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# North Shore Management Board

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## Planned Unit Development Research

May 2008

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*Lake Superior shore at Larmsont Cottages, 2007, Courtesy of Community GIS and MN's Lake Superior Coastal Program.*

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## SECTION 1: North Shore Management Board Background

The North Shore Management Board (NSMB) is a joint powers agreement among 10 local governments (counties, cities, and townships) along Minnesota's Lake Superior coast. The NSMB was created in 1987 to develop a plan for uniform land use regulations for properties on and near Lake Superior (see inset below), which is valued by Minnesotans as a natural, recreational, economic, and cultural resource. The NSMB completed and implemented its original plan in 1988. That plan was revised and updated in 2004. Implementation of the 2004 plan's minimum standards with local units of government is now nearly complete.

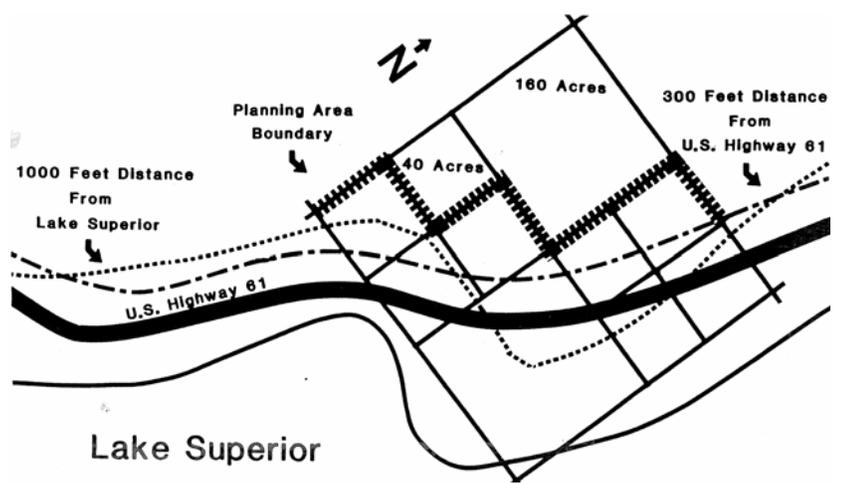
In addition to being responsible for the North Shore Management Plan, the NSMB serves as a forum for land use and environmental discussion between the member entities. The Board discusses development trends, newly identified issues, and other concerns that are common among the entities. The Board has organized a Technical Advisory Committee (TAC) of zoning professionals and agency officials to add expertise to the discussions.

The North Shore Management Plan area boundary is defined along the 40-acre subdivision lines of the rectangular coordinate system established in the U.S. Public Land Survey, nearest to the landward side of a line 1000 feet from the shoreline of Lake Superior or 300 feet landward from the center line of U.S Highway 61, whichever is greater. However, the boundary between Lakewood Township and the western corporate limits of Two Harbors is the centerline of the U.S. Highway 61 Expressway. (See Figure 2 below).

**The North Shore of Lake Superior**



**Definition of the North Shore Management Plan Area Boundary**



Source: 1988 North Shore Management Plan



## **SECTION 2: Introduction**

### What is a Planned Unit Development?

A Planned Unit Development is a subdivision with extensive review processes, management, and design process that is regulated by a local government's Planned Unit Development ordinance. Public entities include Planned Unit Development ordinances to allow for alternative ways to plan developments and grant flexibility to developers for increased open space.

The Planned Unit Development process is a way to deviate from the strict guidelines identified in local zoning districts. Planned Unit Developments are intended to encourage a variety of outcomes that are widely considered as beneficial to communities and the natural surroundings. Planned Unit Developments provide variety in development type, design, and placement of structures and by including conservation and the more efficient use of land. Each Planned Unit Development is unique because they include considerations for natural land features and other elements, when designating the layout and building standards. By utilizing techniques that integrate land features (ie. wetlands, timber stands, stream water sheds), Planned Unit Developments maximize the use of the land while continuing to remain sensitive to unique and valuable natural and scenic characteristics.

The open space of a Planned Unit Development is often considered the most valuable public benefit in using this type of development organization. By clustering the development in a few areas and setting other areas aside as open space there will be a savings by the developer and possibly the entity by decreasing the length of streets and other utilities, while maximizing densities. If all the buildings are in a few high density areas it is easier to get utilities to them. Densities of areas may be increased as Planned Unit Developments regulate the number of units by acre rather than by lot size. Planned Unit Development ordinances also allow for mixed district integration by combining compatible land uses. Having a Planned Unit Development ordinance can also contribute to infill in areas where development may not have happened through the existing underlying zoning districts.

### History of Planned Unit Developments

The first Planned Unit Developments were built in the 1940's. These developments permitted the development of a large tract of land as a complete neighborhood unit, having a range of dwelling types, the local

shopping, parks, playgrounds, schools, and other community facilities. Since the first Planned Unit Developments, communities began to integrate ordinances that regulated these Planned Unit Developments into their local ordinances.

#### Review of the NSMB Planned Unit Development Guidelines

The NSMB views Planned Unit Developments as a way to optimize the use of building sites and protect and enhance the natural amenities of those sites and secure open space for resident benefit. The NSMB sets the minimum standards for Planned Unit Developments along the North Shore.

The NSMB sets the minimum area for Planned Unit Developments at one acre for areas served by the public sewer system and 10 acres for areas served by decentralized systems or individual treatment systems. Also the NSMB requires that Planned Unit Developments have at least five units. These guidelines were decided upon to provide uniform standards to local officials and potential developers for the optimization of development opportunities and maximum environmental protection on any given development site.

The NSMB also provides design criteria for Planned Unit Developments to aid in evaluating, reviewing, and designing the developments. This criteria addresses density, impact, site development, open space, historic sites, and other items that make the planned unit developments more beneficial to the public.

Another important topic in the NSMP standards is the plan approval process for planned unit developments. These guidelines clarify several issues which should be addressed before final development including; project approval, ownership, environmental effects, etc. The entire NSMB Planned Unit Development standards are located in *Appendix A* in their entirety.

#### Planned Unit Development Flexibility Requests

Although the NSMP sets the minimum shoreland standards within the North Shore Management Zone, there may be flexibility. The NSMB realizes that there are different ways for local entities to regulate development which may be just as effective in meeting the intent of the NSMP. When an entity's new standards are effective in preserving the shoreland but do not technically meet the minimum standards, they can apply for flexibility. Since the 2004 Update, the NSMB has granted three flexibility requests, all relating to Planned Unit Developments.

