

**WAYZATA CITY COUNCIL MEETING AGENDA**  
Wayzata City Hall Community Room, 600 Rice Street  
Tuesday, October 7, 2014

**DINNER AVAILABLE FOR WAYZATA CITY COUNCIL-CONFERENCE RM. (4:30 PM)**

**CLOSED SPECIAL MEETING OF THE CITY COUNCIL TO DISCUSS THE CITY'S  
LABOR NEGOTIATION STRATEGY PURSUANT TO MINN. STAT. 13D.03 -  
CONFERENCE RM. (5:00 PM)**

**WORKSHOP TOPICS FOR DISCUSSION:**

- 1. SECTION FOREMAN HOUSE (APPROX. 5:30 PM)**
- 2. CIP WITH SPECIAL EMPHASIS ON PARKS & TRAILS (6:00 PM OR  
IMMEDIATELY FOLLOWING)**

**7:00 PM - CITY COUNCIL MEETING**

| ITEM | DESCRIPTION                                                                                                                    | PRESENTER | TT | JA | KW | AM | BA | VOTE | PAGE # |
|------|--------------------------------------------------------------------------------------------------------------------------------|-----------|----|----|----|----|----|------|--------|
| 1    | Roll Call                                                                                                                      |           |    |    |    |    |    |      |        |
| 2    | Approve Agenda                                                                                                                 |           |    |    |    |    |    |      |        |
| 3    | Public Forum - 15 Minutes (3 min/person)                                                                                       |           |    |    |    |    |    |      |        |
| 4    | Consent Agenda                                                                                                                 |           |    |    |    |    |    |      | 2      |
| a.   | Approval of Minutes of September 16, 2014 and Workshop Minutes of: September 16, 2014, September 29, 2014 & September 30, 2014 |           |    |    |    |    |    |      |        |
| b.   | Approval of Check Register                                                                                                     |           |    |    |    |    |    |      |        |
| c.   | Municipal Licenses Which Received Administrative Approval (Informational Only)                                                 |           |    |    |    |    |    |      |        |
| d.   | Approval of Municipal Licenses                                                                                                 |           |    |    |    |    |    |      |        |
| 5    | Public Hearings                                                                                                                |           |    |    |    |    |    |      |        |
| a.   | Public Hearing for Wellhead Protection Plan Part 2, and Submittal of Plan to MDH                                               | Dudinsky  |    |    |    |    |    |      | 25     |
| b.   | Continue Public Hearing for Business Subsidy Criteria & Public Financing Policy                                                | Nelson    |    |    |    |    |    |      | 146    |
| 6    | New Business                                                                                                                   |           |    |    |    |    |    |      |        |
| a.   | Consider Resolution - Agar Request for Conveyance of City Land - 1611 Hollybrook Rd.                                           | Gadow     |    |    |    |    |    |      | 171    |
| b.   | Consider Utilizing Section Foreman's House BNSF Grant for Report/Study                                                         | Gadow     |    |    |    |    |    |      | 186    |
| c.   | Consider Award of Bid for Replacement of Klapprich Park Hockey Boards                                                          | Dudinsky  |    |    |    |    |    |      | 217    |
| d.   | Consider Award of Bid for Fall of 2014 Tree Planting Project                                                                   | Dudinsky  |    |    |    |    |    |      | 220    |
| e.   | Consider 1st Reading of Ordinance 748 Amending Chapter 202 (Police Dept.) of City Code to Address Background Investigations    | Risvold   |    |    |    |    |    |      | 229    |
| f.   | Consider Selection of Owners Representative for Programming and Pre-Design for Mill Street Parking Structure                   | Nelson    |    |    |    |    |    |      | 234    |
| 7    | City Manager's Report and Discussion Items                                                                                     |           |    |    |    |    |    |      |        |
| 8    | Public Forum (as necessary)                                                                                                    |           |    |    |    |    |    |      |        |
| 9    | Adjournment                                                                                                                    |           |    |    |    |    |    |      |        |

**Meeting Rules of Conduct:**

Turn in white card for public forum and blue card for agenda item  
Give name and address  
Indicate if representing a group  
Limit remarks to 3 minutes

**Upcoming Meetings:**

City Council - October 21 & WEDNESDAY, November 5, 2014  
Planning Commission - October 20 & November 3, 2014

Members of the City Council and some staff members may gather at the Wayzata Bar and Grill immediately after the meeting for a purely social event. All members of the public are welcome.

**WAYZATA CITY COUNCIL**  
**DRAFT - MEETING MINUTES**  
**September 16, 2014**

**AGENDA ITEM 1. Call to Order and Roll Call.**

Mayor Willcox called the meeting to order at 7 p.m. Council Members present: Amdal, Anderson, Mullin, and Tanner. Also present: City Manager Nelson, Administrative Services Director Uram, Public Works Director Dudinsky, and City Attorney Meller.

**AGENDA ITEM 2. Approve Agenda.**

Mr. Tanner made a motion, seconded by Mr. Amdal, to approve the agenda, as presented. The motion carried 5/0.

**AGENDA ITEM 3. Public Forum – 15 Minutes (3 minutes per person).**

**a. Basketball Fever in Wayzata - Update on Podia from Wayzata Historical Society**  
Sue Sorrentino, Historical Society, and Dan Baasen, representing Wayzata High School Class of 1960, showed the Council an example of the podia commemorating Wayzata High School winning the State basketball championship in 1959 and recognizing the Coach.

Mayor Willcox added that this was a huge deal because there were not any divisions in sports at that time resulting in a school as small as Wayzata competed against all schools in the area including the large ones.

**b. Event for 10th Anniversary of Big Woods**

Mary Bader, 117 Peavey Lane, invited everyone to attend the event to celebrate the 10th Anniversary of the Big Woods. The event is September 25th from 4 p.m. to 7 p.m. There will be music, a scavenger hunt for kids, a raptor presentation, guided tours of the woods, and Mayor Willcox will speak. Ms. Bader asked everyone to check utility bills for their invitation.

The Council asked Ms. Bader to share the exact location and parking details. Ms. Bader answered that it was the retreat entrance east of Colonial Square. She also shared that there will be parking attendants, but parking is limited so carpooling is encouraged.

**c. Wayzata Chamber of Commerce Person of the Year**

Becky Pierson, Wayzata Chamber of Commerce, announced that Mayor Willcox was named the Chamber of Commerce Person of the Year. A luncheon will be held on October 9th at the Wayzata Country Club for the official presentation and everyone is invited to attend.

The Council congratulated Mayor Willcox and he, in return, thanked the Council and Ms. Pierson.

**AGENDA ITEM 4. Consent Agenda.**

Mr. Amdal made a motion, seconded by Mrs. Anderson, to approve the consent agenda:

- a. Approval of Workshop Minutes of September 2, 2014 and Minutes of September 2, 2014
- b. Approval of Check Register
- c. Municipal licenses which received administrative approval (informational only)
- d. Police Activity Report
- e. Building Activity Report

The motion carried 5/0.

**AGENDA ITEM 5. Public Hearing.**

- a. Consider Resolution No. 27-2014 Business Subsidy Criteria & Public Financing Policy



Ms. Nelson reported that as a part of the Redevelopment Plan created by the HRA and City Council in May of 2013, a recommendation was made to create Business Subsidy Criteria and a Public Financing Policy. She asked the Council to open the public hearing tonight and to continue the public hearing until the following City Council meeting because of one issue that needed to be resolved. Ms. Nelson asked Jason Aarsvold from Ehlers and Associates to explain the policy in more detail.

Jason Aarsvold, Ehlers and Associates, shared that the policy adheres to State Statutes, provides best practices for evaluating requests for public assistance, and is tailored to Wayzata's specific needs. The HRA provided direction on specific issues as follows: public assistance will not be provided where project costs are inflated as a result of overpayment for land, public assistance will not be provided for rental housing, forgiveness of City fees would generally not be considered, and the statutory wage floor should be set at 150% of federal minimum wage.

Mr. Aarsvold answered questions from the Council concerning the difference between TIF and tax abatement and whether the same standards apply to non-profits such as schools.

The Council requested a workshop with the HRA to better understand the policy. Ms. Nelson answered that the workshop would be arranged, but it would have to be pushed back until the following HRA meeting. The Council decided to invite an HRA member to the following City Council meeting.

Mayor Willcox opened the public hearing at 7:36 p.m. There was no input. Mayor Willcox continued the public hearing at 7:37 p.m. until the October 7, 2014 City Council meeting.

#### **AGENDA ITEM 6. New Business.**

##### **a. Second Reading of Ordinance No. 746 Amending Zoning Ordinance to Allow Micro-production Facilities and Taprooms/Tasting Rooms as Conditional Uses and Second Reading of Ordinance No. 747 Authorizing the Issuance of Licenses for Micro-production Facilities, On-Sale Taprooms, and On-Sale Tasting Rooms**

Mayor Willcox shared that Wayzata Brew Works has cancelled their application for approval of an Amendment to an existing Planned Unit Development Conditional Use Permit and site plan for 294 Grove Lane. Conditional approval has lapsed and a new application would need to be submitted if another business wanted to apply for the same site.

Ms. Nelson reported that at the September 2<sup>nd</sup> City Council meeting, the Council reviewed two draft ordinances that pertained to allowing micro-production facilities and their related components. Ordinance No. 746 was for an amendment to the City's Zoning Ordinance to allow micro-production facilities through a Conditional Use Permit process in certain commercial zoning districts. Ordinance No. 747 amended the City's General City Code pertaining to liquor licensing requirements and procedures to permit the operations of micro-production facilities. Ordinance No. 747 also establishes the number of licenses that the City may grant for micro-production facilities and associated taprooms and tasting rooms. The City Council had adopted the first reading of Ordinance Nos. 746 and 747 on a 3-2 vote. Both Ordinances Nos. 746 and 747 require City Council approval of a second reading prior to becoming effective.

The Council discussed the pros and cons of allowing micro-production facilities versus micro-breweries and brew pubs. Mr. Tanner communicated that he was in favor of changing it to micro-breweries and brewpubs only. He stated that at a micro-distillery or micro-winery, a person could only taste and would not be able to purchase the product. Mayor Willcox indicated he was still in favor of micro-breweries and brewpubs. He believed that allowing all micro-production facilities sends the wrong message.

The Council discussed tabling this to a future date and scheduling a workshop. Ms. Nelson answered that the Council could make minor changes, but if the desire was to make major

1 changes, they would need to start the process over. The Council decided to move forward with  
2 the vote.

3 Mrs. Anderson made a motion, seconded by Mr. Amdal, to Adopt the Second Reading of  
4 Ordinance #746 Amending Wayzata's Zoning Ordinance to Allow Micro-production Facilities  
5 and Taprooms/Tasting Rooms as Conditional Uses and to Adopt the Second Reading of  
6 Ordinance No. 747 Authorizing the Issuance of Licenses for Micro-production Facilities, On-Sale  
7 Taprooms, and On-Sale Tasting Rooms. The motion carried 3/2 (Tanner, Willcox).  
8

9 **b. Consider Resolution #24-2014 Certifying the Preliminary Property Tax Levy**  
10 **Payable for 2015**

11 Mr. Uram presented the 2015 preliminary general fund budget, 2015 proposed transfers  
12 spreadsheet, and resolution approving the 2015 preliminary levy. The general fund budget may  
13 be refined until final adoption in December. In order to comply with State Statute, the  
14 preliminary levy must be certified to Hennepin County by September 30, 2014. The final budget  
15 and levy will be presented to the Council for review and approval in early December. Mr. Uram  
16 noted that the final levy may not exceed the amount of preliminary levy and that the preliminary  
17 levy had increased by an amount just shy of 2%.

18 Mr. Mullin stated that it was his desire to see a year of zero increase and that he believed  
19 they were on track to do that this year. Mr. Mullin added he hoped that the levy increase could be  
20 lowered by the time the final budget is adopted.

21 Mr. Tanner made a motion, seconded by Mr. Amdal, to Adopt Resolution No. 24-2014  
22 Certifying to the County Auditor the Preliminary Property Tax Levy Payable for 2014. The  
23 motion carried 4/1 (Mullin).  
24

25 **c. Consider Resolution #25-2014 Adopting Municipal Fees for 2015**

26 Mr. Uram reported on changes made to the fee schedule for 2015. He highlighted three main  
27 changes. The first is an increase in fees for violation of liquor ordinances to address the more  
28 serious nature of those violations. Second, beach passes would no longer be sold to non-  
29 residents. Lastly, a tiered structure had been implemented for special events in order to support  
30 local, smaller organizations.

31 The Council asked if there was an increase in all of the fees. Mr. Uram answered that  
32 Staff reviewed the fee schedule and made changes only where necessary. The majority of fees  
33 received small inflationary increases, but some were unchanged or decreased.

34 Mrs. Anderson made a motion, seconded by Mr. Amdal, to Adopt Resolution No. 25-  
35 2014 Adopting Municipal Fees for 2015. The motion carried 5/0.  
36

37 **d. Presentation of Telecommunications Compound Site Options**

38 Mayor Willcox acknowledged receipt of a petition at the September 2, 2014 City Council  
39 meeting signed by 500 citizens in favor of removing telecommunications equipment from North  
40 Klapprich Park. He shared that the Council will keep their wishes in mind as they hear the results  
41 of the study and go forward.

42 Mr. Dudinsky shared that at the April 15, 2014 City Council meeting Short Elliott  
43 Hendrickson Inc. (SEH) was authorized to analyze telecommunications site improvement options  
44 for the current telecommunications site located just north of the existing City water tower. The  
45 Council was shown a draft of the feasibility study at a workshop held on August 6, 2014. SEH  
46 presented the options that were being considered and asked for comments as they continued to  
47 refine the feasibility report. It was noted that questions raised at the workshop are addressed in  
48 the final draft of the study.

49 Wayne Houle, Project Manager from SEH, presented an outline of the feasibility study  
50 and covered the four options. The goals of the study sought to improve the aesthetics, alleviate  
51 noise, reduce impact of accessing the equipment, and improvements completed within a

1 reasonable/economic time frame. Mr. Houle stated that a question had been asked at the  
 2 workshop concerning relocating the telecommunications equipment to a more remote location  
 3 such as on the south side of Park Avenue or if it could be accessed wirelessly. He explained that  
 4 500 feet is the farthest distance that equipment can be from an antenna. This would place the  
 5 equipment approximately 300 feet from the base of the tower and would cause the potential  
 6 location along Park Avenue to be adjacent to the playground parking lot. Also, the amount of  
 7 data cannot currently be transmitted via a wireless system. The four feasible options were  
 8 presented. The first option removed the fence and added berm and vegetation. Option 2A  
 9 created an inset compound and temporarily improved the existing compound. Option 2B  
 10 constructed a walled compound and temporarily improved the existing compound. Option 2C  
 11 constructed an underground compound and temporarily improved the existing compound. The  
 12 costs ranged from \$61,500 to \$478,800 depending on the option chosen.

13 Dale Romsos, Construction Project Manager from SEH, answered questions from the  
 14 Council concerning moving the tower, coverage, and service. Mr. Romsos answered that if the  
 15 tower was moved even one block it could create gaps in coverage that would require additional  
 16 towers. He shared that the water tower is considered a macro-site and that additional sites were  
 17 already needed. The additional sites are called micro-sites, are much smaller, and can be well  
 18 hidden.

19 Mary Bader, 117 Peavey Lane, asked for clarification over some issues from Mr.  
 20 Romsos. She asked the Council to take another look at the public works site and suggested that  
 21 the options considered were a lot of money to not fix the problem.

22 Lucy Bruntjen, 402 Gardner Street, suggested that a macro-site could be created at the  
 23 public work site and mentioned that the main issue is access for large trucks to the tower.

24 Susan Hughes, 416 Gardner Street, stated that the suggested berm will only take away  
 25 more green space from the Park.

26 Mayor Willcox asked for the turning radii of the larger trucks. Mr. Houle answered  
 27 that the larger trucks will still have to drive over some grass and the cranes will still have to come  
 28 from the northern driveway.

29 Cathy Carlson, 226 Minnetonka Avenue, expressed concern over the truck traffic and the  
 30 damage it causes to the neighborhood roads.

31 The Council discussed all of the information shared at length. Mrs. Anderson wanted to  
 32 create a business plan in order to not be dependent on this revenue source and continue  
 33 communications to create a bigger plan that looks to the future. Mr. Tanner voiced concern over  
 34 the high cost of the best option considering that the best option is still not a real solution. Mr.  
 35 Amdal shared that this has been an ongoing problem for over ten years. He believed it was time  
 36 to either move the site or lose it to the private sector. Mayor Willcox expressed concern over  
 37 losing the revenue source, which would cause taxes to increase, and losing the vendors if the site  
 38 was moved. Mr. Mullin offered a compromise that aimed to work backwards from 2020 when  
 39 the City would be spending a significant amount of money to refurbish and repaint the tower.  
 40 Mr. Mullin's proposal includes a 5-step process as follows: Step 0. Adjust CIP to reserve money  
 41 in order to not be dependent on the revenue starting with \$30,000-50,000 this year. Step 1. Put  
 42 an ordinance in place to defer unintended consequences to coverage. Step 2. Spend \$50,000 as a  
 43 temporary fix to the current site to impact the visuals. Step 3. Move all ground equipment to  
 44 right-of-way off Gardner Street. Step 4. Erect a monopole on public land or purchased private  
 45 land to move antennas off the water tower.

46 The Council decided to take Mr. Mullin's proposal to a workshop and continue working  
 47 on the best solution for everyone involved.

48 Mrs. Anderson requested a formal audio recording of the telecommunications workshop  
 49 for the public. She stated that even though the workshops are open to the public, it is hard to hear  
 50 what is going on and are scheduled during the work day making it hard for most people to attend.  
 51 The Council discussed the pros and cons of recording the workshops and each offered their

opinion. Ms. Nelson cautioned the Council that once the recordings were made, they would need to be kept, maintained, and made available. The Council decided to amplify the telecommunications workshop to improve the experience for those attending the workshop.

**e. Consider Resolution #26-2014 Granting Cable Franchise Extension Beyond 09-30-2014**

Ms. Nelson reported that the existing Cable Television Franchise Agreement expired on or about July 1, 2013. The City had adopted resolutions extending the franchise term through September 30, 2014. An additional extension of the franchise term is required so that Staff can continue in negotiations with Mediacom to reach a mutually acceptable franchise terms and conditions. Negotiations are anticipated to be complete in the next two months.

Mr. Tanner made a motion, seconded by Mr. Amdal, to Adopt Resolution No. 26-2014 Granting Mediacom a Franchise Extension through December 31, 2014. The motion carried 5/0.

Mrs. Anderson suggested negotiating senior discounts for those financially eligible into the contract with Mediacom. Ms. Nelson responded that she would ask Mediacom and see where it went from there.

**AGENDA ITEM 7. City Manager's Report and Discussion Items.**

**a. Update on Mill Street Parking Request for Qualifications**

Ms. Nelson shared that three firms were interviewed this morning. She asked the Council for feedback. The Council decided to organize a workshop before the following City Council meeting to discuss the interviews in more detail. The Council mentioned that HRA members would need to attend the workshop and asked for staff to provide their recommendation as well.

**b. Future Calendar Items**

Ms. Nelson announced the following upcoming meetings with Mary DeLaitre on the Lake Effects: September 29th from 5:30 - 7:00 p.m., October 21st, and November 18th. She also shared that absentee voting begins Friday, September 19th.

**d. Announcements**

Ms. Nelson reported that Bushaway construction will start in the next 10 days and that communications have been going out to the affected areas.

Mrs. Anderson shared that the Communications Board would like to hold a joint workshop with the Council. She also requested staff to send out letters to multi-family homes that all election candidates are allowed to go door-to-door.

**AGENDA ITEM 7. Public Forum Continued (if necessary).**

There were no comments.

**AGENDA ITEM 8. Adjournment.**

Mr. Tanner made a motion, seconded by Mrs. Anderson to adjourn. There being no further business, Mr. Willcox adjourned the meeting at 10:12 p.m.

Respectfully submitted,

Becky Malone  
Deputy City Clerk

Drafted by Sarah Peterson, *TimeSaver Off Site Secretarial, Inc.*

**WAYZATA CITY COUNCIL**  
**DRAFT-WORKSHOP MEETING MINUTES**  
**September 16, 2014**

**7:00 AM - INTERVIEWS WITH OWNERS REPRESENTATIVE CONSULTANTS FOR MILL STREET PARKING STRUCTURE PROGRAMMING AND PRE-DESIGN**

Mayor Willcox called the workshop meetings to order at 7:00 a.m. in the Community Room at Wayzata City Hall. Council members present: Amdal, Anderson, Mullin and Tanner. HRA Commissioners present: Petit and Wothe. Also present: City Manager Nelson, City Planner Gadow, Director of Public Service Dudinsky, City Engineer Kelly, and Administrative Services Director Uram.

The group assembled to conduct interviews with three firms that responded to the City's Request for Qualifications (RFQ) for Owners Representative Services to address programming and pre-design for a parking structure on Mill Street. The Council and HRA Commissioners conducted interviews with the following firms: LSA Design, LaSalle-Walker and SourceGroup. A half hour was allocated for each interview. Each firm was asked three questions: 1) To provide an introduction of principals that will be performing work and a brief overview of their firm and how they approach owners representative services; 2) To describe their understanding of the project and related issues, and specific challenges facing Wayzata's downtown; and 3) To provide an overview of two (2) other relevant projects where they have provided very similar services and how they helped their client with managing cost, timeline, resolution of related issues.

**8:30 AM - WORKSHOP ON 165 AND 213 CENTRAL AVE. N. SUBDIVISION CONCEPT**

Mayor Willcox and the following Council members were present: Amdal, Anderson, Mullin and Tanner. Also present: City Manager Nelson, City Planner Gadow, Director of Public Service Dudinsky, and City Engineer Kelly.

Mr. Gadow reminded the Council that on August 5<sup>th</sup>, the Council met with the applicant (Crossdale Development, LLC) in a workshop to discuss the proposed subdivision at 165 and 213 Central Ave. N. He stated the project included a five (5) lot subdivision with private access to the lots on a roadway that would connect Cross St. and Byrondale Ave. N.

Mr. Gadow informed the Council that the applicant asked for this additional workshop to go over a revised concept plan that responds to feedback received on the concerns over cut-thru traffic in the neighborhood. He said the revised concept incorporates 165 and 213 Central Ave. lots, in addition to the adjacent 1015 Cross St. property, for a seven (7) lot subdivision with a twenty (20) foot private access off of Byrondale terminating in a cul-de-sac within the middle of the properties. He stated the revised concept would also include a PUD component, so the proposed roadway could be narrower in width to match existing roadways in the area.

The Council reviewed the concept plans provided by Crossdale Development, LLC. The Council provided feedback on the layout, indicating that the cul-du-sac addresses the cut-thru issue but creates additional hardcover. The Council asked the applicant to look at other alternatives for the roadway, including widening it to twenty four (24) ft. The Council also indicated a preference for five (5) lots rather than the seven (7) proposed. The Council also asked the applicant to consider additional green space and areas for guest parking. The applicant indicated they would continue to work with staff on the concept layout.

The workshop meetings were adjourned at 9:20 a.m.

Respectfully submitted,

Becky Malone, Deputy City Clerk

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**WAYZATA CITY COUNCIL**  
**DRAFT-WORKSHOP MEETING MINUTES**  
**September 29, 2014**

**5:30 PM – WAYZATA LAKE EFFECT WORKSHOP MEETING**

Mayor Willcox called the workshop meeting to order at 5:30 p.m. in the Community Room at Wayzata City Hall. Council members present: Amdal, Anderson, Mullin and Tanner. Also present: City Manager Nelson, City Planner Gadow, and Mary deLaittre with Groundwork, the Foundation for City Building.

The Council discussed with consultant Mary deLaittre how to organize potential projects into a coordinated integrated approach for a request for proposals (RFP) process for architectural/urban design firms, ultimately leading to built out of portions of the framework plan. In addition, the Council discussed how short term fundraising and private donations could be coordinated. Items for the next meeting will be organization structure to carry the process forward and establishing partnership with other jurisdictions that would have a stake in the project build out. The upcoming meetings are scheduled for Oct. 21st and Nov. 18<sup>th</sup>, both at 5pm.

The workshop meeting was adjourned at 7:00 p.m.

Respectfully submitted,

Becky Malone  
Deputy City Clerk

**WAYZATA CITY COUNCIL**  
**DRAFT-WORKSHOP MEETING MINUTES**  
**September 30, 2014**

**7:00 AM – FOLLOW-UP ON INTERVIEWS WITH OWNERS REPRESENTATIVE FIRMS FOR  
MILL STREET PARKING STRUCTURE PROGRAMMING AND PRE-DESIGN**

Mayor Willcox called the workshop meeting to order at 7:00 a.m. in the Community Room at Wayzata City Hall. Council members present: Amdal, Anderson, Mullin and Tanner. HRA Commissioners present: Petit and Wothe. Also present: City Manager Nelson, City Planner Gadow, and Administrative Services Director Uram.

The group assembled to discuss the interviews that were conducted on September 16, 2014 with the three firms that responded to the City's Request for Qualifications (RFQ) for Owners Representative Services. The three firms interviewed were: LSA Design, LaSalle-Walker, and SourceGroup. The group discussed how each firm responded to the three questions asked of them: 1) To provide an introduction of principals that will be performing work and a brief overview of their firm and how they approach owners representative services; 2) To describe their understanding of the project and related issues, and specific challenges facing Wayzata's downtown; and 3) To provide an overview of other relevant projects where they have provided very similar services and how they helped their client with managing cost, timeline, resolution of related issues. The Council discussed how each firm would best meet the city's needs to address programming and pre-design for a parking structure. Staff also discussed the preference to utilize Jay Lindgren with Dorsey & Whitney for legal counsel for the project. The Council/HRA representative consensus was to move forward LSA Design for owners Representative services. The Council directed staff to bring a preliminary agreement forward for consideration at the October 7<sup>th</sup> City Council meeting.

The workshop meeting was adjourned at 8:00 a.m.

Respectfully submitted,

Becky Malone  
Deputy City Clerk

**\*Check Detail Register©**

September 2014

Check Amt Invoice Comment

**10100 Anchor Bank**

Paid Chk# 096345 9/17/2014 LEXUS

G 630-20300 Deposits Payable \$1,678.25 CVR REFUND CVR REFUND

Total LEXUS \$1,678.25

Paid Chk# 096346 9/17/2014 MUNICIPAL CLERKS &amp; FINANCE

E 101-41500-433 Dues, Licensing &amp; Seminars \$15.00 SEMINAR RE SEMINAR REGISTRATION

Total MUNICIPAL CLERKS &amp; FINANCE \$15.00

Paid Chk# 096347 9/17/2014 RUDY LUTHER

G 630-20300 Deposits Payable \$3,359.63 CVR REFUND CVR REFUND

Total RUDY LUTHER \$3,359.63

Paid Chk# 096348 9/17/2014 SPRINT

E 101-42100-323 Radio Units \$265.70 134573312-15 SERVICE

Total SPRINT \$265.70

Paid Chk# 096349 9/17/2014 VERIZON WIRELESS

E 101-42100-323 Radio Units \$320.10 9730220189 SERVICE

Total VERIZON WIRELESS \$320.10

Paid Chk# 096350 9/22/2014 AFSCME COUNCIL

G 101-21709 PW Union dues \$312.32 SEPT.2014 PW UNION DUES - SEPT.2014

Total AFSCME COUNCIL \$312.32

Paid Chk# 096351 9/22/2014 ALLEGRA PRINT &amp; IMAGING

E 404-40000-499 Miscellaneous \$1,158.00 108872 NEW PARKS/TRAILS BROCHURE

Total ALLEGRA PRINT &amp; IMAGING \$1,158.00

Paid Chk# 096352 9/22/2014 AMERICAN OFFICE PRODUCTS

E 101-42100-200 Office Supplies (GENERAL) \$93.65 137029 PD SUPPLIES

Total AMERICAN OFFICE PRODUCTS \$93.65

Paid Chk# 096353 9/22/2014 BEST &amp; FLANAGAN

E 101-41500-304 Legal Fees \$112.50 445811 CUBICLES PLUS ISSUE

E 101-41500-304 Legal Fees \$637.50 445812 CROSSDALE LLC

G 101-20310 Escrow \$412.50 445812 CROSSDALE LLC ESCROW PROJECT

Total BEST &amp; FLANAGAN \$1,162.50

Paid Chk# 096354 9/22/2014 BROOKDALE CHRYSLER, JEEP,DODGE

E 101-42100-404 Repairs/Maint - Machin/Equip \$70.89 250816 PD REPAIRS

Total BROOKDALE CHRYSLER, JEEP,DODGE \$70.89

Paid Chk# 096355 9/22/2014 CARQUEST OF WAYZATA

E 101-42100-404 Repairs/Maint - Machin/Equip \$3.45 6973-226880 PARTS/REPAIRS

E 101-43100-210 Operating Supplies (GENERAL) \$70.08 6973-228457 PARTS/REPAIRS

E 101-43100-210 Operating Supplies (GENERAL) \$12.55 6973-228904 PARTS/REPAIRS

Total CARQUEST OF WAYZATA \$86.08

Paid Chk# 096356 9/22/2014 CITY VIEW PLUMBING &amp; HEATING

E 233-40000-309 Contractual Services \$6,784.00 42023 DEPOT WATER FOUNTAIN

Total CITY VIEW PLUMBING &amp; HEATING \$6,784.00

Paid Chk# 096357 9/22/2014 CLASSIC CLEANING COMPANY

E 101-41940-409 Maint services &amp; Improv \$1,345.00 21240 MONTHLY CLEANING

E 101-41940-409 Maint services &amp; Improv \$415.00 21241 MONTHLY CLEANING

Total CLASSIC CLEANING COMPANY \$1,760.00

Paid Chk# 096358 9/22/2014 CUBICLES PLUS, INC.

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| E 408-40000-560                               | Furniture and Fixtures       |                                         | \$14,929.00 | 2569-2       | PW CARPET                       |
| E 408-40000-560                               | Furniture and Fixtures       |                                         | \$2,830.00  | 2569-3       | LABOR TO REMOVE FURNITURE AT PW |
| E 408-40000-560                               | Furniture and Fixtures       |                                         | \$2,506.00  | 2569-4       | PW CHAIRS & WORKTABLE           |
| <b>Total CUBICLES PLUS, INC.</b>              |                              |                                         | \$20,265.00 |              |                                 |
| Paid Chk# 096359                              | 9/22/2014                    | <b>CULLIGAN-BOTTLED WATER</b>           |             |              |                                 |
| E 101-42100-499                               | Miscellaneous                |                                         | \$33.36     | 1778692      | PD SUPPLIES                     |
| <b>Total CULLIGAN-BOTTLED WATER</b>           |                              |                                         | \$33.36     |              |                                 |
| Paid Chk# 096360                              | 9/22/2014                    | <b>ECM PUBLISHERS, INC.</b>             |             |              |                                 |
| E 101-42100-350                               | Printing & Publishing        |                                         | \$77.00     | 260017       | BACK TO SCHOOL SAFETY NOTICE    |
| <b>Total ECM PUBLISHERS, INC.</b>             |                              |                                         | \$77.00     |              |                                 |
| Paid Chk# 096361                              | 9/22/2014                    | <b>EHLERS</b>                           |             |              |                                 |
| E 401-40000-309                               | Contractual Services         |                                         | \$102.50    | 65726        | ECON.DEV.STRATEGIES             |
| E 401-40000-309                               | Contractual Services         |                                         | \$562.50    | 65727        | BAY CENTER                      |
| E 401-40000-309                               | Contractual Services         |                                         | \$205.00    | 65728        | BUS.SUBSIDY POLICY              |
| E 401-40000-309                               | Contractual Services         |                                         | \$512.50    | 65729        | GEN.TIF CONSULTING              |
| <b>Total EHLERS</b>                           |                              |                                         | \$1,382.50  |              |                                 |
| Paid Chk# 096362                              | 9/22/2014                    | <b>FASTENAL</b>                         |             |              |                                 |
| E 101-43100-240                               | Small Tools and Minor Equip  |                                         | \$63.61     | MNPLY71694   | TOOLS                           |
| <b>Total FASTENAL</b>                         |                              |                                         | \$63.61     |              |                                 |
| Paid Chk# 096363                              | 9/22/2014                    | <b>FORMS &amp; SYSTEMS OF MINNESOTA</b> |             |              |                                 |
| E 101-42100-350                               | Printing & Publishing        |                                         | \$58.80     | 138865       | PD FORMS                        |
| <b>Total FORMS &amp; SYSTEMS OF MINNESOTA</b> |                              |                                         | \$58.80     |              |                                 |
| Paid Chk# 096364                              | 9/22/2014                    | <b>GRAINGER, INC.</b>                   |             |              |                                 |
| E 610-40000-210                               | Operating Supplies (GENERAL) |                                         | \$30.47     | 9539042573   | SUPPLIES                        |
| E 620-40000-210                               | Operating Supplies (GENERAL) |                                         | \$30.47     | 9539042573   | SUPPLIES                        |
| E 610-40000-240                               | Small Tools and Minor Equip  |                                         | \$43.18     | 9539265489   | SUPPLIES                        |
| E 620-40000-240                               | Small Tools and Minor Equip  |                                         | \$43.17     | 9539265489   | SUPPLIES                        |
| <b>Total GRAINGER, INC.</b>                   |                              |                                         | \$147.29    |              |                                 |
| Paid Chk# 096365                              | 9/22/2014                    | <b>HENN.CNTY.INFO.TECH.DEPT.</b>        |             |              |                                 |
| E 101-42100-323                               | Radio Units                  |                                         | \$786.65    | 1000048245   | PD RADIO CONNECTION             |
| E 101-42100-323                               | Radio Units                  |                                         | \$786.65    | 1000049061   | PD RADIO CONNECTION             |
| <b>Total HENN.CNTY.INFO.TECH.DEPT.</b>        |                              |                                         | \$1,573.30  |              |                                 |
| Paid Chk# 096366                              | 9/22/2014                    | <b>HENN.CO.ADLT CORR.FACILITY</b>       |             |              |                                 |
| E 101-42120-308                               | Prisoner Care                |                                         | \$572.50    | 1000048670   | PRISONER PROCESSING             |
| E 101-42120-308                               | Prisoner Care                |                                         | \$697.09    | 1000048859   | PRISONER PROCESSING             |
| <b>Total HENN.CO.ADLT CORR.FACILITY</b>       |                              |                                         | \$1,269.59  |              |                                 |
| Paid Chk# 096367                              | 9/22/2014                    | <b>HOLIDAY</b>                          |             |              |                                 |
| E 101-42100-212                               | Motor Fuels                  |                                         | \$40.71     |              | PD FUEL                         |
| <b>Total HOLIDAY</b>                          |                              |                                         | \$40.71     |              |                                 |
| Paid Chk# 096368                              | 9/22/2014                    | <b>J.H. LARSON COMPANY</b>              |             |              |                                 |
| E 101-41940-210                               | Operating Supplies (GENERAL) |                                         | \$274.42    | S100745128.0 | SUPPLIES                        |
| <b>Total J.H. LARSON COMPANY</b>              |                              |                                         | \$274.42    |              |                                 |
| Paid Chk# 096369                              | 9/22/2014                    | <b>LAW ENFORCEMENT LABOR SERVICES</b>   |             |              |                                 |
| G 101-21707                                   | Police union dues            |                                         | \$405.00    | SEPT.2014    | PD UNION DUES - SEPT.2014       |
| <b>al LAW ENFORCEMENT LABOR SERVICES</b>      |                              |                                         | \$405.00    |              |                                 |
| Paid Chk# 096370                              | 9/22/2014                    | <b>LEXISNEXIS RISK DATA</b>             |             |              |                                 |
| E 101-42100-309                               | Contractual Services         |                                         | \$33.00     | 121455020140 | PD SERVICE                      |

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| <b>Total LEXISNEXIS RISK DATA</b>        |                              |                                    | \$33.00    |            |                        |
| Paid Chk# 096371                         | 9/22/2014                    | <b>MEDIACOM</b>                    |            |            |                        |
| E 101-41940-321                          | Telephone                    |                                    | \$309.95   |            | IPSERVICE              |
| <b>Total MEDIACOM</b>                    |                              |                                    | \$309.95   |            |                        |
| Paid Chk# 096372                         | 9/22/2014                    | <b>MN GFOA</b>                     |            |            |                        |
| E 101-41500-433                          | Dues, Licensing & Seminars   |                                    | \$60.00    | 03787      | MEMBERSHIP FOR D.URAM  |
| <b>Total MN GFOA</b>                     |                              |                                    | \$60.00    |            |                        |
| Paid Chk# 096373                         | 9/22/2014                    | <b>MORRIE S MINNETONKA FORD</b>    |            |            |                        |
| E 101-42100-404                          | Repairs/Maint - Machin/Equip |                                    | \$8.97     | 526395     | PD REPAIRS             |
| <b>Total MORRIE S MINNETONKA FORD</b>    |                              |                                    | \$8.97     |            |                        |
| Paid Chk# 096374                         | 9/22/2014                    | <b>NAPA AUTO PARTS-LONG LAKE</b>   |            |            |                        |
| E 101-42100-404                          | Repairs/Maint - Machin/Equip |                                    | \$7.33     | 240427     | PARTS/REPAIRS          |
| E 101-45200-404                          | Repairs/Maint - Machin/Equip |                                    | \$25.14    | 242287     | PARTS/REPAIRS          |
| <b>Total NAPA AUTO PARTS-LONG LAKE</b>   |                              |                                    | \$32.47    |            |                        |
| Paid Chk# 096375                         | 9/22/2014                    | <b>NAPA AUTO PARTS-WATERTOWN</b>   |            |            |                        |
| E 101-42100-404                          | Repairs/Maint - Machin/Equip |                                    | \$12.63    | 423458     | PARTS/REPAIRS          |
| E 101-42100-404                          | Repairs/Maint - Machin/Equip |                                    | \$230.64   | 423608     | PARTS/REPAIRS          |
| E 610-40000-224                          | Repair & Maint - Motor Equip |                                    | \$6.00     | 424246     | PARTS/REPAIRS          |
| E 620-40000-224                          | Repair & Maint - Motor Equip |                                    | \$7.35     | 424246     | PARTS/REPAIRS          |
| <b>Total NAPA AUTO PARTS-WATERTOWN</b>   |                              |                                    | \$256.62   |            |                        |
| Paid Chk# 096376                         | 9/22/2014                    | <b>NORTH MEMORIAL URGENT CARE</b>  |            |            |                        |
| E 101-41500-306                          | Personnel Expense            |                                    | \$22.00    | 059764-00  | NEW HIRE DRUG TESTING  |
| <b>Total NORTH MEMORIAL URGENT CARE</b>  |                              |                                    | \$22.00    |            |                        |
| Paid Chk# 096377                         | 9/22/2014                    | <b>OIL-AIR PRODUCTS, LLC</b>       |            |            |                        |
| E 101-43100-210                          | Operating Supplies (GENERAL) |                                    | \$73.71    | 555835-001 | SUPPLIES               |
| <b>Total OIL-AIR PRODUCTS, LLC</b>       |                              |                                    | \$73.71    |            |                        |
| Paid Chk# 096378                         | 9/22/2014                    | <b>PHILIPS MEDICAL SYSTEMS</b>     |            |            |                        |
| E 101-42100-210                          | Operating Supplies (GENERAL) |                                    | \$140.40   | 928346010  | PD SUPPLIES            |
| <b>Total PHILIPS MEDICAL SYSTEMS</b>     |                              |                                    | \$140.40   |            |                        |
| Paid Chk# 096379                         | 9/22/2014                    | <b>PRIMARY PRODUCTS COMPANY</b>    |            |            |                        |
| E 101-42100-210                          | Operating Supplies (GENERAL) |                                    | \$43.53    | 53923      | PD SUPPLIES            |
| <b>Total PRIMARY PRODUCTS COMPANY</b>    |                              |                                    | \$43.53    |            |                        |
| Paid Chk# 096380                         | 9/22/2014                    | <b>PRO TIRE &amp; SERVICE</b>      |            |            |                        |
| E 101-42100-404                          | Repairs/Maint - Machin/Equip |                                    | \$22.35    | 26582      | PD REPAIRS             |
| <b>Total PRO TIRE &amp; SERVICE</b>      |                              |                                    | \$22.35    |            |                        |
| Paid Chk# 096381                         | 9/22/2014                    | <b>SAINT PAUL RIVERFRONT CORP.</b> |            |            |                        |
| E 233-40000-309                          | Contractual Services         |                                    | \$4,266.00 | 2014-3     | KIOSK DESIGN           |
| E 233-40000-309                          | Contractual Services         |                                    | \$781.00   | 2014-4     | BROCHURE DESIGN        |
| E 233-40000-309                          | Contractual Services         |                                    | \$150.00   | 2014-5     | WEBSITE POST           |
| E 233-40000-309                          | Contractual Services         |                                    | \$249.75   | 2014-6     | IMPLEX WEBSITE HOSTING |
| E 233-40000-309                          | Contractual Services         |                                    | \$861.67   | WAYZATA 20 | LAKE EFFECT BOOKS      |
| <b>Total SAINT PAUL RIVERFRONT CORP.</b> |                              |                                    | \$6,308.42 |            |                        |
| Paid Chk# 096382                         | 9/22/2014                    | <b>SCHARBER &amp; SONS</b>         |            |            |                        |
| E 101-45200-221                          | Equipment Parts              |                                    | \$37.43    | P23529     | PARTS                  |
| <b>Total SCHARBER &amp; SONS</b>         |                              |                                    | \$37.43    |            |                        |
| Paid Chk# 096383                         | 9/22/2014                    | <b>SHI INTERNATIONAL CORP.</b>     |            |            |                        |

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| E 101-42100-240                             | Small Tools and Minor Equip  |                                       | \$380.00    | B02359882  | PD TOOLS                                   |
| <b>Total SHI INTERNATIONAL CORP.</b>        |                              |                                       | \$380.00    |            |                                            |
| Paid Chk# 096384                            | 9/22/2014                    | <b>SHORT ELLIOTT HENDRICKSON INC.</b> |             |            |                                            |
| E 404-40000-303                             | Engineering Fees             |                                       | \$2,561.43  | 286355     | TELECOM SITE STUDY                         |
| <b>Total SHORT ELLIOTT HENDRICKSON INC.</b> |                              |                                       | \$2,561.43  |            |                                            |
| Paid Chk# 096385                            | 9/22/2014                    | <b>STANTEC CONSULTING SERVICES</b>    |             |            |                                            |
| E 670-40000-302                             | Consultants                  |                                       | \$111.00    | 827616     | WETLAND BANK MONITORING                    |
| G 101-20310                                 | Escrow                       |                                       | \$234.32    | 827663     | 253-257 LAKE ST.WETLAND DELINEATION REVIEW |
| E 670-40000-302                             | Consultants                  |                                       | \$74.32     | 827663     | 437 FERNDAL WETLAND DELINEATION REVIEW     |
| G 101-20310                                 | Escrow                       |                                       | \$530.00    | 827663     | 437 FERNDAL WETLAND DELINEATION REVIEW     |
| E 670-40000-302                             | Consultants                  |                                       | \$1,494.00  | 827663     | BUSHAWAY RD                                |
| E 670-40000-302                             | Consultants                  |                                       | \$64.00     | 827663     | WETLAND CONSERVATION                       |
| E 610-49100-303                             | Engineering Fees             |                                       | \$534.50    | 827798     | WELLHEAD PROTECTION PLAN                   |
| E 620-40000-303                             | Engineering Fees             |                                       | \$2,686.00  | 828212     | EVALUATION OF LS#5 & FORCEMAIN             |
| <b>Total STANTEC CONSULTING SERVICES</b>    |                              |                                       | \$5,728.14  |            |                                            |
| Paid Chk# 096386                            | 9/22/2014                    | <b>STEPP MANUFACTURING CO., INC.</b>  |             |            |                                            |
| E 409-43100-550                             | Vehicles                     |                                       | \$28,194.00 | 46862      | ASPHALT HOT BOX DUMPER                     |
| <b>Total STEPP MANUFACTURING CO., INC.</b>  |                              |                                       | \$28,194.00 |            |                                            |
| Paid Chk# 096387                            | 9/22/2014                    | <b>STERICYCLE, INC.</b>               |             |            |                                            |
| E 101-42100-309                             | Contractual Services         |                                       | \$899.28    | 4005027508 | PD SERVICE                                 |
| <b>Total STERICYCLE, INC.</b>               |                              |                                       | \$899.28    |            |                                            |
| Paid Chk# 096388                            | 9/22/2014                    | <b>STORAGE SOLUTIONS USA, LLC</b>     |             |            |                                            |
| E 101-42100-210                             | Operating Supplies (GENERAL) |                                       | \$201.51    | 0003175    | PD SUPPLIES                                |
| <b>Total STORAGE SOLUTIONS USA, LLC</b>     |                              |                                       | \$201.51    |            |                                            |
| Paid Chk# 096389                            | 9/22/2014                    | <b>STREICHER S</b>                    |             |            |                                            |
| E 101-42100-217                             | Uniforms                     |                                       | \$36.99     | I1105220   | PD UNIFORMS                                |
| E 101-42100-217                             | Uniforms                     |                                       | \$64.39     | I1105942   | PD UNIFORMS                                |
| E 101-42100-217                             | Uniforms                     |                                       | \$19.88     | I1106006   | PD UNIFORMS                                |
| E 101-42100-434                             | Training and schools         |                                       | \$52.50     | I1109070   | PD TRAINING SUPPLIES                       |
| <b>Total STREICHER S</b>                    |                              |                                       | \$173.76    |            |                                            |
| Paid Chk# 096390                            | 9/22/2014                    | <b>TIME SAVER</b>                     |             |            |                                            |
| E 101-41100-302                             | Consultants                  |                                       | \$352.00    | M20797     | MTG.MINUTES                                |
| <b>Total TIME SAVER</b>                     |                              |                                       | \$352.00    |            |                                            |
| Paid Chk# 096391                            | 9/22/2014                    | <b>UPS STORE</b>                      |             |            |                                            |
| E 101-41500-200                             | Office Supplies (GENERAL)    |                                       | \$50.00     |            | BROCHURE RACK                              |
| E 101-42200-200                             | Office Supplies (GENERAL)    |                                       | \$35.28     |            | FD ADDRESS MAPS                            |
| <b>Total UPS STORE</b>                      |                              |                                       | \$85.28     |            |                                            |
| Paid Chk# 096392                            | 9/22/2014                    | <b>US HEALTH WORKS MEDICAL GROUP</b>  |             |            |                                            |
| E 101-41500-306                             | Personnel Expense            |                                       | \$99.00     | 0036410-MN | NEW HIRE TESTING                           |
| <b>Total US HEALTH WORKS MEDICAL GROUP</b>  |                              |                                       | \$99.00     |            |                                            |
| Paid Chk# 096393                            | 9/22/2014                    | <b>VICTORY CORPS</b>                  |             |            |                                            |
| E 101-41940-210                             | Operating Supplies (GENERAL) |                                       | \$1,560.92  | 634761     | FLAGS                                      |
| <b>Total VICTORY CORPS</b>                  |                              |                                       | \$1,560.92  |            |                                            |
| Paid Chk# 096394                            | 9/23/2014                    | <b>ARCTIC GLACIER INC.</b>            |             |            |                                            |
| E 640-47000-254                             | Soft Drinks/Mix For Resale   |                                       | \$128.80    | 460425107  | ICE RESALE                                 |
| E 640-47000-254                             | Soft Drinks/Mix For Resale   |                                       | \$53.00     | 463425813  | ICE RESALE                                 |
| <b>Total ARCTIC GLACIER INC.</b>            |                              |                                       | \$181.80    |            |                                            |

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| Paid Chk#       | 096395                             | 9/23/2014 | <b>BELLBOY BAR SUPPLY CORP.</b>    |            |                    |
| E 640-47000-251 | Liquor For Resale                  |           | \$2,163.32                         | 44758400   | LIQ                |
| E 640-47000-259 | Freight                            |           | \$13.19                            | 44758400   | FREIGHT            |
| E 640-47000-251 | Liquor For Resale                  |           | \$90.00                            | 44785900   | LIQ                |
| E 640-47000-259 | Freight                            |           | \$13.95                            | 44860700   | FREIGHT            |
| E 640-47000-251 | Liquor For Resale                  |           | \$1,163.55                         | 44860700   | LIQ                |
| E 640-47000-251 | Liquor For Resale                  |           | \$105.50                           | 44901800   | LIQ                |
| E 640-47000-259 | Freight                            |           | \$2.55                             | 44901800   | FREIGHT            |
| E 640-47000-254 | Soft Drinks/Mix For Resale         |           | \$118.23                           | 90746700   | MISC.MDSE.         |
| E 640-47000-259 | Freight                            |           | \$4.56                             | 90746700   | FREIGHT            |
| E 640-47000-254 | Soft Drinks/Mix For Resale         |           | \$83.00                            | 90747400   | MISC.MDSE.         |
| E 640-47000-259 | Freight                            |           | \$4.40                             | 90747400   | FREIGHT            |
| E 640-47000-254 | Soft Drinks/Mix For Resale         |           | \$126.17                           | 90808800   | MISC.MDSE.         |
| E 640-47000-259 | Freight                            |           | \$4.60                             | 90808800   | FREIGHT            |
| E 640-47000-254 | Soft Drinks/Mix For Resale         |           | \$109.60                           | 90841000   | MISC.MDSE.         |
| E 640-47000-259 | Freight                            |           | \$4.51                             | 90841000   | FREIGHT            |
| <b>Total</b>    | <b>BELLBOY BAR SUPPLY CORP.</b>    |           | \$4,007.13                         |            |                    |
| Paid Chk#       | 096396                             | 9/23/2014 | <b>BERNICK'S WINE</b>              |            |                    |
| E 640-47000-254 | Soft Drinks/Mix For Resale         |           | \$128.18                           | 161944     | MISC.BEV.          |
| E 640-47000-253 | Beer For Resale                    |           | \$44.40                            | 161945     | BEER               |
| <b>Total</b>    | <b>BERNICK'S WINE</b>              |           | \$172.58                           |            |                    |
| Paid Chk#       | 096397                             | 9/23/2014 | <b>BETH, GERALD O</b>              |            |                    |
| E 640-48000-341 | General Promotions                 |           | \$175.00                           | 10/7/14    | BAR MUSIC 10/7/14  |
| <b>Total</b>    | <b>BETH, GERALD O</b>              |           | \$175.00                           |            |                    |
| Paid Chk#       | 096398                             | 9/23/2014 | <b>BETH, GERALD O</b>              |            |                    |
| E 640-48000-341 | General Promotions                 |           | \$175.00                           | 10/14/14   | BAR MUSIC 10/14/14 |
| <b>Total</b>    | <b>BETH, GERALD O</b>              |           | \$175.00                           |            |                    |
| Paid Chk#       | 096399                             | 9/23/2014 | <b>BETH, GERALD O</b>              |            |                    |
| E 640-48000-341 | General Promotions                 |           | \$175.00                           | 10/21/14   | BAR MUSIC 10/21/14 |
| <b>Total</b>    | <b>BETH, GERALD O</b>              |           | \$175.00                           |            |                    |
| Paid Chk#       | 096400                             | 9/23/2014 | <b>BETH, GERALD O</b>              |            |                    |
| E 640-48000-341 | General Promotions                 |           | \$175.00                           | 10/24/14   | BAR MUSIC 10/24/14 |
| <b>Total</b>    | <b>BETH, GERALD O</b>              |           | \$175.00                           |            |                    |
| Paid Chk#       | 096401                             | 9/23/2014 | <b>COCA-COLA</b>                   |            |                    |
| E 640-47000-254 | Soft Drinks/Mix For Resale         |           | \$310.24                           | 0148121322 | MISC.BEV.          |
| E 640-48000-254 | Soft Drinks/Mix For Resale         |           | \$1,793.27                         | 0178051107 | MISC.BEV.          |
| <b>Total</b>    | <b>COCA-COLA</b>                   |           | \$2,103.51                         |            |                    |
| Paid Chk#       | 096402                             | 9/23/2014 | <b>DAHLHEIMER DISTRIBUTING CO.</b> |            |                    |
| E 640-48000-253 | Beer For Resale                    |           | \$447.00                           | 1119033    | BEER               |
| E 640-48000-253 | Beer For Resale                    |           | \$90.00                            | 1119071    | BEER               |
| E 640-47000-253 | Beer For Resale                    |           | \$716.35                           | 1119074    | BEER               |
| E 640-48000-253 | Beer For Resale                    |           | \$469.00                           | 1119075    | BEER               |
| E 640-47000-253 | Beer For Resale                    |           | \$27.60                            | 97586      | BEER               |
| <b>Total</b>    | <b>DAHLHEIMER DISTRIBUTING CO.</b> |           | \$1,749.95                         |            |                    |
| Paid Chk#       | 096403                             | 9/23/2014 | <b>DAY DISTRIBUTING</b>            |            |                    |
| E 640-48000-253 | Beer For Resale                    |           | \$1,225.00                         | 768648     | BEER               |
| E 640-47000-253 | Beer For Resale                    |           | \$1,145.45                         | 768649     | BEER               |
| E 640-48000-253 | Beer For Resale                    |           | \$310.00                           | 769671     | BEER               |
| E 640-48000-253 | Beer For Resale                    |           | \$247.00                           | 769822     | BEER               |
| E 640-47000-253 | Beer For Resale                    |           | \$2,129.35                         | 769824     | BEER               |

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| <b>Total DAY DISTRIBUTING</b>             |                              |                                     | \$5,056.80 |            |                     |
| Paid Chk# 096404                          | 9/23/2014                    | <b>DELTA DENTAL OF MINNESOTA</b>    |            |            |                     |
| G 101-21717                               | Dental Insurance             |                                     | \$2,507.50 | 5686837    | DENTAL INS.         |
| <b>Total DELTA DENTAL OF MINNESOTA</b>    |                              |                                     | \$2,507.50 |            |                     |
| Paid Chk# 096405                          | 9/23/2014                    | <b>EXTREME BEVERAGE, LLC</b>        |            |            |                     |
| E 640-47000-254                           | Soft Drinks/Mix For Resale   |                                     | \$67.00    | 264-354    | MISC.BEV.           |
| E 640-47000-254                           | Soft Drinks/Mix For Resale   |                                     | \$100.50   | W-1031673  | MISC.BEV.           |
| <b>Total EXTREME BEVERAGE, LLC</b>        |                              |                                     | \$167.50   |            |                     |
| Paid Chk# 096406                          | 9/23/2014                    | <b>G &amp; K SERVICES</b>           |            |            |                     |
| E 640-48500-210                           | Operating Supplies (GENERAL) |                                     | \$91.12    | 1013485487 | UNIFORMS & SUPPLIES |
| E 640-48000-210                           | Operating Supplies (GENERAL) |                                     | \$28.53    | 1013485487 | UNIFORMS & SUPPLIES |
| E 640-48500-217                           | Uniforms                     |                                     | \$30.45    | 1013485487 | UNIFORMS & SUPPLIES |
| E 640-48000-210                           | Operating Supplies (GENERAL) |                                     | \$36.40    | 1013496873 | UNIFORMS & SUPPLIES |
| E 640-48500-210                           | Operating Supplies (GENERAL) |                                     | \$110.60   | 1013496873 | UNIFORMS & SUPPLIES |
| E 640-48500-217                           | Uniforms                     |                                     | \$30.45    | 1013496873 | UNIFORMS & SUPPLIES |
| <b>Total G &amp; K SERVICES</b>           |                              |                                     | \$327.55   |            |                     |
| Paid Chk# 096407                          | 9/23/2014                    | <b>GRAPE BEGINNINGS, INC.</b>       |            |            |                     |
| E 640-47000-259                           | Freight                      |                                     | \$20.25    | 171519     | FREIGHT             |
| E 640-47000-252                           | Wine For Resale              |                                     | \$1,214.00 | 171519     | WINE                |
| <b>Total GRAPE BEGINNINGS, INC.</b>       |                              |                                     | \$1,234.25 |            |                     |
| Paid Chk# 096408                          | 9/23/2014                    | <b>HEGGIES PIZZA</b>                |            |            |                     |
| E 640-48500-255                           | FOODIngredients For Resale   |                                     | \$131.30   | 1427501    | FOOD                |
| <b>Total HEGGIES PIZZA</b>                |                              |                                     | \$131.30   |            |                     |
| Paid Chk# 096409                          | 9/23/2014                    | <b>JJ TAYLOR DISTRIBUTING OF MN</b> |            |            |                     |
| E 640-48000-253                           | Beer For Resale              |                                     | \$187.80   | 2250398    | BEER                |
| E 640-48000-253                           | Beer For Resale              |                                     | \$263.40   | 2255493    | BEER                |
| E 640-48000-253                           | Beer For Resale              |                                     | \$449.55   | 2264340    | BEER                |
| E 640-47000-253                           | Beer For Resale              |                                     | \$880.50   | 2266675    | BEER                |
| E 640-47000-253                           | Beer For Resale              |                                     | \$887.15   | 2266715    | BEER                |
| E 640-47000-254                           | Soft Drinks/Mix For Resale   |                                     | \$38.80    | 2266715    | BEER                |
| <b>Total JJ TAYLOR DISTRIBUTING OF MN</b> |                              |                                     | \$2,707.20 |            |                     |
| Paid Chk# 096410                          | 9/23/2014                    | <b>JOHNSON BROS.-ST.PAUL</b>        |            |            |                     |
| E 640-47000-259                           | Freight                      |                                     | \$1.41     | 1944255    | FREIGHT             |
| E 640-47000-251                           | Liquor For Resale            |                                     | \$92.00    | 1944255    | LIQ                 |
| E 640-47000-252                           | Wine For Resale              |                                     | \$143.65   | 1944256    | WINE                |
| E 640-47000-259                           | Freight                      |                                     | \$4.23     | 1944256    | FREIGHT             |
| E 640-47000-251                           | Liquor For Resale            |                                     | \$1,503.76 | 1944257    | LIQ                 |
| E 640-47000-259                           | Freight                      |                                     | \$17.63    | 1944257    | FREIGHT             |
| E 640-47000-252                           | Wine For Resale              |                                     | \$591.70   | 1944258    | WINE                |
| E 640-47000-259                           | Freight                      |                                     | \$8.46     | 1944258    | FREIGHT             |
| E 640-47000-259                           | Freight                      |                                     | \$7.05     | 1944259    | FREIGHT             |
| E 640-47000-251                           | Liquor For Resale            |                                     | \$450.00   | 1944259    | LIQ                 |
| E 640-47000-259                           | Freight                      |                                     | \$39.48    | 1945474    | FREIGHT             |
| E 640-47000-252                           | Wine For Resale              |                                     | \$1,908.00 | 1945474    | WINE                |
| E 640-47000-259                           | Freight                      |                                     | \$5.64     | 1945475    | FREIGHT             |
| E 640-47000-251                           | Liquor For Resale            |                                     | \$490.35   | 1945475    | LIQ                 |
| E 640-47000-254                           | Soft Drinks/Mix For Resale   |                                     | \$32.00    | 1945476    | MISC.MIX            |
| E 640-47000-259                           | Freight                      |                                     | \$1.41     | 1945476    | FREIGHT             |
| E 640-47000-252                           | Wine For Resale              |                                     | \$527.85   | 1949440    | WINE                |
| E 640-47000-259                           | Freight                      |                                     | \$16.92    | 1949440    | FREIGHT             |
| E 640-47000-251                           | Liquor For Resale            |                                     | \$1,986.45 | 1949441    | LIQ                 |

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| E 640-47000-259                      | Freight                    |                                   | \$17.50     | 1949441     | FREIGHT                 |
| E 640-47000-254                      | Soft Drinks/Mix For Resale |                                   | \$32.25     | 1949442     | MISC.MIX                |
| E 640-47000-259                      | Freight                    |                                   | \$1.41      | 1949442     | FREIGHT                 |
| E 640-47000-252                      | Wine For Resale            |                                   | \$2,505.35  | 1949443     | WINE                    |
| E 640-47000-259                      | Freight                    |                                   | \$57.81     | 1949443     | FREIGHT                 |
| E 640-47000-251                      | Liquor For Resale          |                                   | \$909.50    | 1949444     | LIQ                     |
| E 640-47000-259                      | Freight                    |                                   | \$14.57     | 1949444     | FREIGHT                 |
| E 640-47000-252                      | Wine For Resale            |                                   | \$1,224.00  | 1950739     | WINE                    |
| E 640-47000-259                      | Freight                    |                                   | \$23.97     | 1950739     | FREIGHT                 |
| E 640-47000-251                      | Liquor For Resale          |                                   | \$271.70    | 1950740     | LIQ                     |
| E 640-47000-259                      | Freight                    |                                   | \$2.82      | 1950740     | FREIGHT                 |
| E 640-47000-251                      | Liquor For Resale          |                                   | (\$21.24)   | 632886      | LIQ                     |
| <b>Total JOHNSON BROS.-ST.PAUL</b>   |                            |                                   | \$12,867.63 |             |                         |
| Paid Chk# 096411                     | 9/23/2014                  | <b>JORGENSEN, KURT</b>            |             |             |                         |
| E 640-48000-341                      | General Promotions         |                                   | \$225.00    | 10/2/14     | BAR MUSIC 10/2/14       |
| <b>Total JORGENSEN, KURT</b>         |                            |                                   | \$225.00    |             |                         |
| Paid Chk# 096412                     | 9/23/2014                  | <b>KARLSBURGER FOODS, INC.</b>    |             |             |                         |
| E 640-48500-255                      | FOODIngredients For Resale |                                   | \$317.30    | 5-000061661 | FOOD                    |
| <b>Total KARLSBURGER FOODS, INC.</b> |                            |                                   | \$317.30    |             |                         |
| Paid Chk# 096413                     | 9/23/2014                  | <b>LINNIHAN FOY</b>               |             |             |                         |
| E 640-47000-340                      | Advertising                |                                   | \$320.00    | 2153-00     | SAVOUR BLAST            |
| E 640-47000-340                      | Advertising                |                                   | \$175.00    | 2154-00     | NEW SAVOUR MEMBER BLAST |
| E 640-47000-340                      | Advertising                |                                   | \$680.00    | 2155-00     | LAKESHORE AD            |
| E 640-47000-340                      | Advertising                |                                   | \$175.00    | 2156-00     | SAVOUR BLAST            |
| <b>Total LINNIHAN FOY</b>            |                            |                                   | \$1,350.00  |             |                         |
| Paid Chk# 096414                     | 9/23/2014                  | <b>M.AMUNDSON LLP</b>             |             |             |                         |
| E 640-47000-256                      | MISC.MDSE.RESALE           |                                   | \$1,192.58  | 181443      | CIGARETTES              |
| <b>Total M.AMUNDSON LLP</b>          |                            |                                   | \$1,192.58  |             |                         |
| Paid Chk# 096415                     | 9/23/2014                  | <b>MAIN STREET BAKERY</b>         |             |             |                         |
| E 640-48500-255                      | FOODIngredients For Resale |                                   | \$34.38     | 248857      | FOOD                    |
| E 640-48500-255                      | FOODIngredients For Resale |                                   | \$84.56     | 248906      | FOOD                    |
| E 640-48500-255                      | FOODIngredients For Resale |                                   | \$105.51    | 249029      | FOOD                    |
| E 640-48500-255                      | FOODIngredients For Resale |                                   | \$171.12    | 249123      | FOOD                    |
| E 640-48500-255                      | FOODIngredients For Resale |                                   | \$99.59     | 249179      | FOOD                    |
| <b>Total MAIN STREET BAKERY</b>      |                            |                                   | \$495.16    |             |                         |
| Paid Chk# 096416                     | 9/23/2014                  | <b>MARTIN, SHANE</b>              |             |             |                         |
| E 640-48000-341                      | General Promotions         |                                   | \$300.00    | 10/9/14     | BAR MUSIC 10/9/14       |
| <b>Total MARTIN, SHANE</b>           |                            |                                   | \$300.00    |             |                         |
| Paid Chk# 096417                     | 9/23/2014                  | <b>MURPHY, STEVE</b>              |             |             |                         |
| E 640-48000-341                      | General Promotions         |                                   | \$400.00    | 10/11/14    | BAR MUSIC 10/11/14      |
| <b>Total MURPHY, STEVE</b>           |                            |                                   | \$400.00    |             |                         |
| Paid Chk# 096418                     | 9/23/2014                  | <b>NORTHWESTERN FRUIT COMPANY</b> |             |             |                         |
| E 640-48500-255                      | FOODIngredients For Resale |                                   | (\$9.00)    | 790686      | FOOD                    |
| E 640-48000-253                      | Beer For Resale            |                                   | \$4.00      | 792170      | BEER                    |
| E 640-48500-255                      | FOODIngredients For Resale |                                   | \$381.05    | 792170      | FOOD                    |
| E 640-48000-251                      | Liquor For Resale          |                                   | \$9.40      | 792170      | LIQ                     |
| E 640-48500-255                      | FOODIngredients For Resale |                                   | \$164.70    | 792342      | FOOD                    |
| E 640-48500-255                      | FOODIngredients For Resale |                                   | \$433.25    | 792561      | FOOD                    |
| E 640-48000-251                      | Liquor For Resale          |                                   | \$7.10      | 792561      | LIQ                     |
| E 640-48500-255                      | FOODIngredients For Resale |                                   | \$406.75    | 792760      | FOOD                    |

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| E 640-48000-251                                | Liquor For Resale            |                                          | \$9.40     | 792760  | LIQ                                |
| <b>Total NORTHWESTERN FRUIT COMPANY</b>        |                              |                                          | \$1,406.65 |         |                                    |
| Paid Chk# 096419                               | 9/23/2014                    | <b>PAUSTIS &amp; SONS</b>                |            |         |                                    |
| E 640-48000-252                                | Wine For Resale              |                                          | \$415.25   | 8464798 | WINE                               |
| E 640-47000-259                                | Freight                      |                                          | \$15.00    | 8464898 | FREIGHT                            |
| E 640-47000-252                                | Wine For Resale              |                                          | \$1,361.70 | 8464898 | WINE                               |
| E 640-48000-252                                | Wine For Resale              |                                          | \$264.25   | 8465741 | WINE                               |
| E 640-47000-259                                | Freight                      |                                          | \$12.50    | 8465862 | FREIGHT                            |
| E 640-47000-252                                | Wine For Resale              |                                          | \$771.50   | 8465862 | WINE                               |
| <b>Total PAUSTIS &amp; SONS</b>                |                              |                                          | \$2,840.20 |         |                                    |
| Paid Chk# 096420                               | 9/23/2014                    | <b>PHILLIPS WINES &amp; SPIRITS</b>      |            |         |                                    |
| E 640-48000-251                                | Liquor For Resale            |                                          | \$422.39   | 2664394 | LIQ                                |
| E 640-47000-252                                | Wine For Resale              |                                          | \$553.95   | 2664509 | WINE                               |
| E 640-47000-259                                | Freight                      |                                          | \$7.29     | 2664509 | FREIGHT                            |
| E 640-47000-251                                | Liquor For Resale            |                                          | \$498.98   | 2664510 | LIQ                                |
| E 640-47000-259                                | Freight                      |                                          | \$8.64     | 2664510 | FREIGHT                            |
| E 640-47000-251                                | Liquor For Resale            |                                          | \$1,844.40 | 2664511 | LIQ                                |
| E 640-47000-259                                | Freight                      |                                          | \$12.69    | 2664511 | FREIGHT                            |
| E 640-47000-259                                | Freight                      |                                          | \$3.53     | 2667948 | FREIGHT                            |
| E 640-47000-251                                | Liquor For Resale            |                                          | \$401.24   | 2667948 | LIQ                                |
| E 640-47000-252                                | Wine For Resale              |                                          | \$1,539.85 | 2667949 | WINE                               |
| E 640-47000-259                                | Freight                      |                                          | \$24.79    | 2667949 | FREIGHT                            |
| <b>Total PHILLIPS WINES &amp; SPIRITS</b>      |                              |                                          | \$5,317.75 |         |                                    |
| Paid Chk# 096421                               | 9/23/2014                    | <b>PLUNKETT S PEST CONTROL</b>           |            |         |                                    |
| E 640-48000-409                                | Maint services & Improv      |                                          | \$120.41   | 3742659 | SERVICE                            |
| <b>Total PLUNKETT S PEST CONTROL</b>           |                              |                                          | \$120.41   |         |                                    |
| Paid Chk# 096422                               | 9/23/2014                    | <b>RED DOT GARAGE</b>                    |            |         |                                    |
| E 640-48000-341                                | General Promotions           |                                          | \$400.00   | 10/4/14 | BAR MUSIC 10/4/14                  |
| <b>Total RED DOT GARAGE</b>                    |                              |                                          | \$400.00   |         |                                    |
| Paid Chk# 096423                               | 9/23/2014                    | <b>SCHLOTZ, BOB</b>                      |            |         |                                    |
| E 640-48000-404                                | Repairs/Maint - Machin/Equip |                                          | \$2,732.41 | 344670  | DIRECT TV REPAIRS/HI DEF MODULATOR |
| <b>Total SCHLOTZ, BOB</b>                      |                              |                                          | \$2,732.41 |         |                                    |
| Paid Chk# 096424                               | 9/23/2014                    | <b>SOUTHERN WINE &amp; SPIRITS OF MN</b> |            |         |                                    |
| E 640-47000-259                                | Freight                      |                                          | \$22.84    | 1201942 | FREIGHT                            |
| E 640-47000-251                                | Liquor For Resale            |                                          | \$2,800.22 | 1201942 | LIQ                                |
| E 640-47000-252                                | Wine For Resale              |                                          | \$480.00   | 1201943 | WINE                               |
| E 640-47000-259                                | Freight                      |                                          | \$1.25     | 1201943 | FREIGHT                            |
| E 640-47000-252                                | Wine For Resale              |                                          | \$902.00   | 1201944 | WINE                               |
| E 640-47000-259                                | Freight                      |                                          | \$18.75    | 1201944 | FREIGHT                            |
| E 640-47000-251                                | Liquor For Resale            |                                          | \$2,904.52 | 1204317 | LIQ                                |
| E 640-47000-259                                | Freight                      |                                          | \$34.40    | 1204317 | FREIGHT                            |
| E 640-47000-259                                | Freight                      |                                          | \$2.50     | 1204318 | FREIGHT                            |
| E 640-47000-252                                | Wine For Resale              |                                          | \$906.00   | 1204319 | WINE                               |
| E 640-47000-259                                | Freight                      |                                          | \$16.25    | 1204319 | FREIGHT                            |
| E 640-47000-259                                | Freight                      |                                          | \$3.75     | 1204320 | FREIGHT                            |
| E 640-47000-254                                | Soft Drinks/Mix For Resale   |                                          | \$69.05    | 1204320 | MISC.BEV.                          |
| <b>Total SOUTHERN WINE &amp; SPIRITS OF MN</b> |                              |                                          | \$8,161.53 |         |                                    |
| Paid Chk# 096425                               | 9/23/2014                    | <b>SPENCER JANITORIAL</b>                |            |         |                                    |
| E 640-48000-409                                | Maint services & Improv      |                                          | \$2,204.45 | 10271   | MONTHLY CLEANING                   |
| <b>Total SPENCER JANITORIAL</b>                |                              |                                          | \$2,204.45 |         |                                    |



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| Paid Chk# 096426 | 9/23/2014                       | <b>STRATEGIC EQUIPMENT AND</b>  |             |           |                    |
| E 640-48500-210  | Operating Supplies (GENERAL)    |                                 | (\$130.00)  | 2274621   | KITCHEN SUPPLIES   |
| E 640-48000-210  | Operating Supplies (GENERAL)    |                                 | \$56.11     | 2279461   | SUPPLIES           |
| E 640-48000-341  | General Promotions              |                                 | \$62.64     | 2279461   | PROMO SUPPLIES     |
| E 640-48500-210  | Operating Supplies (GENERAL)    |                                 | \$185.74    | 2279461   | KITCHEN SUPPLIES   |
| E 640-48500-210  | Operating Supplies (GENERAL)    |                                 | \$71.67     | 2279462   | KITCHEN SUPPLIES   |
| <b>Total</b>     | <b>STRATEGIC EQUIPMENT AND</b>  |                                 | \$246.16    |           |                    |
| Paid Chk# 096427 | 9/23/2014                       | <b>SUNBURST CHEMICALS, INC.</b> |             |           |                    |
| E 640-48500-210  | Operating Supplies (GENERAL)    |                                 | \$489.22    | 0330303   | SUPPLIES           |
| E 640-48000-210  | Operating Supplies (GENERAL)    |                                 | \$425.97    | 0330303   | SUPPLIES           |
| <b>Total</b>     | <b>SUNBURST CHEMICALS, INC.</b> |                                 | \$915.19    |           |                    |
| Paid Chk# 096428 | 9/23/2014                       | <b>SYSCO MINNESOTA</b>          |             |           |                    |
| E 640-48500-255  | FOODIngredients For Resale      |                                 | \$3,654.63  | 409010728 | FOOD               |
| E 640-48000-251  | Liquor For Resale               |                                 | \$76.87     | 409010728 | LIQ                |
| E 640-48000-342  | Promotions - Food/Drinks        |                                 | \$28.17     | 409010728 | PROMO FOOD         |
| E 640-48500-210  | Operating Supplies (GENERAL)    |                                 | \$96.63     | 409010728 | KITCHEN SUPPLIES   |
| E 640-48500-210  | Operating Supplies (GENERAL)    |                                 | \$74.94     | 409031214 | KITCHEN SUPPLIES   |
| E 640-48000-210  | Operating Supplies (GENERAL)    |                                 | \$45.78     | 409031214 | SUPPLIES           |
| E 640-48000-342  | Promotions - Food/Drinks        |                                 | \$56.05     | 409031214 | PROMO FOOD         |
| E 640-48500-255  | FOODIngredients For Resale      |                                 | \$4,103.51  | 409031214 | FOOD               |
| E 640-48000-342  | Promotions - Food/Drinks        |                                 | \$75.00     | 409031215 | PROMO FOOD         |
| E 640-48000-253  | Beer For Resale                 |                                 | \$10.84     | 409051536 | BEER               |
| E 640-48500-210  | Operating Supplies (GENERAL)    |                                 | \$142.48    | 409051536 | KITCHEN SUPPLIES   |
| E 640-48000-210  | Operating Supplies (GENERAL)    |                                 | \$45.78     | 409051536 | SUPPLIES           |
| E 640-48000-341  | General Promotions              |                                 | \$45.60     | 409051536 | PROMO SUPPLIES     |
| E 640-48000-251  | Liquor For Resale               |                                 | \$135.26    | 409051536 | LIQ                |
| E 640-48000-342  | Promotions - Food/Drinks        |                                 | \$56.05     | 409051536 | PROMO FOOD         |
| E 640-48500-255  | FOODIngredients For Resale      |                                 | \$4,753.23  | 409051536 | FOOD               |
| E 640-48000-253  | Beer For Resale                 |                                 | \$10.84     | 409080741 | BEER               |
| E 640-48500-255  | FOODIngredients For Resale      |                                 | \$4,041.94  | 409080741 | FOOD               |
| E 640-48000-210  | Operating Supplies (GENERAL)    |                                 | \$131.83    | 409080741 | SUPPLIES           |
| E 640-48000-251  | Liquor For Resale               |                                 | \$147.72    | 409080741 | LIQ                |
| E 640-48000-342  | Promotions - Food/Drinks        |                                 | \$27.88     | 409080741 | PROMO FOOD         |
| <b>Total</b>     | <b>SYSCO MINNESOTA</b>          |                                 | \$17,761.03 |           |                    |
| Paid Chk# 096429 | 9/23/2014                       | <b>T.D. ANDERSON INC.</b>       |             |           |                    |
| E 640-48000-409  | Maint services & Improv         |                                 | \$115.00    | 383193    | BEER LINES CLEANED |
| <b>Total</b>     | <b>T.D. ANDERSON INC.</b>       |                                 | \$115.00    |           |                    |
| Paid Chk# 096430 | 9/23/2014                       | <b>THORPE DISTRIBUTING CO.</b>  |             |           |                    |
| E 640-48000-253  | Beer For Resale                 |                                 | \$404.00    | 845842    | BEER               |
| E 640-48000-253  | Beer For Resale                 |                                 | \$71.65     | 845843    | BEER               |
| E 640-48000-253  | Beer For Resale                 |                                 | \$2,925.80  | 846743    | BEER               |
| E 640-47000-253  | Beer For Resale                 |                                 | \$5,501.60  | 847299    | BEER               |
| E 640-47000-253  | Beer For Resale                 |                                 | \$55.65     | 847300    | BEER               |
| E 640-48000-253  | Beer For Resale                 |                                 | (\$96.00)   | 847301    | BEER               |
| E 640-48000-253  | Beer For Resale                 |                                 | \$71.65     | 847302    | BEER               |
| E 640-48000-253  | Beer For Resale                 |                                 | \$214.95    | 848513    | BEER               |
| E 640-48000-253  | Beer For Resale                 |                                 | \$104.00    | 848516    | BEER               |
| E 640-48000-253  | Beer For Resale                 |                                 | \$580.00    | 848517    | BEER               |
| <b>Total</b>     | <b>THORPE DISTRIBUTING CO.</b>  |                                 | \$9,833.30  |           |                    |
| Paid Chk# 096431 | 9/23/2014                       | <b>VINOPIA</b>                  |             |           |                    |
| E 640-47000-259  | Freight                         |                                 | \$2.50      | 0106849   | FREIGHT            |
| E 640-47000-252  | Wine For Resale                 |                                 | \$96.00     | 0106849   | WINE               |



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|-------------------------------------------------|------------------------------|-------------------------------------------|------------|-------------------|
| <b>Total VINOPIA</b>                            |                              | <b>\$98.50</b>                            |            |                   |
| Paid Chk# 096432                                | 9/23/2014                    | <b>WEBER CONNECTION, THE</b>              |            |                   |
| E 640-48000-404                                 | Repairs/Maint - Machin/Equip | \$125.00                                  | 2010       | DIRECT TV REPAIRS |
| <b>Total WEBER CONNECTION, THE</b>              |                              | <b>\$125.00</b>                           |            |                   |
| Paid Chk# 096433                                | 9/23/2014                    | <b>WINE COMPANY</b>                       |            |                   |
| E 640-47000-252                                 | Wine For Resale              | \$984.00                                  | 371481-00  | WINE              |
| E 640-47000-259                                 | Freight                      | \$8.25                                    | 371481-00  | FREIGHT           |
| <b>Total WINE COMPANY</b>                       |                              | <b>\$992.25</b>                           |            |                   |
| Paid Chk# 096434                                | 9/23/2014                    | <b>WINE MERCHANT</b>                      |            |                   |
| E 640-47000-252                                 | Wine For Resale              | \$504.00                                  | 518473     | WINE              |
| E 640-47000-259                                 | Freight                      | \$5.75                                    | 518473     | FREIGHT           |
| E 640-47000-252                                 | Wine For Resale              | \$1,560.00                                | 519554     | WINE              |
| E 640-47000-259                                 | Freight                      | \$7.05                                    | 519554     | FREIGHT           |
| E 640-47000-252                                 | Wine For Resale              | \$631.25                                  | 519555     | WINE              |
| E 640-47000-259                                 | Freight                      | \$11.28                                   | 519555     | FREIGHT           |
| <b>Total WINE MERCHANT</b>                      |                              | <b>\$2,719.33</b>                         |            |                   |
| Paid Chk# 096435                                | 9/23/2014                    | <b>WIRTZ BEVERAGE MN BEER</b>             |            |                   |
| E 640-48000-253                                 | Beer For Resale              | \$724.00                                  | 1090282327 | BEER              |
| E 640-47000-253                                 | Beer For Resale              | \$2,268.20                                | 1090285999 | BEER              |
| E 640-47000-253                                 | Beer For Resale              | \$16.80                                   | 1090286000 | BEER              |
| E 640-48000-253                                 | Beer For Resale              | \$474.00                                  | 1090288393 | BEER              |
| E 640-47000-253                                 | Beer For Resale              | \$1,807.95                                | 1090289546 | BEER              |
| <b>Total WIRTZ BEVERAGE MN BEER</b>             |                              | <b>\$5,290.95</b>                         |            |                   |
| Paid Chk# 096436                                | 9/23/2014                    | <b>WIRTZ BEVERAGE MN WINE &amp; SPIRI</b> |            |                   |
| E 640-47000-251                                 | Liquor For Resale            | \$1,237.93                                | 1080225777 | LIQUOR            |
| E 640-47000-259                                 | Freight                      | \$14.49                                   | 1080225777 | FREIGHT           |
| E 640-47000-259                                 | Freight                      | \$15.95                                   | 1080225778 | FREIGHT           |
| E 640-47000-252                                 | Wine For Resale              | \$1,248.00                                | 1080225778 | WINE              |
| E 640-48000-251                                 | Liquor For Resale            | \$153.86                                  | 1080225966 | LIQUOR            |
| E 640-47000-259                                 | Freight                      | \$29.11                                   | 1080228627 | FREIGHT           |
| E 640-47000-252                                 | Wine For Resale              | \$72.00                                   | 1080228627 | WINE              |
| E 640-47000-251                                 | Liquor For Resale            | \$3,281.23                                | 1080228627 | LIQUOR            |
| E 640-47000-252                                 | Wine For Resale              | \$2,956.00                                | 1080228628 | WINE              |
| E 640-47000-259                                 | Freight                      | \$31.90                                   | 1080228628 | FREIGHT           |
| <b>Total WIRTZ BEVERAGE MN WINE &amp; SPIRI</b> |                              | <b>\$9,040.47</b>                         |            |                   |
| <b>10100 Anchor Bank</b>                        |                              | <b>\$198,756.19</b>                       |            |                   |

**\*Check Detail Register©**

September 2014

Check Amt Invoice Comment

**Fund Summary****10100 Anchor Bank**

|                        |              |
|------------------------|--------------|
| 101 GENERAL FUND       | \$15,932.68  |
| 233 LAKFRONT IMPROVE   | \$13,092.42  |
| 401 PERM IMPROVEMENT   | \$1,382.50   |
| 404 PARK AND TRAIL CIP | \$3,719.43   |
| 408 GENERAL FUND CIF   | \$20,265.00  |
| 409 EQUIP REVOLVING    | \$28,194.00  |
| 610 WATER FUND         | \$614.15     |
| 620 SEWER FUND         | \$2,766.99   |
| 630 MOTOR VEHICLE      | \$5,037.88   |
| 640 LIQUOR             | \$106,007.82 |
| 670 STORMWATER         | \$1,743.32   |
|                        | \$198,756.19 |

10/7/2014  
THE FOLLOWING MUNICIPAL LICENSES  
WERE APPROVED ADMINISTRATIVELY

| Special Event/Itinerant Food - JJ Hill Days - 9/5/14                |             |
|---------------------------------------------------------------------|-------------|
| Ben & Jerry's                                                       | Wayzata     |
| Special Event/Itinerant Food - Meridian Manor Oktoberfest - 10/3/14 |             |
| Sizzling Wagon                                                      | Minneapolis |
| Special Event/Itinerant Food - Public Safety Day - 10/6/14          |             |
| Wayzata Bar & Grill                                                 | Wayzata     |
| 2015 Seasonal Sidewalk Café                                         |             |
| Starbucks Coffee #2440                                              | Wayzata     |
| Yogurt Lab                                                          | Wayzata     |

# 2014 MUNICIPAL LICENSES FOR CITY COUNCIL APPROVAL ON 10/07/2014

(Recommended for approval, pending staff review for completeness of application materials.)

| Permit for a ONE (1) Day Temporary Consumption and Display Permit<br>at Unitarian Universalist Church of Minnetonka on November 15, 2014 |                 |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Unitarian Universalist Church of Minnetonka                                                                                              | 605 Rice Street |



Minnesota Department of Public Safety  
Alcohol and Gambling Enforcement Division  
444 Cedar Street, Suite 222, St. Paul, MN 55101  
651-201-7500 Fax 651-297-5259 TTY 651-282-6555

**APPLICATION AND PERMIT FOR A 1 DAY  
TEMPORARY CONSUMPTION AND DISPLAY PERMIT**  
(City or county may not issue more than 10 permits in any one year)

**RECEIVED**

**SEP 23 2014**

**CITY OF WAYZATA**

|                                                                           |                                               |                                                                                                                                                                                   |                                   |
|---------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Name of organization<br><u>Unitarian Universalist Church</u>              |                                               | Date organized<br><u>1960</u>                                                                                                                                                     | Tax exempt number<br><u>23688</u> |
| Address<br><u>605 Rice Street</u>                                         |                                               | City<br><u>Wayzata</u>                                                                                                                                                            | State<br><u>Minnesota</u>         |
| Name of person making application<br><u>Fred Hulting &amp; Judy Regan</u> |                                               | Business phone<br><u>952-473-5900</u>                                                                                                                                             | Home phone<br><u>[REDACTED]</u>   |
| Date(s) of event<br><u>November 15th 2014</u>                             | Time(s) of event<br><u>5:00 pm - 10:00 pm</u> | Type of organization<br><input type="checkbox"/> Club <input type="checkbox"/> Charitable <input checked="" type="checkbox"/> Religious <input type="checkbox"/> Other non-profit |                                   |
| Organization officer's name<br><u>X Kent Hemmen Saleska, Minister</u>     |                                               | City<br><u>Wayzata</u>                                                                                                                                                            | State<br><u>Minnesota</u>         |
|                                                                           |                                               | Zip<br><u>55391</u>                                                                                                                                                               |                                   |

NAME OF PERSON IN CHARGE AT EVENT: Fred Hulting

TELEPHONE NUMBER OF PERSON IN CHARGE AT EVENT: [REDACTED]

DESCRIPTION OF EVENT: Annual Auction Fundraiser

WHAT DO YOU PLAN TO CONSUME: Wine & Beer  
(BEER, WINE, OR INTOXICATING LIQUOR)

DO YOU PLAN TO PROVIDE THE LIQUOR? ☒ NO, GUESTS WILL PROVIDE THEIR OWN LIQUOR  
☐ YES

A CERTIFICATE OF LIQUOR LIABILITY INSURANCE COVERAGE MUST BE ATTACHED. COVERAGE FOR THE ACTUAL EVENT LOCATION AND EXACT DATES OF THE EVENT MUST BE SHOWN. IS IT ATTACHED? ☒ YES

LOCATION LICENSE WILL BE USED. IF AN OUTDOOR AREA, DESCRIBE:

Inside @ 605 Rice Street, Wayzata, MN  
church

SIGNATURE OF APPLICANT: Judy A Regan DATE: 9/19/2014

CITY FEE AMOUNT: \$2500 DATE FEE PAID: 9-24-2014

**APPROVAL**

APPLICATION MUST BE APPROVED BY CITY OR COUNTY BEFORE SUBMITTING TO ALCOHOL AND GAMBLING ENFORCEMENT

City of Wayzata, Hennepin County, MN  
City/County

Date Approved

\$25.00

City Fee Amount

09-24-2014 Receipt #29034

Date Fee Paid

[Signature]  
Police Signature

Permit Date

9/29/14  
Date Signed

Signature City Clerk or County Official

Approved Director Alcohol and Gambling Enforcement

NOTE: Submit this form to the city or county 30 days prior to event. Forward application signed by city and/or county to the address above. If the application is approved the Alcohol and Gambling Enforcement Division will return this application to be used as the permit for the event.

