

WACONIA CITY COUNCIL MEETING AGENDA



Tuesday, September 3, 2024
6:00 PM

VISION STATEMENT

A thriving, connected community with deep roots: a great place to live for a lifetime.

MISSION STATEMENT

A city that leads, serves, and governs to enhance the quality of life for all community members.

MAYOR: NICOLE WALDRON
COUNCIL MEMBER : RANDY SORENSEN
COUNCIL MEMBER: NICK GLEASON
COUNCIL MEMBER: JEFF GRENGS
COUNCIL MEMBER: JACOB COLEMAN

NOTE: TO ENSURE THAT YOU ARE PRESENT FOR ITEMS OF INTEREST, PLEASE BE PRESENT AT 6:00 P.M.

Those with items on the agenda should reach out to their staff contact. Others who wish to participate in the meeting, please contact the City Administrator at 952-442-3100 or sfineran@waconia.org to make certain that you are called upon during the meeting.

1. CALL MEETING TO ORDER AND ROLL CALL
2. PLEDGE OF ALLEGIANCE
3. ADOPT AGENDA
4. VISITOR'S PRESENTATIONS, PETITIONS, CORRESPONDENCE
5. ADOPT CONSENT AGENDA

The items listed on the Consent Agenda are considered routine and non-controversial by the Council and will be approved by one motion. There will be no separate discussion of these items unless a Councilmember, City Staff, or Citizen so requests; in which case, the item will be removed from the Consent Agenda and considered at the end of the Regular Agenda.

- 1) [Approve City Council Minutes July 15, 2024](#)
Motion to approve the July 15, 2024 Council Minutes
- 2) [Approve September 3, 2024 Expenditures](#)
Motion to Approve Payment of September 3, 2024 Expenditures
- 3) [Approve Lodging Tax Fund Request - Waconia CVB](#)
Motion to Approve Request for Lodging Tax Reimbursement from the Waconia CVB for Expenditures Incurred May - July 2024
- 4) [Approve Kraus-Anderson Construction Pay Request #23 for the New Fire Station](#)
Motion to Approve Kraus-Anderson Construction Pay Request #23 for the New Fire Station Project
- 5) [Contractor Pay Request #4 - Waconia Downtown Reconstruction - Phase 2](#)

Motion to approve Pay Estimate No. 4 to W.M. Mueller & Sons, Inc. for the Waconia Downtown Reconstruction - Phase 2 Project

6) [Authorizing Approval of Sale or Disposal of Surplus Equipment](#)

Adopt Resolution No. 2024-183 Authorizing Approval of Sale or Disposal of Surplus Equipment

7) [Contract for Infield Repairs of Brook Peterson Fields 1-4](#)

Adopt Resolution No. 2024-184 Authorizing staff to execute a contract for infield repairs at Brook Peterson Fields 1-4.

8) [Extension of Subdivision Regulations - 9550 Little Avenue, 9780 Little Avenue, 10080 Little Avenue - M/I Homes of Minneapolis, LLC & Pulte Group](#)

Motion to adopt Resolution No. 2024-185 extending the application of the City of Waconia's Subdivision Regulations to the subject properties located at 9550 Little Avenue, 9780 Little Avenue and 10080 Little Avenue.

9) [Approve Temporary On-Sale Liquor License for Lake Country Libare Distilling LLC dba J. Carver Distillery](#)

Adopt Resolution No. 2024-186 Approving a Temporary On-Sale Liquor License for September 14, 2024

10) [Special Event - Bode Grays Nickle Dickle Day Block Party](#)

Adopt Resolution No. 2024-187 Approve Special Event & Noise Permit

11) [Special Event Permit - Waconia Brewing Company 10-year anniversary](#)

Adopt Resolution No. 2024-188 Approving a Special Event and Noise Permit

12) [Calling for Public Hearing to Consider the Establishment of TIF District #6](#)

Adopt Resolution No. 2024-189 calling for a Public Hearing on the proposed adoption of a modification to the development program for the Waconia Development District, the proposed establishment of TIF District #6 and adoption of a TIF financing plan.

6. COUNCIL BUSINESS

1) [Approve Waconia Works Loan for The Short Cut Salon, Inc.](#)

Adopt Resolution No. 2024-190 Approving Waconia Works Loan for The Short Cut Salon, Inc. at 132 West Main Street.

2) [Accepting the Feasibility Report for the Southeast Area Growth Study](#)

Adopt Resolution No. 2024-191 Receiving Feasibility Report for the Southeast Area Growth Study

7. ITEMS REMOVED FROM CONSENT AGENDA

8. STAFF REPORTS

9. BOARD REPORTS

- 1) Councilmember Sorensen
- 2) Councilmember Coleman
- 3) Councilmember Gleason
- 4) Councilmember Grengs
- 5) Mayor Waldron

10. ANNOUNCEMENTS

11. ADJOURN REGULAR MEETINGOFFICE OF THE CITY ADMINISTRATOR

Shane Fineran

Work Session: Turf to Native Grant Sites
Downtown Phase 3 Update
2025 Budget & Preliminary Levy

UPCOMING CALENDAR OF EVENTS/MEETINGS:

Planning Commission - September 5th at 6:30 p.m.

Nickle Dickle Day - September 14th

City Council Meeting - September 16th at 6:00 p.m.



REQUEST FOR CITY COUNCIL ACTION

Meeting Date: September 3, 2024

Item Name: Approve City Council Minutes July 15, 2024

Originating Department: Administration

Presented by: Sue Schwalbe

Previous Council Action (if any):

Item Type (X only one):	Consent	☒ X	Regular Session		Discussion Session	
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RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED (Include motion in proper format.)

Motion to approve the July 15, 2024 Council Minutes

EXPLANATION OF AGENDA ITEM (Include a description of background, benefits, and recommendations.)

Approve City Council Minutes of August 19, 2024.

Attachments:

1. [August 19, 2024 City Council Minutes](#)

FINANCIAL IMPLICATIONS:

Funding Sources & Uses:

Budget Information:

_____ Budgeted

_____ Non Budgeted

_____ Amendment Required

ADVISORY BOARD RECOMMENDATIONS:

Planning Commission	
Parks and Recreation Board	
Safari Island Advisory Board	
Other	

CITY OF WACONIA
AUGUST 19, 2024

1) CALL MEETING TO ORDER AND ROLL CALL

Pursuant to due call and notice thereof, the regular meeting of the City Council of the City of Waconia was called to order by Mayor Waldron at 6:00 p.m.

The following Council Members were present: Nicole Waldron, Jacob Coleman, Jeff Grengs, Randy Sorensen. Absent: Nick Gleason

The following staff were present: Shane Fineran, Jackie Schulze, Nicole Meyer, Justin Sorensen, Jody Lechner, Jon Haukaas, Lane Braaten, Jake Saulsbury of Bolton & Menk, City Attorney Mike Melchert

2) PLEDGE OF ALLEGIANCE

3) ADOPT AGENDA

Motion by Coleman second by Sorensen to adopt the agenda as published.
MOTION CARRIED.

PUBLIC HEARING

PUBLIC HEARING: 2024 Fee Schedule Ordinance Amendment

[Cover Page](#)

[Ordinance No. 774 Amending Chapter 1100 Related to Permits, Licenses and Fees](#)

Nicole Meyer, Finance Director, gave a brief description of the agenda item stating a public hearing is required before a zoning ordinance can be amended. The Public Hearing is for the entire fee schedule to avoid inadvertently violating this requirement for land use/zoning fee changes. The fee schedule changes requested are for the ice arena ice and locker room rental fees along with removal of the bowling alley and amusement machines fees.

Motion by Sorensen second by Grengs to open the Public Hearing.
MOTION CARRIED

No comments from residents or Council Members

Motion by Grengs second by Coleman to close the Public Hearing.
MOTION CARRIED

Motion by Grengs second by Sorensen to adopt Ordinance No. 774 Amending Chapter 1100 of the Waconia City Code related to permits, licenses, and fees to authorize summary publication.

MOTION CARRIED

4) VISITOR'S PRESENTATIONS, PETITIONS, CORRESPONDENCE

None

5) ADOPT CONSENT AGENDA

5.1 Approve City Council Minutes July 15, 2024

[Cover Page](#)

[City Council Minutes 08-05-2024](#)

5.2 Approve August 19, 2024 Expenditures

[Cover Page](#)

[Council List Expenditures 08-18-2024 - Regular](#)

[Council List Expenditures 08-18-2024 - Other](#)

[Council List Expenditures 08-18-2024 Purchasing Card](#)

5.3 Approve Rink Management Services Corporation Waconia Ice Arena Expenditures Incurred July 2024

[Cover Page](#)

[Ice Arena - Bills Applied Payments 07-2024](#)

5.4 Approve Rink Management Services Corporation Safari Island Community Center Expenditures Incurred July 2024

[Cover Page](#)

[Safari Island - Bills Applied Payments 07-2024](#)

5.5 Approve Kraus-Anderson Contractor Pay Request for the New Fire Station

[Cover Page](#)

[Fire Station Payment Request from Kraus-Anderson 07-15-2024](#)

5.6 Accepting Donation and Approving Pass Thru Recommendation - Waconia Fire Relief Association

Cover Page

Resolution No. 2024-173 Approving Donation and Approving Pass Thru Recommendation from Waconia Fire Relief Association

5.7 Authorizing Approval of Sale or Disposal of Surplus Equipment

Cover Page

Resolution No. 2024-174 Approving Sale or Disposal of Surplus Equipment

5.8 Designate Outdoor Area for Nickle Dickle Day Festival

Cover Page

Resolution No. 2024-175 Approving Outdoor Area for Community Festival

5.9 Special Event Permit - Waconia Masonic Lodge #326

Cover Page

Resolution No. 2024-176 Approving Special Event Permit for the Waconia Masonic Lodge #326

Special Event Permit Application

Detour Map No Construction #1

Detour Map Construction #2

Setup 09-08-2024 Event

Motion by Coleman second by Sorensen to adopt the Consent Agenda as published.

MOTION CARRIED.

6) COUNCIL BUSINESS

6.1 Site Plan, Design Review, Variance, and Plat - Olive & Second Street Mixed Use Building

[Cover Page](#)

[Resolution No. 2024-177 Approving Site Plan and Variance](#)

[Resolution No. 2024-178 Approving OLIVE and SECOND Final Plat](#)

[Conclusion Recommendation](#)

[Location Map - Olive and Second Street](#)

[Olive and Second Street Narrative](#)

[Olive and Second Street Plan Set](#)

[Olive and Second Street Final Plat](#)

[Public Hearing Comments](#)

Lane Braaten, Community Development Director, gave a brief description of the agenda item stating the applicant has submitted applications for the Site Plan, Design Review, Variance, and Platting to redevelop the site with construction of a 5-story mixed use building with 92 apartments and 4,277 square feet of commercial space. The proposed site improvements are consistent with the City's Downtown District Design Standards. The applicant will coordinate utility, road, sidewalk, and alley improvements with City staff to ensure the construction of the new building and the future City road and utility projects do not impact each other.

Council Member Grengs questioned if there is anything in the development agreement on public parking. Fineran stated if the project is approved and moves forward, the City would enter into additional agreements with the Developer to satisfy the public parking requirements in writing.

Council Member Coleman inquired as to the increase traffic that will be directed to the alley. Bratten explained that staff has been working with the developer to address this issue to determine if a one-way alley or a bump-out to assist traffic flow.

Steve Yetzer, 332 West Fourth Street, assured the Council that if the alley does not flow well, it will be a deterrent for this property.

Craig Hartman, architect with Momentum Design Group, spoke to the Council on the height issue explaining it is an average grade plane around the building and then measure from the average grade plane to the top. This is the formula used by the developer to

arrive at the 65 feet, 10 inches. This height is only realized on a small portion of the building on the Second Street elevation.

Waldron requested clarification on the height of this building in comparison to the height of other buildings in the Downtown District. Braaten reminded the Council the Uptown Apartments received a height variance of 3 feet to a 48-foot height.

Carl Runck, Development Partner, stated the project would not be financially viable without the additional height for the additional floor.

Mayor Waldron requested a parking cost be included in the rent agreements so that renters are encouraged to use the underground parking and not the parking designated as public.

Council Member Grengs stated the 45-foot height requirement is obsolete and requested staff to bring the Council an updated ordinance for review during a Council Work Session.

Council Member Sorensen stated he agrees with the Mayor that the Council is setting a precedent and agrees with Grengs to have the Council review the height ordinance; but overall believes this is a good plan.

Council Member Coleman is also concerned with the precedent but believes the Ordinance is outdated stating that Waconia is a fast-growing community and the growth needs to be managed. This building is a good fit in the downtown district.

Council Member Grengs also agrees.

Motion by Grengs second by Coleman to adopt Resolution No. 2024-177 approving the Site Plan, Design Review and Variance application related to the Olive & Second mixed use building with a condition that each unit shall be allocated onsite parking associated with the rent/lease of the unit to ensure that the newly created public parking and the existing street parking is not the primary parking used by the tenants.

MOTION CARRIED

Motion by Grengs second by Sorensen to adopt Resolution No. 2024-178 approving the OLIVE AND SECOND Preliminary and Final Plat application.

MOTION CARRIED

6.2 Cedar Point Park Pickleball Courts

[Cover Page](#)

Resolution No. 2024-179 Affirming Recommendation of the Park Board for Dedicated Pickle Ball Facility at Cedar Point Park

Cedar Point Park Map

Court Photo

Shane Fineran, City Administrator, gave the Council an update on the agenda item stating in early June a pickleball group requested the City consider painting up to six pickleball courts on the court surface at Cedar Point Park. Currently the court surface features striping for two tennis courts, with two pickleball courts striped within the tennis court boundaries and two permanent net systems in place. The Council referred the request to the Park Board for review and recommendation.

The Park Board reviewed the request at its June 20, 2024, meeting. At that meeting, the pickleball group presented materials regarding the interest in, demand of, and health and social benefits of the sport as well as information related to concerns related to noise and parking. The request grew from the concept proposed to the Council to request to make the courts at the park a dedicated six court pickleball facility, with no tennis. An estimate of a complete conversion along with proposed sound deadening wind screening proposed by the pickleball group approached \$60,000. The Park Board failed to pass a motion to recommend that the facility be converted by a 2-3 vote citing concerns related to noise, parking availability, and the desire to keep this park multi-use park for all residents. At tonight's meeting, the pickleball group is amending the request that was presented to the Park Board to be more reflective of the original request made to the Council which would be additional pickleball court striping while keeping tennis courts on the site with pickleball played utilizing portable nets. The pickleball group is offering to pay and or enter into an agreement for the repayment of the costs for striping and the net systems.

Darel Radde, 13675 County Road 32, gave the Council an explanation of the project which started two years ago at the Park Board Meeting and appreciated the Council dedicating \$450,000 in Capital Improvements in 2026; however, due to playing on cement, the players are incurring injuries. Darel stated that there is a great need for pickleball at this time and 2026 is years away. Tonight, the Pickleball group is requesting what was requested a year ago where there are six courts available, not affect the tennis players, and use portable nets. This would be restriping of the two tennis courts at Cedar Point Park. The Waconia Pickleball Association will pay for the nets and the upgrade of the painting. The benefit to the City would be making the courts more useful and more community orientated.

John Douville, 1153 Spring Hill Circle, stated \$14,600 is for the repaint. The Pickleball group can provide a check for \$6,000 by Friday with the remainder of the funds raised by the time the invoice is due. The group has \$15,000 pledged and have stopped fundraising

until the project moves forward. Nets are not included in this price as the project will be done in phases and will utilize temporary nets.

Waldron stated this is a very different proposal than the proposal brought to the Parks Board and would consider returning this new proposal to the Parks Board for review.

Chris Johnson, 1109 Gold Finch Drive, stated he is in full support of pickleball and happy that there are City funds in the 2026 budget. Johnson also stated that the noise levels have been underestimated as well as the parking issues. He has correspondence from abutting neighbors stating there are concerns with the noise levels and using on-street parking. Also, questions the numbers that were presented regarding the frequency of tennis players. Would like to see more design standards as the current lines on the courts are confusing for everyone.

Motion by Grengs second by Coleman Affirming Recommendation of the Park Board for Dedicated Pickleball Facility at Cedar Point Park.

MOTION CARRIED

Mike Madson, 1614 Sandbar Circle, stated he represents the tennis group and was under the impression that tonight's meeting was to discuss the Park Boards decision not another counter proposal for consideration. Would like to see the new proposal discussed at the Park Board level first specifically to address the parking issues.

Motion by Waldron second by Grengs to refer additional discussion and the new proposal to the Park Board.

MOTION FAILED DUE TO LACK OF MAJORITY. VOTE SPLIT 2-2

6.3 Pavement Condition Rating Evaluation Contract

[Cover Page](#)

[Resolution No. 2024-180 Authorizing Pavement Condition Rating Data Collection Contract](#)

[WACONIA RDAI Overview](#)

Jon Haukaas, Public Services Director spoke to the Council stating staff is working to develop a long-term Pavement Management Plan to guide future investment in maintaining the streets in Waconia. The plan will be using an Asset Management approach to long term maintenance.

Council requested staff to include parking lots with this project.

Motion by Sorensen second by Grengs to Adopt Resolution No. 2024-180 Authorizing Pavement Condition Rating Data Collection Contract.

MOTION CARRIED

6.4 Reject Bids for Well #9 and Re-advertise Project

[Cover Page](#)

[Resolution No. 2024-181 Rejecting Bids and Rebid for the Construction of Well #9](#)

[Well No. 9 Rebid Memo Bolton & Menk 08-14-2024](#)

Haukaas stated two bids were received and opened on August 13, 2024, for the construction of Well #9. After review, irregularities were found in the calculations making the low bid invalidated. Staff recommends rejecting all bids received and re-advertise the project.

Motion by Coleman second by Grengs to Adopt Resolution No. 2024-181 Rejecting Bids and to authorize Rebid for the Construction of Well #9.

MOITON CARRIED.

6.5 Water System Study & Water Model Update

[Cover Page](#)

[Resolution No. 2024-182 Authorizing Water System Study and Water Model Update](#)

[Water System Study 08-13-2024](#)

Haukaas stated staff recommends completing an updated Water System Study and Model to guide investment decisions over the next several years.

Motion by Sorensen second by Coleman to Adopt Resolution No. 2024-182 Authorizing Water System Study and Water Model Update.

MOTION CARRIED

6.6 Closed Session

[Cover Page](#)

[Closed Session Memo dated 08-18-2024](#)

7) ITEMS REMOVED FROM CONSENT AGENDA

No items removed.

8) STAFF REPORTS

Jackie Schulze provided an update on the State Primary Election held on August 13, 2024 with 73 in person voters and 61 absentee voters. This is a 7% voter turnout for the City. A special thank you to all the election judges for a job well done.

9) BOARD REPORTS

Sorensen: Nothing to report
Coleman: Nothing to report
Grengs: Nothing to report
Waldron: Nothing to report

10) ANNOUNCEMENTS

No announcements

11) CLOSED SESSION

6.6 Closed Session

[Cover Page](#)

[Closed Session Memo dated 08-18-2024](#)

The Mayor stated the Council will be moving into closed session (Agenda Item 6.6) pursuant to Minnesota Statute 13d.05 subdivision 3b. The City Council will be in closed session to discuss the potential sale of real property identified by PD #750501470 and described as Lot 2, Block 16 of the plat of City Lots of Waconia.

Motion by Grengs second by Coleman to move into closed session.

MOTION CARRIED

Motion by Sorensen second by Coleman to close the closed session at 8:20 p.m.

MOTION CARRIED

Motion by Grengs second by Coleman to adjourn the August 19, 2024, City Council Meeting at 8:21 p.m.

MOTION CARRIED

Nicole Waldron, Mayor

ATTEST: _____

Sue Schwalbe, Office Specialist



REQUEST FOR CITY COUNCIL ACTION

Meeting Date:		September 3, 2024			
Item Name:		Approve September 3, 2024 Expenditures			
Originating Department:		Finance			
Presented by:		Nicole Meyer			
Previous Council Action (if any):					
Item Type (X only one):	Consent	X	Regular Session		Discussion Session
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>					
Motion to Approve Payment of September 3, 2024 Expenditures					
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>					
Attached is the claim and disbursements register for the City of Waconia as of September 3, 2024. Payments are made to vendors via check, electric payment, and through the City's purchasing card program.					
<u>Attachments:</u>					
FINANCIAL IMPLICATIONS:			ADVISORY BOARD RECOMMENDATIONS:		
Funding Sources & Uses:					
Budget Information:			Planning Commission		
_____ Budgeted			Parks and Recreation Board		
_____ Non Budgeted			Safari Island Advisory Board		
_____ Amendment Required			Other		



REQUEST FOR CITY COUNCIL ACTION

Meeting Date:		September 3, 2024					
Item Name:		Approve Lodging Tax Fund Request - Waconia CVB					
Originating Department:		Finance					
Presented by:		Nicole Meyer					
Previous Council Action (if any):							
Item Type (X only one):	Consent	☒ X	Regular Session	☐	Discussion Session	☐	
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Motion to Approve Request for Lodging Tax Reimbursement from the Waconia CVB for Expenditures Incurred May - July 2024							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
The Waconia Chamber Convention & Visitors Bureau (CVB) has requested a lodging tax reimbursement for expenditures accrued from May - July 2024. Staff reviewed the request for reimbursement and supporting invoices as approved by the CVB. Lodging tax funds are currently available for payment of these expenditures. Staff recommends approval of the request in the amount \$9,506.65.							
<u>Attachments:</u>							
FINANCIAL IMPLICATIONS:				ADVISORY BOARD RECOMMENDATIONS:			
Funding Sources & Uses:							
Lodging Tax Fund (701)							
Budget Information:				Planning Commission			
☒ X Budgeted				Parks and Recreation Board			
☐ Non Budgeted				Safari Island Advisory Board			
☐ Amendment Required				Other			



REQUEST FOR CITY COUNCIL ACTION

Meeting Date:		September 3, 2024					
Item Name:		Approve Kraus-Anderson Construction Pay Request #23 for the New Fire Station					
Originating Department:		Finance					
Presented by:		Amanda Ortloff					
Previous Council Action (if any):							
Item Type (X only one):	Consent	☒ X	Regular Session	☐	Discussion Session	☐	
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Motion to Approve Kraus-Anderson Construction Pay Request #23 for the New Fire Station Project							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
Kraus-Anderson Construction Co. has reviewed the contractor pay request #23 for the new fire station project. The contractors requesting payment are as follows: Prime Construction Solutions, LLC \$25,365.62 Ben's Structural Fabrication, Inc. \$29,944.95 Right-Way Caulking, Inc. \$2,964.00 Kendell Doors & Hardware, Inc. \$3,287.00 RTL Construction, Inc. \$1,710.91 Twin City Acoustics, Inc. \$845.50 Gag Sheet Metal, Inc. \$1,368.19 Electrical Production Services, Inc. \$7,762.51 Parker Contracting, LLC \$40,449.55 Northwest Asphalt, Inc. \$47,005.05 The total amount of the contractor payments for this request is \$160,703.28. Retainage remains due for each contractor until the project is complete and upon review of liquidated damages.							
<u>Attachments:</u>							
FINANCIAL IMPLICATIONS:				ADVISORY BOARD RECOMMENDATIONS:			
Funding Sources & Uses:							
PIR							
Budget Information:				Planning Commission			
☒ Budgeted				Parks and Recreation Board			
☐ Non Budgeted				Safari Island Advisory Board			
☐ Amendment Required				Other			



REQUEST FOR CITY COUNCIL ACTION

Meeting Date:		September 3, 2024					
Item Name:		Contractor Pay Request #4 - Waconia Downtown Reconstruction - Phase 2					
Originating Department:		Finance					
Presented by:		Nicole Meyer					
Previous Council Action (if any):							
Item Type (X only one):	Consent	☒ X	Regular Session	☐	Discussion Session	☐	
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Motion to approve Pay Estimate No. 4 to W.M. Mueller & Sons, Inc. for the Waconia Downtown Reconstruction - Phase 2 Project							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
Staff has reviewed the contractor pay request for the Waconia Downtown Reconstruction - Phase 2 Project and recommends payment of \$507,211.41 based on the engineering request for payment. This payment represents approximately 70.9% of the total approved contract for the project.							
<u>Attachments:</u>							
FINANCIAL IMPLICATIONS:				ADVISORY BOARD RECOMMENDATIONS:			
Funding Sources & Uses: PIR, Water, Sewer, Storm Water							
Budget Information: ☒ X Budgeted ☐ Non Budgeted ☐ Amendment Required				Planning Commission			
				Parks and Recreation Board			
				Safari Island Advisory Board			
				Other			



REQUEST FOR CITY COUNCIL ACTION

Meeting Date:	September 3, 2024
Item Name:	Authorizing Approval of Sale or Disposal of Surplus Equipment
Originating Department:	Finance
Presented by:	Nicole Meyer

Previous Council Action (if any):

Item Type (X only one):	Consent	X	Regular Session		Discussion Session	
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RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED *(Include motion in proper format.)*

Adopt Resolution No. 2024-183 Authorizing Approval of Sale or Disposal of Surplus Equipment

EXPLANATION OF AGENDA ITEM *(Include a description of background, benefits, and recommendations.)*

City staff have reviewed inventory and items in storage at Public Services and the old fire station facility. Staff is requesting this equipment be deemed surplus equipment and be sold or properly disposed of.

- Truck #41 Dodge Ram (replacement in 2024 put into service)
- #6018 Chainsaw
- Wooden captain's office desk system - 6 pieces - 2 corner pieces and 4 straight pieces with drawers
- Desk Light
- (6) 48"x78" Black lockable storage cabinets
- (2) 4-drawer file cabinets
- (3) 2 drawer file cabinets fireproof
- (20) 6' Training room tables
- (40) Training room chairs with carts
- (4) Metal magazine storage racks
- (4) Office desk chairs
- (2) 2-person office desk systems 10' wide with overhead storage
- (2) EF Johnson Mobile radios including miscellaneous speakers and cables
- Misc old cleaning supplies and tools
- (4) Maxxis Bighorn 2.0 28X11.00 R14 tires with Can Am aluminum wheels
- (10) Orange Honeywell fire helmets
- Misc mismatched expired yellow turnout gear sets and boots
- Large flammable cabinet
- Small flammable cabinet
- Hose cart with garden hose
- Sectional leather couch
- (10) Out of service MSA SCBA's, (4) spare bottles, and spare parts
- GearGrid frames and outlet panels for old lockers
- Misc whiteboards and corkboards
- Misc out of service or obsolete hand tools

The City utilizes Jeff Martin Auctioneers, Inc. for the sale of these types of items along with general postings at City Hall. The equipment is listed at the lowest price the City will accept and people can bid on the item. The equipment is then sold to the highest bidder. Funds from the sale will be

recognized in the General Fund - Streets/Fire and Water/Sewer Utility (sale of truck #41 only) departments operating funds as reimbursement revenue.

Attachments:

1. [Resolution No. 2024-183 Approving Surplus Equipment And Sale](#)

<i>FINANCIAL IMPLICATIONS:</i> Funding Sources & Uses: General Fund - Streets/Fire (101) & Water/Sewer Utility Funds (601/602)		<i>ADVISORY BOARD RECOMMENDATIONS:</i>	
Budget Information:		Planning Commission	
☐ Budgeted		Parks and Recreation Board	
☒ Non Budgeted		Safari Island Advisory Board	
☐ Amendment Required		Other	

CITY OF WACONIA
RESOLUTION NO. 2024-183
RESOLUTION APPROVING SURPLUS EQUIPMENT AND SALE

WHEREAS, Public Services and Fire department staff cleared from storage equipment and materials no longer in use for operations; and

WHEREAS, the list of surplus equipment includes the following:

- Truck #41 Dodge Ram (replacement in 2024 put into service)
- #6018 Chainsaw
- Wooden captain's office desk system - 6 pieces - 2 corner pieces and 4 straight pieces with drawers
- Desk Light
- (6) 48"x78" Black lockable storage cabinets
- (2) 4-drawer file cabinets
- (3) 2 drawer file cabinets fireproof
- (20) 6' Training room tables
- (40) Training room chairs with carts
- (4) Metal magazine storage racks
- (4) Office desk chairs
- (2) 2-person office desk systems 10' wide with overhead storage
- (2) EF Johnson Mobile radios including miscellaneous speakers and cables
- Misc old cleaning supplies and tools
- (4) Maxxis Bighorn 2.0 28X11.00 R14 tires with Can Am aluminum wheels
- (10) Orange Honeywell fire helmets
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- Sectional leather couch
- (10) Out of service MSA SCBA's, (4) spare bottles, and spare parts
- GearGrid frames and outlet panels for old lockers
- Misc whiteboards and corkboards
- Misc out of service or obsolete hand tools

WHEREAS, funds received for the equipment with saleable value will be recognized in the General Fund – Streets/Fire and Water/Sewer Utility departments as reimbursement revenue; and

WHEREAS, equipment that cannot be sold will be properly disposed of by City staff.

NOW, THEREFORE, BE IT RESOLVED the City Council of the City of Waconia hereby declares the equipment listed as surplus equipment and authorizes its sale or disposal as determined by City staff.

Adopted by the City Council of the City of Waconia this 3rd day of September, 2024.

Nicole Waldron, Mayor

ATTEST: _____
Jacqueline Schulze, Assistant City Administrator



REQUEST FOR CITY COUNCIL ACTION

Meeting Date:		September 3, 2024					
Item Name:		Contract for Infield Repairs of Brook Peterson Fields 1-4					
Originating Department:		Public Services					
Presented by:		Jon Haukaas					
Previous Council Action (if any):							
Item Type (X only one):	Consent	☒ X	Regular Session	☐	Discussion Session	☐	
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Adopt Resolution No. 2024-184 Authorizing staff to execute a contract for infield repairs at Brook Peterson Fields 1-4.							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
The ballfields at Brook Peterson Park are heavily used and programmed throughout the summer. As the infields are continually graded, a large 'bump' in the elevation at the transition from the infield to the outfield is formed. This is problematic from a playing perspective, creates a safety hazard for players running across this area, and for proper drainage over the fields. Staff met with the School District recreation staff to learn of their experiences and then met with two contractors specializing in this type of work. The contractor would remove and lower the unsafe, raised lip along the interface of the infield and outfield sod, regrade and restore both sides. • Magic Turf of Elk River, MN provided a quote of \$24,652.50 to perform the work with the City providing any additional soil materials needed to complete the work. • Professional Turf & Restoration (Pro Turf) of Big Lake, MN provided a quote of \$26,000.00 to perform the work using laser guided grading equipment. Staff is recommending the City Council approve the service offered by Professional Turf & Restoration as a more complete and accurate method to perform this safety repair for only a slightly higher cost.							
Attachments:							
1. Resolution No. 2024-184 Authorizing Brook Peterson Fields 1-4 Grading and Repair Contract 2. 03-03-2024 Cost Estimate from Professional Turf & Restoration							
FINANCIAL IMPLICATIONS:				ADVISORY BOARD RECOMMENDATIONS:			
Funding Sources & Uses:							
Contractual Service Line Item							
Budget Information:				Planning Commission			
☒ Budgeted				Parks and Recreation Board			
☐ Non Budgeted				Safari Island Advisory Board			
☐ Amendment Required				Other			

**CITY OF WACONIA
RESOLUTION NO. 2024-184**

**RESOLUTION AUTHORIZING BROOK PETERSON FIELDS 1-4
GRADING AND REPAIR CONTRACT**

WHEREAS, one of the City’s Priorities is to “manage, maintain, and improve our current and future physical assets”; and

WHEREAS, the ballfields at Brook Peterson Park are heavily used throughout the season and are in need of regrading where the inner edge of the outfields and the outer edge of the infields meet for improved playability and drainage; and

WHEREAS, city staff have solicited quotes from two vendors to complete the necessary work with funding from our contractual services line item; and

WHEREAS, Staff recommend approval of the contract with Professional Turf & Restoration (Pro Turf) of Big Lake, Minnesota as providing the best value and most complete method to achieve accurate and safe repair of these highly used athletic facilities.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Waconia hereby authorizes City staff to execute a contract with Professional Turf & Restoration (Pro Turf) of Big Lake, Minnesota for repair of the Brook Peterson Fields 1-4.

Adopted by the City Council of the City of Waconia this 3rd day of September 2024.

Nicole Waldron, Mayor

Attest: _____
Jackie Schulze, Assistant City Administrator

March 3, 2024

Mike Mawdsley
City of Waconia
201 South Vine Street
Waconia, MN 55387

Subject: Softball Fields

Mike:

Professional Turf & Renovation is pleased to offer you an estimate to improve the softball fields at Brook Peterson. Our services would include:

Softball Infields

- Remove the lip along the arc and pile spoils on site
- Provide equipment and labor to laser grade the infield for optimal drainage and playability
- Prep for sod and apply starter fertilizer
- Supply and install 1-2 rows of big roll sod along arc (depending on arc distance from pitching rubber and sprinkler location)
- Drag infield and rake edges

Estimated Cost: \$6,500.00 per infield

Softball Field Fertilization (4 Fields)

- Supply and apply 1 application of 21-0-5 50% Contain Advanced @ 1lb of N/1,000 sq ft
 - o Cost: \$1,162.00
- Supply and apply 1 application of 22-0-8 50% UMaxx, 25% CA, 25% AMS @ 1lb of N/1,000 sq ft
 - o Cost: \$1,333.33

If you have questions, please let me know.

Sincerely,

Andy Hopko



REQUEST FOR CITY COUNCIL ACTION

Meeting Date:		September 3, 2024					
Item Name:		Extension of Subdivision Regulations - 9550 Little Avenue, 9780 Little Avenue, 10080 Little Avenue - M/I Homes of Minneapolis, LLC & Pulte Group					
Originating Department:		Community Development					
Presented by:		Lane Braaten					
Previous Council Action (if any):							
Item Type (X only one):	Consent	☒ X	Regular Session	☐	Discussion Session	☐	
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Motion to adopt Resolution No. 2024-185 extending the application of the City of Waconia's Subdivision Regulations to the subject properties located at 9550 Little Avenue, 9780 Little Avenue and 10080 Little Avenue.							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
The City Council adopted Ordinance No. 717 in 2018, which allows the City the authority to extend the application of the City's Subdivision Regulations to unincorporated territory within two miles of its limits, subject to Minnesota Statutes, Section 462.358. Further, the ordinance allowed the review of the municipality where the Waconia City Council has extended the regulations by resolution pursuant to Minnesota Statutes, section 462.358, subdivision 1a. M/I Homes of Minneapolis, LLC and Pulte Group, on behalf of the property owners, have requested the City Council pass a resolution allowing the City of Waconia to review a future subdivision application for the subject properties located at 9550 Little Avenue, 9780 Little Avenue, and 10080 Little Avenue. The concept plan proposes to subdivide the 240+ acre property into approximately 341 single-family residential parcels.							
CONCLUSION/RECOMMENDATION							
The City Council should consider if the proposed extended subdivision review is appropriate for the subject properties.							
Attachments:							
1. Resolution No. 2024-185 Extending the Application Subdivision Regulations to Property Outside the Corporate City Limits 2. Location Map							
FINANCIAL IMPLICATIONS:				ADVISORY BOARD RECOMMENDATIONS:			
Funding Sources & Uses:							
Budget Information:				Planning Commission			
_____ Budgeted				Parks and Recreation Board			
_____ Non Budgeted				Safari Island Advisory Board			
_____ Amendment Required				Other			

**CITY OF WACONIA
RESOLUTION NO. 2024-185**

**A RESOLUTION EXTENDING THE APPLICATION OF THE CITY OF WACONIA'S
SUBDIVISION REGULATIONS TO CERTAIN PROPERTY OUTSIDE THE CORPORATE
LIMITS OF THE CITY OF WACONIA**

WHEREAS, The City of Waconia has authority, granted in Minnesota Statutes, section 462.358, to adopt subdivision regulations to promote the orderly, economic, and safe development of land;

WHEREAS, The City of Waconia has adopted subdivision regulations by ordinance in accordance with the authority granted to it in Minnesota Statutes, section 462.358;

WHEREAS, The City of Waconia has the authority under Minnesota Statutes, section 462.358, subdivision 1a, to extend the application of its subdivision regulations to unincorporated territory within two miles of its limits;

WHEREAS, The City of Waconia may not extend its subdivision regulations by resolution to a town that has adopted subdivision regulations;

WHEREAS, The City of Waconia has received a sketch plan application and anticipates submittal of a preliminary plat application seeking approval for land presently in Laketown Township that is within two miles of the City of Waconia's corporate limits;

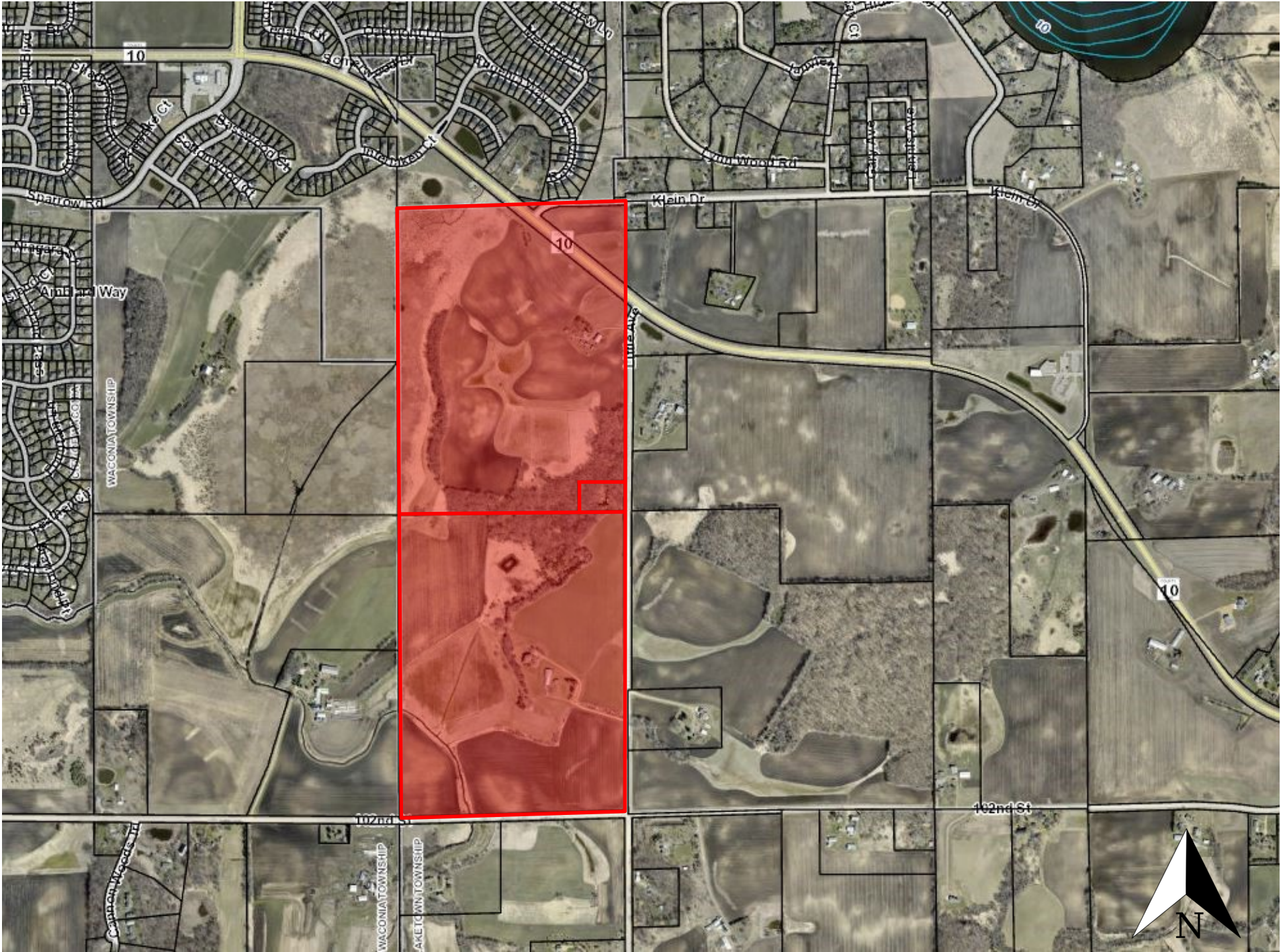
WHEREAS, Laketown Township has not adopted subdivision regulations.

NOW, THEREFORE, BE IT RESOLVED That the City of Waconia's subdivision regulations are hereby extended to the certain properties that are located at 9550 Little Avenue (PID#070300200), 9780 Little Avenue (PID#070300300), and 10080 Little Avenue (PID# 070300100), within Laketown Township.

Adopted by the City Council of the City of Waconia this 3rd day of September 2024.

Nicole Waldron, Mayor

Attest: _____
Jacqueline Schulze, Assist City Administrator





REQUEST FOR CITY COUNCIL ACTION

Meeting Date:		September 3, 2024					
Item Name:		Approve Temporary On-Sale Liquor License for Lake Country Libare Distilling LLC dba J. Carver Distillery					
Originating Department:		Administration					
Presented by:		Sue Schwalbe					
Previous Council Action (if any):							
Item Type (X only one):	Consent	☒ X	Regular Session	☐	Discussion Session	☐	
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Adopt Resolution No. 2024-186 Approving a Temporary On-Sale Liquor License for September 14, 2024							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
On July 31, 2024, the office of the City Administrator received an application for a temporary on-sale liquor license from J. Carver Distillery for a 10 year anniversary event scheduled for September 14, 2024. The sale and consumption of alcoholic beverages for the event will be limited to the parking lot associated with J. Carver Distillery at 1320 Mill Lane in Waconia. Staff recommends approval of this Resolution. Attachments: 1. Resolution No. 2024-186 Approving Temporary On-Sale Liquor License for J Carver Distillery							
FINANCIAL IMPLICATIONS:				ADVISORY BOARD RECOMMENDATIONS:			
Funding Sources & Uses:							
Budget Information:				Planning Commission			
☐ Budgeted				Parks and Recreation Board			
☐ Non Budgeted				Safari Island Advisory Board			
☐ Amendment Required				Other			

**CITY OF WACONIA
RESOLUTION NO. 2024-186**

**RESOLUTION APPROVING TEMPORARY ON-SALE
LIQUOR LICENSE APPLICATION**

WHEREAS, An application for a temporary on-sale liquor license has been received in the Office of the City Administrator from the Lake Country Libare Distilling LLC dba J. Carver Distillery, 1320 Mill Lane for a 10 year anniversary event September 14, 2024; and

WHEREAS, Sale and consumption of alcoholic beverages will be limited to the parking area associated with J. Carver Distillery, 1320 Mill Lane in Waconia, Minnesota.

NOW, THEREFORE, BE IT RESOLVED, That the City Council of the City of Waconia hereby approves the temporary on-sale liquor license application of the Lake Country Libare Distilling LLC dba J. Carver Distillery for September 14, 2024, upon completion of all forms, payment of fees, receipt of certificates of insurance, and proof of compliance with state and local requirements.

Adopted by the City Council of the City of Waconia this 3rd day of September 2024.

Nicole Waldron, Mayor

ATTEST: _____
Jackie Schulze, Assistant City Administrator



REQUEST FOR CITY COUNCIL ACTION

Meeting Date:		September 3, 2024					
Item Name:		Special Event - Bode Grays Nickle Dickle Day Block Party					
Originating Department:		Administration					
Presented by:		Shane Fineran					
Previous Council Action (if any):							
Item Type (X only one):	Consent	X	Regular Session		Discussion Session		
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Adopt Resolution No. 2024-187 Approve Special Event & Noise Permit							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
Greg James, with Bode Gray's, 125 1st St West, has submitted a Special Event Permit and Noise Permit for Friday, September 13, 2024 to conduct a block party featuring live music, food, and beverages. The event will require the closure of the 100 block of 1st Street West between Olive Street and Vine Street. The event will run from 7:00 p.m. until 10:00 p.m. with the closure lasting from 5:00 p.m. to 11:00 p.m. for set-up and tear down. The applicant will be responsible for acquiring necessary barricades and signage from the City for the closure, proof of liability insurance naming the city as additional insured, and notifying adjacent property owners. Attachments: 1. Resolution No. 2024-187 Approving Special Event and Noise Permit for Bode Grays 2. Special Event Permit Application - Bode Gray, Nickle Dickle Day							
FINANCIAL IMPLICATIONS:				ADVISORY BOARD RECOMMENDATIONS:			
Funding Sources & Uses:							
Budget Information:				Planning Commission			
_____ Budgeted				Parks and Recreation Board			
_____ Non Budgeted				Safari Island Advisory Board			
_____ Amendment Required				Other			

**CITY OF WACONIA
RESOLUTION NO. 2024-187**

**RESOLUTION APPROVING SPECIAL EVENT AND NOISE PERMIT
BODE GRAYS NICKLE DICKLE BLOCK PARTY**

WHEREAS, the City of Waconia has received a permit application for a special event and noise permit to occur on municipal streets from Bode Gray's, 125 W 1st St; and

WHEREAS, the event will be held on Friday, September 13th from 7:00 p.m. until 10:00 p.m. and will feature alcohol and food sales, live music; and

WHEREAS, municipal property to be used include the 100 block of 1st Street W from the hours of 5:00 p.m. until 11:00 p.m.; and

WHEREAS, the applicant shall furnish the City of Waconia a certificate of insurance naming the city as additional insured with the limits consistent with the Special Events Policy, procure and return necessary barricades and signage for the street closure, and at notify adjacent businesses at least two weeks prior to the event; and

NOW, THEREFORE, BE IT RESOLVED That the City Council of the City of Waconia hereby approves the Special Event and Noise Permit.