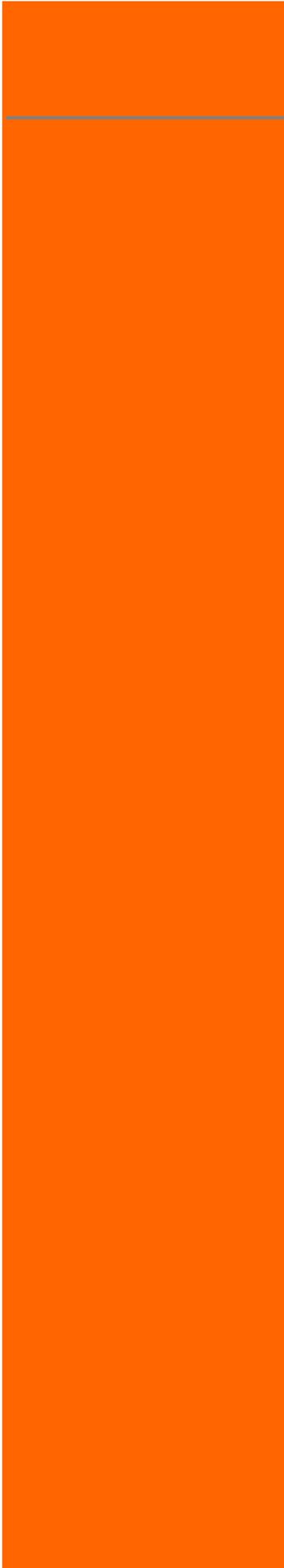
Cook County was granted two flexibility requests for Planned Unit Developments. Cook County requested a change in the minimum of 10 acres for a Planned Unit Development, down to 3 acres. The county felt that due to the trends in major resort conversions and the nature of those properties, allowing the property to be a Planned Unit Development will give the County more review and control of the new development, which will increase protection of the environment. The County also requested to use 3,000 square feet per acre (4,500 if conditions are met) rather than the NSMP standard of .5 units per acre. The county felt that due to extensive regulations contained in their subdivision ordinance for shoreland Planned Unit Developments that their density requirements are equally or more restrictive overall.

Lake County was also granted flexibility in 2006 for Planned Unit Development Regulation. Lake County sought flexibility by exempting single owner hotels, motels, and resorts in a planned unit development from the plan update regulations that manage densities by limiting numbers of units per acre. The county wanted to instead limit the structures by square footage (2,000 sq ft per acre). In 2008, Lake County was again granted flexibility from requiring the minimum area of ten acres for conversions of existing resorts, flexibility from requiring five minimum units for existing resorts to convert to Planned Unit Developments, and to begin regulating Planned Unit Developments by square footage in commercial zones.

#### Planned Unit Development Issues

The benefits that Planned Unit Developments provide are often overshadowed by further problems that arise. Open space is often the foremost public benefit to Planned Unit Developments, however many developments are designed and constructed with unmeaningful and unusable open space, which reduces the benefits of Planned Unit Developments. Another argument against Planned Unit Developments is the minimal protection for natural resource areas. Wetlands, rivers, and shoreland are often not protected and become simply obstacles for development.

Planned Unit Developments located close to lakes tend to have over clustering near the lakes. The most valuable property is near water bodies, which leads developers towards clustering all units on the shore, which creates density related runoff and other problems.



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Density bonuses are often what encourage developers to use the planned unit development process, because they can raise profits with more housing units. However there are many arguments against bonuses, including that planned unit developments are already allowing higher densities- why allow even further increased densities that will negatively affect the land and water.

There are several other issues with planned unit developments that continue to make them a tool that needs further reform, including; long term septic management, the review process, minimal conservation design features, practical standards for management after construction, the use of tiered development, and the use as a tool for encouraging development.

## SECTION 3: Innovative Planned Unit Development Techniques and Strategies

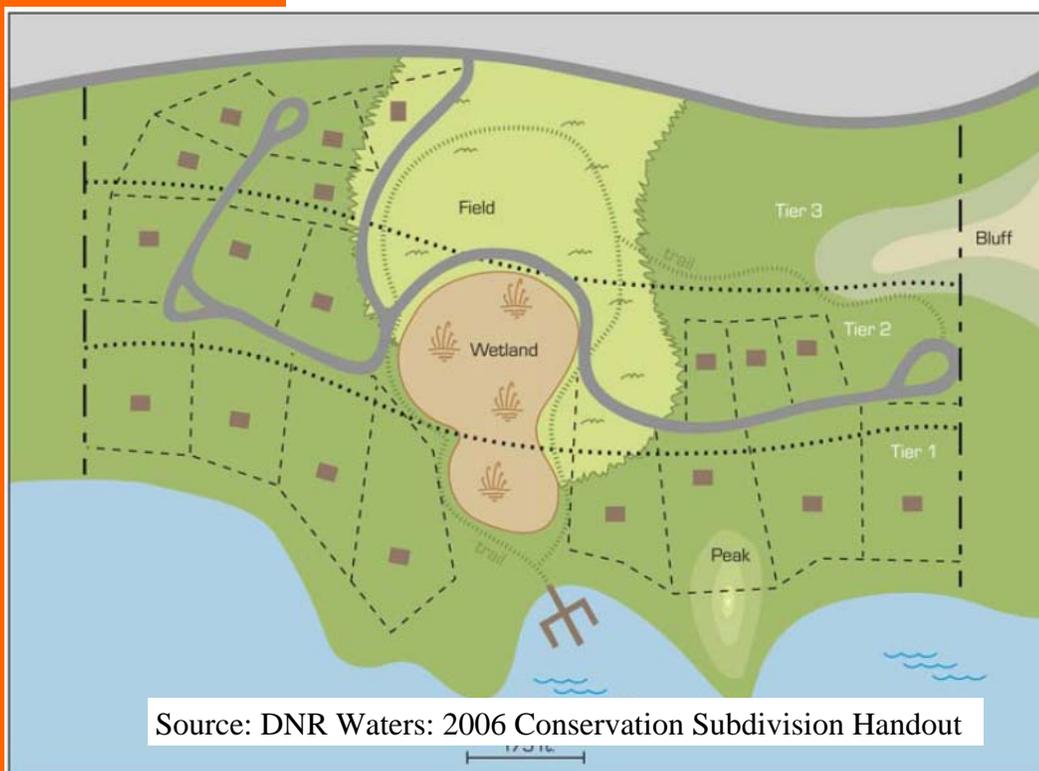
There are many entities, both locally and nationally, utilizing new innovative techniques in administering Planned Unit Developments. They are becoming an effective tool to make development more economically viable and allow development that contributes to the public benefit for residents living within the development or neighboring areas. Several key ordinances from around the country were reviewed in this process and several new techniques and ordinance language was identified. New techniques that could be beneficial to the communities of the North Shore are summarized below.

