Urban density and character is softened by plant materials and natural treatment of rain water.
Vision

The University of Minnesota’s stewardship responsibilities as a public research institution include the pursuit of opportunities to maximize the value of its assets and increase the benefits to citizens through research, education and public engagement. The nearly 5,000-acre University of Minnesota Outreach, Research and Education (UMore) Park property offers a unique and unprecedented opportunity for the University to transport its land grant mission into the future. The property is an asset that could generate a wealth of academic, intellectual, economic and social benefits for the University, the local region, the state of Minnesota and the world. With the imprimatur of the University, the new community at UMore Park would be the lasting legacy that is refreshed over the generations through cutting-edge research and discovery.

Introduction to the Plan

The Concept Master Plan shown on the following page addresses the nearly 5,000-acre UMore Park property and its connectivity and synergistic relationships to the 2,822-acre Vermillion Highlands property to the south. The plan captures the intent for a diverse community with a range of single and multi-family dwellings, significant open space and natural amenities, neighborhood commercial and retail, office and light industrial space, recreation and relaxation, energy efficiencies and emphases on education, health and sustainability. The Design Workshop consultant team’s comprehensive approach of addressing environment, community, economics, and art is the planning framework by which the sustainability and legacy of the new community can be achieved.

The Concept Master Plan will provide a guide for development of the UMore Park property over the next 25 to 30 years (see the Concept Master Plan illustration on the following page). It will ensure that the vision of the University for the property is reflected in the eventual development of the property. It will serve as the basis for formal entitlement proceedings with local jurisdictions and governmental agencies. The Concept Master Plan will also assist the University in soliciting interest from development partners and in marketing the community to the greater region and potential buyers and renters.

The Concept Master Plan is essential in charting the core elements of a robust future community. It is also flexible and allows for change and unanticipated opportunities in future decades.

It is anticipated that new information will come to light over time and circumstances such as technology, partnership opportunities, and market conditions will require adjustment and adaptation of the plan.

Purpose of the Plan

The Concept Master Plan will combine elements of several initial planning concepts and features two main components:

» A master planned community with housing for as many as 30,000 people, neighborhood commercial, retail centers, civic buildings, and community amenities interspersed with man-made lakes and open space.

» An Eco-Industrial Park in which businesses collaborate with the community to reduce waste and pollution, share resources, provide opportunities for job creation and help achieve sustainable development.
The shades of color on the Vermillion Highlands indicate intensity of use, with lowest intensity being lightest uses of all kinds to preserve the environmental character of the land and allow for habitat restoration.
DISTINCTIVE ELEMENTS

The application of University research and innovation as well as the public information and education that can enrich the new community at UMore Park permeates the elements of the Concept Master Plan. Additionally, the land grant university tripartite mission of research, education and public engagement has driven the creation of this Concept Master Plan. More specifically, the Design Workshop consultant team has drawn from the work of the six University academic mission task forces (Distinctiveness through Academic Mission report, March 2008). The task forces provided detailed analyses and recommendations on ways that the University, in partnership with numerous organizations in the public and private sectors, can infuse unique benefits into the community and create models that can be applied elsewhere. This plan strives to exceed the qualities of conventional master planned communities, especially through University programming and collaborations, with particular attention paid to:

» **Sustainability.** The plan integrates environmental, socio-cultural and economic opportunities with a specific focus on innovation in education and lifelong learning, health and wellness, renewable energy, the natural environment, quality of life and regional economic development.

» **Energy.** The renewable resource goal for the community is to generate production of its own energy from sun, wind and biomass. Dwellings and other buildings would be constructed with materials and technologies that are energy efficient, energy producing and that conserve water.

» **Health and wellness.** With an emphasis on prevention, the opportunity to nurture, sustain and enhance human health and well-being can be addressed through a core focus on community, family and home – the bases of social connectedness.

» **Education and lifelong learning.** From early childhood through the older adult years, this learning community would offer its members an array of educational opportunities, all of which will reflect the commitment to educational excellence and equity for all.

» **Environmental stewardship.** The plan reflects the University’s vision to create a community over time that would simultaneously implement sustainable practices on the landscape, be a platform for ongoing University research in natural resources and ecology, and educate the public about the benefits that can be derived from a focus on environmental quality and sustainability.

