Master Planning Study

Hodgson Road & CR J



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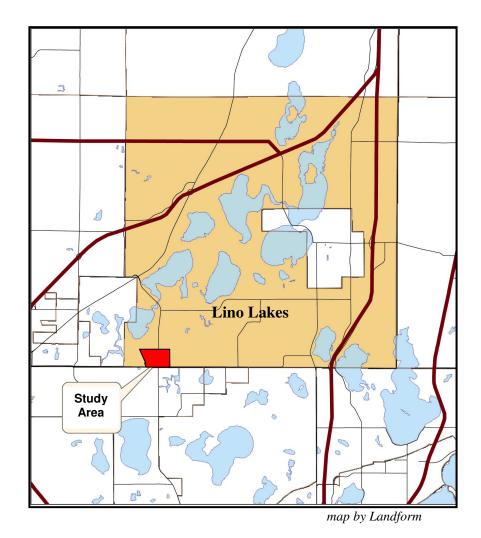
Approved By Lino Lakes City Council February 12, 2007

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BACKGROUND

In August of 2004, the City of Lino Lakes began a master planning process for the area surrounding the intersection of Hodgson Road (CSAH 49) and County Road J (Ash Street). The intersection of Hodgson Road and CR J is an important gateway into Lino Lakes, but the current appearance of this location needs improvement. While this has been known for some time, landowner interest in redeveloping the restaurant site on the northwest corner catalyzed the master planning project and focused attention on the area.



The intersection area is dominated by parking lots and automobiles. The restaurant/bar on the northwest corner is boarded up, and some other properties are vacant. In order to address these deficiencies, redevelopment of some parcels is as important as developing unused or underused properties. However, a number of shortcomings must be corrected in order to support development.

The 49/CR J intersection functions poorly at peak periods. Transportation studies show that traffic will continue to increase. Very little traffic at this intersection is generated by business in the area so even if new development does not occur on land at the intersection, the number of vehicles going through the intersection will increase. Planning for redeveloping the area must consider the fact that Hodgson and CR J are arterial roads serving a greater geographical area.



Northwest corner of Hodgson/CR J intersection, viewed from the north



Northwest corner of Hodgson/CR J intersection



Northeast corner of Hodgson/CR J intersection

photos by Landform

The 49/J study area lacks sufficient internal roadways, and access to existing arterial and collector roads is unplanned overall, with individual driveways serving individual properties. Any business expansion will require extensive site planning including safe access to Hodgson and CR J. An overall road and access plan is needed to accommodate traffic movement on and access to these arterial roads.

There is no public water or sanitary sewer service currently existing in most of the study area. Utilities exist to the north, west, east, and in Shoreview to the south of the 49/J study area. However, the City has not completed a detailed analysis of how to serve this area with utilities. Existing homes and businesses have onsite wells and individual wastewater treatment systems, which are not sufficient to support contemporary development. Redevelopment or expansion of the existing businesses will require municipal utilities.

Infrastructure planning must include the City of Shoreview to the south of CR J. Because CR J forms the county boundary, and because both CR J and Hodgson are county roads, both Anoka and Ramsey Counties are important planning partners as well.

In addition to these infrastructure issues, development planning for the area should include gateway elements. The visual appearance of this entrance to Lino Lakes should be considered in the overall planning. At the outset of the project, the list of objectives included design of the gateway elements for this entrance to the community. The gateway idea has expanded to become a project of its own, to address other gateways and possibly the design of a consistent gateway theme.

It is very important to note that there are several viable commercial businesses within the study area. One of the challenges of the study is to plan both for current and future use of land in the area. To be clear, this planning study does not advocate or analyze the relocation of existing businesses. However, planning must acknowledge that redevelopment of existing business sites is a strong possibility. Either way, there are a number of issues to be resolved for the existing businesses as well as for future development or redevelopment.

Master Plan Study Objectives

- Identify appropriate land uses (present & future) in study area
- Plan for road improvements to provide good access and circulation
- Identify routing & phasing solutions for utilities to facilitate future development
- Plan for redevelopment while recognizing existing businesses

These study objectives are closely interrelated. Though they are listed separately, no single objective can be accomplished without the others.

Study Area

The study area includes approximately 60 acres of land in the southwest part of Lino Lakes. Starting at CR J (Ash St.) on the south, the study area runs ¼ mile north along Hodgson Rd. (CSAH 49). On the west side of Hodgson, the study area includes a triangular area of about 20 acres. On the east side of Hodgson, the study area includes 40 acres extending to Ware Road. The study originally included only 20 acres east of Hodgson, but considering the access and utility needs for the area, the effort was extended to include land all the way to Ware Road.



Roads

Hodgson Road (CSAH 49) is an arterial road that runs from Lino Lakes south into central St. Paul. County Road J, (CSAH 1, CSAH 32 or Ash Street), is an arterial running across much of Anoka County, from State Trunk Highway 65 on the west to I-35E on the east. Co. Rd. J forms the boundary between Lino Lakes and Shoreview. It also is the boundary of Anoka County and Ramsey County, which share responsibilities for CR J.

Existing Land Uses

The study area includes a variety of residential and commercial uses. A garden center, used auto lot, and auto repair business line the east side of Hodgson Rd. The auto sales business owner has acquired a five-acre lot immediately east of the existing sales lot. On the periphery of the study area, several single family homes exist on large, rural lots without water or sanitary sewer services. About 600 feet to the north is the new neighborhood of Ravens Hollow.

A closed bar/restaurant sits on the northwest corner of Hodgson Road and CRJ. To the north of that is an insurance office. Next is a liquor store with an apartment on the second floor. Further north is a 17-acre parcel running for 1000 feet up the west side of Hodgson. This parcel includes a house and some out buildings.

Several existing neighborhoods border the study area: Woodridge Estates and Blomquist Addition to the west, Rohavic Oaks to the north, and homes south of CR J in Shoreview.

Discussions with property owners at a March 2005 open house and throughout 2005 were a vital part of the study. Some want to develop their site, some want to continue the existing use for now, but have plans for future development. Others have no plan to change their use of their site.

The figure below shows the existing uses.



Comprehensive Plan Proposed Land Use Map and Zoning

Comprehensive Plan Proposed Land Use Map

The 2002 Lino Lakes Comprehensive Plan guides the study area for Mixed Use, Medium Density Residential, and Commercial. The following passages from the Comprehensive Plan describe the intent of these land use categories.

The Mixed Use designation is intended to accommodate development that includes a variety of land uses. This could be a development that integrates uses in the same building, such as residential units above commercial space. It also might include different uses in separate locations as elements of a larger development, as part of a master plan.

page 97, as amended by Resolution 05-153

The medium and high density residential land uses have been proposed in close proximity to the City's commercial locations as a means of providing convenient access to commercial goods and services, nearby market support for the commercial businesses, and reduced traffic impacts between these land uses. The Comprehensive Plan stresses the integration of commercial and medium density residential land uses.

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The intent of the Comprehensive Plan is to identify commercial locations within the City that will provide attractive shopping environments and convenient access to retail goods and services for community residents.

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The study area is entirely within the Stage 1 (pre-2010) growth area. The "Staged Growth Area Rules" in Comprehensive Plan include:

- 1. Development through year 2010 shall be confined to the 2010 staged growth area. The City will annually evaluate community growth prior to expanding into the 2020 staged growth area.
- 2. Excess acreage exists within the 2010 and 2020 growth areas. Properties within a staged growth area without designated MUSA have no vested right to MUSA. These lands may pursue a MUSA allocation with a City approved development application.