### Tiered Planned Unit Developments

Most local governments have specific ordinances for regulating Planned Unit Developments. However these ordinances often don't dictate how the structures should be spread out- beyond just stating an overall density. This can be problematic when a planned unit development next to Lake Superior has all the structures clustered on the lakeshore, increasing the amount of impervious surfaces and stormwater runoff. A growing trend is to utilize tiers in the planned unit developments. The tiers have different regulations, which ensure that the structures are not stacked on the lakeshore. This can be done in several ways and is included in the DNR Alternative Shoreland Standards. These standards have up to three tiers that are determined by their closeness to the lake shore. By limiting the

densities in the tiers closer to the lake, the entities have more control in how the lakeshores are being developed- even within a larger development.

This image at left illustrates the use of tiers using Tier 1, 2, and 3 and then having different standards and density numbers for each tier. On a



general development lake the DNR sets tier dimensions at:

- *1<sup>st</sup> Tier: 200 foot swath from lakeshore*
- *2<sup>nd</sup> Tier: 267 foot bordering Tier 1*
- *3<sup>rd</sup> Tier: remaining land*

The DNR set varying tier dimensions for different lake classifications including rural development and sensitively classified lakes.

#### Regulated By Size

Regulating Planned Unit Developments by size can help to alleviate problems that arise when entities try to put the same restrictions on small and large developments. Horry County, South Carolina created a planned development district (PDD) and requires PDDs to be built only in these areas. Horry County allows two types of planned developments major and minor:

*A “major” PDD may have several land uses that vary in density and intensity and is characterized by detailed phased development plans. A “major” PDD may be used for large tracts of land where master planning is beneficial to the property owner and the public.*

*A “minor” PDD is less than five acres and is generally established to permit uses in a particular location that if not properly regulated may result in adverse impacts on the surrounding properties. A minor PDD generally establishes additional buffering/screening requirements and limits proposed uses to insure that the future use of the site does not adversely impact the surrounding property.*

With this language the county allows for major PDDs to vary greatly in density and to have more flexibility in an area that is over five acres. The major PDDs in Horry County are generally used for more industrial type developments. The minor PDDs that are allowed are in areas less than five acres are more heavily regulated to reduce the impact on neighboring properties. The minor developments are likely to be located in already established neighborhoods and reducing the impact is important to the community.

The minor PDDs are used in areas, generally almost fully developed communities where only a small parcel of land is available. The increased buffers and other standards provide a tool for customized zoning, to make the developments fit into a community with minimal impact that would not have been able to meet the other standards. The PDD process allows for closer regulation and monitoring, and there is an emphasis on the larger

PDDs providing a quality public benefit; i.e. public park or an improved roadway system. This creates an effective development providing public benefits and flexibility to the developer. The same principles that are used in this ordinance language could be used along Lake Superior for decreasing structure visibility from the lake or from Highway 61.

#### Regulated By Purpose

Regulating Planned Unit Development can be achieved in a variety of ways that accomplish different objectives. Hilton Head, South Carolina is another example of having two types of Planned Unit Developments to serve a variety of purposes. One type of development includes a similar use and intensity as the underlying zoning. This Planned Unit Development would have an expedited path to approval because it is not a large change from regular development allowed in the area. This is a definite perk for developers, because often times a large drawback in Planned Unit Developments is the approval process. There would be no rezoning required, but would still need planning commission final approval.

Proposed Planned Unit Developments that had a mixed use and intensity regardless of underlying zoning, require a rezoning. Planned Unit Developments have been regulated by purpose in other ways like having a zoning designation that is solely for developing mobile home communities.

In Mendon, Vermont, planned developments are split into two different kinds; Planned Unit Developments and Planned Residential Developments:

*A planned unit development may include within its area any permitted or conditional residential uses in the district in which it is located, subject to the building height, coverage, and floor area requirements of these planned unit development provisions. A PRD may include only permitted or conditional residential uses.*

Other than these differences the ordinance has mostly the same standards for the two different development types. But by having the different types, it gives the entity a way to control both residential and commercial development.

#### Noncontiguous Developments

An interesting alternative that Hilton Head, South Carolina uses in their ordinance is the option for developments to be noncontiguous. The town tries to provide greater flexibility and meeting their own land management

goals, by allowing the PUD to be divided by roads or other easements. If the development accomplishes one or more of the following:

1. *To make better use of existing infrastructure;*
2. *To establish and link amenities including, but not limited to, open space, pedestrian and bike paths, and parking;*
3. *To provide solutions to drainage, parking, redevelopment, or shoreline erosion problems;*
4. *To allow protection in the Airport Hazard Overlay Zoning District; and*
5. *To enable protection of significant historic, cultural or natural resources.*

Hilton Head takes the position that flexibility will be granted if in return benefits will be added to help the community and environment that is near the development. Hilton Head is a newly formed town that hadn't had a lot of property organization in the past. Providing this tool for utilizing noncontiguous lands in development can help in areas that are land locked and with divided parcels that have single owners. A master plan is required to show that at least one of the above accomplishments is met.

#### Density Increase Regulations

Density increases (bonuses) are often considered a negative by public officials and neighboring properties, but if regulated correctly this can be an area that can really provide a positive attribute to developments and can negate the negative affects of increased density. Mendon, Vermont has language in their ordinance that allows increases up to 25 percent:

- A. *Landscaping (maximum increase nine percent). Streetscape, open spaces and plazas, use of existing landscape, pedestrian way treatment, and recreational areas.*
- B. *Siting (maximum increase of eight percent). Visual focal points, use of existing physical features, such as, topography, view, sun, wind orientation, circulation pattern, physical environment, clustering, variation in building setbacks and the underground installation of utilities.*
- C. *Design features (maximum increase of eight percent). Street sections, architectural styles, harmonious use of materials, parking areas broken by landscape features, varied use of house types.*

Mendon has a maximum zoning increase of 25 percent. The PUD and PRDs initially use the same zoning as the underlying zones until these increases are utilized. While density increases are often criticized, land

enhancements like these give a definite public benefit and can offset the negatives associated with density increases.

### Meaningful Open Space

There are a variety of techniques that exist to provide open space that is more usable and accessible, and not simply the leftover, undevelopable land. In many Planned Unit Developments open space is considered a variety of things like ball fields, yards between homes, and even golf courses. Many local entities are using new techniques to make sure Planned Unit Developments are providing open space that truly creates or preserves a public asset.