# COMMERCIAL LIABILITY CERTIFICATE OF INSURANCE

THIS CERTIFICATE IS USED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER.  
THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES LISTED BELOW.

|                                                                                                                        |                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NAME AND ADDRESS OF AGENCY<br>Helland Agency, Inc.<br>17113 Minnetonka Blvd.<br>Minnetonka, MN. 55345                  |                                                                                                                    |
| NAME AND ADDRESS OF FIRST NAMED INSURED<br>Unitarian Universalist Church<br>605 Rice Street East<br>Wayzata, MN. 55391 | This Certificate of Insurance neither affirmatively nor negatively amends, extends or alters the coverage or any provision of Policy No. <u>1296-430</u> issued by <u>GuideOne Specialty Ins. Co.</u> |

This is to certify that policies of insurance listed below have been issued to the insured named above and are in force at this time.

| TYPE OF INSURANCE                                                                                                                                                                                                                                                                      | COMPANY AFFORDING COVERAGE AND POLICY NUMBER                                                                                                                                                                                                                    | POLICY EXPIRATION DATE | Limits of Liability                                                                                                                                                                    |                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                 |                        | OCCURRENCE/AGGREGATE                                                                                                                                                                   | OCCURRENCE/AGGREGATE                                                                                                                                       |
| <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY (OCCURRENCE FORM)<br><input type="checkbox"/> _____<br><input type="checkbox"/> _____                                                                                                                                 | <input type="checkbox"/> GuideOne Mutual<br><input type="checkbox"/> GuideOne Elite<br><input checked="" type="checkbox"/> GuideOne Specialty Mutual<br><input type="checkbox"/> GuideOne America<br><input type="checkbox"/> GuideOne Lloyds<br>Policy # _____ | 04/01/15               | <input type="checkbox"/> \$ 300,000/\$ 600,000<br><input type="checkbox"/> 500,000/ 1,000,000<br><input type="checkbox"/> 1,000,000/ 2,000,000<br><input type="checkbox"/> _____/_____ | <input type="checkbox"/> \$ 300,000/\$1,000,000<br><input type="checkbox"/> 500,000/ 1,500,000<br><input checked="" type="checkbox"/> 1,000,000/ 3,000,000 |
| <b>AUTOMOBILE LIABILITY</b><br>SYMBOL<br><input type="checkbox"/> ANY AUTO 1<br><input type="checkbox"/> ALL OWNED AUTOS 2<br><input type="checkbox"/> SCHEDULED AUTOS 7<br><input checked="" type="checkbox"/> HIRED AUTOS 8<br><input checked="" type="checkbox"/> NON-OWNED AUTOS 9 | <input type="checkbox"/> GuideOne Mutual<br><input type="checkbox"/> GuideOne Specialty Mutual<br>Policy # <u>Same</u>                                                                                                                                          |                        | BODILY INJURY AND PROPERTY DAMAGE COMBINED                                                                                                                                             | \$1,000,000                                                                                                                                                |
| <b>EXCESS LIABILITY</b><br><input checked="" type="checkbox"/> UMBRELLA FORM                                                                                                                                                                                                           | <input checked="" type="checkbox"/> GuideOne Mutual<br><input type="checkbox"/> GuideOne Elite<br><input type="checkbox"/> GuideOne Specialty Mutual<br><input type="checkbox"/> GuideOne America<br><input type="checkbox"/> GuideOne Lloyds<br>Policy # _____ | 04/01/15               | OCCURRENCE/AGGREGATE                                                                                                                                                                   | \$1,000,000<br>\$1,000,000                                                                                                                                 |
| <b>WORKERS' COMPENSATION and EMPLOYERS' LIABILITY</b>                                                                                                                                                                                                                                  | <input checked="" type="checkbox"/> GuideOne Mutual<br><input type="checkbox"/> GuideOne Elite<br><input type="checkbox"/> GuideOne Specialty Mutual<br><input type="checkbox"/> GuideOne America<br><input type="checkbox"/> GuideOne Lloyds<br>Policy # _____ | 04/01/15               | STATUTORY<br>EACH ACCIDENT DISEASE —<br>POLICY LIMITS<br>DISEASE —<br>EACH EMPLOYEE                                                                                                    | Included<br>\$100,000<br>\$500,000<br>\$100,000                                                                                                            |
| Property Ins. OTHER                                                                                                                                                                                                                                                                    | GuideOne Spec.                                                                                                                                                                                                                                                  | 04/01/15               | Per Schedule                                                                                                                                                                           |                                                                                                                                                            |

**DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES**

Church And Related Activities, On And Off Church Premises.

**CANCELLATION:** Should any of the above described policies be cancelled before the expiration date thereof, the Issuing company will endeavor to mail 30 days\* (unless otherwise indicated below) written notice to the below-named certificate holder, but failure to mail such notice shall impose no obligation or liability of any kind upon the company.

\*Optional number of days written notice applicable in lieu of above only if indicated: N/A

NAME AND ADDRESS OF CERTIFICATE HOLDER:

Information

(FIRM AND ADDRESS)

THIS CERTIFICATE IS FOR INFORMATION ONLY; IT IS NOT A CONTRACT OF INSURANCE BUT ATTESTS THAT A POLICY AS NUMBERED HEREIN, AND AS IT STANDS AT THE DATE OF THIS CERTIFICATE, HAS BEEN ISSUED BY THE INSURER.

DATE ISSUED: 3/18/2014

Any person who knowingly and with intent to defraud any insurance company or other person files an application for insurance containing any materially false information, or conceals for the purpose of misleading, information concerning any material fact thereto, commits a fraudulent insurance act which is a crime. (This statement is required by the laws of New York and Ohio when this application is used in those states. The laws of other states may be different.)

  
Greg Helland

AUTHORIZED REPRESENTATIVE



**PUBLIC WORKS**

**To:** Wayzata City Council and City Manager  
**From:** Dave Dudinsky; Director of Public Service  
Mark Janovec; Professional Geoscientist from Stantec  
**Date:** OCTOBER 2, 2014

**CITY OF WAYZATA PART 2 WELLHEAD PROTECTION PLAN**  
**PUBLIC HEARING**

**BACKGROUND:**

In 2010, the City of Wayzata was officially entered into the Minnesota Department of Health's (MDH) wellhead protection program. Wellhead protection planning is a means by which to identify the area of the underlying aquifer that is supplying water to the City's wells over a 10-year time span and develop a means to protect that aquifer from contamination. The program is mandated for all public water suppliers in the State of Minnesota.

The City of Wayzata completed the Part 1 Wellhead Protection Plan in February 2014. The Part 1 plan identified the 10-year capture zone for the City's water supply wells and identified the level of vulnerability for the aquifer(s) in this area. Results of this plan were presented to the Council in April of 2014.

Based on the results of the Part 1 plan, the City retained Stantec Consulting Services, Inc. to assist with the completion of the Part 2 Wellhead Protection Plan. The Part 2 plan includes an inventory of potential contamination sources located within the wellhead protection area that could potentially impact the quality of the water in the aquifer(s), if not managed appropriately. The plan also established management strategies in order to mitigate the risk of contaminating the aquifer(s) within the 10-year capture zone. Management strategies fall under seven main categories:

1. Continue monitoring aquifer water quality and maintain required well isolation distances for potential contaminants around each wellhead.
2. Educate the public about wellhead protection planning and local water quality issues
3. Locate and manage other groundwater wells identified within the 10-year capture zone.
4. Manage storage tanks identified within the 10-year capture zone.
5. Inform the public about regulations regarding shallow disposal wells.
6. Collect data relevant to local groundwater issues, including identification of spills and other potential contamination sources.
7. Include wellhead protection planning in future land use planning decisions.

Management strategies for wells and storage tanks will largely be concentrated on educating well/tank owners of the importance of keeping their structures up to code. Sites that are found to be out of compliance with State codes may be reported to the appropriate State agency if owners appear unwilling to stay within code. The plan is also written to take advantage of available grant money, should land owners need financial assistance in sealing unused wells.

The Wellhead Protection Plan has a 10-year lifetime, once it is approved by the MDH. After 10 years, the plan must be updated to reflect current conditions. Updates may also be required if the City installs new wells to the water supply system.

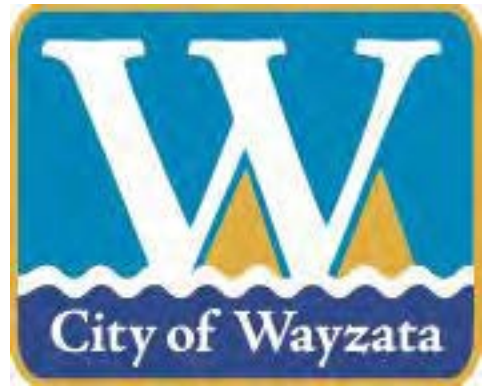
**RECOMMENDATION:**

The City Council is required to present these results to the general public at this time in the form of a public hearing. At this time, the Council should receive any comments or questions from the public regarding the wellhead protection plan.

**COUNCIL ACTION:**

The City Council should consider approval of the Wellhead Protection Plan Part 2 and submittal of the plan to the Minnesota Department of Health for review and approval assuming no comments are received during the public hearing that requires revisions to the plan.





**DRAFT**

# **WELLHEAD PROTECTION PLAN PART 2**

July 15, 2014

Stantec Project No. 193800599





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**PUBLIC WATER SUPPLY**

**NAME:** City of Wayzata

**ADDRESS:** 600 Rice Street East

Wayzata, MN 55391

**TELEPHONE NUMBER:** (952) 404.5300

**WELLHEAD PROTECTION MANAGER**

**NAME:** David Dudinsky, Director of Public Service

**ADDRESS:** 299 W. Wayzata Boulevard

Wayzata, MN 55391

**TELEPHONE NUMBER:** (952) 404-5361

**E-MAIL:** daved@wayzata.org

**CONSULTANT/TECHNICAL ASSISTANCE**

**NAME:** Stantec Consulting Services, Inc.

**ADDRESS:** 2335 West Highway 36

St. Paul, MN 55113

**TELEPHONE NUMBER:** (651) 636-4600

**E-MAIL:** mark.janovec@stantec.com

**FAX No.:** (651) 636-1311

## DOCUMENTATION LIST

| <b>STEP</b>                                                                                                 | <b>DATE PERFORMED</b>    |
|-------------------------------------------------------------------------------------------------------------|--------------------------|
| <b>Part I Approval Notice Received from MDH</b>                                                             | <u>February 27, 2014</u> |
| <b>Scoping 2 Meeting Held (4720.5349, subp. 1)</b>                                                          | <u>April 11, 2014</u>    |
| <b>Scoping Decision Notice Received (4720.5340, subp. 2)</b>                                                | <u>May 14, 2014</u>      |
| <b>Remaining Portion of Plan Submitted to Local Units of Government (LGUs) (4720.5350, subp. 1 &amp; 2)</b> | <u>July 2014</u>         |
| <b>Review Received From Local Units of Government (4720.5350, subp. 2)</b>                                  | <u></u>                  |
| <b>Review Considered (4720.5350, subp. 3)</b>                                                               | <u></u>                  |
| <b>Public Hearing Conducted (4720.5350, subp. 4)</b>                                                        | <u></u>                  |
| <b>Remaining Portion WHP Plan Submitted (4720.5360, subp. 1)</b>                                            | <u></u>                  |
| <b>Approved Review Notice Received</b>                                                                      | <u></u>                  |

## PUBLIC WATER SUPPLY WELL INFORMATION

| Local Name | Unique Number | Aquifer                   | Casing Depth (ft) | Well Depth (ft) | Date Constructed | Vulnerability * |
|------------|---------------|---------------------------|-------------------|-----------------|------------------|-----------------|
| 3          | 206931        | Drift                     | 70                | 100             | 1965             | Vulnerable      |
| 4          | 206932        | Prairie du Chien - Jordan | 284               | 507             | 1970             | Vulnerable      |
| 5          | 497387        | Prairie du Chien - Jordan | 229               | 464             | 1992             | Vulnerable      |

\*See the Part 1 Wellhead Protection Plan report (Stantec, 2013) in Appendix F for an explanation of the well vulnerability assessments.

## PART 2 EXECUTIVE SUMMARY

This portion of the wellhead protection (WHP) plan for the City of Wayzata includes:

- The results of the Potential Contaminant Source Inventory,
- The Potential Contaminant Source Management Strategy,
- The Alternative Water Supply Contingency Plan, and
- The Wellhead Protection Program Evaluation Plan.

*Part 1* of the wellhead protection plan presented the 1) delineation of the wellhead protection area (WHPA) and the drinking water supply management area (DWSMA) and 2) the vulnerability assessments for the system's wells and the aquifer within the DWSMA. Part 1 of the WHP plan was submitted to the Minnesota Department of Health (MDH) and approved on February 24, 2014. The Part 1 report is present in Appendix F of this document. The boundaries of the WHPA/DWSMA are shown in Figure 1.

The *vulnerability assessment* for the aquifers within the DWSMA was performed using available information and indicates that the vulnerability of the aquifers used by the system are “moderately vulnerable” to contamination. In the moderately vulnerable areas of the DWSMA, the aquifers are partially protected by semi-confining layers of sediment that partially restrict vertical movement of contaminants.

The *principle potential sources of contamination* to the aquifer in moderate vulnerability settings include:

- Other wells that reach or penetrate confining layers.
- Storage tanks that might contain products capable of breaking down confining units.

Also, automotive disposal systems, large sewer systems, and cesspools must also be inventoried throughout the DWSMA. This information was presented to the WHP Team during the Second Scoping meeting held with the MDH on April 11, 2014, when the necessary requirements for the content of Part 2 were outlined and discussed.

Sections 4-7 of this part of the WHP Plan (hereafter referred to as Plan) provide data and analysis in support the approaches taken to address potential contamination sources. Section 8 of this report describes the approaches taken in terms of goals, objectives, and actions to be taken.

In Section 4, the required *data elements* indicated by MDH in the Scoping 2 Decision Notice are addressed. Pertinent data elements include information about hydrology, geology, water quality, and water quantity

A *potential contaminant source inventory* and general *land use* information is given in Section 5. The potential contaminant source and land use inventory reflects the vulnerability of the aquifer in each land parcel and what is known about the data elements in Section 4.

Section 6 addresses the possible impacts that *changes in the physical environment, land use, and water resources* may have on the public water supply. The City of Wayzata will update its Wellhead Protection Plan as new public water supply wells are added, as required by the Minnesota Wellhead Protection Rules.

The *problems and opportunities* concerning land use issues relating to the aquifer, well water, and the DWSMA are addressed in Section 7. The major concerns addressed in the plan are 1) other wells located within the DWSMA that could become pathways for contamination to enter the aquifer; 2) portions of the DWSMA fall outside of the city limits; and 3) the potential sources of contamination identified in Section 5 of this plan.

The drinking water protection *goals* that the public water supplier (PWS) would like to achieve with this plan are listed in Section 8. In essence, the PWS would like to:

- maintain the current drinking water quality
- increase public awareness of groundwater protection issues
- protect the aquifer
- continue to collect data on water quality
- practice water conservation

The *objectives and action plans* for managing potential sources of contamination are also contained in Section 8. Actions aimed toward educating the general public about groundwater and land use issues, gathering information about other wells and potential contaminant sources, using the collected data in water supply and land use planning, and collecting data relevant to wellhead protection planning are the general focus.

Section 9 contains *guidance for use* for Wayzata staff, identifying areas of responsibility.

Section 10 contains a *guide to evaluate the implementation* of the identified management strategies of Section 8. The wellhead protection program for Wayzata will be evaluated every two years.

Section 11 references the *Contingency Plan* developed by the City to address water supply emergencies.

Finally, Section 12 discusses the *review process* and addresses any comments brought by local units of government and the public.

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## 1.0 INTRODUCTION

Wellhead protection is a means of safeguarding public water supply wells by preventing contaminants from entering the area that contributes water to the well or well field over a period of time. This program is now required in Minnesota since the Minnesota Department of Health (MDH) implemented its Wellhead Protection Rules in November 1997. The MDH initiated its Wellhead Protection Program in response to the 1986 Amendments to the Safe Drinking Water Act and MDH's statutory authority is granted in the Minnesota Groundwater Protection Act of 1989. This report is the culmination of the Wayzata's efforts to adopt wellhead protection planning for its water supply system.

The City of Wayzata obtains its drinking water supply from 1 well screened in the buried drift aquifer and 2 wells screened in the Prairie du Chien – Jordan aquifer. Detailed descriptions of the geologic and hydrogeologic setting of the water supply system, the delineation of the Wellhead Protection Area and Drinking Water Supply Area, and the well and aquifer vulnerability assessments are presented in *Wellhead Protection Plan, Part I* (Stantec, 2013) which was approved by MDH on February 24, 2014. See Appendix F. The rest of this report summarizes the information presented in the Part 1 report, presents additional data elements, and presents the contents of the wellhead protection plan.



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## **2.0 WELLHEAD PROTECTION AREA AND DRINKING WATER SUPPLY MANAGEMENT AREA**

The wellhead protection area (WHPA) and drinking water supply management area (DWSMA) delineation analyses were conducted in accordance with Minnesota Rules. As a result, the following criteria were considered in making the delineation analysis: 1) aquifer transmissivity, 2) groundwater flow directions, 3) the maximum average daily pumping rate for each of the wells, 4) hydrogeologic boundaries, and 5) time of travel. Each of these criteria was factored into the development of a groundwater flow model that was used to conduct the delineation analyses. The results of these analyses (the WHPA and DWSMA) are presented in Figure 1. Additional details on the delineation analysis are presented in *Wellhead Protection Plan, Part I*, prepared by Minnesota Department of Health (MDH) and approved by MDH on February 24, 2014. See Appendix F of this document for a full copy of this report.

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### 3.0 VULNERABILITY ASSESSMENT

Two separate vulnerability assessments were undertaken to as part of the Part 1 Plan. The first assessment consisted of an assessment of the vulnerability to contamination of the aquifer within the identified DWSMA. This assessment was completed according to MDH guidelines and recommended methodology. The second assessment was a well vulnerability assessment for each of the Wayzata public water supply wells. The well vulnerability assessment was also completed using MDH guidelines. A description of the two assessments is presented in *Wellhead Protection Plan, Part I*, prepared by the Minnesota Department of Health (approved February 24, 2014). See Appendix F. The DWSMA has a vulnerability ranking of “moderate.” All three public water supply wells were also ranked as “vulnerable” during the well vulnerability assessment. The results of these vulnerability assessments drove the need for a detailed evaluation of potential contaminant sources, which is presented later in this report.

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## 4.0 DATA ELEMENTS

The state rules relating to wellhead protection require that wellhead protection plans include specific data elements. The required physical environment, water quantity and water quality data elements were addressed in the Part 1 Plan (See Appendix F). The Part 1 Plan also includes an assessment of the impact of these data elements on 1) the use of the wells, 2) the wellhead protection area delineation criteria and 3) the quality and quantity of water supplying the public water supply wells. Each of these elements was discussed specifically in the second scoping meeting with MDH and is presented briefly here.

### 4.1 Geology

A description of geologic conditions in the wellhead protection area was provided in the Part 1 report. Late Precambrian through Ordovician sedimentary rocks make up the major regional aquifers and aquitards in the metropolitan area, and include units such as the Mt. Simon-Hinckley Sandstone, Franconia-Ironton-Galesville Group, the Jordan Sandstone, the Prairie du Chien Group, and the St. Peter Sandstone. The Quaternary unconsolidated deposits include glacial outwash, glacial till, and alluvial deposits. Sand and gravel layers in these unconsolidated deposits can often serve as local aquifers, if water yield is sufficient.

Well 3 obtains its water from a buried unconsolidated sand and gravel deposit. Wells 4 and 5 are open to both the Prairie du Chien Dolomite and the Jordan Sandstone aquifers.

The degree of geologic protection was an important factor in the DWSMA vulnerability assessment described in the Part 1 report. The level of vulnerability, in turn, determines the types of potential contaminants and land uses of concern and the appropriate level of management. The aquifers used by the City's wells has been determined to have "moderate" vulnerability to contamination. This means that while confining materials separate this aquifer from direct surficial infiltration, the confining layer either isn't thick enough or continuous enough to ensure total separation from the land surface, or some evidence of younger water has been found in the aquifer. Some contaminants, such as fuels and other petroleum products, may have the ability to break down the confining layer over time and reach the aquifer.

### 4.2 Groundwater Quality

Routine monitoring data collected for the Public Water Supply Program are in the files of the Minnesota Department of Health. Routine monitoring by the Public Water Supply Program shows no contamination above existing water quality standards. A summary of the system's finished water quality is provided in the annual Consumer Confidence Report (Appendix B). Future changes in water chemistry reflected in routine monitoring results would be an indication that groundwater quality was affected by changes in the hydrologic system.

#### *4.3 Groundwater Quantity*

Other than the Wayzata water supply wells, the only other wells in DWSMA which are covered by state groundwater appropriation permits are three irrigation wells. Of the these three irrigation wells, two groundwater wells are at Woodhill Country Club (Unique numbers 205170 and 578940) and 1 well at Wayzata Country Club (Unique number 208853). Information about these wells is presented in the Part 1 report (see Appendix F) and in Table A-1 in Appendix A.

There are no known well interference problems in or around the Wayzata DWSMA. Therefore, existing high capacity wells or groundwater use conflicts do not need to be addressed in the management plan at this time.

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## 5.0 CONTAMINANT SOURCE INVENTORY

As part of the City of Wayzata wellhead protection planning process, an inventory of potential contaminant sources was conducted within the delineated Drinking Water Supply Management Area (DWSMA). The purpose behind this inventory was to develop a database listing potential sources of contamination that may affect the public water supply wells. The results of this effort provide the water supplier with information about contaminant sources identified in the DWSMA. Wellhead protection planning strategies can be directed in a manner that will deal with any potential sites before they become a problem or a threat to the drinking water supply.

### 5.1 Land Use

Understanding land use is important in determining key areas for concern in managing a wellhead protection area. For example, knowledge about the location of future development in relation to the DWSMA may reveal a need to closely manage the activity within more sensitive areas. Additionally, any land uses that currently pose a potential threat to the City's water supply need to be highlighted to increase awareness of any concerns. A land use map, compiled from Hennepin County parcel data, is provided as Figure 2. The major zoning designations within the DWSMA are residential, commercial, and recreational, with low density residential being the largest of the three areas. A portion of the DWSMA also lies outside of the City in the City of Orono and a small portion of the City of Plymouth. This land is largely residential and recreational (golf courses).

For the 10-year life of this wellhead protection plan, no known or anticipated land use designation changes are expected for the area encompassed by the DWSMA. Therefore, Figure 2 represents both the current land use map and the anticipated future land use until the year 2024.

Following a scoping meeting held with Minnesota Department of Health (MDH) staff on April 11, 2014, Wayzata staff proceeded to locate information about land and water use within the delineated DWSMA for the Wayzata wells. Any data which was relevant to the public water supply wells, the quality of the water being drawn in to the wells, or land and groundwater uses around the wells was considered important in determining any potential threat to the water supply. The following criteria were used:

1. All areas must be evaluated for the presence of groundwater wells, automotive disposal systems and cesspools (types of Class V or shallow disposal wells) and large sewer systems serving more than 20 people or 2 or more facilities, and non-point sources in areas that drain to high vulnerability areas.
2. All areas must also be evaluated for the presence of storage tanks.

Each of these elements is described separately below. Figure 2 shows existing land use in the DWSMA. Figure 3 shows the locations of wells and Figure 4 shows identified storage tank sites within the DWSMA. Figure 5 shows identified spill and leak sites that have occurred within the DWSMA. The wells, tanks, and spill sites are listed by parcel in the tables provided in Appendix A.

## 5.2 Shallow Disposal Wells

Disposal wells are potential sources of contamination that must be inventoried for the entire DWSMA. The USEPA regulates shallow disposal wells (Class V injection wells). Automotive disposal wells have been banned in groundwater protection areas and cesspools have been banned throughout Minnesota. Furthermore, the Code of Federal Regulations (Title 40, Chapter I, Part 144.12(a)) states that “no owner or operator [of an injection well] shall construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR part 142 or may otherwise adversely affect the health of persons.”

No known shallow disposal well sites were identified within the DWSMA. This determination was made based on Wayzata staff knowledge of land uses in the area. A component of the management plan will include continued vigilance for identifying shallow disposal wells as they are discovered.

## 5.3 Wells

An important component of the potential contaminant source inventory was the location of any known wells within the groundwater capture zones. Since wells may penetrate confining layers that protect an aquifer, they are potential pathways for contaminants to rapidly enter the aquifer. A search for active and unsealed abandoned wells was undertaken for the DWSMA.

The following sources were used to identify wells in the DWSMA:

1. Minnesota Geological Survey’s County Well Index (CWI)
2. Wayzata staff knowledge about current and historical land uses.
3. Aerial photographs

The identified wells are plotted on the map in Figure 3, and listed in Appendix A. The results of the well search indicated that there are 37 wells known to be in the DWSMA, in addition to the three municipal supply wells. Known sealed wells were omitted from the inventory, as they are thought to pose no threat to the DWSMA. There may be additional wells within the DWSMA that are not part of the current databases, including both active wells and abandoned wells that were never properly sealed. Figure 3 shows 15 suspected wells sites based on properties that may contain a well, but haven’t been verified. The management plan will attempt to verify these wells through a planned well survey.

The accuracy of the locations of the wells as mapped in Figure 3 varies. Whenever possible, wells were mapped using coordinates obtained by the MGS or MDH. When accurate coordinates were not available, all wells were mapped on the correct land parcel using an ortho-rectified digital air photo base map.

The majority of the identified wells in the DWSMA are used for domestic supply or monitoring purposes. Monitoring wells are present at former spill and leak sites to characterize the possible migration and concentration of contaminants. A total of 6 monitoring and observation wells were

identified. At least 18 wells were identified within the DWSMA as being domestic wells, which includes several parcels located in the City of Orono that are not served by the City's water supply system. Several test wells, test borings, and "other" wells were identified in the State's database, the status of which is currently unknown. As part of the implementation of this Wellhead Protection Plan, the City of Wayzata will survey these well sites to better determine the use and status of these wells.

#### *5.4 Point Sources*

An important component of the potential contaminant source inventory was to look for any potential point sources within the DWSMA that might be a threat to the quality of the public water supply. For moderately vulnerable DSWMAs, the point sources of main concern are storage tanks and spill sites, particularly petroleum-related tanks and spills. Potential point sources of contamination were identified according to the criteria listed above in Section 5.1. A listing of potential point sources by land parcel is presented in Appendix A. GIS data files containing the point source data are also available electronically. The locations are mapped in Figures 4 and 5.

Items located within the DWSMA were identified and inventoried according the required criteria. Data points were located by the address information provided in the databases and by Wayzata staff.

A total of 10 storage tanks were located within the DWSMA. This includes seven above ground storage tanks and three underground storage tanks. Storage tanks are of particular concern because they represented a large volume and high concentration of potential pollutants that could feasibly be released into the environment within a short span of time. Underground tanks, and any associated piping to/from these tanks, pose additional concern because leakage can occur slowly over time, releasing a large quantity of contamination into the soil before the leak is eventually discovered.

A total of 23 leak sites have been documented within the DWSMA (see Figure 5). The release of any additional contaminants is usually halted upon discovery of a leak, but long term impacts to soil and groundwater quality may require long term cleanup and monitoring efforts. All 23 leak sites are now listed as "closed" with the Minnesota Pollution Control Agency, meaning that it has been determined that the majority of the spill contaminant has either been recovered or that the site no longer appears to pose a significant threat to public health of the environment. However, there exists the possibility that residual contaminants may still remain in the subsurface and could potential impact the quality of groundwater resources. Proper management of storage tanks is critical towards preventing further leaks and spills within the DWSMA.

#### *5.5 Public Utility Services*

Infrastructure-related accidents are another potential contaminant source. Roadways, railways and oil pipelines are examples of transportation routes that may be the site of a leakage or spill that could threaten the aquifers.

Highway 12 and the railroad are the major transportation corridors that intersect the DWSMA. The potential for spills along the railroad corridor and the highways is one concern for managing the DWSMA. While spills may not impact the aquifer in moderate vulnerability area, if quickly contained and recovered, a large spill that infiltrates into soils may pose long term problems for groundwater

quality. The proximity of Highway 12 and the railroad is close enough to two of the three active public water supply wells that they intersect the 1-year time-of-travel capture zone, also known as the Emergency Response Area.

There are no identified petroleum pipelines located within the DWSMA.

### *5.6 Active Sites of Contamination*

There are currently no sites currently in the State's database that are shown as active sites of contamination releases or cleanup. 23 past leaks sites, which have obtained closure, were identified in this study and are shown on Figure 5.

Should any additional contamination sites be identified within the DWSMA, they will be prioritized in order of the threat they pose to the municipal wells. Site specific soil conditions, geology, surface runoff, and estimated time of travel to the public supply wells will be investigated to assess the level of threat to the City's water supply.

### *5.7 Summary*

Proactive management of potential point sources of contamination within the 1-year groundwater capture zones, or Emergency Response Areas, in high vulnerability areas are of most immediate concern. These items would pose the greatest potential risk to the quality of water drawn from the public water supply wells.

Sites identified within the Emergency Response area include two other groundwater wells. While these wells are not considered to be sources of contamination, they are potential pathways for contaminants to rapidly infiltrate to one of the water supply aquifers.

| <b>Type of Potential Contaminant Source</b> | <b>Total Identified Sites within DWSMA</b> | <b>Total Sites within the Emergency Response Area</b> |
|---------------------------------------------|--------------------------------------------|-------------------------------------------------------|
| Aboveground Storage Tank                    | 7                                          | 0                                                     |
| Underground Storage Tank                    | 3                                          | 2                                                     |
| Groundwater Wells                           | 37                                         | 2                                                     |
| Class V wells                               | None identified                            | None identified                                       |
| Large sewer system                          | None identified                            | None identified                                       |
| Transportation routes                       | Highways, Railroad                         | Highways, Railroad                                    |

The land use map (Figure 2) provides a tool for understanding the scope of land uses in the DWSMA. The inventory was made as complete as practicable at the time of the development of this Plan. Further data collection issues and the other problems and opportunities associated with land uses are addressed in Chapter 7. Plan goals, objectives, and actions are addressed in Chapter 8.



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## **6.0 PROJECTED CHANGES TO THE ENVIRONMENT, LAND USE, AND SURFACE AND GROUNDWATER**

General land uses within the DWSMA are not expected to change in the next ten years. Figure 2 shows the current land uses. These land uses are expected to remain unchanged over the ten-year life of this plan. Growth in the City of Wayzata is not sufficient enough to require an immediate expansion of the current water supply system. A small increase in average annual water demand is possible over the next ten years, but any changes are expected to be minimal. The current system is expected to supply the City's needs beyond the ten-year time frame of this Wellhead Protection Plan. In summary, no significant changes to the environment, land use, and surface and groundwater can be anticipated at this time.

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## 7.0 PROBLEMS AND OPPORTUNITIES

### 7.1 Problems

1. The DWSMA for the City of Wayzata is moderately vulnerable to contamination.
2. A number of storage tanks have been identified within the DWSMA.
3. Highway and railroad transportation corridors run through the center of the DWSMA, close to the public water supply wells.
4. Portions of the DWSMA are outside of the jurisdiction of the City of Wayzata.

### 7.2 Opportunities

1. The majority of the DWSMA containing potential contamination sources is located within the city limits.
2. The City's wells utilize separate aquifers, decreasing the chances that all three wells could become contaminated simultaneously.
3. An opportunity exists to work with local units of government intersected by the DWSMA in planning land uses in order to protect the area's groundwater resources.

### 7.3 Status of Existing Governmental Controls Concerning Water and Related Land Use

#### City of Wayzata

Zoning ordinances and special use permits are the primary means by which the City of Wayzata controls water and land use within the city.

#### Hennepin County

It is the responsibility of the Hennepin County Environmental Services department to provide services related to solid waste, planning and zoning, and water planning activities. The planning and zoning activities include enforcement of the zoning ordinance, feedlot ordinance compliance, and septic system inspections and permitting. In addition, this department is also responsible for administering the Water Plan for the County. The purpose of the Water Plan is to:

1. Prepare and adopt a local water management plan that meets the requirements of Minnesota State Statute 103B.
2. Review water and related land resources plans submitted by local units of government.
3. Exercise any and all powers necessary to assure implementation of local water management plans.

The plan includes goals focusing on groundwater quality issues, including targeting BMP programs in wellhead protection areas, such as RIM, CRP, manure management, and nutrient planning.

The Hennepin County Water Plan was completed in 2013 and is expected to serve the period of 2014 to 2023.

## Minnehaha Creek Watershed District

The MCWD is governed by a seven-member Board of Managers, who are appointed by the Hennepin and Carver county boards. As required by state law, the MCWD has developed a comprehensive water resources management plan (Wenck Associates, Inc., 1997) that describes the existing water resources and water-related problems within the watershed, possible solutions to the problems and the objectives of the MCWD. The plan sets forth the goals and direction of the MCWD.

Minnehaha Creek Watershed District regulates surface water management issues within its boundary through a permitting process. The MCWD reviews permit applications for land development after the application has received preliminary city approval.

## State and Federal Regulations

Many of the state and federal regulations for potential sources of pollution are design and operation standards. Examples are regulations concerning on-site sewer systems, large storage tanks, and wells. It should be noted that the state's design and operation standards would be adequate for most contaminant sources within the Wayzata DWSMA.

Land use authority that addresses the location of potential sources of contamination within the Wayzata DWSMA rests with local units of government according to Minnesota law. The Wayzata DWSMA falls within the jurisdiction of the City of Wayzata and Hennepin County.

State and federal governmental units regulate:

- Well construction – MDH;
- Well sealing – MDH;
- State groundwater appropriation permits – DNR;
- Public water supply quality – MDH;
- Setbacks for specific contaminant sources from a well – MDH and local governments through conditional use permitting;
- Tank control program – MPCA, MDA
- Shallow disposal wells - U.S. EPA.

Any of the permitted activities which have the potential to affect the wellhead protection area and/or the quality or quantity of the Wayzata water supply should be reviewed by the respective state agency before a permit can be approved.

The wellhead protection planning team recommends that no additional regulations be imposed at this time and are confident that local issues may be adequately addressed through existing processes.

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## **8.0 WELLHEAD PROTECTION GOALS, OBJECTIVES, AND IMPLEMENTATION PLAN**

Goals and objectives have been developed based on the results of the vulnerability analysis, the results of the potential contaminant source inventory, and the projected changes to the environment, land use, and surface and ground water. In general, goals and objectives are ranked in order of priority.

### **8.1 Goals**

The following goals form the framework within which the information generated during delineation and source inventory activities is evaluated and upon which the planning activities are based:

1. To continue to provide high quality water that meets state and federal drinking water standards.
2. Practice prevention strategies and best management practices for properties containing potential contaminant sources to avoid adversely impacting the quality of the water drawn from the aquifer.
3. To work cooperatively with Hennepin County and state government on aquifer protection actions.
4. To work cooperatively with Hennepin County to ensure land use planning and zoning takes into account protection of the aquifer.
5. Build awareness of wellhead protection goals among and disseminate information about wellhead protection plan implementation City staff and property owners in the DWSMA.

### **8.2 Objectives**

In light of the problems and opportunities listed in Chapter 7 and the goals listed above, a strategy of objectives and specific actions aimed toward meeting those objectives was developed. Because the system water meets all state and federal drinking water standards, and contamination from human sources has not been a problem to date, the plan will focus on preventing acute point source releases, particularly in the Emergency Response Areas. To meet the stated goals, the following specific objectives were developed:

1. Evaluate the potable water quality monitoring strategy used for the water supply system to ensure that not only is it consistent with federal and state requirements but also that it takes into account local conditions.
2. Monitor the 200 foot Inner Wellhead Management Zones and one-year time of travel delineations to prevent contamination in the areas immediately surrounding the wellheads.
3. Locate missing or unknown wells in the DWSMA.
4. Seal abandoned or unused wells.
5. Manage storage tanks within the DWSMA.
6. Identify new spills or potential contaminant sources within the DWSMA.
7. Attempt to identify shallow disposal wells in the DWSMA and notify owners of federal reporting responsibilities.
8. Include Wellhead Protection overlays in future land use planning and comprehensive planning.
9. Develop specific guidance for Wayzata staff so that personnel can make informed day-to-day decisions that may affect the wellhead protection program.

10. Develop public support and understanding for the wellhead protection plan through the use of newsletters, handouts, and participation in special events.
11. Identify possible impacts of new high capacity wells or changes in groundwater appropriations on the DWSMA.

### **8.3 Implementation Plan**

Objective 1: Evaluate the water quality monitoring strategy and results to ensure that they are consistent with federal and state requirements yet also take into account local conditions.

Action 1A: Maintain water quality sampling requirements mandated by MDH and analyze trends in water chemistry, looking for any possible degradation of quality.

Who: Wayzata Public Works staff

Cooperators: MDH

When: Annually

Cost: Staff time

How: Review MDH monitoring requirements, requirements of 1996 amendments to Federal Safe Drinking Water Act, results of MDH and Wayzata water quality testing, proposed and new water quality rulemaking, and unique needs for Wayzata to verify the water pumped from the wells meets all appropriate drinking water quality standards.

Status: Continuation of ongoing program.

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Objective 2: Monitor the 200 foot Inner Wellhead Management Zones and one-year time of travel delineations to prevent contamination in the areas immediately surrounding the wellheads.

Action 2A: Continue to monitor setbacks for all potential sources of contamination located within Inner Wellhead Management Zones.

Who: Wayzata Public Works staff

Cooperators: MDH

When: Ongoing

Cost: Staff time

How: The wellhead protection manager will ensure that any new regulated activities will meet the required setbacks.

Status: Already implemented.

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Objective 3: Locate missing or unknown wells in the DWSMA not previously identified.

Action 3A: Make direct contact with well owners in the DWSMA to determine location and status of each well.  
Who: Wayzata Public Works staff  
When: Within three years of plan implementation.  
Cost: City staff time  
How: Wayzata will survey suspected well owners to determine that status of wells at each site. Wells without accurate location information will be surveyed to better define well location and status.  
Status: Not currently implemented.

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Action 3B: Request that MDH inform Wayzata when permits are granted for new wells, any change in maintenance of existing wells, or wells are abandoned and sealed within the WHP area.  
Who: Wayzata staff  
When: Within six months following the implementation of this Plan  
Cost: City staff time  
How: Contact designated Point Of Contact staff at MDH.  
Status: Not currently implemented.

---

Objective 4: Seal abandoned or unused wells located in the groundwater DWSMA and encourage proper well maintenance.

Action 4A: Provide MDH with a list of abandoned and unsealed well locations as Wayzata personnel discover them.  
Who: Wayzata staff  
Cooperators: MDH  
When: Ongoing  
Cost: City staff time  
How: Prepare written report for distribution to MDH as wells are discovered.  
Status: Not currently implemented.

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Action 4B: Make property owners aware of financial and technical resources available to assist in securing grant funding for properly sealing wells.  
Who: Wayzata staff  
Cooperators: MDH, Hennepin County  
When: Ongoing  
Cost: Staff time  
How: Research types of grants and loans available for permanent well sealing and distribute this information to appropriate well owners, as requested.  
Status: Not currently implemented.

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Action 4C: If wells are identified that require sealing, pursue grant funding, if needed, to assist with well sealing activity.  
Who: Wayzata staff, MDH  
When: Funding needs and grant opportunities to be reviewed annually  
Cost: Staff time  
How: Determine the availability of grant money from MDH for well sealing activities. Apply for grants to seal wells that are identified to no longer being used and/or are not properly maintained.  
Status: Not currently implemented.

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Action 4D: Send reminder notices to well owners reminding them of proper well maintenance.  
Who: Wayzata staff  
When: Within two years of Plan implementation and Plan updates  
Cost: Staff time, printing and postage costs  
How: Notices will be sent to addresses identified in the DWSMA well inventory.  
Status: Not currently implemented.

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Objective 5: Manage storage tanks within the DWSMA.

Action 5A: Contact property owners and make them aware of their placement within the City's wellhead protection area. Educate owners on the importance of spill prevention in the DWSMA.  
Who: City staff  
Cooperators: MPCA  
When: Within 1 year of adoption of this Plan.  
Cost: Staff time  
How: Send mailing out to property owners notifying them about the Drinking Water Supply Management Area delineation and the importance of spill prevention. Provide contact numbers for appropriate government agencies if requested. Send copies of tank management fact sheets, along with contact information for MPCA staff.  
Status: Not currently implemented.

---

Objective 6: Identify new spills or potential contaminant sources within the DWSMA.

Action 6A: Determine if state agencies or local services have knowledge of new spills or potential contaminant sources in the DWSMA. Determine if the status of any existing spill/leak sites has changed.

Who: Wayzata staff

Cooperators: MPCA, Department of Agriculture, Local emergency response services

When: Once every two years

Cost: Staff time

How: Contact designated Point Of Contact staff at MDH, MPCA, and MDA staff acting as a liaison to the wellhead protection program. Provide map coverage of DWSMA to agencies along with current known PCSI inventory. Request updates on any new or existing spills/leaks or possible contamination sources.

Status: Not currently implemented.

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Action 6B: Communicate wellhead protection goals and concerns to railroad.

Who: Wayzata staff

Cooperators: Railroad

When: Once every two years

Cost: Staff time

How: Provide wellhead protection plan maps to the railroad. Communicate the vulnerability of the aquifer and the management goals to protect drinking water with Wayzata. Emphasize the need for the railroad to practice appropriate spill prevention and spill response planning for the DWSMA and surrounding areas.

Status: Not currently implemented.

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Objective 7: Attempt to identify shallow disposal wells (Class V wells) in the DWSMA and notify owners of federal reporting responsibilities.

Action 7A: Identify possible Class V shallow disposal well sites within the DWSMA

Who: Wayzata staff

Cooperators: MDH, US EPA

When: Every two years or as suspected sites are identified.

Cost: Staff time

How: Contact owners of properties with suspected shallow disposal wells to determine if well exists on site. Provide information to property owners to identify shallow disposal wells and requirements for their removal (or maintenance). Provide contact information at MDH and US EPA.

Status: First review already completed. Revisit within two years or as needed.

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Action 7B: Notify MDH of Class V shallow disposal well sites within the DWSMA as they are identified by Wayzata staff.  
Who: Wayzata staff  
Cooperators: MDH  
When: Ongoing, as needed  
Cost: Wayzata staff time  
How: Mail a letter to MDH source water protection unit identifying the shallow disposal well site.  
Status: Implement as needed.

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Objective 8: Include Wellhead Protection overlays in future land use planning and comprehensive planning.

Action 8A: Provide wellhead protection maps and overlays for land use planning, zoning, and comprehensive planning.  
Who: Wayzata staff  
Cooperators: Hennepin County  
When: Ongoing, as needed  
Cost: Staff time  
How: Provide DWSMA information to planning department. Identify issues in land use, zoning, and comprehensive planning that could impact the wellhead protection goals. Consider changes or controls (such as setbacks of tanks from wells) that would help maintain or improve groundwater quality within or near the DWSMA.  
Status: Not currently implemented.

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Objective 9: Develop specific guidance for Wayzata personnel to use so that staff can make informed day-to-day decisions.

Action 9A: Review responsibilities of each department. Determine action triggers that could affect wellhead protection activities. Establish means of educating City staff about wellhead protection planning and the role they play in ensuring its successful implementation.  
Who: Wayzata staff  
When: Within one year of plan implementation, annual review thereafter  
Cost: Staff time  
How: Prepare specific guidance for each utility department and educate appropriate City staff about its use.  
Status: Currently prepared in outline form as part of this document.

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Objective 10: Develop public support and understanding for the wellhead protection plan through the use of newsletters, handouts, and the website.

Action 10A: Develop handouts or informational brochures to be given to residents in the DWSMA explaining the issues involved in protecting water quality in the DWSMA.

Who: Wayzata staff

Cooperators: MDH

When: Within one year of plan implementation

Cost: Staff time, printing costs

How: Identify and obtain existing materials available from MDH and other resources. Make information available at City buildings. Include information about wellhead protection on the City's website. Include information about wellhead protection periodically within the annual consumer confidence reports.

Status: Not currently implemented.

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Objective 11: Identify possible impacts of new high capacity wells or changes in water appropriations on the DWSMA.

Action 11: Request that the DNR inform City of any proposed new appropriations or changes in appropriations to existing wells that may impact the capture zones for Wayzata public water supply wells. Request that MDH inform Wayzata of high capacity well permits issued in or near the DWSMA.

Who: Wayzata staff

Cooperators: DNR, MDH

When: Within 6 months of Plan implementation

Cost: Staff time

How: Send a letter and a figure showing the WHPAs and the DWSMA to the DNR, requesting that the Wayzata be informed of water appropriations applications that would affect the municipal wells and/or WHPAs.

Status: Not currently implemented

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## **9.0 GUIDANCE FOR USE BY WAYZATA STAFF FOR WELLHEAD PROTECTION PLANNING**

To ensure that wellhead protection planning is viable for the City of Wayzata, City staff should understand the nature of the Wayzata Wellhead Protection Plan and how their day-to-day actions pertain to the Wellhead Protection program

Wellhead Protection Manager: Wayzata Director of Public Service, David Dudinsky

### *9.1 Activities Affecting Wellhead Protection*

The list presented below reflects the type of information or activities that City staff may encounter or manage as part of their normal functions that should be communicated to the Wellhead Protection Manager.

#### City of Wayzata

- Well siting
- Well sampling and analysis results
- Contamination noted during construction
- Change in pumping of municipal wells
- Review of new construction within Inner Wellhead Management Zone
- Annual review of land use changes within one-year capture zone

#### Wellhead Protection Manager

- Internal coordination and plan management
- Interaction with external cooperators
- Biannual evaluation of WHP activities accomplished, with report to governing authority

When City staff and the Wellhead Protection Manager encounter activities that fall under the above categories, an effort should be made to tie in those activities with the Wellhead Protection Plan, ensuring that the protection of the groundwater resources within the DWSMA are accounted for when these activities take place. Certain activities may also trigger “as needed” management strategies listed in Chapter 8.

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## **10.0 PROGRAM EVALUATION**

The City of Wayzata will evaluate the progress of the implementation plan every two years. The Wellhead Protection Manager will prepare a progress report to be completed by December 31<sup>st</sup> on odd-numbered years while this Plan is in effect. The progress report will briefly discuss the actions implemented by the City or any cooperators during the year, and actions that will be completed in the next two years. The progress report will be distributed to the Wayzata City Council for their review after which it will be submitted to MDH.

According to Minnesota wellhead protection rules, this wellhead protection plan will be updated every 10 years from date of adoption or with the installation of any new municipal well to the water supply system.

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## **11.0 EMERGENCY PREPAREDNESS AND CONTINGENCY PLAN**

Wayzata's *Water Supply Plan* was submitted to the Department of Natural Resources for approval. The approved plan has been adopted by the City. This plan fulfills the Wellhead Protection Rule requirements for an emergency preparedness and contingency plan. The plan may be reviewed at the Wayzata offices in Wayzata, MN. Notice of the DNR's approval of this plan is included in Appendix C.

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## 12.0 LOCAL GOVERNMENT REVIEW AND PUBLIC HEARING

The draft Wayzata wellhead protection plan was submitted to local units of government for their review and comments on \_\_\_\_\_. The required 60-day review period ended on \_\_\_\_\_. Comments received from local units of government include \_\_\_\_\_.

Wayzata held a public hearing on the Wellhead Protection Plan on \_\_\_\_\_. Documentation from the public hearing is included in Appendix E. Comments and questions were received from the general public have been considered for the creation of this version of the Part 2 Wellhead Protection Plan.

*(Note: This section will be completed following the completion of the 60-day review period and the public hearing.)*

## FIGURES



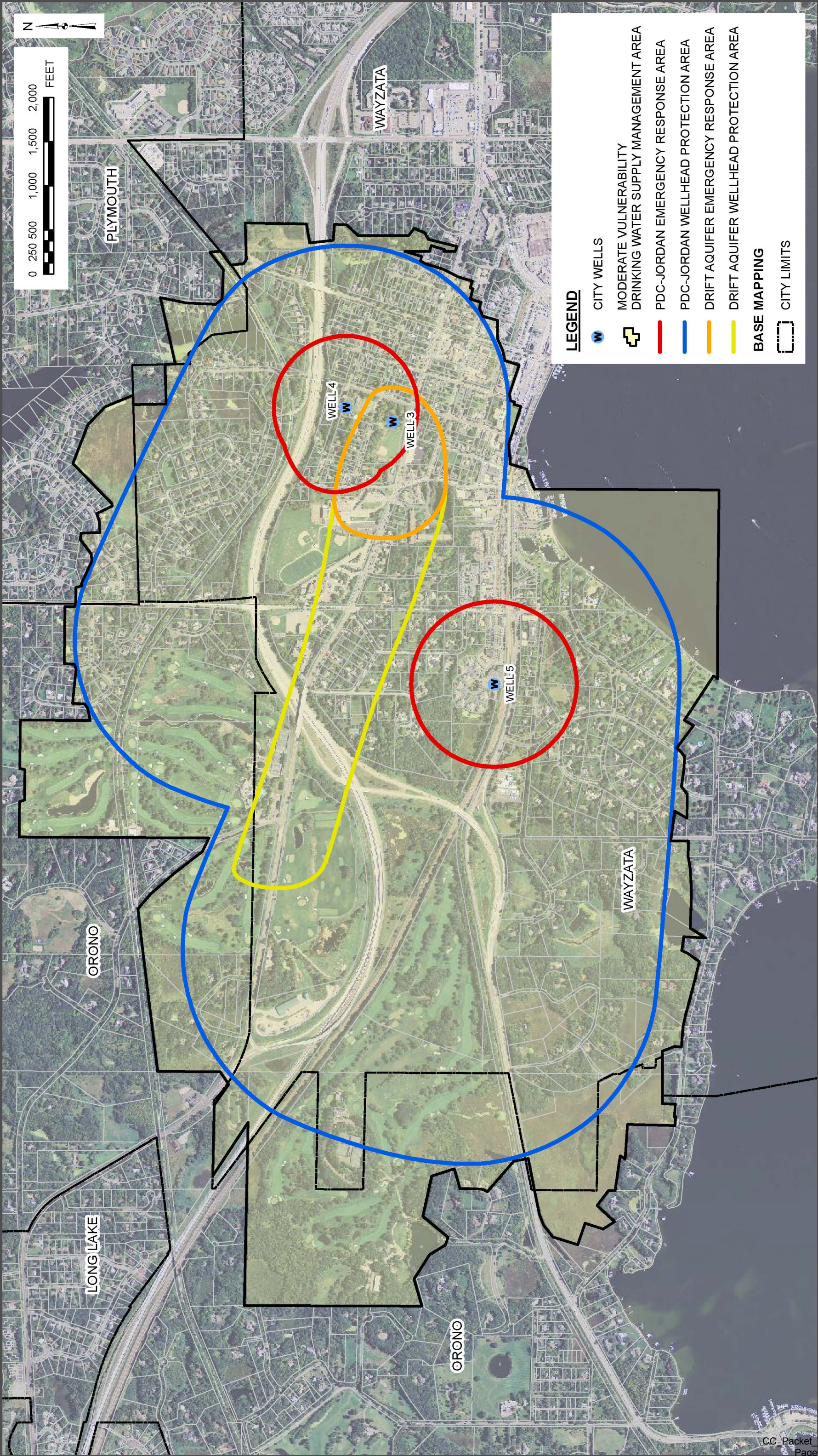


FIGURE 1 - DRINKING WATER SUPPLY MANAGEMENT AREA

WAYZATA WELLHEAD PROTECTION PLAN

Stantec Consulting Services  
2335 Highway 36 West  
Saint Paul, MN 55113  
651.636.4600



January 2014

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V:\1938\active\193800599\GIS\Projects\Part 2 Figure 1 - DWSMA.mxd



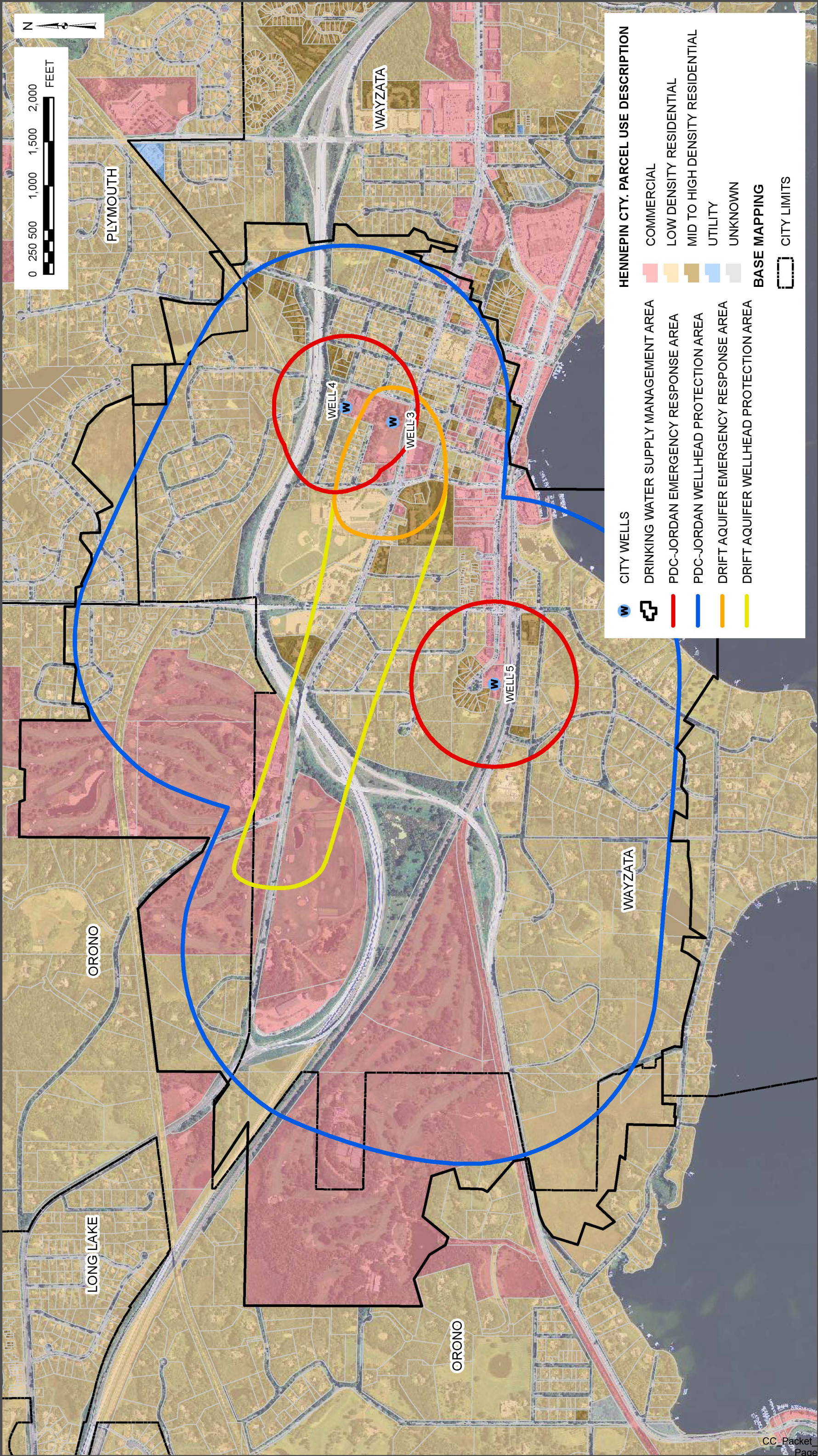


FIGURE 2 - EXISTING HENNEPIN COUNTY LAND USE

WAYZATA WELLHEAD PROTECTION PLAN

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2335 Highway 36 West  
Saint Paul, MN 55113  
651.636.4600



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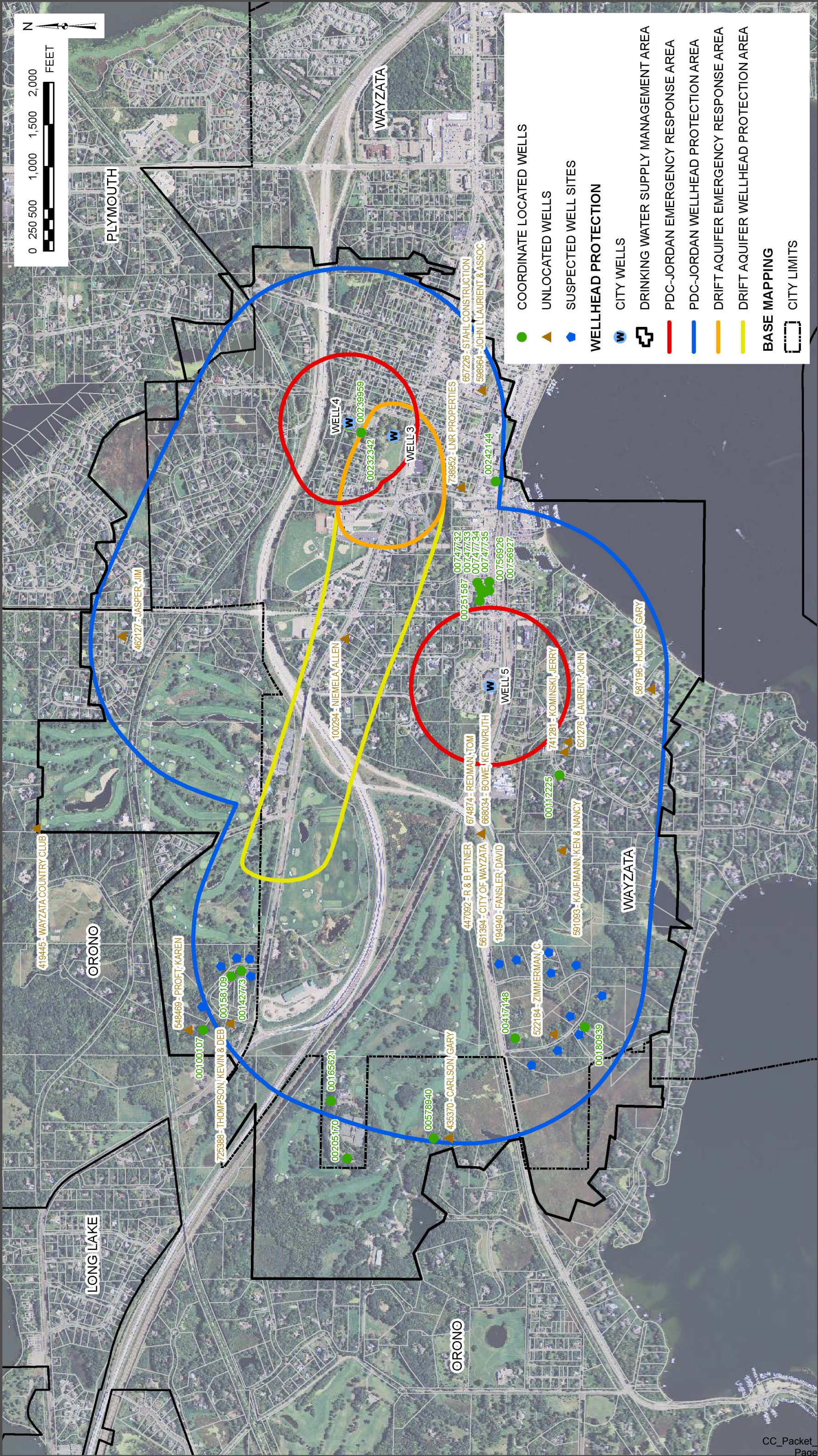


FIGURE 3 - GROUNDWATER WELLS WITHIN DWSMA

WAYZATA WELLHEAD PROTECTION PLAN

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Saint Paul, MN 55113  
651.636.4600



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Design With Community In Mind

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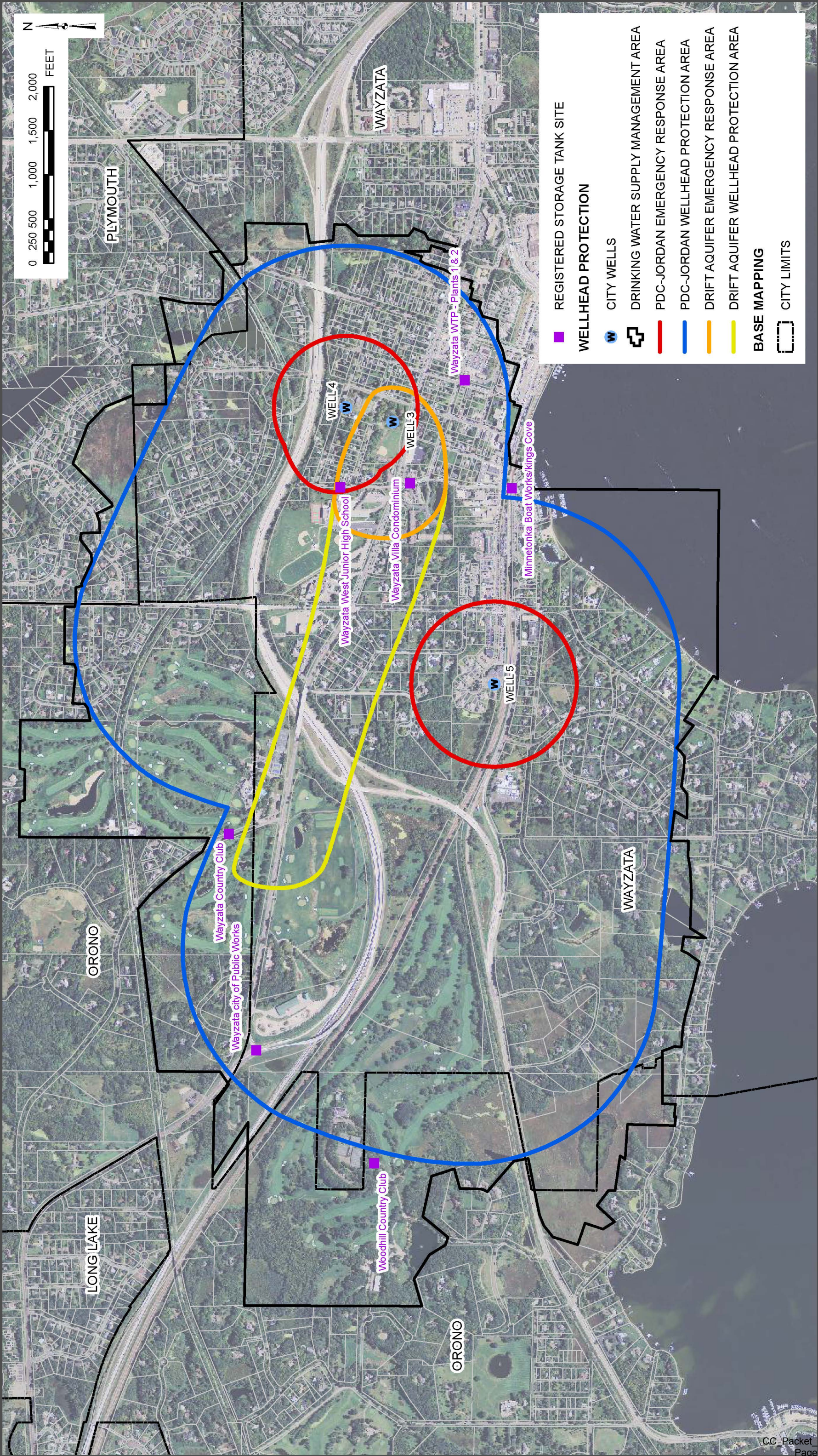


FIGURE 4 - STORAGE TANKS WITHIN DWSMA

WAYZATA WELLHEAD PROTECTION PLAN

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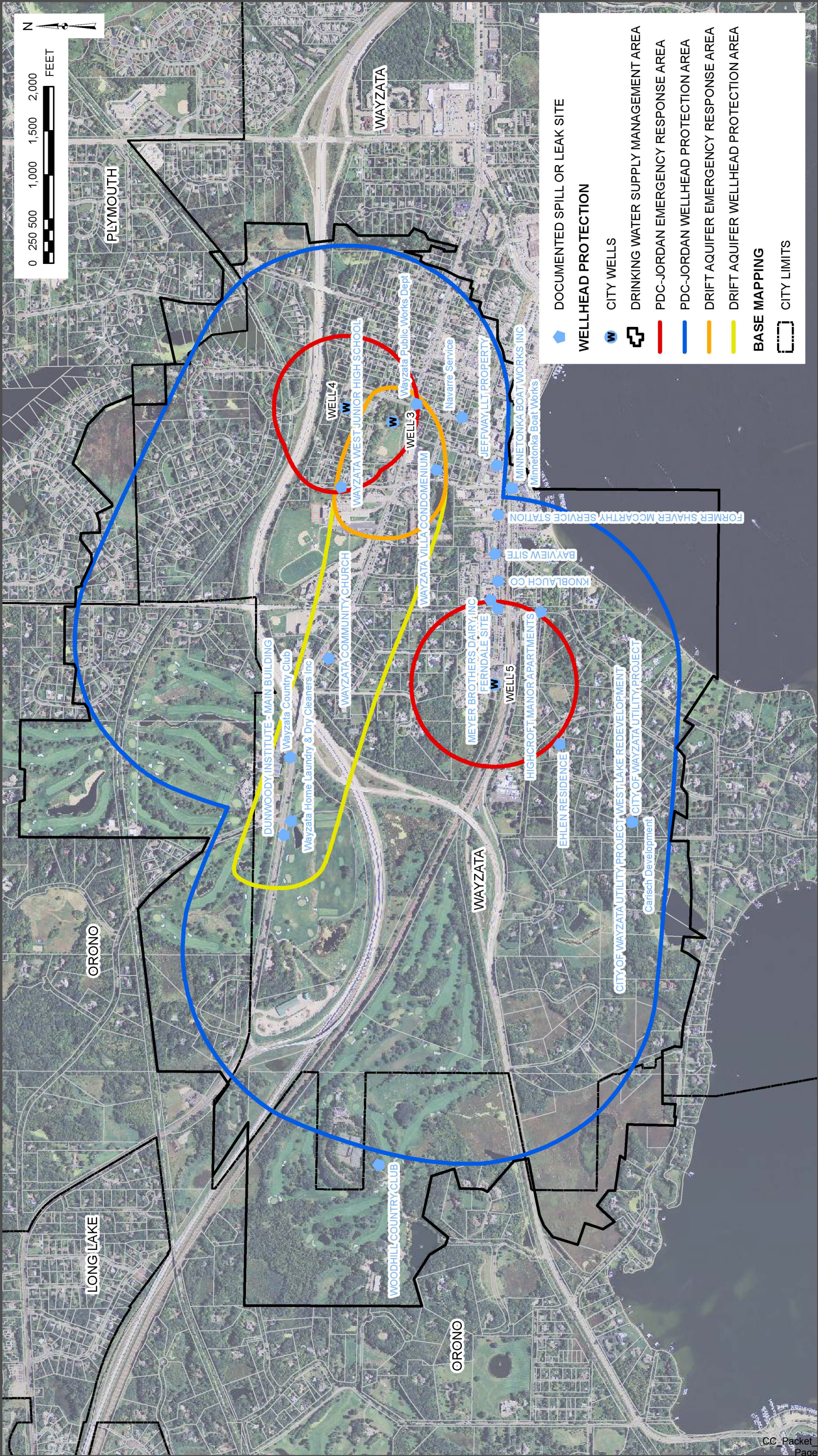


FIGURE 5 - DOCUMENTED SPILLS AND LEAKS WITHIN DWWSMA

WAYZATA WELLHEAD PROTECTION PLAN

Design With Community In Mind

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Saint Paul, MN 55113  
651.636.4600



