture, water, timber, habitat.

IV. Permitted Accessory Use - Solar energy systems are a permitted accessory use in all zoning districts where structures of any sort are allowed, subject to certain requirements as set forth below. Solar carports and associated electric vehicle charging equipment are a permitted accessory use on surface parking lots in all districts regardless of the existence of another building. Solar energy systems that do not meet the following design standards will require a conditional use permit.

A. Height - Solar energy systems must meet the following height requirements:

1. Building- or roof- mounted solar energy systems shall not exceed the maximum allowed height in any zoning district. For purposes for height measurement, solar energy systems other than building-integrated systems shall be given an equivalent exception to height standards as building-mounted mechanical devices or equipment.

2. Ground- or pole-mounted solar energy systems shall not exceed 15 feet in height when oriented at maximum tilt.

3. Solar carports in non-residential districts shall not exceed 20 feet in height.

Height - Rooftop System

This ordinance notes exceptions to the height standard when other exceptions for rooftop equipment are granted in the ordinance. Communities should directly reference the exception language rather than use the placeholder language here.

Height - Ground or Pole Mounted System

This ordinance sets a 15-foot height limit, which is typical for residential accessory uses. Some communities allow solar to be higher than other accessory uses in order to enable capture of the lot's solar resource when lots and buildings are closer together. An alternative is to balance height with setback, allowing taller systems if set back farther– for instance, an extra foot of height for every extra two feet of setback. In rural (or large lot) areas, solar resources are unlikely to be constrained by trees or buildings on adjacent lots and the lot is likely to have adequate solar resource for a lower (10-15 foot) ground-mount application.

B. Set-back - Solar energy systems must meet the accessory structure setback for the zoning district and primary land use associated with the lot on which the system is located, except as allowed below.

1. **Roof- or Building-mounted Solar Energy Systems** – The collector surface and mounting devices for roof-mounted solar energy systems shall not extend beyond the exterior perimeter of the building on which the system is mounted or built, unless the collector and mounting system has been explicitly engineered to safely extend beyond the edge, and setback standards are not violated. Exterior piping for solar hot water systems shall be allowed to extend beyond the perimeter of the building on a side-yard exposure. Solar collectors mounted on the sides of buildings and serving as awnings are considered to be building-integrated systems and are regulated as awnings.

2. **Ground-mounted Solar Energy Systems** - Ground-mounted solar energy systems may not extend into the side-yard or rear setback when oriented at minimum design tilt, except as otherwise allowed for building mechanical systems.

C. Visibility - Solar energy systems in residential districts shall be designed to minimize visual impacts from the public right-of-way, as described in C.1-3, to the extent that doing so does not affect the cost or efficacy of the system. Visibility standards do not apply to systems in non-residential districts, except for historic building or district review as described in E. below.

Visibility and Aesthetics

Aesthetic regulation should be tied to design principles rather than targeted at a specific land use. If the community already regulates aesthetics in residential districts, this model language provides guidance for balancing between interests of property owners who want to use their on-site solar resources and neighbors concerned with neighborhood character. Substantial evidence demonstrates that solar installations have no effect on property values of adjacent properties. But where aesthetic regulation is used to protect community character, these standards provide balance between competing goals.

1. **Building Integrated Photovoltaic Systems** - Building integrated photovoltaic solar energy systems shall be allowed regardless of whether the system is visible from the public right-of-way, provided the building component in which the system is integrated meets all required setback, land use, or performance standards for the district in which the building is located.

2. **Aesthetic restrictions** – Roof-mount or ground-mount solar energy systems shall not be restricted for aesthetic reasons if the system is not visible from the closest edge of any public right-of-way other than an alley, or if the system meets the following standards.

   a. Roof-mounted systems on pitched roofs that are visible from the nearest edge of the front right-of-way shall have the same finished pitch as the roof and be no more than ten inches above the roof.

   b. Roof-mount systems on flat roofs that are visible from the nearest edge of the front right-of-way shall not be more than five feet above the finished roof and are exempt from any rooftop equipment or mechanical system screening.

3. **Reflectors** - All solar energy systems using a reflector to enhance solar production shall minimize glare from the reflector affecting adjacent or nearby properties.

D. Lot Coverage - Ground-mount systems total collector area shall not exceed half the building footprint of the principal structure.

1. Ground-mount systems shall be exempt from lot coverage or impervious surface standards if the soil under the collector is maintained in vegetation and not compacted.

2. Ground-mounted systems shall not count toward accessory structure limitations.

3. Solar carports in non-residential districts ar exempt from lot coverage limitations.

E. Historic Buildings - Solar energy systems on buildings within designated historic districts or on locally designated historic buildings (exclusive of State or Federal historic designation) must receive approval of the community Heritage Preservation Commission, consistent with the standards for solar energy systems on historically designated buildings published by the U.S. Department of Interior.

F. Plan Approval Required - All solar energy systems requiring a building permit or other permit from Model Community shall provide a site plan for review.

Building Integrated PV

Building integrated solar energy systems can include solar energy systems built into roofing (existing technology includes both solar shingles and solar roofing tiles), into awnings, skylights, and walls.

Roof-Mounted Solar Energy Systems

This ordinance sets a threshold for pitched roof installations that they not be steeper than the finished roof pitch. Mounted systems steeper than the finished roof pitch change the appearance of the roof, and create additional considerations in regard to the wind and drift load on structural roof components. If the aesthetic impacts are not a concern to the community, the structural issues can be addressed in the building permit, as described in this Toolkit.

Reflectors

Unlike a solar collector, reflector systems do create a potential glare nuisance. While reflector systems are unusual, communities may want to include this reference as a precaution.

Impervious Surface Coverage

Rather than consider the solar panel for a ground-mount system as a roof, this provision recognizes that the ground under the panel can mitigate stormwater risks if it is kept in vegetation so that rain water can infiltrate. Any effects are deminimus for a small array if the lot is otherwise within coverage ratios.

