# INVER GROVE HEIGHTS
# PLANNING COMMISSION AGENDA

**TUESDAY, SEPTEMBER 16, 2014 – 7:00 p.m.**
**City Council Chambers - 8150 Barbara Avenue**

1. **CALL TO ORDER**

2. **APPROVAL OF PLANNING COMMISSION MINUTES FOR SEPTEMBER 2, 2014.**

3. **APPLICANT REQUESTS AND PUBLIC HEARINGS**

**3.01 PAUL AND STACY MARION – CASE NO. 14-36V**

Consider a **Variance** from the shoreland setback to allow a deck 61 feet from the OHW whereas 75 feet is required for the property located at 1905 63rd Street.

Planning Commission Action _____

**3.02 BENNET BENSON – CASE NO. 14-33V**

Consider a **Variance** to allow two detached accessory buildings on a property whereas one is the maximum allowed for the property located at 5906 Asher Ave

Planning Commission Action _____

**3.03 KEH&H – CASE NO. 14-35CA**

Consider a **Conditional Use Permit Amendment** to add a car wash and expand the outdoor storage area for the property located at 16 Mendota Road.

Planning Commission Action _____

**3.04 DEANOVIC – CASE NO. 14-22PUD**

Consider the following requests for a variety of properties located in the northwest area:

A) A **Comprehensive Plan Amendment** to change the land use categories on portions of the parcels from;

1) Blackstone Vista: 40 acres from IOP, Industrial Office Park, CC, Community Commercial, MDR, Medium Density Residential to LDR, Low Density Residential.

2) Blackstone Ridge: 40 acres from LMDR, Low-Medium Density Residential, MDR, to LDR.

Plus these additional amendments:

3) Change in the Sanitary Sewer map to show the proposed change in routing of the sanitary sewer through the Argenta Sewer District.

4) Change to the MUSA Expansion Exceptions through the Leitch Estates Neighborhood with routing of public street and utility improvements through the neighborhood.

5) Creating new districts for the MDR and LDR categories to address financial implications in the Northwest Area.

Planning Commission Action _____

B) **Rezoning** of the property from A, Agricultural to R-1C/PUD, Single Family Residential PUD and R-3B/PUD, Multiple Family Residential PUD.

Planning Commission Action _____

C) A **Preliminary Plat and Preliminary PUD Development Plan** Approval for a three parcel plan to be known as Blackstone Vista – 78 unit single family, Blackstone Ponds – 104 unit townhome and Blackstone Ridge – 121 single family.

Planning Commission Action _____

## 4. OTHER BUSINESS

## 5. ADJOURN

This document is available upon 3 business day request in alternate formats such as Braille, large print, audio recording, etc. Please contact Kim Fox at 651.450.2545 or kfox@invergroveheights.org

# PLANNING COMMISSION MINUTES - CITY OF INVER GROVE HEIGHTS

Tuesday; September 2, 2014 – 7:00 p.m.
City Hall Chambers - 8150 Barbara Avenue

Chair Hark called the Planning Commission meeting to order at 7:00 p.m.

| | |
|---|---|
| Commissioners Present: | Bill Klein<br>Dennis Wippermann<br>Joan Robertson<br>Harold Gooch<br>Paul Hark<br>Pat Simon<br>Tony Scales |
| Commissioners Absent: | Armando Lissarrague (excused)<br>Annette Maggi (excused) |
| Others Present: | Allan Hunting, City Planner<br>Heather Botten, Associate Planner |

## APPROVAL OF MINUTES

The minutes from the August 19, 2014 Planning Commission meeting were approved as submitted.

## WOODDALE BUILDERS, INC – CASE NO. 14-30C

### Reading of Notice

Commissioner Simon read the public hearing notice to consider the request for a conditional use permit to exceed the maximum impervious surface allowed on a property, for the property located at 9063 Altman Court. 58 notices were mailed.

### Presentation of Request

Heather Botten, Associate Planner, explained the request as detailed in the report. She advised that the applicant is requesting a CUP to exceed the impervious surface allowed on the property. The applicant is currently building a new home and infiltration system on the property. The applicant is requesting a maximum of 26,000 square feet of hard surface to be allowed on the property. The applicants have calculated what their maximum future needs would be for the property and are requesting that amount as it is easier to install stormwater features during the construction process rather than building the house and adding them later on. Impervious surface can be increased by up to 10% of the lot area with a CUP; on this specific lot the 10% would allow an additional 10,992 square feet of hard surface. The applicants are proposing 9,665 square feet of additional hard surface. Staff recommends approval of the request with the conditions listed in the report. Staff heard from one neighboring property owner who had general questions.

Commissioner Klein noted that the lot was heavily wooded and asked if the existing trees would likely provide screening between the proposed house and the abutting home on Altman Court.

Ms. Botten replied in the affirmative.

### Opening of Public Hearing

Steve Schwieters, Wooddale Builders, advised he was available to answer any questions.

Chair Hark asked the applicant if he read and understood the report.

Mr. Schwieters replied in the affirmative.

Chair Hark asked why the applicants did not ask for the maximum amount of impervious surface.

Mr. Schwieters replied that the storm water management systems were complicated and they wanted to ensure they did not exceed the maximum.

Chair Hark closed the public hearing.

**Planning Commission Recommendation**
Motion by Commissioner Klein, second by Commissioner Wippermann, to approve the request for a conditional use permit to exceed the maximum impervious surface allowed on a property, for the property located at 9063 Altman Court, with the conditions listed in the report.

Motion carried (7/0). This item goes to the City Council on September 22, 2014.

## THOMAS LEACH – CASE NO. 14-31V

**Reading of Notice**
Commissioner Simon read the public hearing notice to consider the request for a variance from the setback requirements for a parking lot on a commercially zoned property, for the property located at 6426 and 6399 Cahill Avenue and 3095 – 65th Street. 9 notices were mailed.

**Presentation of Request**
Heather Botten, Associate Planner, explained the request as detailed in the report. She advised that the owner of the Bierstube property installed five parking spaces in two separate locations (10 spaces total) on his property without verifying setbacks or property lines or contacting the City. The parking spaces are partially located on neighboring properties. Parking spaces in the B-3 district are required to have a minimum five foot setback from property lines. The City became aware of the violation when a complaint was received. The applicant is requesting to keep the ten spaces where they are located which requires variances from three separate parcels since both parking areas encroach onto the abutting properties. The applicant received written and verbal permission from the abutting property owners to encroach onto their property. For the reasons stated in Alternative B of the staff report, staff recommends denial of the request. Staff received an inquiry from one neighboring property who questioned whether this would impact 65th Street, which it would not.

Chair Hark asked if the eastern most property owned by Mr. Leach would be available for parking.

Ms. Botten replied in the affirmative.

Chair Hark asked when the two paved areas in question were installed.

Ms. Botten replied last fall.

Commissioner Scales questioned why the City was involved since there were no issues with the adjoining property owners.

Ms. Botten replied that parking of any kind required a five foot setback from the side and rear

property lines.

Commissioner Gooch asked if the applicant had permission to have the parking spaces on the adjoining properties.

Ms. Botten replied that Mr. Leach received verbal and written permission from the abutting property owners after the fact. The applicant would not be granted permanent right of access to the property; however, as the other property owners could tell him at any time he could no longer park there.

Chair Hark asked for clarification that it was not an easement.

Ms. Botten replied in the affirmative.

**Opening of Public Hearing**
Tom Leach, 6760 Arkansas Avenue, advised he was available to answer any questions.

Chair Hark asked if the applicant read and understood the report.

Mr. Leach replied in the affirmative.

Chair Hark asked when the pavement was installed in the two areas in question.

Mr. Leach replied a little over a year ago. He advised that he used to own the car wash property and built the parking spaces at that time. When he sold the property four months ago they wanted 20 feet beyond the north end of the building, so that property went to the new owner.

Chair Hark asked what happened with the five spaces on the north side of the property.

Mr. Leach replied that he had the lot surveyed; however, he used the wrong survey stake in error. He then explained the situation to the affected landowner and offered to remove the parking spaces. The landowner said they could remain and she would sign a letter stating as such, providing she could request they be removed at any time.

Chair Hark asked what would happen if the landowner decided to sell and the new owner did not want the parking spaces.

Mr. Leach replied that he would physically remove the pavement.

Commissioner Klein advised that the property to the north was heavily wooded and the owner would not see the parking spaces. Also, the person who purchased the car wash would have known the spaces were there when he bought it.

Mr. Leach advised that the car wash has an easement over a portion of the Bierstube property so the car wash patrons can exit west to his property to get to 65th Street.

Chair Hark stated he had more of an issue with the parking spaces to the north than the car wash spaces.

Nevin Raghuveer, 6251 Queensland Lane North, Maple Grove, owner of the neighboring car wash, advised that he had an understanding with Mr. Leach that he could use the parking area in question until such time as he told him he did not want him to use it any more. If anything was changed today, he would like those changes clearly outlined.

Commissioner Robertson asked Mr. Raghuveer if he had any more formal documentation, other than the letter included in the packet, should it become an issue of contention.

Mr. Raghuveer replied he did not, but that if the variance was granted he would want something more sophisticated in terms of documentation stipulating that the parking would cease immediately upon his request. He advised that at this point; however, he did not have an issue with the spots being used for parking.

Eileen Wojowitz, co-owner with her sister and other family members of 6399 Cahill Avenue, stated she was upset that Mr. Leach had installed the parking spaces a year ago without asking and had not said anything to them until recently when a complaint had been made and he wanted a letter from her sister giving him permission to retain the parking spaces.

Mr. Raghuveer asked if the variance would be granted on each situation individually.

Ms. Botten replied there would be three separate variances; one for each parcel.

Mr. Raghuveer asked if all three would be denied if one was not approved.

Ms. Botten replied the Commission could decide on each lot individually.

Chair Hark closed the public hearing.

**Planning Commission Discussion**

Commissioner Gooch questioned if Mr. Leach could request a variance on someone else's property.

Ms. Botten replied that he could because he had written permission from the abutting landowners giving approval for the encroachment.

Chair Hark asked if the far eastern portion of Mr. Leach's property ever filled up with parked cars.

Mr. Leach replied that it filled up on Wednesdays when the church was having a function.

Commissioner Robertson asked for clarification of how the error was made regarding the parking area next to the car wash.

Mr. Leach replied that the car wash property belonged to him at the time the additional parking spaces were installed.

Commissioner Robertson asked if the challenge came when he sold the car wash property.

Mr. Leach replied in the affirmative.

Commissioner Klein stated it was often difficult to find a parking space at Bierstube, the neighbors were agreeable to him using the ten parking spaces, and he supported the request as he did not want to lose another local business.

Commissioner Robertson asked Ms. Wojkowitz if the letter of permission was from her sister, Diane Knuckey, but not necessarily the other co-owners of the property.

Ms. Wojkowitz advised that her sister had spoken to her and the other co-owners regarding the

situation and they had given her the power to make the decision.

Commissioner Scales supported the variance request and felt the landowners should work it out amongst themselves.

Commissioner Wippermann supported the staff's recommendation of denial as the request did not meet the variance criteria and he did not think a variance should be granted based on whether or not the neighbors agreed.

Commissioner Scales did not want to hamper a business, stating the three businesses worked it out amongst themselves.

Chair Hark agreed with Commissioner Wippermann that the request did not meet the variance criteria.

Commissioner Klein did not think a variance was necessary and the landowners could work it out themselves.

Commissioner Wippermann stated the Planning Commission is charged with following the ordinances established by the City Council.

Commissioner Klein asked what prompted this request.

Ms. Botten replied that staff received a complaint about the the parking locations. Staff then went to the site and noticed it was in violation. A letter was then sent to Mr. Leach stating he could either remove the parking spaces or request a variance because he was not meeting the five foot setback requirement in the zoning code.

Commissioner Robertson stated from her perspective the need for parking was a Bierstube issue which should not be placed on neighboring property owners.

Commissioner Klein stated it was a bigger issue than that as there were other tenants there as well.

Commissioner Robertson questioned what weight the letters from the two neighbors would hold in court and she was concerned about the potential for future conflict.

Commissioner Klein replied that Mr. Leach has stated on record that he would remove the parking spaces whenever he was requested to do so.

Chair Hark stated there was a lack of a practical difficulty.

**Planning Commission Recommendation**

Motion by Commissioner Simon to deny the request for a variance from the setback requirements for a parking lot on a commercially zoned property, for the property located at 6426 and 6399 Cahill Avenue and 3095 – 65th Street, based on the reasons stated in Alternative B, including the lack of a practical difficulty.

Commissioner Gooch stated he saw a practical difficulty in the lack of parking and the property being essentially landlocked. He stated parking was not allowed on Cahill or 65th and there were no other lots nearby that could be used for overflow parking.

Chair Hark questioned if the lack of parking would constitute a practical difficulty.

Ms. Botten stated the applicant was currently meeting the parking requirements of the zoning code, the applicant could install an overflow parking area on the eastern part of the property, or he could purchase property from the landowners to the north and east and put in parking that meets setbacks and complies with code requirements.

Second by Commissioner Wippermann.

Motion carried (4/3 – Gooch, Klein, Scales). This item goes to the City Council on September 8, 2014.

## CHS, INC – CASE NO. 14-32V

### Reading of Notice

Commissioner Simon read the public hearing notice to consider the request for a major site plan review to expand the parking lot facilities and pedestrian access, and a variance from the front yard setback requirements for a parking lot, for the property located at 5500 Cenex Drive. 53 notices were mailed.

### Presentation of Request

Allan Hunting, Associate Planner, explained the request as detailed in the report. He advised that CHS is proposing to add additional parking on property they own on Cenex Drive across the street from their main campus. A variance is being requested to allow the parking lot to be 10 feet from the property line whereas 30 feet is required in the B-1 district. CHS is working towards minimal impacts to the existing grades and tree stand on site. The practical difficulty is that requiring compliance with the setbacks would impact existing grades and require more tree removal. Since there would be a significant amount of employees crossing Cenex Drive, CHS is proposing a pedestrian crossing for safety. The location of the pedestrian crossing is still being worked out between the applicant and the City. The Public Works Director prefers the crossing to be at the Babcock/Cenex intersection; however, the final location has not yet been determined. Staff recommends approval of the request, with the final design of the crosswalk to be determined and approved by the Public Works Director.

Commissioner Robertson asked staff to comment on the potential impact the proposed parking lot could have on traffic flow.

Mr. Hunting replied that traffic volumes have not been raised as a concern by the City Engineer or Public Works Director, and his understanding is that current traffic volumes are not at the level where traffic safety improvements would be necessary.

Commissioner Klein asked if Cenex Drive was a public or private street.

Mr. Hunting replied it was a public street.

Commissioner Simon noted there were often semi-trailers parked along Cenex Drive.

Commissioner Klein stated that the additional parking was necessary as CHS was anticipating additional employees.

Commissioner Simon was concerned about the proposed location for the crosswalk, and suggested it be located further east on Cenex Drive.

Commissioner Klein agreed with Commissioner Simon's recommendation.

Mr. Hunting replied that the proposed location is believed to be the closest route that could provide the best possible safety for a crosswalk.

Commissioner Wippermann asked staff for clarification regarding the proposed additional landscaping referred to in the report.

Mr. Hunting advised that the proposed plantings are shown on the landscape plan. He advised that additional shrubs were proposed along Babcock Trail to break up the visibility; however, it is difficult to fit plantings in along Cenex Drive as the City Engineer does not want plantings inside City easements.

Commissioner Robertson stated she had a traffic concern regarding the proposed crosswalk from the proposed parking lot over to the Cenex building and the fact that it sits just inside a right turn lane off of Babcock. She questioned whether approving the request would also be approving the crosswalk at the proposed location.

Mr. Hunting replied that technically that was not part of the request since the pedestrian crosswalk, which would be within the public right-of-way, was not a land use issue that would normally be addressed by the Planning Commission. The crosswalk would be handled through the Public Works Department.

Commissioner Klein suggested the City consider speaking with the County regarding the possibility of installing a traffic signal at that location.

Commissioner Scales did not think the parking lot would be any less safe than the current parking situation, stating that currently employees parkon the street and walk across traffic.

Commissioner Klein stated the traffic would likely be most active in the morning as employees arrived at work and in the evening when they left. He suggested they have a safety patrol member on duty during those hours.

Commissioner Gooch stated that the original crosswalk location away from the intersection would be safer than the one near Babcock. It was also a more logical location as people typically take the shortest route.

**Opening of Public Hearing**

Ian Ellis, Cenex Facilities Manager, 5500 Cenex Drive, advised he was available to answer any questions.

Chair Hark asked if the applicant read and understood the report.

Mr. Ellis replied in the affirmative.

Chair Hark asked if the proposed additional parking was for current or future needs.

Mr. Ellis replied that the parking lot would provide a safer parking situation for the employees currently parking on the street, and they also anticipate adding another 50 employees this winter. He advised they could work with the proposed location for the crosswalk, although in the winter employees would likely take the shortest route.

Chair Hark closed the public hearing.

**Planning Commission Recommendation**
Motion by Commissioner Scales, second by Commissioner Simon, to approve the request for a major site plan review to expand the parking lot facilities and pedestrian access, and a variance from the front yard setback requirements for a parking lot, for the property located at 5500 Cenex Drive.

Motion carried (7/0). This item goes to the City Council on September 8, 2014.

## OTHER BUSINESS

**Northwest Area Overlay District Review**
Allan Hunting introduced Brad Scheib, Hoisington Koegler Group Inc., who was involved in early discussions regarding the Northwest Area.

Chair Hark asked if the PowerPoint presentation being presented tonight was available on the City's website.

Mr. Hunting replied it was not, but that he could make it available on the website.

Mr. Scheib presented an overview of the Northwest Area Overlay District. He advised that although his firm was involved in the early Northwest Area discussions, his involvement did not begin until 2001 or 2002. He explained that the 1998 Comprehensive Plan was the catalyst for discussions regarding development in the Northwest Area since it was one of the remaining places where future development could occur. There was a lot of public engagement during this process, and the conversation ultimately led to the creation of an advisory committee. The main concern was the cost of infrastructure and the implications of development patterns in doing that. The plan called for a new pipe to be installed to pipe stormwater to the Mississippi River. The Northwest Quadrant Study was prepared by Hoisington Koegler, in collaboration with a natural resource based engineering firm, the University of Minnesota, and an engineering firm specializing in wetlands. The key questions were can the Northwest Quadrant develop using creative land use patterns that minimize the need for traditional stormwater management, and how could it work with private property rights, zoning, and market place economics. The study looked at the area between 70th and Highway 55, and Argenta Trail and Robert and what they had to do from a development standpoint to get the number of units necessary to support leaving 25-20% of that area as open space. They then began a series of more in-depth studies for the entire Northwest Area, which included a significant public participation process. In 2004 the Natural Resource Inventory and Management Plan was prepared which outlined a strategy for managing the site and identified areas to be preserved as open space corridors. A Northwest Quadrant Hydrologic and Hydraulic Analysis was also done which showed where the water was flowing and identified which basins were most suitable for infiltration retention. In 2005 the Northwest Area Water and Sanitary Sewer Extension Feasibility Report was prepared which focused on providing sewer and water services up to 70th Street. The Alternative Urban Area-Wide Review (AUAR) was completed and evaluated the impact development would have on traffic and natural resources. The AUAR is required to be updated every five years. The Stormwater Manual was then developed which serves as a resource by illustrating acceptable practices and procedures for designing, construction and maintenance of on-site stormwater systems and tying into the regional system. This manual is very innovative and is often referred to as a model. In 2008 the City's Comprehensive Plan was updated to reflect the Northwest Area planning that had been done since 1998. The Northwest Area Collector Street Plan was prepared and looked at the logical network of arterial and collector streets that would be necessary to serve this area, and established guidance for spacing, street design, and access to property. In working towards establishing a regulatory

approach in the Northwest Area the City looked at a variety of approaches to accommodate the non-traditional development pattern across the Northwest Area necessary for the proposed stormwater management approach to be feasible. It was determined that the PUD Overlay District was the most logical approach. The Northwest Quadrant PUD Overlay District was then established. The normal PUD procedures were revised to allow for flexibility in use and design to achieve the broader goals of preserving open space and accommodating enough growth and development to support the financing for the infrastructure. It was understood from the beginning that PUDs would involve trade-offs, and that the City might have to compromise on design in order to get other things relevant to the stormwater aspect of the Northwest Area. He advised that all developments must be processed as a PUD. There are regulations in place which establish a baseline for what the City is trying to achieve; however, some flexibility may be required to achieve the broader goals. Because of this, language was intentionally put into the ordinance stating 'unless otherwise approved by the City Council'. The ordinance language works towards providing more open space, preserving high-quality natural resources, and the clustering of housing. The ordinance also establishes a minimum density. They are also trying to encourage diversity of housing types and a PUD could consist of a mix of housing types. The financing of infrastructure in the Northwest Area is unique as it is 100% reliant on connection fees. To date services are available up to 70th Street and the City knows how many units are needed to pay for that investment that has been made. Staff therefore evaluates all projects to make sure they achieve the targeted density.

Mr. Hunting summarized the applications that came in for the Northwest Area since the ordinance was adopted in 2007, including 1) the United Properties industrial office park, 2) Southview Senior Housing, 3) McGough – Argenta Hills commercial and residential, 4) Loch Gregor and Hartford, which never materialized, and 5) Groveland Heights, which was recently approved.

Mr. Scheib advised that a financial challenge was created when the market moved away from the multi-family projects that were assumed towards single-family detached.

Commissioner Klein asked how the valuation of the single-family homes compared to that of a duplex.

Mr. Scheib replied two connection fees versus one.

Commissioner Klein noted that the valuation of the homes thus far has been around $350,000.

Mr. Hunting replied that he could not compare the actual valuation as the City has not received an application for a townhome project. Mr. Hunting advised that the projects thus far have either achieved or exceeded the 20% open space, as well as the disturb and undisturb ratios. However, the 100 foot wide continual corridor has been hard to hit and some flexibility has been approved. He advised that projects have been getting approved with structures being closer together than what was originally planned. The main reason for this is that it was originally assumed that rain gardens or other stormwater features would be located along common property lines between homes. In reality that does not work well because the two units must be built at the same time and there are maintenance issues with having two landowners. He agreed with Mr. Scheib that the primary market seems to be for single-family detached so they have been struggling to get a mix of housing types. Developers have been requesting, and receiving, flexibility for a narrower side yard on corner lots. Argenta Hills has a 10 foot minimum separation between homes, however, the other projects that have been requested are proposing a 15 foot separation, which is the standard throughout most of the City and seems to be typical in all suburban development.

Commissioner Robertson asked if the removal of stormwater features between homes has presented any problems.

Mr. Hunting replied that it has not negatively impacted the overall stormwater goals. The stormwater is either going to larger regional basins or stormwater features are being set up on individual lots.

Vance Grannis Jr, 9249 Barnes Avenue, asked if there was any attempt to get landowner and developer input regarding the flexibility and changes being requested.

Mr. Scheib replied they were not recommending any changes to the ordinance. Mr. Scheib explained that the intention behind a PUD is for every product that comes in to have some flexibility built in as to how it is implemented and each is required to have a public hearing.

Mr. Hunting stated that City Council has not directed staff to look at changing the ordinance to reflect the requested flexibilities and issues being raised.

Chair Hark asked if density was the primary issue.

Mr. Hunting replied in the affirmative, stating it was mostly due to current market demand. He advised the reason the code uses PUDs is because it allows for flexibility and applicants do not need to apply for variances.

Mr. Grannis stated the present system in reality is actually not very flexible, and more flexibility should be allowed.

The meeting was adjourned by unanimous vote at 8:37 p.m.

Respectfully submitted,

Kim Fox
Recording Secretary

# PLANNING REPORT
# CITY OF INVER GROVE HEIGHTS

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**REPORT DATE:** September 11, 2014 **CASE NO.:** 14-36V

**HEARING DATE:** September 16, 2014

**APPLICANT AND PROPERTY OWNER:** Paul and Stacy Marion

**REQUEST:** A variance from the shoreland setback

**LOCATION:** 1905 63rd Street

**COMP PLAN:** LDR, Low Density Residential

**ZONING:** R-1C, Single Family Residential

**REVIEWING DIVISIONS:** Planning **PREPARED BY:** Heather Botten
Associate Planner

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## BACKGROUND

The applicant would like to replace their existing deck and add an additional two feet onto the back of the deck. The deck is currently located about 63 feet from the ordinary high water (OHW) mark, when you include the requested expansion the deck would be about 61 feet from the OHW. City Code states that lots abutting a recreational development lake shall have a 75 foot structure setback from the ordinary high water mark.

The existing deck encroaches into the required setback. The deck was installed with the original home construction. The two foot expansion would not require additional footings and is a small addition but it is increasing the size of the non-conformity.

## SPECIFIC REQUEST

The following specific application is being requested:

1) A variance from the shoreland setback to add an addition onto an existing deck 61 feet from the OHW whereas 75 feet is required.

DNR REVIEW

The variance request was sent to the DNR for review; they responded no comment or concern.

ENGINEERING REVIEW

The Engineering Department has no comment on the variance since it meets impervious surface requirements and does not adversely affect drainage.

**SURROUNDING USES:** The subject site is surrounded by the following uses:

North – Water
South, West and East - Single Family Residential; zoned R-1C; guided Low Density Residential

## EVALUATION OF REQUEST:

City Code Title 10, Chapter 3. **Variances**, states that the City Council may grant variances when they are in harmony with the general purposes and intent of the zoning ordinance and consistent with the comprehensive plan and establishes that there are practical difficulties in complying with the official control. In order to grant the requested variances, City Code identifies criteria which are to be considered practical difficulties. The applicant's request is reviewed below against those criteria.

1. *The variance request is in harmony with the general purpose and intent of the city code and consistent with the comprehensive plan.*

The shoreland requirements are in place to regulate the subdivision, use and development of shorelands of public waters to preserve and enhance the quality of surface waters, conserve the economic and natural environmental values of shorelands, and provide for wise use of waters and related land resources. Although the addition is relatively small it does not meet the intent of the zoning ordinance; the deck already encroaches into the setback about 12 feet.

The request is in harmony with the intent of the comprehensive plan as the lot is being utilized as residential.

2. *The property owner proposes to use the property in a reasonable manner not permitted by the zoning ordinance.*

Shoreland requirements are in place to minimize the impact to the shoreland and protected water bodies. The deck already encroaches into the setback, approving the variance would intensify the impact. Additionally, the setback standards are not precluding the property owner from reasonable use of the property as there is already an existing deck and increasing the size of the deck is more of a convenience to the applicant.

3. *The plight of the landowner is due to circumstances unique to the property not created by the landowner.*

This situation is not unique as there are other instances throughout the city where properties are located along lakes or the river that have structures that may encroach into the setback area.

4. *The variance will not alter the essential character of the locality.*

One of the functions of setbacks is to maintain consistency of structure placement and aesthetic qualities from lake, street, and neighboring views. Even though no additional footings would be required a precedent could be set for other non-conforming expansions.

5. *Economic considerations alone do not constitute an undue hardship.*
Economic considerations do not appear to be a basis for this request.

## ALTERNATIVES

The Planning Commission has the following alternatives available for the requested action:

**A.** **Approval** If the Planning Commission finds the setback variance to be acceptable, the Commission should recommend approval of the request with at least the following conditions:

1. The site shall be developed in substantial conformance with the site plan on file with the Planning Department.

**B.** **Denial** If the Planning Commission does not favor the proposed request, it should be recommended for denial, which could be based on the following rationale:

1. Denying the variance request does not preclude the applicant from reasonable use of the property.
2. Approval of the variance could set a precedent for other shoreland encroachments.
3. The variance request is out of a convenience to the applicant.

## RECOMMENDATION

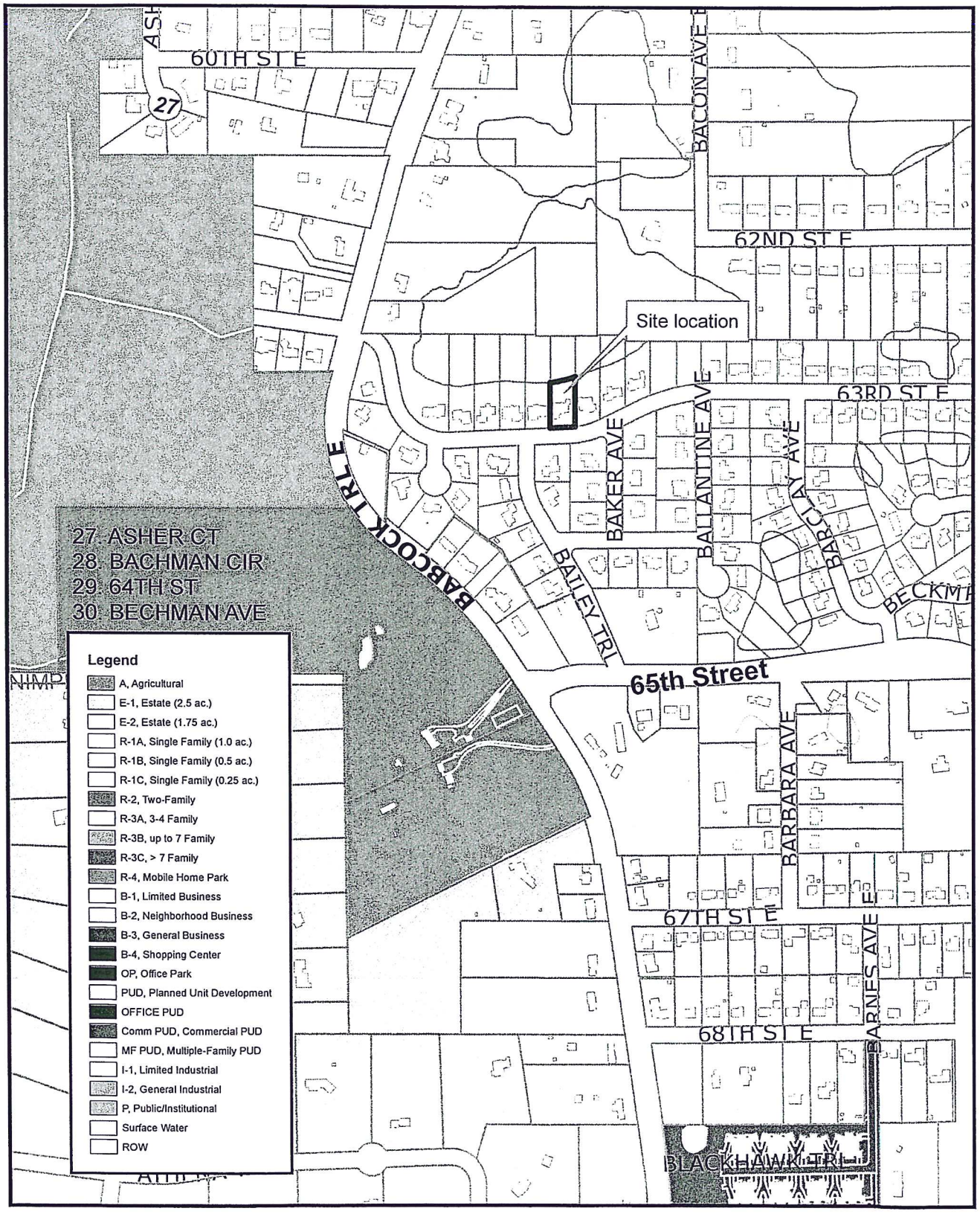
Variances may be granted when the applicant for the variance establishes that there are practical difficulties in complying with the zoning ordinance. "Practical difficulties," as used in connection with the granting of a variance, means that the property owner proposes to use the property in a reasonable manner not permitted by the zoning ordinance; the plight of the landowner is due to circumstances unique to the property not created by the landowner; and the variance, if granted, will not alter the essential character of the locality.

Staff believes the applicant did not identify practical difficulties to comply with the ordinance. For the reasons listed in alternative B staff is recommending denial of the proposed request.

Attachments:
Exhibit A – Location/Zoning Map
Exhibit B – Applicant Narrative
Exhibit C – Site Plan
Exhibit D – Picture of existing deck

Map not to scale

# Paul & Stacy Marion
# Case No. 14-36V

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This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is to be used for reference purpose only. The City of IGH is not responsible for any inaccuracies herein contained.

Exhibit A
Zoning and Location Map

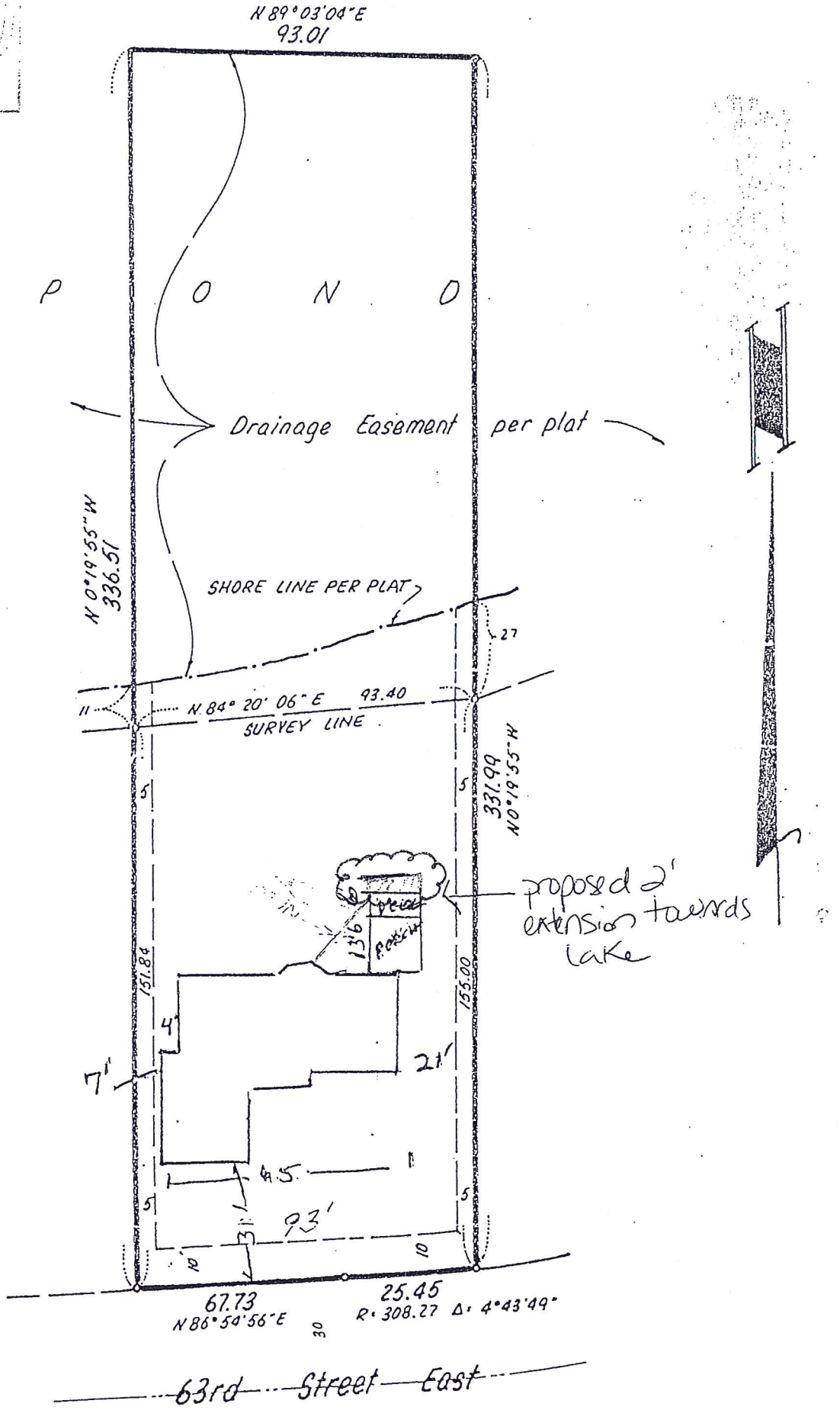
Variance request to add 2 foot extension to existing deck.
Variance required due to not meeting the 75 feet from the high water line from the little lake we are one.
The deck extension by 2 feet would enable us to use the existing deck structure without major structural changes. We want to keep the angled deck the same due to the structure of the house, the lay out of the windows & because the lot is low & that area seems to stay wetter & requires more sunlight to stay drier.

Variance would not impact the neighbors view of lake or in anyway take away from the beauty or integrity of the water. By reusing the existing foundation supports for the 2 foot overhang we will minimize the footprints on the lake lot.

B

DESCRIPTION

Lot 6 , Block 6 , SALEM HILLS FARM, according to the recorded plat thereof on file in the office of the Registrar of Titles, Dakota County, Minnesota.




Drainage & Utility Easement per plat (width as shown)

o Denotes 3/4" iron pipe set, marked No 16099

# PLANNING REPORT
# CITY OF INVER GROVE HEIGHTS

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**REPORT DATE:** September 10, 2014 **CASE NO.:** 14-33V

**HEARING DATE:** September 16, 2014

**APPLICANT AND PROPERTY OWNER:** Bennett Benson

**REQUEST:** Variance to allow two accessory buildings on the property whereas one is allowed by code

**LOCATION:** 5906 Asher Avenue

**COMP PLAN:** LDR, Low Density Residential

**ZONING:** R-1B, Single-family Residential

**REVIEWING DIVISIONS:** Planning **PREPARED BY:** Heather Botten
Associate Planner

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## BACKGROUND

The applicant is requesting to allow two detached accessory buildings on the property whereas one is allowed by code in the R-1 district. The property currently has a 12'x12' detached shed. The applicants are constructing a new, larger accessory building on the property and they would like to keep the existing shed. The applicants recently received a building permit for an 864 square foot garage to be located on the property with the condition that a variance be requested and if it is denied the existing shed would have to be removed or reduced to 120 square feet or less, thus being exempt from the code.

## SPECIFIC REQUEST

The following specific application is being requested:

A.) A **Variance** to allow two detached accessory buildings whereas one is allowed by code

**SURROUNDING USES:** The subject site is surrounded by the following uses:

| | |
|---|---|
| North, South, West and East- | Single-family; zoned R-1B; guided LDR, Low Density Residential |

## EVALUATION OF REQUEST:

City Code Title 10, Chapter 3. **Variances**, states that the City Council may grant variances when they are in harmony with the general purposes and intent of the zoning ordinance and consistent with the comprehensive plan and establishes that there are practical difficulties in complying with the official control. In order to grant the requested variances, City Code identifies criteria which are to be considered practical difficulties. The applicant's request is reviewed below against those criteria.

1. *The variance request is in harmony with the general purpose and intent of the city code and consistent with the comprehensive plan.*

   The existing shed would be exempt from the total number of structures allowed on a property if it was 120 square feet or less; in this case the structure is 144 square feet which does not meet the intent of the zoning ordinance. The accessory buildings on the property would meet all other setback and zoning requirements including building materials and impervious surface. The request is in harmony with the intent of the comprehensive plan as the lot is being utilized as residential.

2. *The property owner proposes to use the property in a reasonable manner not permitted by the zoning ordinance.*

   The number of accessory buildings allowed on the property is not precluding the homeowner from reasonable use of the land as the property has an attached garage and is allowed one accessory building up to 1,000 square feet in size.

3. *The plight of the landowner is due to circumstances unique to the property not created by the landowner.*

   The property is not unique; the single-family lot is .46 acres in size. The code allow for lots larger than 5 acres in have more than one accessory building. The property has an attached garage and is allowed one detached structure up to 1,000 square feet.

4. *The variance will not alter the essential character of the locality.*

   The applicants' property is located in a developed neighborhood with mature trees surrounding the property. The location of both sheds would be along the northern property line, behind the attached garage, screened from most views.

5. *Economic considerations alone do not constitute an undue hardship.*

   Economic considerations do appear to be a basis for this request. The property owner would have to remove the shed or reduce the size by 24 square feet to comply with ordinance requirements.

## ALTERNATIVES

The Planning Commission has the following alternatives available for the requested action:

**A. Approval** If the Planning Commission finds the variance to allow two accessory buildings to be acceptable, the Commission should recommend approval of the request subject to the following conditions:

1. The site shall be developed in substantial conformance with the site plan on file with the Planning Department.
2. The accessory structures shall not be used for commercial uses or storage related to a commercial use.

**B. Denial** If the Planning Commission does not favor the proposed request, it should be recommended for denial, which could be based on the following rationale:

1. Denying the variance request does not preclude the applicant from reasonable use of the property.
2. Approval of the variance could set a precedent for the number of accessory buildings allowed on an R-1 property.
3. Staff does not believe there are practical difficulties in complying with the official control as the applicants have an attached garage and are allowed an accessory building up to 1,000 square feet in size.