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The Metropolitan Urban Service Area, or MUSA, is the area within which the City can extend sanitary sewer service. The western 2/3 of the study area is within the existing MUSA. The eastern 20 acres, on the west side of Ware Road is outside the existing MUSA.

The Comprehensive Plan creates seven planning districts across the city that include recommendations for the specified areas. The project site is within Planning District 4, which includes the following relevant recommendations:

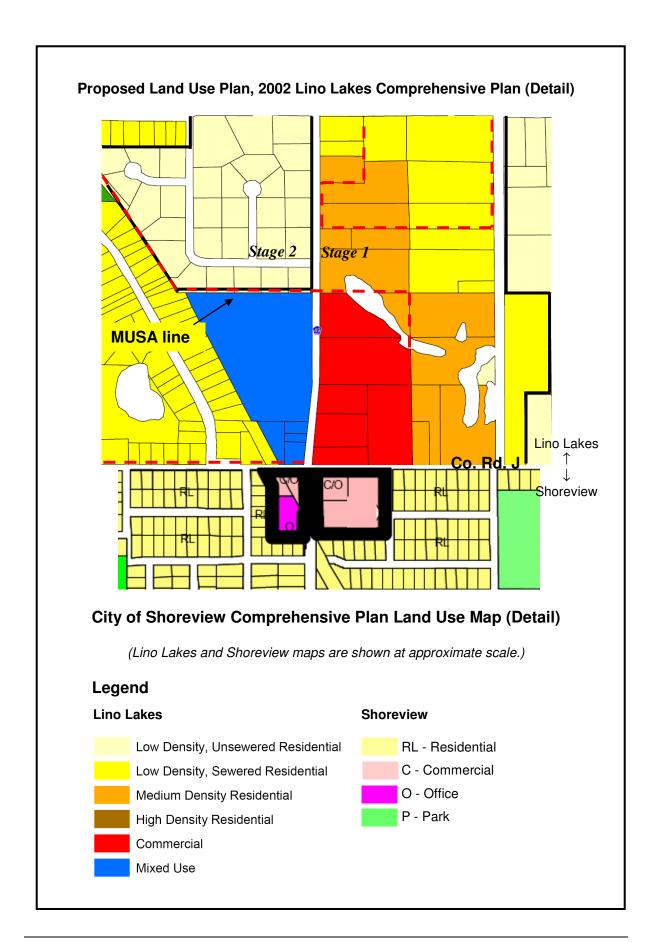
- 4. Unsewered residential neighborhoods shall be maintained as long term land uses. Extension of sanitary sewer into unsewered subdivisions will occur only at the request of the private property owners.
- 7. When considering new development, the ability of the street system to accommodate additional traffic will be evaluated.
- 10. The commercial land uses within District 4 are located near major street intersections. The commercial locations are oriented to serving the nearby neighborhoods. In this respect, the City will regulate future commercial development to control land use intensity and establish both site and building designs that will be compatible with the surrounding residential uses. Attention will be given to site design, building architecture, green space, setbacks, access, signage and lighting to create attractive commercial locations.

- 12. The City will work to establish a hierarchy of streets to improve traffic circulation throughout District 4. Street planning efforts will include:
 - b. Maintain Hodgson Road and County Road J as "A" minor arterial streets. With this functional classification, the right-of-way width and roadway design should promote traffic movement and limit direct site access.
 - d. Encourage local street connections between neighborhoods.
- 13. Implement the City Park Plan to locate and develop a comprehensive park and trail system within District 4.

Zoning

The zoning of the study area includes General Business and Rural. The General Business includes a wide variety of businesses including retail, service, and semi-industrial uses. They may contain businesses which tend to serve other business and industry as well as those catering to shoppers' needs. The Rural zone includes typical agricultural uses, but also in intended to guide development along an orderly design. That is, the Rural zone often serves as a "holding" zone until urbanization occurs.

South of CR J, in the City of Shoreview, land is guided and zoned for single family residential use except for the commercial land at the corners of Hodgson and CR J. The following figures show future land use and zoning from the comprehensive plans and zoning maps of both Lino Lakes and Shoreview.

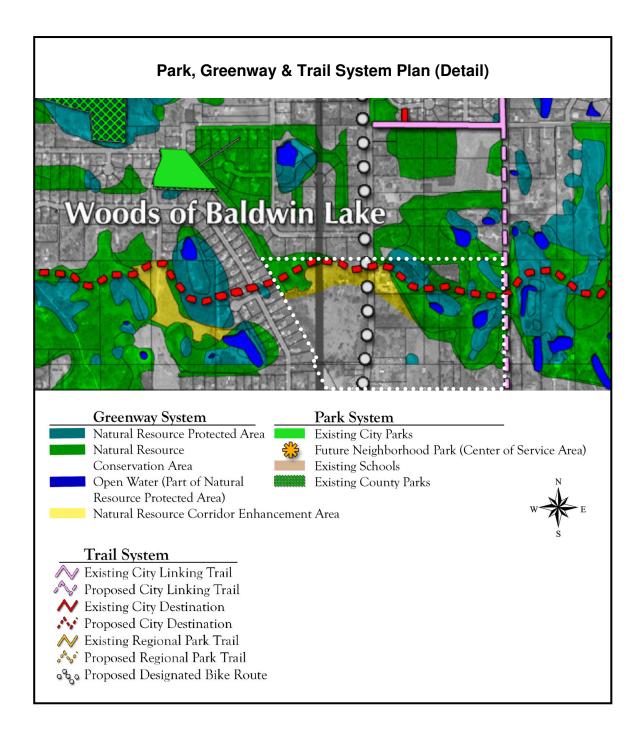




Parks, Natural Open Space/Greenways and Trail System Plan

The *Parks*, *Natural Open Space/Greenways and Trail System Plan* shows a potential trail crossing the northern part of the study area and continuing to the west. There is an existing trail easement between two lots which was dedicated with the plat of the Woodridge Estates neighborhood. Though the easement is only ten feet wide, a trail was paved in this easement. The *Trail System Plan* envisions this trail as a connection to land to the west of Woodridge Estates. Whether or not such a western extension is feasible, the existing trail does allow a connection to Woodridge Lane, which then provides access to Woods of Baldwin Lake Park to the north. An east/west, pedestrian and bicycle route through the study area would provide a connection to a trail along Ware Road.

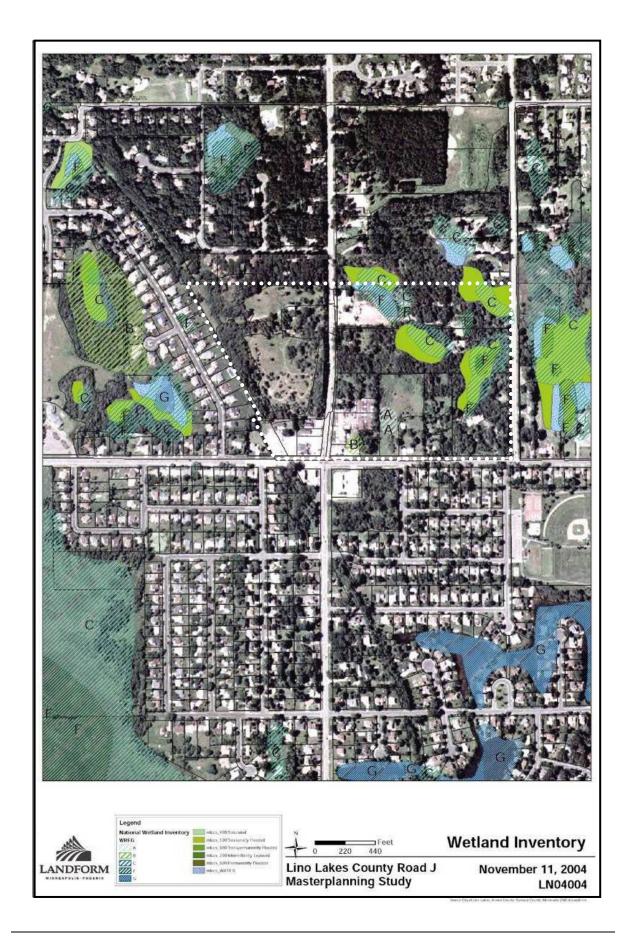
The parks plan also shows Natural Resource Protection Areas in the northeast area. These are wetland areas that will be protected by existing wetland law or may be important plant communities. The Natural Resource Conservation Areas in the northeast and northwest portions of the study area are uplands with features that have high ecological value. These areas should be examined for the potential for protection. A Natural Resource Enhancement Corridor is shown to indicate that an area could be considered for a trail to connect the two other areas.