Roof Coverage

National Fire Code standards recommend keeping solar arrays well away from roof edges and peak in order to enable some fire fighting access. Different fire departments have addressed this in different ways. Recommendations for solar friendly permitting that accommodate Fire Code recommendations can be found in the Solar America Board of Codes and Standards.

Plan Approval

This process is generally part of the process for obtaining a building permit. If the community does not issue building permits, it can be tied to a land use permit instead. For rural areas or cities without standards for rooftop systems, the plan approval section may be eliminated.

1. **Plan Applications** - Plan applications for solar energy systems shall be accompanied by to-scale horizontal and vertical (elevation) drawings. The drawings must show the location of the system on the building or on the property for a ground-mount system, including the property lines.

2. **Plan Approvals** - Applications that meet the design requirements of this ordinance shall be granted administrative approval by the zoning official and shall not require Planning Commission review. Plan approval does not indicate compliance with Building Code or Electric Code.

G. Approved Solar Components - Electric solar energy system components must have a UL or equivalent listing and solar hot water systems must have an SRCC rating.

H. Compliance with Building Code - All solar energy systems shall meet approval of local building code officials, consistent with the State of Minnesota Building Code, and solar thermal systems shall comply with HVAC-related requirements of the Energy Code.

I. Compliance with State Electric Code - All photovoltaic systems shall comply with the Minnesota State Electric Code.

J. Compliance with State Plumbing Code - Solar thermal systems shall comply with applicable Minnesota State Plumbing Code requirements.

K. Utility Notification - All grid-intertie solar energy systems shall comply with the interconnection requirements of the electric utility. Off-grid systems are exempt from this requirement.

V. Principal Uses – Model Community encourages the development of commercial or utility scale solar energy systems where such systems present few land use conflicts with current and future development patterns. Ground-mounted solar energy systems that are the principal use on the development lot or lots are conditional uses in selected districts.

A. Principal Use General Standards

1. Site Design

a. **Set-backs** – Community- and large-scale solar arrays must meet the following setbacks:

1. Property line setback for buildings or structures in the district in which the system is located, except as other determined in 1.a.5 below.

2. Roadway setback of 150 feet from the ROW centerline of State highways and CSAHs, 100 feet for other roads, except as other determined in 1.a.5 below.

3. Housing unit setback of 150 feet from any existing dwelling unit, except as other determined in 1.a.5 below.

4. Setback distance should be measured from the edge of the solar energy system array, excluding security fencing, screening, or berm.

5. All setbacks can be reduced by 50% if the array is fully screened from the setback point of measurement.

b. **Screening** – Community- and large-scale solar shall be screened from existing residential dwellings.

1. A screening plan shall be submitted that identifies the type and extent of screening.

2. Screening shall be consistent with Model Community's screening ordinance or standards typically applied for other land uses requiring screening.

3. Screening shall not be required along property lines within the same zoning district, except where the adjoining lot has an existing residential use.

4. Model Community may require screening where it determines there is a clear community interest in maintaining a viewshed.

Community-Scale Solar or Solar Gardens

Community solar systems differ from rooftop or solar farm installations primarily in regards to system ownership and disposition of the electricity generated, rather than land use considerations. There is, however, a somewhat greater community interest in community solar, and thus communities should consider creating a separate land use category.

This language limits the size of the garden to ten acres, which is an installation of no more than one MW of solar capacity. Communities should tailor this size limit to community standards, which may be smaller or larger.

Appropriate Setbacks

The community should consider balancing set-back requirements and screening requirements for principal use solar. Since the primary impact to neighbors of large-scale solar is visual, screening becomes less useful, as the setbacks get larger (and vice versa).

The setback distances provided here are general examples that should be modified to be consistent with other setbacks already in the ordinance. Excessive setbacks that are unique to solar land uses, or that are similar to high nuisance land uses such as industrial uses or animal agriculture, are unjustified given the low level of risk or nuisance posed by the system.

Screening

The community should consider limiting screening of community- or large-scale solar to where there is a visual impact from an existing use, such as adjacent residential districts or uses. Solar energy systems may not need to be screened from adjacent lots if those lots are in agricultural use, are non-residential, or have low-intensity commercial use.

c. **Ground cover and buffer areas** - The following provisions shall be met related to the clearing of existing vegetation and establishment of vegetated ground cover. Additional requirements may apply as required by Model Community.

1. Large-scale removal of mature trees on the site is discouraged. Model Community may set additional restrictions on tree clearing or require mitigation for cleared trees.

2. The project site design shall include the installation and establishment of ground cover meeting the beneficial habitat standard consistent with Minnesota Statutes, section 216B.1642, or successor statutes and guidance as set by the Minnesota Board of Water and Soil Resources (BWSR).

3. The applicant shall submit a planting plan accompanied by a completed "Project Planning Assessment Form" provided by BWSR for review by BWSR or the County SWCD.

4. Beneficial habitat standards shall be maintained on the site for the duration of operation, until the site is decommissioned. The owner of the solar array shall complete BWSR's "Established Project Assessment Form" at year 4 and every 3 years after that, and allow the County SWCD to conduct a site visit to verify compliance.

5. Model Community may require submittal of inspection fee at the time of the initial permit application to support ongoing inspection of the beneficial habitat ground cover.

6. The applicant shall submit a financial guarantee in the form of a letter of credit, cash deposit or bond in favor of the Community equal to one hundred twenty-five (125) percent of the costs to meet the beneficial habitat standard. The financial guarantee shall remain in effect until vegetation is sufficiently established.

d. Foundations - A qualified engineer shall certify that the foundation and design of the solar panel racking and support is within accepted professional standards, given local soil and climate conditions.

e. Power and communication lines - Power and communication lines running between banks of solar panels and to nearby electric substations or interconnections with buildings shall be buried underground. Exemptions may be granted by Model Community in instances where shallow bedrock, water courses, or other elements of the natural landscape interfere with the ability to bury lines, or distance makes undergrounding infeasible, at the discretion of the zoning administrator.