January 2014

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**APPENDIX A**

**WELLS AND POTENTIAL CONTAMINANT  
SOURCES INVENTORY**

TABLE A-1: MAPPED GROUNDWATER WELLS, WAYZATA PART 2 WELLHEAD PROTECTION PLAN

| UNIQUE NUMBER | WELL NAME                | TOWNSHIP | RANGE | SECTION | SUB-SECTION | RECORDED STATUS | WELL USE      | WELL DEPTH (FEET) | CASING DEPTH (FEET) | AQUIFER | PCSI CODE | UTM E COORD | UTM N COORD | LOCATION METHOD |
|---------------|--------------------------|----------|-------|---------|-------------|-----------------|---------------|-------------------|---------------------|---------|-----------|-------------|-------------|-----------------|
| 100107        | SALLSBURY ADAMS          | 118      | 23W   | 36      | CCBCDD      | ACTIVE          | DOMESTIC      | 150               | 146                 | QBAA    | WEL       | 457282      | 4980853     | COORDINATE      |
| 100294        | NIEMELA, ALLEN           | 117      | 23W   | 1       | AAD         | ACTIVE          | DOMESTIC      | 139               | 139                 |         | WEL       | 458698      | 4980342     | UNLOCATED       |
| 112225        | DONALD GUSTAFSON         | 117      | 23W   | 1       | DBDBC B     | ACTIVE          | DOMESTIC      | 300               | 290                 | OSTP    | WEL       | 458205      | 4979563     | COORDINATE      |
| 142773        | DON LUNDBERG             | 118      | 23W   | 36      | CCDCAD      | ACTIVE          | DOMESTIC      | 147               | 141                 | QBAA    | WEL       | 457496      | 4980714     | COORDINATE      |
| 158109        | WM. OGRAM                | 118      | 23W   | 36      | CCDCAB      | ACTIVE          | DOMESTIC      | 136               | 130                 | QBAA    | WEL       | 457476      | 4980750     | COORDINATE      |
| 165621        | WOODHILL GOLF COURSE     | 117      | 23W   | 2       | AADCCA      | ACTIVE          | PUBLIC SUPPLY | 365               | 305                 | OPDC    | WEL       | 457024      | 4980390     | COORDINATE      |
| 180939        | COOK                     | 117      | 23W   | 1       | CBCCDD      | ACTIVE          | DOMESTIC      | 170               | 165                 | QBAA    | WEL       | 457292      | 4979471     | COORDINATE      |
| 194940        | FANSLER, DAVID           | 117      | 23W   | 1       |             | UNKNOWN         | DOMESTIC      | 220               | 215                 |         | WEL       | 457991      | 4979850     | UNLOCATED       |
| 205170        | WOODHILL COUNTRY CLUB    | 117      | 23W   | 2       | AACBCB      | ACTIVE          | PUBLIC SUPPLY | 485               | 260                 | MTPL    | WEL       | 456815      | 4980332     | COORDINATE      |
| 206931        | WAYZATA 3                | 117      | 22W   | 6       | BDACBD      | ACTIVE          | PUBLIC SUPPLY | 100               | 70                  | QBAA    | WEL       | 459432      | 4980163     | COORDINATE      |
| 206932        | WAYZATA 4                | 117      | 22W   | 6       | BADCAA      | ACTIVE          | PUBLIC SUPPLY | 507               | 284                 | OPCJ    | WEL       | 459481      | 4980325     | COORDINATE      |
| 232342        | WAYZATA 2                | 117      | 22W   | 6       | BADCCB      | ACTIVE          | PUBLIC SUPPLY | 150               | 110                 | QBUA    | WEL       | 459445      | 4980280     | COORDINATE      |
| 239959        | WAYZATA 1                | 117      | 22W   | 6       | BADCAC      | ACTIVE          | PUBLIC SUPPLY | 154               | 128                 | QBAA    | WEL       | 459471      | 4980326     | COORDINATE      |
| 251587        | MEYER BROS. DAIRY        | 117      | 22W   | 6       | CBBBAB      | ACTIVE          | COMMERCIAL    | 103               | 0                   |         | WEL       | 458866      | 4979840     | COORDINATE      |
| 417148        | BROYER                   | 117      | 23W   | 1       | CBBCAB      | ACTIVE          | DOMESTIC      | 216               | 184                 | OPDC    | WEL       | 457252      | 4979724     | COORDINATE      |
| 419445        | WAYZATA COUNTRY CLUB     | 118      | 23W   | 36      |             | ACTIVE          | DOMESTIC      | 128               | 124                 |         | WEL       | 458011      | 4981458     | UNLOCATED       |
| 435370        | CARLSON, GARY            | 117      | 23W   | 2       | ADC         | ACTIVE          | DOMESTIC      | 200               | 196                 |         | WEL       | 456888      | 4979966     | UNLOCATED       |
| 447092        | R & B PITNER             | 117      | 23W   | 1       |             | UNKNOWN         | DOMESTIC      | 327               | 303                 |         | WEL       | 457991      | 4979850     | UNLOCATED       |
| 462127        | JASPER, JIM              | 118      | 23W   | 36      | DAD         | ACTIVE          | DOMESTIC      | 260               | 200                 |         | WEL       | 458707      | 4981149     | UNLOCATED       |
| 497387        | WAYZATA 5                | 117      | 23W   | 1       | DABABD      | ACTIVE          | PUBLIC SUPPLY | 464               | 229                 | OPCJ    | WEL       | 458526      | 4979814     | COORDINATE      |
| 522184        | ZIMMERMAN, C.            | 117      | 23W   | 1       | CBD         | ACTIVE          | DOMESTIC      | 244               | 216                 |         | WEL       | 457488      | 4979562     | UNLOCATED       |
| 548469        | PROFT, KAREN             | 118      | 23W   | 36      |             | ACTIVE          | IRRIGATION    | 146               | 142                 |         | WEL       | 458011      | 4981458     | UNLOCATED       |
| 561394        | CITY OF WAYZATA          | 117      | 23W   | 1       |             | ACTIVE          | DOMESTIC      | 176               | 168                 |         | WEL       | 457991      | 4979850     | UNLOCATED       |
| 578940        | WOODHILL C.C. NO.2A      | 117      | 23W   | 2       | ADCBAD      | ACTIVE          | IRRIGATION    | 470               | 313                 | OPCJ    | WEL       | 456888      | 4980018     | COORDINATE      |
| 587196        | HOLMES, GARY             | 117      | 23W   | 1       |             | ACTIVE          | ELEVATOR      | 36                | 38                  |         | WEL       | 457991      | 4979850     | UNLOCATED       |
| 591093        | KAUFMANN, KEN & NANCY    | 117      | 23W   | 1       |             | ACTIVE          | DOMESTIC      | 200               | 177                 |         | WEL       | 457991      | 4979850     | UNLOCATED       |
| 598964        | JOHN L LAURIENT & ASSOC. | 117      | 22W   | 6       |             | ACTIVE          | ELEVATOR      | 30                | 32                  |         | WEL       | 459598      | 4979847     | UNLOCATED       |
| 621276        | LAURENT, JOHN            | 117      | 23W   | 1       |             | ACTIVE          | ELEVATOR      | 25                | 27                  |         | WEL       | 457991      | 4979850     | UNLOCATED       |
| 657226        | STAHL CONSTRUCTION       | 117      | 22W   | 6       |             | ACTIVE          | ELEVATOR      | 26                | 28                  |         | WEL       | 459598      | 4979847     | UNLOCATED       |
| 668034        | BOWE, KEVIN/RUTH         | 117      | 23W   | 1       |             | ACTIVE          | DOMESTIC      | 102               | 94                  |         | WEL       | 457991      | 4979850     | UNLOCATED       |
| 674874        | REDMAN, TOM              | 117      | 23W   | 1       |             | ACTIVE          | ELEVATOR      | 30                | 33                  |         | WEL       | 457991      | 4979850     | UNLOCATED       |
| 725388        | THOMPSON, KEVIN & DEB    | 118      | 23W   | 36      | CCC         | ACTIVE          | DOMESTIC      | 145               | 0                   |         | WEL       | 457304      | 4980758     | UNLOCATED       |
| 738952        | LNR PROPERTIES           | 117      | 22W   | 6       |             | ACTIVE          | ELEVATOR      | 41                | 0                   |         | WEL       | 459598      | 4979847     | UNLOCATED       |
| 741281        | KOMINSKI, JERRY          | 117      | 23W   | 1       | DBD         | ACTIVE          | DOMESTIC      | 246               | 226                 |         | WEL       | 458288      | 4979549     | UNLOCATED       |
| 747732        | MW-1                     | 117      | 22W   | 6       | BCCCCD      | ACTIVE          | MONITORING    | 18                | 8                   | QWTA    | WEL       | 458836      | 4979851     | COORDINATE      |
| 747733        | MW-2                     | 117      | 22W   | 6       | BCCCCD      | ACTIVE          | MONITORING    | 17                | 7                   | QWTA    | WEL       | 458883      | 4979850     | COORDINATE      |
| 747734        | MW-3                     | 117      | 22W   | 6       | CBBBAA      | ACTIVE          | MONITORING    | 15                | 5                   | QWTA    | WEL       | 458874      | 4979818     | COORDINATE      |
| 747735        | MW-4                     | 117      | 22W   | 6       | BCCCCD      | ACTIVE          | MONITORING    | 32                | 22                  | QWTA    | WEL       | 458866      | 4979845     | COORDINATE      |

TABLE A-1: MAPPED GROUNDWATER WELLS, WAYZATA PART 2 WELLHEAD PROTECTION PLAN

| UNIQUE NUMBER | WELL NAME            | TOWNSHIP | RANGE | SECTION | SUB-SECTION | RECORDED STATUS | WELL USE   | WELL DEPTH (FEET) | CASING DEPTH (FEET) | AQUIFER | PCSI CODE | UTM E COORD | UTM N COORD | LOCATION METHOD |
|---------------|----------------------|----------|-------|---------|-------------|-----------------|------------|-------------------|---------------------|---------|-----------|-------------|-------------|-----------------|
| 756926        | WAYZATA BAY CAR WASH | 117      | 22W   | 6       | BCCDCC      | ACTIVE          | MONITORING | 12                | 12                  | QWTA    | WEL       | 458902      | 4979860     | COORDINATE      |
| 756927        | WAYZATA BAY CAR WASH | 117      | 22W   | 6       | CBBABB      | ACTIVE          | MONITORING | 13                | 12.7                | QWTA    | WEL       | 458904      | 4979818     | COORDINATE      |

V:\1938\active\193800599\Reports\WHP Part 2 Tables.xlsxTable A-1

TABLE A-2: MAPPED STORAGE TANK SITES, WAYZATA PART 2 WELLHEAD PROTECTION PLAN

| SITE NAME                        | MPCA ID | TANK STATUS | TANK TYPE    | TANK CONTENTS | TANK VOLUME (GAL) | LATITUDE  | LONGITUDE  | LEGAL ENTITY                     | MAILING ADDRESS   | CITY    | STATE | ZIP   | CONTACT NAME      |
|----------------------------------|---------|-------------|--------------|---------------|-------------------|-----------|------------|----------------------------------|-------------------|---------|-------|-------|-------------------|
| Wayzata West Junior High School  | 1791    | Active      | UNDER GROUND | Fuel Oil      | 10,000            | 44.975365 | -93.517370 | WAYZATA IND SCHOOL DISTRICT #284 |                   |         |       |       |                   |
| Minnetonka Boat Works/kings Cove | 2384    | Active      | UNDER GROUND | Gasoline      | 10,000            | 44.970041 | -93.517352 | Wayzata Bay Management           | 294 E Grove Ln    | Wayzata | MN    | 55391 | TODD NELSON       |
| Woodhill Country Club            | 15244   | Active      | ABOVE GROUND | Gasoline      | 1,500             | 44.974173 | -93.546970 | WOODHILL COUNTRY CLUB            | 200 Woodhill Rd   | Wayzata | MN    | 55391 | RICK FREDERICKSON |
| Woodhill Country Club            | 15244   | Active      | ABOVE GROUND | Used Oil      | 265               | 44.974173 | -93.546970 | WOODHILL COUNTRY CLUB            | 200 Woodhill Rd   | Wayzata | MN    | 55391 | RICK FREDERICKSON |
| Wayzata Villa Condominium        | 16142   | Active      | UNDER GROUND | Fuel Oil      | 3,000             | 44.973197 | -93.517171 | WAYZATA VILLA HOMEOWNERS ASSN    | 215 Barry Ave S   | Wayzata | MN    | 55391 |                   |
| Wayzata WTP - Plants 1 & 2       | 53376   | Active      | ABOVE GROUND | Diesel        | 285               | 44.971528 | -93.512648 | CITY OF WAYZATA                  | 600 Rice St       | Wayzata | MN    | 55391 | JIM EIBENSTEINER  |
| Wayzata Country Club             | 122768  | Active      | ABOVE GROUND | Diesel        | 500               | 44.978758 | -93.532580 | WAYZATA COUNTY CLUB              | 200 W Wayzata Blm | Wayzata | MN    | 55391 | ROBERT DISTEL     |
| Wayzata Country Club             | 122768  | Active      | ABOVE GROUND | Gasoline      | 1,000             | 44.978758 | -93.532580 | WAYZATA COUNTY CLUB              | 200 W Wayzata Blm | Wayzata | MN    | 55391 | ROBERT DISTEL     |
| Wayzata Country Club             | 122768  | Active      | ABOVE GROUND | Used Oil      | 250               | 44.978758 | -93.532580 | WAYZATA COUNTY CLUB              | 200 W Wayzata Blm | Wayzata | MN    | 55391 | ROBERT DISTEL     |
| Wayzata city of Public Works     | 124015  | Active      | ABOVE GROUND | Diesel        | 2,000             | 44.977860 | -93.542040 | CITY OF WAYZATA                  | 600 Rice St       | Wayzata | MN    | 55391 | DAVID DUDINSKY    |

V:\1938\active\193800599\Reports\WHP Part 2 Tables.xlsx|Table A-2



TABLE A-3: DOCUMENTED LEAK SITES, WAYZATA PART 2 WELLHEAD PROTECTION PLAN

| LEAK ID      | SITE NAME                               | MAILING ADDRESS          | CITY        | ZIP   | MPCA ID  | REPORTED   | DISCOVERED | CLOSED     | LOCATION METHOD               | UTM E<br>COORD | UTM N<br>COORD | POINT<br>DESCRIPTION |
|--------------|-----------------------------------------|--------------------------|-------------|-------|----------|------------|------------|------------|-------------------------------|----------------|----------------|----------------------|
| 1150         | WAYZATA WEST JUNIOR HIGH SCHOOL         | 149 BARRY AVE N          | WAYZATA     | 55391 | 214057   | 5/26/1989  | -          | 4/3/1992   | Address Matching House Number | 459206         | 4980344        | -                    |
| 3203         | CITY OF WAYZATA UTILITY PROJECT         | -                        | WAYZATA     | 55391 | 215980   | 8/16/1990  | 8/16/1990  | 1/9/1997   | Interpolation Unknown         | 458050         | 4979338        | -                    |
| 3204         | CITY OF WAYZATA UTILITY PROJECT         | -                        | WAYZATA     | 55391 | 215981   | 8/16/1990  | 8/16/1990  | 1/23/1991  | Interpolation Unknown         | 458050         | 4979338        | -                    |
| 3259         | DUNWOODY INSTITUTE - MAIN BUILDING      | 818 WAYZATA BLVD         | MINNEAPOLIS | 55403 | 216032   | 9/21/1990  | -          | 1/3/1991   | Address Matching Unknown      | 458005         | 4980541        | -                    |
| 3351         | KNOBLAUCH CO                            | 143 E LAKE ST            | WAYZATA     | 55391 | 216119   | 10/9/1990  | 10/9/1991  | 10/22/1993 | Address Matching House Number | 458882         | 4979803        | -                    |
| 3717         | MEYER BROTHERS DAIRY INC                | 105 E LAKE ST            | WAYZATA     | 55391 | 216466   | 1/7/1991   | -          | 4/15/2009  | Digitized-DOQ                 | 458817         | 4979828        | Main Site Building   |
| 5216         | HIGHCROFT MANOR APARTMENTS              | 101 PEAVEY LA            | WAYZATA     | 55391 | 217888   | 5/18/1992  | 5/18/1992  | 6/25/1993  | Address Matching House Number | 458775         | 4979655        | -                    |
| 6681         | WAYZATA COMMUNITY CHURCH                | 125 E WAYZATA BLVD       | WAYZATA     | 55391 | 219315   | 8/24/1993  | 8/23/1993  | 12/9/1993  | Address Matching House Number | 458615         | 4980386        | -                    |
| 7593         | BAYVIEW SITE                            | 201 LAKE ST E            | WAYZATA     | 55391 | 220203   | -          | 3/1/1991   | 10/7/1991  | Address Matching House Number | 458977         | 4979813        | -                    |
| 8222         | MINNETONKA BOAT WORKS INC               | 294 E GROVE LN           | WAYZATA     | 55391 | 220802   | 3/6/1995   | 3/6/1995   | 9/12/1997  | Address Matching House Number | 459204         | 4979752        | -                    |
| 8269         | FERNDALE SITE                           | FERNDALE AVE & W LAKE ST | WAYZATA     | 55391 | 220849   | 4/5/1995   | 4/3/1995   | 6/30/1995  | Address Matching Unknown      | 458788         | 4979804        | -                    |
| 8458         | WAYZATA VILLA CONDOMINIUM               | 205 BARRY AVES           | WAYZATA     | 55391 | 221027   | 6/13/1995  | 6/13/1995  | 6/18/1996  | Address Matching Unknown      | 459266         | 4980014        | -                    |
| 8705         | WEST LAKE REDEVELOPMENT                 | -                        | WAYZATA     | 55391 | 221264   | 8/23/1995  | 8/23/1995  | 1/4/1996   | Interpolation Unknown         | 458050         | 4979338        | -                    |
| 9119         | FORMER SHAVER MCCARTHY SERVICE STATION  | 259 LAKE ST E            | WAYZATA     | 55391 | 221664   | 2/2/1996   | 8/15/1985  | 3/16/1999  | Address Matching House Number | 459111         | 4979803        | -                    |
| 10808        | WOODHILL COUNTRY CLUB                   | 200 WOODHILL RD          | WAYZATA     | 55391 | 223237   | 9/29/1997  | 9/29/1997  | 12/31/1997 | Address Matching House Number | 458865         | 4980213        | -                    |
| 10981        | EHLEN RESIDENCE                         | 325 HIGH CROFT LN        | WAYZATA     | 55391 | 223405   | 11/20/1997 | 11/20/1997 | 12/24/1997 | Address Matching House Number | 458318         | 4979589        | -                    |
| 16889        | JEFFWAY LLT PROPERTY                    | 315 E LAKE ST            | WAYZATA     | 55391 | 439159   | 7/12/2007  | 7/12/2007  | -          | Interpolation Other           | 459282         | 4979806        | -                    |
| 457          | Carisch Development                     | 641 Lake St E            | Wayzata     | 55391 | SPL      | 2/18/1988  |            | 1/1/1996   | Interpolation Unknown         | 458050         | 4979339        |                      |
| 17843        | Navarre Service                         | 3360 Shoreline Dr        | Orono       | 55392 | SPL      |            |            |            | Zip Code Centroid             | 459448         | 4979927        |                      |
| A00011961    | Wayzata Public Works Dept               | 500 Wayzata Blvd W       | Wayzata     | 55391 | SROUT    |            |            |            | Address Matching House Number | 459493         | 4980082        |                      |
| MN0000232827 | Wayzata Country Club                    | 200 Wayzata Blvd         | Wayzata     | 55391 | HWG, PCS |            |            |            | Address Matching House Number | 458273         | 4980519        |                      |
| VP10920      | Wayzata Home Laundry & Dry Cleaners Inc | 820 Wayzata Blvd E       | Wayzata     | 55391 | HWG, PCS |            |            |            | Digitized-DRG                 | 458054         | 4980516        |                      |
| VP14490      | Minnetonka Boat Works                   | 294 Grove Ln             | Wayzata     | 55391 | PCS      | 5/4/2001   |            | 5/28/2002  | Digitized-DRG                 | 459202         | 4979756        |                      |

V:\1938\active\193800599\Reports\I\WHP Part 2 Tables.xlsx\Table A-3

**APPENDIX B**

**CITY OF WAYZATA**

**CONSUMER CONFIDENCE REPORT**

# CONSUMER CONFIDENCE REPORT

PWSID: 1270054

## **City of Wayzata** 2013 Drinking Water Report



The City of Wayzata is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2013. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources.

### Source of Water

The City of Wayzata provides drinking water to its residents from a groundwater source: three wells ranging from 100 to 507 feet deep, that draw water from the Quaternary Buried Artesian and Prairie Du Chien-Jordan aquifers.

The water provided to customers may meet drinking water standards, but the Minnesota Department of Health has also made a determination as to how vulnerable the source of water may be to future contamination incidents. If you wish to obtain the entire source water assessment regarding your drinking water, please call 651-201-4700 or 1-800-818-9318 (and press 5) during normal business hours. Also, you can view it on line at [www.health.state.mn.us/divs/eh/water/swp/swa](http://www.health.state.mn.us/divs/eh/water/swp/swa).

Call Wayzata Public Works, 952-404-5360, option 2 if you have questions about the City of Wayzata drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water.

### Results of Monitoring

No contaminants were detected at levels that violated federal drinking water standards. However, some contaminants were detected in trace amounts that were below legal limits. The table that follows shows the contaminants that were detected in trace amounts last year. (Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for in 2013. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.)

#### Key to abbreviations:

**MCLG**—Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MCL**—Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MRDL**—Maximum Residual Disinfectant Level.

**MRDLG**—Maximum Residual Disinfectant Level Goal.

**AL**—Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.

# CONSUMER CONFIDENCE REPORT

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**90th Percentile Level**—This is the value obtained after disregarding 10 percent of the samples taken that had the highest levels. (For example, in a situation in which 10 samples were taken, the 90th percentile level is determined by disregarding the highest result, which represents 10 percent of the samples.) Note: In situations in which only 5 samples are taken, the average of the two with the highest levels is taken to determine the 90th percentile level.

**pCi/l**—PicoCuries per liter (a measure of radioactivity).

**ppm**—Parts per million, which can also be expressed as milligrams per liter (mg/l).

**ppb**—Parts per billion, which can also be expressed as micrograms per liter (µg/l).

**nd**—No Detection.

**N/A**—Not Applicable (does not apply).

| Contaminant<br>(units)                    | MCLG | MCL  | Level Found     |                     | Typical Source of Contaminant                                                                                                                                                                         |
|-------------------------------------------|------|------|-----------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                           |      |      | Range<br>(2013) | Average<br>/Result* |                                                                                                                                                                                                       |
| Alpha Emitters<br>(pCi/l)<br>(08/16/2011) | 0    | 15.4 | N/A             | 8.6                 | Erosion of natural deposits.                                                                                                                                                                          |
| Arsenic (ppb)<br>(06/08/2012)             | 0    | 10   | N/A             | 3.47                | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.                                                                                               |
| Barium (ppm)<br>(06/08/2012)              | 2    | 2    | N/A             | .2                  | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.                                                                                                           |
| Combined Radium (pCi/l)<br>(08/16/2011)   | 0    | 5.4  | N/A             | 1.2                 | Erosion of natural deposits.                                                                                                                                                                          |
| Fluoride (ppm)                            | 4    | 4    | 1-1.2           | 1.24                | State of Minnesota requires all municipal water systems to add fluoride to the drinking water to promote strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories. |
| Haloacetic Acids (HAA5) (ppb)             | 0    | 60   | 3.1-5.2         | 5.2                 | By-product of drinking water disinfection.                                                                                                                                                            |
| Nitrate (as Nitrogen) (ppm)               | 10.4 | 10.4 | nd-.48          | .48                 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.                                                                                                          |
| TTHM (Total trihalomethanes) (ppb)        | 0    | 80   | 5.9-10.6        | 10.6                | By-product of drinking water disinfection.                                                                                                                                                            |

\*This is the value used to determine compliance with federal standards. It sometimes is the highest value detected and sometimes is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.

|                        |       |      |      |       |                               |
|------------------------|-------|------|------|-------|-------------------------------|
| Contaminant<br>(units) | MRDLG | MRDL | **** | ***** | Typical Source of Contaminant |
|------------------------|-------|------|------|-------|-------------------------------|



# CONSUMER CONFIDENCE REPORT

PWSID: 1270054

| Contaminant (units) | MRDLG | MRDL | ****  | ***** | Typical Source of Contaminant            |
|---------------------|-------|------|-------|-------|------------------------------------------|
| Chlorine (ppm)      | 4     | 4    | .2-.6 | .44   | Water additive used to control microbes. |

\*\*\*\*Highest and Lowest Monthly Average.

\*\*\*\*\*Highest Quarterly Average.

| Contaminant (units)       | MCLG | AL  | 90% Level | # sites over AL | Typical Source of Contaminant                                         |
|---------------------------|------|-----|-----------|-----------------|-----------------------------------------------------------------------|
| Copper (ppm) (08/29/2011) | 1.3  | 1.3 | 1.25      | 2 out of 20     | Corrosion of household plumbing systems; Erosion of natural deposits. |
| Lead (ppb) (08/29/2011)   | 0    | 15  | .9        | 0 out of 20     | Corrosion of household plumbing systems; Erosion of natural deposits. |

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Wayzata is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Monitoring may have been done for additional contaminants that do not have MCLs established for them and are not required to be monitored under the Safe Drinking Water Act. Results may be available by calling 651-201-4700 or 1-800-818-9318 during normal business hours.

## Compliance with National Primary Drinking Water Regulations

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

*Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

*Inorganic contaminants*, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

*Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

*Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

*Radioactive contaminants*, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U. S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food

# CONSUMER CONFIDENCE REPORT

PWSID: 1270054

and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

***Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.***

## **APPENDIX C**

### **NOTICE OF APPROVAL OF EMERGENCY PREPAREDNESS PLAN**

(NOT INCLUDED IN THIS DRAFT)



# **APPENDIX D**

## **CORRESPONDENCE**



**COPY**

May 14, 2014

*Protecting, maintaining and improving the health of all Minnesotans*

Mr. David Dudinsky, Director of Public Service  
City of Wayzata  
Public Works Building  
299 Wayzata Boulevard West  
Wayzata, Minnesota 55391

Dear Mr. Dudinsky:

**Subject: Scoping 2 Decision Notice and Meeting Summary – City of Wayzata– PWSID 1270054**

This letter provides notice of the results of the second scoping meeting I held with you and Mark Janovec (Stantec) on April 11, 2014, at the Wayzata Public Works Building regarding Part II of your wellhead protection (WHP) plan. During the meeting, we discussed data elements that must be included and used to prepare the part of the WHP plan related to the management of potential contaminants in the approved drinking water supply management area. The enclosed Scoping 2 Decision Notice lists the data elements that were discussed at the meeting. We also discussed a summary of planning issues that were identified during the Part I WHP Plan development process which should be considered for inclusion in your Part II WHP Plan.

The city of Wayzata has met the requirements to distribute copies of the first part of the WHP plan to local units of government. The city of Wayzata has not met the requirements to hold an informational meeting for the public. The city of Wayzata will have until December 8, 2014, to complete its WHP plan. The city was given additional time due to Minnesota Rules, part 4720.5130, subpart 4, items D and E.

If a data element is marked on the enclosed notice as a data element that must be used and it does not exist, it is helpful if your plan notes this. Stantec will be working with you to develop a draft of the remainder of the WHP plan. I will be contacting you to review the progress of the development of Part II of your plan. If you have any questions regarding the enclosed notice, contact me by email at [john.freitag@state.mn.us](mailto:john.freitag@state.mn.us) or by phone at (651) 201-4669.

Sincerely,

John Freitag, Planner  
Source Water Protection Unit  
Environment Health Division  
P.O. Box 64975  
St. Paul, Minnesota 55164-0975

JF:ds-b

Enclosures

cc: Mark Janovec, Stantec  
Isaac Bradlich, MDH Engineer, Metro District Office  
Ron Struss, Minnesota Department of Agriculture

## SCOPING 2 DECISION NOTICE

### Moderately Vulnerable DWSMA

#### Remainder of the Wellhead Protection Plan

|                                                   |               |                |
|---------------------------------------------------|---------------|----------------|
| <b>Name of Public Water Supply:</b>               |               | <b>Date:</b>   |
| City of Wayzata                                   | PWSID 1270054 | May 14, 2014   |
| <b>Name of the Wellhead Protection Manager:</b>   |               |                |
| David Dudinsky, Director of Public Service        |               |                |
| <b>Address:</b>                                   | <b>City:</b>  | <b>Zip:</b>    |
| 299 Wayzata Boulevard West                        | Wayzata       | 55391          |
| <b>Unique Well Numbers:</b>                       |               | <b>Phone:</b>  |
| 206931 (Well 3), 206932 (Well 4), 497387 (Well 5) |               | (952) 404-5361 |

#### Instructions for Completing the Scoping 2 Form

|          |   |   |                                                                                                                                                                                                                                                                   |
|----------|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| N        | R | S | <b>N = Not required.</b><br>If this box is checked, this data element is <b>NOT</b> necessary for your wellhead protection plan because it is not needed or it has been included in the first scoping decision notice. <b>Please go to the next data element.</b> |
| <b>X</b> |   |   |                                                                                                                                                                                                                                                                   |

|   |          |   |                                                                                                                                              |
|---|----------|---|----------------------------------------------------------------------------------------------------------------------------------------------|
| N | R        | S | <b>R = Required for the remainder of the plan.</b><br>If this box is checked, this data <b>MUST</b> be used for the "remainder of the plan." |
|   | <b>X</b> |   |                                                                                                                                              |

|                                                                                                                                                                                                                                                                                                                                                                                  |   |          |                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|----------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| N                                                                                                                                                                                                                                                                                                                                                                                | R | S        | <b>S = Submit to MDH.</b> If this box is checked, this data element <b>MUST</b> be included in your wellhead protection plan and submitted to MDH. |
|                                                                                                                                                                                                                                                                                                                                                                                  |   | <b>X</b> |                                                                                                                                                    |
| If there is <b>NO</b> check mark in the "S" box but there is an "X" in the "R" box, this data element <b>MUST</b> be included in your plan, but should <b>NOT</b> be submitted to MDH. This box will only be checked if MDH does not have access to this data element. This will help to reduce the cost by reducing the amount of paper and time to reproduce the data element. |   |          |                                                                                                                                                    |

**Note:** Any data elements required in the first scoping decision notice must also be used to complete the remainder of the wellhead protection plan.

## DATA ELEMENTS ABOUT THE PHYSICAL ENVIRONMENT

| PRECIPITATION                                                                                                                                                  |          |          |                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>N</b>                                                                                                                                                       | <b>R</b> | <b>S</b> | An existing map or list of local precipitation gauging stations.                                                                                                                                                                                            |
| <b>X</b>                                                                                                                                                       |          |          |                                                                                                                                                                                                                                                             |
| <b>Technical Assistance Comments:</b>                                                                                                                          |          |          |                                                                                                                                                                                                                                                             |
| <b>N</b>                                                                                                                                                       | <b>R</b> | <b>S</b> | An existing table showing the average monthly and annual precipitation in inches for the preceding five years.                                                                                                                                              |
| <b>X</b>                                                                                                                                                       |          |          |                                                                                                                                                                                                                                                             |
| <b>Technical Assistance Comments:</b>                                                                                                                          |          |          |                                                                                                                                                                                                                                                             |
| GEOLOGY                                                                                                                                                        |          |          |                                                                                                                                                                                                                                                             |
| <b>N</b>                                                                                                                                                       | <b>R</b> | <b>S</b> | An existing geologic map and a description of the geology, including aquifers, confining layers, recharge areas, discharge areas, sensitive areas as defined in Minnesota Statutes, section 103H.005, subdivision 13, and groundwater flow characteristics. |
|                                                                                                                                                                | <b>X</b> |          |                                                                                                                                                                                                                                                             |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements. |          |          |                                                                                                                                                                                                                                                             |
| <b>N</b>                                                                                                                                                       | <b>R</b> | <b>S</b> | Existing records of the geologic materials penetrated by wells, borings, exploration test holes, or excavations, including those submitted to the department.                                                                                               |
|                                                                                                                                                                | <b>X</b> |          |                                                                                                                                                                                                                                                             |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements. |          |          |                                                                                                                                                                                                                                                             |
| <b>N</b>                                                                                                                                                       | <b>R</b> | <b>S</b> | Existing borehole geophysical records from wells, borings, and exploration test holes.                                                                                                                                                                      |
|                                                                                                                                                                | <b>X</b> |          |                                                                                                                                                                                                                                                             |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect the geology of the area(s).              |          |          |                                                                                                                                                                                                                                                             |
| <b>N</b>                                                                                                                                                       | <b>R</b> | <b>S</b> | Existing surface geophysical studies.                                                                                                                                                                                                                       |
|                                                                                                                                                                | <b>X</b> |          |                                                                                                                                                                                                                                                             |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect the geology of the area(s).              |          |          |                                                                                                                                                                                                                                                             |
| SOILS                                                                                                                                                          |          |          |                                                                                                                                                                                                                                                             |
| <b>N</b>                                                                                                                                                       | <b>R</b> | <b>S</b> | Existing maps of the soils and a description of soil infiltration characteristics.                                                                                                                                                                          |
| <b>X</b>                                                                                                                                                       |          |          |                                                                                                                                                                                                                                                             |
| <b>Technical Assistance Comments:</b>                                                                                                                          |          |          |                                                                                                                                                                                                                                                             |
| <b>N</b>                                                                                                                                                       | <b>R</b> | <b>S</b> | A description or an existing map of known eroding lands that are causing sedimentation problems.                                                                                                                                                            |
| <b>X</b>                                                                                                                                                       |          |          |                                                                                                                                                                                                                                                             |
| <b>Technical Assistance Comments:</b>                                                                                                                          |          |          |                                                                                                                                                                                                                                                             |



| <b>WATER RESOURCES</b>                |          |          |                                                                                                                                                                |
|---------------------------------------|----------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>N</b>                              | <b>R</b> | <b>S</b> | An existing map of the boundaries and flow directions of major watershed units and minor watershed units.                                                      |
| <b>X</b>                              |          |          |                                                                                                                                                                |
| <b>Technical Assistance Comments:</b> |          |          |                                                                                                                                                                |
| <b>N</b>                              | <b>R</b> | <b>S</b> | An existing map and a list of public waters as defined in Minnesota Statutes, section 103G.005, subdivision 15, and public drainage ditches.                   |
| <b>X</b>                              |          |          |                                                                                                                                                                |
| <b>Technical Assistance Comments:</b> |          |          |                                                                                                                                                                |
| <b>N</b>                              | <b>R</b> | <b>S</b> | The shoreland classifications of the public waters listed under subitem (2), pursuant to part 6120.3000 and Minnesota Statutes, sections 103F.201 to 103F.221. |
| <b>X</b>                              |          |          |                                                                                                                                                                |
| <b>Technical Assistance Comments:</b> |          |          |                                                                                                                                                                |
| <b>N</b>                              | <b>R</b> | <b>S</b> | An existing map of wetlands regulated under Chapter 8420 and Minnesota Statutes, section 103G.221 to 103G.2373.                                                |
| <b>X</b>                              |          |          |                                                                                                                                                                |
| <b>Technical Assistance Comments:</b> |          |          |                                                                                                                                                                |
| <b>N</b>                              | <b>R</b> | <b>S</b> | An existing map showing those areas delineated as floodplain by existing local ordinances.                                                                     |
| <b>X</b>                              |          |          |                                                                                                                                                                |
| <b>Technical Assistance Comments:</b> |          |          |                                                                                                                                                                |

### DATA ELEMENTS ABOUT THE LAND USE

| <b>LAND USE</b>                                                                                                                                              |          |          |                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|--------------------------------------------------------------------------------|
| <b>N</b>                                                                                                                                                     | <b>R</b> | <b>S</b> | An existing map of parcel boundaries.                                          |
|                                                                                                                                                              | <b>X</b> | <b>X</b> |                                                                                |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element. |          |          |                                                                                |
| <b>N</b>                                                                                                                                                     | <b>R</b> | <b>S</b> | An existing map of political boundaries.                                       |
|                                                                                                                                                              | <b>X</b> | <b>X</b> |                                                                                |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element. |          |          |                                                                                |
| <b>N</b>                                                                                                                                                     | <b>R</b> | <b>S</b> | An existing map of public land surveys including township, range, and section. |
|                                                                                                                                                              | <b>X</b> |          |                                                                                |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element. |          |          |                                                                                |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |   |   |                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | R | S | A map and an inventory of the current and historical agricultural, residential, commercial, industrial, recreational, and institutional land uses and potential contaminant sources. |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | X | X |                                                                                                                                                                                      |
| <b>Technical Assistance Comments:</b> The inventory, mapping and management of land uses and potential sources of contamination for all the Drinking Water Supply Management Areas(s) must reflect what is known about these data elements, as follows:<br><u>Moderate Vulnerability</u> - 1) All potential contaminant sources and facility designations as listed on the attachment, 2) a land use/land cover map and table, and 3) an inventory of the Inner Wellhead Management Zone (IWMZ).<br>As a starting point, MDH will provide a 2006 land cover map and table from federal data bases. This data set must be used unless an alternative electronic data set that is more current and detailed is available.<br>Management strategies must be developed for all land uses and potential sources of contamination. |   |   |                                                                                                                                                                                      |
| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | R | S | An existing comprehensive land-use map.                                                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | X | X |                                                                                                                                                                                      |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |   |                                                                                                                                                                                      |
| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | R | S | Existing zoning map.                                                                                                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | X | X |                                                                                                                                                                                      |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |   |                                                                                                                                                                                      |
| <b>PUBLIC UTILITY SERVICES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |                                                                                                                                                                                      |
| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | R | S | An existing map of transportation routes or corridors.                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | X |   |                                                                                                                                                                                      |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |   |                                                                                                                                                                                      |
| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | R | S | An existing map of storm sewers, sanitary sewers, and public water supply systems.                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | X | X |                                                                                                                                                                                      |
| <b>Technical Assistance Comments:</b> It is not necessary to include a map of your public water supply system in your plan if you feel it would pose a threat to the security of your system. An existing map of the storm sewers and sanitary sewers in the Drinking Water Supply Management Area(s) must be included in the wellhead protection plan and must also be submitted to MDH as part of the approval.                                                                                                                                                                                                                                                                                                                                                                                                            |   |   |                                                                                                                                                                                      |
| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | R | S | An existing map of the gas and oil pipelines used by gas and oil suppliers.                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | X | X |                                                                                                                                                                                      |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |   |                                                                                                                                                                                      |
| N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | R | S | An existing map or list of public drainage systems.                                                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | X |   |                                                                                                                                                                                      |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |   |                                                                                                                                                                                      |

|                                                                                                                                                                |   |   |                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| N                                                                                                                                                              | R | S | An existing record of construction, maintenance, and use of the public water supply well and other wells within the drinking water supply management area. |
|                                                                                                                                                                | X |   |                                                                                                                                                            |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements. |   |   |                                                                                                                                                            |

## DATA ELEMENTS ABOUT WATER QUANTITY

| SURFACE WATER QUANTITY                                                                                                                                       |   |   |                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|--------------------------------------------------------------------------------------------------------------------------------------------------|
| N                                                                                                                                                            | R | S | An existing description of high, mean, and low flows on streams.                                                                                 |
| X                                                                                                                                                            |   |   |                                                                                                                                                  |
| <b>Technical Assistance Comments:</b>                                                                                                                        |   |   |                                                                                                                                                  |
| N                                                                                                                                                            | R | S | An existing list of lakes where the state has established ordinary high water marks.                                                             |
| X                                                                                                                                                            |   |   |                                                                                                                                                  |
| <b>Technical Assistance Comments:</b>                                                                                                                        |   |   |                                                                                                                                                  |
| N                                                                                                                                                            | R | S | An existing list of permitted withdrawals from lakes and streams, including source, use, and amounts withdrawn.                                  |
| X                                                                                                                                                            |   |   |                                                                                                                                                  |
| <b>Technical Assistance Comments:</b>                                                                                                                        |   |   |                                                                                                                                                  |
| N                                                                                                                                                            | R | S | An existing list of lakes and streams for which state protected levels or flows have been established.                                           |
| X                                                                                                                                                            |   |   |                                                                                                                                                  |
| <b>Technical Assistance Comments:</b>                                                                                                                        |   |   |                                                                                                                                                  |
| N                                                                                                                                                            | R | S | An existing description of known water-use conflicts, including those caused by groundwater pumping.                                             |
| X                                                                                                                                                            |   |   |                                                                                                                                                  |
| <b>Technical Assistance Comments:</b>                                                                                                                        |   |   |                                                                                                                                                  |
| GROUNDWATER QUANTITY                                                                                                                                         |   |   |                                                                                                                                                  |
| N                                                                                                                                                            | R | S | An existing list of wells covered by state appropriation permits, including amounts of water appropriated, type of use, and aquifer source.      |
|                                                                                                                                                              | X |   |                                                                                                                                                  |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element. |   |   |                                                                                                                                                  |
| N                                                                                                                                                            | R | S | An existing description of known well interference problems and water use conflicts.                                                             |
|                                                                                                                                                              | X | X |                                                                                                                                                  |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element. |   |   |                                                                                                                                                  |
| N                                                                                                                                                            | R | S | An existing list of state environmental bore holes, including unique well number, aquifer measured, years of record, and average monthly levels. |
|                                                                                                                                                              | X |   |                                                                                                                                                  |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element. |   |   |                                                                                                                                                  |

## DATA ELEMENTS ABOUT WATER QUALITY

| SURFACE WATER QUALITY                                                                                                                                          |   |   |                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| N                                                                                                                                                              | R | S | An existing map or list of the state water quality management classification for each stream and lake.                                                                                                                                                                                                       |
| X                                                                                                                                                              |   |   |                                                                                                                                                                                                                                                                                                              |
| <b>Technical Assistance Comments:</b>                                                                                                                          |   |   |                                                                                                                                                                                                                                                                                                              |
| N                                                                                                                                                              | R | S | An existing summary of lake and stream water quality monitoring data, including:                                                                                                                                                                                                                             |
| X                                                                                                                                                              |   |   | <div style="display: flex; justify-content: space-between;"> <div> 1. bacteriological contamination indicators;<br/> 2. inorganic chemicals;<br/> 3. organic chemicals; </div> <div> 4. sedimentation;<br/> 5. dissolved oxygen; and<br/> 6. excessive growth or deficiency of aquatic plants. </div> </div> |
| <b>Technical Assistance Comments:</b>                                                                                                                          |   |   |                                                                                                                                                                                                                                                                                                              |
| GROUNDWATER QUALITY                                                                                                                                            |   |   |                                                                                                                                                                                                                                                                                                              |
| N                                                                                                                                                              | R | S | An existing summary of water quality data, including: 1. bacteriological contamination indicators; 2. inorganic chemicals; and 3. organic chemicals.                                                                                                                                                         |
|                                                                                                                                                                | X |   |                                                                                                                                                                                                                                                                                                              |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.   |   |   |                                                                                                                                                                                                                                                                                                              |
| N                                                                                                                                                              | R | S | An existing list of water chemistry and isotopic data from wells, springs, or other groundwater sampling points.                                                                                                                                                                                             |
|                                                                                                                                                                | X |   |                                                                                                                                                                                                                                                                                                              |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.   |   |   |                                                                                                                                                                                                                                                                                                              |
| N                                                                                                                                                              | R | S | An existing report of groundwater tracer studies.                                                                                                                                                                                                                                                            |
|                                                                                                                                                                | X |   |                                                                                                                                                                                                                                                                                                              |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.   |   |   |                                                                                                                                                                                                                                                                                                              |
| N                                                                                                                                                              | R | S | An existing site study and well water analysis of known areas of groundwater contamination.                                                                                                                                                                                                                  |
|                                                                                                                                                                | X |   |                                                                                                                                                                                                                                                                                                              |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements. |   |   |                                                                                                                                                                                                                                                                                                              |
| N                                                                                                                                                              | R | S | An existing property audit identifying contamination.                                                                                                                                                                                                                                                        |
|                                                                                                                                                                | X |   |                                                                                                                                                                                                                                                                                                              |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.   |   |   |                                                                                                                                                                                                                                                                                                              |
| N                                                                                                                                                              | R | S | An existing report to the Minnesota Department of Agriculture and the Minnesota Pollution Control Agency of contaminant spills and releases.                                                                                                                                                                 |
|                                                                                                                                                                | X |   |                                                                                                                                                                                                                                                                                                              |
| <b>Technical Assistance Comments:</b> The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.   |   |   |                                                                                                                                                                                                                                                                                                              |



**Scoping 2 Meeting**  
**Wellhead Protection (WHP) Planning Issues Summary**  
**PWSID: 1270054 - Wayzata**

**Drinking Water Protection Issues Identified to Date:**

- ☒ *The clay-rich geologic materials covering the aquifer are thin, discontinuous, or leaky.*
- ☒ *There is a petroleum leak near Well 14*  
Foster Residence, Leak ID Number 18535, Release discovered on 09-15-2011  
10150 Powers Lake Pt  
Woodbury, MN 55129
- ☒ *The amended DWSMA is significantly larger.*
- ☒ *The DWSMA extends beyond city boundaries (the previous DWSMA did not).*

**Water Quality Detections and Implications:**

- ☒ *The detection of tritium indicates all city wells captures young (post-1953) recharge indicating that the aquifer is dominated by young recharge.*

**Old Municipal Well Information:**

- ☒ *The Minnesota Department of Health has compiled historical information for use in the planning process.*

**Sanborn Maps:**

- ☐ Sanborn Maps are available for this area
- ☒ Sanborn Maps are not available for this area

**Recommended WHP Measures:**

- ☒ *Consult with area hydro.*
- Collect water samples from City Well water (Wells 2, 13, 14, 17, and 18) and analyze for tritium. Sampling of these additional wells will provide a more complete set of tritium data that can be used in the future to support assessment of the vulnerability of the aquifer to contaminants released at the surface. Sampling at Well 14 (which was analyzed in 2012) will provide an idea on tritium fate in the Jordan aquifer.
- Collect water samples from Wells 13 and 14, Colby Lake, Wilmes Lake and Powers Lake, and conduct stable isotope analyses to evaluate the mixture of surface water and groundwater.
- Continue collecting groundwater samples for analysis of regulated contaminants and provide the data to the MDH.

*This document is intended to be a summary of issues identified to date and is not intended to replace the required data elements identified in the Scoping 2 Decision Notice nor is it intended to be an exhaustive list of all potential drinking water issues.*

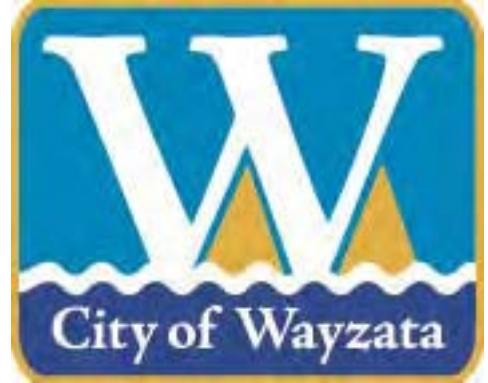
**APPENDIX E**

**PUBLIC HEARING  
DOCUMENTATION**

(NOT INCLUDED IN THIS DRAFT)

## **APPENDIX F**

### **PART 1 WELLHEAD PROTECTION PLAN**



# **CITY OF WAYZATA WELLHEAD PROTECTION PLAN PART I**

NOVEMBER 15, 2013

Stantec Project No. 193800599





**CITY OF WAYZATA**

**WELLHEAD PROTECTION PLAN – PART 1  
(AMENDMENT)**

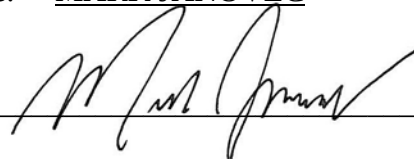
NOVEMBER 15, 2013

**WELLHEAD PROTECTION AREA AND DRINKING WATER SUPPLY  
MANAGEMENT AREA DELINEATION AND VULNERABILITY  
ASSESSMENTS**

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 Geologist under the laws of the State of Minnesota.

Print Name: MARK JANOVEC

Signature: \_\_\_\_\_



Date: NOVEMBER 15, 2012

License # 45625

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## EXECUTIVE SUMMARY

This report documents the delineation of the wellhead protection area (WHPA) and drinking water supply management area (DWSMA) and the vulnerability assessments for the wells and DWSMA for the City of Wayzata drinking water supply wells. The amended plan covers the wells listed in Table 1. Well logs are presented in Appendix A. The delineation was performed in accordance with rules (Minnesota Rules 4720.5100 to 4720.5590) for preparing and implementing wellhead protection measures for public water supply wells. The rules are administered by MDH, and the results described in this report were prepared by Stantec.

The City of Wayzata currently obtains its drinking water supply from three active wells, two of which are completed in the Prairie du Chien and Jordan aquifers, with the third completed in the buried drift (sand and gravel) aquifer.

A computer groundwater modeling platform was utilized for this project. The porous-flow portion of the wellhead protection areas (WHPAs) for Wayzata's Prairie du Chien-Jordan aquifer wells were delineated using a modified version of the Metropolitan Councils Metro Model 2, originally built in 2009. This model is a steady state MODFLOW model built using the Groundwater Vistas platform. The model was updated to reflect current pumping and geological conditions in and near the area around the Wayzata well field. The model was used to delineate one-year and ten-year capture zones for Wayzata's wells (Figure 1).

A fracture flow analysis was then undertaken using current MDH methodology to predict the area of the Prairie du Chien aquifer that is capable of rapidly transmitting water to the municipal wells. This fracture flow delineation was created by utilizing MDH guidance developed for fracture flow settings. The calculated area is shown in Figure 2.

The drinking water supply management area (DWSMA) was determined for the composite groundwater delineations by using property parcels and roadways as boundaries. Figure 3 shows the boundaries of both the WHPA and the DWSMA.

The amount of geologic protection documented in well logs from the water supply wells and regional information, along with water quality information was used to determine well vulnerability. Geologic sensitivity across the DWSMA, as determined by well logs, is mostly "low." However, elevated tritium shows that relatively young water is reaching the Wayzata municipal wells, suggesting that geologic confining layers across the DWSMA do not provide absolute protection against recently-infiltrated water. Therefore, a "moderate" vulnerability designation was assigned to the DWSMA, as shown in Figure 4. Aquifer vulnerability will be used to define the scope of activities required to complete the amendment to Part 2 of the Wellhead Protection Plan.

Wayzata's wells appear to meet the construction standards of the State Well Code, however, and the wells themselves are not considered a likely avenue for contamination to reach the aquifer from which they pump.

# CHAPTER ONE

## DATA ELEMENTS and ASSESSMENT (4720.5200)

### PART 1. REQUIRED DATA ELEMENTS

This section contains required data elements that were outlined in the Scoping Decision Notice provided to Wayzata by the MDH. Appendix D contains a table assessing the data elements required for this plan. Below is a summary of each data element.

#### A. Physical Environment Data Elements

1. **Precipitation** – Precipitation was generally not considered for the Part 1 wellhead protection activities, since the aquifers utilized by the City’s wells are separated from the water table (and the direct impacts of infiltration) from one or more geologic confining units. A more general accounting of precipitation was made during the development of the Metro Model 2 (Metropolitan Council, 2009), in order to set recharge values to the upper layer of the model. There was no data discovered during the course of the project to suggest a modification of this recharge value was needed at this time.
2. **Geology** – Geologic units in Hennepin County, and throughout the metropolitan area, fall into three broad categories: (1) Precambrian volcanic and crystalline rocks; (2) late-Precambrian through Ordovician sedimentary rocks; and (3) Quaternary unconsolidated deposits. The Precambrian volcanic and crystalline rocks generally are not considered major water-bearing units and are at a considerable depth below ground surface within the model domain. The late Precambrian through Ordovician sedimentary rocks make up the major regional aquifers and aquitards in the metropolitan area, and include units such as the Mt. Simon-Hinckley Sandstone, Franconia-Ironton-Galesville Group (also known as the Tunnel City-Wonewoc), the Jordan Sandstone, the Prairie du Chien Group, and the St. Peter Sandstone. The Quaternary unconsolidated deposits include glacial outwash, glacial till, and alluvial deposits. Sand and gravel layers in these unconsolidated deposits can often serve as local aquifers, if water yield is sufficient. These unconsolidated aquifers, however, are sometimes not laterally extensive or consistent in nature.

The Hennepin County Geologic Atlas (Balaban, 1989) displays the extent of bedrock units in Hennepin County and provides cross-sectional diagrams of the bedrock and surficial geology. Additionally, two geologic cross-sections are provided in Appendix A showing more localized geology in the Wayzata area, including the geology of the City’s three active water supply wells. Well 3 obtains its water from a buried unconsolidated sand and gravel deposit. Wells 4 and 5 are open to both the Prairie du Chien Dolomite and the Jordan Sandstone aquifers.

3. **Soils** – Soils were generally not considered for the Part 1 wellhead protection activities, since the aquifers under consideration were not in direct contact with surficial soils.
4. **Water Resources** – Surface water resources, such as lakes, rivers, and wetlands were generally not considered for the Part 1 wellhead protection activities, since these water bodies generally did not penetrate the confining units overlying the aquifer(s) that the City’s wells utilized and/or the surface water bodies were not in direct hydraulic contact with these aquifers. A more general accounting of surface water resources was made during the construction of the Metro Model 2, in instances where these resources were in hydraulic connection to the aquifers being modeled.

## **B. Land Use Data Elements**

1. **Land use** – Land use was generally not considered for the Part 1 wellhead protection activities. Land use will be covered in greater detail in the updated Part 2 plan, where the role of land use on water quality will be closely reviewed. Parcel boundaries, political boundaries, and roadways were used in order to help delineate the outer boundary of the DWSMA.
2. **Public utility services** – The only public utilities that play a role in the Part 1 Wellhead Protection Plan are the municipal water supply wells in Wayzata and other nearby public water supply wells for surrounding communities that utilize the same aquifers. Table 2 shows the modeled rates of the wells operated by Wayzata. Most high capacity wells in the DNR SWUDs database were already included in the MODFLOW model. However, nearby high capacity wells which exceed 10 million gallons per year have been modified (or added) to the model to reflect current conditions. Table 3 shows the modeled rates of municipal wells from surrounding communities that were either added or modified from the existing Metropolitan Council model. Well usage is also addressed in Part 2 of this chapter.

## **C. Water Quantity Data Elements**

1. **Surface water quantity** – The Minnesota River and Mississippi River are the major discharge features located within the domain of the Metro Model 2 utilized for this project. Numerous smaller discharge features have been added to the model domain and are explained in greater detail in the Metropolitan Council’s technical report for the Metropolitan Model (October 2009). For the purpose of the Wayzata Part 1 wellhead protection activities, no additional surface water features were added (or modified) within the model.
2. **Groundwater quantity** - Review of groundwater appropriations permits in the State Water Use Data System (SWUDS) database was performed to identify high capacity wells in the area that might affect delineation of the wellhead protection area. Most high capacity wells as of 2009 were included in the Metropolitan Council’s model. High capacity wells within Wayzata and nearby communities were updated in the model for the purposes of this delineation effort and are listed in Table 3. The City of Wayzata wells were modeled at the rate outlined in the wellhead protection rules, based on historical or projected within with 5 years of the current date. Modeled Wayzata well rates are shown in Table 2.

## **D. Water Quality Data Elements**

1. **Surface water quality** – Major surface water features in the area, such as the Minnesota River and Mississippi River, which are in direct hydraulic connection with the buried drift or the Prairie du Chien-Jordan aquifers, serve as flow boundaries within select layers of the Metropolitan Model. The aquifers utilized by Wayzata do not appear to have a direct connection to surface water features in the immediate vicinity of the wells, however, so it is believed that surface water quality does not have a significant short-term impact on the quality of the water in the aquifers that Wayzata utilizes.
2. **Groundwater quality** – Results of routine monitoring of the Wayzata wells are contained within the files of the Minnesota Department of Health. Historical monitoring has shown that the water quality within the aquifers used by Wayzata is generally of



excellent quality. Nitrates contamination, which is a source of concern in other parts of metropolitan area, does not appear to currently pose a problem in Wayzata. Nitrates levels in Wayzata's wells generally remain in the range of 0.1-0.5 mg/L, well below the health risk limit threshold of 10.4 mg/L.

Sampling of tritium took place at Wayzata Wells 3, 4, and 5 in April 2011. Tritium is an isotope of hydrogen that was released into the atmosphere during the above-ground testing of nuclear weapons in the early 1950s. While harmless, the presence of tritium in aquifers indicates that some portion of the water was in contact with the atmosphere within the past 60 years. A tritium level of 1 tritium unit (TU) or greater is an indication that these aquifers are somewhat vulnerable to contamination, because some portion of the water entering the well is less than 60 years old. The tritium level detected at Wayzata's wells ranged between 1.0-4.3 tritium units. Results of the April 2011 sampling are shown on the well vulnerability worksheets in Appendix C.

## PART 2. ASSESSMENT OF DATA ELEMENTS USED TO DELINEATE THE WELLHEAD PROTECTION AREA

- A. Use of the Wells** – The wells shown in Table 1 serve as the primary drinking water source for residents of the City of Wayzata. Pumping from the wells is rotated based on water demand and seasonal usage.

Table 2 shows a comparison of the usage of the City of Wayzata wells for the past five years versus a projected pumping rate 5 years into the future. The greatest amount of pumping from any of these years is used to represent the pumping rate for that well in the groundwater model. This is done for the purpose of developing a delineation that is conservative and takes into account the potential volume each well may be used in the near future.

Other high capacity wells included within the model, but not being delineated for the plan, are modeled using an average pumping rate taken from a 5 year period. This is explained in greater detail in the Metropolitan Council's 2009 technical report for the Metropolitan Model. High capacity wells shown in Table 3 were modeled based on an average rate from the years 2006-2010. These pumping volumes modify the volumes originally modeled by the Metropolitan Council. In some cases, the wells in Table 3 are new additions to the model, not previously included in the Metro Model 2.

### **B. Wellhead Protection Area Delineation Criteria**

1. **Time of travel** – The minimum time-of-travel for porous-flow aquifer delineations is 10-years, which is what was used for the buried drift aquifer and the Jordan aquifer. A 1-year time-of-travel zone was also delineated using standard techniques and represents the Emergency Management Area. An additional delineation of the Prairie du Chien-Jordan aquifer wells beyond the 10-year porous-flow capture zone was also conducted and is described in greater detail in Chapter Two.
2. **Hydrologic flow boundaries** – The Minnesota River and Mississippi River represents the major flow boundaries for the Prairie du Chien and Jordan aquifers in the metropolitan area. Other boundaries include the known edges of drift deposits and the lateral extent of bedrock aquifers. Hydrologic flow boundaries included in the groundwater model are documented in greater detail in the technical report for the Metropolitan Model (Metropolitan Council, 2009).
3. **Daily volume** – Projected annual pumping volumes for the Wayzata wells are shown in Table 2. The maximum projected annual pumping volumes were converted to cubic meters per day in order to be applied to the groundwater model.
4. **Groundwater flow field** – The groundwater flow field was calculated by the groundwater flow model. Original model calibration and ambient flow-field simulation results are described in the technical report for the Metropolitan Model (Metropolitan Council, 2009). Model calibration remains relatively unchanged, since only localized changes (near the Wayzata well field) were made to refine known aquifer depths, thicknesses, and hydraulic conductivities. These changes, while having an impact on the size of the delineated capture zones, were not enough to significantly impact model calibration results.
5. **Aquifer transmissivity** – Modeled hydraulic conductivity for the buried drift, Prairie du Chien, and Jordan aquifers varies throughout the Metropolitan Model. Methodology for selecting different conductivity values is documented within the technical report (Metropolitan Council, 2009).

Local refinements of hydraulic conductivity were made within the model based on aquifer pumping test data from nearby wells.

For the buried drift aquifer, a short-duration pumping and recovery test was run on Wayzata Well 3 in June 2013. The results of this test indicated a calculated transmissivity of 15,500 ft<sup>2</sup>/day. Using the saturated thickness of 30 feet that was observed at Well 3, hydraulic conductivity was calculated to be 518 ft/day (or 158 m/day).

Since Wayzata Wells 4 and 5 are open to both the Prairie du Chien and Jordan aquifers, it was necessary to determine representative hydraulic conductivities for each aquifer. For the purposes of assigning values to the individual aquifers (Prairie du Chien and Jordan), individual transmissivity values needed to be calculated. Specific capacity tests from four nearby Jordan aquifer wells were analyzed by the MDH and determined to provide a mean transmissivity of 3023.5 ft<sup>2</sup>/day. Further review of aquifer pumping tests analyzed by the MDH at Minnetonka 6A (208012) and Medina 6 (747666) demonstrated calculated transmissivity values of 2,400 ft<sup>2</sup>/day and 2838.7 ft<sup>2</sup>/day, respectively. For the base model simulations, a base transmissivity of 3020 ft<sup>2</sup>/day appeared to be representative for the Jordan aquifer in this area. With an average Jordan thickness of 90 feet in Wayzata, this calculates to a hydraulic conductivity of 33.6 ft/day (10.2 m/day).

For the nearby Long Lake wellhead protection delineation, the MDH used the Long Lake Well No. 1 aquifer test to parse out an estimated transmissivity value for the Prairie du Chien aquifer. An April 2003 aquifer pumping test at Long Lake Well No. 1 (also a Prairie du Chien-Jordan well) demonstrated a combined calculated transmissivity of 11,510 ft<sup>2</sup>/day. Estimated individual transmissivity values for the Prairie du Chien aquifer were calculated by the MDH to range between 8,600 and 10,500 ft<sup>2</sup>/day, with average values around 9,850 ft<sup>2</sup>/day. This transmissivity of 9,850 ft<sup>2</sup>/day was used for the base model simulation of Prairie du Chien transmissivity in Wayzata due to the geologic similarity and geographic proximity of the Long Lake well to the City of Wayzata's wells. With the average Prairie du Chien thickness in Wayzata being 145 feet, this calculates to a conductivity of 67.9 ft/day (or 20.7 m/day).

**C. Quality and Quantity of Water Supplying the Public Water Supply Well** - Water in the City of Wayzata water distribution system is regularly sampled and analyzed for contaminants regulated under the federal Safe Drinking Water Act. Routine monitoring by the Public Water Supply Program at MDH does not indicate contamination that may pose a public health risk. No contaminants of significant concern have been detected in the City's wells, however the tritium readings between 1.0 TU and 4.3 TU does indicate the aquifers being pumped may be somewhat vulnerable to contamination.

The utilized aquifers appear to have sufficient transmissivity and recharge to remain a long-term source of drinking water for the residents of Wayzata. Any future water supply wells (or replacement wells) will most likely be completed within the Jordan aquifer. Monitoring of water levels within the aquifer in the region will help establish the long term sustainability of the aquifer as the metropolitan area continues to develop. Water level data collected in the Wayzata wells will contribute to the understanding of groundwater sustainability.

**D. The Land Uses in the Drinking Water Supply Management Area** – Land uses in the DWSMA for the Wayzata wells is primarily residential, commercial, and recreational in nature, including two golf courses. Land uses will be discussed in greater detail in the Part 2 Wellhead Protection Plan, which will include the contaminant source inventory for parcels within the DWSMA.

## **CHAPTER TWO**

### **WELLHEAD PROTECTION AREA AND DRINKING WATER SUPPLY MANAGEMENT AREA DELINEATION (4720.5205)**

- A. Physical setting and subsurface hydrogeology** – The Wayzata municipal wells draw water from the buried drift aquifer, the Prairie du Chien aquifer, and the Jordan aquifer. See Table 1. Geologic wells logs and cross-sections for the City’s wells are presented in Appendix A. The Twin Cities Metropolitan Model developed by the Metropolitan Council formed the basis for the modeling approach of Wayzata’s well field. The basic hydrogeologic setting for the Metropolitan Model is presented in the report *Twin Cities Metropolitan Area Regional Groundwater Flow Model Version 2.00* (Metropolitan Council, 2009). Localized refinements of aquifer depth, thickness, and hydraulic conductivity were made to more closely represent observed conditions in and around Wayzata’s well field.

Local surface water features do not appear to be in direct hydraulic connection with the aquifers from which Wayzata obtains its water supply. Larger, regional hydraulic features such as major river valleys are in connection with these aquifers and are accounted for in the larger model domain.

Groundwater flow in all three aquifers is generally in an east-southeast direction. Groundwater contour maps are provided in the Hennepin County Geologic Atlas (Balaban, 1989) for reference.

#### **B. Delineation of the Wellhead Protection Area**

##### **1. Porous Flow Delineation Method – Buried Drift and Jordan Aquifer**

The delineation of the Buried Drift capture zone for Well 3 and the Jordan aquifer capture zone for Wells 4 and 5 was conducted utilizing the modified Metropolitan Model. Original model construction detail, data files, and calibration results are outlined in the Metropolitan Council report (2009). Modifications to the model included:

- Refinement of the model grid was done to reduce model grid size from 500 x 500 meters to 62.5 x 62.5 meters around the Wayzata municipal wells.
- Updating modeled flow rates for Wayzata municipal wells to match wellhead protection rule requirements. See Table 2.
- Updating average modeled flow rates for nearby high capacity wells (both municipal and private) to reflect the period from 2006 to 2010. See Table 3. Updated rates were applied only to wells which regularly pump more than 10 million gallons per year. Wells pumping less than this volume have little impact on modeled capture zones.
- The modeling of some high capacity wells in Table 3 was modified to better reflect the actual construction of the well. It is common practice for local well drillers, who are constructing a Jordan aquifer well, to drill a few feet below the Jordan aquifer into the St. Lawrence aquifer. This is done to ensure that the full interval of the Jordan is open to the well. The borehole that is open to the St. Lawrence formation often yields very little water and often becomes back-filled over time with sediment and debris. When the well is recorded in the County Well Index database, however, it is often classified as a “Jordan-St. Lawrence” well, even though the well is truly a Jordan aquifer well. County Well Index classifications were used in simulating some of the wells in the Metropolitan Model, showing the wells being open to Layer 5 (the St. Lawrence). This can



result in the model simulating a higher-than-expected water volume from the St. Lawrence layer. For the purposes of this modeling effort, Jordan aquifer wells which are open to a few feet of the St. Lawrence formation were modeled as only being in Layer 4 (the Jordan aquifer).

- The Buried Drift (Layer 1), Prairie du Chien (Layer 3), and Jordan Aquifer (Layer 4) parameters around the Wayzata area was adjusted to match local values, as shown in Table 4. Horizontal hydraulic conductivity was adjusted to match values from local aquifer pumping test data, as described in Chapter One, Part 2. A global porosity of 0.25 was chosen to represent the buried drift aquifer and a porosity of 0.20 was chosen to represent the Jordan aquifer across the model domain. A porosity of 0.056 was chosen to represent the overlying Prairie du Chien aquifer.

Calibration of the modified Metropolitan Model was checked using target wells located in Layer 1 (Buried Drift aquifer), Layer 3 (Prairie du Chien aquifer), and Layer 4 (Jordan aquifer). Comparisons between the original model calibration and the modified model calibration are presented in Appendix B. Calibration was checked both on the entire model domain and on a refined scale which included only the target wells in the area comprising Wayzata, Orono, Long Lake, Plymouth, and Minnetonka. A comparison of the refined scale calibration between the original Metro Model and the modified model showed little deviation.

The delineations were created using particle tracking analysis in MODPATH. A circle of particles was established at a radius of 100 meters from each wellhead and tracking backwards (upgradient) with 40 particle lines per well. The path line groupings were then outlined to develop capture zones for 1-year and 10-year time-of-travel delineations. Additionally, two separate modeling runs were complete. One modeling run simulated both Wells 4 and 5 open to both Layer 3 (PDC) and Layer 4 (Jordan). A second model run simulated Wells 4 and 5 open only to the Jordan aquifer layer. This was done to account for the uncertainty regarding what percentage of water the Jordan aquifer provided to each well. (Uncertainty regarding the Prairie du Chien contribution in addressed using the Fracture Flow Delineation described below).

Figure 1 shows the composite result of the porous delineation model runs. Model files and generated path lines are provided as supplemental data in Appendix E.

## **2. Fracture Flow Delineation Method – Prairie du Chien Aquifer**

Since the Prairie du Chien formation, which overlies the Jordan aquifer, is capable of rapidly transmitting water through its secondary porosity features (fractures and solution cavities), an additional delineation effort was required to account for the uncertainty in how much volume this aquifer provides to the overall pumped volume. The Minnesota Department of Health has developed a guidance for delineating the fracture flow component of the delineation in wells with this type of setting, where wells are open to both a porous-flow aquifer (Jordan) and a fractured-flow aquifer (Prairie du Chien). The methodology is outlined in greater detail in *Guidance for Delineating Wellhead Protection Areas in Fractured and Solution-Weathered Bedrock in Minnesota* (Minnesota Department of Health, September 2005).

While the volume of the calculated porous delineation of the Jordan aquifer can account for the full 10-year volume of water pumped from Wayzata Wells 4 and 5, a comparable delineation must be made under the assumption that 100% of the water may be supplied by

the Prairie du Chien aquifer.

The first step of the process was to delineate a fixed radius capture zone for the Prairie du Chien aquifer around each municipal well. Table 5 shows the values used to create the fixed radius calculation for each well. This calculation takes into account aquifer thickness (based on average thicknesses noted in well logs), aquifer porosity (5.6%, as noted in MDH guidance documents), and the percentage of pumped volume from each well thought to be supplied by the Prairie du Chien (100% of the total pumped volume over a 5-year period, in this case). Since the fixed radius of each well overlapped each other, the calculated areas had to be increased accordingly (since two wells cannot share the same capture area). The next step was to apportion a volume of the overlap area of each well, by calculating the volume of the shared area and determining the percentage of the shared area that should be added to each well's delineated area. Table 5 shows this calculation and shows the resulting modified fixed radius.

The final step of the fracture flow delineation method was to extend the fixed radius delineations in the upgradient direction. Since a natural flow boundary was not encountered near the Wayzata well field, an upgradient extension was made to represent an additional 5-year capture zone area for the fracture flow area. The fixed radius delineations were extended in the upgradient direction to double the calculated area of the fracture flow delineation, to create a 10-year fracture flow delineation (5-year fixed radius plus 5-year upgradient extension). The extensions were then varied 10 degrees in either direction of the flow gradient (285 degrees from North), to account for possible uncertainties regarding flow direction. The fixed radius delineations and their upgradient extensions were combined to create a composite fracture-flow delineation area for the Prairie du Chien bedrock, as shown in Figure 2. This is the area that, combined with the 10-year porous flow area delineated in Figure 1, will serve as the wellhead protection area (WHPA) for the Wayzata aquifer wells.

### **C. Uncertainties relating to the accuracy of the calculated wellhead protection area boundaries**

Using computer models to simulate ground-water flow necessarily involves representing a complicated natural system in a simplified manner. These simplifications are a result of incomplete knowledge or understanding of part of the natural system and the limitations of mathematical models implemented in groundwater modeling computer codes. The necessary simplifications give rise to uncertainty in the model results. A reasonable attempt to account for the most significant causes of model uncertainty was made in the delineation of the WHPA. The technical report for the Metropolitan Model (Metropolitan Council, 2009) outlines some of the model uncertainties that exist within the original MODFLOW model. Wherever possible, locally obtained values of hydraulic conductivity were used to more accurately represent conditions in and around the Wayzata wells.

The chief area of uncertainty for Wells 4 and 5 was the portion of water coming from each aquifer (Prairie du Chien and Jordan) that each well is utilizing. The MDH guidance for calculating wellhead protection areas in fracture flow and solution-weathered settings is designed to account for a large amount of that uncertainty. The additional areas, added to the delineation around the wellhead (and extended in the upgradient direction), add a higher degree of confidence that the delineation accounts for areas within both the Prairie du Chien and Jordan aquifers that supply water to the municipal wells over a 10-year period.

**D. Delineation of the DWSMA**

The Drinking Water Supply Management Area (DWSMA) is shown on Figure 3. This area includes all of the porous-flow wellhead protection areas and the fracture-flow wellhead protection area. The DWSMA was delineated using a combination of parcel boundaries, street and road centerlines, public land survey coordinates, and municipal boundaries. Any parcel of land either wholly or partially within one of the delineation areas was included within the DWSMA.

The DWSMA represents the area of land that will be considered during the creation of the management plan for Part 2. The vulnerability of the DWSMA is discussed in Chapter 3 of this report.

## **CHAPTER THREE**

### **VULNERABILITY ASSESSMENT**

This chapter documents the vulnerability assessments of the wells and drinking water supply management area (DWSMA) for the City of Wayzata wells listed in Table 1. This assessment was performed in accordance with rules (Minnesota Rule 4720.5210) for preparing and implementing wellhead protection measures for public water supply wells.

The vulnerabilities of the wells were determined by evaluating available information on the 1) geology, 2) well construction, 3) pumping rates, and 3) chemical composition of the well water and comparing these results with the criteria in Minnesota Rule 4720.5550.

The vulnerability of the DWSMA was determined by evaluating available information on 1) the lateral continuity of protective geologic materials overlying the aquifer and 2) the chemical and isotopic composition of well water from the aquifer. DWSMA vulnerability was calculated using a combination of the Hennepin County Geologic Atlas, bedrock geology, surface geology, mapped clay layers, and water chemistry data.

- A. Well vulnerability assessment** - A vulnerability score was calculated for each well based on factors such as well construction, geology at the well site, and chemical data; higher scores correlate to greater perceived vulnerability. A numeric cutoff (of 45 points) is used to identify vulnerable from non-vulnerable wells (MDH, 1997). Vulnerable wells are also identified based on the presence of contamination, such as nitrate-nitrogen in excess of 10 mg/l, or young (post-1953) water, as indicated by the presence of 1 tritium unit or greater in the well water. The completed well vulnerability assessment worksheets are provided in Appendix C.

All three municipal wells were determined to be vulnerable, based on the presence of tritium in each well over 1.0 TU in April 2011. Well 4 also had a vulnerability score of 50, based on a combination of other scoring factors (geologic sensitivity, pumping rate, well construction, etc.)

There is nothing that was discovered in the well vulnerability assessment, however, that indicates that the wells themselves are a likely avenue for contamination to reach the aquifer. The wells appear to meet construction standards set fourth in the State Well Code. Well vulnerability in Wayzata is mostly the result of elevated tritium levels, which indicate some portion of younger water is entering the aquifers.

- B. Drinking Water Supply Management Area Vulnerability Assessment** - The vulnerability of land parcels located within the drinking water supply management area (DWSMA) for Wayzata was evaluated primarily on the basis of the geologic sensitivity, as determined from well records in County Well Index. Each mapped well from County Well Index was assigned an “L” score based on a GIS application developed by the Minnesota Department of Health. An L-score identifies the amount of geologic protection between the land surface and the aquifer, as identified in each well’s geologic log. Each L-score represents 10 feet of low permeability material found above the aquifer. This material may be either be unconsolidated deposits of clay or may be a confining bedrock layer, such as shale. An L-Score of 3, for example, would indicate at least 30 feet of low permeability material above the aquifer in question.

Figure 4 displays the L-scores generated for the wellhead protection area by the Minnesota Department of Health. All mapped wells of comparable depth to the City’s wells had L-scores that indicated that geologic sensitivity across the DWSMA is low. In the absence of other indicators, this would generally suggest that aquifer vulnerability across the DWSMA is also low. However, the presence of tritium between 1.0 and 4.3 TU in the City of Wayzata wells does indicate that younger water (less than 60 years old) is reaching all three aquifers the City

utilizes. Therefore, these readings suggest that other factors may be present, beyond just geologic sensitivity scores, that indicates some level of vulnerability. Using current MDH methodology, a low geologic sensitivity score combined with elevated tritium results in a DWSMA vulnerability ranking of “moderate.”

The implications of the assigned vulnerability level will be addressed in greater detail in the amended Part 2 Wellhead Protection Plan. In general, the moderate vulnerability ranking will necessitate a selected inventory of potential contamination sources within the affected parcels that can either penetrate or break down the confining layers.



## REFERENCES

- Metropolitan Council, *Twin Cities Metropolitan Area Regional Groundwater Flow Model Version 2.00, Technical Report in Support of the Metropolitan Area Master Water Supply Plan*, October 2009.
- Minnesota Department of Health, *Assessing Well and Aquifer Vulnerability for Wellhead Protection*, February 1997.
- Minnesota Department of Health and Minnesota Geological Survey, *Minnesota County Well Index, Version 4.00*.
- Minnesota Department of Health, *Guidance for Delineating Wellhead Protection Areas in Fractured and Solution-Weathered Bedrock in Minnesota*, December 2011.
- Minnesota Geological Survey, *Geologic Atlas of Hennepin County, Minnesota*, County Atlas Series C-4, Ed. N. H. Balaban, University of Minnesota, St. Paul. 1989.
- Minnesota Geological Survey, *Bedrock Geology and Structure of the Seven-County Twin Cities Metropolitan Area, Minnesota*, 2000.

## **TABLES**

**Table 1 - Wayzata Water Supply Well Information**

| Well Name | Unique Number | UTM E Coord | UTM N Coord | Model E Coord | Model N Coord | Aquifer                 | Casing Depth (feet) | Well Depth (feet) | Year Constructed | Vulnerability* |
|-----------|---------------|-------------|-------------|---------------|---------------|-------------------------|---------------------|-------------------|------------------|----------------|
| Well 3    | 206931        | 459432      | 4980163     | 53657         | 70181         | Drift                   | 70                  | 100               | 1965             | Vulnerable     |
| Well 4    | 206932        | 459481      | 4980325     | 53706         | 70343         | Prairie du Chien-Jordan | 284                 | 507               | 1970             | Vulnerable     |
| Well 5    | 497387        | 458526      | 4979814     | 52751         | 69832         | Prairie du Chien-Jordan | 229                 | 464               | 1992             | Vulnerable     |

\* vulnerability status based on review of well construction, geologic materials encountered during drilling, well use, and water quality.

See Chapter 3 and Appendix D for further information.