Also placing limitations on what open space can consist of is common. For example in Charleston County, South Carolina limiting the open space to containing only 40 percent of open water. Some ordinances also specified that wetlands of a specified size could not be included as open space:

*The total combined acreage of freshwater wetlands, detention ponds, and buffers to be used as open space shall not comprise more than forty percent (40%) of the open space requirement as stated in this Section.*

As one major goal of Planned Unit Developments is to preserve open space. Different entities have put restrictions on what the open space can consist of. Charleston County has even gone the way of requiring developments to preserve certain resources:

*Planned developments shall protect any resources determined significant by the Planning Director including, but not limited to: agricultural soils and active farmland, buffer areas between active farmland and existing/planned future non-farm development, wetlands, mature trees, land adjacent to preserved farmland on neighboring properties, scenic views, water access and shoreline buffers, and habitat of species designated as of federal, state and local concern.*

The amount of open space in various ordinances can be regulated in various ways. Where often there is a percentage of the acreage that is required to be open space, some entities go about regulating the open space differently and base the number on lot size or dwelling numbers. Some issues could arise as the Planning Director is given significant power and could be put into the position to make subjective decisions.

Davis, California has unique technique as to how they manage open space. For each square foot of land gained within a Planned Unit Development through a reduction of lot sizes below the minimum requirements, equal amounts of land shall be dedicated to the city and retained as open space for park or recreational use. All such lands dedicated shall meet the city's requirements. Right-of-ways for riding, hiking, and other types of trails and scenic ways may be dedicated to the city through a space exchange by a reduction in lot sizes. Also, elimination of the planting strip along boulevards on an equal per square foot exchange basis elsewhere in the open space. Public utility easements and other similar easements cannot be used for space exchange under the planned unit development approval.

#### Defining specific uses of open space

The City of Scottsdale, Arizona has distinct types of open spaces which include:

- *Passive natural open spaces that will preserve wildlife and view corridors and sensitive historic/archeological sites, and provide areas for low impact recreational activities such as hiking and horseback riding*
- *A system of contiguous open spaces, accessible from Scottsdale neighborhoods, that connect the desert, mountains, washes, canal systems*
- *Park space and facilities for active recreational activities such as softball, tennis, basketball, volleyball, swimming, and equestrian pursuits*

By following these guidelines, the city looks to ensure that the open space is usable by more than one group and that the open space is useful, beyond just undeveloped/leftover land.

#### Specified Regulations for Each Use

The Town of Stowe, Vermont has three general planned developments; Planned Residential Developments (PRDs), Agricultural Planned Residential Developments (AG-PRD), and Planned Unit Developments. Within both the PRD and AG-PRD the time sharing of units is not allowed. The AG-PRD is used to guarantee the continuance of agricultural land by enabling the owner to sell or develop some land as highly dense PRD, with the remaining farm land being taxed as at its current value. However the AG-PRD has other limitations including a minimum of 25 contiguous acres. Besides that the agriculture land that is preserved through these developments, open space that is non agricultural is also required in the

development. This provides an option for farmers to be able to keep the farms in developing areas in use.

Time sharing continues to be a popular activity, which can cause problems with year round residents along the North Shore. This is an alternative way to regulate time share units by having two types of Planned Unit Developments- one that allows timeshares and one that does not. Entities can then designate areas where these timeshares would have less impact on neighbors by placing restrictions on that type of Planned Unit Development.

In Stowe, the PUDs are also regulated a little differently. They have broken down the developments into very specified uses including; Resort PUD, Ski PUD, Industrial PUD, and Village PUD. Each type of PUD has different regulations that address issues that are unique to each use.

The resort PUD is used to allow a large resort, which must be a self contained complex, that has minimal impact and maximum buffers from neighbors, and with the purpose of providing housing, recreation, and other services for transient guests and the other allowed uses. These PUDs must be on 100 contiguous acres. The amount of open space in the Resort- PUD varies by the underlying zone.

The Ski-PUD is another development option in the Town of Stowe, which must be on a minimum of 1,000 contiguous acres. The Ski-PUD allows various changes in requirements because of the need for lifts and various equipment to be spread all over the land rather than in a clustered area. Often land for ski resorts is used, but not owned by the resort owner, instead it is owned by state or local governments and leased for the use of skiing.

*Acreage included in the lease agreement shall not be used to allocate total density for the Ski-PUD, unless such land was included in the 1,000+ acres of contiguous owner property and density was allocated per section 18.5 and said land was reserved as open space per section 18.5 prior to state or municipal ownership.*

When land for a ski resort is leased, and not owned, it cannot be factored into the overall density unless the land was reserved as open space prior to the government ownership. This ensures that higher densities are not granted and then the leased land sold or redistributed in another use, creating a larger development to have significantly less total area.

The Town of Stowe also has a Village PUD that enables flexibility but also provides a way for Stowe to carry out objectives of their Municipal Plan. The ordinance encourages businesses to use the best land in central sections for general business, maintain a more densely developed pattern of development in the immediate center of the Village, provide for compact residential development where water and sewer are available, and a wealth of other advantages. As a way to allow for more businesses and residents to locate in this area where higher densities are desired, many conditional uses are available. The conditional uses include:

*A. In the Residential Zone:*

- 1. One family, two family, and multiple family dwellings, with no minimum lot size per Dwelling Unit.*
- 2. The renting of rooms to not more than six (6) persons in a family Dwelling Unit by the residents thereof. From time to time and on an occasional basis throughout the year, these rooms may also be rented to hotels and motels located within the Stowe Village PUD, by the residents thereof.*

*B. In the Residential/Industrial/Business Zone [Amended 7/10/89]:*

- 1. All of the uses in the Residential Zone.*
- 2. Industrial Unit: an Industrial Unit is any building or locale where the following work or activities take place: Manufacturing; warehousing and enclosed storage; truck storage and shipping; printing; publishing; research and development laboratories; public utilities. Obnoxious or excessive noise, smoke, vibration, dust, glare, odors, electrical interference or heat shall not be generated that is detectable at the boundaries of each industrial building. Each Industrial Unit shall consist of a total of two thousand one hundred seventy-eight (2,178) square feet of interior building space, whether on one (1) floor or more than one (1) floor regardless of the number of industrial users occupying the said space. Exterior storage and accessory buildings or uses shall not be included in calculating the two thousand one hundred seventy-eight (2,178) square feet, but the exterior storage and accessory buildings shall not exceed one thousand (1,000) square feet per each Industrial Unit.*
- 3. All of the uses in the residential/business zone. (Added 7/10/89)*

*C. In the Residential/Business Zone:*

- 1. All of the uses in the Residential Zone.*
- 2. Business Units: a Business Unit is any building or part of a building or locale where commercial occupations, professions or trades are carried on, including stores, service establishments and offices of all kinds and types. Each store, service establishment, or office shall constitute one (1) Business Unit. Without limiting the generality of the foregoing, "Business Units" shall include: Theaters, bowling alleys,*