Ground Cover Standards

Minnesota has created a "beneficial habitat" certification, administered by the Board of Soil and Water Resources (BWSR) to enable local governments and solar developers to certify principal use solar as having achieved the co-benefits of using the site as pollinator habitat.

Establishing and maintaining native ground cover creates important co-benefits to the community or the property owner. Native grasses can be harvested for forage and wildflowers and blooming plants can create pollinator and bird habitat, and maintaining the site in native vegetation will build soils that can be turned back into agriculture at the end of the solar farm's life.

Site Design in Conditional Use Permit

Certain site design elements may be included in a community's conditional use permit for community- and large-scale solar. Best practices for habitat-friendly solar site design include, for instance, that:

• panels be at least 36 inches off the ground to allow mowing and other maintenance,

• panels be spaced to allow vegetation to be self-sustaining,

• maintenance standards limit or prevent pesticide use.

Financial Surety

Communities frequently require bonds or similar financial guarantees when infrastructure improvements are required for a development project. The beneficial habitat installation can be considered in a similar light. Establishing a self-sustaining pollinator or native habitat ground cover requires maintenance over the first 2-3 years, and some maintenance over the life of the project.

2. **Stormwater and NPDES** - Solar farms are subject to Model Community's stormwater management and erosion and sediment control provisions and NPDES permit requirements. Solar collectors shall not be considered impervious surfaces if the project is certified as beneficial habitat solar, as described in A.1.c.2. of this ordinance.

3. **Other standards and codes** - All solar farms shall be in compliance with all applicable local, state and federal regulatory codes, including the State of Minnesota Uniform Building Code, as amended; and the National Electric Code, as amended.

4. **Site Plan Required** - A detailed site plan for both existing and proposed conditions must be submitted, showing location of all solar arrays, other structures, property lines, rights-of-way, service roads, floodplains, wetlands and other protected natural resources, topography, electric equipment, and all other characteristics requested by Model Community. The site plan should show all zoning districts and overlay districts.

5. **Aviation Protection** - For solar farms located within 500 feet of an airport or within approach zones of an airport, the applicant must complete and provide the results of the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the Interim Policy, FAA Review of Solar Energy Projects on Federally Obligated Airports, or most recent version adopted by the FAA.

6. **Agricultural Protection** - Solar farms must comply with site assessment or soil identification standards that are intended to identify agricultural soils. Model Community may require mitigation for use of prime soils for solar array placement, including the following:

   a. Demonstrating co-location of agricultural uses (agrivoltaics) on the project site.

   b. Using an interim use or time-limited CUP that allows the site to be returned to agriculture at the end of life of the solar installation.

   c. Placing agricultural conservation easements on an equivalent number of prime soil acres adjacent to or surrounding the project site.

   d. Locating the project in a Drinking Water Supply Management Area or wellhead protection area.

Stormwater and Water Quality Standards

Perennial grasses and wildflowers planted under the panels, between arrays, and in setback or buffer areas will substantially mitigate the stormwater risks associated with solar arrays, and result in less runoff than typically seen from many types of agriculture. The ground cover standards in Section A.3. will mitigate many stormwater risks, although soil type and slope can still affect the need for additional stormwater mitigation.

Solar with native perennial ground cover can provide multiple water quality benefits when converting from most agricultural crop uses. Both groundwater (limiting nitrate contamination) and surface waters (reducing phosphorus and sediment loading) can benefit if the system is appropriately designed.

Site Plan

Solar farm developers should provide a site plan similar to that required by the community for any other development. Refer to your existing ordinance to guide site plan submittal requirements.

Aviation Standards, Glare

This standard was developed for the FAA for solar installations on airport grounds. It can also be used for solar farm and garden development in areas adjacent to airports. This standard is not appropriate for areas where reflected light is not a safety concern.

Agricultural Protection

If the community has ordinances that protect agricultural soils, this provision applies those same standards to solar development. Communities should understand, however, that solar farms do not pose the same level or type of risk to agricultural practices as does housing or commercial development. Solar farms can be considered an interim use that can be easily turned back to agriculture at the end of the solar farm's life (usually 25 years.)

7. **Decommissioning** - A decommissioning plan shall be required to ensure that facilities are properly removed after their useful life.

   a. Decommissioning of the system must occur in the event the project is not in use for 12 consecutive months.

   b. The plan shall include provisions for removal of all structures and foundations, restoration of soil and vegetation and assurances that financial resources will be available to fully decommission the site.

   c. Disposal of structures and/or foundations shall meet the provisions of the Model Community Solid Waste Ordinance.

   d. Model Community may require the posting of a bond, letter of credit or the establishment of an escrow account to ensure proper decommissioning.

Prime Farmland and Agrivoltaics

Minnesota Admin. 7850.4400 Subd. 4 has provisions for the protection of prime farmland when large electric power generating plants are located on lands designated as prime farmland.

There are a number of mitigation opportunities for solar sited on prime farmland, such as co-locating agricultural uses within solar arrays (also called agrivoltaics). Groundcover that includes pollinator-friendly plantings may enhance surrounding agricultural opportunities, or in the case of protecting drinking water or wellhead protection areas as described below.

B. Community-Scale Solar – Model Community permits the development of community-scale solar, subject to the following standards and requirements:

1. **Rooftop gardens permitted** - Rooftop community systems are permitted in all districts where buildings are permitted.

2. **Community-scale uses -** Ground-mount community solar energy systems must cover no more than ten acres (project boundaries), and are a permitted use in industrial and agricultural districts, and permitted with standards or conditional in all other non-residential districts. Ground-mount solar developments covering more than ten acres shall be considered large-scale solar.

3. **Dimensional standards** - All structures must comply with setback, height, and coverage limitations for the district in which the system is located.

4. **Other standards** - Ground-mount systems must comply with all required standards for structures in the district in which the system is located.