## RECOMMENDATION

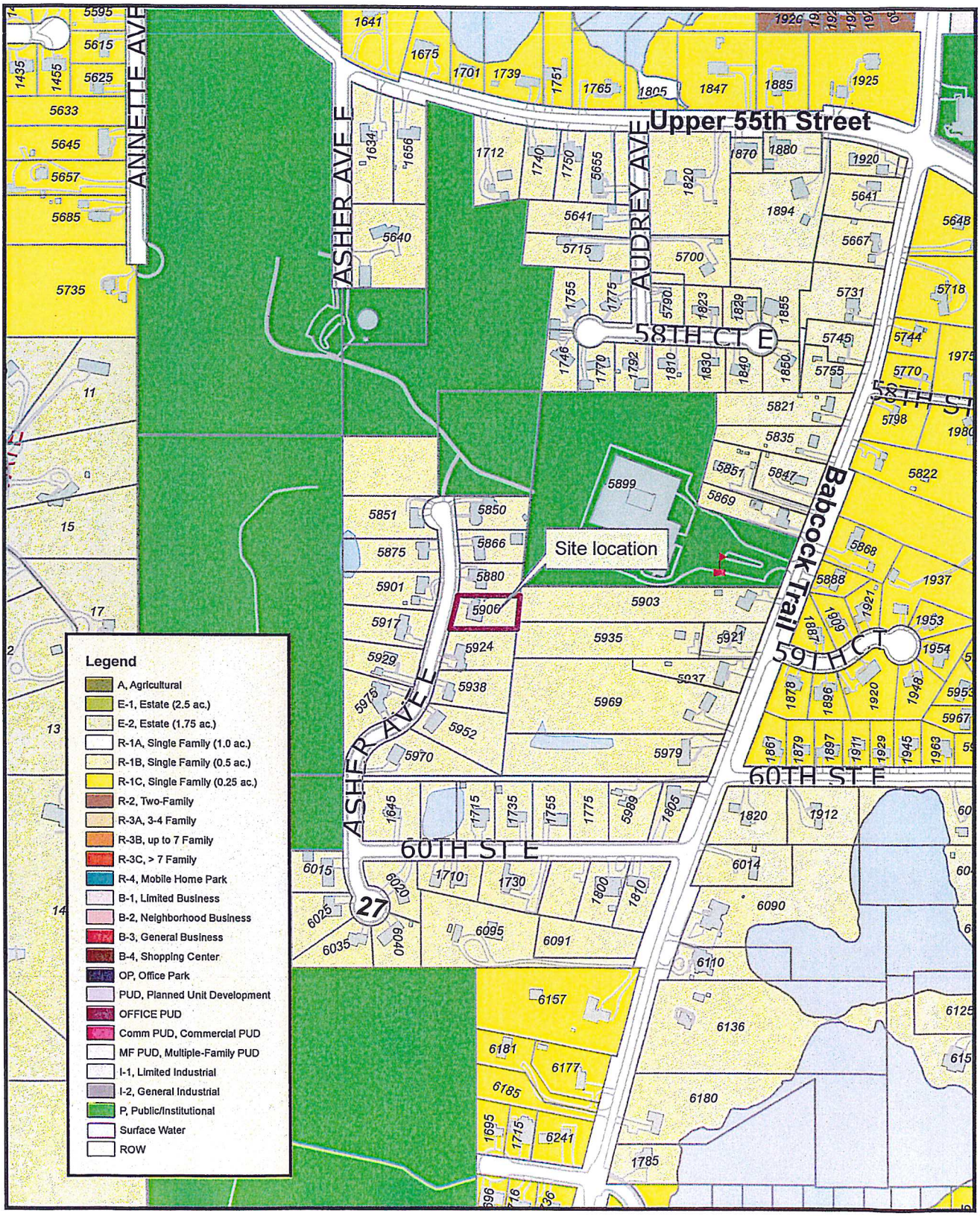
Variances may be granted when the applicant for the variance establishes that there are practical difficulties in complying with the zoning ordinance. "Practical difficulties," as used in connection with the granting of a variance, means that the property owner proposes to use the property in a reasonable manner not permitted by the zoning ordinance; the plight of the landowner is due to circumstances unique to the property not created by the landowner; and the variance, if granted, will not alter the essential character of the locality.

Staff believes the applicant did not identify practical difficulties to comply with the ordinance. For the reasons listed in alternative B staff is recommending denial of the proposed request.

Attachments: Exhibit A – Location/Zoning Map
Exhibit B – Narrative
Exhibit C - Site Plan
Exhibit D – Approval from neighbors across the street

Map not to scale

# Bennett Benson
# Case No. 14-33V




N

This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is to be used for reference purpose only. The City of IGH is not responsible for any inaccuracies herein contained.

Exhibit A
Zoning and Location Map

To the Planning Commission, Inver Grove Heights:

Re: Variance Application for 5906 Asher Ave., Inver Grove Heights, MN 55077

From Bennett Benson and Charleen Fenick, Owners

Plan: Building new 24' X 36' garage/storage structure in the NE corner of the ½ acre property located at 5906 Asher Ave, in Inver Grove Heights. There is currently a smaller 12' X 12' structure existing on the north side, much closer to the house. It is on a cement slab, and well constructed, framed and vinyl sided, roofed with a small cement ramp. There is also a small canvas shed with no foundation, that WILL be removed. We are applying for a variance to keep the small 12'X12' shed in place for our lawn mowers and gas cans, in order to keep the smell and mess out of the new garage/storage building. The smaller structure currently matches the house with same color scheme on siding and roof so to blend in nicely on the property. The new structure will also have same color scheme and is being built by reputable builders as a solid permanent structure for storage of mopeds, motorcycle, trailer, and other yard and hobby items, etc... No business will ever be conducted on the property.

The current smaller shed is 5' away from the fence and approx 7' from the property line. The new building will line up the same, with room for riding lawn mower to get through behind both structures.

Our property is a half acre and even with the two structures there is plenty of lawn area so the lot does not look crowded.

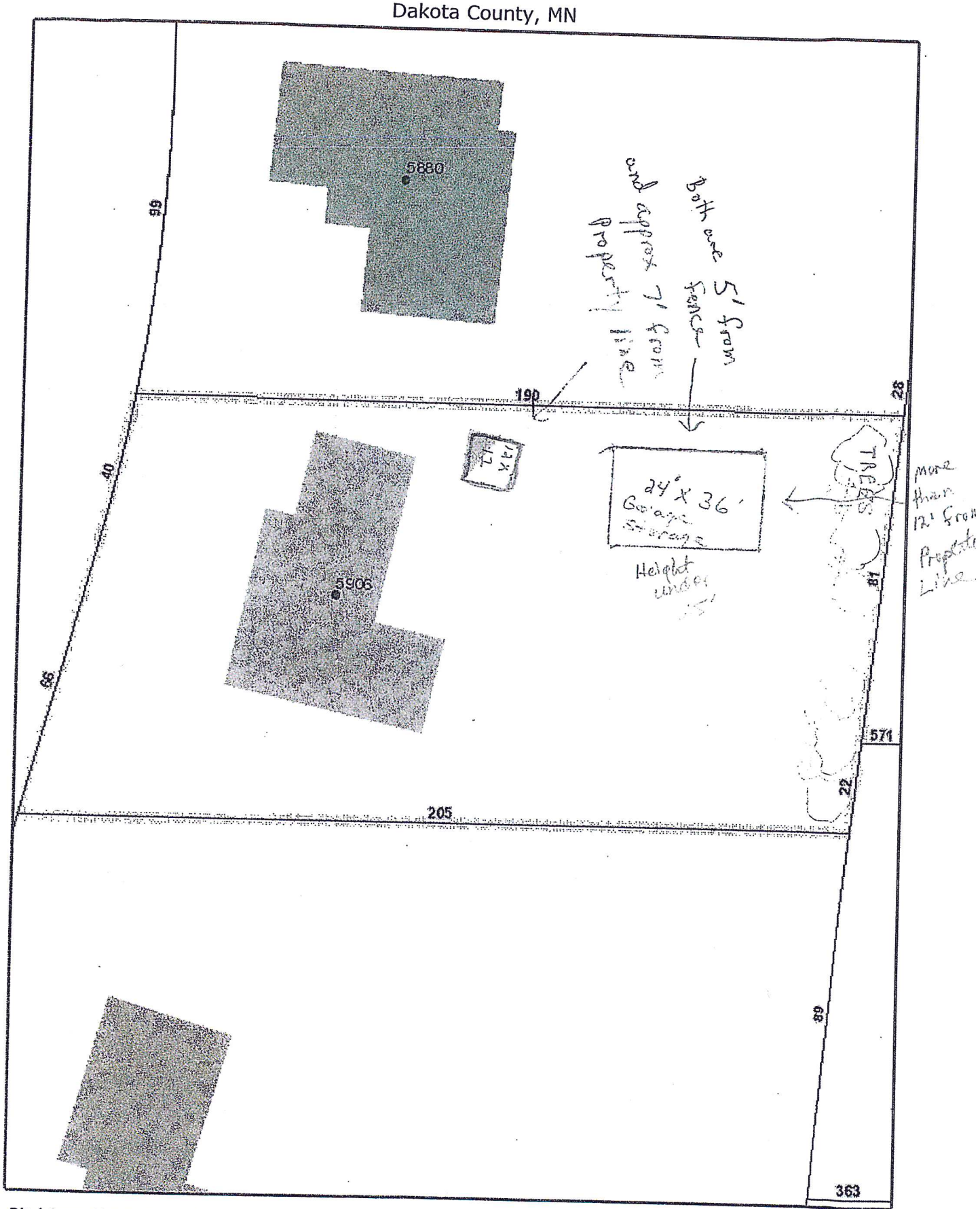
We respectfully hope you will consider this request for variance, to allow us to keep our smaller shed that only exceeds the code by 24 sq ft.

Thank you so much,

Bennett and Charlie

B

Dakota County, MN




*Disclaimer: Map and parcel data are believed to be accurate, but accuracy is not guaranteed. This is not a legal document and should not be substituted for a title search,appraisal, survey, or for zoning verification. Dakota County assumes no legal responsibility for the information contained in this data.*

Map Scale
**1 inch = 32 feet**
8/14/2014

C

To Our Neighbors surrounding 5906 Asher Ave, Inver Grove Heights, MN 55077

From Bennett Benson & Charlie Fenick

Re: Variance request from City of Inver Grove Heights, MN

Hello Neighbors,

Bennett & I are having a 24' X 36' 2 story garage/storage building built in the NE corner of our ½ acre property. It is strictly for our personal use, and no business use.

We want to keep the existing small 12'X12' shed where it is, so we have to apply for a variance from the city. We are to make the surrounding neighbors aware of our plans, and to be sure there are no objections.

We would appreciate it if you could write a short note addressed to the City of IGH, letting them know that you have no objections. You can give those to us to bring to the city or send it to them directly.

Please let Bennett or I know if you have any questions or objections, so we can address them.

Thank you so much,

Charlie

Charlie & Bennett

5906 Asher Ave

IGH, MN 55077

651 453-9755

5851 Asher Ave

Don't Care

Connie [illegible]

D

To Our Neighbors surrounding 5906 Asher Ave, Inver Grove Heights, MN 55077

From Bennett Benson & Charlie Fenick

Re: Variance request from City of Inver Grove Heights, MN

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We want to keep the existing small 12'X12' shed where it is, so we have to apply for a variance from the city. We are to make the surrounding neighbors aware of our plans, and to be sure there are no objections.

We would appreciate it if you could write a short note addressed to the City of IGH, letting them know that you have no objections. You can give those to us to bring to the city or send it to them directly.

Please let Bennett or I know if you have any questions or objections, so we can address them.

Thank you so much,

Charlie & Bennett

5906 Asher Ave

IGH, MN 55077

Dana & Darling Johnson

OK 5901 ASHOR

D

# PLANNING REPORT
## CITY OF INVER GROVE HEIGHTS

---

**REPORT DATE:** September 11, 2014 **CASE NO:** 14-35CA

**HEARING DATE:** September 16, 2014

**APPLICANT/PROPERTY OWNER:** KEH&H (Morrie's Mazda)

**REQUEST:** A conditional use permit amendment to add a car wash and expand the outdoor storage area

**LOCATION:** 16 Mendota Road

**COMPREHENSIVE PLAN:** RC, Regional Commercial

**ZONING:** B-3, General Business

**REVIEWING DIVISIONS:** Planning
Engineering

**PREPARED BY:** Heather Botten
Associate Planner

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## BACKGROUND

The applicant is requesting a conditional use permit amendment to expand the outdoor storage area and at a future date add a car wash to the existing building. The vehicles located in the new storage area would not be displayed for sale; it would be used as overflow storage area until the vehicles are moved onto the dealership lot for display and sale. KEH&H (Morrie's Mazda) currently operates out of the property located at 10 Mendota Rd, directly west of the proposed property. KEH&H acquired the proposed property in August 2014; the existing tenant, Car Hop, will continue to operate on the property until their lease is up.

The specific request consists of the following:

A.) A **Conditional Use Permit Amendment** to add a car wash and expand the outdoor storage area.

## EVALUATION OF THE REQUEST

The following land uses, zoning districts, and comprehensive plan designations surround the subject property:

| | |
|---|---|
| North | Commercial; West St. Paul |
| East | Southview Animal Hospital; zoned B-3; guided RC, Regional Commercial |
| South | Car dealership; zoned B-3; guided RC, Regional Commercial |
| West | Mazda; zoned B-3; guided RC, Regional Commercial |

## SITE PLAN REVIEW

Setbacks. The car wash and proposed storage area meets and exceeds the required perimeter setbacks for the site.

Parking Lot. The proposed outdoor storage area would hold about 44 vehicles and would be used for new car inventory. The parking lot would be bituminous with concrete curbing. The project meets parking and surfacing requirements.

Access. Public access to the site would not be changing; there is one entrance off of Mendota Road share by the abutting property to the east. An internal access point would be added on the southwest portion of the property connecting the two Morrie's parcels.

Tree Preservation/Landscaping. Based on the tree protection and preservation ordinance, tree removal falls under the allowed removal threshold and therefore no reforestation would be required.

Landscaping requirements require a total of 4 overstory trees or the equivalent to be planted as part of the expansion. The applicant has provided a landscape plan which shows four maple trees. The proposed plan meets the landscaping requirements.

Engineering. Engineering has reviewed the plans and has been working with the applicant on stormwater and grading requirements. Engineering has made some recommendations on conditions that should be added to the approval; these conditions are included in the list of conditions at the end of this report. The applicant shall continue to work with the City to secure final approval of the construction drawings.

An improvement agreement will be required to be executed between the City and the developer. The agreement will address the necessary site improvements including a storm water maintenance agreement, the parties responsible for the improvements, and will require financial surety for the landscaping, erosion control and any other improvements that may be necessary. The developer is required to enter into a contract with the City addressing the improvements and construction on site. A letter of credit equal to 125% of the cost of these improvements is required before construction can begin. This requirement assures the City that these particular improvements will be constructed to the satisfaction of the City.

Lighting. All lighting shall be designed as to deflect light away from any adjoining public streets. The source of light shall be hooded, recessed, or controlled in some manner so as not to be visible from adjacent property or streets.

Fire Marshal Review. All plans shall be subject to the review and approval of the City Fire Marshal for fire lane designation and the signage or marking of the fire lanes at time of building permit review.

## GENERAL CONDITIONAL USE PERMIT REVIEW

This section reviews the plans against the CUP criteria in the Zoning Ordinance (Section 10-3A).

1. *The use is consistent with the goals, policies and plans of the City Comprehensive Plan, including future land uses, utilities, streets and parks.*

   The use is consistent with the goals, policies, and plans of the Comprehensive Plan. The future land use of this parcel is Regional Commercial and outdoor storage associated with automobile sales would be consistent with the uses envisioned in this district.

2. *The use is consistent with the City Code, especially the Zoning Ordinance and the intent of the specific Zoning District in which the use is located.*

   The applicant's property is zoned commercial. The use is consistent with the intent of the B-3 zoning district.

3. *The use would not be materially injurious to existing or planned properties or improvements in the vicinity.*

   The proposed use would not have a detrimental effect on public improvements in the vicinity of the project. Vehicle sales lots in the B-3 zoning district are a permitted, conditional use.

4. *The use does not have an undue adverse impact on existing or planned City facilities and services, including streets, utilities, parks, police and fire, and the reasonable ability of the City to provide such services in an orderly, timely manner.*

   This use does not appear to have any negative effects on City facilities or services. The applicant is working with the City Engineering department to obtain the required easements and agreements by the City.

5. *The use is generally compatible with existing and future uses of surrounding properties, including:*

   *i. Aesthetics/exterior appearance*

   The proposed carwash would have to comply with ordinance standards for exterior building materials. The parking area will be paved complying with code requirements.

   *ii. Noise*

   The car sales lot will not generate noises that are inconsistent with the B-3 zoning.

   *iii. Fencing, landscaping and buffering*

   The proposed landscaping complies with the zoning requirements.

6. *The property is appropriate for the use considering: size and shape; topography, vegetation, and other natural and physical features; access, traffic volumes and flows; utilities; parking; setbacks; lot coverage and other zoning requirements; emergency access, fire lanes, hydrants, and other fire and building code requirements.*

   The amount of traffic would not be out of the ordinary for a commercial area. The expansion of the carwash and parking area will have little effect on the surrounding properties.

7. *The use does not have an undue adverse impact on the public health, safety or welfare.*

   This use does not appear to have any negative effects on the public health, safety or welfare.

8. *The use does not have an undue adverse impact on the environment, including, but not limited to, surface water, groundwater and air quality.*

   This use would not have an undue adverse impact on the environment. All surface water will be treated on site before it reaches the pond.

## ALTERNATIVES

The Planning Commission has the following actions available on the following requests:

**A.** **Approval.** If the Planning Commission finds the application to be acceptable, the following action should be taken:

- Approval of a **Conditional Use Permit Amendment** to allow a carwash and expand the outdoor storage area subject to the following conditions:

  1. The site shall be developed in substantial conformance with the following plans on file with the Planning Department except as may be modified by the conditions below.

     | | |
     |---|---|
     | Civil Plan Set | dated 09/05/14 |
     | Landscaping | dated 09/05/14 |
     | Lighting Plan | dated 09/05/14 |

  2. All parking lot lighting on site shall be a down cast "shoe-box" style and the bulb shall not be visible from property lines.

  3. The City Code Enforcement Officer, or other designee, shall be granted right of access to the property at all reasonable times to ensure compliance with the conditions of this permit.

4. A storm water facility maintenance agreement shall be prepared by the City Attorney and executed by both the City and the property owner to ensure long term maintenance of the facilities.

5. Prior to any work being done on the site, an Engineering cash escrow and letter of credit shall be submitted to the City to ensure the proper construction of the improvements and to review the drainage modeling.

6. The developer shall meet all the conditions outlined in the City Engineers review letters and subsequent correspondence. Prior to commencement of any grading, the final grading, drainage and erosion control, and utility plans shall be approved by the City Engineer.

7. An improvement agreement and related agreements shall be prepared by the City Attorney and executed by both the City and the property owner.

8. All final development plans shall be subject to the review and approval of the City Fire Marshal.

9. No display pennants, flags, searchlights, balloons or other similar devices shall be used on the subject property.

**B.** **Denial**. If the Planning Commission does not favor the proposed application the above request should be recommended for denial. With a recommendation for denial, findings or the basis for the denial should be given.

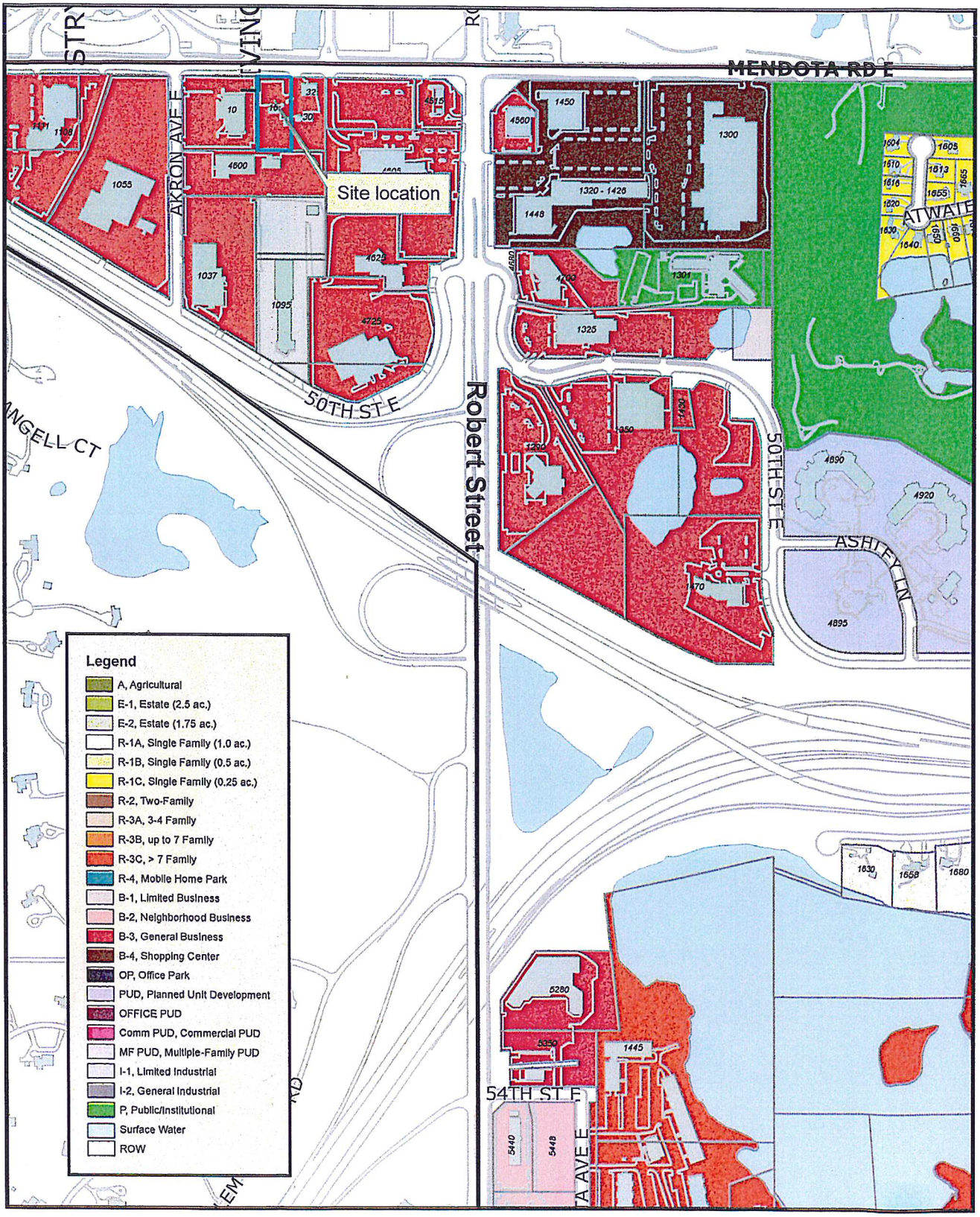
## RECOMMENDATION

Based on the information in the preceding report and the conditions listed in Alternative A, staff is recommending approval of the request.

Attachments: Location Map
Narrative
Site Plan
Landscape Plan

Map not to scale

# KEH&H (Morries Mazda)
# Case No. 14-35CA




N

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Exhibit A
Zoning and Location Map

MORRIE'S
AUTOMOTIVE GROUP
BUY HAPPY®

12520 Wayzata Boulevard
Minnetonka, MN 55305
phone 952-544-0376

morries.com

August 18, 2014

City of Inver Grove Heights
8150 Barbara Avenue
Inver Grove Heights, MN 55077

Re: Conditional Use Permit Amendment-16 Mendota Road East

Dear Planning Commission and City Council Members,

Background:
KEH&H purchased the property located at 16 E. Mendota Road on August 12, 2014. The Car Hop operation will continue operating at the site as a tenant of KEH&H. Morrie's Inver Grove Mazda has redeveloped the property contiguous to the west of the site and is in need of additional vehicle parking.

Proposal:

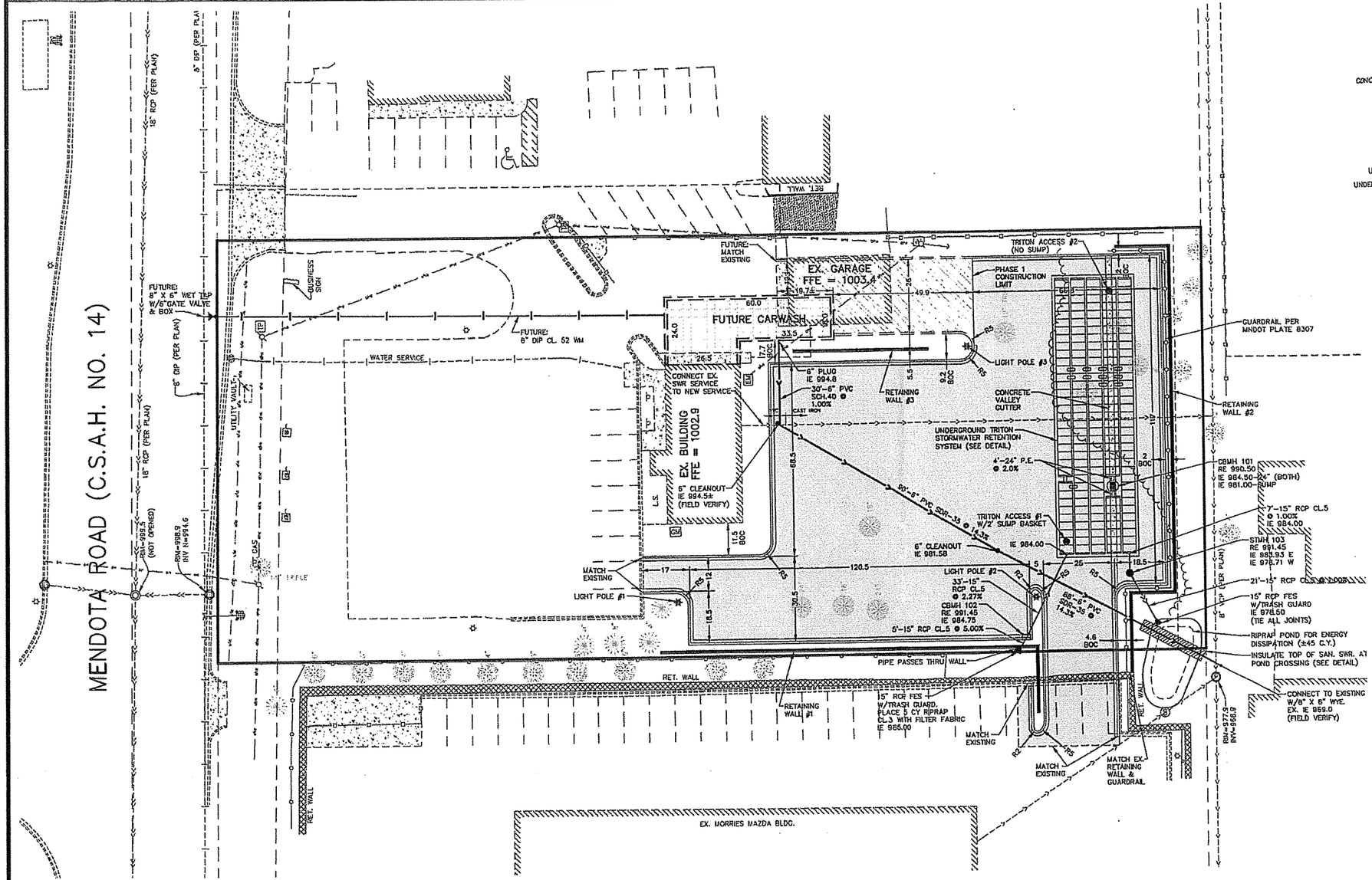
- The Applicant, KEH&H wishes to request an amendment to the existing conditional use permit at 16 East Mendota Road to allow for the redevelopment of the south side of the lot for additional vehicle parking.
- The plan also includes a future car wash at the north east side of the site.

Thank you for your time and consideration of this project.

Sincerely,

Lynn Robson
CFO Morrie's Automotive Group
952-797-1349

site plan




## SITE & UTILITY PLAN LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| CURB | | |
| BITUMINOUS | | |
| CONCRETE/CONCRETE WALK | | |
| PROPERTY LINE | | |
| EX. RIGHT OF WAY | | |
| STORM SEWER | | |
| SANITARY SEWER | | |
| WATER MAIN | | |
| OVERHEAD ELECTRIC | | |
| UNDERGROUND ELECTRIC | | |
| UNDERGROUND FIBER OPTICS | | |
| MANHOLE | | |
| ROOF DRAIN | RD | |
| HYDRANT | | |
| GATE VALVE | | |
| WATER STRUCTURE | | |
| CLEANOUT | CO | |
| GAS METER | GM | |
| ELECTRIC METER | EM | |
| POWER POLE | TP | |
| LIGHT POLE | | |
| SIGN | | |
| TREE/TREELINE | | |
| RETAINING WALL | | |
| FENCE | | |

## GOVERNING SPECIFICATIONS

1. THE LATEST EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND THE CITY OF INVER GROVE HEIGHTS SPECIFICATIONS.
2. THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD).
3. THE LATEST EDITION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD SPECIFICATIONS.

## SITE PLAN NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. CONCRETE CURB AND GUTTER SHALL BE B612 UNLESS OTHERWISE NOTED.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO THE START OF SITE WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF DISCREPANCIES OR VARIATIONS FROM THE PLAN.
4. ALL BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF THE BUILDING UNLESS OTHERWISE NOTED.
5. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVISES (MMUTCD).
6. CATCH BASINS IN THE GUTTER LINE SHALL BE SUMPED 0.17'. ELEVATIONS SHOWN ON THE PLANS REFLECT THE SUMPED LOCATIONS.
7. SANITARY SEWER CLEANOUTS SHALL BE EQUIPPED W/ A BOX FRAME AND SOLID LID (NEENAH R-1914-A) OR APPROVED EQUAL.
8. INSTALL TRITON UNDERGROUND STORMWATER SYSTEM PER MANUFACTURES SPECIFICATIONS.

## SITE DATA

| | |
|---|---|
| ZONING: | B-3 GENERAL BUSINESS |
| PARCEL AREA: | 1.205 AC. |
| EXISTING IMPERVIOUS: | 0.416 AC. (34.5%) |
| PROPOSED ADDED IMPERVIOUS: | 0.418 AC. (34.7%) |
| TOTAL ULTIMATE IMPERVIOUS: | 0.834 AC. (69.2%) |

N

0 10 20 40
( IN FEET )

## STORM SEWER SCHEDULE

| STRUCTURE | | NEENAH CASTING or EQUAL |
|---|---|---|
| TYPE & No. | SIZE | |
| CBMH-101 | 48" DIA. | R-3347-A |
| CBMH-102 | 48" DIA. | R-3067-V |
| STMH-103 | 48" DIA. | R-1733 |
| ACCESS 1 | 30" DIA. | R-1733 |
| ACCESS 2 | 30" DIA. | R-1733 |

CALL BEFORE YOU DIG

811 Know what's below. Call before you dig.

## BENCHMARK

ELEVATIONS BASED ON INFORMATION AS SHOWN ON THE MNDOT GEODETIC WEBSITE. SURVEY DISK 19188 WITH AN ELEVATION OF 972.23 WAS USED TO ESTABLISH VERTICAL CONTROL (NAVD 88).


Carlson McCain
ENVIRONMENTAL - ENGINEERING - SURVEYING
248 Apollo Dr, Suite 100, Lino Lakes, MN 55014
Phone: 763-489-7900 Fax: 763-489-7959


SITE & UTILITY PLAN

**MORRIES PARKING LOT EXPANSION**
16 Mendota Road E.
Inver Grove Heights, Minnesota

**MORRIES AUTOMOTIVE GROUP**
12520 Wayzata Blvd.
Minnetonka, MN 55305

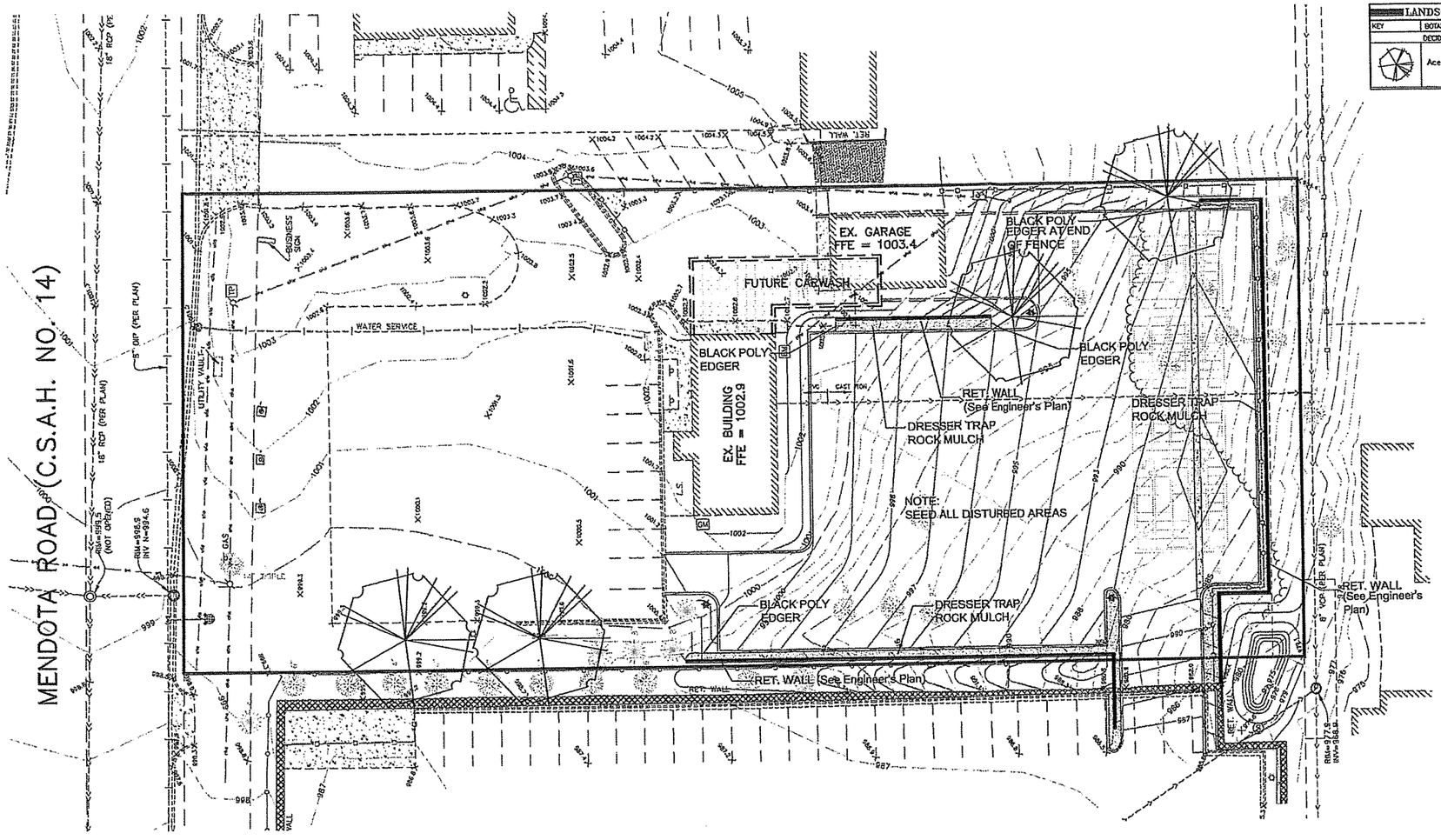
| REVISIONS | |
|---|---|
| 1. 09/03/14 Per City comments. | |
| 2. | |
| 3. | |
| 4. | |
| 5. | |
| 6. | |
| DRAWN BY: | JTR/KHH |
| DESIGNED BY: | JTR |
| ISSUE DATE: | 08/18/14 |

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

Name: Joseph T. Radach, P.E.
Signature:
Date: 08/18/14 License #: 43889

C2 of 6

Landscape Plan




LANDSCAPE LEGEND

| KEY | BOTANICAL NAME | COMMON NAME | SIZE | ROOT | QTY. | REMARKS |
|---|---|---|---|---|---|---|
| | DECIDUOUS TREES | | | | | |
| | Acer x freemanii 'Jeffersred' | AUTUMN BLAZE MAPLE | 2.5" | BB | 4 | |

NOTES:
1. DRESSER TRAP ROCK MULCH TYPICAL ALONG ALL RETAINING WALLS. USE A LANDSCAPE FABRIC IN THE ROCK MULCH AREAS. MULCH TO BE MIN. 4" THICK WITH NO LANDSCAPE FABRIC VISIBLE. DRESSER TRAP ROCK MULCH TO BE 2.5" TO 4" MIN. SIZE & 10% @ 6". EDGER TYPICAL WHERE ROCK MULCH AREAS INTERFACE WITH SEEDED AREAS.

2. EDGER SHOULD BE BLACK DIAMOND EDGER OR EQUAL.

3. SEED ALL DISTURBED AREAS WITH MNDOT SEED MIX 25-141 (GENERAL ROADSIDE MIX) AT 60 LBS. PER ACRE. REFER TO ENGINEER'S PLAN C5 OF 6 FOR MORE DETAIL.

**LANDSCAPE REQUIREMENTS**:

10-15-11 B.1: ONE (1) TREE PER EVERY (10) PARKING SPACES.

APPROXIMATELY 42 PARKING SPACES ADDED:
42/10 = 4 TREES REQ.

## PLANTING NOTES

1. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE AND BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE LANDSCAPE LEGEND.

2. ALL TREES MUST BE STRAIGHT TRUNKED AND FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED.

3. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANTS WHICH ARE DEEMED UNSATISFACTORY BEFORE, DURING, OR AFTER INSTALLATION.

4. NO SUBSTITUTIONS OF PLANT MATERIAL SHALL BE ACCEPTED UNLESS APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.

5. ALL PLANTING STOCK SHALL CONFORM TO THE "AMERICAN STANDARD FOR NURSERY STOCK," ANSI-Z80, LATEST EDITION, OF THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIALS.

6. EXISTING TREES AND SHRUBS TO REMAIN SHALL BE PROTECTED TO THE DRIP LINE FROM ALL CONSTRUCTION TRAFFIC, STORAGE OF MATERIALS ETC. WITH 4' HT. ORANGE PLASTIC SAFETY FENCING ADEQUATELY SUPPORTED BY STEEL FENCE POSTS 6' O.C. MAXIMUM SPACING.

7. ALL PLANT MATERIAL QUANTITIES, SHAPES OF BEDS AND LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN AND ADJUSTED TO CONFORM TO THE EXACT CONDITIONS OF THE SITE. THE LANDSCAPE ARCHITECT SHALL APPROVE THE STAKING LOCATION OF ALL PLANT MATERIALS PRIOR TO INSTALLATION.

8. ALL TREES MUST BE PLANTED, MULCHED, AND STAKED AS SHOWN IN THE DETAILS.

9. ALL PLANTING AREAS MUST BE COMPLETELY MULCHED AS SPECIFIED.

10. MULCH: SHREDDED HARDWOOD MULCH, CLEAN AND FREE OF NOXIOUS WEEDS OR OTHER DELETERIOUS MATERIAL IN ALL MASS PLANTING BEDS AND FOR TREES, UNLESS INDICATED AS ROCK MULCH ON DRAWINGS. SUBMIT SAMPLE TO LANDSCAPE ARCHITECT PRIOR TO DELIVERY ON-SITE FOR APPROVAL. DELIVER MULCH ON DAY OF INSTALLATION. USE 4" FOR TREES, SHRUB BEDS, AND 3" FOR PERENNIAL/GROUND COVER BEDS, UNLESS OTHERWISE DIRECTED.

11. THE PLAN TAKES PRECEDENCE OVER THE LANDSCAPE LEGEND IF DISCREPANCIES EXIST. THE SPECIFICATIONS TAKE PRECEDENCE OVER THE PLANTING NOTES AND GENERAL NOTES.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MULCHES AND PLANTING SOIL QUANTITIES TO COMPLETE THE WORK SHOWN ON THE PLAN. VERIFY ALL QUANTITIES SHOWN ON THE LANDSCAPE LEGEND.

13. LONG-TERM STORAGE OF MATERIALS OR SUPPLIES ON-SITE WILL NOT BE ALLOWED.

14. THE CONTRACTOR SHALL KEEP PAVEMENTS, PLANTERS AND BUILDINGS CLEAN AND UNSTAINED. ALL PEDESTRIAN AND VEHICLE ACCESS TO BE MAINTAINED THROUGHOUT CONSTRUCTION PERIOD. ALL WASTES SHALL BE PROMPTLY REMOVED FROM THE SITE. ANY PLANT STOCK NOT PLANTED ON DAY OF DELIVERY SHALL BE HEELED IN AND WATERED UNTIL INSTALLATION. PLANTS NOT MAINTAINED IN THIS MANNER WILL BE REJECTED. ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPAVED AT THE CONTRACTOR'S EXPENSE.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES, REGULATIONS, AND PERMITS GOVERNING THE WORK.

16. LOCATE AND VERIFY ALL UTILITIES, INCLUDING IRRIGATION LINES, WITH THE OWNER FOR PROPRIETARY UTILITIES AND GOPHER STATE ONE CALL AT 454-0002 (TWIN CITIES METRO AREA) OR 800-252-1166 (GREATER MINNESOTA) 48 HOURS BEFORE DIGGING. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ANY DAMAGES TO SAME. NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONFLICTS TO FACILITATE PLANT RELOCATION.

17. USE ANTI-DESICCANT (WILTPRUF OR APPROVED EQUAL) ON DECIDUOUS PLANTS MOVED IN LEAF AND FOR EVERGREENS MOVED ANYTIME. APPLY AS PER MANUFACTURER'S INSTRUCTIONS. ALL EVERGREENS SHALL BE SPRAYED IN THE LATE FALL FOR WINTER PROTECTION DURING WARRANTY PERIOD.