*tennis courts, ice rinks, billiard parlors, convention or art centers, and similar places of commercial amusements; profession and business offices and financial institutions; licensed and unlicensed restaurants, provided that all food and beverages are served to customers while seated at tables or counters inside the building or while seated at tables outside the building, but this shall not prohibit salad bars, buffets, ice cream shops or a catering business for the sale of food to be consumed elsewhere, (take-out windows or drive-up windows are specifically prohibited); public parks and playgrounds, community recreation buildings or centers, libraries, museums, municipal fire or police stations, telephone exchanges or maintenance buildings, clinics, convalescent homes or homes for the aged, private clubs, the principal activity of which is not carried on as a business; hospitals, schools, small shops making and selling crafts, commercial kennels or veterinary hospitals, places for making cider, syrup, jams and jellies, hotels and motels. A hotel or motel consists of Transient Units. A Transient Unit is a rentable accommodation whose maximum design capacity is four (4) people. A room with two (2) double beds equals one (1) Transient Unit; a suite with two (2) twin or single beds plus sofa bed equals one (1) Transient Unit; a suite with two (2) double beds plus sofa bed equals one and one-half (1-1/2) units. One (1) Transient Unit equals one-half (1/2) Business Unit. Convalescent homes, homes for the aged, hospitals, and school dormitories shall consist of Transient Units, and every eight (8) persons housed in these places shall constitute one (1) Business Unit. For example, a Convalescent Home with beds for twenty four (24) patients shall constitute three (3) Business Units.*

*3. Time shared or Interval Ownership Dwelling and/or Lodging Units. (Added 3/19/02)*

*4. Any use which the DRB finds to be similar to a use permitted under this Section in its effect upon the character of the vicinity, traffic patterns and flows and its effect on the value of neighboring properties.*

*5. Individual Business Units may be merged and/or divided after they are constructed, but the total number may never exceed the total number for which permits have been issued, and which are specified in the affidavit referred to in Section G of the Stowe Village PUD.*

*D. These conditional uses shall be subject to the conditions of Section 4.7.*

*E. The total number of Business Units, not including Transient Units, may not exceed two hundred twenty-seven thousand, eight hundred (227,800) square feet of interior space.*

Stowe's Planned Unit Developments could be used to encourage and discourage certain kinds of development in various areas to help create a town village or commercial center. This idea or variations of this model could be used on the North Shore where entities are working to develop commercial centers. There are so many varying activities along the entire North Shore that having varying specifications could be helpful in effectively regulating these different types of developments.

#### Reducing Impact on Neighbors

As described earlier, the impact of planned unit developments can be burdensome on the surrounding neighborhoods. Summit County, Ohio requires a Landscape Plan be completed and reviewed by the Planning Commission before the development is approved. This plan includes proposed trees, shrubs, ground covers and other landscaping elements. This plan also includes a performance bond that requires maintenance for dead and dying trees/shrubs to be removed. This is a way to encourage native plantings so that they will have the highest chance of survival. Also credits are received through existing tree preservation as well as continuing to provide shade.

*...minimum required shade tree quantities to be included in the Landscape Plan. Tree location, grouping and/or spacing shall be in accordance with the landscape plan reviewed by the local Township and approved by the Summit County Planning Commission. The Developer shall receive a 1:1 credit of existing trees that are with utilities, roadways, walkways, bikepaths, trails, easements, sight distances, street lights, and road right-of-ways.*

Summit County, through their subdivision regulations, puts a strong emphasis on minimizing the disturbance or impact that the subdivisions have with neighboring lands and environmental processes. This includes having regulations that require vision screening to minimize the land use conflicts. Types of buffers include; fencing, evergreens, berms, rocks, boulders, mounds, etc. These can be required by the planning commission if a need to shield neighboring properties, as well as, the subdivisions from the outside uses.

Another way Summit County chooses to eliminate the impacts from subdivisions to the neighboring areas is by regulating on-site lighting. Some of the restrictions include:

- (1) *External light fixtures including pole or wall mounted, and parking lot lighting shall be cut-off type fixtures of similar type and style.*

- (2) *All light fixtures chosen shall minimize glare and light trespass onto adjacent properties.*
- (3) *Accent lighting of buildings or landscaping shall be permitted from concealed cut-off type fixtures.*
- (4) *On site lighting standards shall be filed with the Final Plat.*

Summit County uses their regulations to make sure that subdivisions do not interrupt the 'flow of life' for the neighboring properties surrounding the new development areas.

#### Public benefits

Throughout this process of reviewing and analyzing the development ordinances, a trend was noticed in adding regulations that provide for further public benefit. These entities see a need for an increase in public benefit as a payoff for increasing densities and other things associated with planned unit developments that are seen as detriments to the community. Many techniques have already been mentioned including allowing density bonuses with a tradeoff of public benefits or even requiring a public benefit for certain developments like improving road infrastructure, etc.

#### Develop a Handbook and Site Planning Guide

Many entities have found it very useful to develop a Planned Unit Development guide to the regulations and process. These are distributed to developers and can help with making the process easier. Such guides can include the permitting process timelines, review of conformance of adopted plans, intent of designing to avoid environmental effects, and all of the necessary steps that can be expected. These guides can include detailed descriptions and thoroughly explain how the designs will be evaluated prior to approval.

The City of Mount Vernon, Washington does a thorough job in setting out the guidelines for Planned Unit Developments. Their handbook explains what the intent for every standard is; giving the developer not only the exact guideline but also what the city is hoping will come out of each guideline.

*Guideline: The road system must provide adequate access to building sites for residents, visitors, deliveries, and garbage collection.*

*Intent: The street system provides access to buildings, both from the street and side streets or alleys. The streetscape can be enhanced when residents and visitors are encouraged to enter buildings from the street, with entrances from parking areas being a complement to the*

*primary street entrance. Deliveries and garbage collection is facilitated through an adequate street network that provides access to all buildings. Garbage collection and deliveries might utilize parking area or secondary building access points instead of the street entry.*

This can clarify issues before they occur and help expedite the process of Planned Unit Developments. Not to mention it can save time and effort of the developers and entity officials.

#### Public Review Process

More and more, entities are choosing to engage the public earlier in the development process. While public input is generally only taken at the Public Hearings, involving them earlier can also help to address problems before development construction begins. The City of Mount Vernon, WA involves the public early on:

*The applicant must conduct a neighborhood meeting to review the project proposal with property owners within 500 feet of the subject property. Comments received from this meeting should be submitted with the PUD application. After the meeting, if residents require additional information or have questions, they can request an informal meeting with the development services director or the applicant.*

This is a totally separate meeting that gives neighbors and residents a chance to see what the development consists of and what to expect. At this time public input can be taken into account, before the public hearings.