Defining Community-Scale Solar

The acreage size for community-scale solar garden written here (10 acres) is the high end of project size for a one megawatt system, which is the maximum size of community solar gardens within Xcel Energy's program. But other utilities have other size limitations, and community-scale could be defined as high as 10 megawatts (100 acre project size). Community-scale solar is the size that can fit in to the landscape.

Drinking Water Protection

In identifying preferred sites for solar principal uses the community should consider co-benefits of solar energy development. One such potential co-benefit is protection of drinking water supplies. Solar energy development may be intentionally sited within vulnerable portions of Drinking Water Supply Management Areas (DWSMAs)as a best management practice to restore and protect native perennial groundcover that reduces nitrate contamination of ground water supplies.

C. **Large-Scale Solar** - Ground-mount solar energy arrays that are the primary use on the lot, designed for providing energy to off-site uses or export to the wholesale market, are permitted under the following standards:

1. **Conditional use permit** – Solar farms are conditional uses in agricultural districts, industrial districts, shoreland and floodplain overlay districts, airport safety zones subject to A.1.5. of this ordinance, and in the landfill/brownfield overlay district for sites that have completed remediation.

Large-Scale Solar Conditional Uses

Large -scale solar should require a conditional use or interim use permit in order for the community to consider the site-specific conditions. The districts listed here are examples. Each community needs to consider where large scale solar is suitable in the context of its zoning districts and priorities.

Example Use Table

Use Type	Residential	Mixed Use	Business	Industrial	Agricultural, Rural, Landfill	Shoreland	Floodplain	Special (Conservation, Historic Districts)
Large-scale solar				C	C	C	C	C
Community-scale solar	C	C	C	P	P	PS	PS	PS
Accessory use ground-mounted solar	P	P	P	P	P	P	C	C
Rooftop solar	P	P	P	P	P	P	P	PS

P = Permitted

PS = Permitted Special (additional separate permit or review)

C = Conditional

Blank Cell = Prohibited

Solar as a Land Use

The above use table shows four types of solar development that are distinct types of land uses (two kinds of accessory uses, two principal uses), and a group of districts or overlays that are commonly used in Minnesota.

• Rooftop system are permitted in all districts where buildings are permitted, with recognition that historic districts will have special standards or permits separate from the zoning permits.

• Accessory use ground-mount are conditional where potentially in conflict with the primary district or overlay goal.

• Community-scale solar principal uses are conditional where land use conflicts or opportunity conflicts are high, permitted where a 10 acre development can be integrated into the landscape, and requiring special consideration in shoreland and floodplain overlay districts.

• Large-scale is prohibited in higher density districts and conditional in all other districts.

Both community- and large-scale solar is allowed in shoreland and floodplain overlay districts, because the site design standards requiring beneficial habitat ground cover not only ensure a low-impact development but in most cases result in a restoration of ecosystem services from the previous (usually agricultural) use.

VI. Restrictions on Solar Energy Systems Limited – As of (adoption date for this ordinance) new homeowners' agreements, covenant, common interest community standards, or other contract between multiple property owners within a subdivision of Model Community shall not restrict or limit solar energy systems to a greater extent than Model Community' solar energy standards.

VII. Solar Access - Model Community encourages protection of solar access in all new subdivisions.

A. Solar Easements Allowed - Model Community allows solar easements to be filed, consistent with Minnesota State Code 500. Any property owner can purchase an easement across neighboring properties to protect access to sunlight. The easement can apply to buildings, trees, or other structures that would diminish solar access.

B. Easements within Subdivision Process - Model Community requires new subdivisions to identify and create solar easements when solar energy systems are implemented as a condition of a PUD, subdivision, conditional use, or other permit, as specified in Section 8 of this ordinance.

Solar Easements

Minnesota allows the purchase and holding of easements protecting access to solar and wind energy. The easement must specify the following information:

Required Contents - Any deed, will, or other instrument that creates a solar or wind easement shall include, but the contents are not limited to:

(a) A description of the real property subject to the easement and a description of the real property benefiting from the solar or wind easement; and

(b) For solar easements, a description of the vertical and horizontal angles, expressed in degrees and measured from the site of the solar energy system, at which the solar easement extends over the real property subject to the easement, or any other description which defines the three dimensional space, or the place and times of day in which an obstruction to direct sunlight is prohibited or limited;

(more provisions, see Statute)

Source: Minnesota Stat. 500.30 Subd. 3.

VIII. Renewable Energy Condition for Certain Permits

A. **Condition for Planned Unit Development (PUD) Approval** - Model Community may require on-site renewable energy systems, zero-net-energy (ZNE) or zero-net-carbon (ZNC) building designs, solar-synchronized electric vehicle charging or other clean energy systems as a condition for approval of a PUD permit to mitigate for:

1. Impacts on the performance of the electric distribution system,

2. Increased local emissions of greenhouse gases associated with the proposal,

3. Need for electric vehicle charging infrastructure to offset transportation-related emissions for trips generated by the new development,

4. Other impacts of the proposed development that are inconsistent with the Model Community Comprehensive Plan.

B. **Condition for Conditional Use Permit** - Model Community may require on-site renewable energy systems or zero net energy construction as a condition for a rezoning or a conditional use permit.

Renewable Energy Conditions, Incentives

The community can use traditional development tools such as conditional use permits, PUDs, or other discretionary permits to encourage private investment in solar energy systems as part of new development or redevelopment. This model ordinance notes these opportunities for consideration by local governments. In most cases, additional ordinance language would need to be tailored to the community's ordinances.

For instance, a provision that PUDs (or other special district or flexible design standard) incorporate solar energy should be incorporated into the community's PUD ordinance rather than being a provision of the solar standards.

Conditional use permits generally include conditions, and those conditions can include renewable energy or zero net energy design, but only if the conditions are clearly given preference in adopted policy or plans. Explicit reference to climate or energy independence goals in the ordinance and explicit preference for such conditions will set a foundation for including such conditions in the permit.