18. PLANTING SOIL FOR TREES, SHRUBS AND GROUND COVERS: FERTILE FRIABLE LOAM CONTAINING A LIBERAL AMOUNT OF HUMUS AND CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH. IT SHALL COMPLY WITH MN/DOT SPECIFICATION 3877 TYPE B SELECT TOPSOIL. MIXTURE SHALL BE FREE FROM HARDPACK SUBSOIL, STONES, CHEMICALS, NOXIOUS WEEDS, ETC. SOIL MIXTURE SHALL HAVE A PH BETWEEN 6.1 AND 7.5 AND 10-10-10 FERTILIZER AT THE RATE OF 3 POUNDS PER CUBIC YARD. IN PLANTING BEDS INCORPORATE THIS MIXTURE THROUGHOUT THE ENTIRE BED BY ROTOTILLING IT INTO THE TOP 12" OF SOIL.

19. ALL PLANTS SHALL BE GUARANTEED FOR TWO COMPLETE GROWING SEASON (APRIL 1 - NOVEMBER 1), UNLESS OTHERWISE SPECIFIED. THE GUARANTEE SHALL COVER THE FULL COST OF REPLACEMENT INCLUDING LABOR AND PLANTS.

20. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AT LEAST 3 DAYS PRIOR TO PLANNED DELIVERY. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AT LEAST 24 HOURS IN ADVANCE OF BEGINNING PLANT INSTALLATION.

21. SEASONS/TIME OF PLANTING: NOTE: THE CONTRACTOR MAY ELECT TO PLANT IN OFF-SEASONS ENTIRELY AT HIS/HER RISK.
DECIDUOUS POTTED PLANTS:
APRIL 1-JUNE 1; AUG. 21-NOV. 1
DECIDUOUS B&B:
APRIL 1-JUNE 1; AUG. 21-NOV. 1
EVERGREEN POTTED PLANTS:
APRIL 1-JUNE 1; AUG. 21-OCT. 1
EVERGREEN B&B:
APRIL 1-MAY 15; AUG. 21-SEPT. 15

22. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER EACH PORTION OF THE WORK IS IN PLACE. PLANT MATERIAL SHALL BE PROTECTED AND MAINTAINED UNTIL THE INSTALLATION OF THE PLANTS IS COMPLETE, INSPECTION HAS BEEN MADE, AND PLANTINGS ARE ACCEPTED EXCLUSIVE OF THE GUARANTEE. MAINTENANCE SHALL INCLUDE WATERING, CULTIVATING, MULCHING, REMOVAL OF DEAD MATERIALS, RE-SETTING PLANTS TO PROPER GRADE AND KEEPING PLANTS IN A PLUMB POSITION. AFTER ACCEPTANCE, THE OWNER SHALL ASSUME MAINTENANCE RESPONSIBILITIES. HOWEVER, THE CONTRACTOR SHALL CONTINUE TO BE RESPONSIBLE FOR KEEPING THE TREES PLUMB THOUGHOUT THE GUARANTEE PERIOD.

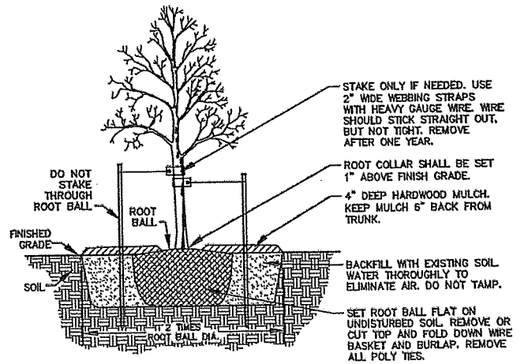
23. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL LANDSCAPE LEGEND SPECIFICATIONS.

24. WATERING: MAINTAIN A WATERING SCHEDULE WHICH WILL THOROUGHLY WATER ALL PLANTS ONCE A WEEK IN EXTREMELY HOT, DRY WEATHER, WATER MORE OFTEN AS REQUIRED BY INDICATIONS OF HEAT STRESS SUCH AS WILTING LEAVES. CHECK MOISTURE UNDER MULCH PRIOR TO WATERING TO DETERMINE NEED. CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR WATER.

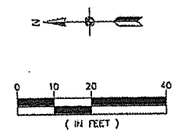
25. CONTRACTOR SHALL REQUEST IN WRITING, A FINAL ACCEPTANCE INSPECTION.

26. PROPOSED IRRIGATION SYSTEM TO BE DESIGN BUILD.

27. ALL DISTURBED AREAS TO BE SEEDED, ARE TO RECEIVE 4" TOP SOIL, SEED, MULCH, AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.




A DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE




CALL BEFORE YOU DIG

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Carlson McCain
ENVIRONMENTAL • ENGINEERING • SURVEYING
248 Apollo Dr, Suite 100, Lino Lakes, MN 55014
Phone: 763-489-7900 Fax: 763-489-7959

LANDSCAPE PLAN

MORRIES PARKING LOT EXPANSION
16 Mendota Road E.
Inver Grove Heights, Minnesota

MORRIES AUTOMOTIVE GROUP
12520 Wayzata Blvd.
Minnetonka, MN 55305

REVISIONS
1. 09/09/14 Per City comments.
2.
3.
4.
5.
6.

DRAWN BY: ELF/JCW
DESIGNED BY: JCW
ISSUE DATE: 08/18/14

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

Name: John C. Winter, R.L.A.
Signature:
Date: 08/18/14 License #: 12258
Contact #: 218-556-1022

L1 of 1

# PLANNING REPORT
## CITY OF INVER GROVE HEIGHTS

**REPORT DATE:** September 12, 2014 **CASE NO:** 14-22PUD

**APPLICANT:** Jim Deanovic

**PROPERTY OWNER:** Jeffers Pond Development, PeterAndrea Investments, Dakota 53 Properties

**REQUEST:** Preliminary Plat/PUD, Rezoning and Comprehensive Plan Amendment

**LOCATION:** Northwest Area **HEARING DATE:** September 16, 2014

**COMPREHENSIVE PLAN:** Multiple Categories **ZONING:** A, Agricultural

**REVIEWING DIVISIONS:** Planning
Engineering
Park and Recreation
City Attorney

**PREPARED BY:** Allan Hunting
City Planner

## BACKGROUND

The City has received an application for a three part residential subdivision within the Northwest Area. The three part project is known as Blackstone Vista, Blackstone Ponds and Blackstone Ridge. Blackstone Vista consists of a 78 unit single family development on approximately 40 net acres. Blackstone Ponds is a 104 unit townhome development on approximately 17 net acres. Blackstone Ridge is a 121 unit single family development on approximately 57 net acres. The three parcels are not all contiguous to each other, but the developer is proposing the three neighborhoods at the same time as they all contribute to meeting specific performance standards and overall goals of the Northwest Area.

## REQUESTS

The specific requests for this project consist of the following:

1. A Comprehensive Plan Amendment to change the land use categories on portions of the parcels from;
   a) Blackstone Vista: 40 acres from IOP, Industrial Office Park, CC, Community Commercial, MDR, Medium Density Residential to LDR, Low Density Residential.
   b) Blackstone Ridge: 40 acres from LMDR, Low-Medium Density Residential, MDR, to LDR.

2. Rezoning of the property from A, Agricultural to R-1C/PUD, Single Family Residential PUD and R-3B/PUD, Multiple Family Residential PUD.

3. Preliminary Plat and Preliminary PUD Development Plan Approval for a three parcel plan to be known as Blackstone Vista – 78 unit single family, Blackstone Ponds - 104 unit townhome and Blackstone Ridge – 121 single family.

Staff has determined that the following comprehensive plan amendments also need to be addressed:

1) Change in the Sanitary Sewer map to show the proposed change in routing of the sanitary sewer through the Argenta Sewer District.
2) Change to the MUSA Expansion Exceptions through the Leitch Estates Neighborhood with routing of public street and utility improvements through the neighborhood.
3) Creating new districts for the MDR and LDR categories to address financial implications in the Northwest Area.

## EVALUATION OF THE REQUEST

## EXTENSION OF MUNICIPAL UTILITIES TO THE AREA

The proposed development is approximately one mile from the existing trunk sewer pipe. The existing sewer pipe ends at Alverno Avenue in Argenta Hills. The pipe needs to cross private property to get to the subject site. This is typically called "leap frog" development as it is jumping over the land currently right next to sewer to land where the services have to be extended.

The City has not yet extended trunk sewer and water to this area of the City. The trunk sewer installed to date is along Hwy 3 to 70th Street. Truck sewer has also been extended through Argenta Hills and is currently built to the end of Alverno Avenue. In order to serve the Blackstone development, the sewer needs to be extended from Alverno northwesterly into the Vista subdivision and then northward.

The second phase of the project, the Ponds, requires sewer to cross 70 Street and then northward to this development. The utility study anticipates the sewer line to extend easterly along the alignment of the current public street 69th Street. The sewer would ultimately cross Argenta Trail and extend further east to the Ridge at some point.

Work completed:

- The City has conducted a feasibility study and a preliminary design study for the sewer trunk line extension.

- The City has also done a financial study on the impact of the trunk line extension. Cost projected at approximately 8 million dollars.

- A contract to award the project for final design work.

Work remaining includes:

- The final design work must be completed and contract awarded.
- Need to identify easements and acquire or condemn those easements
- Need to determine the funding source
- Award contract for work
- Construction to begin in approximately 15 weeks
- Total costs estimated at 8 million dollars
- Funding for utilities has yet to be determined be City Council
- Construction of the sewer line could commence in spring, 2015.

Exception Neighborhood. The routing of the sewer along 69th Street goes through an exception neighborhood identified earlier in the report. The City Council will have to make the decision to extend sewer through an exception neighborhood and then determine who pays for the extension and what impacts it has on the neighborhood regarding required hook up or not. These decisions will impact the project as proposed.

- Issue of sewer needing to extend through an exception neighborhood. The Comprehensive Plan did not propose to extend sewer and/or require hook up.

- No funding source identified to pay for the sewer.

- 69th Street would need to be built to current city standards with pavement and curb and gutter.

- Part of this street extension needs to be built over land where no right-of-way exists and would need to be acquired.

- No funding source identified to pay for the right-of-way acquisition and street construction.

## NORTHWEST AREA WIDE ROADWAY STUDIES

The City and Dakota County have conducted a series of studies to determine the roadway needs for the Northwest Area.

- The City completed the 2010 Regional Roadway Visioning Study for northeast Eagan and northwest Inver Grove Heights.

- The City completed the Northwest Area Collector Street Plan in May 2012.

- Currently, the City and Dakota County are beginning a preliminary engineering design. This project will result in an improved configuration of the intersection of Argenta Trail and Trunk Highway 55, with improved turn lanes and a traffic signal system. The design will also consider the location of a potential future interchange at this intersection to insure ramp locations will work with county and local street connections. The design will identify right-of-way needs, allowing final decisions to be made concerning the development of, and access to adjacent parcels. This phase of the project will cover the area from the current Hwy 55/Argenta Trail intersection to just south of 70th Street. This phase of the project is planned to be completed by the end of February, 2015. It is anticipated that a second phase of this study will address the area from 70th Street to the future interchange with I-494.

While a number of roadway studies have been completed and some are just getting underway, there are still a number roadway issues that still need to be addressed before all of the phases of the proposed project can be evaluated.

**Argenta Trail**

The Regional Roadway System Visioning Study, August, 2010, and adopted by the City Council identified two key improvements needed to accomdate future traffic. One was a new I-494 interchange near Argenta Trail. The other was a high volume, high capacity interchange at TH 55/Argenta Trail. An upgraded, realigned Argenta Trail is an important factor both locally and regionally. The alignment of Argenta Trail is important and plays an important role in the planning of the Northwest Area and in this development proposal.

- Argenta Trail is a major arterial roadway in the Northwest Area.
- It is the key roadway that would connect the new I-494 interchange with TH 55/Argenta interchange.
- Roadway is expected to eventually be built to a 6-lane road within a 200 foot wide right-of-way.
- Argenta Trail is expected to carry approximately 30,000 to 40,000 ADT in the future.
- The alignment of Argenta Trail has not yet been determined.
- Three possible options for alignment have been discussed
    - All right-of-way on the Blackstone Ridge plat. This could result in a considerable loss of development potential.
    - All right-of-way on the west side of Blackstone Ridge. This could mean an impact on 10 properties with some acquisitions.
    - The right-of-way part on Blackstone Ridge, part on properties on west side. Could result in some lost development potential and loss of some existing residences. There is a power line in this corridor and preliminary estimates for moving it are one million per mile.

- Cost of acquisition of right-of-way and construction wojuld be significant.
- Total costs not yet known. The City bears 45% of the cost.
- Funding source for the roadway not yet identified.

**Collector Roadway Policy**

The collector street study identifies the needed roadway system and general right-of-way needs. The Ridge plat does not address the necessary right-of-way identified on the collector street study.

The collector street study does not address the funding mechanism needed to pay for the roadway system. The City does not have a policy on dedication of right-of-way for these roads or the funding for construction. These policies should be in place before the City makes any recommendation on subdivision plats that are impacted by these issues. More time is needed for the Council to adopt a policy on right-of-way dedication and funding.

**Comprehensive Plan Amendment**

1. Land use designation changes. When the City began its work on the 2020 Comprehensive Plan back in 1996, detailed land use and utility studies had not yet been done for the Northwest Area. The land use designations for the majority of the properties in the Northwest Area were guided for Low Density Residential.

When the Alternative Urban Areawide Review (AUAR) was conducted for the Northwest Area in 2005, the land use designations were changed in order to address overall unit counts and density projections.

The Land Use Chapter of the comprehensive plan has a description of the Northwest Area which includes the following:

> "This comprehensive plan update modifies some of the land uses previously guided for the Northwest Area. These modifications are based on what we have learned over the last eight years of planning work completed in the Northwest Area as well as reflections of recent development proposals and comprehensive plan amendments. Two key guidelines were adhered to in modifying the land uses in the Northwest Area. 1) the development projections assumed within the Northwest AUAR remain higher than those projected for the 2030 Comprehensive Plan update, thus rendering the AUAR still effective and not impacting the design capacity of future infrastructure. 2) the assumptions used to determine how infrastructure improvements are financed remain on the low side, thus making sure that we project to exceed the amount of development needed to ensure the delivery of infrastructure to the Northwest Area is financially feasible."

Blackstone Vista: The current residential land use designations on the parcel would equate to approximately 118 residential units and approximately 300,000 square feet of commercial/office. Approximately 11 acres of land guided CC and IOP are to remain as proposed. This is a later phase of the development and will be determined once the Hwy 55/Argenta Interchange study is completed. The amendment includes changing approximately 41 acres to LDR. The density would be 78 units or 1.92 units/acre.

Blackstone Ponds: No changes are proposed. The density for this project would be 104 units or 6.1 units/acre.

Blackstone Ridge: The request is to change approximately 20 acres from MDR to LDR and approximately 20 acres from LMDR to LDR. The southern 20 acres would remain LMDR. Based on the number of lots proposed in the northern half of the site (74) the overall density would be 1.92 units per acre. There are 47 lots proposed on the southern 20 acres for a density of 3.11 units per acre.

The overall density for the entire project would be 2.2 units per acre.

**RATIONAL FOR THE LAND USE CHANGE**

- Through numerous discussions with developers and identified by other land use and real estate professionals, it has been stated that there is a high demand for detached single family development in the suburban communities right now. The demand for higher density apartments or mid density townhome projects is very low outside of the central city areas. Due to the changes in market demand, the City may need to be flexible in density demands and housing mixes until the demand for higher densities increases, which is expected to occur in the next few years.

- Extending sewer and water to the proposed properties would open up larger areas for development with the availability of sewer and water. The current extension along Hwy 3 to 70th Street has not spurred development as anticipated. The sewer alignment proposed exposes more parcels to be able to connect.

- The development projected within the AUAR would still remain higher than the proposed project thus keeping the assumptions within the AUAR accurate and no additional burdens would be placed on the design capacity of future infrastructure.

2. New Land Use Category text. During the initial steps for studying development in the Northwest Area, the City conducted land use and financial studies to determine the densities and costs per unit in order to fund the installation of city utilities. Since no assessments were levied, fees are collected when a parcel of land is developed. Minimum densities have been established for each parcel to achieve these goals. Based on those assumptions, the total project area calculation assumed 378 units would be developed to cover city utility costs. The

preliminary plats submitted show a total of 305 units. The project would be 75 units short and therefore would come up short in providing its fair share of the overall utility costs. This same scenario occurred with the Argenta Hills and Groveland Heights projects and the developers did agree to and pay the difference in the units they were short. A preliminary number based on plat connection and building permit fee collections for 75 lots would be approximately $1,000,000.

The City Council created a new subcategory for the Northwest Area during the Groveland Heights which required any change to the comprehensive land use plan that a new category be placed on the land that obligates the developer to pay the difference. This new category was created for the LMDR category and would need to be created for the LDR and MDR categories.

New categories called LDR-NWAPUD and MDR-NWAPUD establishes parameters whereby projects with unit counts that fall below projections are obligated to pay the projected unit count fee collections that were part of the original assumptions and where the land use change is based on an overall reduced density category. These categories would state the same uses and goals but add that any development is subject to PUD approvals and agreements with the city must be in place which obligates the developer to pay any difference in utility fees collected between financial assumptions and those approved.

The proposed language is as follows:

> The land use designations of LDR-NWAPUD (Low Density Residential/ Northwest Area PUD) and MDR-NWAPUD (Medium Density Residential/Northwest Area PUD) means that the property so classified has the same density and development requirements of the LDR and MDR designations, together with the additional following requirements:
>
> 1. The property must be zoned, platted and developed as a PUD within an approved PUD contract and approved PUD plans.
>
> 2. At the time the plat is recorded, the landowner/developer by written agreement with the city must pay the city the difference between (a) the Northwest Area utility connections fees (including those usually payable at time of plat as well as building permit issuance) and the hook-up fees (including the water connection and sewer connection fee) that would have been payable for the densities shown for the subject property in the city's financial and connection fee analysis (prepared by Ehlers & Associates and amended from time to time) for the Northwest Area and (b) the Northwest Area utility connection fees and hookup fees that will be collected for the subject property per the actual density at which the subject property develops.
>
> The land use designation of LDR-NWAPUD and MDR-NWAPUD will typically be applied to land in the Northwest Area which previously was guided for higher density

> residential development, but for which the city determines that a lower density is satisfactory if the connection fees and hookup fees actually paid, together with the additional payment by the landowner/developer due to the reduction in density, equals the total amount required by the city to pay for the utility infrastructure as stated in the financial and connection fee analysis prepared by Ehlers & Associates for the Northwest Area.

This insures the City that fee assumptions would be paid if the City approves the comp plan land use plan with a lower project unit count than what was projected before a PUD application is approved. We would expect this scenario to be repeated in the future. This establishes the category for future requests. These same extra conditions may have to be added to other land use categories.

3. Sewer Map Change. The proposed development requires a change to the planned routing of the main sewer line that would serve this portion of the Northwest Area. The project area is located within the Argenta District. Figure 7.1: Sanitary Sewer and Sewer District map from the Comprehensive plan show the sewer line extending westward along the north side of Hwy 55 and then extending northward near the Eagan Boundary. The City has initiated a study to look at an alternate routing for sewer with this development. The proposed new alignment would extend the sewer from the Argenta Hills development northwesterly following the street pattern proposed in Blackstone Vista. The line would then extend northward to 70th Street (Co Rd 26) where a lift station is proposed. The line would then continue east following the alignment of 69th Street and then along future Argenta Trail.

The AUAR for the Northwest Area was just recently updated and the new sewer alignment map was included in this update. Since the alignment is a departure from the 2030 map, staff is recommending that the comprehensive plan be updated with this new information. Only the alignment of the sewer line would change. There would be no changes to sewer flow projections. A map of the new alignment is included in this report.

4. Impacts to Exception Neighborhood. The Comprehensive Plan identifies four established neighborhoods that have unique land use characteristics that warrant special consideration in the land use plan and specifically, in future utility planning. One of these neighborhoods, Leitch Estates, straddles Argenta Trail just north of 70th Street. This area contains 46 acres of land and contains approximately 33 homes. The Comprehensive Plan states;

> "The comprehensive plan includes these four neighborhood areas within proposed MUSA line expansions, however, they are expected to remain as islands without sanitary sewer unless unforeseen circumstances occur. These properties would only receive sanitary sewer service in the future "if required" or "desired" by the property owners. Requiring the area to be served by sanitary sewer would only happen if substantial quantities of on-site systems exhibit future failures and no other action can

be taken to provide proper treatment. These neighborhoods are considered permanent land uses and the land use plan does not contemplate further lot divisions or platting."

The Preliminary Engineering Report for the Northwest Area Trunk Utilities – Argenta District looked at how the Blackstone development could be served by sewer. Once the line would extend north across Co Rd 26, it would follow the street alignment in Blackstone Ponds and then extend easterly through the Leitch Estates neighborhood following 69th Street. The sewer line would then cross Argenta Trail to serve the Blackstone Ridge plat.

This utility plan has an impact on a neighborhood that was anticipated to remain as is. If the City Council were to approve this plan and approve a utility plan with the current alignment, staff would recommend that language be added to recognize this current situation and that this "unforeseen circumstance" may have occurred and a sewer extension following 69th Street may be an option to serve northern areas of the Northwest Area. Staff proposes the following language:

"The comprehensive plan includes these four neighborhood areas within proposed MUSA line expansions, however, they are expected to remain as islands without sanitary sewer unless unforeseen circumstances occur. These properties would only receive sanitary sewer service in the future "if required" or "desired" by the property owners **or unless alternative alignments for sanitary sewer extension through the Northwest Area are approved by the City Council.** Requiring the area to be served by sanitary sewer would only happen if substantial quantities of on-site systems exhibit future failures and no other action can be taken to provide proper treatment. These neighborhoods are considered permanent land uses and the land use plan does not contemplate further lot divisions or platting."

## IDENTIFICATION OF NATURAL RESOURCES

A review of the Natural Resource Inventory and Management Plan was conducted to determine what resources exist on the property.

A. Blackstone Vista
- Natural Resource inventory identify the area as primarily an "old field" which is a lower manage classification area and does not have any unique features to retain.
- Potential Greenway is shown in the vicinity along the eastern boundary.
- The inventory notes a wetland in the northeast corner.
-

B. Blackstone Ponds
- Natural Resource inventory identify the area as primarily an "old field" which is a lower manage classification area and does not have any unique features to retain.
- Potential Greenway is shown on property. The County Greenway is identified along the western boundary of this site.

- The inventory notes a wetland in the southeast corner.

C. Blackstone Ridge
- Potential Secondary Greenway is shown in the vicinity along the eastern boundary.
- The inventory notes a wetland on the south end of the property.

## NET DEVELOPABLE AREA

The calculation of net developable area in for the parcels includes subtraction of wetlands and right-of-way for Co Rd 26. Blackstone Ponds is located in the Shoreland Overlay District. The net developable area for each neighborhood is listed below

| | |
|---|---|
| Blackstone Vista | 40.41 acres |
| Blackstone Ponds | 16.83 acres |
| Blackstone Ridge | 56.96 acres |

## NATURAL AREA/OPEN SPACE

The Northwest Area Ordinance requires 20% of the net developable area be preserved as natural area/open space. Based on the net developable area calculated above, a summary of open space requirements is listed below:

| **Blackstone Vista** | **Square Feet** | **Required Acres** | **Proposed Acres** |
|---|---|---|---|
| *Total Net Developable Area* | *176,026* | *41.41* | *NA* |
| Minimum Open Space Required = 20% of net area | 352,836 | 8.1 | 15.7 (39%) |
| Required contiguous area = 75% of required open space with a minimum 100 foot corridor width | 264,627 | 6.0 | 10.7 (132%) |
| Area to be undisturbed = 50% of required open space | 174,240 | 4.0 | 4.2 (10.1%) |

| **Blackstone Ponds** | **Square Feet** | **Required Acres** | **Proposed Acres** |
|---|---|---|---|
| *Total Net Developable Area* | *733,115* | *16.83* | *NA* |
| Minimum Open Space Required = 20% of net area | 148,104 | 3.4 | 4.9 (29%) |
| Required contiguous area = 75% of required open space with a minimum 100 foot corridor width | 111,078 | 2.5 | 1.8 (53%) |
| Area to be undisturbed = 50% of required open space | 74,052 | 1.7 | 2.4 (14.6%) |

| Blackstone Ridge | Square Feet | Required Acres | Proposed Acres |
|---|---|---|---|
| *Total Net Developable Area* | *2,481,178* | *56.96* | *NA* |
| Minimum Open Space Required = 20% of net area | 496,584 | 11.4 | 14.8 (26%) |
| Required contiguous area = 75% of required open space with a minimum 100 foot corridor width | 372,438 | 8.5 | 5.1 (44.7%) |
| Area to be undisturbed = 50% of required open space | 248,292 | 5.7 | 6.4 (1.2%) |

The Northwest Area Overlay District Ordinance requires the natural area/open space be designated based upon four criteria that are defined in Title 10-13J-5.D. The project is designed to cover criteria in b and d. The project provides a substantial amount of open space around the perimeters of Vista and Ponds. The open space is more broken up within the Ridge. There are large areas of open space in the northern portion of the site, but the design does not provide for a contiguous open space as intended by the code. Staff has prepared a concept greenway/open space plan. Staff recommends that the design of Ridge be modified to provide more contiguous open space similar in design to the plan prepared by staff and included with this report.

While individually, two of the neighborhoods fall short of the 75% goal, overall, the project complies with the goal of 75% contiguous. As stated above, Blackstone Ridge needs more open space area to be connected in some fashion to provide more connected open space.

The corridors vary in width and not all areas meet the goal of 100 feet wide. In many cases this requirement may be difficult to achieve. The applicant has requested flexibility from this requirement. As proposed, staff feels the intent of the open space requirements have been addressed on the plans.

The Northwest Area Overlay District Ordinance requires the entire area set aside for natural area/open space shall be maintained in perpetuity and the restriction shall run with the land and be binding on the current and future land owners.

The ordinance also requires the ownership to be in one of the following four categories; by the property owner (private ownership), homeowners association, third party (non-profit) organization or dedicated to the City. Some of the storm water system and open space would be in outlots owned by the City. Overall ownership of the storm water system and open space has yet to be determined and will be addressed with the final plan review.

## DEVELOPMENT CAPACITY PLAN

Blackstone Vista

Based on the density proposed, the development capacity would be based on the R-1C district. The plans show a net developable area for the residential area to be 40.41 acres. Based on

12,000 square feet per unit, the maximum development density allowed by the Northwest Area Overlay District would be 147 units. This number is the maximum allowed.

The Northwest Area Overlay District Ordinance requires a minimum density for each zoning district. An R-1C/PUD zoning requires a minimum of 2.0 units per net developable acre. An R-1C/PUD zoning requires a minimum density of 2.0 units/acre which equals 80 units. The 78 units proposed for practical purposes meets the intent of the minimum density standard.

Blackstone Ponds

Based on the density proposed, the development capacity would be based on the R-3B district. The plans show a net developable area for the residential area to be 16.83 acres. Based on 3,630 square feet per unit, the maximum development density allowed by the Northwest Area Overlay District would be 229 units. This number is the maximum allowed.

The Northwest Area Overlay District Ordinance requires a minimum density for each zoning district. An R-3B/PUD zoning requires a minimum of 8.0 units per net developable acre which equals 134. The 104 units proposed are 30 units shy. The reduction in density is a flexibility request for the overall project.

Blackstone Ridge

Based on the density proposed, the development capacity would be based on the R-1C district. The plans show a net developable area for the residential area to be 56.96 acres. Based on 12,000 square feet per unit, the maximum development density allowed by the Northwest Area Overlay District would be 207 units. This number is the maximum allowed.

The Northwest Area Overlay District Ordinance requires a minimum density for each zoning district. An R-1C/PUD zoning requires a minimum of 2.0 units per net developable acre which equals 114. The 121 units proposed exceed the minimum density standard.

## BULK STANDARDS

Building Setbacks, Separation and Impervious Surface.

Flexibility Requests. The applicant has provided information in their narrative on the specific standards they are requesting flexibility. Upon reviewing the plans, staff has determined the following items should be included in the list of flexibility requests.

1. Setbacks. Side yard separation and corner lot setbacks.

The applicant is proposing side yard setbacks of five feet on a garage or accessory structure side and 10 feet for the house or principal structure side. This is the same standard as in all residential zoning districts in the City. The Northwest Area Code requires a 20 foot separation. Since there

are no rain gardens or other infiltration systems or storm systems designed in side yards, staff supports the reduced setback.

The applicant is also requesting a corner lot setback of 15 feet whereas 20 feet is the minimum. Allowing a reduced corner setback provides more flexibility in house placement on some of the narrower lots. This same standard has been approved in Argenta Hills and is being proposed in Groveland Heights. Staff also supports this request.

The plans show a rear yard setback standard of 25 feet, yet the narrative indicates the rear yards would be 30 feet. Staff would recommend the 30 foot setback be required. It appears that the plans are designed to allow for rear yard setbacks of at least 30 feet. A condition of approval should be that all setbacks standards identified on any of the plans reflect a 30 foot rear yard setback.

2. Density. As stated earlier, the overall density of the project is short 25 units based on the minimum density standards found in Section 10-13J-5, Table 13J-1. The way the ordinance is set up, a project is reviewed against categories based on number of units in each building or complex. The Ponds plat is reviewed against the R-3B standards because the largest unit size buildings fall into the 4-7 unit category. The building complexes are a mix of 4 unit and 6 unit buildings. The site is constrained by the fact that it abuts a DNR wetland and DNR protected water so there are more restrictive setbacks that place some limitations on the overall density of the site.

The minimum density regulation was also put in place part to make sure enough units were proposed in each project to cover the cost of utilities. Since this project, as well as others previously, have paid the full share or are recommended to pay the full share of utility fees, staff is comfortable with recommending approval of the flexibility from density.

3. Minimum Corridor Width. The applicant is requesting flexibility from the minimum 100 foot corridor width. The plan for the plats do show significant amounts of contiguous open space with varying widths. All the corridors do not meet the 100 foot standard. Previously approved projects have been granted this same flexibility as it has been found hard to meet all other standards and find room for continually wide corridors. Staff recognizes that this standard may be a little lofty and hard to meet. Staff focuses more on obtaining contiguous corridors for trail connections as opposed to continual wide corridors. Staff would support this flexibility request.

4. Driveway widths. The applicant is requesting flexibility from the 20 foot driveway width requirement. They are proposing standard driveways that would be approximately 30 feet wide without constructing the additional width with porous pavement. This same flexibility has been approved in Argenta Hills and Groveland Heights. The amount of impervious surface in the driveways has been included in the total impervious surface amounts for the project and the storm water plans are designed with the wider driveways.

All other proposed setbacks comply with Northwest Area standards.

Proposed Residential Densities.

As stated earlier, The Ponds would be 30 units shy of the density required based on an R-3B District density. The Northwest Area Overlay District Ordinance establishes minimum densities based on zoning categories. The zoning categories are identified based on the number of units in each building. In general, the building size in the Ponds falls into to the 4-7 unit building which is the equivalent of the R-3B District. The Ridges meets the density standard and is actually 7 units over. The Vista meets the density standard. Overall, the three neighborhoods provide 25 units less than the minimum density laid out in the Code.

The Metropolitan Council's goal for communities in developing areas with municipal sewer and water services is to achieve a net density of 3 to 5 units per acre. The overall density if the project falls at approximately 2.7 units per net acre. While the proposed density falls short of the Metropolitan Council's density goal, the goal should be applied across the entire City and not just to any one single project. Allowing a lower density suggests that the City would need to support higher densities in other areas of the community to achieve the regional density goal.

The extension of utilities to new areas within the Northwest Area opens up additional lands for development. The land to the east of Blackstone Ridge is guided for higher densities. This area will allow opportunities for the higher density development the Comp Plan anticipated in the long term and should be able to help with any density short falls in the short term.

Impervious surface coverage. Total impervious surface for the single family developments is limited to 25% while the multiple family development is allowed up to 55%. The applicant has provided impervious surface calculations by subdivision.

| | |
|---|---|
| Blackstone Vista | 23.78% total impervious surface coverage |
| Blackstone Ponds | 37.5% total impervious surface coverage |
| Blackstone Ridge | 26% total impervious surface coverage |

Overall, the total project falls within the impervious surface maximums. Each neighborhood has been or will be reviewed against the storm water manual to insure that all storm water is being treated in accordance with the Northwest Area goals. As we have done with Argenta Hills and Groveland Heights, staff is recommending that a specific impervious surface calculation be done for each lot at time of final plat review. This allows the City, builder and homeowner to know exactly how much coverage is allowed per lot and the City can track this with building permits.

## LOT AND BLOCK DESIGN

### Blackstone Vista

Lots sizes range from approximately 9,000 to 17,000 square feet. The majority of the lots have widths ranging in the 65-70 foot range. There are 8 outlots proposed. Outlots A-D would be for

storm water requirements and open space. Outlot E is for future development. The grading plan shows the general building pad area based on setbacks. The lots would have sufficient building area.

### Blackstone Ponds

Proposed as a townhome type plat with a lot around each unit and the common space would be in outlots. Outlots A and B would contain the storm water requirements and open space. These outlots would be owned and maintained by a home owners association.

### Blackstone Ridge

Lots sizes range from approximately 8,000 to 20,000+ square feet. The majority of the lots have widths ranging in the 65-75 foot range. There are 7 outlots proposed. The outlots would contain the storm water ponding and open space. The grading plan shows the general building pad area based on setbacks. The lots would have sufficient building area. There is a power line easement running along the west boundary of the site. The lots are deep enough and designed to accommodate the additional easement. Typical of power line easements, there would be no structures allowed within this 65 foot wide strip.

## PARKS/TRAILS/SIDEWALKS

### Parks/Trails

The recently adopted NW Area Park plan does not indicate a need for public park land within the proposed Blackstone development plats, therefore the City of Inver Grove Heights is requiring that the developer provide a cash dedication equal to the number of lots proposed at the rate in effect at the time of final plat. The City's NW Area Park Plan does suggest some additional trail connections within the proposed subdivisions, and the developer is working with the City to provide those connections.

### Regional Greenway

Dakota County has a Master Plan for the Mendota/Lebanon Regional Greenway which has been adopted by the City of Inver Grove Heights and the developer has done a good job of accommodating the greenway as depicted in the County's Master Plan. Additionally, Dakota County plans for a grade separated crossing of 70th for the greenway and the developer should be expected to study and provide an adequate amount of land for the future construction of the crossing which will be constructed by Dakota County sometime in the future.

### Sidewalks

The plans do provide for sidewalks on one side of the public streets through Blackstone Vista and Blackstone Ridge.

## STREETS

The whole development is proposed using both public and private streets. All the streets within Blackstone Vista and Blackstone Ridge would be public. The main road heading east and the cul-de-sac in Blackstone Ponds would be public and the other shorter stub streets would be private.

**Blackstone Vista**

The street system would have access to both Argenta Trail and Co Rd 26 (70th Street). Access to Argenta Trail would be a temporary access point subject to change once the interchange study is completed and the new alignment of Argenta Trail is known. The County has indicated they support the two access points onto county roads. The future development of Outlot E would be served by existing Argenta Trail. The street alignment provides stubs to the property to west and east for future road connections. There are no city collector streets planned in this area that need to be provided for or provide connections to. Staff feels this system works for the project.

**Blackstone Ponds**

Blackstone Ponds is proposed with both public and private streets. There would be one access point to Co Rd 26. The County has also supported this location. Additional turn lanes will be required per County regulations. The City strives to have two access points to each development. In this case, the public road is intended to extend east beyond the boundaries of the plat and connect to 69th Street. There is a gap between the east edge of the plat and 69th Street. The applicant does not own the land needed for right-of-way to extend 69th Street. One of the issues the Council has to address is need to acquire the necessary right-of-way so 69th Street would connect to Argenta Trail. The costs of the improvements would also have to be addressed by the Council. A project of 78 units needs to have two access points and staff would recommend the Council pursue the 69th Street extension and roadway improvements.

**Blackstone Ridge**

Blackstone Ridge is proposed with public streets and one access point to Argenta Trail. As proposed, the local street pattern does not meet the city policy of having more that access point to an existing street. With 121 lots proposed, additional street connections are necessary. The plan is not consistent with the roadway network plan as indicated below:

- The Northwest Area Collector Street study indicates some collector streets will be needed in this vicinity.

- The Collector Street Study shows an extension of Alverno Avenue heading north on the east boundary of this site. The proposed plan shows a stub and partial right-of-way heading east to this future road. Consideration needs to be given to determine how this road stub should connect to the collector network.

- The extension of 65th Street is shown along the north boundary of this site. The project only provides a half right-of-way of 40 feet. The anticipated total right-of-way would be in the range of 80-100 feet. More right-of-way should be dedicated.

- There are no connection points planned northward to 65th Street. The plan needs to be modified to have a connection point to 65th Street.

- The Collector Street Study identifies a collector street at about 67th Street running through the middle of this development. The plan identifies a connection point to 67th Street, but does not provide for a through street to Argenta Trail nor provides the appropriate right-of-way width. The access point to Argenta Trail should be roughly north of the wetland on the west boundary.

The City Council must address and establish a policy on dedication of right-of-way and costs for funding the collector street system.

The largest regional roadway question that has yet to be answered is the alignment of future Argenta Trail. The application notes the alignment on the plans but shows all of the right-of-way needs to occur on properties to the west. The City and County are in the process of studying the southern alignment of Argenta (from 70th Street south) and the northern alignment to I-494 are anticipated to be part of this study. Completion would still be several months out. One of the biggest questions that impact either this project or the properties on the west side of Argenta Trail is where will the most appropriate alignment for Argenta Trail be? Staff feels this is a very important issue to be resolved before a plat could be approved.

## GUEST PARKING

The design of Blackstone Ponds (townhouse project) complies with the city parking standards. They are providing a two-car enclosed garage with a two-car driveway in front. The project contains both public and private streets. The public streets allow parking on one side. The private streets would not be allowed parking on either side due to the narrow width. There have been issues in some townhome neighborhoods over the years where no guest parking was provided and there was nowhere for anyone to park. Staff has raised this question with the applicant for them to look at providing guest parking. The applicant has looked into this comment and feels there will be adequate parking on the public streets. There are longer sections along the public streets with no driveways that could be used for parking. Staff recommends that a plan be prepared that shows the possible parking areas to determine approximately how many cars could be parked.

## DAKOTA COUNTY REVIEW

The property abuts County Road 26 (70th Street) and County Road 63 (Argenta Trail) and therefore the plats are subject to review by Dakota County. The County Plat Commission meet to discuss this project on August 25, 2014 (letter attached). The Commission supports the Vista and Ponds developments with road improvement conditions listed in the letter. The Commission did not approve the Ridges and indicated the Argenta Trial interchange study needs to be completed to determine the alignment of future Argenta Trail to I-494. The Commission will comment on the Ridge plat once the alignment study is complete.

## LANDSCAPING/TREE PRESERVATION

The developer has also provided a tree inventory on all three parcels to verify tree preservation. The Tree Preservation Ordinance allows up to 30% removal before replacement is required. The applicant has provided a summary table of the three plats with the replacement and reforestation numbers.

| | Caliper inches required | Caliper inches shown |
|---|---|---|
| Blackstone Vista | 3795.2 | 1164.5 |
| Blackstone Ponds | 128.2 | 551 |
| Blackstone Ridge | (805) | 1403 |
| | 3118.5 | 3118.5 |

The Blackstone Vista plat is heavily wooded and there would be a large amount of trees removed. The other two plats are on areas that have fewer trees. Combining the three plats together, tree reforestation would be met. The tree replacement is shown primarily in rear yards on the plats. There are no specific tree replacement location requirements, so location is required. Typically what occurs is that the builder is required to plant a certain number of trees on each lot. The new homeowner usually has the option to plant where they chose provided they are not in any city easements.

## WETLANDS

The entire subject area contains three wetlands, including a DNR protected wetland. The applicant has submitted a wetland delineation report for all the wetlands. The wetlands are all classified Manage 3 and 4. A wetland delineation report was submitted and approved per WCA administration rules. There are no impacts to the wetlands proposed, therefore no mitigation plans are required.

The Stormwater Manual establishes buffer areas and setbacks based on information from the AUAR and Natural Resource Inventory. The City's consultant Emmons and Olivier are reviewing the plans to verify that the plans are consistent with the wetland buffer requirements.

## AIRPORT NOISE OVERLAY

All of the development except for the far eastern portion of Ridge is located within the Met Council Noise Abatement Overlay District. The overlay district requires that home construction be designed to attenuate aircraft noise from MSP. The zoning ordinance contains a number of specifications that need to be met to meet this standard which are typical noise attenuating construction standards. Specific details will need to be submitted with building permits in the overlay district and these standards would be reviewed by the Inspections Department as part of the building permit review.

## ENGINEERING

The City Engineer has prepared a memo dated 9-12-14 that summarizes the work done by the consultants hired by the City and his recommended conditions of approval. The memo and its attachments are included with this memo.

## FINANCING – SANITARY SEWER CONNECTION FEES

When the City Council decided to extend water and sewer to the Northwest Area in 2007, it made some key decision to protect existing property owners from the costs associated with the project. The Council directed staff, the City Attorney and Ehlers (city financial consultant) to establish development fees that would cover the costs of the improvements, and specified that:

- No property owners should be specially assessed (unless they request the City to assess the fees).
- No fees should be charged to existing property owners until the land is subdivided for development.
- The total cost of the project should be paid, over time, by property and developers in the Northwest Area.