Adopted by the City Council of the City of Waconia this 3rd day of September 2024.

Nicole Waldron, Mayor

Attest: _____
Jackie Schulze, Assistant City Administrator



SPECIAL EVENT PERMIT APPLICATION

A special event includes an event held in the city in which one of the following occurs:

- a) Amplified sound is to be used
- b) A street, sidewalk or other public right of way or place is closed for the benefit of the event attendees
- c) A temporary alcoholic beverage license is required or an existing on-sale alcoholic beverage license is carried to the event location as part of a community festival
- d) The event will adversely impact a considerable number of members of the public

Most outdoor events and activities within the City of Waconia require permits or approvals. All costs associated with the event are to be borne by the event sponsor. All applications must be approved by the City Council prior to issuance of a permit.

A Review Committee, made up of representatives from City and County departments, will review the application and make changes and/or recommendations to the event sponsor prior to application being forward to the City Council for a final decision.

TIMING FOR APPLICATION SUBMISSION

- Applications for special events need to be received by the City of Waconia at least 30 days prior to the event date, with submission 60 days in advance requested wherever possible.
- There is no guarantee an event application can be processed and approved in less than 30 days.
- For large scale events involving 1,000 participants or more application must be made 120 days in advance.

ADDITIONAL CONSIDERATIONS FOR EVENT ORGANIZERS

In the case of a race, walk, parade, or other event using City streets, a detailed layout of the route and arrangements for traffic control to be done by a certified vendor using the Manual of Uniform Traffic Control Devices standards will be required to be submitted with the application.

Any event to be held within Parks or shelter must contact City Hall. A special event permit is required for events/activities exceeding 300 participants or any event/activity which extends beyond the immediate park boundaries.
<https://www.waconia.org/347/Facility-Use-Rental-Applications>

All applications, are to be sent directly to City Hall. **Issued permits will NOT be eligible for refunds.**

Section 1. CHECKLIST OF REQUIRED INFORMATION

Select any of the following that apply to this event:

- ☐ Amplified Sound to be used – COMPLETE SECTION 3 (B)
- ☒ Closure request for a street, sidewalk, or other public way or place as part of the event – COMPLETE SECTION 3 (C)
- ☒ Alcohol service as part of the event – COMPLETE SECTION 3 (D) AND ANY ADDITIONAL LIQUOR LICENSES WITH THE CITY HALL'S OFFICE IF REQUIRED
- ☒ Tents or other membrane structures to be erected as part of the event
- ☐ Fireworks Display as part of the event

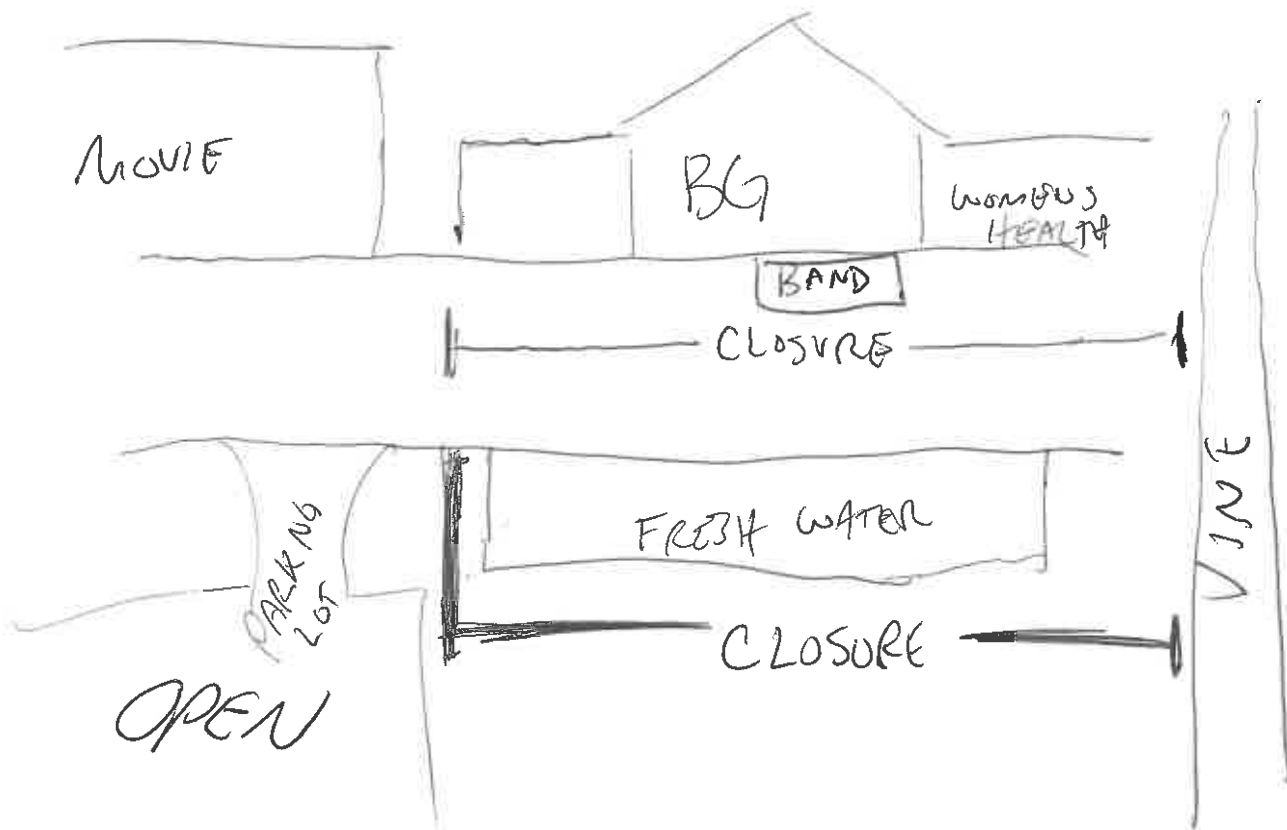
Staff Initials: For your license application to be processed, you must submit the following to the City Halls's Office:

- | | |
|--------------------------|---|
| ☐ | ☐ This application form, fully completed and signed by the applicant or an authorized officer or partner. ANSWER EVERY QUESTION, USING N/A IF NECESSARY ON ANY QUESTIONS. APPLICATIONS WITH BLANK QUESTIONS WILL BE RETURNED WITHOUT PROCESSING. |
| ☐ | ☐ Detailed Site Plan for the event |
| ☐ | ☒ Certificate of Insurance, if required |
| ☐ | ☐ Traffic Control plan from an approved vendor for any street closures |
| ☐ | ☒ Payment for required permit fee; Checks must be made payable to the City of Waconia
•\$100 for base Special Event Permit |
| ☐ | ☐ Any required additional permit applications from other City departments |

CHECK #
3851

\$100.00

08-20-24



Section 2. REQUIRED LICENSE INFORMATION – complete every question**A. Information about who is completing and submitting this application**

1. First Name GREG		2. Last Name JAMES	
3. Primary Telephone Number 952-300-0518	4. Type of Phone: ☒ Cell ☐ Business ☐ Home ☐ Other	5. Alternate Phone Number	6. Type of Phone: ☐ Cell ☐ Business ☐ Home ☐ Other
7. Email Address INFO@IRONTAPMN.COM			
8. Please send official notices relating to this license to: ☐ Mailing Address ☒ Email ☐ Business Address		9. Role of person completing application: ☒ Owner ☐ Officer ☐ Partner ☐ Manager ☐ Agent for the Owner ☐ Other	

**B. Information about primary point of contact for this license during licensed activity (if different than above)
THIS PERSON MUST BE ON SITE DURING THE EVENT**

10. First Name		11. Last Name	
12. Primary Telephone Number	13. Type of Phone: ☐ Cell ☐ Business ☐ Home ☐ Other	14. Alternate Phone Number	15. Type of Phone: ☐ Cell ☐ Business ☐ Home ☐ Other
16. Email Address		17. Role of primary contact: ☐ Owner ☐ Officer ☐ Partner ☐ Manager ☐ Agent for the Owner ☐ Other	

C. Mailing Address Information

18. Name of organization or individual to whom correspondence should be sent about this permit BODE GRAYS			
19. Email Address INFO@IRONTAPMN.COM			
20. Mailing Address 300 W LAKE ST	21. City WACONIA	22. State MN	23. Zip Code 55387
24. Please send official notices relating to this license to: ☐ Mailing Address ☐ Email			

D. License Holder Information

Provide information about who this license will be issued to			
25. Entity license will be issued to BODE GRAYS			
26. Business Federal Tax ID Number/Tax Exempt Number 87-4103676		27. Business State Tax ID Number 8509564	
28. Business Address 125 W FIRST STREET	29. City WACONIA	30. State MN	31. Zip Code 55387

Section 3. Event Information – attach additional sheets as needed for any questions**A. Event Basics**

32. Name of Event BODE GRAYS MUSIC / BLOCK PARTY	
33. Date(s) of Event complete separate applications for a series of events held at separate times SEPT 13	
34. Time of Event 7-10 PM	35. Set up start time and clean up finish time 5:00pm - 11:00 p.m.

36. Location of Event –Street Address 125 W FIRST STREET	37. City WAGONIA	38. State MN	39. Zip Code 55387
40. Description of area to be used at the event location for activities (Attach additional sheets as needed) ***A detailed diagram of the site plan is also required to be submitted			
41. Is your event in a City park? ☐ Yes ☒ No If yes, you must schedule use of the park with City Hall as well. Call: 952-442-2615			
42. Is your event outdoors? ☒ Yes ☐ No			
43. Estimated Number of Attendees- 160-150	44. Are tickets being sold? ☐ Yes ☒ No		
45. What is the admission charge, if any 0	46. Purpose of event proceeds (if applicable) NA		
47. Describe how attendance will be monitored and limited if necessary WE WILL SET UP A PERIMETER TO KEEP PEOPLE IN			
48. Describe any entertainment being provided MUSIC BY 3 QUARTER COUNTRY			

49. Describe food and beverage plans for the event, including who will be providing any food or beverages and what other licenses or permits will be obtained from any jurisdiction for this service.

FOOD WILL BE PROVIDED BY BG
AS WELL AS THE ALCOHOL MOSTLY
PROVIDED/SUPPLIED BY BG AND JONIE
OF DAHLMEIER.

50. Describe how any emergencies or medical needs occurring during the event will be met

OWNER WILL MONITOR ANY SUCH
EVENT AND GET PROPER AUTHORITIES
INVOLVED IF NEEDED.

Sanitation and garbage disposal is the responsibility of the event sponsor. Staff will review this information for adequacy based on planned attendance.

51. Will you be providing additional trash receptacles?

☒

Yes

Company providing this service:

Number of receptacles:

4

What is the plan for picking these receptacles up following the event? STAFF

☐

No

Explain how trash will be managed as part of the event:

52. Will you be providing toilets and wash stations?

☒

Yes

INSIDE BUILDING

Company providing this service:

Number of toilets:

Number of wash stations:

What is the plan for picking these items up following the event?

☐

No

Explain how these needs will be met for event attendees:

B. Information about Amplified Sound

53. INDICATE WHICH OF THE FOLLOWING APPLIES TO THIS EVENT:

- ☐ Maximum allowable sound pressure level no more than 85 decibels measure at the property line or venue boundary.
- ☐ Waive the maximum allowable sound pressure level and require the amplified sound to terminate no later than 10:30 PM
- ☐ There will be NO amplified sound at this event.

EVENT MUSIC DONE BY 10PM

54. Describe the means and method proposed by you as the applicant to prevent noise from the event from unreasonably disturbing those persons who live or work in the vicinity of the event.

C. Information about any public right of way closures

55. Are you requesting any kind of public right of way closure as part of this event?

- ☐ Yes, for a very limited duration less than 15 minutes
- ☒ Yes, for 15 minutes or longer – an obstruction permit through Public Services Department will be required
- ☐ No – if no, please skip the remainder of this section and jump to subsection D

When a street is to be closed for over 15 minutes, a detour is to be established and signed to provide a designated route around the event. A detailed layout of the route and arrangements for traffic control must be done by a certified vendor using the Manual of Uniform Traffic Control Devices standards. Law Enforcement Officers must be utilized at all traffic controlled intersections. Public Services time for temporary traffic signal modifications, additional signage, or other City costs may be charged.

In addition all events with street closures must include an emergency plan detailing access for emergency vehicles. Road closures are not allowed for locations where there are no other access options for the businesses or residents

56. Attach a detailed diagram of any proposed closure, and explain here exactly what is pictured in the diagram and intended in terms of the closure

57. Are you proposing a street closure that will impact residential properties?

- ☐ Yes – if yes, you must notify all properties at least 7-days in advance of the event of the closure
- ☒ No

58. Are you proposing a street closure that will impact commercial properties?

- ☐ Yes
- ☒ No

If yes, you must notify all businesses at least 14-days in advance of the closure.

MOST BUSINESSES ARE CLOSED DURING THIS TIME

D. Information about any alcohol as part of the event

59. Are you planning to serve alcoholic beverages as part of this event?

- ☒ Yes – if yes, please answer the following questions
☐ No – if no, please skip the remainder of this section and jump to Section 4 of the application

60. Which of the following are you requesting as part of serving alcoholic beverages?

- ☐ Temporary Liquor License (requires a separate application)
☒ Designation of the special event as a Community Festival to allow on-sale licensee(s) to provide service
☐ Service by licensed on-sale licensee(s) on Municipal Facilities
☐ Use of licensed caterer(s) who will be providing alcohol service incidental to the service of food
☐ Other

If you indicated other, please explain how alcoholic beverages will be provided as part of this event, by whom, and under what authority

61. If you intend to apply for a temporary liquor license, is the same entity applying for the liquor license as the special event permit?

- ☒ Yes
☐ No – Name of the organization/entity applying for a temporary liquor license also serving as an event sponsor:

Indicate what type of organization will be applying for the liquor license:

- ☐ Club
☐ Religious Organization
☐ Political Committee Registered Under Minn. Stat. Section 10A.14
State University
☐ Brewer or Microdistillery
☐ Charitable Organization
☐ Non-Profit Organization

*If the organization is not one of the above, it is not eligible to apply for a temporary liquor license

If the organization is a club or a charitable, religious or non-profit organization, has it been in existence for at least 3 years?

- ☐ Yes
☐ No-the organization is not eligible for a temporary liquor license

Note: A temporary liquor application must be received by the City Hall's Office NO LATER 45 DAYS BEFORE THE EVENT. There is no ability to make any exceptions to this requirement.

62. Please list all on-sale licensees who will be providing liquor service as part of this event under this designation. Certificates of insurance specifically covering this event must also be provided for all vendors.

BODE GRAYS

63. If a licensed caterer will be used as part of the event, indicate the name and state license number of the caterer

64. List who will be carrying liquor liability insurance for this event

BODE GRAYS

65. Indicate the specific area(s) liquor will be dispensed and consumed, and what measures will be followed to ensure liquor is only dispensed to event attendees who are of legal age, and that no liquor leaves the authorized area

STAFF WILL BE DILIGENT IN CARDING INDIVIDUALS

66. Do you plan to hire off-duty officers to provide security during the event (required with alcohol service)?

☐ Yes

☒ No

HOWEVER I PLAN ON INFORMING THEM

Contact Carver County Sheriff's Office. 952-361-1231

67. Fireworks Display as Part of the event?

☐ Yes

☒ No

If you answered yes to the above, please contact the Fire Department at 952-442-2316 in order to request a Fireworks Display Permit

68. Tents or other membrane structures to be erected as part of the event?

☒ Yes

☐ No

69. If you answered yes to question 68, please name the tent provider/company. Please also list the square footage and dimensions of your tent. If you do not have or need a tent provider please state so below.

10x10 TENT PROVIDED BY OWNER

If your tent is over 400 square ft. Please contact the Planning Department for a temporary structure permit. 952-442-2184

Section 4. APPLICATION VERIFICATION AND ACCEPTANCE OF RESPONSIBILITY

Notice of Collection of Private Data

The information collected and required as part of a license application will be used to determine eligibility for a City of Waconia License or Permit. Disclosure of this information is voluntary. It is not legally required to provide requested data, however, failure to do so may mean the City of Waconia is unable to process this application.

Social Security Numbers and Birth Dates are classified as private data, and are not available to the public. Access to this data is limited to staff with a business need in order to determine license eligibility, and to administer and manage the licensing program.

Disclosure of a Minnesota Tax ID Number is required by Minnesota Statutes 270C.72, and this information may be requested by and released to the Minnesota Commissioner of Revenue.

All other information contained in this application is public information upon submission pursuant to the Government Data Practices Act, Minnesota Statutes Chapter 13. Individuals have the right to see and obtain copies of the data maintained on them, including private data, and also have the right to be told the contents and meaning of the data, and to contest the accuracy and completeness of the data.

A SIGNATURE VERIFYING THE OVERALL ACCURACY AND COMPLETENESS OF THIS APPLICATION BY THE OWNER, PARTNER, OR OFFICER OF THE ENTITY APPLYING IS REQUIRED IN ORDER TO PROCESS THIS LICENSE APPLICATION

I, (print name) GREG JAMES, agree to strictly comply with all the laws of the State of Minnesota governing the taxation of business and all ordinances of the City of Waconia, and that I intend to comply with the special event policy as well as any conditions of approval that may be placed on the permit if granted. I understand I can review all City ordinances on the City website or in the City Hall's Office.

I affirm I have no intention or agreement to transfer the permit being applied for to another person or entity, or to allow any other person or entity to operate under the authority of the permit. I understand that by submitting this application, I hereby consent to allow the appropriate City personnel, or any authorized representative or agents, to inspect the event premises for the purpose of ensuring compliance with the law and any permit conditions at any time the permit is active. I also understand that a denial of permission for such a lawful inspection of the premises is a violation of the permit provisions.

I hereby certify that I have read and understand every question in this application and that the answer to every question is true to my knowledge, information and belief. I further understand that the giving of false information as part of this application, regardless of when it is discovered, and/or failure to give required pertinent information can constitute cause for denial, suspension, or revocation of any permit issued.

Signature of Applicant



Date

8-20-24



Carver County GIS, City of Waconia



Coordinate System:
WGS 1984 Web Mercator Auxiliary Sphere



City of Waconia
201 Vine Street South, Waconia, MN 55387

Landscape_11x17



REQUEST FOR CITY COUNCIL ACTION

Meeting Date:		September 3, 2024					
Item Name:		Special Event Permit - Waconia Brewing Company 10-year anniversary					
Originating Department:		Administration					
Presented by:		Shane Fineran					
Previous Council Action (if any):							
Item Type (X only one):	Consent	X	Regular Session		Discussion Session		
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Adopt Resolution No. 2024-188 Approving a Special Event and Noise Permit							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
Dee DeLange, Waconia Brewing Company at 255 W Main St, has submitted a special event and noise permit for the Waconia Brewing 10 year anniversary celebration on October 25th and 26th of 2024. The event will run from 2:00 p.m. on October 25th and from 11:00 a.m. until 10:00 p.m. on the 26th. The event seeks to utilize a portion of Lot 1 for alcohol sales and consumption, live music, and a food truck. The applicant shall furnish barricades to cordon off the event area, provide a certificate of insurance naming the city as additional insured, and notify adjacent business owners. Attachments: 1. Resolution No. 2024-188 Approving Special Event and Noise Permit for Waconia Brewing Company 2. Special Event Permit Application for Waconia Brewing Company							
FINANCIAL IMPLICATIONS:				ADVISORY BOARD RECOMMENDATIONS:			
Funding Sources & Uses:							
Budget Information:				Planning Commission			
_____ Budgeted				Parks and Recreation Board			
_____ Non Budgeted				Safari Island Advisory Board			
_____ Amendment Required				Other			

**CITY OF WACONIA
RESOLUTION NO. 2024-188**

**RESOLUTION APPROVING SPECIAL EVENT AND NOISE PERMIT
WACONIA BREWING COMPANY**

WHEREAS, the City of Waconia has received a permit application for a special event and noise permit to occur on Municipal Parking Lot 1 by Waconia Brewing Company; and

WHEREAS, the brewery 10-year anniversary event will be held on October 25, 2024, from 2:00 p.m. until 10:00 p.m. and on October 26, 2024, from 11:00 a.m. until 10:00 p.m.; and

WHEREAS, municipal property to be used include portions of Lot 1; and

WHEREAS, the applicant shall furnish the City of Waconia a certificate of insurance naming the city as additional insured with the limits consistent with the Special Events Policy and at notify adjacent businesses least two weeks prior to the event; and

NOW, THEREFORE, BE IT RESOLVED That the City Council of the City of Waconia hereby approves the Special Event and Noise Permit.

Adopted by the City Council of the City of Waconia this 3rd day of September 2024.

Nicole Waldron, Mayor

Attest: _____
Jackie Schulze, Assistant City Administrator

Section 1. CHECKLIST OF REQUIRED INFORMATION

Select any of the following that apply to this event:

- ☐ Amplified Sound to be used – COMPLETE SECTION 3 (B)
- ☒ Closure request for a street, sidewalk, or other public way or place as part of the event – COMPLETE SECTION 3 (C)
- ☒ Alcohol service as part of the event – COMPLETE SECTION 3 (D) AND ANY ADDITIONAL LIQUOR LICENSES WITH THE CITY HALL'S OFFICE IF REQUIRED
- ☐ Tents or other membrane structures to be erected as part of the event
- ☐ Fireworks Display as part of the event

Staff Initials	For your license application to be processed, you must submit the following to the City Hall's Office:
-------------------	---

- | | |
|--------------------------|--|
| ☐ | ☐ This application form, fully completed and signed by the applicant or an authorized officer or partner.
ANSWER EVERY QUESTION, USING N/A IF NECESSARY ON ANY QUESTIONS. APPLICATIONS WITH BLANK QUESTIONS WILL BE RETURNED WITHOUT PROCESSING. |
| ☐ | ☐ Detailed Site Plan for the event |
| ☐ | ☐ Certificate of Insurance, if required |
| ☐ | ☐ Traffic Control plan from an approved vendor for any street closures |
| ☐ | ☐ Payment for required permit fee; Checks must be made payable to the City of Waconia Pd \$100.00
#7753
•\$100 for base Special Event Permit |
| ☐ | ☐ Any required additional permit applications from other City departments |

Section 2. REQUIRED LICENSE INFORMATION – complete every question**A. Information about who is completing and submitting this application**

1. First Name Dee		2. Last Name DeLange	
3. Primary Telephone Number 6125900928	4. Type of Phone: ☒ Cell ☐ Business ☐ Home ☐ Other	5. Alternate Phone Number	6. Type of Phone: ☐ Cell ☐ Business ☐ Home ☐ Other
7. Email Address ddelange@waconiabrewing.com			
8. Please send official notices relating to this license to: ☐ Mailing Address ☒ Email ☐ Business Address		9. Role of person completing application: ☒ Owner ☐ Officer ☐ Partner ☐ Manager ☐ Agent for the Owner ☐ Other	

**B. Information about primary point of contact for this license during licensed activity (if different than above)
THIS PERSON MUST BE ON SITE DURING THE EVENT**

10. First Name		11. Last Name	
12. Primary Telephone Number	13. Type of Phone: ☐ Cell ☐ Business ☐ Home ☐ Other	14. Alternate Phone Number	15. Type of Phone: ☐ Cell ☐ Business ☐ Home ☐ Other
16. Email Address		17. Role of primary contact: ☐ Owner ☐ Officer ☐ Partner ☐ Manager ☐ Agent for the Owner ☐ Other	

C. Mailing Address Information

18. Name of organization or individual to whom correspondence should be sent about this permit Waconia Brewing Company			
19. Email Address ddelange@waconiabrewing.com			
20. Mailing Address 255 W. Main Street	21. City Waconia	22. State MN	23. Zip Code 55387
24. Please send official notices relating to this license to: ☐ Mailing Address ☒ Email			

D. License Holder Information**Provide information about who this license will be issued to**

25. Entity license will be issued to Waconia Brewing Company			
26. Business Federal Tax ID Number/Tax Exempt Number 46-4530089		27. Business State Tax ID Number 3509654	
28. Business Address 255 W. Main Street	29. City Waconia	30. State MN	31. Zip Code 55387

Section 3. Event Information – attach additional sheets as needed for any questions**A. Event Basics**

32. Name of Event 10th Anniversary Party	
33. Date(s) of Event <i>complete separate applications for a series of events held at separate times</i> October 25th and 26th, 2024	
34. Time of Event 2 pm to 10 pm on the 25th and 11 am on the 26th	35. Set up start time and clean up finish time Noon on the 25th and 10 pm on the 26th

36. Location of Event –Street Address 255 W. Main Street	37. City Waconia	38. State MN	39. Zip Code 55387
40. Description of area to be used at the event location for activities (Attach additional sheets as needed) ***A detailed diagram of the site plan is also required to be submitted In the front of the brewery using the parking lot. Diagram attached.			
41. Is your event in a City park? ☐ Yes ☒ No If yes, you must schedule use of the park with City Hall as well. Call: 952-442-2615			
42. Is your event outdoors? ☒ Yes ☐ No			
43. Estimated Number of Attendees- 100-200	44. Are tickets being sold? ☐ Yes ☒ No		
45. What is the admission charge, if any	46. Purpose of event proceeds (if applicable)		
47. Describe how attendance will be monitored and limited if necessary We put up stanchions to keep the beer in the area we corridor. We have an employee stationed to parole the entrance and exit.			
48. Describe any entertainment being provided Traveled Ground will be playing their original music list from 6 pm - 9 pm. We are hoping to do this outside if the weather allows.			

49. Describe food and beverage plans for the event, including who will be providing any food or beverages and what other licenses or permits will be obtained from any jurisdiction for this service.

We will have a food truck on both evenings. If we do we are asking that they be able to park up top on the parking lot.

50. Describe how any emergencies or medical needs occurring during the event will be met
911

Sanitation and garbage disposal is the responsibility of the event sponsor. Staff will review this information for adequacy based on planned attendance.

51. Will you be providing additional trash receptacles?

☐ Yes

Company providing this service:

Number of receptacles:

What is the plan for picking these receptacles up following the event?

☒ No

Explain how trash will be managed as part of the event:

We have plenty of trash barrels and maintain our own trash contract with Suburban Waste.

52. Will you be providing toilets and wash stations?

☐ Yes

Company providing this service:

Number of toilets:

Number of wash stations:

What is the plan for picking these items up following the event?

☒ No

Explain how these needs will be met for event attendees:

We have restrooms.

B. Information about Amplified Sound

53. INDICATE WHICH OF THE FOLLOWING APPLIES TO THIS EVENT:

- ☐ Maximum allowable sound pressure level no more than 85 decibels measure at the property line or venue boundary.
- ☒ Waive the maximum allowable sound pressure level and require the amplified sound to terminate no later than 10:30 PM
- ☐ There will be NO amplified sound at this event.

54. Describe the means and method proposed by you as the applicant to prevent noise from the event from unreasonably disturbing those persons who live or work in the vicinity of the event.

The only time it will be louder is when Traveled Ground is playing. We will only have them play outside if weather permits and from 6 pm - 9 pm.

C. Information about any public right of way closures

55. Are you requesting any kind of public right of way closure as part of this event?

- ☐ Yes, for a very limited duration less than 15 minutes
- ☐ Yes, for 15 minutes or longer – an obstruction permit through Public Services Department will be required
- ☒ No – if no, please skip the remainder of this section and jump to subsection D

When a street is to be closed for over 15 minutes, a detour is to be established and signed to provide a designated route around the event. A detailed layout of the route and arrangements for traffic control must be done by a certified vendor using the Manual of Uniform Traffic Control Devices standards. Law Enforcement Officers must be utilized at all traffic controlled intersections. Public Services time for temporary traffic signal modifications, additional signage, or other City costs may be charged.

In addition all events with street closures must include an emergency plan detailing access for emergency vehicles. Road closures are not allowed for locations where there are no other access options for the businesses or residents

56. Attach a detailed diagram of any proposed closure, and explain here exactly what is pictured in the diagram and intended in terms of the closure

57. Are you proposing a street closure that will impact residential properties?

- ☐ Yes – if yes, you must notify all properties at least 7-days in advance of the event of the closure
- ☒ No

58. Are you proposing a street closure that will impact commercial properties?

- ☐ Yes
 - ☒ No
- If yes, you must notify all businesses at least 14-days in advance of the closure.

D. Information about any alcohol as part of the event

59. Are you planning to serve alcoholic beverages as part of this event?

- ☒ Yes – if yes, please answer the following questions
☐ No – if no, please skip the remainder of this section and jump to Section 4 of the application

60. Which of the following are you requesting as part of serving alcoholic beverages?

- ☒ Temporary Liquor License (requires a separate application)
☐ Designation of the special event as a Community Festival to allow on-sale licensee(s) to provide service
☐ Service by licensed on-sale licensee(s) on Municipal Facilities
☐ Use of licensed caterer(s) who will be providing alcohol service incidental to the service of food
☐ Other

If you indicated other, please explain how alcoholic beverages will be provided as part of this event, by whom, and under what authority

61. If you intend to apply for a temporary liquor license, is the same entity applying for the liquor license as the special event permit?

- ☒ Yes
☐ No – Name of the organization/entity applying for a temporary liquor license also serving as an event sponsor:

Indicate what type of organization will be applying for the liquor license:

- ☐ Club
☐ Religious Organization
☐ Political Committee Registered Under Minn. Stat. Section 10A.14
State University
☒ Brewer or Microdistillery
☐ Charitable Organization
☐ Non-Profit Organization

*If the organization is not one of the above, it is not eligible to apply for a temporary liquor license

If the organization is a club or a charitable, religious or non-profit organization, has it been in existence for at least 3 years?

- ☐ Yes
☐ No-the organization is not eligible for a temporary liquor license

Note: A temporary liquor application must be received by the City Hall's Office NO LATER 45 DAYS BEFORE THE EVENT. There is no ability to make any exceptions to this requirement.

62. Please list all on-sale licensees who will be providing liquor service as part of this event under this designation. Certificates of insurance specifically covering this event must also be provided for all vendors.

Waconia Brewing Company

63. If a licensed caterer will be used as part of the event, indicate the name and state license number of the caterer

64. List who will be carrying liquor liability insurance for this event

Waconia Brewing Company

65. Indicate the specific area(s) liquor will be dispensed and consumed, and what measures will be followed to ensure liquor is only dispensed to event attendees who are of legal age, and that no liquor leaves the authorized area

We will serve out of the taproom and have a kegerator outside.
We put up stanchions to keep the beer in the area we corridor.
We have an employee stationed to parole the entrance and exit.

66. Do you plan to hire off-duty officers to provide security during the event (required with alcohol service)?

☐ Yes

☒ No

Contact Carver County Sheriff's Office. 952-361-1231

67. Fireworks Display as Part of the event?

☐ Yes

☒ No

If you answered yes to the above, please contact the Fire Department at 952-442-2316 in order to request a Fireworks Display Permit

68. Tents or other membrane structures to be erected as part of the event?

☒ Yes

☐ No

69. If you answered yes to question 68, please name the tent provider/company. Please also list the square footage and dimensions of your tent. If you do not have or need a tent provider please state so below.

Just our 10x10 Waconia Brewing Co. tent.

If your tent is over 400 square ft. Please contact the Planning Department for a temporary structure permit. 952-442-2184

Section 4. APPLICATION VERIFICATION AND ACCEPTANCE OF RESPONSIBILITY

Notice of Collection of Private Data

The information collected and required as part of a license application will be used to determine eligibility for a City of Waconia License or Permit. Disclosure of this information is voluntary. It is not legally required to provide requested data, however, failure to do so may mean the City of Waconia is unable to process this application.

Social Security Numbers and Birth Dates are classified as private data, and are not available to the public. Access to this data is limited to staff with a business need in order to determine license eligibility, and to administer and manage the licensing program.

Disclosure of a Minnesota Tax ID Number is required by Minnesota Statutes 270C.72, and this information may be requested by and released to the Minnesota Commissioner of Revenue.

All other information contained in this application is public information upon submission pursuant to the Government Data Practices Act, Minnesota Statutes Chapter 13. Individuals have the right to see and obtain copies of the data maintained on them, including private data, and also have the right to be told the contents and meaning of the data, and to contest the accuracy and completeness of the data.

A SIGNATURE VERIFYING THE OVERALL ACCURACY AND COMPLETENESS OF THIS APPLICATION BY THE OWNER, PARTNER, OR OFFICER OF THE ENTITY APPLYING IS REQUIRED IN ORDER TO PROCESS THIS LICENSE APPLICATION

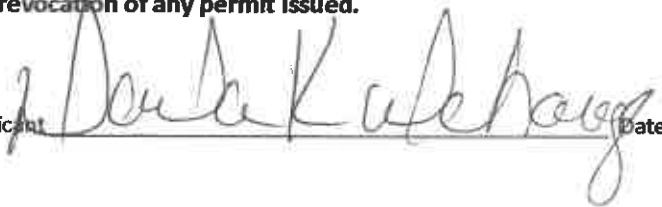
Dee DeLange

I, (print name) _____, agree to strictly comply with all the laws of the State of Minnesota governing the taxation of business and all ordinances of the City of Waconia, and that I intend to comply with the special event policy as well as any conditions of approval that may be placed on the permit if granted. I understand I can review all City ordinances on the City website or in the City Hall's Office.

I affirm I have no intention or agreement to transfer the permit being applied for to another person or entity, or to allow any other person or entity to operate under the authority of the permit. I understand that by submitting this application, I hereby consent to allow the appropriate City personnel, or any authorized representative or agents, to inspect the event premises for the purpose of ensuring compliance with the law and any permit conditions at any time the permit is active. I also understand that a denial of permission for such a lawful inspection of the premises is a violation of the permit provisions.

I hereby certify that I have read and understand every question in this application and that the answer to every question is true to my knowledge, information and belief. I further understand that the giving of false information as part of this application, regardless of when it is discovered, and/or failure to give required pertinent information can constitute cause for denial, suspension, or revocation of any permit issued.

Signature of Applicant



Date

8-19-24



08/19/2024

To Whom It May Concern:

Waconia Brewing Company is requesting the use of the entire area of our parking lot to the north of the building, up to the handicap parking spot for our 10th Anniversary party on Friday, October 25th and Saturday, October 26th.

We will have ropes and barriers set up to contain drinkers and will have an employee stationed to monitor the area.

WBC would also ask that our food truck be allowed to park in the area above for those days as well.

Traveled Ground will be playing outside, (weather permitting) from 6 pm – 9 pm.

I have submitted the special event license paperwork and a temporary liquor license along with this request.

Thank you for taking the time to consider our proposal. If you have any questions please feel free to reach out to me at ddelange@waconiabrewing.com or 612-590-0928.

Cheers,

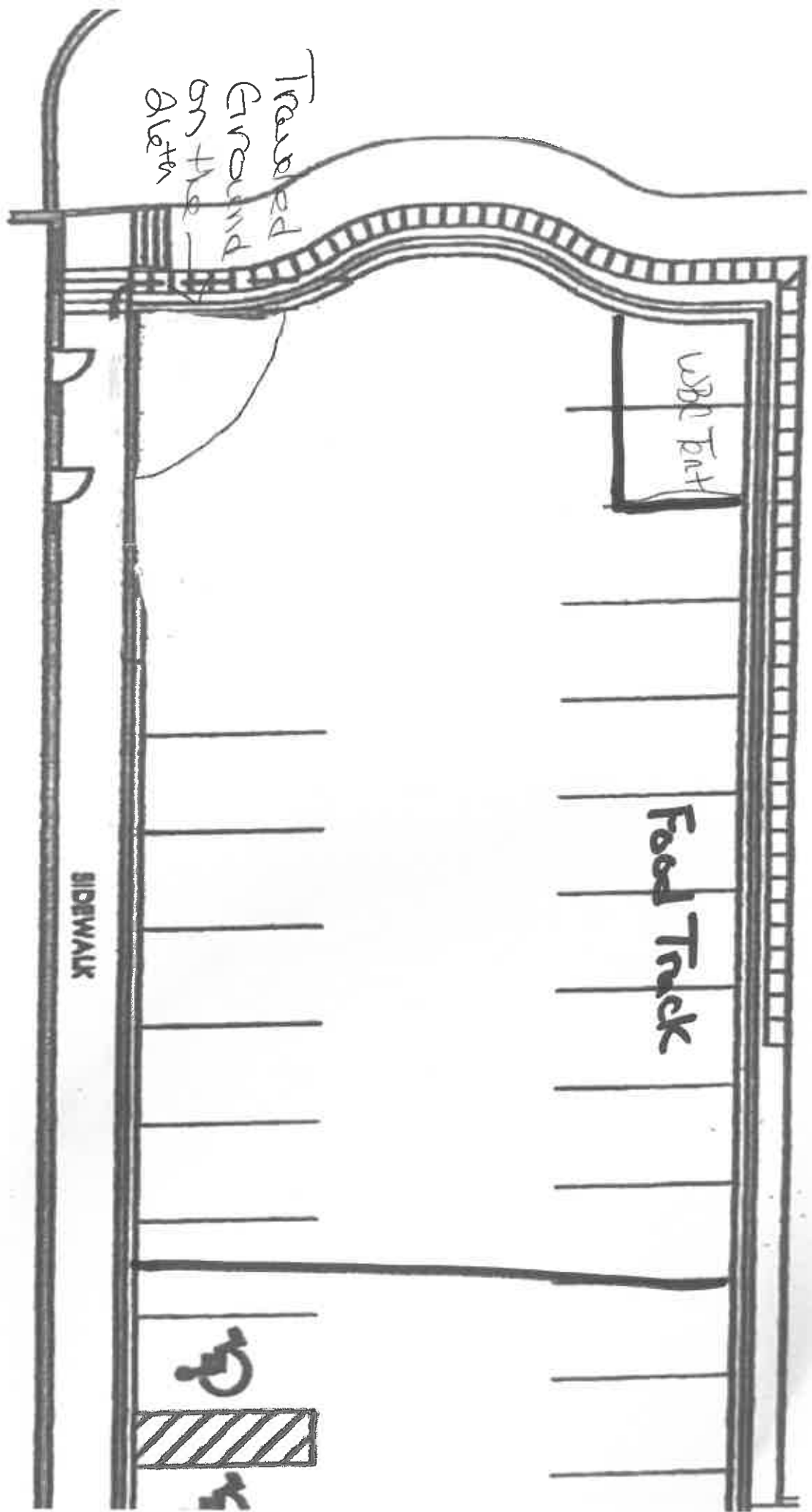
A handwritten signature in dark ink, appearing to read "Dee DeLange", written in a cursive style.

Dee DeLange

Waconia Brewing Company

10-25-10-26-24

10-25 - 10-26 - 24





REQUEST FOR CITY COUNCIL ACTION

Meeting Date:		September 3, 2024					
Item Name:		Calling for Public Hearing to Consider the Establishment of TIF District #6					
Originating Department:		Administration					
Presented by:		Shane Fineran					
Previous Council Action (if any):							
Item Type (X only one):	Consent	X	Regular Session		Discussion Session		
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Adopt Resolution No. 2024-189 calling for a Public Hearing on the proposed adoption of a modification to the development program for the Waconia Development District, the proposed establishment of TIF District #6 and adoption of a TIF financing plan.							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
The Olive & Second, LLC has submitted a municipal subsidy application for the proposed use of tax increment financing to aid the redevelopment of the 100 block of 2nd Street West into a 92 unit multi-family apartment building featuring approximately 4,000 square feet of commercial space. The project received final plat and site plan approval on August 19, 2024. Prior to considering adoption of a tax increment financing district and financing plan, the City Council shall hold a public hearing regarding the request. The attached resolution calls for the public hearing to be held on October 21, 2024. <u>Attachments:</u> 1. Resolution No. 2024-189 Calling For a Public Hearing Adoption of Modification to Development Program for the Waconia Development District 2. 2nd St Redevelopment Map							
FINANCIAL IMPLICATIONS:				ADVISORY BOARD RECOMMENDATIONS:			
Funding Sources & Uses:							
Budget Information: ☐ Budgeted ☐ Non Budgeted ☐ Amendment Required				Planning Commission			
				Parks and Recreation Board			
				Safari Island Advisory Board			
				Other			

**CITY OF WACONIA
RESOLUTION NO. 2024-189**

**RESOLUTION CALLING FOR A PUBLIC HEARING ON THE
PROPOSED ADOPTION OF A MODIFICATION TO THE
DEVELOPMENT PROGRAM FOR THE WACONIA DEVELOPMENT
DISTRICT, THE PROPOSED ESTABLISHMENT OF TAX INCREMENT
FINANCING DISTRICT NO. 6 THEREIN AND THE PROPOSED
ADOPTION OF A TAX INCREMENT FINANCING PLAN THEREFOR**

BE IT RESOLVED by the City Council (the "Council") of the City of Waconia, Minnesota (the "City"), as follows:

1. Public Hearing. This Council shall meet on October 21, 2024, at approximately 6:00 p.m., to hold a public hearing on the following matters: (a) the proposed adoption of a Modification to the Development Program for the Waconia Development District, (b) the proposed establishment of Tax Increment Financing District No. 6 within the Waconia Development District, and (c) the proposed adoption of a Tax Increment Financing Plan relating thereto, all pursuant to and in accordance with Minnesota Statutes, Sections 469.124 through 469.133, both inclusive, as amended, and Minnesota Statutes, Sections 469.174 through 469.1794, both inclusive, as amended (collectively, the "Act").

2. Notice of Hearing; Filing of Program Modification and Plan. The City Administrator is hereby authorized to cause a notice of the hearing to be published, substantially in the form attached hereto as Exhibit A, as required by the Act, and to place a copy of the proposed Development Program, as modified, and the proposed Tax Increment Financing Plan on file in the Administrator's Office at City Hall and to make such copies available for inspection by the public.

3. Consultation with Other Taxing Jurisdictions. The Administrator is hereby directed to mail a notice of the public hearing and a copy of the proposed Modification to the Development Program and the proposed Tax Increment Financing Plan to Carver County and Independent School District No. 110, informing those taxing jurisdictions of the estimated fiscal and economic impact of the establishment of the proposed tax increment financing district.

Adopted by the City Council of the City of Waconia this 3rd day of September 2024.

Nicole Waldron, Mayor

ATTEST: _____
Jackie Schulze, Assistant City Administrator





REQUEST FOR CITY COUNCIL ACTION

Meeting Date:		September 3, 2024					
Item Name:		Approve Waconia Works Loan for The Short Cut Salon, Inc.					
Originating Department:		Finance					
Presented by:		Nicole Meyer					
Previous Council Action (if any):							
Item Type (X only one):		Consent		Regular Session	X	Discussion Session	
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Adopt Resolution No. 2024-190 Approving Waconia Works Loan for The Short Cut Salon, Inc. at 132 West Main Street.							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
City staff have received an application for the Waconia Works Loan program from The Short Cut Salon. The owners, Nancy Wilson and Pamela Hucky have requested a five year loan totaling \$20,000 for roof replacement at their salon located on Main Street. The total project costs are estimated to be around \$30,000 and the owners plan to make a cash contribution to the project of \$10,000. The owners have provided the application along with supporting documents requested under the program. With the City Council's approval, staff will work to get documents drawn up and signed by the borrowers. Under the program, the borrowers will be required to sign a promissory note and loan agreement. The total amount requested will be amortized over a five year period with a 2.0% interest rate. Monthly payments under this program are requested to be paid to the City with electronic funds and are expected to start on November 1, 2024.							
Attachments:							
1. Resolution No. 2024-190 Approving Waconia Works Loan for the Short Cut Salon Inc.							
FINANCIAL IMPLICATIONS:				ADVISORY BOARD RECOMMENDATIONS:			
Funding Sources & Uses:							
Economic Development Fund Loan Programs							
Budget Information:				Planning Commission			
_____ Budgeted				Parks and Recreation Board			
_____ X Non Budgeted				Safari Island Advisory Board			
_____ Amendment Required				Other			

**CITY OF WACONIA
RESOLUTION 2024-190**

**RESOLUTION APPROVING WACONIA WORKS LOAN
FOR THE SHORT CUT SALON, INC.**

WHEREAS, the City has approved three economic development programs to support the downtown commercial core, commercial and industrial sectors, and small business start-ups; and

WHEREAS, the City has received a Waconia Works Loan application from Nancy Wilson and Pamela Hucky, the owners of The Short Cut Salon, Inc. located at 132 West Main Street in Waconia; and

WHEREAS, proposed work includes roof replacement of the commercial building located on Main Street; and

WHEREAS, the purpose of the loan is consistent with the goals of the Waconia Works Loan and Economic Development Programs.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Waconia approves the \$20,000 loan for The Short Cut Salon, Inc.

Adopted by the Waconia City Council this 3rd day of September 2024.