IX. Solar Roof Incentives - Model Community encourages incorporating on-site renewable energy system or zero net energy construction for new construction and redevelopment. Model Community may require on-site renewable energy or zero-net-energy construction when issuing a conditional use permit where the project has access to local energy resources, in order to ensure consistency with Model Community's Climate Action Plan.

A. **Density Bonus** - Any application for subdivision of land in the ___ Districts that will allow the development of at least four new lots of record shall be allowed to increase the maximum number of lots by 10% or one lot, whichever is greater, provided all building and wastewater setbacks can be met with the increased density, if the applicant enters into a development agreement guaranteeing at least three (3) kilowatts of PV for each new residence that has a solar resource.

Solar Roof Incentives

This section of the model ordinance includes a series of incentives that can be incorporated into development regulation. Most cities and many counties use incentives to encourage public amenities or preferred design. These same tools and incentives can be used to encourage private investment in solar energy. Communities should use incentives that are already offered, and simply extend that incentive to appropriate solar development.

Some of the incentives noted here are not zoning incentives, but fit more readily into incentive programs offered by the community (such as financing or incentive-based design standards).

B. **Financial Assistance** – Model Community provides financial assistance to certain types of development and redevelopment. All projects that receive financial assistance of $_____ or greater, and that have a solar resource shall incorporate on-site renewable energy systems.

C. **Solar-Ready Buildings** – Model Community encourages builders to use solar-ready design in buildings. Buildings that submit a completed U.S. EPA Renewable Energy Ready Home Solar Photovoltaic Checklist (or other approved solar-ready standard) and associated documentation will be certified as a Model Community solar ready home, and are eligible for low-cost financing through Model Community's Economic Development Authority. A designation that will be included in the permit home's permit history.

D. **Solar Access Variance** – When a developer requests a variance from Model Community's subdivision solar access standards, the zoning administrator may grant an administrative exception from the solar access standards provided the applicant meets the conditions of 1. and 2. below:

1. **Solar Access Lots Identified** - At least __% of the lots, or a minimum of __ lots, are identified as solar development lots.

2. **Covenant Assigned** - Solar access lots are assigned a covenant that homes built upon these lots must include a solar energy system. Photovoltaic systems must be at least three (3) KW in capacity.

3. **Additional Fees Waived** - Model Community will waive any additional fees for filing of the covenant.

Solar Ready Buildings

New buildings can be built "solar-ready" at very low cost (in some cases the marginal cost is zero). Solar energy installation costs continue to decline in both real and absolute terms, and are already competitive with retail electric costs in many areas. If new buildings have a rooftop solar resource, it is likely that someone will want to put a solar energy system on the building in the future. A solar ready building greatly reduces the installation cost, both in terms of reducing labor costs of retrofits and by "pre-approving" most of the installation relative to building codes.

A community's housing and building stock is a form of infrastructure that, although built by the private sector, remains in the community when the homeowner or business leaves the community. Encouraging solar-ready construction ensures that current and future owners can take economic advantage of their solar resource when doing so makes the most sense for them.

Solar Access Subdivision Design

Some communities will require solar orientation in the subdivision ordinance, such as requiring an east-west street orientation within 20 degrees in order to maximize lot exposure to solar resources. However, many such requirements are difficult to meet due to site constraints or inconsistency with other requirements (such as connectivity with surrounding street networks). Rather than simply grant a variance, the community can add a condition that lots with good solar access actually be developed as solar homes.

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SOLAR STANDARDS RESEARCH

DATE	7/28/23
PROJECT NAME	Ordinance Amendments - Solar Research
PROJECT NUMBER	CNO23005
PROJECT LOCATION	North Oaks, MN
PREPARED BY	Nicholas Ouellette

	RESIDENTIAL DISTRICTS				COMMERCIAL/INDUSTRIAL DISTRICTS				STANDARDS		NOTES
CITY	ROOF MOUNTED		GROUND MOUNTED		ROOF MOUNTED		GROUND MOUNTED		ROOF MOUNTED	GROUND MOUNTED	
Andover	R1, R2, R3, R4, R5, RR, M1, M2, M3	Permitted Accessory Use	RR, R-1	Permitted Accessory Use	NB, SC, GB, I	Permitted Accessory Use	NB, SC, GB, I	Prohibited Use	Comply with maximum height standards. Panels and equipment flush with roof. May not extend beyond perimeter of exterior walls. Visibility to commercial/industrial solar on flat roofs should be limited.	Not permitted in front yard. 30 ft. setback to interior side/rear lot lines. 15 ft. maximum height. Max. ground coverage limited based on parcel/lot area. Lots less than 3 acres may not exceed 400 sq. ft. ground cover. Lots 3 acres or more the max. coverage may not exceed the foundation area of the residence or 1,200 sq. ft. whichever is less.	
Chanhassen	A2, RR, RSF, R4, RLM, R8, R12, R16	Permitted Accessory Use	A2, RR, RSF, R4, RLM, R8, R12, R16	Accessory	BN, BH, CBD, CC, BG, BF, OI, IOP	Permitted Accessory Use	BN, BH, CBD, CC, BG, BF, OI, IOP	Permitted Accessory Use	Comply with district height standards. Orient glare away from neighboring windows. Mounted flush to roofs. Not to extend beyond perimeter of walls. Colors should be dark or blend with the building.	Comply with accessory structure height standards for district. Exterior lines shall be underground. Screen with walls, fences or landscaping. Setbacks: - Non-residential comply with district setbacks. - Residential only permitted in rear yards with a min. 10 ft. setback.	
Cottage Grove	All districts	Permitted Accessory Use	All districts	Permitted Accessory Use	All districts	Permitted Accessory Use	All districts	Permitted Accessory Use	Pitched roof panels must be flush, flat roof panels may be angled. Colors shall blend with building. Comply with max. height for zoning district. Glare away from neighboring windows. Systems may not extend beyond perimeter of building.	Only permitted on properties 5 or more acres in size. Not to exceed 15 ft. Prohibited in front yard of properties in MUSA. Comply with district setback standards.	Standards for decommissioning. Wall-mounted systems permitted. Heliostats prohibited.
Eagan	All districts	Permitted Accessory Use	All districts	Permitted Accessory Use	All districts	Permitted Accessory Use	All districts	Permitted Accessory Use	Must comply with zoning district regulations. Residential setback up to 1 ft. from edge of roof. Commercial/Ind./Inst. setback 10 ft. from edge of roof. Subject to district height standards. Reduce glare to other structures, screening may be required. Max 80% roof-surface coverage on south facing roof or entire surface of flat roof.	Must comply with zoning district regulations. Must comply with accessory structure standards. Ground coverage not to exceed: - 30% of residential lot area. - 70% of commercial/ind./inst. lot area. Landscape screening from ROW's and adjacent lots to soften view. Height limited to 12 ft. and may extend an addition 1 ft. in height for every additional 2 ft. of setback (up to 15 ft. total height).	Community solar standards. Color does not need to match.
Lake Elmo	All districts	Permitted Accessory Use	All districts	Permitted Accessory Use	All districts	Permitted Accessory Use	All districts	Permitted Accessory Use	Permitted in all districts where buildings are permitted. Commercial rooftop solar shall be placed to limit visibility from the ROW or blend into roof design.	Permitted in all districts where buildings are permitted. Comply with accessory setback, height and lot coverage restrictions. Any foundation, compacted soil or component of solar resting on ground counts to impervious surface coverage. Solar systems 6 sq. ft. or less are exempt from zoning district setback requirements.	