» **Balance of housing, jobs, amenities, services and open space.** Consistent with University aspirations, the new community should be diverse in all ways – in age, gender, ethnicity, race, income, housing, employment and recreation opportunities and lifestyles. The creation of jobs and the commitment to open space help to ensure that residents can work and play in the community where they live.

» **Walkable and connected neighborhoods with innovations to reduce automobile dependency.** The academic mission focus on health and wellness inspires a plan where all ages can walk to schools, work and retail shops through safe pathways that take advantage of natural landscapes and vegetation.

» **Economic contributions.** The new community will contribute to regional economic development through unique community characteristics that are linked to University discovery, programming and lifelong learning as well as opportunities to locate light industry, businesses and service providers and support entrepreneurs.
The Concept Master Plan has evolved from earlier concept scenario plans shown in June 2008. Public forums, open houses and other public sessions reinforced the plan direction. The following is a summary of the significant shapers that have influenced the form of the community design.

**University Academic Mission**

The distinctiveness of the new community is defined by the quality research, education and public engagement activities of the University. Through all phases of planning and development University faculty and students can engage with current and future residents in the region to help ensure that research is a seamless “infrastructure” that benefits the community and contributes to quality of life. Research across disciplines will translate into learning opportunities, recreation, entertainment, cultural enrichment, job creation, economic development, energy efficiencies, and a healthy environment. The location of the University’s existing Rosemount Research and Outreach Center near the southern edge of the property will become the focal point for demonstration and education that fosters engagement and participation in research and its benefits to the community.

**Aggregate Resources**

The report “Geological Assessment: UMore Park” (September, 2008) provides information about the eventual shape the land may take following potential aggregate mining activities and informs the potential timing of development and mining. The aggregate resources data provides a preliminary understanding of where the lower lying areas of the property will be following mining and the locations in which water bodies may form as a result. These low-lying areas form the framework of the stormwater management system and the parks and open space system of the new community.

**Environmental Stewardship**

The University is a responsible landowner and steward of its valuable asset. Planning and future development take into account the University’s ongoing discussions with the federal government regarding the remnants of the former Gopher Ordnance Works, a smokeless gunpowder production facility that was established on a portion of the property during World War II. Ideally, ongoing discussions and a phased development of the property that spans several years would address the nearly 263,000 tons of concrete that remain on the property and any potential need for remediation at the site of the former War Department production facility.
Vermillion Highlands

The University has long recognized the 2,822-acre property on the southern border of its nearly 5,000-acres as an ecological jewel that should be preserved as it integrates into the fabric of the larger property and the surrounding region. Vermillion Highlands: A Research, Recreation and Wildlife Management Area is jointly managed by the University and the Minnesota Department of Natural Resources, in conjunction with Dakota County, as described by legislation in May 2006. Vermillion Highlands is a unique amenity to the new community on the UMore Park property. The Concept Master Plan creates trails and open space (approximately 1,000 acres of the nearly 5,000-acre UMore Park property) that flow northward from Vermillion Highlands. Cyclists and walkers can safely and conveniently connect to recreational areas in Vermillion Highlands from the new community. In addition, wildlife corridors extend northward from Vermillion Highlands to support native species.

Compact, Complete and Connected Community

The locations of schools, recreation and civic facilities, places of worship, retail, transit stops, and commercial, mixed-use, and higher-density development were carefully designed to be within walking distance of places of employment and residences (see the Walking Distance Plan on the following page). Small neighborhood commercial centers are also located to provide a gathering place for those living within walking distance. The spacing of transit stops particularly shaped the locations of the dense centers. The Concept Master Plan calls for a series of bus rapid transit (BRT) lines to connect the UMore Park property with other suburban destinations in the southeastern portion of the Twin Cities region. The plan calls for two transit stations for BRT along the northern edge of the UMore Park property, and its route would divert to the south of the Dakota County Technical College campus to accommodate student traffic from the campus as well as nearby high schools and civic facilities in the community. A proposed light rail line, running from the eastern neighborhood center of the UMore Park property through the western neighborhood center and west toward Minnesota Highway 3, would eventually connect the community with the proposed Robert Street corridor light rail line and a comprehensive mass transit system serving the Twin Cities region. The consultant team recommends three transit stations along the line, to be developed over time.