#### Further Flexibility Options

In Hamburg Township, Michigan an open space community is the goal of the township. The standards that the township implements are to preserve permanent open space, allow for flexibility, ensure compatibility between neighborhoods, and ensure less sprawling form of development. In Hamburg, an open space community district was established as an overlay district that is applied to all single family residential districts. The regulations are intended to create small residential nodes, contrasting with open space or less intensive land uses.

The open space policies are generally applied to groupings of residential development, however commercial uses may be allowed within the open space communities of 50 acres or more.

Before being eligible for open space community (Planned Unit Development) the applicant must meet several requirements. The Planned Unit Development must have recognizable benefits to the community. This includes a benefit to the residents within the development, but also contributes something to the overall township. The township also breaks down the minimum development size into three categories. The minimum size for single family residential units is 5 acres. However if there are dwellings other than single family units, the minimum area is 25 acres, and to qualify for commercial uses a site design of at least 50 acres is required. Open space must total the same amount as the minimum allowed in the original zoning. Also the open space must be maintained in the manner approved. The proposed development must be under single ownership, and the contact must be completed as proposed.

An interesting way that the township deals with reducing lot size is requiring that all open space shall equal or exceed the total area by which all dwelling unit lots are reduced below 30,000 square feet. This creates more open space than the minimum of 40 percent open space for the development. There are several areas that are not allowed to be considered as open space including; street right of ways (ditches), submerged land areas (swamps/wetlands), anything used for commercial purposes (golf courses). The open space shall also remain "open" forever.

The majority of the standards for the underlying zones in Hamburg Township, are to remain in the Planned Unit Developments. However some flexibility from lot standards may be given as part of the approval process. However, for flexibility to be granted it must first be shown that it would result in a higher quality of development than otherwise possible through the original zoning.

#### Innovative Designs

The City of Chandler, Arizona has developed a Planned Area Development which can be administered by an overlay district or an independent zoning district. Basically this zoning designation encourages innovatively designed developments that involve both residential and non-residential uses.

The development is given flexibility in that it can be a large scale development with mixed uses that can function as its own individual community, or as a transitional area between dis-similar land uses. Where Planned Area Developments are deemed appropriate or necessary, traditional rigid zoning regulations are replaced by

performance conditions to fulfill the objectives of the community plan. Beyond this the community does not set strict guidelines that need to be followed for Planned Area Developments, but leaves them opened in hopes that developers are innovative and flexible.

#### Innovative Techniques Conclusion

There are limitless techniques that can be used to organize and successfully plan development. Many of these techniques that were summarized, could be used along the North Shore and may help to more sensitively plan for developing the shoreline of Lake Superior. Many of the techniques that were summarized may or may not be applicable to certain areas along the North Shore. Local entities should use the aspects of these ordinances that best fit their needs and goals for development.

## **SECTION 4: Minnesota Department of Natural Resources Alternative Shoreland Standards**

The Alternative Shoreland Standards began as part of the Clean Water Initiative pilot project in the north-central lakes area of Minnesota. These standards are voluntary tools for the local units of government to protect water quality. Entities are encouraged by the Department of Natural Resources (DNR) to review the standards and are encouraged to consider using some or all of the standards on shoreland in local ordinances. The standards focus on new development and construction along lakefront property. Basically, they provide new tools for local entities to address increasing growth and development that affects water quality and habitat.

The Alternative Shoreland Standards address many different issues including promoting conservation subdivisions over conventional subdivisions, using multiple shoreland lake classifications on a single lake, identifying sensitive area districts for lakeshore segments where development standards follow natural environment lake class standards, new lake classifications, improved planned unit development standards (i.e. residential densities for all Planned Unit Developments, increased setbacks, clustered docking, and no density bonuses), special resort standards, better water quality standards (i.e. improved stormwater runoff management, increased drain field setbacks, and higher shoreline vegetation standards), larger lot sizes, and several other tools for regulating lakeshore.

The Alternative Shoreland Standards go to great detail to make Planned Unit Development standards more effective. Resorts are addressed separately from Planned Unit Development, however much of the Planned Unit Development design criteria is used. Existing resorts may replace structures if stormwater management is addressed. Resort expansion is dependant upon impervious surface coverage changes. Resort flexibility is possible with unique economic and cultural value within the state.

The Alternative Shoreland Standards use tiers for dwelling site and density determination, with the possibility of three tiers. Residential densities are only allowed for Planned Unit Developments and density bonuses are not allowed. The suitable area and residential lot size determines the maximum units or sites allowed in each tier. Densities can be transferred to tiers further away from the shore. All developments must contain at least 3 contiguous acres of buildable area; at least 400 feet wide.

Touted as the biggest benefit for Planned Unit Developments, open space plays a large role in the Planned Unit Development process. In the Alternative Shoreland Standards at least 50 percent of a total project area must be permanent open space, with at least 75 percent of this area being uplands, and 33 percent of the area be contiguous. The standards limit open space by not using space between buildings, structure buffers, road right-of-ways, and impervious surfaces. Commercial facilities are not allowed, e.g. golf courses. The space must also be made available to the participants.

The Shore impact zones are allowed to be included as common open space, however in new developments and redevelopments, no impervious surfaces are allowed within the zone. However boat launches, stairways, lifts or landings are allowed. Structure setbacks vary depending on the class of the shoreline. They can range from 120 ft setback on general development lakes to a 200 ft setback on special protection areas.

The Alternative Shoreland Standards also set standards for conservation subdivisions. Riparian lots are given the same minimum restrictions as other developments. Nonriparian lots, however, use the same standards that apply to lot size and lot width, except that these numbers are maximum lot size instead of minimum standards. This allows the compact lots to meet the open space standards and to better facilitate protecting sensitive areas. If available the conservation subdivisions are required to connect to public water and sewer systems. If public utilities are not available the subdivision should dedicate areas for individual sewage treatment systems.

Impervious surface coverage is limited to 15 percent in the total project area and the first tier. The standards also require Planned Unit Developments to incorporate the use of narrower rights-of-way to help alleviate impervious surfaces. Erosion control relies heavily on the Pollution Control Agency stormwater best management practices.

Under these standards, the DNR sees Planned Unit Developments as a preferred type of development (along with conservation subdivisions) because of the principles used through the process. They provide greater public value and preserve resources better than regular subdivisions.

## **SECTION 5: Conservation Subdivisions**

A conservation subdivision ordinance is a tool that communities use to achieve the goals of a community and to accomplish objectives within a comprehensive plan. Using this tool has several benefits with some limitations, but overall several developmental opportunities are made available.

Conservation subdivisions can occur in a variety of places each of which poses its benefits. A conservation subdivision in a rural area will keep a general “rural feel” to the area and keep it from feeling overdeveloped which can be the case with other subdivisions in rural areas. Conservation subdivisions also provide a buffer between urban and rural areas by providing transitional undeveloped land between areas. Conservation subdivisions that are located in urban areas permanently mark areas as; undeveloped and can be very instrumental in preserving some open space for larger cities.