Minnetonka	All districts	Permitted Accessory Use	All districts	Conditional Use Permit	All districts	Permitted Accessory Use	B1, B2, B3, I-1, PID	Permitted Accessory Use in parking lot	Must comply with all location, setback, size and height requirements of the attached structure.	Must follow parking lot setback requirements and not disrupt required parking lot design. Height: drive aisle clearance of 13.5 ft. not to exceed 20 ft. in height or the principal structure height. Structures may not have enclosed walls.	Glare should be minimized, may required plant materials. City owned solar may be installed within the ROW and are exempt from other standards in solar section. Abandonment standards.
St. Louis Park	All districts	Permitted Accessory Use	All districts	Permitted Accessory Structure	All districts	Permitted Accessory Use	All districts	Permitted Accessory Structure	Must comply with dimensional standards applicable to the attached structure. May extend no more than 3 ft. beyond height of roof. (10 ft. for flat roof). Setback 1 ft. from perimeter of roof (3 ft. for flat roof with no parapet).	Not permitted in front yard or side yard abutting public street, unless situated over parking areas. Setback 3 ft. from non-residential lot lines. Max. 20 ft. in height. Area for solar system to be included in max. allowed size for accessory structures. Frame shall be constructed of permanent materials.	Abandonment standards. Minimize glare to adjacent/nearby properties.

Cedar Creek Energy
3155 104th Ln NE
Blaine, MN 55449
763-432-5261

DATE.REV

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3155 104th Ln NE
Blaine, MN 55449
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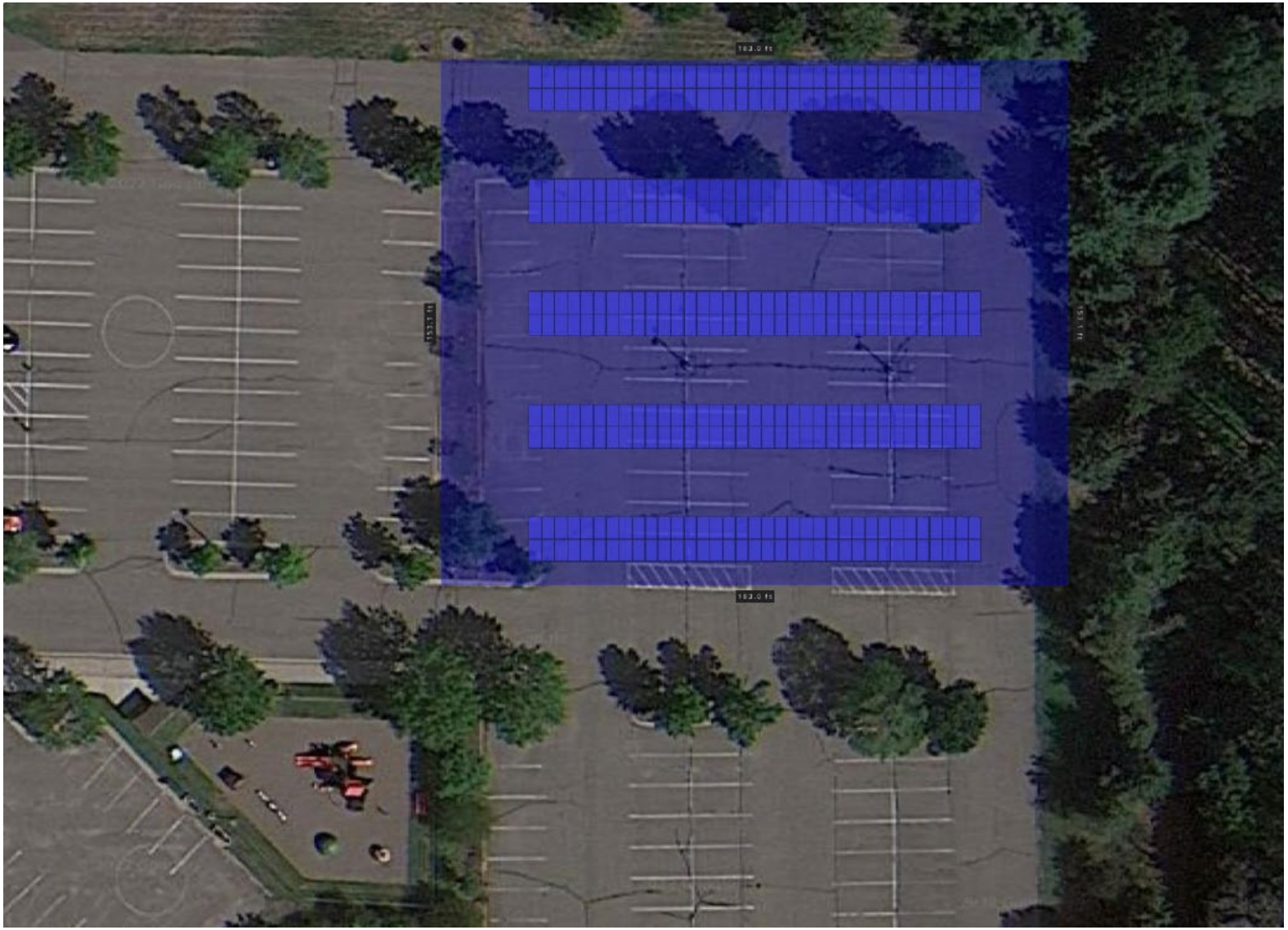
DATE.REV