Environmental Issues: Wetlands, Water Table

Wetlands exist in the area between Hodgson and Ware Roads, and the water table in the overall study area is shallow. The shallow water table constrains some development options that would require below-grade construction. Wetlands create some challenges for routing roads and utilities.

However, the wetlands also can be viewed as the basis of an open space amenity area that can be incorporated into site designs. Proper buffering of the wetlands can protect water quality and enhance the quality of these open spaces. This approach fits with the City's conservation development philosophy, whereby new development would create significant public values beyond those achievable under conventional development.



DEVELOPMENT ISSUES

Land Use

The existing land uses are illustrated in the previous figures. Any development of the study area must recognize the existing abutting neighborhoods of Woodridge Estates, Blomquist Addition, Rohavic Oaks, Ware Road and Hodgson Road residents in Lino Lakes, as well as the existing residential development south of CR J in Shoreview. These will continue as stable residential neighborhoods. Design of new development must take into account potential impacts on the neighbors.

Also noted previously, some property owners want to develop their site, some want to continue the existing use for now, but have plans for future development. Others have no plan to change their use of their site.

For example, a garden center and an auto sales business exist on Hodgson Road. Both these businesses are consistent with the Proposed Land Use Map in the Comprehensive Plan: the sites are guided for commercial use. The garden center owner wants to continue running the business on the site. Immediately to the south, the auto sales lot owner also plans to continue doing business.

However, either one of these two sites could be redeveloped. The garden center has several buildings, but the site could be redeveloped either for expansion of the garden sales business or for a completely different use. The auto sales property is mostly undeveloped and could be used for a variety of things.

Land at the northwest corner of CR J and Ware Road is owned by a developer hoping to create a small townhome development on the site. This is consistent with the Proposed Land Use Map, which guides the site for medium density residential use.

On the west side of Hodgson Road, there are several properties under different ownership. The existing buildings are on small parcels near the street intersection. A larger parcel of 17 acres lies to the north of the retail area and is largely vacant with only a house and some small outbuildings. A developer is working to develop the 17 acres. It would be desirable to include the smaller parcels in a redevelopment project.

No specific plans have been offered on the other properties in the study area.

The important point is that road, utility, and development plans for the area should provide both for future development and for continuing the existing businesses on the site at least for the short term until redevelopment options arise. Accommodating both possibilities poses challenges.

Roads, Access

Creating new local access and circulation is vital to development in the study area. Creating new road alignments must address three issues: access and circulation, development parcel size, and road right of way width. Addressing these will require cooperation between different agencies and jurisdictions.

Access and Circulation

Access management is an important aspect of planning new road alignments. A number of studies have demonstrated a relationship between the number of full access points on major roadways and the number of crashes. The City's Comprehensive Plan addresses this issue with the recommendation to

Maintain Hodgson Road and County Road J as "A" minor arterial streets. With this functional classification, the right-of-way width and roadway design should promote traffic movement and limit direct site access.

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Managing access to the arterial roads in the study area supports several sound planning goals, including: maintaining an acceptable level of mobility on the roads; reducing the potential for safety problems; and promoting appropriate property access.

The intersection of Hodgson and CR J functions poorly now at peak periods. Traffic will continue to increase, further degrading traffic conditions at the intersection. Most of this traffic is generated outside of the study area, but significant development in the study area will generate additional traffic. Development within the area will require good, safe access and circulation. Planning for the study area must acknowledge that the intersection must be improved. This requires improvements to Hodgson Rd. and CR J, but also requires designing clearly defined access points and internal circulation within the study area.

Because of the delay at the Hodgson/CR J intersection, drivers are diverting through residential neighborhoods in Shoreview to avoid delays at the intersection. This is a clear example of how traffic growth over time creates the need for road improvements; in this case, the intersection and approaches to it. Insufficient transportation infrastructure results in ripple effects on surrounding areas such as the cut-through traffic on residential streets.

On the Lino Lakes side, Hodgson Road, CR J, and Ware Road are the only roads in the study area. No existing local streets provide access to and circulation within the interior of the study area. Defining the access points onto the arterials and collector also includes recognizing that the number of accesses will be limited. The intent is that access to land will be via new, internal circulation roads rather than with individual driveways onto Hodgson and CR J. The new roads will access Hodgson and CR J at specific locations. Limiting the number of accesses to the main roads supports continuing mobility on the main roads. It also minimizes potential safety problems. This will be better than if individual driveways access the arterials at numerous places. Individual driveways interfere with mobility and pose

safety hazards. Therefore, eliminating existing driveways that now access the arterial roads goes along with creating the new access points.

Speed limits are important considerations for planning improvements and access points. Both Hodgson Road and CR J are classified as minor arterials. The speed limit is 50 mph on Hodgson north of CR J, but 45 mph to the south in Ramsey County. On CR J, the speed limit is 35 mph at the Hodgson intersection. The speed limit increases to 50 mph approximately 2,000 feet to the west and about 2,600 feet to the east of Hodgson Rd. The speed limit on Ware Rd. in the area is 45 mph.

Extensive discussions with the Anoka County Highway Department have resulted in some specific design parameters. These discussion included the recognition of conflicting interests. Property owners want direct and extensive access to their properties. However, numerous accesses impede traffic flow on collector and arterial roads and create safety hazards. It is also important to avoid disadvantaging one property by treating a neighboring property more favorably. County and City staff worked toward the goal of reaching a balance among these interests and creating a system of access points, circulation routes, and needed road improvements that will provide good access to all properties while ensuring public safety and keeping traffic flowing on arterial roads.

Access Locations

Hodgson Road: When development occurs, there should be one access to Hodgson, approximately 990 feet north of CR J. This point would have an access from both east and west, creating a full access intersection (not blocked with a median). Turn lanes would be necessary on Hodgson Road. Anoka County has not eliminated the possibility that a median could block the intersection if future safety concerns arise.

Co. Rd. J: There also should be one access to CR J between Hodgson and Ware. Anoka County has agreed to one access between Hodgson and Ware, which would be constructed as right in/right out, with individual driveways being eliminated as development occurs. Because there will be one access, it must be a public road, not a private road or driveway. It should be located as close as possible to being centered between Hodgson and Ware Roads. Aligning it with Kent Street on the south is an option. This would eliminate the offset between the two. However, Anoka County will require that this new road access be a right in/right out access. This would prevent almost every conflicting movement normally seen with an offset, so the offset would not be a concern.

There should be one access to CR J between Hodgson Road and Woodridge Lane. This would be as far west as possible to create the greatest possible separation from the Hodgson/CR J intersection. Anoka County has stated that this access must be constructed as right in/right out.