A development potential analysis was done for each parcel to determine the development capacity. This capacity established the assumed number of residential units or commercial/industrial square footage for the lots. This number is used to compare a proposed project density to the assumed density. This number was also used to estimate the total number of utility connections in the Northwest Area and resultant fees.

Properties in the Northwest Area are charged a platting fee and a connection fee for water, sanitary sewer and storm sewer. The City Council adopted Utility Plat Connections Fees for the Northwest Area that will be collected with every development. Water, sanitary sewer and storm water plat connection fees are to be paid when 1) a property is platted, 2) a building permit is obtained, or 3) a connection is made, whichever occurs first. These plat connection fees are in addition to building permit connection unit fees that are collected at time of building permit issuance.

The calculated fees will be high because there are no special assessments on the properties levied to pay for utilities. Approximate calculations made by Staff show the fees that will be collected for the following:

| Plat Name | Proposed Fees | Assumed Fees | Difference |
|---|---|---|---|
| Blackstone Vista | $1,186,888 | $1,874,205 | ($687,317) |
| Blackstone Ponds | $1,216,273 | $794,058 | $422,215 |
| Blackstone Ridge | $1,753,030 | $2,520,900 | ($767,870) |
| | | | ($1,032,972) |

Council has held to its practice of requiring developers to pay the connection fees equal to the amount the City assumed for each parcel. The ultimate decision on how and what fees are paid is a decision to be made by the City Council.

Final calculations would be determined with the development contract at time of final PUD.

## DEVELOPMENT CONTRACT

The Developer and Owner shall enter into a Development Contract with the City. The form of Development Contract shall substantially comply with the model Development Contract which is part of the Administrative Code, taking into account the particular requirements of the Planned Unit Development plans.

## CITY ATTORNEY REVIEW

The City Attorney has prepared some general conditions of approval that should be used for all projects in the Northwest Area. The conditions relate to development contract, ownership of open space and storm water systems. These conditions are listed in the staff recommendation (conditions 9,10,11,13,14,15,16,17).

## ALTERNATIVES

The Planning Commission has the following actions available on the proposed project:

A. **Approval.** If the Planning Commission finds the application to be acceptable, the following actions should be recommended for approval:

- Approval of the Comprehensive Plan Amendment for land use changes and text amendments as listed in the staff report subject to the following conditions:

    1. The Metropolitan Council shall not require any significant modifications to the comprehensive plan amendment.

2. The Metropolitan Council shall not make a finding that the comprehensive plan amendment has a substantial impact or contain a substantial departure from any metropolitan systems plan.

- Approval of a **Rezoning** of the property from A, Agricultural to R-1C/PUD, Single Family Residential and R-3B, Multiple Family Residential subject to the following conditions:

1. The rezoning shall not become effective until the final plat is approved by the City and recorded with the County. In the event a final plat is not approved, the rezoning shall become null and void and the zoning of the property shall remain in its current classification.

- Approval of the **Preliminary Plat and Preliminary PUD Development Plan** for a Blackstone Vista, Blackstone Ponds and Blackstone Ridge subject to the following conditions:

1. The final plat and accompanying site plans shall be in substantial conformance with the following plans on file with the Planning Department except as may be modified by the conditions below.

| | |
|---|---|
| Preliminary Plat of Blackstone Vista, Ponds, Ridge | 8/14/14 |
| Preliminary Overall Site Plan of Blackstone | 8/14/14 |
| Preliminary Open Space Plan of Blackstone | 8/14/14 |
| Preliminary Grading and Drainage Plan | 8/14/14 |
| Preliminary Overall Utility Plan | 8/14/14 |
| Preliminary Landscape Plan | 8/14/14 |
| Preliminary Tree Inventory and Preservation Plan | 8/14/14 |
| Trail Plan | 8/14/14 |

2. Prior to final plat and plan approval, the final grading, drainage and erosion control, and utility plans shall be approved by the Director of Public Works. Said plans shall address the comments from the City Engineer Memo dated 9-12-14.

3. Drainage and utility easements shall be provided on the final plats as required by the Director of Public Works.

4. When not in city owned outlots, the ownership of all of the natural area/open space shall be owned in private ownership by the property owner. A conservation easement shall be required by the City restricting the use of the open space.

5. Park dedication shall consist of a cash contribution in the amount of the rates in effect at the time the final plat is approved.

6. All plans shall be subject to the review and approval of the Fire Marshal.

7. The approval of the preliminary Plat and PUD development plans are subject to approval by Dakota County.

8. Prior to execution of the plat by the City and prior to recording of the plat with the County, the Owner shall execute a Storm Water Facilities Maintenance Agreement with the City whereby the Owner shall be responsible for the maintenance of storm water improvements on such lots.

9. The Agreement shall provide that the following storm water improvements shall be maintained by the following entities; in instances where the City is not responsible for maintenance of the storm water improvements, the City shall nonetheless have the right to repair, maintain and replace the improvements if the responsible party does not fulfill its responsibility and the City shall have the right to charge the costs to the responsible party and impose the charges on the property if the responsible party fails to pay the costs.

| **Type of Storm Water Improvement** | **Location of Storm Water Improvement** | **Responsible Party** |
|---|---|---|
| Regional ponds | | City of IGH |
| Infiltration basins | Throughout Site | Developer |
| Rain Gardens | Throughout Site | Developer |

10. Prior to execution of the plat by the City and prior to recording of the plat with the County, the Owner shall execute a Conservation and Open Space Easement over those portions of the development that are to be retained for required open space. The easement shall provide that the area must be retained in a natural and scenic state with no removal of vegetation and no mowing of the vegetation except to the extent identified in the easement. The vegetation management practices, such as vegetation removal and vegetation mowing, shall be subject to approval of the City's Planning Department before the final plat. The easement shall be in favor of the City and enforceable by the City. Implementation of the vegetation management plan shall be the responsibility of the developer. In instances where the City is not responsible for maintenance, the City shall nonetheless have the right to maintain the Conservation and Open Space Easement if the responsible party does not fulfill its responsibility and the City shall have the right to charge the costs to the responsible party and impose the charges on identified property in the plat if the responsible party fails to pay the costs. The locations and descriptions of the conservation areas shall be determined with the final plat and final PUD review and approval.

11. Prior to execution of the plat by the City and prior to recording of the plat with the County, the Developer must pay the City utility plat connection fees consisting of a Water Utility Fee, Sanitary Sewer Utility fee and Storm Water Sewer Utility fee according to the formulas adopted by city ordinance.

12. At the time the plat is recorded, the landowner/developer by written agreement with the city must pay the city the difference between (a) the Northwest Area utility connections fees (including those usually payable at time of plat as well as building permit issuance) and the hook-up fees (including the water connection and sewer connection fee) that would have been payable for the densities shown for the subject property in the city's financial and connection fee analysis (prepared by Ehlers & Associates and amended from time to time) for the Northwest Area and (b) the Northwest Area utility connection fees and hookup fees that will be collected for the subject property per the actual density at which the subject property develops. The fees as currently estimated are $1,032,972.

13. In the Development Contract, the Developer and Owner shall acknowledge that at the time the building permits are obtained additional connection fees for the water utility system and sanitary sewer utility system are due and owing.

14. In the Development Contract, the Developer and Owner shall agree that the following elements of the Planned Unit Development shall not be altered, changed or removed without first obtaining the following consents:

| Site Plan Element | Consent Required By |
|---|---|
| Building Location | City Council |
| Driveways and Private Roads | Planning Department |
| Landscaping | Planning Department |
| Location of Utilities | Engineering Department |
| Location of Conservation Easement and Open Space | City Council |
| Parking Areas | City Council |
| Signage Location Plan | City Council |

15. The Developer and Owner shall execute an Acknowledgement of Planned Unit Development Zoning. This Acknowledgement shall state that property within the plat is subject to the approved PUD plans and PUD zoning and that the development on the property must conform to the PUD plans and PUD zoning. This Acknowledgement shall be recorded when the plat is recorded.

16. The Developer and Owner shall enter into a Development Contract with the City. The form of Development Contract shall substantially comply with the model Development

Contract which is part of the Administrative Code, taking into account the particular requirements of the Planned Unit Development plans.

17. The following documents shall be recorded when the plat is recorded:
    - Development Contract;
    - Storm Water Facilities Maintenance Agreement;
    - Conservation Open Space Easement; and
    - Acknowledgement of PUD Zoning.

18. The City is in the process of planning, designing and constructing sanitary sewer and water trunk lines to provide trunk service for the platted area. The Developer is responsible for constructing the lateral lines and the service lines. The Development Contract shall provide that the Developer and Owner release and hold the City harmless from any claim resulting from the delay in completing construction of the City trunk utility lines.

19. All private streets shall be maintained by the Home Owners Association.

20. Prior to City Council review of the final PUD development plans, the plans shall be modified such that visitor parking shall be accommodated in the single family and townhome neighborhoods.

21. Prior to City Council review of the final PUD development plans, wetland buffers shall be provided around the perimeter of all wetlands. The developer shall describe the proposed seed mix, installation and erosion control measures for the buffer areas on the landscape plan.

22. All residential construction shall conform to the noise mitigation measures as defined in the Airport Noise Abatement Overlay District, Title 10-13F of the City Code.

23. Prior to City Council review of the final PUD development plans, the Developer must respond to all of the comments of the Emmons and Oliver memorandum.

24. Street lighting shall be required within the single family neighborhoods and along all public streets. The street lights shall be paid for and installed by the developer. The street lighting plans shall be approved by the City prior to installation.

25. Separate trail easements shall be granted to the City for the trail system through the development. The City reserves the right to assign the trail easement to Dakota County for the Regional Mendota/Lebanon Greenway. The City/County shall be responsible for the maintenance of the trail and trail easement area.

26. The developer shall be responsible for installing marker posts at reasonable locations to define the boundary of the open space. This provides identification for future land owners to know boundaries of the open space areas. The final PUD plans must show the location of the marker posts.

27. All setbacks standards identified on any of the plans shall reflect a 30 foot rear yard setback and shall be listed in the summary table on those plans.

28. The design of Blackstone Ridge shall be modified to provide more contiguous open space similar in design to the plan prepared by staff and included with this report.

29. The final plat of Blackstone Ridge shall reflect the future alignment of Argenta Trail, as adopted by the City Council and Dakota County.

30. Final plat approval is subject to approval by the City of a comprehensive plan amendment to the transportation plan to the effect that realigned Argenta Trail will not be placed on the plat of Blackstone Ridge.

31. The final design of Blackstone Ridge shall require a street connection to 65th Street and a connection to future Argenta Trail on the west side of the plat roughly just north of the existing wetland. The road connection point shall be subject to approval by Dakota County.

32. The connection point from 69th Street to Argenta Trail would be considered a temporary access by Dakota County. This access point may be required to be modified or abandoned. The final design and decision shall be subject to Dakota County.

33. The final plat of Blackstone Ridge shall be consistent with the City policy of collector streets, as subsequently adopted by the City Council, including right-of-way dedication, construction, and funding.

34. The final plat of Blackstone Ponds is subject to the City approving the design, acquiring rights of way and easements, approving the construction, and identifying funding of the extension of utilities and a public street, easterly from Blackstone Ponds along 69th Street and onto Blackstone Ridge.

35. The Blackstone project shall be modified to address comments #1-11 from the memo prepared by the Director of Parks and Recreation dated September 10, 2014.

36. Prior to final plat and final PUD approval, the developer shall identify a specific impervious surfaced maximum for each lot..This lot maximum must be listed in table on the approved plans.

37. Prior to final plat and final PUD approval, a parking plan shall be prepared that shows the possible parking areas to determine approximately how many cars could be parked.

38. Final plat approval is subject to the City Council ordering a public improvement project to extend trunk water main and trunk sanitary sewer to serve the parcels included in the plat; approving the project plans and specifications for that project; authorizing the acquisition of necessary easements over parcels not included in the plat, for construction of that project and awarding a construction contract for that project; approval of a financing plan for extension of public utilities, including trunk lines.

39. Plat approval is subject to the City ordering public improvement projects and ordering acquisition or condemnation processes to construct and acquire easements for extension of utilities form their current location in the City to the Blackstone Vista Plat and from Blackstone Ponds Plat to the Blackstone Ridge Plat.

40. Plat approval is subject to the City approving a financing plan to construct public improvement projects and acquire easements from the current location of utilities in the City to the Blackstone Vista Plat, and from the Blackstone Ponds Plat to the Blackstone Ridge Plat.

41. Plat approval is subject to the City approving bond financing or other means of financing to pay for the extension of trunk utilities to serve the plats.

42. Plat is subject to the City ordering a public improvement project and ordering acquisitions or condemnation processes to acquire and construct a street connection segment or multiple street connection segments from the Blackstone Ridge Plat to existing Argenta Trail.

- **Denial:** Should the proposed request or portions thereof, not be found to be acceptable, the appropriate requests described above should be denied. The basis for denial must be stated in any such motion.

## RECOMMENDATION

The proposed project presents a number of challenges for the City to resolve such as Utility extension, collector and regional roadway plans and impacts to the exception neighborhood.

Staff offers the following recommendation options for the Planning Commission:

1. Approve the entire request with all conditions listed.
2. Deny the request, or portions thereof, since the development is premature and should await;

a. The City/County adoption of the Argenta Trail alignment study for that segment of Argenta Trail lying north of 70th Street.
b. The City adoption of:
    i. Final utility design of the extension of utilities from its current terminus to the Blackstone plats
    ii. Identification of easements
    iii. Acquisition/condemnation of the easements
    iv. Approval of financing plan
    v. Awarding of contract
c. The City adoption of a Collector Street Policy that addresses feasibility studies, right of way acquisition and dedication, construction, and funding.
d. The City adoption of:
    i. Final design of utilities and roads from the Blackstone Ponds to Blackstone Ridges
    ii. Identification of easements
    iii. Acquisition/condemnation of easements
    iv. Approval of financing plan
    v. Awarding of contract

3. Tabling until the next Planning Commission meeting on October 6 to allow:
    a. the Planning Commission and concerned citizens to give further consideration and study to a large and complex development proposal
    b. the staff and the developer to respond to concerns and questions raised at the public hearing

    (Tabling will not delay the application since the normal date for the application to be considered by the City Council is October 13)

The Planning Commission has the option of recommending approval of all three plats or approving, tabling or denying portions.

## STAFF RECOMMENDATION

Staff is not ready at this point to make a recommendation for the following reasons:

1. Given the size and scope of the project, there may considerable discussion at the meeting that will affect outcomes.

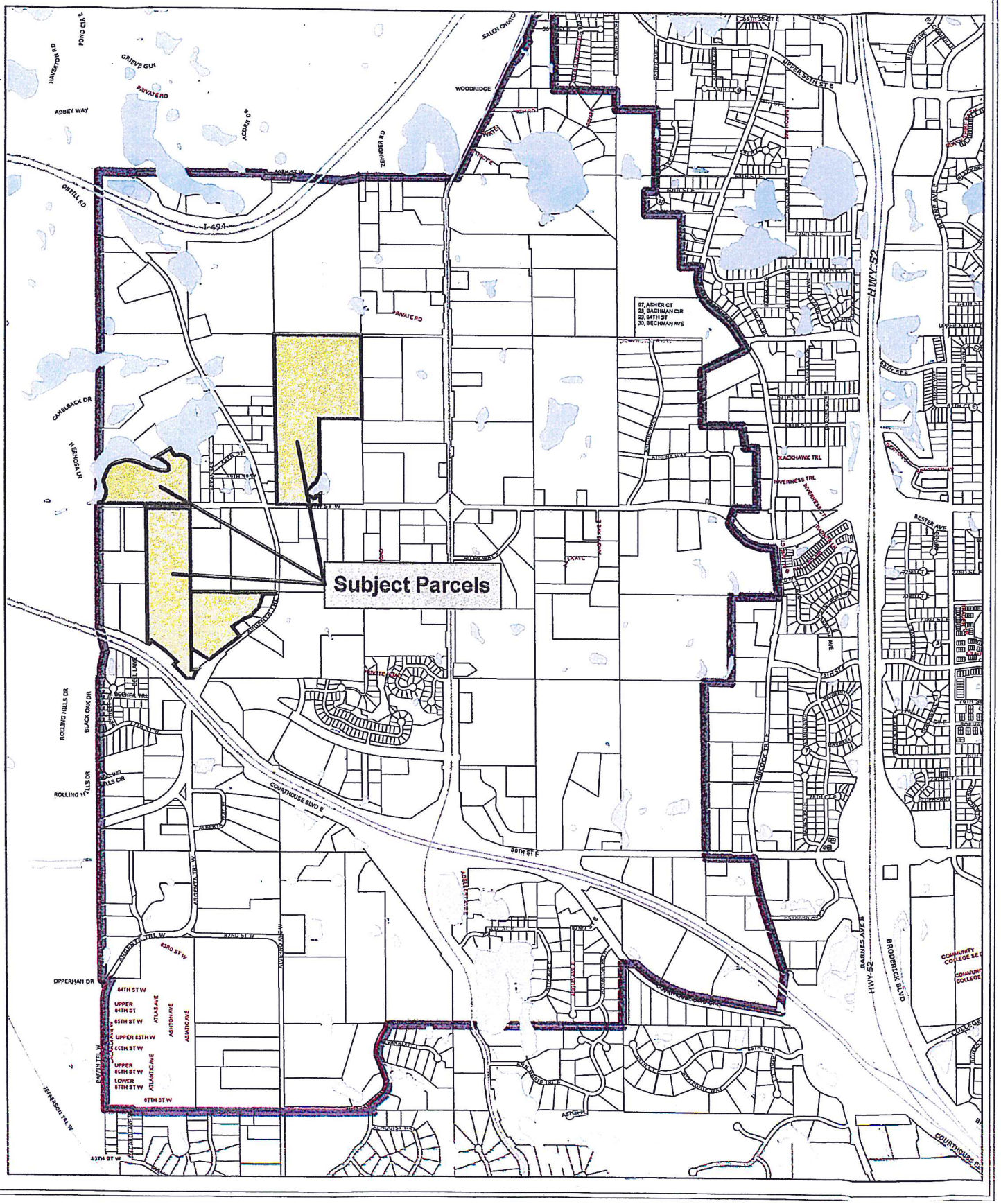
2. This the first time the neighborhoods have been given a chance to review the application and make comment at a public meeting. The decisions made on utility extension and roadway alignments have an impact on a number of properties.

3. There is some discussion about a separate comp plan amendment relating to the Transportation Plan that is being discussed between the City Attorney and the applicants Attorney. This may require some further exploration and consideration.

The list of conditions is set up to allow approval of all three projects. The list is long, but there are a number of issues yet to be resolved.

Attachments: Location Map
Applicant Narrative
Comp Plan Amendment Narrative
Plan Set for Blackstone
Collector Street Study Map
Staff Open Space Drawing for Blackstone Ridge
Memo from Parks Director dated 9/10/14
Memo from City Engineer dated 9-12-14
Letter from Dakota County
Map of new Sewer Alignment for Comp Plan Amendment

# Location Map
# Case No. 14-22PUD



# Blackstone

*Application for Planned Unit Devleopment*

City of Inver Grove Heights, MN

06.06.2014

Vista |

Ponds |

Ridge |

*Narrative for Planning Unit Development*

| | |
|---|---|
| Project: | Blackstone Vista, Blackstone Ponds & Blackstone Ridge |
| Applicant: | Mr. Jim Deanovic |
| Prepared by: | Sathre-Berguist |
| Submitted to: | City of Inver Grove Heights |

# Introduction

The following narrative is provided to the City for review and consideration of the Blackstone projects (Vista, Ponds and Ridge) which are all included in this submittal for preliminary plat. All three parcels are located within the City's designated Northwest Area Overlay District and are subject to the Planned Unit Development (PUD) process. We understand that the process establishes additional regulations and standards to ensure that projects are planned in a way that is consistent with the goals and objectives of the City for this anticipated high growth area. For several months, the development team has been working through the site planning and market analysis process to ensure that the proposed Blackstone neighborhoods not only meet the goals of the city, but that the developments are marketable and desirable places to live that bring new residents to the community.

The proposed development is unique because the Blackstone project consists of three separate, non-contiguous parcels that will be developed by the same developer and as such will have a cohesive character and standard of development that generally only happens when projects are contained within one site. The hope is that by approaching each of these sites with a common design approach, while providing market diversity, that there will be homes available from everyone throughout the housing lifecycle.

One of the most influential design elements proposed within the Blackstone Vista, Ponds and Ridge plats is the attempt to seamlessly integrate the open spaces and natural resources thoughtfully through each of the proposed neighborhoods. The City recognizes the value of these important resources as demonstrated within the City's various plans for the Northwest Area, and our team worked diligently to ensure that open spaces, trail connections and natural resource areas were protected and available to not only the proposed neighborhoods, but to the greater community.

The significant open spaces means that guided densities were more difficult to attain. As a result, concurrent to this application, the Developer has applied for a Comprehensives Plan Amendment (CPA) to re-guided portions of the three parcels to allow for greater diversity in housing types as well as provide greater areas of contiguous open spaces and natural resource areas that would otherwise be subject to development.

The following description is provided to better introduce the Blackstone neighborhoods.

# The Details (Site design, unit types, open space, character)

The Developer is proposing to create three separate neighborhoods Vista, Ponds and Ridge all under the Blackstone plat. Each of the proposed neighborhoods are located on non-contiguous parcels and have differing site characteristics which contributed to the proposed site design and proposed unit types proposed within this application. The following breakdown is provided for each neighborhood.

| Neighborhood | Proposed Product Type and #s | Site Characteristics |
|---|---|---|
| Blackstone Vista<br>Schmidt Parcel<br>59.34 Acres | Single Family Residential<br>78 Units | The proposed Vista neighborhood is located to the west of Argenta Trail, and northwest of TH 55. The site is nestled behind land which abuts 55 and is guided for Industrial Office Park and Community Commercial uses. The site has fairly significant topographic changes with a ridge that separates the proposed residential use from the more commercial/industrial uses. The site plan proposes to maintain a significant buffer between the residential and commercial/industrial lands with an open space corridor and trail along the southern and western perimeter of the project. |
| Blackstone Ponds<br>Shanahan Parcel<br>24.82 Acres | Townhomes 4, 6 and 8-plex<br>106 Units | The Ponds neighborhood is situated north of the proposed Vista neighborhood, and will be accessed from 70th Street north. The project will include row style attached townhomes in 4-plex, 6-plex, and 8-plex configurations. The entire northern perimeter of the site is bordered by open water (Franke Lake). As configured, this area would be located within an Outlot allowing for the protection of the shoreland and respecting the buffer and setback areas necessary to protect this natural resource area. |
| Blackstond Ridge<br>Jeffers Parcel | Single Family Residential<br>121 Units | The Ridge neighborhood is located further east down 70th Street North from the Ponds neighborhood and is located on the north side of the street. Although the parcel has frontage on 70th Street the proposed neighborhood will be accessed from Argenta Trail located to the west of the project site. Additional right-of-way will need to be established to create this connection, but will provide the safest access to the proposed neighborhood. There is some existing vegetation, including some fairly dense tree stands, along the eastern edge of the site that will be preserved in an Outlot. All of the roads include sidewalks and trail connections internally, as well as connections to the greater regional system. A series of stormwater ponds are integrated throughout the site offering additional amenities to the development while providing adequate surface water management to the project. |

All three proposed neighborhoods were designed with the goals and objectives of the Northwest Overlay District in mind. As a baseline, before any plans were established, each parcel was reviewed against the Comprehensive Plan, Northwest Overlay District's established intent and purpose, and Greenway Plan to determine the appropriate locations for open spaces, trail connections and other neighborhood amenities on each parcel. The next step was to integrate these elements into the site plan while trying to develop a neighborhood that would be marketable and a long-term asset to the City of Inver Grove Heights.

As previously indicated, the proposed Project does require an amendment to the City's official Land Use Plan adopted within the 2030 Comprehensive Plan. The CPA application will be made concurrently to the PUD application to ensure that an informed decision can be made with respect to the Blackstone Project and how the proposed neighborhoods vary, or are consistent, from the Comprehensive Plan.

The other primary guiding document for the area is the Northwest Overlay District Ordinance which sets out specific targets for Open Space and natural resource preservation. The following list of items within the City's Ordinance are found within the proposed Blackstone neighborhoods, "diverse housing styles, natural features as integral elements...pedestrian connections, and open space areas as development amenities." As demonstrated on the submitting PUD application the Blackstone Vista and Blackstone Ponds development integrate the Dakota County Greenway corridor, provide trail connections and position lots strategically to preserve open spaces providing amenities to future residents. The Blackstone Ridge development also integrates trail corridors and preserves a large open space area along the eastern edge of the property offering protection of existing vegetation and preserving it as an amenity to the development. The careful integration of these open spaces with a diversity of housing types means that new residents will have options for attached or detached housing types all while enjoying trail access, open space and vegetative diversity within their individual neighborhoods.

The ordinance further states with respect to open space that, "an amount of land equal to at least 20% of the net developable area within the PUD shall be preserved as natural area/open space, which may include greenways as shown in the City of Inver Grove Heights Natural Resources Inventory and Management Plan...." The neighborhoods as designed include between 29% and 47% of the area platted as Outlots, each of which contain a significant amount of upland open space areas that will be accessible to the neighborhood's residents and include trail connections, protection of tree stands, water (Franke Lake)and surface water management features. We believe that these neighborhoods will not only meet the current market demands, but meet the overall goals and objectives of the City's plans for development in the Northwest Overlay district area.

## Site Specific Tailoring

*(Where we propose to vary)*

While our Team worked diligently to follow the Ordinance's requirements and standards, there are few areas in which we propose to vary slightly to better accommodate each neighborhood's unique characteristics. As previously described, it was very important to us to design each neighborhood in a manner that would respond to the existing topography, protect certain natural features while attempting to meet the Comprehensive Plan's land use categories as closely as possible - essentially, we understood that we would not be able to meet the land use densities as described given the open space requirements, but we attempted to reduce the non-conformance as much as possible.

With that in mind, our Team proposes the following areas in which the neighborhoods vary from the specific zoning standards established within the Ordinance. While each neighborhood roadway design is consistent with the City's specification for a standard 28-foot wide street (STR-002), we would propose some flexibility with respect to the dedicated Right-of-Way (ROW). By allowing a slight reduction in ROW, we are able to achieve greater densities even within the single family residential neighborhoods proposed in Blackstone Vista and Ridge.

The Blackstone Ridge development is also somewhat different than the other two parcels because of the existence of a large utility easement along the western edge of the site. The presence of that regional utility easement means that roadway connections/realignment along this area would be extremely difficult and cost prohibitive. However, the City's existing transportation plan identifies this location for future realignment of Argenta Trail which does not seem feasible based on current discussions between the City, County, and developer. As a result, the proposed Argenta Trail realignment is proposed further to the west of the site which would create the need for additional easements in order for the proposed Blackstone Ridge neighborhood to be developed. (Further description of easements is found in subsequent sections.)

Finally, the amount, location and size of Open Spaces do not all necessarily meet every aspect of the Northwest Overlay district ordinance. However, the open spaces and outlots were thoughtfully designed and integrated into each neighborhood to ensure that the intent of the City's Northwest Overlay district ordinance was attained in each plat, while trying to balance the City's need for density (housing units) in the area to ensure the ability to provide cost-effective municipal services to the area.

## The Infrastructure Program

*(Roads, Utilities, Stormwater & Phasing)*

The proposed Blackstone neighborhoods each have differing site demands with respect to infrastructure, and as such the phasing of each neighborhood is somewhat contingent on the ability to provide the necessary municipal services including utilities and roadway connections. The following description of anticipated needs, phasing and other infrastructure demands is provided for each proposed neighborhood.

## *Blackstone Vista*

The Vista neighborhood is generally located northwest of the existing Argenta Trail and TH 55 intersection. As such, utilities are most available (closest) in this location and must be extended from the southeast in order to serve this area. Therefore the Vista project is anticipated to be the first neighborhood developed, and will require obtaining an easement from James Peltier to install and hook up to sanitary and water services that are currently stubbed in the Argenta Hills subdivision.

Access to the Vista neighborhood also requires some improvements to ensure safe ingress and egress into the community. Currently, the northern border of the site has frontage along 70th Street. The number of proposed homes will require the installation of a dedicated turn lane, for which the current ROW does not provide an adequate amount of area for construction. In conversations with the City and County, the access location was shifted as far west as possible from the intersection of Argenta Trail and 70th Street to allow for proper intersection spacing along the future upgrades of 70th Street. Therefore, additional ROW will be needed from adjacent property owners Dueth, Steininger and Brandvold in order to properly develop the turn lane. The secondary access proposed for the project is off of Argenta, and the construction of a turn lane will also be necessary in this location. Currently, it is anticipated that at a minimum additional ROW will be needed over the Rechtzigel property, but depending on ultimate design, there may be additional ROW needed from the Schaefer and Swanson properties.

Finally, the onsite surface water management features are proposed to be integrated within the proposed Outlots and open spaces as demonstrated on the preliminary plat. We will construct 3 storm water ponds to provide the required storm water treatment. The large depression in the northwest corner and the 2 southern ponds will provide the required infiltration/filtration.

## *Blackstone Ponds*

The Blackstone Ponds project is located directly north of the Vista neighborhood, and services will be readily available to the site once the Vista neighborhood site work is underway. As a result of the adjacency, no additional utility easements are necessary in order to serve this neighborhood since the Vista project is under control of the same developer.

Likewise, the roadway improvements required for the Vista project will subsequently improve the road network on the southern boundary of the Ponds site which is 70th Street. The proposed access into the Ponds neighborhood is from 70th Street, and the access location will be lined up accordingly with the access point for the Vista neighborhood, ensuring safe turning movements for both neighborhoods. The ponds and the infiltration basin meet the required treatment for quality and quantity control

The surface water management on the site is proposed to be handled with ponds that are integrated into the Outlots and open space areas. Surface/storm water will be collected from the roadways via curb and gutter which will be connected through a series of pipes which will discharge into the ponds. As designed the

southeast pond and the existing basin are connected with existing pond in the northwest corner of the site. A small pond on the west side of the site will treat all the water that we are unable to get to the eastern pond and basin. The ponds and the infiltration basin meet the required treatment for quality and quantity control.

### *Blackstone Ridge*

The Blackstone Ridge neighborhood is furthest to the east, and is the last phase of the proposed Blackstone project as it currently is geographically the furthest away from municipal services. In order to serve the site, utility easements will be necessary from the Edward Joseph and Martha Zachary properties. Once the Blackstone Vista and Ponds sites are underway and the utility easements secured, the proposed Ridge neighborhood can begin development activities.

As previously described, access to the Ridge neighborhood is proposed to be from Argenta Trail rather than 70th Street West. Additionally, the proposed future realignment will create additional demands for ROWs to ensure that this site is accessible from a road with adequate capacity to serve the neighborhood. To ensure access to the site, between 50 and 60-feet of additional ROW will need to be obtained over the Daniel Krenz property depending on ultimate design of the access road and whether we are allowed to reduce the amount of ROW necessary for the neighborhood's internal roadway network. Similarly to the other Blackstone neighborhoods, a dedicated turn lane from Argenta Trail will also be necessary which will require additional ROW be obtained from the Daniel Krence, Rebecca Ketcham, and Pamela Burst properties.

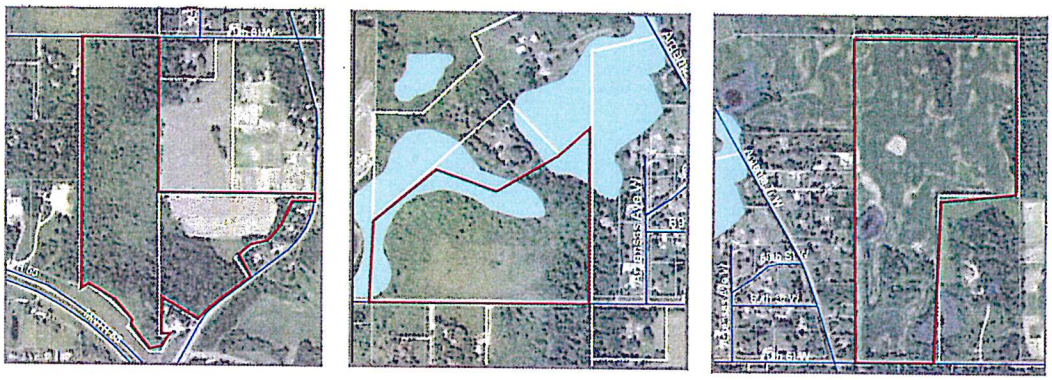
Finally as with the other two Blackstone neighborhoods, the stormwater is proposed to be managed on site with a series of ponds and infiltration basins which are interspersed throughout the proposed open spaces. The ponds and the infiltration basin meet the required treatment for quality and quantity control.

## Conclusion and Summary

The proposed Blackstone Vista, Blackstone Ponds, and Blackstone Ridge project will create opportunities for new residents, offer greater diversity in housing types, and further the City's goals for open space within the Northwest area of the community. Our team carefully designed the three projects to be cohesive, while respecting the individual characteristics of each site. We believe that we have demonstrated a commitment to achieve the goals and objectives the City has identified for development within the Northwest Overlay District, and are excited to begin working towards development of these three new neighborhoods.

# Blackstone

## Vista | Ponds | Ridge



*Application for Comprehensive Plan Amendment*

City of Inver Grove Heights, MN

06.02.2014

*Application for Comprehensive Plan Amendment*

Applicant: Mr. Jim Deanovic

Prepared by: Sathre-Berguist &
SHC, LLC

Submitted to: City of Inver Grove Heights

Date: 06.02.2014

# Executive Summary

The Developer is requesting a Comprehensive Plan Amendment to re-guide portions of the Blackstone parcels for slightly lower densities, allowing for the preservation of open spaces consistent with the stated objectives for the Northwest Area Overlay. The Project consistent of three cohesive, but distinct neighborhoods: Blackstone Vista, Blackstone Ponds and Blackstone Ridge. The following summary of the request is provided:

| *Neighborhood* | *Adopted Land Use* | *Proposed Land Use* | *# Units* | *Proposed Density* |
|---|---|---|---|---|
| Vista | LMDR/MDR | LDR | 78 | 2.25 U/A |
| Ponds | MDR | MDR | 108 | 6.9 U/A |
| Ridge | LMDR/MDR | LDR | 74 | 1.92 |
| | LMDR | LMDR | 47 | 3.11 U/A |
| TOTAL | | | 307 | |

One of our team's primary objectives is to develop each neighborhood as closely, and consistently, as possible with the City's goals and objectives for the Northwest Area Overlay District while respecting the guided land uses designated within the Comprehensive Plan The summary table above demonstrates our commitment to diverse land uses and housing style, and the attached concept plans demonstrate how each neighborhood will be connected with trail corridors, greenway and open space network. The analysis on the following pages describes the request in further detail including a description of each neighborhood, number and types of units proposed, and open space objectives on each parcel.

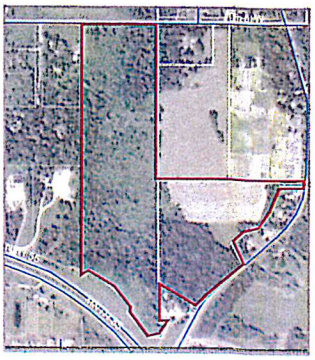
# Blackstone Vista

## *Parcel Snapshot (Figure 2)*

| | |
|---|---|
| 2010 Adopted Land Use: | Low-Medium Density Residential (LMDR), Medium Density Residential (MDR), Industrial Office Park (IOP), and Community Commercial (CC) |
| Proposed Land Use: | Low Density Residential (LDR), Industrial Office Park (IOP) and Community Commercial (CC) |
| Total Site Size: | 59.34 Acres |
| ROW: | 11.38 Acres |
| Outlots: | Outlot A: 2.92 Acres, green space & ponding |
| | Outlot B: 0.15 Acres, Open Space Remnant, perhaps monument signage |
| | Outlot C: 0.19 Acres, Open Space Remnant, perhaps monument signage |
| | Outlot D: 10.67 Acres, Open Space, ponding, trail, could be publicly dedicated |
| | Outlot E: 13.07 Acres, Land Use designations Industrial Office Park and Community Commercial, not included in density calculation |
| | Outlot F: 0.94 Acres, remnant open space |
| | Outlot G: 0.25 Acres, Remnant open space, also provides potential future connection to realigned Argenta Trail |
| | Outlot H: 0.09 Acres, Remnant open space |
| Outlot Total Acres: | 28.28 Acres |
| # of units needed assuming adopted Land Uses: | Minimum of 113 |
| # of Proposed Lots: | 78 |
| Proposed Unit Types: | Single Family |
| Proposed Lot Sizes: | 9,060 – 16,484 Square Feet |
| Proposed Density: | #of Lots / (Total Site Area – ROW – Outlot E)<br>78 lots /34.89 Net Acres = 2.25 Units per Acre |

## *Analysis*

The proposed Blackstone Vista preliminary plat integrates open spaces throughout the development consistent with stated goals and objectives for the Northwest Area contained within both the City's Comprehensive Plan and associated Ordinance. Based upon the Metropolitan Council's methods for calculating density, the ownership of the open spaces is of particular significance on this plat because it substantially alters the required number of units to meet the current land use designation. In the case of Blackstone Vista, the Applicant is proposing to develop 78 single family lots that will be bordered on the south and eastern edge of the site by open space which will contain a public trail, as well as stormwater management for the proposed



*See Figure 2 for Concept Detail*

development. Depending on whether or not the City is interested in the area designated as Outlot D on the Concept Plan, the proposed land use designation for the residential area would be either Low Density Residential (LDR) if it remains private, or Low-Medium Density Residential (LMDR) if Outlot D were to become publicly dedicated. The development team is open to discussing either option, and simply has determined that the highest and best use of this portion of the parcel is for single-family residential development.

Also contained on this parcel as designated within the adopted Land Use Plan is an area along TH 55 and existing Argenta Trail for approximately 15+/- acres of Industrial Office Park (IOP) and approximately 9+/- acres of Community Commercial (CC). As depicted on Figures 1 and 2, we propose to leave approximately 13 acres in the IOP and CC land use designation, and propose the remaining 11 acres be re-guided to LDR or LMDR depending on the ownership of the Outlots. The proposed reason to alter the IOP and CC land areas is due primarily to the existing topographic changes in the area which would impact utilities and access, and the proposed modifications more closely aligns with existing site conditions.

# Blackstone Ponds

### *Parcel Snapshot (Figure 3)*

| | |
|---|---|
| 2010 Adopted Land Use: | Medium Density Residential (MDR) |
| Proposed Land Use: | Medium Density Residential (MDR) |
| Total Site Size: | 24.82 Acres |
| ROW: | 4.05 Acres |
| Water: | 5.2 Acres (approximately) |
| | Outlot A: 3.01 Acres, open space, water, ponding, areas adjoining townhome lots |
| | Outlot B: 3.18 Acres, open space, ponding, and areas adjoining townhome lots |
| Outlot Total Acres: | 16.19 Acres |
| # of units needed assuming adopted Land Uses: | Minimum of 93 Lots |
| # of Proposed Lots: | 108 |
| Proposed Lot Sizes: | 1,725 – 2,070 Square Feet |
| Proposed Unit Types: | 4-plex, 6-plex, 8-plex |
| Proposed Density: | #of Lots /(Total Site Area – ROW – water)<br>108 lots /15.57 Net Acres = 6.9 Units per Acre |

As demonstrated by the attached preliminary plat, Blackstone Ponds when isolated from the other two parcels, will meet the adopted land use designation of Medium Density Residential which prescribes a range from 6 units per acre to 12 units per acre. As calculated, the water and right-of-way are deducted from the calculation resulting in approximately 6.9 Units per Acre.

Outlots A and B contain ponding areas, wetland and Shoreland buffer areas which could also be deducted from the overall density calculation further increasing the estimated number of units per acre ensuring that the project fits within the required MDR range established within the Comprehensive Plan. The Blackstone Ponds plat will help contribute to the number of units necessary to support the infrastructure improvements identified within the City's Capital Improvement Plan, and also will ensure that the SAC and WAC fees are adequate support the long term plan. Because of the proximity of the site to the adjacent lake, and the fact that the waterbody encroaches on the parcel, an open space buffer along the entire northern perimeter of the plat is established which supports the goals and objectives for the Northwest Area and the Greenway plan as established within the City's Comprehensive Plan, corresponding ordinances and Dakota County's Greenway plan.