Nicole Waldron, Mayor

ATTEST: _____
Jackie Schulze, Assistant City Administrator



REQUEST FOR CITY COUNCIL ACTION

Meeting Date:		September 3, 2024					
Item Name:		Accepting the Feasibility Report for the Southeast Area Growth Study					
Originating Department:		Public Services					
Presented by:		Jon Haukaas					
Previous Council Action (if any):		Resolution No. 2023-241, Authorizing Southeast Area Feasibility Study, November 6, 2023					
Item Type (X only one):	☐ Consent	☐	☐ Regular Session	☐	☐ Discussion Session	☐	☐
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Adopt Resolution No. 2024-191 Receiving Feasibility Report for the Southeast Area Growth Study							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
The City Council discussed a desire to better understand infrastructure needs, planning, and potential costs associated with future development potential growth to the east and southeast. An overall sketch plan was reviewed by the City Council at a work session last November. This included two focus areas that indicated desire to develop immediately. These two areas are within the 2040 growth boundary as identified in the 2040 Comprehensive Plan but reflect a different type of development for the community that has been experienced in recent years. Both of these areas are outside of easily serviceable areas adjacent to existing utilities and or lift stations and also incorporate some significant future transportation corridors identified in the community. These areas and beyond would require substantial infrastructure development to be considered by the city in order to develop. The infrastructure necessary would also serve a much broader area than those anticipated by the sketch plans under review. It was recommended by staff that a feasibility study in these areas be completed to better provide information to the City Council regarding development capacities, demand on services and capabilities for service. On November 6, 2023, Council authorized the preparation of the Feasibility Report for the Southeast Area Feasibility Study. At the August 5, 2024 work session Council reviewed a high level overview improvement areas. From the recommendations and comments, the City Engineer finalized the draft and prepared the Feasibility Report for acceptance by the City Council. Attached Council and the public will find the Feasibility Report as directed noting the conceptual layouts and preliminary costs associated for expansion of infrastructure to this area. A short presentation will be prepared on the proposed improvements and the City Engineer and city staff will be available for questions on the report as attached. Staff recommends approval of the Resolution No. 2024-191 accepting the final study. Attachments: 1. Resolution No. 2024-191 Accepting Feasibility Study Report 2. East Area Development Feasibility Study							
FINANCIAL IMPLICATIONS:				ADVISORY BOARD RECOMMENDATIONS:			
Funding Sources & Uses:							
Budget Information:				Planning Commission			
☒ Budgeted				Parks and Recreation Board			
☐ Non Budgeted				Safari Island Advisory Board			

_____Amendment Required	Other
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**CITY OF WACONIA
RESOLUTION NO. 2024-191**

**RESOLUTION ACCEPTING FEASIBILITY STUDY REPORT FOR THE EAST AND
SOUTHEAST GROWTH AREAS**

WHEREAS, the City of Waconia has identified areas to the east and southeast of the existing city limits for future development as part of the 2040 Comprehensive Plan; and

WHEREAS, to better define and understand the impact of development, capacities, and infrastructure necessary to support development; and

WHEREAS, to define the appropriate investment and cost apportionment rational for public in vestments in these areas a feasibility study is recommended; and

WHEREAS, pursuant to resolution of the council adopted November 6, 2023, a report has been prepared by the City Engineer; and

WHEREAS, the report provides information regarding whether the proposed improvement is necessary, cost effective, and feasible from a technical perspective to provide adequate transportation, sanitary sewer, water system, and other improvements in the project area, and a description of the methodology used to calculate individual apportionment of costs for the included parcels.

NOW, THEREFORE, BE IT RESOLVED That the City Council of the City of Waconia accepts the Feasibility Study Report for the East and Southeast Growth Areas and the recommendations of the report to facilitate the future development of those areas.

Adopted by the City Council of the City of Waconia this 3rd day of September 2024.

Nicole Waldron, Mayor

Attest: _____
Jackie Schulze, Assistant Administrator

East Area Development Feasibility Study

City of Waconia
August 28, 2024



Real People. Real Solutions.

Submitted by:

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Certification

Feasibility Report

For

East Area Development Improvements

City of Waconia

OC1.132700

August 28, 2024

PROFESSIONAL ENGINEER

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature:



Typed or Printed Name: Ryan Johnson

Date: 8/28/2024

License Number: 54278

Table of Contents

I. INTRODUCTION	1
A. Impetus.....	1
B. Report Organization	1
C. Overall Feasibility & Cost Effectiveness.....	1
II. TRANSPORTATION IMPROVEMENTS	2
A. General	2
B. C.S.A.H. 10 and Little Avenue/Future C.S.A.H. 92	2
C. Airport Road / Future C.S.A.H. 92.....	8
III. SANITARY SEWER IMPROVEMENTS.....	12
A. General	12
B. Previous Planning Activities.....	12
C. Projected Wastewater Flows.....	13
D. Future Sewer System	14
E. Estimated Cost.....	16
F. Phase 1 Sewer System Improvements	16
G. Phase 2 Sewer System Improvements	17
IV. WATER SYSTEM IMPROVEMENTS	18
A. General	18
B. Previous Planning Activities.....	18
C. Existing Water System and Capacities.....	19
D. Water Demand	20
E. Future Water System.....	23
F. Phase 1 Water System Improvements	24
G. Phase 2 Water System Improvements	25
H. Future Phase Water System Improvements.....	26
V. OTHER IMPROVEMENTS	28
A. Drainage Facilities and Stormwater Management.....	28
B. Trail and Pedestrian Facilities	29
C. Right-of-Way and Easement Acquisition	31
VI. FINANCING, FUNDING, & COST APPORTIONMENT.....	33
A. Financing.....	33
B. Funding	33
VII. RECOMMENDATIONS	38
A. General	38

Insets

Inset A: Carver County Typical Section (Looking South)	3
Inset B: City of Waconia 2040 Growth Boundary – Development Assumptions	4
Inset C: Planned Roadway Improvements	5
Inset D: Planned Roadway Improvements with Development	5
Inset E: Airport Road Area Development	10
Inset F: Planned Pedestrian Facility Improvements	30

Tables

Table A: Distributed C.S.A.H. 10/Little Avenue Roundabout Project Costs.....	6
Table B: C.S.A.H. 10/Little Avenue Roundabout Project Costs By Leg	7
Table C: Distributed C.S.A.H. 10/Klein Dr/Little Ave Roundabout Project Costs By Warrants	8
Table D: C.S.A.H. 92/Airport Road Roundabout Project Costs By Leg	11
Table E: C.S.A.H. 92/Airport Road Traffic Forecasting	11
Table F: C.S.A.H. 92/Airport Road Roundabout Project Costs Allocation	11
Table G: Waconia Water Demand Summary	20
Table H: Historic Gallons Per Capita Per Day Demand.....	21
Table I: Projected Water Demand.....	22
Table J: Residential Unit Construction.....	23
Table K: Planned Well Construction	26
Table L: Falk-Saltire Site Development Project Cost Apportionment - Sewer	34
Table M: Kirsch Site Development Project Cost Apportionment - Sewer	35
Table N: Falk-Saltire Site Development Project Cost Apportionment - Water	36
Table O: Kirsch Site Development Project Cost Apportionment - Water	37
Table P: Near-Term Development Trunk Utility Cost Comparison	38

Appendix

Appendix A: Figures

Appendix B: Cost Estimates

Appendix C: C.S.A.H. 92 Planning Study

Appendix D: Water Supply System Plan

Appendix E: Hydrogeological Assessment

Appendix F: Design Criteria

I. INTRODUCTION

A. Impetus

The impetus for this report is a request from the City of Waconia to evaluate the feasibility of developing the east area of the City.

B. Report Organization

Section 1: Introduction

Section 2: Transportation Improvements

Section 3: Sanitary Sewer Improvements

Section 4: Water System Improvements

Section 5: Other Improvements

Section 6: Financing, Funding, and Cost Apportionment

Section 7: Recommendations

C. Overall Feasibility & Cost Effectiveness

All improvements addressed within this report are feasible from a technical perspective. In addition, the proposed improvements are necessary and cost-effective solutions to provide adequate transportation, sanitary sewer, water system, and other improvements in the project area. **Figure 1**, in **Appendix A**, shows the proposed project location.

II. TRANSPORTATION IMPROVEMENTS

A. General

Transportation improvements and upgrades to various intersections are needed to support the buildout of the east area of the City. This includes the construction of future County State Aid Highway (C.S.A.H.) 92 from 102nd Street to just north of Trunk Highway (T.H.) 5 as defined in the previously completed Carver County C.S.A.H. 92 planning study and as shown on **Figure 2.1** in **Appendix A**. The planned highway will connect to several existing and proposed streets including C.S.A.H. 10 and Airport Road. Intersection improvements at side street crossings will be required to manage access and traffic conditions, provide safe pedestrian routes, and allow for planned development to occur in the area. Multiple segment and intersection improvements along C.S.A.H. 92 are included in the County's future planned Highway Projects. However, development of this area is anticipated to require the upgrade of Little Avenue to service development in the near term with a roundabout required in the long-term once certain triggers are met. A roundabout is also planned at the intersection of C.S.A.H. 92 and Airport Road when the broader vision for the C.S.A.H. 92 corridor is achieved.

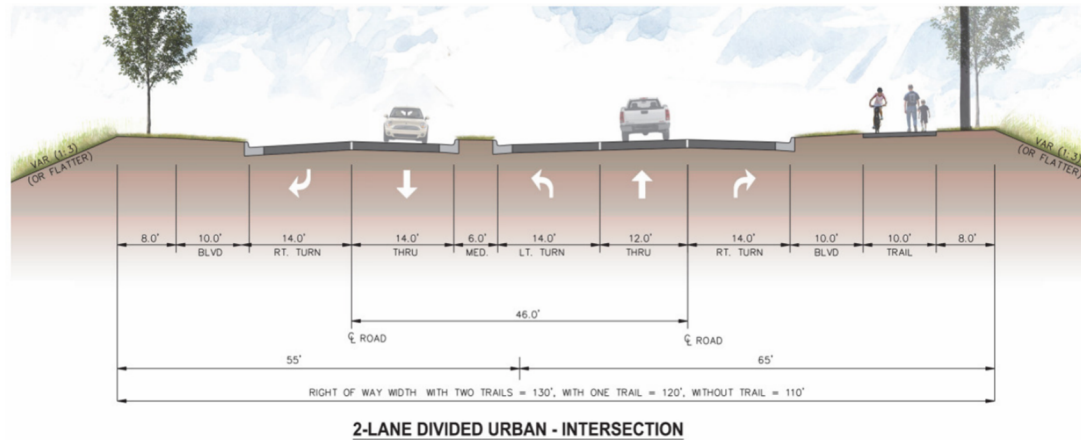
B. C.S.A.H. 10 and Little Avenue/Future C.S.A.H. 92

Project Background

The City of Waconia 2040 Comprehensive Plan and the Carver County 2040 Comprehensive Plan include a future north-south County highway along the eastern portion of the City. This future highway ultimately is planned to connect T.H. 212 east of Cologne to T.H. 5 east of Waconia. The planned corridor is an extension of C.S.A.H. 92 that exists along the east side of Lake Waconia. Existing C.S.A.H. 92 currently runs from T.H. 5 to the north to the City of St. Bonifacius and ultimately to T.H. 12. Portions of the right-of-way for this future corridor have been preserved as part of the Interlaken Development and as part of Carver County land swap and platting work that occurred in preparation for the future connection.

The future C.S.A.H. 92 highway is anticipated to be a 2-lane divided urban facility with one separated bike/pedestrian facility on the west side of the road. According to the Carver County 2040 Comprehensive Plan, the typical ROW is 120 feet. **Inset A** details the planning level typical roadway sections for 2-lane divided urban intersections. The same dimensions are assumed for the typical sections between the major roadway intersections.

Inset A: Carver County Typical Section (Looking South)



A roundabout is planned for the intersection of C.S.A.H. 10 and future C.S.A.H. 92. This roundabout is planned to be a 150' diameter single lane roundabout with a 20' wide circulatory roadway width and 20' wide entrance and exit lanes. It is anticipated that the roundabout will operate at a speed of approximately 30 M.P.H. under typical traffic conditions. A pedestrian crossing is proposed to be provided on the west leg of the roundabout to allow safe crossing of C.S.A.H. 10 and continuous 10' wide bituminous trail on future C.S.A.H. 92 from 102nd Street to T.H. 5. A pedestrian crossing is also proposed to be maintained along the north leg of the roundabout to facilitate pedestrian and bicycle movements for the proposed 10' wide bituminous trail along the north side of C.S.A.H. 10.

Refer to **Figure 2.2** in **Appendix A** for a conceptual layout of the roundabout at C.S.A.H. 10 and future C.S.A.H. 92. The figure shows the proposed final condition of the roundabout. In the interim, development near the intersection will need to accommodate temporary access connections to Little Avenue. Temporary access will need to be completed through City or County permitting and to the appropriate standards. The final condition of a roundabout at C.S.A.H. 10 and future C.S.A.H. 92 and realigned south leg of the intersection will be considered in the placement and construction of approved temporary access conditions. The roundabout will be installed with the construction of the future C.S.A.H. 92 improvements to the north and/or when traffic triggers the need for a traffic control treatment in excess of the existing side street stop-controlled intersection.

The total estimated project cost of a roundabout at C.S.A.H. 10 and Little Avenue/Future C.S.A.H. 92 is \$4,320,000. An itemized cost estimate for this roundabout is included in **Appendix B**. The cost for interim improvements on Little Avenue is anticipated to be a requirement of the development of the adjacent property. Methodology for financing, funding, and cost apportionment for improvements associated with the roundabout and necessary highway work is included below.

At the request of the City of Waconia, an evaluation was completed to estimate traffic volumes and trip assignments accompanying land uses proposed in the vicinity of the C.S.A.H. 10 and Little Avenue/Future C.S.A.H. 92 intersection. This high-level exercise referenced work completed by Westwood Engineering that aligned land use assumptions, development densities, and trip generation rates to estimate traffic levels associated with 21 parcels within the City's 2040 Growth Boundary. A detailed breakdown of these assumptions can be found in **Inset B**.

CSAH 10 / CSAH 92 Improvement Distribution

This portion of the parcel does not contribute significant traffic to the area of concern and therefore is omitted from the calculations.

Parcel #7
Parcel #6

Parcel #8
Parcel #9

Parcel #10
Parcel #11
Parcel #12

Parcel #13
Parcel #14
Parcel #15
Parcel #16
Parcel #17
Parcel #18
Parcel #19
Parcel #20
Parcel #21

ENGLE BLVD.
TITLEY RD.
102ND ST.

CITY 2040 GROWTH BOUNDARY

	Area Acres	Wetland / Floodplain Acres	Net Developable Acres	Land Use										
				LDR	MHR	HDR	MXD	C	BP	P	F	T	Total	
Parcel #1	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #2	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #3	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #4	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #5	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #6	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #7	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #8	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #9	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #10	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #11	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #12	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #13	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #14	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #15	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #16	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #17	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #18	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #19	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #20	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parcel #21	104.76	61.74	43.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*NOTE: Acreage & breakdowns as indicated are approximations based on city of Wisconsin 2040 Comprehensive Plan Figure 3-7, dated September 2019.

Landuse for Parcels 1&2 representative of current proposed plans.

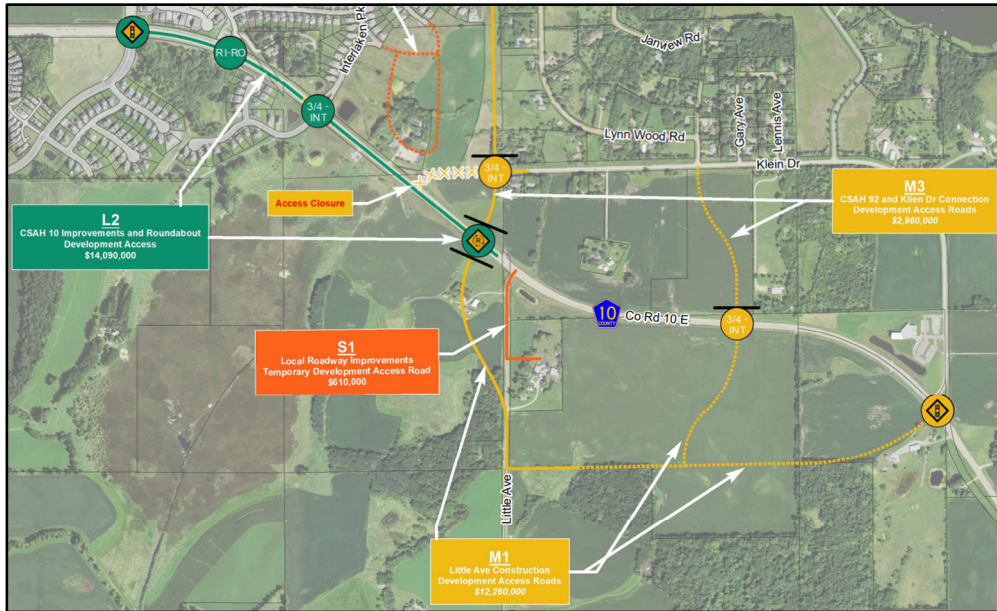
LEGEND

- (L) Low Density Residential
- (M) Medium Density Residential
- (H) High Density Residential
- (MXD) Mixed Use
- (C) Commercial
- (BP) Business Park
- (P) Park
- Wetland / Floodplain (shaded boundaries = NHD mapping)

0' 400' 800' 1200'

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Inset C: Planned Roadway Improvements



An exercise was then completed to identify the primary access points for traffic traveling to/from each of the 21 parcels in the City 2040 Growth Boundary plan. Additional detail was provided for the Falk-Saltire Site which occupies the collective of Parcel 1 and Parcel 2. The overlapping of the planned C.S.A.H. 10 access points from the C.S.A.H. 92 Planning Study and development areas is provided in **Inset D**, below.

Inset D: Planned Roadway Improvements with Development

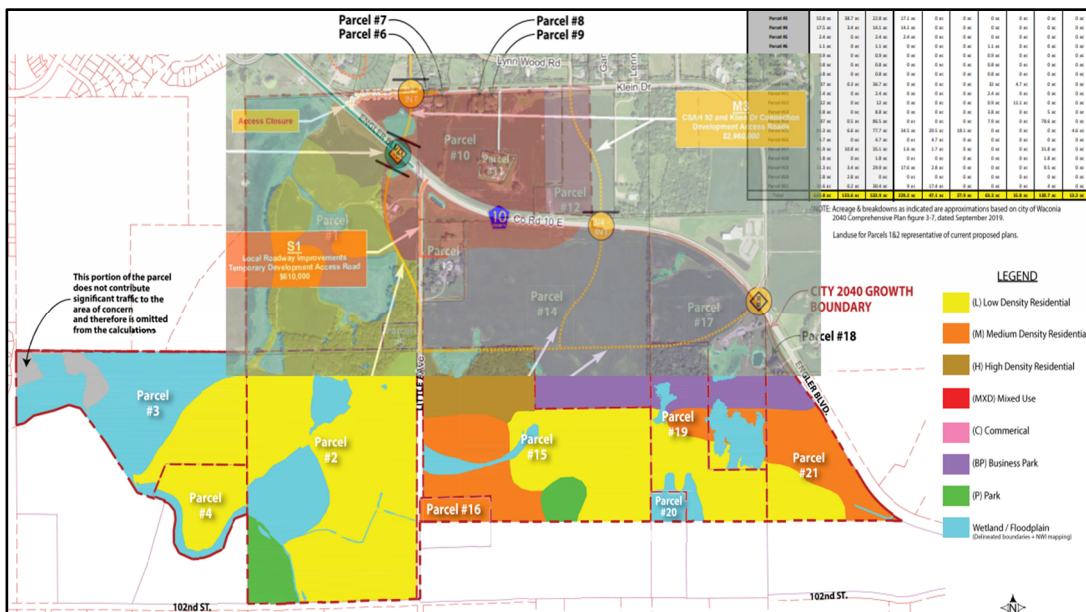


Table A below documents the high-level assumptions for trip allocation based on proximity of each parcel to the proposed intersection location and treatment. As noted, Parcels 1-16 all anticipate traffic

traveling through the proposed roundabout at C.S.A.H. 10 and Little Avenue/Future C.S.A.H. 92. The percentage of total trips passing through the intersection was then reallocated as a percentage of the whole to estimate projects costs allocated to each parcel.

Table A: Distributed C.S.A.H. 10 and Little Avenue/Future C.S.A.H. 92 Roundabout Project Costs

Development Traffic - Intersection Allocation											Adjusted Little Avenue %	Allocated CSAH 10/Little Ave (Future CSAH 92) Roundabout Costs
Parcel Number	% of Total	Access Points			Trip Allocation			Total Percentage				
		Little Avenue	3/4-Access	Klein Drive East	Little Avenue	3/4-Access	Klein Drive East	Little Avenue	3/4-Access	Klein Drive East		
Parcels #1 & #2								13.4%			26.26%	\$1,133,912.18
LDR	5.8%	X			100%			5.8%			11.40%	\$492,169.47
HDR	1.9%	X			100%			1.9%			3.75%	\$161,999.36
MXD	5.6%	X			100%			5.6%			11.08%	\$478,283.81
P	0.0%	X			100%			0.0%			0.03%	\$1,459.54
Parcel #3	0.9%	X			100%			0.9%			1.81%	\$78,356.77
Parcel #4	0.8%	X			100%			0.8%			1.50%	\$64,609.97
Parcel #5	0.1%	X			100%			0.1%			0.25%	\$10,997.44
Parcel #6	0.4%	X			100%			0.4%			0.86%	\$36,963.62
Parcel #7	0.4%	X			100%			0.4%			0.70%	\$30,242.97
Parcel #8	0.3%	X			100%			0.3%			0.62%	\$26,882.64
Parcel #9	0.3%	X			100%			0.3%			0.62%	\$26,882.64
Parcel #10	14.5%	X			100%			14.5%			28.56%	\$1,233,240.93
Parcel #11	1.0%	X	X		50%	50%		0.5%	0.5%		0.93%	\$40,323.95
Parcel #12	4.8%	X	X		50%	50%		2.4%	2.4%		4.67%	\$201,619.77
Parcel #13	3.5%	X			100%			3.5%			6.85%	\$295,709.00
Parcel #14	34.3%	X	X	X	33.33%	33.33%	33.33%	11.4%	11.4%	11.4%	22.44%	\$968,895.01
Parcel #15	3.3%	X		X	50%		50%	1.7%		1.7%	3.27%	\$141,426.21
Parcel #16	0.3%	X			100%			0.3%			0.66%	\$28,425.49
Parcel #17	12.8%			X			100%			12.8%	0.00%	\$0.00
Parcel #18	0.7%			X			100%			0.7%	0.00%	\$0.00
Parcel #19	4.9%			X			100%			4.9%	0.00%	\$0.00
Parcel #20	0.0%			X			100%			0.0%	0.00%	\$0.00
Parcel #21	3.3%			X			100%			3.3%	0.00%	\$0.00
Total	100.0%	16	3	7	Check			50.9%	Check		100.0%	\$4,318,488.58
												Total Project Cost

In the event that a roundabout is constructed at the intersection of C.S.A.H. 10 and Future C.S.A.H. 92 (Little Avenue) as part of the extension of C.S.A.H. 92, as identified with the CSAH 92 Planning Study, a scenario exists where Carver County would hold responsibility for all four legs of the intersection due to future ownership of the north-south C.S.A.H. 92 connection. If the roundabout becomes warranted due to safety and operational needs/issues at the intersection due to area development identified within this study while the City maintains ownership of the north (Klein Drive) and south (Little Avenue) legs of the intersection, project costs would be allocated based upon the Carver County Development Driven Cost Participation Policy.

Project costs allocated by parcel are adjusted to account for assumptions provided with the Carver County Development Driven Cost Participation Policy. The policy includes guidance on roundabouts and other corridor elements to identify costs that are the responsibility of the County and Municipality. Cost participation by the County and allocation of costs associated with the roundabout is determined by timing of warrants being met for installation. The following assumptions are

referenced:

- County Share is “By Leg” if meets warrants by opening day.
- Cost Share is “By Leg up to 50% if meets warrants for design year”.
- Cost Share is “0% if does not meet warrants for design year”.

Estimated project costs for each leg of the roundabout is provided, below, for the intersection of C.S.A.H. 10/Little Avenue. Costs associated with the south leg of the roundabout include the realignment of Little Avenue to tie into the existing roadway section to the south. Estimated project costs, including a 5% contingency, and engineering/administration costs are provided in **Table B**.

Table B: C.S.A.H. 10/Future C.S.A.H. 92 Roundabout Project Costs By Leg

Roundabout Improvement Costs				Cost - By Leg			
Intersection	Construction	Eng/Admin. (25%)	Totals	North	East	South	West
CSAH 10 at Future CSAH 92/Little Ave	\$ 3,454,790.86	\$ 863,697.72	\$ 4,318,488.58	\$ 787,354.98	\$ 548,060.63	\$ 2,431,731.10	\$ 551,341.88

The final step in the process is to allocate project costs by Parcel with consideration of the County’s Development Driven Cost Participation Policy. **Table C** provides the City of Waconia’s share of the C.S.A.H. 10/Future C.S.A.H 92 roundabout allocated by parcel that is expected to access C.S.A.H. 10 using the intersection. Project costs are provided by parcel for the conditions of the intersection meeting warrants for the roundabout opening day, meeting warrants for the design year, and not meeting warrants at all.

Table C: Distributed C.S.A.H. 10/ Future C.S.A.H. 92 Roundabout Project Costs By Warrants

CSAH 10/Little Avenue (Future CSAH 92) Cost Allocation By Parcel							
Intersection Allocation				Allocated CSAH 10/Little Ave (Future CSAH 92)	Warranted Opening Day	Warranted Design Year	Not Warranted
Parcel Number	Little Avenue	3/4- Access	Klein Drive East				
Parcel #1 & #2	X			\$1,133,912.18	\$ 845,240.37	\$ 989,576.28	\$ 1,133,912.18
LDR	X			\$492,169.47	\$ 366,872.78	\$ 429,521.12	\$ 492,169.47
HDR	X			\$161,999.36	\$ 120,757.50	\$ 141,378.43	\$ 161,999.36
MXD	X			\$478,283.81	\$ 356,522.13	\$ 417,402.97	\$ 478,283.81
P	X			\$1,459.54	\$ 1,087.97	\$ 1,273.75	\$ 1,459.54
Parcel #3	X			\$78,356.77	\$ 58,408.68	\$ 68,382.73	\$ 78,356.77
Parcel #4	X			\$64,609.97	\$ 48,161.54	\$ 56,385.76	\$ 64,609.97
Parcel #5	X			\$10,997.44	\$ 8,197.71	\$ 9,597.58	\$ 10,997.44
Parcel #6	X			\$36,963.62	\$ 27,553.41	\$ 32,258.52	\$ 36,963.62
Parcel #7	X			\$30,242.97	\$ 22,543.70	\$ 26,393.33	\$ 30,242.97
Parcel #8	X			\$26,882.64	\$ 20,038.84	\$ 23,460.74	\$ 26,882.64
Parcel #9	X			\$26,882.64	\$ 20,038.84	\$ 23,460.74	\$ 26,882.64
Parcel #10	X			\$1,233,240.93	\$ 919,281.97	\$ 1,076,261.45	\$ 1,233,240.93
Parcel #11	X	X		\$40,323.95	\$ 30,058.27	\$ 35,191.11	\$ 40,323.95
Parcel #12	X	X		\$201,619.77	\$ 150,291.33	\$ 175,955.55	\$ 201,619.77
Parcel #13	X			\$295,709.00	\$ 220,427.28	\$ 258,068.14	\$ 295,709.00
Parcel #14	X	X	X	\$968,895.01	\$ 722,233.34	\$ 845,564.17	\$ 968,895.01
Parcel #15	X		X	\$141,426.21	\$ 105,421.87	\$ 123,424.04	\$ 141,426.21
Parcel #16	X			\$28,425.49	\$ 21,188.92	\$ 24,807.20	\$ 28,425.49
Parcel #17			X	\$0.00	\$ -	\$ -	\$ -
Parcel #18			X	\$0.00	\$ -	\$ -	\$ -
Parcel #19			X	\$0.00	\$ -	\$ -	\$ -
Parcel #20			X	\$0.00	\$ -	\$ -	\$ -
Parcel #21			X	\$0.00	\$ -	\$ -	\$ -
Total	16	3	7	\$4,318,488.58	\$ 3,219,086.08	\$ 3,768,787.33	\$ 4,318,488.58
City Cost Share					\$ 3,219,086.08	\$ 3,768,787.33	\$ 4,318,488.58
County Cost Share					\$ 1,099,402.50	\$ 549,701.25	\$ -
					Warranted Opening Day	Warranted Design Year	Not Warranted
County Legs					By Leg	By Leg - 50%	100% City
City Legs					100% City	100% City	0

A future roundabout at the intersection of C.S.A.H. 10 and Little Avenue/Future C.S.A.H. 92 is expected to serve broader regional trips with future improvements at the intersection of C.S.A.H. 92 and T.H. 5 and long-range plans to provide a regional roadway on the existing 102nd Street alignment. The timing and these improvements are not yet defined but were considered in the completion of the C.S.A.H. 92 Corridor Study.

C. Airport Road / Future C.S.A.H. 92

The proposed construction of C.S.A.H. 92 discussed above will also extend through Airport Road with the same proposed width and typical section. A roundabout is planned for the intersection of future C.S.A.H. 92 and Airport Road. This roundabout is planned to be a 150' diameter single lane roundabout with a 20' wide circulatory roadway width and 20' wide entrance and exit lanes. It is anticipated that the roundabout will operate at a speed of close to 30 M.P.H. under typical traffic

conditions. After further design of the roundabout in the future the overall size may be reduced, but the current design is intended to accommodate larger vehicles as a default concept. Pedestrian crossings are planned to be included on all legs of the roundabout to connect the proposed C.S.A.H. 92 trail with future trail systems along Airport Road. A possible future pedestrian underpass is also provided beneath the west leg of the Airport Road/C.S.A.H. 92 intersection consistent with the City's sidewalk/trail masterplan.

Refer to **Figure 2.3 in Appendix A** for a planning level layout of the roundabout at Airport Road and C.S.A.H. 92. The figure shows the proposed final condition of the roundabout. Similar to the C.S.A.H. 10 roundabout, in the interim, development near the intersection will need to accommodate temporary access connections with replacement and installation of final access connections near the intersection happening with the final roundabout installation. The roundabout would be installed with the construction of the C.S.A.H. 92 improvements and no interim intersections are currently being considered.

The total estimated project cost of the future roundabout at the intersection of future C.S.A.H. 92 with Airport Road is \$4,360,000. An itemized cost estimate for this roundabout is included in **Appendix B**. The cost for interim improvements to allow access to the surrounding properties will be a requirement of those developments. Methodology for financing, funding, and cost apportionment for improvements associated with the roundabout and necessary highway work is included below.

Cost Participation

At the request of the City of Waconia, an evaluation was completed to estimate traffic volumes and trip assignments accompanying land uses proposed in the vicinity of the C.S.A.H. 92 and Airport Road intersection. This high-level exercise referenced DRAFT development plans completed by Tamarack Land for residential development planned on Airport Road, east and west of the proposed C.S.A.H. 92 highway corridor. Expected vehicle trips traveling to and from these sites was estimated using ITE Trip Generation manual methodology. The following assumptions were made related to the proposed development:

- Airport Road, West of C.S.A.H. 92
 - Single-Family Detached Housing (Land Use 210)
 - 82 Single Family Lots | 773 Daily Trips
 - Single-Family Attached Housing (Land Use 215)
 - 66 Twin Home Lots (132 Single-Family Attached Housing) | 950 Daily Trips
- Airport Road, East of C.S.A.H. 92

- Multifamily Housing – Mid-Rise (Land Use 221)
 - Between 105 and 280 units planned on the site. The average of 195 Units is assumed for this exercise.
 - 195 Multifamily Housing Units | 885 Daily Trips

A schematic of the proposed site plans is provided in **Inset E**, below.

Inset E: Airport Road Area Development



Project costs allocated by parcel were then adjusted to account for assumptions provided with the Carver County Development Driven Cost Participation Policy. The policy includes guidance on roundabouts and other corridor elements to identify costs that are the responsibility of the County and Municipality. Costs participation by the County and allocation of costs associated with the roundabout is determined by timing of warrants being met for installation. The following assumptions are referenced:

- County Share is “By Leg” if meets warrants by opening day.
- Cost Share is “By Leg up to 50% if meets warrants for design year”.
- Cost Share is “0% if does not meet warrants for design year”.

Estimated project costs for each leg of the roundabout are provided, below, for the intersection of C.S.A.H. 92/Airport Road. Costs associated with the east and west legs of the roundabout include the realignment of Airport Road to tie into the existing roadway section. Estimated project costs, including a 5% contingency, and engineering/ administration costs are provided in **Table D** as follows.

Table D: C.S.A.H. 92/Airport Road Roundabout Project Costs By Leg

Roundabout Improvement Costs				Cost - By Leg			
Intersection	Construction	Eng/Admin. (25%)	Totals	North	East	South	West
CSAH 92 at Airport Road	\$ 3,488,922	\$ 872,230	\$4,361,152	\$773,183	\$1,846,504	\$ 771,870	\$969,596

An exercise was completed to assess the share of total planned traffic growth on Airport Road as generated by the proposed development located near the C.S.A.H. 92/Airport Road intersection. It is estimated that 52% of total growth anticipated on the City streets (east and west legs) can be attributed to the development properties. This current exercise considers development traffic identified in **Table E** as well as background traffic growth identified in the Carver County Comprehensive Plan. Additional benefiting parcels may be identified as development interests continue to arise along Airport Road and Future C.S.A.H. 92.

Table E: C.S.A.H. 92/Airport Road Traffic Forecasting

Airport Road Traffic Volumes						
Traffic Scenario	West of CSAH 92		East of CSAH 92		Totals	
	ADT	% of Growth	ADT	% of Growth	ADT	% of Growth
Existing*	300		300		600	
Future (2040)**	3,500		2,100		5,600	
Development Traffic	1,723	54%	885	49%	2,608	52%
Background Growth	1,477	46%	915	51%	2,392	48%

*Existing traffic volumes are estimated

**Traffic volumes obtained from Carver County, Scenario 3.5 Forecasts

The final step in the process is to allocate project costs to the development parcels or to the anticipated background growth in the greater area. Costs were allocated with consideration of the County's Development Driven Cost Participation Policy. **Table F** provides the City of Waconia's share of the C.S.A.H. 92/Airport Road roundabout that is expected to access C.S.A.H. 92 using the intersection. Project costs are provided for the conditions of the intersection meeting warrants for the roundabout opening day, meeting warrants for the design year, and not meeting warrants at all.

Table F: C.S.A.H. 92/Airport Road Roundabout Project Costs Allocation

CSAH 92/Airport Road Cost Allocation				
Intersection Allocation	Allocated CSAH 92/Airport Rd	Warranted Opening Day	Warranted Design Year	Not Warranted
Development Costs	52%	\$ 1,464,371.66	\$ 1,866,085.35	\$ 2,267,799.05
City-Share of Costs	48%	\$ 1,351,727.68	\$ 1,722,540.33	\$ 2,093,352.97
Total	\$4,361,152.02	\$ 2,816,099.34	\$ 3,588,625.68	\$ 4,361,152.02
	City Cost Share	\$ 2,816,099.34	\$ 3,588,625.68	\$ 4,361,152.02
	County Cost Share	\$ 1,545,052.68	\$ 772,526.34	\$ -
		Warranted Opening Day	Warranted Design Year	Not Warranted
	County Legs	By Leg	By Leg - 50%	100% City
	City Legs	100% City	100% City	100% City

III. SANITARY SEWER IMPROVEMENTS

A. General

Trunk sanitary sewer improvements will be necessary to provide service to the growth areas in the east area of Waconia. The need to determine trunk sewer sizing for future land use and development is critical to the growth of the City. Estimated elevations of the sanitary mains and associated manholes were developed with current land topography without the details of future development grading plans and site layouts in most of the study area. With these assumptions made, there is the potential some additional secondary lift stations will be needed in the future that are not currently identified due to the order in which properties develop or due to a change in the topography from future site development. **Figure 3.1** in **Appendix A** indicates the location of the proposed sanitary sewer districts and the proposed regional lift stations to serve the Study area. **Figure 3.2** in **Appendix A** indicates the approximate location of future trunk sanitary sewer mains. The Study area includes three separate sewersheds that are discussed in this section.

B. Previous Planning Activities

1. 2040 Comprehensive Plan

The City's 2040 Comprehensive Plan includes an analysis of the existing sewer system capabilities and descriptions of the future improvements that are required to service growth.

2. Laketown Township Orderly Annexation Area Sanitary Sewer Study

The evaluation, dated September 2004, was completed by the City of Waconia and it determined the size and approximate locations of future trunk sewer mains and future primary lift stations to serve the City's entire growth area that resides in Laketown Township.

3. Reitz Lake Lift Station and Airport Road Forcemain Summary

This evaluation dated January 21, 2016, expanded on the 2004 study and provided additional details for the Reitz Lake lift station and forcemain. This evaluation also provided adjustments to the planned sewersheds due to a trunk sewer main being constructed through the Lake Waconia Regional Park in order to serve the Shores of Lake Waconia Development and the eastern area of Waconia to the north of T.H. 5.

4. Laketown Township Wastewater Facility Plan

Laketown Township commissioned Bolton & Menk to evaluate sanitary sewer upgrades to five separate systems. This Facility Plan is dated October 24, 2023. Two of these systems are adjacent to Reitz Lake and are in Waconia's planned growth area. The planned improvements for these two systems were

reviewed by the Public Services Department to confirm the improvements could be maintained by the City of Waconia in the future, and to also confirm the planned sewer mains could be connected to the City's future planned trunk sewer mains.

5. Feasibility Study for Southeast Area Improvements

This study dated August 1, 2006, evaluated and proposed infrastructure improvements required to service developments in the southeast portion of the City that were proposed at that time. These developments included Interlaken, Legacy Village, Pinehill, the Hartmann Property, and the Paradise Partners Property. It had similar characteristics to the current feasibility study and covered a portion of the current study area.

C. Projected Wastewater Flows

1. Design Criteria

The East Area Study region was divided into three large sewer districts: Southeast Area, Reitz Lake, and Northeast Area. Each of those districts was broken into multiple sub-district drainage areas based on topography and geographical features. Average wastewater flow rates and the Future Land Use Plan from the City's 2040 Comprehensive Plan were utilized to determine flows from each district. Some assumptions on average sewer flow rates that differ from the Comprehensive Plan land uses are that Low Density Residential is 750 Gallons/Day/Acre, Medium Density Residential is 1,500 Gallons/Day/Acre, High Density Residential is 2,500 Gallons/Day/Acre, and Urban Reserve is 1,000 Gallons/Day/Acre. Sanitary sewer flow rates vary from month to month, depending on weather, precipitation, infiltration and inflow (I&I), and other factors. The flow rate also varies during the day with peak flows generally occurring in the mornings and evenings. The sanitary sewer system capacity must be designed to accommodate these peak flows. Therefore, the system is sized using a peak factor. These peak flow rates can be expressed as a variable ratio applied to the average flow rates. This variable ratio, called the peak flow factor, has been found generally to decrease with increasing average flow rates. Peak flow factors used in this study are from the Metropolitan Council's Program Year 2025 Ongoing Inflow and Infiltration Program Procedure Manual, dated January 2023. The peak flow factors in this study range from 3.3 to 4.5 depending on the estimated average flow in each trunk sewer main. Design flow criteria are shown in **Table A** in **Appendix F**.

2. Capacity Analysis

The design criteria stated in Section III.C.1 was used to project wastewater flows and to estimate the pipe sizes and capacities required to provide service to each district in the East Area of the City. Pipe design and capacity was based on flows within each sub-district and used minimum pipe slopes to make

conservative estimates on future construction. The design of the future sanitary sewer is based on less than full pipe capacity. This provides for a safety factor in the event that the actual ultimate flows are greater than the projected flows resulting from changes in land use and increased development density. **Table B in Appendix F** provides the full and design capacities of sanitary sewer up to 36-inch diameter. Elevations of manholes and pipe are necessary to estimate for design to determine constructability of the sewer mains and where potential secondary lift stations may need to be provided.

The projected wastewater design flows and trunk sewer pipe capacities are shown in **Table C in Appendix F**.

D. Future Sewer System

1. Southeast Area Sewer District

The southern portion of the project area is planned to connect to the existing Southeast Area regional lift station. This lift station was installed in 2006 and was designed to accommodate the ultimate growth area of the City with future pump upgrades and forcemain upgrades. The current lift station capacity is 1,500 gallons per minute (gpm) or 2.16 million gallons per day (MGD). The ultimate capacity of this lift station based on projected wastewater flow is 5,200 gpm or 7.49 MGD. Two trunk sewer lines are needed to connect the entire service area of the Southeast Area lift station. The first of these was installed in 2006 prior to the Interlaken Development. This trunk main has a diameter of 36 inches and is located along Somerwood Drive, Airport Road, Interlaken Crossing, C.S.A.H. 59 / Main Street, and T.H. 5. The Southeast Area lift station connects to this trunk main via a 16-inch forcemain located along C.S.A.H. 10 and the south end of Somerwood Drive. Based on estimated ultimate flow design in this Study, an additional 16-inch forcemain is anticipated to be needed in this location for the full buildout scenario. The western portion of this sewershed is completely developed with the exception of the Hartmann parcel and a few small parcels adjacent to the Hartmann parcel to the west of C.S.A.H. 59. The eastern portion of this sewershed requires additional trunk sewer lines as shown on **Figures 3.6-3.11 in Appendix A**. The area serviced as shown on the figures is approximately 1,600 developable acres of land. To the north side of the district, there is a 12-inch sewer servicing the properties between C.S.A.H. 10 and Klein Drive. The southernmost locations serviced in this district are the properties near Knight Avenue and extending south to Carver Creek and 102nd Street on the north edge of this sub district. Reaching these southern properties with lower elevations will require an additional secondary lift station in order to pump sewage back up the hill north towards 102nd Street with a 10-inch forcemain. The potential future location of this lift station is anticipated to be located between Little Avenue and Knight Avenue. There is an additional, smaller secondary lift station that is anticipated at the southern

end of Knight Avenue with an 8-inch forcemain. The trunk sewer extension along 102nd Street will also serve the properties between C.S.A.H. 10 and 102nd Street. This area is planned to be a future business park with some residential properties and will have multiple 12-inch trunk sewer mains. These two areas drain into the planned Falk-Saltire Site Development along the east side of the large wetland near the Southeast Area lift station. The trunk sewer extending through the Falk Site Development is 27-inch up to 36-inch. With all properties in this district combining near the C.S.A.H. 10 and Little Avenue intersection, it is designed to have a 36-inch trunk sewer draining into the Southeast Area lift station.

2. Reitz Lake Sewer District

The northern portion of the project area is planned to be served by a new regional lift station referred to as the Reitz Lake Lift Station. This location includes the proposed Kirsch Site Development just north of the future lift station location. The properties on the south side of T.H. 5 are also included in this sewer district. After analyzing the feasibility of draining these properties to the north towards the Regional Park, it was determined that crossing T.H. 5 was not the most efficient or economical way to serve these properties. The district provides service to a large area in the general vicinity of Reitz Lake with approximate boundaries of C.S.A.H. 10 to the south and Scandia Road to the northeast. The location of the future primary lift station along with the adjacent trunk sewer main are shown on **Figures 3.3-3.8 in Appendix A**. The area serviced as shown on the figures is approximately 1,400 developable acres of land. There will be an 8-inch sewer extension to service the existing Hidden Bay and Schmittville-Creekview subdivisions that will connect at the southeast side of Reitz Lake with an 18-inch trunk sewer servicing the southeast area of the district. This southeast area of the district services properties from C.S.A.H. 10 to the eastern annexation boundary. A 24-inch trunk sewer will service the properties directly north of Reitz Lake and properties to the east extending to approximately Turbid Lake. This 24-inch sewer will connect to the future Reitz Lake Lift Station. The northern portion of the district will be providing service to the properties between T.H. 5, Airport Road, and Scandia Road with a 21-inch sewer main.

3. Northeast Area Sewer District

The northeast portion of the project area is also planned to be served by the new regional Reitz Lake Lift Station. This sewer district is made up of properties to the northeast of Scandia Road extending towards T.H. 5. The additional trunk sewer mains are shown on **Figures 3.4-3.5 in Appendix A**. The area serviced as shown on the figures is approximately 400 developable acres of land. A 12-inch trunk sewer main will extend from the properties adjacent to T.H. 5 and drain to the Reitz Lake Sewer District across Scandia Road. The southern area of this district, west of Turbid Lake, will be serviced by a 15-inch trunk sewer main. A lift station will be required on this line with an 8-inch forcemain carrying flows into the

Reitz Lake Sewer District near the 2040 growth boundary line.

E. Estimated Cost

The total estimated project cost for the entirety of the trunk sanitary sewer improvements covering the entire eastern buildout area of the City is \$56,100,000 based on estimated 2024 costs. Itemized cost estimates are included in **Appendix B**. Financing, funding, and cost apportionment for these proposed trunk sanitary sewer improvements are included in Section VI.

F. Phase 1 Sewer System Improvements

1. Falk-Saltire Site Development

The Falk-Saltire site development improvements consist of the proposed trunk sewer main facilities within and adjacent to the Falk-Saltire development and are shown on **Figure 3.6** in **Appendix A**. The proposed trunk sewer runs north-south, generally along the west side of the property and ranging between 27-inch and 36-inch pipe. The trunk sewer main within the development is the responsibility of the developer except for the oversizing which is a City cost. The City is responsible for the trunk sewer extension cost for 300-feet of 36-inch trunk sewer main along C.S.A.H. 10 to the development property.