Thus, 15 existing driveway access points on Hodgson and CR J would be reduced to four access points. This reduction from 15 individual, random driveways to four properly designed access points would be a significant public safety improvement.

The access points are shown on the final Master Plan.

Signalization

The Hodgson/CR J intersection should be signalized. The City recognizes the need to plan for the right of way to accommodate signalization. The City also recognizes the need for inter-jurisdictional cooperation because CR J forms the border between Anoka and Ramsey Counties and between the Cities of Lino Lakes and Shoreview. Discussions between staff from these jurisdictions have resulted in agreement that the signalization is needed and the recognition that it is a shared responsibility to accomplish this goal.

Parcel Size

In addition to access needs, the design of new internal roads should allow for the creation of parcels of property that are large enough to develop. The parcels must accommodate buildings, parking, access drives, and site amenities such as landscaping or other features. The street system must take into account existing uses as well as the potential for future development.

Right of Way

Road rights of way must be large enough to accommodate vehicle movement, pedestrian sidewalks or trails, utility easements, and landscaping. While it is possible to have utilities in separate easements, this uses additional land. It is most efficient to include utilities in the road rights of way.

Additional right of way will be needed for Hodgson and CR J, especially at their intersection. The intersection of these arterials will need additional right of way for signalization and turn lanes. The specific dimensions will require further joint planning among Anoka County, Ramsey County, the City of Shoreview, and Lino Lakes.

The offset of Ware Road and Mackubin Street should be addressed by acquiring right of way to allow Ware Road to be realigned to the west and form a four-way intersection. The purpose is to eliminate the danger posed by left turns at an offset intersection. Signalizing the Hodgson/CR J intersection will facilitate north/south traffic and eliminate the incentive to cut through the Shoreview neighborhood to avoid delay at the Hodgson/CR J intersection.

The City recognizes that providing access to land within the study area probably will take different forms. In the area between Hodgson and Ware Roads, the best approach is a new

public roadway. One end would access CR J, the other end would access Hodgson. The access locations are shown on the Master Plan.

To the west of Hodgson, the triangular configuration is not conducive to creating a complete road in a right of way. The study area only has about 300 feet fronting CR J, which does not allow for a public right of way without severely limiting development potential on the property there. The preferred solution there is for the parking drive design to create what would be, in effect, a backage road running up from CR J through property to the north and then out to Hodgson at the location described above. This would require access easements between properties, which would be required as conditions of development approvals.

It is possible that such an approach would be appropriate in the eastern part of the study area, between Hodgson and Ware Roads. However, the access drive method requires a larger development plan rather than individual development on numerous small parcels. It also may be possible to create a new public road on the west portion of the study area, but this option is unlikely, as noted above.

The width and specific alignments of the internal roads and/or access drives will be examined with potential development designs. However, the points at which they access CR J and Hodgson Road are to be consistent with the descriptions above and as shown on the final Master Plan.

Utilities: Water and Sanitary Sewer

If the area is to develop, it must have municipal water and sanitary sewer service. Providing these utilities to the study area poses numerous challenges. The water and sanitary sewer figures show the locations of existing municipal utilities.

Several potential locations for utility service connections have been considered:

- Shoreview
- Woodridge Lane
- White Pine Road, approximately ¼ mile to the north of the study area
- Ravens Court, approximately 1/8 mile north of the study area
- Ware Road

There are several common issues for water and sanitary sewer service in this area. For an area that lacks both utilities, it is financially cost effective to plan both in the same alignment. This avoids the need to acquire easements for separate alignments, and both can be constructed at the same time. However, there are some issues that apply to one but not to the other. In particular, the need to loop the water system. Issues for utility service are described below.

Water Main

All the properties in the area with existing uses have individual wells for water. Homes on Woodridge Lane have municipal water, but there is no service between the Woodridge Estates neighborhood and Ware Rd.

The City of Lino Lakes has recognized the need to loop its trunk lines. Water trunk looping is needed in order to provide adequate water service, particularly fire protection. Looping the system allows for better flow and water pressure. Looping also provides alternative service if water is interrupted from one direction. Neither the trunk in Woodridge Lane nor the trunk in Ware Rd. are looped to other trunks. Both trunks end near the Hodgson/CR J area.

The City needs to loop the water even if no new development occurs. New development provides new easements because it needs utility service. If no new development occurs, the City faces the need to acquire new easements solely at City cost.

Sanitary Sewer

The majority of properties in the study area have onsite septic systems for wastewater treatment. Only a few properties in the area have municipal sewer service. These are all west of Hodgson. They include homes on the north side of CR J, the closed bar/restaurant site, the existing insurance building, and the existing liquor store.

There are capacity issues with some of the connection alternatives. The city's draft comprehensive sanitary sewer plan assumed that land west of Hodgson would be served by the system west of Hodgson (which includes the Woodridge Lane and White Pine Road options), and land east of Hodgson would be served by the system east of Hodgson (which includes the Ware Road and Ravens Court options).

Connection Location Options

Shoreview

Water: The Cities of Lino Lakes and Shoreview have a water interconnect at Woodridge Lane. In the past, this interconnect provided ongoing, supplementary water availability. However, Shoreview has closed this connection. It is available for emergency water service, but not available on an ongoing basis. This has increased the importance of looping the Lino Lakes system.

Sewer: There are a few parcels with sewer service served by a special service pipe that connects to the City of Shoreview sewer system. Shoreview has stated that it will not plan to accommodate additional Lino Lakes development through this service line.

Therefore, service for the rest of the study area must be provided by the Lino Lakes system.

Woodridge Lane

Water: The City needs to create a loop connection to the Woodridge Lane water trunk, west of the study area. Because of this need, connecting to the Woodridge Lane water trunk is a priority. The challenge lies in the lack of any specified corridor for a utility easement between the existing homes.

The water loop could run along CR J, then turn north through new development in the study area. The CR J right of way is 100 feet wide in this location (50 feet on each side of the centerline). There are numerous private utility services in this right of way such as natural gas, electricity, cable tv, and fiber optics. Running a new water pipe would require moving these utilities or acquiring a new easement. Moving the private utilities would be expensive. The remaining option is to acquire a new easement outside of the existing road right of way that would not affect the private utilities.

Sewer: As noted in the description of water service, there is no corridor between existing homes for a utility easement to connect to the Woodridge Lane utilities. Connecting to this sewer line would require a new easement. Early preliminary analyses did not include the Woodridge Lane option because of the lack of access through the existing residential lots. However, if such a connection is possible through a new easement, this would be the most desirable option because the system east of Hodgson has capacity constraints that may affect development potential. It is likely that a lift station will be needed to connect to this line because of its shallow depth.

White Pine Road

Water: There is service available in White Pine Road, about ¼ mile north of the study area. Connecting to this would require either utilizing an easement through the Rohavic Oaks residential properties or running along Hodgson to Rohavic Lane, and running the pipe in Rohavic Lane and Laurene Ave. There is an existing Metropolitan Council utility easement between the home lots that has the potential for being used for city utilities. This route could provide a loop from Woodridge. The Ware Road trunk could be connected to this new trunk when development fills in the gap.

The major obstacle for this option is the Rohavic Oaks neighborhood. The comprehensive plan guides the Rohavic Oaks neighborhood as Unsewered Low Density Residential and the City has received only one inquiry from this neighborhood about utility service. Without property owner participation, there would be insufficient funding for utilities and road reconstruction.