*See Figure 3 for Concept Detail*

# Blackstone Ridge

## *Parcel Snapshot (Figure 4)*

| | |
|---|---|
| 2010 Adopted Land Use: | Approx. 40 Acres Low-Medium Density Residential (LMDR) and Approx. 20 Acres Medium Density Residential (MDR) |
| Proposed Land Use: | Approximately 40 Acres Low Density Residential (LDR) and Approximately 20 Acres Low-Medium Density Residential (LMDR) |
| Total Site Size: | 60.25 Acres |
| ROW: | 9.82 Acres |
| Ponding/Wetlands: | 5.18 Acres (approximately) |
| Outlots: | Outlot A: 1.02 Acres |
| | Outlot B: 3.90 Acres, open space and ponding |
| | Outlot C: 0.46 Acres |
| | Outlot D: 5.10 Acres, open space and trees |
| | Outlot E: 1.07 Acres, open space and ponding |
| | Outlot F: 3.65 Acres, open space, ponding, wetland |
| | Outlot G: 2.40 Acres, open space, ponding, wetland |
| Outlot Total Acres: | 17.61 Acres |
| # of units needed assuming adopted Land Uses: | Minimum of 193 Lots |
| # of Proposed Lots: | 121 |
| Proposed Lot Sizes: | 7,870 – 28,657 Square Feet |
| Proposed Unit Types: | Single Family Residential |
| Proposed Density: | #of Lots /(Total Site Area – ROW – ponding/wetlands)<br>North 40: 74 / 38.46 = 1.92 Units/Acre<br>South 20: 47 / 15.1 = 3.11 Units/Acre |

The proposed Blackstone Ridge development would require a reduction in density on the northern 40-acres of the parcel, and would leave the southern 20-acres guided for Low-Medium Density Residential uses as currently guided within the Land Use Plan (See Figure 1). As depicted on Figure 4 that shows the preliminary plat, the lot configuration for Blackstone Ridge integrates a diversity of lot sizes and seamlessly blends smaller lots on the southern end of the site transitioning to larger lots on the northern end. Much of the existing vegetation on the site will be preserved where possible, integrating the treed areas around the perimeter of the site. As calculated, the Outlots are not removed from the density calculation with the exception of the wetland and ponding areas. The remaining green spaces are currently calculated as if they were private, but depending on the City's preference, the developer is open to discussing whether some of these outlots would be of value from a public open space perspective. Even if some of the open space area are publicly dedicated on the northern 40-acres, it is likely that the land use designation would still be Low Density Residential given some of the site constraints. In particular the power line easement that runs along the western edge of the site significantly reduces the amount of usable yard space, and therefore the lots are larger on this edge to allow for adequate yard space for the proposed homes.

*See Figure 4 for Preliminary Plat*

## Summary Changes

The following line items within "Table 2.2 2030 Future Land Use Calculations (in Acres)" would need to be adjusted according to the proposed amendments to the land use categories.

| Land Use | Currently within Urban Service Area (MUSA) | *Acreage adjustments based upon CPA* | Total | % of Total* |
|---|---|---|---|---|
| Low Density Residential | 3,176 | +73 | 3,249 | 17% |
| Low Medium Density Residential | 567 | -40 | 527 | 3% |
| Medium Density Residential | 961 | -27 | 937 | 5% |
| Industrial Office Park | 194 | -6 | 188 | 1% |

**The acreage changes do not result in any adjustment to the overall percent the land use category contributes to the city's land area as whole.*

The calculations and tabulations within Tables 2.3, 4.1, 4.3 and 7.7 would all be slightly different than calculated, however, since the proposed change reduces density the ability to serve the land with utilities and services should not be affected by the change. As such, the tables could remain unchanged, with perhaps a footnote which reflects that the majority of the changes primarily affect the Low Density Residential and Low Medium Residential land use categories based upon this request.

As stated within the Northwest Area section of the Comprehensive Plan, many studies and planning efforts have been completed to project and plan for a mix of land uses within the Northwest Area. The proposed land use amendments contained within this CPA application reduce the intensity on the subject parcels. As a result, the proposed changes remain consistent with the following statements; "the development projects assumed within the Northwest AUAR remain higher than those projected for the 2008 Comprehensive Plan update, thus rendering the AUAR still effective and not impacting the design capacity of future infrastructure." Therefore the proposed changes should not create a conflict with the adopted AUAR, and from an environmental perspective no further analysis should be necessary if the CPA is approved. The section further states that the number of units necessary to support the infrastructure investment needs to remain relatively consistent with the guided land uses in order to make servicing the area economically viable. The proposed amendments seek to remain as consistent as possible with the land use plan, while respecting the Northwest Area ordinance which requires a substantial quantity of open space and greenway corridor dedications in every project. When reviewing the subject amendments, it is important to consider that if all of the open spaces were allowed to be netted out of the development calculations that all of the sites would be close to meeting the land use descriptions currently adopted within the 2008 Comprehensive Plan. Therefore we believe that the proposed CPA should be acceptable to the City, as it integrates extensive open spaces, preserves natural resources, provides trail connections all while providing a diversity of housing types and lot sizes in this growing area of the community.

## Inver Grove Heights - Adopted Land Use Plan
Figure 2.2

## Proposed Land Use Changes to Figure 2.2

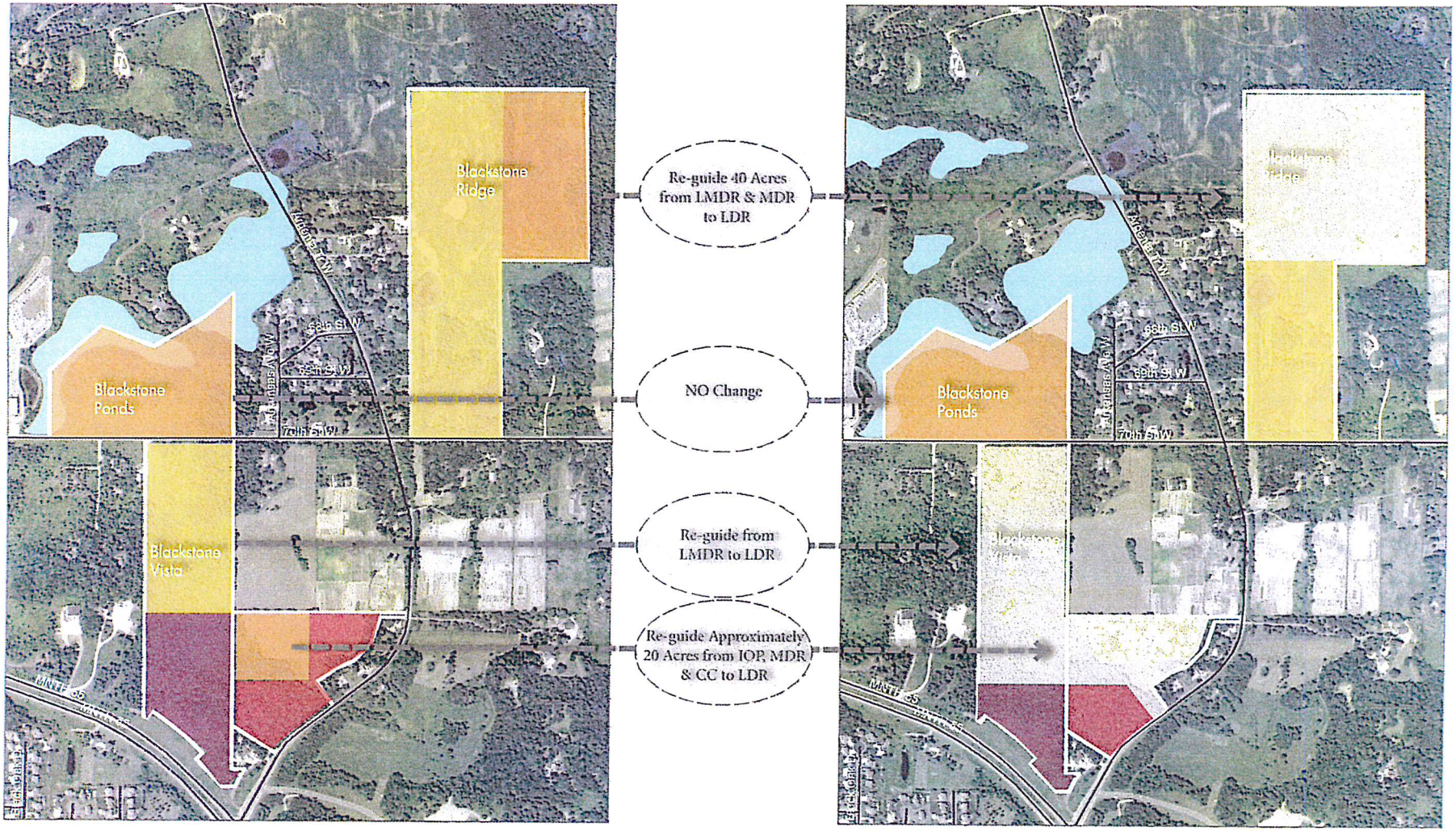


Figure 2: Blackstone Vista

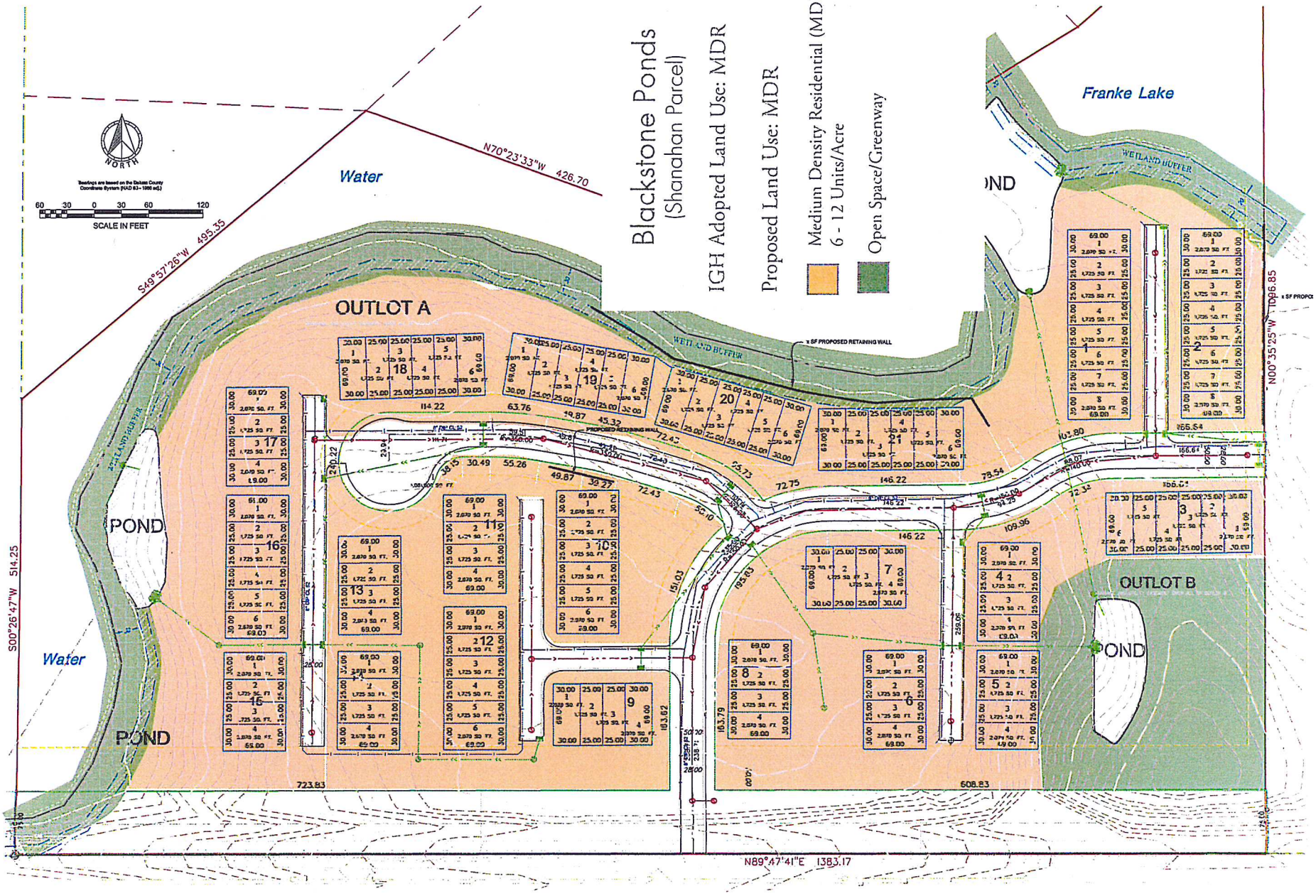
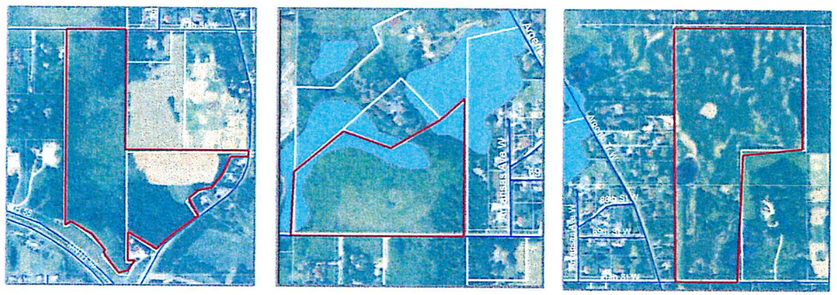



Figure 3: Blackstone Ponds

Figure 4: Blackstone Ridge

# Blackstone

## Vista | Ponds | Ridge



Application for Preliminary Planned Unit Development (PUD)

*PUD in the Northwest Overlay Distict*

City of Inver Grove Heights, MN

06.09.2014

Revised: 8.14.2014

Narrative (11 x 17 Only)....(Not Included in 8-13-2014 Submittal)
Comprehensive Plan Amendment (11 x 17 Only)....(Not Included in 8-13-2014 Submittal)
Ryland Product Information (11 x 17 Only)....(Not Included in 8-13-2014 Submittal)

A. 75'....
B. 65'....
C. Townhomes....

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Phasing Plan....Pages SP1-2
Sidewalk Plan....Page SW1.
Existing County Road....Pages ES1-7

*Blackstone Vista*

Site Plan....Pages SP1-2
Open Space Plan....Page OS1
Boundary Survey....Pages 1-2
Preliminary Plat....Pages PP 1-3
Lot Tab (11 x 17 Only)....
Preliminary Grading, Drainage, and Erosion Control Plan....Pages GP 1-5
Preliminary Utility Plan....Pages UP 1-6
Preliminary Street Plans....Pages ST 1-4
Tree Preservation Plan....Pages TS 1-5
Planting Plan....Page TRP 1
Concepts – Residential and Commercial Access....Page 1
Basin and BMP Map....Page B1

*Blackstone Ponds*

Site Plan....Page SP1
Open Space Plan....Page OS1
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Tree Preservation Plan....Pages TS 1-2
Planting Plan....Page TRP 1
Basin and BMP Map....Page B1

*Blackstone Ridge*

Site Plan....Page SP1
Open Space Plan....Page OS1
Boundary Survey....Page 1
Preliminary Plat....Pages PP 1-5
Lot Tab (11 x 17 Only)....
Preliminary Grading, Drainage, and Erosion Control Plan....Pages GP 1-6
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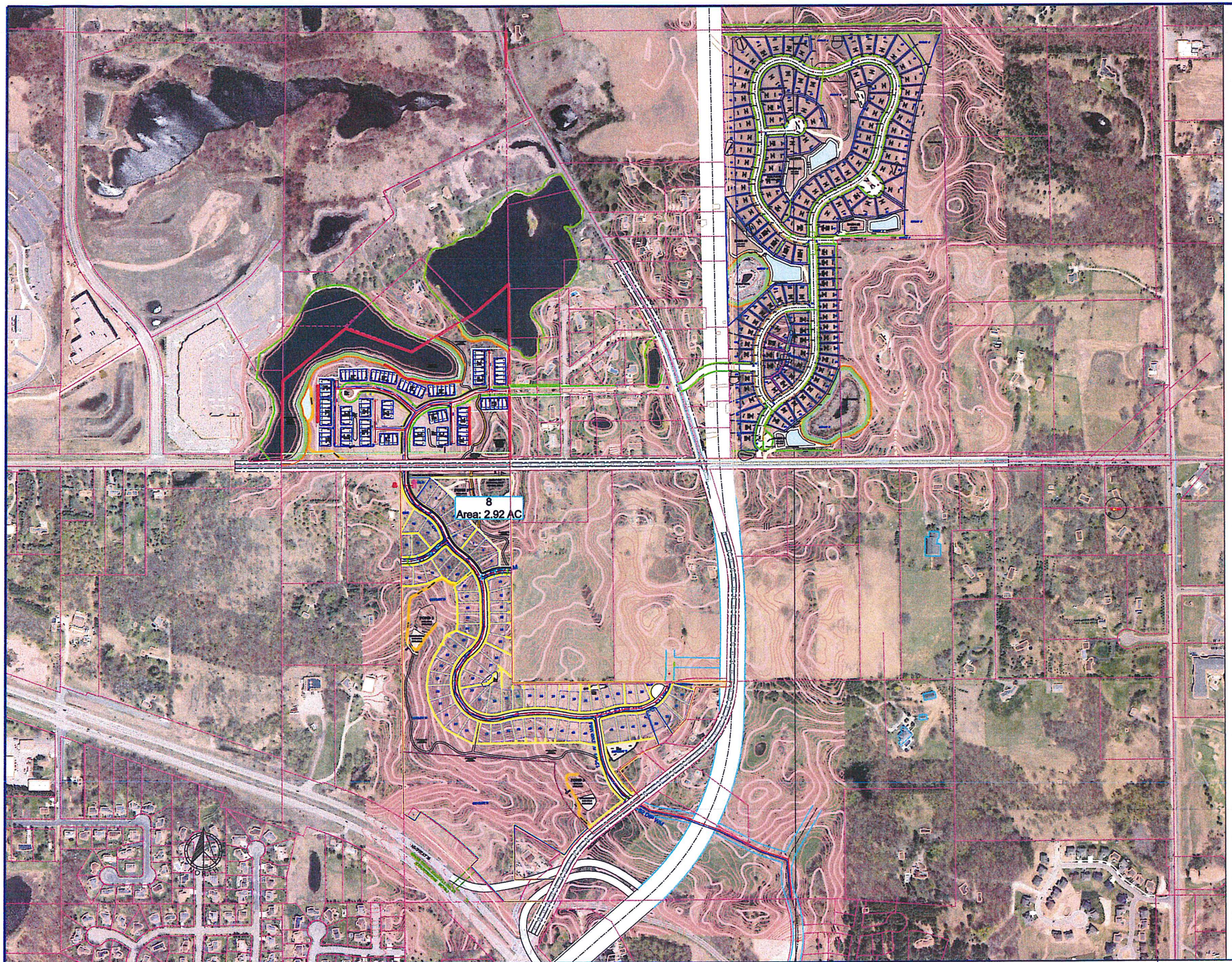
Planting Plan....Page TRP 1
Basin and BMP Map....Page B1




## SHEET INDEX TABLE


| SHEET | Description |
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| ES 1-7 | County Road Profiles |
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| 1 | Boundary Survey |
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| GP 1-5 | Preliminary Grading, Drainage, and Erosion Control Plan |
| UP 1-5 | Preliminary Utility Plan |
| SP 1-4 | Preliminary Street Plans |
| TS 1-5 | Tree Preservation Plan |
| LP 1 | Preliminary Landscape Plan |
| B 1 | Basin and BMP Map |


## PREPARED BY


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150 SOUTH BROADWAY
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## PREPARED FOR


DEVELOPER
JIM DEANOVIC
5116 MIRROR LAKES DRIVE
EDINA, MN 55436

CONTACT:
PHONE: (612) 799-5399


## LOT DESIGN STANDARDS

BLACKSTONE VISTA
65' WIDE SINGLE FAMILY-
MIN. FRONT YARD SETBACK = 25'
MIN. SIDE YARD SETBACK = 5', 10'
MIN. REAR YARD SETBACK = 25'
MIN. CORNER LOT SETBACK=15'
MIN. COUNTY ROAD SETBACK - 50'

MIN. LOT SIZE -=9,000 SF

ROAD ROW WIDTH= 50'
STREET WIDTH=28'

BLACKSTONE VISTA
MULTI FAMILY
UNIT SIZE SHOWN - 25'X52' plus10' Deck
PRIVATE DRIVE SETBACK FROM CURB - 20'
MIN FRONT YARD SETBACK - 15'
COUNTY ROAD SETBACK - 50'

BLACKSTONE RIDGE
65'/75' WIDE SINGLE FAMILY-PROPOSED
MIN. FRONT YARD SETBACK = 25'
MIN. SIDE YARD SETBACK = 5', 10'
MIN. REAR YARD SETBACK = 25'
MIN. CORNER LOT SETBACK=15'
MIN. COUNTY ROAD SETBACK - 50'

65' WIDE MIN. LOT SIZE =8,500 SF
65' WIDE MIN. LOT SIZE =9,500 SF

ROAD ROW WIDTH= 50'
STREET WIDTH=28'

WETLANDS:
WETLAND BUFFER=DEPENDENT ON CLASS
BUFFER SETBACK 15'

PROPOSED ZONING: NORTHWEST AREA CORRIDOR - PUD

| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| DSG | 1 | DLS | 06/09/2014 | REVISED PLANS |
| DRAWN BY | 2 | DLS | 07/07/2014 | REVISED PLANS |
| DLS | 2 | DLS | 08/13/2014 | REVISED PLANS |
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Daniel L Schmidt

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Date: 06-09-2014 Lic. No. 26147

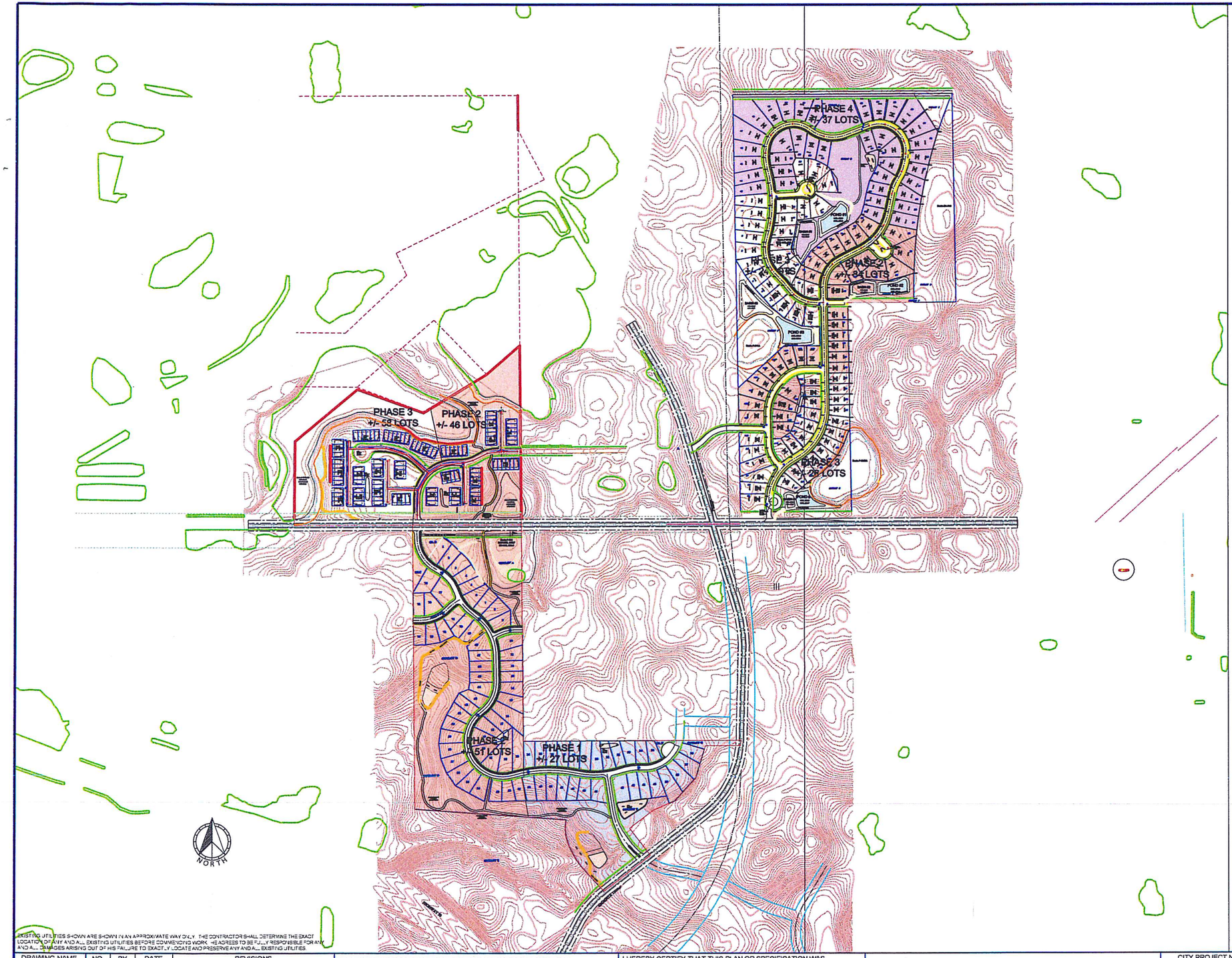
ENGINEERS SURVEYORS DESIGNERS PLANNERS

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
—
INVER GROVE HEIGHTS, MINNESOTA

TITLE SHEET
BLACKSTONE
JIM DEANOVIC

FILE NO.
—
T1
T1




NOTES:

1. THE TIMELINE OF THE PHASING SHALL BE DETERMINED BY MARKET CONDITIONS.

- PHASE 1 - 27 SINGLE FAMILY LOTS
- PHASE 2 85 SINGLE FAMILY LOTS, 48 MULTI FAMILY LOTS
- PHASE 3 50 SINGLE FAMILY LOTS, 60 MULTI FAMILY LOTS
- PHASE 4 37 SINGLE FAMILY LOTS

EXISTING UTILITIES SHOWN ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES ARISING OUT OF HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.

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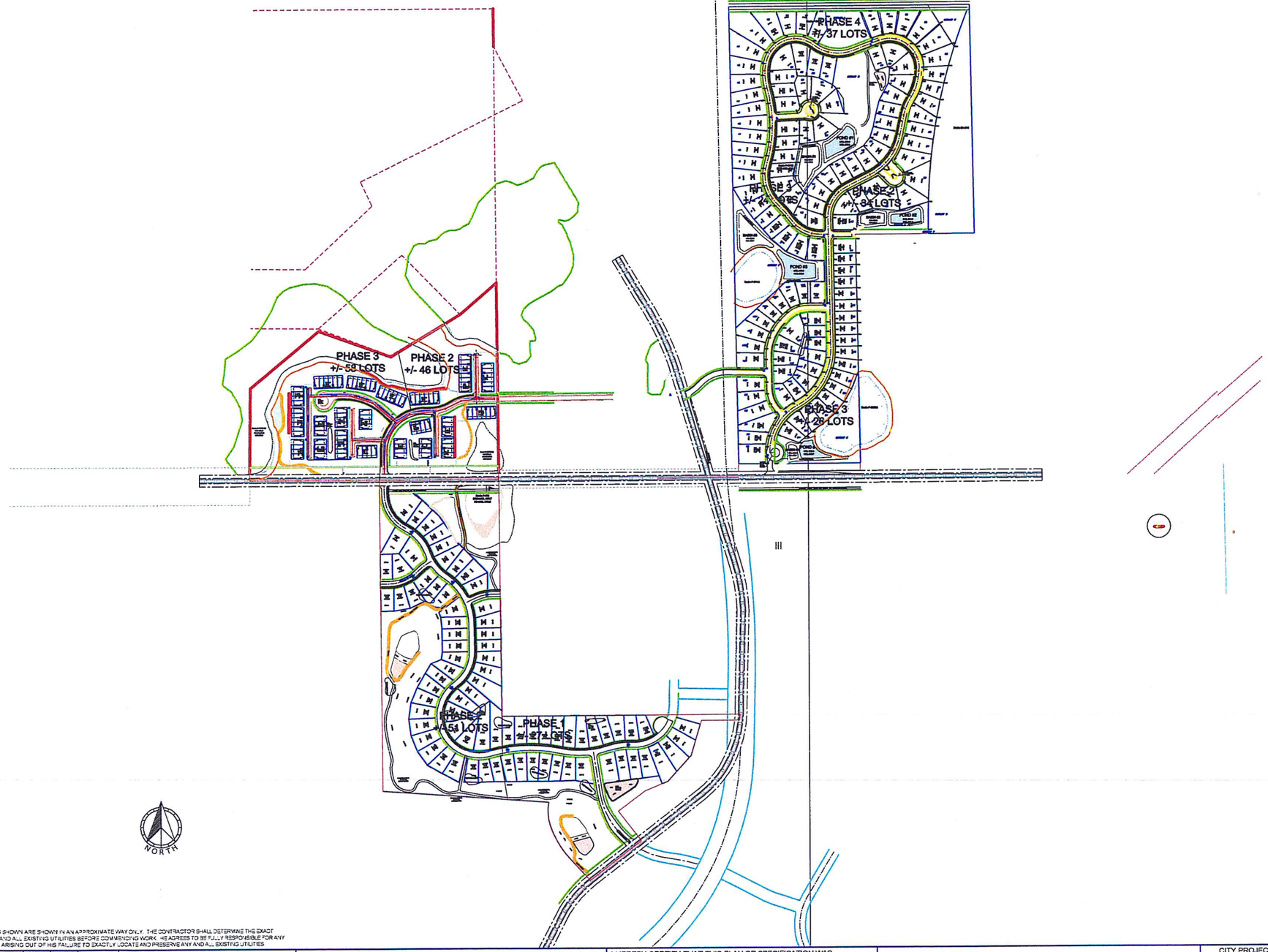
CITY PROJECT NO.
—

INVER GROVE HEIGHTS, MINNESOTA

# PHASING PLAN
BLACKSTONE
JIM DEANOVIC

FILE NO.
1920-006

P1 / P1

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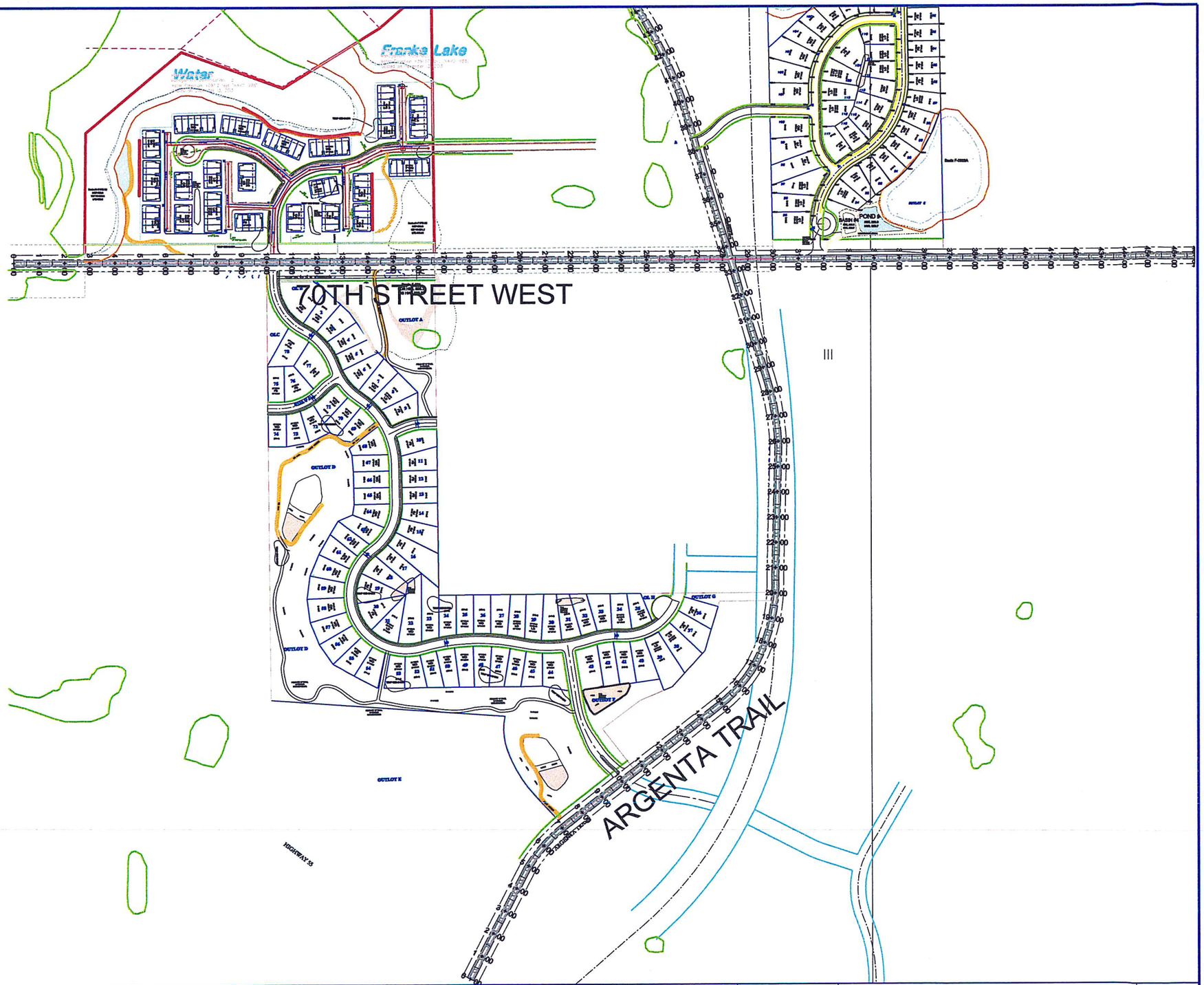
SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.

SIDEWALK PLAN
BLACKSTONE
JIM DEANOVIC

FILE NO.
SW1

| PREPARED BY | PREPARED FOR |
|---|---|
| ENGINEER<br>SATHRE-BERGQUIST, INC.<br>150 SOUTH BROADWAY<br>WAYZATA, MINNESOTA 55391<br><br>PHONE: (952) 476-6000<br>FAX: (952) 476-0104<br><br>CONTACT : DANIEL L. SCHMIDT, P.E.<br>EMAIL: SCHMIDT@SATHRE.COM | DEVELOPER<br>JIM DEANOVIC<br>5116 MIRROR LAKES DRIVE<br>EDINA, MN 55436<br><br>CONTACT:<br>PHONE: (612) 799-5399 |

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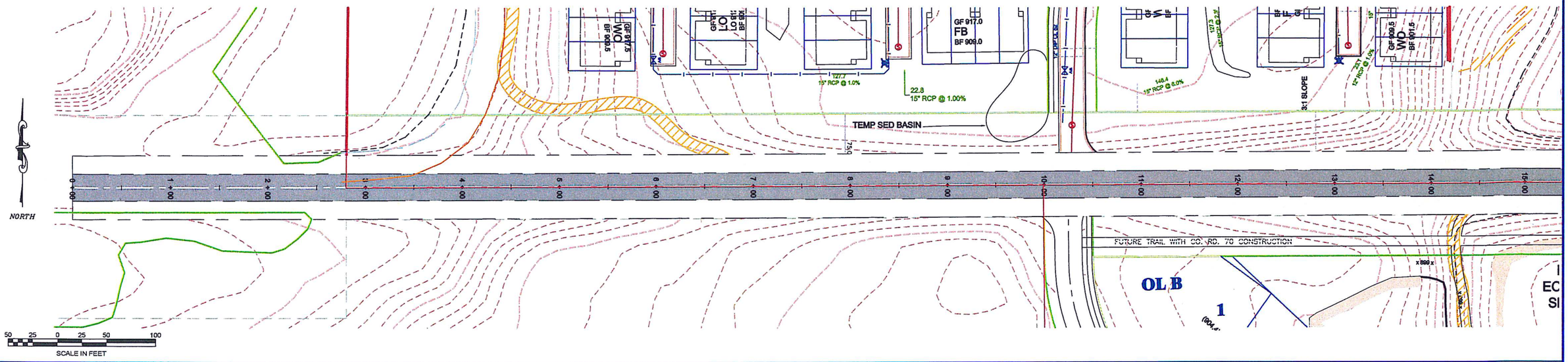
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
—
INVER GROVE HEIGHTS, MINNESOTA

EXISTING STREETS
BLACKSTONE
JIM DEANOVIC

FILE NO.
—
ES1
ES7

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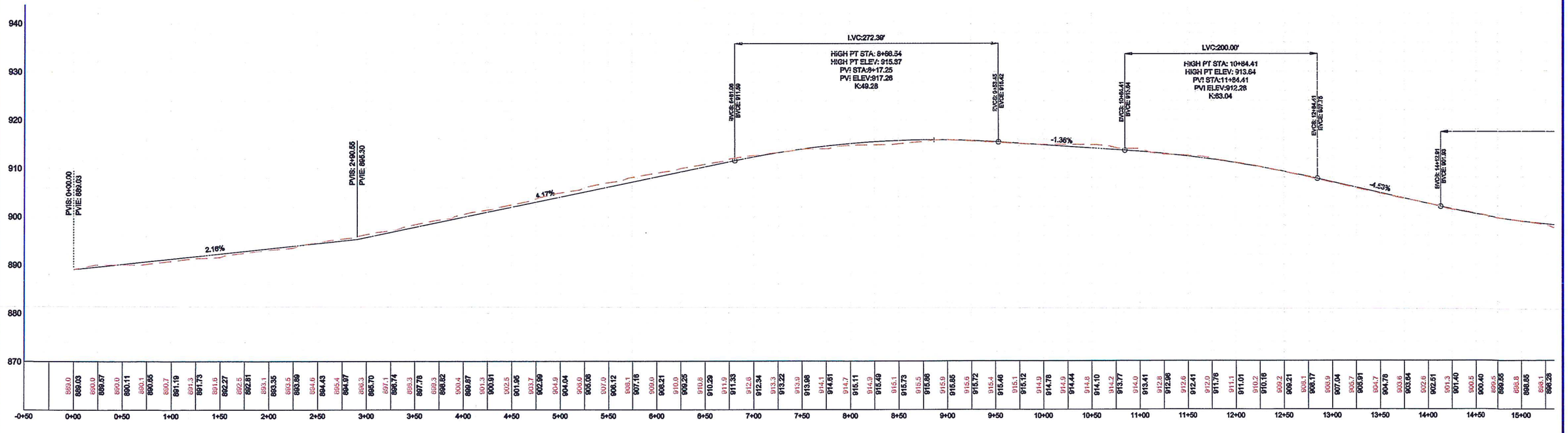


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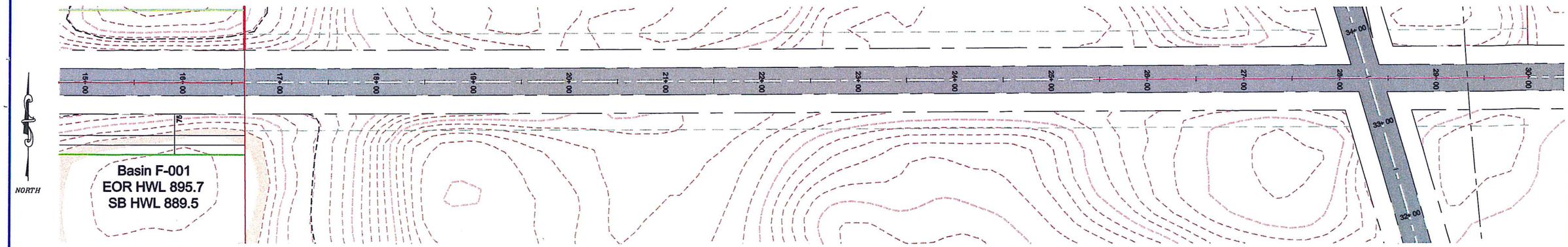
CITY PROJECT NO.

EXISTING STREETS
BLACKSTONE
JIM DEANOVIC

FILE NO.
ES2
ES7

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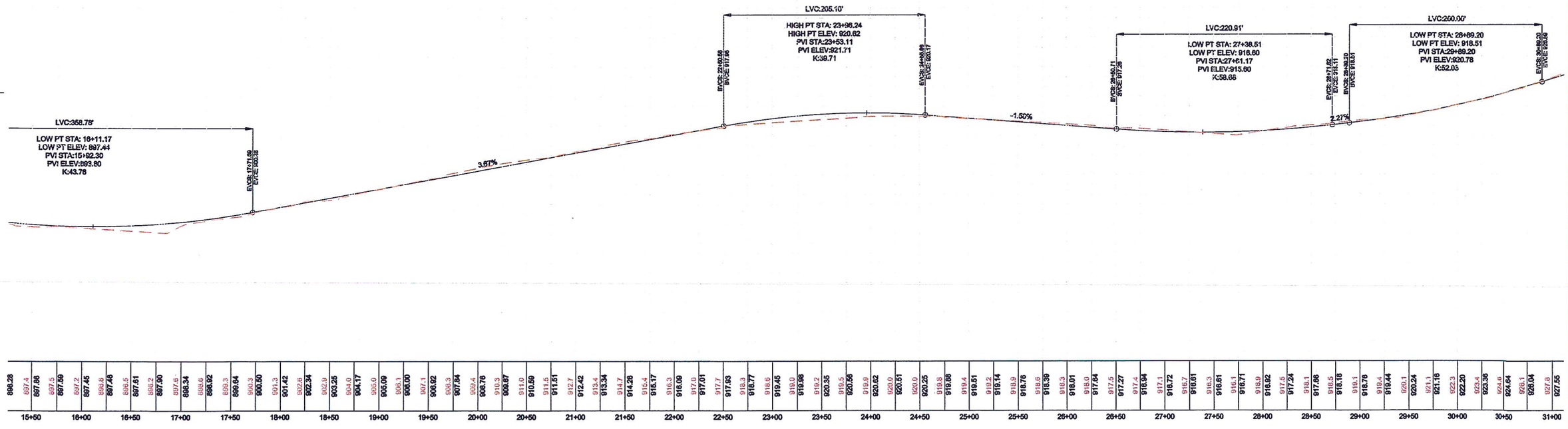


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Date: 06-09-2014 Lic. No. 26147

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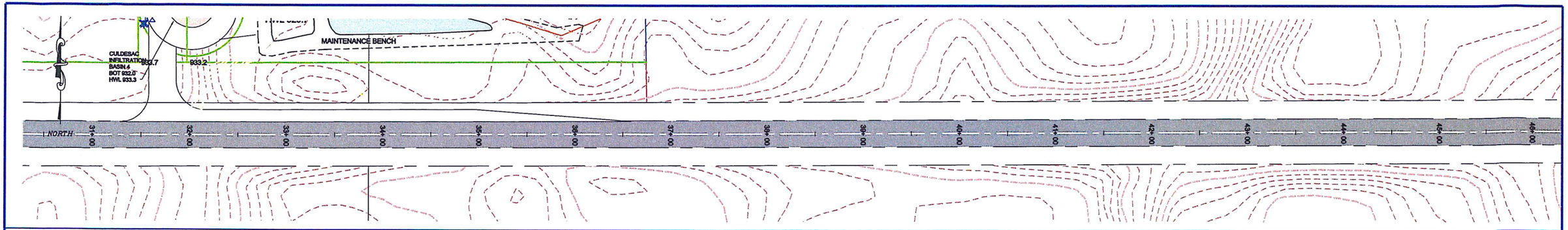
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.