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DATE.REV

(Ord. 94, § 7.3, passed 2-11-1999; Am. Ord. passed 11-24-1999; Am. Ord. passed 7-24-2001; Am. Ord. passed 10-22-2002; Am. Ord. passed 4-1-2003; Am. Ord. passed 12-23-2003)

§ 151.048 LOT DIVIDED BY ZONING DISTRICT LINE.

Where a developed lot at the time of the effective date of this chapter is divided by a district boundary line as established in this section and as shown on the Zoning District Map, the uses authorized thereon and the other requirements applying to the most restricted portion of the lot under this chapter shall be considered as extending to the entire lot.
(Ord. 94, § 7.4, passed 2-11-1999; Am. Ord. passed 11-24-1999; Am. Ord. passed 7-24-2001; Am. Ord. passed 10-22-2002; Am. Ord. passed 4-1-2003; Am. Ord. passed 12-23-2003)

§ 151.049 ZONING DISTRICT BOUNDARIES.

(A) Zoning district boundary lines as indicated on the Zoning District Map follow lot lines, center of watercourses, or the corporate limit lines, all as they exist upon the effective date of this chapter.

(B) If district boundary lines do not follow any of the above described lines, the district boundary lines are established as indicated on the Zoning District Map.
(Ord. 94, § 7.5, passed 2-11-1999; Am. Ord. passed 11-24-1999; Am. Ord. passed 7-24-2001; Am. Ord. passed 10-22-2002; Am. Ord. passed 4-1-2003; Am. Ord. passed 12-23-2003)

§ 151.050 RSL - RESIDENTIAL SINGLE-FAMILY LOW DENSITY DISTRICT.

(A) *Purpose.* This District is established to provide for low density single-family detached residential dwellings and directly related complimentary uses compatible with the environment and conforming to the level of services available and to provide the community facilities as will enhance the quality of the area.

(B) *Permitted uses.* The following uses shall be permitted:

(1) Single-family detached dwellings;

(2) Essential services;

(3) Single-family detached dwelling planned unit development or phases of a planned unit development which meet all requirements of this section; and

(4) A business conducted in the dwelling or a home occupation, provided that:

(a) The business or home occupation is conducted by a resident occupant of the dwelling;

(b) The business or home occupation is incidental and secondary to the residential use of the dwelling;

(c) There is no external activity or external alteration of the dwelling, including any observable business activity such as deliveries or visitation or use of the lot upon which the dwelling is located by customers, clients, agents, independent contractors, or employees;

(d) There is no business related exterior storage, display, or signage and no interior signage which may be viewed from the exterior of the dwelling;

(e) The business or home occupation conducted in the dwelling generates no external noise; and

(f) The business or home occupation generates no light glare, odor, vibration, smoke, electrical or other interference that in any way adversely affects adjacent or nearby uses.

(C) *Permitted accessory uses.* The following accessory uses shall be permitted:

(1) Attached or detached private garage and private carport facilities, provided the structures are constructed in the same architectural style as the principal building or structure and provided that the combined facilities shall not exceed 1,500 square feet;

(2) Private tennis courts and swimming pools, which are maintained for the enjoyment and convenience of the resident of the principal use and their guests;

(3) Buildings and uses accessory to the principal use, small tool houses, sheds for storage of domestic supplies, and noncommercial recreation equipment, provided the structures are constructed in the same architectural style as the principal building or structure, but accessory dwelling units shall not be permitted;

(4) Noncommercial greenhouses; and

(5) Signs showing residents' name and/or address identification not to exceed 2 square feet and 1 real estate sale sign not to exceed 8 square feet.

(D) *Conditional uses.* The following conditional uses may be permitted, but only after securing a conditional use permit in accordance with § 151.076:

(1) Municipal and public utility buildings and structures necessary for the health, safety, and general welfare of the community, provided that:

(a) The architectural appearance and functional plan of the buildings and site shall be compatible with the adjacent area;

(b) Screening is provided in compliance with § 151.034;

(c) Adequate off-street parking, loading, and service entrances are provided in compliance with § 151.028;

(d) All accessory equipment is completely enclosed in a permanent structure with no outside storage; and

(e) Section 151.083 is complied with.

(2) Neighborhood or community centers, provided that:

(a) The architectural appearance and functional plan of the buildings and site shall be compatible with the adjacent area;

(b) Screening is provided in compliance with § 151.034;

(c) Adequate off-street parking, loading, and service entrances are provided in compliance with § 151.028;

(d) All accessory equipment is completely enclosed in a permanent structure with no outside storage;

(e) The site of the principal use and related parking is served by a road or street of sufficient capacity to accommodate the traffic which will be generated; and

(f) Section 151.083 is complied with.

(3) Private nonprofit golf clubs, provided that:

(a) The architectural appearance and functional plan of the buildings and site shall be compatible with the adjacent area;

(b) Screening is provided in compliance with § 151.034;

(c) Adequate off-street parking, loading, and service entrances are provided in compliance with § 151.028;

(d) All accessory equipment is completely enclosed in a permanent structure with no outside storage;

(e) Use of the premises is restricted to members and their guests; and

(f) Section 151.083 is complied with.