Roadways

The consultant team carefully explored intersection dynamics along County Roads 42 and 46 and Biscayne Avenue in the planning of future roads that would connect through the new community. Additionally, the Concept Master Plan reflects the orientation of the street pattern to optimize the potential for harnessing the sun for energy creation and thermal comfort.
Walking Distance Plan

Legend

- Single Family Residential (large lot)
- Single Family Residential (small lot)
- Single Family Residential (attached)
- Multi Family Residential
- Mixed-Use
- Commercial/Retail
- Commercial/Office
- Light Industrial/Office
- Civic/Institutional/Education
- Parks and Parkways
- Open Space
- Water
- Wetlands
- Forest

VERMILLION HIGHLANDS

- Highest Intensity Use
- Moderate Intensity Use
- Low Intensity Use

The shades of color on the Vermillion Highlands indicate intensity of use, with lowest intensity being lightest uses of all kinds to preserve the environmental character of the land and allow for habitat restoration.
PL\N DESIGN

Land Uses

The Concept Master Plan and its component land use plan provide for zoning categories and districts, neighborhoods and development patterns necessary to create a more vibrant community that will stand in contrast to typical suburban developments in the Twin Cities region. The large size of the property and lack of current development allow the University and its future development partner(s) to have the opportunity to create a land-use plan from the outset that considers the interaction of various neighborhoods and community centers, various programmatic elements, and the phasing of development to create a community of legacy for the Twin Cities region. The following section describes some unique or inventive land uses including an Eco-Industrial Park, an office and wellness complex, regional retail, lifelong learning facilities, regional recreation amenities, and energy infrastructure.

ECO-INDUSTRIAL PARK

An Eco-Industrial Park is described as a community “of manufacturing and service businesses that cooperate closely to improve their environmental and economic performance by reducing waste and increasing resource efficiency. Firms coordinate their activities to increase the efficient use of raw materials, reduce outputs of waste, conserve energy and water resources, and reduce transportation requirements. This resource efficiency translates into economic gains for the businesses while the local community benefits from the resulting improvements in its environment and from the creation of new jobs.”

The Eco-Industrial Park anchors the eastern end of the UMore Park property and provides facilities or potential locations for companies and industries that have interest in pursuing green or sustainable practices.

The proposed size of the Eco-Industrial Park shown in the Concept Master Plan is similar to those of facilities in comparable metropolitan areas around the country.

The plan locates the Eco-Industrial Park in the eastern portion of the property to place these light industrial and related uses close to U.S. 52 and along the primary wildlife corridor. Locating industrial uses close to U.S. 52 allows for ease in the shipment of goods to regional markets and would reduce the level of truck traffic passing through the heart of the new community. Industrial uses are most compatible with adjacent wildlife corridors because they do not involve the presence of domestic pets and residential lighting that often conflict with wildlife movement. This location also places industrial uses closer to office and retail uses. The Concept Master Plan suggests that the land designated as an Eco-Industrial Park and related light industrial uses should remain flexible to reflect market conditions during the development of the new community.

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OFFICE AND WELLNESS COMPLEX

To the north of the proposed Eco-Industrial Park, the Concept Master Plan locates an office and wellness complex at County Road 42 and Blaine Avenue. The land on either side of this intersection features rolling hills and extensive tree cover. Land uses such as corporate headquarters, professional office buildings, and health and wellness facilities usually integrate well with relatively hilly parcels, and other developments around the country have successfully introduced these uses and while preserving significant areas of woodland. A creative development integrating professional uses with the natural features of this portion of the property would create an attractive gateway to the new community from the north and east.

REGIONAL RETAIL

The plan integrates auto-oriented uses along the major thoroughfares serving the community, including County Road 42 and County Road 46. Larger format retail centers along these routes provide space for businesses including big-box retailers, discount outlets, supermarkets and service facilities that serve the greater area. In addition, these regional retail uses provide for improved transitions between land uses within the new community and adjacent land to the north of County Road 42.

Along County Road 42, between the Dakota County Technical College and the proposed professional office and wellness complex, an area of primarily big-box retail would generate significant commercial activity for the new community and serve the larger Dakota County market. Although the consultant team has not undertaken a detailed market investigation of potential retail uses on the property, the projected population of the new community and surrounding developments would likely justify a significant retail program at this location. The sale or lease of retail property along County Road 42 would produce significant revenues for the University and/or its development partner(s) and represent a logical first step in the development of sections of the property over time. Two full-service intersections along County Road 42 (at Blaine Avenue, and at another proposed arterial located to the west) would serve this retail area, providing significant traffic to stimulate commercial activity. Also, one of the three proposed light rail stops in the new community would serve this retail area. The recommended location for retail along County Road 42 includes relatively flat land well suited for parking areas serving big-box tenants.