The total estimated project cost for the trunk sewer main improvements within the development is \$5,529,000 of which \$1,536,000 is the oversizing cost and \$234,000 is the trunk sewer extension cost. Financing and funding for the proposed trunk sewer main improvements are addressed in Section VI.

2. Kirsch Site Development

The Kirsch site development improvements consist of the proposed trunk sewer main facilities within and adjacent to the Kirsch development and are shown on **Figure 3.3** in **Appendix A**. The proposed trunk sewer runs north-south, generally along the west side of the property and ranging between 8-inch and 24-inch pipe. The trunk sewer main within the development is the responsibility of the developer except for the oversizing which is a City cost. This site development would prompt the construction of the Reitz Lake lift station to accommodate sewer flows to the west. The lift station would be oversized for future buildout needs of the city. The construction of a standard sized lift station would be the responsibility of the developer, and the oversizing would be a City cost. The City is responsible for the trunk sewer extension for 1,000-feet of 24-inch trunk sewer main from the proposed Reitz Lake Lift Station to the development property.

The total estimated project cost for the trunk sewer main improvements within the development is \$5,155,000 of which \$647,000 is the oversizing cost and \$791,000 is the trunk sewer extension cost.

The total estimated project cost of the lift station is \$2,000,000 of which \$1,250,000 is the oversizing cost. Adding the trunk sewer and lift station components together results in a total estimated project cost of \$7,155,000 for the development, of which \$2,688,000 is oversizing and extension costs. Financing and funding for the proposed trunk sewer main improvements are addressed in Section VI.

G. Phase 2 Sewer System Improvements

1. Trunk Sewer Mains

The remaining proposed trunk sewer main work would take place as developments come to fruition in the future. This estimate encompasses the remaining trunk sewer anticipated for the Southeast Area District, Reitz Lake District, and Northeast Area District combined, minus the proposed development work in Phase 1.

The total estimated project cost for the trunk sewer main improvements beyond the Phase 1 system improvements is \$45,416,000. Financing and funding for the proposed trunk sewer main improvements are addressed in Section VI.

IV. WATER SYSTEM IMPROVEMENTS

A. General

The primary purpose of this feasibility study is to identify the infrastructure improvements including the water system that are required to service the proposed development of the Falk-Saltire property and of the Kirsch property in the east portion of the City.

Extensions of trunk water facilities are required to service the proposed developments and the balance of the east portion of the City. The general planning of the water system improvements for the entire east area is therefore included.

B. Previous Planning Activities

1. 2040 Comprehensive Plan

The Water Supply Plan section of the City's 2040 Comprehensive Plan includes an analysis of the existing water system capabilities and descriptions of the future improvements that are required to service growth.

Figure 6-5 from the Comprehensive Plan shows the 2040 Water Supply System Plan and this is included as **Appendix D**. This shows the study areas for future wells, water storage and water treatment facilities. No information was provided for future trunk watermain extensions.

2. Hydrogeological Assessment

The City commissioned Leonard Rice Engineers, Inc. to provide a desktop hydrogeological assessment for the east portion of the City. The report date is February 18, 2020. This assessment consisted of reviewing available geologic information and analyzing the feasibility of water supply wells. This identified exploration areas for both deep sand and gravel aquifer and Jordan Sandstone aquifer wells. The exploration areas are shown on figures for the southeast area and northeast area which are found in **Appendix E**.

The assessment recommended an exploration program starting with test holes to supplement and confirm geologic conditions. The next phase is drilling test wells, completing aquifer pumping tests, and evaluating the feasibility of water supply wells.

3. Capital Improvement Plan

The City's Capital Improvement Plan, 2024 through 2033 includes construction of Wells 9, 10, and 11, construction of Water Treatment Facility 4, and water tower construction along with the anticipated construction year and estimated cost.

4.2018 Water Supply Plan

Information in this plan includes water demand projections, identification of the source of future water supply, emergency water use restrictions, and water conservation efforts.

5. Feasibility Study for Southeast Area Improvements

This study dated August 1, 2006, evaluated and proposed infrastructure improvements required to service developments in the southeast portion of the City that were proposed at that time. These developments included Interlaken, Legacy Village, Pinehill, the Hartmann Property, and the Paradise Partners Property. It had similar characteristics to the current feasibility study and covered a portion of the current study area.

C. Existing Water System and Capacities

The existing water system consists of two water treatment facilities, six water supply wells, two active elevated storage tanks and a distribution system of 4-inch to 16-inch diameter watermains.

Water Treatment Plant 3, located on 10th Street, provides iron and manganese removal. It has a capacity of 4,080,000 gallons per day (gpd) or 3,400 gallons per minute (gpm) based on operating 20 hours-per-day. The facility also has 900,000 gallons of underground storage. Water Treatment Plant 2 is located at Maple Street and Main Street. It is currently used as a backup treatment plant and has a capacity of about 384,000 gpd (320 gpm) based on operating 20 hours-per-day.

Wells 2 and 3 are located near Water Treatment Plant 2. These wells are available for emergency use only and are capable of providing approximately 400 gpm and 430 gpm, respectively. Wells 5 and 6 are Mount Simon aquifer wells and supply Water Treatment Plant 3. They have capacities of 400 gpm and 1,500 gpm, respectively. Wells 7 and 8 are sand and gravel drift aquifer wells and also supply Treatment Plant 3. They have capacities of 1,000 gpm and 800 gpm, respectively, and were added to reduce the demand on the Mount Simon wells.

The total capacity of Wells 5 through 8, the City's main wells, is 3,700 gpm or 4.44 million gallons per day (MGD) based on 20 hours operations. When including emergency Wells 2 and 3, the capacity increases to about 4,530 gpm or 5.44 MGD.

Elevated Tank 2 is located adjacent to the Carver County Fairgrounds and has a capacity of 250,000 gallons. Elevated Tank 3 is on 10th Street next to Water Treatment Plant 3 and has a capacity of 2,000,000 gallons. The total storage capacity, including the 900,000 gallons of underground tanks, is 3,150,000 gallons.

The 2040 Comprehensive Plan which was completed in 2019 concluded that the current water

treatment capacity could accommodate approximately 900 new residential units based on modifying operations and run times and utilizing peak use wells. The water supply well capacity could also accommodate about 900 new units based on increasing well run time to 20 hours-per-day. The storage capacity was projected adequate to accommodate about 4,000 new units.

D. Water Demand

1. Historic Water Demand

Table G below shows the total annual water demand in millions of gallons (MG) and the average day and peak day demand in gallons per day (gpd) for the last five years.

Table G: Waconia Water Demand Summary

Year	Annual Demand (MG)	Avg. Daily Demand (GPD)	Peak Daily Demand (GPD)	Peak Factor
2019	325	891,000	1,894,000	2.13
2020	375	1,028,000	2,691,000	2.62
2021	436	1,195,000	3,105,000	2.60
2022	447	1,224,000	3,098,000	2.53
2023	484	1,325,000	3,089,000	2.33

The peak factor in the table is the ratio of the peak daily demand to the average daily demand. Water supply systems must have adequate capacity to meet the peak demand. Peak demand results mostly from lawn irrigation.

It is typical to express water demand by gallons per capita per day (gpcd). Historic gpcd rates are used to project future water demand based on population projection. **Table H** shows the gpcd of water use for the past five years. The population estimates were provided by City staff.

Table H: Historic Gallons Per Capita Per Day Demand

Year	Estimated Population	Avg. Daily Demand (GPD)	GPCD
2019	12,797	891,000	70
2020	13,038	1,028,000	79
2021	13,841	1,195,000	86
2022	14,483	1,224,000	84
2023	14,830	1,325,000	89

The per capita water demand has been relatively stable the past five years but has trended upward. This could result from additional lawn irrigation demand the past two years which are considered drought years. It can also result from increases in commercial and industrial demand.

2. Fire Flow Demand

Availability of water for firefighting is a vital consideration in the design of a water supply system. Fire demands vary greatly from normal usage in that a large volume of water is required at a single demand point. Fire demand typically governs the distribution system design.

Typical fire demand requirements are 1,000 gpm for single family residential areas and 1,500 gpm for attached housing. The requirements for commercial and industrial buildings can vary significantly based on building construction, building use, and if the building has a fire suppression sprinkler system. Flows of 3,500 gpm for a three-hour duration are generally considered acceptable.

3. Design Criteria

The design criteria for water system design in the City's Watery Supply Plan dated September 2018 are a per capita demand of 97 gpcd and a peak factor of 2.06 for years 2025 and beyond. Based on **Table H**, this per capita demand appears appropriate. The 2.06 peak factor, however, is low based on peak factors in **Table G** which average 2.44 over the past five years.

A detailed analysis of the design criteria is beyond the scope of this study and should be done in conjunction with the study for the expansion of water supply and treatment facilities.

4. Future Water Demand Projections

Future water demand is typically projected by multiplying the per capita demand times the projected

population. **Table I** shows the projected water demand from the 2018 Water Supply Plan. These are based on the population projections used in the 2040 Comprehensive Plan.

Table I: Projected Water Demand

Year	Projected Population	Projected per Capita Demand (GPCD)	Projected Avg. Daily Demand (MGD)	Projected Peak Factor	Projected Peak Day Demand
2020	14,200	97	1.377	2.24	3.096
2023	16,120	97	1.564	2.23	3.480
2025	17,400	97	1.688	2.06	3.480
2028	19,320	97	1.874	2.06	3.861
2030	20,600	97	1.998	2.06	4.120
2040	24,000	97	2.328	2.06	4.800

5. Capacity Analysis

From Section IV C., the current capacities of the water treatment and water supply wells is 4.08 MGD and 4.44 MGD, respectively. This does not include the 0.384 MGD treatment capacity of Treatment Plant 2 which is considered an emergency backup facility. Based on this and the projections in **Table I**, the current water system would have capacity to meet peak demand until about 2029. However, **Table G** shows the peak factor in recent years is higher than the 2.06 factor in the above projections. The average peak factor for the past five years is 2.44. Applying this average to the 2025 average daily demand of 1.688 MGD results in a projected peak demand of 4.110 MGD which exceeds the capacity of Treatment Plant 3. It should be noted that the 2023 projected population of 16,120 from the Water Supply Plan is 1,290 more than the 2023 estimated population of 14,830. This results in a conservatively high water use projection. Reducing the projected 2025 population by 1,290 and using the 2.44 peak factor reduces the 2025 peak day demand to 3.81 MGD.

As described in Section IV C., the 2040 Comprehensive Plan stated that the existing water system had capacity for 900 additional residential units in 2019. **Table J** shows the residential unit construction information from the City's Annual Land Use Activity and Development Reports for 2019 through 2023.

Table J: Residential Unit Construction

Year	Single Family	Townhomes/Twin Homes	Apartments	Total
2019	21	-	51	72
2020	27	16	-	43
2021	138	8	60	206
2022	144	38	206	388
2023	71	16	-	87
Total	401	78	317	796

Generally, an apartment unit is considered equivalent to 0.8 of a single-family unit. Using this adjustment, the total equivalent residential units added since 2019 is 733. Based on the 2019 projection, this leaves water system capacity for 167 additional units in 2024. Over the past three years an average of 138 units per year have been added. On this basis, water system capacity would be exceeded in 2026.

The 2023 Land Use and Development Report shows that 355 single-family and 24 townhome developed lots are available. The concept plans for the Falk-Saltire property and the Kirsch property show a total of 405 single-family, 66 twin home, and 486 to 776 apartment units.

E. Future Water System

1. Trunk Watermains

Trunk watermains are the larger diameter mains that convey water from the water treatment plant and storage tanks to provide water supply to the smaller lateral mains throughout the City. For Waconia these are 12- and 16-inch diameter mains.

Figure 4.1 in Appendix A shows the future trunk watermains corridors in the east portion of the City. These mains connect to existing trunk watermains, connect to future water treatment and storage facilities, and form a series of loops within the study area. A 16-inch watermain is shown extending to the southwest boundary of the Falk-Saltire property to provide supplemental water supply to the south-central portion of the City.

The future trunk watermain sizes shown are consistent with the general criteria and goals from previous water system planning. Updating of the water model and performing computer flow analyses are

beyond the scope of this Study. It is recommended that the model update and analyses of the east portion of the City should be performed to confirm the future trunk watermain system shown on **Figure 4.1** in **Appendix A**.

Figure 4.1 in **Appendix A** shows the general corridors for the future trunk watermain. The locations should be refined to follow future subdivision streets when possible, to maximize the lateral benefit and reduce the trunk water expense.

The total estimated cost for the future trunk watermain shown on **Figure 4.1** in **Appendix A** is \$31,800,000 based on estimated 2024 costs. The detailed cost estimate is in **Appendix B**.

2. Water Supply Wells

Figure 4.1 in **Appendix A** shows the study areas for future wells. The locations shown consider the study areas shown on the 2040 Water Supply Plan from the 2040 Comprehensive Plan in **Appendix D** and the well exploration areas identified by the Hydrogeological Assessment which are shown on the figures in **Appendix E**.

The north portion of the Falk-Saltire property is within the deep sand and gravel well (drift well) exploration area as shown on **Figure 4.1** in **Appendix A**. This also shows a Jordan Sandstone well exploration area at the northeast edge of the business park land use area on the south-side of C.S.A.H. 10. These well exploration locations are closest to existing trunk watermain and provide the most cost-effective construction in the near term.

3. Water Treatment Facility

Figure 4.1 in **Appendix A** shows the study area for the future water treatment facility in the general location of the intersection of C.S.A.H. 10 and future C.S.A.H. 92. This facility is best located close to the future sand-gravel aquifer wells. The study area includes the north portion of the Falk-Saltire property. If a well is feasible in the Jordan Sandstone well study area, a raw watermain to the treatment plant will be required.

4. Water Storage Tank

The future elevated water storage tank study area is shown in the business park area on the south-side of C.S.A.H. 10 as shown on the 2040 Land Use Plan. While the entire business park area is shown as the study area, the tank would be most cost-effective from a construction perspective if sited on the high elevation area in the west portion of the business park.

F. Phase 1 Water System Improvements

1. Falk-Saltire Site Development

The Falk-Saltire site development area improvements consist of proposed trunk water facilities within and adjacent to the Falk-Saltire property development and are shown on **Figure 4.2** in **Appendix A**. The proposed 16-inch watermain connects to the existing 16-inch main on C.S.A.H. 10 and extends southeasterly to future C.S.A.H. 92. It then extends south along future C.S.A.H. 92 and then through the development to 102nd Street. The trunk watermain within the development is the responsibility of the developer except for the main oversizing which is a City cost.

The total estimated project cost for the trunk watermain improvements within the development is \$5,334,000 of which \$490,000 is the oversizing cost. The total estimated cost of the 16-inch watermain on C.S.A.H. 10 for looping purposes is \$1,150,000. Financing and funding for the proposed watermain improvements are addressed in Section VI.

The north portion of the Falk-Saltire property, shown as future apartments on the concept plan, is within the future well and water treatment facility study area. It is recommended that Phase I includes discussion with the developer regarding property acquisition for these facilities and the initiation of the exploration work to determine if water supply wells in this area are feasible.

2. Kirsch Site Development

The Kirsch site development area improvements consist of proposed trunk watermain within and adjacent to the Kirsch property development and are shown on **Figure 4.2** in **Appendix A**. Water service to the development will be provided by extension of a 16-inch watermain from the existing 16-inch main on Airport Road. This extends to the east side of future C.S.A.H. 92 in order for the road crossing to be done by open-trench construction versus the more costly jacked casing construction that would be required after C.S.A.H. 92 is constructed. A 12-inch watermain extends north of Airport Road through the development. The trunk watermain within the development is the responsibility of the developer except for the main oversizing which is a City cost.

The total estimated project cost for the trunk watermain within the development is \$1,236,000 of which \$39,000 is oversizing cost. The total estimated cost of the 16-inch watermain on Airport Road for looping purposes is \$489,000. Financing and funding for the proposed watermain improvements are discussed in Section VI.

G. Phase 2 Water System Improvements

1. Water Treatment Facility

As discussed in Section IV, D. 5., based on capacity projections in the 2040 Comprehensive Plan and the added connections since the projections were done in 2019, the water treatment capacity may be

exceeded in 2026. It takes a minimum of two years for the planning, design and construction of a treatment facility. Therefore, the planning for a new facility is recommended to be initiated in 2024 or right away in 2025 to prevent the need to restrict development.

The City's Capital Improvement Plan (CIP) shows the water treatment facility in 2029 with an estimated cost of \$12,200,00. It is recommended that the planning study be initiated as soon as possible. This study will establish the need, capacity, location, schedule and funding of the treatment facility. This study should include the wells required to supply water to the treatment facility and the schedule for adding water storage facilities in both the southeast and northeast areas of the City.

2. Water Supply Wells

The City's CIP includes the following water supply wells which are shown in **Table K** below. These wells will provide water to the new treatment facility.

Table K: Planned Well Construction

Well	Year	Estimated Cost
9	2024-25	\$1,700,000
10	2028	\$1,720,000
11	2028	\$1,720,000

The schedule for Wells 10 and 11 will need to be accelerated. The planning for the wells should be included in the water planning study. The first step in the planning for the treatment facility and wells is the exploration program to determine the feasibility of construction wells within both the sand/gravel well study area and the Jordan Sandstone study area. The exploration program is detailed in the Hydrogeological Assessment Study.

H. Future Phase Water System Improvements

1. Water Storage Tank

The City's CIP includes an elevated water storage tank in 2031 with an estimated cost of \$7,000,000. The schedule for adding storage facilities along with the capacity and locations should also be addressed in the water planning study. **Figure 4.1 in Appendix A** shows a water tank study area in the business park land use area on the south side of C.S.A.H. 10. It also shows a study area north of T.H. 5.

2. Trunk Watermains

Trunk watermain construction as shown on **Figure 4.1** in **Appendix A** will occur in multiple phases. This will typically occur as required to provide services to new developments. The extensions for new developments often result in the new areas being serviced by a single watermain which is the case with both the southern and northern developments. This results in service reliability concerns and potential water quality issues. At some point, an extensive trunk watermain construction program may be required to provide a looped distribution system which will address these concerns.

The total estimated project cost for the trunk watermain improvements beyond the Phase 1 system improvements is \$25,230,000. Financing and funding for the proposed trunk watermain improvements are addressed in Section VI.

V. OTHER IMPROVEMENTS

A. Drainage Facilities and Stormwater Management

1. General

As the City grows, land is converted from natural/rural landscapes to urbanized areas, increasing areas of compacted soils and impervious areas. This leads to increased runoff rates and volumes which can result in flooding, sedimentation, and the transportation of pollutants. Therefore, stormwater management will be essential to promote responsible development and to protect water quality. The requirements for stormwater management are detailed in the City's Surface Water Management Plan.

2. Development Requirements

Stormwater management facilities will be required with all new developments in the City. These facilities will be designed to meet local stormwater management rules as well as the rules of the Carver County Water Management Organization (CCWMO) that are set forth through the Ordinances of Carver County. These facilities will include wet retention ponds, biofiltration basins, rain gardens, sump manholes, and various other items in order to provide water quality treatment and volume control. In addition, stormwater reuse will be evaluated where appropriate to aid in groundwater recharge and to lessen potable water use.

Stormwater management requirements will be met on a per site or per development basis and paid entirely with developer funds or non-City funds. The location of stormwater management facilities will depend on the individual grading plans and developments plans. Therefore, locations for these facilities and estimated costs for these facilities are not included in this Study. It is anticipated that the majority of the future drainage improvements will be constructed within development projects. No significant trunk stormwater facility improvements were proposed in the Surface Water Management Plan for the east Waconia area.

However, if a significant development is proposed where the opportunity for a larger pond exists, a regional pond will be evaluated at that time. This approach would likely result in the City paying for a portion of the pond construction and then billing this amount back to neighboring sites when they develop and come into the City. The City's Surface Water Management Capital Improvement Plan includes "C.S.A.H. 92 Business Park and C.S.A.H. 10 Reuse" with an estimated cost of \$500,000. This will be considered with the future business park development located east of the Falk-Saltire property development.

3. Natural Resources

In addition to stormwater management, the City will also require management and protection of wetlands to maximize wetland function and improve surface water resources. Steep slopes, wooded areas, and other significant natural resources will also be preserved to the extent practical with any development.

B. Trail and Pedestrian Facilities

1. General

The City of Waconia is committed to developing a robust and functional pedestrian system connecting new and existing developments together. The City's primary goals for the pedestrian system are the following:

- a) To link neighborhoods with other neighborhoods.
- b) To link neighborhoods with priority destinations (schools, parks, churches, public facilities, natural areas, medical facilities, commercial areas, and other points of interest.)
- c) To ensure public safety by allowing a safe route for sidewalk and trail users off of major roadways.
- d) To provide an alternative transportation option for residents, reducing the reliance on the automobile.
- e) To promote healthy lifestyles and provide residents with outdoor recreation activities.
- f) To provide individuals with disabilities access to the system.
- g) To assist in the planning for future growth and development of the community.

The City is committed to working with project partners such as Carver County, MnDOT, Metropolitan Council, and other municipalities to flesh out the pedestrian system as development continues throughout the area. The City of Waconia 2040 Comprehensive Plan identifies several planned pedestrian routes within the East Area Development study boundaries. **Inset F** below identifies the current existing and planned pedestrian facilities in the area. Additional publications such as the Carver County comprehensive plan outline trail and bicycle improvements planned in the region

Inset F: Planned Pedestrian Facility Improvements

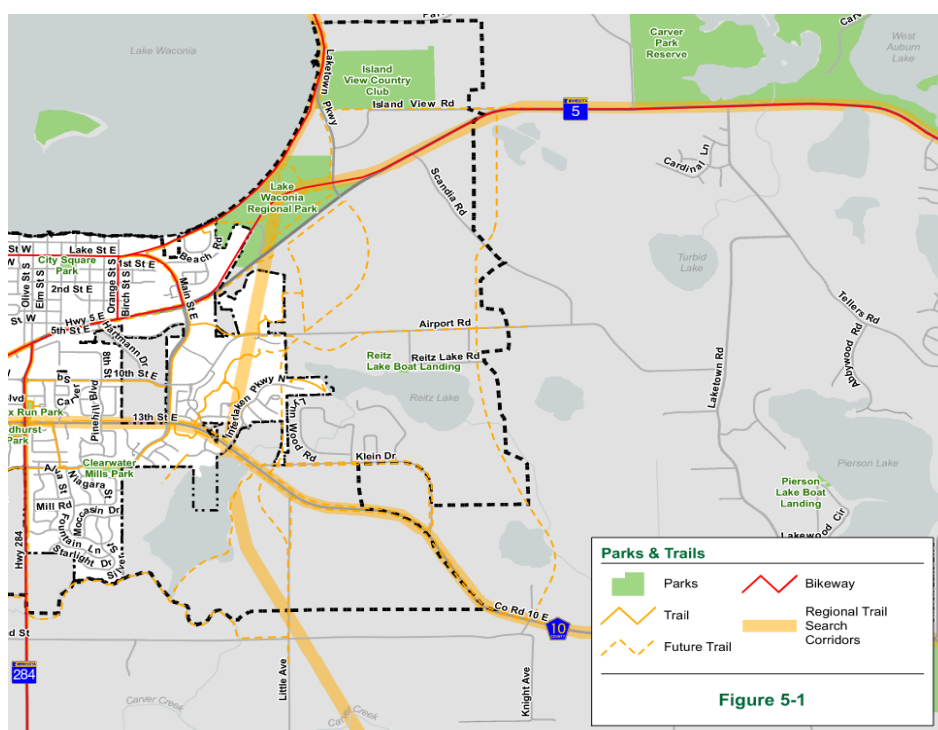


Figure 5-1

2.Future Regional Trail Routes

Notable planned pedestrian routes in the east region include trail connections on C.S.A.H. 92 and Airport Road, C.S.A.H. 10, and T.H. 5. These projects along with other planned future pedestrian improvements are in various stages of development.

a) C.S.A.H. 92 Corridor

A trail extension on the full length of the C.S.A.H. 92 corridor is currently planned as part of the future C.S.A.H. 92 roadway project. This trail connection will serve as a critical connection for pedestrian and bicycle traffic between east Waconia neighborhoods, downtown Waconia, and Lake Waconia Regional Park.

The C.S.A.H. 92 trail extension also includes connections to planned City trail systems such as Airport Road. This connection point is shown in **Figure 2.1** in **Appendix A** as a potential pedestrian underpass location to remain consistent with previous studies and comprehensive plans. Additional design will need to occur during the C.S.A.H. 92 project to confirm if a pedestrian underpass is needed.

The transportation section in this study includes information on the proposed trail extension along the full length of the planned C.S.A.H. 92 corridor. Additional information can be found in the C.S.A.H. 92 Planning Study in the **Appendix C**.

b) C.S.A.H. 10 Corridor

C.S.A.H. 10 is being evaluated for a regional trail system as part of the Carver County masterplan process. This trail connection would provide an additional connection point between the southeast region and other destinations in and near Waconia, including neighboring municipalities.

c) T.H. 5 Corridor

A regional trail connection was moved forward in 2015 with the phase 1 Trunk Highway 5 improvements that extended trail systems along T.H. 5 towards Waconia Lake Regional Park. The eastern limit of this project was at T.H. 284 (Olive Street). The City is currently working with MnDOT to continue this trail connection to C.S.A.H. 59 / Main street to complete the trail connection along T.H. 5 and provide a safe and direct route to Lake Waconia Regional Park. Construction on the phase 2 T.H. 5 improvements is slated for 2027 with the project currently undergoing preliminary design.

3. Future Local Sidewalk Locations

Sidewalk locations will be evaluated with each individual development. Based on recent developments along with the guidance from the 2040 Comprehensive Plan, it is assumed that a sidewalk will be required along at least one side of all local roadways.

4. Trail and Sidewalk Improvement Costs

Similarly to the stormwater management items, local pedestrian facilities are planned to be paid entirely with developer funds or non-City funds as part of the individual developments when they come into the City. Regional trails are planned to be paid for with a combination of developer funds, City park fees and grants, if available. Therefore, cost estimates for these facilities are not included. The exception to this is the possible pedestrian underpass at future C.S.A.H. 92 and Airport Road. This feature is proposed to be 100% funded by the City. The cost for a pedestrian underpass can vary greatly depending on the grading work needed, the length of the structure, the infrastructure necessary to provide drainage, the amount of retaining wall or structural support needed, whether or not lighting is included, and whether or not the installation occurs as part of the construction / reconstruction of the road. However, assuming the grading and drainage work would occur as part of an adjacent development, and assuming the installation would occur when Airport Road is constructed / reconstructed, the total estimated project cost for this pedestrian underpass is \$700,000.

C. Right-of-Way and Easement Acquisition

Highway and roadway right-of-way along with drainage and utility easements will be necessary for the development of the east area of Waconia. Permanent right-of-way has already been obtained for the majority of the future C.S.A.H. 92 corridor from C.S.A.H. 10 to T.H. 5. Additional right-of-way will still

be needed for this corridor near T.H. 5 and near Airport Road. Additional right-of-way will also be needed for the realignment of C.S.A.H. 10 and Airport Road to accommodate the two future roundabouts. Additionally, permanent right-of-way is needed for the various local roadways that will be contained within the various developments. Drainage and utility easements are needed for the various trunk sanitary sewer mains and watermain. It is anticipated that the majority of the right-of-way and easements will be dedicated by property owners and developers through the development and platting process at no cost to the City.

As noted above, additional right-of-way will be needed for planned major roadway improvements and also for future utility improvements. The Phase 1 trunk sanitary sewer and watermain extensions proposed in this study are within proposed developments and existing street right-of-ways. Easements may be required adjacent to existing right-of-way to allow for the utility construction. In addition, easements may be needed over undeveloped properties to allow for extension of utilities to service future development. City cost contribution will be needed in these cases and will be evaluated at that time.

VI. FINANCING, FUNDING, & COST APPORTIONMENT

A. Financing

The proposed project components are proposed to be financed through a combination of general obligation bonds, sewer/water revenue bonds, and private Developer financing.

B. Funding

The project costs are proposed to be recaptured through a combination of Future Availability charges to benefitting properties, Municipal State Aid funds, County State Aid funds, development funds, sewer revenues, water revenues, and taxes. Future Availability charges are proposed to be collected when subject parcels are developed.

The following sections provide a cost apportionment and funding summary for the utility project components as follows:

1. Sanitary Sewer

Oversizing is required as part of the trunk sanitary sewer main construction. Oversizing is calculated as the material cost increase of the necessary materials plus 20% handling and installation fee. The sanitary sewer system is oversized for the two proposed developments in order to account for the future build-out of the east area of the City. The proposed Falk-Saltire site development requires a 10-inch line to serve the development. A 36-inch line is proposed for oversizing to account for the future build-out of the Southeast Area Sewer District. The proposed total project cost for the sanitary sewer oversizing within this development is \$1,536,000. The total estimated project cost for the trunk sewer extension to this development is \$234,000. The proposed Kirsch site development requires a 10-inch line to serve the development. A 21-inch line is proposed for oversizing to account for the future build-out of a portion of the Reitz Lake Sewer District and all of the Northeast Area Sewer District. The proposed project cost for the sanitary sewer oversizing within the development is \$647,000. The total estimated project cost for the Reitz Lake lift station oversizing within this development is \$1,250,000. The total estimated project cost for the trunk sewer extension to this development is \$791,000.

The sewer total project costs for the proposed Falk-Saltire site development are apportioned as follows:

Table L: Falk-Saltire Site Development Project Cost Apportionment - Sewer

Item	Project Cost	Recommended Financing / Funding Sources
Total Project Cost	\$5,529,000	Bond
Oversizing Cost (100% City)	\$1,536,000	Sewer Revenues
Extension Cost (100% City)	\$234,000	Sewer Revenues
Development Project Cost	\$3,759,000	
Number of Benefiting ERUs (Single Family)	323	
Number of Benefiting ERUs (Multi-Family & Mixed Use)	216	
Total Number of Benefiting ERUs	539	
Trunk Fee Charge per Unit	\$3,600	
Total Collected at Building Permit	\$1,940,400	Trunk Fees
Availability Charge	\$1,818,600	Availability Charges
Availability Charge per Unit	\$3,374.03	

The sewer total project costs for the proposed Kirsch site development are apportioned as follows:

Table M: Kirsch Site Development Project Cost Apportionment - Sewer

Item	Project Cost	Recommended Financing / Funding Sources
Total Project Cost	\$7,155,000	Bond
Oversizing Sewer Cost (100% City)	\$647,000	Sewer Revenues
Oversizing Lift Station Cost (100% City)	\$1,250,000	Sewer Revenues
Extension Cost (100% City)	\$791,000	Sewer Revenues
Development Project Cost	\$4,467,000	
Number of Benefiting ERUs (Single Family)	148	
Number of Benefiting ERUs (Multi-Family & Mixed Use)	192	
Total Number of Benefiting ERUs	340	
Trunk Fee Charge per Unit	\$3,600	
Total Collected at Building Permit	\$1,224,000	Trunk Fees
Availability Charge	\$3,243,000	Availability Charges
Availability Charge per Unit	\$9,538.24	

2. Watermain

Oversizing is required as part of the watermain construction. The proposed Falk-Saltire site requires a 10-inch line to serve the development. A 16-inch line is proposed for oversizing to account for the future build-out of the City. The proposed project cost for the watermain oversizing within the development is \$490,000. The proposed project cost for the watermain looping to the development is \$1,150,000. The proposed Kirsch site development also requires a 10-inch line to serve the

development. A 12-inch line is proposed for oversizing to account for the future build-out of the City. The proposed project cost for the watermain oversizing of the Kirsch site development is \$39,000. The proposed project cost for the watermain looping to the development is \$489,000.

The watermain total project costs for the proposed Southern Development are apportioned as follows:

Table N: Falk-Saltire Site Development Project Cost Apportionment - Water

Item	Project Cost	Recommended Financing / Funding Sources
Total Project Cost	\$5,334,000	Bond
Oversizing Cost (100% City)	\$490,000	Water Revenues
Looping Cost (100% City)	\$1,150,000	Water Revenues
Development Project Cost	\$3,694,000	
Number of Benefiting ERUs (Single Family)	323	
Number of Benefiting ERUs (Multi-Family & Mixed Use)	216	
Total Number of Benefiting ERUs	539	
Trunk Fee Charge per Unit	\$5,100	
Total Collected at Building Permit	\$2,748,900	Trunk Fees
Availability Charge	TBD*	Availability Charges
Availability Charge per Unit	TBD*	

*Water System Planning Recommended to Set Availability Charge Rates

The watermain total project costs for the proposed Kirsch site development are apportioned as follows:

Table O: Kirsch Site Development Project Cost Apportionment - Water

Item	Project Cost	Recommended Financing / Funding Sources
Total Project Cost	\$1,236,000	Bond
Oversizing Cost (100% City)	\$39,000	Water Revenues
Looping Cost (100% City)	\$489,000	Water Revenues
Development Project Cost	\$708,000	
Number of Benefiting ERUs (Single Family)	148	
Number of Benefiting ERUs (Multi-Family & Mixed Use)	192	
Total Number of Benefiting ERUs	340	
Trunk Fee Charge per Unit	\$5,100	
Total Collected at Building Permit	\$1,734,000	Trunk Fees
Availability Charge	TBD*	Availability Charges
Availability Charge per Unit	TBD*	

*Water System Planning Recommended to Set Availability Charge Rates

VII. RECOMMENDATIONS

A. General

The following items are necessary and are recommended in order to facilitate the development of the east area of the City.

1. Trunk Utility Project – Trunk sanitary sewer and water system projects are recommended to be completed as City led projects. Development in the study area of this report is not able to occur until trunk utilities are in place. A determination should be made if the City plans to complete a trunk utility project for the northern area and/or the southern area as outlined in this report. Topographic survey work and a geotechnical evaluation are needed prior to starting the design for a trunk utility project. A summary of the trunk utility costs, along with the estimated City contribution, is included in **Table P** below.

Table P: Near-Term Development Trunk Utility Cost Comparison

Trunk Utility Component	Falk-Saltire Site		Kirsch Site	
	Developer	City	Developer	City
Sewer (Lateral Benefit)	\$3,759,000		\$3,717,000	
Sewer (Oversizing)		\$1,536,000		\$647,000
Sewer (Trunk Extension)		\$234,000		\$791,000
Lift Station (Lateral Benefit)	N/A		\$750,000	
Lift Station (Oversizing)		N/A		\$1,250,000
Water (Lateral Benefit)	\$3,694,000		\$708,000	
Water (Oversizing)		\$490,000		\$39,000
Water (Looping)		\$1,150,000		\$489,000
Total Developer Cost	\$7,453,000		\$5,175,000	
Total City Cost		\$3,410,000		\$3,216,000

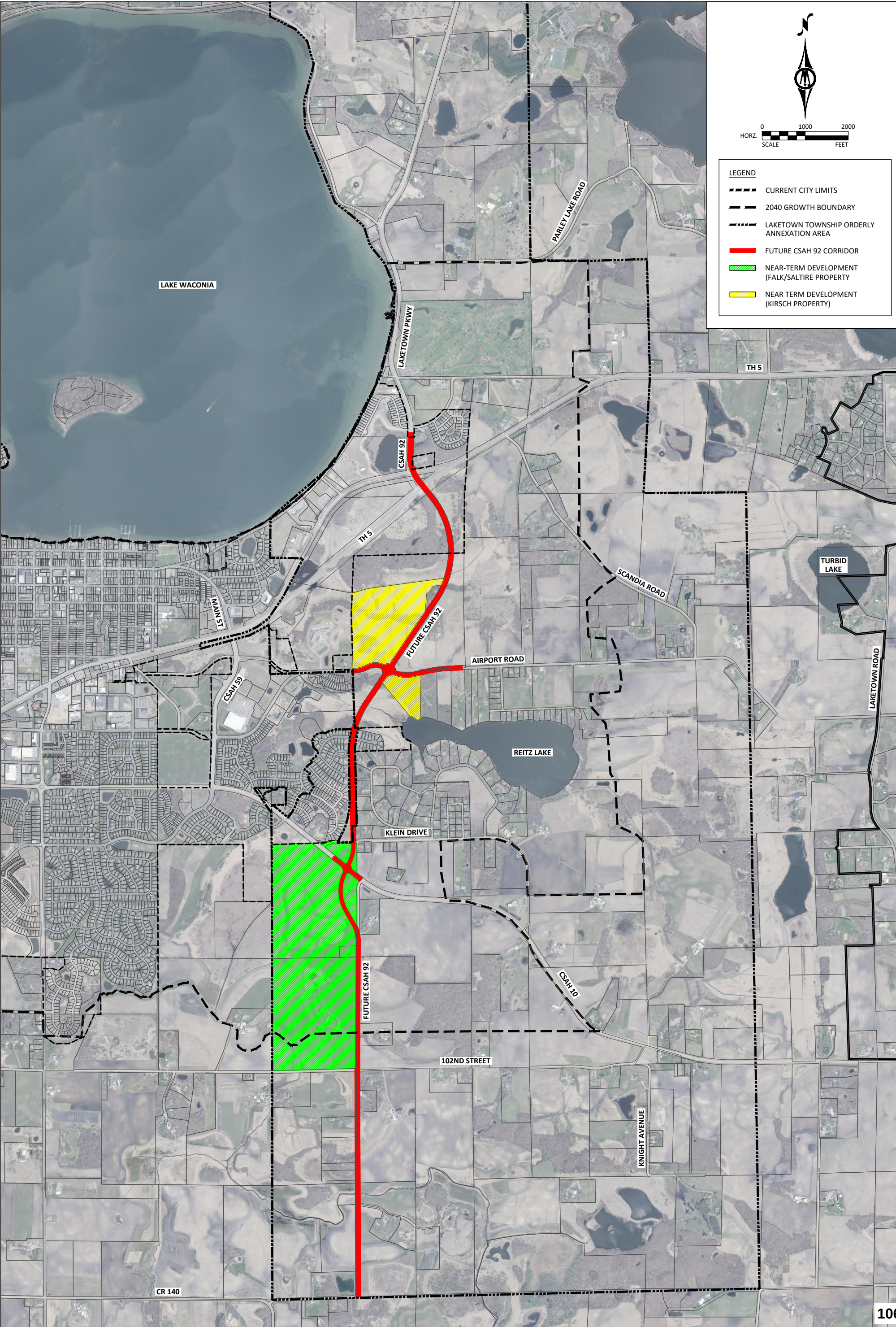
2. Test Wells – Well No. 10 and Well No. 11 are planned to be drilled in the growth area to the east of the current City limits. Coordination should occur with any property that is proposing

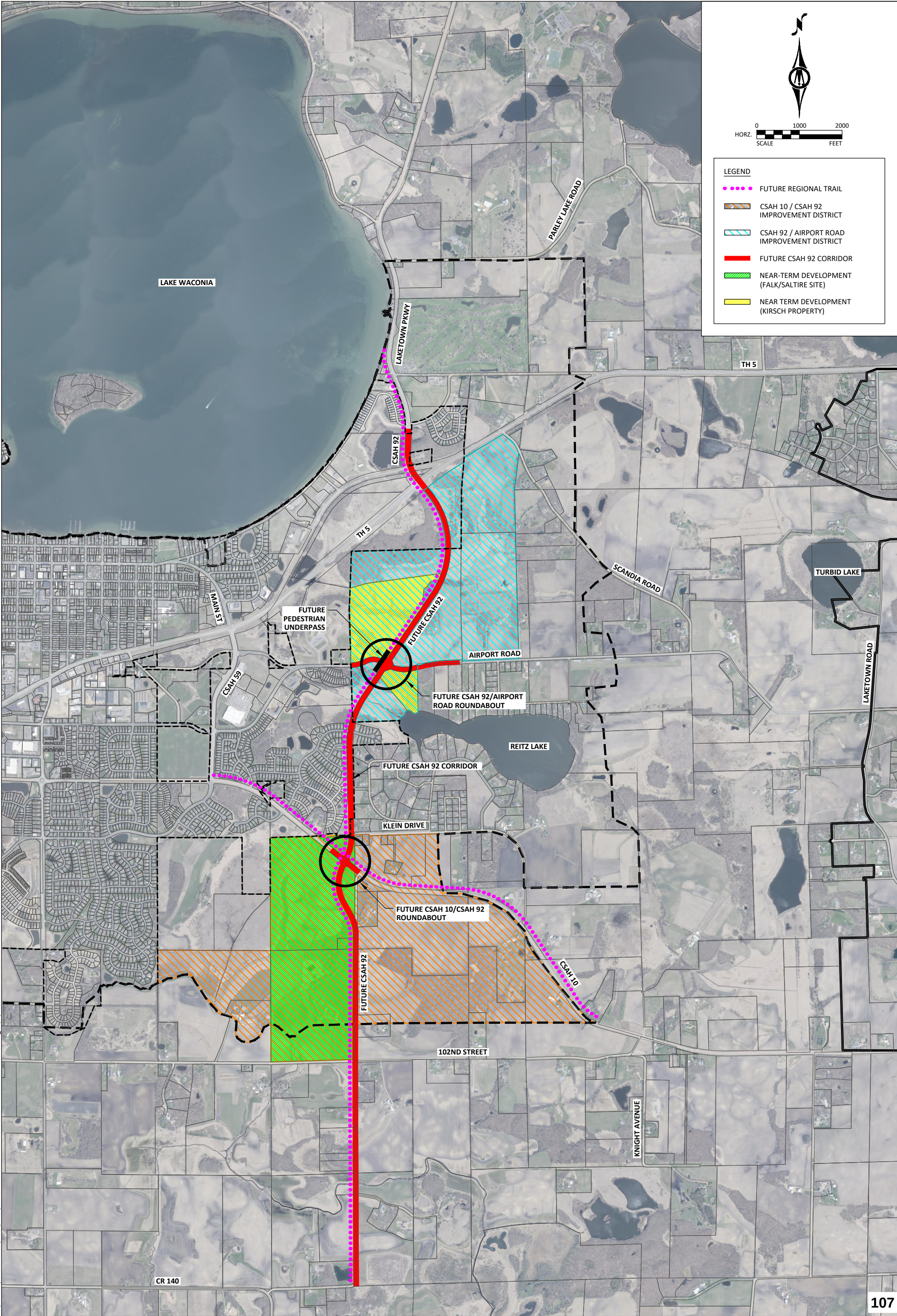
to develop in the identified “Deep Sand & Gravel Exploration Area” or in the “Jordan Sandstone Exploration Area”.

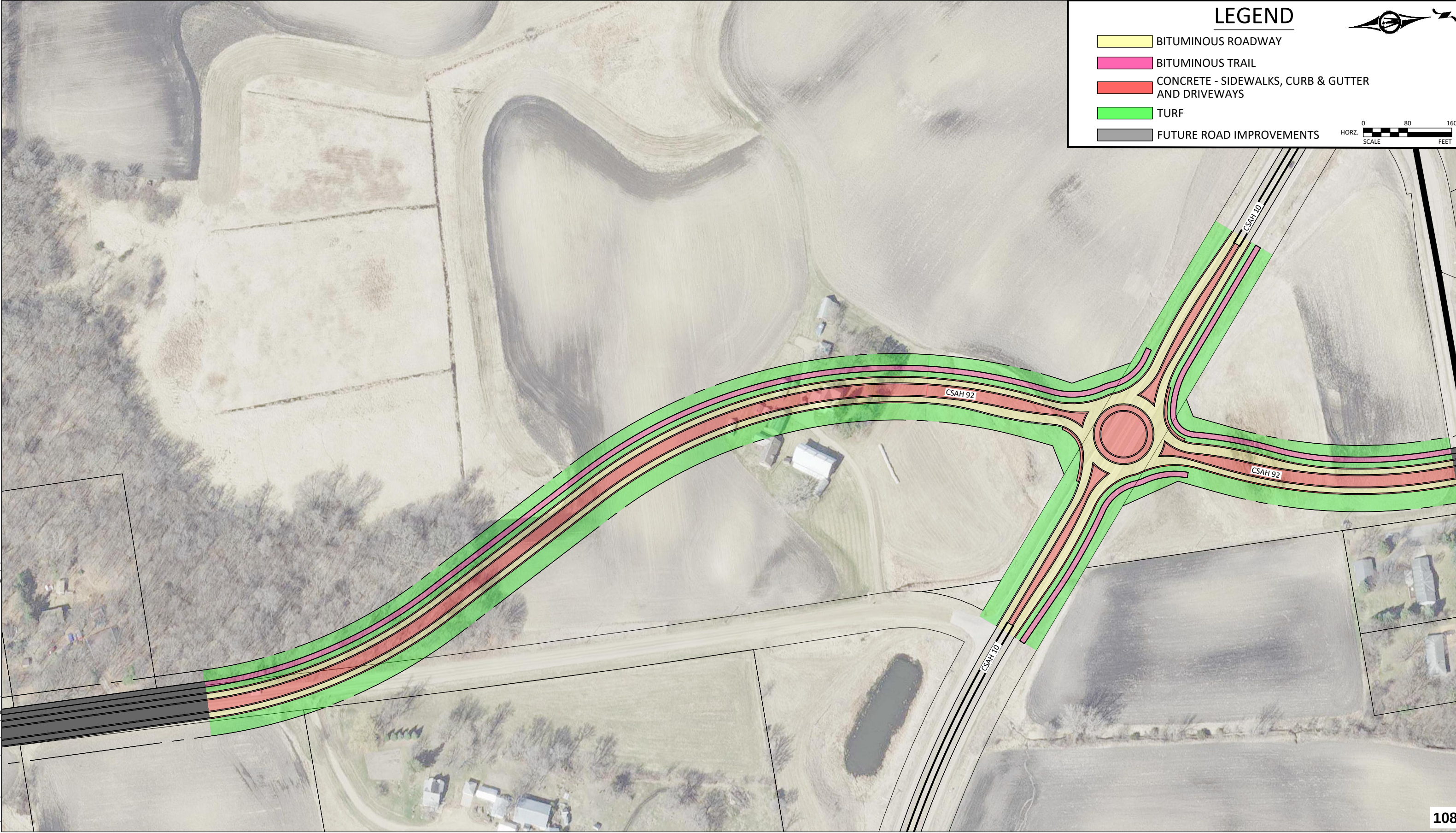
3. Water System Planning – Due to the recent pace of development, a new Water Treatment Facility is needed earlier than the date of 2029 as is listed in the City’s current CIP. A Water Study is recommended to proceed in the very near term in order to determine the capacity, location, schedule, and estimated cost of the treatment facility. This study should include the wells required to supply water to the treatment facility and the schedule for adding water storage facilities in both the southeast and northeast areas of the City. This study should also include an update to the City’s water model to confirm the sizes of the trunk watermain shown in this report. Finally, this study should be used to determine the Future Availability charges for the potential Falk-Saltire Development, the potential Kirsch Development, and the remaining properties included in the East Area of the City.