EXISTING STREETS
BLACKSTONE
JIM DEANOVIC

FILE NO.
ES3
ES7

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# 70TH STREET WEST

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+00 31+50 32+00 32+50 33+00 33+50 34+00 34+50 35+00 35+50 36+00 36+50 37+00 37+50 38+00 38+50 39+00 39+50 40+00 40+50 41+00 41+50 42+00 42+50 43+00 43+50 44+00 44+50 45+00 45+50 46+00 46+50 47+

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| DATE | | | | |
| 06/09/2014 | | | | |

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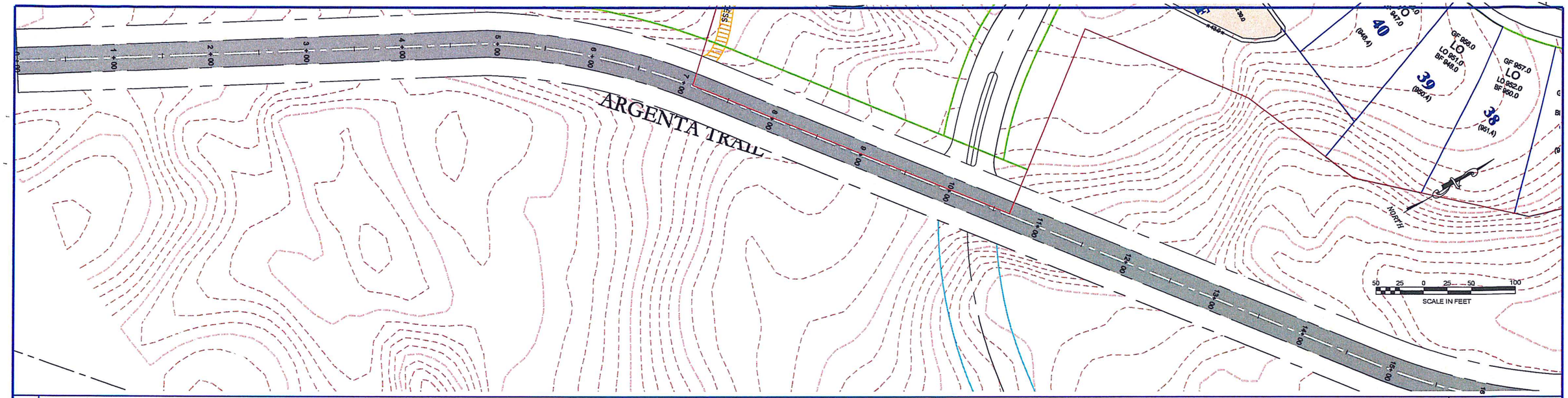
Daniel L. Schmidt, P.E.
Date: 06-09-2014 Lic. No. 26147

ENGINEERS SURVEYORS DESIGNERS PLANNERS
SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.

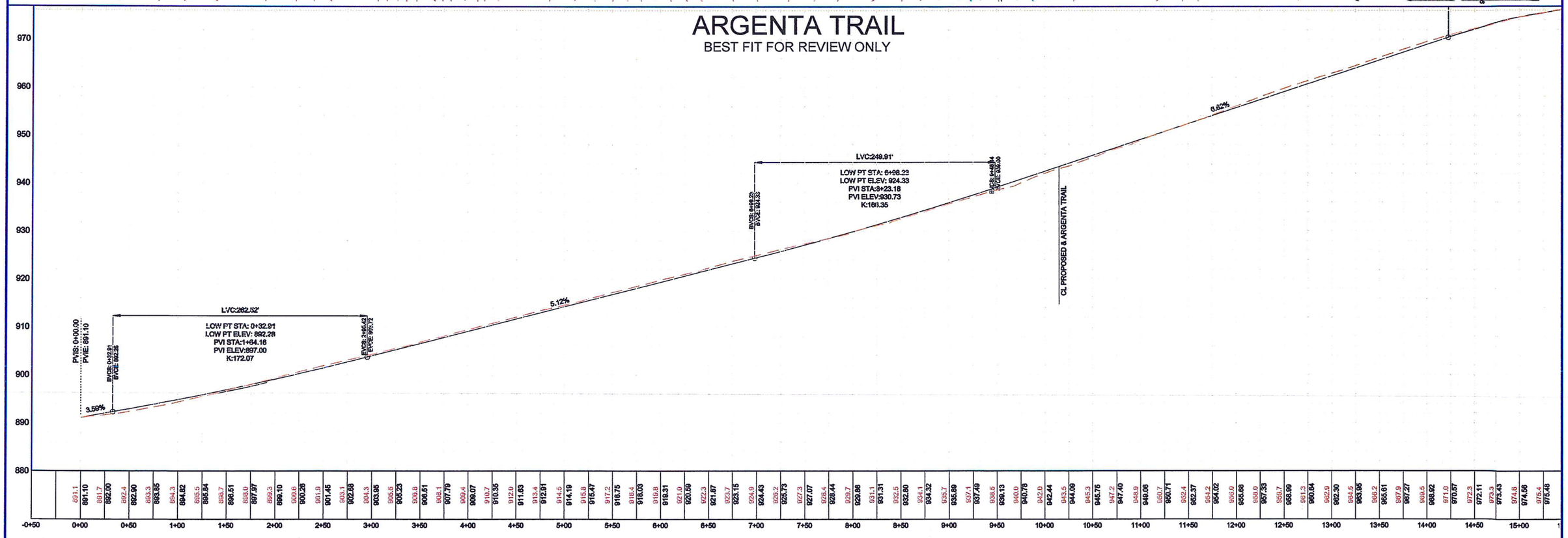
EXISTING STREETS
BLACKSTONE
JIM DEANOVIC

FILE NO.
ES4
ES7




# ARGENTA TRAIL

BEST FIT FOR REVIEW ONLY




| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| DSG | 1 | DLS | 06/09/2014 | REVISED PLANS |
| DRAWN BY | 2 | DLS | 07/07/2014 | REVISED PLANS |
| DLS | 2 | DLS | 08/13/2014 | REVISED PLANS |
| CHECKED BY | | | | |
| DLS | | | | |
| DATE | | | | |
| 06/09/2014 | | | | |

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Daniel L. Schmidt

Daniel L. Schmidt, P.E.
Date: 06-09-2014 Lic. No. 26147

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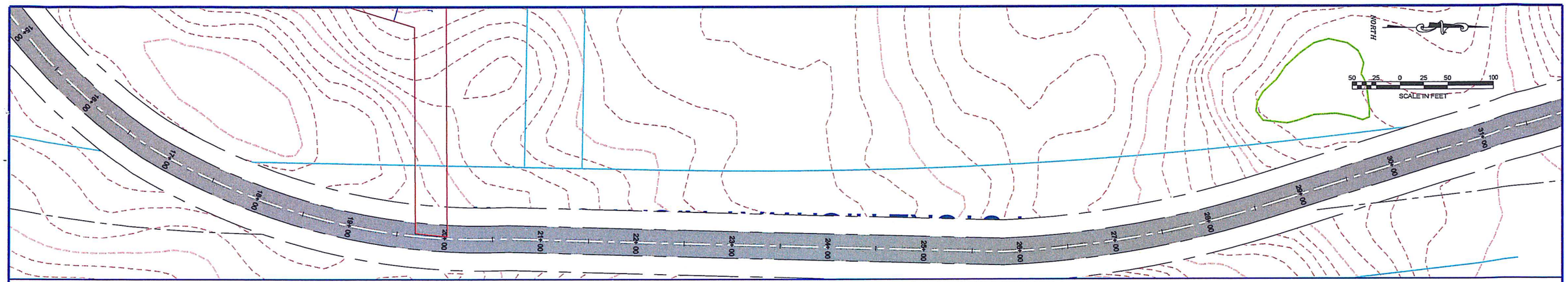
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

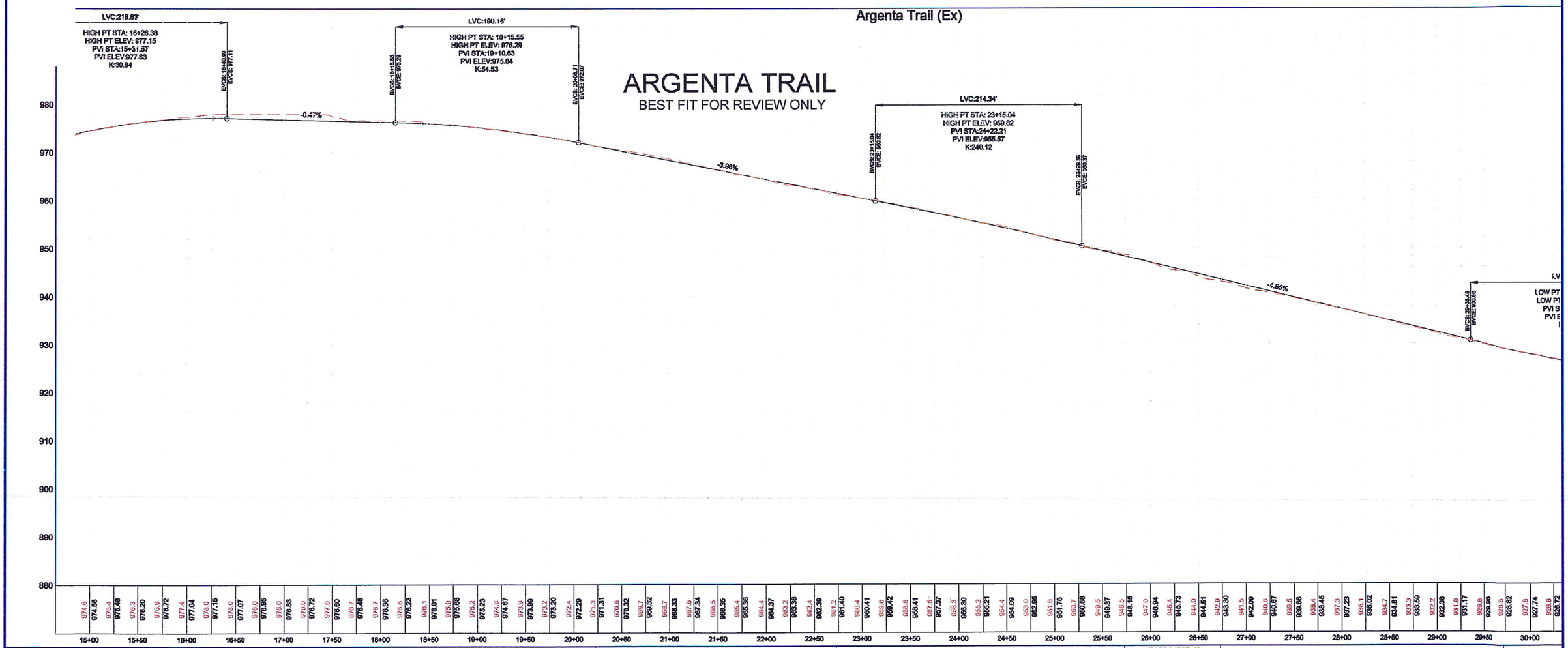
CITY PROJECT NO.

EXISTING STREETS
BLACKSTONE
JIM DEANOVIC

FILE NO.

ES5
ES7




| DRAWING NAME | NO. | BY | DATE | REVISIONS |
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| DSG | 1 | DLS | 06/09/2014 | REVISED PLANS |
| DRAWN BY | 2 | DLS | 07/07/2014 | REVISED PLANS |
| DLS | 3 | DLS | 08/13/2014 | REVISED PLANS |
| CHECKED BY | | | | |
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| DATE | | | | |
| 06/09/2014 | | | | |

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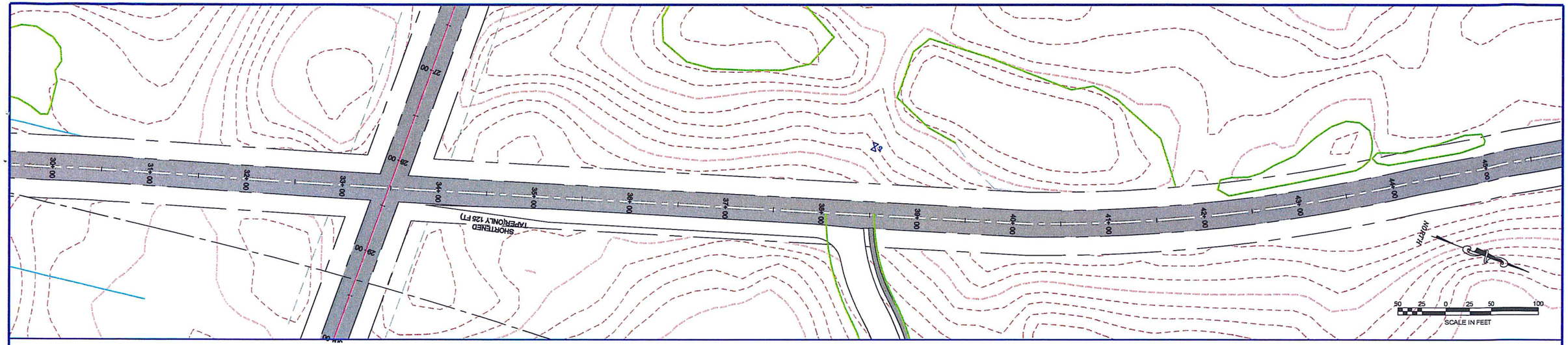
Date: 06-09-2014 Lic. No. 26147

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 475-6000

CITY PROJECT NO.

EXISTING STREETS
BLACKSTONE
JIM DEANOVIC

FILE NO.
ES6
ES7




# ARGENTA TRAIL

BEST FIT FOR REVIEW ONLY

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|---|---|---|---|---|
| DSG | 1 | DLS | 06/09/2014 | REVISED PLANS |
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| 06/09/2014 | | | | |

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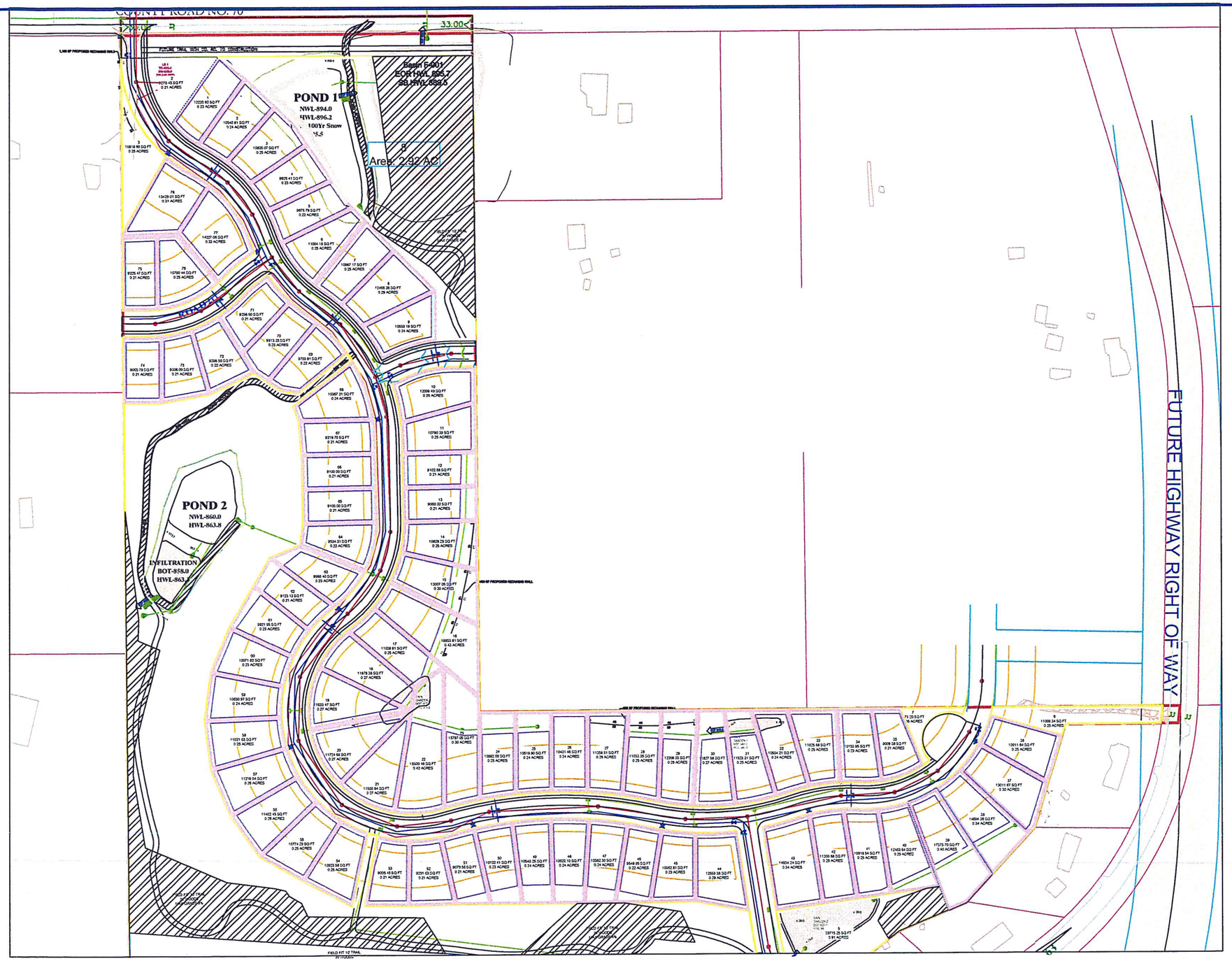
150 SOUTH BROADWAY WAYZATA, MN 55391 (952) 476-6000

CITY PROJECT NO.

EXISTING STREETS
BLACKSTONE
JIM DEANOVIC

FILE NO.
ES7
ES7




100 50 0 50 100 200
SCALE IN FEET

EXISTING UTILITIES SHOWN ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES ARISING OUT OF HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.

| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| BASE SCHMIDT | 01 | DSG | 06/09/14 | PRELIMINARY REVISIONS |
| DRAWN BY | 02 | DLS | 07/07/14 | PRELIMINARY REVISIONS |
| CAW | 03 | DLS | 08/13/14 | PRELIMINARY REVISIONS |
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| 05/12/14 | | | | |

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Daniel L Schmidt

Name, P.E.

Date: 05/18/14 Lic. No. 26147

ENGINEERS SURVEYORS DESIGNERS PLANNERS

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
—

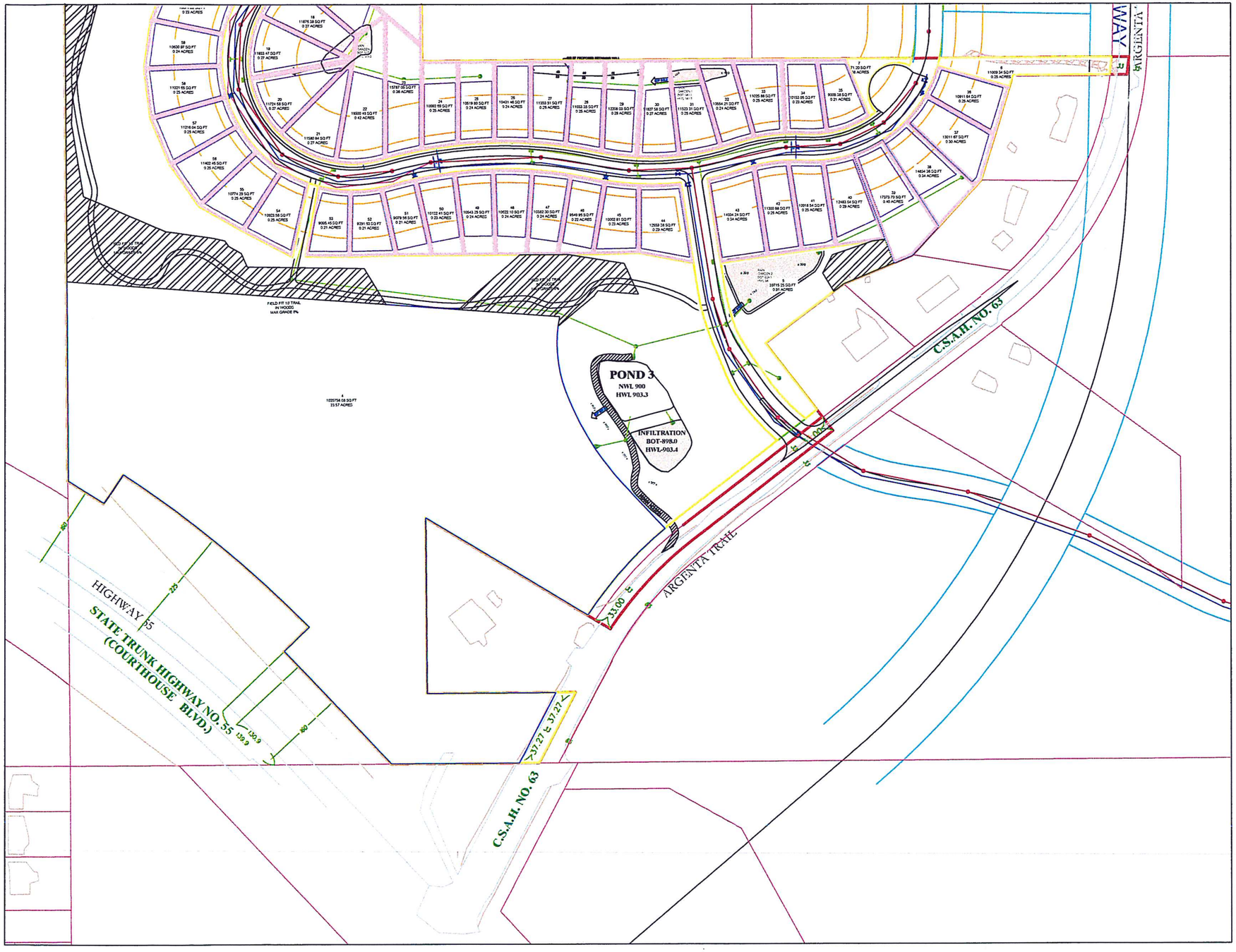
INVER GROVE HEIGHTS, MINNESOTA

# SITE PLAN
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO.
1920-013

SP1 / SP2

BROCKTON EAST 5-801-661




100 50 0 50 100 200
SCALE IN FEET

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| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| BASE SCHMIDT | 01 | DSG | 06/09/14 | PRELIMINARY REVISIONS |
| DRAWN BY | 02 | DLS | 07/07/14 | PRELIMINARY REVISIONS |
| CAW | 03 | DLS | 08/13/14 | PRELIMINARY REVISIONS |
| CHECKED BY | | | | |
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| 05/12/14 | | | | |

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150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
---
INVER GROVE HEIGHTS, MINNESOTA

# SITE PLAN
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO.
1920-013
SP2 / SP2

BROCKTON EAST 5401-681

## LEGEND:

- OPEN SPACE
- UNDISTURBED

NORTH

100 50 0 50 100 200
SCALE IN FEET

| | Blackstone Vista |
|---|---|
| | Low-Med |
| Gross Area | 41.55 |
| 75' - 70th Street West | 1.14 |
| Wetland/Lake | 0.00 |
| Net Area | 40.41 |
| Required Min Density | 121 |
| Open Space Dedication | 2.24 |
| | Total |
| Net Area | 40.4 |
| Required Dedication(20%) | 8.1 |
| Undisturbed Dedication (10%) | 4.0 |
| Provided Dedication | 15.7 |
| Provided Undisturbed | 4.2 |

| | Total | Undisturbed |
|---|---|---|
| Outlot A | 2.9 | 1.6 |
| Outlot B | 0.2 | 0.0 |
| Outlot C | 0.2 | 0.0 |
| Outlot D | 10.4 | 2.2 |
| Outlot E* | 13.1 | 0.0 |
| Outlot F | 0.9 | 0.2 |
| Outlot G | 0.3 | 0.2 |
| Outlot H | 0.9 | 0.0 |
| TOTAL | 15.7 | 4.2 |
| Required Dedication(acres) | | 8.1 |
| Largest Open Space(acres) | | 10.7 |
| Continous Dedication | | 132% |

All values in Acres
*Not Included in Gross Area or Dedication Calculations

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| BASE SCHMIDT | 01 | DSG | 06/09/14 | PRELIMINARY REVISIONS |
| DRAWN BY | 02 | DLS | 07/07/14 | PRELIMINARY REVISIONS |
| CAW | 03 | DLS | 08/13/14 | PRELIMINARY REVISIONS |
| CHECKED BY | 04 | DLS | 09/09/14 | REVISED OPEN SPACE CALCS |
| DLS | | | | |
| DATE | | | | |
| 05/12/14 | | | | |

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ENGINEERS SURVEYORS DESIGNERS PLANNERS

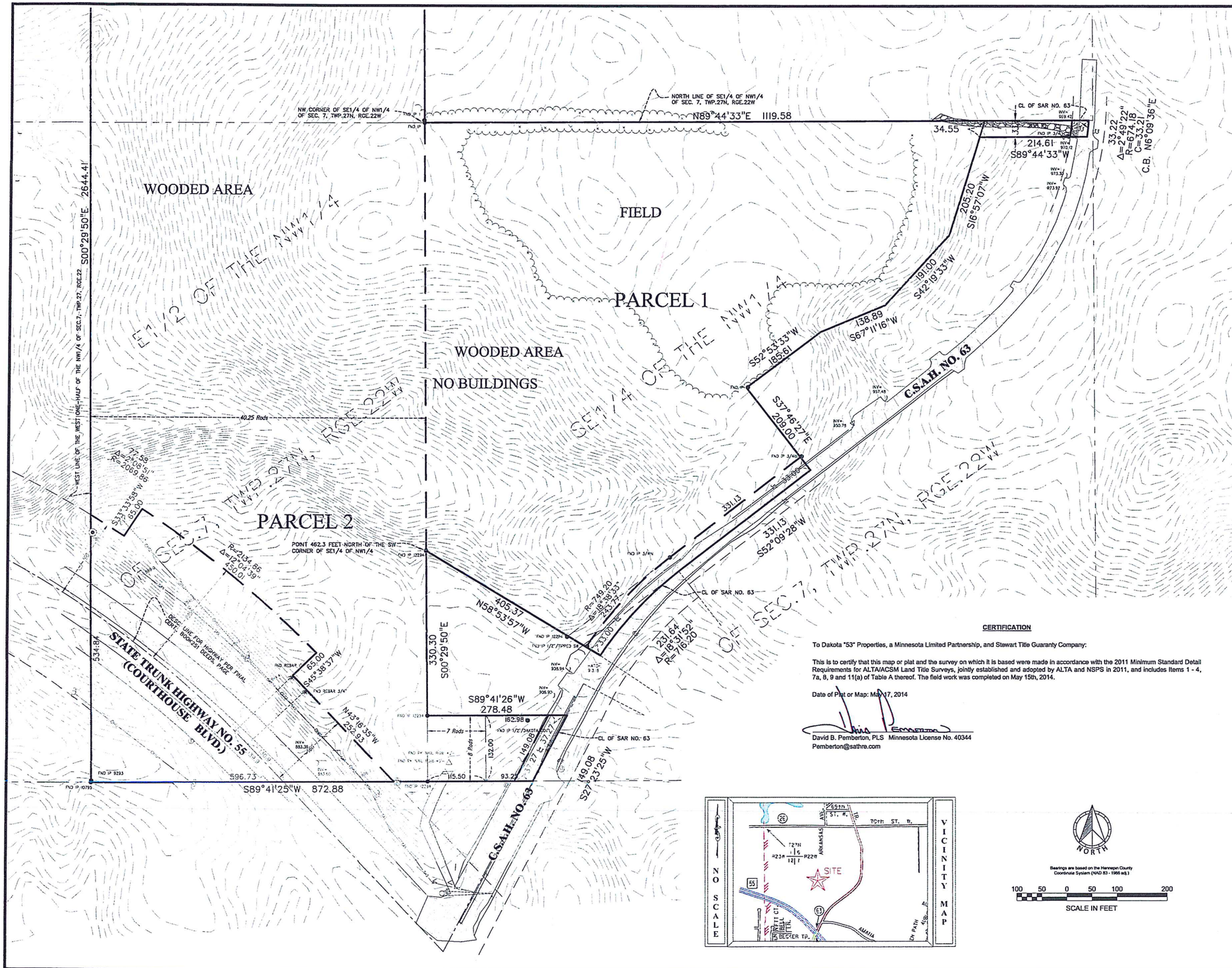
SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
—
INVER GROVE HEIGHTS, MINNESOTA

OPEN SPACE
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO.
1920-013
OS1
OS1

BLACKSTONE VISTA 1920-013




## DESCRIPTION OF PROPERTY SURVEYED

(Per Schedule A of the herein referenced Title Commitment)

Parcel 1 (20-00700-30-010):
That part of the Southeast Quarter of the Northwest Quarter of Section 7, Township 27 North, Range 22 West, Dakota County, Minnesota, lying Northwesterly of SAR No. 63 (formerly SAR No. 26) described as follows:
Commencing at the Intersection of the North line of said Southeast Quarter of the Northwest Quarter with the centerline of SAR No. 63, said point being 1327.68 feet East of the Northwest corner of said Southeast Quarter of the Northwest Quarter; thence North 89 degrees 17 minutes 24 seconds West (assumed bearing) along the North line of said Southeast Quarter of the Northwest Quarter 208.10 feet;
thence South 17 degrees 55 minutes 10 seconds West 34.55 feet to a point which is 33 feet South of the North line of the Southeast Quarter of the Northwest Quarter; thence South 89 degrees, 17 minutes 24 seconds East 214.17 feet to the centerline of SAR No. 63, said point being the point of beginning of the property to be described; thence North 89 degrees, 17 minutes 24 seconds West 214.17 feet; thence South 17 degrees 55 minutes 10 seconds West 205.20 feet; thence South 43 minutes 17 seconds 36 seconds West 191.0 feet; thence South 68 degrees 09 minutes 19 seconds West 138.89 feet; thence South 53 degrees 51 minutes 36 seconds West 185.61 feet; thence South 36 degrees 48 minutes 24 seconds East 209.0 feet to the centerline of SAR No. 63; thence South 53 degrees 07 minutes 31 seconds West along said centerline 331.13 feet; thence Southwesterly along said centerline on a tangential curve concave to the Southeast, radius 716.20 feet central angle 18 degrees 31 minutes 52 seconds, arc distance 231.64 feet; thence North 57 degrees 33 minutes 29 seconds West 404.52 feet to a point on the West line of said Southeast Quarter of the Northwest Quarter which is 462.3 feet North of the Southwest Corner of the Southeast Quarter of the Northwest Quarter; thence North 0 degrees 19 minutes 42 seconds East, along said West line 857.50 feet to the Northwest corner of said Southeast Quarter of the Northwest Quarter; thence South 89 degrees 17 minutes 24 seconds East 1327.68 feet to the centerline of SAR No. 63; thence Southerly along said centerline an arc distance of 33.26 feet to the point of beginning.

Parcel 2 (20-00700-27-010):
The East 40.25 rods of West one-half of the Northwest Quarter of Section 7, Township 27 North, Range 22 West, Dakota County, Minnesota.

And
The South 8 rods of the West 7 rods of the Southeast Quarter of the Northwest Quarter, Section 7, Township 27 North, Range 22 West, Dakota County, Minnesota.

And

That part of the Southeast Quarter of the Northwest Quarter, Section 7, Township 27 North, Range 22 West, Dakota County, Minnesota, lying Westerly of SAR No. 63 (formerly SAR No. 26) described as follows:
Commencing at the Southwest Corner of said Southeast Quarter of the Northwest Quarter; thence South 89 degrees 19 minutes 11 seconds East (assumed bearing) along the South line of the Southeast Quarter of the Northwest Quarter 115.5 feet to the beginning of the property to be described; thence North 0 degrees 19 minutes 42 seconds parallel with the West line of the Southeast Quarter of the Northwest Quarter 132.0 feet; thence South 89 degrees 19 minutes 11 seconds East 159.85 feet to the centerline of SAR No. 63; thence South 28 degrees 32 minutes 54 seconds West 149.31 feet to the South line of the Southeast Quarter of the Northwest Quarter; thence North 89 degrees 19 minutes 11 seconds West 89.25 feet to the point of beginning.

## ALTA/ACSM OPTIONAL TABLE A NOTES

(The following items reference Table A optional survey responsibilities and specifications)

2) Site Address: Unassigned, Inver Grove Heights, MN

3) This property is contained in Zone X (area of Areas outside the 1-percent annual chance floodplain, areas of 1% annual chance sheet flow flooding where average depths are less than 1 foot, areas of 1% annual chance stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 1% annual chance flood by levees. No Base Flood Elevations or depths are shown within this zone. Insurance purchase is not required in these zones.) per Flood Insurance Rate Map, Community Panel No. 27037C0105E. Per the City of Inver Grove Heights website.

4) Land area: Parcel 1: 777,078 +/- square feet or 17.839 +/- acres. (Net)
19,868 +/- square feet or 0.456 +/- acres. (R/W)
796,946 +/- square feet or 18.295 +/- acres. (Gross)

Parcel 2: 1,556,686 +/- square feet or 35.737 +/- acres. (Net)
231,285 +/- square feet or 5.310 +/- acres (R/W)
1,787,971 +/- square feet or 41.046 +/- acres (Gross)

5) Elevations are based on MNDOT Geodetic Station 1919 S Reset: Elevation = 853.853 feet (NAVD88)

6) We have not received the current zoning classification and building setback requirements from the insurer.

Please note that the general restrictions for the subject property may have been amended through a city process. We could be unaware of such amendments if they are not in a recorded document provided to us. We recommend that a zoning letter be obtained from the Zoning Administrator for the current restrictions for this site.

11)(a) We have shown the location of utilities on the surveyed property by observed evidence only.

## SURVEY REPORT

This map and report was prepared with the benefit of a Commitment for Title Insurance issued by Stewart Title Guaranty Company, File No. 0100-3786, dated November 19, 2013.

1) We note the following with regards to Schedule B of the herein referenced Title Commitment:
   a) Item no.'s 1-9~*Not survey related*
   b) Item no.10~ Subject to State Aid Road No.63 as laid out and traveled. ***Shown hereon. County Maps show limits of right-of-way differ from "as laid out and traveled".***
   c) Item no.11~ Subject to reservation of Minerals and Mineral Rights by the State of Minnesota, as referenced in Warranty Deed dated 11/6/1980, filed 10/3/1985, as Document No.702616.
   d) Item no.12~ Subject to terms and conditions of Agreement dated 11/6/1947, filed 11/24/1965, as Document No. Book 67 Misc., page 590 - Amended by Agreement amending Easement dated 11/6.1972, filed 11/30/1972, as Document No. 408760. ***Does not encumber subject parcels***
   e) Item no.13~ Subject to terms and conditions of easements for highway purposes as contained in Final Certificate dated 8/4/1938, filed 8/28/1938, in Book 47 Misc., page 153, and Final Certificate dated 8/30/1955, in Book 251 Deeds, page 415. ***Shown hereon.***

2) Conflicts such as (but not limited to): encroachments, protrusions, access, occupation, and easements and/or servitudes:
a. State Trunk Highway northerly right-of-way not legible in document. Our best interpretation is shown hereon. Found monumentation along said right of way are shown hereon.

## CERTIFICATION

To Dakota "53" Properties, a Minnesota Limited Partnership, and Stewart Title Guaranty Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS in 2011, and includes Items 1 - 4, 7a, 8, 9 and 11(a) of Table A thereof. The field work was completed on May 15th, 2014.

Date of Plat or Map: May 17, 2014

David B. Pemberton, PLS Minnesota License No. 40344
Pemberton@sathre.com







## SURVEY LEGEND

| | |
|---|---|
| RADIAL LANDMARK | A/C UNIT |
| CATCH BASIN | CABLE TV PEDESTAL |
| FLARED END SECTION | ELECTRIC TRANSFORMER |
| GATE VALVE | ELECTRIC MAN-HOLE |
| GUY WIRE | ELECTRIC METER |
| HYDRANT | GAS METER |
| SURVEY MONUMENT SET | GAS VALVE |
| SURVEY MONUMENT FOUND | GUARD RAIL |
| SURVEY CONTROL POINT | HAND HOLE |
| LIGHT POLE | SOIL BORING |
| POWER POLE | TREE CONIFEROUS |
| SANITARY MAN-HOLE | TREE DECIDUOUS |
| SANITARY CLEANOUT | TELEPHONE MAN-HOLE |
| SIGN | TELEPHONE PEDESTAL |
| GROUND ELEVATION | TRAFFIC SIGNAL |
| STORM DRAIN | UTILITY MAN-HOLE |
| STORM MAN-HOLE | UTILITY PEDESTAL |
| YARD LIGHT | WELL |
| BITUMINOUS | |
| CABLE TV | |
| CONCRETE CURB | |
| CONCRETE | |
| CONTOUR EXISTING | |
| CONTOUR PROPOSED | |
| DRAIN TILE | |
| ELECTRIC UNDERGROUND | |
| FENCE | |
| FIBER OPTIC UNDERGROUND | |
| GAS UNDERGROUND | |
| OVER-HEAD UTILITY | |
| RAILROAD TRACKS | |
| SANITARY SEWER | |
| STORM SEWER | |
| TELEPHONE UNDERGROUND | |
| UTILITY UNDERGROUND | |
| WATERMAIN | |

| FIELD CREW | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| ALL | | | | |
| DRAWN BY | | | | |
| DBP | | | | |
| CHECKED BY | | | | |
| DBP | | | | |
| DATE | | | | |
| 05/15/14 | | | | |

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

Dated this 17th day of May, 2014.