The plan configures retail buildings to maximize visibility from County Road 42 while minimizing the size of parking lots separating the retail program from the highway. It is recommended that smaller in-line retail tenants line a grid of streets in the proposed retail district to separate the inventory of parking spaces into smaller areas and form a more attractive character and pedestrian scale. The size of the proposed retail complex is similar to the areas of big-box retail that helped to drive the initial development of master planned communities similar in size to this new community.

LIFELONG LEARNING

The University vision for the new community includes a unique focus on opportunities for people of all ages through lifelong learning – a special distinction that comes to the community and the region through its relationship to this first-tier public research institution. The Concept Master Plan incorporates the vision for a comprehensive learning community that addresses early childhood learning and development, preK-12 education, post-secondary education
and adult and continuing education, as described by the Academic Mission Task Force on Education. In addition to schools (and in partnership with the existing school district), the plan includes a learning center/library; public facilities that could provide venues for community classes, seminars and lectures sponsored by the University; and a new University Rosemount Research and Outreach Center location that would create new public information and public education opportunities. Further, the location of Dakota County Technical College adjacent to the northern boundary of the property offers the backdrop for academic collaborations that would enrich the community and provide opportunities for faculty members and students at the University and within the Minnesota State Colleges and Universities (MnSCU) system.

**REGIONAL RECREATION**

Dakota County Technical College and the City of Rosemount have begun a joint project to create sports fields adjacent to the college. The consultant team recommends building upon this idea and creating a recreation center sports complex. The complex would be ideally located adjacent to County Road 42 in order to capture traffic without bringing it through the community. Locating the complex adjacent to the Dakota County Technical College provides visibility for this center. It would also be accessible to residents of Rosemount who may not live within the UMore Park development. Linkages to recreational sports, wellness programs and other University activities could enrich the lives of children and adults.

**ENERGY INFRASTRUCTURE**

The Concept Master Plan considers multiple avenues for producing energy on-site. This includes an energy innovation center with a biomass gasification facility that has the potential to provide district heating to two of the three village centers using a minimum of piping and other infrastructure components. The University could leverage the proximity of the energy innovation center to Dakota County Technical College and County Road 42 by creating potential educational opportunities for University and Minnesota State Colleges and Universities (MnSCU) students concerning the development and maintenance of alternative energy systems.

The energy innovation center could also serve as a research and demonstration focal point, benefitting from University faculty involvement in a variety of renewable energy investigations. This location also allows for the transport of biomass fuels to the facility without routing truck traffic through the heart of the community. Additionally, ground source heat pumps could provide energy to different zones of the residential areas. Demonstration-size wind turbines within the open space surrounding the Eco-Industrial Park and other areas could be used for University research and education, and as a potential source of energy.

**SOFT INFRASTRUCTURE**

Although not visible on an image, it will be the “soft infrastructure” – the University-linked programming for lifelong learning, wellness, arts and culture and sustainability, for example – that supports the social fabric of the community. Relationships to University strengths in education, public health, design, technology, food and natural resources and business, to name but a few areas, relate directly to features of the Concept Master Plan – including public facilities, open space and landscaping, the wellness complex and the Eco-Industrial Park.
Districts

The Concept Master Plan for the new community at the UMore Park property organizes land uses to create six distinct districts and a series of neighborhoods that should develop their own sense of character and identity over 25 to 30 years (see the Districts Plan on the following page). The phasing of development would be determined in conjunction with the University and potential development partner(s), based on the market. Highlights of these districts are as follows:

» Sports fields and other public facilities for community education and enrichment create a focal point for recreation and public events that draw people from the community and the surrounding region.

» The Eco-Industrial Park district on the eastern portion of the property would serve as a primary employment center for the new community and for the larger region. It would represent a significant center of commerce and innovation and help establish a brand identity for the community.

» The three mixed-use, transit-oriented neighborhood centers along the light-rail corridor would serve as nodes for neighborhood activity.

» The presence of significant bodies of water in the western and eastern portions of the community would create a number of “lakes districts” incorporating residential and open space uses.