4. Coordination – Ongoing coordination is recommended to occur with Carver County, Laketown Township, property owners, and any applicable developers.

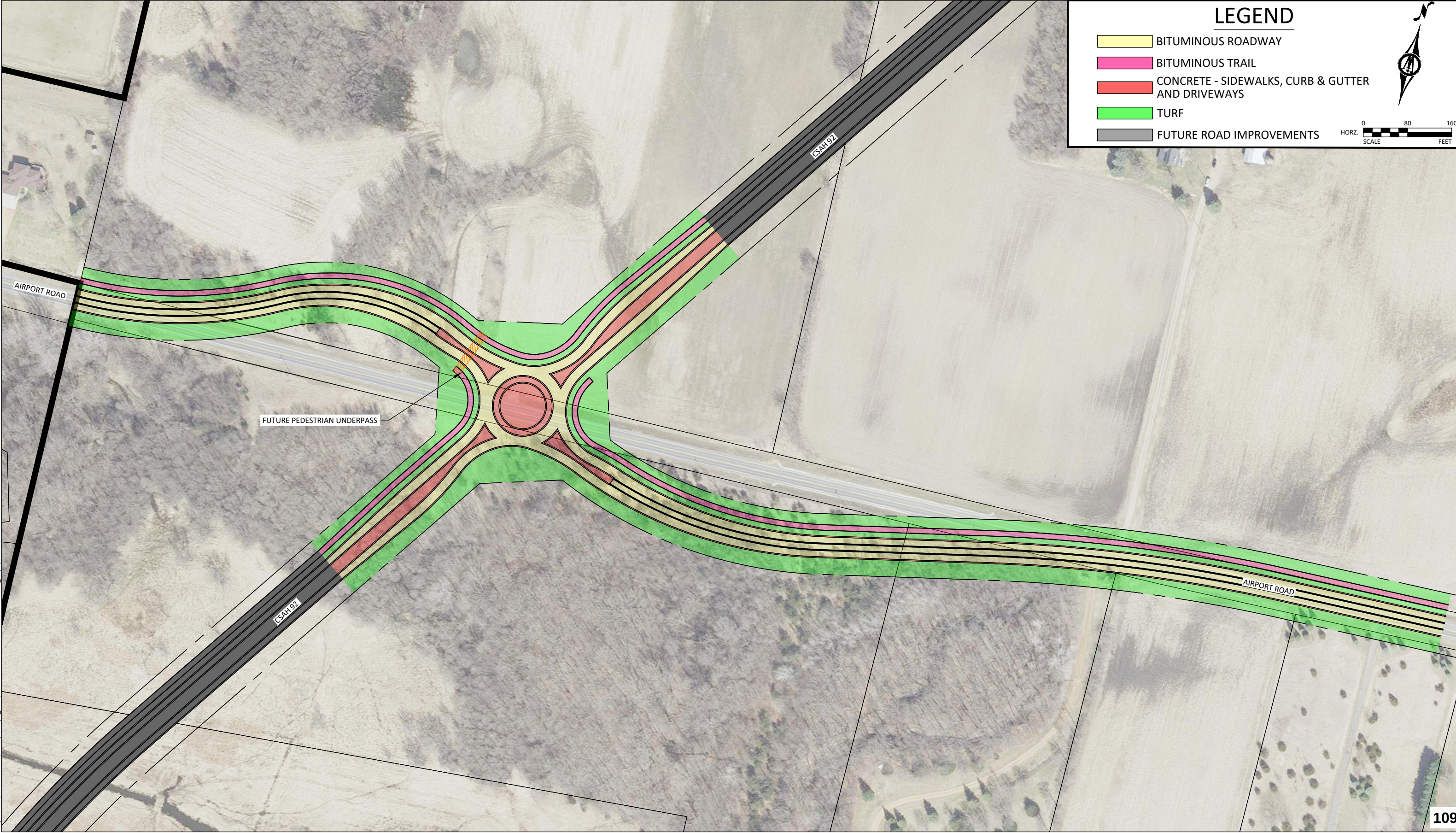
Appendix A: Figures

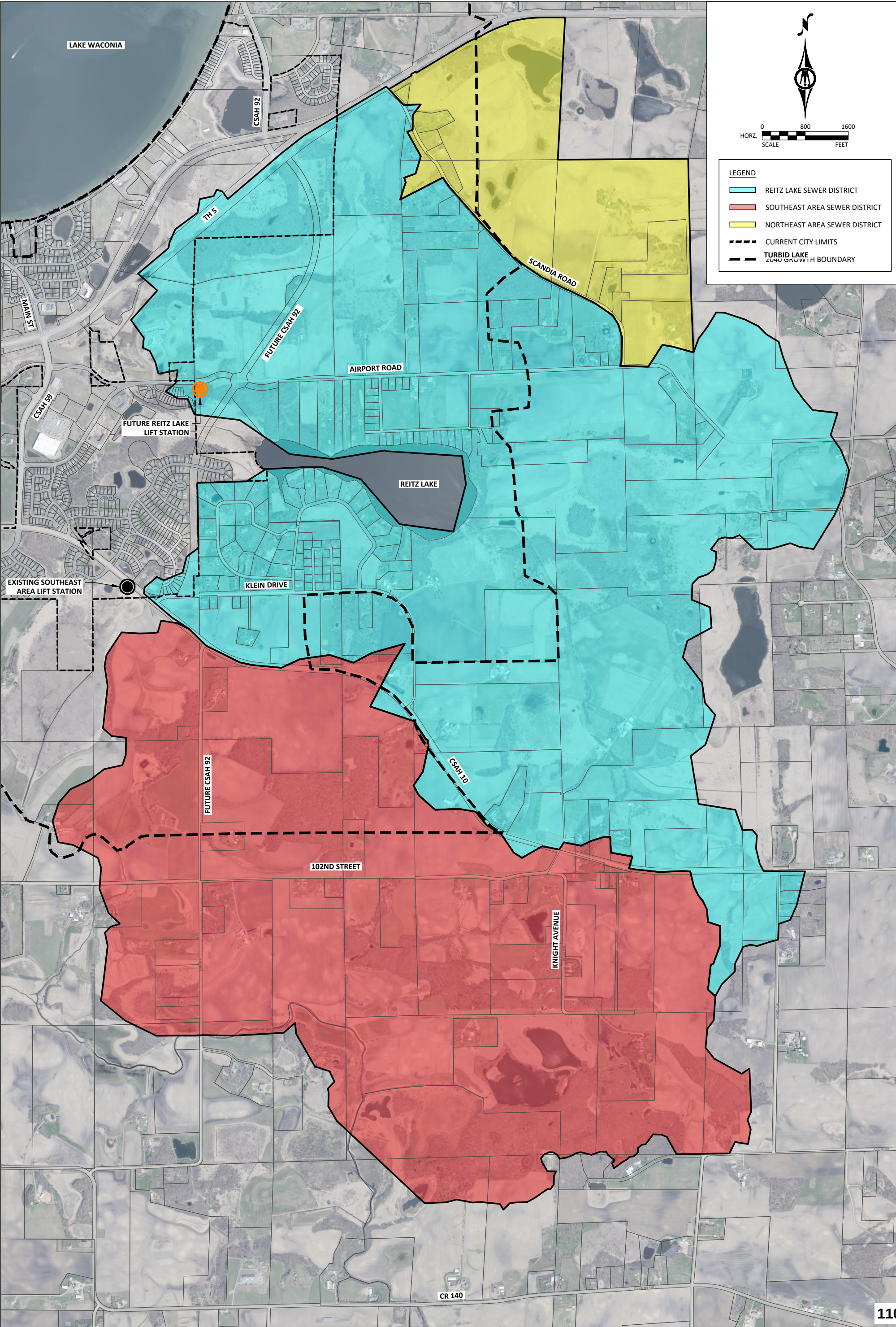


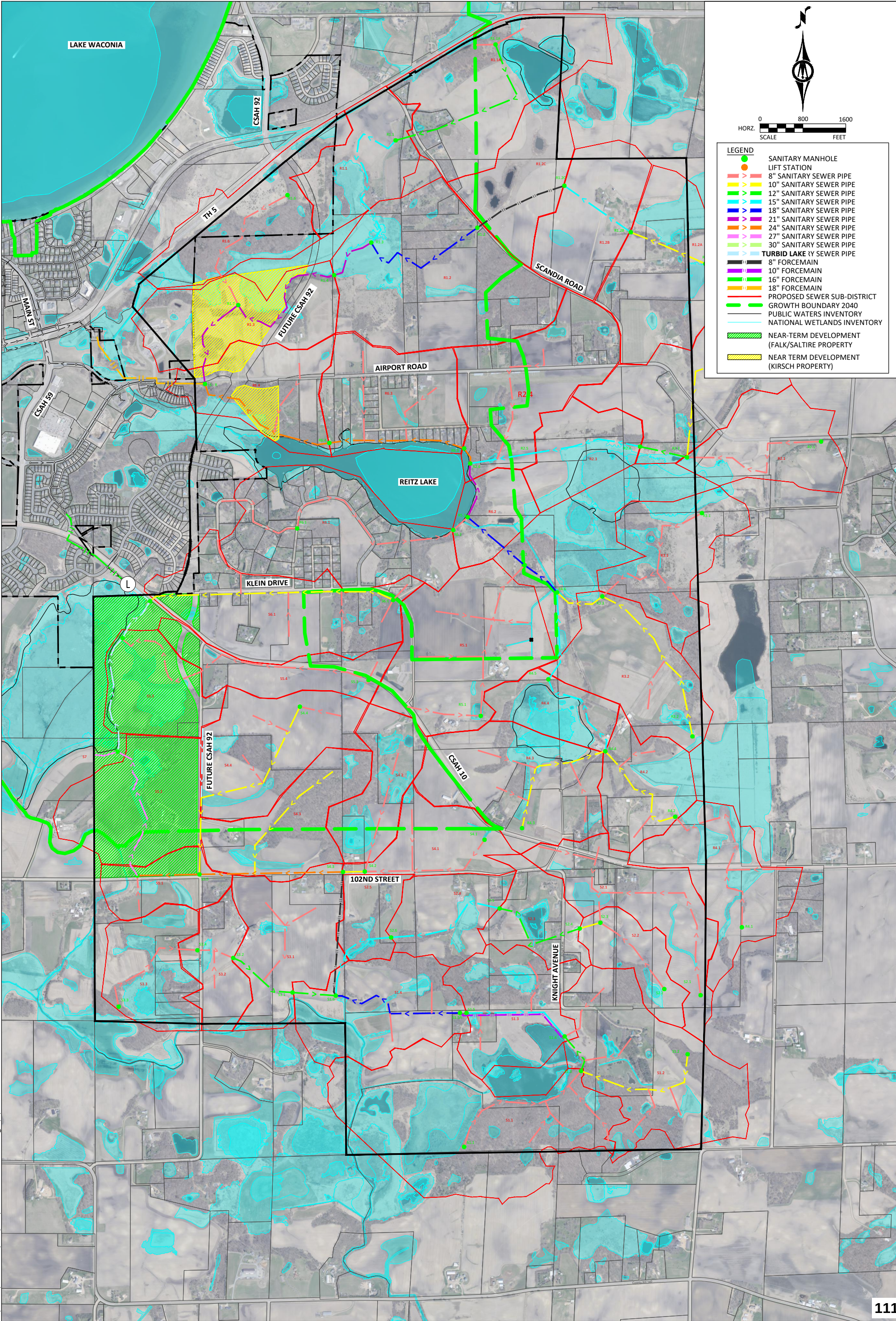


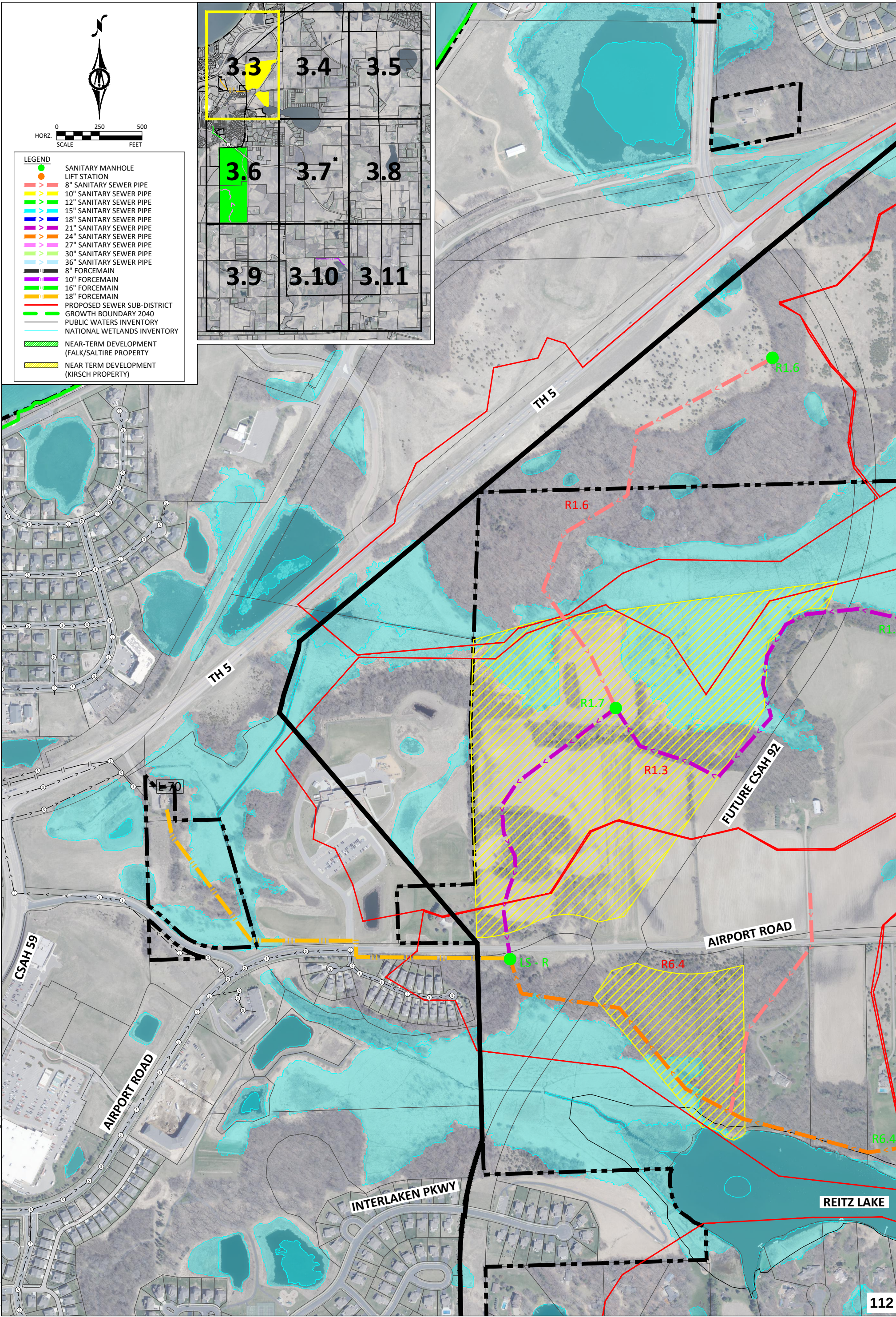


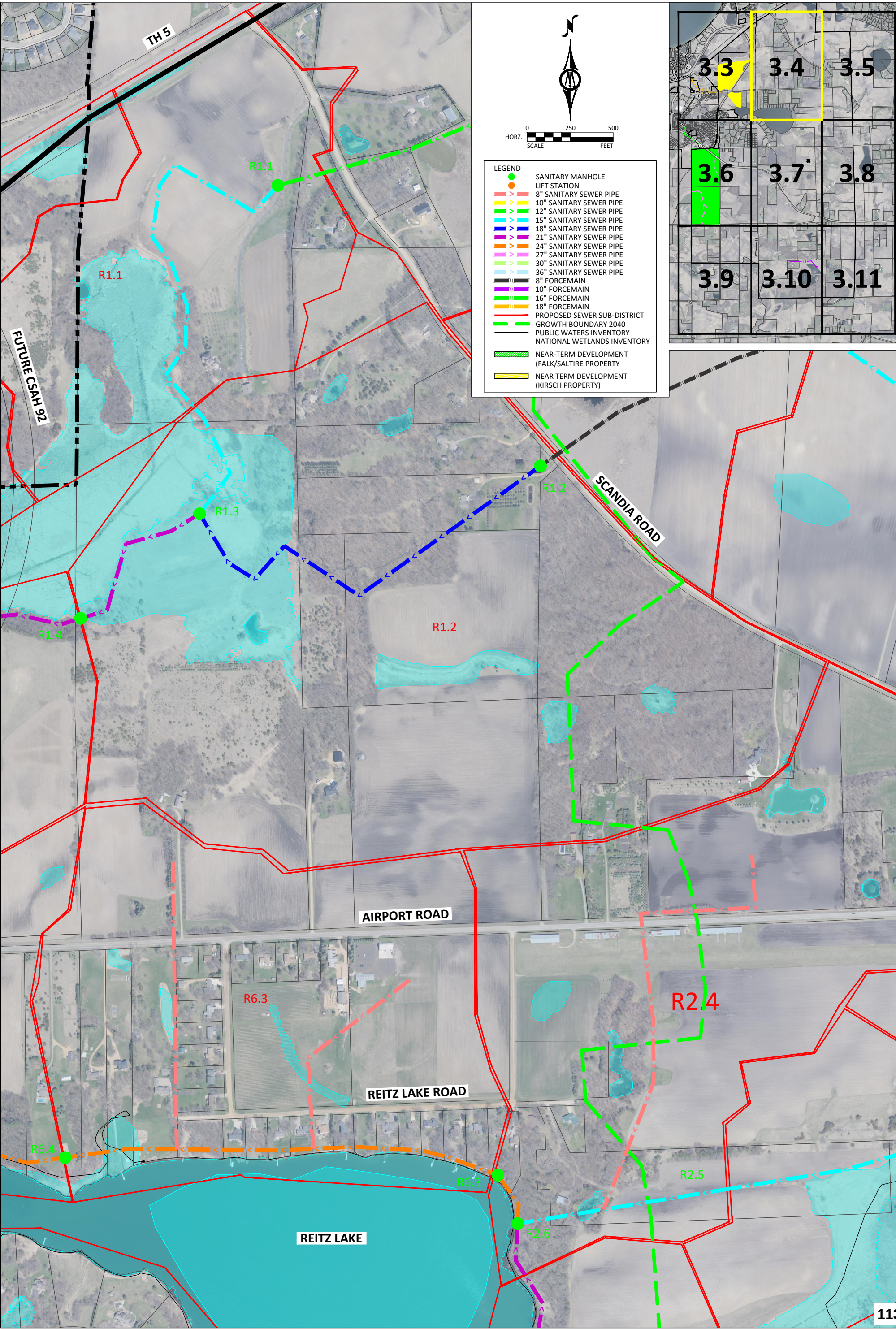
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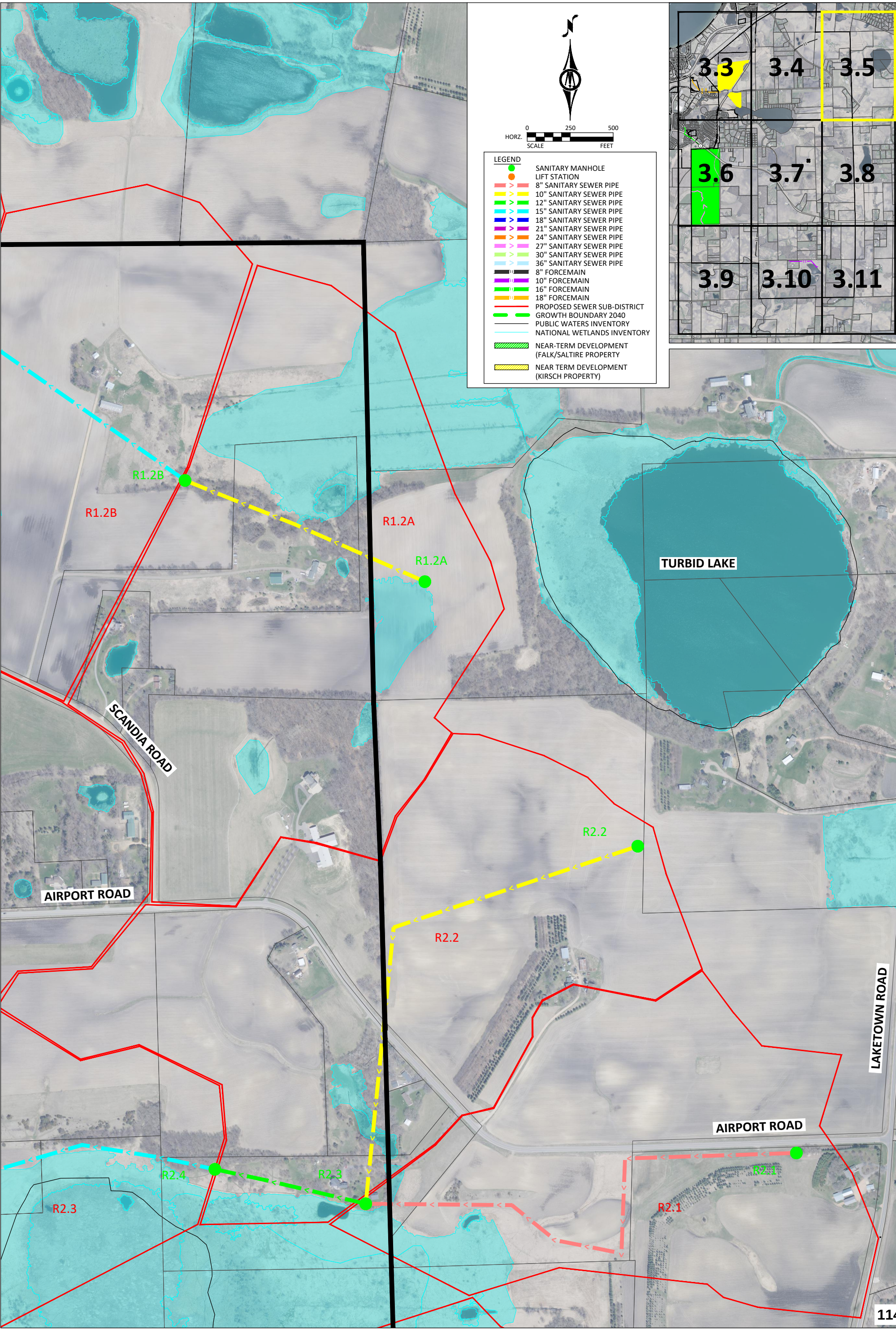