Sewer: As with water, there is a sanitary sewer line in White Pine Road, about ¼ mile north of the study area. Connecting to this would require running the pipe in Laurene Avenue and Rohavic Lane. It also would require either utilizing an easement through the Rohavic Oaks residential properties or running along Hodgson to Rohavic Lane. In addition, the comprehensive plan guides this neighborhood as Low Density *Unsewered* Residential (no utilities to be provided) and the City has received only one inquiry from this neighborhood about providing utilities. Without property owner participation, there would be insufficient funding for utilities and road reconstruction.

Ravens Court

Water: Connection to the Ravens Court water is possible. This could address the need to loop the water system to Woodridge or Ware.

Sewer: Connection to the Ravens Court sanitary sewer is possible, depending on depth issues and the potential need for a lift station. However, the Raven's Court pipe flows into the Linda Ave. line, which has capacity constraints because of its size.

Ware Road

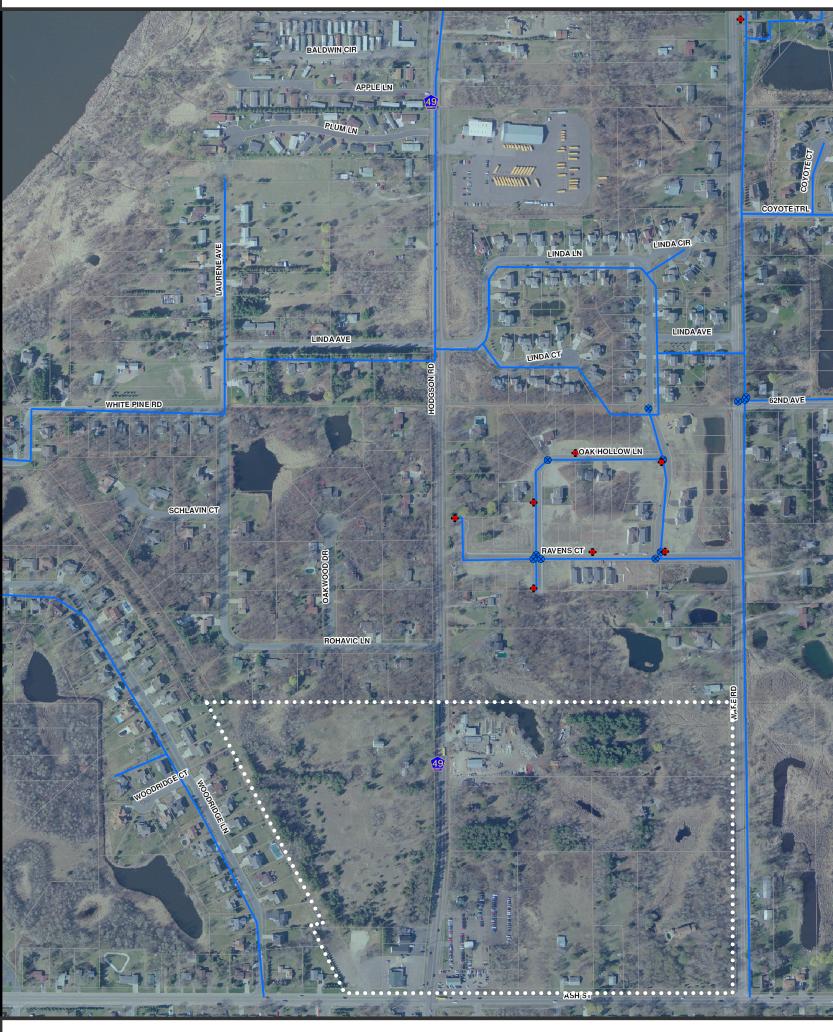
Water: The Ware Rd. properties are undeveloped, so the opportunity exists to plan utility service alignment as land develops. As property develops along Ware Road, the trunk can be brought from that side. However, it will be necessary to provide the water loop as development is planned.

Sewer: The Ware Rd. properties are undeveloped, so the opportunity exists to plan utility service alignment as land develops. As property develops along Ware Road, the trunk can be brought from that side. The Ware Road trunk is relatively shallow. Depending on grade elevations for new development, a lift station may be needed. The Ware Rd. pipe is constrained by the capacity of Lift Station No. 3, which handles all the Ware Rd. flow. Even if the lift station's pumps are upgraded, there is a limit on its capacity. The size of the force main from the lift station also limits the potential capacity of this segment of the system.

Both the Ware Rd. and Ravens Court pipes flow to Linda Ave. The Linda Ave. pipe itself has a capacity constraint due to its size, which therefore constrains both the pipes flowing into it.



WATER SYSTEM



Legend

WATER STRUCTURES

- SATE VALVE
- HYDRANT
- WATER TOWERWELL

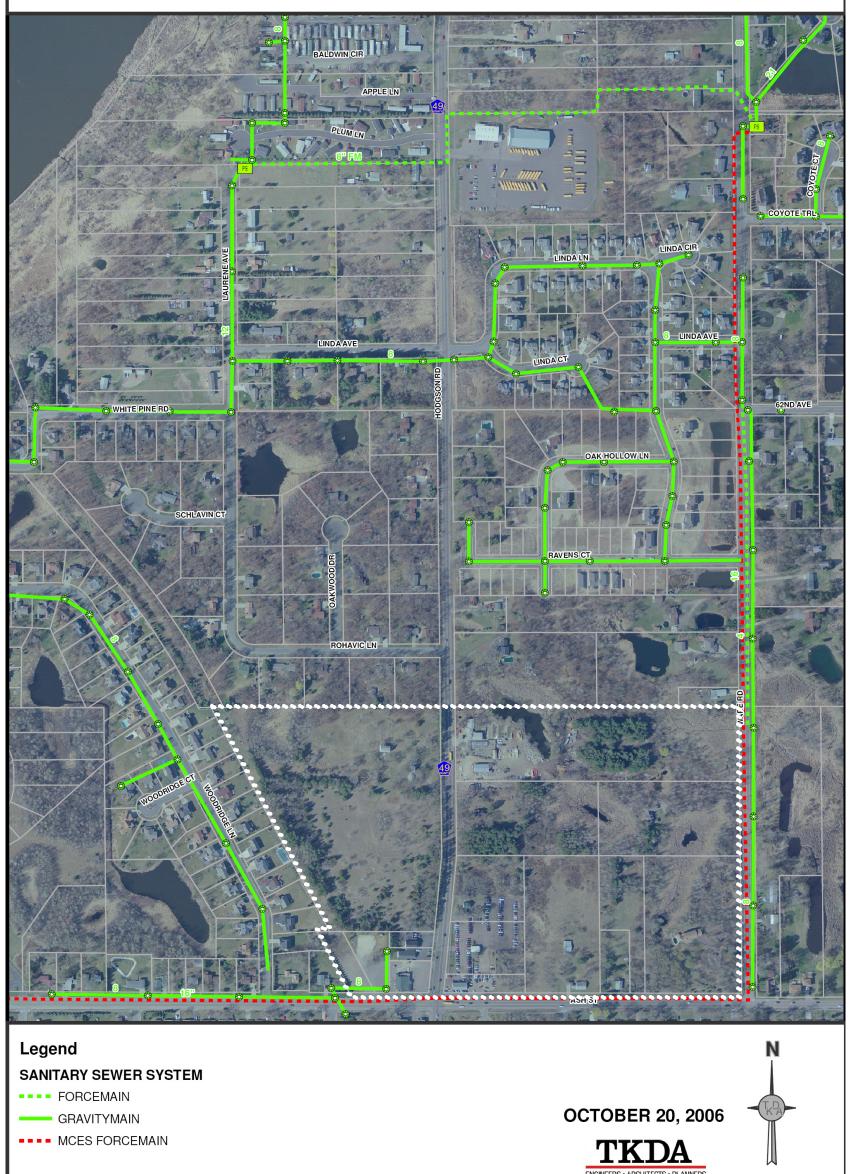
--- WATERMAIN







SANITARY SEWER SYSTEM



CONCEPT PLANS

The study produced several concept plans. The earlier concept plans were intended to provide a basis for discussion as the study progressed. The final concept plan evolved from the earlier plans and additional research.