» The transition area between the UMore Park property and the Vermillion Highlands property to the south would represent a district for local foods demonstrations and research drawing on University expertise and offering community benefits. A new University Rosemount Research and Outreach Center facility would engage residents in learning activities and programming from across the University.

» All residential neighborhoods would be oriented around schools, mixed-use commercial centers, parks and open spaces.
Plan outlining the six districts as well as open space corridors. Open space includes parks, gardens, walking and bike trails and wildlife corridors that flow from the Vermillion Highlands property.
District I

District I will serve as a hallmark of this sustainable community. Mixed-use, mixed income housing will adjoin retail uses, cultural assets, educational facilities, an energy innovation center, the Eco-Industrial Park and the gateway to a parkway system. Neighborhood parks and greens would connect tree-lined streets into the parkway system that circulates throughout the community. Regional recreational amenities and educational facilities would anchor this first phase of development.

ESSENTIAL ELEMENTS

» Wide spectrum of uses including civic, commercial, educational, residential, eco-industrial, and recreational

» “Front door” of the sustainable community along County Road 42

» At the nexus of an expansive trail network and parkway system

» Full range of housing types

» Transit-oriented eastern village

» Walkable streets
District II

District II would serve as the mixed-use employment core of the new community, incorporating the Eco-Industrial Park, larger scale employers, and a commercial center along 160th Street. Plazas, malls, and courts would create internal public spaces and connect to the greenway system. District II’s proximity to the wildlife habitat corridor contributes to its less formal landscape character and unique edges. Mixed-use streets, varied building types, and residential styles animate the life of the district and provide opportunities for supporting retail uses to thrive. The attraction of major employers to the new community contributes to the intellectual development of emerging ideas and trends in sustainability and increases the possibilities for residents to work in the same community in which they live.

ESSENTIAL ELEMENTS

» Employment center of the new community
» Diverse architecture in several building types
» Transit oriented
» Walkable streets
» Informal landscape creates urban green network
» Edges relate to the regional open space network, including the wildlife habitat corridor

Habitat corridor illustration
District III

District III would serve as the garden suburb to the northwest, near one of the larger lakes in the community. Its amenity derives from its proximity to the lake and recreation amenities on the perimeter, and its character is found in the spaces within. An intimate neighborhood retail street runs parallel to the lake edge, accommodating destination retail, shops and restaurants. A variety of spaces link the retail activity centers back to the water’s edge through residential neighborhoods. Blocks and streets respond to topography and natural edges.

DISTRICT III PROFILE

ESSENTIAL ELEMENTS

» Organic neighborhoods in a primarily lake-oriented setting

» Interconnected system of parks, parkways, community facilities, and institutions

» Primarily single-family homes on several different lot types

» Small neighborhood retail centers are embedded in the neighborhood fabric and linked to the water and each other through a sequence of civic spaces

District III illustration

Lake edge illustration
District IV

District IV would provide the urban, civic, and entertainment core of the new community. A clear network of public spaces connect to the regional open space framework allowing users to circulate throughout the district and beyond. The community’s regional amenities include the lakes, proximity to other districts, and civic and educational facilities. The streets are vibrant around the clock with commercial and entertainment activity, and shops and eateries spill out into the public spaces. District VI’s neighborhoods are urban and provide diversity in building types.

**ESSENTIAL ELEMENTS**

- Urban, civic, and commercial core
- Vibrant nightlife and entertainment hub
- Neighborhoods centered around parks and institutions
- Formal landscape creates urban green network
- Diverse building types and densities
- Walkable streets that connect to other districts and to trail heads and inter-modal centers.

*Urban core illustration*

*School and neighborhood illustration*
District V

District V encompasses neighborhoods with a distinctly different feel than the other districts. District V is the ‘small town,’ slightly more independent from the central areas of the community both in function and location. The main commercial street leads directly to a marina and park at the lake’s edge, creating a strong visual axis to the water and its recreational and civic amenities. The neighborhood-scale retail can help foster a sense of community and strengthen the social fabric. The neighborhood blocks create a fabric of primarily single-family homes, while details begin to speak to a less formal and relaxed style of life.