(4) Non-neon signs and non-neon informational visual communication devices, except as prohibited in division (D)(1)(d) above, provided that:

(a) The height of the sign or device does not exceed the height of the principal structure or the structure to which it is affixed;

(b) The architectural style and design shall not be so dissimilar to the surrounding buildings or area so as to adversely impact other land;

(c) There are no moving or flashing parts and any illumination shall be in compliance with § 151.031;

(d) The sign or device is permanently fixed to the land or to a building or structure;

(e) The sign or device is not a billboard and is associated with the principal use of the land; and

(f) Section 151.083 is complied with.

(5) Access driveways with a setback of not less than 15 feet, provided that:

(a) Topographical conditions prevent reasonable access elsewhere on the lot or a large tree or major group of trees would be preserved; and

(b) Section 151.083 is complied with.

(6) Sales and management office for a planned unit development (PUD) or planned residential development (PRD) or a home owners association management office, provided that:

(a) The architectural appearance and functional plan of the buildings and site shall be compatible with the surrounding area;

(b) Screening is provided in compliance with § 151.034;

(c) Adequate off-street parking, loading, and service entrances are provided in compliance with § 151.028;

(d) All accessory equipment is completely enclosed in a permanent structure with no outside storage; and

(e) Section 151.083 is complied with.

(7) Buildings with a height greater than 35 feet, provided that:

(a) The front elevation of the building does not exceed 35 feet in height at any point;

(b) The building height at any other elevation does not exceed 45 feet;

(c) The environmental and topographical conditions of the lot prior to building development are naturally suited to the design of a building with an egress or walkout level;

(d) Buildings shall be limited to a basement and 2 full stories. Finished areas within the roof structure will be considered a full story;

(e) Any time the side or rear elevations of a building exceeds 35 feet in height within 50 feet of adjacent lot lines, the building line shall be setback an additional 2 feet from the adjacent setback line for each foot in height above 35 feet; and

(f) Section 151.083 is complied with.

(8) The Lots in Registered Land Survey 527 and 528, also known as Southpointe and South Wildflower Subdivisions, which were approved by the City Council for buildings with walkout levels, are hereby granted the right to seek conditional use permits for the construction of buildings with a height greater than 35 feet, but not exceeding 45 feet, subject to each lot meeting the conditions in Sections 7.6.4(h)(i) through 7.6.4 (h)(vi) and all other provisions of this chapter, except that the procedure as outlined in § 151.079 shall be revised as follows:

(a) The Zoning Administrator shall review and analyze the request, submit a report to the Planning Commission, and schedule a public hearing for the next regular Planning Commission meeting in accordance with § 151.079(D);

(b) At the next regular meeting, the Planning Commission will hold the public hearing, make findings of fact, and recommend denial or approval; and

(c) At the following City Council meeting, the City Council will act on the conditional use permit with the approval needing a 4/5 vote of the City Council when at least 4 members are present.

(9) Garage which exceeds 1,500 square feet, provided that:

(a) The garage shall not exceed 3,000 square feet;

(b) The garage shall be constructed in the same architectural style as the principal building or structure;

(c) The floor area ratio shall not exceed 0.12;

(d) No use of the garage shall be permitted other than for private residential noncommercial use; and

(e) The factors set forth in § 151.076(C) shall be considered.

(E) *Lot area requirements.* No lot, tract, or parcel of land wholly or partly within an RSL District shall hereafter be divided in any manner, unless:

(1) The average size of each and every lot, tract, or parcel of land created by the subdivision shall have a minimum area of 1.45 acres, and in no event shall any lot, tract, or parcel of land so created have a minimum area of less than 1.25 acres;

(2) In determining and calculating average sizes:

(a) Only those lots, tracts, or parcels of land on which a single-family detached residential dwelling can be constructed may be considered and used; and

(b) Those areas within the waters known as Black Lake, Charley Lake, Deep Lake, Gilfillan Lake, Pleasant Lake, and Wilkinson Lake, DNR protected wetlands and VLAWMO designated wetlands shall be excluded in calculating average sizes.

(3) The lot meets the definitions of a suitable site and a usable area as defined in this chapter.

(F) *Setbacks.*

(1) No building or structure (except fences, screening, planting strips, and landscaping in compliance with §§ 151.033 and 151.034), individual sewage treatment system, or well shall be located within 30 feet of the lot lines, the nearest edge of any road or street easements, or any wetland, except that additions which do not exceed 25% of the existing building footprint area, on buildings or structures lawfully existing upon the effective date of this chapter shall be excluded from wetland setback requirements.

(2) No grading or filling shall be allowed within 30 feet of adjacent lot lines without prior notification to the adjacent lot owners and approval of the Planning Commission, except that grading and filling will be allowed if it is within 10 feet of a building.

(G) *Building heights.* The height of any building shall not exceed 35 feet. Buildings shall be limited to a basement (a floor level that has less than 50% of the perimeter walls exposed above the lowest grade) and 2 full stories. Finished areas within the roof structure will be considered a full story.

(H) *Floor area ratios.* For lots where the combined square footage of all buildings thereon exceed 4,000 square feet, then the combined total floor are ratio (FAR) of all buildings on such lots shall not exceed 0.12.
(Ord. 94, § 7.6, passed 2-11-1999; Am. Ord. passed 11-24-1999; Am. Ord. passed 7-24-2001; Am. Ord. passed 10-22-2002; Am. Ord. passed 4-1-2003; Am. Ord. passed 12-23-2003; Am. Ord. 94-G, passed 12-8-2005) Penalty, see § 10.99

§ 151.051 RSM - RESIDENTIAL SINGLE-FAMILY MEDIUM DENSITY DISTRICT.

(A) *Purpose.* This District is established to provide for medium density single-family detached residential dwellings and directly related complimentary uses compatible with the natural environment and conforming to the level of services available and to provide the community facilities as will enhance the quality of the area.