Conservation subdivision design is an alternative approach to subdividing land so that a large percentage of land is permanently protected. It is not entirely different from some of the original goals that are included in the planned unit development process. A few exceptions include conserving “quality” land and preserving natural resources through the process. The major premise behind this process is helping to create an interconnected network of conservation land. The approach is different than planned unit development and clustered development in that there are much higher open space ratios. Some other benefits of this kind of subdivision include conserving existing cultural and natural resources.

The major benefits of the open space in conservation subdivision include; creating a sense of community with the small lots and other shared places. The protection, in some cases restoration, of significant resources such as prime farmland, historic buildings, archaeological sites, mature woodlands, streams, ponds or wetlands, and scenic views. Preserving the rural character also has many benefits for the residents, especially increasing the land values.

Another unique aspect of conservation subdivisions is the ability to preserve farmland as farmland. Increases in housing needs often puts development pressure onto farming land, making it more profitable for the land owner to sell the land rather than continue farming. While conservation subdivisions will not totally protect farming, they can protect

small blocks of agricultural land and promote areas where agriculture and residential activities can exist together.

Conservation subdivisions have specific affects on shoreland and other environmentally friendly areas, which is directly relevant to the North Shore management Board. Clustering properties away from environmentally sensitive areas could be very beneficial to the North Shore of Lake Superior. Some of the issues that the NSMB addresses in the NSMP, setbacks, lot size, density, development concentrations, etc can all be addressed in part by conservation subdivisions. Conservation subdivisions can aid in protecting water quality through the maintenance of waterway buffers and better runoff management.

The most important premise behind conservation subdivisions is the order of the process. Varying from basic developments, conservation subdivision first looks at the areas that should be preserved. This can be a variety of things including; open fields, shoreland areas, historical buildings, forests, etc. The development is then planned around these areas of special interest.

#### Wisconsin Conservation Design Ordinance Development

The State of Wisconsin has been proactive in encouraging conservation subdivisions and went through a process to develop a model ordinance. This provides a template for the local governments cities, towns, and counties in developing an ordinance. Developing an ordinance for Conservation Design is important, as many Planned Unit Development ordinances do not cover important inclusions in conservation design. The model ordinance addresses the definitions of common open space, conservation easement, conservation subdivision, development envelopes, gross acreage, nonprofit conservation organization, and other items that are not normally addressed in Planned Unit Development ordinances. The approval process for conservation subdivisions should not vary greatly from planned unit developments or involve more work as this will become a disincentive for developers to choose this route.

The State of Wisconsin recommends the following steps prior to approving a conservation subdivision; initial conference, initial application, review of initial application, preliminary plat review, and final plat review. The important step in the process is the initial application, in which an inventory and mapping of existing resources is the initial task. Since conservation design was developed to preserve critical aspects of the environment, these areas are first identified then the housing structures are planned. The goals are then set, and the important environmental

aspects are set aside as open space, and the housing is worked in around these areas.

Wisconsin also set requirements for design and improvements that all conservation subdivisions must include. Some areas that were identified by the State that are unsuitable for any proposed use include;

1. *All areas mapped as Floodplain by the Federal Emergency Management Agency (FEMA), Wisconsin Department of Natural Resources, or other public or private entity.*
2. *All wetlands as defined in NR 103.02(5) of the Wisconsin Administrative Code, including a [75] foot buffer.*
3. *All areas within [75] feet of the ordinary high-water mark of navigable streams and lakes, as identified by Wisconsin Department of Natural Resources Water Management Specialists.*
4. *All areas having slopes greater than [12] percent.*
5. *Areas that are known to provide habitat for rare, threatened or endangered species.*
6. *Burial sites and Indian mounds.*
7. *Drainage ways that contain running water during spring runoff, during storm events or when it rains. A [25] foot buffer from the edge of the drainage way shall be included.*

Not every state has been proactive in setting up initial requirements like this to protect important land, it is important for local units of government to identify areas that should never be developed and state these in their ordinances, but allow the areas to be used as open space.

Density bonuses are allowed in Wisconsin only if one or more of the following criteria are met:

- a. *Creating an endowment where the principal would generate sufficient annual interest to cover the conservation easement holder's yearly costs (taxes, insurance, maintenance, enforcement, etc.).*
- b. *Providing for access by the general public to trails, parks, or other recreational facilities, excluding golf courses.*
- c. *Providing affordable housing, to include a minimum of [25] percent of all units that would be affordable to moderate-income households, as defined by the U.S. Department of Housing and Urban Development.*
- d. *Reusing historical buildings and structures, including those sites inventoried by the State Historical Society of Wisconsin. The*

*U.S. Secretary of the Interior's Standards for Rehabilitation of Historic Properties shall apply.*

Interestingly the density bonus criteria in the Wisconsin model does not necessarily address the changes that increased density will have, but the criteria adds other amenities to the area including; making the open land available to the public by adding necessary facilities, making a number of the homes affordable, and reusing historical buildings and structures. Wisconsin is encouraging density bonuses and in return a benefit for the greater public good is delivered.

In the model ordinance, Wisconsin also gives residential lot requirements that could be used. In the document however, it was noted that these lot requirements are only loose examples to be used as reference, so as not to restrict the ingenuity and flexibility, thereby deterring developers from using the process.

This model ordinance is a good resource when developing a conservation design model ordinance because it also breaks down the intent and reasoning behind each standard and how it is beneficial. The ordinance is a great place for a community to start and can be refined according to local needs and issues.

## **SECTION 6: Planned Unit Developments on the North Shore**

The North Shore of Lake Superior is a popular place for new developments. Currently there are several Planned Unit Developments that are within the North Shore Management Plan Boundary.

City of Two Harbors- 2  
City of Beaver Bay- 2  
City of Silver Bay- 1  
City of Grand Marais- 0  
Lakewood Township- 0  
Duluth Township- 0  
Town of Silver Creek- 1  
St. Louis County- 0  
Lake County- 5  
Cook County- n/a

Planned Unit Developments will likely continue to be popular on the North Shore in the upcoming years. Some of these techniques identified in this report will be beneficial to some communities and others will not. Entities are encouraged to look through the techniques and examples listed and integrate or create variations that will help in their particular situation.

Planned Unit Developments can be a tremendous tool to encourage and manage development. Developing thorough ordinances that address all the issues involved with development is important. Ordinances that are strict and inflexible restrict developments and can minimize potential benefits that Planned Unit Developments were intended for.