ESSENTIAL ELEMENTS

» Directly oriented to the lake and waterfront life
» Marina is the focal point of a main commercial street and serves as the civic center for the district
» Urban fabric tends to be looser with larger lots and deeper setbacks

Marina and neighborhood illustration
District VI

District VI’s neighborhoods serve as the transition zones between the central community and Vermillion Highlands. The edges of the district are defined to the north by the realigned and expanded County Road 46 and less so in the south as it decreases in density of residences towards Vermillion Highlands. Recreational and educational amenities central to District VI capitalize on the proximity to Vermillion Highlands and the community-wide parkway system.

**ESSENTIAL ELEMENTS**

» Primarily residential with small neighborhood retail centers

» Amenities built around proximity to natural areas of Vermilion Highlands

» Low-scaled, walkable streets connecting to regional trail networks

» Transition zone between the community and Vermillion Highlands

» The new University Rosemount Research and Outreach Center facility is a hub for learning and public engagement around all aspects of University research that permeates the community and adds value to the lives of residents and others.

» Rural southern edge

*Rural* southern boundary illustration
Commercial Centers

Two commercial centers including more intense retail and civic uses and higher densities are located along high volume travel corridors including the future light rail and bus rapid transit corridor and County Road 44 (see the Centers Plan on the following page). Commercial centers would serve multiple surrounding neighborhoods and contain a greater variety and intensity of office and retail uses as compared to neighborhood centers. This strategy places the greatest number of residents and workers within walking distance of transit and commercial centers.

Villages

Residential uses in village centers would include higher density, multi-story properties with 30 or more dwelling units per acre. The likelihood of extending mass transit to the community would dictate the ultimate density of the village centers. While smaller neighborhood parks and parks associated with elementary schools would service neighborhood centers, larger parks of community scale would serve village centers. In terms of educational planning, village centers should include a middle school and three or four associated elementary schools.

EAST VILLAGE

East Village is located centrally to serve the eastern portions of the new community, including the big-box retail areas, the professional office and wellness complex, the existing Dakota County Technical College, and the Eco-Industrial Park. All four of these nearby land uses will be located within walking distance of a transit station. The Concept Master Plan outlines the development of a mixed-use district adjacent to the transit station, including buildings featuring residential housing units above office or retail space located at street level.

This mixed-use center would be an ideal location for affordable housing units serving the new community including low-cost apartments and homes. The mixed-use district would front a large community park. A small “transit mall” forms the central spine of the East Village and connects District I to major open space systems in the area. This arrangement provides residents the ability to move throughout the park system of trails and paths without having to cross major roads.

VILLAGE CENTER

The Village Center borders the west side of the central open space corridor in the new community. It features a major open space amenity as well as the transit stops along the light rail or bus rapid transit corridor. Residents within the Village Center would enjoy access to the community’s open space system and to the network of paths and trails without having to cross major roadways. Furthermore, a park is located within a short walking distance of a major portion of the residential development. The proposed high school site for the community lies just to the north of this Village Center, within a short walking distance of transit. The high school’s location within walking distance of Dakota County Technical College and the regional recreation center and sports complex could further facilitate linkages between the high school and Dakota County Technical College and offer students easy access to sporting and recreational activities. In addition, given the high school’s location the community may also use the auditorium of the school as a performing arts center. University performances and programming in theater, dance, art and culture would incorporate entertainment and lifelong learning into the community. Evening and weekend concerts and performances at the high school would add to the vitality of the Village Center.
Centers Plan

The shades of color on the Vermillion Highlands indicate intensity of use, with lowest intensity being lightest uses of all kinds to preserve the environmental character of the land and allow for habitat restoration.

Thirteen centers concentrate the density of development and provide services, jobs, and civic uses within walking distance of less dense residential areas.
WEST VILLAGE

The third village center borders the large lake on the western portion of the property. Its location is determined by the proximity to the lake and the desired spacing of light rail or bus rapid transit stations with the community. In addition, West Village also borders a major stand of existing trees, which the plan recommends to be preserved and designed to serve as a nature park. West Village also borders the major community park that will surround the lake. As a result a marina facility with lakeshore restaurants will form the focus of this village.