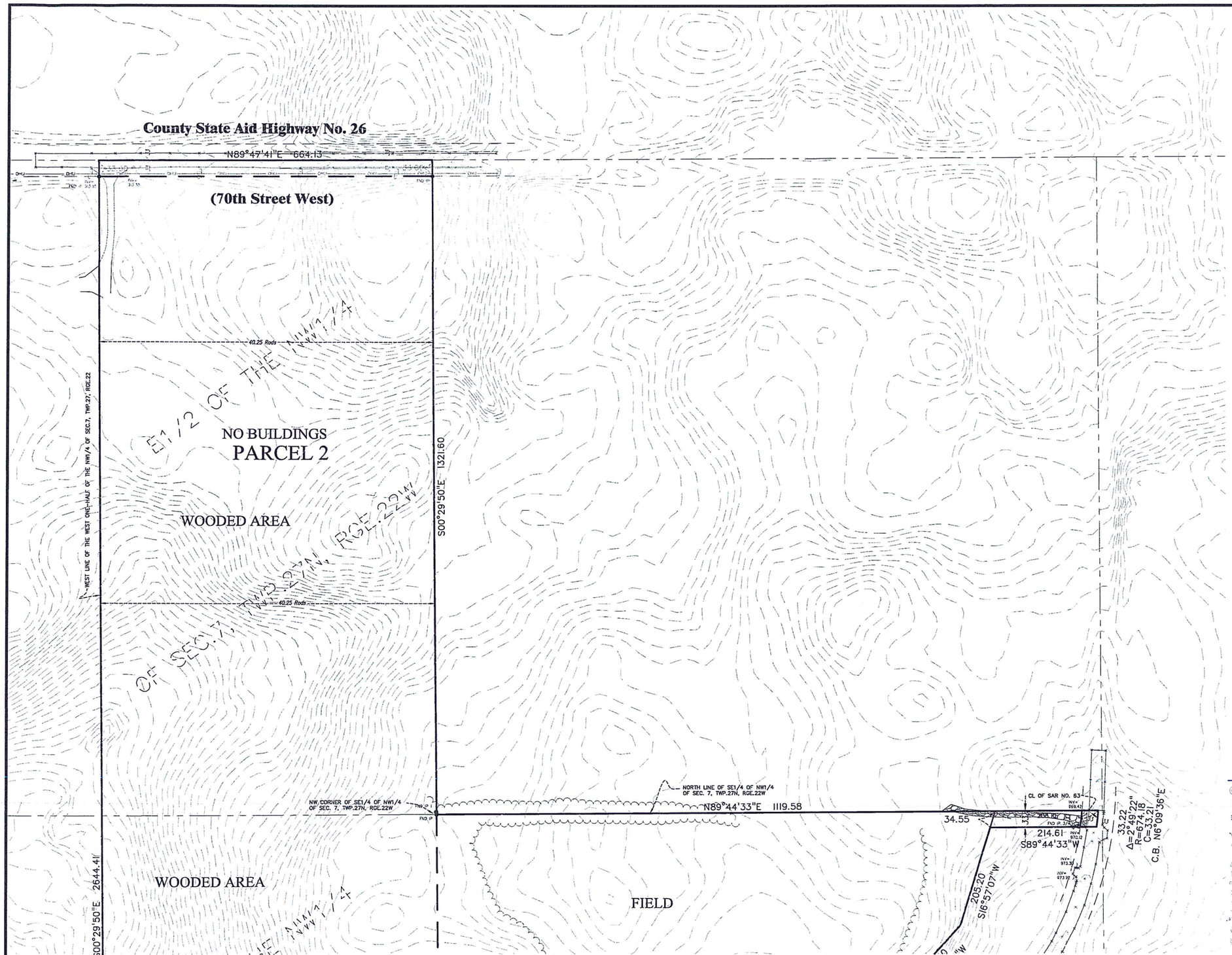
David B. Pemberton, Professional Land Surveyor
Minnesota License No. 40344

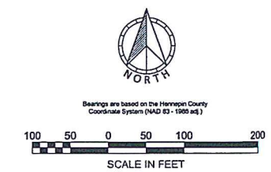
SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

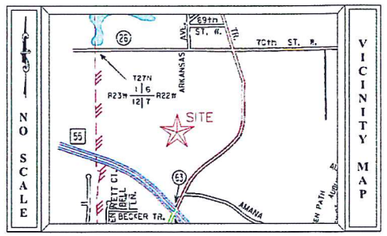
| | |
|---|---|
| TWP.27 - RGE.22 - SEC.07 | |
| DAKOTA COUNTY | |
| BOOK XXX/PAGE XXX | |
| INVER GROVE HEIGHTS MINNESOTA | ALTA/ACSM Land Title Survey |

FILE NO. 1920-013

AA-1 / AA-2




## SURVEY LEGEND

| | | |
|---|---|---|
| CAST IRON MONUMENT | A/C UNIT | BITUMINOUS |
| CATCH BASIN | CABLE TV PEDESTAL | CABLE TV |
| FLARED END SECTION | ELECTRIC TRANSFORMER | CONCRETE CURB |
| GATE VALVE | ELECTRIC MANHOLE | CONCRETE |
| GUY WIRE | ELECTRIC METER | CONTOUR EXISTING |
| HYDRANT | GAS METER | CONTOUR PROPOSED |
| SURVEY MONUMENT SET | GAS VALVE | DRAIN TILE |
| SURVEY MONUMENT FOUND | GUARD RAIL | ELECTRIC UNDERGROUND |
| SURVEY CONTROL POINT | HAND HOLE | FENCE |
| LIGHT POLE | SOIL BORING | FIBER OPTIC UNDERGROUND |
| POWER POLE | TREE CONIFEROUS | GAS UNDERGROUND |
| SANITARY MANHOLE | TREE DECIDUOUS | OVERHEAD UTILITY |
| SANITARY CLEANOUT | TELEPHONE MANHOLE | RAILROAD TRACKS |
| SIGN | TELEPHONE PEDESTAL | SANITARY SEWER |
| GROUND ELEVATION | TRAFFIC SIGNAL | STORM SEWER |
| STORM DRAIN | UTILITY MANHOLE | TELEPHONE UNDERGROUND |
| STORM MANHOLE | UTILITY PEDESTAL | UTILITY UNDERGROUND |
| YARD LIGHT | WELL | WATERMAIN |

| FIELD CREW | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| ALL | | | | |
| DRAWN BY | | | | |
| DBP | | | | |
| CHECKED BY | | | | |
| DBP | | | | |
| DATE | | | | |
| 05/15/14 | | | | |

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ENGINEERS SURVEYORS DESIGNERS PLANNERS
SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

TWP.27 - RGE.22 - SEC.07
DAKOTA COUNTY
BOOK XXX/PAGE XXX
INVER GROVE HEIGHTS
MINNESOTA

ALTA/ACSM Land Title Survey

FILE NO.
1920-013
AA-2
AA-2

LOT AREA INFORMATION

# BLACKSTONE VISTA

Inver Grove Heights, Minnesota

Project # 1920-013 Date August 12, 2014

Prepared for: Jim Deanovic Prepared by: Sathre-Bergquist, Inc.
150 Broadway Ave. S.
Wayzata, MN 55391
Contact: Contact: David Pemberton
tel: 952-xxx-xxxx tel: 952-476-6000

| LOT | GROSS AREA | | | | WETLAND AREA | | NET AREA | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10,229 | s.f. | 0.23 | acres | 0 | s.f. | 10,229 | s.f. | 0.23 | acres |
| 2 | 10,541 | s.f. | 0.24 | acres | 0 | s.f. | 10,541 | s.f. | 0.24 | acres |
| 3 | 10,835 | s.f. | 0.25 | acres | 0 | s.f. | 10,835 | s.f. | 0.25 | acres |
| 4 | 9,926 | s.f. | 0.23 | acres | 0 | s.f. | 9,926 | s.f. | 0.23 | acres |
| 5 | 9,677 | s.f. | 0.22 | acres | 0 | s.f. | 9,677 | s.f. | 0.22 | acres |
| 6 | 11,004 | s.f. | 0.25 | acres | 0 | s.f. | 11,004 | s.f. | 0.25 | acres |
| 7 | 10,987 | s.f. | 0.25 | acres | 0 | s.f. | 10,987 | s.f. | 0.25 | acres |
| 8 | 12,456 | s.f. | 0.29 | acres | 0 | s.f. | 12,466 | s.f. | 0.29 | acres |
| 9 | 10,559 | s.f. | 0.24 | acres | 0 | s.f. | 10,559 | s.f. | 0.24 | acres |
| 10 | 12,099 | s.f. | 0.28 | acres | 0 | s.f. | 12,099 | s.f. | 0.28 | acres |
| 11 | 10,790 | s.f. | 0.25 | acres | 0 | s.f. | 10,790 | s.f. | 0.25 | acres |
| 12 | 9,103 | s.f. | 0.21 | acres | 0 | s.f. | 9,103 | s.f. | 0.21 | acres |
| 13 | 9,060 | s.f. | 0.21 | acres | 0 | s.f. | 9,060 | s.f. | 0.21 | acres |
| 14 | 10,829 | s.f. | 0.25 | acres | 0 | s.f. | 10,829 | s.f. | 0.25 | acres |
| 15 | 13,007 | s.f. | 0.30 | acres | 0 | s.f. | 13,007 | s.f. | 0.30 | acres |
| 16 | 18,854 | s.f. | 0.43 | acres | 0 | s.f. | 18,854 | s.f. | 0.43 | acres |
| 17 | 11,040 | s.f. | 0.25 | acres | 0 | s.f. | 11,040 | s.f. | 0.25 | acres |
| 18 | 11,876 | s.f. | 0.27 | acres | 0 | s.f. | 11,876 | s.f. | 0.27 | acres |
| 19 | 11,933 | s.f. | 0.27 | acres | 0 | s.f. | 11,933 | s.f. | 0.27 | acres |
| 20 | 11,725 | s.f. | 0.27 | acres | 0 | s.f. | 11,725 | s.f. | 0.27 | acres |
| 21 | 11,581 | s.f. | 0.27 | acres | 0 | s.f. | 11,581 | s.f. | 0.27 | acres |
| 22 | 18,500 | s.f. | 0.42 | acres | 0 | s.f. | 18,500 | s.f. | 0.42 | acres |
| 23 | 15,787 | s.f. | 0.36 | acres | 0 | s.f. | 15,787 | s.f. | 0.36 | acres |
| 24 | 10,993 | s.f. | 0.25 | acres | 0 | s.f. | 10,993 | s.f. | 0.25 | acres |
| 25 | 10,520 | s.f. | 0.24 | acres | 0 | s.f. | 10,520 | s.f. | 0.24 | acres |
| 26 | 10,431 | s.f. | 0.24 | acres | 0 | s.f. | 10,431 | s.f. | 0.24 | acres |
| 27 | 11,350 | s.f. | 0.26 | acres | 0 | s.f. | 11,360 | s.f. | 0.26 | acres |
| 28 | 11,033 | s.f. | 0.25 | acres | 0 | s.f. | 11,033 | s.f. | 0.25 | acres |
| 29 | 12,208 | s.f. | 0.28 | acres | 0 | s.f. | 12,208 | s.f. | 0.28 | acres |
| 30 | 11,828 | s.f. | 0.27 | acres | 0 | s.f. | 11,828 | s.f. | 0.27 | acres |
| 31 | 11,523 | s.f. | 0.26 | acres | 0 | s.f. | 11,523 | s.f. | 0.26 | acres |
| 32 | 10,554 | s.f. | 0.24 | acres | 0 | s.f. | 10,554 | s.f. | 0.24 | acres |
| 33 | 11,026 | s.f. | 0.25 | acres | 0 | s.f. | 11,026 | s.f. | 0.25 | acres |
| 34 | 10,154 | s.f. | 0.23 | acres | 0 | s.f. | 10,154 | s.f. | 0.23 | acres |
| 35 | 9,009 | s.f. | 0.21 | acres | 0 | s.f. | 9,009 | s.f. | 0.21 | acres |
| 36 | 10,912 | s.f. | 0.25 | acres | 0 | s.f. | 10,912 | s.f. | 0.25 | acres |
| 37 | 13,012 | s.f. | 0.30 | acres | 0 | s.f. | 13,012 | s.f. | 0.30 | acres |
| 38 | 14,894 | s.f. | 0.34 | acres | 0 | s.f. | 14,894 | s.f. | 0.34 | acres |
| 39 | 17,261 | s.f. | 0.40 | acres | 0 | s.f. | 17,261 | s.f. | 0.40 | acres |
| 40 | 12,572 | s.f. | 0.29 | acres | 0 | s.f. | 12,572 | s.f. | 0.29 | acres |
| 41 | 10,919 | s.f. | 0.25 | acres | 0 | s.f. | 10,919 | s.f. | 0.25 | acres |
| 42 | 11,301 | s.f. | 0.26 | acres | 0 | s.f. | 11,301 | s.f. | 0.26 | acres |
| 43 | 14,934 | s.f. | 0.34 | acres | 0 | s.f. | 14,934 | s.f. | 0.34 | acres |
| 44 | 12,559 | s.f. | 0.29 | acres | 0 | s.f. | 12,559 | s.f. | 0.29 | acres |
| 45 | 10,063 | s.f. | 0.23 | acres | 0 | s.f. | 10,063 | s.f. | 0.23 | acres |
| 46 | 9,550 | s.f. | 0.22 | acres | 0 | s.f. | 9,550 | s.f. | 0.22 | acres |
| 47 | 10,382 | s.f. | 0.24 | acres | 0 | s.f. | 10,382 | s.f. | 0.24 | acres |
| 48 | 10,622 | s.f. | 0.24 | acres | 0 | s.f. | 10,622 | s.f. | 0.24 | acres |
| 49 | 10,513 | s.f. | 0.24 | acres | 0 | s.f. | 10,543 | s.f. | 0.24 | acres |
| 50 | 10,132 | s.f. | 0.23 | acres | 0 | s.f. | 10,132 | s.f. | 0.23 | acres |
| 51 | 9,080 | s.f. | 0.21 | acres | 0 | s.f. | 9,080 | s.f. | 0.21 | acres |
| 52 | 9,292 | s.f. | 0.21 | acres | 0 | s.f. | 9,292 | s.f. | 0.21 | acres |
| 53 | 9,095 | s.f. | 0.21 | acres | 0 | s.f. | 9,095 | s.f. | 0.21 | acres |
| 54 | 10,924 | s.f. | 0.25 | acres | 0 | s.f. | 10,924 | s.f. | 0.25 | acres |
| 55 | 10,774 | s.f. | 0.25 | acres | 0 | s.f. | 10,774 | s.f. | 0.25 | acres |
| 56 | 11,432 | s.f. | 0.26 | acres | 0 | s.f. | 11,402 | s.f. | 0.26 | acres |
| 57 | 11,216 | s.f. | 0.26 | acres | 0 | s.f. | 11,216 | s.f. | 0.26 | acres |
| 58 | 11,022 | s.f. | 0.25 | acres | 0 | s.f. | 11,022 | s.f. | 0.25 | acres |
| 59 | 10,631 | s.f. | 0.24 | acres | 0 | s.f. | 10,631 | s.f. | 0.24 | acres |
| 60 | 10,072 | s.f. | 0.23 | acres | 0 | s.f. | 10,072 | s.f. | 0.23 | acres |
| 61 | 9,922 | s.f. | 0.23 | acres | 0 | s.f. | 9,922 | s.f. | 0.23 | acres |
| 62 | 9,161 | s.f. | 0.21 | acres | 0 | s.f. | 9,161 | s.f. | 0.21 | acres |
| 63 | 9,951 | s.f. | 0.23 | acres | 0 | s.f. | 9,951 | s.f. | 0.23 | acres |
| 64 | 9,534 | s.f. | 0.22 | acres | 0 | s.f. | 9,534 | s.f. | 0.22 | acres |
| 65 | 9,100 | s.f. | 0.21 | acres | 0 | s.f. | 9,100 | s.f. | 0.21 | acres |
| 66 | 9,100 | s.f. | 0.21 | acres | 0 | s.f. | 9,100 | s.f. | 0.21 | acres |
| 67 | 9,220 | s.f. | 0.21 | acres | 0 | s.f. | 9,220 | s.f. | 0.21 | acres |
| 68 | 10,357 | s.f. | 0.24 | acres | 0 | s.f. | 10,367 | s.f. | 0.24 | acres |
| 69 | 9,704 | s.f. | 0.22 | acres | 0 | s.f. | 9,704 | s.f. | 0.22 | acres |
| 70 | 9,913 | s.f. | 0.23 | acres | 0 | s.f. | 9,913 | s.f. | 0.23 | acres |
| 71 | 9,357 | s.f. | 0.21 | acres | 0 | s.f. | 9,357 | s.f. | 0.21 | acres |
| 72 | 9,399 | s.f. | 0.22 | acres | 0 | s.f. | 9,399 | s.f. | 0.22 | acres |
| 73 | 9,308 | s.f. | 0.21 | acres | 0 | s.f. | 9,308 | s.f. | 0.21 | acres |
| 74 | 9,066 | s.f. | 0.21 | acres | 0 | s.f. | 9,066 | s.f. | 0.21 | acres |
| 75 | 9,225 | s.f. | 0.21 | acres | 0 | s.f. | 9,225 | s.f. | 0.21 | acres |
| 76 | 10,790 | s.f. | 0.25 | acres | 0 | s.f. | 10,790 | s.f. | 0.25 | acres |
| 77 | 14,227 | s.f. | 0.33 | acres | 0 | s.f. | 14,227 | s.f. | 0.33 | acres |
| 78 | 13,428 | s.f. | 0.31 | acres | 0 | s.f. | 13,428 | s.f. | 0.31 | acres |
| TOTAL | 866,986 | s.f. | 19.90 | acres | 0 | s.f. | 866,986 | s.f. | 19.90 | acres |
| **OUTLOTS** | | | | | | | | | | |
| A | 127,347 | s.f. | 2.92 | acres | 0 | s.f. | 127,347 | s.f. | 2.92 | acres |
| B | 9,281 | s.f. | 0.21 | acres | 0 | s.f. | 9,281 | s.f. | 0.21 | acres |
| C | 10,843 | s.f. | 0.25 | acres | 0 | s.f. | 10,843 | s.f. | 0.25 | acres |
| D | 452,630 | s.f. | 10.39 | acres | 0 | s.f. | 452,630 | s.f. | 10.39 | acres |
| E | 569,158 | s.f. | 13.07 | acres | 0 | s.f. | 569,158 | s.f. | 13.07 | acres |
| F | 39,740 | s.f. | 0.91 | acres | 0 | s.f. | 39,740 | s.f. | 0.91 | acres |
| G | 11,009 | s.f. | 0.25 | acres | 0 | s.f. | 11,009 | s.f. | 0.25 | acres |
| H | 3,671 | s.f. | 0.08 | acres | 0 | s.f. | 3,671 | s.f. | 0.08 | acres |
| TOTAL | 1,223,679 | s.f. | 28.09 | acres | 0 | s.f. | 1,223,679 | s.f. | 28.09 | acres |
| **R/W** | | | | | | | | | | |
| TOTAL | 494,249 | s.f. | 11.35 | acres | 0 | s.f. | 494,249 | s.f. | 11.35 | acres |
| **TOTAL** | | | | | | | | | | |
| | 2,581,914 | s.f. | 59.34 | acres | 0 | s.f. | 2,581,914 | s.f. | 59.34 | acres |

## DESCRIPTION OF PROPERTY SURVEYED

(Per Schedule A of the herein referenced Title Commitment)

Parcel 1 (20-00700-30-010):
That part of the Southeast Quarter of the Northwest Quarter of Section 7, Township 27 North, Range 22 West, Dakota County, Minnesota, lying Northwesterly of SAR No. 63 (formerly SAR No. 26) described as follows:
Commencing at the Intersection of the North line of said Southeast Quarter of the Northwest Quarter with the centerline of SAR No. 63, said point being 1327.68 feet East of the Northwest corner of said Southeast Quarter of the Northwest Quarter; thence North 89 degrees 17 minutes 24 seconds West (assumed bearing) along the North line of said Southeast Quarter of the Northwest Quarter 208.10 feet;
thence South 17 degrees 55 minutes 10 seconds West 34.55 feet to a point which is 33 feet South of the North line of the Southeast Quarter of the Northwest Quarter; thence South 89 degrees, 17 minutes 24 seconds East 214.17 feet to the centerline of SAR No. 63, said point being the point of beginning of the property to be described; thence North 89 degrees, 17 minutes 24 seconds West 214.17 feet; thence South 17 degrees 55 minutes 10 seconds West 205.20 feet; thence South 43 minutes 17 seconds 36 seconds West 191.0 feet; thence South 68 degrees 09 minutes 19 seconds West 138.89 feet; thence South 53 degrees 51 minutes 36 seconds West 185.61 feet; thence South 36 degrees 48 minutes 24 seconds East 209.0 feet to the centerline of SAR No. 63; thence South 53 degrees 07 minutes 31 seconds West along said centerline 331.13 feet; thence Southwesterly along said centerline on a tangential curve concave to the Southeast, radius 716.20 feet central angle 18 degrees 31 minutes 52 seconds, arc distance 231.64 feet; thence North 57 degrees 33 minutes 29 seconds West 404.52 feet to a point on the West line of said Southeast Quarter of the Northwest Quarter which is 462.3 feet North of the Southwest Corner of the Southeast Quarter of the Northwest Quarter; thence North 0 degrees 19 minutes 42 seconds East, along said West line 857.50 feet to the Northwest corner of said Southeast Quarter of the Northwest Quarter; thence South 89 degrees 17 minutes 24 seconds East 1327.68 feet to the centerline of SAR No. 63; thence Southerly along said centerline an arc distance of 33.26 feet to the point of beginning.

Parcel 2 (20-00700-27-010):
The East 40.25 rods of West one-half of the Northwest Quarter of Section 7, Township 27 North, Range 22 West, Dakota County, Minnesota.

And
The South 8 rods of the West 7 rods of the Southeast Quarter of the Northwest Quarter, Section 7, Township 27 North, Range 22 West, Dakota County, Minnesota.

And

That part of the Southeast Quarter of the Northwest Quarter, Section 7, Township 27 North, Range 22 West, Dakota County, Minnesota, lying Westerly of SAR No. 63 (formerly SAR No. 26) described as follows:
Commencing at the Southwest Corner of said Southeast Quarter of the Northwest Quarter; thence South 89 degrees 19 minutes 11 seconds East (assumed bearing) along the South line of the Southeast Quarter of the Northwest Quarter 115.5 feet to the beginning of the property to be described; thence North 0 degrees 19 minutes 42 seconds parallel with the West line of the Southeast Quarter of the Northwest Quarter 132.0 feet; thence South 89 degrees 19 minutes 11 seconds East 159.85 feet to the centerline of SAR No. 63; thence South 28 degrees 32 minutes 54 seconds West 149.31 feet to the South line of the Southeast Quarter of the Northwest Quarter; thence North 89 degrees 19 minutes 11 seconds West 89.25 feet to the point of beginning.

NORTH

Bearings are based on the Hennepin County Coordinate System (NAD 83 - 1986 adj.)

160 80 0 80 160 320

SCALE IN FEET

## SYMBOL LEGEND

| DESCRIPTION | PROPOSED |
|---|---|
| LOT LINE | |
| WATERMAIN | |
| BUILDING SETBACK BOUNDARY | |
| PARCEL BOUNDARY LINE | |
| DRAINAGE AND UTILITY EASEMENTS | |
| CURB AND GUTTER | |
| RIGHT-OF-WAY | |
| BACKYARD CATCH BASIN | |
| CATCH BASIN | |
| STORM SEWER MANHOLE | |
| FLARED END SECTION W/RIP-RAP | |
| SANITARY SEWER MANHOLE | |
| HYDRANT | |
| GATE VALVE | |

## SURVEY LEGEND

GUY WIRE
IRON PIPE SET
IRON PIPE FOUND
POWER POLE
GROUND ELEVATION
SOIL BORING
BITUMINOUS
CONTOUR EXISTING
FENCE
OVERHEAD ELECTRIC
OVERHEAD UTILITY

| PREPARED BY | PREPARED FOR |
|---|---|
| ENGINEER<br>SATHRE-BERGQUIST, INC.<br>150 SOUTH BROADWAY<br>WAYZATA, MINNESOTA 55391<br><br>PHONE: (952) 476-6000<br>FAX: (952) 476-0104<br><br>CONTACT: Daniel L. Schmidt, P.E.<br>EMAIL: schmidt@sathre.com | DEVELOPER<br>Jim Deanovic<br>5116 Mirror Lakes Drive<br>Edina, MN 55436<br><br>CONTACT: Jim Deanovic<br>PHONE: 612-799-5399<br>EMAIL: jimdeanovic@me.com |

78 SINGLE FAMILY LOTS

| LOT AREA | SIZE: | FRONT: | SIDE: | CORNER: | REAR |
|---|---|---|---|---|---|
| [illegible] | [illegible] AT FRONT SETBACKS | 25' | 5 | 15' | [illegible] |

| FIELD CREW | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| ALL | 01 | JML | 08-13-14 | REVISED SITE LAYOUT |
| DRAWN BY | | | | |
| DBP | | | | |
| CHECKED BY | | | | |
| DBP | | | | |
| DATE | | | | |
| 05/15/14 | | | | |

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

Dated this 15th day of May, 2014.

Daniel L. Schmidt

Daniel L. Schmidt, PLS Minnesota License No. 26147
schmidt@sathre.com

ENGINEERS SURVEYORS DESIGNERS PLANNERS

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

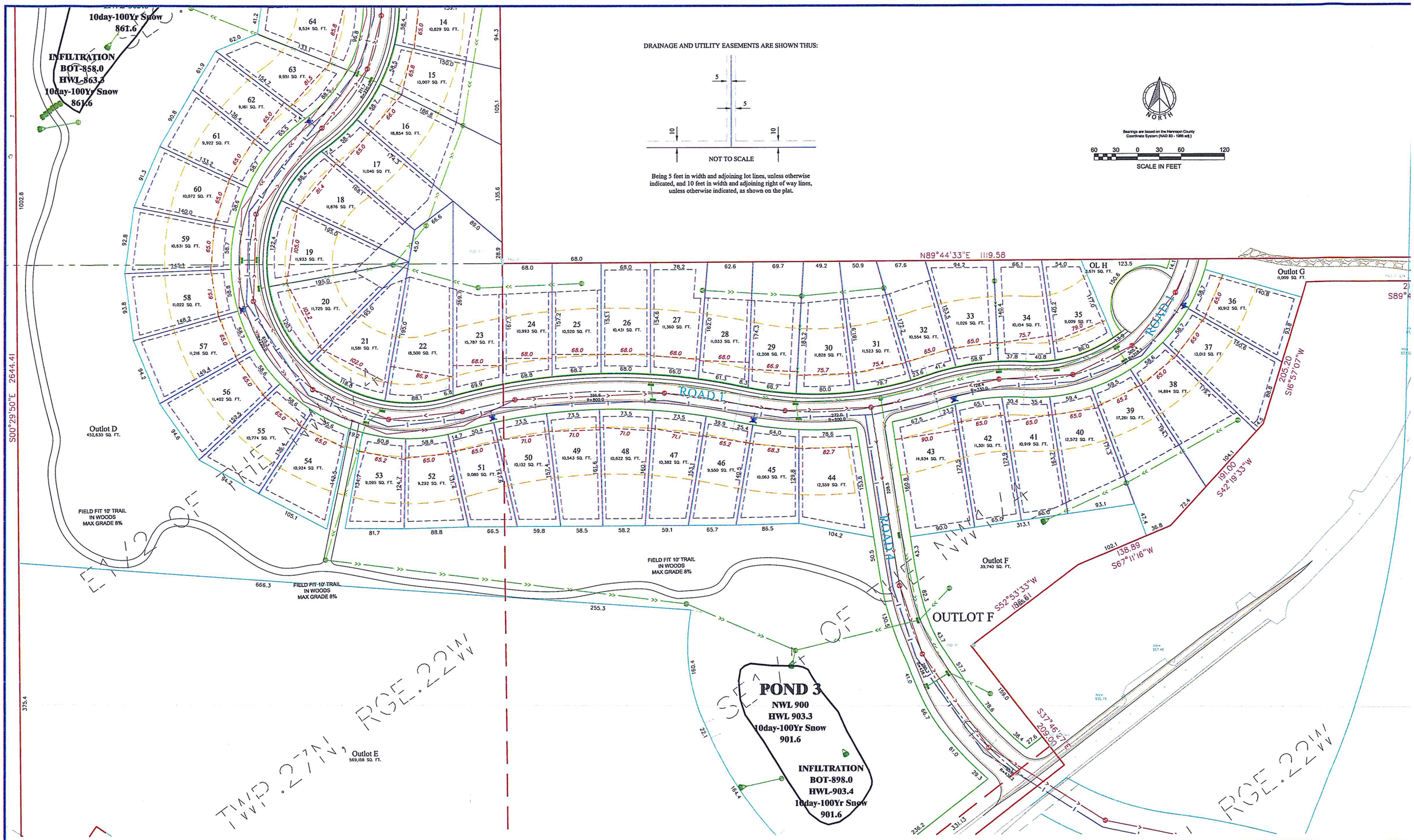
TWP.27 - RGE.22 - SEC.07
DAKOTA COUNTY

INVER GROVE HEIGHTS MINNESOTA

# PRELIMINARY PLAT OF BLACKSTONE VISTA

FILE NO. 1920-013

PP-1 / PP-3




| FIELD CREW | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| ALL | 01 | JML | 08-13-14 | REVISED SITE LAYOUT |
| DRAWN BY | | | | |
| DBP | | | | |
| CHECKED BY | | | | |
| DBP | | | | |
| DATE | | | | |
| 05/15/14 | | | | |

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

Dated this 15th day of May, 2014.

Daniel L. Schmidt

Daniel L. Schmidt, PLS Minnesota License No. 26147
schmidt@sathre.com

ENGINEERS SURVEYORS DESIGNERS PLANNERS

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

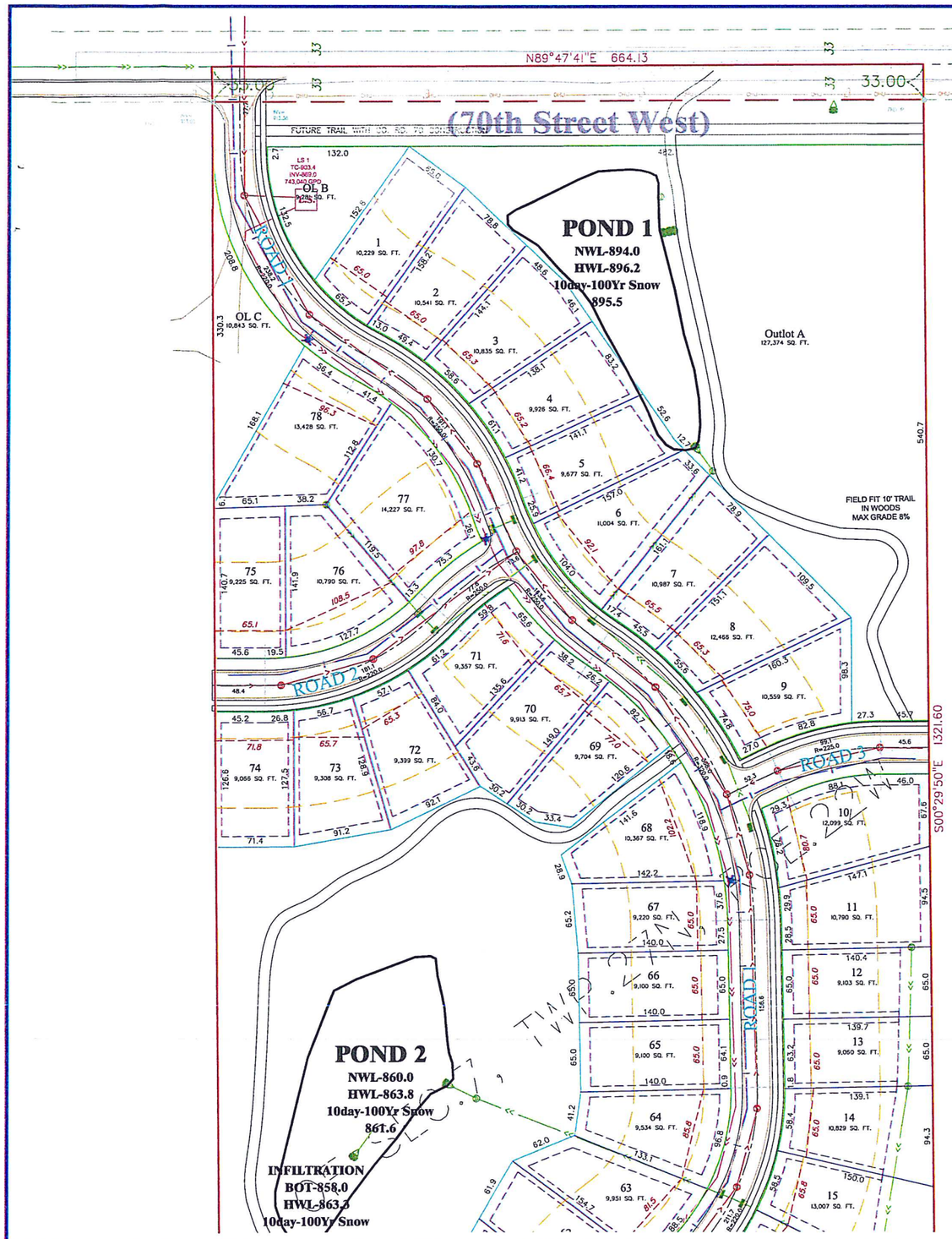
TWP.27 - RGE.22 - SEC.07
DAKOTA COUNTY

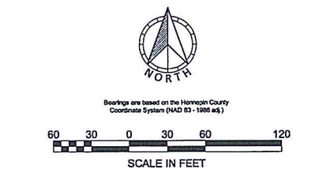
INVER GROVE HEIGHTS
MINNESOTA

PRELIMINARY PLAT OF BLACKSTONE VISTA

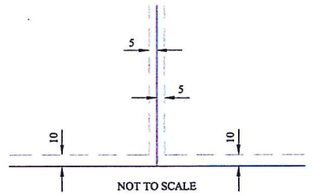
FILE NO.
1920-013

PP-2
PP-3




DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:




Being 5 feet in width and adjoining lot lines, unless otherwise indicated, and 10 feet in width and adjoining right of way lines, unless otherwise indicated, as shown on the plat.

| FIELD CREW | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| ALL | 01 | JML | 08-13-14 | REVISED SITE LAYOUT |
| DRAWN BY | | | | |
| DBP | | | | |
| CHECKED BY | | | | |
| DBP | | | | |
| DATE | | | | |
| 05/15/14 | | | | |

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

Dated this 15th day of May, 2014.

Daniel L. Schmidt, PLS — Minnesota License No. 26147

schmidt@sathre.com

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

TWP.27 - RGE.22 - SEC.07
DAKOTA COUNTY

INVER GROVE HEIGHTS
MINNESOTA

# PRELIMINARY PLAT OF BLACKSTONE VISTA

FILE NO. 1920-013

PP-3

PP-3

# BLACKSTONE VISTA

**Inver Grove Heights, Minnesota**

**Project #** 1920-013 **Date** August 12, 2014

**Prepared for:** Jim Deanovic

Contact:
tel:

**Prepared by:** Sathre-Bergquist, Inc.
150 Broadway Ave. S.
Wayzata, MN 55391
Contact: David Pemberton
tel: 952-476-6000

| LOT | GROSS AREA | | | | WETLAND AREA | | | | NET AREA | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10,229 | s.f. | 0.23 | acres | 0 | s.f. | 10,229 | s.f. | 0.23 | acres |
| 2 | 10,541 | s.f. | 0.24 | acres | 0 | s.f. | 10,541 | s.f. | 0.24 | acres |
| 3 | 10,835 | s.f. | 0.25 | acres | 0 | s.f. | 10,835 | s.f. | 0.25 | acres |
| 4 | 9,926 | s.f. | 0.23 | acres | 0 | s.f. | 9,926 | s.f. | 0.23 | acres |
| 5 | 9,677 | s.f. | 0.22 | acres | 0 | s.f. | 9,677 | s.f. | 0.22 | acres |
| 6 | 11,004 | s.f. | 0.25 | acres | 0 | s.f. | 11,004 | s.f. | 0.25 | acres |
| 7 | 10,987 | s.f. | 0.25 | acres | 0 | s.f. | 10,987 | s.f. | 0.25 | acres |
| 8 | 12,466 | s.f. | 0.29 | acres | 0 | s.f. | 12,466 | s.f. | 0.29 | acres |
| 9 | 10,559 | s.f. | 0.24 | acres | 0 | s.f. | 10,559 | s.f. | 0.24 | acres |
| 10 | 12,099 | s.f. | 0.28 | acres | 0 | s.f. | 12,099 | s.f. | 0.28 | acres |
| 11 | 10,790 | s.f. | 0.25 | acres | 0 | s.f. | 10,790 | s.f. | 0.25 | acres |
| 12 | 9,103 | s.f. | 0.21 | acres | 0 | s.f. | 9,103 | s.f. | 0.21 | acres |
| 13 | 9,060 | s.f. | 0.21 | acres | 0 | s.f. | 9,060 | s.f. | 0.21 | acres |
| 14 | 10,829 | s.f. | 0.25 | acres | 0 | s.f. | 10,829 | s.f. | 0.25 | acres |
| 15 | 13,007 | s.f. | 0.30 | acres | 0 | s.f. | 13,007 | s.f. | 0.30 | acres |
| 16 | 18,854 | s.f. | 0.43 | acres | 0 | s.f. | 18,854 | s.f. | 0.43 | acres |
| 17 | 11,040 | s.f. | 0.25 | acres | 0 | s.f. | 11,040 | s.f. | 0.25 | acres |
| 18 | 11,876 | s.f. | 0.27 | acres | 0 | s.f. | 11,876 | s.f. | 0.27 | acres |
| 19 | 11,933 | s.f. | 0.27 | acres | 0 | s.f. | 11,933 | s.f. | 0.27 | acres |
| 20 | 11,725 | s.f. | 0.27 | acres | 0 | s.f. | 11,725 | s.f. | 0.27 | acres |
| 21 | 11,581 | s.f. | 0.27 | acres | 0 | s.f. | 11,581 | s.f. | 0.27 | acres |
| 22 | 18,500 | s.f. | 0.42 | acres | 0 | s.f. | 18,500 | s.f. | 0.42 | acres |
| 23 | 15,787 | s.f. | 0.36 | acres | 0 | s.f. | 15,787 | s.f. | 0.36 | acres |
| 24 | 10,993 | s.f. | 0.25 | acres | 0 | s.f. | 10,993 | s.f. | 0.25 | acres |
| 25 | 10,520 | s.f. | 0.24 | acres | 0 | s.f. | 10,520 | s.f. | 0.24 | acres |
| 26 | 10,431 | s.f. | 0.24 | acres | 0 | s.f. | 10,431 | s.f. | 0.24 | acres |
| 27 | 11,360 | s.f. | 0.26 | acres | 0 | s.f. | 11,360 | s.f. | 0.26 | acres |
| 28 | 11,033 | s.f. | 0.25 | acres | 0 | s.f. | 11,033 | s.f. | 0.25 | acres |
| 29 | 12,208 | s.f. | 0.28 | acres | 0 | s.f. | 12,208 | s.f. | 0.28 | acres |
| 30 | 11,828 | s.f. | 0.27 | acres | 0 | s.f. | 11,828 | s.f. | 0.27 | acres |
| 31 | 11,523 | s.f. | 0.26 | acres | 0 | s.f. | 11,523 | s.f. | 0.26 | acres |
| 32 | 10,554 | s.f. | 0.24 | acres | 0 | s.f. | 10,554 | s.f. | 0.24 | acres |
| 33 | 11,026 | s.f. | 0.25 | acres | 0 | s.f. | 11,026 | s.f. | 0.25 | acres |
| 34 | 10,154 | s.f. | 0.23 | acres | 0 | s.f. | 10,154 | s.f. | 0.23 | acres |
| 35 | 9,009 | s.f. | 0.21 | acres | 0 | s.f. | 9,009 | s.f. | 0.21 | acres |
| 36 | 10,912 | s.f. | 0.25 | acres | 0 | s.f. | 10,912 | s.f. | 0.25 | acres |
| 37 | 13,012 | s.f. | 0.30 | acres | 0 | s.f. | 13,012 | s.f. | 0.30 | acres |
| 38 | 14,894 | s.f. | 0.34 | acres | 0 | s.f. | 14,894 | s.f. | 0.34 | acres |
| 39 | 17,261 | s.f. | 0.40 | acres | 0 | s.f. | 17,261 | s.f. | 0.40 | acres |
| 40 | 12,572 | s.f. | 0.29 | acres | 0 | s.f. | 12,572 | s.f. | 0.29 | acres |
| 41 | 10,919 | s.f. | 0.25 | acres | 0 | s.f. | 10,919 | s.f. | 0.25 | acres |
| 42 | 11,301 | s.f. | 0.26 | acres | 0 | s.f. | 11,301 | s.f. | 0.26 | acres |
| 43 | 14,934 | s.f. | 0.34 | acres | 0 | s.f. | 14,934 | s.f. | 0.34 | acres |
| 44 | 12,559 | s.f. | 0.29 | acres | 0 | s.f. | 12,559 | s.f. | 0.29 | acres |
| 45 | 10,063 | s.f. | 0.23 | acres | 0 | s.f. | 10,063 | s.f. | 0.23 | acres |
| 46 | 9,550 | s.f. | 0.22 | acres | 0 | s.f. | 9,550 | s.f. | 0.22 | acres |
| 47 | 10,382 | s.f. | 0.24 | acres | 0 | s.f. | 10,382 | s.f. | 0.24 | acres |
| 48 | 10,622 | s.f. | 0.24 | acres | 0 | s.f. | 10,622 | s.f. | 0.24 | acres |
| 49 | 10,543 | s.f. | 0.24 | acres | 0 | s.f. | 10,543 | s.f. | 0.24 | acres |
| 50 | 10,132 | s.f. | 0.23 | acres | 0 | s.f. | 10,132 | s.f. | 0.23 | acres |
| 51 | 9,080 | s.f. | 0.21 | acres | 0 | s.f. | 9,080 | s.f. | 0.21 | acres |
| 52 | 9,292 | s.f. | 0.21 | acres | 0 | s.f. | 9,292 | s.f. | 0.21 | acres |
| 53 | 9,095 | s.f. | 0.21 | acres | 0 | s.f. | 9,095 | s.f. | 0.21 | acres |
| 54 | 10,924 | s.f. | 0.25 | acres | 0 | s.f. | 10,924 | s.f. | 0.25 | acres |
| 55 | 10,774 | s.f. | 0.25 | acres | 0 | s.f. | 10,774 | s.f. | 0.25 | acres |
| 56 | 11,402 | s.f. | 0.26 | acres | 0 | s.f. | 11,402 | s.f. | 0.26 | acres |
| 57 | 11,216 | s.f. | 0.26 | acres | 0 | s.f. | 11,216 | s.f. | 0.26 | acres |
| 58 | 11,022 | s.f. | 0.25 | acres | 0 | s.f. | 11,022 | s.f. | 0.25 | acres |
| 59 | 10,631 | s.f. | 0.24 | acres | 0 | s.f. | 10,631 | s.f. | 0.24 | acres |
| 60 | 10,072 | s.f. | 0.23 | acres | 0 | s.f. | 10,072 | s.f. | 0.23 | acres |
| 61 | 9,922 | s.f. | 0.23 | acres | 0 | s.f. | 9,922 | s.f. | 0.23 | acres |
| 62 | 9,161 | s.f. | 0.21 | acres | 0 | s.f. | 9,161 | s.f. | 0.21 | acres |
| 63 | 9,951 | s.f. | 0.23 | acres | 0 | s.f. | 9,951 | s.f. | 0.23 | acres |
| 64 | 9,534 | s.f. | 0.22 | acres | 0 | s.f. | 9,534 | s.f. | 0.22 | acres |
| 65 | 9,100 | s.f. | 0.21 | acres | 0 | s.f. | 9,100 | s.f. | 0.21 | acres |
| 66 | 9,100 | s.f. | 0.21 | acres | 0 | s.f. | 9,100 | s.f. | 0.21 | acres |
| 67 | 9,220 | s.f. | 0.21 | acres | 0 | s.f. | 9,220 | s.f. | 0.21 | acres |
| 68 | 10,367 | s.f. | 0.24 | acres | 0 | s.f. | 10,367 | s.f. | 0.24 | acres |
| 69 | 9,704 | s.f. | 0.22 | acres | 0 | s.f. | 9,704 | s.f. | 0.22 | acres |
| 70 | 9,913 | s.f. | 0.23 | acres | 0 | s.f. | 9,913 | s.f. | 0.23 | acres |
| 71 | 9,357 | s.f. | 0.21 | acres | 0 | s.f. | 9,357 | s.f. | 0.21 | acres |
| 72 | 9,399 | s.f. | 0.22 | acres | 0 | s.f. | 9,399 | s.f. | 0.22 | acres |
| 73 | 9,308 | s.f. | 0.21 | acres | 0 | s.f. | 9,308 | s.f. | 0.21 | acres |
| 74 | 9,066 | s.f. | 0.21 | acres | 0 | s.f. | 9,066 | s.f. | 0.21 | acres |
| 75 | 9,225 | s.f. | 0.21 | acres | 0 | s.f. | 9,225 | s.f. | 0.21 | acres |
| 76 | 10,790 | s.f. | 0.25 | acres | 0 | s.f. | 10,790 | s.f. | 0.25 | acres |
| 77 | 14,227 | s.f. | 0.33 | acres | 0 | s.f. | 14,227 | s.f. | 0.33 | acres |
| 78 | 13,428 | s.f. | 0.31 | acres | 0 | s.f. | 13,428 | s.f. | 0.31 | acres |
| TOTAL | 866,986 | s.f. | 19.90 | acres | 0 | s.f. | 866,986 | s.f. | 19.90 | acres |
| **OUTLOTS** | | | | | | | | | | |
| A | 127,347 | s.f. | 2.92 | acres | 0 | s.f. | 127,347 | s.f. | 2.92 | acres |
| B | 9,281 | s.f. | 0.21 | acres | 0 | s.f. | 9,281 | s.f. | 0.21 | acres |
| C | 10,843 | s.f. | 0.25 | acres | 0 | s.f. | 10,843 | s.f. | 0.25 | acres |
| D | 452,630 | s.f. | 10.39 | acres | 0 | s.f. | 452,630 | s.f. | 10.39 | acres |
| E | 569,158 | s.f. | 13.07 | acres | 0 | s.f. | 569,158 | s.f. | 13.07 | acres |
| F | 39,740 | s.f. | 0.91 | acres | 0 | s.f. | 39,740 | s.f. | 0.91 | acres |
| G | 11,009 | s.f. | 0.25 | acres | 0 | s.f. | 11,009 | s.f. | 0.25 | acres |
| H | 3,671 | s.f. | 0.08 | acres | 0 | s.f. | 3,671 | s.f. | 0.08 | acres |
| TOTAL | 1,223,679 | s.f. | 28.09 | acres | 0 | s.f. | 1,223,679 | s.f. | 28.09 | acres |
| **R/W** | | | | | | | | | | |
| TOTAL | 494,249 | s.f. | 11.35 | acres | 0 | s.f. | 494,249 | s.f. | 11.35 | acres |
| **TOTAL** | 2,584,914 | s.f. | 59.34 | acres | 0 | s.f. | 2,584,914 | s.f. | 59.34 | acres |

GP3

GP2

GP4

GP5

## LOCATION MAP

| PREPARED BY | PREPARED FOR |
|---|---|
| ENGINEER<br>SATHRE-BERGQUIST, INC.<br>150 SOUTH BROADWAY<br>WAYZATA, MINNESOTA 55391<br><br>PHONE: (952) 476-6000<br>FAX: (952) 476-0104<br><br>CONTACT DANIEL L. SCHMIDT, P.E.<br>EMAIL: SCHMIDT@SATHRE.COM | DEVELOPER<br>JIM DEANOVIC<br>5116 MIRROR LAKES DRIVE<br>EDINA, MN 55436<br><br>CONTACT<br>PHONE: (612) 799-5399 |

## SYMBOL LEGEND

| EXISTING | DESCRIPTION | PROPOSED |
|---|---|---|
| 958 | MINOR CONTOUR | 972 |
| 960 | MAJOR CONTOUR | 970 |
| | LOT LINE | |
| | BUILDING SETBACK BOUNDARY | |
| | PARCEL BOUNDARY LINE | |
| | CURB AND GUTTER | |
| | RIGHT-OF-WAY | |
| | STANDARD SILT FENCE | |
| N/A | SILT FENCE BOX | |
| N/A | ORANGE CONSTRUCTION FENCE | |
| EO | EMERGENCY OVERFLOW SWALE (EOS) | |
| | CATCH BASIN | |
| | STORM SEWER MANHOLE | |
| | FLARED END SECTION | |
| | WATERMAIN LINE | |
| | SANITARY LINE | |

NORTH

100 50 0 50 100 200
SCALE IN FEET

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| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| BASE SCHMIDT | 01 | DSG | 08/09/14 | PRELIMINARY REVISIONS |
| DRAWN BY | 02 | DLS | 07/07/14 | PRELIMINARY REVISIONS |
| CAW | 03 | DLS | 08/13/14 | PRELIMINARY REVISIONS |
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| DLS | | | | |
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Daniel L. Schmidt

Name, P.E.