By its very nature, a concept plan is inexact, a collection of ideas. The concept plans were not intended to eliminate existing businesses. Rather, they were intended to generate discussion by showing a general land use design with some specifics, such as road alignments and access points.

An initial plan was presented to a neighborhood meeting on March 22, 2005. This plan intended to accomplish the following:

- preservation of natural resource areas
- allow for phased development and utilities (connect to utilities in Ware Road)
- good access and circulation
- provide access for new development
- provide for stormwater treatment and management
- conservation development: create significant public values beyond those achievable under conventional development, including:
 - preserving natural habitat
 - creating more open space for natural habitat, neighborhood recreation and trails
- design quality, well-landscaped neighborhoods

The March concept plan also attempted to address gateway design issues. This included keeping the corner buildings close to the street corners and other elements to create a human scale environment, friendly to pedestrians and bicyclists. A major trail along Hodgson is an important part of the City's Parks and Trails Plan. Residential development in the area should have easy walking and biking access to this transportation trail and to new businesses as well.

The March concept plan is shown below.



The March concept plan generated very informative discussions and helpful input from landowners and residents. Several business owners didn't see their businesses pictured on the concept plan and worried that the City was trying to drive them out. They stated they intended to remain on their site, even expand their existing businesses. This misunderstanding enforced the need for further communication, which was accomplished via meetings, conversations, and correspondence. These both helped clarify the goals of the study for landowners and informed the study process regarding landowners' plans and needs.

This educational process led to a second set of concept plans in June 2005. Knowing that some of the existing businesses planned to remain led to realigning the new roads to follow existing property lines. This provides for new road and utility corridors while minimizing impacts on both the existing garden center and the auto sales lot. Expansion is possible, and the new road and utility corridors provide access to utilities and to Hodgson and CR J. Concepts A and B differ in the specific alignments of the internal roads. The alignments result in different approaches to designing the land at the northwest corner of CR J and Ware Road. The actual layout of that site has yet to be determined. However, both Concepts A and B provide a corridor to Ware Road for utilities, through the development site.

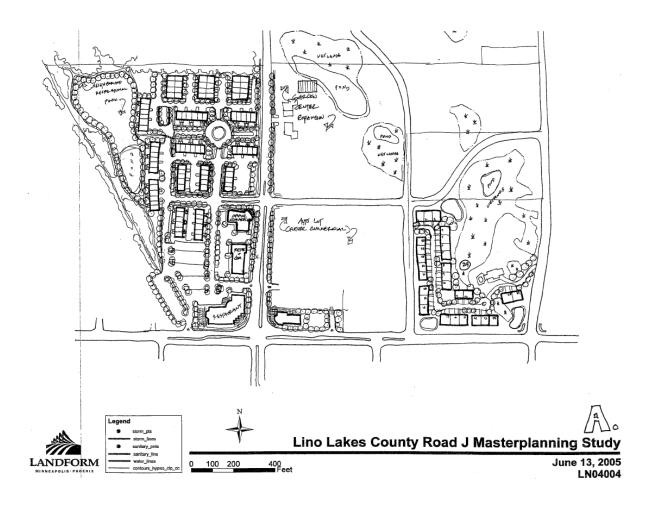
It might be preferable to align the new road access to CR J with the existing Kent Street in Shoreview, as in Concept B. However, aligning it with the property boundary is acceptable, even though it creates an offset. The likelihood of a median in CR J makes a full access there somewhat questionable, so the offset would become moot. Though both concepts show a full access, this has yet to be determined.

The June concept plans led to further, more detailed planning and discussions with land owners. On the west side of Hodgson, a developer is pursuing a plan to develop the 17 acres to the north of the existing buildings. This would include new retail as well as a senior housing campus. Including the redevelopment of those existing buildings would be preferable, as it would allow for overall master planning of that area west of Hodgson.

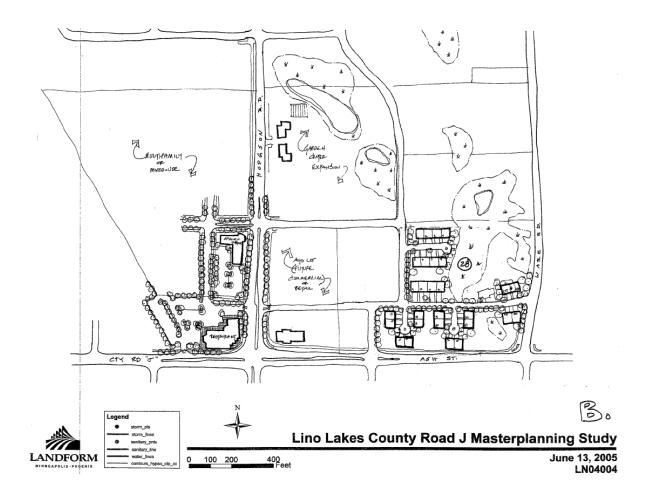
The land owner at the northwest corner of Ware Road and CR J is pursuing a townhome development. If utilities for the study area connect to Ware Road, this townhome development would include a corridor for the water and sanitary sewer.

The June concept plans also formed the basis of discussions with the Anoka County Highway Dept., Ramsey County Public Works., the City of Shoreview City Engineer, and Lino Lakes staff. All agreed that the Hodgson/CR J intersection needs improvement, and a collaborative solution is needed. Subsequently, Anoka County Hwy. prepared a plan for the intersection and road improvements. Lino Lakes prepared a traffic study. Ramsey County contributed data for the study. All jurisdictions will need to examine funding possibilities and cooperative planning.

June 2005: CONCEPT A



June 2005: CONCEPT B



MASTER PLAN

The Master Plan is the culmination of the study process. The Master Plan is intended to establish a general land use design with some specifics, such as road alignments, access points, and specified important design elements. It is not intended to drive out existing businesses. The Master Plan does not mandate the exact site layout or specific uses of individual parcels. However, because infrastructure design is the driving force of the study, individual parcel design must take into account the infrastructure needs for the larger study area. In addition, the plan specifies some fundamental design elements in specified locations to provide a common framework for all development in the area. Both the Master Plan drawing and the accompanying Planning and Development Requirements should be considered together to guide decisions on development.

While recognizing the importance of the Land Use Map, it's important to acknowledge the realities of land development. Future development may involve assembling several land parcels. Site layouts may need some flexibility to ensure efficient design and safety, especially internal circulation. In addition, natural features don't follow linear property boundaries. Because of these and other factors, the actual boundaries on the Proposed Land Use Map should be considered somewhat flexible in order to accommodate development or redevelopment proposals within the study area.

The Master Plan includes important amendments to the Proposed Land Use Map in the 2002 Comprehensive Plan. The Land Use Map is the guide for development in the city and the study area should develop with the land uses as shown on the map. Mixed use development is becoming more and more common, and the Hodgson/CR J area is a good location for it. The west side of Hodgson already is guided Mixed Use. The Master Plan recommends that the east side area currently guided Commercial be amended to Mixed Use. This would allow for, though not mandate, the inclusion of residential units, possibly in multi-story buildings. This would provide customers for the commercial development, and the commercial services would be convenient to the residents.