Neighborhood Centers

Eight neighborhood centers serve as focal points for commercial and civic activity and anchor large residential areas. The Concept Master Plan locates these centers at the intersections of collector roads and at the intersections of selected arterial roadways (County Roads 42 and 46) and collector roadways. Retail uses within neighborhood centers depend on traffic volumes to survive, and as a result the neighborhood centers along County Roads 42 and 46 include full intersections with these arterials to provide enhanced access. Wherever possible, the Concept Master Plan locates neighborhood centers adjacent to water bodies and open spaces, including wetlands and parks, to allow residents easy access to parks and trails without crossing major roadways. The neighborhood centers represent the focal points for elementary schools, neighborhood-scale parks, and convenient retail amenities. Neighborhoods include a mix of townhomes, rowhouses, apartments, and other higher-density residential products at densities of up to 24 dwelling units per acre. Areas of less dense residential uses flow outward from the neighborhood centers, toward the outer edges of the property. They serve as areas of transition from higher density zones to nearby open space areas, including Vermillion Highlands.

Circulation Plan

The recommended circulation plan for the community includes routes for vehicular, bicycle, equestrian and pedestrian traffic as well as mass transit in and around the new community (see the Circulation Plan on the following page). Vehicular circulation includes a hierarchy of roadways, including primary arterials such as County Road 42 and County Road 46, secondary arterials such as Blaine and Biscayne Avenues, and a series of collectors, parkways and streets for commercial areas and residential districts. The plan provides for the re-routing of County Road 46 through the community to provide viewing corridors to open space amenities and the neighborhood centers. Arterials, in the form of divided parkways with planted medians, would connect different districts within the community. Parkways, collector streets, and commercial and local residential streets would include on-street parking to meet parking demands and create safer street environments for pedestrians and bicyclists. The street widths of commercial and residential streets would be reduced to minimum standards in order to calm traffic and reduce the footprint of impermeable surfaces in the community.

A light rail corridor would eventually provide mass transit circulation from County Road 46 through the neighborhood centers, terminating at the Eco-Industrial Park on the eastern edge of the community. In addition to light rail transit, the plan anticipates incorporation of a circulator shuttle system to connect community residents and employees to the county’s proposed bus rapid transit routes along County Road 42 that terminates at U.S. 52.
Circulation Plan

Vermillion Highlands
A Research, Recreation and Wildlife Management Area

Legend
- Single Family Residential (large lot)
- Single Family Residential (small lot)
- Single Family Residential (attached)
- Multi Family Residential
- Mixed-Use
- Commercial/Retail
- Commercial/Office
- Light Industrial/Office
- Civic/Institutional/Education
- Parks and Parkways
- Open Space
- Water
- Wetlands
- Forest
- Transit Station
- Transit Line/BRT Line
- Bike/Pedestrian
- Proposed Roads
  (Minor Arterial, Collector, Parkway)
- BRT (Bus Rapid Transit) Stop

VERMILLION HIGHLANDS
- Highest Intensity Use
- Moderate Intensity Use
- Low Intensity Use

*The shades of color on the Vermillion Highlands indicate intensity of use, with lowest intensity being lightest uses of all kinds to preserve the environmental character of the land and allow for habitat restoration.
Bicycle routes and lanes would connect the street system and parks, parkways, and open space corridors, offering an alternative to automobile use. Each transit station would include bike parking facilities to encourage bicycle use within the community. The Concept Master Plan provides for pedestrian connectivity through the provision of sidewalks on all streets, and multi-use pedestrian trails within all parks and open spaces. The consultant team recommends that a continuous system of sidewalks be constructed throughout the community and that the number of curb cuts be minimized to reduce both interruptions to pedestrian movements and hazards for walkers and runners.

The University of Minnesota’s vision for a new community is unique, given the size and location of its property and the foundational emphasis on infusing University research, education and public engagement into the fabric of the community. The University envisions that technology and facilities will spark lifelong learning. Open space and programming will help to ensure active and healthy living. The application of cutting-edge research will contribute to economical and environmentally sensitive energy production and use.

The Design Workshop consultant team has strived to bring the vision to reality through the Concept Master Plan. Our work has grounded elements of neighborhoods, village centers, connectivity, transportation and transit, employment opportunities and open space in the University’s strengths in research, education and public engagement.

This plan allows flexibility over the anticipated 25 to 30 years of development and growth. It will accommodate market forces and consumer preferences over time. It also sets the stage for achieving the highest standards for community life and providing a model that can be replicated elsewhere in the United States and the world.

The Concept Master Plan is just the beginning of a long and promising pathway to a new University-founded sustainable community.

CONCLUSION