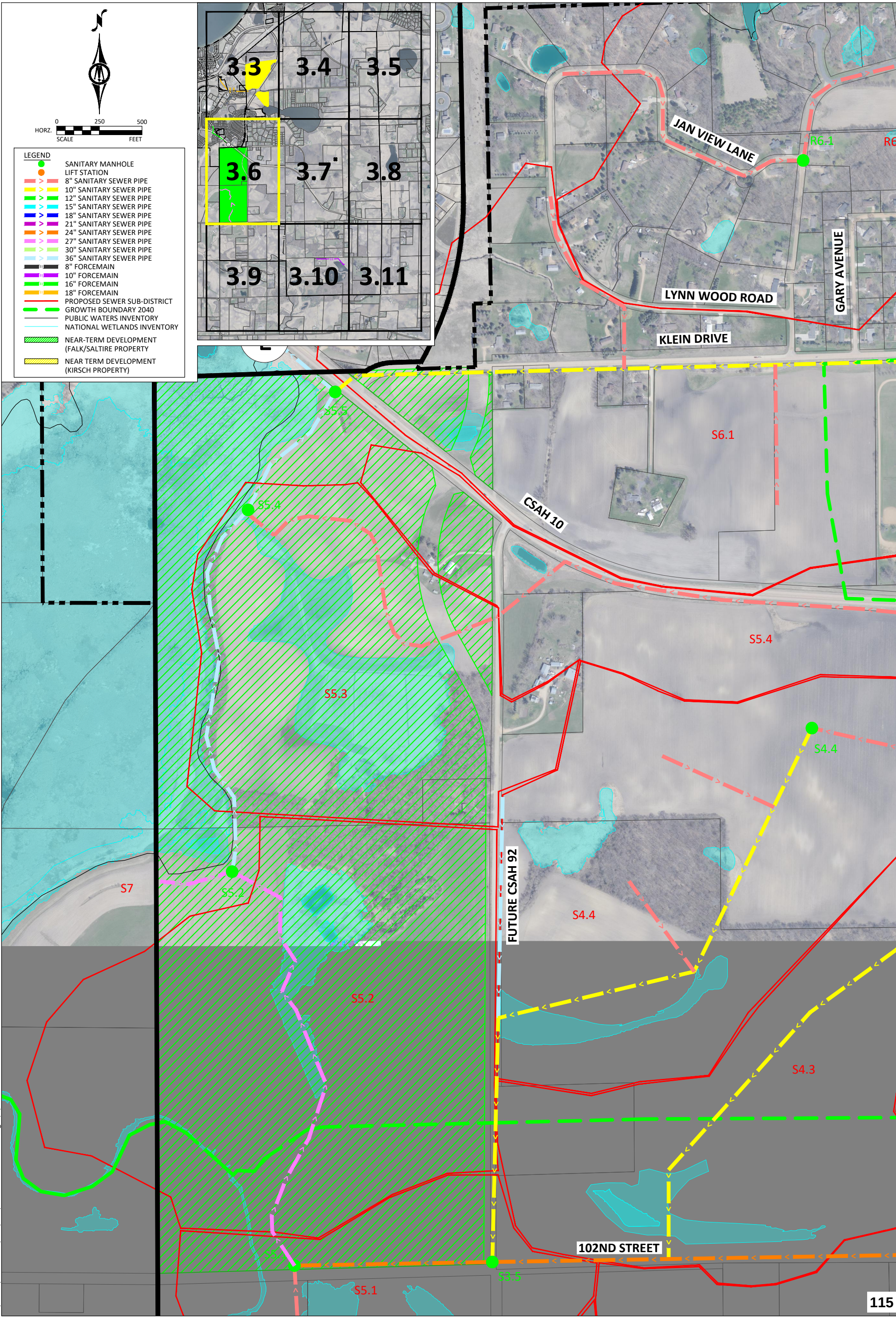


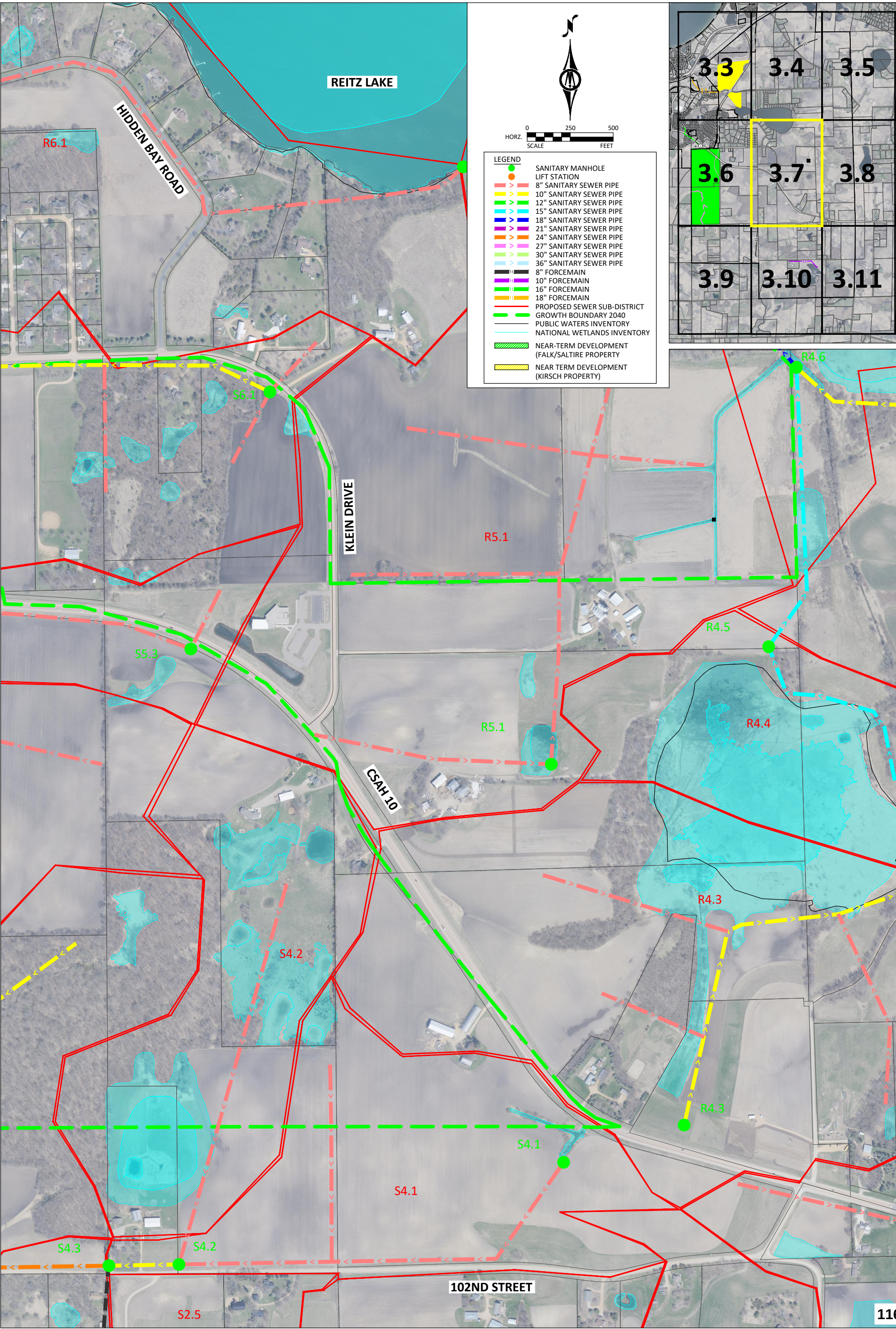


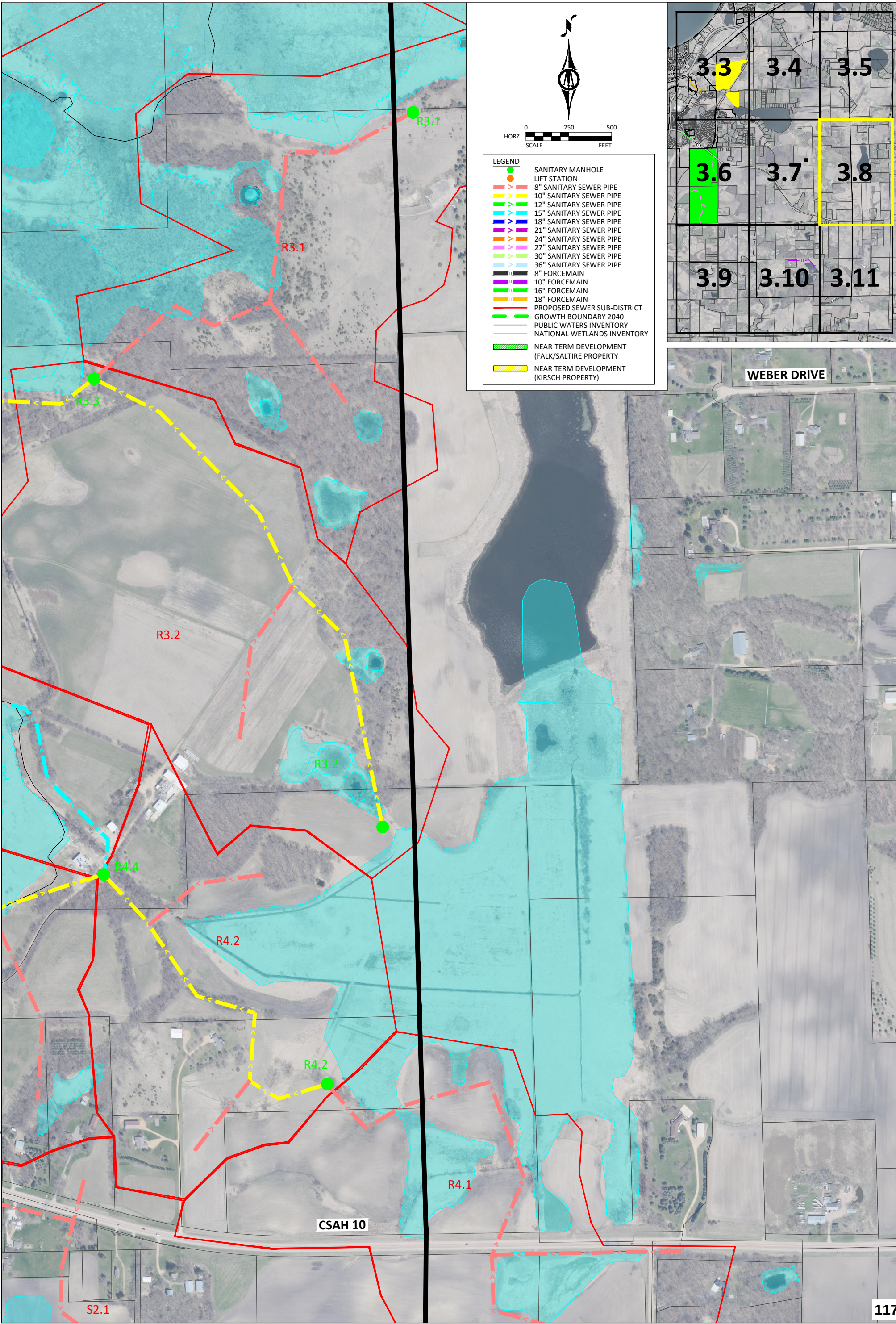




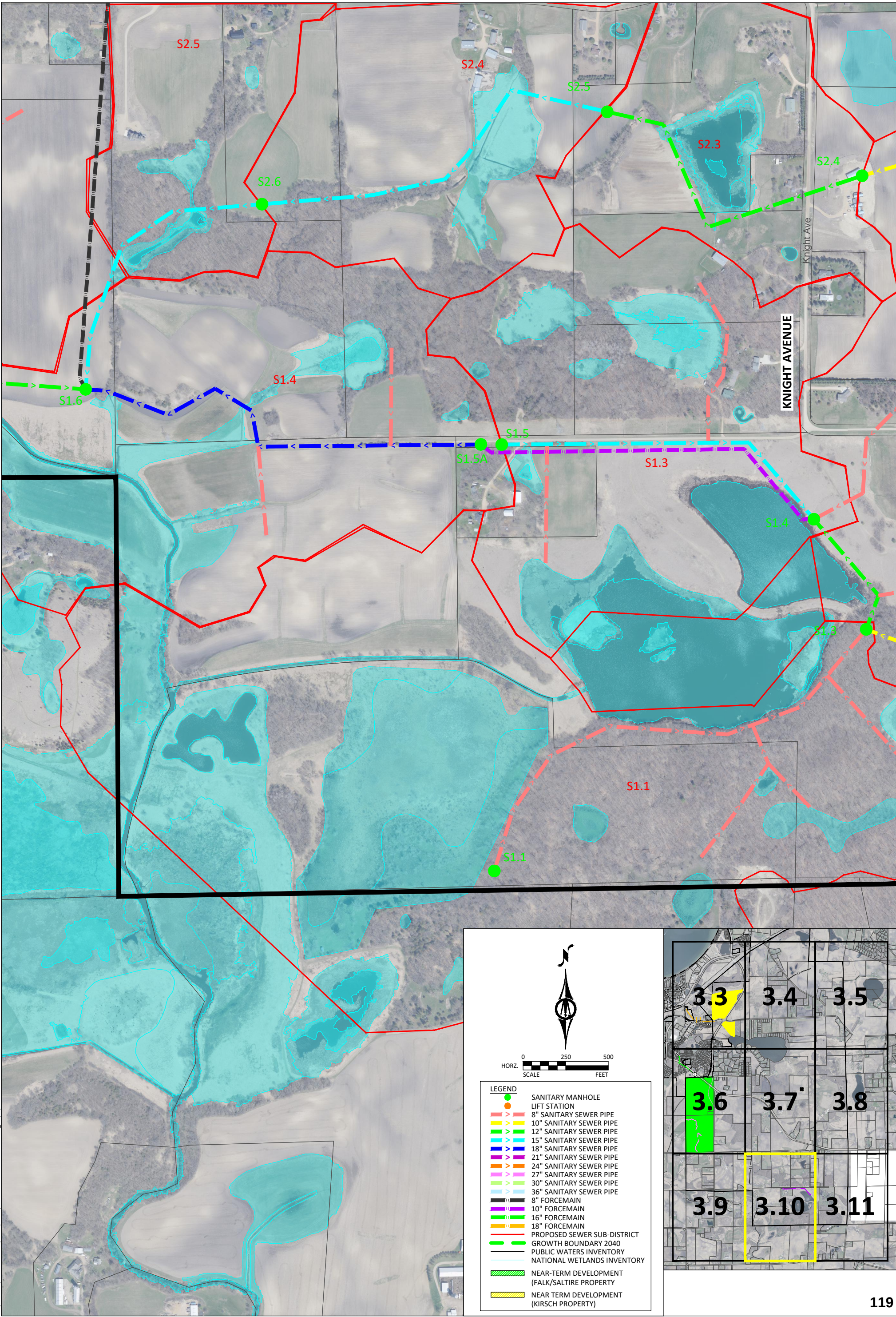


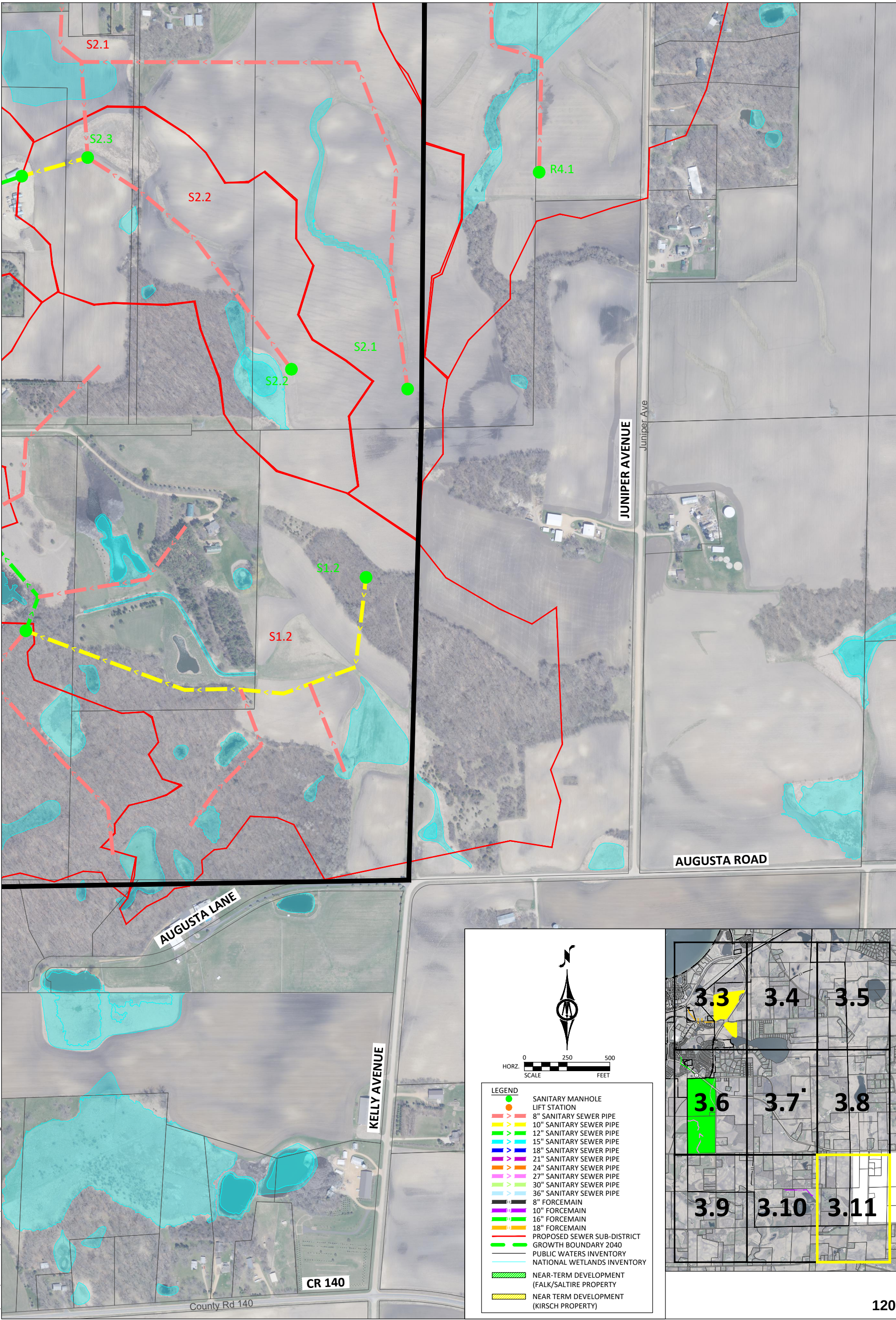




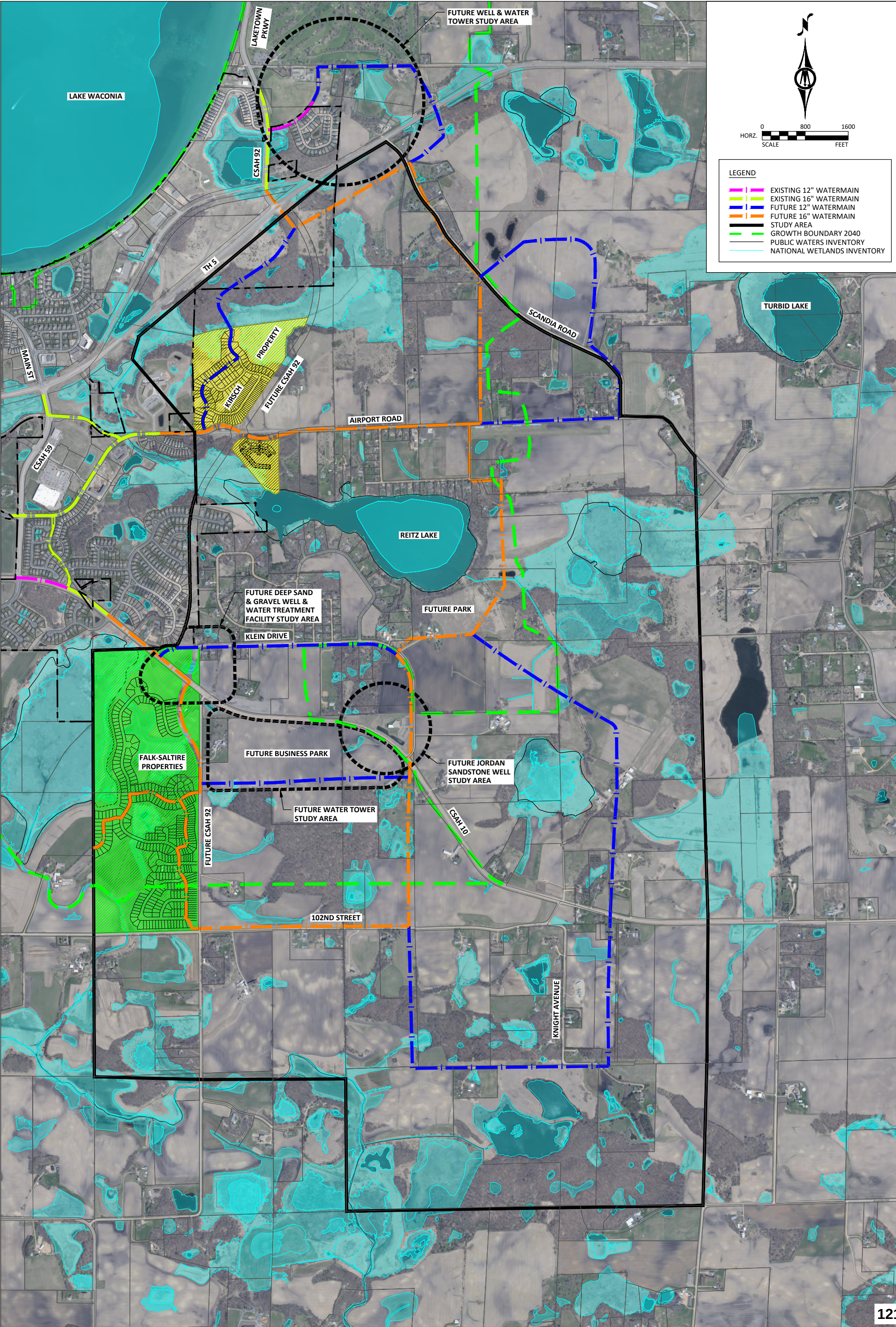


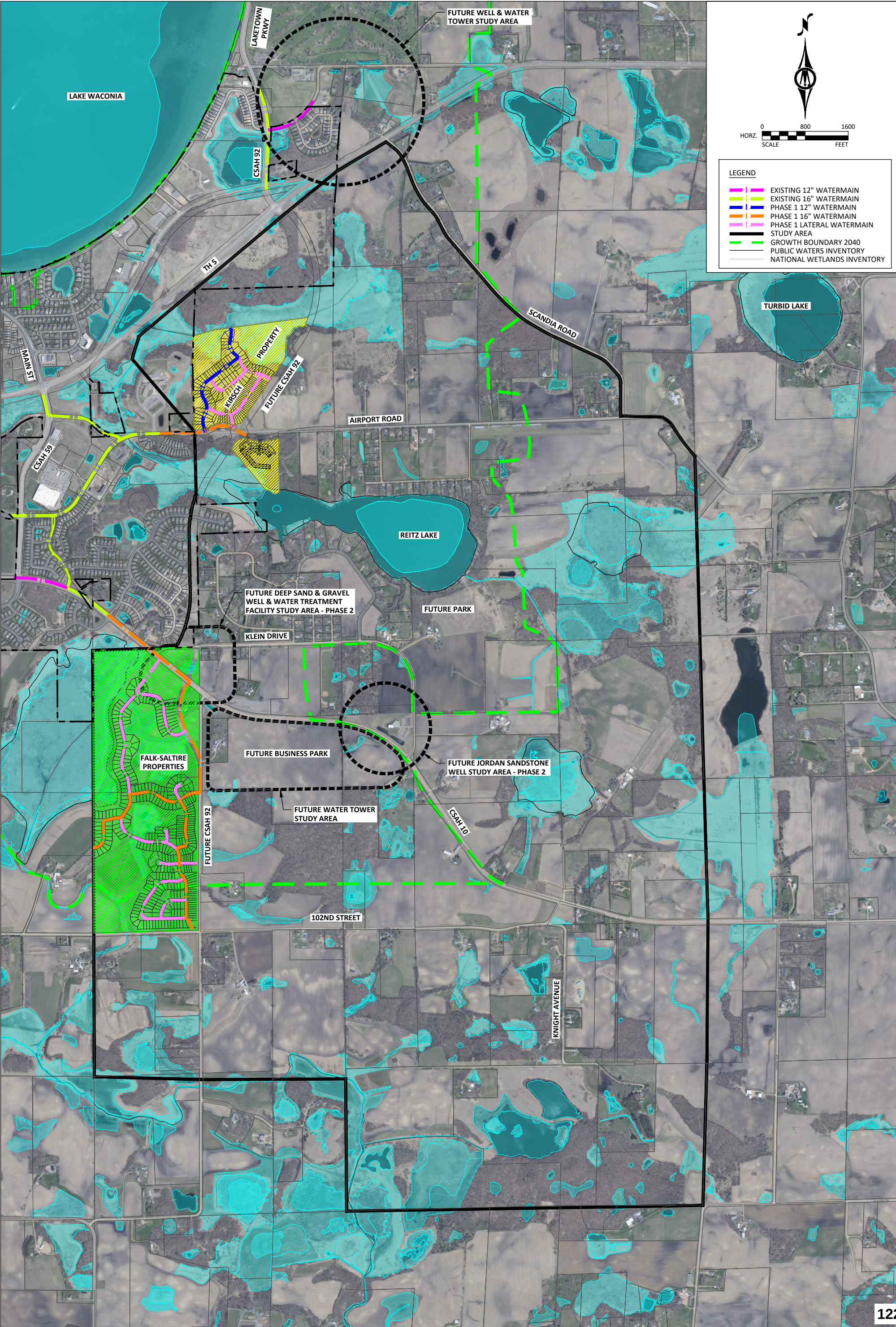






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Appendix B: Cost Estimates

Appendix B - Aiport Road & C.S.A.H. 92 Cost Estimate

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT COST	TOTAL QUANTITY	TOTAL COST	ROADWAY & STORM SEWER							
						NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
						QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
2011.601	VIBRATION MONITORING	LUMP SUM	\$10,000.00	1	\$10,000.00	0.19	\$1,900.00	0.40	\$4,000.00	0.19	\$1,900.00	0.22	\$2,200.00
2021.501	MOBILIZATION	LUMP SUM	\$190,000.00	1	\$190,000.00	0.19	\$36,100.00	0.40	\$76,000.00	0.19	\$36,100.00	0.22	\$41,800.00
2031.502	FIELD OFFICE TYPE D	LUMP SUM	\$20,000.00	1	\$20,000.00	0.19	\$3,800.00	0.40	\$8,000.00	0.19	\$3,800.00	0.22	\$4,400.00
2101.505	CLEARING	ACRE	\$7,500.00	1	\$7,500.00	0.19	\$1,425.00	0.40	\$3,000.00	0.19	\$1,425.00	0.22	\$1,650.00
2101.505	GRUBBING	ACRE	\$7,500.00	1	\$7,500.00	0.19	\$1,425.00	0.40	\$3,000.00	0.19	\$1,425.00	0.22	\$1,650.00
2101.524	CLEARING	TREE	\$500.00	10	\$5,000.00	2	\$1,000.00	4	\$2,000.00	1	\$500.00	3	\$1,500.00
2101.524	GRUBBING	TREE	\$500.00	10	\$5,000.00	2	\$1,000.00	4	\$2,000.00	1	\$500.00	3	\$1,500.00
2104.502	REMOVE SIGN TYPE C	EACH	\$65.00	20	\$1,300.00	4	\$260.00	8	\$520.00	4	\$260.00	4	\$260.00
2104.502	REMOVE SIGN TYPE SPECIAL	EACH	\$80.00	10	\$800.00	2	\$160.00	4	\$320.00	2	\$160.00	2	\$160.00
2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	\$2.00	100	\$200.00	0	\$0.00	50	\$100.00	0	\$0.00	50	\$100.00
2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	\$6.00	11,900	\$71,400.00	0	\$0.00	7,900	\$47,400.00	0	\$0.00	4,000	\$24,000.00
2106.507	EXCAVATION - COMMON	CU YD	\$20.00	22,400	\$448,000.00	4,300	\$86,000.00	8,900	\$178,000.00	4,300	\$86,000.00	4,900	\$98,000.00
2106.507	EXCAVATION - SUBGRADE	CU YD	\$20.00	1,160	\$23,200.00	220	\$4,400.00	460	\$9,200.00	220	\$4,400.00	260	\$5,200.00
2106.507	COMMON EMBANKMENT (CV)	CU YD	\$10.00	15,100	\$151,000.00	2,900	\$29,000.00	6,000	\$60,000.00	2,900	\$29,000.00	3,300	\$33,000.00
2106.507	SELECT GRANULAR EMBANKMENT (CV)	CU YD	\$20.00	5,620	\$112,400.00	660	\$13,200.00	2,800	\$56,000.00	660	\$13,200.00	1,500	\$30,000.00
2112.519	SUBGRADE PREPARATION	SQ YD	\$1.50	16,400	\$24,600.00	1,950	\$2,925.00	8,350	\$12,525.00	1,950	\$2,925.00	4,150	\$6,225.00
2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	\$350.00	50	\$17,500.00	9	\$3,150.00	20	\$7,000.00	9	\$3,150.00	12	\$4,200.00
2211.507	AGGREGATE BASE (CV) CLASS 5	CU YD	\$35.00	5,620	\$196,700.00	660	\$23,100.00	2,800	\$98,000.00	660	\$23,100.00	1,500	\$52,500.00
2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	\$2.50	800	\$2,000.00	200	\$500.00	200	\$500.00	200	\$500.00	200	\$500.00
2301.504	CONCRETE PAVEMENT 8.0"	SQ YD	\$100.00	400	\$40,000.00	100	\$10,000.00	100	\$10,000.00	100	\$10,000.00	100	\$10,000.00
2360.504	TYPE SP 12.5 WEARING COURSE MIXTURE (3,B) 2.0" THICK	SQ YD	\$12.50	800	\$10,000.00	200	\$2,500.00	200	\$2,500.00	200	\$2,500.00	200	\$2,500.00
2360.509	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,B)	TON	\$80.00	3,310	\$264,800.00	380	\$30,400.00	1,700	\$136,000.00	380	\$30,400.00	850	\$68,000.00
2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (3,C)	TON	\$85.00	3,310	\$281,350.00	380	\$32,300.00	1,700	\$144,500.00	380	\$32,300.00	850	\$72,250.00
2521.518	4" CONCRETE WALK	SQ FT	\$7.50	20,200	\$151,500.00	8,700	\$65,250.00	1,400	\$10,500.00	8,700	\$65,250.00	1,400	\$10,500.00
2521.518	6" CONCRETE WALK	SQ FT	\$11.50	1,600	\$18,400.00	400	\$4,600.00	400	\$4,600.00	400	\$4,600.00	400	\$4,600.00
2521.518	3" BITUMINOUS WALK	SQ FT	\$3.50	27,200	\$95,200.00	4,550	\$15,925.00	17,200	\$60,200.00	4,550	\$15,925.00	900	\$3,150.00
2531.503	CONCRETE CURB AND GUTTER DESIGN S524	LIN FT	\$27.50	400	\$11,000.00	100	\$2,750.00	100	\$2,750.00	100	\$2,750.00	100	\$2,750.00
2531.503	CONCRETE CURB AND GUTTER DESIGN B624	LIN FT	\$22.50	9,600	\$216,000.00	1,800	\$40,500.00	3,900	\$87,750.00	1,800	\$40,500.00	2,100	\$47,250.00
2531.618	TRUNCATED DOMES	SQ FT	\$55.00	160	\$8,800.00	40	\$2,200.00	40	\$2,200.00	40	\$2,200.00	40	\$2,200.00
2545.501	LIGHTING SYSTEM	LUMP SUM	\$100,000.00	1	\$100,000.00	0.19	\$19,000.00	0.40	\$40,000.00	0.19	\$19,000.00	0.22	\$22,000.00
2545.601	RELOCATE UTILITY	LUMP SUM	\$25,000.00	1	\$25,000.00	0.19	\$4,750.00	0.40	\$10,000.00	0.19	\$4,750.00	0.22	\$5,500.00
2563.601	TRAFFIC CONTROL	LUMP SUM	\$25,000.00	1	\$25,000.00	0.19	\$4,750.00	0.40	\$10,000.00	0.19	\$4,750.00	0.22	\$5,500.00
2563.613	PORTABLE CHANGEABLE MESSAGE SIGN	UNIT DAY	\$100.00	1	\$100.00	0.19	\$19.00	0.40	\$40.00	0.19	\$19.00	0.22	\$22.00
2564.618	SIGN TYPE C	SQ FT	\$38.00	400	\$15,200.00	90	\$3,420.00	130	\$4,940.00	90	\$3,420.00	90	\$3,420.00
2573.501	EROSION CONTROL SUPERVISOR	LUMP SUM	\$15,000.00	1	\$15,000.00	0.19	\$2,850.00	0.40	\$6,000.00	0.19	\$2,850.00	0.22	\$3,300.00
2573.503	SILT FENCE, TYPE MS	LIN FT	\$2.50	19,000	\$47,500.00	3,600	\$9,000.00	7,800	\$19,500.00	3,600	\$9,000.00	4,000	\$10,000.00
2574.507	BOULEVARD TOPSOIL BORROW	CU YD	\$30.00	1,030	\$30,900.00	130	\$3,900.00	520	\$15,600.00	130	\$3,900.00	250	\$7,500.00
2574.508	FERTILIZER TYPE 4	POUND	\$2.00	285	\$570.00	40	\$80.00	140	\$280.00	40	\$80.00	65	\$130.00
2575.505	SEEDING	SQ YD	\$1.00	6,090	\$6,090.00	785	\$785.00	3,060	\$3,060.00	785	\$785.00	1,460	\$1,460.00
2575.508	SEED MIXTURE 25-151	POUND	\$7.50	275	\$2,062.50	35	\$262.50	140	\$1,050.00	35	\$262.50	65	\$487.50
2575.508	HYDRAULIC BONDED FIBER MATRIX	POUND	\$2.00	3,440	\$6,880.00	560	\$1,120.00	1,490	\$2,980.00	560	\$1,120.00	830	\$1,660.00
2582.503	4" SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	\$2.00	1,900	\$3,800.00	750	\$1,500.00	200	\$400.00	750	\$1,500.00	200	\$400.00
2582.503	24" SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	\$20.00	100	\$2,000.00	25	\$500.00	25	\$500.00	25	\$500.00	25	\$500.00
2582.503	4" DOTTED LINE MULTI-COMPONENT GROUND IN	LIN FT	\$1.50	80	\$120.00	20	\$30.00	20	\$30.00	20	\$30.00	20	\$30.00
2582.503	4" DOUBLE SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	\$3.00	4,870	\$14,610.00	25	\$75.00	3,305	\$9,915.00	25	\$75.00	1,515	\$4,545.00
2582.518	CROSSWALK PREFORM THERMOPLASTIC GROUND IN	SQ FT	\$20.00	240	\$4,800.00	60	\$1,200.00	60	\$1,200.00	60	\$1,200.00	60	\$1,200.00
MISC	STORM SEWER SYSTEM (20%)	LUMP SUM	\$607,000.00	1	\$607,000.00	0.19	\$115,330.00	0.40	\$242,800.00	0.19	\$115,330.00	0.22	\$133,540.00
MISC	LANDSCAPING	LUMP SUM	\$25,000.00	1	\$25,000.00	0.19	\$4,750.00	0.40	\$10,000.00	0.19	\$4,750.00	0.22	\$5,500.00
CONSTRUCTION SUBTOTAL:					\$3,322,782.50		\$589,091.50		\$1,406,860.00		\$588,091.50		\$738,739.50
CONTINGENCY (5%):					\$166,139.13		\$29,454.58		\$70,343.00		\$29,404.58		\$36,936.98
CONSTRUCTION TOTAL:					\$3,488,921.63		\$618,546.08		\$1,477,203.00		\$617,496.08		\$775,676.48
TOTAL PROJECT COST (25%)					\$4,361,152.03		\$773,182.59		\$1,846,503.75		\$771,870.09		\$969,595.59

Appendix B - C.S.A.H. 10 & C.S.A.H. 92/Little Avenue Cost Estimate

ITEM NO.	ITEM DESCRIPTION	UNIT	UNIT COST	TOTAL QUANTITY	TOTAL COST	ROADWAY & STORM SEWER							
						NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
						QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
2011.601	VIBRATION MONITORING	LUMP SUM	\$15,000.00	1	\$15,000.00	0.17	\$2,550.00	0.12	\$1,800.00	0.59	\$8,850.00	0.12	\$1,800.00
2021.501	MOBILIZATION	LUMP SUM	\$179,000.00	1	\$179,000.00	0.17	\$30,430.00	0.12	\$21,480.00	0.59	\$105,610.00	0.12	\$21,480.00
2031.502	FIELD OFFICE TYPE D	LUMP SUM	\$20,000.00	1	\$20,000.00	0.17	\$3,400.00	0.12	\$2,400.00	0.59	\$11,800.00	0.12	\$2,400.00
2101.505	CLEARING	ACRE	\$7,500.00	1	\$7,500.00	0.17	\$1,275.00	0.12	\$900.00	0.59	\$4,425.00	0.12	\$900.00
2101.505	GRUBBING	ACRE	\$7,500.00	1	\$7,500.00	0.17	\$1,275.00	0.12	\$900.00	0.59	\$4,425.00	0.12	\$900.00
2101.524	CLEARING	TREE	\$500.00	10	\$5,000.00	2	\$1,000.00	2	\$1,000.00	4	\$2,000.00	2	\$1,000.00
2101.524	GRUBBING	TREE	\$500.00	10	\$5,000.00	2	\$1,000.00	2	\$1,000.00	4	\$2,000.00	2	\$1,000.00
2104.502	REMOVE SIGN TYPE C	EACH	\$65.00	25	\$1,625.00	5	\$325.00	5	\$325.00	10	\$650.00	5	\$325.00
2104.502	REMOVE SIGN TYPE SPECIAL	EACH	\$80.00	8	\$640.00	2	\$160.00	2	\$160.00	2	\$160.00	2	\$160.00
2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	\$2.00	200	\$400.00	50	\$100.00	50	\$100.00	50	\$100.00	50	\$100.00
2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	\$6.00	14,300	\$85,800.00	2,600	\$15,600.00	2,000	\$12,000.00	7,700	\$46,200.00	2,000	\$12,000.00
2106.507	EXCAVATION - COMMON	CU YD	\$20.00	16,100	\$322,000.00	2,800	\$56,000.00	1,950	\$39,000.00	9,400	\$188,000.00	1,950	\$39,000.00
2106.507	EXCAVATION - SUBGRADE	CU YD	\$20.00	806	\$16,120.00	140	\$2,800.00	98	\$1,960.00	470	\$9,400.00	98	\$1,960.00
2106.507	COMMON EMBANKMENT (CV)	CU YD	\$10.00	3,020	\$30,200.00	530	\$5,300.00	370	\$3,700.00	1,750	\$17,500.00	370	\$3,700.00
2106.507	SELECT GRANULAR EMBANKMENT (CV)	CU YD	\$20.00	3,400	\$68,000.00	620	\$12,400.00	540	\$10,800.00	1,700	\$34,000.00	540	\$10,800.00
2112.519	SUBGRADE PREPARATION	SQ YD	\$1.50	10,060	\$15,090.00	1,840	\$2,760.00	1,610	\$2,415.00	5,000	\$7,500.00	1,610	\$2,415.00
2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	\$350.00	100	\$35,000.00	17	\$5,950.00	12	\$4,200.00	59	\$20,650.00	12	\$4,200.00
2211.507	AGGREGATE BASE (CV) CLASS 5	CU YD	\$35.00	3,400	\$119,000.00	620	\$21,700.00	540	\$18,900.00	1,700	\$59,500.00	540	\$18,900.00
2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	\$2.50	600	\$1,500.00	150	\$375.00	150	\$375.00	150	\$375.00	150	\$375.00
2301.504	CONCRETE PAVEMENT 8.0"	SQ YD	\$100.00	800	\$80,000.00	200	\$20,000.00	200	\$20,000.00	200	\$20,000.00	200	\$20,000.00
2360.504	TYPE SP 12.5 WEARING COURSE MIXTURE (3,B) 2.0" THICK	SQ YD	\$12.50	600	\$7,500.00	150	\$1,875.00	150	\$1,875.00	150	\$1,875.00	150	\$1,875.00
2360.509	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,B)	TON	\$80.00	2,030	\$162,400.00	370	\$29,600.00	330	\$26,400.00	1,000	\$80,000.00	330	\$26,400.00
2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (3,C)	TON	\$85.00	2,030	\$172,550.00	370	\$31,450.00	330	\$28,050.00	1,000	\$85,000.00	330	\$28,050.00
2521.518	4" CONCRETE WALK	SQ FT	\$7.50	60,200	\$451,500.00	11,400	\$85,500.00	5,000	\$37,500.00	38,800	\$291,000.00	5,000	\$37,500.00
2521.518	6" CONCRETE WALK	SQ FT	\$11.50	3,200	\$36,800.00	800	\$9,200.00	800	\$9,200.00	800	\$9,200.00	800	\$9,200.00
2521.518	3" BITUMINOUS WALK	SQ FT	\$3.50	27,020	\$94,570.00	5,000	\$17,500.00	2,010	\$7,035.00	18,000	\$63,000.00	2,010	\$7,035.00
2531.503	CONCRETE CURB AND GUTTER DESIGN S524	LIN FT	\$27.50	340	\$9,350.00	85	\$2,337.50	85	\$2,337.50	85	\$2,337.50	85	\$2,337.50
2531.503	CONCRETE CURB AND GUTTER DESIGN B624	LIN FT	\$22.50	12,350	\$277,875.00	2,150	\$48,375.00	1,500	\$33,750.00	7,200	\$162,000.00	1,500	\$33,750.00
2531.618	TRUNCATED DOMES	SQ FT	\$55.00	320	\$17,600.00	80	\$4,400.00	80	\$4,400.00	80	\$4,400.00	80	\$4,400.00
2545.501	LIGHTING SYSTEM	LUMP SUM	\$150,000.00	1	\$150,000.00	0.17	\$25,500.00	0.12	\$18,000.00	0.59	\$88,500.00	0.12	\$18,000.00
2545.601	RELOCATE UTILITY	LUMP SUM	\$50,000.00	1	\$50,000.00	0.17	\$8,500.00	0.12	\$6,000.00	0.59	\$29,500.00	0.12	\$6,000.00
2563.601	TRAFFIC CONTROL	LUMP SUM	\$50,000.00	1	\$50,000.00	0.17	\$8,500.00	0.12	\$6,000.00	0.59	\$29,500.00	0.12	\$6,000.00
2563.613	PORTABLE CHANGEABLE MESSAGE SIGN	UNIT DAY	\$100.00	100	\$10,000.00	17	\$1,700.00	12	\$1,200.00	59	\$5,900.00	12	\$1,200.00
2564.618	SIGN TYPE C	SQ FT	\$38.00	409	\$15,542.00	234	\$8,892.00	25	\$950.00	125	\$4,750.00	25	\$950.00
2573.501	EROSION CONTROL SUPERVISOR	LUMP SUM	\$15,000.00	1	\$13,200.00	0.17	\$2,550.00		\$0.00	0.59	\$8,850.00	0.12	\$1,800.00
2573.503	SILT FENCE, TYPE MS	LIN FT	\$2.50	24,700	\$61,750.00	4,300	\$10,750.00	3,000	\$7,500.00	14,400	\$36,000.00	3,000	\$7,500.00
2574.507	BOULEVARD TOPSOIL BORROW	CU YD	\$30.00	830	\$24,900.00	150	\$4,500.00	90	\$2,700.00	500	\$15,000.00	90	\$2,700.00
2574.508	FERTILIZER TYPE 4	POUND	\$2.00	230	\$460.00	40	\$80.00	25	\$50.00	140	\$280.00	25	\$50.00
2575.505	SEEDING	SQ YD	\$1.00	4,920	\$4,920.00	880	\$880.00	520	\$520.00	3,000	\$3,000.00	520	\$520.00
2575.508	SEED MIXTURE 25-151	POUND	\$7.50	230	\$1,725.00	40	\$300.00	25	\$187.50	140	\$1,050.00	25	\$187.50
2575.508	HYDRAULIC BONDED FIBER MATRIX	POUND	\$2.00	2,070	\$4,140.00	370	\$740.00	225	\$450.00	1,250	\$2,500.00	225	\$450.00
2582.503	4" SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	\$2.00	1,860	\$3,720.00	1,100	\$2,200.00	720	\$1,440.00	20	\$40.00	20	\$40.00
2582.503	24" SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	\$20.00	80	\$1,600.00	20	\$400.00	20	\$400.00	20	\$400.00	20	\$400.00
2582.503	4" DOTTED LINE MULTI-COMPONENT GROUND IN	LIN FT	\$1.50	80	\$120.00	20	\$30.00	20	\$30.00	20	\$30.00	20	\$30.00
2582.503	4" DOUBLE SOLID LINE MULTI-COMPONENT GROUND IN	LIN FT	\$3.00	4,360	\$13,080.00	20	\$60.00	20	\$60.00	3,600	\$10,800.00	720	\$2,160.00
2582.518	CROSSWALK PREFORM THERMOPLASTIC GROUND IN	SQ FT	\$20.00	480	\$9,600.00	120	\$2,400.00	120	\$2,400.00	120	\$2,400.00	120	\$2,400.00
MISC	STORM SEWER SYSTEM (20%)	LUMP SUM	\$581,000.00	1	\$581,000.00	0.17	\$98,770.00	0.12	\$69,720.00	0.59	\$342,790.00	0.12	\$69,720.00
MISC	LANDSCAPING	LUMP SUM	\$50,000.00	1	\$50,000.00	0.17	\$8,500.00	0.12	\$6,000.00	0.59	\$29,500.00	0.12	\$6,000.00
CONSTRUCTION SUBTOTAL:					\$3,290,277.00		\$599,889.50		\$417,570.00		\$1,852,747.50		\$420,070.00
CONTINGENCY (5%):					\$164,513.85		\$29,994.48		\$20,878.50		\$92,637.38		\$21,003.50
CONSTRUCTION TOTAL:					\$3,454,790.85		\$629,883.98		\$438,448.50		\$1,945,384.88		\$441,073.50
TOTAL PROJECT COST (25%)					\$4,318,488.56		\$787,354.97		\$548,060.63		\$2,431,731.09		\$551,341.88

Appendix B.4.1 - Southeast, Reitz Lake, and Northeast Trunk Sanitary Cost Estimate
(Includes All Trunk Mains & Lift Stations in the Entire Study Area)

From Point	To Point	Design Flow (MGD)	Pipe Existing/ Proposed	Size (in)	Pipe Material	Length (ft)	Average Cut (ft)	Lift Station Cost	Subtotal Trunk Const. Cost	10% Const. Contingency	Total Trunk Const. Cost	25% Soft Costs	Permanent Easement Costs	Temporary Easement Costs	Total Trunk Project Cost	Cost/LF
NORTHEAST AREA																
R1.1A	R1.1	0.568	Proposed	12	PVC	3500	14	\$ -	\$ 523,014	\$ 52,301	\$ 575,316	\$ 143,829	\$ 115,702	\$ 23,140	\$ 857,987	\$ 245
R1.2A	R1.2B	0.435	Proposed	10	PVC	2800	12	\$ -	\$ 396,005	\$ 39,601	\$ 435,606	\$ 108,901	\$ 92,562	\$ 18,512	\$ 655,582	\$ 234
R1.2B	R1.2C	0.826	Proposed	15	PVC	1450	24	\$ -	\$ 350,201	\$ 35,020	\$ 385,221	\$ 96,305	\$ 59,917	\$ 14,380	\$ 555,824	\$ 383
R1.2C-LS	R1.2	1.082	Proposed	8	FM-PVC	2200	26	\$ 1,000,000	\$ 1,423,476	\$ 142,348	\$ 1,565,823	\$ 391,456	\$ 90,909	\$ 21,818	\$ 2,070,007	\$ 941
SUBTOTAL NORTHEAST AREA:					PVC	9950	19	\$ 1,000,000	\$ 2,692,696	\$ 269,270	\$ 2,961,966	\$ 740,492	\$ 359,091	\$ 77,851	\$ 4,139,400	\$ 416
REITZ LAKE																
R1.1	R1.3	0.774	Proposed	15	PVC	3100	15	\$ -	\$ 448,683	\$ 44,868	\$ 493,551	\$ 123,388	\$ 102,479	\$ 20,496	\$ 739,914	\$ 239
R1.2	R1.3	1.393	Proposed	18	PVC	2800	15	\$ -	\$ 465,523	\$ 46,552	\$ 512,075	\$ 128,019	\$ 92,562	\$ 18,512	\$ 751,168	\$ 268
R1.3	R1.4	2.030	Proposed	21	PVC	1050	18	\$ -	\$ 234,287	\$ 23,429	\$ 257,716	\$ 64,429	\$ 34,711	\$ 6,942	\$ 363,797	\$ 346
R1.4	R1.7	2.240	Proposed	21	PVC	2650	23	\$ -	\$ 790,178	\$ 79,018	\$ 869,196	\$ 217,299	\$ 109,504	\$ 26,281	\$ 1,222,280	\$ 461
R1.6	R1.7	0.206	Proposed	8	PVC	2900	18	\$ -	\$ 410,707	\$ 41,071	\$ 451,777	\$ 112,944	\$ 95,868	\$ 19,174	\$ 679,763	\$ 234
R1.7	LS-R	2.423	Proposed	21	PVC	1850	22	\$ -	\$ 554,538	\$ 55,454	\$ 609,992	\$ 152,498	\$ 76,446	\$ 18,347	\$ 857,283	\$ 463
R2.1	R2.3	0.316	Proposed	8	PVC	3100	19	\$ -	\$ 592,614	\$ 59,261	\$ 651,875	\$ 162,969	\$ 102,479	\$ 20,496	\$ 937,819	\$ -
R2.2	R2.3	0.444	Proposed	10	PVC	3100	13	\$ -	\$ 558,858	\$ 55,886	\$ 614,744	\$ 153,686	\$ 102,479	\$ 20,496	\$ 891,405	\$ 288
R2.3	R2.4	0.753	Proposed	12	PVC	900	19	\$ -	\$ 198,469	\$ 19,847	\$ 218,316	\$ 54,579	\$ 29,752	\$ 5,950	\$ 308,598	\$ 343
R2.4	R2.5	0.874	Proposed	15	PVC	2850	28	\$ -	\$ 1,190,787	\$ 119,079	\$ 1,309,866	\$ 327,466	\$ 117,769	\$ 28,264	\$ 1,783,365	\$ 626
R2.5	R2.6	1.274	Proposed	15	PVC	1300	23	\$ -	\$ 316,380	\$ 31,638	\$ 348,019	\$ 87,005	\$ 53,719	\$ 12,893	\$ 501,635	\$ 386
R3.1	R3.3	0.490	Proposed	8	PVC	2900	15	\$ -	\$ 410,707	\$ 41,071	\$ 451,777	\$ 112,944	\$ 95,868	\$ 19,174	\$ 679,763	\$ -
R3.2	R3.3	0.397	Proposed	10	PVC	3200	19	\$ -	\$ 612,030	\$ 61,203	\$ 673,233	\$ 168,308	\$ 105,785	\$ 21,157	\$ 968,484	\$ 303
R3.3	R4.6	0.952	Proposed	10	PVC	1000	20	\$ -	\$ 169,527	\$ 16,953	\$ 186,479	\$ 46,620	\$ 41,322	\$ 9,917	\$ 284,339	\$ 284
R4.1	R4.2		Proposed	8	PVC	3500	16	\$ -	\$ 493,432	\$ 49,343	\$ 542,775	\$ 135,694	\$ 115,702	\$ 23,140	\$ 817,312	\$ -
R4.2	R4.4	0.290	Proposed	10	PVC	2200	21	\$ -	\$ 359,642	\$ 35,964	\$ 395,606	\$ 98,902	\$ 72,727	\$ 21,818	\$ 589,053	\$ 268
R4.3	R4.4	1.605	Proposed	10	PVC	2500	17	\$ -	\$ 373,216	\$ 37,322	\$ 410,538	\$ 102,634	\$ 82,645	\$ 16,529	\$ 612,346	\$ 245
R4.4	R4.5	1.831	Proposed	15	PVC	2000	20	\$ -	\$ 388,057	\$ 38,806	\$ 426,862	\$ 106,716	\$ 66,116	\$ 19,835	\$ 619,528	\$ 310
R4.5	R4.6		Proposed	15	PVC	1700	20	\$ -	\$ 319,185	\$ 31,918	\$ 351,103	\$ 87,776	\$ 56,198	\$ 16,860	\$ 511,937	\$ 301
R5.1	R5.2	0.342	Proposed	8	PVC	3000	17	\$ -	\$ 424,494	\$ 42,449	\$ 466,944	\$ 116,736	\$ 99,174	\$ 19,835	\$ 702,688	\$ -
R4.6	R5.2	2.090	Proposed	18	PVC	800	22	\$ -	\$ 313,996	\$ 31,400	\$ 345,396	\$ 86,349	\$ 33,058	\$ 7,934	\$ 472,737	\$ 591
R5.2	R5.3	3.056	Proposed	18	PVC	1400	22	\$ -	\$ 539,571	\$ 53,957	\$ 593,528	\$ 148,382	\$ 57,851	\$ 13,884	\$ 813,646	\$ 581
R6.1	R6.2	0.290	Proposed	8	PVC	3800	17	\$ -	\$ 534,795	\$ 53,479	\$ 588,274	\$ 147,069	\$ 125,620	\$ 25,124	\$ 886,087	\$ 233
R6.2	R5.3	0.342	Proposed	8	PVC	400	21	\$ -	\$ 90,657	\$ 9,066	\$ 99,722	\$ 24,931	\$ 16,529	\$ 3,967	\$ 145,149	\$ 363
R5.3	R2.6	2.090	Proposed	21	PVC	1100	22	\$ -	\$ 335,737	\$ 33,574	\$ 369,311	\$ 92,328	\$ 45,455	\$ 10,909	\$ 518,002	\$ 471
R2.6	R6.3	3.056	Proposed	24	PVC	300	25	\$ -	\$ 158,890	\$ 15,889	\$ 174,779	\$ 43,695	\$ 12,397	\$ 2,975	\$ 233,846	\$ 779
R6.3	R6.4	3.292	Proposed	24	PVC	2600	28	\$ -	\$ 1,394,922	\$ 139,492	\$ 1,534,415	\$ 383,604	\$ 107,438	\$ 25,785	\$ 2,051,242	\$ 789
R6.4	LS-R	3.522	Proposed	24	PVC	2800	30		\$ 1,500,298	\$ 150,030	\$ 1,650,328	\$ 412,582	\$ 115,702	\$ 37,025	\$ 2,215,637	\$ 791
LS-R	L-70	5.945	Proposed	18	FM-PVC	2500	22	\$ 2,000,000	\$ 2,609,903	\$ 260,990	\$ 2,870,893	\$ 717,723	\$ 82,645	\$ 16,529	\$ 3,687,790	\$ 1,475
SUBTOTAL REITZ LAKE:					PVC	63300	20	\$ 2,000,000	\$ 16,790,083	\$ 1,679,008	\$ 18,469,091	\$ 4,617,273	\$ 2,250,000	\$ 510,248	\$ 25,846,612	\$ 408

Appendix B.4.1 - Southeast, Reitz Lake, and Northeast Trunk Sanitary Cost Estimate
(Includes All Trunk Mains & Lift Stations in the Entire Study Area)

From Point	To Point	Design Flow (MGD)	Pipe Existing/ Proposed	Size (in)	Pipe Material	Length (ft)	Average Cut (ft)	Lift Station Cost	Subtotal Trunk Const. Cost	10% Const. Contingency	Total Trunk Const. Cost	25% Soft Costs	Permanent Easement Costs	Temporary Easement Costs	Total Trunk Project Cost	Cost/LF
SOUTHEAST AREA																
S1.1	S1.3	0.284	Proposed	8	PVC	2900	13	\$ -	\$ 391,216	\$ 39,122	\$ 430,338	\$ 107,584	\$ 95,868	\$ 19,174	\$ 652,964	\$ 225
S1.2	S1.3	0.446	Proposed	10	PVC	2600	13	\$ -	\$ 369,991	\$ 36,999	\$ 406,990	\$ 101,748	\$ 85,950	\$ 17,190	\$ 611,878	\$ 235
S1.3	S1.4-LS	0.714	Proposed	12	PVC	800	24	\$ -	\$ 184,712	\$ 18,471	\$ 203,184	\$ 50,796	\$ 33,058	\$ 7,934	\$ 294,971	\$ 369
S1.5	S1.4-LS	0.979	Proposed	15	PVC	2100	29	\$ -	\$ 760,250	\$ 76,025	\$ 836,275	\$ 209,069	\$ 86,777	\$ 20,826	\$ 1,152,947	\$ 549
S1.4-LS	S1.5A	1.251	Proposed	10	FM-PVC	2250	29	\$ 1,000,000	\$ 1,734,056	\$ 173,406	\$ 1,907,462	\$ 476,865	\$ 92,975	\$ 22,314	\$ 2,499,617	\$ 1,111
S1.5A	S1.6-LS	1.251	Proposed	18	PVC	2600	25	\$ -	\$ 690,421	\$ 69,042	\$ 759,463	\$ 189,866	\$ 107,438	\$ 25,785	\$ 1,082,552	\$ 416
S2.1	S2.3	0.290	Proposed	8	PVC	4200	15	\$ -	\$ 562,776	\$ 56,278	\$ 619,054	\$ 154,763	\$ 138,843	\$ 27,769	\$ 940,429	\$ 224
S2.2	S2.3	0.205	Proposed	8	PVC	1800	13	\$ -	\$ 246,050	\$ 24,605	\$ 270,655	\$ 67,664	\$ 59,504	\$ 11,901	\$ 409,724	\$ 228
S2.3	S2.4	0.484	Proposed	10	PVC	400	18	\$ -	\$ 71,736	\$ 7,174	\$ 78,909	\$ 19,727	\$ 13,223	\$ 2,645	\$ 114,505	\$ 286
S2.4	S2.5	0.681	Proposed	12	PVC	2000	19	\$ -	\$ 350,761	\$ 35,076	\$ 385,837	\$ 96,459	\$ 66,116	\$ 13,223	\$ 561,635	\$ 281
S2.5	S2.6	0.902	Proposed	15	PVC	2300	15	\$ -	\$ 412,497	\$ 41,250	\$ 453,747	\$ 113,437	\$ 76,033	\$ 15,207	\$ 658,423	\$ 286
S2.6	S1.6-LS	0.979	Proposed	15	PVC	1800	19	\$ -	\$ 337,667	\$ 33,767	\$ 371,433	\$ 92,858	\$ 59,504	\$ 11,901	\$ 535,696	\$ 298
S1.6-LS	S4.3	0.979	Proposed	8	FM-PVC	1200	27	\$ 850,000	\$ 1,223,690	\$ 122,369	\$ 1,346,058	\$ 336,515	\$ 49,587	\$ 11,901	\$ 1,744,061	
S3.3	S3.4	0.053	Proposed	8	PVC	1400	17	\$ -	\$ 203,893	\$ 20,389	\$ 224,283	\$ 56,071	\$ 46,281	\$ 9,256	\$ 335,891	\$ 240
S3.4	S3.2	0.181	Proposed	8	PVC	700	25	\$ -	\$ 148,726	\$ 14,873	\$ 163,599	\$ 40,900	\$ 28,926	\$ 6,942	\$ 240,367	\$ 343
S3.2	S3.1	0.530	Proposed	12	PVC	1400	27	\$ -	\$ 485,655	\$ 48,566	\$ 534,221	\$ 133,555	\$ 57,851	\$ 13,884	\$ 739,512	\$ 528
S3.1	S1.6-LS	0.530	Proposed	12	PVC	800	24	\$ -	\$ 184,712	\$ 18,471	\$ 203,184	\$ 50,796	\$ 33,058	\$ 7,934	\$ 294,971	\$ 369
S4.1	S4.2	0.234	Proposed	8	PVC	2500	23	\$ -	\$ 497,146	\$ 49,715	\$ 546,860	\$ 136,715	\$ 103,306	\$ 24,793	\$ 811,674	\$ 325
S4.2	S4.3	0.415	Proposed	10	PVC	400	32	\$ -	\$ 175,084	\$ 17,508	\$ 192,593	\$ 48,148	\$ 16,529	\$ 5,289	\$ 262,559	\$ 656
S4.3	S3.5	3.010	Proposed	24	PVC	2700	30	\$ -	\$ 1,405,699	\$ 140,570	\$ 1,546,268	\$ 386,567	\$ 111,570	\$ 35,702	\$ 2,080,108	\$ 770
S4.4	S3.5	0.537	Proposed	10	PVC	4200	21	\$ -	\$ 865,578	\$ 86,558	\$ 952,136	\$ 238,034	\$ 138,843	\$ 41,653	\$ 1,370,666	\$ 326
S3.5	S5.1	3.785	Proposed	24	PVC	1200	22	\$ -	\$ 417,895	\$ 41,789	\$ 459,684	\$ 114,921	\$ 49,587	\$ 11,901	\$ 636,093	\$ 530
S5.1	S5.2	3.989	Proposed	27	PVC	2700	16	\$ -	\$ 1,023,843	\$ 102,384	\$ 1,126,228	\$ 281,557	\$ 89,256	\$ 17,851	\$ 1,514,892	\$ 561
S7.1	S5.2	3.960	Proposed	27	PVC	550	21	\$ -	\$ 257,351	\$ 25,735	\$ 283,086	\$ 70,772	\$ 22,727	\$ 5,455	\$ 382,040	\$ 695
S5.2	S5.4	7.411	Proposed	36	PVC	2200	19	\$ -	\$ 1,034,974	\$ 103,497	\$ 1,138,471	\$ 284,618	\$ 72,727	\$ 14,545	\$ 1,510,362	\$ 687
S5.3	S5.4	0.215	Proposed	8	PVC	6060	18	\$ -	\$ 808,239	\$ 80,824	\$ 889,063	\$ 222,266	\$ 200,331	\$ 40,066	\$ 1,351,726	\$ 223
S5.4	S5.5	7.568	Proposed	36	PVC	900	21	\$ -	\$ 441,913	\$ 44,191	\$ 486,104	\$ 121,526	\$ 37,190	\$ 8,926	\$ 653,745	\$ 726
S6.1	S5.5	0.514	Proposed	10	PVC	4600	24	\$ -	\$ 946,754	\$ 94,675	\$ 1,041,430	\$ 260,357	\$ 190,083	\$ 45,620	\$ 1,537,490	\$ 334
S5.5	LS-SE	8.112	Proposed	36	PVC	500	21	\$ -	\$ 265,168	\$ 26,517	\$ 291,685	\$ 72,921	\$ 20,661	\$ 4,959	\$ 390,226	\$ 780
LS-SE	EX MH 178	4.056	Existing	16	FM-PVC	1975	18									
LS-SE	EX MH 178	4.056	Proposed	16	FM-PVC	1975	18	\$ -	\$ 456,263	\$ 45,626	\$ 501,889	\$ 125,472	\$ 81,612	\$ 19,587	\$ 728,560	\$ 369
SUBTOTAL SOUTHEAST AREA:					PVC	63710	21	\$ 1,850,000	\$ 16,954,717.53	\$ 1,695,471.75	\$ 18,650,189.29	\$ 4,662,547.32	\$ 2,265,413.22	\$ 522,132.23	\$ 26,100,282.06	\$ 410
TOTAL PROJECT COST					PVC	136960	20	\$ 4,850,000	\$ 36,437,497	\$ 3,643,750	\$ 40,081,247	\$ 10,020,312	\$ 4,874,504	\$ 1,110,231	\$ 56,086,294	\$ 411

Appendix B.4.2 - Kirsch Property Trunk Sanitary Cost Estimate

From Point	To Point	Design Flow (MGD)	Pipe Existing/ Proposed	Size (in)	Pipe Material	Length (ft)	Average Cut (ft)	Lift Station Cost	Subtotal Trunk Const. Cost	10% Const. Contingency	Total Trunk Const. Cost	25% Soft Costs	Permanent Easement Costs	Temporary Easement Costs	Total Trunk Project Cost	Cost/LF
NORTHERN DEVELOPMENT AREA																
R1.4	R1.7	2.240	Proposed	21	PVC	2050	23	\$ -	\$ 614,266	\$ 61,427	\$ 675,692	\$ 168,923	\$ 84,711	\$ 20,331	\$ 949,656	\$ 463
R1.6	R1.7	0.206	Proposed	8	PVC	1000	18	\$ -	\$ 148,743	\$ 14,874	\$ 163,617	\$ 40,904	\$ 33,058	\$ 6,612	\$ 244,191	\$ 244
R1.7	LS-R	2.423	Proposed	21	PVC	1850	22	\$ -	\$ 554,538	\$ 55,454	\$ 609,992	\$ 152,498	\$ 76,446	\$ 18,347	\$ 857,283	\$ 463
R6.4	LS-R	3.522	Proposed	24	PVC	2800	30	\$ 2,000,000	\$ 3,600,298	\$ 360,030	\$ 3,960,328	\$ 990,082	\$ 115,702	\$ 37,025	\$ 5,103,137	\$ 1,823
SUBTOTAL NORTHERN DEVELOPMENT AREA:					PVC	7700	23	\$ 2,000,000	\$ 4,917,844	\$ 491,784	\$ 5,409,629	\$ 1,352,407	\$ 309,917	\$ 82,314	\$ 7,154,268	\$ 929