**Table 2: Modeled Wayzata Pumping Volumes**

| Well Name    | Unique Number | Recorded Pumping Volumes (MG/Y) |       |       |       |       |       | Predicted 2017 Pumping (MG/Y) | Modeled Pumping Rate (MG/Y) | Modeled Pumping Rate (m <sup>3</sup> /day) |
|--------------|---------------|---------------------------------|-------|-------|-------|-------|-------|-------------------------------|-----------------------------|--------------------------------------------|
|              |               | 2007                            | 2008  | 2009  | 2010  | 2011  | 2012  |                               |                             |                                            |
| Well 3       | 206931        | 86.0                            | 97.0  | 48.6  | 73.3  | 65.9  | 87.3  | 95.0                          | 97.0                        | 1006.6                                     |
| Well 4       | 206932        | 103.4                           | 95.4  | 126.4 | 99.3  | 78.0  | 109.0 | 125.0                         | 126.4                       | 1311.8                                     |
| Well 5       | 497387        | 143.9                           | 134.3 | 167.3 | 124.8 | 109.6 | 83.4  | 150.0                         | 167.3                       | 1736.2                                     |
| <b>Total</b> |               | 333.3                           | 326.7 | 342.3 | 297.4 | 253.5 | 279.7 | 370.0                         | 390.7                       | 4054.6                                     |

**Table 3 - High Capacity Wells Within 2-3 Miles of Wayzata's Municipal Wells**

| Unique Number | Well Name                        | DNR Permit Number | Aquifer          | Well Use   | UTM E Coord | UTM N Coord | Reported Pumping Volumes (MG/Y) * |       |       |       |       | Average Withdrawal 2006-2010 (MG/Y) | Modeled Withdrawal (m <sup>3</sup> /day) |
|---------------|----------------------------------|-------------------|------------------|------------|-------------|-------------|-----------------------------------|-------|-------|-------|-------|-------------------------------------|------------------------------------------|
|               |                                  |                   |                  |            |             |             | 2010                              | 2009  | 2008  | 2007  | 2006  |                                     |                                          |
| 100286        | Jack Wahlfors                    | 1977-6402         | Drift (QBAA)     |            | 455805      | 4983818     | 0.0                               | 0.6   | 0.3   | 0.5   | 2.4   | 0.8                                 | 7.9                                      |
| 112202        | City of Plymouth Well 4          | 1978-6376         | PDC-Jordan       | Municipal  | 463214      | 4983513     | 1.1                               | 2.1   | 2.9   | 16.5  | 16.4  | 7.8                                 | 80.9                                     |
| 150356        | City of Minnetonka Well 10A      | 1979-6207         | PDC-Jordan       | Municipal  | 463474      | 4976738     | 194.4                             | 259.1 | 198.0 | 275.8 | 210.2 | 227.5                               | 2360.9                                   |
| 160023        | City of Plymouth Well 5          | 1978-6376         | PDC-Jordan       | Municipal  | 462962      | 4983518     | 16.9                              | 2.3   | 0.1   | 21.1  | 46.1  | 17.3                                | 179.5                                    |
| 184882        | City of Plymouth Well 7          | 1978-6376         | PDC-Jordan       | Municipal  | 463214      | 4983147     | 210.3                             | 315.0 | 134.3 | 228.6 | 159.4 | 209.5                               | 2174.4                                   |
| 204140        | City of Minnetonka Well 10       | 1979-6207         | PDC-Jordan       | Municipal  | 463477      | 4976644     | 196.1                             | 259.1 | 197.9 | 275.6 | 187.4 | 223.2                               | 2316.5                                   |
| 204618        | City of Plymouth Well 3          | 1978-6376         | PDC-Jordan       | Municipal  | 463227      | 4983858     | 256.8                             | 201.9 | 234.6 | 274.4 | 207.3 | 235.0                               | 2438.8                                   |
| 204619        | City of Plymouth Well 2          | 1978-6376         | PDC-Jordan       | Municipal  | 462993      | 4983844     | 240.6                             | 282.2 | 420.9 | 377.5 | 408.9 | 346.0                               | 3590.9                                   |
| 205170        | Woodhill Country Club Well 1     | 1986-6095         | PDC-Jordan       | Irrigation | 456815      | 4980332     | 10.3                              | 9.3   | 9.8   | 9.5   | 4.4   | 8.6                                 | 89.8                                     |
| 205624        | City of Minnetonka Beach Well 2  | 1984-6128         | Jordan           | Municipal  | 453979      | 4976470     | 16.6                              | 25.1  | 20.2  | 20.5  | 24.5  | 21.4                                | 221.9                                    |
| 206933        | City of Long Lake Well 2         | 1965-0980         | Jordan           | Municipal  | 456081      | 4981388     | 21.2                              | 36.7  | 31.5  | 32.2  | 33.3  | 31.0                                | 321.7                                    |
| 208024        | City of Minnetonka Beach Well 1  | 1984-6128         | Jordan           | Municipal  | 453974      | 4976440     | 23.9                              | 21.7  | 20.2  | 28.1  | 21.1  | 23.0                                | 238.7                                    |
| 208853        | Wayzata Country Club Well 1      | 1963-0445         | PDC-Jordan       | Irrigation | 457829      | 4981042     | 32.3                              | 54.4  | 30.0  | 43.6  | 30.0  | 38.1                                | 395.0                                    |
| 255880        | Cargill Inc. Well 1              | 2003-3060         | PDC-Jordan       | Irrigation | 462086      | 4978602     | 0.9                               | 1.9   | 1.1   | 0.9   | 1.0   | 1.2                                 | 12.1                                     |
| 449184        | City of Plymouth Well 6          | 1978-6376         | PDC-Jordan       | Municipal  | 463608      | 4983526     | 391.0                             | 337.2 | 304.9 | 225.4 | 523.6 | 356.4                               | 3698.9                                   |
| 462918        | City of Plymouth Well 13         | 1978-6376         | Jordan           | Municipal  | 462850      | 4983141     | 309.4                             | 428.6 | 289.0 | 296.0 | 547.7 | 374.1                               | 3882.8                                   |
| 508300        | City of Plymouth Well 12         | 1978-6376         | PDC-Jordan       | Municipal  | 463598      | 4983191     | 131.0                             | 123.6 | 302.9 | 415.6 | 91.3  | 212.9                               | 2209.2                                   |
| 578940        | Woodhill Country Club Well 2     | 1986-6095         | PDC-Jordan       | Irrigation | 456888      | 4980018     | 17.5                              | 20.7  | 20.4  | 23.6  | 23.9  | 21.2                                | 220.0                                    |
| 589643        | Spring Hill Golf Club Well 1     | 1998-6133         | PDC-Jordan       | Irrigation | 457194      | 4982352     | 21.1                              | 28.6  | 22.0  | 24.7  | 24.4  | 24.2                                | 250.8                                    |
| 610452        | City of Orono Golf Course Well 1 | 1999-6038         | Prairie du Chien | Irrigation | 455923      | 4980256     | 3.1                               | 7.1   | 5.1   | 5.8   | 5.8   | 5.4                                 | 56.0                                     |
| 661401        | City of Minnetonka Well 16A      | 1979-6207         | PDC-Jordan       | Municipal  | 463236      | 4976840     | 167.0                             | 230.0 | 167.0 | 316.1 | 398.4 | 255.7                               | 2653.6                                   |
| 661402        | City of Minnetonka Well 16B      | 1979-6207         | PDC-Jordan       | Municipal  | 463397      | 4976415     | 178.9                             | 202.8 | 208.3 | 284.5 | 345.6 | 244.0                               | 2532.4                                   |
| 667910        | City of Long Lake Well 1         | 1965-0980         | PDC-Jordan       | Municipal  | 454827      | 4981412     | 46.8                              | 41.9  | 47.0  | 44.9  | 48.8  | 45.9                                | 476.1                                    |

\*Obtained from DNR SWUDS Database



**Table 4 – Aquifer Parameters, City of Wayzata**

| <b>Parameter</b>               | <b>Value</b>                       | <b>Data Source</b>                                                        |
|--------------------------------|------------------------------------|---------------------------------------------------------------------------|
| Aquifer Name                   | QBAA                               | County Well Index Well Logs                                               |
| Aquifer Material               | Glacial deposits                   | County Well Index Well Logs                                               |
| Primary Porosity               | 0.25                               | Estimated                                                                 |
| Aquifer Thickness              | 30 feet                            | County Well Index Well Logs                                               |
| Stratigraphic Top Elevation    | 865 feet                           | County Well Index Well Logs                                               |
| Stratigraphic Bottom Elevation | 835 feet                           | County Well Index Well Logs                                               |
| Hydraulic Confinement          | Confined                           | County Well Index Well Logs                                               |
| Transmissivity (T)             | 15,500 ft <sup>2</sup> /day        | Calculated from short duration pumping test at Wayzata Well 3 (June 2013) |
| Hydraulic Conductivity         | 518 ft/day                         | Calculated from transmissivity and aquifer thickness                      |
| Groundwater Flow Field         | South flow towards Lake Minnetonka | Hennepin County Geologic Atlas                                            |

| <b>Parameter</b>               | <b>Value</b>                                                            | <b>Data Source</b>                                                 |
|--------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------|
| Aquifer Name                   | Prairie du Chien-Jordan                                                 | County Well Index Well Logs                                        |
| Aquifer Material               | Dolomite and Sandstone                                                  | County Well Index Well Logs                                        |
| Primary Porosity               | 0.056 for Prairie du Chien and 0.20 for Jordan                          | Estimated                                                          |
| Aquifer Thickness              | 235 feet                                                                | County Well Index Well Logs                                        |
| Stratigraphic Top Elevation    | 730 feet                                                                | County Well Index Well Logs                                        |
| Stratigraphic Bottom Elevation | 495 feet                                                                | County Well Index Well Logs                                        |
| Hydraulic Confinement          | Confined                                                                | County Well Index Well Logs                                        |
| Transmissivity (T)             | 11,500 ft <sup>2</sup> /day                                             | Calculated from Long Lake Well 1 Aquifer Pumping Test (April 2003) |
| Hydraulic Conductivity         | 48.9 ft/day                                                             | Determined from calculated transmissivity and aquifer thickness    |
| Groundwater Flow Field         | Flow to the southeast with approximate gradient of $1.6 \times 10^{-3}$ | Hennepin County Geologic Atlas                                     |

**Table 4 (continued) – Hydrogeologic Parameters, City of Wayzata**

| <b>Parameter</b>               | <b>Value</b>                                                            | <b>Data Source</b>                                                                                              |
|--------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Aquifer Name                   | Prairie du Chien                                                        | County Well Index Well Logs                                                                                     |
| Aquifer Material               | Dolomite                                                                | County Well Index Well Logs                                                                                     |
| Primary Porosity               | 0.056                                                                   | Estimated                                                                                                       |
| Aquifer Thickness              | 145 feet                                                                | County Well Index Well Logs                                                                                     |
| Stratigraphic Top Elevation    | 730 feet                                                                | County Well Index Well Logs                                                                                     |
| Stratigraphic Bottom Elevation | 585 feet                                                                | County Well Index Well Logs                                                                                     |
| Hydraulic Confinement          | Confined                                                                | County Well Index Well Logs                                                                                     |
| Transmissivity (T)             | 9,850 ft <sup>2</sup> /day                                              | Estimated by MDH for Long Lake Wellhead Protection Plan, using aquifer pumping test data from Long Lake Well 1. |
| Hydraulic Conductivity         | 67.9 ft/day                                                             | Calculated using estimated transmissivity and aquifer thickness                                                 |
| Groundwater Flow Field         | Flow to the southeast with approximate gradient of $1.6 \times 10^{-3}$ | Hennepin County Geologic Atlas                                                                                  |

| <b>Parameter</b>               | <b>Value</b>                                                            | <b>Data Source</b>                                                              |
|--------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Aquifer Name                   | Jordan                                                                  | County Well Index Well Logs                                                     |
| Aquifer Material               | Sandstone                                                               | County Well Index Well Logs                                                     |
| Primary Porosity               | 0.20                                                                    | Estimated                                                                       |
| Aquifer Thickness              | 90 feet                                                                 | County Well Index Well Logs                                                     |
| Stratigraphic Top Elevation    | 585 feet                                                                | County Well Index Well Logs                                                     |
| Stratigraphic Bottom Elevation | 490 feet                                                                | County Well Index Well Logs                                                     |
| Hydraulic Confinement          | Confined                                                                | County Well Index Well Logs                                                     |
| Transmissivity (T)             | 3,020 ft <sup>2</sup> /day                                              | Estimated by MDH using specific capacity tests from nearby Jordan aquifer wells |
| Hydraulic Conductivity         | 33.6 ft/day                                                             | Calculated using estimated transmissivity and aquifer thickness                 |
| Groundwater Flow Field         | Flow to the southeast with approximate gradient of $1.6 \times 10^{-3}$ | Hennepin County Geologic Atlas                                                  |

**TABLE 5 - CALCULATION OF FIXED RADIUS FOR PRAIRIE DU CHIEN FRACTURE FLOW ASSESSMENT**

|                                              |                                        | <b>1-Year Calculated Fixed radius</b> | <b>5-Year Calculated Fixed radius</b> |
|----------------------------------------------|----------------------------------------|---------------------------------------|---------------------------------------|
| <b>Well No. 4<br/>(Unique # 206932)</b>      | Pumping Rate (Q):                      | 1,311.8 m <sup>3</sup> /day           | 1,311.8 m <sup>3</sup> /day           |
|                                              | Water Producing Zone Thickness (L):    | 44.2 m                                | 44.2 m                                |
|                                              | Effective Porosity (n):                | 0.056                                 | 0.056                                 |
|                                              | Original (Calculated) Radius:          | 248.1 m                               | 554.1 m                               |
|                                              | Original (Calculated) Area for Well 4: | 193,441.7 m <sup>2</sup>              | 964,558.8 m <sup>2</sup>              |
|                                              | New Area for Well 4:                   | 193,441.7 m <sup>2</sup>              | 982,740.8 m <sup>2</sup>              |
|                                              | New Radius:                            | 248.1 m                               | 559.3 m                               |
| <b>Well No. 5<br/>(Unique # 497387)</b>      | Pumping Rate (Q)                       | 1,736.2 m <sup>3</sup> /day           | 1,736.2 m <sup>3</sup> /day           |
|                                              | Water Producing Zone Thickness (L):    | 44.2 m                                | 44.2 m                                |
|                                              | Effective Porosity (n):                | 0.056                                 | 0.056                                 |
|                                              | Original (Calculated) Radius:          | 285.5 m                               | 637.5 m                               |
|                                              | Original (Calculated) Area for Well 5: | 256,025.0 m <sup>2</sup>              | 1,276,617.6 m <sup>2</sup>            |
|                                              | New Area for Well 5:                   | 256,025.0 m <sup>2</sup>              | 1,300,681.9 m <sup>2</sup>            |
|                                              | New Radius:                            | 285.5 m                               | 643.4 m                               |
| Long Axis of Overlap:                        |                                        | 0.0 m                                 | 495.3 m                               |
| Short Axis of Overlap:                       |                                        | 0.0 m                                 | 108.6 m                               |
| Total Overlap Area:                          |                                        | 0.0 m <sup>2</sup>                    | 42,246.2 m <sup>2</sup>               |
| Apportioned Overlap Area to Well#4 (206932): |                                        | 0.0 m <sup>2</sup>                    | 18,181.9 m <sup>2</sup>               |
| Apportioned Overlap Area to Well#5 (497387): |                                        | 0.0 m <sup>2</sup>                    | 24,064.3 m <sup>2</sup>               |
| Angle of Flow Direction:                     |                                        | 295 +/- 10 degrees                    | 295 +/- 10 degrees                    |

## **FIGURES**



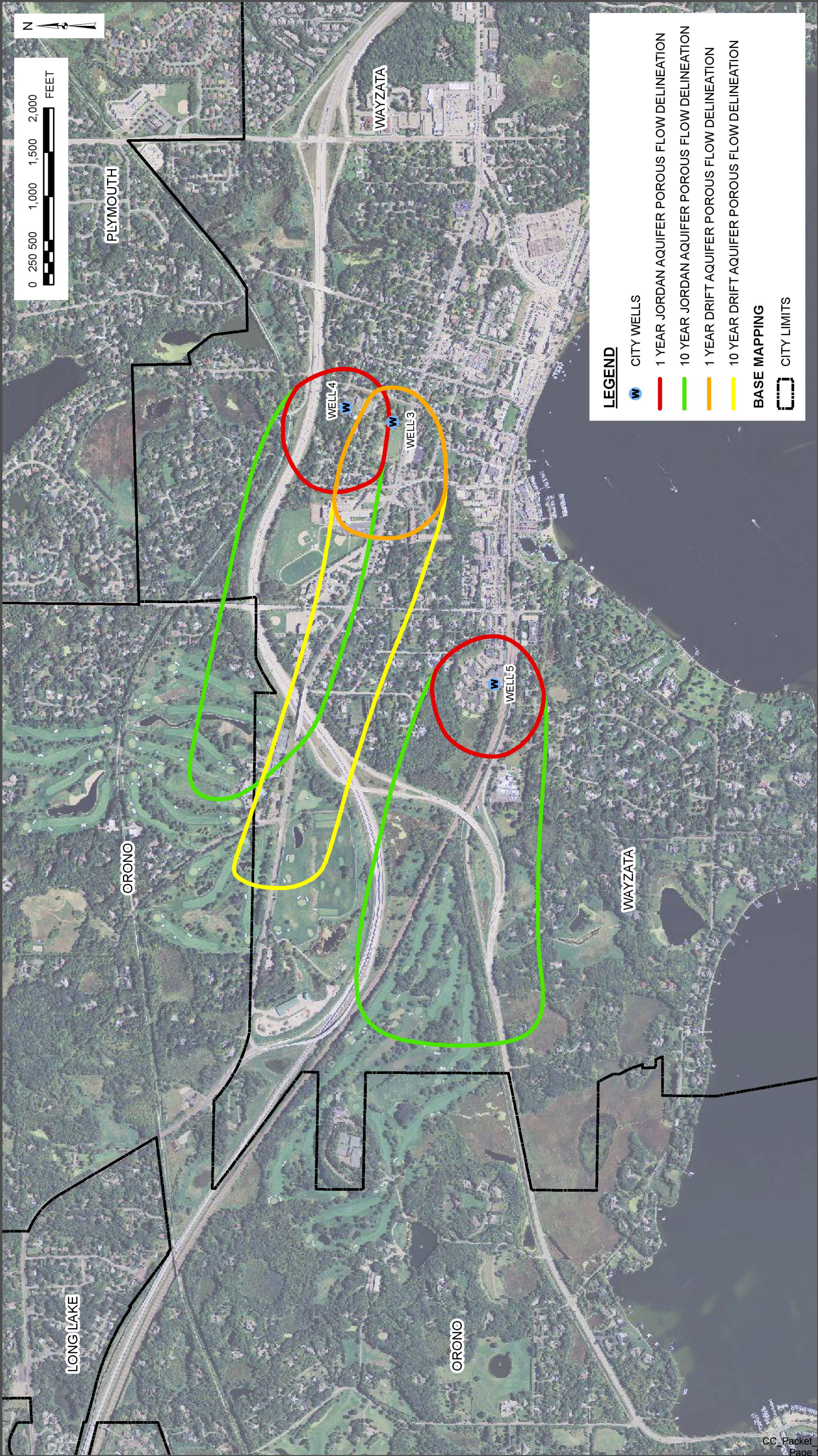


FIGURE 1 - POROUS FLOW MODEL DELINEATIONS

WAYZATA WELLHEAD PROTECTION PLAN

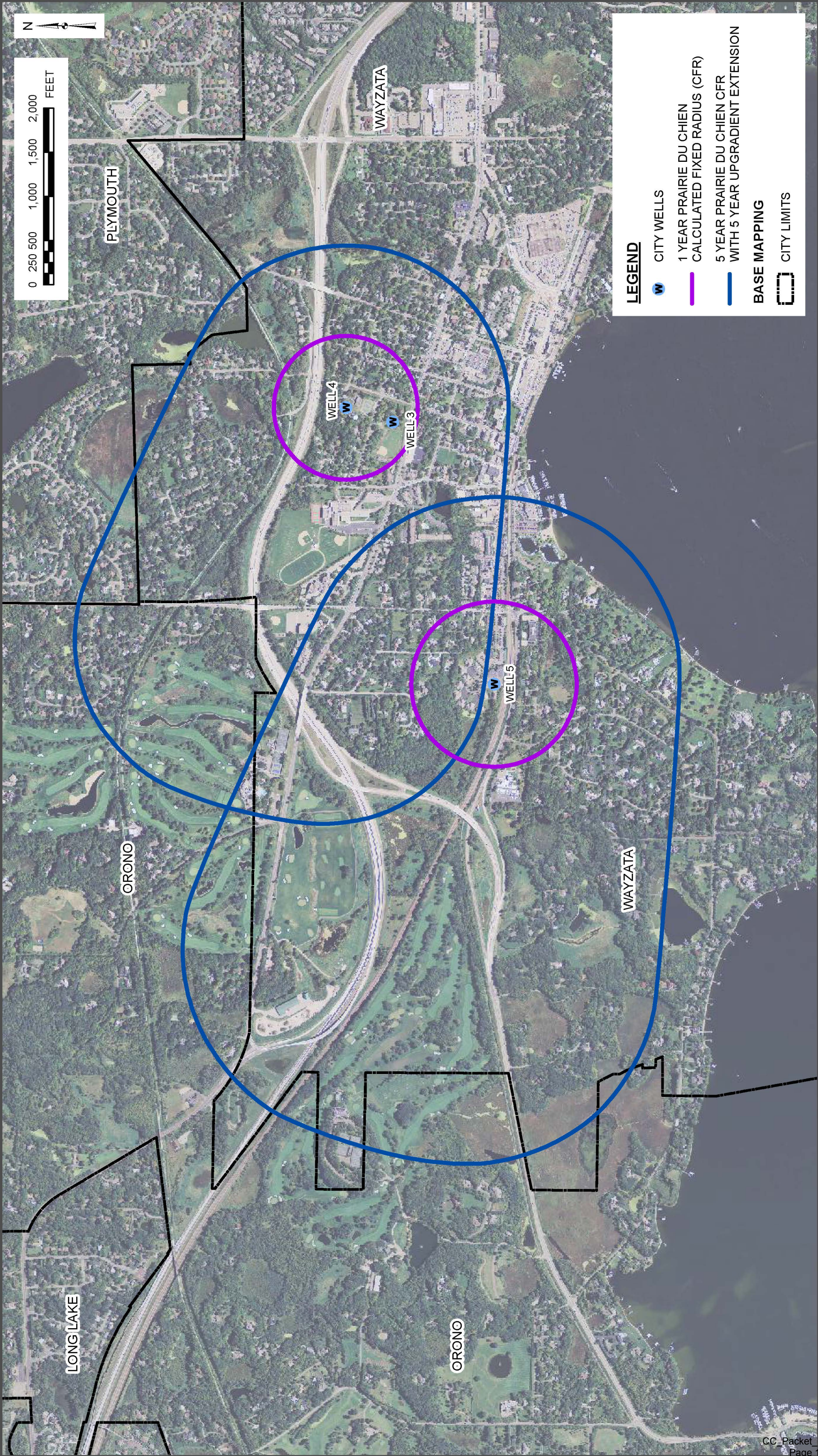
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Saint Paul, MN 55113  
651.636.4600



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**FIGURE 2 - FRACTURE FLOW DELINEATIONS**

WAYZATA WELLHEAD PROTECTION PLAN

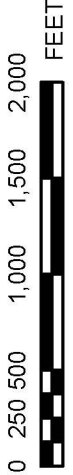
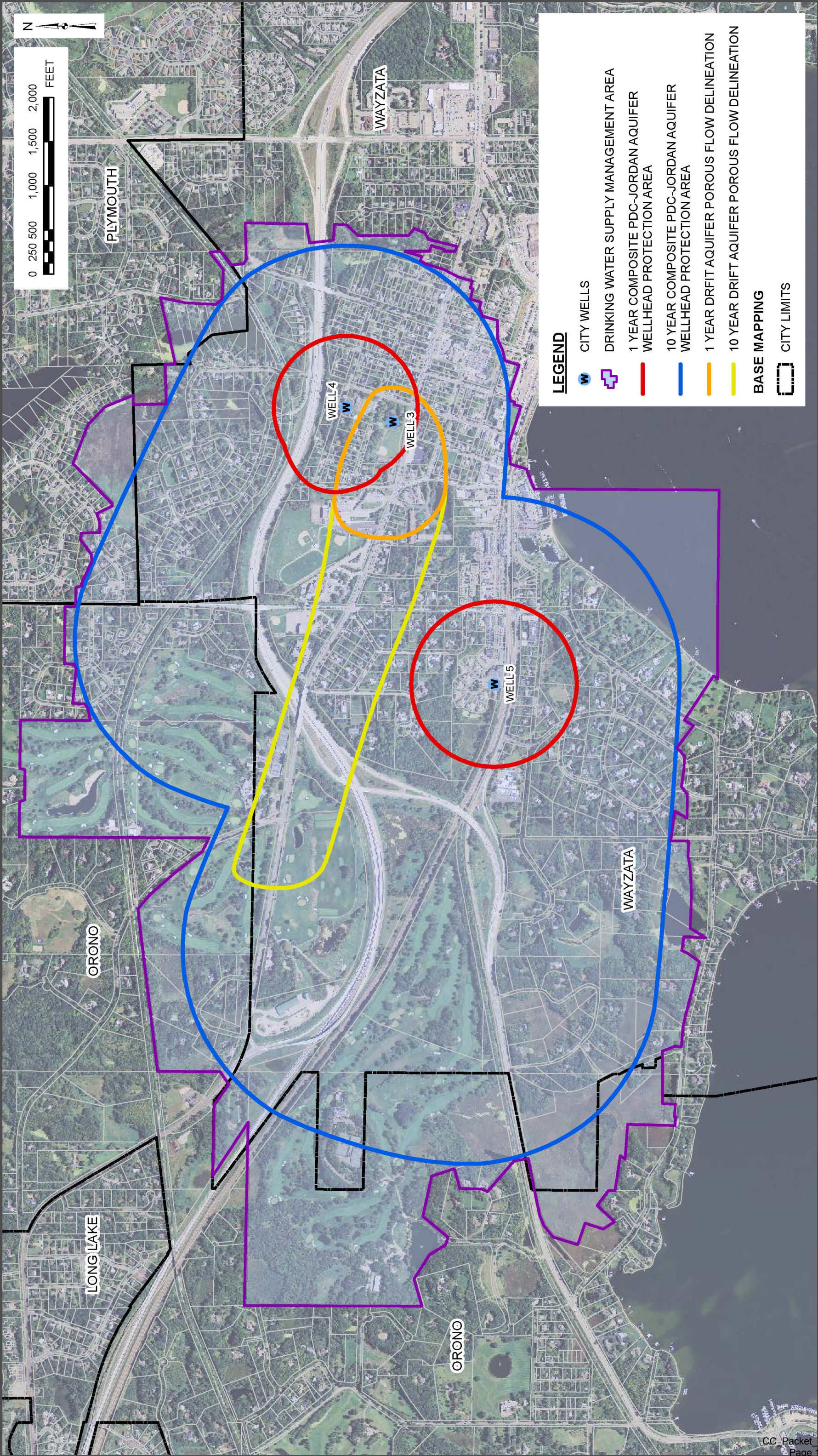
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**LEGEND**

- CITY WELLS
- DRINKING WATER SUPPLY MANAGEMENT AREA
- 1 YEAR COMPOSITE PDC-JORDAN AQUIFER WELLHEAD PROTECTION AREA
- 10 YEAR COMPOSITE PDC-JORDAN AQUIFER WELLHEAD PROTECTION AREA
- 1 YEAR DRIFT AQUIFER POROUS FLOW DELINEATION
- 10 YEAR DRIFT AQUIFER POROUS FLOW DELINEATION
- BASE MAPPING
- CITY LIMITS

**FIGURE 3 - DRINKING WATER SUPPLY MANAGEMENT AREA DELINEATION**

WAYZATA WELLHEAD PROTECTION PLAN

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V:\1938\active\193800599\GIS\Projects\Figure 3 - DWSMA Delineation.mxd



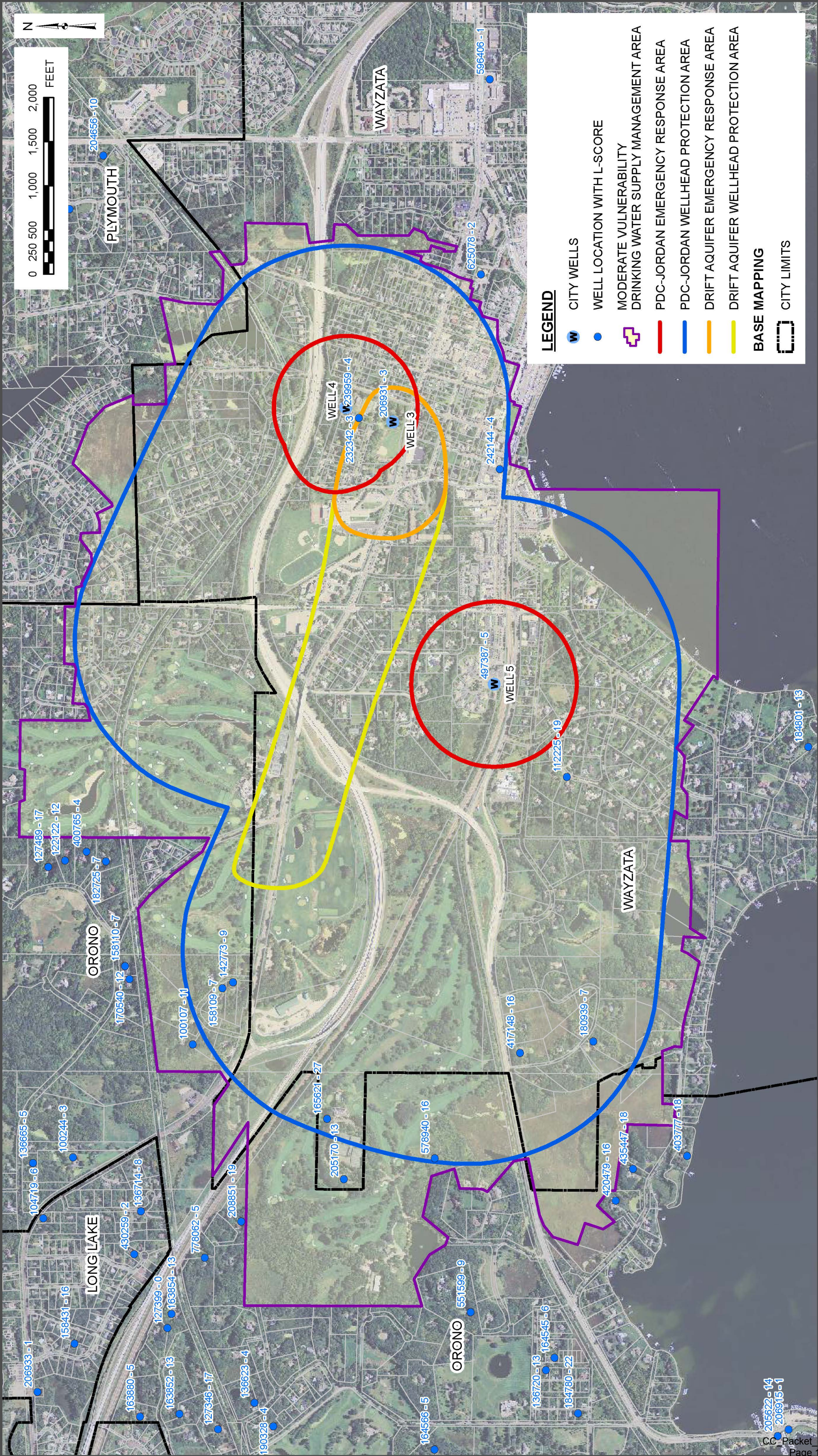


FIGURE 4 - DRINKING WATER SUPPLY MANAGEMENT AREA VULNERABILITY

WAYZATA WELLHEAD PROTECTION PLAN

Stantec Consulting Services  
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Saint Paul, MN 55113  
651.636.4600



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V:\1938\active\193800599\GIS\Projects\Figure 4 - DWSMA Vulnerability.mxd



**APPENDIX A**

**CITY OF WAYZATA WELL LOGS  
AND GEOLOGIC CROSS-SECTIONS**

| Unique No. 00206931                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      | MINNESOTA DEPARTMENT OF HEALTH<br><b>WELL AND BORING RECORD</b> |    |                                                                              |       | Update Date 2012/02/06                                                                           |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------------------------------------------------------|----|------------------------------------------------------------------------------|-------|--------------------------------------------------------------------------------------------------|------|----|---------------------|--|--|---|----|------|------|--|----|----|---------------------|--|--|----|----|------------------------|--|--|----|----|-----------------------|--|--|----|----|--------------|--|--|----|-----|----------------------------------------------------------------------------|--|---------------|
| County Name Hennepin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      | Minnesota Statutes Chapter 1031                                 |    |                                                                              |       | Entry Date 1991/08/24                                                                            |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| Township Name Township Range Dir Section Subsection<br>117 22 W 6 BDACBD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |                                                                 |    | Well Depth Depth Completed Date Well Completed<br>100 ft. 100 ft. 1965/07/14 |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| Well Name WAYZATA 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |                                                                 |    | Drilling Method Cable Tool                                                   |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| Well Owner's Name WAYZATA 3<br><br>WAYZATA MN 55391                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |                                                                 |    | Drilling Fluid                                                               |       | Well Hydrofractured? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>From ft. to ft. |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| Contact's Name CITY OF WAYZATA<br>600 RICE ST<br>WAYZATA MN 55931                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |                                                                 |    | Use Community Supply                                                         |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| <table border="1"> <thead> <tr> <th>GEOLOGICAL MATERIAL</th> <th>COLOR</th> <th>HARDNESS</th> <th>FROM</th> <th>TO</th> </tr> </thead> <tbody> <tr> <td>MUDDY SAND &amp; GRAVEL</td> <td></td> <td></td> <td>0</td> <td>22</td> </tr> <tr> <td>CLAY</td> <td>BLUE</td> <td></td> <td>22</td> <td>54</td> </tr> <tr> <td>GRAVEL W/CLAY LUMPS</td> <td></td> <td></td> <td>54</td> <td>70</td> </tr> <tr> <td>SAND &amp; GRAVEL W/CLAY B</td> <td></td> <td></td> <td>70</td> <td>75</td> </tr> <tr> <td>SAND &amp; GRAVEL - CLEAN</td> <td></td> <td></td> <td>75</td> <td>92</td> </tr> <tr> <td>SAND &amp; ROCKS</td> <td></td> <td></td> <td>92</td> <td>100</td> </tr> </tbody> </table> |      |                                                                 |    | GEOLOGICAL MATERIAL                                                          | COLOR | HARDNESS                                                                                         | FROM | TO | MUDDY SAND & GRAVEL |  |  | 0 | 22 | CLAY | BLUE |  | 22 | 54 | GRAVEL W/CLAY LUMPS |  |  | 54 | 70 | SAND & GRAVEL W/CLAY B |  |  | 70 | 75 | SAND & GRAVEL - CLEAN |  |  | 75 | 92 | SAND & ROCKS |  |  | 92 | 100 | Casing Drive Shoe? <input type="checkbox"/> Yes <input type="checkbox"/> N |  | Hole Diameter |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |                                                                 |    | GEOLOGICAL MATERIAL                                                          | COLOR | HARDNESS                                                                                         | FROM | TO |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| MUDDY SAND & GRAVEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |                                                                 | 0  | 22                                                                           |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| CLAY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | BLUE |                                                                 | 22 | 54                                                                           |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| GRAVEL W/CLAY LUMPS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |                                                                 | 54 | 70                                                                           |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| SAND & GRAVEL W/CLAY B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |                                                                 | 70 | 75                                                                           |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| SAND & GRAVEL - CLEAN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |                                                                 | 75 | 92                                                                           |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| SAND & ROCKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |                                                                 | 92 | 100                                                                          |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| Casing Diameter Weight(lbs/ft)<br>20 in. t 28 ft<br>16 in. t 70 ft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| Screen Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |                                                                 |    | Open Hole From ft. to ft.                                                    |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| Make Type L                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| Diameter Slot Length Set Fitting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| 16 40 2 70 ft. to 72 ft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| 16 20 7 85 ft. to 92 ft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| 16 60 5 92 ft. to 97 ft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| 16 100 3 97 ft. to 100 ft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| 16 80 3 72 ft. to 75 ft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| 16 40 7 75 ft. to 82 ft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| 16 80 3 82 ft. to 85 ft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| Static Water Level 40 ft. from Land surface Date 1965/08/13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| PUMPING LEVEL (below land surface)<br>50.5 ft. after hrs. pumping 1100 g.p.m.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| Well Head Completion<br>Pitless adapter mfr Model<br>Casing Protection <input checked="" type="checkbox"/> 12 in. above grade<br><input type="checkbox"/> At-grade(Environmental Wells and Borings ONLY)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| Grouting Information Well grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| Nearest Known Source of Contamination<br>ft. direction type<br>Well disinfected upon completion? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |
| Pump <input type="checkbox"/> Not Installed Date Installed<br>Mfr nam<br>Model HP Volts<br>Drop Pipe Length ft. Capacity g.p.m.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |                                                                 |    |                                                                              |       |                                                                                                  |      |    |                     |  |  |   |    |      |      |  |    |    |                     |  |  |    |    |                        |  |  |    |    |                       |  |  |    |    |              |  |  |    |     |                                                                            |  |               |

Type

Any not in use and not sealed well(s) on property? ☐ Yes ☐ No

Was a variance granted from the MDH for this Well? ☐ Yes ☐ No

USGS Quad   Excelsior                      Elevation   935  
Aquifer:        QBAA                           Alt Id:       65-0433

**Well CONTRACTOR CERTIFICATION**    Lic. Or   Reg. No.   27058

License Business Name

Name of Driller

## Report Copy

**HE-01205-06 (Rev. 9/96)**



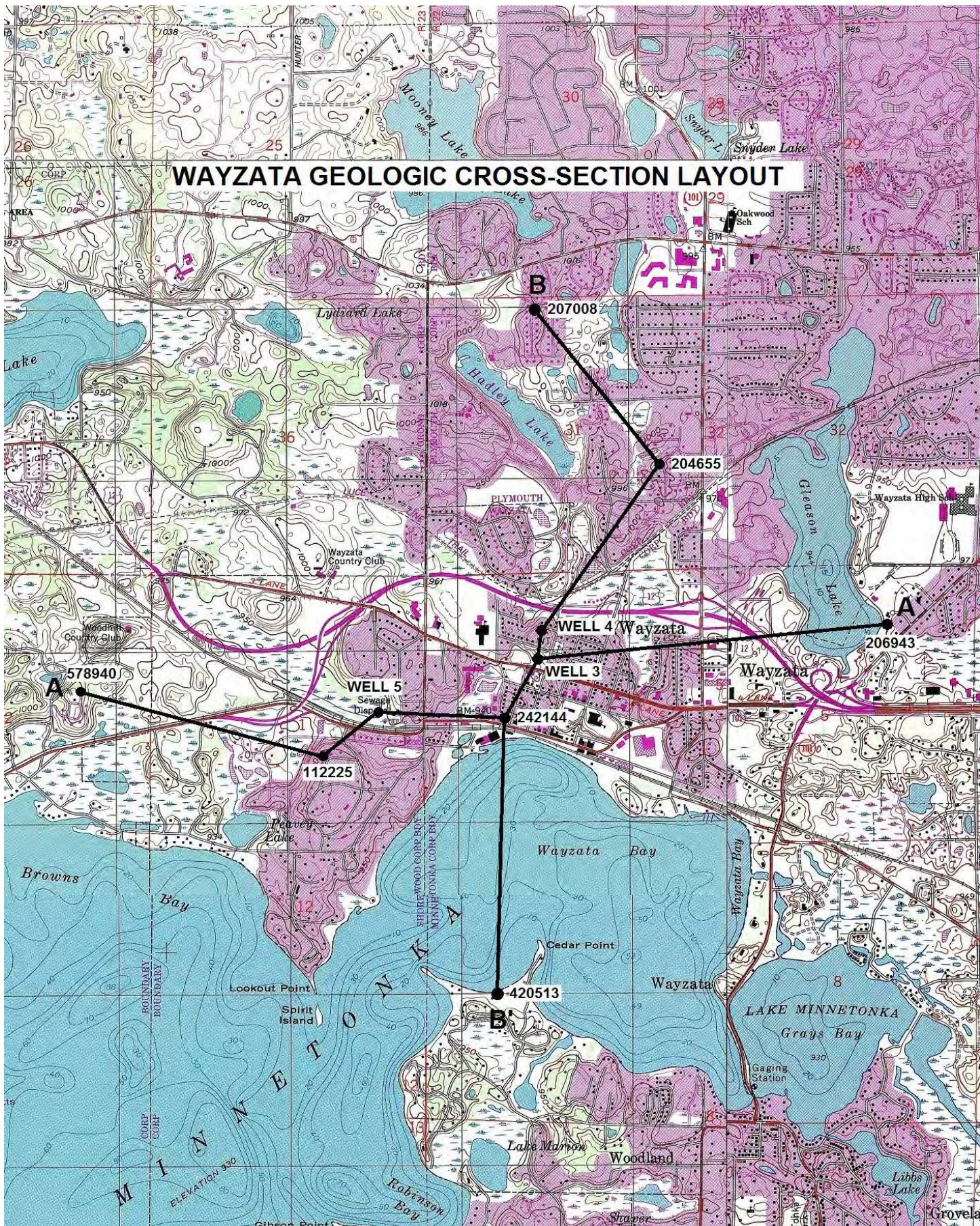
| Unique No. 00206932                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | MINNESOTA DEPARTMENT OF HEALTH<br><b>WELL AND BORING RECORD</b> |     |                                                                                                                                                                                                                                 |       | Update Date 2011/08/29                                                                           |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------------------------------------------------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------------------------------------------------------------|------|-----|---------------|--|--|---|-----|-------------------------|--|--|-----|-----|-----------------------|--|--|-----|-----|-------------------|--|--|-----|-----|-------|------|------|-----|-----|----------------------------------------------------------------------------|--|---------------------------------------------------|--|
| County Name Hennepin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      | Minnesota Statutes Chapter 1031                                 |     |                                                                                                                                                                                                                                 |       | Entry Date 1991/08/24                                                                            |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
| Township Name Township Range Dir Section Subsection<br>117 22 W 6 BADCAA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |                                                                 |     | Well Depth Depth Completed Date Well Completed<br>507 ft. 507 ft. 1970/06/09                                                                                                                                                    |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
| Well Name WAYZATA 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |                                                                 |     | Drilling Method Cable Tool                                                                                                                                                                                                      |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
| Well Owner's Name WAYZATA 4<br>WAYZATA MN 55391                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |     | Drilling Fluid                                                                                                                                                                                                                  |       | Well Hydrofractured? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>From ft. to ft. |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
| Contact's Name CITY OF WAYZATA<br>WAYZATA MN 55391                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |                                                                 |     | Use Community Supply                                                                                                                                                                                                            |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
| <table border="1"> <thead> <tr> <th>GEOLOGICAL MATERIAL</th> <th>COLOR</th> <th>HARDNESS</th> <th>FROM</th> <th>TO</th> </tr> </thead> <tbody> <tr> <td>GLACIAL DRIFT</td> <td></td> <td></td> <td>0</td> <td>176</td> </tr> <tr> <td>SHALE &amp; SANDROCK (ST. P</td> <td></td> <td></td> <td>176</td> <td>268</td> </tr> <tr> <td>LIMEROCK (SHAKOPEE-ON</td> <td></td> <td></td> <td>268</td> <td>412</td> </tr> <tr> <td>SANDROCK (JORDAN)</td> <td></td> <td></td> <td>412</td> <td>494</td> </tr> <tr> <td>SHALE</td> <td>GREE</td> <td>HARD</td> <td>494</td> <td>507</td> </tr> </tbody> </table> |      |                                                                 |     | GEOLOGICAL MATERIAL                                                                                                                                                                                                             | COLOR | HARDNESS                                                                                         | FROM | TO  | GLACIAL DRIFT |  |  | 0 | 176 | SHALE & SANDROCK (ST. P |  |  | 176 | 268 | LIMEROCK (SHAKOPEE-ON |  |  | 268 | 412 | SANDROCK (JORDAN) |  |  | 412 | 494 | SHALE | GREE | HARD | 494 | 507 | Casing Drive Shoe? <input type="checkbox"/> Yes <input type="checkbox"/> N |  | Hole Diameter<br>0 in. t 284 ft<br>0 in. t 507 ft |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |     | GEOLOGICAL MATERIAL                                                                                                                                                                                                             | COLOR | HARDNESS                                                                                         | FROM | TO  |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |     | GLACIAL DRIFT                                                                                                                                                                                                                   |       |                                                                                                  | 0    | 176 |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |     | SHALE & SANDROCK (ST. P                                                                                                                                                                                                         |       |                                                                                                  | 176  | 268 |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
| LIMEROCK (SHAKOPEE-ON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |                                                                 | 268 | 412                                                                                                                                                                                                                             |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
| SANDROCK (JORDAN)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |                                                                 | 412 | 494                                                                                                                                                                                                                             |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
| SHALE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | GREE | HARD                                                            | 494 | 507                                                                                                                                                                                                                             |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
| Casing Diameter Weight(lbs/ft)<br>30 in. t 248 ft<br>24 in. t 284 ft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |                                                                 |     |                                                                                                                                                                                                                                 |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
| Screen N<br>Make                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      | Open Hole From 284 ft. to 507 ft.<br>Type                       |     |                                                                                                                                                                                                                                 |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |     | Static Water Level 133 ft. from Land surface Date 2005/10/14                                                                                                                                                                    |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |     | <b>PUMPING LEVEL (below land surface)</b><br>152 ft. after hrs. pumping 1250 g.p.m.                                                                                                                                             |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |     | <b>Well Head Completion</b><br>Pitless adapter mfr MONITOR Model 9.5PS24<br>Casing Protection <input checked="" type="checkbox"/> 12 in. above grade<br><input type="checkbox"/> At-grade(Environmental Wells and Borings ONLY) |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |     | <b>Grouting Information</b> Well grouted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br>Material From To (ft.) Amount(yds/bags)<br>Y                                                                   |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |     | <b>Nearest Known Source of Contamination</b><br>100 ft. direction N type SEW<br>Well disinfected upon completion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                                           |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |     | <b>Pump</b> <input type="checkbox"/> Not Installed Date Installed Y<br>Mfr nam GOULD<br>Model 12CHC HP 100 Volts 460<br>Drop Pipe Length 230 ft. Capacity E+03 g.p.m<br>Type S                                                  |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
| <b>REMARKS, ELEVATION, SOURCE OF DATA, etc.</b><br><br>M.G.S. NO. 611.<br><br>RECONSTRUCTED 2010 BY KEYS WELL; PITLESS & SUBMERSIBLE PUMP ADDED.<br><br>USGS Quad Excelsior Elevation 995<br>Aquifer: OPCJ Alt Id: 65-0433                                                                                                                                                                                                                                                                                                                                                                               |      |                                                                 |     | Any not in use and not sealed well(s) on property? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                          |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |     | Was a variance granted from the MDH for this Well? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                          |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |     | <b>Well CONTRACTOR CERTIFICATION</b> Lic. Or Reg. No. 27058                                                                                                                                                                     |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |                                                                 |     | License Business Name<br>Name of Driller                                                                                                                                                                                        |       |                                                                                                  |      |     |               |  |  |   |     |                         |  |  |     |     |                       |  |  |     |     |                   |  |  |     |     |       |      |      |     |     |                                                                            |  |                                                   |  |

# Report Copy

| Unique No. 00497387                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       | MINNESOTA DEPARTMENT OF HEALTH<br><b>WELL AND BORING RECORD</b> |                  |                                                                                                                                                                                                                                                                                                                                                                                       |       | Update Date 2011/08/30                                                                                                                            |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|------|----------|------------------|---|---|------|-------|---|---|-----|--------|------|--|----|----|---------------|------|--|----|-----|------------------|------|--|-----|-----|------------------|------|--|-----|-----|-------|------|--|-----|-----|-----------------------|------|--|-----|-----|------------------|-----|--|-----|-----|-------|-----|--|-----|-----|-----------|-----|--|-----|-----|----------|-----|--|-----|-----|--------|--|--|-----|-----|--------|-------|--|-----|-----|--------------|------|--|-----|-----|-----------------------------------------------------------------------------------------------------|--|--------------------------------------|
| County Name Hennepin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |       | Minnesota Statutes Chapter 1031                                 |                  |                                                                                                                                                                                                                                                                                                                                                                                       |       | Entry Date 1993/10/18                                                                                                                             |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| <b>Township Name</b> Township <b>Range</b> 117 <b>Dir</b> W <b>Section</b> 1 <b>Subsection</b> DABABD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |       |                                                                 |                  | <b>Well Depth</b> 464 <b>ft.</b> <b>Depth Completed</b> 464 <b>ft.</b> <b>Date Well Completed</b> 1992/05/07                                                                                                                                                                                                                                                                          |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| <b>Well Name</b> WAYZATA 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |       |                                                                 |                  | <b>Drilling Method</b> Cable Tool                                                                                                                                                                                                                                                                                                                                                     |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| <b>Well Owner's Name</b> WAYZATA 5<br>LAKEVIEW<br>WAYZATA MN 55391                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |       |                                                                 |                  | <b>Drilling Fluid</b><br>Water                                                                                                                                                                                                                                                                                                                                                        |       | <b>Well Hydrofractured?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No<br>From                      ft. to                      ft. |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| <b>Contact's Name</b> CITY OF WAYZATA<br>600 RICE ST<br>WAYZATA MN 55391                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |                                                                 |                  | <b>Use</b> Community Supply                                                                                                                                                                                                                                                                                                                                                           |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| <table border="1"> <thead> <tr> <th>GEOLOGICAL MATERIAL</th> <th>COLOR</th> <th>HARDNESS</th> <th>FROM</th> <th>TO</th> </tr> </thead> <tbody> <tr><td>PEAT</td><td>BLACK</td><td></td><td>0</td><td>4</td></tr> <tr><td>FILL</td><td>BLACK</td><td></td><td>4</td><td>28</td></tr> <tr><td>CLAY</td><td>GRAY</td><td></td><td>28</td><td>50</td></tr> <tr><td>CLAY &amp; STONES</td><td>GRAY</td><td></td><td>50</td><td>117</td></tr> <tr><td>MIX HEAVY GRAVEL</td><td>GRAY</td><td></td><td>117</td><td>123</td></tr> <tr><td>MIX HEAVY GRAVEL</td><td>GRAY</td><td></td><td>123</td><td>140</td></tr> <tr><td>SHALE</td><td>GREE</td><td></td><td>140</td><td>146</td></tr> <tr><td>SHALE &amp; SANDSTONE MIX</td><td>PINK</td><td></td><td>146</td><td>153</td></tr> <tr><td>MIX SHALE/STONES</td><td>TAN</td><td></td><td>153</td><td>183</td></tr> <tr><td>SHALE</td><td>TAN</td><td></td><td>183</td><td>190</td></tr> <tr><td>ST. PETER</td><td>TAN</td><td></td><td>190</td><td>210</td></tr> <tr><td>SHAKOPEE</td><td>TAN</td><td></td><td>210</td><td>275</td></tr> <tr><td>ONEOTA</td><td></td><td></td><td>275</td><td>358</td></tr> <tr><td>JORDAN</td><td>WHITE</td><td></td><td>358</td><td>457</td></tr> <tr><td>ST. LAWRENCE</td><td>BLUE</td><td></td><td>457</td><td>464</td></tr> </tbody> </table> |       |                                                                 |                  | GEOLOGICAL MATERIAL                                                                                                                                                                                                                                                                                                                                                                   | COLOR | HARDNESS                                                                                                                                          | FROM | TO       | PEAT | BLACK    |                  | 0 | 4 | FILL | BLACK |   | 4 | 28  | CLAY   | GRAY |  | 28 | 50 | CLAY & STONES | GRAY |  | 50 | 117 | MIX HEAVY GRAVEL | GRAY |  | 117 | 123 | MIX HEAVY GRAVEL | GRAY |  | 123 | 140 | SHALE | GREE |  | 140 | 146 | SHALE & SANDSTONE MIX | PINK |  | 146 | 153 | MIX SHALE/STONES | TAN |  | 153 | 183 | SHALE | TAN |  | 183 | 190 | ST. PETER | TAN |  | 190 | 210 | SHAKOPEE | TAN |  | 210 | 275 | ONEOTA |  |  | 275 | 358 | JORDAN | WHITE |  | 358 | 457 | ST. LAWRENCE | BLUE |  | 457 | 464 | <b>Casing</b> <b>Drive Shoe?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> N |  | <b>Hole Diameter</b><br>in. t 203 ft |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                 |                  | GEOLOGICAL MATERIAL                                                                                                                                                                                                                                                                                                                                                                   | COLOR | HARDNESS                                                                                                                                          | FROM | TO       |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                 |                  | PEAT                                                                                                                                                                                                                                                                                                                                                                                  | BLACK |                                                                                                                                                   | 0    | 4        |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| FILL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | BLACK |                                                                 | 4                | 28                                                                                                                                                                                                                                                                                                                                                                                    |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| CLAY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | GRAY  |                                                                 | 28               | 50                                                                                                                                                                                                                                                                                                                                                                                    |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| CLAY & STONES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | GRAY  |                                                                 | 50               | 117                                                                                                                                                                                                                                                                                                                                                                                   |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| MIX HEAVY GRAVEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | GRAY  |                                                                 | 117              | 123                                                                                                                                                                                                                                                                                                                                                                                   |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| MIX HEAVY GRAVEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | GRAY  |                                                                 | 123              | 140                                                                                                                                                                                                                                                                                                                                                                                   |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| SHALE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | GREE  |                                                                 | 140              | 146                                                                                                                                                                                                                                                                                                                                                                                   |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| SHALE & SANDSTONE MIX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PINK  |                                                                 | 146              | 153                                                                                                                                                                                                                                                                                                                                                                                   |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| MIX SHALE/STONES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | TAN   |                                                                 | 153              | 183                                                                                                                                                                                                                                                                                                                                                                                   |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| SHALE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | TAN   |                                                                 | 183              | 190                                                                                                                                                                                                                                                                                                                                                                                   |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| ST. PETER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TAN   |                                                                 | 190              | 210                                                                                                                                                                                                                                                                                                                                                                                   |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| SHAKOPEE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TAN   |                                                                 | 210              | 275                                                                                                                                                                                                                                                                                                                                                                                   |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| ONEOTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |       |                                                                 | 275              | 358                                                                                                                                                                                                                                                                                                                                                                                   |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| JORDAN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | WHITE |                                                                 | 358              | 457                                                                                                                                                                                                                                                                                                                                                                                   |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| ST. LAWRENCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BLUE  |                                                                 | 457              | 464                                                                                                                                                                                                                                                                                                                                                                                   |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| <b>Casing Diameter</b> <b>Weight(lbs/ft)</b><br>30 in. t 122 ft 118.7<br>24 in. t 207 ft 94.6<br>18 in. t 229 ft 70.6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |       | in. t 464 ft                                                    |                  |                                                                                                                                                                                                                                                                                                                                                                                       |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                 |                  | <b>Screen</b> N <b>Open Hole</b> From 229 ft. to 464 ft.                                                                                                                                                                                                                                                                                                                              |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                 |                  | Make                      Type                                                                                                                                                                                                                                                                                                                                                        |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                 |                  | Static Water Level 65 ft. from Land surface                      Date 1992/05/24                                                                                                                                                                                                                                                                                                      |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                 |                  | <b>PUMPING LEVEL (below land surface)</b><br>104.4 ft. after                      4 hrs. pumping 1100 g.p.m.                                                                                                                                                                                                                                                                          |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                 |                  | <b>Well Head Completion</b><br>Pitless adapter mfr                      Model<br>Casing Protection <input checked="" type="checkbox"/> 12 in. above grade<br><input type="checkbox"/> At-grade(Environmental Wells and Borings ONLY)                                                                                                                                                  |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                 |                  | <b>Grouting Information</b> Well grouted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><table border="1"> <thead> <tr> <th>Material</th> <th>From</th> <th>To (ft.)</th> <th>Amount(yds/bags)</th> </tr> </thead> <tbody> <tr><td>G</td><td>0</td><td>207</td><td>11 Y</td></tr> <tr><td>G</td><td>0</td><td>234</td><td>11.7 Y</td></tr> </tbody> </table> |       |                                                                                                                                                   |      | Material | From | To (ft.) | Amount(yds/bags) | G | 0 | 207  | 11 Y  | G | 0 | 234 | 11.7 Y |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| Material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | From  | To (ft.)                                                        | Amount(yds/bags) |                                                                                                                                                                                                                                                                                                                                                                                       |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0     | 207                                                             | 11 Y             |                                                                                                                                                                                                                                                                                                                                                                                       |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0     | 234                                                             | 11.7 Y           |                                                                                                                                                                                                                                                                                                                                                                                       |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                 |                  | <b>Nearest Known Source of Contamination</b><br>300 ft.                      direction E                      type SDF<br>Well disinfected upon completion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                       |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                 |                  | <b>Pump</b> <input checked="" type="checkbox"/> Not Installed                      Date Installed N<br>Mfr nam<br>Model                      HP                      Volts<br>Drop Pipe Length                      ft.                      Capacity                      g.p.m<br>Type                                                                                              |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                 |                  | Any not in use and not sealed well(s) on property? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                                                                                |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                 |                  | Was a variance granted from the MDH for this Well? <input type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                           |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |                                                                 |                  | <b>Well CONTRACTOR CERTIFICATION</b> Lic. Or Reg. No. 71015<br>License Business Name<br>Name of Driller SIGAFOOS, R.                                                                                                                                                                                                                                                                  |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |
| <b>REMARKS, ELEVATION, SOURCE OF DATA, etc.</b><br><br>M.G.S. NO. 3309.<br><br><br><br>USGS Quad Excelsior                      Elevation 949<br>Aquifer: OPCJ                      Alt Id: 65-0433                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       |                                                                 |                  |                                                                                                                                                                                                                                                                                                                                                                                       |       |                                                                                                                                                   |      |          |      |          |                  |   |   |      |       |   |   |     |        |      |  |    |    |               |      |  |    |     |                  |      |  |     |     |                  |      |  |     |     |       |      |  |     |     |                       |      |  |     |     |                  |     |  |     |     |       |     |  |     |     |           |     |  |     |     |          |     |  |     |     |        |  |  |     |     |        |       |  |     |     |              |      |  |     |     |                                                                                                     |  |                                      |

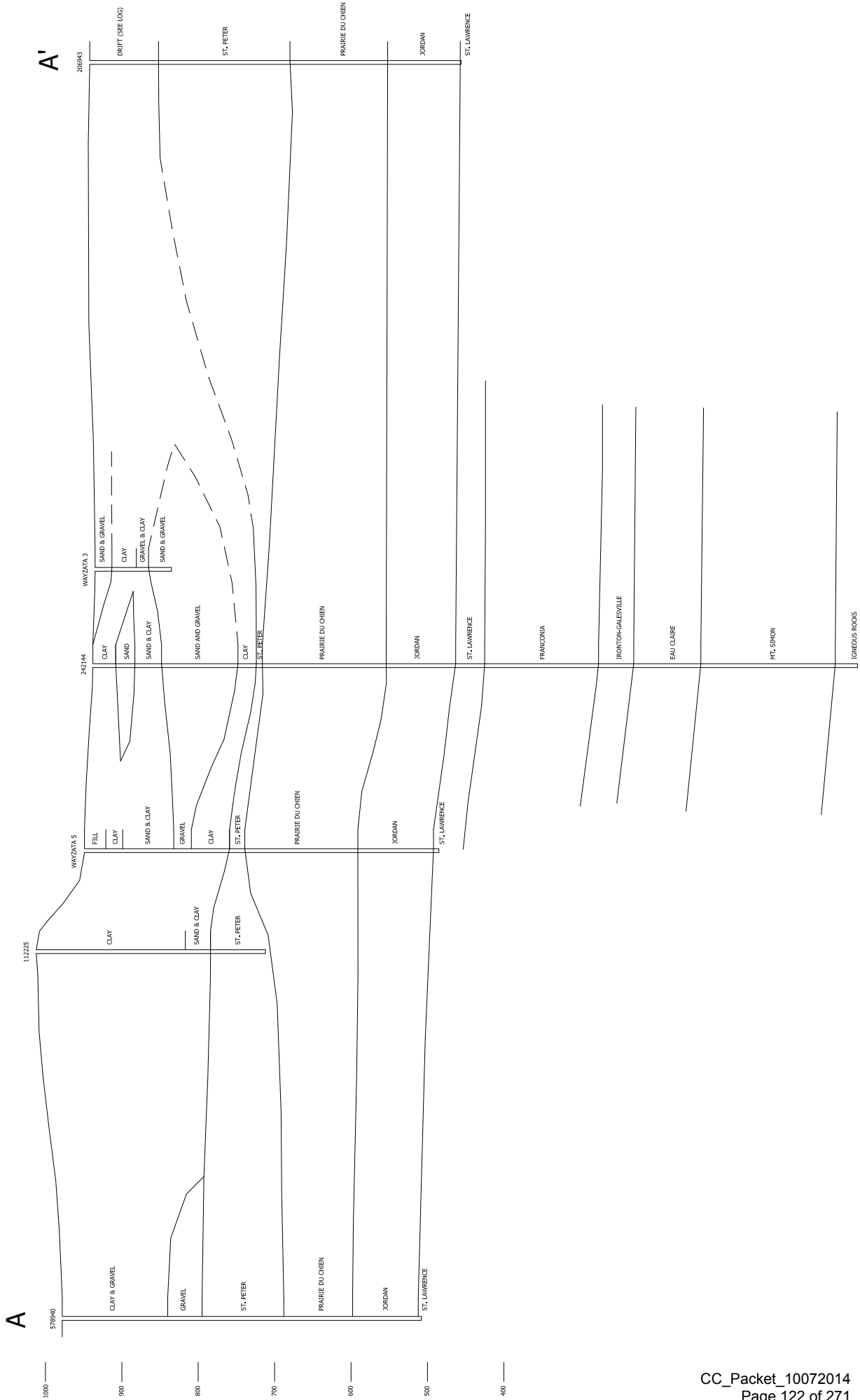
# Report Copy





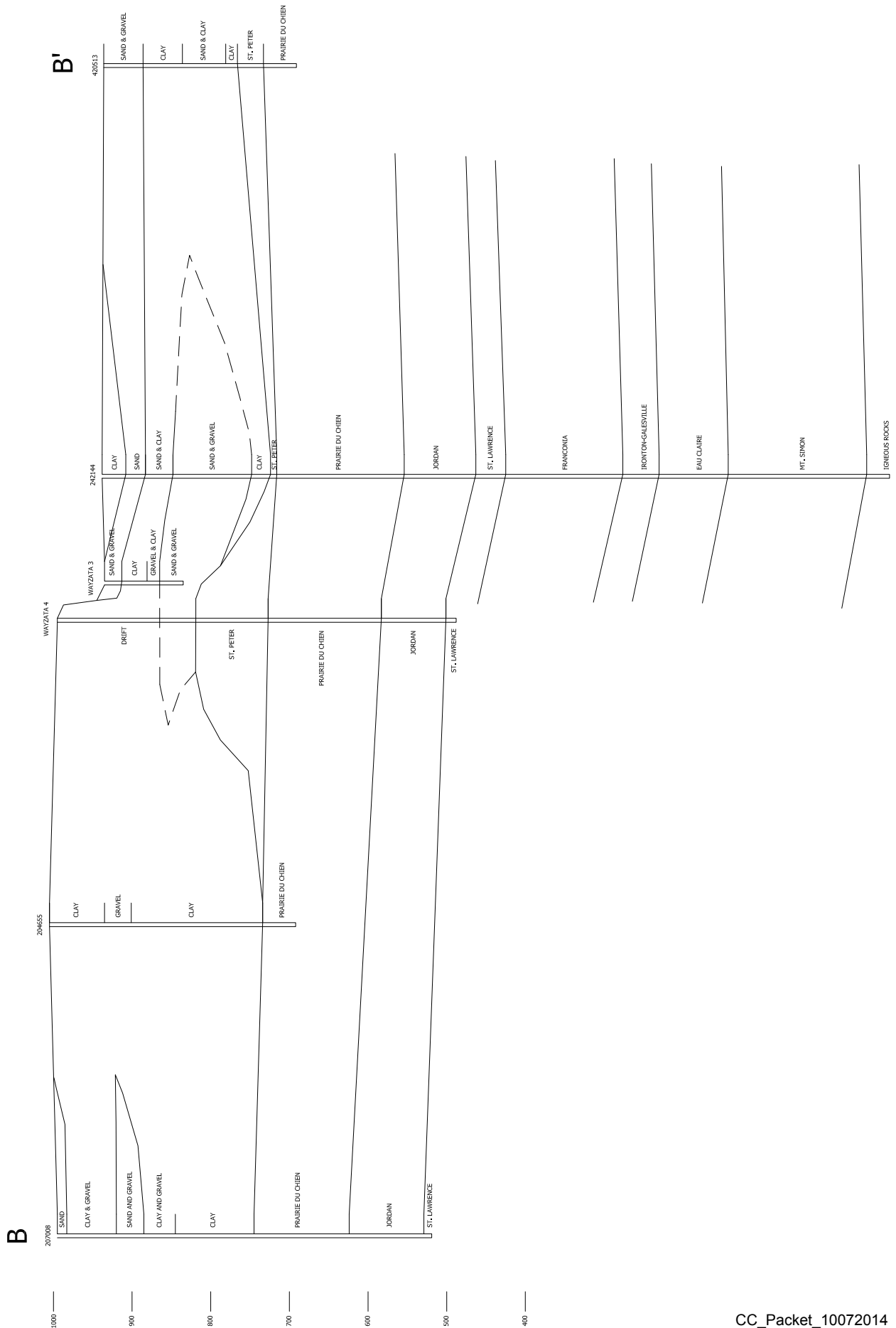


# WAYZATA GEOLOGIC CROSS-SECTION A - A'





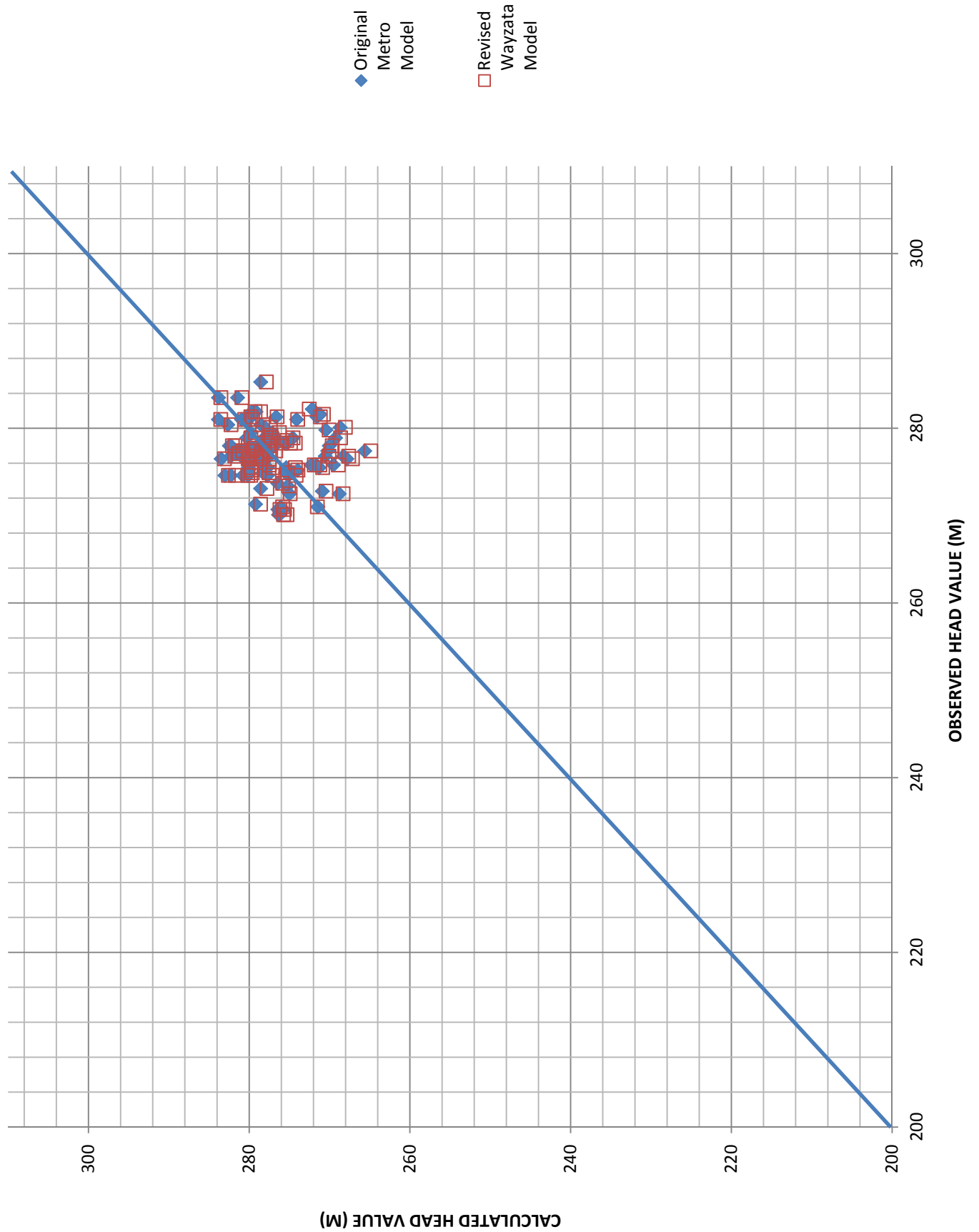
# WAYZATA GEOLOGIC CROSS-SECTION B - B'



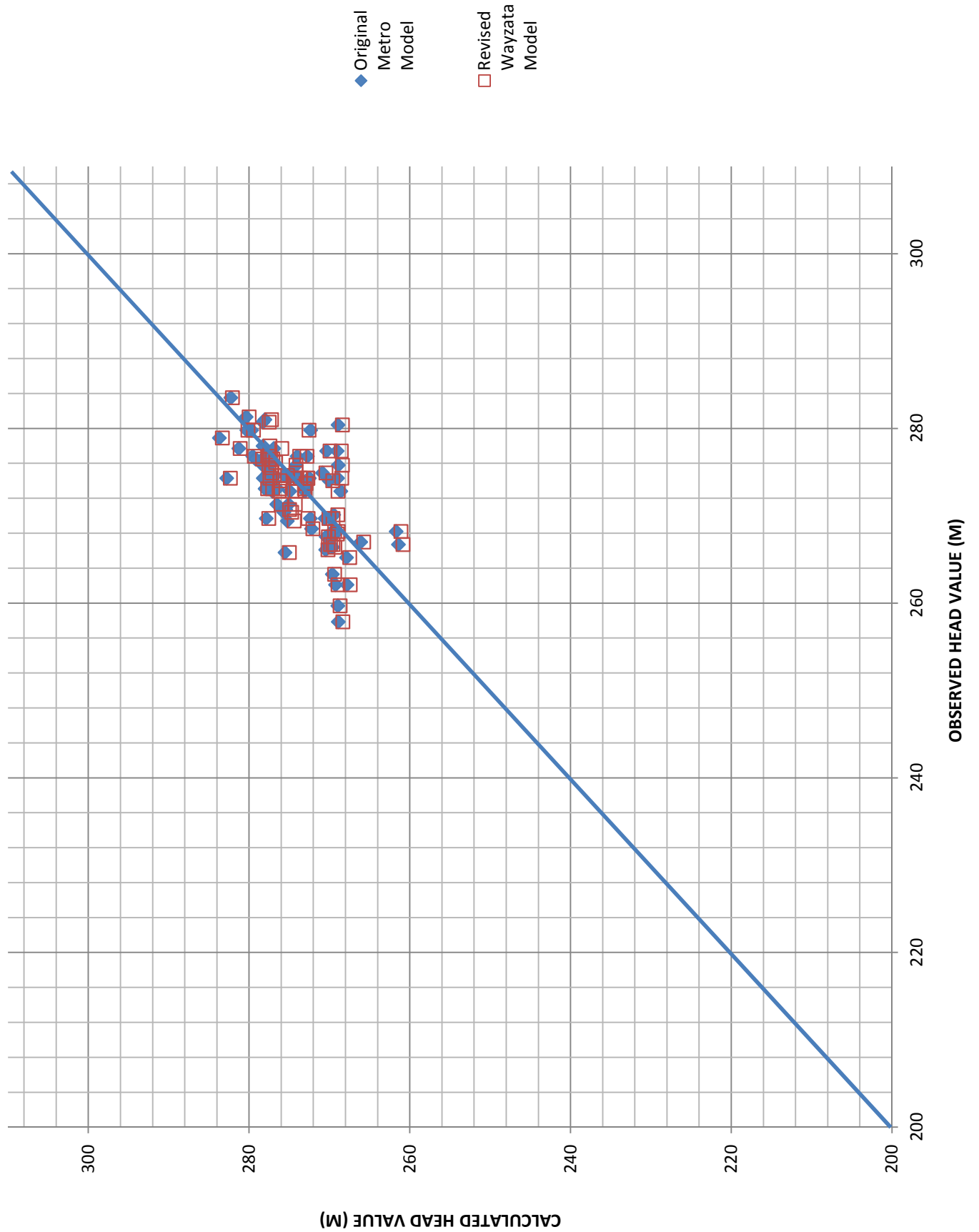
**APPENDIX B**

**MODEL CALIBRATION COMPARISONS**

# Wayzata Model Small Scale Calibration - Layer 1 (Drift)

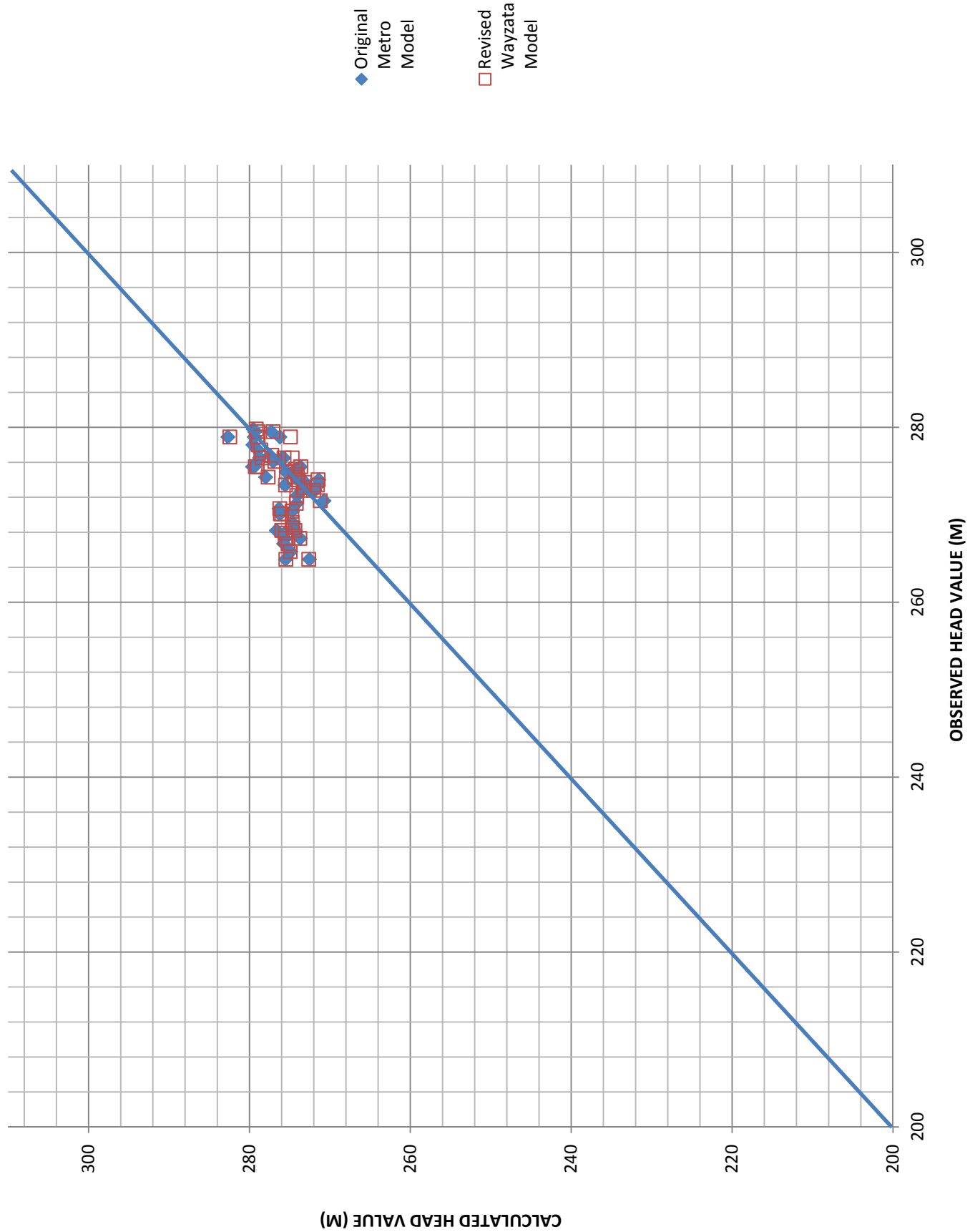


# Wayzata Model Small Scale Calibration - Layer 3 (Prairie du Chien)





# Wayzata Model Small Scale Calibration - Layer 4 (Jordan)



## Target Listing:

| Name   | X      | Y       | Row | Column | Layer | Group | Zone | Observed | Computed | Residual          |
|--------|--------|---------|-----|--------|-------|-------|------|----------|----------|-------------------|
| 100101 | 450282 | 4978731 | 209 | 91     |       | 1     | 1    | 78       | 281      | 280.5703 0.429741 |
| 100132 | 458224 | 4974801 | 235 | 137    |       | 1     | 1    | 74       | 279.8    | 270.0511 9.748917 |
| 100178 | 449630 | 4986706 | 134 | 88     |       | 1     | 1    | 19       | 281      | 283.5433 -2.54328 |
| 100229 | 458328 | 4983469 | 149 | 138    |       | 1     | 1    | 19       | 278.3    | 274.8671 3.432884 |
| 105147 | 459835 | 4985896 | 137 | 162    |       | 1     | 1    | 19       | 278.9    | 274.5478 4.352182 |
| 111030 | 449241 | 4978207 | 214 | 87     |       | 1     | 1    | 78       | 277.4    | 280.8554 -3.45541 |
| 112206 | 458163 | 4976035 | 230 | 136    |       | 1     | 1    | 74       | 275.8    | 271.9112 3.888785 |
| 118803 | 451451 | 4977880 | 216 | 95     |       | 1     | 1    | 78       | 277.7    | 279.417 -1.71696  |
| 118859 | 462738 | 4993548 | 113 | 193    |       | 1     | 1    | 19       | 271      | 271.5295 -0.52945 |
| 121639 | 449230 | 4980824 | 175 | 87     |       | 1     | 1    | 78       | 280.4    | 282.2655 -1.86545 |
| 122824 | 459411 | 4976568 | 227 | 156    |       | 1     | 1    | 74       | 272.8    | 270.4437 2.356307 |
| 127318 | 449339 | 4973144 | 242 | 88     |       | 1     | 1    | 78       | 270.7    | 275.6034 -4.90341 |
| 127392 | 456905 | 4984370 | 143 | 123    |       | 1     | 1    | 19       | 274.6    | 277.1293 -2.52934 |
| 127489 | 457894 | 4981351 | 167 | 131    |       | 1     | 1    | 903      | 274.6    | 274.172 0.42797   |
| 127506 | 449123 | 4973435 | 241 | 87     |       | 1     | 1    | 78       | 270.7    | 276.1818 -5.48184 |
| 128009 | 459365 | 4994444 | 112 | 155    |       | 1     | 1    | 19       | 273.4    | 275.0923 -1.69233 |
| 130783 | 459110 | 4976514 | 227 | 151    |       | 1     | 1    | 74       | 275.5    | 270.8629 4.637141 |
| 136685 | 453546 | 4985315 | 139 | 104    |       | 1     | 1    | 19       | 283.5    | 280.9074 2.59262  |
| 136714 | 456705 | 4981032 | 172 | 121    |       | 1     | 1    | 19       | 278.6    | 275.331 3.269046  |
| 136720 | 456156 | 4979635 | 194 | 117    |       | 1     | 1    | 78       | 273.7    | 275.8466 -2.14655 |
| 136722 | 454040 | 4983617 | 147 | 106    |       | 1     | 1    | 19       | 277.4    | 279.5854 -2.18538 |
| 136729 | 456040 | 4986669 | 134 | 116    |       | 1     | 1    | 19       | 281.9    | 279.2713 2.628681 |
| 136733 | 451065 | 4980394 | 182 | 94     |       | 1     | 1    | 78       | 277.4    | 280.7891 -3.38907 |
| 136741 | 450440 | 4981610 | 163 | 91     |       | 1     | 1    | 78       | 276.8    | 281.7955 -4.99549 |
| 136746 | 455163 | 4983671 | 147 | 110    |       | 1     | 1    | 19       | 277.1    | 278.4997 -1.39969 |
| 137423 | 450434 | 4977572 | 219 | 91     |       | 1     | 1    | 78       | 275.5    | 279.8 -4.29998    |
| 137424 | 450658 | 4977781 | 217 | 92     |       | 1     | 1    | 78       | 274.6    | 279.8119 -5.21186 |
| 142769 | 455196 | 4985537 | 138 | 110    |       | 1     | 1    | 19       | 281      | 279.5778 1.42221  |
| 143364 | 456841 | 4992550 | 115 | 122    |       | 1     | 1    | 19       | 278.3    | 278.0552 0.244756 |
| 149695 | 453907 | 4979685 | 193 | 105    |       | 1     | 1    | 78       | 276.8    | 278.3099 -1.50989 |
| 156612 | 456232 | 4984735 | 141 | 117    |       | 1     | 1    | 19       | 278.3    | 278.1125 0.187522 |
| 157806 | 455797 | 4984719 | 142 | 114    |       | 1     | 1    | 19       | 281.9    | 278.5893 3.310669 |
| 157831 | 459056 | 4976673 | 226 | 150    |       | 1     | 1    | 74       | 281.3    | 271.1476 10.15239 |
| 157847 | 451428 | 4979014 | 204 | 95     |       | 1     | 1    | 78       | 276.8    | 280.0192 -3.21919 |
| 157856 | 449059 | 4980283 | 184 | 87     |       | 1     | 1    | 78       | 278      | 282.09 -4.09      |
| 157857 | 454537 | 4978291 | 213 | 108    |       | 1     | 1    | 74       | 279.2    | 277.2834 1.916588 |
| 157880 | 452072 | 4980069 | 187 | 98     |       | 1     | 1    | 78       | 276.5    | 280.0104 -3.51042 |
| 157882 | 451708 | 4977809 | 217 | 96     |       | 1     | 1    | 78       | 277.7    | 279.2285 -1.52854 |
| 158103 | 456305 | 4982856 | 154 | 118    |       | 1     | 1    | 19       | 277.4    | 276.6961 0.703935 |
| 158104 | 456255 | 4979643 | 194 | 117    |       | 1     | 1    | 78       | 270.1    | 275.7318 -5.63182 |
| 158109 | 457476 | 4980750 | 176 | 127    |       | 1     | 1    | 903      | 275.5    | 274.2504 1.249634 |
| 158110 | 457552 | 4981087 | 171 | 128    |       | 1     | 1    | 903      | 278.3    | 274.2712 4.028804 |
| 158115 | 459100 | 4975923 | 231 | 151    |       | 1     | 1    | 74       | 276.8    | 270.079 6.720985  |
| 162756 | 456549 | 4992552 | 115 | 120    |       | 1     | 1    | 19       | 280.4    | 278.3344 2.065603 |
| 163852 | 456005 | 4980899 | 174 | 115    |       | 1     | 1    | 78       | 279.5    | 276.252 3.248041  |
| 164503 | 451976 | 4980175 | 185 | 97     |       | 1     | 1    | 78       | 276.5    | 280.1177 -3.61772 |
| 164511 | 458825 | 4976067 | 230 | 146    |       | 1     | 1    | 74       | 281.6    | 270.7649 10.83509 |
| 164533 | 454493 | 4978293 | 213 | 107    |       | 1     | 1    | 74       | 277.4    | 277.3235 0.076524 |
| 164581 | 454546 | 4978332 | 213 | 108    |       | 1     | 1    | 74       | 278.6    | 277.2873 1.312661 |
| 164872 | 458746 | 4976316 | 229 | 145    |       | 1     | 1    | 74       | 275.8    | 271.2232 4.576791 |