There are a few specific locations that deserve attention from the perspective of the Proposed Land Use Map in the Comprehensive Plan and the zoning map. These minor inconsistencies should be addressed with the amendment of the Land Use Map.

In the extreme southwest corner of the study area is a parcel forming a narrow strip that runs northwest/southeast. This parcel is guided for residential land use but zoned General Business. The narrow strip is not useable by itself and must be incorporated into the redevelopment of the abutting property. The land use map should be amended to include this piece in the Mixed Use land use category. The General Business zoning is appropriate.

On the north edge of the study area, a parcel between Hodgson and Ware Roads is guided Commercial on the Hodgson side but the area east of the wetland is guided for Medium Density Residential. As noted above, the western portion should be guided Mixed Use. The specifics of the site—especially a wetland delineation—likely will determine how far

commercial development will extend east. Allowing for a flexible edge of the land uses, as recommended above, will allow a design that is sensitive to the natural resources. The zoning should remain General Business. Any future development review will examine rezoning needs.

On the Ware Road side of the study area, a parcel is guided both Medium Density Residential and Low Density Sewered Residential. How or even if development will occur there is unknown. For consistency, the entire parcel should be guided Medium Density. The Rural zoning is appropriate. Any future development review will examine rezoning needs.

Planning and Development Requirements

General

- This Master Plan is to be incorporated into the Lino Lakes Comprehensive Plan with an amendment of the Comprehensive Plan. This includes amendments to the Proposed Land Use Map: the area east of Hodgson Road should be designated Mixed Use instead of Commercial. Minor inconsistencies in the Proposed Land Use Map should be corrected as well, and zoning amendments should follow if and when appropriate.
- The land use boundaries on the Proposed Land Use Map should be considered somewhat flexible in order to accommodate natural features, land assembly and other physical issues.
- Rezoning as part of new development applications will be examined for consistency with the Comprehensive Plan and this 49/J Master Plan.
- The Master Plan is the guiding plan for development in the area. The Master Plan is
 intended to show a general land use arrangement with some specific design elements.
 The individual site layouts and uses are to be determined as part of the development
 review process, but should be based on the Master Plan, including specific elements
 noted below.
- Tax increment financing and tax abatement on qualifying properties should be considered potential tools for implementing the Master Plan.

Transportation and Access

 Accesses to Hodgson Road and Co. Rd. J are to be located at the points indicated on the Master Plan.

- There is to be one full access on Hodgson Road, located 990± feet north of the CR J intersection (approx. 330 feet south of the northern edge of the study area). This access is to be centered on the property line east of Hodgson at this location. No other new permanent accesses are to be allowed. As development occurs, the City will work toward eliminating all other accesses along Hodgson.
 - Temporary accesses onto Hodgson Road may be considered if one property develops prior to the creation of access to CR J. Such temporary accesses must be removed when the CR J access is created. The removal must be included in conditions of approval for the project.
- Between Hodgson and Ware Roads, there is to be only one new access onto CR J, located as close as possible to midway between Hodgson and Ware. This access should be centered on the mid-way property line. This new access is to be constructed as right in/right out only. No other new accesses are to be allowed. The City will work toward eliminating all other accesses along CR J.
- From the full access on Hodgson, a circulation route is to be created leading east of Hodgson to the access point on CR J, providing access to all properties in the area.
 This should be a public road. However, an access drive with mutual easements across properties is a possible solution if it provides adequate access and circulation.
- West of Hodgson Rd., there is to be one access onto CR J, located as far west as possible from the Hodgson/CR J intersection. This new access is to be constructed as right in/right out only. This will be a driveway into the development site, and there will be access easements on that site to provide access to, from, and through property to the north, leading to the full access on Hodgson. No other new accesses are to be allowed. The City will work toward eliminating all other accesses along CR J.
- The access points, right of way, and internal circulation routes noted above are to create a circulation network serving all properties in the study area rather than individual driveways onto arterial and collector roads that serve only individual properties.
- For properties on the eastern edge of the study area, access to Ware Road is a possibility if the City judges the design to be safe. This does not preclude the need for public right of way or easements elsewhere.
- The Hodgson/CR J intersection is to be signalized prior to or as part of any significant development in the study area. This is to be a cooperative effort of Anoka and Ramsey Counties, the Cities of Lino Lakes and Shoreview, and developers. Specific design requirements are to be determined.
- Other road improvement needs such as additional lanes, median, and the like will be
 designed in cooperation with Anoka and Ramsey Counties, the Cities of Lino Lakes and
 Shoreview, and developers, as appropriate. Specific design requirements are to be
 determined.

- The quantity of development of the area will be limited to ensure that traffic generation does not exceed the capacities of Hodgson Road, the intersection with Co Rd J, or the new access. Development shall not create the need for a traffic signal at the new full access on Hodgson Road.
 - Planning for the area must look forward to full development of the study area so as not to allow one project to "use up capacity" so that other sites cannot develop without creating the need for a signal at the new access.
- Right of way will be dedicated with development to ensure adequate right of way for Hodgson and CR J as well as for the internal circulation system, as necessary.
- The offset of Ware Road and Mackubin Street should be addressed by realignment of Ware Road to form a four-way intersection.

Trails, Open Space

- A trail connection, included as an 'enhancement corridor' in the Parks, Natural Open Space/Greenways and Trail System Plan, will be established across the study area. This will link to the existing trail connection to Woodridge Lane on the west, cross through the study area, and link to a future trail in Ware Road. The specific alignment of this trail corridor across the Master Plan area will be determined as development occurs.
- An, open, focal point green space is to be created where the Woodridge Lane trail connection enters the study area. The specific design of this focal point will be reviewed with any development application for the site.
- A trail should be constructed along Hodgson Road in accordance with the City's parks and trails plan. This could be accomplished with sidewalks in the study area.
- The wetland complex in the northeast part of the study area, shown as 'natural resource protected area' and 'natural resource conservation area' in the Parks Plan, should be protected as open space to the degree possible. Detailed information submitted with development proposals will be examined to determine the possibilities for these areas.
- Greenspace buffering is an important design element for new development along the border with existing neighborhoods such as Woodridge Estates and Rohavic Oaks.

Municipal Utilities

• All new development must have sanitary sewer and water service. Possible exceptions prior to the availability of utilities include renovation of existing structures if the building

- code allows it without utilities. However, the preference is for all uses in the study area to have municipal utilities.
- Several options exist for utility service, as described in this study document. West of Hodgson, the preference is for connection to the Woodridge Lane sanitary sewer.
- Water trunk lines must be looped, and development must provide the looping.