Appendix B.4.3 - Falk-Saltire Property Trunk Sanitary Cost Estimate

From Point	To Point	Design Flow (MGD)	Pipe Existing/ Proposed	Size (in)	Pipe Material	Length (ft)	Average Cut (ft)	Lift Station Cost	Subtotal Trunk Const. Cost	10% Const. Contingency	Total Trunk Const. Cost	25% Soft Costs	Permanent Easement Costs	Temporary Easement Costs	Total Trunk Project Cost	Cost/LF
SOUTHERN DEVELOPMENT AREA																
S5.1	S5.2	3.989	Proposed	27	PVC	2700	16	\$ -	\$ 1,023,843	\$ 102,384	\$ 1,126,228	\$ 281,557	\$ 89,256	\$ 17,851	\$ 1,514,892	\$ 561
S7.1	S5.2	3.960	Proposed	27	PVC	550	21	\$ -	\$ 257,351	\$ 25,735	\$ 283,086	\$ 70,772	\$ 22,727	\$ 5,455	\$ 382,040	\$ 695
S5.2	S5.4	7.411	Proposed	36	PVC	2200	19	\$ -	\$ 1,034,974	\$ 103,497	\$ 1,138,471	\$ 284,618	\$ 72,727	\$ 14,545	\$ 1,510,362	\$ 687
S5.3	S5.4	0.215	Proposed	8	PVC	2250	18	\$ -	\$ 468,186	\$ 46,819	\$ 515,005	\$ 128,751	\$ 74,380	\$ 14,876	\$ 733,012	\$ 326
S5.4	S5.5	7.568	Proposed	36	PVC	900	21	\$ -	\$ 462,913	\$ 46,291	\$ 509,204	\$ 127,301	\$ 37,190	\$ 8,926	\$ 682,620	\$ 758
S6.1	S5.5	0.514	Proposed	10	PVC	900	24	\$ -	\$ 195,876	\$ 19,588	\$ 215,464	\$ 53,866	\$ 37,190	\$ 8,926	\$ 315,445	\$ 350
S5.5	LS-SE	8.112	Proposed	36	PVC	500	21	\$ -	\$ 265,168	\$ 26,517	\$ 291,685	\$ 72,921	\$ 20,661	\$ 4,959	\$ 390,226	\$ 780
SUBTOTAL SOUTHERN DEVELOPMENT AREA:					PVC	10000	20	\$ -	\$ 3,708,311	\$ 370,831	\$ 4,079,142	\$ 1,019,786	\$ 354,132	\$ 75,537	\$ 5,528,597	\$ 553

Appendix B.4.4 - Trunk Watermain System
(Includes All Trunk Mains in the Entire Study Area)

Item No.	Item	Estimated Quantity	Unit	Unit Price	Total Amount
1	MOBILIZATION	1	LUMP SUM	\$1,150,000.00	\$1,150,000.00
2	12" PVC WATERMAIN PIPE	43000	LIN FT	\$135.00	\$5,805,000.00
3	16" PVC WATERMAIN PIPE	32100	LIN FT	\$190.00	\$6,099,000.00
4	6" DUCTILE IRON CL 52 PIPE	3755	LIN FT	\$95.00	\$356,725.00
5	HYDRANT	250	EACH	\$8,500.00	\$2,127,550.00
6	DUCTILE IRON FITTINGS	125000	LBS	\$19.00	\$2,375,000.00
7	JACK AND BORE CASING	450	LIN FT	\$3,000.00	\$1,350,000.00
8	6" GATE VALVE & BOX	250	EACH	\$3,500.00	\$876,050.00
9	12" GATE VALVE & BOX	108	EACH	\$13,000.00	\$1,397,500.00
10	16" GATE VALVE & BOX	80	EACH	\$20,000.00	\$1,606,000.00
SUBTOTAL:					\$23,142,825.00
10% CONTINGENCY:					\$2,314,282.50
TOTAL ESTIMATED CONSTRUCTION COST:					\$25,457,107.50
DESIGN, ADMINISTRATION AND CONSTRUCTION ENGINEERING (25%):					\$6,364,280.00
TOTAL ESTIMATED PROJECT COST:					\$31,821,387.50

Appendix B.4.5 - Kirsch Property Trunk Watermain System

Item No.	Item	Estimated Quantity	Unit	Unit Price	Total Amount
1	MOBILIZATION	1	LUMP SUM	\$100,000.00	\$100,000.00
2	12" PVC WATERMAIN PIPE	2100	LIN FT	\$135.00	\$283,500.00
3	16" PVC WATERMAIN PIPE	850	LIN FT	\$190.00	\$161,500.00
4	6" DUCTILE IRON CL 52 PIPE	148	LIN FT	\$95.00	\$14,060.00
5	HYDRANT	10	EACH	\$8,500.00	\$83,300.00
6	DUCTILE IRON FITTINGS	5000	LBS	\$19.00	\$95,000.00
7	6" GATE VALVE & BOX	10	EACH	\$3,500.00	\$34,300.00
8	12" GATE VALVE & BOX	7	EACH	\$13,000.00	\$91,000.00
9	16" GATE VALVE & BOX	2	EACH	\$20,000.00	\$40,000.00
SUBTOTAL:					\$902,660.00
10% CONTINGENCY:					\$86,266.00
TOTAL ESTIMATED CONSTRUCTION COST:					\$988,926.00
DESIGN, ADMINISTRATION AND CONSTRUCTION ENGINEERING (25%):					\$247,230.00
TOTAL ESTIMATED PROJECT COST:					\$1,236,156.00

Appendix B.4.6 - Falk-Saltire Property Trunk Watermain System

Item No.	Item	Estimated Quantity	Unit	Unit Price	Total Amount
1	MOBILIZATION	1	LUMP SUM	\$220,000.00	\$220,000.00
2	12" PVC WATERMAIN PIPE	800	LIN FT	\$135.00	\$108,000.00
3	16" PVC WATERMAIN PIPE	9700	LIN FT	\$190.00	\$1,843,000.00
4	6" DUCTILE IRON CL 52 PIPE	525	LIN FT	\$95.00	\$49,875.00
5	HYDRANT	35	EACH	\$8,500.00	\$297,500.00
6	DUCTILE IRON FITTINGS	18000	LBS	\$19.00	\$342,000.00
7	JACK AND BORE CASING	150	LIN FT	\$3,000.00	\$450,000.00
8	6" GATE VALVE & BOX	35	EACH	\$3,500.00	\$122,500.00
9	12" GATE VALVE & BOX	2	EACH	\$13,000.00	\$26,000.00
10	16" GATE VALVE & BOX	31	EACH	\$20,000.00	\$620,000.00
SUBTOTAL:					\$3,858,875.00
10% CONTINGENCY:					\$407,887.50
TOTAL ESTIMATED CONSTRUCTION COST:					\$4,266,762.50
DESIGN, ADMINISTRATION AND CONSTRUCTION ENGINEERING (25%):					\$1,066,690.00
TOTAL ESTIMATED PROJECT COST:					\$5,333,452.50

Appendix B.4.7 - EAST AREA DEVELOPMENT

UTILITY OVERSIZING ESTIMATED COSTS

MATERIAL COSTS (OBTAINED FROM PIPE SUPPLIER)		
ITEM	UNIT	PRICE
10" PVC SDR 35 SANITARY	LF	\$18.54
10" PVC SDR 26 SANITARY	LF	\$24.60
21" PVC SDR 35 SANITARY	LF	\$82.47
21" PVC SDR 26 SANITARY	LF	\$109.87
24" PVC SDR 26 SANITARY	LF	\$139.11
27" PVC SDR 35 SANITARY	LF	\$135.77
27" PVC SDR 26 SANITARY	LF	\$223.82
36" PVC SDR 35 SANITARY	LF	\$259.30
36" PVC SDR 26 SANITARY	LF	\$319.01
10" PVC C900 WATERMAIN	LF	\$37.78
12" PVC C900 WATERMAIN	LF	\$53.20
16" PVC C900 WATERMAIN	LF	\$89.24

ESTIMATED OVERSIZING COSTS											
AREA	ITEM	REQUIRED SIZE (IN)	PIPE MATERIAL	OVERSIZE (IN)	PIPE MATERIAL	LENGTH (LF)	MATERIAL UNIT COST INCREASE	MATERIALS COST INCREASE	MATERIALS HANDLING (20%)	TOTAL OVERSIZING COST	
										BY ITEM	TOTAL
NORTHERN DEVELOPMENT	SEWER	10	SDR 26	21	SDR 26	1850	\$85.27	\$157,749.50	\$31,549.90	\$189,299.40	\$646,405.20
	SEWER	10	SDR 26	21	SDR 26	2050	\$85.27	\$174,803.50	\$34,960.70	\$209,764.20	
	SEWER	10	SDR 26	24	SDR 26	1800	\$114.51	\$206,118.00	\$41,223.60	\$247,341.60	
	WATER	10	C900	12	C900	2100	\$15.42	\$32,382.00	\$6,476.40	\$38,858.40	\$38,858.40
SOUTHERN DEVELOPMENT	SEWER	10	SDR 35	27	SDR 35	2700	\$117.23	\$316,521.00	\$63,304.20	\$379,825.20	\$1,535,538.00
	SEWER	10	SDR 26	27	SDR 26	550	\$199.22	\$109,571.00	\$21,914.20	\$131,485.20	
	SEWER	10	SDR 35	36	SDR35	2200	\$240.76	\$529,672.00	\$105,934.40	\$635,606.40	
	SEWER	10	SDR 26	36	SDR 26	900	\$294.41	\$264,969.00	\$52,993.80	\$317,962.80	
	SEWER	10	SDR 26	36	SDR 26	200	\$294.41	\$58,882.00	\$11,776.40	\$70,658.40	
	WATER	10	C900	12	C900	800	\$15.42	\$12,336.00	\$2,467.20	\$14,803.20	\$490,293.60
	WATER	10	C900	16	C900	7700	\$51.46	\$396,242.00	\$79,248.40	\$475,490.40	

100% CITY COST ITEMS (UNIT PRICES ESTIMATED BY BMI)					
ITEM	QUANT	UNIT	UNIT PRICE	COST	REMARKS
16" WM FROM FIRESTEED RIDGE TO WEST PROPERTY LINE	850	LF	\$575.00	\$488,750.00	COST INCLUDED IN KIRSCH DEVELOPMENT
16" WM FROM INTERLAKEN PKWY TO WEST PROPERTY LINE	2000	LF	\$575.00	\$1,150,000.00	COST INCLUDED IN FALK-SALTIRE DEVELOPMENT
16" WM LOOPING AT INTERSECTION OF TH 5 & CR 92	2000	LF	\$1,675.00	\$3,350,000.00	INCLUDES COST FOR CASING CROSSING HIGHWAY
12" WM LOOPING SOUTH OF ISLAND VIEW RD	700	LF	\$1,550.00	\$1,085,000.00	INCLUDES COST FOR CASING CROSSING HIGHWAY
SANITARY SEWER FROM R6.4 TO LS-R	1000	LF	\$791.00	\$791,000.00	COST INCLUDED IN KIRSCH DEVELOPMENT
SANITARY SEWER FROM S5.5 TO LS-SE	300	LF	\$780.00	\$234,000.00	COST INCLUDED IN FALK-SALTIRE DEVELOPMENT

Appendix C: C.S.A.H. 92 Planning Study

Certification

CSAH 92 Planning Study

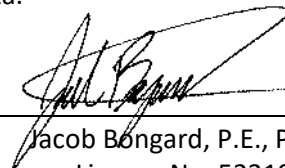
For

Carver County
City of Waconia
T43.115114

September 8, 2020

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

By:



Jacob Bongard, P.E., PTOE
License No. 52210

Date: 09/8/2020

Table of Contents

EXECUTIVE SUMMARY	1
I. PREFERRED ALIGNMENT DETAILS.....	1
II. RIGHT-OF-WAY DETAILS	2
III. IMPLEMENTATION PLAN	2
IV. NEXT STEPS.....	3
STUDY INTRODUCTION	7
I. CSAH 92 ALIGNMENT ANALYSIS	7
A. Alignment and Right-of-Way Review.....	7
B. Additional Right-of-Way Needs	9
C. Typical Section	9
II. ACCESS SPACING CONSIDERATIONS	10
III. PROJECT IMPLEMENTATION AND COST	10
IV. TRAFFIC ANALYSIS - EXISTING CONDITIONS	12
A. Data Collection	12
B. Safety Analysis	12
C. Warrant Analysis (Existing).....	13
D. Traffic Operations Analysis (Existing)	13
V. TRAFFIC ANALYSIS - FUTURE CONDITIONS	14
A. Traffic Forecasts.....	14
B. Traffic Warrants (Future).....	14
C. Traffic Operations Analysis (Future).....	15

Figures

Figure 1: Alignment and Right-of-Way.....	4
Figure 2: Airport Road and CSAH 92 Alignment	5
Figure 3: Property Impacts Comparison	8
Figure 4: Carver County Typical Section.....	9
Figure 5: Access Spacing.....	11

Tables

Table 1: Implementation Details.....	6
Table 2: Carver County Access Spacing Guidelines.....	10
Table 3: Safety Analysis Results Summary.....	12
Table 4: Crash Severity and Crash Type	13
Table 5: Existing Operation Results	13
Table 6: CSAH 92 at TH 5 – Traffic Warrant Results.....	14
Table 7: CSAH 92 at CSAH 10 – Traffic Warrant Results	14

Appendix

Appendix A: Alignment Review Figure
Appendix B: Implementation Plan and Cost Estimate Details
Appendix C: Traffic Volumes Details
Appendix D: Crash Reports
Appendix E: Warrant Analysis
Appendix F: Future Traffic Operation

EXECUTIVE SUMMARY

The CSAH 92 Planning Study addresses the development needs on the east side of the City of Waconia. Previous studies resulted in a recommended alignment and right-of-way needs for a ‘Minor Arterial’ connection between Trunk Highway (TH) 5 and County State Aid Highway (CSAH) 10. The CSAH 92 corridor is identified as the East Waconia Bypass within the 2040 Roadway System Plan and 20-Year Transportation Tax Projects Implementation Plan. This segment of CSAH 92 is identified as a Priority “C” Project and is expected to be constructed between 2029 and 2033 as identified in the Carver County CIP. The City of Waconia and Carver County would like to assure that development occurs in accordance with a current and jointly approved plan for future transportation facilities. The purpose of this study is to refine the alignment and right-of-way needs, analyze traffic demands and expectations, prioritize project needs, and provide a plan to prepare for the future.

Figure 1 show the *preferred alignment and right-of-way* developed by the project partners. This alignment meets the needs of the County and the City by minimizing impacts and creating a strategic vision for future development. The 120-foot right-of-way corridor proposed for CSAH 92 is consistent with the County standard for a 2-Lane Divided Urban typical section with one pedestrian trail. Some right-of-way is already secured because of previous work completed, while additional acquisitions are needed for the preservation of the proposed corridor from south of CSAH 10 to north of TH 5.

Figure 2 and **Table 1** detail the *implementation plan* for future projects associated with the study area. The improvements are separated into recommended projects and potential timeframes based on project needs, expected development, and stakeholder input. The implementation plan describes individual projects, potential funding sources, lead agency, project cost and the anticipated timeframes for completion. All timeframes identified in the implementation plan are approximate and will be largely dependent on development and available funding. Additional design, studies and stakeholder input will be needed throughout the project life for each of the recommended projects.

I. PREFERRED ALIGNMENT DETAILS

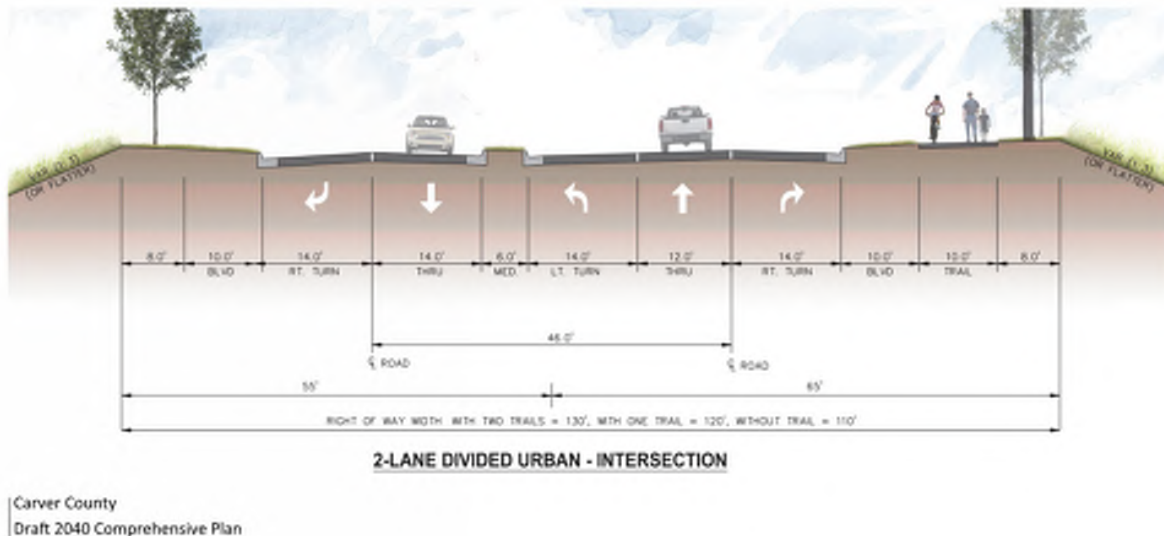
Figure 1 shows the preferred alignment developed by the project partners. The current planning study involved thorough analysis of multiple alignment options in an effort to minimize wetland impacts, right-of-way (ROW) impacts and construction cost while determining an efficient and effective alignment. The preferred alignment accomplishes the following:

- Design speed of 45 mph near TH 5 and CSAH 10 to reduce impacts at the intersections. Design speed of 55 mph for the remainder of the corridor.
- The northern limit matches into existing CSAH 92 approximately 850 feet north of TH 5 and the southern limit matches into existing Little Avenue approximately 1,200 feet north of 102nd Street.
- Avoids alignment changes to TH 5. The proposed intersection location of CSAH 92 and TH 5 is shifted Northeast to increase the horizontal radius of CSAH 92 to the desired design standards and have a 90-degree angle between the two approaches.
- Avoids alignment changes to CSAH 10. The proposed intersection location of CSAH 92 and CSAH 10 will have a skew angle of 15-degrees. The 15-degree skew angle is a result of minimizing property impacts near Klein Drive.
- Avoids major grade and elevation challenges south of existing TH 5 and north of the wetland area.
- Realign Airport Road at the future intersection with CSAH 92.
- At-grade crossing at Interlaken Parkway.

II. RIGHT-OF-WAY DETAILS

The necessary right-of-way (ROW) for the preferred CSAH 92 alignment is shown in **Figure 1**. Some ROW is already secured as part of previous work completed, additional acquisition is necessary for the completion of the entire project. The following summarizes the ROW details:

- 120-foot minimum ROW. This allows for 2-Lane divided urban highway with one separate bike/pedestrian facility to Carver County Standards. The figure below illustrates the Carver County Typical section considered for the CSAH 92 Planning Study.



- Minimizes private property impacts except for one full property acquisition south of CSAH 10 and west of existing Little Avenue. The full property acquisition is necessary to avoid wetland impacts as much as possible and properly align the future CSAH 92 and CSAH 10 intersection.
- A range of alignment and right-of-way alternatives near the Klien Drive and CSAH 10 intersections is provided in **Figure 3**. A deviation from the preferred alignment identified in **Figure 1** may occur pending additional information becoming available related to property acquisition, future CSAH 10/CSAH 92 traffic control, and soil correction needs south of CSAH 10.
- Partial property acquisition is necessary at the future CSAH 92 and TH 5 location, CSAH 92 and Airport Road location, CSAH 92 and Klein Drive location, and the CSAH 10 and Little Avenue location.

III. IMPLEMENTATION PLAN

Table 1 documents the recommendations of the CSAH 92 Improvement Project and associated projects in the study area. The CSAH 92 Improvement Project will not be constructed or completed all at once, however, the projects will be driven by the needs of the area. The improvements are separated into recommended projects and potential timeframes based on project needs, expected development, and stakeholder input. The implementation plan describes individual projects, potential funding sources, lead agency, project cost, and the anticipated timeframes for completion. **Figure 2** illustrates project locations and timeframes.

Short-term projects, expected to occur in the next five years, include improvements to existing Little Avenue and the Interlaken Parkway development.



Improving Little Avenue creates temporary access for potential development south of CSAH 10 and east of Little Avenue. The Interlaken Parkway development extends the existing neighborhood north of CSAH 10. Short-term projects are expected to be completed in the next five years and cost between 3.1 and 4.6 million dollars.

The majority of projects are anticipated to be mid-term projects, expected to occur in the next five to twelve years. Mid-term projects include realigning Airport Road, completing CSAH 92 from CSAH 10 through Airport Road, connecting to existing Little Avenue, and various development access roads. Mid-term projects will largely depend on future development projects. Cost for the mid-term projects is expected to be between 22.1 and 48.8 million dollars.

Completing the construction of CSAH 92 from Airport Road through TH 5 and improvements to CSAH 10 are identified as long-term projects at this time. These projects are not anticipated to be necessary in the next 12 years and is estimated to cost between 21.0 and 45.6 million dollars.

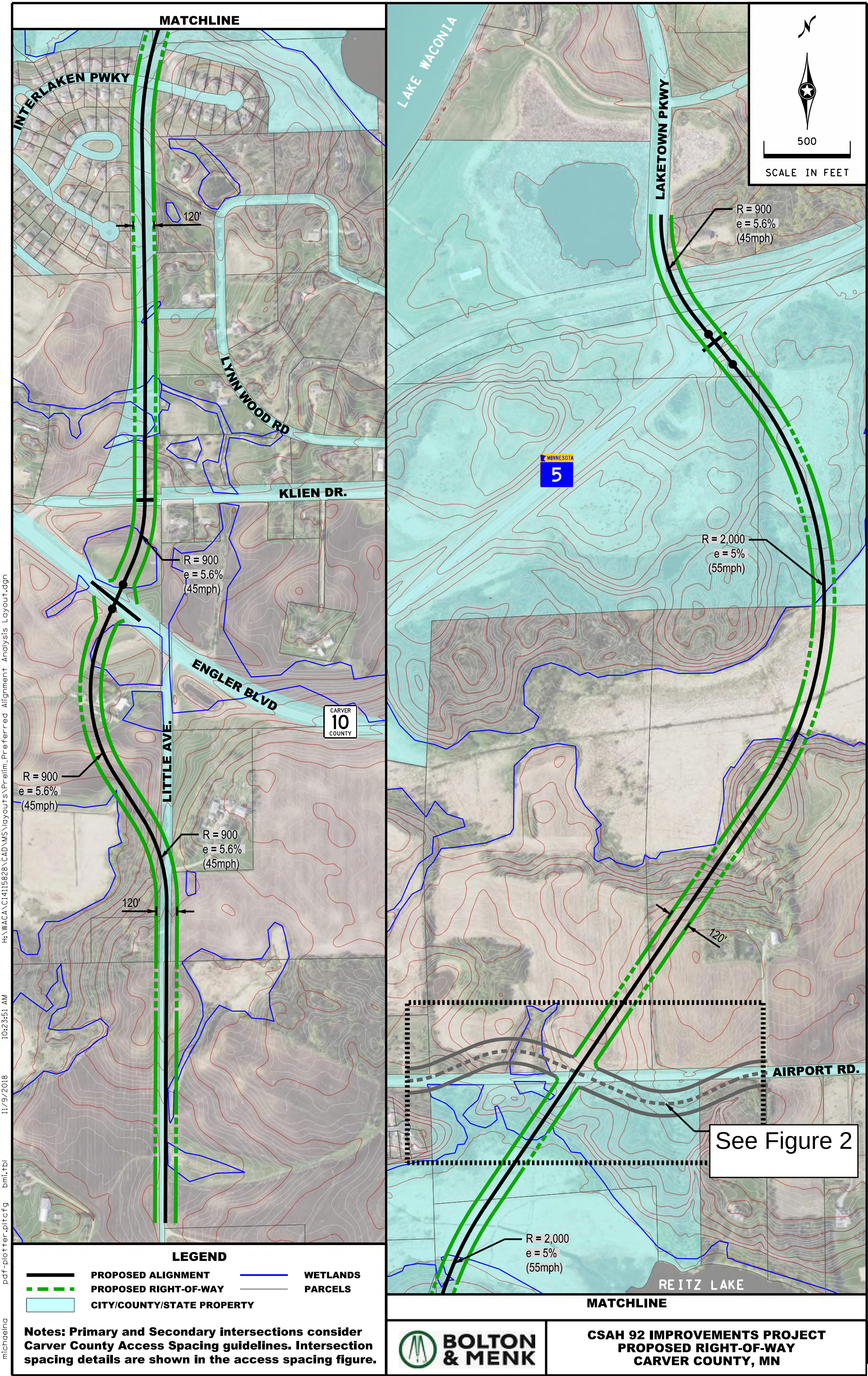
All timeframes identified in the implementation plan are approximate and will be largely dependent on development and available funding. However, this plan gives Carver County, City of Waconia, and MnDOT a guide to focus efforts for future construction projects in a logical manner.

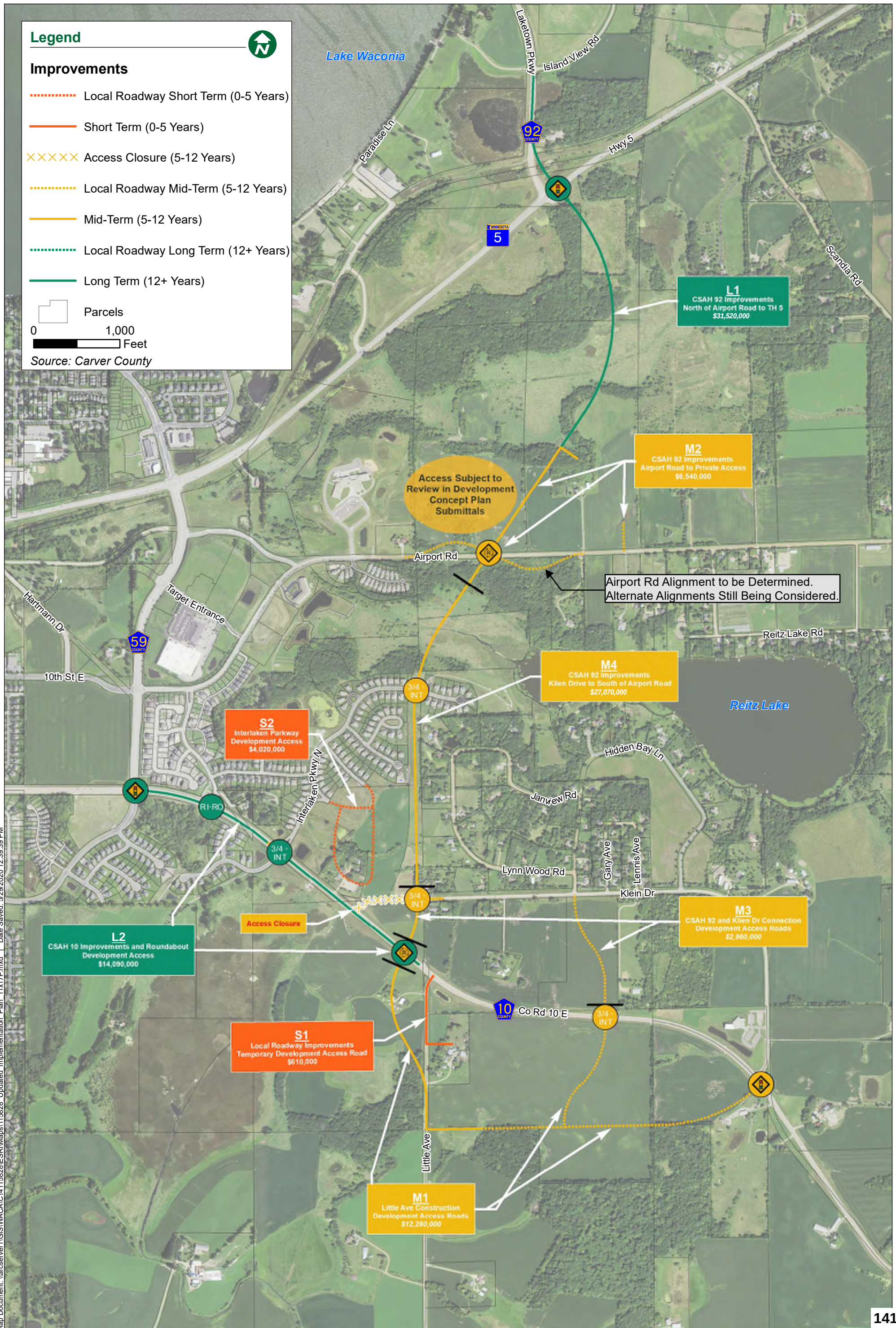
IV. NEXT STEPS

Additional design, studies, and public input will be needed for each of the proposed improvements to move forward with construction. The recommended projects and timeframes developed as part of this study are high-level and will need additional refinement through preliminary and final design. Environmental review, geotechnical investigation, and property acquisition will be required as determined by the scope of each individual project.

The recommended projects identified in the implementation plan help to identify a shared vision among project partners, stakeholders and the general public. Study partners must continue to work together to further plan, obtain funding, design and implement the recommended projects. All partners have an active role in implementing the findings of this study.

Figure 1: Preferred Alignment and Right-of-Way







CSAH 92 Improvements Project
Implementation Plan
September 2020



Priority	Project Number	Years Estimated	Project Description	Potential Funding	Lead Agency	Cost														Comments		
						Construction			Project Development and Delivery			ROW			Total (2018 Dollars)			Year	Total Expected Cost (with 3% inflation)			
Short-Term	S1	0-5 Years	Little Avenue Improvements Temporary Development Access Road	CITY, PRIV	City	\$320,000	to	\$470,000	\$60,000	to	\$90,000	Unknown	to	Unknown	\$380,000	to	\$560,000	2020	\$420,000	to	\$610,000	•ROW cost is development driven
	S2	0-5 Years	Interlaken Parkway Development Access	CITY, PRIV	City	\$2,050,000	to	\$3,070,000	\$410,000	to	\$610,000	Unknown	to	Unknown	\$2,460,000	to	\$3,680,000	2020	\$2,690,000	to	\$4,020,000	•ROW cost is development driven
	Subtotal					\$2,370,000	to	\$3,540,000	\$470,000	to	\$700,000	\$0	to	\$0	\$2,840,000	to	\$4,240,000		\$3,110,000	to	\$4,630,000	
Mid-Term	M1	5-7 Years	Little Ave Connection Development Access Roads	CITY, PRIV	City	\$3,200,000	to	\$4,810,000	\$640,000	to	\$960,000	\$1,630,000	to	\$3,910,000	\$5,470,000	to	\$9,680,000	2025	\$6,930,000	to	\$12,260,000	•Includes 3/4 intersection and traffic signal for local road intersections at CSAH 10 •ROW cost assumes full property acquisition of 9550 Little Avenue. Cost range assumes estimated value x1.25 to x3
	M2	5-7 Years	CSAH 92 Improvements Airport Road to Private Access	CO, CITY, PRIV	City/County	\$2,870,000	to	\$4,300,000	\$570,000	to	\$860,000	Unknown	to	Unknown	\$3,440,000	to	\$5,160,000	2025	\$4,360,000	to	\$6,540,000	•Includes realigning Airport Road and two potential development access roads •ROW cost is development driven
	M3	5-10 Years	CSAH 92 & Klien Dr Connection Development Access Roads	CO, CITY, PRIV	County	\$1,190,000	to	\$1,780,000	\$240,000	to	\$360,000	\$0	to	\$0	\$1,430,000	to	\$2,140,000	2028	\$1,980,000	to	\$2,960,000	•Includes development roads and complete multilane roundabout at CSAH 10 and CSAH 92 •ROW cost is assumed to be acquired with M1
	M4	8-12 Years	CSAH 92 - Klien Dr to Airport Dr Connection Development Access	CO, CITY, SRTS, PRIV	County	\$5,020,000	to	\$15,300,000	\$1,000,000	to	\$3,060,000	\$30,000	to	\$70,000	\$6,050,000	to	\$18,430,000	2030	\$8,880,000	to	\$27,070,000	•Includes 3/4 intersection at Interlaken Pkwy •ROW cost assumes partial property acquisition of 9340 Klien Dr. Cost range assumes estimated value x1.25 to x3
	Subtotal					\$12,280,000	to	\$26,190,000	\$2,450,000	to	\$5,240,000	\$1,660,000	to	\$3,980,000	\$16,390,000	to	\$35,410,000		\$22,150,000	to	\$48,830,000	
Long-Term	L1	12+ Years	CSAH 92 Improvements North of Airport Road to TH 5	CO, CITY, STATE, PRIV	County	\$6,030,000	to	\$16,330,000	\$1,210,000	to	\$3,270,000	\$20,000	to	\$40,000	\$7,260,000	to	\$19,640,000	2033	\$11,650,000	to	\$31,520,000	•Includes traffic signal improvments at TH 5 •ROW cost assumes partial property acquisition of 8095 Laketown Pwky. Cost range assumes estimated value x1.25 to x3
	L2	12+ Years	CSAH 10 Improvements & Roundabout Development Access	CO, CITY	County	\$4,880,000	to	\$7,320,000	\$980,000	to	\$1,460,000	\$0	to	\$0	\$5,860,000	to	\$8,780,000	2033	\$9,400,000	to	\$14,090,000	•Includes 3/4 and right-in/right-out intersection on CSAH 10 at Shorewood Dr and Interlaken Pkwy and Roundabout at CSAH 92
	Subtotal					\$10,910,000	to	\$23,650,000	\$2,190,000	to	\$4,730,000	\$20,000	to	\$40,000	\$13,120,000	to	\$28,420,000		\$21,050,000	to	\$45,610,000	
Total Investment						\$25,560,000	to	\$53,380,000	\$5,110,000	to	\$10,670,000	\$1,680,000	to	\$4,020,000	\$32,350,000	to	\$68,070,000		\$46,310,000	to	\$99,070,000	

FUNDING KEY

CO	County State Aid Highway, County Sales Tax, Wheelage, or Other County Funds		Note: Construction and Project Development and Delivery cost are estimate cost plus or minus 20%
CITY	City Funding MSAS		
PRIV	Private Funding / Development (Private)		
SRTS	Safe Routes to School		
STATE	Trunk Highway Funds (State)		

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STUDY INTRODUCTION

The City of Waconia is experiencing development pressures on the eastern side of the City and expects those pressures to continue. Prior studies completed by the City of Waconia and Carver County determined a recommended alignment, right-of-way (ROW) footprint and access spacing for a 'A Minor Arterial' in this area. As a result of continued development interest, the CSAH 92 Planning Study will supplement the prior study by exploring:

- refinements to the CSAH 92 alignment and ROW section,
- typical section needs,
- intersection spacing needs for CSAH 92 and surrounding highways,
- project implementation and cost estimates, and
- updated traffic analysis and recommendations.

The CSAH 92 Planning Study will aim to evaluate the above and provide both the City and County with an updated and supplemental planning document necessary to appropriately secure ROW as needed and guide development appropriately in accordance with the transportation system needs.

I. CSAH 92 ALIGNMENT ANALYSIS

A. Alignment and Right-of-Way Review

The CSAH 92 Planning Study involved analysis of multiple alignments for the future highway in an effort to minimize wetland impacts, right-of-way (ROW) impacts and construction cost while determining an efficient and effective alignment. The alignment review considered the following assumptions:

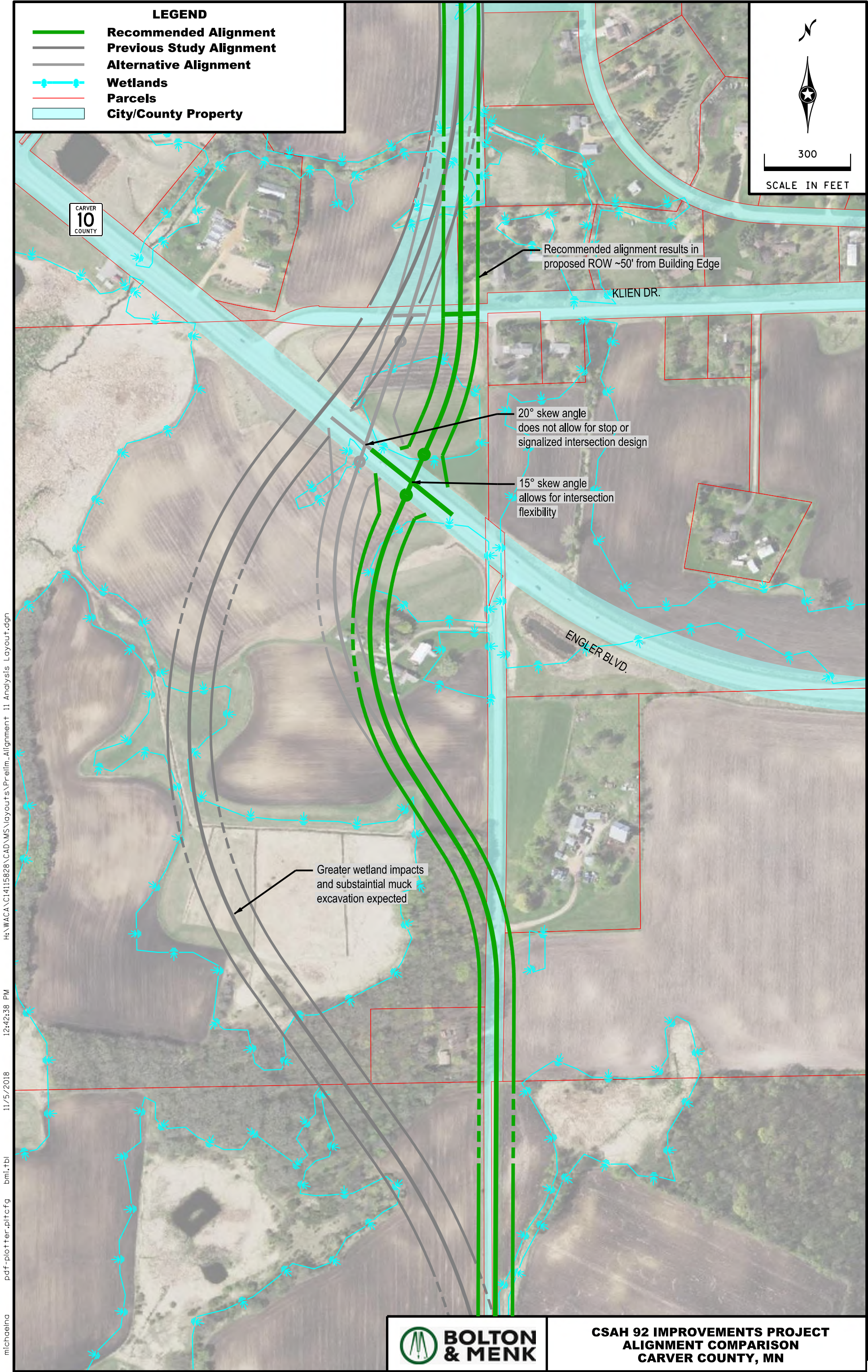
- The future highway will match into existing CSAH 92 north of TH 5.
- The future highway will match into a similar location of Little Avenue south of CSAH 10.
 - Little Avenue improvements would be development driven.
- All alignments include a north/south tangent section in the County ROW between Interlaken Parkway and Klein Drive.
- There will be full access intersections at TH 5, CSAH 10 and Airport Drive.
 - The exact location of the intersections varies.
- Design speeds range from 45 mph to 55 mph.

Multiple alignment options are shown in **Figures A-1 through A-12** in **Appendix A**. The figures detail horizontal curve radii, superelevation grade and design speed for the alignment curves. General intersection locations and tie-in points are also shown for some alignments. Parcel boundaries, wetland boundaries and topographic information are displayed in the figures. Light blue shading represents city, county or state property.

Figure A-11 generally shows the preferred alignment for CSAH 92 except for the Klein Drive, CSAH 10 and Little Avenue connections. Further evaluation considered a range of property impacts at 9340 Klein Drive and the correlated skew angle between existing CSAH 10 and the future CSAH 92 alignment. The alignment in **Figure A-11** included a tangent section adjacent to the aforementioned property. This alignment has an associated ROW footprint that extends 34 feet from an existing garage on the property. Additional refinement adjusted the CSAH 92 alignment to increase the distance between the proposed ROW and an existing building at 9340 Klein Drive. However, distancing the alignment from the existing building results in an increased skew angle between the existing CSAH 10 alignment and the potential CSAH 92 alignment. It is not desired to adjust CSAH 10.

Figures 3 shows the previous study alignment, the preferred alignment, and an alternative alignment for comparison.

Figure 4: Property Impacts Comparison



The preferred alignment has a 15-degree skew angle between CSAH 92 and CSAH 10. However, the alignment shifts west at Klein Drive resulting in 50 feet of separation between the existing garage and the proposed ROW; this is an increase of 16 feet from the original alignment in **Figure A-11**. Increasing the distance between the existing building and the proposed ROW is possible, but the resulting skew angle between CSAH 92 and CSAH 10 will be greater 15-degrees. It was decided that given the high-speed design of CSAH 10 and CSAH 92, increasing the skew angle greater than 15-degrees is not desired if a traditional intersection design is to be used. Therefore, the alternative alignment would require a roundabout design at the intersection of CSAH 10 and CSAH 92 in order to reduce the negative effects of skew angles between approaching roadways.

The previous study alignment is also shown in **Figure 3**. This alignment follows the previously acquired ROW section north of Klein Drive. This alignment intersects CSAH 10 at a desirable angle, however, the associated wetland impacts and potential muck excavation needed for construction were determined to be unnecessary and the preferred alignment was more appealing to stakeholders although additional property acquisition is necessary.

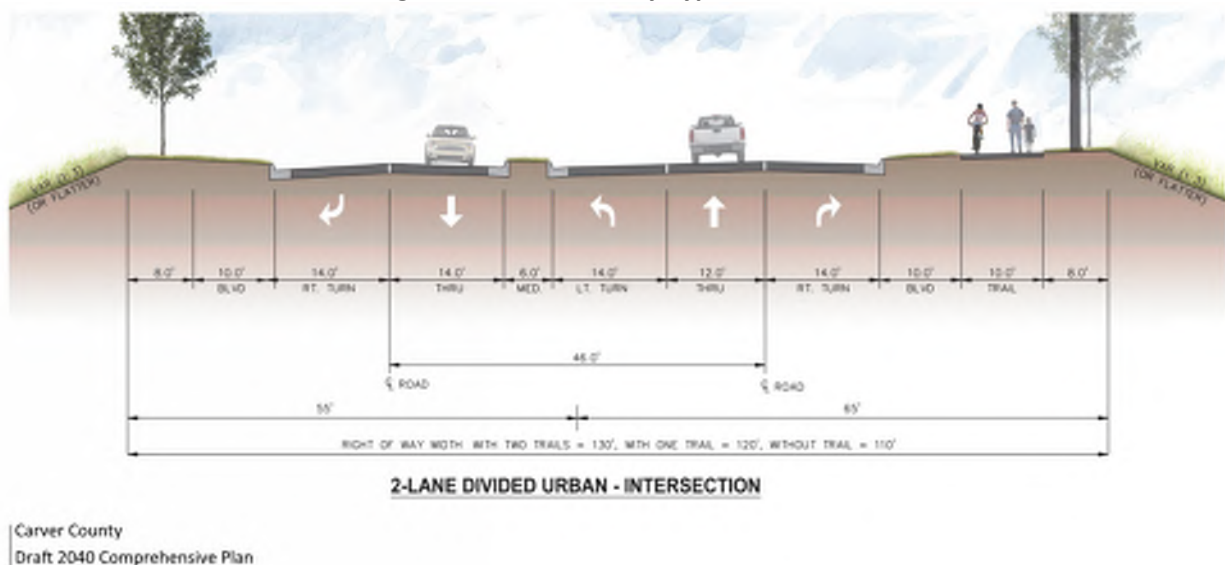
B. Additional Right-of-Way Needs

In addition to the property impacts mentioned above, additional ROW acquisition is necessary for the completion of all projects. Specific to the CSAH 92 Corridor, full property acquisition is likely at the southwest quadrant of CSAH 10 and Little Road. The preferred alignment is expected to impact the household on this property. Partial property acquisition is necessary at the future CSAH 92 and TH 5 location, CSAH 92 and Airport Road location, CSAH 92 and Klein Drive location, and the CSAH 10 and Little Avenue location in order to accommodate the needs of the preferred alignment. Additional property will be needed to complete all associate project specific to potential development, but these acquisitions are not considered as part of this study.

C. Typical Section

The future CSAH 92 highway is anticipated to be a 2-Lane Divided Urban facility with one separated bike/pedestrian facility. According to the Carver County Draft 2040 Comprehensive Plan, the typical ROW is 120 feet. **Figure 5** details the Planning Level Typical Roadway Sections for 2-Lane Divided Urban Intersections, the same dimensions are assumed for the midblock typical sections.