|        |        |         |     |     |   |   |     |       |          |          |
|--------|--------|---------|-----|-----|---|---|-----|-------|----------|----------|
| 173019 | 456495 | 4984096 | 144 | 119 | 1 | 1 | 19  | 280.1 | 277.3693 | 2.730714 |
| 173232 | 459365 | 4975074 | 234 | 155 | 1 | 1 | 74  | 272.5 | 268.3274 | 4.17264  |
| 173248 | 452839 | 4979558 | 195 | 101 | 1 | 1 | 78  | 279.5 | 279.2547 | 0.245273 |
| 178966 | 453883 | 4984218 | 144 | 105 | 1 | 1 | 19  | 274.6 | 280.1829 | -5.58285 |
| 178978 | 454671 | 4983011 | 152 | 108 | 1 | 1 | 19  | 276.5 | 278.5508 | -2.05084 |
| 178979 | 454443 | 4978642 | 210 | 107 | 1 | 1 | 74  | 278   | 277.4655 | 0.534485 |
| 178980 | 454583 | 4978305 | 213 | 108 | 1 | 1 | 74  | 278.9 | 277.2463 | 1.653655 |
| 182074 | 450791 | 4978446 | 212 | 93  | 1 | 1 | 78  | 276.5 | 280.1256 | -3.62558 |
| 182078 | 452897 | 4981898 | 161 | 101 | 1 | 1 | 78  | 276.8 | 279.957  | -3.15696 |
| 182085 | 453188 | 4980021 | 188 | 102 | 1 | 1 | 78  | 276.1 | 279.1453 | -3.04529 |
| 186428 | 451675 | 4983385 | 149 | 96  | 1 | 1 | 78  | 274.6 | 281.7526 | -7.15259 |
| 190304 | 449153 | 4983217 | 151 | 87  | 1 | 1 | 78  | 276.5 | 283.0857 | -6.58568 |
| 190322 | 455948 | 4983933 | 145 | 115 | 1 | 1 | 19  | 285.3 | 277.8654 | 7.434559 |
| 190323 | 453859 | 4980730 | 177 | 105 | 1 | 1 | 78  | 276.5 | 278.6725 | -2.17252 |
| 196122 | 459776 | 4986964 | 133 | 162 | 1 | 1 | 19  | 272.5 | 274.9138 | -2.41379 |
| 197585 | 450666 | 4977681 | 218 | 92  | 1 | 1 | 78  | 275.2 | 279.7477 | -4.54771 |
| 203764 | 461631 | 4979077 | 203 | 184 | 1 | 1 | 74  | 278   | 269.6765 | 8.323523 |
| 203783 | 461238 | 4977459 | 220 | 181 | 1 | 1 | 74  | 278.9 | 268.6345 | 10.26548 |
| 203788 | 461590 | 4977523 | 219 | 184 | 1 | 1 | 74  | 280.1 | 268.0328 | 12.06715 |
| 204170 | 460544 | 4976905 | 224 | 174 | 1 | 1 | 74  | 275.8 | 268.9235 | 6.876467 |
| 204183 | 460641 | 4976145 | 230 | 175 | 1 | 1 | 74  | 276.8 | 267.6294 | 9.170617 |
| 204188 | 460896 | 4976107 | 230 | 178 | 1 | 1 | 74  | 276.5 | 267.1577 | 9.342266 |
| 204459 | 461709 | 4975500 | 232 | 185 | 1 | 1 | 74  | 277.4 | 264.874  | 12.52603 |
| 204656 | 460352 | 4981162 | 170 | 171 | 1 | 1 | 903 | 282.2 | 272.5292 | 9.670825 |
| 205174 | 454490 | 4979221 | 201 | 107 | 1 | 1 | 74  | 274.9 | 277.5356 | -2.63564 |
| 205179 | 454495 | 4979102 | 203 | 107 | 1 | 1 | 74  | 275.8 | 277.5032 | -1.70321 |
| 205183 | 453549 | 4979406 | 198 | 104 | 1 | 1 | 78  | 271.3 | 278.5923 | -7.29235 |
| 205188 | 452187 | 4979641 | 194 | 98  | 1 | 1 | 78  | 278.9 | 279.787  | -0.887   |
| 205603 | 451609 | 4978397 | 212 | 96  | 1 | 1 | 78  | 274.9 | 279.623  | -4.72301 |
| 205622 | 455928 | 4978835 | 207 | 115 | 1 | 1 | 74  | 278.3 | 276.0172 | 2.282766 |
| 205635 | 451579 | 4975732 | 232 | 96  | 1 | 1 | 78  | 276.5 | 277.5141 | -1.01413 |
| 205641 | 453419 | 4974543 | 236 | 103 | 1 | 1 | 78  | 274.9 | 275.2396 | -0.33958 |
| 205647 | 458284 | 4974735 | 235 | 138 | 1 | 1 | 74  | 277.4 | 269.7924 | 7.607587 |
| 207026 | 459328 | 4990225 | 120 | 154 | 1 | 1 | 19  | 281.3 | 276.5376 | 4.762373 |
| 207031 | 459919 | 4984800 | 141 | 164 | 1 | 1 | 19  | 275.2 | 273.9441 | 1.255934 |
| 207037 | 459531 | 4983968 | 145 | 158 | 1 | 1 | 19  | 281   | 273.9729 | 7.027052 |
| 208851 | 456669 | 4980685 | 177 | 121 | 1 | 1 | 78  | 270.1 | 275.3003 | -5.20029 |
| 208980 | 449713 | 4986624 | 134 | 88  | 1 | 1 | 19  | 283.5 | 283.5335 | -0.03353 |
| 403760 | 452071 | 4980206 | 185 | 98  | 1 | 1 | 78  | 276.8 | 280.0618 | -3.26181 |
| 403762 | 451923 | 4980140 | 186 | 97  | 1 | 1 | 78  | 277.4 | 280.1416 | -2.74161 |
| 405061 | 454442 | 4978304 | 213 | 107 | 1 | 1 | 74  | 278.9 | 277.3725 | 1.527545 |
| 413393 | 449421 | 4981965 | 161 | 88  | 1 | 1 | 78  | 274.6 | 282.5881 | -7.98809 |
| 417136 | 449869 | 4973532 | 240 | 89  | 1 | 1 | 78  | 271   | 275.8548 | -4.85482 |
| 419315 | 448740 | 4978379 | 212 | 86  | 1 | 1 | 78  | 277.1 | 281.2285 | -4.1285  |
| 419426 | 450502 | 4981651 | 163 | 91  | 1 | 1 | 78  | 278   | 281.7771 | -3.77706 |
| 420455 | 455175 | 4979845 | 191 | 110 | 1 | 1 | 78  | 275.5 | 277.0134 | -1.51336 |
| 420471 | 454471 | 4980106 | 187 | 107 | 1 | 1 | 78  | 273.1 | 277.7954 | -4.69536 |
| 420548 | 449874 | 4979807 | 191 | 89  | 1 | 1 | 78  | 277.1 | 281.371  | -4.27103 |
| 434274 | 450715 | 4977826 | 217 | 92  | 1 | 1 | 78  | 281.3 | 279.8007 | 1.499285 |
| 435387 | 456272 | 4986626 | 134 | 117 | 1 | 1 | 19  | 276.8 | 279.045  | -2.24498 |
| 100115 | 459546 | 4975957 | 231 | 158 | 2 | 1 | 125 | 274.3 | 269.1988 | 5.101249 |
| 100119 | 457417 | 4974396 | 237 | 127 | 2 | 1 | 131 | 271   | 270.2776 | 0.722361 |

|        |        |         |     |     |   |   |     |       |          |          |
|--------|--------|---------|-----|-----|---|---|-----|-------|----------|----------|
| 100120 | 459624 | 4976220 | 230 | 159 | 2 | 1 | 125 | 274.6 | 269.4287 | 5.171302 |
| 100121 | 459063 | 4976536 | 227 | 150 | 2 | 1 | 125 | 275.8 | 270.6571 | 5.14287  |
| 104862 | 459428 | 4976174 | 230 | 156 | 2 | 1 | 125 | 271.3 | 269.6704 | 1.629556 |
| 105269 | 461418 | 4985914 | 137 | 183 | 2 | 1 | 123 | 271   | 272.5225 | -1.52247 |
| 109861 | 450427 | 4978445 | 212 | 91  | 2 | 1 | 78  | 271.3 | 280.3259 | -9.02586 |
| 111007 | 459202 | 4976297 | 229 | 152 | 2 | 1 | 125 | 274.3 | 270.1665 | 4.133464 |
| 111011 | 457991 | 4973200 | 242 | 133 | 2 | 1 | 131 | 270.4 | 266.6844 | 3.715636 |
| 111016 | 457404 | 4987281 | 131 | 127 | 2 | 1 | 132 | 274.3 | 277.8943 | -3.59429 |
| 111019 | 459426 | 4975290 | 233 | 156 | 2 | 1 | 125 | 268.2 | 268.3645 | -0.1645  |
| 111041 | 459133 | 4976222 | 230 | 151 | 2 | 1 | 125 | 274.9 | 270.2064 | 4.693626 |
| 112351 | 460237 | 4976183 | 230 | 169 | 2 | 1 | 125 | 276.8 | 268.5347 | 8.265259 |
| 114466 | 460077 | 4987459 | 131 | 166 | 2 | 1 | 19  | 271.9 | 274.7488 | -2.84877 |
| 122846 | 457011 | 4973698 | 240 | 123 | 2 | 1 | 131 | 272.8 | 269.5178 | 3.282228 |
| 127301 | 459136 | 4976278 | 229 | 151 | 2 | 1 | 125 | 271.6 | 270.2598 | 1.340185 |
| 127315 | 458844 | 4973899 | 239 | 147 | 2 | 1 | 131 | 267.6 | 266.8095 | 0.790463 |
| 127316 | 455904 | 4973466 | 241 | 115 | 2 | 1 | 131 | 271.3 | 270.8235 | 0.476484 |
| 127325 | 459202 | 4974936 | 235 | 152 | 2 | 1 | 125 | 271.9 | 268.1324 | 3.767629 |
| 127339 | 459000 | 4976067 | 230 | 149 | 2 | 1 | 125 | 274.3 | 270.2652 | 4.034828 |
| 127382 | 458603 | 4975901 | 231 | 143 | 2 | 1 | 125 | 266.1 | 270.797  | -4.697   |
| 127384 | 459174 | 4976084 | 230 | 152 | 2 | 1 | 125 | 272.2 | 269.9832 | 2.216802 |
| 127391 | 459022 | 4976847 | 225 | 149 | 2 | 1 | 125 | 274.6 | 271.0477 | 3.552324 |
| 127399 | 456301 | 4980940 | 173 | 118 | 2 | 1 | 78  | 276.1 | 275.8506 | 0.249354 |
| 127459 | 459290 | 4974950 | 235 | 154 | 2 | 1 | 125 | 273.4 | 267.9531 | 5.446949 |
| 127463 | 459015 | 4975690 | 232 | 149 | 2 | 1 | 125 | 268.8 | 269.761  | -0.96101 |
| 127464 | 458762 | 4975035 | 234 | 145 | 2 | 1 | 74  | 276.1 | 269.2989 | 6.801136 |
| 127470 | 458346 | 4973739 | 239 | 139 | 2 | 1 | 131 | 269.7 | 267.3364 | 2.36358  |
| 127471 | 456216 | 4973303 | 241 | 117 | 2 | 1 | 131 | 272.8 | 269.9628 | 2.83724  |
| 127475 | 460268 | 4977746 | 217 | 169 | 2 | 1 | 125 | 279.5 | 270.4164 | 9.083607 |
| 127476 | 459693 | 4975362 | 233 | 160 | 2 | 1 | 125 | 268.2 | 268.0463 | 0.153651 |
| 127478 | 459087 | 4975168 | 234 | 150 | 2 | 1 | 125 | 268.2 | 268.8237 | -0.62371 |
| 127479 | 459054 | 4975482 | 233 | 150 | 2 | 1 | 125 | 269.7 | 269.393  | 0.306979 |
| 127483 | 459091 | 4976058 | 230 | 151 | 2 | 1 | 125 | 270.7 | 270.0983 | 0.601714 |
| 127486 | 459372 | 4976134 | 230 | 155 | 2 | 1 | 125 | 272.2 | 269.7093 | 2.490685 |
| 127488 | 459081 | 4975501 | 232 | 150 | 2 | 1 | 125 | 269.7 | 269.365  | 0.335036 |
| 127494 | 459113 | 4976586 | 227 | 151 | 2 | 1 | 125 | 274.3 | 270.6302 | 3.669761 |
| 127502 | 459456 | 4976490 | 227 | 156 | 2 | 1 | 125 | 272.2 | 269.9963 | 2.203745 |
| 127508 | 450295 | 4982270 | 158 | 91  | 2 | 1 | 78  | 274   | 282.17   | -8.17002 |
| 127535 | 455813 | 4973104 | 242 | 114 | 2 | 1 | 131 | 271.6 | 270.0418 | 1.558234 |
| 127542 | 456086 | 4973462 | 241 | 116 | 2 | 1 | 131 | 275.2 | 270.5516 | 4.648431 |
| 137393 | 456839 | 4973628 | 240 | 122 | 2 | 1 | 131 | 265.8 | 269.6661 | -3.86606 |
| 138734 | 455900 | 4973450 | 241 | 114 | 2 | 1 | 131 | 272.8 | 270.7872 | 2.01284  |
| 145401 | 460390 | 4991280 | 118 | 171 | 2 | 1 | 103 | 272.8 | 275.7557 | -2.95567 |
| 149423 | 457919 | 4986813 | 133 | 132 | 2 | 1 | 132 | 276.8 | 277.1225 | -0.32247 |
| 149764 | 458488 | 4974071 | 238 | 141 | 2 | 1 | 131 | 273.4 | 267.7652 | 5.634835 |
| 149838 | 457909 | 4973475 | 241 | 132 | 2 | 1 | 131 | 262.7 | 267.4718 | -4.77182 |
| 157867 | 454460 | 4977983 | 215 | 107 | 2 | 1 | 132 | 278.6 | 277.2362 | 1.363769 |
| 157897 | 459407 | 4976914 | 224 | 156 | 2 | 1 | 125 | 279.8 | 270.5273 | 9.272657 |
| 159002 | 458059 | 4973490 | 240 | 134 | 2 | 1 | 131 | 262.1 | 267.2671 | -5.16705 |
| 159004 | 457956 | 4973257 | 241 | 132 | 2 | 1 | 131 | 266.7 | 266.878  | -0.178   |
| 159032 | 458805 | 4976468 | 228 | 146 | 2 | 1 | 125 | 277.4 | 270.9787 | 6.421277 |
| 159046 | 457160 | 4973452 | 241 | 125 | 2 | 1 | 131 | 267.3 | 268.6733 | -1.37331 |
| 159646 | 458452 | 4974110 | 238 | 140 | 2 | 1 | 131 | 264.3 | 267.9199 | -3.61987 |



|        |        |         |     |     |   |   |     |       |          |          |
|--------|--------|---------|-----|-----|---|---|-----|-------|----------|----------|
| 160011 | 455973 | 4990647 | 119 | 115 | 2 | 1 | 19  | 279.5 | 279.6349 | -0.13489 |
| 162096 | 461386 | 4985893 | 137 | 182 | 2 | 1 | 123 | 271.9 | 272.5549 | -0.65488 |
| 163654 | 448548 | 4989653 | 122 | 86  | 2 | 1 | 19  | 278.6 | 282.3053 | -3.70532 |
| 163877 | 457921 | 4987556 | 130 | 132 | 2 | 1 | 132 | 274.3 | 277.3652 | -3.06521 |
| 163878 | 453850 | 4985833 | 137 | 105 | 2 | 1 | 19  | 281   | 280.7937 | 0.206291 |
| 163895 | 457482 | 4987129 | 132 | 127 | 2 | 1 | 132 | 277.4 | 277.7485 | -0.34848 |
| 164898 | 458789 | 4975976 | 231 | 146 | 2 | 1 | 125 | 275.8 | 270.505  | 5.295003 |
| 170262 | 453938 | 4980751 | 176 | 105 | 2 | 1 | 132 | 277.7 | 278.5206 | -0.82056 |
| 171033 | 459968 | 4985685 | 138 | 165 | 2 | 1 | 123 | 276.1 | 274.3092 | 1.790821 |
| 171059 | 458872 | 4976609 | 226 | 147 | 2 | 1 | 125 | 273.4 | 271.0327 | 2.367304 |
| 173663 | 456294 | 4973231 | 242 | 118 | 2 | 1 | 131 | 266.7 | 269.673  | -2.97304 |
| 179455 | 456425 | 4973690 | 240 | 119 | 2 | 1 | 131 | 270.7 | 270.5626 | 0.137368 |
| 180250 | 456327 | 4973435 | 241 | 118 | 2 | 1 | 131 | 268.5 | 270.1134 | -1.61342 |
| 183678 | 458141 | 4981642 | 163 | 135 | 2 | 1 | 123 | 277.4 | 274.1085 | 3.291463 |
| 189572 | 454026 | 4980890 | 174 | 106 | 2 | 1 | 132 | 278.9 | 278.4566 | 0.443402 |
| 190056 | 458980 | 4976326 | 229 | 149 | 2 | 1 | 125 | 276.5 | 270.5659 | 5.934106 |
| 190432 | 459100 | 4975202 | 234 | 151 | 2 | 1 | 125 | 274   | 268.8536 | 5.146355 |
| 191303 | 458342 | 4973800 | 239 | 139 | 2 | 1 | 131 | 263   | 267.4777 | -4.4777  |
| 191332 | 459272 | 4976376 | 228 | 153 | 2 | 1 | 125 | 271.6 | 270.1357 | 1.464311 |
| 192805 | 459974 | 4985277 | 139 | 165 | 2 | 1 | 123 | 272.8 | 274.1178 | -1.3178  |
| 192840 | 453403 | 4983098 | 152 | 103 | 2 | 1 | 132 | 276.5 | 279.9338 | -3.43379 |
| 194929 | 456944 | 4974641 | 236 | 123 | 2 | 1 | 131 | 268.2 | 271.6166 | -3.41658 |
| 199157 | 457833 | 4987104 | 132 | 130 | 2 | 1 | 132 | 277.4 | 277.3102 | 0.089755 |
| 203761 | 461304 | 4979522 | 196 | 182 | 2 | 1 | 124 | 271.3 | 270.4761 | 0.823932 |
| 203776 | 460747 | 4977540 | 219 | 177 | 2 | 1 | 125 | 276.5 | 269.4996 | 7.000395 |
| 204164 | 461003 | 4977282 | 221 | 179 | 2 | 1 | 125 | 275.8 | 268.5448 | 7.255179 |
| 204175 | 460832 | 4976584 | 227 | 178 | 2 | 1 | 125 | 275.8 | 267.7047 | 8.095333 |
| 204179 | 460989 | 4976290 | 229 | 179 | 2 | 1 | 125 | 278.3 | 267.0033 | 11.2967  |
| 204185 | 460928 | 4976180 | 230 | 179 | 2 | 1 | 125 | 278.6 | 266.924  | 11.67597 |
| 204189 | 460832 | 4976143 | 230 | 178 | 2 | 1 | 125 | 277.4 | 267.0272 | 10.37281 |
| 204190 | 460829 | 4976102 | 230 | 178 | 2 | 1 | 125 | 278.9 | 266.9772 | 11.9228  |
| 204195 | 461179 | 4976530 | 227 | 181 | 2 | 1 | 125 | 271.3 | 267.0847 | 4.21527  |
| 204205 | 461230 | 4989761 | 121 | 181 | 2 | 1 | 103 | 265.2 | 274.3801 | -9.18009 |
| 204211 | 462074 | 4987130 | 132 | 188 | 2 | 1 | 123 | 273.7 | 272.2758 | 1.424201 |
| 204289 | 460415 | 4986460 | 135 | 172 | 2 | 1 | 123 | 271.6 | 274.0848 | -2.48475 |
| 204290 | 461162 | 4986640 | 134 | 181 | 2 | 1 | 123 | 277.4 | 273.2336 | 4.166389 |
| 204293 | 461296 | 4984745 | 141 | 182 | 2 | 1 | 123 | 272.8 | 271.9983 | 0.801683 |
| 204304 | 461284 | 4984111 | 144 | 182 | 2 | 1 | 123 | 271.3 | 271.709  | -0.40902 |
| 204305 | 461374 | 4983890 | 145 | 182 | 2 | 1 | 123 | 274.3 | 271.4602 | 2.839784 |
| 204323 | 462995 | 4985055 | 140 | 195 | 2 | 1 | 123 | 274.6 | 269.6626 | 4.937429 |
| 204325 | 462981 | 4984992 | 140 | 195 | 2 | 1 | 123 | 271.9 | 269.6095 | 2.290466 |
| 204331 | 463036 | 4984864 | 141 | 196 | 2 | 1 | 123 | 276.8 | 269.4028 | 7.397194 |
| 204410 | 461652 | 4976021 | 230 | 185 | 2 | 1 | 125 | 279.5 | 265.6166 | 13.88338 |
| 204424 | 460148 | 4976556 | 227 | 167 | 2 | 1 | 125 | 277.4 | 269.1766 | 8.22336  |
| 204446 | 460223 | 4975546 | 232 | 169 | 2 | 1 | 125 | 274.6 | 267.3599 | 7.240106 |
| 204448 | 460284 | 4975162 | 234 | 170 | 2 | 1 | 125 | 271.3 | 266.5672 | 4.732793 |
| 204450 | 458927 | 4975714 | 232 | 148 | 2 | 1 | 125 | 271.3 | 269.9569 | 1.343053 |
| 204457 | 461930 | 4975719 | 232 | 187 | 2 | 1 | 125 | 278.9 | 264.6078 | 14.29218 |
| 204466 | 461048 | 4975444 | 233 | 180 | 2 | 1 | 125 | 273.1 | 265.5991 | 7.500866 |
| 204467 | 460592 | 4975495 | 232 | 175 | 2 | 1 | 125 | 274.3 | 266.542  | 7.757994 |
| 204468 | 460691 | 4975481 | 233 | 176 | 2 | 1 | 125 | 277.1 | 266.3019 | 10.79805 |
| 204471 | 461022 | 4974265 | 237 | 179 | 2 | 1 | 125 | 269.7 | 263.7218 | 5.97824  |

|        |        |         |     |     |   |   |     |       |          |          |
|--------|--------|---------|-----|-----|---|---|-----|-------|----------|----------|
| 204473 | 461545 | 4974235 | 237 | 184 | 2 | 1 | 125 | 268.2 | 262.8242 | 5.375797 |
| 204628 | 460698 | 4983812 | 146 | 176 | 2 | 1 | 19  | 269.7 | 272.4508 | -2.75083 |
| 204632 | 460606 | 4983649 | 147 | 175 | 2 | 1 | 19  | 271.3 | 272.51   | -1.21001 |
| 204633 | 460746 | 4983597 | 148 | 177 | 2 | 1 | 19  | 275.8 | 272.3112 | 3.488819 |
| 204640 | 461871 | 4982463 | 157 | 186 | 2 | 1 | 123 | 281   | 270.456  | 10.54398 |
| 204641 | 461818 | 4982463 | 157 | 186 | 2 | 1 | 123 | 285   | 270.5424 | 14.4576  |
| 204658 | 461800 | 4981520 | 164 | 186 | 2 | 1 | 123 | 275.8 | 270.6494 | 5.150555 |
| 204678 | 462686 | 4981832 | 162 | 193 | 2 | 1 | 123 | 281.9 | 269.4418 | 12.45818 |
| 204681 | 462531 | 4981575 | 164 | 192 | 2 | 1 | 123 | 278.9 | 269.6719 | 9.228098 |
| 204698 | 462721 | 4981194 | 169 | 193 | 2 | 1 | 123 | 281.9 | 269.4554 | 12.44463 |
| 204702 | 462301 | 4981363 | 166 | 190 | 2 | 1 | 123 | 281.9 | 269.9923 | 11.9077  |
| 205020 | 462932 | 4973898 | 239 | 195 | 2 | 1 | 125 | 266.7 | 260.3359 | 6.364063 |
| 205023 | 462821 | 4973725 | 240 | 194 | 2 | 1 | 125 | 263.7 | 260.2133 | 3.486684 |
| 205025 | 462800 | 4973408 | 241 | 194 | 2 | 1 | 129 | 257.6 | 259.5334 | -1.93337 |
| 205031 | 462226 | 4973895 | 239 | 189 | 2 | 1 | 125 | 272.8 | 261.2862 | 11.5138  |
| 205037 | 462425 | 4973603 | 240 | 191 | 2 | 1 | 74  | 264.3 | 260.5128 | 3.787151 |
| 205059 | 462830 | 4973358 | 241 | 194 | 2 | 1 | 129 | 259.1 | 259.3492 | -0.24919 |
| 205089 | 459549 | 4973734 | 239 | 158 | 2 | 1 | 125 | 272.8 | 265.2341 | 7.565929 |
| 205092 | 460229 | 4973524 | 240 | 169 | 2 | 1 | 125 | 272.8 | 263.7498 | 9.050191 |
| 205101 | 460055 | 4973222 | 242 | 166 | 2 | 1 | 125 | 275.8 | 263.4124 | 12.38762 |
| 205180 | 454639 | 4979187 | 201 | 108 | 2 | 1 | 74  | 275.8 | 277.3892 | -1.58918 |
| 205654 | 458035 | 4973241 | 241 | 134 | 2 | 1 | 131 | 272.5 | 266.7109 | 5.789079 |
| 207033 | 459248 | 4984288 | 143 | 153 | 2 | 1 | 19  | 276.8 | 274.4559 | 2.344142 |
| 207035 | 459257 | 4984034 | 144 | 153 | 2 | 1 | 19  | 276.1 | 274.3243 | 1.77566  |
| 223814 | 461296 | 4977523 | 219 | 182 | 2 | 1 | 126 | 278.9 | 268.5487 | 10.35135 |
| 223817 | 461271 | 4976007 | 230 | 181 | 2 | 1 | 125 | 278.9 | 266.1139 | 12.78607 |
| 224078 | 462376 | 4974292 | 237 | 190 | 2 | 1 | 125 | 272.5 | 261.7129 | 10.78711 |
| 226841 | 460989 | 4975175 | 234 | 179 | 2 | 1 | 125 | 278.3 | 265.2395 | 13.06048 |
| 227322 | 459017 | 4975798 | 231 | 149 | 2 | 1 | 125 | 279.2 | 269.9054 | 9.294613 |
| 233123 | 460082 | 4977558 | 219 | 166 | 2 | 1 | 125 | 274.9 | 270.4548 | 4.445206 |
| 400793 | 457727 | 4972986 | 242 | 129 | 2 | 1 | 131 | 273.7 | 266.6022 | 7.09785  |
| 400896 | 458978 | 4975845 | 231 | 149 | 2 | 1 | 125 | 276.8 | 270.0404 | 6.759552 |
| 403770 | 448549 | 4980757 | 176 | 86  | 2 | 1 | 78  | 275.8 | 282.5952 | -6.79518 |
| 405060 | 460361 | 4977312 | 221 | 171 | 2 | 1 | 126 | 279.8 | 269.8876 | 9.91243  |
| 405081 | 459127 | 4975866 | 231 | 151 | 2 | 1 | 125 | 275.2 | 269.7911 | 5.408923 |
| 405082 | 457570 | 4974578 | 236 | 128 | 2 | 1 | 131 | 268.8 | 270.4195 | -1.61946 |
| 405086 | 458848 | 4975856 | 231 | 147 | 2 | 1 | 125 | 267.3 | 270.2802 | -2.98017 |
| 405087 | 459246 | 4975977 | 231 | 153 | 2 | 1 | 125 | 267.6 | 269.7015 | -2.10153 |
| 405091 | 459230 | 4975969 | 231 | 153 | 2 | 1 | 125 | 269.7 | 269.7218 | -0.02183 |
| 405492 | 461341 | 4991001 | 118 | 182 | 2 | 1 | 103 | 274.6 | 274.5116 | 0.088353 |
| 410358 | 458271 | 4973618 | 240 | 137 | 2 | 1 | 131 | 272.2 | 267.2261 | 4.973885 |
| 412247 | 455953 | 4973450 | 241 | 115 | 2 | 1 | 131 | 272.8 | 270.7137 | 2.086292 |
| 413357 | 459230 | 4976101 | 230 | 153 | 2 | 1 | 125 | 273.4 | 269.903  | 3.497046 |
| 413362 | 459277 | 4975436 | 233 | 154 | 2 | 1 | 125 | 266.7 | 268.8566 | -2.15659 |
| 413391 | 456697 | 4974163 | 238 | 121 | 2 | 1 | 131 | 270.4 | 271.1192 | -0.71917 |
| 415472 | 460317 | 4977293 | 221 | 170 | 2 | 1 | 126 | 276.8 | 269.9367 | 6.863349 |
| 415485 | 459712 | 4976212 | 230 | 160 | 2 | 1 | 125 | 270.7 | 269.2866 | 1.413435 |
| 419344 | 454787 | 4979165 | 202 | 109 | 2 | 1 | 132 | 274.6 | 277.2373 | -2.63731 |
| 420454 | 459648 | 4976147 | 230 | 159 | 2 | 1 | 125 | 271.9 | 269.302  | 2.598023 |
| 420459 | 459057 | 4976234 | 229 | 150 | 2 | 1 | 125 | 269.7 | 270.3474 | -0.64735 |
| 420465 | 458884 | 4973919 | 239 | 147 | 2 | 1 | 131 | 267.3 | 266.7826 | 0.517382 |
| 420467 | 458831 | 4974170 | 238 | 146 | 2 | 1 | 125 | 276.5 | 267.3404 | 9.159573 |

|        |        |         |     |     |   |   |     |       |          |          |
|--------|--------|---------|-----|-----|---|---|-----|-------|----------|----------|
| 420473 | 457851 | 4974423 | 237 | 131 | 2 | 1 | 131 | 271.9 | 269.5879 | 2.31214  |
| 420474 | 458048 | 4973430 | 241 | 134 | 2 | 1 | 131 | 272.8 | 267.1418 | 5.658241 |
| 420475 | 460325 | 4977065 | 223 | 170 | 2 | 1 | 126 | 279.2 | 269.569  | 9.630966 |
| 420479 | 456741 | 4979394 | 198 | 121 | 2 | 1 | 132 | 273.4 | 275.126  | -1.72596 |
| 420492 | 457371 | 4973294 | 241 | 126 | 2 | 1 | 131 | 271.3 | 267.9222 | 3.377804 |
| 420515 | 456687 | 4974215 | 238 | 121 | 2 | 1 | 131 | 270.4 | 271.2434 | -0.84342 |
| 420522 | 458965 | 4976138 | 230 | 149 | 2 | 1 | 125 | 267.9 | 270.3998 | -2.49978 |
| 420524 | 458973 | 4975445 | 233 | 149 | 2 | 1 | 125 | 275.2 | 269.5069 | 5.693148 |
| 420528 | 457987 | 4973318 | 241 | 133 | 2 | 1 | 131 | 274.3 | 266.9742 | 7.325801 |
| 424008 | 458346 | 4973681 | 240 | 139 | 2 | 1 | 131 | 271   | 267.2102 | 3.789815 |
| 426503 | 458806 | 4973895 | 239 | 146 | 2 | 1 | 131 | 267.9 | 266.8653 | 1.034731 |
| 426523 | 455981 | 4973365 | 241 | 115 | 2 | 1 | 131 | 274   | 270.4512 | 3.548803 |
| 426527 | 459260 | 4976005 | 230 | 153 | 2 | 1 | 125 | 272.8 | 269.7157 | 3.084259 |
| 426536 | 457076 | 4974321 | 237 | 124 | 2 | 1 | 131 | 268.2 | 270.7484 | -2.54839 |
| 426537 | 458030 | 4973151 | 242 | 134 | 2 | 1 | 131 | 270.4 | 266.5033 | 3.896745 |
| 426540 | 457010 | 4974322 | 237 | 123 | 2 | 1 | 131 | 267.6 | 270.87   | -3.27003 |
| 426564 | 455813 | 4973204 | 242 | 114 | 2 | 1 | 131 | 273.7 | 270.2885 | 3.411544 |
| 431445 | 457622 | 4987047 | 132 | 128 | 2 | 1 | 132 | 276.8 | 277.5532 | -0.75317 |
| 435419 | 458869 | 4973948 | 239 | 147 | 2 | 1 | 131 | 270.7 | 266.8659 | 3.834063 |
| 435422 | 458921 | 4976178 | 230 | 148 | 2 | 1 | 125 | 272.8 | 270.509  | 2.290994 |
| 435447 | 456851 | 4979334 | 199 | 122 | 2 | 1 | 74  | 274.9 | 275      | -0.09999 |
| 435802 | 458751 | 4986849 | 133 | 145 | 2 | 1 | 132 | 274.3 | 276.1309 | -1.83092 |
| 435862 | 458216 | 4982238 | 158 | 137 | 2 | 1 | 123 | 275.8 | 274.1917 | 1.608275 |
| 438251 | 459700 | 4976275 | 229 | 160 | 2 | 1 | 125 | 268.2 | 269.3842 | -1.1842  |
| W00098 | 462180 | 4981154 | 170 | 189 | 2 | 1 | 123 | 277.4 | 270.1596 | 7.240383 |
| 100112 | 459822 | 4976268 | 229 | 162 | 3 | 1 | 271 | 270.1 | 268.951  | 1.149028 |
| 100183 | 458420 | 4982422 | 157 | 140 | 3 | 1 | 904 | 274.9 | 274.1717 | 0.728254 |
| 100256 | 460306 | 4986395 | 135 | 170 | 3 | 1 | 272 | 275.8 | 274.1604 | 1.639562 |
| 100283 | 460958 | 4985870 | 137 | 179 | 3 | 1 | 272 | 273.1 | 273.0998 | 0.000168 |
| 118825 | 456609 | 4973349 | 241 | 120 | 3 | 1 | 216 | 262.1 | 268.9336 | -6.83359 |
| 118839 | 458791 | 4981676 | 163 | 146 | 3 | 1 | 904 | 276.8 | 273.7079 | 3.092145 |
| 118841 | 456659 | 4973366 | 241 | 121 | 3 | 1 | 216 | 268.2 | 268.8896 | -0.68958 |
| 118842 | 456648 | 4973407 | 241 | 120 | 3 | 1 | 216 | 267.9 | 269.0086 | -1.10861 |
| 118866 | 450047 | 4992278 | 116 | 90  | 3 | 1 | 19  | 277.7 | 281.1001 | -3.40014 |
| 122971 | 454482 | 4978044 | 215 | 107 | 3 | 1 | 213 | 275.5 | 277.2277 | -1.72766 |
| 127346 | 455952 | 4980766 | 176 | 115 | 3 | 1 | 904 | 272.8 | 276.267  | -3.46698 |
| 127383 | 455010 | 4979556 | 195 | 109 | 3 | 1 | 904 | 273.1 | 277.0682 | -3.96816 |
| 127509 | 456622 | 4973615 | 240 | 120 | 3 | 1 | 216 | 269.7 | 269.5625 | 0.137473 |
| 127519 | 456760 | 4982771 | 154 | 121 | 3 | 1 | 904 | 274.6 | 276.0868 | -1.48677 |
| 127549 | 456762 | 4982916 | 153 | 121 | 3 | 1 | 904 | 274   | 276.1803 | -2.18035 |
| 131940 | 456687 | 4982353 | 158 | 121 | 3 | 1 | 904 | 277.7 | 275.9205 | 1.779516 |
| 137351 | 458963 | 4975875 | 231 | 149 | 3 | 1 | 271 | 277.4 | 269.9203 | 7.479706 |
| 137377 | 456214 | 4973566 | 240 | 117 | 3 | 1 | 216 | 267.6 | 270.1245 | -2.52446 |
| 137387 | 456233 | 4973273 | 241 | 117 | 3 | 1 | 216 | 268.2 | 269.3529 | -1.15286 |
| 145414 | 455337 | 4992533 | 115 | 111 | 3 | 1 | 19  | 276.8 | 279.3474 | -2.54736 |
| 147857 | 456226 | 4973596 | 240 | 117 | 3 | 1 | 216 | 266.1 | 270.1816 | -4.08156 |
| 149826 | 454016 | 4980651 | 178 | 105 | 3 | 1 | 213 | 276.5 | 278.3217 | -1.82169 |
| 155164 | 455285 | 4982121 | 159 | 111 | 3 | 1 | 904 | 275.8 | 277.5072 | -1.7072  |
| 155221 | 458098 | 4981588 | 164 | 135 | 3 | 1 | 904 | 272.8 | 274.1201 | -1.32008 |
| 158070 | 459143 | 4976281 | 229 | 151 | 3 | 1 | 271 | 269.7 | 270.0765 | -0.37648 |
| 163612 | 449523 | 4990275 | 120 | 88  | 3 | 1 | 19  | 283.5 | 282.0819 | 1.418081 |
| 163863 | 455105 | 4978260 | 213 | 110 | 3 | 1 | 213 | 276.1 | 276.691  | -0.59102 |

|        |        |         |     |     |   |   |     |        |          |          |
|--------|--------|---------|-----|-----|---|---|-----|--------|----------|----------|
| 163882 | 454365 | 4978021 | 215 | 107 | 3 | 1 | 213 | 276.5  | 277.3255 | -0.82545 |
| 163890 | 458161 | 4982284 | 158 | 136 | 3 | 1 | 904 | 271.3  | 274.2536 | -2.95364 |
| 164534 | 460411 | 4986380 | 135 | 172 | 3 | 1 | 272 | 274.3  | 274.0375 | 0.262535 |
| 164553 | 458244 | 4982440 | 157 | 137 | 3 | 1 | 904 | 274.3  | 274.3064 | -0.00635 |
| 165574 | 458480 | 4974073 | 238 | 141 | 3 | 1 | 216 | 262.1  | 267.4183 | -5.31832 |
| 165621 | 457024 | 4980390 | 182 | 123 | 3 | 1 | 904 | 270.4  | 274.7168 | -4.31677 |
| 168746 | 458284 | 4973186 | 242 | 138 | 3 | 1 | 216 | 267    | 265.7317 | 1.268285 |
| 170247 | 456484 | 4973430 | 241 | 119 | 3 | 1 | 216 | 263.3  | 269.3414 | -6.04141 |
| 171017 | 456600 | 4973233 | 241 | 120 | 3 | 1 | 216 | 259.7  | 268.6687 | -8.96868 |
| 173225 | 454517 | 4977926 | 216 | 107 | 3 | 1 | 213 | 274.9  | 277.1536 | -2.2536  |
| 173233 | 449840 | 4981955 | 161 | 89  | 3 | 1 | 78  | 274.3  | 282.3349 | -8.0349  |
| 181995 | 456142 | 4990736 | 119 | 116 | 3 | 1 | 19  | 279.8  | 279.4608 | 0.339167 |
| 182081 | 459249 | 4976015 | 230 | 153 | 3 | 1 | 271 | 274    | 269.5854 | 4.414616 |
| 184780 | 456007 | 4979524 | 196 | 115 | 3 | 1 | 904 | 271.3  | 276.0032 | -4.70321 |
| 203782 | 461560 | 4977870 | 216 | 184 | 3 | 1 | 271 | 257.86 | 268.3283 | -10.4683 |
| 204295 | 460824 | 4984874 | 141 | 178 | 3 | 1 | 272 | 274.3  | 272.7054 | 1.594571 |
| 204296 | 460888 | 4985047 | 140 | 178 | 3 | 1 | 272 | 274.3  | 272.7111 | 1.58889  |
| 204298 | 460854 | 4984927 | 141 | 178 | 3 | 1 | 272 | 274.3  | 272.6923 | 1.607717 |
| 204300 | 460898 | 4984755 | 141 | 178 | 3 | 1 | 272 | 279.8  | 272.5361 | 7.263912 |
| 204431 | 459941 | 4975993 | 230 | 164 | 3 | 1 | 271 | 275.8  | 268.378  | 7.422001 |
| 204432 | 459894 | 4975997 | 230 | 163 | 3 | 1 | 271 | 274.3  | 268.4637 | 5.836301 |
| 204433 | 459886 | 4975938 | 231 | 163 | 3 | 1 | 271 | 280.4  | 268.3924 | 12.00764 |
| 204435 | 459852 | 4975992 | 230 | 163 | 3 | 1 | 271 | 277.4  | 268.5276 | 8.872351 |
| 204642 | 460383 | 4983822 | 146 | 171 | 3 | 1 | 205 | 276.8  | 272.8045 | 3.995531 |
| 204646 | 459278 | 4982495 | 156 | 154 | 3 | 1 | 904 | 274.3  | 273.5524 | 0.747584 |
| 204647 | 459863 | 4982299 | 158 | 163 | 3 | 1 | 904 | 272.8  | 273.012  | -0.21196 |
| 204649 | 459841 | 4981687 | 163 | 163 | 3 | 1 | 904 | 273.7  | 272.9181 | 0.781861 |
| 204654 | 458955 | 4982122 | 159 | 148 | 3 | 1 | 904 | 274.3  | 273.6501 | 0.649899 |
| 204655 | 460167 | 4981279 | 168 | 168 | 3 | 1 | 904 | 269.7  | 272.6511 | -2.95106 |
| 204706 | 462860 | 4980901 | 174 | 194 | 3 | 1 | 271 | 272.8  | 268.9204 | 3.879645 |
| 205032 | 462083 | 4973704 | 240 | 188 | 3 | 1 | 271 | 268.2  | 261.0884 | 7.111568 |
| 205033 | 462087 | 4973572 | 240 | 188 | 3 | 1 | 271 | 266.7  | 260.8513 | 5.84868  |
| 205171 | 454834 | 4980267 | 184 | 109 | 3 | 1 | 904 | 274.3  | 277.4004 | -3.10041 |
| 205172 | 454820 | 4980222 | 185 | 109 | 3 | 1 | 904 | 278    | 277.4069 | 0.593148 |
| 205173 | 454970 | 4980004 | 188 | 109 | 3 | 1 | 904 | 281    | 277.2022 | 3.79784  |
| 205629 | 452065 | 4976155 | 230 | 98  | 3 | 1 | 78  | 273.1  | 277.6934 | -4.59344 |
| 205630 | 451954 | 4975951 | 231 | 97  | 3 | 1 | 78  | 269.7  | 277.5581 | -7.85806 |
| 206915 | 455848 | 4978784 | 208 | 114 | 3 | 1 | 904 | 273.1  | 276.0831 | -2.98313 |
| 206926 | 455111 | 4981704 | 163 | 110 | 3 | 1 | 904 | 280.7  | 277.5002 | 3.199775 |
| 207042 | 448577 | 4983370 | 149 | 86  | 3 | 1 | 78  | 278.9  | 283.3327 | -4.43269 |
| 207129 | 457986 | 4983114 | 151 | 133 | 3 | 1 | 904 | 265.8  | 274.9849 | -9.18485 |
| 208987 | 449784 | 4993611 | 113 | 89  | 3 | 1 | 19  | 279.8  | 280.1446 | -0.34463 |
| 241021 | 458564 | 4974161 | 238 | 142 | 3 | 1 | 216 | 265.2  | 267.4639 | -2.26386 |
| 403777 | 456896 | 4979148 | 202 | 122 | 3 | 1 | 904 | 270.7  | 274.9651 | -4.26508 |
| 417148 | 457252 | 4979724 | 193 | 125 | 3 | 1 | 904 | 269.4  | 274.3929 | -4.99293 |
| 419420 | 450524 | 4977970 | 216 | 91  | 3 | 1 | 78  | 281.3  | 279.9832 | 1.31683  |
| 420513 | 459200 | 4978181 | 214 | 152 | 3 | 1 | 271 | 268.5  | 272.0685 | -3.56851 |
| 424082 | 454170 | 4978086 | 215 | 106 | 3 | 1 | 213 | 276.8  | 277.5097 | -0.70973 |
| 434271 | 456162 | 4973428 | 241 | 117 | 3 | 1 | 216 | 266.7  | 269.8526 | -3.15256 |
| 434287 | 456246 | 4973363 | 241 | 117 | 3 | 1 | 216 | 266.7  | 269.5544 | -2.85443 |
| 434296 | 458720 | 4975938 | 231 | 145 | 3 | 1 | 271 | 274.9  | 270.4254 | 4.474579 |
| 434300 | 456331 | 4973326 | 241 | 118 | 3 | 1 | 216 | 266.4  | 269.3301 | -2.93015 |



|        |        |         |     |     |   |   |     |       |          |          |
|--------|--------|---------|-----|-----|---|---|-----|-------|----------|----------|
| 435402 | 454628 | 4977954 | 216 | 108 | 3 | 1 | 213 | 276.5 | 277.0576 | -0.55759 |
| 435411 | 458307 | 4984108 | 144 | 138 | 3 | 1 | 214 | 274.6 | 275.2035 | -0.60351 |
| 104701 | 461271 | 4990679 | 119 | 181 | 4 | 1 | 301 | 274.3 | 274.3882 | -0.08822 |
| 104702 | 461295 | 4990599 | 119 | 182 | 4 | 1 | 301 | 268.2 | 274.3532 | -6.15322 |
| 104727 | 456537 | 4986355 | 135 | 120 | 4 | 1 | 316 | 277.4 | 278.5926 | -1.19257 |
| 104768 | 461714 | 4990332 | 120 | 185 | 4 | 1 | 301 | 267.3 | 273.743  | -6.44301 |
| 104815 | 461476 | 4990761 | 119 | 183 | 4 | 1 | 301 | 272.2 | 274.1235 | -1.92353 |
| 104841 | 455086 | 4984416 | 143 | 110 | 4 | 1 | 316 | 278   | 278.9189 | -0.91889 |
| 104842 | 461437 | 4990796 | 119 | 183 | 4 | 1 | 301 | 271.3 | 274.1777 | -2.87766 |
| 105381 | 462961 | 4992904 | 115 | 195 | 4 | 1 | 307 | 273.4 | 271.5468 | 1.853197 |
| 107149 | 462589 | 4988528 | 126 | 192 | 4 | 1 | 307 | 272.8 | 272.0243 | 0.775725 |
| 118898 | 460537 | 4990044 | 120 | 174 | 4 | 1 | 301 | 264.9 | 275.4772 | -10.5772 |
| 124972 | 461165 | 4988648 | 126 | 181 | 4 | 1 | 301 | 274   | 273.9899 | 0.010104 |
| 127394 | 457439 | 4983807 | 146 | 127 | 4 | 1 | 316 | 268.2 | 275.989  | -7.78903 |
| 127453 | 458428 | 4985651 | 138 | 140 | 4 | 1 | 316 | 270.1 | 275.9973 | -5.89734 |
| 128030 | 462563 | 4990823 | 119 | 192 | 4 | 1 | 301 | 264.9 | 272.6356 | -7.73557 |
| 136083 | 461037 | 4990675 | 119 | 180 | 4 | 1 | 301 | 270.4 | 274.7223 | -4.32225 |
| 140105 | 458402 | 4985016 | 140 | 140 | 4 | 1 | 316 | 276.5 | 275.7113 | 0.788656 |
| 140114 | 461121 | 4990694 | 119 | 180 | 4 | 1 | 301 | 268.5 | 274.6031 | -6.10308 |
| 145406 | 457881 | 4987284 | 131 | 131 | 4 | 1 | 316 | 279.5 | 277.078  | 2.421993 |
| 145412 | 450557 | 4989273 | 123 | 92  | 4 | 1 | 19  | 278.9 | 282.4498 | -3.54981 |
| 159606 | 462168 | 4992298 | 116 | 189 | 4 | 1 | 307 | 273.7 | 273.1451 | 0.554888 |
| 159642 | 461187 | 4988797 | 125 | 181 | 4 | 1 | 301 | 274.6 | 274.0438 | 0.556182 |
| 159643 | 460532 | 4991529 | 117 | 174 | 4 | 1 | 307 | 273.4 | 275.5275 | -2.12748 |
| 166097 | 459788 | 4991058 | 118 | 162 | 4 | 1 | 307 | 270.7 | 276.2282 | -5.5282  |
| 192807 | 457658 | 4986737 | 133 | 129 | 4 | 1 | 316 | 276.8 | 277.2265 | -0.42647 |
| 192811 | 461061 | 4990591 | 119 | 180 | 4 | 1 | 301 | 269.1 | 274.6973 | -5.59726 |
| 194942 | 456195 | 4986740 | 133 | 117 | 4 | 1 | 317 | 279.8 | 279.1605 | 0.639509 |
| 204203 | 460893 | 4989990 | 120 | 178 | 4 | 1 | 301 | 265.8 | 274.9418 | -9.14176 |
| 204204 | 460494 | 4989838 | 121 | 173 | 4 | 1 | 307 | 274.9 | 275.4036 | -0.50361 |
| 204206 | 461241 | 4989804 | 121 | 181 | 4 | 1 | 301 | 275.2 | 274.2846 | 0.915414 |
| 204644 | 459612 | 4983429 | 149 | 159 | 4 | 1 | 356 | 275.5 | 273.6332 | 1.866812 |
| 204794 | 462958 | 4993007 | 114 | 195 | 4 | 1 | 307 | 274   | 271.482  | 2.517967 |
| 205611 | 451196 | 4977509 | 219 | 94  | 4 | 1 | 317 | 275.5 | 279.2761 | -3.77607 |
| 205626 | 451411 | 4976639 | 226 | 95  | 4 | 1 | 317 | 276.5 | 278.4375 | -1.93752 |
| 205638 | 451232 | 4975762 | 231 | 94  | 4 | 1 | 317 | 274.3 | 277.6809 | -3.38088 |
| 206924 | 457161 | 4981988 | 160 | 125 | 4 | 1 | 905 | 278.9 | 274.909  | 3.991035 |
| 207008 | 459410 | 4982253 | 158 | 156 | 4 | 1 | 905 | 272.8 | 273.3395 | -0.53954 |
| 207044 | 459708 | 4990025 | 120 | 160 | 4 | 1 | 307 | 270.1 | 276.1625 | -6.06252 |
| 207469 | 461341 | 4981305 | 167 | 182 | 4 | 1 | 356 | 271.6 | 271.1935 | 0.406468 |
| 208975 | 458328 | 4988114 | 128 | 138 | 4 | 1 | 316 | 276.1 | 276.8597 | -0.75972 |
| 247311 | 457643 | 4982383 | 157 | 128 | 4 | 1 | 905 | 276.5 | 274.693  | 1.807024 |
| 400848 | 460427 | 4992022 | 116 | 172 | 4 | 1 | 307 | 267.3 | 275.5539 | -8.25395 |
| 405432 | 460428 | 4992048 | 116 | 172 | 4 | 1 | 307 | 267.9 | 275.5455 | -7.64545 |
| 405801 | 462161 | 4992245 | 116 | 189 | 4 | 1 | 307 | 273.1 | 273.1689 | -0.06891 |
| 420453 | 456358 | 4986648 | 134 | 118 | 4 | 1 | 19  | 279.5 | 278.9636 | 0.53643  |
| 425057 | 456294 | 4986664 | 134 | 118 | 4 | 1 | 19  | 278.9 | 279.0376 | -0.13764 |
| 435429 | 456323 | 4986772 | 133 | 118 | 4 | 1 | 19  | 275.5 | 279.0348 | -3.53477 |
| 436313 | 457913 | 4983363 | 149 | 132 | 4 | 1 | 316 | 266.7 | 275.2092 | -8.50924 |
| 127232 | 452282 | 4991506 | 117 | 99  | 5 | 1 | 19  | 278.9 | 281.4388 | -2.53878 |
| 131261 | 453766 | 4992387 | 116 | 104 | 5 | 1 | 19  | 276.1 | 280.4313 | -4.33126 |
| 148144 | 454398 | 4993856 | 113 | 107 | 5 | 1 | 19  | 266.4 | 279.0554 | -12.6554 |

|        |        |         |     |     |   |   |     |        |          |          |
|--------|--------|---------|-----|-----|---|---|-----|--------|----------|----------|
| 159595 | 461107 | 4989005 | 124 | 180 | 5 | 1 | 415 | 268.22 | 274.1236 | -5.9036  |
| 207105 | 460432 | 4992665 | 115 | 172 | 5 | 1 | 19  | 274.32 | 275.2259 | -0.90593 |
| 426346 | 452221 | 4990537 | 119 | 98  | 5 | 1 | 19  | 268.2  | 281.8051 | -13.6051 |
| 436258 | 457949 | 4982881 | 153 | 132 | 5 | 1 | 415 | 269.14 | 275.0423 | -5.90231 |
| 100322 | 449311 | 4984738 | 141 | 88  | 6 | 1 | 539 | 279.81 | 283.3848 | -3.57478 |
| 104737 | 457829 | 4990509 | 119 | 130 | 6 | 1 | 539 | 277.37 | 277.7056 | -0.33563 |
| 104754 | 456852 | 4991128 | 118 | 122 | 6 | 1 | 539 | 282.85 | 278.4932 | 4.356797 |
| 104756 | 457231 | 4994005 | 112 | 125 | 6 | 1 | 524 | 271.27 | 277.1267 | -5.85671 |
| 104758 | 457225 | 4994156 | 112 | 125 | 6 | 1 | 524 | 267.61 | 277.0603 | -9.45028 |
| 104762 | 458081 | 4990649 | 119 | 134 | 6 | 1 | 539 | 277.06 | 277.4597 | -0.39967 |
| 104764 | 458011 | 4990576 | 119 | 133 | 6 | 1 | 539 | 274.93 | 277.5287 | -2.59868 |
| 104775 | 457937 | 4990570 | 119 | 132 | 6 | 1 | 539 | 275.54 | 277.5979 | -2.05787 |
| 104829 | 456646 | 4990995 | 118 | 120 | 6 | 1 | 539 | 276.45 | 278.7154 | -2.26538 |
| 107096 | 450979 | 4987841 | 129 | 93  | 6 | 1 | 539 | 273.1  | 282.662  | -9.56201 |
| 118858 | 454240 | 4989619 | 122 | 106 | 6 | 1 | 539 | 284.07 | 280.8494 | 3.220592 |
| 118881 | 458498 | 4991215 | 118 | 141 | 6 | 1 | 539 | 274.62 | 277.0458 | -2.42579 |
| 118886 | 459572 | 4992459 | 116 | 158 | 6 | 1 | 524 | 274.32 | 276.0017 | -1.68171 |
| 118887 | 456806 | 4993618 | 113 | 122 | 6 | 1 | 524 | 274.62 | 277.6029 | -2.9829  |
| 118897 | 458853 | 4991838 | 117 | 147 | 6 | 1 | 524 | 274.02 | 276.7036 | -2.68359 |
| 122211 | 461213 | 4989408 | 123 | 181 | 6 | 1 | 500 | 268.53 | 274.0004 | -5.47039 |
| 124985 | 457743 | 4990492 | 119 | 129 | 6 | 1 | 539 | 277.98 | 277.7869 | 0.193135 |
| 126603 | 459245 | 4993242 | 114 | 153 | 6 | 1 | 524 | 266.7  | 275.9161 | -9.21607 |
| 136068 | 458549 | 4990489 | 119 | 142 | 6 | 1 | 539 | 274.32 | 277.0432 | -2.72317 |
| 136082 | 458076 | 4990824 | 119 | 134 | 6 | 1 | 539 | 271.27 | 277.4454 | -6.1754  |
| 136090 | 459001 | 4994440 | 112 | 149 | 6 | 1 | 524 | 271.88 | 275.3851 | -3.50511 |
| 136629 | 449512 | 4984784 | 141 | 88  | 6 | 1 | 539 | 277.37 | 283.3341 | -5.96405 |
| 140121 | 457784 | 4990820 | 119 | 130 | 6 | 1 | 539 | 277.98 | 277.7118 | 0.268169 |
| 140122 | 458837 | 4990639 | 119 | 146 | 6 | 1 | 539 | 277.98 | 276.8037 | 1.176302 |
| 140153 | 457720 | 4991021 | 118 | 129 | 6 | 1 | 539 | 274.93 | 277.7282 | -2.79819 |
| 140158 | 456762 | 4991039 | 118 | 121 | 6 | 1 | 539 | 278.28 | 278.5976 | -0.31764 |
| 140168 | 456816 | 4991150 | 118 | 122 | 6 | 1 | 539 | 277.67 | 278.5217 | -0.85168 |
| 144038 | 458896 | 4994476 | 112 | 147 | 6 | 1 | 524 | 276.76 | 275.467  | 1.293048 |
| 149803 | 458024 | 4990779 | 119 | 133 | 6 | 1 | 539 | 274.93 | 277.4991 | -2.56912 |
| 152582 | 456752 | 4992574 | 115 | 121 | 6 | 1 | 539 | 277.67 | 278.0408 | -0.37078 |
| 156276 | 458732 | 4994469 | 112 | 145 | 6 | 1 | 524 | 272.8  | 275.6335 | -2.83352 |
| 157803 | 456780 | 4992642 | 115 | 122 | 6 | 1 | 524 | 280.42 | 277.988  | 2.432043 |
| 157879 | 453361 | 4986273 | 135 | 103 | 6 | 1 | 539 | 275.23 | 281.1695 | -5.93954 |
| 158051 | 449269 | 4984735 | 141 | 87  | 6 | 1 | 539 | 280.42 | 283.3973 | -2.97732 |
| 162079 | 455350 | 4992057 | 116 | 111 | 6 | 1 | 539 | 275.84 | 279.4433 | -3.6033  |
| 162885 | 455273 | 4992042 | 116 | 110 | 6 | 1 | 539 | 279.2  | 279.5055 | -0.3055  |
| 163875 | 458027 | 4991086 | 118 | 134 | 6 | 1 | 539 | 274.32 | 277.447  | -3.12699 |
| 164549 | 453875 | 4986411 | 135 | 105 | 6 | 1 | 500 | 280.11 | 280.699  | -0.58902 |
| 169031 | 459829 | 4993043 | 114 | 162 | 6 | 1 | 524 | 273.71 | 275.5247 | -1.81469 |
| 169360 | 458827 | 4994452 | 112 | 146 | 6 | 1 | 524 | 269.75 | 275.5471 | -5.79713 |
| 182186 | 458887 | 4991474 | 118 | 147 | 6 | 1 | 524 | 271.88 | 276.7388 | -4.85883 |
| 188763 | 450176 | 4985351 | 139 | 90  | 6 | 1 | 539 | 279.68 | 283.1584 | -3.47838 |
| 189596 | 450567 | 4985299 | 139 | 92  | 6 | 1 | 539 | 280.72 | 282.9204 | -2.20039 |
| 190324 | 456473 | 4985774 | 137 | 119 | 6 | 1 | 500 | 269.14 | 277.9875 | -8.84753 |
| 194923 | 456127 | 4986510 | 134 | 116 | 6 | 1 | 500 | 276.45 | 278.6479 | -2.19794 |
| 204801 | 461053 | 4992540 | 115 | 180 | 6 | 1 | 524 | 272.19 | 274.6483 | -2.45829 |
| 204802 | 461231 | 4991846 | 117 | 181 | 6 | 1 | 500 | 269.75 | 274.4133 | -4.66327 |
| 204803 | 461138 | 4991713 | 117 | 180 | 6 | 1 | 500 | 268.22 | 274.5208 | -6.3008  |

|        |        |         |     |     |   |   |     |        |          |          |
|--------|--------|---------|-----|-----|---|---|-----|--------|----------|----------|
| 205200 | 450600 | 4977954 | 216 | 92  | 6 | 1 | 532 | 274.32 | 279.9388 | -5.61885 |
| 206903 | 449596 | 4985122 | 140 | 88  | 6 | 1 | 539 | 279.32 | 283.398  | -4.07805 |
| 206906 | 449367 | 4985121 | 140 | 88  | 6 | 1 | 539 | 275.84 | 283.4861 | -7.6461  |
| 207074 | 448511 | 4989260 | 123 | 86  | 6 | 1 | 539 | 280.72 | 282.4377 | -1.71767 |
| 208979 | 453847 | 4986423 | 135 | 105 | 6 | 1 | 500 | 279.5  | 280.7385 | -1.23847 |
| 244660 | 457680 | 4991689 | 117 | 129 | 6 | 1 | 539 | 281.03 | 277.5639 | 3.466059 |
| 255630 | 460570 | 4993013 | 114 | 174 | 6 | 1 | 524 | 271.58 | 274.9293 | -3.34931 |
| 401396 | 449493 | 4984737 | 141 | 88  | 6 | 1 | 539 | 280.11 | 283.3261 | -3.21614 |
| 404720 | 454484 | 4990364 | 120 | 107 | 6 | 1 | 539 | 279.81 | 280.5882 | -0.77817 |
| 404725 | 454521 | 4990289 | 120 | 107 | 6 | 1 | 539 | 281.03 | 280.5775 | 0.452495 |
| 408712 | 457561 | 4991407 | 118 | 128 | 6 | 1 | 539 | 274.02 | 277.7658 | -3.74584 |
| 418425 | 458737 | 4992660 | 115 | 145 | 6 | 1 | 524 | 274.32 | 276.5396 | -2.21961 |
| 418433 | 457233 | 4993454 | 114 | 125 | 6 | 1 | 524 | 275.54 | 277.3703 | -1.83026 |
| 418439 | 457058 | 4993567 | 113 | 124 | 6 | 1 | 524 | 275.84 | 277.4489 | -1.60888 |
| 418989 | 449486 | 4984735 | 141 | 88  | 6 | 1 | 539 | 276.15 | 283.3278 | -7.17778 |
| 420494 | 450047 | 4973441 | 241 | 90  | 6 | 1 | 533 | 267    | 275.3048 | -8.30482 |
| 421149 | 461403 | 4992502 | 115 | 183 | 6 | 1 | 524 | 267.92 | 274.2303 | -6.31026 |
| 425071 | 458554 | 4990687 | 119 | 142 | 6 | 1 | 539 | 278.28 | 277.0448 | 1.235174 |
| 425073 | 457747 | 4990421 | 120 | 129 | 6 | 1 | 539 | 276.76 | 277.7898 | -1.02981 |
| 425084 | 457692 | 4990968 | 119 | 129 | 6 | 1 | 539 | 272.8  | 277.7625 | -4.96246 |
| 430246 | 458389 | 4984396 | 143 | 139 | 6 | 1 | 500 | 273.71 | 275.3675 | -1.65748 |
| 431415 | 457236 | 4993248 | 114 | 125 | 6 | 1 | 524 | 277.98 | 277.4547 | 0.525255 |
| 431424 | 456894 | 4994459 | 112 | 122 | 6 | 1 | 524 | 274.62 | 277.1393 | -2.51928 |
| 438501 | 452714 | 4991194 | 118 | 100 | 6 | 1 | 539 | 283.77 | 281.2814 | 2.488626 |
| 462939 | 450057 | 4985133 | 140 | 90  | 6 | 1 | 539 | 277.06 | 283.1725 | -6.11251 |
| 537387 | 458118 | 4994181 | 112 | 135 | 6 | 1 | 524 | 276.45 | 276.3426 | 0.107408 |
| 541774 | 450545 | 4985372 | 139 | 92  | 6 | 1 | 539 | 278.59 | 282.9491 | -4.3591  |
| 554064 | 453794 | 4985689 | 138 | 105 | 6 | 1 | 500 | 278.28 | 280.5842 | -2.30424 |
| 589632 | 450992 | 4985072 | 140 | 93  | 6 | 1 | 539 | 280.42 | 282.6043 | -2.18425 |
| 136087 | 457217 | 4994395 | 112 | 125 | 7 | 1 | 613 | 277.98 | 276.9427 | 1.037317 |
| 137376 | 458821 | 4991709 | 117 | 146 | 7 | 1 | 613 | 277.37 | 276.746  | 0.623954 |
| 145413 | 458067 | 4990931 | 119 | 134 | 7 | 1 | 625 | 274.93 | 277.3266 | -2.39663 |
| 159605 | 457902 | 4990971 | 119 | 132 | 7 | 1 | 625 | 274.93 | 277.461  | -2.53096 |

## **APPENDIX C**

### **WELL VULNERABILITY ASSESSMENT WORKSHEETS**





MINNESOTA DEPARTMENT OF HEALTH  
SECTION OF DRINKING WATER PROTECTION  
SWP Vulnerability Rating



625 Robert St. N. St. Paul MN 55155  
P.O. Box 64975 St. Paul MN 55164 - 0975

PWSID: 1270054  
SYSTEM NAME: Wayzata  
WELL NAME: Well #3

TIER: 1  
WHP RANK:  
UNIQUE WELL #: 00206931

COUNTY: Hennepin TOWNSHIP NUMBER: 117 RANGE: 22 W SECTION: 6 QUARTERS: BDAC

| CRITERIA                                 | DESCRIPTION                | POINTS     |
|------------------------------------------|----------------------------|------------|
| Aquifer Name(s)                          | Quaternary Buried Artesian |            |
| DNR Geologic Sensitivity Rating          | Very low                   | 0          |
| L Score                                  | 3                          |            |
| Geologic Data From                       | Well Record                |            |
| Year Constructed                         | 1965                       |            |
| Construction Method                      | Cable Tool/Bored           | 0          |
| Casing Depth                             | 70                         | 10         |
| Well Depth                               | 100                        |            |
| Casing grouted into borehole?            | Unknown                    | 0          |
| Cement grout between casings?            | Unknown                    | 5          |
| All casings extend to land surface?      | Yes                        | 0          |
| Gravel - packed casings?                 | No                         | 0          |
| Wood or masonry casing?                  | No                         | 0          |
| Holes or cracks in casing?               | No                         | 0          |
| Isolation distance violations?           |                            | 0          |
| Pumping Rate                             | 900                        | 10         |
| Pathogen Detected?                       |                            | 0          |
| Surface Water Characteristics?           |                            | 0          |
| Maximum nitrate detected                 | <.4 10/11/1989             | 0          |
| Maximum tritium detected                 | 3.1 04/11/2011             | VULNERABLE |
| Non-THMS VOCs detected?                  |                            | 0          |
| Pesticides detected?                     |                            | 0          |
| Carbon 14 age                            | Unknown                    | 0          |
| Wellhead Protection Score                |                            | 25         |
| Wellhead Protection Vulnerability Rating |                            | VULNERABLE |
| Vulnerability Overridden                 |                            |            |

COMMENTS



MINNESOTA DEPARTMENT OF HEALTH  
SECTION OF DRINKING WATER PROTECTION  
SWP Vulnerability Rating



625 Robert St. N. St. Paul MN 55155  
P.O. Box 64975 St. Paul MN 55164 - 0975

PWSID: 1270054  
SYSTEM NAME: Wayzata  
WELL NAME: Well #4

TIER: 1  
WHP RANK:  
UNIQUE WELL #: 00206932

COUNTY: Hennepin TOWNSHIP NUMBER: 117 RANGE: 22 W SECTION: 6 QUARTERS: BADC

| CRITERIA                                 | DESCRIPTION                     | POINTS     |
|------------------------------------------|---------------------------------|------------|
| Aquifer Name(s)                          | Prairie Du Chien-Jordan         |            |
| DNR Geologic Sensitivity Rating          | Low                             | 20         |
| L Score                                  | 0                               |            |
| Geologic Data From                       | Data Inferred From Nearby Wells |            |
| Year Constructed                         | 1970                            |            |
| Construction Method                      | Cable Tool/Bored                | 0          |
| Casing Depth                             | 284                             | 5          |
| Well Depth                               | 507                             |            |
| Casing grouted into borehole?            | Unknown                         | 0          |
| Cement grout between casings?            | Unknown                         | 5          |
| All casings extend to land surface?      | Yes                             | 0          |
| Gravel - packed casings?                 | No                              | 0          |
| Wood or masonry casing?                  | No                              | 0          |
| Holes or cracks in casing?               | No                              | 0          |
| Isolation distance violations?           |                                 | 0          |
| Pumping Rate                             | 1100                            | 20         |
| Pathogen Detected?                       |                                 | 0          |
| Surface Water Characteristics?           |                                 | 0          |
| Maximum nitrate detected                 | <.4 10/11/1989                  | 0          |
| Maximum tritium detected                 | 4.3 04/11/2011                  | VULNERABLE |
| Non-THMS VOCs detected?                  |                                 | 0          |
| Pesticides detected?                     |                                 | 0          |
| Carbon 14 age                            | Unknown                         | 0          |
| Wellhead Protection Score                |                                 | 50         |
| Wellhead Protection Vulnerability Rating |                                 | VULNERABLE |
| Vulnerability Overridden                 |                                 |            |

COMMENTS

CHANGED DNR RATING FROM L-2 TO VL BASED ON ADDITIONAL PRESENCE OF OSTP BASAL SHALE.



MINNESOTA DEPARTMENT OF HEALTH  
SECTION OF DRINKING WATER PROTECTION  
SWP Vulnerability Rating



625 Robert St. N. St. Paul MN 55155  
P.O. Box 64975 St. Paul MN 55164 - 0975

PWSID: 1270054  
SYSTEM NAME: Wayzata  
WELL NAME: Well #5

TIER: 1  
WHP RANK:  
UNIQUE WELL #: 00497387

COUNTY: Hennepin TOWNSHIP NUMBER: 117 RANGE: 23 W SECTION: 1 QUARTERS: DAB

| CRITERIA                                 | DESCRIPTION             | POINTS     |
|------------------------------------------|-------------------------|------------|
| Aquifer Name(s)                          | Prairie Du Chien-Jordan |            |
| DNR Geologic Sensitivity Rating          | Very low                | 0          |
| L Score                                  | 12                      |            |
| Geologic Data From                       | Well Record             |            |
| Year Constructed                         | 1992                    |            |
| Construction Method                      | Cable Tool/Bored        | 0          |
| Casing Depth                             | 229                     | 5          |
| Well Depth                               | 464                     |            |
| Casing grouted into borehole?            | Yes                     | 0          |
| Cement grout between casings?            | Yes                     | 0          |
| All casings extend to land surface?      | Yes                     | 0          |
| Gravel - packed casings?                 | No                      | 0          |
| Wood or masonry casing?                  | No                      | 0          |
| Holes or cracks in casing?               | No                      | 0          |
| Isolation distance violations?           |                         | 0          |
| Pumping Rate                             | 1000                    | 10         |
| Pathogen Detected?                       |                         | 0          |
| Surface Water Characteristics?           |                         | 0          |
| Maximum nitrate detected                 | .53 08/17/2009          | 0          |
| Maximum tritium detected                 | 1 04/11/2011            | VULNERABLE |
| Non-THMS VOCs detected?                  |                         | 0          |
| Pesticides detected?                     |                         | 0          |
| Carbon 14 age                            | Unknown                 | 0          |
| Wellhead Protection Score                |                         | 15         |
| Wellhead Protection Vulnerability Rating |                         | VULNERABLE |
| Vulnerability Overridden                 |                         |            |

COMMENTS

**APPENDIX D**

**ASSESSMENT OF DATA ELEMENTS**



## Assessment of the Data Elements

This table presents the assessment of these data elements relative to the present and future implications of planning items that are specified in Minnesota Rules, part 4720.5210.

| Data Element                                       | Present and Future Implications |                      |                                    |                                   | Data Source              |
|----------------------------------------------------|---------------------------------|----------------------|------------------------------------|-----------------------------------|--------------------------|
|                                                    | Use of the Wells                | Delineation Criteria | Quality and Quantity of Well Water | Land and Groundwater Use in DWSMA |                          |
| <b>Precipitation</b>                               | L                               | L                    | L                                  | L                                 | MN Climatology Office    |
| <b>Geology</b>                                     |                                 |                      |                                    |                                   |                          |
| Maps and geologic descriptions                     | M                               | H                    | M                                  | M                                 | MGS                      |
| Subsurface data                                    | M                               | H                    | M                                  | M                                 | MGS, MDH, CWI            |
| Borehole geophysics                                | M                               | H                    | M                                  | M                                 | MGS                      |
| Surface geophysics                                 | L                               | L                    | L                                  | L                                 | Not Available or Unknown |
| Maps and soil descriptions                         | L                               | L                    | L                                  | L                                 | NRCS                     |
| Eroding lands                                      |                                 |                      |                                    |                                   |                          |
| <b>Water Resources</b>                             |                                 |                      |                                    |                                   |                          |
| Watershed units                                    | L                               | L                    | L                                  | L                                 | DNR, USGS                |
| List of public waters                              | L                               | L                    | L                                  | L                                 | DNR                      |
| Shoreland classifications                          |                                 |                      |                                    |                                   |                          |
| Wetlands map                                       |                                 |                      |                                    |                                   |                          |
| Floodplain map                                     |                                 |                      |                                    |                                   |                          |
| <b>Land Use</b>                                    |                                 |                      |                                    |                                   |                          |
| Parcel boundaries map                              | L                               | H                    | L                                  | L                                 | Hennepin County, Wayzata |
| Political boundaries map                           | L                               | H                    | L                                  | M                                 | Wayzata, MnGEO           |
| PLS map                                            | L                               | H                    | L                                  | M                                 | MnGEO, MDH               |
| Land use map and inventory                         |                                 |                      |                                    |                                   |                          |
| Comprehensive land use map                         |                                 |                      |                                    |                                   |                          |
| Zoning map                                         |                                 |                      |                                    |                                   |                          |
| <b>Public Utility Services</b>                     |                                 |                      |                                    |                                   |                          |
| Transportation routes and corridors                | L                               | M                    | L                                  | L                                 | MnGEO, MnDOT             |
| Storm/sanitary sewers and PWS system map           | L                               | L                    | L                                  | L                                 | Wayzata                  |
| Oil and gas pipelines map                          |                                 |                      |                                    |                                   |                          |
| Public drainage systems map/list                   | L                               | L                    | L                                  | L                                 | Wayzata                  |
| Records of well construction, maintenance, and use | H                               | H                    | H                                  | H                                 | Wayzata, CWI, MDH Files  |
| <b>Surface Water Quantity</b>                      |                                 |                      |                                    |                                   |                          |
| Stream flow data                                   | L                               | L                    | L                                  | L                                 | DNR, USGS                |
| Ordinary high water mark data                      | L                               | L                    | L                                  | L                                 | DNR, USGS                |

| Data Element                | Present and Future Implications |                      |                                    |                                   | Data Source       |
|-----------------------------|---------------------------------|----------------------|------------------------------------|-----------------------------------|-------------------|
|                             | Use of the Wells                | Delineation Criteria | Quality and Quantity of Well Water | Land and Groundwater Use in DWSMA |                   |
| Permitted withdrawals       | L                               | L                    | L                                  | L                                 | DNR               |
| Protected levels/flows      | L                               | L                    | L                                  | L                                 | DNR               |
| Water use conflicts         | M                               | L                    | M                                  | M                                 | DNR               |
| <b>Groundwater Quantity</b> |                                 |                      |                                    |                                   |                   |
| Permitted withdrawals       | H                               | H                    | H                                  | H                                 | DNR, Wayzata      |
| Groundwater use conflicts   | L                               | L                    | L                                  | L                                 | DNR               |
| Water levels                | H                               | H                    | H                                  | H                                 | CWI, MDH, Wayzata |

| Data Element                                            | Present and Future Implications |                      |                                    |                                   | Data Source   |
|---------------------------------------------------------|---------------------------------|----------------------|------------------------------------|-----------------------------------|---------------|
|                                                         | Use of the Well s               | Delineation Criteria | Quality and Quantity of Well Water | Land and Groundwater Use in DWSMA |               |
| Surface Water Quality                                   |                                 |                      |                                    |                                   |               |
| Stream and lake water quality management classification |                                 |                      |                                    |                                   |               |
| Monitoring data summary                                 | L                               | L                    | L                                  | L                                 | SWCD          |
| Groundwater Quality                                     |                                 |                      |                                    |                                   |               |
| Monitoring data                                         | H                               | H                    | H                                  | H                                 | MDH           |
| Isotopic data                                           | H                               | H                    | H                                  | H                                 | MDH           |
| Tracer studies                                          | M                               | M                    | M                                  | M                                 | Not Available |
| Contamination site data                                 | M                               | M                    | M                                  | M                                 | Not Available |
| Property audit data from contamination sites            |                                 |                      |                                    |                                   |               |
| MPCA and MDA spills/release reports                     | M                               | L                    | M                                  | L                                 | MPCA, MDA     |

#### Definitions Used for Assessing Data Elements:

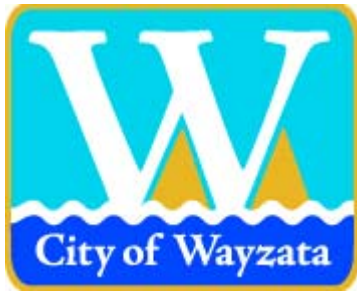
- High (H)** - the data element has a direct impact
- Moderate (M)** - the data element has an indirect or marginal impact
- Low (L)** - the data element has little if any impact
- Shaded** - the data element was not required by MDH for preparing the WHP plan

Acronyms used in this report are listed on page ii, after the “Glossary of Terms.”

**APPENDIX E**

**ELECTRONIC DATA FILES**

**(see attached files on CD-ROM)**



**City of Wayzata**  
**600 Rice Street**  
**Wayzata, MN 55391-1734**

---

**Mayor:**  
Ken Willcox  
**City Council:**  
Jack Amdal  
Bridget Anderson  
Andrew Mullin  
Tom Tanner  
**City Manager:**  
Heidi Nelson

## MEMORANDUM

**TO:** Mayor Willcox and Councilmembers  
**FROM:** Heidi Nelson, City Manager  
**DATE:** September 29, 2014  
**RE:** Public Hearing for Business Subsidy Criteria and Public Financing Policy

At the September 16, 2014 meeting, the City Council opened and continued a Public Hearing on a Business Subsidy Criteria and Public Financing Policy to the October 7, 2014 meeting. The purpose of continuing the Public Hearing is to allow the City Council to gather additional feedback from the Housing and Redevelopment Authority (HRA) regarding the proposed policy.

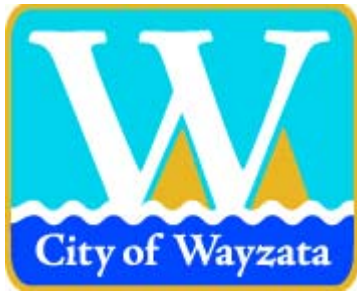
In addition, Staff has received a request from Interfaith Outreach and Community Partners (IOCP), Outreach Development Corporation (ODC) and Community Legacy Homes, LLC to utilize the City's existing Tax Abatement Program to receive back the local share of property taxes for the Maggie's Manor project at 110 Grand Avenue S. However, due to legal noticing requirements, the Council cannot formally review IOCP's request until the October 21, 2014 meeting. A copy of their application materials is attached for reference.

However, given the Council's current Public Finance Policy discussions, Staff wanted to raise for additional discussion how the Public Finance Policy would address assistance for rental housing. The current version of the Policy would prohibit the use of TIF and Tax Abatement for construction of new rental housing units. If it is the Council's preference to utilize public financing for the purposes of preservation or reinvestment in existing rental housing, the Policy could be modified to include such language. A draft of the Policy, including the allowance for public financing for reinvestment in existing rental housing is attached for discussion purposes.