## APPENDIX A: NSMB PUD STANDARDS

### 3.3.1 Introduction

This section outlines guidelines intended to provide uniform criteria for the local units of government to review and approve Planned Unit Developments (PUD). This section starts with explaining the purpose of these guidelines, followed by the definition of minimum size of a PUD. It further discusses design criteria, sewage disposal and a plan approval process.

### 3.3.2 Purpose, Goal, Definition

#### Purpose:

The purpose of these guidelines is to provide uniform criteria for the local approval of planned unit developments within the North Shore Management Planning Area. The criteria allow for development densities greater than those provided for in this plan. These provisions apply to new planned unit developments, both commercial and residential, on undeveloped land, redevelopment of previously built sites, or conversions of existing buildings and land.

Planned unit developments must be designed and operated to be compatible and harmonized with their surroundings and located in compliance with the North Shore Management Plan. It is the intent of these guidelines to provide the North Shore units of government with the flexibility to review, modify and approve planned unit developments that follow the rules of common sense and practicality. The end result should be development that optimizes the use of building sites and protects and enhances the natural amenities of those sites.

#### Goal:

It is the goal of these guidelines to provide uniform standards to local officials and potential developers for the optimization of development opportunities and maximum environmental protection on any given planned unit development site.

#### Definition:

#### **Minimum Area for Planned Unit Development:**

- **Area Served by public sewer system:**                      **1 acre**

- **Area served by decentralized system or individual sewage treatment system:** **10 acres**

**Minimum number of Units:**

- **The minimum number of dwelling or transient units for a Planned Unit Development shall be five (5) while meeting other criteria contained in this document such as impervious surface, setbacks and wastewater needs.**

**3.3.3 Planned Unit Development Design Criteria**

The purpose of the following criteria is to provide guidance to citizens, local officials, and developers in evaluating, reviewing and designing planned unit developments. Many free local resources and services are available to assist in meeting these criteria. These include city and county zoning administrators, health officials, county extension, and soil and water conservation district personnel.

Many state and federal resources are also available. These include the Minnesota Department of Natural Resources, Pollution Control Agency, University of Minnesota Sea Grant Extension, Department of Transportation, Natural Resources Conservation Service, and the U.S. Army Corps of Engineers.

**1) Maximum Density:**

- **Unsewered Areas:** **0.5 units per acre**
- **Area served by decentralized waste water system:** **0.5 units per acre**
- **Incorporated Areas** **Density standards do not apply**

- **Bonus densities may be allowed in unsewered areas up to a maximum of one unit per acre based on criteria established by local units of government except for Lake Superior riparian areas outside incorporated areas and while considering habitat, pollution, view from the lake, accommodation for greater density at development nodes and shoreland alteration.**

**2) Structures, parking areas, and other facilities must be designed and placed to reduce visibility as viewed from Lake Superior, roads and adjacent shorelands by vegetation, topography, increased setbacks, color, or other means acceptable to the local unit of**

government, assuming summer, leaf-on conditions. The end result should be a development that is visually unobtrusive to the natural environment or surrounding properties.

3) Units, recreation facilities, and commercial uses must be clustered into one of more groups and located on suitable areas of the development site.

4) At least 50% of the development area must be dedicated as open space for the users and residents of the development. Road rights-of-way, land covered by road surfaces, parking areas, units, and structures area considered developed areas, units, and structures are considered developed areas and should not be included in the computation of minimum open space. This 50% open space dedication must be filed as a restriction against the property. At least 40% of the lot width at the shoreline setback line shall be left as open space. For other development in shoreland areas, 25% open space at the structure setback line shall be open space.

5) Open space areas, including topography, vegetation, and allowable uses must be preserved by the use of restrictive deed covenants, permanent easements, public dedication and acceptance, or other equally effective and permanent means.

6) Areas with physical characteristics unsuitable for development in their natural state, such as wetlands or areas containing significant historic sites shall be considered open space.

7) The development must also provide access to developed public roads.

8) The dimensional and density provisions of these guidelines do not apply to incorporated areas served by a public sewer system, but the purposes and intent of these PUD guidelines and policies must be met.

#### 3.3.4 Sewage Disposal Standards

1) On-site water supply and sewage treatment systems must be centralized and designed, installed and operated to meet or exceed applicable standards or regulations of the Minnesota Pollution control Agency (MPCA) or the local unit of government.

- 2) On-site sewage treatment systems must be located on the most suitable areas of the development.
- 3) Public water and sewage service must be used where available, as determined by the local unit of government.
- 4) The potential person capacity of a dwelling shall be used to determine the potential gallons generated which in turn shall dictate the appropriate system(s) that should be utilized by the proposed development. Local and state standards and regulations apply and should be consulted.
- 5) All new units must utilize water conserving plumbing fixtures and have water meters installed and accessible which serve all sewage generating appliances.
- 6) No occupancy of any unit or use of any commercial structure of any planned unit development shall be allowed until the approved sewage disposal system is in place and fully operational.

#### 3.3.5 Plan Approval

At the time of application, planning, and scheduled development the proposed facility shall be under unified control or ownership. The applicant will provide a detailed development plan to the local government, which must include a description of the following:

- 1) The property under consideration, including property boundaries, contours, on-site features, roads, lakes, rivers, wetlands, rock outcroppings, wooded areas, and other relevant features.**
- 2) Building elevations, location on site, proposed uses, number of units, and commercial operations.**
- 3) A concept statement describing the project.**
- 4) Parking areas and driveways for both residences and commercial activities, vehicle loading/unloading areas, proposed public road entrances, and projected traffic generation of the proposed development.**
- 5) Proposed phasing of the final development.**
- 6) Description of how the project will operate after completion.**
- 7) Nature of proposed ownership after completion.**

- 8) Proposed fire protection.**
- 9) Proposed homeowners association agreement, where applicable.**
- 10) Detailed landscape plan that shows existing vegetation, proposed alteration, new plantings and landscaping which is consistent with shoreland alteration guidelines.**
- 11) Recreational space location and use.**
- 12) Adequate water sources and water supply system plans.**
- 13) Proposed sewage treatment system plans.**
- 14) Storm water runoff plans (construction and operation).**
- 15) Erosion control plan for shoreline, where applicable.**
- 16) Erosion control plan for site (construction and operation ).**
- 17) Evidence of application for appropriate permits, state and federal.**
- 18) Evidence of availability of necessary public utilities.**
- 19) Proposed financial plans and necessary performance bonds or escrow agreements to protect the local unit of government's financial liability for site restoration, landscaping, erosion control measures, and sewage treatment systems.**

The proposed development plan will demonstrate that the development will conform with adjacent development and be screened from the lake, adjacent roads, and adjacent properties. Any other information deemed to be necessary by the local unit of government will be provided by the applicant. The local unit of government may require plan modifications or require special conditions or performance standards as a part of its approval of the project.



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