Site Design, Urban Form

- The intent is to create an urban form for the area.
- Development layouts are to include buildings at intersection corners to establish the "cornerstones" of the area's urban form.
- As another means of pursuing an urban form, development is to avoid lining Hodgson with large parking lots. This could include the following elements.
 - o Buildings fronting along Hodgson in addition to the cornerstone buildings
 - Extensive landscaping and screening of parking lots will be required along Hodgson and CR J, including boulevard trees and decorative fencing or walls. Landscaping must be included on the street side of fences or walls along parking lots.
- Larger parking areas should be planned with internal landscaping, pedestrian sidewalks or walkways and be divided into smaller areas where possible:
 - Pedestrian walkways provided in larger parking lots should be landscaped, include path lighting, and provide direct access for pedestrians to an entrance of a commercial building;
 - Walkways should be raised, paved areas or defined paths distinguished by striping or a change in paving provided that pedestrians are kept safe from vehicular travel on the route to an entrance of a commercial building.
- Sidewalks are to be constructed on both sides of Hodgson Road and on the north side of Co. Rd. J to form connections to the trails to the development areas and contribute to the urban form of the area.
- Pedestrian circulation should be an important design factor within the development areas to facilitate pedestrian and bicycle circulation among businesses and residential sites. Such circulation routes must be safe and aesthetically pleasing.
- Design guidelines must be prepared for any new development project in the area. Developers should submit draft guidelines with development applications. Design

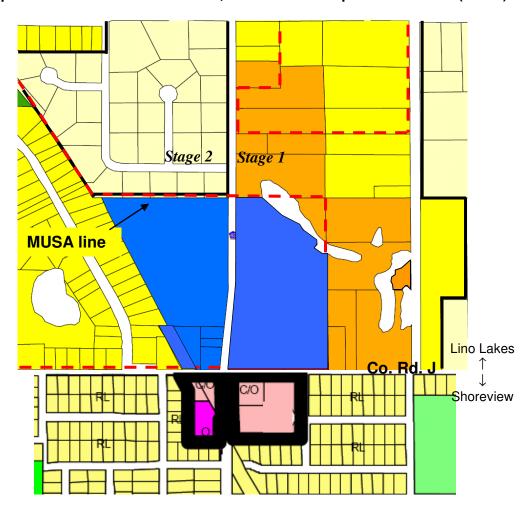
guidelines for each project must include attention to previous projects in order to coordinate design throughout the study area. After being refined in collaboration with City staff, design requirements shall be incorporated into the approval of the development.

- Buildings must be designed with "four-sided architecture", using the same quality materials on all sides.
 - o All facades shall be articulated with a variety of materials, glazing, awnings, or other details to add visual interest.
 - Building design elements should include an expression of a building base (of brick or stone), a middle, and a top with cornice elements at the top of the first floor and the top of the building.
 - o Roof lines and cornice details shall be completed in a three-dimensional manner so that the features on the back of the roof or similar unfinished areas are not visible
 - o The front façade may have a unique design or more significant glazing.
- Commercial buildings must incorporate trash and service areas within the buildings rather than utilizing outdoor enclosures. This will conserve land and maximize the potential for outdoor seating and pedestrian friendly amenities.
- It is not the intent of this plan to specify housing unit styles. However, garage units must not access directly onto the main access drive or the main public streets through the development.
- The Hodgson/Co Rd J intersection is a gateway and appropriate elements are to be included in the development of the corners of this intersection.
- The interface between new residential and commercial uses should be flexible. For example, new development in central areas can be multi-family, commercial, or mixed use. This would be consistent with the flexible land use lines noted above. Maintaining safety and quality of life are important considerations.
- Lighting is to be appropriately scaled to a pedestrian friendly development. Lighting should be directed downward and screened to reduce light pollution, glare, and impacts on adjacent residential areas.
- Security or service lighting should be limited in coverage area and designed to reduce glare.

Stormwater Management

- Stormwater management design must incorporate filtration and infiltration elements. This could include such features as rain gardens, swales, dry creeks, infiltration chambers, and other ecologically based methods along with more traditional ponds and pipes.
- Stormwater management ponds, if used, should be designed to be a site amenity, including appropriate landscape elements.

Proposed Amended Land Use Plan, Lino Lakes Comprehensive Plan (Detail)

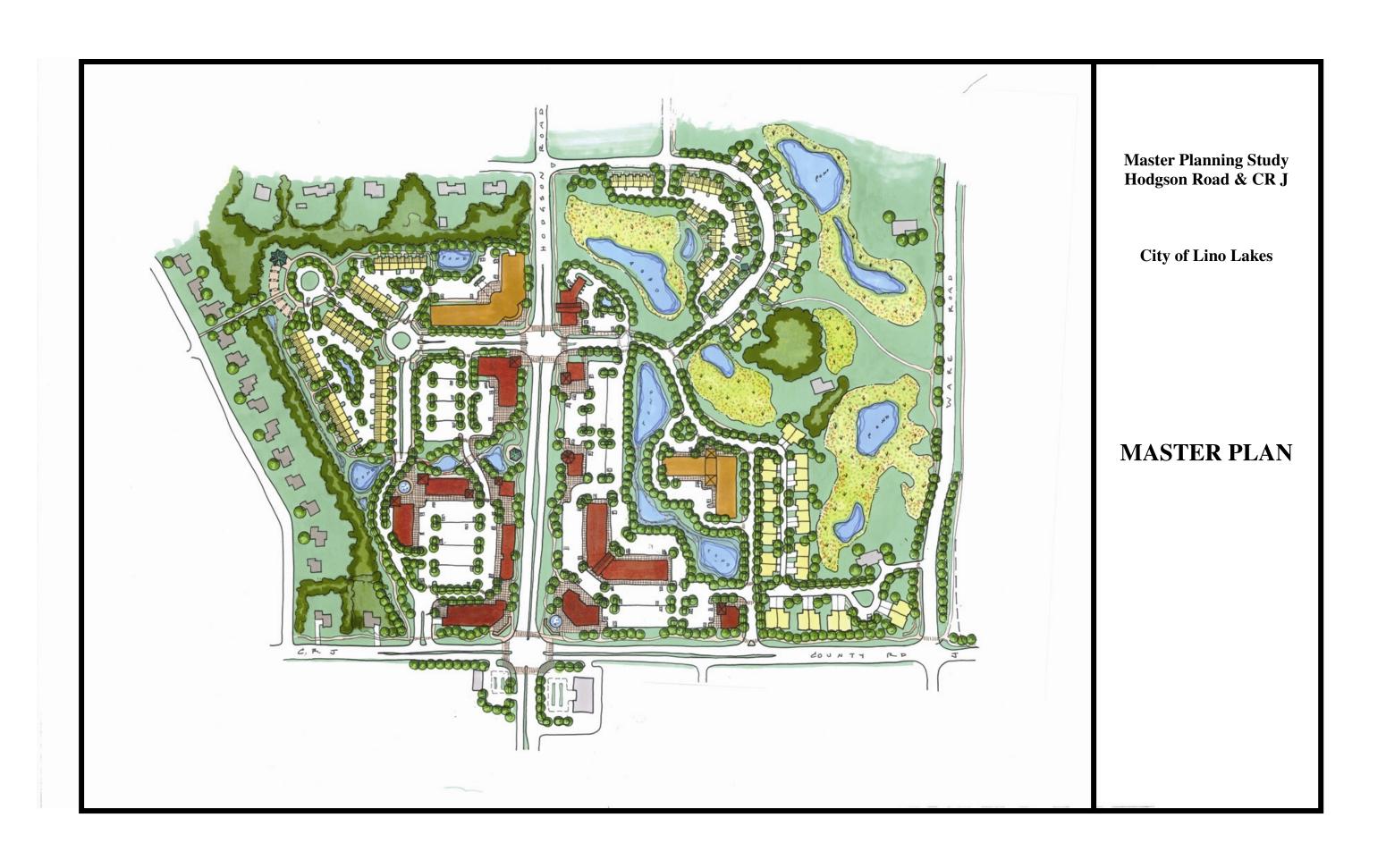


City of Shoreview Comprehensive Plan Land Use Map (Detail)

(Lino Lakes and Shoreview maps are shown at approximate scale.)

Legend







Master Planning Study Hodgson Road & CR J

City of Lino Lakes

HODGSON/CR J NORTHWEST CORNER PERSPECTIVE



Master Planning Study Hodgson Road & CR J

City of Lino Lakes

HODGSON/CR J NORTHEAST CORNER PERSPECTIVE



Master Planning Study Hodgson Road & CR J

City of Lino Lakes

NORTHERN
HODGSON
INTERSECTION
PERSPECTIVE
LOOKING
NORTHWEST