### Background

As a part of the Redevelopment Plan created by the HRA and City Council in May of 2013, a recommendation was made to create Business Subsidy Criteria and a Public Financing Policy. At the regular meeting of the HRA on April 24<sup>th</sup> 2014, potential business subsidy criteria and terms of a policy for public financing for redevelopment projects in Wayzata were discussed. At the August 8<sup>th</sup> meeting, the HRA reviewed a draft policy and recommended that the City Council adopt the policy. Minutes from the April 24 and August 8, 2014 HRA meetings are attached for reference. The City's Redevelopment Plan of May 2013 is also attached for reference.





**City of Wayzata**  
**600 Rice Street**  
**Wayzata, MN 55391-1734**

---

**Mayor:**  
Ken Willcox  
**City Council:**  
Jack Amdal  
Bridget Anderson  
Andrew Mullin  
Tom Tanner  
**City Manager:**  
Heidi Nelson

The policy in general reflects the following:

- Flexibility, recognizing the unique nature of redevelopment projects and avoiding a one size fits all approach
- Appropriate guidance for staff and advisors to act as a filter for proposed projects, ensuring they meet the spirit and intent of the policy before bringing them forward to the HRA or City Council
- A willingness to use the maximum number of years allowed by statute for TIF districts when warranted
- No elaborate job and wage goals, since this is not the primary public purpose of redevelopment in Wayzata. Job and wage goals should meet the statutory requirements and provide for flexibility.

In addition, the HRA provided direction on specific issues and statutory requirements as follows:

- Statement that public assistance will not be provided where project costs are inflated as a result of overpayment for land
- Public assistance will not be provided for rental housing, except for the preservation and reinvestment in existing rental housing.
- Forgiveness of city fees would generally not be considered
- The statutory wage floor should be set at 150% of state minimum wage

Attached to this memorandum is the recommended Business Subsidy Criteria and Public Financing Policy and the application the City would utilize for the process. City Council is required to hold a public hearing tonight and adopt the attached resolution to formally adopt the policy. Upon formal approval, the city's financial advisors, Ehlers, will submit the policy to the Department of Employment and Economic Development (DEED) as required by State Statute.



**City of Wayzata**  
**Business Subsidy Criteria and Public Financing Policy**  
**September 23, 2014**

**INTRODUCTION:**

This Policy is adopted for purposes of the business subsidies act, which is Minnesota Statutes, Sections 116J.993 through 116J.995 (the “Statutes”). Terms used in this Policy are intended to have the same meanings as used in Statutes. Subdivision 3 of the Statutes specifies forms of financial assistance that are not considered a business subsidy. This list contains exceptions for several activities, including redevelopment, pollution clean-up, and housing, among others. By providing a business subsidy, the city commits to holding a public hearing, as applicable, and reporting annually to the Department of Employment and Economic Development on job and wage goal progress.

**1. PURPOSE AND AUTHORITY**

- A. The purpose of this document is to establish criteria for the City of Wayzata for granting of business subsidies and City public financing for private development within the City. These criteria shall be used as a guide in processing and reviewing applications requesting business subsidies and/or City public financing.
- B. The City's ability to grant business subsidies is governed by the limitations established in the Statutes. The City may choose to apply its Business Subsidy Criteria to other development activities not covered under this statute. City public financing may or may not be considered a business subsidy as defined by the Statutes.
- C. Unless specifically excluded by the Statutes, business subsidies include grants by state or local government agencies, contributions of personal property, real property, infrastructure, the principal amount of a loan at rates below those commercially available to the recipient of the subsidy, any reduction or deferral of any tax or any fee, tax increment financing (TIF), abatement of property taxes, loans made from City funds, any guarantee of any payment under any loan, lease, or other obligation, or any preferential use of government facilities given to a business.
- D. These criteria are to be used in conjunction with other relevant policies of the City. Compliance with the Business Subsidy Criteria and City Public Financing Guidelines shall not automatically mean compliance with such separate policies.

- E. The City may deviate from these criteria by documenting in writing the reason(s) for the deviation. The documentation shall be submitted to the Department of Employment and Economic Development with the next annual report.
- F. The City may amend this document at any time. Amendments to these criteria are subject to public hearing requirements contained in the Statutes.

## **2. BUSINESS SUBSIDY PUBLIC PURPOSE REQUIREMENT**

- A. All business subsidies must meet a public purpose with measurable benefit to the City as a whole. Public purpose may include, but not be limited to: diversification of the local economy, creating needed services or facilities not currently available, redeveloping and removing blight and encouraging redevelopment in the commercial areas of the City in order to encourage high levels of property maintenance and private reinvestment in those areas, retaining local jobs, increasing the job base, and providing diversity in that job base, enhancing existing jobs through increased wages, encouraging additional unsubsidized private development in the area, either directly, or through secondary “spin off” development, offsetting increased costs of redevelopment over and above those costs that a developer would incur in normal urban and suburban development, and meeting other uses of public policy, as adopted by the Council from time to time including the promotion of quality urban design, quality architectural design, energy conservation, decreasing the capital and operating costs of local government, etc.
- B. Job retention may only be used as a public purpose in cases where job loss is specific and demonstrable. The City shall document the information used to determine the nature of the job loss.
- C. The creation of tax base shall not be the sole public purpose of a subsidy.
- D. Unless the creation of jobs is removed from a particular project pursuant to the requirements of the Statutes, the creation of jobs is a public purpose for granting a subsidy. Creation of at least one Full Time Equivalent (FTE) job is a minimum requirement for consideration of assistance.
- E. The wage floor for wages to be paid for the jobs created shall be not less than 150% of the State of MN Minimum Wage. The City will seek to create jobs with higher wages as appropriate for the overall public purpose of the subsidy. Wage goals may also be set to enhance existing jobs through increased wages, which increase must result in wages higher than the minimum under this Section.
- F. After a public hearing, if the creation or retention of jobs is determined not to be a goal, the wage and job goals may be set at zero.

## **3. SUBSIDY AGREEMENT**

- A. In granting a business subsidy, the City shall enter into a subsidy agreement with the recipient that provides the following information: wage and job goals (if applicable), commitments to provide necessary reporting data, and recourse for failure to meet goals required by the Statutes.

- B. The subsidy agreement may be incorporated into a broader development agreement for a project.
- C. The subsidy agreement will commit the recipient to providing the reporting information required by the Statutes.

#### **4. CITY'S OBJECTIVE FOR THE USE OF PUBLIC FINANCING**

- A. As a matter of adopted policy, the City may consider using public financing which may include tax increment financing (TIF), tax abatement, bonds, and other forms of public financing as appropriate, to assist private development projects when such assistance complies with all applicable statutory requirements to:
  - 1. Remove blight and/or encourage redevelopment in designated redevelopment/development area(s) per the goals and visions established by the HRA and City Council.
  - 2. Diversify the local economy and tax base.
  - 3. Encourage additional unsubsidized private development in the area, either directly or through secondary "spin-off" development.
  - 4. Offset increased costs for redevelopment over and above the costs that a developer would incur in normal urban and suburban development (determined as part of the But-For analysis).
  - 5. Facilitate the development process and promote development on sites that could not be developed without this assistance.
  - 6. Retain local jobs and/or increase the number and diversity of quality jobs
  - 7. Meet other uses of public policy, as adopted by the City Council from time to time, including but not limited to promotion of quality urban design, quality architectural design, energy conservation, sustainable building practices, and decreasing the capital and operating costs of local government.

#### **5. PUBLIC FINANCING PRINCIPLES**

- A. The guidelines and principles set forth in this document pertain to all applications for City public financing regardless of whether they are considered a Business Subsidy as defined by the Statutes. The following general assumptions of development/redevelopment shall serve as a guide for City public financing:
  - 1. All viable requests for City public financing assistance shall be reviewed by staff, and, if staff designates so, a third party financial advisor who will inform the City of its findings and recommendations.



2. The City shall establish mechanisms within the development agreement to ensure that adequate checks and balances are incorporated in the distribution of financial assistance where feasible and appropriate, including but not limited to:
  - a. Third party review of the “but for” analysis
  - b. Establishment of “look back provisions”
  - c. Establishment of minimum assessment agreements
3. TIF and abatement will be provided on a pay-as-you-go-basis. Any request for upfront assistance will be evaluated on its own merits and may require security to cover any risks assumed by the City.
4. The City will set up TIF districts in accordance with the maximum number of statutory years allowable. However, this does not mean that the developer will be granted assistance for the full term of the district.
5. The City will elect the fiscal disparities contribution to come from inside applicable TIF district(s) to eliminate any impact to the existing tax payers of the community.
6. Public financing will not be used to support speculative commercial, office or housing projects. In general the developer should be able to provide market data, tenant letters of commitment or finance statements which support the market potential/demand for the proposed project.
7. Public financing will not be used in projects that would give a significant competitive financial advantage over similar projects in the area due to the use of public subsidies. Developers should provide information to support that assistance will not create such a competitive advantage. Priority consideration will be given to projects that fill an unmet market need.
8. Public financing will not be used in a project that involves a land and/or property acquisition price in excess of fair market value.
9. ~~TIF and Abatement will not be utilized for the construction of new rental housing units~~The City may consider public financing for the preservation and reinvestment in the existing housing stock. The goal of such financing would be to preserve and promote affordability and/or alleviate blight conditions.
10. The developer will pay all applicable application fees and pay for the City and HRA’s fiscal and legal advisor time as stated in the City’s Public Assistance Application.
11. The developer shall proactively attempt to minimize the amount of public assistance needed through the pursuit of grants, innovative solutions in structuring the deal, and other funding mechanisms.

## **6. PROJECTS WHICH MAY QUALIFY FOR PUBLIC FINANCING ASSISTANCE**

- A. All new applications for assistance considered by the City must meet each of the following minimum qualifications. However, it should **not** be presumed that a project meeting any of the qualifications will automatically be approved for assistance. Meeting the qualifications does not imply or create contractual rights on the part of any potential developer to have its project approved for assistance.

### **6.1 MINIMUM QUALIFICATIONS:**

- A. In addition to meeting the applicable requirements of State law, the project shall meet one or more of the Public financing objectives outlined in Section 4; and shall either:
  - 1. Remove blight and/or encourage redevelopment in the City in order to encourage high quality development or redevelopment and private reinvestment in those areas; OR
  - 2. Facilitate the development process to achieve development on sites which would not be developed without this assistance.
- B. The developer must demonstrate to the satisfaction of the City that the project is not financially feasible “but for” the use of tax increment or other public financing.
- C. The project must be consistent with the City’s Comprehensive Plan and Zoning Ordinances, Design Guidelines or any other applicable land use documents.
- D. Prior to approval of a financing plan, the developer shall provide any requested market and financial feasibility studies, appraisals, soil boring, private lender commitment, and/or other information the City or its financial consultants may require in order to proceed with an independent evaluation of the proposal.
- E. The developer must provide adequate financial guarantees to ensure the repayment of any public financing and completion of the project. These may include, but are not limited to, assessment agreements, letters of credit, personal deficiency guarantees, guaranteed maximum cost contract, etc.
- F. Any developer requesting assistance must be able to demonstrate past successful general development capability as well as specific capability in the type and size of development proposed. Public financing will not be used when the developer’s credentials, in the sole judgment of the City, are inadequate due to past history relating to completion of projects, general reputation, and/or bankruptcy, or other problems or issues considered relevant to the City.

- G. The developer, or its contractual assigns, shall retain ownership of any portion of the project long enough to complete it, to stabilize its occupancy, to establish project management and/or needed mechanisms to ensure successful operation.

## **6.2 DESIRED QUALIFICATIONS:**

- A. Projects providing higher than a 3 to 1 ratio of private investment to City public investment will receive priority consideration. Private investment includes developer cash, government and bank loans, conduit bonds, tax credit equity, and land if already owned by the developer.
- B. Proposals that significantly increase the amount of property taxes paid after redevelopment will receive priority consideration.
- C. Proposals that encourage the following will receive priority consideration:
  - 1. Implementation of the City's values and vision for its lakefront, as detailed in the Lake Effect Design Framework
  - 2. Adding needed road, access and multi-modal improvements
  - 3. Contributes additional public parking
  - 4. Alleviates the need for additional public parking
  - 5. Provides significant improvement to surrounding land uses, the neighborhood, and/or the City
  - 6. Attracts or retains a significant employer within the City
  - 7. Provides significant rehabilitation of an existing apartment complex or significant rehabilitation and/or expansion of existing office or commercial facility
- D. Preference will be given to projects that meet good public policy criteria as determined by the City Council, including:
  - 1. High project quality (e.g. sound architectural design, quality construction and materials, sustainable building practices)
  - 2. Projects that meet financial feasibility criteria established by the City
  - 3. Projects that provide the highest and best desired use for the property

## **7. PUBLIC FINANCING PROJECT EVALUATION PROCESS**

- A. The following methods of analysis for all public financing proposals will be used:
  - 1. Consideration of project meeting minimum qualifications

2. Consideration of project meeting desired qualifications
3. Project meets “but-for” analysis and/or statutory qualifications
4. Project is deemed consistent with City’s Goals and Objectives

***Please note that the evaluation methodology is intended to provide a balanced review. Each area will be evaluated individually and collectively and in no case should one area outweigh another in terms of importance to determining the level of assistance.***

Adopted by the Wayzata HRA August 8, 2014

Adopted by the Wayzata City Council \_\_\_\_\_, 2014

**CITY OF WAYZATA  
HENNEPIN COUNTY  
STATE OF MINNESOTA**

Council member \_\_\_\_\_ introduced the following resolution and moved its adoption:

**RESOLUTION NO. 27-2014**

**RESOLUTION ADOPTING A POLICY AND CRITERIA  
FOR GRANTING BUSINESS SUBSIDIES**

BE IT RESOLVED By the City Council (the "Council") of the City of Wayzata, Minnesota (the "City") as follows:

Section 1. Recitals.

1.01. *Minnesota Statutes, Sections 116J.993 through 116J.995* (the "Statutes") require the adoption of a policy and criteria for the granting of business subsidies as defined in the Statutes; and,

1.02. The City has determined that it is necessary and appropriate to adopt a business subsidy policy and criteria pursuant to the Statutes; and,

1.03. The City has performed all actions required by law to be performed prior to the adoption and approval of the proposed business subsidies, including the holding of a public hearing upon published notice as required by law on September 16, 2014.

Section 2. City Approval; Further Proceedings

2.01. The business subsidy policy and criteria, contained in Exhibit A of this resolution are hereby approved, ratified, established, and adopted and shall be placed on file at City Hall.

2.02. The City Manager is authorized and directed to file a copy of the business subsidy criteria, along with annual reports, to the Minnesota Department of Employment and Economic Development, pursuant to the Statutes.

The motion for the adoption of the foregoing resolution was duly seconded by Council member \_\_\_\_\_, and upon a vote being taken thereon, the following voted in favor thereof:

and the following voted against the same:

Dated: September 16, 2014.

ATTEST:

\_\_\_\_\_  
Ken Willcox, Mayor

\_\_\_\_\_  
Heidi Nelson, City Manager



**ACTION ON THIS RESOLUTION:**

Motion for adoption:

Seconded by:

Voted in favor of:

Voted against:

Abstained:

Absent:

Resolution:

I hereby certify that the foregoing is a true and correct copy of Resolution No. 27-2014 adopted by the City Council of the City of Wayzata, Minnesota, at a duly authorized meeting held on September 16, 2014.

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Becky Malone, Deputy City Clerk

SEAL

## Exhibit A

# CITY OF WAYZATA



## PLANNING DEPARTMENT

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### MEMORANDUM

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**To:** City Council  
**From:** Bryan Gadow, City Planner  
**Date:** September 29, 2014  
**Re:** Public Hearing on IOCP/ODC Request for Tax Abatement for 110 Grand Ave ("Maggie Manor") – **for Public Hearing at October 21, 2014 City Council Meeting**

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#### Background

Interfaith Outreach and Community Partners (IOCP), Outreach Development Corporation, and Community Legacy Homes, LLC (collectively, the "Applicant") is requesting to utilize the City's Tax Abatement Program to receive back the local share of the property taxes for their property at 110 Grand Ave. The Property contains the six (6) unit affordable rental townhome project, called "Maggie Manor", which was approved by the City in 2012. The tax abatement request is for the City's portion of the property taxes, which is \$986.66 for a duration of fifteen (15) years or a total tax abatement of \$14,799.90.

Due to public notice requirements, the City Council will not formally review this request until **October 21, 2014**.

IOCP has previously applied for and received City Council approval for tax abatement for the Gleason Lake Townhome project in 2007 (a total tax abatement of \$14,400) and the Boulevard Apartments project in 2010 (a total of \$11,039.70 in tax abatement).

Minnesota State Statute 469.1813 provides local governments with the authority to release their local share of property tax back to a property for a period of up to fifteen (15) years, provided that the use of the funds will meet a public purpose. In 2004, the City Council adopted a policy on tax abatement that provides additional criteria which must be met in order to receive the tax abatement (Copy of Tax Abatement Policy attached).

In order to grant tax abatement, State Law requires that the City:

1. Adopt a Tax Abatement Policy (Completed in 2004)
2. Hold a Public Hearing for each tax abatement request (A Public Hearing for the IOCP request was noticed for October 7, 2014).
3. Find that the tax abatement request meets the 5 statutory conditions and additional city conditions.

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#### WAYZATA CITY HALL

600 EAST RICE STREET WAYZATA, MINNESOTA 55391-1799

(P) 952-404-5312 - (F) 952-404-5318

### Recommendation

The decision on whether or not to grant tax abatement is a City Council policy decision. The Applicant is requesting the funds to offset future maintenance costs of keeping the building well maintained over the life of the building. If the City Council is inclined to approve the tax abatement request, then it should adopt Draft Resolution 27-2014 approving the tax abatement request.

### Attachments:

- Copy of IOCP Tax Abatement Request Application
- Copy of City Tax Abatement Policy
- Copy of Resolution No. 24-2006 Approving IOCP Tax Abatement Request for 170 Gleason Lake Road
- Copy of Resolution No. 47-2010 Approving Tax Abatement Request for 645 Wayzata Blvd
- Draft Resolution No. 27-2014 Approving Tax Abatement for Maggie Manor Project

## APPLICATION FOR TAX ABATEMENT

Applicant Names: Community Legacy Homes, LLC, Outreach Development Corporation, and Interfaith Outreach & Community Partners

DBA: Maggie Manor

Address: ODC, 1605 County Road 101 N., Plymouth, MN 55447

Phone/Fax/Email: Kim Vohs, 952-975-9316 / vohsconsult@outlook.com

Attach the following information concerning the proposed housing project:

**1. General Description: location, estimated construction costs, number of units, partners, funding sources, project start date, etc.**

The address is 110 Grand Avenue and this is the former site of the IOCP office. The construction costs were over \$1.5 million to develop 6 units of affordable rental housing, four 3BR units, two 2BR units, and 1 handicapped-accessible unit.

The project was developed by Outreach Development Corporation, as the development arm of Interfaith Outreach & Community Partners (IOCP). The project was funded by the Minnesota Housing Finance Agency, Metropolitan Council, Hennepin County, St. Bart's Church, and a federal CDBG grant through the City of Wayzata. The units were brought on line in May, 2013.

**2. Describe how the proposed project meets the Statutory Conditions for Tax Abatement as described in Wayzata's Tax Abatement Policy**

Regarding "1. benefits to the City...", providing permanent affordable housing is a long standing goal of the City of Wayzata. This project accomplishes that goal.

Regarding "2. the public interest...", this project will increase the tax base by creating new housing on a site formerly occupied by an aging commercial building.

Regarding "3. total tax abatement...", the abatement is less than 5 percent of its current tax levy.

Regarding "4. State's business subsidy law requirements...", is not applicable here.

Regarding "5. a 10 day notice...", notice has been granted and public hearings held.



**3. Describe how the proposed project meets the Additional Conditions for Tax Abatement as described in Wayzata's Tax Abatement Policy**

Regarding 1., this project meets the HRA's Guidelines for Participation in a Housing Project in that it is scattered site, permanently affordable housing that blends in with the neighborhood and is consistent with the City's Comprehensive Plan/Zoning Ordinances.

Regarding 2., the abatement will be only on the City's portion of the taxes collected on the increased value of the improvements. Taxes collected on the value of the land will not be abated.

Regarding 3., as a multi-unit residential project, these units meet the criteria of this policy and do qualify for tax abatement/rebate of the incremental increase in the City's property taxes for up to 15 years.

Regarding 4., these rental units meet or exceed the requirements for a low-income housing credit under section 142(d) of the Internal Revenue Code, even though the project is not receiving tax credits, due to it being a smaller project. Covenants and restrictions on the funding for these units established by Hennepin County specifies rents affordable to those between 30% and 50% of the AMI. These affordability restrictions run for 30 years.

**4. Identify how many housing units are being requested for tax abatement. If abatement is being requested for housing units that do not meet the Wayzata Tax Abatement Policy criteria for tax abatement, describe how the overall project meets a specific housing need identified by the City Council.**

Six units are requested for tax abatement as described above.

**5. Describe the impact on the project if the requested tax abatement is not granted by the Wayzata City Council.**

The tax abatement funds contribute to the cash flow of the project, and help ODC to maintain the appearance of the property in accordance with the community norms of the City of Wayzata.

Thank you for considering our request.

# WAYZATA TAX ABATEMENT POLICY

## **INTRODUCTION**

The Wayzata City Council may grant tax abatements pursuant to *Minnesota Statutes 469.1812 to 469.1815*. The purpose of the Wayzata Tax Abatement Policy is to provide a uniform set of standards and procedures for the City and HRA to follow when considering tax abatement requests. The adoption of this policy is a prerequisite to determine the level and extent of any tax abatement of City property taxes.

Tax abatement allows cities to:

- rebate a property tax to the property owner,
- reallocate taxes to pay bondholders,
- reallocate taxes to pay for public infrastructure costs, or
- defer property taxes.

The existing tax base is not affected by the abatements and no other property's taxes would increase as a result of the abatement. Properties in an abatement area pay the same level of tax as any other property. The City does not need the property owner's consent to abate taxes on a new development. An abatement can be requested from any of the following "political subdivisions":

1. City or Town
2. County
3. School District

This tax abatement policy was developed to address the ongoing concern that if current housing trends (land and housing prices rising faster than incomes and new development continuing to focus on only high-end housing) continue, housing opportunities for people with more modest incomes will diminish and thus threaten a key element to Wayzata's "small town" character.

## **STATUTORY CONDITIONS**

According to Minnesota State Statutes, tax abatement for City taxes can be granted if all of the following five (5) conditions are met:

1. City Council finds that the benefits to the City are at least equal to the amount of the City taxes proposed to be abated;
2. City Council finds that the abatement will be in the public interest because it will accomplish at least one of the following purposes:
  - a. increase or preserve tax base
  - b. provide affordable housing opportunities
  - c. provide employment opportunities
  - d. provide or help acquire or construct public facilities
  - e. provide access to services for residents of the City

- f. provide public infrastructure;
3. City's total tax abatement is less than 5 percent of its current tax levy.
4. State's business subsidy law requirements, if applicable, are met.
5. Following a 10 day notice containing specific language in the notice regarding the abatement property and process, a public hearing is held.

### **ADDITIONAL CONDITIONS**

The City Council has set forth additional conditions the abatement must meet:

1. The City Council must find that the project meets the HRA's Guidelines for Participation in a Housing Project i.e. scattered site, permanently affordable housing that blends in with the neighborhood and is consistent with the City's Comprehensive Plan/Zoning Ordinances.
2. The abatement will be on the City's portion of the taxes collected on the increased value of the improvements; taxes collected on the value of the land will not be abated.
3. For a multi-unit residential project, units that meet the criteria of this policy will qualify for tax abatement/rebate of the incremental increase in the City's property taxes for up to 15 years. Tax abatement will also be considered for market rate units in the project on a case by case basis if the project is being built to address a specific housing need identified by the City Council.
4. A rental housing project must meet all of the requirements for a low-income housing credit under section 142(d) of the Internal Revenue Code, regardless of whether the project actually receives a housing credit.

### **RECAPTURE OF ABATEMENT**

The City Council reserves the right, in its sole discretion, to recapture abatement for any reason. For example, should the project fail to meet any of this policy's criteria in the future, the City Council could recapture the abatement.

## APPLICATION FOR TAX ABATEMENT

Applicant Name: \_\_\_\_\_

DBA: \_\_\_\_\_

Address: \_\_\_\_\_

Phone/Fax/Email: \_\_\_\_\_

Attach the following information concerning the proposed housing project:

1. General Description: location, estimated construction costs, number of units, partners, funding sources, project start date, etc.
2. Describe how the proposed project meets the Statutory Conditions for Tax Abatement as described in Wayzata's Tax Abatement Policy
3. Describe how the proposed project meets the Additional Conditions for Tax Abatement as described in Wayzata's Tax Abatement Policy
4. Identify how many housing units are being requested for tax abatement. If abatement is being requested for housing units that do not meet the Wayzata Tax Abatement Policy criteria for tax abatement, describe how the overall project meets a specific housing need identified by the City Council.
5. Describe the impact on the project if the requested tax abatement is not granted by the Wayzata City Council.

**RESOLUTION NO. 24-2006**

**RESOLUTION APPROVING \$14,400 TAX ABATEMENT FOR IOCP VILLAGE HOMES PROJECT LOCATED AT 170 GLEASON LAKE ROAD**

**WHEREAS**, MN Statutes 469.1812 to 469.1815 gives the City the authority to grant a Tax Abatement if certain conditions are met; and

**WHEREAS**, the Wayzata City Council has adopted a Tax Abatement Policy which identifies additional conditions which must be met; and

**WHEREAS**, the Interfaith Outreach and Community Partners ("IOCP") has requested a Tax Abatement for its Village Homes Project located at 170 Gleason Lake Road; and

**WHEREAS**, the Wayzata City Council held a public hearing on June 4<sup>th</sup>, 2006 to consider this request; and

**WHEREAS**, the City Council determined that the Village Homes Project meets the statutory and City conditions for a Tax Abatement; and

**WHEREAS**, the City's Financial Consultant, Public Financial Management, has calculated that the present value of the City's portion of the property taxes from the incremental tax base which is created by the Project for the next 15 years is \$14,400; and

**BE IT RESOLVED THAT** the City of Wayzata grants IOCP a \$14,400 Tax Abatement for its Village Homes Project to be paid once the Project is complete.

Adopted by the Wayzata City Council this 20<sup>th</sup> day of June, 2006.

  
\_\_\_\_\_  
Mayor Andrew Humphrey

ATTEST:

  
\_\_\_\_\_  
City Manager Allen Orsen



**ACTION ON THIS RESOLUTION:**

Motion for adoption: Willcox

Seconded by: Bangert

Voted in favor of: Bangert, Berns, Humphrey, Willcox

Voted against: None

Abstained:

Absent:

Resolution adopted.

I hereby certify that the forgoing is a true and correct copy of a resolution adopted by the Wayzata City Council at a duly authorized meeting held on June 20, 2006

  
Sandy Langley, City Clerk

SEAL

**RESOLUTION NO. 47-2010**

**RESOLUTION APPROVING \$11,039.70 TAX ABATEMENT FOR IOCP  
REHABILITATION PROJECT LOCATED AT 645 WAYZATA BOULEVARD**

**WHEREAS**, Minnesota Statutes Sec. 469.1813 gives the City the authority to grant a tax abatement under certain conditions, for up to a total of fifteen (15) years; and

**WHEREAS**, the Wayzata City Council has adopted a Tax Abatement Policy which identifies additional conditions which must be met; and

**WHEREAS**, the Interfaith Outreach and Community Partners ("IOCP") and Outreach Development Corporation ("ODC") (collectively, the "Applicant") have requested a Tax Abatement for its Boulevard Apartments Project (the "Boulevard Apartments Project") located at 645 Wayzata Boulevard (the "Property"); and

**WHEREAS**, the Wayzata City Council held a duly noticed public hearing on December 7<sup>th</sup>, 2010, in accordance with Minnesota Statutes Sec. 469.1813, subd. 5, to consider this request; and

**WHEREAS**, the City Council finds the Boulevard Apartments Project meets the requirements of the City's Tax Abatement Policy; and

**WHEREAS**, the City Council finds: (1) the Boulevard Apartments Project meets the requirements of Minnesota Statutes Sec. 469.1813, subd. 1; (2) that granting the Tax Abatement is in the public interest, will help renew a blighted property and assist in its on-going maintenance, and help provide access to housing services to residents in the municipality; and (3) the expected benefits to the City are at least equal the cost of the Tax Abatement for the Boulevard Apartments Project; and

**WHEREAS**, Hennepin County has calculated that the present value of the City's portion of the property taxes from the incremental tax base which is created by the Boulevard Apartments Project as \$735.98 annually, or a total of \$11,039.70 over the duration of the allowed 15 years abatement period.

**BE IT RESOLVED THAT** the City of Wayzata hereby grants IOCP a \$11,039.70 Tax Abatement for its Boulevard Apartments Project, such amount to be paid by the City to the Property owner, in annual installments of \$735.98 for a duration of fifteen (15) years, pursuant to Minnesota Statutes Sec. 469.1815.

Adopted by the Wayzata City Council this 7<sup>th</sup> day of December, 2010.

  
\_\_\_\_\_  
Mayor Ken Willcox

ATTEST:

  
\_\_\_\_\_  
City Manager Allan Orsen

ACTION ON THIS RESOLUTION:

Motion for adoption: Mullen

Seconded by: Bader

Voted in favor of: Amdal, Bader, Mullin, Tanner, Willcox

Voted against: None

Abstained: None

Absent: None

Resolution adopted.

I hereby certify that the foregoing is a true and correct copy of a resolution adopted by the City Council of the City of Wayzata, Minnesota, at a duly authorized meeting held on December 7, 2010.

  
\_\_\_\_\_  
Becky Malone, Deputy City Clerk

SEAL

#449852\_1

**DRAFT RESOLUTION NO. 27-2014**

**RESOLUTION APPROVING \$14,799.90 TAX ABATEMENT FOR “MAGGIE MANOR” PROJECT LOCATED AT 110 GRAND AVENUE SOUTH**

**WHEREAS**, Minnesota Statutes Sec. 469.1813 gives the City the authority to grant a tax abatement under certain conditions, for up to a total of fifteen (15) years; and

**WHEREAS**, the Wayzata City Council has adopted a Tax Abatement Policy which identifies additional conditions which must be met; and

**WHEREAS**, Community Legacy Homes, LLC, Outreach Development Corporation, and Interfaith Outreach and Community Partners (collectively, the “Applicant”) has requested a Tax Abatement for its Maggie Manor project (the “Maggie Manor Project”) located at 110 Grand Avenue South (the “Property”); and

**WHEREAS**, the Wayzata City Council held a duly noticed public hearing on September 2, 2014, in accordance with Minnesota Statutes Sec. 469.1813, subd. 5, to consider this request; and

**WHEREAS**, the City Council finds the Maggie Manor Project meets the requirements of the City’s Tax Abatement Policy; and

**WHEREAS**, the City Council finds: (1) Maggie Manor Project meets the requirements of Minnesota Statutes Sec. 469.1813, subd. 1; (2) that granting the Tax Abatement is in the public interest and will help maintain a affordable housing property within the community; and (3) the expected benefits to the City are at least equal the cost of the Tax Abatement for the Maggie Manor Project; and

**WHEREAS**, Hennepin County has calculated that the present value of the City’s portion of the property taxes from the incremental tax base which is created by the Boulevard Apartments Project for the next 15 years is \$14,799.90.

**BE IT RESOLVED THAT** the City of Wayzata hereby grants the Applicant a \$14,799.90 Tax Abatement for its Maggie Manor Project, such amount to be paid by the City to the Property owner, in annual installments of \$986.66 for a duration of fifteen (15) years, pursuant to Minnesota Statutes Sec. 469.1815.

Adopted by the Wayzata City Council this \_\_\_\_ day of \_\_\_\_\_, 2014.

\_\_\_\_\_  
Mayor Ken Willcox

ATTEST:

---

City Manager Heidi Nelson

ACTION ON THIS RESOLUTION:

Motion for adoption:

Seconded by:

Voted in favor of

Voted against:

Abstained:

Absent:

Resolution adopted.

I hereby certify that the foregoing is a true and correct copy of a resolution adopted by the City Council of the City of Wayzata, Minnesota, at a duly authorized meeting held on \_\_\_\_\_, 2014.

---

Becky Malone, Deputy City Clerk

SEAL

#449852\_1



# CITY OF WAYZATA



## PLANNING DEPARTMENT

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### MEMORANDUM

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**To:** City Council  
**From:** Heidi Nelson, City Manager and Bryan Gadow, City Planner  
**Date:** September 29, 2014  
**Re:** 1611 Hollybrook Road – Agar Land Request

---

On August 6<sup>th</sup>, the Council had a workshop session with Mr. Marc Agar, owner of the property at 1611 Hollybrook Road, to discuss his request that the City convey a vacant parcel of land owned by the City, which is adjacent to his property. Mr. Agar is requesting conveyance of the parcel to allow him to construct an expansion of his garage. At the workshop, the Council did not indicate an objection to conveying the land, provided that there was no public purpose.

The adjacent parcel is a small triangle of land that was formerly State of Minnesota land related to the construction of I-394, and is 4,855 SF. Attached are a number of property surveys and maps which depict the vacant parcel and 1611 Hollybrook Road. There are no utilities within the vacant parcel, with the exception of an Xcel line that is near the boundaries of the parcel.

Pillar Homes has provided a copy of the concept plans for the garage addition to the house. In addition, Mr. Agar's attorney has provided a letter detailing his request.

Staff and the City Attorney have drafted a resolution for the conveyance for the Council's consideration. The conditions on the conveyance in the draft resolution are: 1) that the owner will have to combine the parcel with the 1611 Hollybrook property pursuant to the City's Subdivision Ordinance, and 2) pay the City \$500.00 plus expenses. The City Attorney will be available at the meeting to address any questions.

#### Attachments:

- Letter from Mr. Agar's Attorney detailing the request
- Surveys of the parcel and 1611 Hollybrook
- Concept Drawing of Garage Addition
- Minutes from August 6, 2014 Workshop
- Draft Resolution XX - 2014

# Felhaber ■■ Larson

Richard C. Salmen  
612-373-8413  
Fax: 612-338-4608  
E-mail: rsalmen@felhaber.com  
Reply to Minneapolis Office

June 25, 2014

**VIA E-MAIL AND U.S. MAIL**  
**hnelson@wayzata.org**

Ms. Heidi Nelson  
City of Wayzata  
City Hall  
600 Rice Street  
Wayzata, MN 55391-1799

**RE: Agar Acquisition from City of Wayzata of Vacant Land Parcel Adjacent to 1611  
Hollybrook Road, Wayzata, MN  
Our File No. 20371.000**

Dear Ms. Nelson:

I represent Marc Agar in connection with his efforts to obtain fee title to the vacant parcel of land owned by the City of Wayzata which is adjacent to Mr. Agar's property at 1611 Hollybrook Road, Wayzata, Minnesota.

Mr. Agar is seeking to have the City vacate or otherwise convey this vacant parcel of land to him so that he can construct an expansion of his garage on the vacant parcel (as has been depicted on the plans and specifications recently submitted by Mr. Agar's builder, Pillar Homes, to the City). Mr. Agar's garage expansion is necessitated, in part, by the City's refusal to allow construction of a sound wall along Hollybrook Road.

A review of the City's files will show that the land at issue was initially taken from Mr. Agar's predecessors-in-interest, Bert and Phyllis Supplee, by the State of Minnesota pursuant to a condemnation proceeding relating to the construction/expansion of Highway 394 in the late 1970s. After the State of Minnesota determined that it did not need this property for the Highway 394 project, the property was conveyed to the City pursuant to the provisions of Minnesota Statutes Section 161.16 Subd. 4. The City paid nothing to obtain title to this property.

I am enclosing with this letter a copy of the Certificate of Survey prepared by Sathre-Berquist, Inc. for Mr. Agar, on which survey I have highlighted the property which Mr. Agar wishes to have vacated by or acquired from the City. You will note that this parcel encompasses a significant portion of Mr. Agar's driveway (which is the only access to and from Mr. Agar's home) as well as a significant number of trees and other landscaping which Mr. Agar (or the

639241.v1

Minneapolis  
220 South Sixth Street Suite 2200  
Minneapolis MN 55402-4504  
612 339 6321 || fax 612 338 0535



felhaber.com



St. Paul  
444 Cedar Street Suite 2100  
St. Paul MN 55101-2136  
651 222 8905  
CG-10072014-10072014-222 8905  
Page 172 of 271



Supplees) installed and have continuously maintained ever since the property was taken by the State of Minnesota some thirty years or so ago. In short, the property which Mr. Agar seeks to acquire has never been used by or maintained by the City.

The City's files will also indicate that Mr. Agar sought to have the City convey this same vacant parcel of land to him some nine years ago. An agreement had been made between the then City Manager, Al Orsen, and Mr. Agar to do just that (subject to City Council approval) on the following terms:

1. The conveyance would be subject to all then existing utility easements in favor of Quest, Xcel and Centerpoint remaining in place.
2. The City would be provided an access easement over a portion of Mr. Agar's property allowing the City to be connected to the County Highway 101 south exit ramp.
3. Mr. Agar would pay the City the sum of \$500.00 and reimburse the City for its legal fees incurred in drafting any necessary conveyance/easement documentation.
4. The parcel conveyed by the City to Mr. Agar would not be considered additional lot square footage for Mr. Agar's 1611 Hollybrook Road property in connection with any redevelopment of the property by Mr. Agar or any successor owner of the property.

The City Council voted against the agreement which had been struck between the City Manager and Mr. Agar (and which had been endorsed by the then Mayor of the City, Andrew Humphrey) purportedly because of skepticism by certain Council members over the property redevelopment issue.

Now, nine years after Mr. Agar's previous request for conveyance/vacation of the vacant parcel, it is abundantly clear that the City Council's fear of redevelopment of this property was unfounded. All of the utilities within the vacant parcel have been relocated and are no long located within the vacant parcel. Likewise, the access easement previously requested by the City is, to Mr. Agar's understanding, no longer needed.

In summary, Mr. Agar is requesting the City to convey to, or vacate for the benefit of, Mr. Agar the vacant parcel of land owned by the City which is adjacent to Mr. Agar's property at 1611 Hollybrook Road, Wayzata, Minnesota, so that Mr. Agar can construct a garage expansion on such property in accordance with the plans and specifications recently submitted by Mr. Agar's builder, Pillar Homes, to the City. Mr. Agar will pay the City the sum of \$500.00 for such conveyance/vacation and will reimburse the City for its legal fees incurred in drafting any necessary conveyance/vacation documentation. Mr. Agar understands that approval of any

Ms. Heidi Nelson  
City of Wayzata  
June 25, 2014  
Page 3

agreement will need to be obtained from the City Council and would request that this matter be given the City's immediate attention so that construction of the garage expansion can be completed before the end of this coming September.

Either Mr. Agar or I would be happy to address any questions which you might have concerning this request. Also, Mr. Agar would like to obtain copies of any documents/correspondence in the City's files relating to the City's acquisition from the State of Minnesota or conveyance by the City to Mr. Agar's predecessor owners, the Supplees, of the subject property. Thank you very much for your consideration of and anticipated prompt response to this request.

Very truly yours,

A handwritten signature in black ink, appearing to read "Rich Salmen", written in a cursive style.

Richard C. Salmen

/cld  
Enclosure

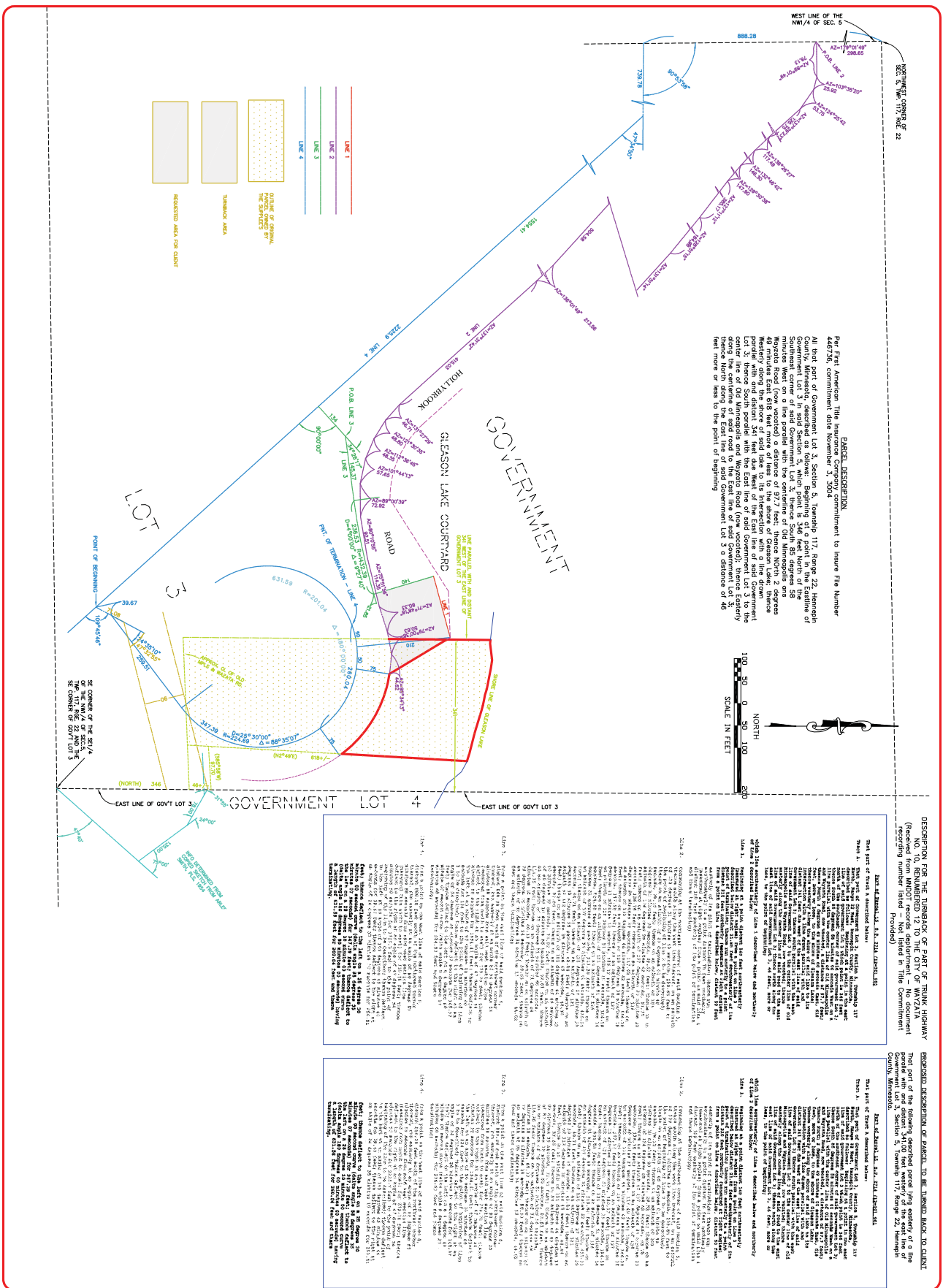
cc: Marc Agar (via e-mail: [magar@cacommunications.com](mailto:magar@cacommunications.com))



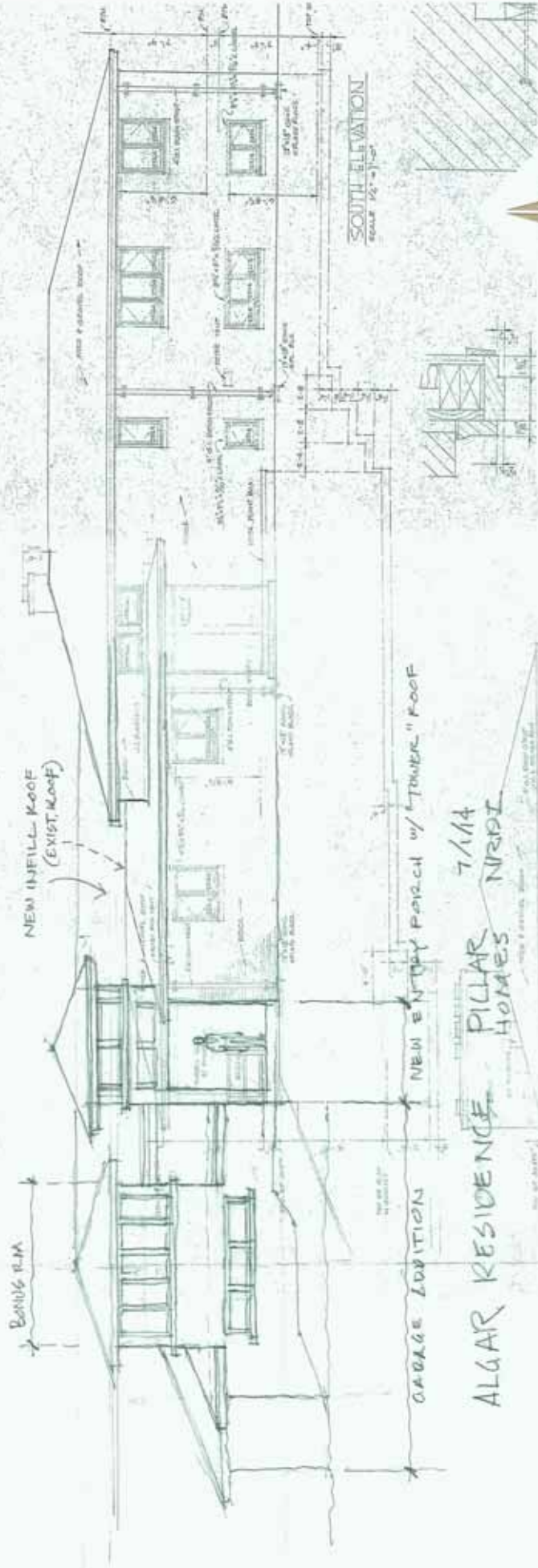




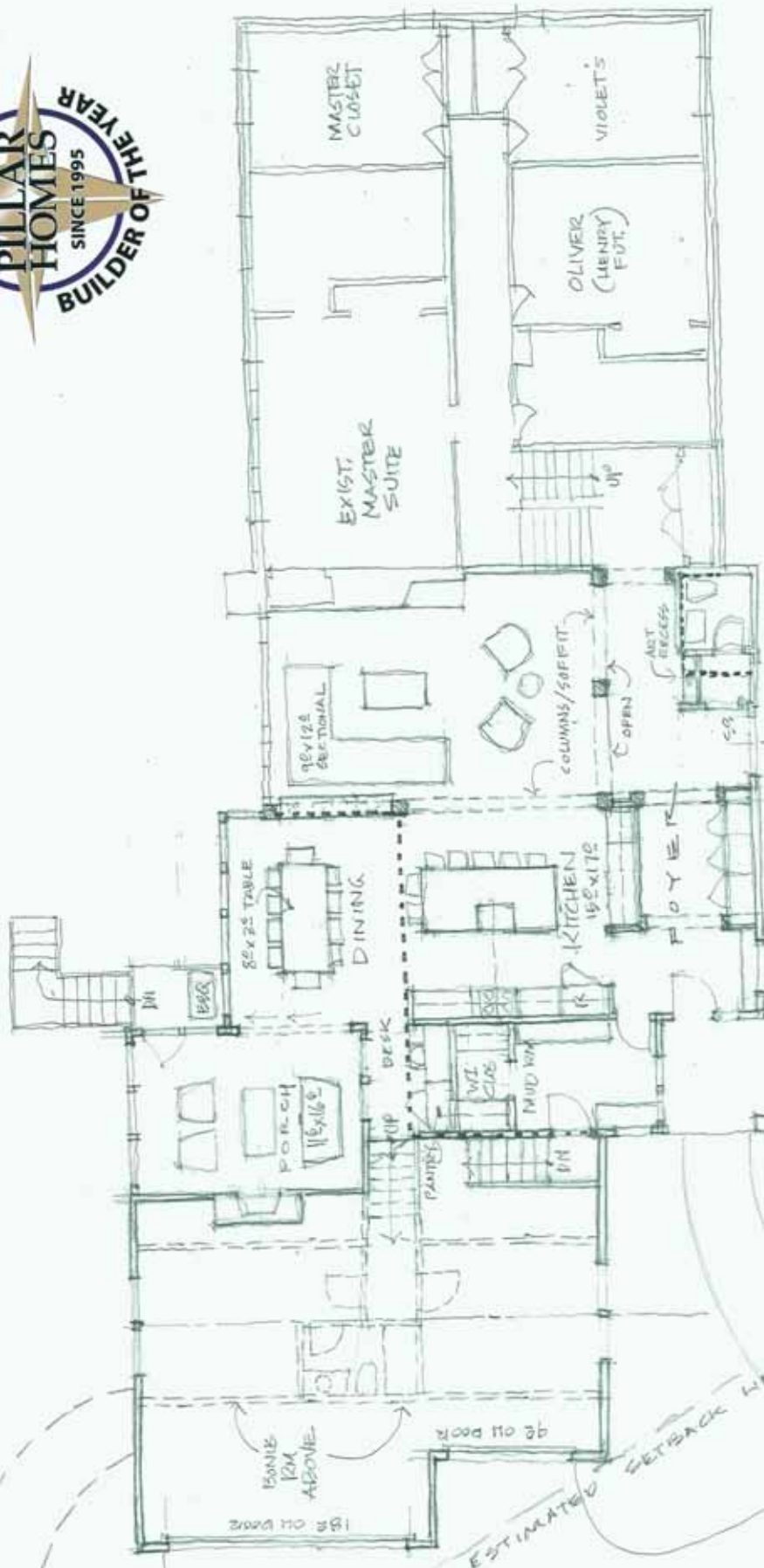








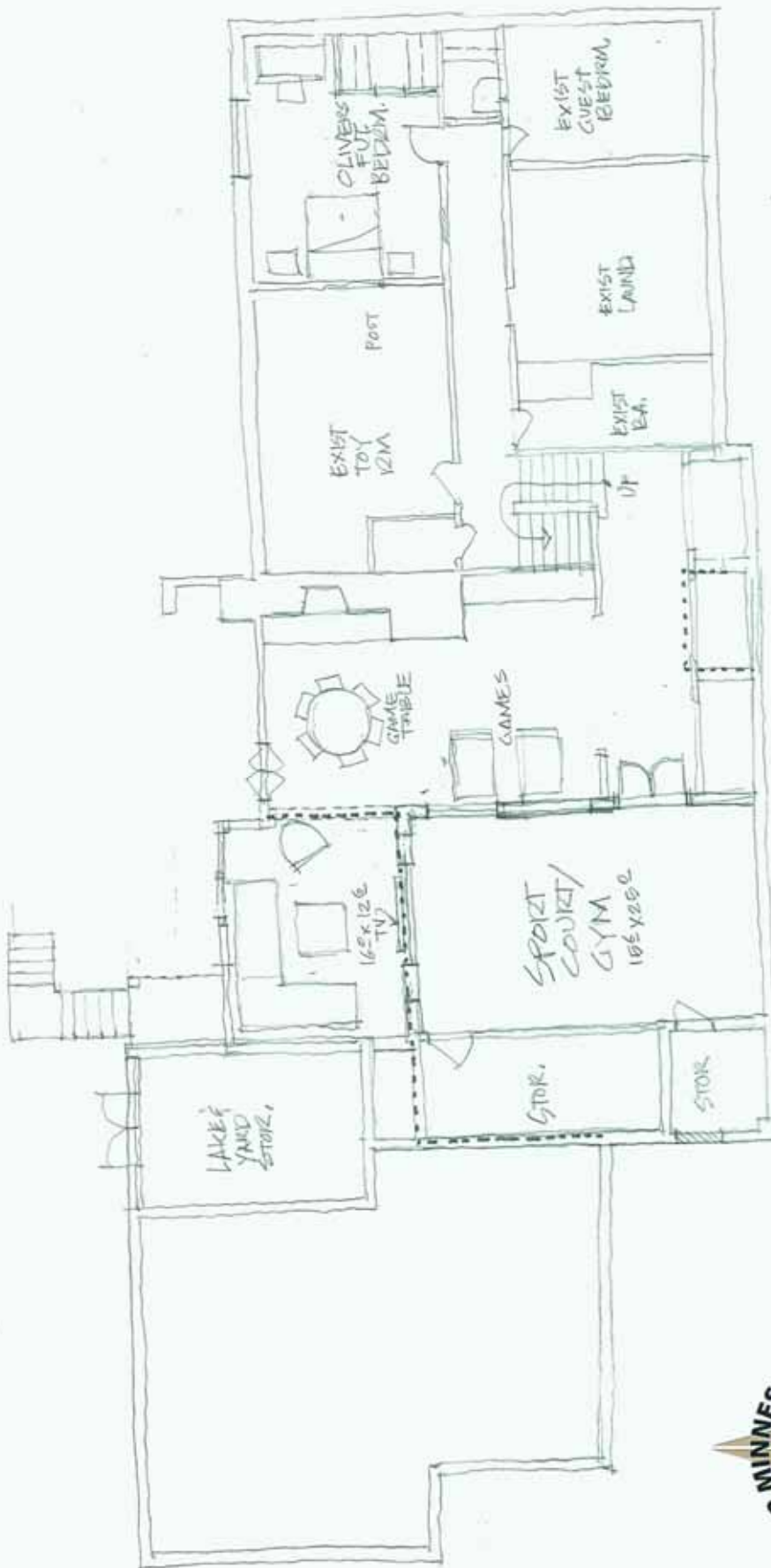




1ST FLOOR PLAN  
1/8" = 1'-0"

ALGAR RESIDENCE PILLAR HOMES  
7/1/14 NRDI





WO FLOOR PLAN  
1/8"=1'-0"

7/1/14  
NRDT

PILLAR  
HOMES

ALGAR RESIDENCE



1 access should connect through or have a defined separation, and if the access should be public or  
2 private. The applicant asked for a workshop with the Council prior to being formally before the  
3 City Council. The purpose of today's workshop is to receive feedback from the Council on  
4 whether the access should be open, connecting Byrondale Ave. and Cross St., or if it should be  
5 closed with a defined break. Mr. Gadow stated the applicant also asked for feedback on a five (5)  
6 lot subdivision concept and a seven (7) lot subdivision concept.

7 The applicant answered questions from the Council. Councilmember Mullin indicated a  
8 preference for a twenty to twenty four ft wide road with curb and no through connection and a  
9 mechanism to close the road. Councilmember Tanner indicated a preference for a twenty four ft  
10 road with an open connection, and a concern with how guest parking would be addressed.  
11 Councilmember Amdal indicated a preference for a roadway that was separated and did not have  
12 a through connection to prevent cut-thru traffic. He also indicated that each property should be  
13 designed to meet the code requirements for lot size. Mayor Willcox indicated that he is generally  
14 opposed to closing off streets and that the Police Department wants two points of entry and exit  
15 from neighborhoods within the community. He indicated he would like to see the road open first  
16 and then determine if cut-thru traffic was an issue that needed to be addressed.

17 Mr. Gadow indicated that staff would review the Council's feedback with the applicant  
18 and determine how to proceed in bringing the application forward to the City Council for review  
19 at a future meeting.

20 **6:00 PM DISCUSS 1611 HOLLYBROOK ROAD – MARC AGAR**

21 Mayor Willcox called the workshop meeting to order at 6:00 p.m. in the Community Room at  
22 Wayzata City Hall. Council members present: Amdal, Mullin and Tanner. Council member  
23 absent and excused: Anderson. Also present: City Manager Nelson, Director of Public Service  
24 Dudinsky, City Planner Gadow, City Engineer Kelly, applicant Marc Agar, and Mr. Agar's  
25 attorney Richard Salmen.

26 Mr. Gadow informed the council that a requested has been received from Marc Agar,  
27 owner of the property at 1611 Hollybrook Road, asking the City to convey a vacant parcel of  
28 City-owned land to Mr. Agar to allow him to construct an expansion of his garage. Mr. Gadow  
29 informed the council that this request is regarding a small triangle of land that was formerly State  
30 of Minnesota land related to the construction of Highway 12. Property surveys and maps which  
31 depict the vacant parcel and 1611 Hollybrook Road were reviewed. Mr. Gadow explained there  
32 are no utilities within the vacant parcel, with the exception of an Xcel Energy line that is near the  
33 boundaries of the parcel. The Council reviewed concept plans provided by Pillar Homes, as well  
34 as a letter from Mar. Agar's attorney detailing his request.

35 The Council directed staff to review land values for this parcel and indicated that they  
36 were generally comfortable conveying the parcel to Mr. Agar, provided there was no public  
37 purpose for the parcel. The Council directed staff to formally bring the proposal back to the  
38 Council at a future meeting.

39  
40 The workshop meeting was adjourned at 6:25 p.m.

41  
42 Respectfully submitted,

43  
44  
45  
46 Becky Malone  
47 Deputy City Clerk  
48

**DRAFT - RESOLUTION NO. \_\_\_\_\_ - 2014**

**RESOLUTION APPROVING CONVEYANCE OF CITY PROPERTY**

WHEREAS, Marc Agar, a resident of 1611 Hollybrook Road, Wayzata , Minnesota, (the “Existing Property”) has requested that the City of Wayzata convey certain City-owned property, the legal description of which is set forth in the attached Exhibit A, (the “Parcel”) in order to combine the Parcel with Mr. Agar’s Existing Property and construct a new garage upon the combined property; and

WHEREAS, the City of Wayzata has determined that the Parcel represents a small piece of land that was conveyed to the City at no cost by the Minnesota Department of Transportation upon the completion of the Interstate 394/County Highway 101 construction project, and is not used, and does not have the potential to be used, by the City for any public purpose.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Wayzata, Minnesota, that the sale and conveyance of the City’s rights in and to the Parcel to Marc Agar is approved, subject to all existing easements that burden the Parcel; and

BE IT FURETHER RESOVLED that said sale and conveyance shall be made upon (i) the City’s approval of the combination of the Parcel with the Existing Property and the platting thereof pursuant to the City’s Subdivision Ordinance; and (ii) payment by Mr. Agar to the City of five hundred dollars (\$500.00) and all legal and other expenses related to said sale and conveyance, including discussions, correspondence, survey, City approvals and legal documents; and

BE IT FURTHER RESOLVED that the Mayor and City Manager are hereby directed to sign the appropriate legal documents to effectuate said conveyance that the City Attorney determines are necessary and appropriate to carry out the transaction as contemplated and approved hereby.

Adopted by the Wayzata City Council this \_\_\_\_\_ day of \_\_\_\_\_ 2014.

\_\_\_\_\_  
Ken Willcox, Mayor

ATTEST:

\_\_\_\_\_  
Heidi Nelson, City Manager

ACTION ON THIS RESOLUTION:

Motion for adoption:

Seconded by:

Voted in favor of:

Voted against:

Abstained:

Absent:

Resolution Adopted

I hereby certify that the foregoing is a true and correct copy of a resolution adopted by the City Council of the City of Wayzata, Minnesota, at a duly authorized meeting held on \_\_\_\_\_, 2014.

\_\_\_\_\_  
Becky Malone, Deputy City Clerk

EXHIBIT A

*[insert legal description of Property]*

DRAFT



# CITY OF WAYZATA



## PLANNING DEPARTMENT

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### MEMORANDUM

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**To:** City Council Members  
**From:** Bryan Gadow, City Planner  
**Date:** September 29, 2014  
**Re:** Grant Application and National Register of Historic Places Nomination for Section Foreman's House

---

In March of 2010, the City Council approved a resolution (Resolution 08-2010, attached) of support for a grant application with the Minnesota Arts and Cultural Heritage Fund Legacy Grant for a historical context study of the Wayzata Section Foreman's House (the "House"), collaboratively with the Wayzata Historical Society (WHS). The purpose of the historical context study was to begin the process of preparing background information for a potential state-level National Register of Historic Places nomination for the House with the Minnesota Historic Preservation Office (SHPO), and to better understand the feasibility of restoring the House.

Staff and WHS completed the application in 2010, and were successful in receiving \$7,000 in grant funds to complete a Historic Context Study on the House by the Hess, Roise and Company (copy of the Study attached). Staff and WHS requested a preliminary evaluation of the eligibility of the House for placement of the National Register, and the Minnesota Historical Society replied with some additional items that needed further research on the history of the structure and the past alterations to the House.

The next step in the process is to conduct a Historic Assessment Report/Reuse Study to physically evaluate the building to determine its current condition and what options may be available for its future reuse. The reuse of the House was included as a key element of the City's Lake Effect planning discussions over the past two years. To this end, WHS applied for and received a \$10,000 grant from the Burlington Northern Santa Fe (BNSF) Railway Foundation to offset the cost of the Historic Structures Report/Reuse Study (copy of grant award letter attached). WHS has received a proposal from Charles Libby of Miller Dunwiddie to complete the Historic Structures Report/Reuse Study for a not to exceed number of \$10,000 (copy of proposal attached). Mr. Liddy is familiar with the structure and has provided guidance to WHS on the historic structures report process.

WHS and Staff are requesting City Council approval to utilize the received grant uses to complete a Historic Structures Report/Reuse Study with Miller Dunwiddie.

Furthermore, the City Council should also continue discussion on a public policy level on whether to direct Staff to continue with the state-level National Register of Historic Places nomination after the completion of the Historic Structures Report/Reuse Study. As a point of comparison, the City's Historic Depot was placed on the state-level National Register of Historic Places in 1981.

A summary of the National Register of Historic Places is below:

### Intro

- National Park Service administers the National Register of Historic Places.
- National Register is the official federal list of districts, sites, building, structures, and objects significant in American history, architecture, archeology, engineering, and culture.<sup>1</sup>
- Properties on list have significance to a community, state, or the nation.
- Examples range from National (Gettysburg), State (Fort Snelling), Local (Wayzata Depot)

### Benefits

- Eligibility for certain tax provisions and federal and state grant opportunities, when funds are available.

### Restrictions

- No federal restrictions if no federal monies attached to property (i.e. private property owners could make any changes to the property).
- However, if property is also placed on the state register, then Minnesota State Historic Preservation Office (SHPO) may have other restrictions on what changes can be done to the property.
- For example, the rules of the Minnesota Environmental Quality Board (EQB) require preparation of an Environmental Assessment Worksheet (EAW) by the responsible unit of government (in this case the City of Wayzata) for any proposed demolition or the moving of a property that is listed on the National Register.<sup>2,3</sup>

### Other Considerations<sup>4</sup>

- Properties are removed from the National Register only if they lose the qualities they had at the time of listing.
- Properties are automatically removed from the Register if they have been moved.
- Properties on the National Register are not exempt from state and local building codes, but may receive special consideration under State Building Code at discretion of the local building official.
- If a National Register building is open to the public, the Americans with Disabilities Act (ADA) calls for the building to meet basic levels of accessibility for people with disabilities. While the law requires the removal of certain barriers, it does have special provisions for historic structures where changes would destroy a building's significant historic features.

### Attachments:

- BNSF Grant Award Letter
- Miller Dunwidde Historic Proposal for Historic Assessment Services
- Resolution 08-2010
- Hess, Roise and Company Historic Context Study
- Lake Effect Framework – Section Foreman's House Related Pages

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<sup>1</sup> National Park Service. 2010. *Frequently Asked Questions*. Accessed at: <http://www.nps.gov/nr/faq.htm#restrictions>.

<sup>2</sup> Minnesota State Historic Preservation Office. 2010. The National Register of Historic Places Program.  
Accessed at: <http://www.mnhs.org/shpo/nrhp/program.htm>.

<sup>3</sup> Minnesota Office of the Revisor of Statutes. 2010. *4410.4300 Mandatory EAW Categories*.

Accessed at: <https://www.revisor.mn.gov/data/revisor/rule/current/4410/4410.4300.pdf>

<sup>4</sup> Minnesota State Historic Preservation Office. 2010. *Frequently Asked Question*.

Accessed at: <http://www.mnhs.org/shpo/nrhp/faq.htm>



Zak A. Andersen  
President

BNSF Railway Foundation  
P.O. Box 961057  
Fort Worth, TX 76161-0057  
2850 Lou Menk Dr.  
Fort Worth, TX 76131-2830  
817-867-6407  
817-352-7924 fax  
Zak.andersen@bnsf.com

May 27, 2014

Ms Bernadette Klein  
Project Manager  
Wayzata Historical Society  
402 East Lake Street  
Wayzata, MN 55391

Dear Ms Klein:

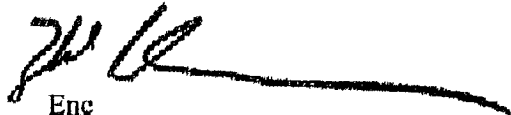
It is a pleasure to enclose BNSF Railway Foundation's **\$10,000.00** contribution towards the Wayzata Great Northern Section Foreman House Historic Structures Report/Reuse Study. By endorsing and depositing this check, you warrant that there has been no change in your I.R.S. tax classification as an organization described in Internal Revenue Service Code section 501(c)(3). If you would like to publicize this grant, please feel free to do so.

The BNSF Foundation does not accept perquisites in exchange for its charitable giving. Therefore, kindly donate any tickets or other benefits to which the Foundation may be entitled to an eligible 501(c)3 public charity. No tickets may be given to BNSF employees or their families.

It is important for our Foundation to be informed about the success of our investments in our communities. Therefore, we ask that you send a Final Report one year from today's date or at the project end date, whichever comes first, containing the amount of the grant, a brief description of the project or program, and how the Foundation's funds have impacted your constituents and the community at large. You may include photos with your report. Final Reports may be sent via electronic mail to [deanna.dugas@bnsf.com](mailto:deanna.dugas@bnsf.com), or through postal service to the Foundation's address above. If you would like to reapply for future consideration, we ask that organizations refrain from applying more than once per year.

If you have any questions, you may contact Deanna Dugas, Manager BNSF Railway Foundation, at [deanna.dugas@bnsf.com](mailto:deanna.dugas@bnsf.com) or (817) 867-6458. We extend our best wishes for your continued success and look forward to hearing about your accomplishments during the year. It is a pleasure to be among your current supporters.

Sincerely,



Enc

U

August 22, 2014

Ms. Heidi Nelson  
City Manager  
City of Wayzata  
600 Rice Street East  
Wayzata, MN 55391

**RE: Wayzata Great Northern Railroad Section House Historic Assessment Services  
MDA #P2010-011**

Dear Ms. Nelson:

It has been a pleasure over the last few years talking with you and others at the City of Wayzata (City) and the Wayzata Historical Society (WHS) about the potential for reuse of the Great Northern Railroad Section House that is owned by the City on the waterfront in downtown Wayzata. It is exciting that the BNSF Foundation has awarded a \$10,000 grant to WHS to help fund a study of the building's condition and adaptability for reuse.

We first sent a proposal to WHS in February 2010 that included three tasks to determine the reuse potential of the building. The tasks were:

- TASK 1: Preliminary Research to determine if the building is eligible for the National Register of Historic Places
- TASK 2: Preparing a National Register Nomination form
- TASK 3: Preparing a Historic Structures Report (HSR) or similar

Task 1 was completed in 2010 by historical consultants, Hess Roise (HR), through Legacy Grant funding from the MHS. The determination of eligibility was contingent upon further investigation of the building to determine what parts are original and historic and what is of more recent construction, not historic, and should be removed. Because an HSR or similar report would be able to provide that type of information, it made sense to adjust the order of the tasks and do the report as Task 2. That led to the BNSF Grant application, which sought \$45,000 to help fund the HSR. \$10,000 was awarded.

The \$10,000 grant won't be able to fund a full HSR, but there has been a lot of additional work and study completed by the City since the grant was applied for, particularly with the Lake Effect Study. Other tasks originally identified as part of the HSR can be delayed to future phases. This letter is our proposal to fine tune the scope and services to match the grant amount and still yield the information needed to assist the City and WHS in determining how to best reuse the Section House.

#### **TASK 2: HISTORIC ASSESSMENT REPORT / REUSE STUDY**

MDA will prepare a study of a scope consistent with the size and type of the building, its potential reuse, and within the amount covered by the BNSF grant. The services will consist of the following:

- A. MDA will measure the building's interior and exterior and produce a set of computer-based drawings consisting of plans and elevations depicting the existing conditions.
- B. MDA will evaluate the physical condition of the building and document the condition of its features, materials, and spaces. We would like to be able to perform some destructive evaluation – for example opening up walls, ceilings, or other parts of the structure – to try to determine the history of the house's construction. We assume City employees will supply the necessary skills to assist us in that task.
- C. MDA will look for signs of structural issues, but we will not engage a structural engineer at this time to perform an in-depth inspection. We will note any conditions that cause concern and warrant further study later. However, if we see something that we feel has the potential to affect the structural stability of the building and/or threaten the safety of people as they access the building, we will call it to the immediate attention of the City for possible engagement of a structural engineer at that time.



- D. MDA will compare the historic information gathered, digital photographs taken, Lake Effect findings, and existing conditions encountered with previous historical information gathered by HR.
- E. MDA will meet with WHS and City representatives to discuss our findings and, based on those findings, brainstorm ideas as to what the Section House could be used for.
- F. Based on the site assessment and brainstorming meeting, MDA will prepare concept drawings that illustrate how the Section House could be used for the determined reuse(s). The drawings will explore what portions of the building might be removed, how the building can be made accessible, how an accessible restroom can be accommodated, how many people might be able to be accommodated for various uses, whether it should be moved, etc. The design concepts will be presented in plans, elevations, and/or 3D renderings.
- G. The MDA team will prepare a draft report of our findings and will submit it to the City and WHS for review and comment.
- H. Based on the comments received, we will revise the draft and produce the final report. We will provide five paper copies of the report as well as an electronic copy.
- I. During the course of preparing the report we will attend the following meetings or site visits:
  - 1. Site visit with City staff to do on-site verification, documentation, and destructive investigation. This may be one or two days.
  - 2. A meeting with City and WHS representatives to review findings and discuss reuse alternatives.
  - 3. A meeting with City and WHS representatives to present the draft report.
  - 4. Presentation of the report a public meeting.

## **TASK 2: FEES**

We will provide the above outlined services for a Fixed Fee of \$10,000.

## **TASK 2: ADDITIONAL SERVICES**

We will provide Additional Services on a Time and Materials Basis or another fee basis mutually agreed upon at the time the need for Additional Services is identified. Some potential Additional Services could include:

- A. Civil, structural, mechanical, electrical, or other engineering services.
- B. Landscape Architecture services.
- C. More than two meetings with City staff (besides on-site documentation).
- D. More than one presentation of the report at a public meeting.
- E. Preparation of the final Grant report to BNSF. (It is assumed this will be done by WHS.)
- F. Hiring of a contractor to provide destructive access to portions of the building if City staff is not available to do so.

## **TASK 3: NATIONAL REGISTER NOMINATION**

The report will help to determine if nominating the building to the National Register is desirable. A separate fee for doing so can be requested at that time.

## **SCHEDULE**

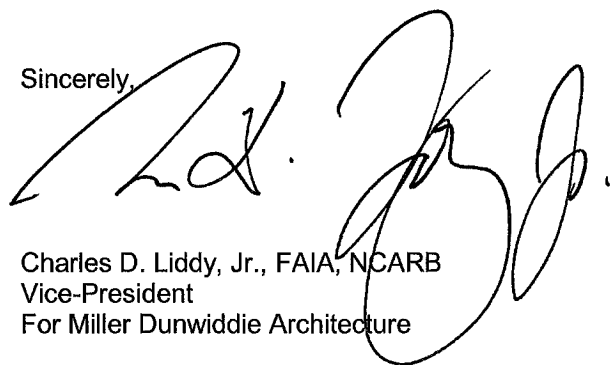
Task 2 could take approximately two months, depending on the timing of meetings, etc. This fall would be a good time to do the on-site documentation. Because of the heavy vegetation around the building, after the leaves are off the trees but before the snow starts falling, we would be able to better access the exterior and photographically document it.

I hope that this proposal is acceptable to you. As we discussed on the phone, I have tentatively scheduled a meeting at the City Council workshop on September 16<sup>th</sup> to present this proposal and answer any questions. In the meantime, if you have any questions, please contact me.

For your information in evaluating our credentials, please visit our website at [www.millerdunwiddie.com](http://www.millerdunwiddie.com). If you need paper copies of a brochure highlighting Miller Dunwiddie's experience in preservation projects, please let me know.



Sincerely,



Charles D. Liddy, Jr., FAIA, NCARB  
Vice-President  
For Miller Dunwiddie Architecture

Accepted for the City of Wayzata

By:

Date

Accepted for the Wayzata Historical Society

By:

Date:

Copy: Mark Miller, MDA

P:\2013\P2010-011 Wayzata Railroad Foreman House\4 Submitted Documents\Proposal 3.doc

**CITY OF WAYZATA**

**RESOLUTION NO. 08-2010**

**A RESOLUTION OF SUPPORT FOR A GRANT APPLICATION OF A HISTORICAL  
CONTEXT STUDY OF THE WAYZATA SECTION FOREMAN'S HOUSE.**

**WHEREAS**, the Section Foreman's House (also known as the Roadmaster's Cottage) located at 738 Lake Street was built in 1914 by the Great Northern Railroad, and was purchased by the City in 1988; and

**WHEREAS**, the Section Foreman's House is believed to be one of the last of its kind in Minnesota; and

**WHEREAS**, the Section Foreman's House is historically significant to the City of Wayzata, because of the importance of the railroad in development of the community and the nation; and

**WHEREAS**, the Wayzata Heritage Preservation Board and the Wayzata Historical Society have identified the Minnesota Arts and Cultural Heritage Fund Legacy Grant as a potential funding source for a historical context study of the Section Foreman's House; and

**WHEREAS**, both the City of Wayzata and private parties have at various times initiated discussions regarding the restoration and utilization of the Section Foreman's House as a destination for residents and visitors; and

**WHEREAS**, the Wayzata City Council has expressed interest in further understanding the historical context of the Section Foreman's House and the feasibility of restoring the structure.

**NOW, THEREFORE, BE IT RESOLVED**, that the Wayzata City Council supports the Wayzata Historical Society in preparing and submitting an application for a Minnesota Arts and Cultural Heritage Fund Legacy Grant.

**BE IT FURTHER RESOLVED**, that if the Wayzata Historical Society is successful in receiving grant funding for a Historic Structures Report on the Section Foreman's House, they will present the report findings to the Heritage Preservation Board and the City Council.

**BE IT FINALLY RESOLVED**, that after the completion of the Historic Structures Report, the Heritage Preservation Board, the Planning Commission, and the City Council will submit an application for the Section Foreman's House for inclusion in the National Register of Historic Places or other state or local historic designations, in accordance with the historic preservation process outlined in Section 801.11 of the Wayzata Zoning Ordinance.

Adopted by the Wayzata City Council this 2nd day of March, 2010.

  
\_\_\_\_\_  
Mayor Kenneth Willcox

ATTEST:

  
\_\_\_\_\_  
City Manager Allan Orsen

ACTION ON THIS RESOLUTION:

Motion for adoption: Amdal

Seconded by: Mullin

Voted in favor of Amdal, Bader, Mullin, Tanner, Willcox

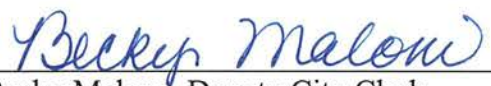
Voted against: None

Abstained: None

Absent: None

Resolution Adopted.

I hereby certify that the foregoing is a true and correct copy of a resolution adopted by the City Council of the City of Wayzata, Minnesota, at a duly authorized meeting held on March 2nd, 2010.

  
\_\_\_\_\_  
Becky Malone, Deputy City Clerk

SEAL



**GREAT NORTHERN SECTION HOUSE  
738 EAST LAKE STREET, WAYZATA:  
A NATIONAL REGISTER ASSESSMENT  
(MHS GRANT #3989L-11-HE)**

PREPARED FOR  
**WAYZATA HISTORICAL SOCIETY**  
402 EAST LAKE STREET  
WAYZATA, MINNESOTA 55391

PREPARED BY  
**CHARLENE ROISE**  
**HESS, ROISE AND COMPANY**  
THE FOSTER HOUSE  
100 NORTH FIRST STREET  
MINNEAPOLIS, MINNESOTA 55401

**JUNE 2011**

## INTRODUCTION

The house at 738 East Lake Street is located in downtown Wayzata, on a narrow strip of land between Lake Minnetonka and a single railroad track. It is hidden from view from Lake Street, one of Wayzata's main commercial corridors, by buildings along that street and by trees and other vegetation along the tracks. The property is accessed by a lane at the southeast corner of a public parking lot between the street and the lake. The lane goes south across the tracks, then turns southeast along the shore, passing a modern storage building and a small dock. The lane ends on the south side of the residence.<sup>1</sup> Land east of the house has been excavated for a storm water management pond. A few blocks to the west is the Great Northern Depot at 402 East Lake Street. The depot was erected in 1904-1905 and listed in the National Register in 1981 under Criterion C for its architectural significance and under Criterion A for its historic role in serving commuter and resort traffic.

Bryan Gadow, a planner in the Wayzata Planning Department, prepared a draft National Register nomination in 2007. Two architecture students from the University of Minnesota, Tyler Wilfahrt and Shari Hemmingsen, conducted research and drafted a National Register nomination for 738 East Lake Street in 2009. In March 2010, Gadow sent both studies to Susan Roth, the Minnesota State Historic Preservation Office National Register historian, asking for comments on the draft nomination forms. Roth sent a letter in response on July 15, 2010, raising a number of questions about the history of the building's construction and its current condition. To address this request for more information, the Wayzata Historical Society obtained a \$7,000 grant from the Arts and Cultural Heritage Fund through the Minnesota Historical Society and hired Hess, Roise and Company to prepare a preliminary National Register assessment. Bernie Klein oversaw the project for the Wayzata Historical Society. Hess Roise historian Charlene Roise served as project manager and principal author of this report with assistance from researcher Penny Petersen.

*This project has been made possible by the Arts and Cultural Heritage Fund through the vote of Minnesotans on November 4, 2008. Administered by the Minnesota Historical Society.*

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<sup>1</sup> Although the alignment of the residence is slightly off of cardinal directions, to simplify the following discussion, the side facing the lake will be assumed to be south with the other sides corresponding to this alignment.

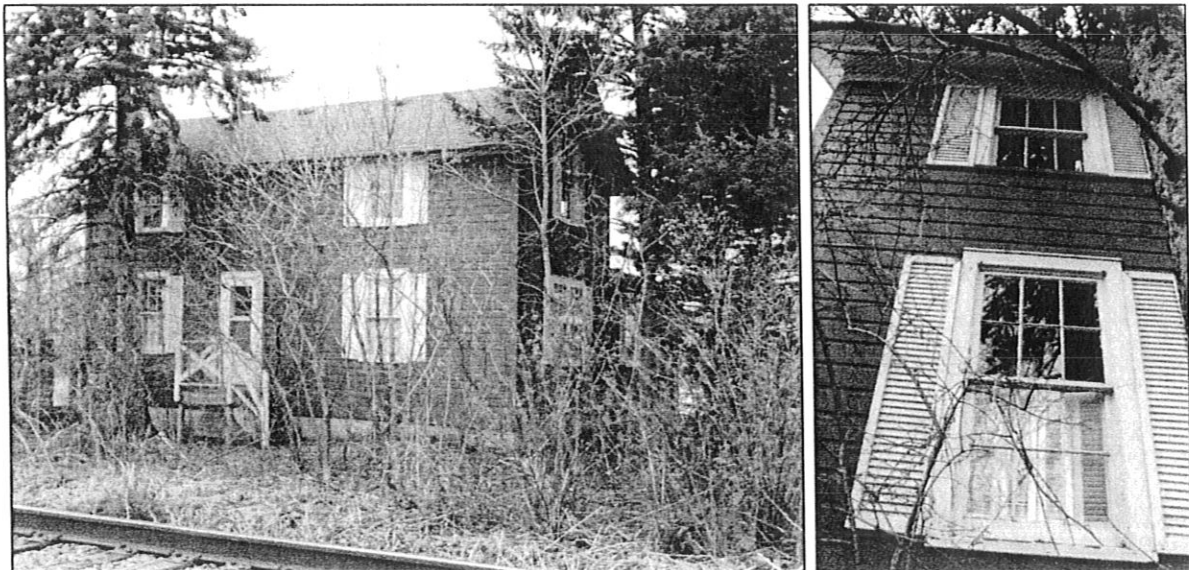


## DESCRIPTION

The house originally faced the railroad tracks to the north. Additions have reoriented it 180 degrees to front on Lake Minnetonka. The original section, measuring about 32 feet wide by 16 feet deep, rises one-and-one-half stories and has a side gable roof. With two single-story extensions to the south, the depth is now about 36 feet. The building, including the additions, are covered with clapboard. The north facade has an off-center door, creating a slightly asymmetrical facade. One window is centered in each of the walls that flank the door. Small second-floor windows are directly above the first-floor windows. The west facade of the original building has paired nonhistoric windows on the first floor and a single window on the second floor. The east facade has a window centered on each floor and a door on the south end, which is approached by steps from the south. A small window is beneath the projecting eaves on the east end of the south side. Some of the windows appear to be original; many have newer shutters.