Figure 5: Carver County Typical Section



II. ACCESS SPACING CONSIDERATIONS

Carver County access spacing guidelines are shown in **Table 2**. County guidelines indicate that rural facilities (CSAH 10 and TH 5 in the project study area) have a desired primary and secondary intersection spacing of ½ and ¼ mile, respectively. Urban facilities (preferred CSAH 92 design) have a desired primary and secondary intersection spacing of ¼ and 1/8 mile, respectively. **Figure 5** details the proposed access inventory associated with the CSAH 92 improvements. The primary intersections shown in **Figure 5** are anticipated to be full access intersections. The secondary intersections shown in **Figure 5** may be reduced access intersections depending on future needs of the system. Future development roads are shown to provide a visual of possible access locations. Further evaluation of specific access controls and movements is needed when appropriate.

Table 2: Carver County Access Spacing Guidelines

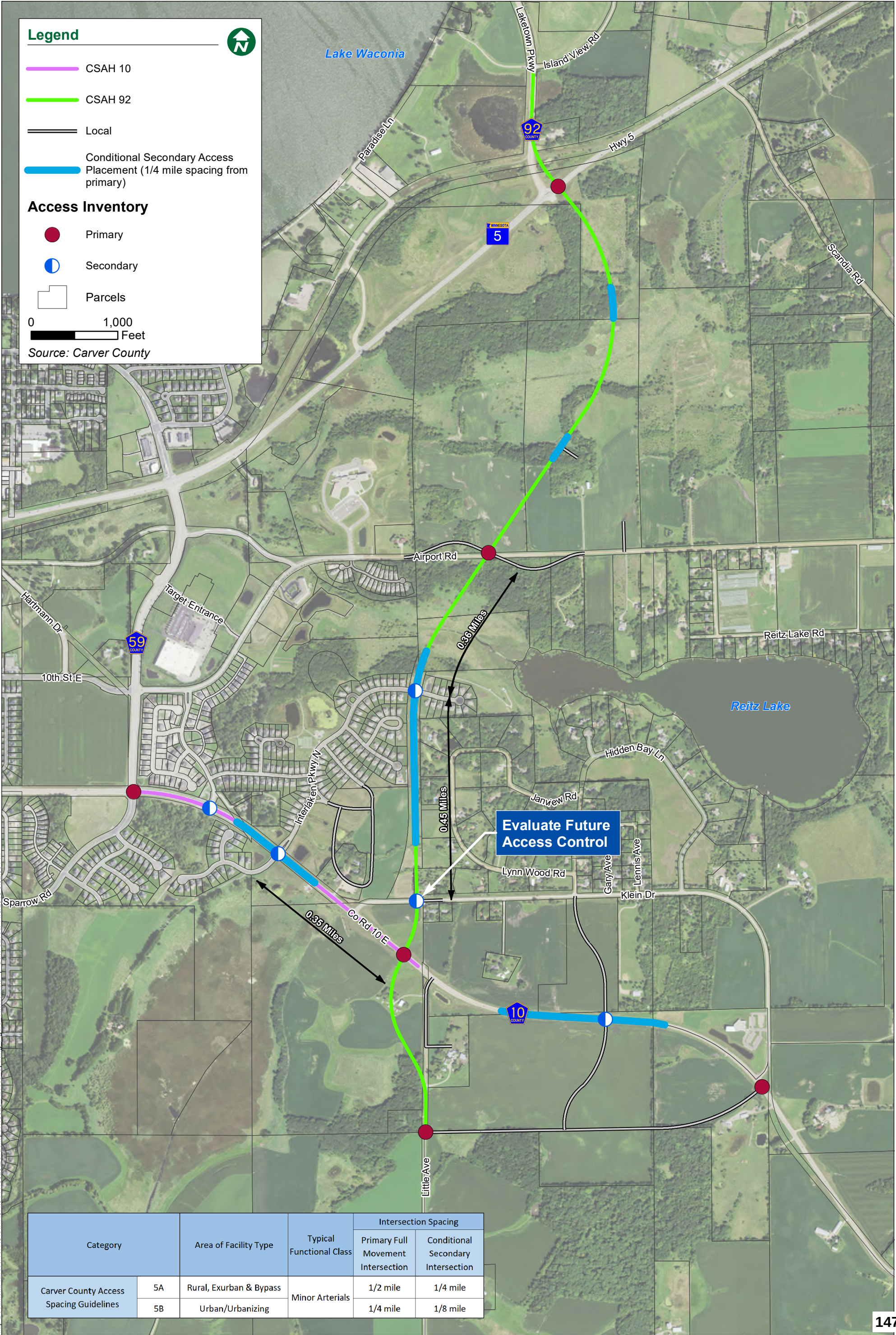
Category		Area of Facility Type	Typical Functional Class	Intersection Spacing	
				Primary Full Movement Intersection	Conditional Secondary Intersection
Carver County Access Spacing Guidelines	5A	Rural, Exurban & Bypass	Minor Arterials	1/2 mile	1/4 mile
	5B	Urban/Urbanizing		1/4 mile	1/8 mile

III. PROJECT IMPLEMENTATION AND COST

The CSAH 92 Improvement Project will not be constructed or completed all at once, however, the projects will be driven by the needs of the area. The improvements are separated into recommended projects and potential timeframes based on project needs, expected development, and stakeholder input. The implementation plan describes individual projects, potential funding sources, lead agency, project cost, and the anticipated timeframes for completion. **Table 1 and Figure 2** at the beginning of this document illustrate the project locations and timeframes. All timeframes identified in the implementation plan are approximate and will be largely dependent on development and available funding. However, this plan gives Carver County, City of Waconia, and MnDOT a guide to focus efforts for future construction projects in a logical manner.

Project cost estimates include specific roadway typical section from other City of Waconia and Carver County projects in the area. All major roadway items are accounted for; however, detailed review of necessary soil corrections needs was not completed as part of this review. An overall contingency is applied to the major roadway items to account for additional construction cost unforeseen at this time. Other roadway features including drainage, electrical, traffic control, environmental needs and signing and pavement marking are included in the cost estimates as a percentage of the major roadway items. Finally, the total project cost includes engineering and legal fees to better represent what would be expected for cost to complete the projects.

Implementation and cost estimate details can be found in **Appendix B**.



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IV. TRAFFIC ANALYSIS - EXISTING CONDITIONS

CSAH 92, CSAH 10 and TH 5 are two-lane rural highways classified as minor arterials. CSAH 92 runs north from TH 5 towards St. Bonifacius and is locally known as Laketown Parkway. At the intersection with TH 5, CSAH 92 currently serves up to 8,000 vehicles per day (vpd) and has a left turn lane and a channelized right turn with an acceleration lane. TH 5 is an east-west connection for the cities of Waconia and Victoria. TH 5 currently serves up to 14,100 vpd at the intersection with CSAH 92 and has turn lanes on both approaches. CSAH 10 is an east-west connection for the Cities of Waconia and Chaska. CSAH 10 currently serves up to 12,200 vpd at the intersection with Little Avenue and has turn lanes on both approaches. Little Avenue is a gravel road that currently serves approximately 150 vpd.

A. Data Collection

Traffic data was collected in March of 2018 at the intersections of CSAH 92 at TH 5 and CSAH 10 at Little Avenue and for the roadways of Airport Road and Klein Drive. AM and PM peak hour turning movement counts and average daily traffic (ADT) volumes were determined from the traffic counts.

The 2018 Existing peak hour turning movements and ADTs are found in **Appendix C**.

B. Safety Analysis

Crash data was obtained from the Minnesota Crash Mapping Analysis Tool for the last five complete years of data (2011-2015). Each intersection was analyzed individually to determine the observed crash rate, statewide average crash rate, critical crash rate and critical index. The observed crash rate is the number of crashes per million entering vehicles (MEV) for the intersection. The statewide average crash rate is the average crash rate for similar type intersections statewide. The critical crash rate is the statistical comparison based on similar intersections statewide. The critical index is the comparison of the observed crash rate to the critical crash rate; a critical index greater than 1.0 indicates that the observed crash rate is greater than the critical rate and that the intersection operates outside the expected, normal range. **Table 3** summarizes the safety analysis results for the corridor

Table 3: Safety Analysis Results Summary

Intersection	Traffic Control	Total Crashes (5 Years)	Crash Rate	Statewide Average	Critical Rate	Crash Index
TH 5 and CSAH 92	TWSC	14	0.52	0.25	0.52	1.00
CSAH 10 and Little Ave	TWSC	1	0.05	0.25	0.56	0.09

The TH 5 and CSAH 92 intersection has a crash index of 1.0 indicating that the intersection is operating at the upper-most threshold of the normal range for similar type intersections. The TH 5 and CSAH 92 intersection is statistically a safety concern and crash reduction mitigation techniques should be investigated.

Only one crash was reported at the intersection of CSAH 10 and Little Avenue.

Table 4 details the crash severity and crash type at each intersection. Crash severity levels are as follows:

- F – Fatal
- A – Capacitating Injury
- B – Non-Capacitation Injury
- C – Possible Injury
- PDO – Property Damage Only

Table 4: Crash Severity and Crash Type

Intersection	Crash Severity					Crash Type							
	F	A	B	C	PDO	Right Angle Crashes	Left Turn Crashes	Rear End Crashes	Sideswipe Passing	Right Turn	Head On	Ran Off Road	Collision w/ Deer
TH 5 and CSAH 92	0	0	1	2	11	1	2	1	2	2	2	1	3
CSAH 10 and Little Ave	0	0	1	0	0	0	0	0	0	0	0	1	0

No fatal or incapacitating injury crashes were reported during the analysis period at the intersections. One non-incapacitating injury was reported at each intersection. There is no recognizable pattern in crash types at the intersections. However, there has been three reported crashes with deer at TH 5 and CSAH 92 intersection that may not be directly associated with the intersection but are included in this analysis.

Crash Report details can be found in **Appendix D**.

C. Warrant Analysis (Existing)

Traffic signal and all-way stop control (AWSC) warrants were completed using the 2018 existing traffic volumes at the intersection of CSAH 92 and TH 5. No warrants were met with the 2018 existing traffic volumes. Typically, minor street right turns are not included in the warrant analysis, however, if 45% of the minor street right turns (southbound right turns) are included in the warrant analysis, the intersection of CSAH 92 and TH 5 satisfies Warrant 1A for Eight-Hour Vehicular Volume.

Existing traffic volumes on Little Avenue at CSAH 10 are too low and do not satisfy any warrants.

Warrant Analysis details are found in **Appendix E**.

D. Traffic Operations Analysis (Existing)

A level of service (LOS) analysis of the peak hours was completed using the existing turning movement counts in collaboration with the microsimulation software, Trafficware Synchro. The LOS results are based on average delay per vehicle as calculated by the Highway Capacity manual (HCM) 2010, which defines the level of service, based on control delay. Control delay is the delay experienced by vehicles slowing down as they are approaching the intersection, the wait time at the intersection, and the time for the vehicle to speed up through the intersection and enter into the traffic stream.

The existing traffic operations analysis includes the intersection of TH 5 and CSAH 92 and CSAH 10 at Little Avenue with the existing geometric and traffic control conditions.

Table 5 details the overall delay and individual movement delay (in seconds) per vehicle at the intersections. The intersections currently have LOS A for the overall intersection and at worst LOS C for individual movements.

Table 5: Existing Operation Results

Intersection	Peak Hour	Intersection Delay (1.)		Approach Delay (1)								Max V/C (2.)	ICU (3.)
				NB	SB	EB	WB						
TH 5 & CSAH 92 <i>Stop Controlled</i>	AM	6	A		15 C	4 A	0 A					0.43	0.41
	PM	8	A		24 C	5 A	0 A					0.62	0.55
Little Ave & CSAH 10 <i>Stop Controlled</i>	AM	0.1	A	22 C		0 A	0 A					0.59	0.59
	PM	0.1	A	20 C		0 A	0 A					0.6	0.59

1. Delay in seconds per vehicle

2. Volume to Capacity Ratio

3. Intersection Capacity Utilization

V. TRAFFIC ANALYSIS - FUTURE CONDITIONS

A. Traffic Forecasts

Future traffic volumes for the design year (2038) were developed using the Carver County 2040 Comprehensive plan Build 3 and Build 4 models. The Build 3 and Build 4 models will be referred to as the Baseline (Build 3) and the Ultimate (Build 4) for the rest of this report. Future conditions analysis considered the following range of traffic volumes:

- 2038 Baseline Traffic Volumes
- 2038 Baseline + 25% Ultimate Traffic Volumes
- 2038 Baseline + 50% Ultimate Traffic Volumes
- 2038 Baseline + 75% Ultimate Traffic Volumes
- 2038 Ultimate Traffic Volumes

Introducing CSAH 92 between TH 5 and CSAH 10 is expected to impact the traffic patterns at the study intersections and the surrounding area. The distribution of the future traffic, including turning movements at intersections, is based on existing traffic patterns and engineering judgement when appropriate.

Forecasted peak hour turning movements and future average annual daily traffic (AADT) volumes are found in **Appendix C**.

B. Traffic Warrants (Future)

Future traffic warrants were completed to estimate when each intersection is expected to satisfy signal or AWSC warrants. Hourly traffic volumes were calculated based on the forecasted AADT and the existing hourly distribution. The hourly distribution for future intersection legs that currently do not exist (CSAH 92 northbound at TH 5 and CSAH 92 southbound at CSAH 10) were assumed to have similar distribution as the currently existing intersection legs. **Tables 6 and 7** summarize the future traffic warrant results:

Table 6: CSAH 92 at TH 5 – Traffic Warrant Results

Traffic Scenario	Signal Warrant				AWSC Warrant
	1A	1B	2	3	
2038 Base	No	Yes	Yes	Yes	Yes
2038 Base + 25% Ultimate	No	Yes	Yes	Yes	Yes
2038 Base + 50% Ultimate	Yes	Yes	Yes	Yes	Yes

Table 7: CSAH 92 at CSAH 10 – Traffic Warrant Results

Traffic Scenario	Signal Warrant				AWSC Warrant
	1A	1B	2	3	
2038 Base	No	No	Yes	Yes	No
2038 Base + 25% Ultimate	No	Yes	Yes	Yes	Yes
2038 Base + 50% Ultimate	Yes	Yes	Yes	Yes	Yes

The intersections of CSAH 92 at TH 5 and CSAH 10 are anticipated to satisfy Warrant 2 and Warrant 3 with the 2038 Baseline traffic volumes. Warrants 1, 2, 3 and AWSC are anticipated to be satisfied with the 2038 Baseline +25% of the Ultimate traffic volumes at both intersections. The future warrant analysis indicates a potential need for a signalized or roundabout intersection when the 2038 Baseline traffic volumes are realized.

A potential housing development is being considered north of the TH 5 and CSAH 92 intersection. The 90-Home development is anticipated to add 944 new trips to the area. For the purpose of this study, it was assumed that all the anticipated trips generated by the housing development would use the existing intersection of TH 5 and CSAH 92. Signal or

AWSC warrants are not met with the additional trips generated by the housing development added to the existing turning movement counts.

Warrant Analysis details can be found in **Appendix E**.

C. Traffic Operations Analysis (Future)

A LOS analysis of the forecasted peak hours was completed using the future turning movements for each traffic volume scenario. Trafficware Synchro was used to determine delay and LOS.

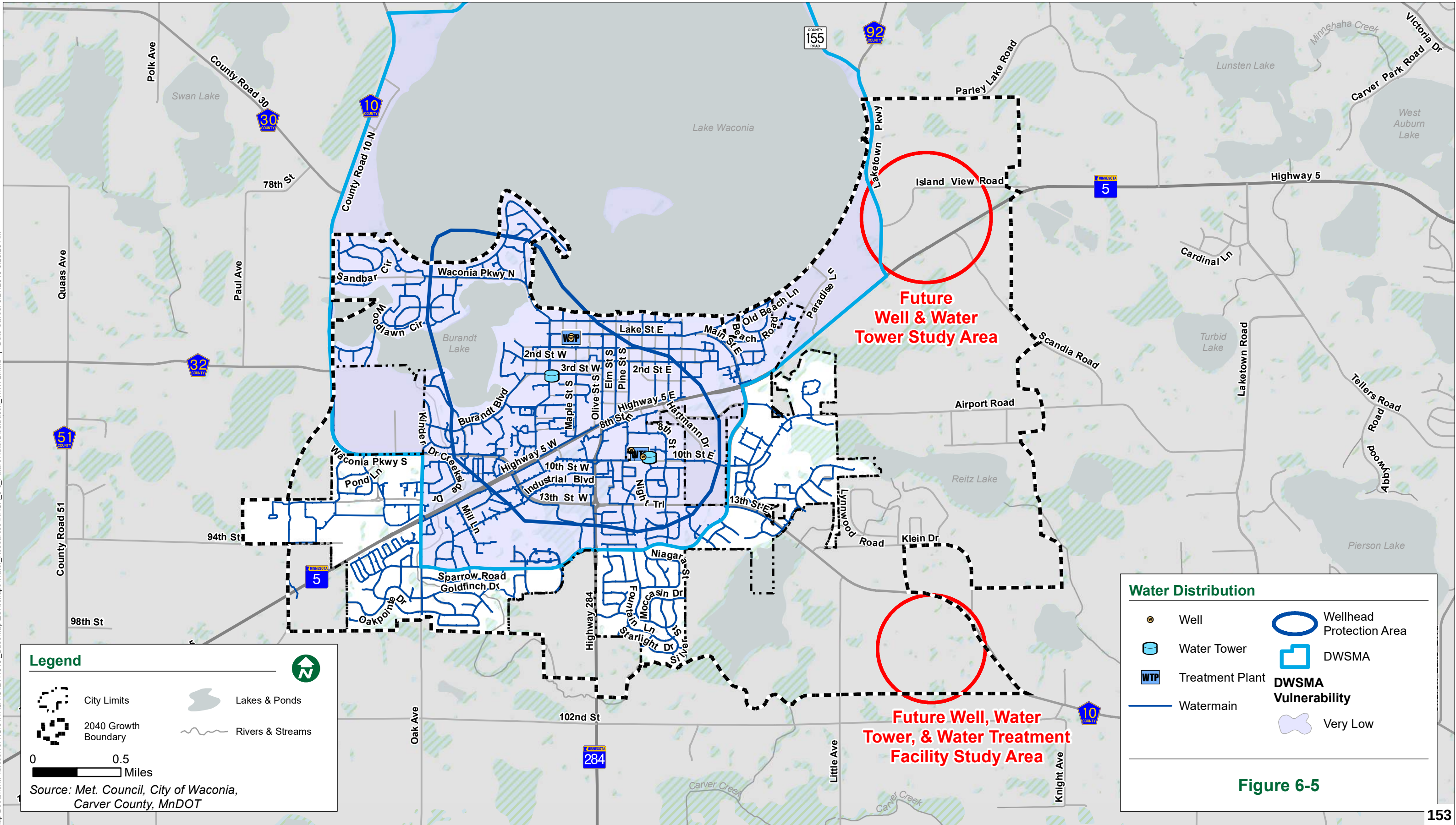
The future traffic operations analysis indicates how various intersection control types are anticipated to operate with the forecasted traffic volumes. Additionally, the analysis shows when potential upgrades to the intersection control may be needed. For instance, converting a stop controlled intersection to a signalized or roundabout intersection or expanding a roundabout from a single lane to a multilane roundabout. This high-level approach indicates the general needs for the future intersections, however, additional analysis of signal timings, turn lanes, approach lanes, and specific geometric features should be completed when appropriate.

All future traffic scenarios include the completion of CSAH 92 from TH 5 through CSAH 10 creating four-legged intersections at TH 5, CSAH 10 and Airport Rd. The following sections summarize the overall traffic operations at three intersections analyzed:

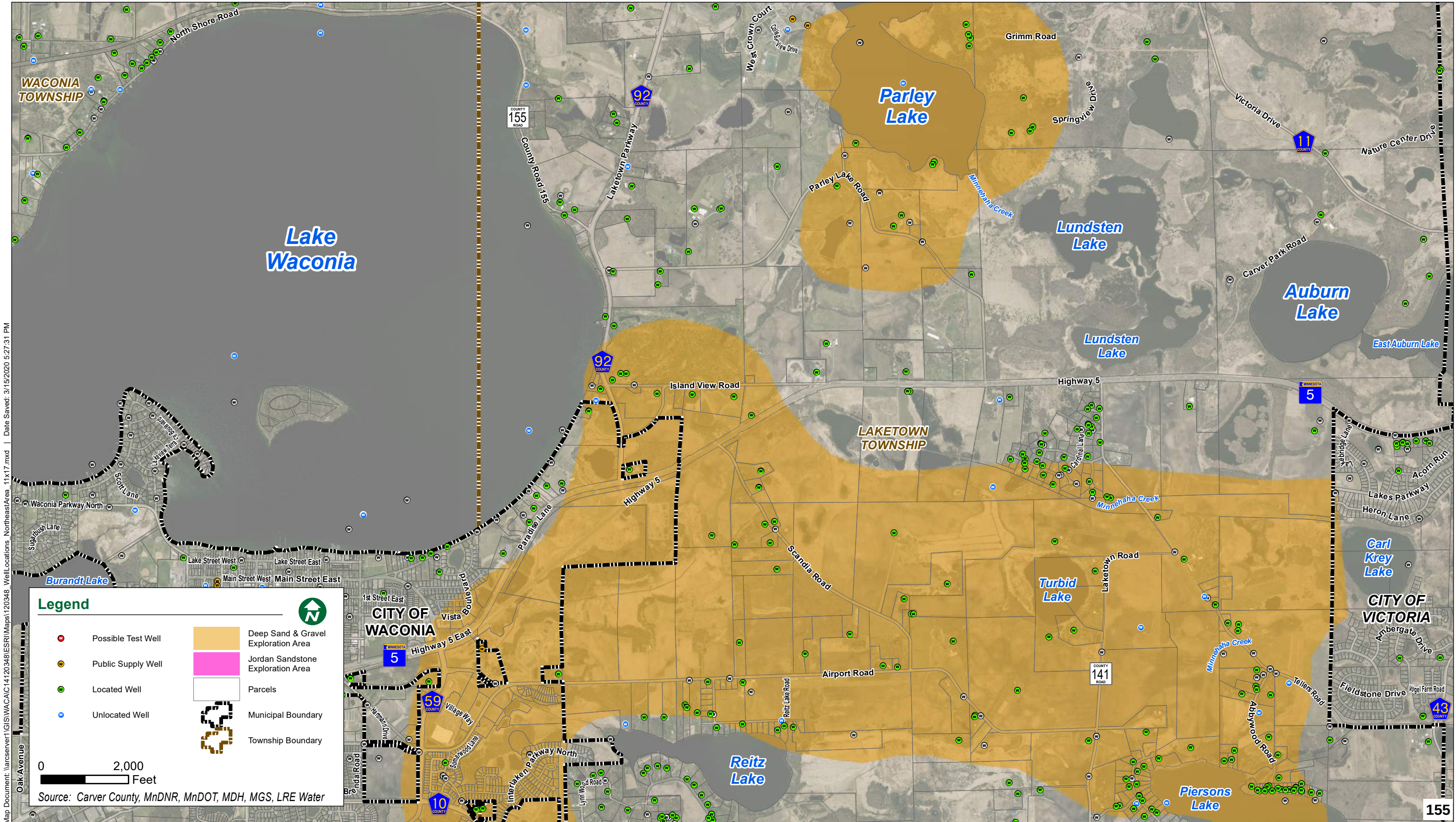
- CSAH 92 and TH 5
 - Signalized or Multi-Lane Roundabout control is anticipated to be needed if the 2038 Baseline traffic volumes are realized.
- CSAH 92 and CSAH 10
 - Signalized or Multi-Lane Roundabout control is anticipated to be needed if the 2038 Baseline traffic volumes are realized.
- CSAH 92 and Airport Road
 - Two-way Stop Control, requiring eastbound and westbound traffic on Airport Road to stop, is expected to be sufficient if the 2038 Baseline traffic volumes are realized.
 - Signalized or Single-Lane Roundabout control is anticipated to be needed if the 2038 + 75% of the Ultimate traffic volumes are realized.
 - A Single-Lane Roundabout would also be necessary with a right-in/right-out or $\frac{3}{4}$ -access intersection at Interlaken Parkway to facilitate U-turn movements for the restricted access.

Additional details regarding the future traffic operations are in **Appendix F**.

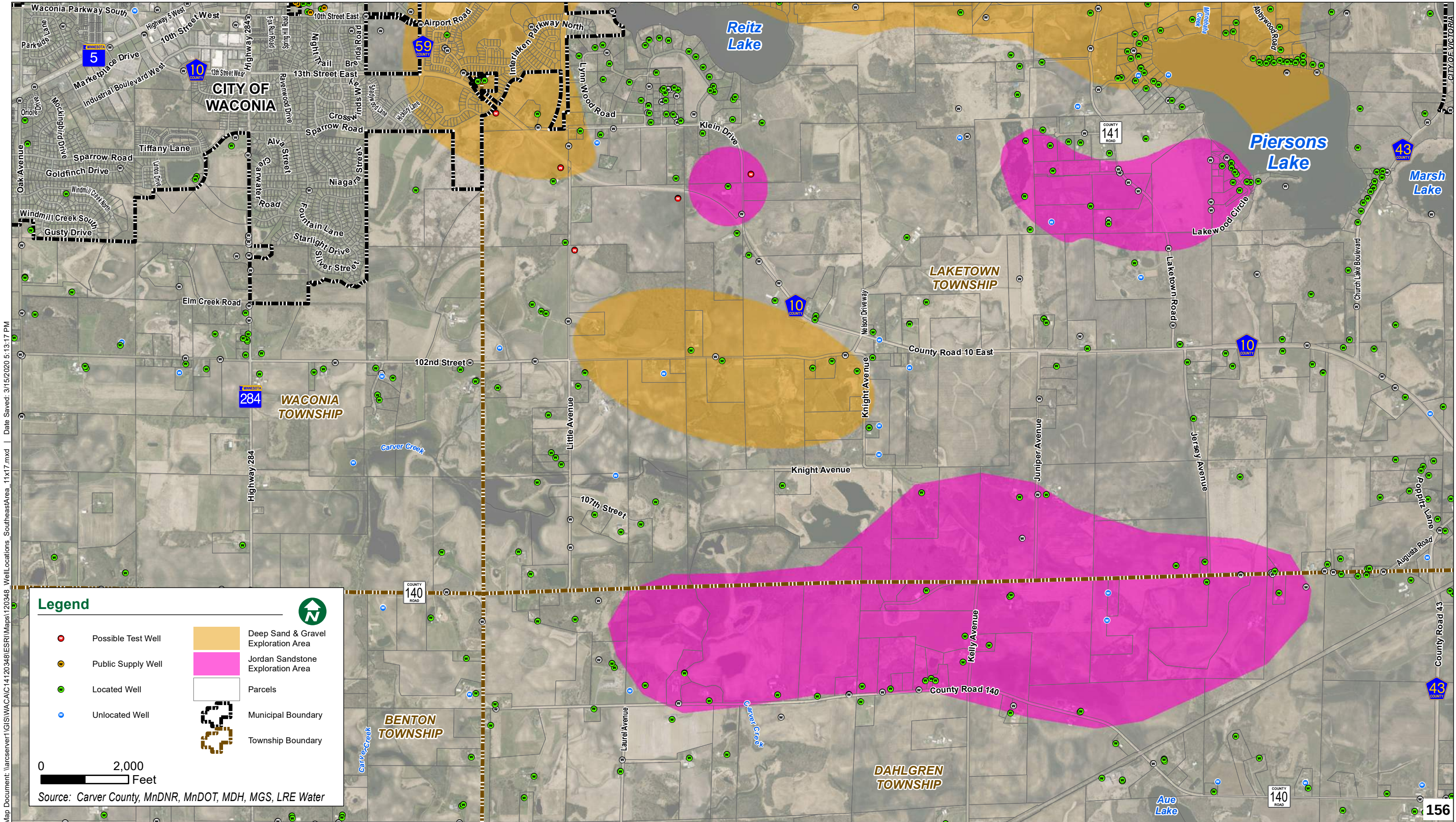
Appendix D: Water Supply System Plan



Appendix E: Hydrogeological Assessment



Map Document: \\arcserver1\GIS\WACAC\14120348\ESRI\Maps\120348_WellLocations_SoutheastArea_11x17.mxd | Date Saved: 3/15/2020 5:13:17 PM



Legend

-  Possible Test Well
-  Public Supply Well
-  Located Well
-  Unlocated Well
-  Deep Sand & Gravel Exploration Area
-  Jordan Sandstone Exploration Area
-  Parcels
-  Municipal Boundary
-  Township Boundary

0 2,000
Feet

Source: Carver County, MnDNR, MnDOT, MDH, MGS, LRE Water

Appendix F: Design Criteria

Table A - Design Flows

From Point	To Point	Sub District Added	Average Flow Added (MGD)	Cumulative Average Flow (MGD)	Peak Flow Factor	DESIGN FLOW (MGD)

Northeast Area

R1.1A	R1.1	R1.1A	0.129	0.129	4.4	0.568
R1.2A	R1.2B	R1.2A	0.097	0.097	4.5	0.435
R1.2B	R1.2C	R1.2B	0.091	0.188	4.4	0.826
R1.2C-LS	R1.2	R1.2C	0.064	0.252	4.3	1.082

Reitz Lake District

R1.1	R1.3	R1.1	0.047	0.176	4.4	0.774
R1.2	R1.3	R1.2	0.080	0.332	4.2	1.393
R1.3	R1.4		0.000	0.508	4.0	2.030
R1.4	R1.7	R1.3	0.053	0.560	4.0	2.240
R1.6	R1.7	R1.6	0.046	0.046	4.5	0.206
R1.7	LS-R		0.000	0.606	4.0	2.423

R2.1	R2.3	R2.1	0.070	0.070	4.5	0.316
R2.2	R2.3	R2.2	0.101	0.101	4.4	0.444
R2.3	R2.4		0.000	0.171	4.4	0.753
R2.4	R2.5	R2.3	0.028	0.199	4.4	0.874
R2.5	R2.6	R2.4	0.105	0.303	4.2	1.274

R3.1	R3.3	R3.1	0.013	0.013	4.5	0.056
R3.2	R3.3	R3.2	0.084	0.084	4.5	0.377
R3.3	R4.6		0.000	0.096	4.5	0.433

R4.1	R4.2	R4.1	0.060	0.060	4.5	0.269
R4.2	R4.4	R4.2	0.052	0.111	4.4	0.490
R4.3	R4.4	R4.3	0.088	0.088	4.5	0.397
R4.4	R4.5	R4.4	0.022	0.221	4.3	0.952
R4.5	R4.6		0.000	0.221	4.3	0.952

R5.1	R5.2	R5.1	0.064	0.064	4.5	0.290
R4.6	R5.2	R3 & R4	0.318	0.382	4.2	1.605
R5.2	R5.3		0.000	0.447	4.1	1.831

R6.1	R5.3	R6.1	0.064	0.064	4.5	0.290
R6.2	R5.3	R6.2	0.012	0.076	4.5	0.342
R5.3	R2.6	R5	0.447	0.523	4.0	2.090
R2.6	R6.3	R2	0.303	0.826	3.7	3.056
R6.3	R6.4	R6.3	0.064	0.890	3.7	3.292
R6.4	LS-R	R6.4	0.062	0.952	3.7	3.522

Table A - Design Flows

From Point	To Point	Sub District Added	Average Flow Added (MGD)	Cumulative Average Flow (MGD)	Peak Flow Factor	DESIGN FLOW (MGD)

SE Development District

S1.1	S1.3	S1.1	0.063	0.063	4.5	0.284
S1.2	S1.3	S1.2	0.099	0.099	4.5	0.446
S1.3	S1.4		0.000	0.162	4.4	0.714
S1.5	S1.4	S1.3	0.065	0.228	4.3	0.979
S1.4-L	S1.5A		0.063	0.291	4.3	1.251
S1.5A	S1.6	S1.4	0.063	0.291	4.3	1.251

S2.1	S2.3	S2.1	0.064	0.064	4.5	0.290
S2.2	S2.3	S2.2	0.046	0.046	4.5	0.205
S2.3	S2.4		0.000	0.110	4.4	0.484
S2.4	S2.5	S2.3	0.045	0.155	4.4	0.681
S2.5	S2.6	S2.4	0.055	0.210	4.3	0.902
S2.6	S1.6	S2.5	0.018	0.228	4.3	0.979
S1.6	S4.3			0.639		

S3.3	S3.4	S3.3	0.012	0.012	4.5	0.053
S3.4	S3.2	S3.2	0.028	0.040	4.5	0.181
S3.2	S3.1	S3.1	0.080	0.121	4.4	0.530
S3.1	S1.6		0.000	0.121	4.4	0.530

S4.1	S4.2	S4.1	0.052	0.052	4.5	0.234
S4.2	S4.3	S4.2	0.040	0.092	4.5	0.415
S4.3	S3.5	S4.3	0.061	0.792	3.8	3.010
S4.4	S3.5	S4.4	0.122	0.122	4.4	0.537

S3.5	S5.1	S3, S4, S5.1	0.017	1.051	3.6	3.785
S5.1	S5.2	S5.2	0.057	1.108	3.6	3.989
S7.1	S5.2	S7	1.100	1.100	3.6	3.960
S5.2	S5.4	S5.3	0.038	2.246	3.3	7.411
S5.3	S5.4	S5.4	0.048	0.048	4.5	0.215
S5.4	S5.5		0.000	2.293	3.3	7.568

S6.1	S5.5	S6.1	0.117	0.117	4.4	0.514
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S5.5	LS-SE		0.000	2.458	3.3	8.112
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Table B
Pipe Design Capacity Table
 July 2024

Gravity Sanitary Sewer Pipe								
Slope	Size	Percent Full	Full Capacity		Reserve Capacity		Design Capacity	
(%)	(in)	Design (%)	(gpm)	(MGD)	(gpm)	(MGD)	(gpm)	(MGD)
0.40	8	50%	445.9	0.642	223.0	0.321	223.0	0.321
0.28	10	50%	676.5	0.974	338.2	0.487	338.2	0.487
0.22	12	50%	975.1	1.404	487.5	0.702	487.5	0.702
0.15	15	55%	1,459.8	2.102	656.9	0.946	802.9	1.156
0.12	18	60%	2,123.2	3.057	849.3	1.223	1,273.9	1.834
0.10	21	65%	2,923.6	4.210	1,023.3	1.473	1,900.3	2.736
0.08	24	70%	3,733.4	5.376	1,120.0	1.613	2,613.4	3.763
0.067	27	75%	4,677.4	6.736	1,169.4	1.684	3,508.1	5.052
0.058	30	80%	5,763.7	8.300	1,152.7	1.660	4,611.0	6.640
0.046	36	85%	8,346.8	12.019	1,252.0	1.803	7,094.8	10.216
Minimum Slope according to "10 state standards"	Pipe Diameter (Inches)	Percent Full used in Design Calculation (%)	100% Full Pipe Capacity (gpm)	100% Full Pipe Capacity (MGD)	Reserve Capacity in the Pipe at the Design Conditions (gpm)	Reserve Capacity in the Pipe at the Design Conditions (MGD)	Capacity in the Pipe at the Design Conditions (gpm)	Capacity in the Pipe at the Design Conditions (MGD)

Mannings N

0.010

Value Used In
Capacity Calculations

Forcemain Sanitary Sewer Pipe						
Size	Hz/W C	5 fps	2 fps	Percent	Design	Design
(in)	Values (unitless)	Capacity (gpm)	Capacity (gpm)	Full (%)	Flow (gpm)	Flow (MGD)
4	100	195	80	100%	195.0	0.281
6	110	450	170	100%	450.0	0.648
8	110	800	310	100%	800.0	1.152
10	120	1275	465	100%	1275.0	1.836
12	120	1800	700	100%	1800.0	2.592
16	130	3400	1250	100%	3400.0	4.896
18	140	4250	1600	100%	4250.0	6.120
24	140	7500	2750	100%	7500.0	10.800
Pipe Diameter (Inches)	Hazen-Williams Coefficient Values for the Pipe (unitless)	Capacity in the Forcemain at Max. Velocity (10 state Standard = 5 fps) (gpm)	Capacity in the Forcemain at Min. Velocity (10 state Standard = 2 fps) (gpm)	Percent of Capacity used in Design (%)	Design Capacity of Forcemain (gpm)	Design Capacity of Forcemain (MGD)

Table C - Trunk Sewer Design Flow And Capacity Information

										At Minimum Slope		
From Point	To Point	Design Flow (MGD)	Pipe Existing/ Proposed	Size (in)	Pipe Material	Length (ft)	Upstream MH		Downstream Inv Elev (ft)	Min Slope (%)	Capacity (MGD)	% Full Design Flow/ Capacity
							Rim Elev (ft)	Inv Elev (ft)				
Northeast Area												
R1.1A	R1.1	0.568	Proposed	12	PVC	3500	990	978.00	951.75	0.220%	1.407	40.38%
R1.2A	R1.2B	0.435	Proposed	10	PVC	2800	1008.02	996.02	968.02	0.220%	0.865	50.29%
R1.2B	R1.2C	0.826	Proposed	15	PVC	1450	980.09	968.02	965.85	0.150%	2.107	39.19%
R1.2C-LS	R1.2	1.082	Proposed	8	FM-PVC	2200	1002.00	965.85	965.85		1.152	93.91%
Reitz Lake District												
R1.1	R1.3	0.774	Proposed	15	PVC	3100	966.90	951.75	940.9	0.150%	2.107	36.74%
R1.2	R1.3	1.393	Proposed	18	PVC	2800	1002.12	987.12	940.9	0.120%	3.064	45.46%
R1.3	R1.4	2.030	Proposed	21	PVC	1050	955.07	940.9	939.85	0.100%	4.219	48.12%
R1.4	R1.7	2.240	Proposed	21	PVC	2650	961.47	939.85	937.20	0.100%	4.219	53.10%
R1.6	R1.7	0.206	Proposed	8	PVC	2900	1002.00	990.00	946.50	0.400%	0.644	31.99%
R1.7	LS-R	2.423	Proposed	21	PVC	1850	961.61	937.20	923.33	0.100%	4.219	57.44%
R2.1	R2.3	0.316	Proposed	8	PVC	3100	1024.56	1000.6	932.4	0.400%	0.644	49.09%
R2.2	R2.3	0.444	Proposed	10	PVC	3100	1008.64	996.40	934.4	0.280%	0.976	45.50%
R2.3	R2.4	0.753	Proposed	12	PVC	900	946.96	932.4	930.42	0.220%	1.407	53.52%
R2.4	R2.5	0.874	Proposed	15	PVC	2850	954.83	930.42	926.145	0.150%	2.107	41.51%
R2.5	R2.6	1.274	Proposed	15	PVC	1300	957.43	926.145	924.195	0.150%	2.107	60.47%
R3.1	R3.3	0.056	Proposed	8	PVC	2900	957.27	945.27	923.52	0.400%	0.644	8.75%
R3.2	R3.3	0.377	Proposed	10	PVC	3200	951.12	931.80	922.84	0.280%	0.976	38.61%
R3.3	R4.6	0.433	Proposed	10	PVC	1000	941.17	922.84	920.04	0.280%	0.976	44.38%
R4.1	R4.2	0.269	Proposed	8	PVC	3500	1005.31	992.32	939.82	0.400%	0.644	41.77%
R4.2	R4.4	0.490	Proposed	10	PVC	2200	958.69	939.82	933.66	0.280%	0.976	50.18%
R4.3	R4.4	0.397	Proposed	10	PVC	2500	985.25	973.25	935.75	0.280%	0.976	40.63%
R4.4	R4.5	0.952	Proposed	15	PVC	2000	956.27	933.66	930.66	0.150%	2.107	45.18%
R4.5	R4.6	0.952	Proposed	15	PVC	1700	948.37	930.66	928.11	0.150%	2.107	45.18%
R5.1	R5.2	0.290	Proposed	8	PVC	3000	986.00	974.00	927.50	0.400%	0.644	45.08%
R4.6	R5.2	1.605	Proposed	18	PVC	800	942.04	920.04	919.08	0.120%	3.064	52.37%
R5.2	R5.3	1.831	Proposed	18	PVC	1400	941.78	919.08	917.40	0.120%	3.064	59.75%
R6.1	R6.2	0.290	Proposed	8	PVC	3800	960.81	948.81	922.21	0.400%	0.644	45.08%
R6.2	R5.3	0.342	Proposed	8	PVC	400	943.28	922.21	917.40	0.400%	0.644	53.20%
R5.3	R2.6	2.090	Proposed	21	PVC	1100	938.86	917.40	916.30	0.100%	4.219	49.55%
R2.6	R6.3	3.056	Proposed	24	PVC	300	938.76	916.30	916.06	0.080%	5.388	56.72%
R6.3	R6.4	3.292	Proposed	24	PVC	2600	943.80	916.06	913.98	0.080%	5.388	61.09%
R6.4	LS-R	3.522	Proposed	24	PVC	2800	942.80	913.98	911.74	0.080%	5.388	65.36%
LS-R	L-70	5.945	Proposed	18	FM-PVC	2500	942.94	911.74	943.25		6.120	97.14%

Table C - Trunk Sewer Design Flow And Capacity Information

										At Minimum Slope		
From Point	To Point	Design Flow (MGD)	Pipe Existing/ Proposed	Size (in)	Pipe Material	Length (ft)	Upstream MH		Downstream Inv Elev (ft)	Min Slope (%)	Capacity (MGD)	% Full Design Flow/ Capacity
							Rim Elev (ft)	Inv Elev (ft)				
SE Development District												
S1.1	S1.3	0.284	Proposed	8	PVC	2900	933.90	921.90	910.30	0.400%	0.644	44.13%
S1.2	S1.3	0.446	Proposed	10	PVC	2600	1015.71	1003.71	919.21	0.280%	0.976	45.73%
S1.3	S1.4-LS	0.714	Proposed	12	PVC	800	933.20	919.21	917.45	0.220%	1.407	50.75%
S1.5	S1.4-LS	0.979	Proposed	15	PVC	2100	963.01	939.21	918.21	0.150%	2.107	46.48%
S1.4-LS	S1.5A	1.251	Proposed	10	FM-PVC	2250	952	918.21	901.47		1.836	68.14%
S1.5A	S1.6-LS	1.251	Proposed	18	PVC	2600	964.32	939.32	908.12	0.120%	3.064	40.83%
S2.1	S2.3	0.290	Proposed	8	PVC	4200	1025.00	1010.00	959.60	0.400%	0.644	45.06%
S2.2	S2.3	0.205	Proposed	8	PVC	1800	1000.00	988.00	961.00	0.400%	0.644	31.82%
S2.3	S2.4	0.484	Proposed	10	PVC	400	973.93	959.60	958.48	0.280%	0.976	49.55%
S2.4	S2.5	0.681	Proposed	12	PVC	2000	980.50	958.48	938.48	0.220%	1.407	48.40%
S2.5	S2.6	0.902	Proposed	15	PVC	2300	955.05	938.48	935.03	0.150%	2.107	42.82%
S2.6	S1.6-LS	0.979	Proposed	15	PVC	1800	949.42	935.03	901.47	0.150%	2.107	46.47%
S1.6-LS	S4.3	0.979	Proposed	8	FM-PVC	1200	925.93	901.47	977.03		1.152	84.98%
S3.3	S3.4	0.053	Proposed	8	PVC	1400	927.51	912.51	906.91	0.400%	0.644	8.29%
S3.4	S3.2	0.181	Proposed	8	PVC	700	926.13	906.91	904.11	0.400%	0.644	28.19%
S3.2	S3.1	0.530	Proposed	12	PVC	1400	934.43	904.11	902.43	0.120%	1.039	51.04%
S3.1	S1.6-LS	0.530	Proposed	12	PVC	800	926.83	902.43	901.47	0.120%	1.039	51.04%
S4.1	S4.2	0.234	Proposed	8	PVC	2500	989.03	977.03	967.03	0.400%	0.644	36.31%
S4.2	S4.3	0.415	Proposed	10	PVC	400	1000.95	967.03	965.91	0.280%	0.976	42.47%
S4.3	S3.5	3.010	Proposed	24	PVC	2700	1007.05	977.05	952.57	0.080%	5.388	55.86%
S4.4	S3.5	0.537	Proposed	10	PVC	4200	1004.00	992.00	952.57	0.280%	0.976	55.00%
S3.5	S5.1	3.785	Proposed	24	PVC	1200	982.72	952.57	914.17	0.080%	5.388	70.24%
S5.1	S5.2	3.989	Proposed	27	PVC	2700	927.39	914.17	912.36	0.067%	6.750	59.10%
S7.1	S5.2	3.960	Proposed	27	PVC	550	935.95	913.10	912.36	0.067%	6.750	58.66%
S5.2	S5.4	7.411	Proposed	36	PVC	2200	930.77	912.36	911.35	0.046%	12.046	61.52%
S5.3	S5.4	0.215	Proposed	8	PVC	6060	1011.99	996.19	911.35	0.400%	0.644	33.45%
S5.4	S5.5	7.568	Proposed	36	PVC	900	931.07	911.35	910.94	0.046%	12.046	62.83%
S6.1	S5.5	0.514	Proposed	10	PVC	4600	1005.48	979.93	910.93	0.280%	0.976	52.70%
S5.5	LS-SE	8.112	Proposed	36	PVC	500	932.70	910.93	910.70	0.046%	12.046	67.35%
LS-SE	EX MH 178	4.056	Existing	16	FM-PVC	1975	936.78	910.70	992.31		4.896	82.84%
LS-SE	EX MH 178	4.056	Proposed	16	FM-PVC	1975	936.78	910.70	992.31		4.896	82.84%