A porch with paired windows and a doorway is tucked into the southeast corner of the addition section. A band of casements is to the west. The east wall has two windows, and paired windows are on the west wall.

On the interior, a stair divides the first floor of the original section into two rooms, an arrangement repeated on the second floor. A hallway runs east-west to the exterior door in the east wall. The addition section is divided into several rooms. While the interior of the original section has been extensively remodeled, including the insertion of a modern kitchen in the northwest room, some doors, windows, and trim seem to be original. A more detailed physical investigation will be needed to identify original features. The basement contained a large amount of water during a May 2011 site visit and was difficult to examine as a result.



*Front (north) facade, and detail of west end of front facade.*

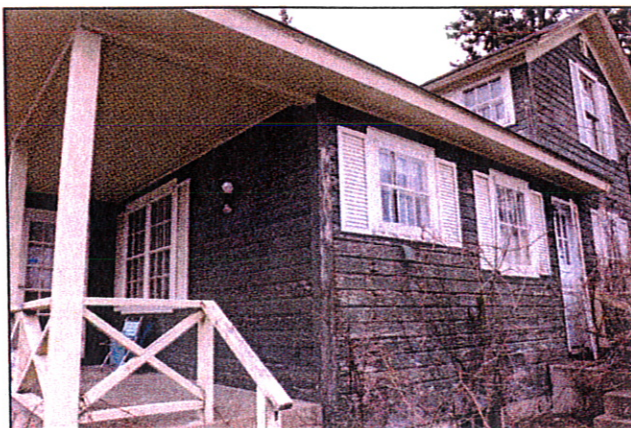




*East and south sides of original section (right) and addition (below).*



*West side of original section (left) and addition (above).*

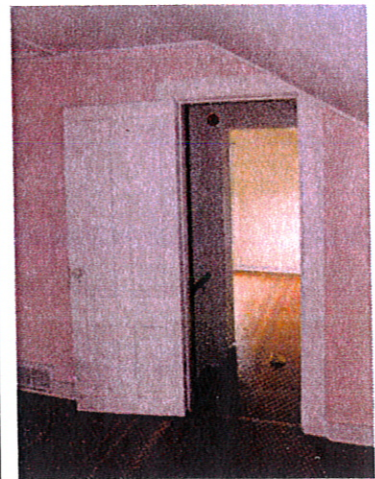






*Above: The section house in its setting, with views to the northwest (left) and southwest (right).*

*Below: The interior of the original section. The top photographs show the west (left) and east (right) rooms on the first floor. The lower photographs are of the second-floor bedrooms.*



## HISTORICAL CONTEXT

### The Depot War

The original site of Wayzata was platted in 1854. While its founders attempted to make it a local trade center, a financial panic in 1857 thwarted these ambitions. The community was revived in 1867 when the main line of the Saint Paul and Pacific Railroad Company linked it to Minneapolis some twenty-five miles to the east. This soon brought a new form of economic vitality: tourism. Wayzata, blessed with a beautiful setting on Lake Minnetonka, was one of the lakeshore communities that benefitted from an influx of seasonal visitors by the late nineteenth century.<sup>2</sup>

The Saint Paul and Pacific was acquired by the Saint Paul, Minneapolis and Manitoba Railway in 1879. The operations of that company were transferred to the Great Northern Railway Company in 1890. Wayzata was part of the company's Willmar Division, which extended west from Saint Louis Park. These communities were fortunate in being in the orbit of the Great Northern, which was under the guiding force of James J. Hill, the "Empire Builder." Hill's vision for the railroad's future extended to the Pacific Ocean, and his work to expand the railroad was relentless. The Pacific link was completed in 1893.<sup>3</sup>

Although Wayzata was beholden to the railroad for its growth, the citizens did not always appreciate the noise, soot, and hazard associated with train traffic. In 1883, Wayzata passed an ordinance requiring the railroad to move the tracks. When the community tried to enforce it several years later, the case ended up in court. In retaliation for the affront, Hill razed the centrally located Broadway Depot. He built two smaller depots at Holdridge (near today's Bushaway Road/County Road 101) and Ferndale, less convenient locations on the outskirts of town.<sup>4</sup>

The impasse remained until the city council passed a reconciliation ordinance in 1905. It had the desired effect. Hill attended the dedication of a handsome new depot that was erected downtown in the following year. It was officially known in the railroad's records as Station No. A24. While the combination depot accommodated passengers and freight for decades, the arrival of the Twin City Rapid Transit Company's streetcar line in 1914 diverted many commuters and tourists away from the railroad. Cars and trucks were even tougher competition. This ultimately led to the discontinuation of passenger service to Wayzata in 1958 and the transfer of the depot property to the city in 1972.<sup>5</sup>

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<sup>2</sup> Richard Prosser, *Rails to the North Star: A Minnesota Railroad Atlas* (Minneapolis and London: University of Minnesota Press, 2007), 135, 160; Ralph Hidy, Muriel Hidy, Roy Scott, and Don Hofsommer, *The Great Northern Railway: A History* (Minneapolis and London: University of Minnesota Press, 1988), 72-73.

<sup>3</sup> Hidy et al, *Great Northern Railway*, 72-73, 85.

<sup>4</sup> Robert Vogel, "Historical and Architectural Resources of Wayzata, Minnesota," July 2003, Appendix J, page 13, prepared for the Heritage Preservation Board, Wayzata Historical Society; *History of Wayzata, 1854-2004* (Wayzata: Wayzata Historical Society and City of Wayzata 150 Year Celebration Committee, 2004), 19-20.

<sup>5</sup> Vogel, "Historical and Architectural Resources," Appendix J, page 13; *History of Wayzata, 1854-2004*. Data on many of the company's authorizations for expenditures (AFE) are included in a joint archive website maintained by the Great Northern Railway Historical Society and the Northern Pacific Railway Historical Association ([http://www.gn-npjointarchive.org/Lists/AFE\\_List/](http://www.gn-npjointarchive.org/Lists/AFE_List/)), hereafter cited as GNRHS/NPRHA Archives. The original



## Railroad Operations in Wayzata

Railroad operations required a large staff and a variety of buildings and other facilities. A sense of the scale of the latter is provided by Great Northern records of construction and maintenance associated with Wayzata in the early twentieth century. In 1901, a storage house for hand cars was relocated to Saint Anthony Park. In the following year, the railroad moved a privy from Ferndale to Wayzata and erected a 16-foot by 32-foot section house with a 14-foot by 16-foot kitchen. The budget for the house was \$775. This is apparently the building at 738 East Lake Street. On May 17, 1902, the *Minneapolis Journal* reported that “the Great Northern railway is building a house at Wayzata.”<sup>6</sup>

The return of the depot to Wayzata a few years later also entailed removing the old stations and erecting a 16-foot by 150-foot dock just east of the new depot. The building was connected to the city water supply and a well was retired. During the same period, the railroad installed a 400-gallon steel tank with a brick structure, as well as a 50,000-gallon wood water tank on a 30-foot-tall wood tower with a 12-foot by 14-foot pump house. (Sanborn maps and a photograph in the collections of the Wayzata Historical Society indicate that the wood water tower was near the section house.) In 1907, a coal shed was relocated, and in 1910 the railroad built an 8-foot by 15-foot wood septic tank and a 16-foot by 32-foot freight depot. A “box car body bunkhouse” was placed in the vicinity in 1912, presumably to house maintenance crews. (This structure was sold to a private party in 1933 after being condemned.) Railroad property also included a signal maintainer’s building.<sup>7</sup>

In addition, major and minor adjustments were made to the track over time. The railroad installed a crossover for the main line between Wayzata and Ferndale in 1904, for example, and removed a 202-foot-long main-line crossover from the Peoples Ice Company the next year. Track had to be relocated when the depot was erected in 1905, and a new 1,120-foot side track accompanied the freight depot in 1910.<sup>8</sup>

The pedestrian dock, car body repair shop, and tool house were “retired” in 1943, signifying a major change in the railroad’s operations in Wayzata.<sup>9</sup>

## Maintenance of Way

Given their extensive holdings and nonstop operation in all seasons, railroad facilities were costly to maintain. According to an early twentieth-century source, “experience shows that over 23 per cent of all the expense of operating the road is required for maintaining the track, bridges, culverts, buildings, fences, gates and crossings, and over 15 per cent for maintaining the

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source for this information is the Great Northern Railway Company Archives at the Minnesota Historical Society. Box 133-F-11-8-F contains index cards for AFEs at the Wayzata station from 1917 to 1974; these are cited as Index Cards, GNRCA-MHS. An entry on a card dated November 1, 1972, documents the transfer of the depot: “Retire and donate in place depot facilities to the City of Wayzata, relocate telephone.”

<sup>6</sup> This information is from entries in the GNRHS/NPRHA Archives and the *Minneapolis Journal*, May 17, 1902.

<sup>7</sup> GNRHS/NPRHA Archives; Index Cards, GNRCA-MHS.

<sup>8</sup> GNRHS/NPRHA Archives.

<sup>9</sup> Index Cards, GNRCA-MHS.



equipment in good order so that operations may be continued with economy and safety.” It added: “The problem of maintenance of track is constantly becoming more and more difficult by reason of the increased weight of rolling stock and the heavier loads hauled.”<sup>10</sup> Indeed, tracks were one of the most critical components of the system, requiring day-to-day maintenance and repair. Despite the best diligence, emergencies were inevitable, and personnel had to be available twenty-four hours a day, seven days a week, to address any problems that came up.

A book published in 1915 explained: “The territory covered by a railway is divided into districts or divisions each of which is further subdivided and each subdivision placed in charge of a roadmaster or supervisor of track. Each subdivision is in turn subdivided into sections. The section-foreman is in charge of the section and is assigned a force of men varying in number according to the location and length of the section, density of traffic, equipment of track, season of the year, etc.”<sup>11</sup>

The person directly responsible for keeping the track in good operating condition was the section foreman. This position was the highest some men attained, while others used it as a stepping stone to other management jobs. A 1901 text noted that fieldwork provided critical training for young engineers, who are placed “in section gangs where they can learn the practical work and are then advanced to section foremen, supervisors of several gangs of section men, and then to roadmasters.”<sup>12</sup>

Sections were a very small unit in a vast railway system. “On our more important lines,” a 1901 book reported, “a section of single track should not exceed six miles, and section-houses should be placed as near a telegraph office or station as possible.” Double-track sections were shorter, around four miles in length. (Separate bridge crews had special equipment and training and covered a larger territory.) “The foreman should have the care of track and property of the company on his section, and should be held accountable for their proper care and maintenance.” They used handcars to inspect all of the tracks within their purview, usually twice a week. The size of a section gang related to the scale and use of the track: “On roads having a large traffic, each section gang should consist of a foreman and one and one-half men per mile of double track, with an additional allowance of one man for every two miles of sidings. On single track each gang should consist of a foreman and one man per mile of track, with an additional allowance of one man for every two miles of sidings.” Maintenance work required specialized equipment, so “each section should have a tool house large enough to accommodate a hand car and a full complement of tools.”<sup>13</sup>

Convenient housing was not always readily available for trackmen, who typically led a rather transient life, so railroads provided “section houses” for these workers. Standardization was required for the operation of a rail system, and this approach was extended into ancillary structures including section houses. Situated in the right of way, “the houses are usually framed structures, and are built single or double”—the latter to hold two crews—according to a book on

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<sup>10</sup> Marshall M. Kirkman, *Building and Repairing Railways—Supplement to the Science of Railways* (New York and Chicago: World Railway Publishing Company, 1901), 323.

<sup>11</sup> William C. Willard, *Maintenance of Way and Structures* (New York: McGraw-Hill Book Company, 1915), 23.

<sup>12</sup> Kirkman, *Building and Repairing Railways*, 325.

<sup>13</sup> *Ibid.*, 327, 331-332.

railroad structures published in 1918. “The character of these houses varies to suit the class of labor and the accommodation necessary or desirable to provide under different conditions.”<sup>14</sup>

Another book from the same period explained that “section dwelling-houses are of three kinds: Section-houses, in which both foreman and laborers live; section-foreman’s houses and section-laborers’ houses. The plans of these vary greatly on different railways.” Costs could vary greatly as well—from \$600 to \$5,000, with around \$2,000 said to be the norm.<sup>15</sup>

“The general plans are based on climatic conditions and adaptability to different nationalities of laborers.” One of the biggest challenges that section foremen faced—one that seemed to loom larger than the relatively straightforward task of keeping the rails in service—was training and managing crew members. “The ordinary wages paid section-laborers are not enough to attract reliable men,” one writer complained. The first chapter of another early twentieth-century book on *Practical Track Maintenance* was headed “The Big Problem—Labor,” and the third chapter covered “Handling Laborers of Different Nationalities.” Rather surprisingly, “outside of the American or northern European trackmen who used to be available for section work, the American hobo is conceded to be the best all around trackman. . . . A foreman could come nearer [to] treating such men as equals than he could men of foreign nationalities. It is a much easier and pleasanter job to handle men who not only understand the English language but who understand track work thoroughly.”<sup>16</sup>

To retain crews, the foreman often had to share lodging and food. “Under such circumstances the foreman’s wife generally has charge of the house and boards the men of the gang.” A contemporary source confirms that “in order to have the trackmen live on their sections it is often necessary to provide houses for them, the foremen very generally boarding the single men.”<sup>17</sup> It appears that residences designed to include borders were larger as the illustrations on the next page suggest. More illustrations on the following pages show some typical station house designs.

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<sup>14</sup> J.W. Orrock, *Railroad Structures and Estimates*, 2d ed. (New York: John Wiley and Sons, 1918), 343.

<sup>15</sup> Willard, *Maintenance of Way and Structures*, 23.

<sup>16</sup> *Ibid.*, 23, 272-273; Kenneth L. Van Auken, *Practical Track Maintenance*, 2<sup>nd</sup> ed. (Chicago: Railway Educational Press, 1921), 13, 52.

<sup>17</sup> Willard, *Maintenance of Way and Structures*, 23, 272-274; E. E. Russell Tratman, *Railway Track and Track Work*, 3d ed. (New York: Engineering News Publishing Company, 1908), 213.

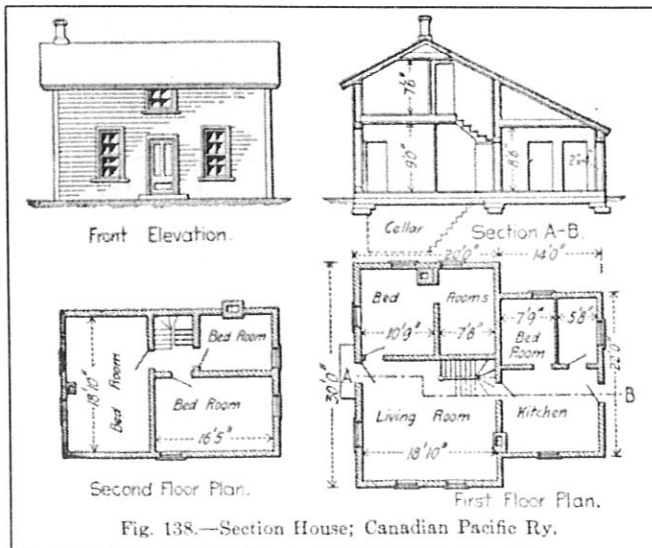


The photograph to the left, dated 1900, depicts a large section house for the Eastern Minnesota Railroad in Ball Club, Minnesota.



The front and side (left photograph) and back (right) of a section house of similar design in Henricks, Minnesota, in 1990. It has suffered a number of alterations since its construction in the late nineteenth or early twentieth century.

(All photographs from Minnesota Historical Society Collections)



These drawings from a book published in 1908 show a section house of the Canadian Pacific Railway that was designed to accommodate a number of workers. The text describes the structure as "a very plain house." (Tratman, Railway Track and Track Work, 213-214)

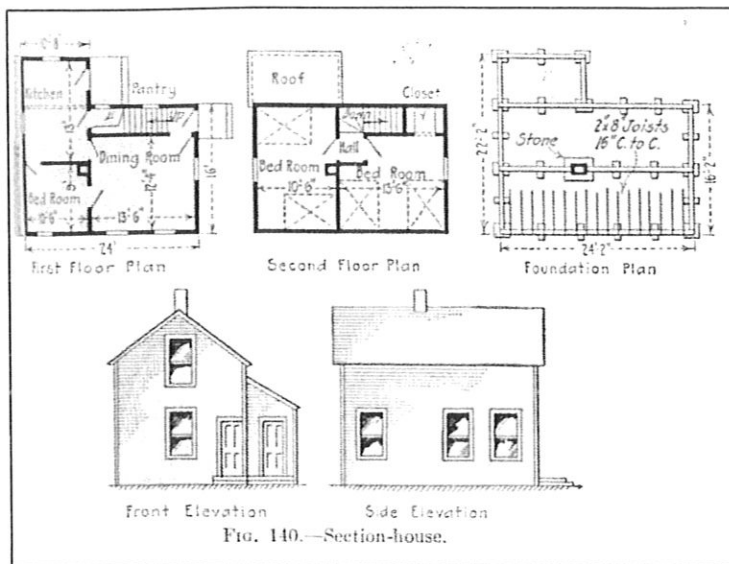


FIG. 140.—Section-house.

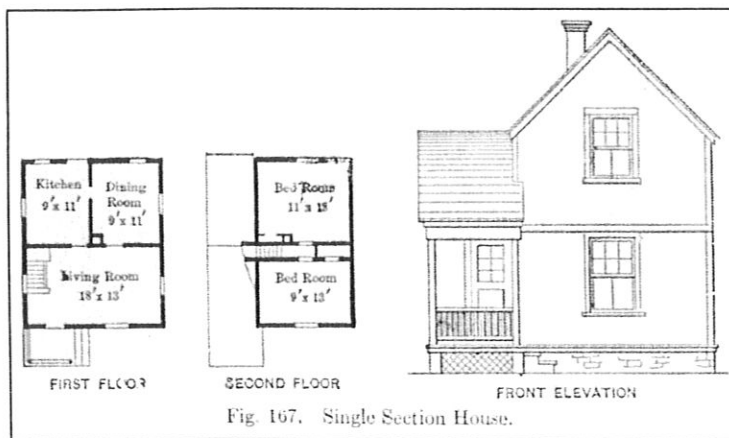


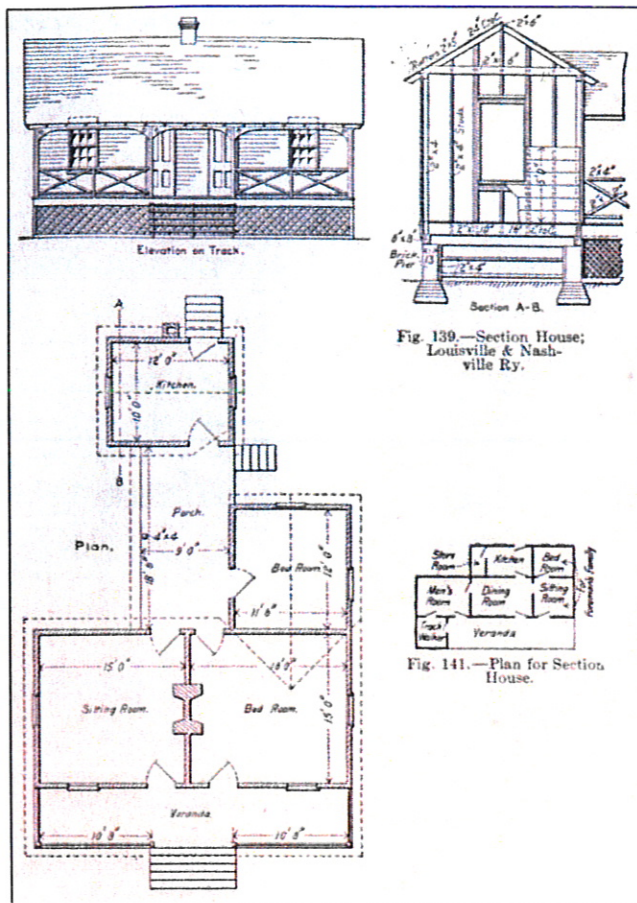
Fig. 167. Single Section House.

Both of the section houses illustrated on this page are similar, with gable-front designs. One has a projecting front entry porch; the kitchen extends from the side of the other plan. The main mass of the upper house is 16 wide by 24 feet deep; the lower house is about 2 feet wider and of the same depth.

The top drawings are from a 1915 publication and depict "a typical wooden section-house." This was apparently a standard design of the Lehigh Valley Railroad, and it was also used by the Northern Pacific. "The outside painting is Indian red with bottle green trimmings, and is sanded to a height of 6 ft. The inside is sealed." The text notes that "bridge-gangs are housed in old passenger-cars converted into living quarters. Floating gangs are housed in old box cars converted into bunk-cars." (Willard, Maintenance of Way and Structures, 273-274)

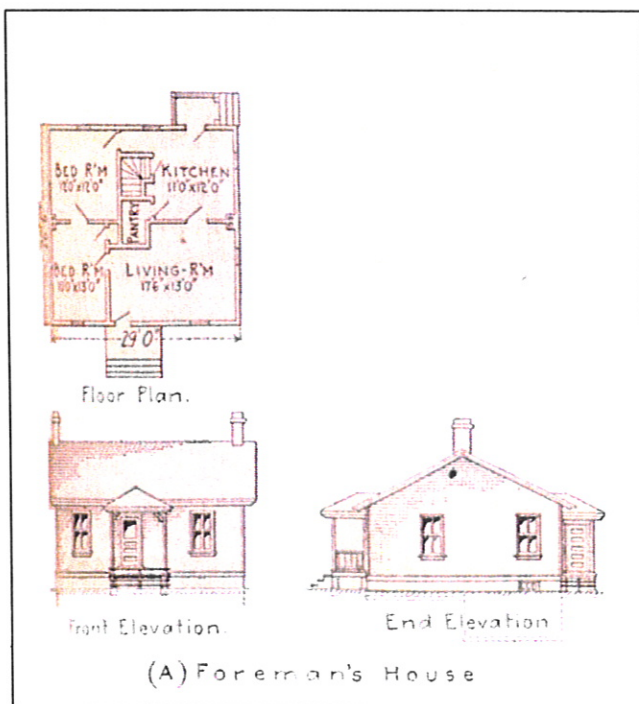
According to a 1918 publication, the section house in figure 167 (bottom drawing) is "an ordinary single section house" that "can be built for \$750, wood foundation, or \$900 with concrete foundation." It provides further details of the construction: "Frame and partitions, spruce; rough boarding, floors, clapboards, outside and inside finish, frames, etc., good quality native spruce or pine; shingles, pine or cedar; all mouldings, doors, windows, and inside finish, stock pattern." "Cedar sills or posts about 5-ft. centers, or when it can be done cheaply, concrete, stone, or brick foundation with cellar. Frame, 2" x 3" studs at 16-in. centers, 2" x 10" joists at 16-in. centers, ceiling roof joists and rafters 2" x 6" at 16-in. centers, 4" x 3" wall plates and runners, outside walls 7/8-in. rough boarding, with 7/8-in. ship lap, siding, or shingles, with building paper between, and 1" x 5" trim around windows, doors, porch, eaves, etc. All inside walls lathed and plastered. Shingle roof, 7/8-in. boards with building paper between. Floors 7/8-in. rough boards and 7/8-in. finished floor with building paper between for ground floor, and 7/8-in. finished floor only for upper story." (Orrock, Railroad Structures and Estimates, 343-344)





The drawings on the left depict two section houses of the Louisville and Nashville Railway. The single-story plan and the inclusion of verandas is a sign that section house designs sometimes responded to particular regional conditions.

(Tratman, Railway Track and Track Work, 213, 215)



This house is for a section foreman of the Lehigh Valley Railroad. It has a larger footprint than many of the plans—29 feet by 26.5 feet, plus projecting entries on the front and back—but is only a single story.

(Willard, Maintenance of Way and Structures, 273-274)



## Great Northern Standard Plans

The Engineering Department records in the substantial Great Northern archives, which are located at the Minnesota Historical Society, have standard plans for some section houses. None have been found, however, that could have provided the design for the Wayzata structure. Design 8324, for example, which is dated 1899, is for a two-story, 30-foot by 30-foot structure with eight rooms. Other standard plans are for smaller, single-story houses. By 1918, the railroad had adopted a bungalow style (the 8141 series) for cottages with four to six rooms.<sup>18</sup>

Although standard plans that match the design of the Wayzata section house have not been located, an 1890 photograph (below) of a Great Northern section house in Askov, Minnesota, suggests that other buildings shared the same design.

*Askov section house (below),  
and detail of Wayzata section house (right).  
(Historic photograph from Minnesota Historical Society Collections)*



<sup>18</sup> The drawings were in GNRCR-MHS, Chief Engineer, Structures Drawings Code #0012, 1882-1964.

## The Wayzata Section House

Although some sources give a construction date of 1914, it appears that the house was erected in 1902, based on the Great Northern's records. The 1905 federal census listed only one person in Wayzata whose occupation was given as "railroad": Thomas Gannon. The twenty-nine-year-old man was born in Minnesota to Irish parents and had a twenty-year-old wife, Julia, who was born in "Dakota." Her parents were from Wisconsin. Although his position with the railroad is not provided, they presumably occupied the section house.<sup>19</sup>

Two people associated with the railroad appear in the 1910 census. Maurice Carmody was a "towerman." The thirty-three-year-old single man was a border with the family of Lars Pederson, a sail maker. The second railroad employee, Ole Stafney, was a railroad section foreman. The forty-nine-year old man emigrated from Norway in 1888, as did his wife, Anna, who was forty-five years old in 1910. By 1910, she had produced nine babies, and six survived. Five lived with them in Wayzata: sons Olaf (age 19, a grocery wagon teamster), Jalmer (age 12), Custer (age 7), and Lowell (age 2), and daughter Olga (age 15). They presumably occupied the building at 738 Lake Street, and the size of the family apparently prohibited them from taking in borders.<sup>20</sup>

An index of the railroad's authorizations for expenditure occasionally mention the section house, and other entries might also relate to the property. An order on December 8, 1926, was for "installing electric lights in section house," a project apparently done by railway employees. A payment approved May 23, 1938, covered an "assessment for five year period 1933 to 1937 incl. levied against railway co. property for cost of construction of water main." On September 26, 1938, an expenditure of \$190 was approved to "install 100 ft. pipe line between City water main and the section house and install cesspool." Other payments to the city for assessments related to water main construction were approved June 6, 1939, and June 13, 1941. An entry on August 10, 1942, is to "furnish and place 725 cu yds riprap and slope bank of Lake Minnetonka from sta. 765+75 to 766+60" for \$825.<sup>21</sup>

On June 12, 1943, work was authorized to "place section house on concrete foundations, etc., \$2175." An entry on December 8 of the next year was to "install toilet facilities in section house and place sewer line" at a cost of \$550. (Wayzata did not have a municipal sewer system until the 1930s; before that, according to a local history, "The Lake was both water supply and sewage receptacle!")<sup>22</sup>

One of the main sources of information about the building is a 1959 article in the *Minnetonka Herald* entitled "Wayzata Section House among Last of Those that Once Lined Railroad." Written only a few years before the house was sold by the Great Northern, the article has

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<sup>19</sup> U.S. Census enumeration records for the Village of Wayzata from the Fifth Decennial Census of Minnesota (1905), Sheet 4.

<sup>20</sup> U.S. Census enumeration records for the Village of Wayzata from the Thirteenth Census (1910), sheets 19 and 20. The Minnesota birth certificates index on the Minnesota Historical Society website ([www.mnhs.org](http://www.mnhs.org)) lists a Custer Gerald Stafney born on December 27, 1902, in Meeker County and a Lowell Russell Stafney born on November 21, 1907 in Hennepin County.

<sup>21</sup> Cards for Wayzata in Box 133-F-11-8-F, GNRCR-MHS.

<sup>22</sup> Ibid; *History of Wayzata, 1854-2004* (Wayzata: Wayzata Historical Society and City of Wayzata 150 Year Celebration Committee, 2004), 31.

information about both the house and the lives of its occupants, Mr. and Mrs. Gustave Frederick Ehrreich. Gustave, who was born in about 1900, had started working for the railroad at the age of fifteen and had become a foreman by the time he was twenty-five. He got married about a decade later, and the couple had lived in railroad housing their entire wedded life. The article noted that although they had moved numerous times, Mrs. Ehrreich “never once . . . experienced the frustration of trying to make the old curtains fit windows in the new place. The reason is quite simple. The houses have all been identical.” The paint color was always grey, inside and out, and the layout was “austere, simple with two rooms upstairs and two down.”<sup>23</sup>

According to the article, the section houses were built by carpenters employed by the railroad and situated at about ten-mile intervals on the Willmar line. The railroad did not charge rent, but the occupants were responsible for paying for their own utilities. Assignments for sections were based on seniority, and “Wayzata has been a high ranking location for many years, perhaps because of its ideal location on a perfect stretch of beach with a million-dollar view across the bay.”<sup>24</sup>

As more rental housing became available, it was no longer essential to provide quarters for the section men, and the railroad sold off most of the houses. The article claimed that the section house “in Wayzata is the only one in Minnesota,” but also reported that “the house in the St. Boni sector on Lake Waconia was purchased by the section foreman . . . when he retired. He remodeled the house and his wife still lives there. The section house in Willmar was sold recently.” This contradiction suggests that the article is not altogether reliable, but it seems likely that few houses are extant and that the survivors have been altered.<sup>25</sup>

By the mid-twentieth century, the railroad apparently loosened its requirements for conformity. The 1959 article reported that “about five years ago Wayzata broke with the old custom, and the section house was painted white with green trim. Two rooms were also added to the first floor facing the lake.”<sup>26</sup>

The final mention of the section house in the railroad’s authorizations for expenditures comes on October 8, 1962: “Sale of approximately .11 acres land and section house to Dr. Charles N. Brooks at Wayzata, Minnesota.”<sup>27</sup>

The new owner received a permit from the city to “remodel front” in the following year, a project estimated to cost \$3,800. The existing building dimensions shown on the permit are 32 feet wide and 30 feet deep, so the project apparently produced the southernmost section of the building.<sup>28</sup>

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<sup>23</sup> “Wayzata Section House among Last of Those that Once Lined Railroad,” *Minnetonka Herald*, July 23, 1959.

<sup>24</sup> Ibid.

<sup>25</sup> Ibid.

<sup>26</sup> Ibid.

<sup>27</sup> Ibid; *History of Wayzata, 1854-2004*, 31.

<sup>28</sup> A copy of the building permit application, dated June 12, 1963, is included in Bryan Gadow, “Roadmaster’s Cottage,” draft National Register of Historic Places Nomination Form, 2007, 7-1, prepared for the City of Wayzata.

In 1984, the building was repaired after storm damage. The work is described on the building permit: "Replace damage[d] framing on roof/walls. Interior/exterior painting, replace brick chimney."<sup>29</sup>

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<sup>29</sup> Ibid.

## NATIONAL REGISTER EVALUATION

### Wayzata 2003 Survey

A survey of Wayzata's historical and architectural resources was completed in July 2003 by historian Robert Vogel. The survey classified properties into three categories related to potential local "Heritage Preservation Site" designation: 1) properties that were individually eligible; 2) properties that were not individually eligible but that contributed to one of three potential historic neighborhood heritage preservation districts—South Wayzata ("Bluff"), North Wayzata, and Old Holdridge; and 3) "old buildings and sites . . . [that] were evaluated as nonsignificant and therefore ineligible for Heritage Preservation Site designation because of their lack of architectural distinction or compromised historic integrity due to alterations, additions, or deterioration."<sup>30</sup>

The survey identified several buildings in addition to the Great Northern Depot that were associated with the railroad. Two were classified as being contributing features in potential local historic districts, although neither was flagged as "pivotal" in those districts:

- The O'Laughlin House, 507 Rice Street East: "Four-Square Style suburban cottage; historically associated with the Great Northern Railroad (station master's residence). . . . Built in 1915." The study found that it "contributes to the historic character of the [Bluff Neighborhood] district."
- House, 337 Reno Street: "Gabled Ell Style suburban cottage; historically associated with the Great Northern Railroad (station master's residence). . . . Built in 1904." Even though the property was altered, it was determined to contribute to the historic character of the proposed Old Holdridge Historic District.<sup>31</sup>

The survey also mentioned the Wayzata Section House, which was identified as "House (Roadmaster's Cottage)" and described as a "vernacular suburban cottage on Wayzata Bay." The report gave a construction date of 1914, and noted the property's association with the Great Northern Railway. The building was placed in the third category as "nonsignificant."

The designations of "station master's residence" for 337 Reno and "roadmaster's cottage" for 738 Lake are questionable. While the 1904 construction date of the house at 337 Reno coincides with the construction of the new depot, the house is located about a mile to the east, near the Wayzata Yacht Club, not a convenient location for a station master. It is, though, very close to the tracks. The house at 507 Rice Street, on the other hand, is only two blocks from the depot, making it a more logical location for someone in that position, but it was built a decade later, if the construction date is correct. The label of "roadmaster's cottage" for the residence at 738 Lake Street is also suspect. As discussed above, the roadmaster was at the apex of field workers; the modest building at 738 Lake seems more likely a section foreman's residence.

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<sup>30</sup> Vogel, "Historical and Architectural Resources of Wayzata," Appendix J, page 98.

<sup>31</sup> Ibid., Appendix J, pages 88 and 98.



## National Register Multiple Property Listing

A National Register of Historic Places Multiple Property Documentation Form has been prepared for “Railroads in Minnesota, 1962-1956.” Section F, “Associated Property Types,” includes a discussion of section houses and provides registration requirements. It outlines registration requirements for individual section houses by criteria:

- Criteria A and B: “If the railroad corridor does not retain integrity as a historic district, a section house will not convey its function as a specialized railroad building.”
- Criterion C: “A railroad section house will meet Criterion C if it meets one of the following conditions: it embodies the distinctive architectural design or construction methods associated with significant railroads, including the use of standard company designs; it embodies the work of a significant architect, engineer or builder; or it represents historically important trends in the evolution of standardized railroad company architecture.”
- Criterion D: “The structure or its ruin itself must be, or must have been, the principal source of . . . important information” regarding “a significant aspect of the standardized architecture developed as part of the evolution of its class of railroad-related properties.”<sup>32</sup>

### Evaluation of Wayzata Section House

The Wayzata Section House is most likely to qualify for the National Register under Criterion C for embodying the standard design of a significant railroad, the Great Northern. More research should be done to verify that the Wayzata house is a rare survivor of a once common property type. Assuming this is the case, however, the property appears likely to meet the registration requirement for Criterion C.

Although some information has been discovered about the property, there are many gaps—for example: Who occupied the house over time and what were their backgrounds? Did it sometimes shelter laborers as boarders in addition to the foreman’s family? Do standard plans survive anywhere? What other railroad structures (e.g., tool house) were associated with the house, and where were they located? Information to fill these gaps might be obtained from in-depth research that was beyond the scope of this project (e.g., a more intensive probe of the archives of the Great Northern Railway Company, a detailed examination of local newspapers and other publications, interviews with individuals knowledgeable about the Great Northern’s history).

The period of significance begins with the building’s construction in 1902. Further research is needed to establish the ending date. There are at least three options: 1943, the mid-1950s, or 1962. The early to mid-1940s appear to be a turning point for the railroad’s operations in Wayzata. As mentioned above, the pedestrian dock, car body repair shop, and tool house were “retired” in 1943. The section house was placed on a concrete foundation and had other work performed in the same year. In the following year, a sewer line and toilet facilities were installed in the house. In 1945-1946, the tracks were shifted towards the lake so that Lake Street could be

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<sup>32</sup> Andrew Schmidt, Daniel Pratt, Andrea Vermeer, and Betsy Bradley, “Railroads in Minnesota, 1962-1956,” National Register of Historic Places Multiple Property Documentation Form, prepared by Summit Envirosolutions, Saint Paul, F-243 – F-246.

widened—a project that cost the railroad over \$100,000. Further change occurred in 1953 when the railroad logged a work order to convert a “public crossing to private crossing on Broadway st. and construct fence and gate.” This might refer to the access road to the section house, which is at the foot of Broadway. Around the same time, two rooms were added to the south side of the section house. Finally, the railroad sold the house in 1962. There does not appear to be a reasonable argument for extending the period of significance beyond that date.<sup>33</sup>

## Issues of Integrity

As is apparent from the description earlier in this report, the Wayzata Section House has been subjected to many alterations. These have affected its integrity.

Some alterations to the building are minor in nature and easily reversible. Nonhistoric shutters could be removed and the location of the attachments repaired. The exterior paint scheme, now green and cream, could be returned to the original gray color. The modern asphalt-shingle roofing could be replaced by something more appropriate to the early twentieth century.

Some of the alterations might date from the building’s period of significance and could be significant in their own right. One addition is clearly later. On June 12, 1963, the Dahl and Baldus Construction Company applied to the City of Wayzata for a building permit to remodel the property. At that time, the dimensions of the house were given as 32 feet across the front, 30 feet in depth, and 20 feet (1.5 stories) high. The project was estimated to cost \$3,800.<sup>34</sup>

The remodeling apparently produced a single-story extension to the south holding a recessed entry porch. The south facade clearly reflects its 1960s origin and is visually jarring. This further reinforced the building’s reorientation to the south, which began with the 1950s addition, detracting from its relationship to the railroad tracks to the north.

Another strike against the building’s integrity is the replacement of the chimney in 1984. The chimney, a functional necessity, would have been of little visual interest on a more ornate structure. Because the building’s design was so utilitarian, however, the chimney was a pivot point, reinforcing the symmetry and serving as the building’s apex.

The setting has also experienced alteration. In about 1988, the City of Wayzata installed a storm water treatment pond directly east of the building. This is a modern intrusion, and changes the relationship the house had to a small creek that emptied into the lake in that vicinity.<sup>35</sup>

The growth of vegetation on the north side of the house makes it difficult to imagine that as the front facade. The vegetation is overgrown on the other sides as well, particularly to the west. This, however, would be easy to reverse.

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<sup>33</sup> Index Cards, GNRCA-MHS.

<sup>34</sup> Dahl and Baldus Contracting Company, Application for Building Permit to City of Wayzata, June 12, 1963, reprinted in “Railroad Section House,” draft National Register of Historic Places Registration Form for 738 Lake Street East, Wayzata, prepared by Shari Hemmingsen and Tyler Wilfahrt, December 8, 2009.

<sup>35</sup> Hemmingsen and Wilfahrt, “Railroad Section House,” 3.

## Recommendations

The building, constructed from a standard Great Northern plan, once had numerous contemporaries. Few if any are known to survive in Minnesota, the company's headquarters. While a comprehensive inventory of this property type has not been completed, it seems likely that the attrition rate for this utilitarian building type is high. As such, the building is significant under Criterion C in the area of transportation as a representative example of a once common building type that was an important component in the operation of a main line of a major American railroad, the Great Northern.

The building's integrity is greatly compromised. A historic structures report conducted by architects and historians who meet the Secretary of the Interior's Professional Qualifications Standards would be extremely helpful in answering questions about the original design that might not be provided by archival sources.

Given the building's poor integrity, it is probably necessary to undertake some restoration before the property could be successfully nominated to the National Register. It is imperative that any surviving historic materials and elements, such as windows, be retained. The case for designation would be strengthened by the restoration of some components, such as interior window trim, and removal of the 1963 addition. Moving the building to a different location would further harm its integrity and is not recommended.

## SECTION FOREMAN'S HOUSE



The Section Foreman's House offers an opportunity for a quieter, more contemplative lakeside experience. The existing landscape needs some cleanup, and includes a pond that would be suitable for winter activities such as ice skating.

### YEAR-ROUND FOOD VENDOR

The restored Section Foreman's House provides an opportunity for a year-round informal food vendor in the style of Sea Salt (Minnehaha Falls), Bread + Pickle (Lake Harriet), or Tin Fish (Lake Calhoun). This operation could also serve as a warming house for ice skaters in the winter.

### ADDITIONAL DOCKS

Additional transient boat parking is available along the east side of the Broadway pier to avoid interfering with lake views from Lake Street.

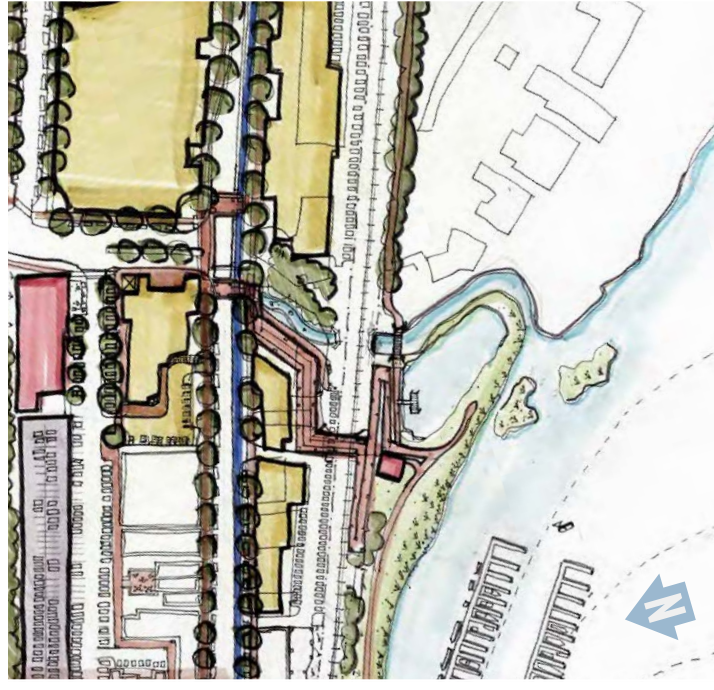
### UNDER-TRACK TUNNEL CONNECTION

The framework proposes exploring the potential for an under-track tunnel connection to this location from Lake Street and Superior Blvd. Additional research is required regarding the feasibility of this proposal.

### STORMWATER MANAGEMENT AND WATER QUALITY

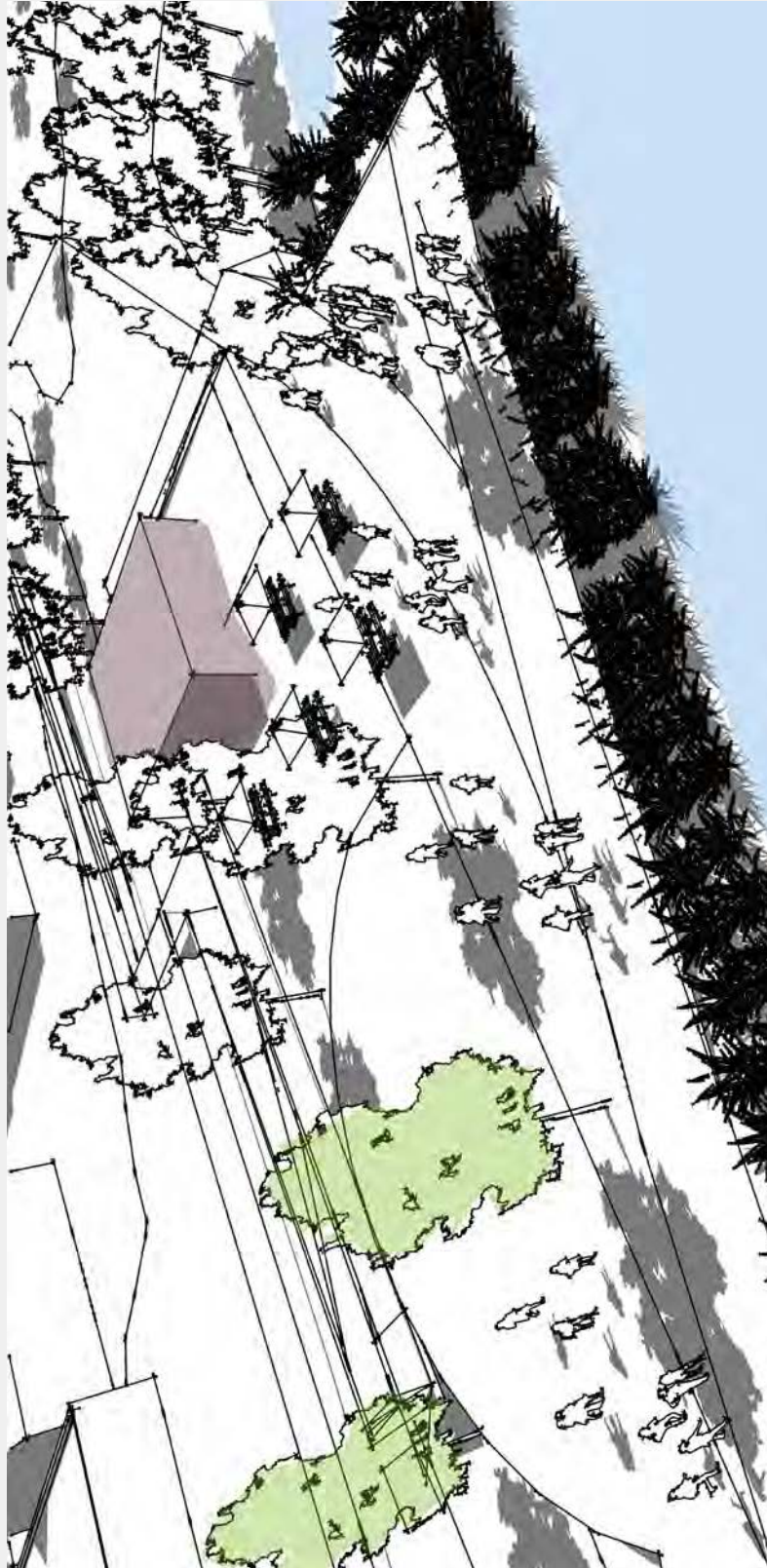
Stormwater management is an important factor in managing water quality. Expanding on the existing natural features around the Section Foreman's House would enhance water quality for the lake.

- **Floating islands**  
Floating islands assist in enhancing water quality by removing pollutants and particulate matter.
- **Natural shoreline**  
The natural shoreline condition is maintained in this area. Shoreline vegetation filters runoff and improves water quality while providing habitat for lake wildlife.
- **Gleason Creek inlet**  
As a small pond next to the Section Foreman's House, the Gleason Creek inlet currently provides some stormwater management.





# SECTION FOREMAN'S PARK



## HIDDEN GEM REVEALED

Embracing this historic site offers many opportunities for Wayzata. A rehabilitated Section Foreman's house serves as a touchstone to the past, acknowledging the role of the railroad in keeping Wayzata's lakefront open. This project also creates a new lakeside venue with unique opportunities for summer and winter activities.

## OBJECTIVES

Create a new lakeside public gathering space

Provide year-round food vendor space

Incorporate all-season programming

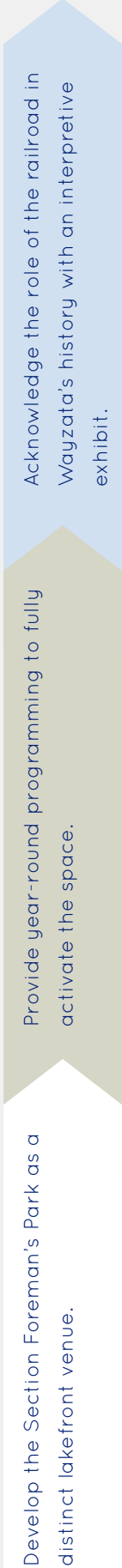
Preserve historic character



## SECTION FOREMAN’S PARK

| Suggested Enhancements                | Description                                                                                                                                                      | Order of Magnitude Cost  |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Rehabilitate Section Foreman’s House  | Repair and update house.                                                                                                                                         | \$ 1,000,000 - 1,175,000 |
| Landscape and stormwater pond cleanup | Invasive species monitoring and removal, stormwater pond re-engineering, landscape design, installation, and maintenance, shoreline restoration, litter removal. | \$ 575,000 - 675,000     |
| Vehicle and pedestrian access         | Permeable pavers on access road and walking trail from Broadway pier to Section Foreman’s Park                                                                   | \$ 250,000 - 275,000     |
| Total                                 |                                                                                                                                                                  | \$ 1,825,000 - 2,125,000 |

### STRATEGIES



When the railroad tracks were built, a section foreman oversaw track workers for each section of the track. This railroad company employee was also responsible for inspecting and maintaining the tracks, and was housed next to them for that purpose.

# CITY OF WAYZATA



## PUBLIC WORKS

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### MEMORANDUM

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**To:** City Council and City Manager  
**From:** Dave Dudinsky, Director of Public Service  
**Date:** 10/1/2014  
**Re:** **REPLACEMENT OF KLAPPRICH PARK HOCKEY BOARDS BIDS**

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Please find below a summary of the bids accepted by Public Works on Tuesday, September 30, 2014 for the Replacement of Klapprich Park Hockey Boards.

|                                         |              |
|-----------------------------------------|--------------|
| FINLEY BROTHERS, INC. (dba) TENNIS WEST | \$ 26,783.00 |
| XPAND, INC.                             | \$ 31,000.00 |

Staff Recommends Award to the Low Bidder:  
**FINLEY BRO. INC. in the amount of \$ 26,783.00**

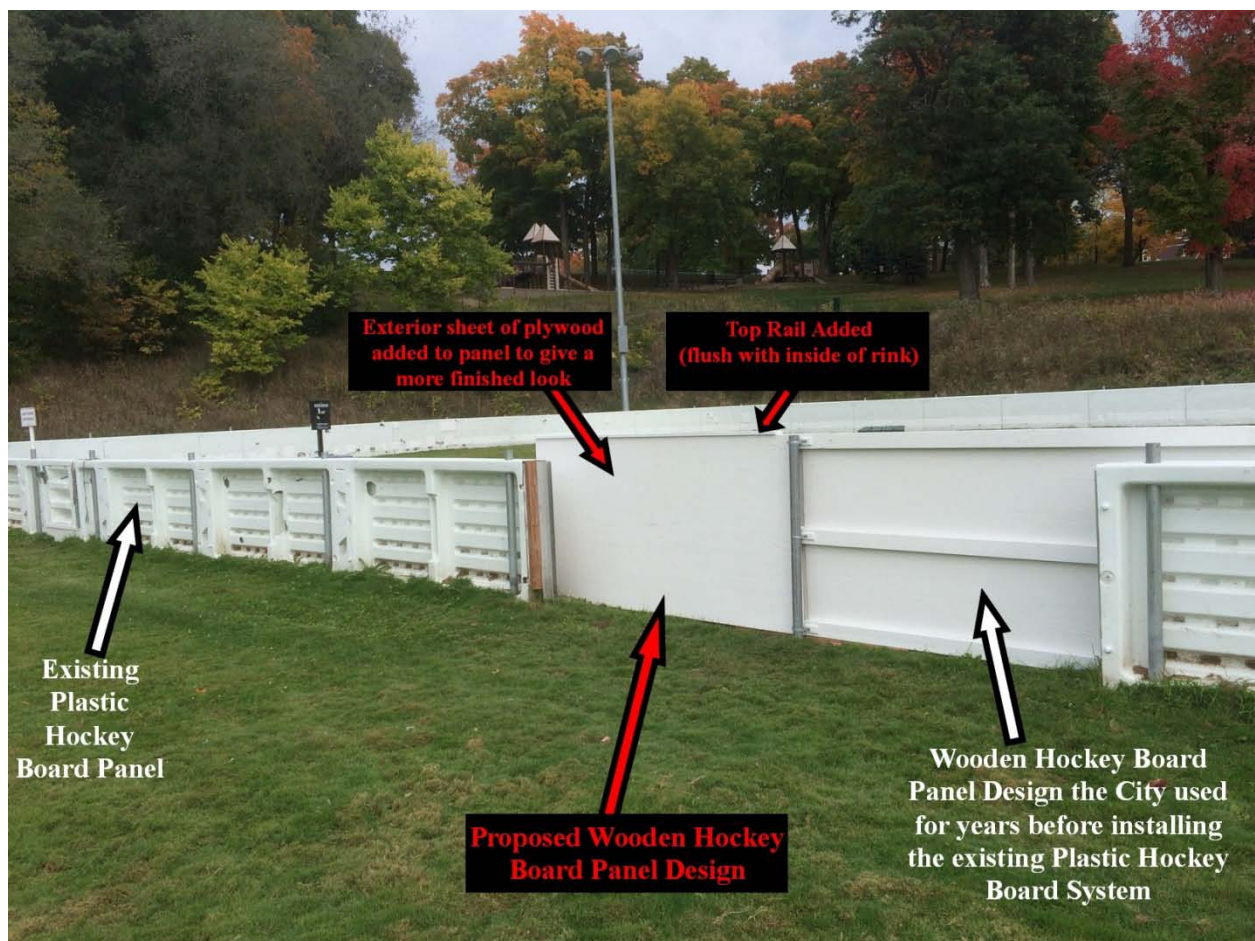
City Staff considered various types of replacement hockey board systems. In summary:

- A galvanized frame Fiberglass system is estimated to cost +/- \$80,000 installed.
- A galvanized frame Wood system is estimated to cost +/- \$60,000 installed.
- A Wooden system similar to what the City had in place for over 35 years before the plastic system was installed in 2010, with enhancements, has been bid to be built and installed no later than November 15, 2014. The wooden system is simple in design and has performed well in the poor soils that are present where the existing hockey board system is located today.

City Staff created a specification for an enhanced wooden panel hockey system. A half inch sheet of plywood was added to the exterior of the hockey panel and a trim board was added to the top of the hockey panel.

The following pictures show what the previous wooden system looked like and what a specified wooden hockey board panel will look like from the outside of the hockey rink.

Staff discussed the various hockey board system options with the Parks & Trails Board and the board showed support for replacing the existing hockey board system with the wooden board system recommended by city staff.



## **HISTORY**

The city had the Klapprich Park Hockey Boards replaced in 2010. Unfortunately, the hockey board system started to fail due to ultraviolet degradation from the sun. Over the years, hockey pucks started piercing through the hockey boards to the point repairs became an unreasonable solution.

The contractor that supplied and installed the hockey board system in 2010 and the City came to a negotiated arrangement where the contractor agreed to purchase back the damaged hockey board system in the amount of \$24,320 by the end of May, 2014 and remove the hockey board system as soon as the field was dry enough to do the removal without damage to the playing field.

The contractor did not make payment to the City in May as agreed to. The city finally made contact with the contractor and received a partial payment of \$12,500 with the verbal promise that the final amount due would be paid by the end of the month. The contractor is scheduled to dismantle and removed the plastic hockey board system within the first couple of weeks of October. If the city has not received full payment by the time the existing system is removed, the panels will be transported to public works and will remain in the city's possession until full payment is received from the contractor.

# CITY OF WAYZATA



## PUBLIC WORKS

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### MEMORANDUM

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**To:** City Council and City Manager  
**From:** Dave Dudinsky, Director of Public Service  
**Date:** 10/2/2014  
**Re:** **FALL OF 2014 TREE PLANTING PROJECT**

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Please find below a summary of the bids accepted by Public Works on Wednesday, October 1, 2014 for a Fall Tree Planting Project in Wayzata.

|                    |              |
|--------------------|--------------|
| FAIRS NURSERY      | \$ 22,274.00 |
| HOFFMAN & MCNAMARA | \$ 27,425.00 |

Consulting Firm's Engineering Estimate: \$22,100

Staff Recommends Award to the Low Bidder:  
**FAIRS NURSERY in the amount of \$ 22,274.00**

Scope of the fall tree planting project:

Removal and Replacement of trees that perished and were part of a previous planting program are being replaced in kind.

- New tree plantings: Tree selection and size for plantings at new locations were determined following a site visit by our parks personal and the city's arborist consultant.
- Tree Replacement for a tree lost in last year's spring storm.

A copy of the plan sheets that show location of the tree planting is enclosed for reference.

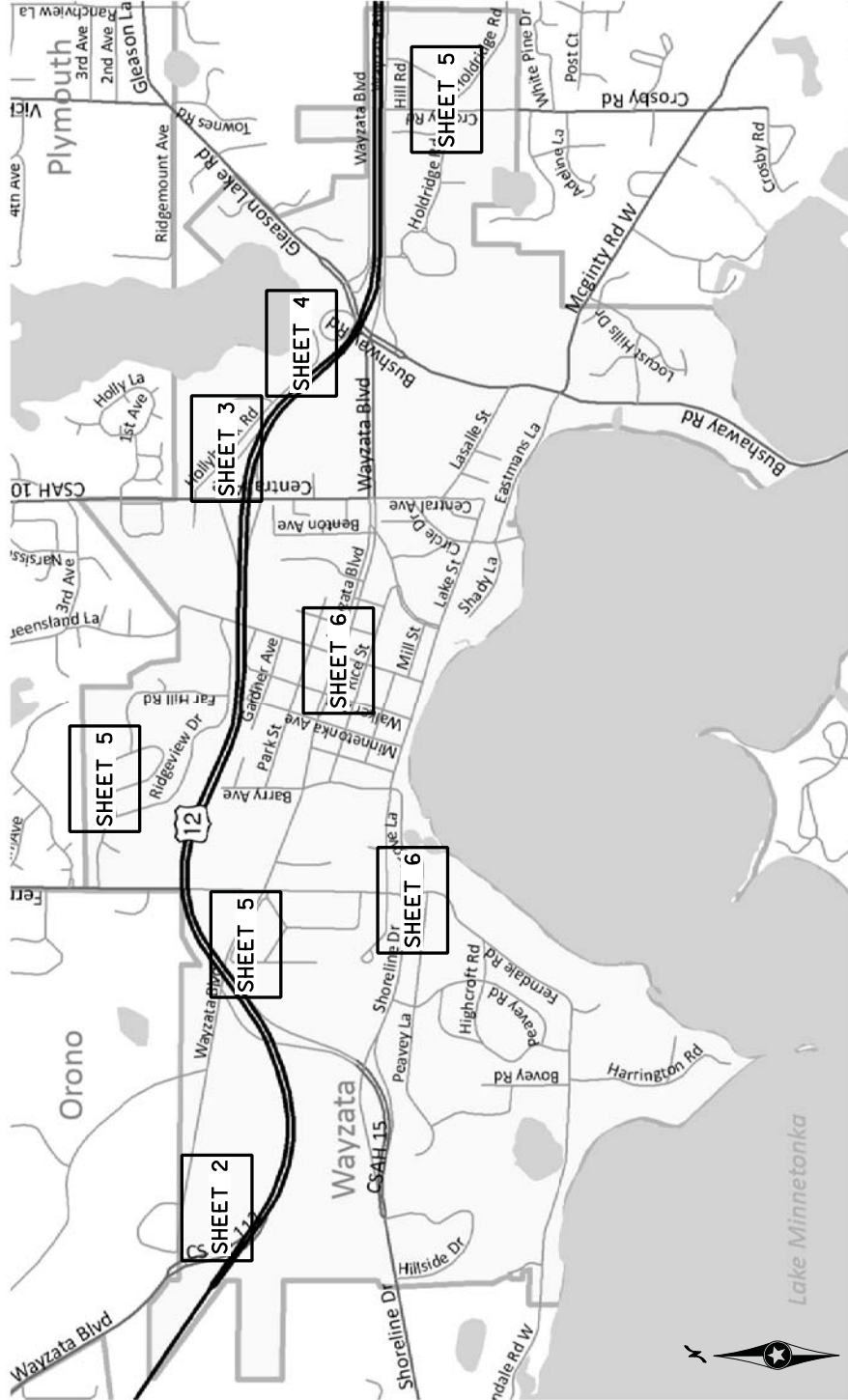
To address the imminent arrival of the Emerald Ash Borer (EAB), next year the city is planning to start removing poorly rated ash trees within the city's right of ways and replacing them with a diversified stock of suitable shade trees.



# CITY OF WAYZATA

HENNEPIN COUNTY, MINNESOTA  
PLANS FOR:

## FALL 2014 TREE PLANTING



PROJECT LOCATION  
COUNTY : HENNEPIN

THIS PLAN AND/OR SPECIFICATION WAS PREPARED SPECIFICALLY FOR THIS PROJECT, AND ANY RE-USE OF DETAILS OR SPECIFICATIONS ON OTHER PROJECTS IS NOT INTENDED OR AUTHORIZED. THE DESIGNER ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS IN THIS PROJECT. THE DESIGNER, AGENCY, OR CONSULTANT ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS IN THIS PROJECT.

### INDEX

SHEET NO. SHEET DESCRIPTION

1  
2-6  
7-8

TITLE SHEET  
LANDSCAPE PLANS  
PLANTING DETAILS

THIS PLAN CONTAINS ..... 8..... SHEETS



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE

*Sam J. Jereys*

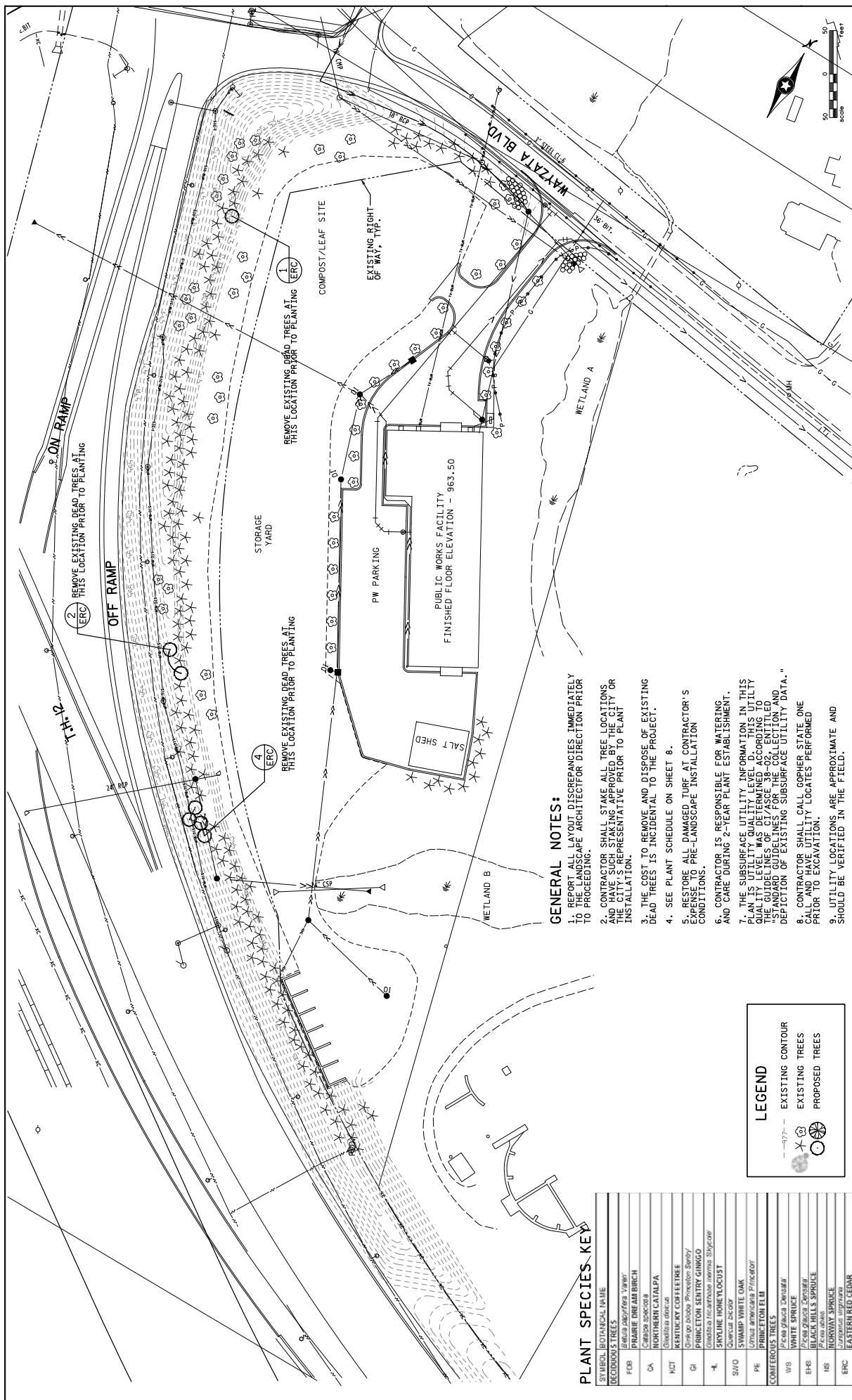
DATE 9/26/14

LIC. NO. 47256

PRINT NAME

SEAN C. JEREYS

SHEET NO. 1 OF 8 SHEETS



|  |  |  |  |  |  |  |  |  |  |                                                                                     |  |  |  |  |  |  |  |  |  |                                    |  |  |  |  |  |  |  |  |  |                |  |  |  |  |  |  |  |  |  |         |  |  |  |  |  |  |  |  |  |                                                  |  |  |  |  |  |  |  |  |  |         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  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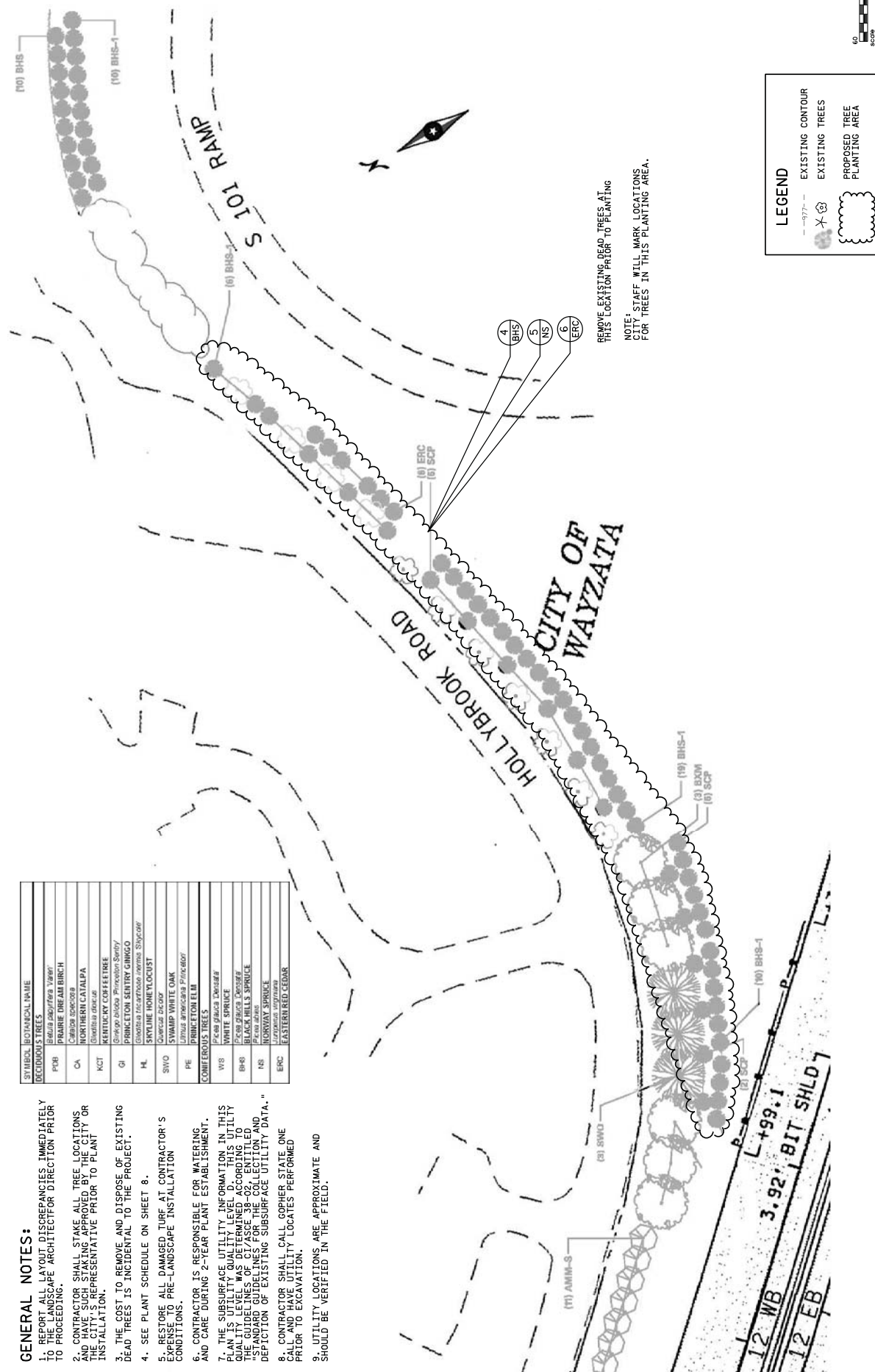


**GENERAL NOTES:**

1. REPORT ALL LAYOUT DISCREPANCIES IMMEDIATELY TO THE LANDSCAPE ARCHITECT FOR DIRECTION PRIOR TO PROCEEDING.

2. CONTRACTOR SHALL STAKE ALL TREE LOCATIONS AND SHALL HAVE SUCH STAKING APPROVED BY THE CITY OR THE CITY'S REPRESENTATIVE PRIOR TO PLANT INSTALLATION.
3. THE COST TO REMOVE AND DISPOSE OF EXISTING DEAD TREES IS INCIDENTAL TO THE PROJECT.
4. SEE PLANT SCHEDULE ON SHEET 8.
5. RESTORE ALL DAMAGED TURF AT CONTRACTOR'S DISCRETION TO PRE-LANDSCAPE INSTALLATION CONDITIONS.
6. CONTRACTOR IS RESPONSIBLE FOR WATERING AND CARE DURING 2-YEAR PLANT ESTABLISHMENT.
7. THE SUBSURFACE UTILITY INFORMATION IN THIS SPECIFICATION QUALITY LEVEL 1 SHALL BE UTILIZED. THE QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF AISC# 38-02, ENTITLED "STANDARD PRACTICES FOR THE COLLECTION AND INTERPRETATION OF EXISTING SUBSURFACE UTILITY DATA."
8. CONTRACTOR SHALL CALL GORMER STATE ONE (800) 455-4555 TO LOCATE UTILITIES PERFORMED PRIOR TO EXCAVATION.
9. UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD.

| SYMBO            | BOTANICAL NAME                                                          |
|------------------|-------------------------------------------------------------------------|
| DECIDUOUS TREES  |                                                                         |
| PUB              | <i>Prunella virginiana</i> "Prayer"                                     |
| CA               | PRAIRIE DREAM BIRCH<br><i>Carolina sophora</i>                          |
| KCT              | NORTHERN CATALPA<br><i>Gleditsia dioica</i>                             |
| GI               | KENTUCKY CORFEE TREE<br><i>Ginkgo biloba</i> "Princeton Sentry"         |
| H                | PRINCETON SENTRY GINKGO<br><i>Staphylea trifolia</i> "Princeton Sentry" |
| SVO              | SWAMP WHITE OAK<br><i>Quercus bicolor</i>                               |
| PE               | LITTLE AMERICAN "Princeton Sentry"                                      |
| CONIFEROUS TREES |                                                                         |
| V8               | PRINCETON EM<br><i>Pinus glauca</i> "Dorinda"                           |
| BH8              | WHITE SPRUCE<br><i>Picea canadensis</i>                                 |
| ERC              | BLACK SPRUCE<br><i>Pinus strobus</i>                                    |
| PER              | NORWAY SPRUCE<br><i>Picea canadensis</i>                                |
| BAR              | RED CEDAR<br><i>Juniperus horizontalis</i>                              |



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Consulting Group, Inc.

DRAWN BY  
S. JERGENS

DESIGNED BY

S. JERGENS  
CHECKED BY

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| T. WOLD         |
| COMM NO 0149631 |

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 Landscape Architect under the laws of the State of Minnesota.

Print Name: SEAN C. JERGENS

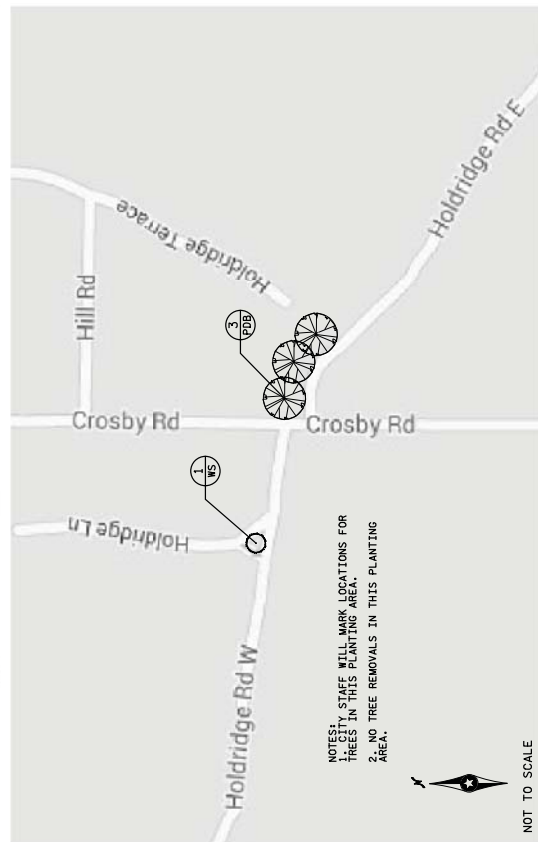
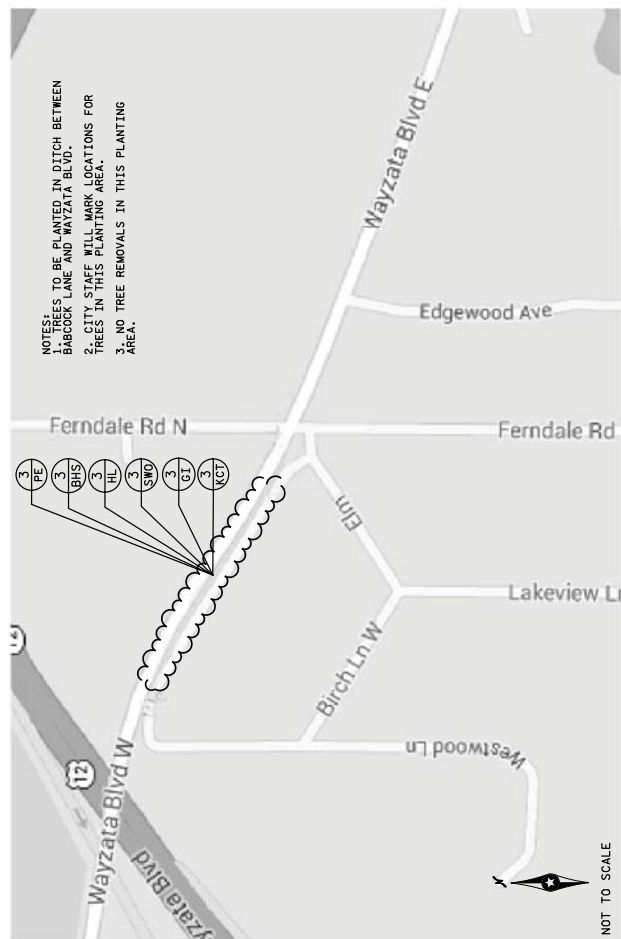
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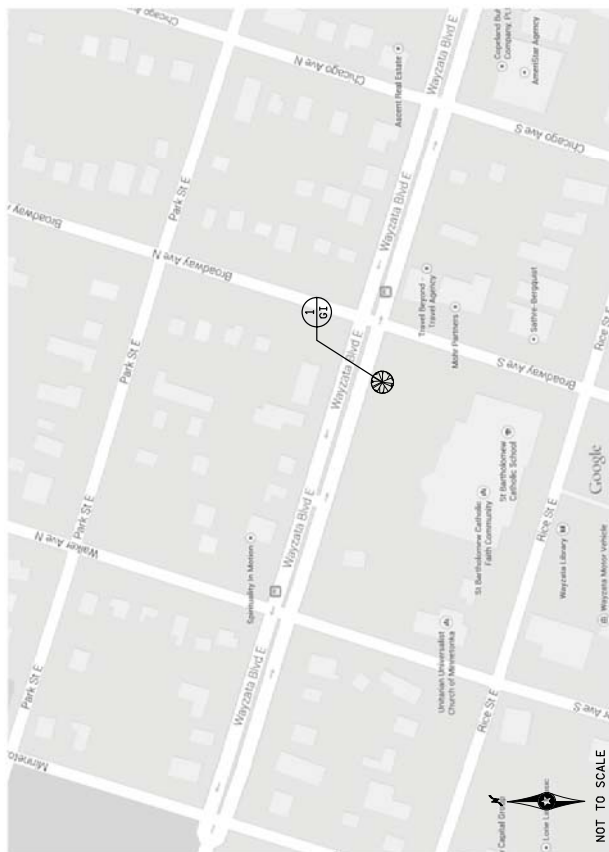
| SYMBOL           | BOTANICAL NAME                                        |
|------------------|-------------------------------------------------------|
| DECIDUOUS TREES  |                                                       |
| PDB              | Pink Dogwood <i>Cornus florida</i> "Vigor"            |
| PRB              | Prairie Dream Birch                                   |
| CA               | California sycamore                                   |
| NCT              | Northern Catalpa                                      |
| KCT              | Kentucky Coffeetree                                   |
| GI               | Ginkgo biloba <i>Ginkgo biloba</i> "Princeton Sentry" |
| PI               | Pink-Tree SENTRY GINKGO                               |
| H                | Hardy magnolia <i>Magnolia</i>                        |
| HL               | Shady magnolia <i>Magnolia</i> "normal Shady"         |
| SVO              | Swamp White Oak                                       |
| PE               | Pinus americana <i>Pinus strobus</i>                  |
| CONIFEROUS TREES |                                                       |
| WS               | White Spruce                                          |
| B-S              | Balsam Fir                                            |
| SR               | Spruce                                                |
| HR               | Horsetail                                             |
| W                | Willow                                                |

**GENERAL NOTES:**

1. REPORT ALL LAYOUT DISCREPANCIES IMMEDIATELY TO THE LANDSCAPE ARCHITECT FOR DIRECTION PRIOR TO PROCEEDING.
2. CONTRACTOR SHALL STAKE ALL TREE LOCATIONS. LANDSCAPE ARCHITECT SHALL VERIFY TREE LOCATIONS AND HAVE SUCH STAKING APPROVED BY THE CITY OR COUNTY REPRESENTATIVE PRIOR TO PLANT INSTALLATION.
3. THE COST TO REMOVE AND DISPOSE OF EXISTING DEAD TREES IS INCIDENTAL TO THE PROJECT.
4. SEE PLANT SCHEDULE ON SHEET 8.
5. RESTORE ALL DAMAGED TURF AT CONTRACTOR'S EXPENSE TO PRE-LANDSCAPE INSTALLATION CONDITIONS.
6. CONTRACTOR IS RESPONSIBLE FOR WATERING AND MAINTAINING DURING 2-YEAR PLANT ESTABLISHMENT.
7. THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS A UTILITY QUALITY LEVEL 1. ACCORDING TO THE UTILITY QUALITY LEVEL 1 STANDARD, THE UTILITY INFORMATION SHOWN ON THIS PLAN IS TO BE CONSIDERED IN ACCORDANCE WITH THE GUIDELINES OF C1/ASSE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND REPORTING OF EXISTING SUBSURFACE UTILITY DATA."
8. CONTRACTOR SHALL CALL Gopher State ONE (800) 447-4673 PRIOR TO EXCAVATION.
9. UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE FIELD PERSONNEL.

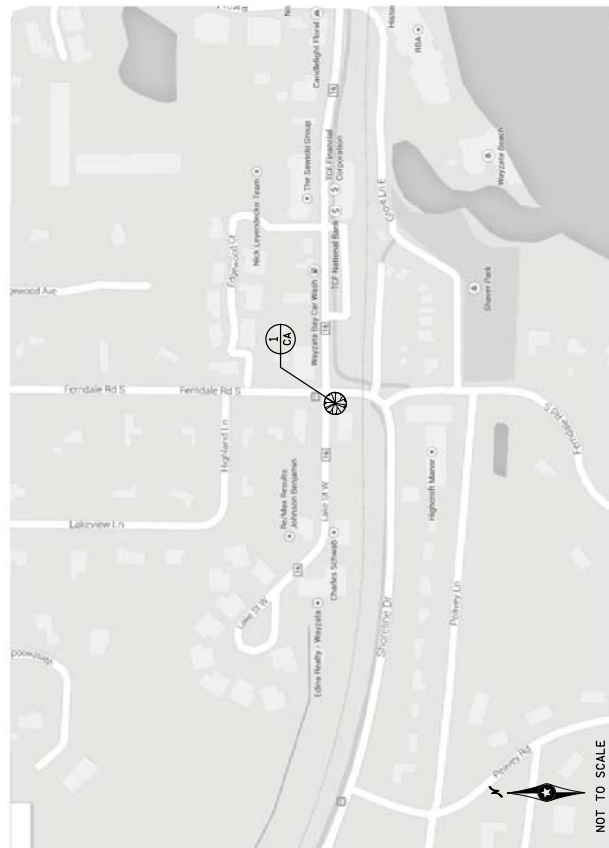
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|-----|------|----|-----|---------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------------------------------|---------------------------------|
| NO. | DATE | BY | ECO | APPROV. | REVISION | <p>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.</p> <p>Print Name: SEAN C. JERGENS</p> <p><i>Sean C. Jergens</i></p> <p>Date: 9/26/16 License #: 47256</p> <p>COMM. NO. 0148631</p> |  | <p>ENGINEERS<br/>PLANNERS<br/>DESIGNERS</p> | <p>CITY OF WAYZATA</p> <p>LANDSCAPE PLANTING PLAN<br/>WAYZATA TREE PLANTINGS</p> | <p>SHEET<br/>5<br/>OF<br/>8</p> |
|-----|------|----|-----|---------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------------------------------|---------------------------------|





NOT TO SCALE

NOTES:  
1. CITY STAFF WILL MARK LOCATIONS FOR TREES IN THIS PLANTING AREA.  
2. NO TREE REMOVALS IN THIS PLANTING AREA.



NOT TO SCALE

NOTES:  
1. CITY STAFF WILL MARK LOCATIONS FOR TREES IN THIS PLANTING AREA.  
2. NO TREE REMOVALS IN THIS PLANTING AREA.

| LEGEND                                                                              |                  |
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| — 1977 —                                                                            | EXISTING CONTOUR |
|  | EXISTING TREES   |
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GENERAL NOTES:

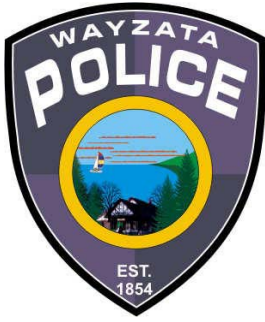
1. REPORT ALL LAYOUT DISCREPANCIES IMMEDIATELY TO THE LANDSCAPE ARCHITECT FOR DIRECTION PRIOR TO PROCEEDING.

2. CONTRACTOR SHALL STAKE ALL TREE LOCATIONS AND HAVE SUCH STAKING APPROVED BY THE CITY OR THE CITY'S REPRESENTATIVE PRIOR TO PLANT INSTALLATION.
3. THE COST TO REMOVE AND DISPOSE OF EXISTING DEAD TREES IS INCIDENTAL TO THE PROJECT.
4. SEE PLANT SCHEDULE ON SHEET 8.
5. RESCUE ALL DAMAGED TREES AT CONTRACTOR'S EXPENSE TO MEET LANDSCAPE INSTALLATION CONDITIONS.
6. CONTRACTOR IS RESPONSIBLE FOR WATERING, MAINTENANCE AND CARE DURING 2-YEAR PLANT ESTABLISHMENT.
7. THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN SHALL BE THE QUALITY LEVEL OF THIS UTILITY. THE QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASCE 38-02, ENTITLED "STANDARD PRACTICES FOR THE COLLECTION AND INTERPRETATION OF EXISTING SUBSURFACE UTILITY DATA."
8. CONTRACTOR SHALL GORPHER STATE ONE (1) UTILITY LOCATED AND HAVE UTILITY LOCATED PERFORMED PRIOR TO EXCAVATION.
9. UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD.

[illegible]







# WAYZATA POLICE DEPARTMENT

Proudly Serving Wayzata and Long Lake

600 Rice Street  
Wayzata, MN 55391-1734  
(952) 404-5340  
Fax: (952) 404-5359

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## MEMORANDUM

**To:** Heidi Nelson  
**From:** Chief Mike Risvold  
**Date:** October 1, 2014  
**Re:** Chapter 202.11 Changes

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Chapter 202.11 of the Wayzata city code book (Police Department) was recently reviewed by department staff and city legal representation. The chapter has been amended to come into compliance with state statute and mandates regarding background investigations. These mandates pertain to law enforcement access to Minnesota's criminal history information database for non-criminal purposes of employment and licensure background checks. The section has been amended in its entirety. It now gives the police department the legal authority to conduct criminal history checks for employment positions, licenses, and permits consistent with state statute. As a part of this process, the Wayzata Police Department has also updated the applicant consent form to come into compliance with state statute.

Attachments:  
Revised Ordinance

**CITY OF WAYZATA**  
**HENNEPIN COUNTY, MINNESOTA**  
**ORDINANCE NO. 748**

**AN ORDINANCE AMENDING CHAPTER 202 (POLICE DEPARTMENT) OF THE  
WAYZATA CITY CODE TO ADDRESS BACKGROUND INVESTIGATIONS**

**THE CITY OF WAYZATA ORDAINS:**

**Section 1. Amendment.** Section 202.11 of the Wayzata City Code (Background Investigations) is hereby amended to read in its entirety as follows (~~struck~~ text deleted; underlined text added):

**202.11 Background Investigations.**

**a. ~~Definitions~~Purpose and Intent.** ~~For the purpose of this Section, the following terms have the meaning stated:—~~The purpose and intent of this Section is to establish regulations that will allow the Wayzata Police Department to access Minnesota's computerized criminal history information to conduct background checks on individuals in connection with employment, contracts, licenses, permits and/or volunteer work with the City.

~~(1) — "CJDN" means the State of Minnesota Criminal Justice Data Communication Network or any successor communication network.~~

~~(2) — "Informed Consent/Waiver Form" means a consent/waiver form approved by the City and meeting the requirements of Minn. Stat. §13.05, 4(d), as amended.~~

~~(3) — "Manager" means an individual who is hired or is applying to be hired by an owner of rental property and who has or would have the means, within the scope of the individual's duties, to enter tenants' dwelling units.~~

~~(4) — "Rental Property Designee" means the owner or manager of rental property located within the City which has received a request from a prospective tenant to reside in said rental property.~~

~~(5) — "Tenant" means an individual who is or is applying to be a tenant in rental property.~~

**b. ~~Purpose and Intent~~Authority.** ~~It is the purpose and intent of this Section to protect and preserve the City's neighborhoods, to assure of safe park and recreation programs and to protect the overall public health, safety, welfare and morale of City residents by providing a system at the local level for criminal history/background investigations of Managers of rental property, Tenants, park and recreation and other City volunteers and new City employees through use of the CJDN. The Wayzata Police Department is required to do a criminal history~~



background investigation on individuals in connection with applications for the following positions, licenses and permits within the City of Wayzata:

- (1) Regular and part-time employment with the City
- (2) Certain volunteer positions with or for the City
- (3) Independent contractors that have: (i) direct access to, or management of, public funds; (ii) substantial contact with juveniles in a setting where other adults are not present; (iii) the task of entering private property on a regular basis; or (iv) supervisory responsibilities
- (4) Massage licenses, including managers and owners of the business
- (5) Liquor licenses, including managers of the establishments
- (6) Charitable gambling licenses
- (7) Sexually oriented business licenses
- (8) Solicitor and peddler permits
- (9) Pawnbroker and precious metal dealer permits

In conducting criminal history background investigations under this Section, the Wayzata Police Department is authorized to access data maintained in the Minnesota Bureau of Criminal Apprehension's (BCA) computerized criminal history information system in accordance with BCA policy. Any data that is accessed and acquired must be maintained at the Police Department under the care and custody of the Chief of Police or his or her designee. A summary of the results of the computerized criminal history data may be released by the Police Department to other city staff involved in the application process.

**c. Tenant Background and Investigation Applicant Consent.** ~~A Rental Property Designee may request the Wayzata Police Department to conduct a criminal history/background investigation on a Manager of rental property and/or a Tenant. Such request shall be on a City approved form and accompanied with an Informed Consent/Waiver Form executed by the Manager or Tenant. Before a background investigation is undertaken, the City must obtain written consent from the applicant, authorizing the Wayzata Police Department to undertake the investigation. The written consent must fully comply with the provisions of state law, including Minn. Stat. Chapter 13, regarding the collection, maintenance and use of the information.~~

**d. City Volunteer Background Investigation Rejection of Employment Application.** ~~The City Manager may request the Wayzata Police Department to conduct a criminal history/background investigation on a prospective volunteer for any City program, City sponsored event or for any volunteer position with the City. Such request shall be accompanied with an Informed Consent/Waiver Form executed by the prospective volunteer. Except for the positions set forth in Minn. Stat. 364.09, the City will not reject an applicant for employment on the basis of the applicant's prior conviction unless the crime is directly related to the position of employment sought and the conviction is for a felony, gross misdemeanor, or~~

misdemeanor with a jail sentence. If the City rejects the applicant's request on this basis, the City shall notify the applicant in writing of the following:

- (1) the grounds and reason for the rejection;
- (2) the applicant complaint and grievance procedure set forth in Minn. Stat. 364.06;
- (3) the earliest date the applicant may reapply for employment; and
- (4) that all competent evidence of rehabilitation will be considered upon reapplication

**e. New Employees Fees.** ~~The City Manager may request the Wayzata Police Department to conduct a criminal history/background investigation on a prospective new employee. Such request shall be accompanied with an Informed Consent/Waiver Form executed by the prospective employee.~~ All applications under this Section must be accompanied by a fee set by the Council, adopted by resolution, and uniformly enforced. Such fees may, from time to time, be amended by the Council by resolution. A copy of the resolution shall be kept on file in the office of the City Clerk and open to inspection during regular business hours.

**f. — Fees.** ~~All requests under this Section shall be accompanied by a fee to be fixed and determined by the Council, adopted by resolution, and uniformly enforced. Such fees may, from time to time, be amended by the Council by resolution. A copy of the resolution shall be kept on file in the office of the City Clerk and open to inspection during regular business hours.~~

(Ord. 613 [5-27-1999; Ord. 748 [XX-XX-2014])

## **Section 2. Effective Date**

2.1 This Ordinance will become effective upon passage and publication.

Adopted by the City Council this \_\_\_\_ day of \_\_\_\_\_, 2014.

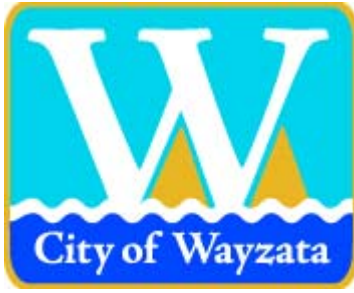
\_\_\_\_\_  
Ken Willcox  
Mayor

ATTEST:

\_\_\_\_\_  
Heidi Nelson  
City Manager

First Reading:  
Second Reading:  
Publication:

000043/204032/1933292\_1



**City of Wayzata**  
**600 Rice Street**  
**Wayzata, MN 55391-1734**

---

**Mayor:**  
Ken Willcox  
**City Council:**  
Jack Amdal  
Bridget Anderson  
Andrew Mullin  
Tom Tanner  
**City Manager:**  
Heidi Nelson

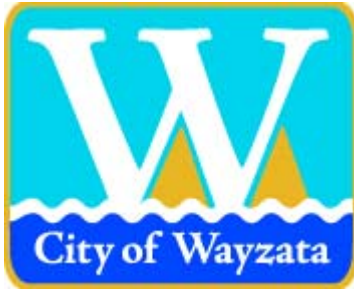
## MEMORANDUM

**TO:** Mayor Willcox and Councilmembers  
**FROM:** Heidi A. Nelson, City Manager  
**DATE:** October 1, 2014  
**RE:** Consider Selection of Owners Representative for Programming and Pre-Design for Mill Street Parking Structure

At the September 2nd City Council meeting, Council reviewed two drafts of a Request for Proposal for consultants to address downtown parking. After significant discussion, Council directed staff to proceed with a Request for Qualifications (RFQ) for Owners Representative Services to address programming and pre-design for a parking structure on Mill Street. The RFQ is attached for Council reference.

Three firms, including LSA Design, LaSalle/Walker, and SourceGroup responded to the RFQ. Interviews were conducted with the three firms by the City Council and two HRA representatives on September 16<sup>th</sup>. The interviews process asked each of the firms to address the following: provide an introduction of principals that will be performing work and a brief overview of your firm(s) and how you approach owners representative services; describe your firms understanding of the project and related issues, and specific challenges facing Wayzata's downtown; and provide an overview of other relevant projects where you have provided very similar services and how you helped your client with managing cost, timeline, resolution of related issues.

The City Council and the HRA representatives met on September 20<sup>th</sup> to discuss the interviews with the three firms. The consensus of the Council and HRA representatives was to move forward with LSA Design for Owners Representative Services for programming and pre-design for a parking structure at Mill Street. The LSA Design RFQ response is attached for Council reference.



**City of Wayzata**  
**600 Rice Street**  
**Wayzata, MN 55391-1734**

---

**Mayor:**  
**Ken Willcox**

**City Council:**  
**Jack Amdal**  
**Bridget Anderson**  
**Andrew Mullin**  
**Tom Tanner**

**City Manager:**  
**Heidi Nelson**

Staff has solicited a preliminary proposal from LSA Design engage as the City of Wayzata Owner' Representative and to assist with the pre-contract planning services, to include the following:

- Attend preliminary meetings with client and other parties to clearly understand the scope of services needed, financial implications and scheduling issues for the Project
- Assist in identifying project opportunities and constraints that will impact the final scope of work for the Project.
- Prepare existing conditions reports as requested by the City to assist in understanding the Project.
- Solicit, on behalf of the City, additional site investigations such as geotechnical or environmental, that will assist in defining the final scope of services for the Project.

The preliminary proposal assumes that a final scope of services and fee will be negotiated and agreed to between both parties once the scope is clearly defined. During this phase of pre-contract planning services, work would be billed on an hourly basis. The proposal is attached for Council review and consideration.

Additionally, staff is recommending that the City utilize Jay Lindgren with Dorsey Whitney for legal counsel for this project. An engagement letter is attached for Council review and consideration.

Staff is recommending that funding for this work be provided by the General Fund CIP (see CIP fund balance sheet in workshop packet for current cash flows) with all project costs being tracked for the purposes of a future construction project. Staff anticipates 1-2 staff level meetings and a Council workshop to outline the scope of issues to be addressed in programming and pre-design.

**Attachments:**

Parking Structure Owner's Representative Services RFQ  
LSA Design RFQ Response  
LSA Design Engagement Letter  
Dorsey Whitney Engagement Letter



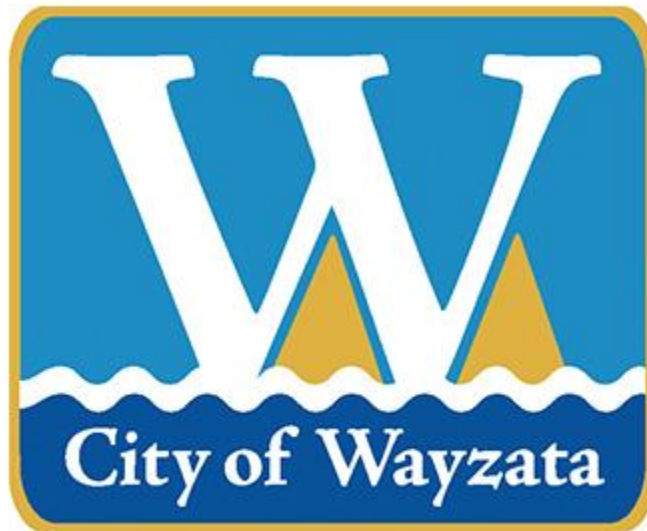
# REQUEST FOR QUALIFICATIONS

for

**Owners Representative Services**

Downtown Wayzata Parking Structure

Issued by:



September 5, 2014

# **Downtown Wayzata Parking Structure Request for Qualifications Owners Representative Services**

## **INTRODUCTION**

The City of Wayzata is proposing to construct a parking structure in downtown Wayzata in the area of the Mill Street Public Parking Lot. The parking structure is being constructed to provide additional public parking to serve the downtown public amenities and business district. The proposed project area includes the Mill Street Parking Lot and associated right of way and access points between Superior Boulevard and Broadway Avenue along Mill Street (Attachment A). The City owns the property and all adjacent right of way. The City recently updated its downtown parking study in an effort to better understand parking demand in the downtown district; the completed study is attached for reference (Attachment B).

The City is seeking professional Owners Representative Services for programming and pre-design for the new parking structure. This Request for Qualifications (RFQ) has been prepared to elicit information from consultants to perform Owners Representative Services and will provide a basis for contracting professional services.

## **PROJECT OVERVIEW**

The City of Wayzata is seeking proposals from consultants with experience in the area of parking district development in urban areas, parking structure programming and design, transit/interim transportation systems/services, and construction project delivery and oversight. The selected firm will work with the assistance of and direction of the City of Wayzata staff.

Professional services shall include, but may not be limited to:

- Programming services to include the following:
  - Development of a Downtown Parking District and a business model for the structure
  - Consideration of interim conditions and construction impacts to existing parking and potential off-site parking/shuttle service
  - Planning for traffic flow and surface parking configuration for areas in and around the new parking structure
  - Consideration of commercial uses as a part of the parking structure design at its east and west corners and/or fronting on Mill Street
  - Consideration of Municipal Liquor Operation, building, parking and access
  - Ensuring a design that accommodates and encourages a high level of pedestrian use of the area and recognizes other multi-modal uses in the downtown
  - Consideration of existing residential on the bluff above the project area
  - Development of the city owned lot at the northwest corner of Lake Street and Superior Boulevard

- Potential redevelopment of commercial buildings in the 700 Block of Lake Street and opportunities for public/private partnership
  - Coordination with privately owned, public ramp in the 600 Block of Lake Street and opportunities for public/private partnership
  - Ensuring new parking structure design reflects the vision of the city's lakefront plan – the Lake Effect and the community values established and documented in the Lake Effect Development Framework (Attachment C)
- Pre-Design services to include consideration of the following:
    - Architectural relevance to downtown district buildings and character
    - Conformance with city zoning code with regard to building heights and bluff neighborhood height restrictions
    - Site feasibility and geotechnical considerations
    - Connections to pedestrian ways and public spaces, consideration of public restrooms within the facility
    - Specific attention to public safety concerns of structured parking
    - Best management practices for the treatment of storm water, to include, but not limited to green roof solutions, environmentally sensitive landscape
    - Consideration of other sustainable practices, such as solar and snow removal/melting options
    - Consideration of structural design elements to include long-term durability, reduced cost of maintenance, a minimum 50-year life span, internal navigation or way-finding system, internal vehicle and pedestrian traffic circulation, self-parking, effective and energy efficient lighting system, and patron safety and security.

The programming and pre-design design process may include public input in the scope of work to include up to three meetings to address the scope outlined above. It is important that the parking structure design efforts are sensitive to the residential and commercial buildings and residents and businesses in and around the 700 Block of Lake and Mill Streets. The consultant will be responsible for leading the public input process in coordination with city staff, to include facilitating the process and providing materials for the meetings.

Other services desired may include method of delivery/procurement process recommendation, assistance with A/E selection, and construction oversight.

This Request for Qualifications does not obligate the City of Wayzata to complete the project. The City reserves the right to cancel the solicitation if such action is considered to be in its best interest.

## **ATTACHMENTS**

Attachment A: Map of Project Area  
 Attachment B: Updated Downtown Parking Study  
 Attachment C: Lake Effect Development Framework - available on-line at  
[www.wayzatalakeeffect.com](http://www.wayzatalakeeffect.com)

## **QUALIFICATION RESPONSE CONTENTS**

1. Title Page/Cover Letter- Introduce the firm submitting the proposal, including the name, address, telephone number, fax number and email address of the contact person(s) representing the same, and also names of other firms or individuals participating in the RFQ. Indicate other office locations, if any, where project work may be completed.
2. Table of Contents- Identify the material by section and page number.
3. Project Overview- Restate RFQ objectives to demonstrate the consultant's understanding of the project.
4. Experience and Qualifications- Identify the general background, structure and organization, and available resources in personnel/experience/information systems of the participating firm or firms to perform the following specific work: parking district development in urban areas, parking structure programming and design, transit/interim transportation systems/services, and construction project delivery and oversight. List at least five client references (include address and phone number) with a brief statement of services rendered. Provide specific recent project examples to demonstrate competence and performance ability in similar Owners Representative services for parking structure projects.
5. Fee Structure - Identify fee structure for Owners Representative services.

## **PROJECT TIMELINE**

The timetable for submission, evaluation, and award shall be as follows:

- RFQ Issued: Friday, September 5<sup>th</sup>, 2014
- RFQ responses requested: Thursday, September 11<sup>th</sup>, 2014
- Possible Interviews with Council/HRA: morning of Tuesday, September 16<sup>th</sup>

## **RFQ SUBMITTAL**

All proposals must be sent to:

Ms. Heidi Nelson, City Manager  
[hnelson@wayzata.org](mailto:hnelson@wayzata.org)

***All RFQ responses are requested by noon, Thursday September 11<sup>th</sup> 2014.*** Submit one (1) electronic copy (pdf format) of the response. Each response must be electronically signed by an authorized member of the firm.

## **RFQ QUESTIONS**

Prospective responders who have any questions regarding this RFPQ should submit questions by e-mail to:

Heidi Nelson, City Manager  
[hnelson@wayzata.org](mailto:hnelson@wayzata.org)

# Request for Qualifications City of Wayzata

## Owner's Representative Services

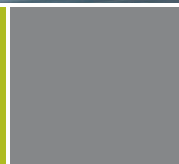
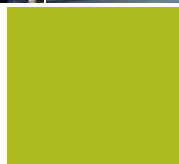
### Downtown Wayzata Parking Structure



With:



9.11.2014



LSA Design, Inc.  
Northwestern Building  
219 N. Second Street  
Suite 302  
Minneapolis, MN 55401  
T. 612.339.8729  
[www.lsadesigninc.com](http://www.lsadesigninc.com)

Planning  
Architecture  
Urban Design





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LINK TO LSA PROJECT EXAMPLES AND GRAPHIC ABILITIES:

<http://www.lsadesigninc.com/#!/DowntownWayzataParkingStructure/c1hg5>





LSA Design, Inc.  
Northwestern Building  
219 N. Second Street  
Suite 302  
Minneapolis, MN 55401  
T. 612.339.8729  
www.lsaesigninc.com

Planning  
Architecture  
Urban Design

## COVER LETTER

1

September 11, 2014

Ms. Heidi Nelson  
City Manager, City of Wayzata  
600 Rice Street East  
Wayzata, MN 55391

RE: Request for Qualifications Owner's Representative Services

Dear Ms. Nelson,

Thank you for this opportunity to submit qualifications for Owner's Representative Services for the Downtown Wayzata Parking Structure. LSA Design has proven experience in providing Owner's Representative Services for projects involving parking facilities, commercial and residential development, planning and implementation, transportation, wayfinding and connectivity. We typically provide services from the initial pre-design and programming steps through construction closeout in our role as Project Manager on behalf of our clients. In all of our Owner's Representative projects we have saved our clients time and unexpected costs by anticipating and resolving any issues, and most importantly have facilitated the achievement of our clients' interests and goals.

To best serve the City of Wayzata, LSA Design, Inc. (LSA) has selected a highly qualified team of experts to provide services in each requested services listed in the RFQ.

LSA Design, Inc.

Project Management, Owner's Representative Services, Planning, Programming and Pre-Design, Parking Feasibility and Design, Real Estate Development, Structural Engineering and Connectivity

WSB

Civil, Sustainability and Traffic Engineering

Visual Communications

Wayfinding

Jim Lasher will be the Principal in Charge and will work directly with Heidi Nelson. Jo Ann Olsen will provide project management and direction of the sub-consultants. Our team is very committed to assisting the City reach their goals for this project. We believe our creativity and skills as the City's Owner's Representative will provide great value in all areas from pre-design and site Investigation through construction services. We are excited about this opportunity and are ready to start work immediately at your direction.

Please review our qualifications and contact me with any further questions.

Respectfully,

LSA Design Inc.

James B. Lasher, RLA  
President





**LSA DESIGN, INC.**

219 N. SECOND STREET  
SUITE 302  
MINNEAPOLIS, MN 55401  
612.339.8729

|                 |            |
|-----------------|------------|
| FEDERAL ID:     | 41-1660611 |
| D-U-N-S NUMBER: | 847032497  |
| MN TAX ID:      | 2860684    |

The City of Wayzata's main contacts for the project will be James Lasher, RLA, President and Jo Ann Olsen, AICP, Principal, of LSA Design, Inc. (LSA). Jim and Jo Ann will be supported by LSA staff William Fossing, PE, and Melissa Cross, Architectural Intern. Our consultants include WSB & Associates, Inc. (civil engineering, traffic flow and surface parking configuration, storm water management and sustainable practices) and Visual Communications (wayfinding).

An organizational chart can be found on page 19 of the request for qualifications detailing the teams reporting structure.

**MAIN CONTACTS:****JAMES B. LASHER, RLA**

*President*

Responsibility:  
Principal-in-Charge

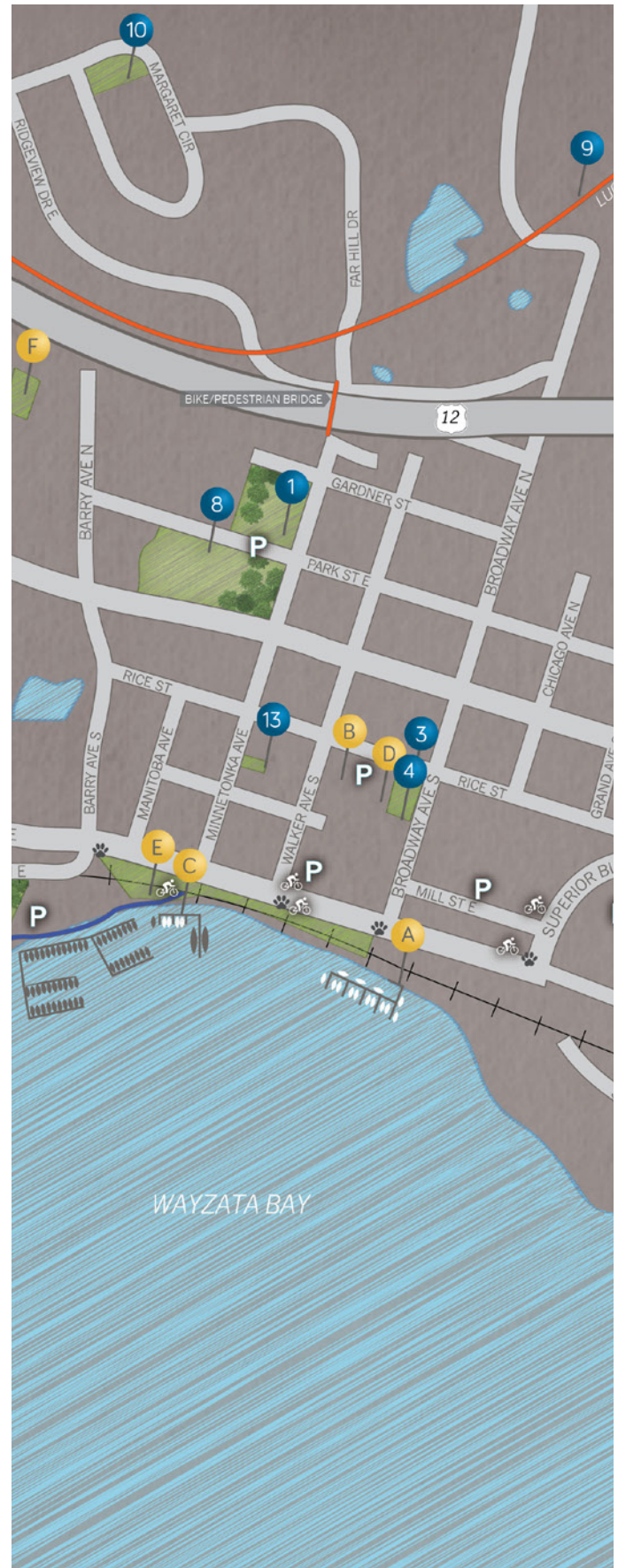
jameslasher@lsadesigninc.com  
|direct| 612.767.5972  
|fax| 612.767.5982

**JO ANN OLSEN, AICP**

*Principal*

Responsibility:  
Project Manager,

joannolsen@lsadesigninc.com  
|direct| 612.767.5974  
|fax| 612.767.5984



## PROJECT OVERVIEW

The City of Wayzata is requesting proposals for an Owner's Representative to assist the City in the programming and pre-design for a new parking structure to be owned by the City of Wayzata (the Project), in addition, the owner's representative will provide guidance with support in determining and implementing pedestrian, commercial development, bicycle, and urban design improvements associated with the new parking facility. The Owner's Representative will assist the City in monitoring the Project to ensure that it provides the least impact to existing businesses, parking and circulation, is on schedule, within budget, and proceeds in conformance with the approved plans, specifications, and funding agreements.

LSA understands the City's objectives and goals for this significant capital investment. We understand the importance of establishing a strong and clearly defined road map for achieving these goals and meeting all of the requirements associated with such a highly impactful public project and its impacts during both the planning stages as well as construction. As the City's Owner's Representative, LSA will ensure the City's best interests are represented and fulfilled.

LSA will also assist the city in the planning and financial analysis for potential commercial development opportunities within the limits of the Project. If necessary, LSA will engage the services of a market research firm to assist with developing a model for commercial development that assesses the viability and marketability of future commercial space, potential achievable rents, anticipated absorption rates and associated capital and operating costs.

LSA will actively manage the quality of the Project during initial planning stages as well as through the design and construction stages of the project. We recommend this service include a full commissioning report by the Owner's Representative team. This is a very effective way to provide the necessary assurances to the City that their project conforms to the level of excellence required for the project.

LSA Design and our sub-consultants have read all of the attached documentation regarding this Owners Representative RFQ and clearly understand the principle objectives to be as follows:

- I) To enhance the mobility of the community of Wayzata, its downtown business and residential populations by:
  - a. Adding new parking stalls to meet the goals and shortfall as depicted in the April 24, 2014 Parking Study.
  - b. Enhancing the pedestrian opportunities to more effectively gain access to downtown business and residential properties and as a connecting link to the rest of the city.
  - c. Building on the success of bicycle usage and its importance for both residents and visitors alike.
  - d. Elevating the status and image of mass transit within the community and review the potential of transit service to increase downtown and park and ride usage and provide added benefit to business and residential properties.
  - e. To aid in the successful implementation of the Lake Effect Development Framework and support the City of Wayzata as a tourist destination.
- II) To successfully integrate commercial development and parking into the existing fabric of the downtown core area by:
  - a. Ensuring that both street front and lake view properties are afforded the highest level of continued benefit and that new improvements do not negatively impact current uses.
  - b. Ensuring that new street front development successfully integrates into the fabric of Wayzata in scale, design rhythm and texture, and adds to the street edge vitality.
  - c. Building added tax base at various locations throughout the core area, including the NW corner of Superior and Lake, and adjacent to any new parking structure.

- d. Enhancing the existing Urban Design of the city with in-fill opportunities that continue to enhance the street front experience and eliminate gaps in the pedestrian experience, and enhanced sustainability for public buildings (possible LEED Certification).
  - e. Ensuring the proper treatment of storm water as to not contribute to negative impacts on the community and contribute to the value of greenspace in the downtown core area.
  - f. Increasing accessibility to goods and services to the citizens and tourists of the City of Wayzata
- III) To create a fair and equitable methodology for business and residential properties to share in the access to and the costs of "Mobility Improvements" by:
- a. Assisting the city in creating a fair and equitable process to allocate parking by demand to various business and residential properties to ensure the continued success of each property.
  - b. Clearly identify allocation, costs and on-going expenses to identify a reasonable strategy for annual costs with a District Parking Plan.
  - c. Assist with the creation of a DRAFT Ordinance to solidify the roles, rights and obligations of all parties with a new Parking District Plan.
- IV) Assist the City in developing an implementation process to achieve the aforementioned objectives by:
- a. Developing a thorough Program of Uses for the Project and assess spatial and cost impacts.
  - b. Test the Program with selected design concepts that will allow for a clear understanding of the community impacts, during both construction and final use.
  - c. Engage the community and solicit input from various business and community leaders, citizens and business owners alike to ensure a proper vetting of all concepts and ideas.
  - d. Create an easily understood Wayzata Parking Structure Master Plan that identifies the project need and all "Mobility" improvements as a result of the design and public engagement process.
  - e. Assist the City in assessing the benefits of various procurement methodologies for design and construction such as design-bid-build (DBB), design-build (DB), Developer Turn-Key and Public Private Partnerships (PPP), Design-Build-Operate-Maintain (DBOM)
  - f. Engage design and construction professionals as determined by the procurement through a qualifications based-selection and successfully negotiate final terms and conditions.
  - g. Manage the design and construction process and provide for active engagement of downtown businesses and residents during each phase of work to ensure an open and public improvement process.

## PROJECT OVERVIEW

LSA Design has found that the most successful projects break out the scope of services into two stages. LSA Design will provide Owner's Representation services for both stages. Stage One assembles the key stakeholders, assesses existing conditions, performs the programming and pre-design, selection of preferred alternative, and procurement analysis. This stage provides a clear definition of project need, defines an achievable and supported preferred alternative, and sets up the format for the second stage through selection of procurement and implementation plan for the Project. Stage Two will be more clearly defined upon completion of Stage One. Stage Two includes procurement, contract negotiations, entitlement, final design, and construction oversight. We estimate Stage One to be completed in four months with some of the steps being performed concurrently.

### STAGE ONE SERVICES

1. Assemble a Technical Advisory Committee (TAC) made up of key representatives from various factions within the city, including but not limited to city council members, planning commissioners, business owners and operators, and residents. Create goals and objectives for the TAC, establish the public outreach process for the Project and begin to define basic budgets, schedules and strategies for the success of the Project. We will facilitate up to three meetings.
2. Review existing planning and community documentation to clearly understand the larger picture for the future path of the City of Wayzata:
  - a. Assess the status of the April 2014 Parking Study and update as necessary with any new information.
  - b. Detailed review of the Lake Effect Vision and outlining the specific areas where this project will impact the goals of that study.
  - c. Formulate a Limits of Investigation map that includes any and all opportunities to meet the goals and objectives of the Project.
3. Existing conditions assessment and identification of project boundaries:
  - a. Prepare base maps that show limits of area for investigation.
  - b. Complete a Real Property analysis of land to be dedicated to the Project and its condition of title.
  - c. Review any available geotechnical information, traffic studies, utility and infrastructure availability.
  - d. Assess applicable view-sheds from various locations to ensure limited encroachment of any new improvements.
  - e. Identify any shortfalls in existing condition documentation and complete the following as necessary:
    - i. Geotechnical Investigation
    - ii. Traffic Counts
    - iii. Topo/Existing Conditions Surveys
    - iv. Cultural/Historic Impacts
    - v. Phase I Investigations
  - f. Existing Conditions Assessment of the 700 block Parking Structure including:
    - i. Condition of structural and support members
    - ii. Condition of joints
    - iii. Condition of mechanical and electrical systems
    - iv. Condition of access/egress points including stair towers, door assemblies, elevator (if applicable)
    - v. Condition of pavements, retaining and separation walls
4. Programming & Pre-Design:
  - a. Develop a detailed development program (by square foot or project element) including ALL Project component:
    - i. Number and location of proposed parking stalls
    - ii. Anticipated Commercial Development



- iii. Pedestrian Improvements
  - iv. Bicycle Improvements
  - v. Transit Improvements
  - vi. Restoration of existing facilities
- b. Develop three concept design plans that utilize the approved development program and address the existing conditions impacts. Work product will include plans, elevations, sections, aerial perspectives and fly-over video to ensure the complete understanding of each Concept.
- c. Complete public outreach activities and seek to build consensus on a preferred alternative for the combination of components from multiple concepts.
- d. Select preferred alternative.
- e. Complete a preliminary project cost based on the preferred alternative.
- 5. Complete a project impacts report, base on the preferred alternative, that itemizes the impacts on existing conditions throughout the duration of the project along with recommendations to mitigate unavoidable conflicts:
  - a. Potential loss of parking for entire construction sequence
  - b. Potential transit circulator services
  - c. Temporary pedestrian and bicycle improvements
  - d. Traffic impacts, diversions and anticipated delays
  - e. Utility and infrastructure impacts
- 6. Procurement Analysis
  - a. Prepare a list of potential implementation strategies such as design-bid-build (DBB), design-build (DB), Developer Turn-Key and Public Private Partnerships (PPP), Design-Build-Operate-Maintain (DBOM) for the Approved Concept Plan and review options with TAG.
  - b. Define the advantages and disadvantages of each procurement methodology including cost impacts, schedule impacts, revenue impacts, and ownership issues and limitations.
  - c. Prepare Cost-Benefit Analysis of a select few of the preferred procurement options and assist with final determination.
  - d. Prepare final procurement report that itemizes selection process and TAC recommendations for the preferred procurement and implementation plan for the Project.

**Deliverables:** Preferred Concept, Project Impacts Report, Final Procurement Report, Project Budget and Schedule.

## STAGE TWO SERVICES

Stage Two Services are contingent on the decisions made in Stage One and are therefore not clearly definable at this point but will include the following basic elements:

- Preparation of the appropriate RFP/RFQ for Selection of a Development Partner or Partners for the design and construction of the Project Improvements (Note: It is certainly possible that selected Project elements may fall to the City for Implementation and are not appropriate for the Development Partner. These elements will be defined and a logical Project development Path will be prepared for the successful implementation of these elements)
- Negotiations and Contract Approval with Development Partners
- Entitlement Process (in concert with Development Partner)
- Final Design, Schedule, and Anticipated Project Cost
- Bidding or Negotiations for Construction
- Construction Over-site, testing and materials certifications
- Commissioning of systems (LEED?)
- Final Punch list and Owner Occupancy
- Grand Opening



## EXPERIENCE AND QUALIFICATIONS - LSA



### BACKGROUND

LSA Design, Inc. defines an Owner's Representative (OR) as an effective third party extension hired by the owner to monitor and manage the building process on behalf of the owner. Our first task as OR is understanding our clients' goals and objectives so that we may best guide our clients through building process. This includes the site selection, design and/or construction process of a facility. With extensive knowledge and experience in planning, architecture, construction administration, contract management, federal process and policy, real estate, project economics and overall project development, LSA Design, Inc. has the ability to anticipate issues along the way and monitor overall project quality. Our presence minimizes the owner's risk, keeping your project on-time, on-budget and on-scope.

LSA Design, Inc. can act as Owner's Representative (OR) in a wide variety of sectors and we have specialized in mixed-use transit and parking facilities over the last 25 years. Our services can be provided on an as-needed basis, individually or in any combination.

#### DTA MULTIMODAL TRANSPORTATION FACILITY DULUTH, MN

CONTACT: Mr. Dennis Jensen  
2402 West Michigan Street  
Duluth, MN 55806-1988  
(218) 722-4426  
DJensen@DuluthTransit.com  
Dennis.Jensen@firstgroup.com

LSA is serving as the DTA's Owner's Representative to advance the Multimodal Transportation Facility. LSA provided guidance and recommendations for DTA in selecting the scope of the project, delivery method and steps for analyzing options and making a recommendation on the type of Public Private Partnership to pursue.

The scope of work includes pre-design of the facility, cost estimating, presentations, and coordination with all stakeholders. LSA drafted a TIGER federal funding application, along with supporting documentation for Livability Grant and State of Good Repair. In addition, LSA prepared the Documented Categorical Exclusion document to initiate the NEPA process and receive environmental approvals. LSA was also responsible for issuing RFPs and making recommendations for all sub consultant work.

Click here to view more graphics from this project:

<http://www.lsadesigninc.com/#!/DowntownWayzataParkingStructure/c1hg5>



*DTA Multimodal Concept Renderings:*



## EXPERIENCE AND QUALIFICATIONS - LSA

GRAND RIVER STATION, LA CROSSE, WI  
CONTACT: Keith Lee, Transit Manager  
Municipal Transit Utility (MTU)  
2000 Marco Drive  
LaCrosse, WI 54601-9988  
(608) 789-7350  
leek@cityoflacrosse.org

Grand River Station was the first FTA funded Public/Private Partnership transit center project for the City of La Crosse, WI. LSA was hired on the project in 2003 to provide preliminary planning and design. LSA then took on a role of Owner's Representative to provide our expertise in Public Private Partnerships and knowledge of FTA funding. LSA managed the Public/Private Partnership process, authored and issued three separate Request for Proposals for the Public/Private Partnership partner, selected and negotiated with the development partner, and ensured the project adhered to FTA 5309 policies and procedures.

Our team worked with the Client to coalesce the initial, conceptual ideas into a historically contextual, architectural centerpiece which seamlessly blends transit and retail with affordable rental and owner occupied housing. The 208,000 s.f. mixed use transit center includes primary passenger station and loading platform; retail; structured parking; live/work housing units; LIHTC affordable rental housing units; market rate rental housing units; and owner occupied condominium units.

In 2008, LSA again acted as the Owner's Representative and prepared the Agency Construction Manager (ACM) RFP and assisted the City in reviewing, scoring and the final selection of the ACM.

*Grand River Station: Images & Rendering*



## EXPERIENCE AND QUALIFICATIONS - LSA

SOUTHWEST TRANSIT, EAST CREEK STATION,  
CHASKA, MN

CONTACT: Len Simich – CEO, Southwest  
Transit  
13500 Technology Drive  
Eden Prairie, MN 55344  
952-974-3101  
lsimich@swtransit.org



LSA is currently serving as Owner's Representative for East Creek Station, located in Chaska, MN. The scope of work includes preparing procurement request for proposals for the design team and construction team on behalf of Owner and complete construction administration of federal funds. LSA has guided the client, SouthWest Transit, through final design stages and is in the process of bidding for construction. The program for this project includes a 650 car parking structure, bicycle storage facilities, rain garden and a transit passenger station.

SOUTHWEST TRANSIT, SOUTHWEST VILLAGE  
CHANHASSEN, MN

CONTACT: Len Simich – CEO, Southwest  
Transit  
13500 Technology Drive  
Eden Prairie, MN 55344  
952-974-3101  
lsimich@swtransit.org



As program manager for SouthWest Transit (SWT), LSA identified and facilitated transit-oriented development opportunities within their service area along the Trunk Highway 212 corridor. SouthWest Village was created at one such location in Chanhassen, MN. LSA developed a master plan incorporating town homes, neighborhood commercial property and transit center. Working with SWT, LSA solicited and negotiated the development agreements for the residential and commercial properties and set design standards for those projects to ensure overall the project quality that was sought by SWT.



LSA created concept designs for the transit center, which included an enclosed passenger area and parking facility. LSA coordinated the A/E selection process for the transit center and continued as overall program manager during final design and construction of SouthWest Village.

The program for this project includes a 600 car parking facility, 15,000 SF commercial shell, 44 town homes, bicycle station, and a transit passenger station.



## MANKATO BUS FACILITY

CITY OF MANKATO, MN

CONTACT: Mark Anderson, Mass Transit  
Superintendent  
City of Mankato  
10 Civic Center Plaza  
PO Box 3368  
Mankato, MN 56002-3368  
manderson@city.mankato.mn.us  
(507) 387-8655

LSA was hired by the City of Mankato to provide Owner's Representative services from pre-design through the construction of the new transit facility. The project includes the construction of a new garage storage facility to house the entire 40 vehicle fleet within an enclosed, heated structure and the demolition of an existing office annex that will involve new construction and remodeling of the existing facility. LSA provided grant management/assistance and graphic support for the FTA State of Good Repair Grant in 2011, of which the City of Mankato was awarded \$1.5 million in federal funds.

As Owner's Representative, LSA provided the owner with the value added resources needed to make their project a success. LSA serves as an extension to Mankato staff.

## MALL OF AMERICA STATION, BLOOMINGTON, MN

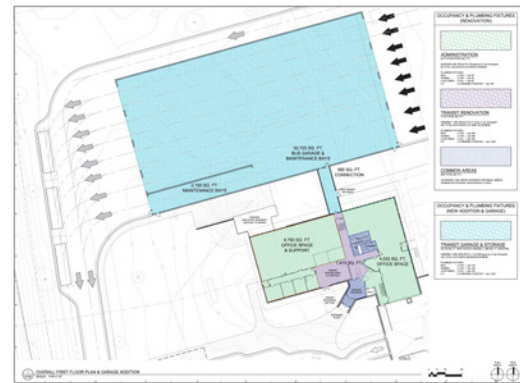
CONTACT: Jeff Freeman  
560 6th Ave N.  
Minneapolis, MN  
(612) 349-7527  
jeff.freeman@metc.state.mn.us

LSA Design was selected by Metro Transit to perform a needs analysis for the MOA Transit Station to determine the bus and service capacity, and shortfalls, of the current facility. The outcome of this needs analysis determined that there was capacity at the station to add bus service, but that the overall function of the station was very poor and needed improvement. LSA Design was then asked by Metro Transit to perform a Master Plan for the MOA Transit Station. The Master Plan provided a design that greatly increased the efficiency and capacity of the MOA Transit Station. In addition, by working closely with Metro Transit, the City of Bloomington, and the Mall of America, it was agreed to have the MOA Transit station directly connect to the MOA and provide a continuous enclosed station for passengers and MOA visitors/employees. These two studies were used as the basis for a successful Congestion Mitigation Air Quality grant and a recent submittal to the FTA for a TIGER IV grant.

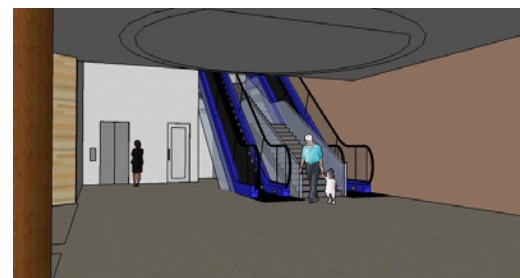
Click here to view more graphics from this project:

<http://www.lsadesigninc.com/#!/DowntownWayzataParkingStructure/c1hg5>

Image of Mankato Bus Facility:



Images of Mall of America Station:



## EXPERIENCE AND QUALIFICATIONS - LSA



### JAMES LASHER, RLA

Position: President  
 Responsibility: Principal-in-Charge  
 Years Experience: 29  
 Years with Firm: 25

Mr. Lasher is the founding principal of LSA. Mr. Lasher holds a Bachelors of Landscape Architecture from the University of Minnesota. Focusing on "Community Mobility", Mr. Lasher has developed a regional and national reputation in Transit Oriented Development / Mixed-Use Transit Facility Development and Public Private Partnerships through his writings and project specific experiences.

#### RELEVANT EXPERIENCE IN LAST FIVE YEARS

- Owners Representative for DTA Multimodal Transportation Center, Duluth, MN
- Owners Representative for SouthWest Transit Commission, East Creek Station, Transit Station, Chaska, MN
- Owners Representative for SouthWest Commission SouthWest Village, Mixed-Use Transit Station, Chanhassen, MN
- Owners Representative for Washington County Housing and Redevelopment Authority and Red Oak Preserve, LLC. Red Oak Preserve, Mixed-Use Development, Oakdale, MN
- Central Corridor LRT, 4th and Cedar Public/Private Partnership, St. Paul. Principal-in-Charge.
- Marschall Road Transit Station, Mixed-Use Transit Station/Parking Facility, Shakopee, MN. Principal-in-Charge
- Mall of America Transit Station Programming Study, Mixed-Use Transit Station, Bloomington, MN. Principal-in-Charge
- Parkway Station, Transit Station Parking Facility, Maple Grove, MN. Principal -in-Charge
- Grand River Station, Mixed Use Multimodal Transit Center, La Crosse, WI. Principal-in-Charge
- Ramsey Municipal Parking Facility & Transit Station, Ramsey, MN. Principal-in-Charge
- DTA Multimodal Transportation Center, Site Selection Study, Duluth, MN. Principal-in-Charge

### JO ANN OLSEN, AICP

Position: Principal  
 Responsibility: Project Manager  
 Planning Manager  
 Years Experience: 32  
 Years with Firm: 17

Ms. Olsen holds a Masters in Urban Planning from the University of Michigan and a Bachelor of Science from Michigan State University. Ms. Olsen has extensive experience in project management, transit facility planning, and project approvals. She is experienced with transit studies to determine demand and site location, site design and Public/Private Partnership projects.

#### RELEVANT EXPERIENCE IN LAST FIVE YEARS

- DTA Multimodal Transportation Center, Site Selection Study, Duluth, MN. Project Manager
- Centennial Hills Transit Center and Park and Ride, Las Vegas, NV, Project Manager.
- RTC Public/Private Partnership, Las Vegas, NV. Project Manager (description under Lasher)
- Lakeville BRT Station Siting Study, Dakota County, MN – Project Manager Assessed and identified a preferred location for a BRT station along the Cedar Avenue Corridor. Developed site plan sufficient for land acquisition.
- Minneapolis Downtown Layover Study. Project Manager - The purpose of this study was to document and increase understanding of bus transit layover facility needs in downtown Minneapolis. The study included operations analysis, market analysis, and conceptual design to meet existing and future needs. It also evaluated Public/Private Partnership possibilities to maximize use of downtown land acquisition investments.



## WILLIAM FOSSING, PE

Position: Principal  
 Responsibility: Structural Engineering  
 Years Experience: 29  
 Years with Firm: 8

Mr. Fossing holds a Bachelor of Science/Civil Engineering from the University of Minnesota. He has over twenty-five years experience as a Structural Engineer, Project Manager and Parking Consultant. During that time he has designed over one-hundred parking facilities throughout the country. His work experience includes parking studies, conceptual design, structural and functional design as well as construction administration. Mr. Fossing is considered a national expert in this field.

### RELEVANT EXPERIENCE

- Duluth Multimodal Transportation Facility, Owners Representative/Pre-Design (Duluth, MN)
- Ramsey Municipal Parking Facility, Ramsey, MN Project Manager - 600 space parking structure - Recipient of the 2007 MC&MCA Excellence in Concrete & Masonry Design and Construction Award
- Grand River Station, Mixed Use Multimodal Transit Center, La Crosse, WI: Parking Consultant
- Radisson Blue Hotel, Bloomington, MN: Structural Engineer
- Stillwater Parking Ramp, Stillwater, MN. Parking Consultant Structural Engineer - First Deck structure located in downtown historic Stillwater.
- Maple Grove Parkway Station, 500 space park and ride facility (Maple Grove, MN)
- Burnsville Transit Station, 1,300 space 3-level parking facility (Burnsville, MN)
- Centennial Hills Transit Center, 500 space park and ride facility (Las Vegas, NV)
- Station 73, City of Plymouth, 280 space parking structure
- Maple Grove Transit Station, 940 space parking structure (Maple Grove, MN)

## MELISSA CROSS

Position: Architectural Intern and Graphic Designer  
 Responsibility: Architectural Design, Technical Support and Graphic Support  
 Years Experience: 4  
 Years with Firm: 1

Ms. Cross earned her Bachelor of Science in Architecture from the University of Minnesota and her Masters of Architecture from North Carolina State University. She joined LSA in July of 2014 with three years of previous architectural and design experience at Target Corporation.

Melissa's experience at LSA has been centered on architectural drawing/modeling support, digital design support and graphic/video presentation. She has worked closely with James, Jo Ann and William to provide support in developing site plan concepts and 3D simulations for transit facilities and parking structures.

### RELEVANT EXPERIENCE IN LAST FIVE YEARS:

- SouthWest Transit Bus Garage Remodel and Fuel Canopy Design.
- Design and Construction documents for the City of Ramsey's Parking Facility Enclosure.
- Graphic Support for Cedar Grove Station CTIB Grant.
- Feasibility Studies and Schematic Design of several Target retail stores throughout the United States and Canada.

## EXPERIENCE AND QUALIFICATIONS - WSB & ASSOCIATES, INC.



### BACKGROUND

WSB & Associates, Inc. is a professional consulting and design firm providing diverse engineering, planning, environmental, and construction services to clients in the government, energy, and commercial markets.

Our corporate culture of creativity, long-lasting relationships, and high technical standards allows us to deliver cost-effective, successful projects. WSB delivers technical excellence in the kind of trusting relationship our clients appreciate and value.

WSB has more than 270 staff members who are passionate about meeting challenges in new, innovative, and collaborative ways.

One of our strengths is developing strong partnership relationships and making sure our combined team delivers a product that is stronger and better than we could have provided by ourselves. We have been particularly successful with strategic teaming on large transportation and design-build projects.



### TEAM PROFILES

#### ANTHONY J. HEPPELMANN, PE

Tony is a Vice President and is WSB's Transportation Group Manager. He has more than 30 years of experience in transportation planning, traffic engineering, and transportation design. Tony has been project manager on a wide variety of transportation projects, including traffic impact studies, highway corridor studies, environmental impact studies, and preliminary design studies. His technical responsibilities on these projects have included traffic forecasting, traffic impacts and needs assessments, alternatives analyses, and preliminary geometric design. Through his work on these projects, Tony has developed a thorough knowledge and understanding of the project development process for federal and state aid projects, as well as the keys for successful implementation of a project.

### SELECTED PROJECT EXPERIENCE

#### TRAFFIC STUDIES:

Tony has conducted a wide variety of traffic impact studies for small and large developments, as well as neighborhood traffic studies, throughout his career. Examples of recent traffic studies completed by Tony include the Target Traffic Impact Study Review for the City of Bloomington, an intersection access and safety study on Lyndale Avenue for the City of Bloomington, a neighborhood traffic study for Oak Drive in the City of Minnetonka, and development traffic studies for numerous developments in the City of Minnetonka.

#### TRANSPORTATION PLANNING:

Tony has been Project Manager for many transportation planning studies in the Twin Cities Metropolitan area including the Airport South Transportation Plan, City of Bloomington Transportation Plan, I-35W Corridor Transportation Study, and the I-494 Corridor Study.

#### PARKING STUDIES:

Tony has conducted downtown parking studies for the Cities of Orono, Long Lake, Excelsior, Hutchinson, Hastings and Sauk Rapids, Minnesota; as well as Fort Myers, Florida and Fort Wayne, Indiana. These studies have included an inventory of parking supply and demand, estimating future parking demand and evaluating both surface and ramp alternatives for meeting the parking demand, as well as traffic access and circulation. He has also conducted several parking studies for Universities including the University of Minnesota, Minneapolis, Minnesota, and University of Michigan, Ann Arbor, Michigan.

#### TRAVEL DEMAND MANAGEMENT:

Another area of Tony's expertise is Travel Demand Management (TDM). The assessment of TDM strategies has been a critical element of several of the highway corridor studies and transportation planning studies which Tony has managed. Tony directed the development of a travel demand forecasting model for the I-494 Corridor which was used to test impacts of different TDM scenarios on traffic forecasts for I-494. He was also project manager for the development of a travel forecasting model for the City of Bloomington which was used to test the impacts of alternative roadway network alternative land use scenarios and different TDM

strategies on traffic demand within the City. Tony was responsible for developing a Travel Demand Management Plan for the Airport South District of Bloomington, Minnesota, the location of the Mall of America. He has also prepared Travel Demand Management Plans for several private developments including the Opus 2 Development in Minnetonka, Minnesota.

Tony has also managed the preparation of state and federal environmental assessments (EAWs and EAs) for various highway and development projects.

## TODD HUBMER, PE

Todd has more than 20 years of experience in water resources engineering. As Project Manager and Project Hydrologist, he is responsible for completing hydrologic and hydraulic analyses for drainage systems in a wide variety of water resource, transportation, environmental, and municipal projects. Todd has been responsible for the development of comprehensive water resource management plans, numerous feasibility studies, preparations of plans and specifications, and construction management. He is also an expert in utilizing numerous water quality and quantity models used in hydrologic/hydraulic analysis.

## SELECTED PROJECT EXPERIENCE

### COMMUNICATION EXPERTISE:

Many projects for which Todd has been involved with have required significant education, input, and developing consensus with residence, review agencies, and elected officials. Todd has developed a style that seeks to understand the goals of the client, provide direction on how to apply those goals into actions, and to provide follow-up in developing consistent messages that have been very successful in receiving funding from state, local, and federal entities.

### STORMWATER MANAGEMENT AND VOLUME REDUCTION PROJECTS, ST. PAUL, MN:

Todd has played a key role in assisting St. Paul Public Works staff in developing and implementing volume reduction initiatives. These initiatives have helped the City be in compliance with local watershed management policies and improved water quality in key subwatersheds.

- St. Paul Stormwater Management Plan
- Volume Reduction Inventory
- Central Corridor Light Rail Transit Hydraulic Review and Volume Reduction Compliance
- Victoria/St. Albans/Arundel Infiltration Projects
- East Phalen Wetland Enhancement Project

### ST. ANTHONY WATER REUSE FACILITY, CITY OF ST. ANTHONY VILLAGE, MN:

The City Council requested that City staff identify areas to improve their environment through low impact and sustainability initiatives within the City. To reach that goal, Todd developed a plan that reduced pollutant discharges to the Mississippi River and the Rice Creek Watershed District as well as reduced the ground water dependency for irrigation by nearly six million gallons on an annual basis. The constructed water reuse facility provided immediate financial benefits to Hennepin County's Silver Lake Road reconstruction project and the St. Anthony New Brighton School redevelopment.

The water reuse facility takes previously wasted storm water, which was discharged to the Mississippi River and Rice Creek, and waste products from the City's drinking water treatment plant. These two sources are routed into a half a million-gallon underground reservoir system and is used to replace or supplement the irrigation demands for a 20 acre park within the City of St. Anthony Village.

Todd worked closely with the Mississippi WMO to secure nearly 1.2 million dollars in funding, \$250,000 from Hennepin County Transportation Department, and \$50,000 from the Rice Creek Watershed District for the construction of the project.

The project was completely constructed with funding outside the City of St. Anthony Village with St. Anthony Village managing the construction project and being responsible for the future operation and maintenance of the system.

## EXPERIENCE AND QUALIFICATIONS - WSB & ASSOCIATES, INC.

### EARTH EVANS, PE

Earth has more than 13 years of experience as a water resource engineer and more than 15 years of civil engineering experience. She has served clients as a project engineer and project manager on technically-diverse projects in water resources and other disciplines, including municipal and site design. Earth is a technical resource in areas such as hydrologic and hydraulic modeling, flood damage reduction and floodplain modeling, water quality modeling, comprehensive planning, stormwater management plans, development review, and water resources design. Earth's most current role involves ongoing planning, preliminary design and cost estimates for proposed BMPs to address the new impervious proposed with the west segment of the SWLRT. The project involves extensive coordination with permitting agencies including Cities, watershed districts, DNR, USACOE, MnDOT, Hennepin County, Metro Transit and Metropolitan Council.

#### SELECTED PROJECT EXPERIENCE

##### SOUTHWEST LIGHT RAIL TRANSIT, WEST SEGMENT WATER RESOURCES, METROPOLITAN COUNCIL:

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##### JACKSON POND WATER QUALITY FEASIBILITY STUDY, COLUMBIA HEIGHTS, MN:

Earth analyzed a suite of BMP options/costs for Jackson Pond in coordination with proposed flood improvements. Analysis included water quality modeling to estimate pollutant removals from various BMP options including water reuse, iron-enhanced filtration and biofiltration. The project has been awarded funding from the Mississippi Watershed Management Organization and is currently in design phase.

##### WOODBURY 2012, 2013, AND 2014 STREET RECONSTRUCTION, WOODBURY, MN:

Earth served as project manager responsible for sizing, locating and financial analysis of a suite of BMPs within the linear corridor and in adjacent public and/or open space to comply with City's MS4 permit for non degradation and watershed requirements. Street reconstruction projects include over 12 miles of roadway.

##### TOWER DRIVE UTILITY IMPROVEMENTS, MEDINA, MN:

Earth evaluated potential BMP options/costs to address existing erosion issues in a ditch upstream of Elm Creek as a part of a proposed street and utility improvement project. The BMPs retrofit water quality and rate control for a densely developed commercial area. BMPs evaluated include iron-enhanced filtration, biofiltration and wet ponds. BMPs are sized to meet watershed district, draft Elm Creek TMDL and City requirements.



## BACKGROUND

Visual Communications is a professional sign design and project management group with extensive experience in identification and wayfinding systems. As designers and specifiers for over one hundred-twenty combined years, we have successfully designed, programmed and implemented effective signage for many new and revitalized projects including retail complexes, shopping centers, cities and municipalities, educational facilities, governmental and medical facilities, office campuses, hotels, planned unit developments, and corporate headquarters.

The principals of the company include in their personal resumes, seven national design awards. As professional members and area representatives of the Society for Experiential Graphic Design (SEGD) for the past twenty (20) years, principals Cheryl Long O'Donnell and Richard Lang have participated in establishing industry standards during the development of a Technical Sourcebook and have participated on Government Relations and Research Committees. Visual Communications is a member of the St. Paul, Twin West, Midway Chambers of Commerce, and is a 70% Woman Owned Business (WPE).

Visual Communications offers a powerful combination of creative design, project management expertise, and technical knowledge. This combination provides our clients with a distinct advantage. We are able to blend and implement aesthetic and image design goals with identification and wayfinding theory and the technical specifications necessary to provide signage that is effective and achievable.

### CITY OF ST. LOUIS PARK PARK COMMONS AND WOLFE PARK

Visual Communications provided the logo design and signage imaging for this specialized area within St. Louis Park. Included in the design and wayfinding, were locating all key gateway signs and updating existing structures for an enhanced image. The Wolfe Park gateway signage serves as the city signature for city celebrations.

### CITY OF EDEN PRAIRIE TWENTY-FIVE YEAR WAYFINDING MASTER PLAN

In collaboration with SRF Consulting, Visual Communications provided sign design and wayfinding master plan theory and preliminary design for this unusual downtown zone named the "Major Center Area" (MCA) as part of an overall streetscape improvement plan. The signage Master Plan included the integration of all transportation modes, including walking, bicycling and transit. A future light rail transit line is anticipated to pass through the new Town Center.

### CITY OF MOUND MOUND HARBOR DISTRICT, IDENTIFICATION AND WAYFINDING MASTER PLAN

Visual Communications provided master plan design, wayfinding, specification, and bid procurement. Services included area identification, directional maps, and standard regulatory signage. The sign design complements the area history as reflected in surrounding bridge design and the street landscape. The newly named "Mound Harbor District" includes a new wayfinding signage plan, which addresses the flow of visitors in this multimodal community, comprising of transit stops, bicycle trails, restaurants, shelters, public facilities, pertinent shopping and services, residential, and office areas.

### MALL OF AMERICA WAYFINDING MASTER PLAN

Visual Communications provided the blueprint, wayfinding plan, and message schedule for the largest mall in America. The plan, undertaken two years prior to the mall opening, included all Interstate signage within the region, local and city pathfinder signage, two parking facilities, and all interior and exterior wayfinding signage throughout the facility.



## EXPERIENCE AND QUALIFICATIONS - VISUAL COMMUNICATIONS

### CITY OF SAINT PAUL EXTERIOR PATHFINDER AND SKYWAY IDENTIFICATION AND WAYFINDING

Visual Communications provided design, wayfinding, and consensus building for the creation of exterior directional signage. The designs incorporated wrought iron sign structures, park logos, downtown directional signs, including message schedules, and location plans. The Master Plan included public and community participation through Mayor Coleman's office, the St. Paul Building Owners and Managers Association (BOMA) to create interest, approval and backing. Visual Communications also created designs for an interior Skyway Connection signage system prior to the RNC in May of 2008 (fast track signage implementation in 2 months with consensus building of design with multiple levels of authority). Design was used for over 100 signage units within skyway.



### TEAM PROFILES

#### RICHARD LANG, PROJECT PRINCIPLE

In the past 35 years, Mr. Lang has directed many award-winning projects. His designs have been published in "Successful Sign Design", "Signs of the Times", and "Graphic Design in Architecture." Mr. Lang has directed the development of specifications (design and/or technical) for the City of Duluth, City of St. Paul, City of Wayzata, and the City of Mound – Mound Harbor District. Mr. Lang has been called upon to serve as an expert witness in the area of branding, sign design, and fabrication techniques. His experience with the corporate identities of Best Buy and Wells Fargo Home Mortgage provide a strong knowledge for the design of high quality and cost effective signage.

Mr. Lang has provided project management and directed the sign design and wayfinding for retail, and municipal projects including master planning for the City of St. Louis Park – Park Commons and Wolfe Park, the City of Eden Prairie – 25 year Master Plan, the City of Mound – Mound Harbor District, the City of Wayzata, and Three Rivers Park District.

Recently, Mr. Lang directed the design of a new identity plan for the City of Duluth's Skyline Parkway including signage, brochure, commemorative poster, and web page development.

Early in his career, Mr. Lang recreated the Wayzata Marquee Place signature "marquee" from historic photos and created the interior and exterior wayfinding plan for the lake front complex. Currently, Mr. Lang is directing the Signage Master Plan for the City of Elk River Identity, Historic Downtown, and Parks and Recreation.

Mr. Lang is an active member of the Society for Experiential Graphic Design since 1987. He is also a member (past president) of the Saint Louis Park Historical Society and the Preservation Alliance of Minnesota.

#### CONSTANCE CARLSON, SENIOR DESIGNER

Constance has been involved in the development of environmental graphics throughout her 30-year design career. Ms. Carlson most recently provided the Master Plan design and Specification Documents for the City of St. Paul Parks and Recreation, Mound Harbor District, and the City of Wayzata. She also created logo/branding graphics and signage design for the City of St. Louis Park – Park Commons and Wolfe Park.

Her resume includes branding of key destination parks within downtown St. Paul. She created the master plan design and specifications for the exterior and skyway signage in the City of Saint Paul, and the Science Museum of Minnesota. She also was senior designer for the Wells Fargo Home Mortgage interior and exterior sign system at the historic Honeywell Corporate Campus in Minneapolis, MN.

Ms. Carlson is a member of the Society for Experiential Graphic Design since 1991. She is also a member of the Preservation Alliance of Minnesota.

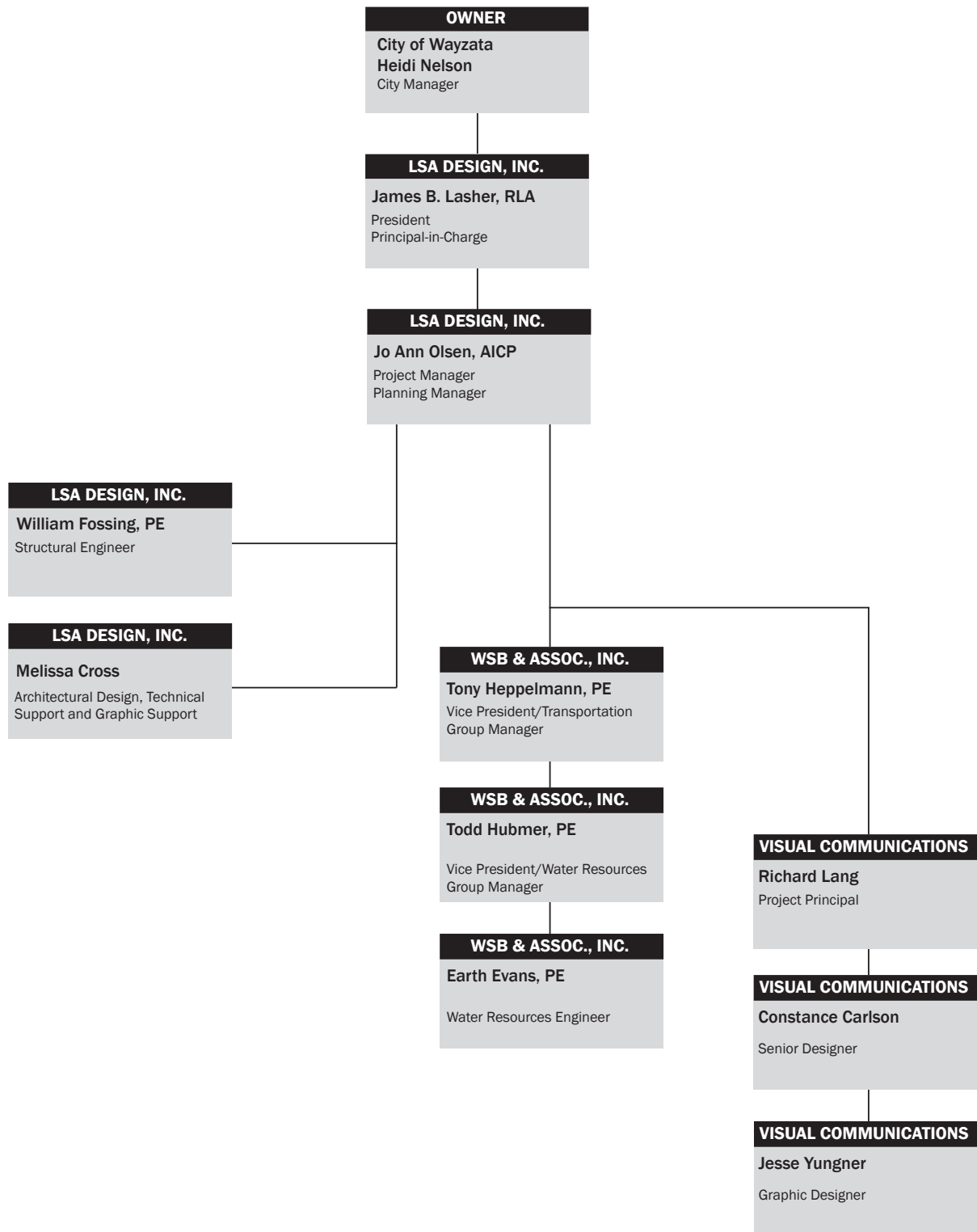
### JESSE YUNGNER, GRAPHIC DESIGNER

Mr. Yungner is a graduate of the Minneapolis College of Art & Design in the field on Graphic Design and Illustration. During the past eight years, Mr. Yungner has worked extensively with the design of wayfinding signage, brochure and maps for simple to complex environments, including Duluth's Skyline Parkway, Mound Harbor District, and Macalester College Signage Master Plan.

His graphic experience has been key in the recent design upgrade of award winning Hennepin County Medical Center's wayfinding graphics, which introduce the Hablamos Juntos pictogram system for multilingual populations. The map also includes welcome information in ten languages spoken within the neighborhood served. Most recently, Mr. Yungner completed a 7'x 65' pictorial history wall & banner graphics program for St. Paul College's centennial. The banner won first Place in the 2011 United States Sign Competition.

Mr. Yungner is Regional Co-chair of the Society for Experiential Graphic Design.

# TEAM ORGANIZATIONAL CHART





|                                   |                           |
|-----------------------------------|---------------------------|
| James Lasher, Principal in Charge | \$170.00                  |
| Jo Ann Olsen, Principal Planner   | \$150.00                  |
| Bill Fossing, Senior Engineer     | \$150.00                  |
| Melissa Cross, Designer           | \$70.00                   |
| Architect                         | \$120.00                  |
| Technician                        | \$50 to \$70              |
| Administrative                    | \$50                      |
| Sub-Consultants*                  | \$110% of Invoice Amounts |

\*Optional sub-consultant services may include  
 - M/E commissioning  
 - Commercial marketing analysis



|                     |          |
|---------------------|----------|
| Tony Heppelmann, PE | \$147.00 |
| Todd Hubmer, PE     | \$147.00 |
| Earth Evans, PE     | \$119.00 |

**PLEASE NOTE:** We are providing these hourly rates with the understanding that we will negotiate a Contract for Services based on the exact scope of work as agreed to by the City of Wayzata.



LSA Design, Inc. 219 N. Second Street, Suite 302 | Minneapolis, MN 55401 | 612.339.8729





LSA Design, Inc.  
Northwestern Building  
219 North Second Street  
Suite 302  
Minneapolis, MN 55401  
T. 612.339.8729  
F. 612.339.7433  
www.lsadesigninc.com

Planning  
Architecture  
Urban Design

# Proposal

**To:** Heidi Nelson, City Manager - City of Wayzata  
**From:** James B. Lasher  
**Project:** Owners Representation on the Wayzata Parking Project  
**Subject:** Pre-Contract Planning Services Proposal  
**Date:** September 30, 2014

## BACKGROUND

The City of Wayzata (City) wishes to begin work discussions, pre-project planning and scope of services definition for Owners Representative Services for the Wayzata Parking Project (Project).

## WORK PROPOSAL

LSA Design agrees to engage as the City of Wayzata Owner' Representative and to assist with the Pre-Contract Planning Services:

1. Attend preliminary meetings with client and other interested parties to clearly understand the scope of services needed, financial implications and scheduling issues for the Project
2. Assist in identifying project opportunities and constraints that will impact the final scope of work for the Project.
3. Prepare existing conditions reports as requested by the City to assist in understanding the Project.
4. Solicit, on behalf of the City, additional site investigations such as geotechnical or environmental, that will assist in defining the final scope of services for the Project.

## FUTURE CONTRACTS

This Proposal assumes that a Final Scope of Services and Fee will be negotiated and agreed to between both parties. This Proposal does not bind the City to any future services.

## FEE PROPOSAL

LSA Design Inc. will complete all work as described as Pre-Contract Planning Services in the above Work Proposal on an Hourly Basis (Attached as Exhibit A) as directed by the City Manager. LSA will invoice the City at the end of each month for services rendered. Reimbursable Expenses will be in addition to the Hourly Services and will be billed at 105% of the Invoiced Amount.

## **SIGANTURES OF APPROVAL**

The following signatures signify approval of the general terms and conditions of this Proposal.



10-2-14

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James B. Lasher, President  
LSA Design Inc.

Date

---

Heidi Nelson- City Manager  
City of Wayzata

Date

EC: LSA File



|                                   |                           |
|-----------------------------------|---------------------------|
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| Earth Evans, PE     | \$119.00 |

**PLEASE NOTE:** We are providing these hourly rates with the understanding that we will negotiate a Contract for Services based on the exact scope of work as agreed to by the City of Wayzata.

October 1, 2014

Heidi Nelson, City Manager  
City of Wayzata  
600 Rice Street  
Wayzata, MN 55391-1799

Re: Downtown Parking Project

Dear Ms. Nelson:

Thank you for asking Dorsey & Whitney LLP (the "Firm") to represent and advise the City of Wayzata. Because clear and timely communication is important for serving clients well, we want to begin by stating mutual understandings about services and charges.

Services. We will provide legal services for the City of Wayzata regarding real estate and finance options for parking and related development. It is mutually understood that these services are solely for the benefit of the City of Wayzata.

Fees, Disbursements and Billing. Our fees are ordinarily based primarily on our usual and customary hourly rates and minimum increments. We will charge the City at those usual and customary rates, less 10 percent. We are happy to estimate our fees for particular portions of the project. Also, when a development is involved, the City of Wayzata may be reimbursed by the developer for our fees. Our hourly rates are subject to adjustment from time to time, usually in October. Our fees may also be affected by factors such as the amount involved in the representation, unusual time constraints, use of prior work product, and overall value of the services. Although on client request we may attempt to estimate the fees for an engagement, legal representations often involve variables that make it difficult or impossible to estimate fees accurately.

Disbursements for certain items, such as filing fees and travel expenses are usually advanced by us, then billed to clients. We sometimes ask providers, such as court reporters or expert witnesses, to submit certain substantial charges directly to clients. Our service charges for such items as facsimile service, photocopying, and computerized research are billed at our own estimated costs, direct and indirect.

We will submit monthly statements, describing services performed, and stating fees and other charges. Payment by the City of Wayzata will be due within 30 days.

Completing Our Services. We intend and expect to complete our services to your satisfaction. However, we will withdraw from representation upon client request. We may also withdraw in the manner and for the reasons provided by judicial and professional rules, such as if our fees are not paid timely. At the conclusion of representation, a client may have on request a copy of any client files or papers to which the client is entitled, for which we may charge a

Heidi Nelson  
October 1, 2014  
Page 2

reasonable fee for the cost of copying all documents and the cost of gathering and/or producing electronic documents.

File Retention and Destruction. The Firm's policy is to deliver to clients during or promptly following the completion of a particular matter all original documents and materials the client has provided to us, and all materials prepared as a part of the representation that are necessary for the client to have. We may charge a reasonable cost for photocopying file documents. Extra copies of documents or other duplicative materials are likely to be discarded when the file is closed.

Please sign this letter and email a copy of the same to my attention at your earliest convenience. Acceptance of our legal services entails acceptance of the terms of this letter.

We greatly appreciate the opportunity to be of service. If there are any questions about our services, or the fee and billing arrangements, please call me.

Very truly yours,



Jay R. Lindgren

JRL/prb

The arrangements stated above are hereby agreed to.

CITY OF WAYZATA

By: \_\_\_\_\_  
Ken Willcox, Mayor

By: \_\_\_\_\_  
Heidi Nelson, City Manager

Dated: \_\_\_\_\_



CITY OF WAYZATA

Proposed Dorsey & Whitney LLP  
Hourly Fee Schedule

|                             | <u>Normal Rate</u> | <u>Discounted Rate</u> |
|-----------------------------|--------------------|------------------------|
| Jay Lindgren, Partner       | \$610              | \$549                  |
| Brad Clouser, Associate     | \$310              | \$279                  |
| Kim Haley, Senior Paralegal | \$285              | \$257                  |

\* Any other required timekeepers will also be billed with a 10% discount on current hourly rates.