Date: 05/18/14 Lic. No. 26147

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

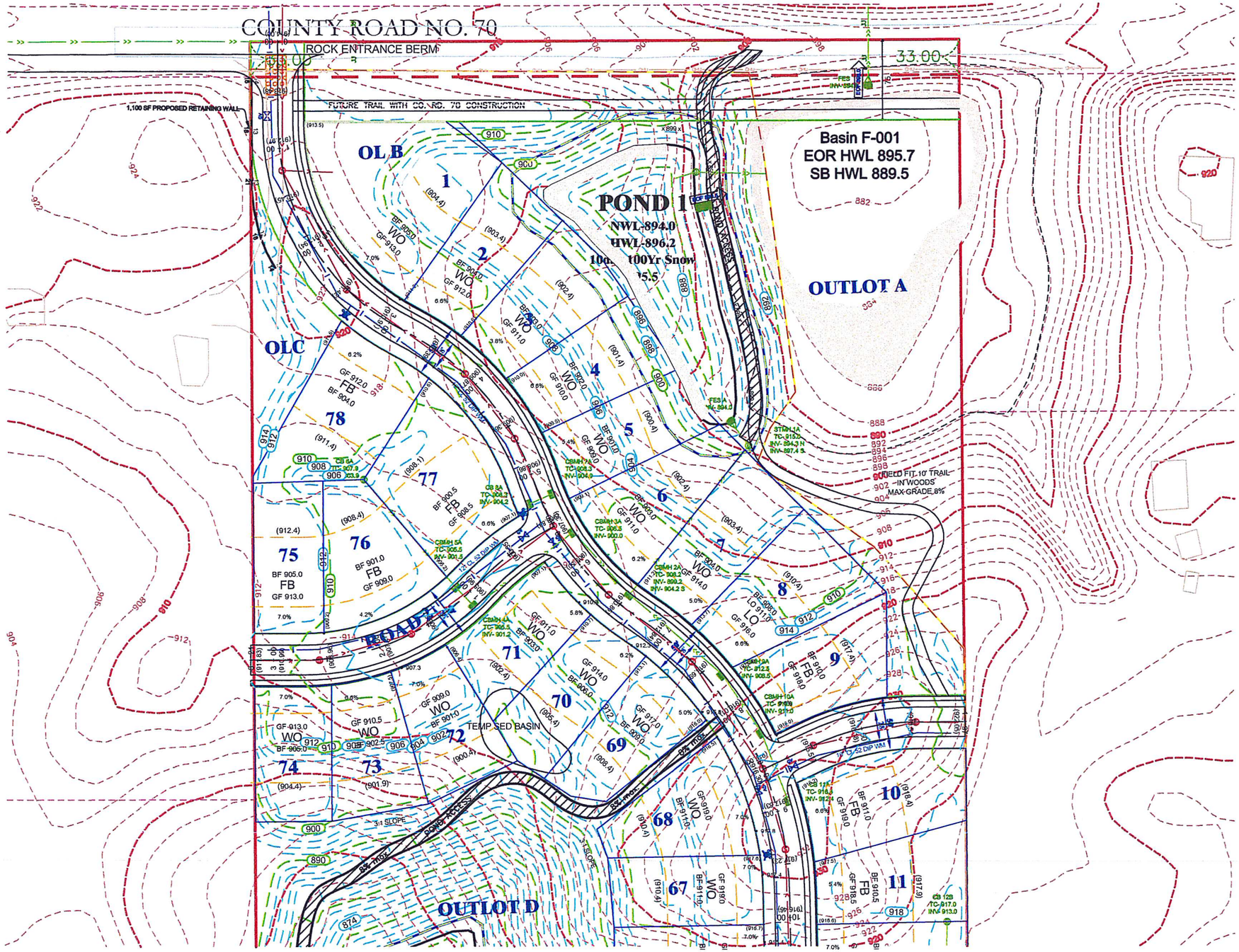
CITY PROJECT NO.
—

INVER GROVE HEIGHTS, MINNESOTA

# PRELIMINARY GRADING PLAN
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO. 1920-013

GP1 / GP6

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| CAW | 03 | DLS | 08/13/14 | PRELIMINARY REVISIONS |
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CITY PROJECT NO.
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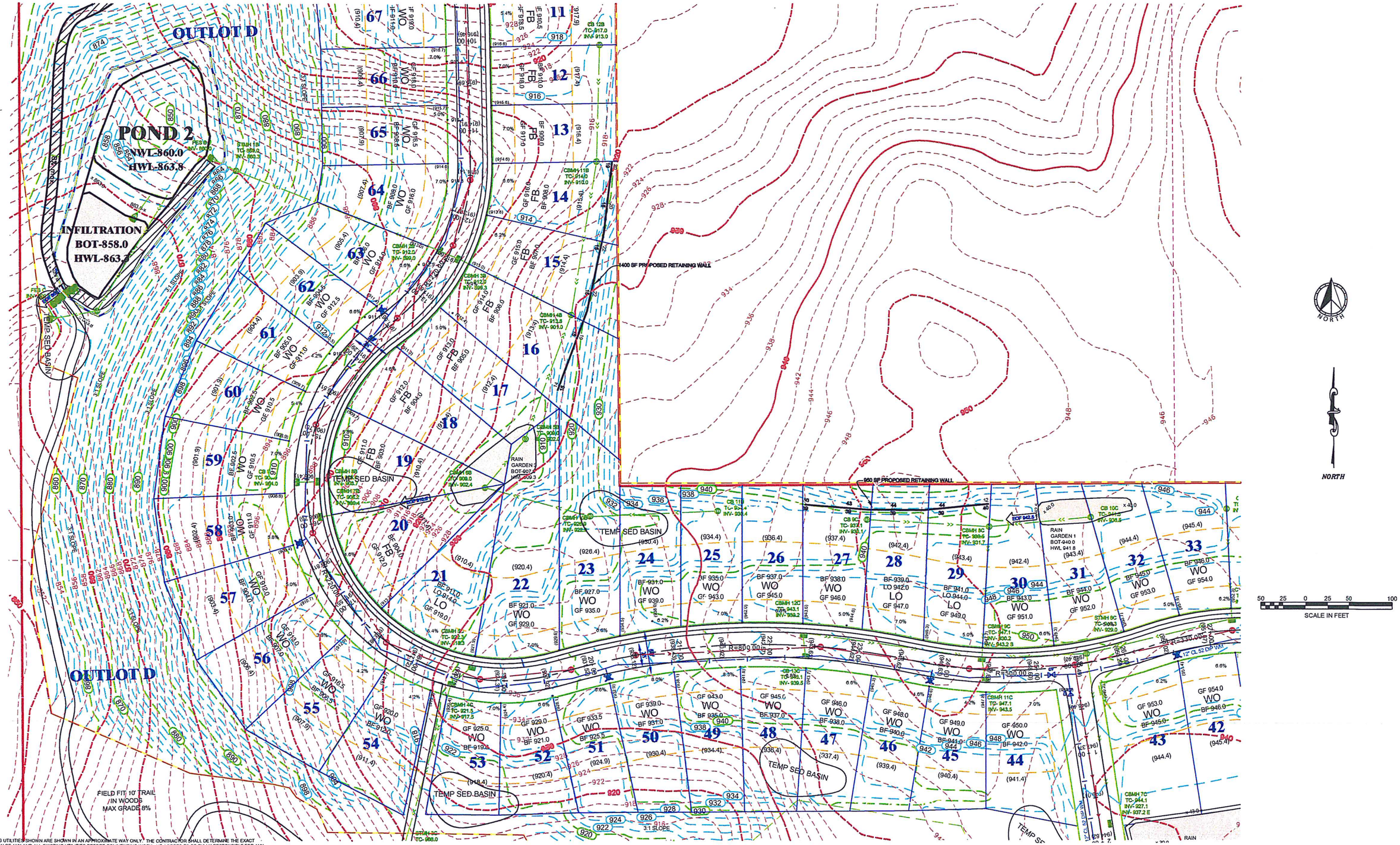
INVER GROVE HEIGHTS, MINNESOTA

PRELIMINARY GRADING PLAN
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO.
1920-013

GP2
GP6

BLACKSTONE VISTA 1920-013

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BLACKSTONE VISTA
JIM DEANOVIC

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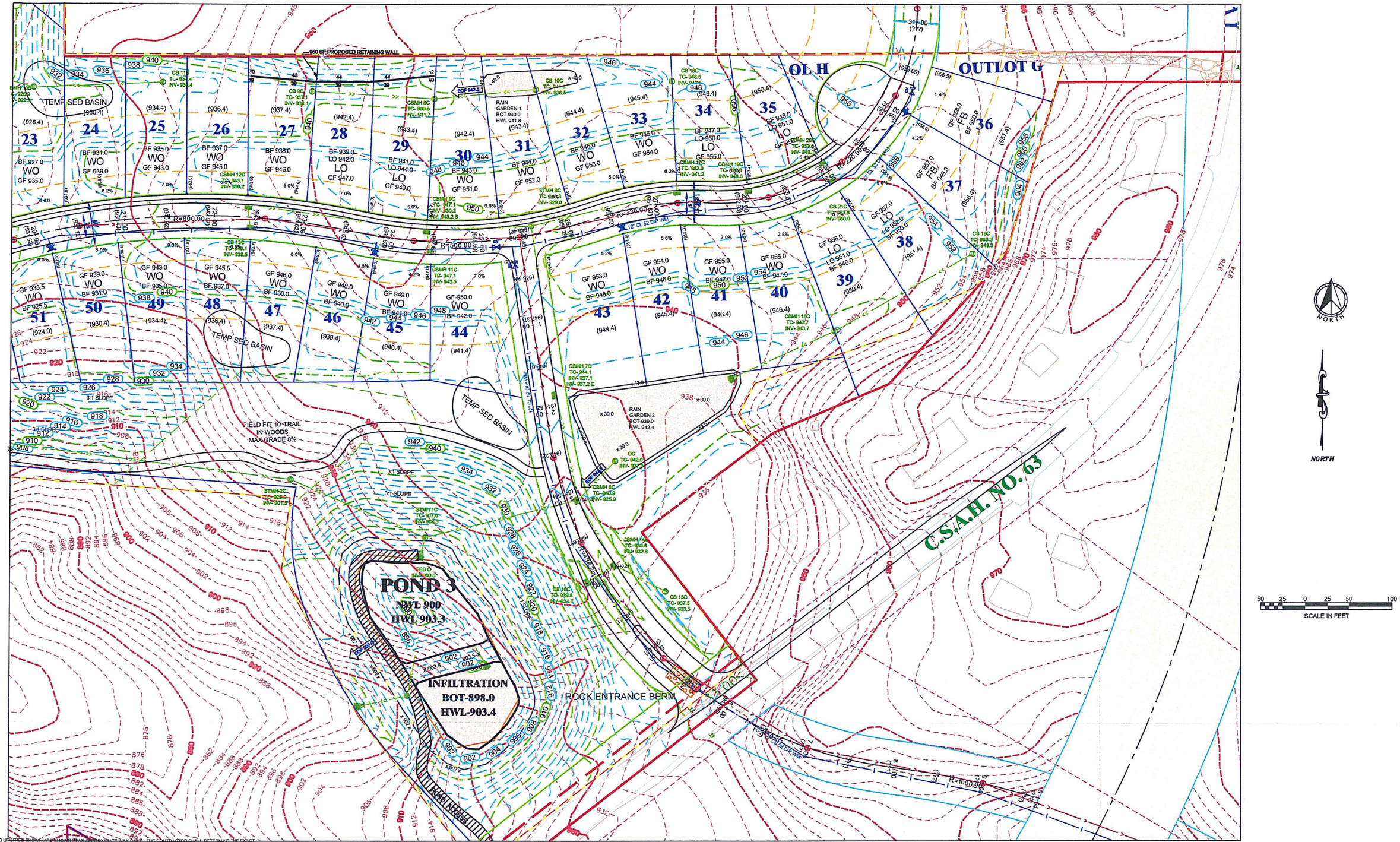
GP3 / GP6

BLACKSTONE VISTA 1920-013

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INVER GROVE HEIGHTS, MINNESOTA

PRELIMINARY GRADING PLAN

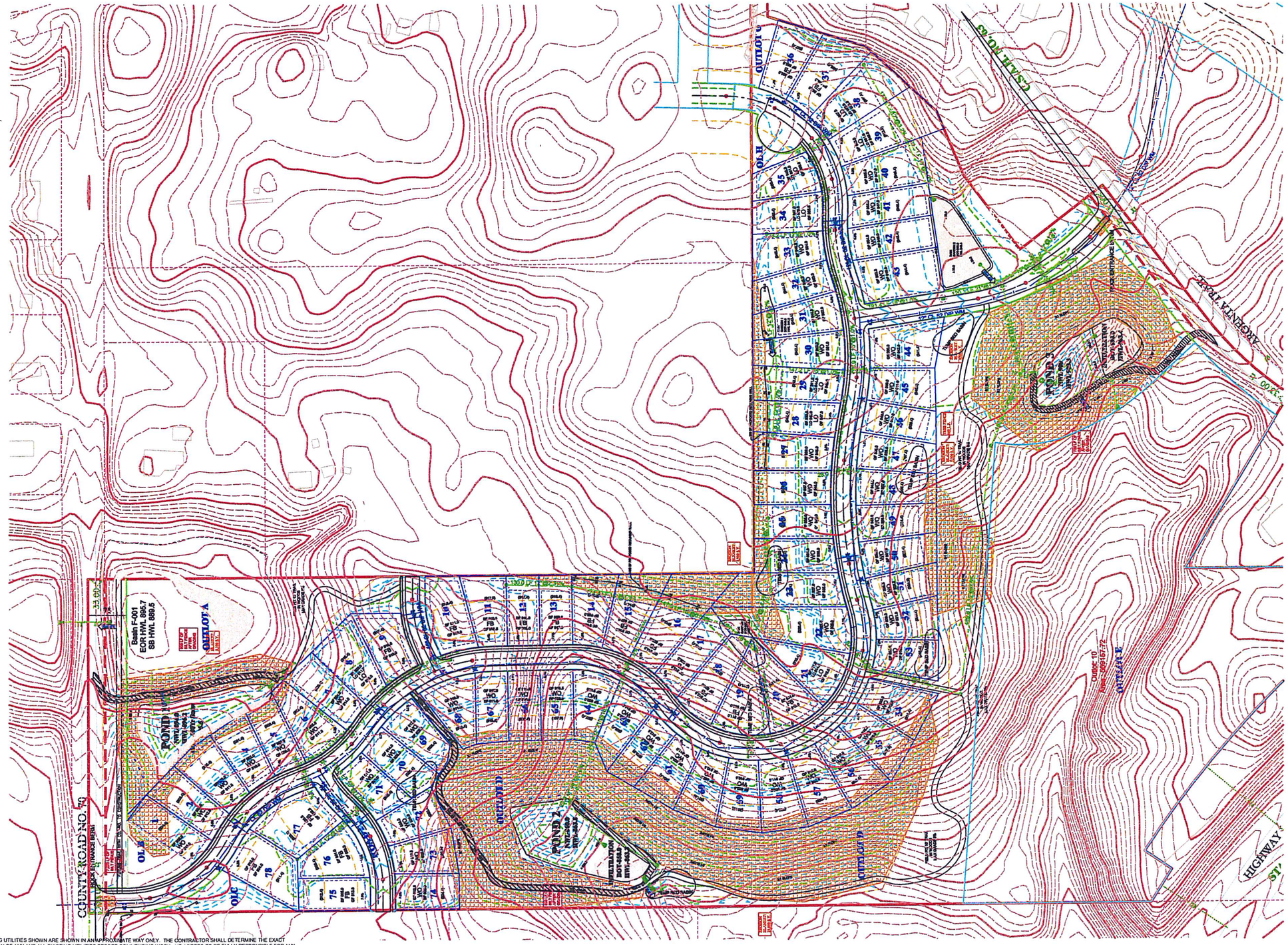
BLACKSTONE VISTA

JIM DEANOVIC

FILE NO. 1920-013

GP4 / GP6

BLACKSTONE VISTA 1920-013

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| DATE | | | | |
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Daniel L Schmidt

Name, P.E.

Date: 05/18/14 Lic. No. 26147

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN 55391 (952) 476-6000

CITY PROJECT NO.
---
INVER GROVE HEIGHTS, MINNESOTA

# PRELIMINARY EROSION CONTROL PLAN
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO.
1920-013
GP5 / GP6

BLACKSTONE VISTA 1920-013

CONSTRUCTION NOTES

1. INSTALL SILT FENCE AS SHOWN ON PLAN, AS REQUIRED BY THE CITY OF INVER GROVE HEIGHTS OR DIRECTED BY THE ENGINEER.

2. THE WATER QUALITY POND MUST BE EXCAVATED AT THE BEGINNING OF GRADING OPERATIONS TO PROVIDE TEMPORARY STORM WATER DETENTION DURING CONSTRUCTION. SAND,CLAYS, AND SILTS MUST BE REMOVED FROM THE POND AS NECESSARY DURING CONSTRUCTION AND AT THE COMPLETION OF THE PROJECT. REFER TO SECTION 2.2 OF THE STORM WATER POLLUTION PREVENTION PLAN.

3. BEGIN GRADING, INSTALL PERFORATED RISER PIPE IN PONDS WHEN POND GRADING IS COMPLETE. TEMPORARY DRAINAGE PIPE SHALL BE USED FOR INTERMEDIATE DRAINAGE DURING THE CONSTRUCTION PERIOD AS NECESSARY AND DIRECTED BY THE ENGINEER. THE TEMPORARY DRAINAGE PIPES SHALL BE INCIDENTIAL TO THE GRADING OPERATIONS. INSTALL SILT FENCE AROUND EXCAVATED POND, AFTER THE AS-BUILT ELEVATIONS HAVE BEEN VERIFIED BY THE ENGINEER.

4. INSPECT POND, SILT FENCE, AND ROCK ENTRANCE BERM AFTER ALL RAINFALL EVENTS AS REQUIRED BY THE NPDES PERMIT.

5. LINE ALL PONDS WITH A MINIMUM 3" ORGANIC SOILS & SEED SLOPES BETWEEN NWL AND 100 YR HWL WITH A WATER TOLERANT MIX. (OR AS NOTED)

6. REMOVE PERFORATED RISER PIPE WHEN STORM SEWER AND OUTLET STRUCTURE FOR PONDS ARE INSTALLED (INCIDENTAL).

7. POND - 10:1 BENCH (1 FOOT) THEN 4:1 MAX

8. LO & WO FINISHED PADS SHALL BE FLATTER THAN 3:1. ALL OTHER SLOPES 4:1 MAX (UNLESS NOTED)

9. RESTORATION - ACRES PLUS WETLAND RESTORATION AREAS
   A. RESTORE ALL DISTURBED AREAS WITH 4" TO 6" OF TOPSOIL, OR EXISTING ON-SITE ORGANIC MTRL.
   B. SEED ALL DISTURBED AREAS WITH MNDOT MIXTURE #250 AT A RATE OF 100 LBS./ACRE AND FERTILIZE WITH 20-0-10 AT 100 LBS./ACRE. (UNLESS OTHERWISE NOTED) WETLAND RESTORATION - BWSR SEED MIX FOR WETLANDS (AS NOTED IN THE WETLAND REPLACEMENT PLAN APPLICATION)
   C. ONLY PHOSPHOROUS FREE FERTILIZER IS TO BE USED ON SITE.
   D. MULCH WITH TYPE 1 AT A RATE OF 2 TONS/ACRE AND DISC ANCHOR IMMEDIATELY AFTER PLACEMENT. USE WOODFIBER BLANKET ON ALL SLOPES 3:1 (FT) OR GREATER.
   E. PLACE APPROVED STORM SEWER INLET PROTECTION IN OR AROUND ALL STORM SEWER INLETS AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.
   F. MAINTAIN ALL SILT FENCE UNTIL TURF HAS BEEN ESTABLISHED.
   G. RESTORATION WORK WILL BE COMPLETED WITHIN 72 HOURS OF GRADING COMPLETION.

10. SILT FENCE, BEFORE GRADING -7,200 LF
    AFTER GRADING - 2,500 LF

11. EROSION CONSTROL BLANKET - 44,300 SY

12. ESTIMATED EXCAVATION CY - 240,000 CY

GENERAL NOTES:

1. THE GRADING CONTRACTOR IS RESPONSIBLE FOR ALL STORM WATER INSPECTIONS ACCORDING TO THE MPCA STORM WATER PERMIT. THIS INCLUDES BOTH WEEKLY INSPECTIONS AND INSPECTIONS DONE AFTER A 0.5" RAIN EVENT. A COPY OF THE INSPECTION REPORT MUST BE EMAILED TO THE ENGINEER AND DEVELOPER ON A WEEKLY BASIS.

2. THE CONTRACTOR SHALL PLACE INLET PROTECTION DEVICES FOR ALL STORM SEWER INLETS(EXISTING AND PROPOSED) AND MAINTAIN THEM AS AN EFFECTIVE SILT CONTROL DEVICE. INLET PROTECTION SHALL BE REMOVED WHEN RESTORATION HAS BEEN ESTABLISHED.

3. ALL RETAINING WALLS WILL REQUIRE A STRUCTURAL DESIGN, A BUILDING PERMIT & A FINAL INSPECTION REPORT.(IF APPLICABLE)

4. A 1"-2" CRUSHED ROCK ENTRANCE BERM SHALL BE PLACED AT THE SITE ENTRANCE, TO REPLACE SILT FENCE, AND MINIMIZE EROSION ON TO THE STREETS. THE ROCK BERMS SHALL BE THE WIDTH OF THE ENTRANCE AND 2 FEET HIGH WITH 4:1 SLOPES.
(SEE DETAIL)

5. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM THE BUILDING PAD AND STREET AREAS THROUGHOUT CONSTRUCTION.

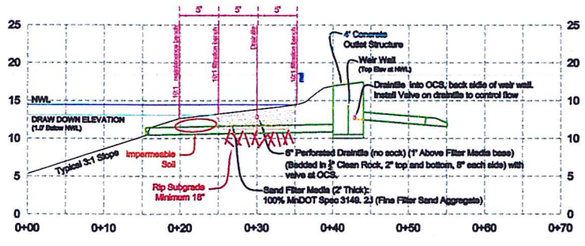
6. THE CONTRACTOR SHALL ATTEMPT TO PREVENT SOIL MATERIALS FROM LEAVING THE SITE BY EROSION AND VEHICLE WHEEL TRACKING. HE SHALL BE RESPONSIBLE FOR CLEANING OF STREET, BOULEVARD AND UTILITY FACILITIES THAT RECEIVE ANY ERODED OR TRACKED SOIL MATERIAL OR OTHER CONSTRUCTION DEBRIS OR MATERIAL. THE GRADING CONTRACTOR WILL BE REQUIRED TO PROVIDE STREET SWEEPING ON HUNTER DRIVE DURING THE GRADING OPERTIONS, IF REQUIRED.

7. EXISTING UTILITIES SHOWN ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES ARISING OUT OF HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.

ON-SITE BMPS

1. NURP POND - NURP POND WILL BE UTILIZED TO MEET OR EXCEED QUALITY AND RATE CONTROL REQUIREMENTS.
2. SKIMMERS - THE POND OUTLET STRUCTURE INCLUDES A SUBMERGED INLET PIPE TO ALLOW SKIMMING.(Utility Contractor)
3. RIP RAP - RIP RAP WILL BE UTILIZED AT ALL APRONS FOR ENERGY DISSIPATION AND PROVIDE SEDIMENT CONTROL- (Utility Contractor)
4. INLET PROTECTION - INLET PROTECTION WILL BE INSTALLED AND MAINTAINED IN ALL CATCH BASINS & REAR YARD STRUCTURES. (WIMCO'S OR EQUAL)-(Utility Contractor)
5. SLOPE STABILIZATION - SILT FENCE WILL BE INSTALLED ALONG DOWN GRADIENT GRADING LIMITS AND WOODFIBER BLANKET WILL BE UTILIZED ON ALL SLOPES 3:1 OR GREATER TO PROVIDE ADEQUATE SLOPE STABILIZATION. (Grading Contractor)
6. BIOROLLS - BIOROLLS WILL BE INSTALLED ALONG REAR YARD SWALES TO PREVENT SEDIMENT FROM REACHING THE NURP POND AND ULTIMATELY DOWNSTREAM WETLANDS(Grading Contractor).
7. INFILTRATION AREAS - INFILTRATION AREAS WILL BE UTILIZED TO REDUCE THE AMOUNT OF RUNOFF FROM THE INCREASED HARDSURFACE. (Grading Contractor)
8. STREET SWEEPING - STREET SWEEPING WILL BE DONE A MINIMUM OF ONCE PER WEEK OR AS NEEDED TO MINIMIZE DUST CONTROL AND VEHICLE TRACKING.(Grading and Utility Contractor)
10. PHOSPHOROUS FREE FERTILIZER - PHOSPHORUS FREE FERTILIZER WILL ALSO BE USED ON SITE.-
11. ALL CONCRETE WASHOUT WASTE PRODUCED SHALL BE REMOVED FROM THE SITE. (Utility Contractor)

## TYPICAL FILTRATION BENCH DETAIL

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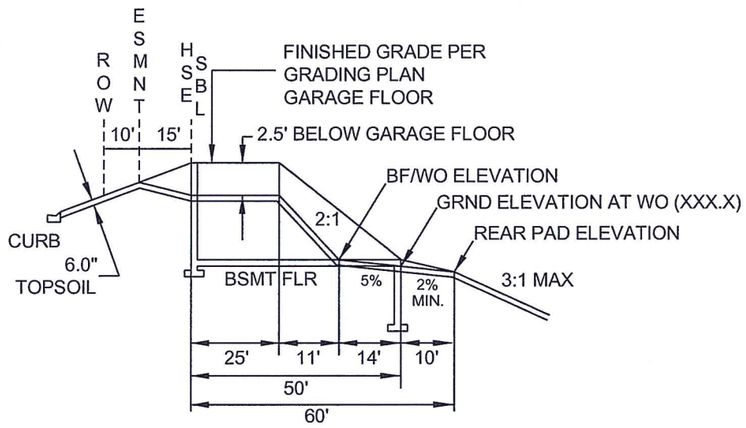
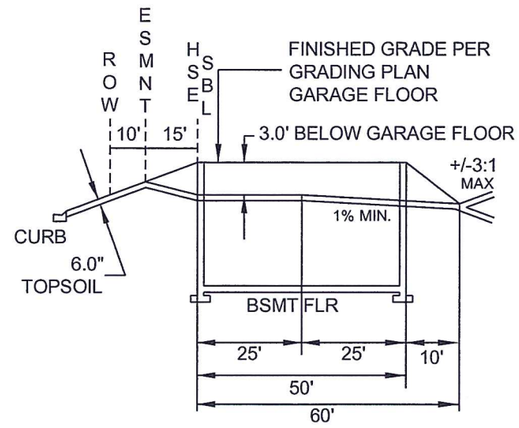
# HOLDDOWN DETAILS



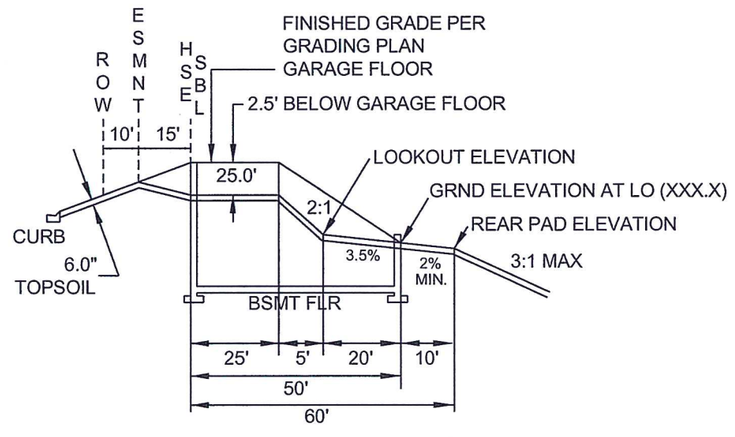

60' PAD
(UNLESS OTHERWISE NOTED)

## WALKOUT (WO)




ENSURE FULL BASEMENT PADS ARE DRAINED
60' PAD
(UNLESS OTHERWISE NOTED)

## FULL BASEMENT (FB)




60' PAD
(UNLESS OTHERWISE NOTED)

## LOOKOUT (LO)

NOTES:
1. GRADE (999.0) BEHIND EACH HOMESITE IS THE LOW GROUND ELEVATION AND PROPOSED TOP OF TOPSOIL, SUBGRADE SHALL BE DOWN 0.50 FEET.
2. ESTABLISH FINISH GRADE AT ALL 10' FRONT YARD UTILITY EASEMENT LOCATIONS.
3. THESE DETAILS REFERENCE A 8' POURED FOUNDATION WALL, AND A 0.7' DROP FROM REAR TOP FOUNDATION TO GROUND ELEVATION FOR ALL LOOKOUTS AND WALKOUTS.

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150 SOUTH BROADWAY WAYZATA, MN 55391 (952) 476-6000

CITY PROJECT NO.
—
INVER GROVE HEIGHTS, MINNESOTA

PRELIMINAY GRADING NOTES AND HOLD DOWN DETAILS
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO.
1920-013
GP6
GP6

BLACKSTONE VISTA 1920-013

BLACKSTONE VISTA 1920-013

COUNTY ROAD NO. 70

FUTURE TRAIL SOUTH CO. RD. 70 CONSTRUCTION

# UTILITY 2

# UTILITY 3

# UTILITY 4

# VV UTILITY 5,6 VV

POND 1
NWL-894.0
HWL-896.2
Max. 100Yr Snow
895.5

POND 2
NWL-860.0
HWL-863.8

INFILTRATION
BOT-858.0
HWL-863.3

OUTLOT A

OUTLOT D

OUTLOT G

OL H

OLC

FIELD FIT 10' TRAIL IN WOODS MAX GRADE 8%

FUTURE HIGHWAY RIGHT OF WAY

MIDDLETOWN TRAIL

| PREPARED BY | PREPARED FOR |
|---|---|
| ENGINEER<br>SATHRE-BERGQUIST, INC.<br>150 SOUTH BROADWAY<br>WAYZATA, MINNESOTA 55391<br><br>PHONE: (952) 476-6000<br>FAX: (952) 476-0104<br><br>CONTACT : DANIEL L. SCHMIDT, P.E.<br>EMAIL: SCHMIDT@SATHRE.COM | DEVELOPER<br>JIM DEANOVIC<br>3116 MIRROR LAKES DRIVE<br>EDINA, MN 55436<br><br>CONTACT:<br>PHONE: (612) 799-5399 |

## SYMBOL LEGEND

| EXISTING | DESCRIPTION | PROPOSED |
|---|---|---|
| 958 | MINOR CONTOUR | 972 |
| 960 | MAJOR CONTOUR | 970 |
| | LOT LINE | |
| | BUILDING SETBACK BOUNDARY | |
| | PARCEL BOUNDARY LINE | |
| | CURB AND GUTTER | |
| | RIGHT-OF-WAY | |
| | STANDARD SILT FENCE | |
| N/A | SILT FENCE BOX | |
| N/A | ORANGE CONSTRUCTION FENCE | |
| EOF | EMERGENCY OVERFLOW SWALE (MAJ) | |
| | CATCH BASIN | |
| | STORM SEWER MANHOLE | |
| | FLARED END SECTION | |
| | WATERMAIN LINE | |
| | SANITARY LINE | |

NORTH

100 50 0 50 100 200
SCALE IN FEET

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CITY PROJECT NO.
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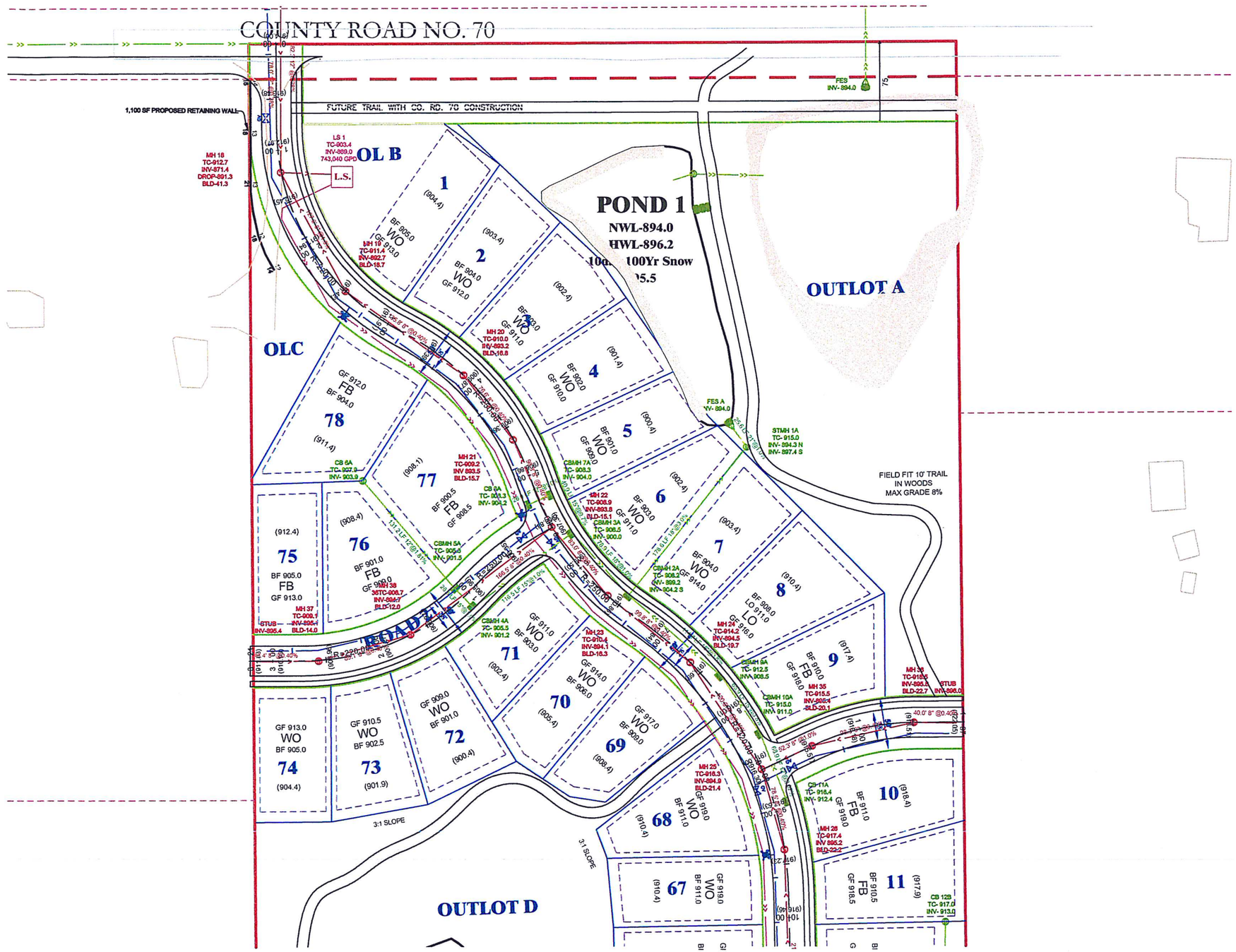
INVER GROVE HEIGHTS, MINNESOTA

PRELIMINARY UTILITY PLAN
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO.
1920-013
UP1 / UP6




BLACKSTONE VISTA 1920-013

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CITY PROJECT NO.
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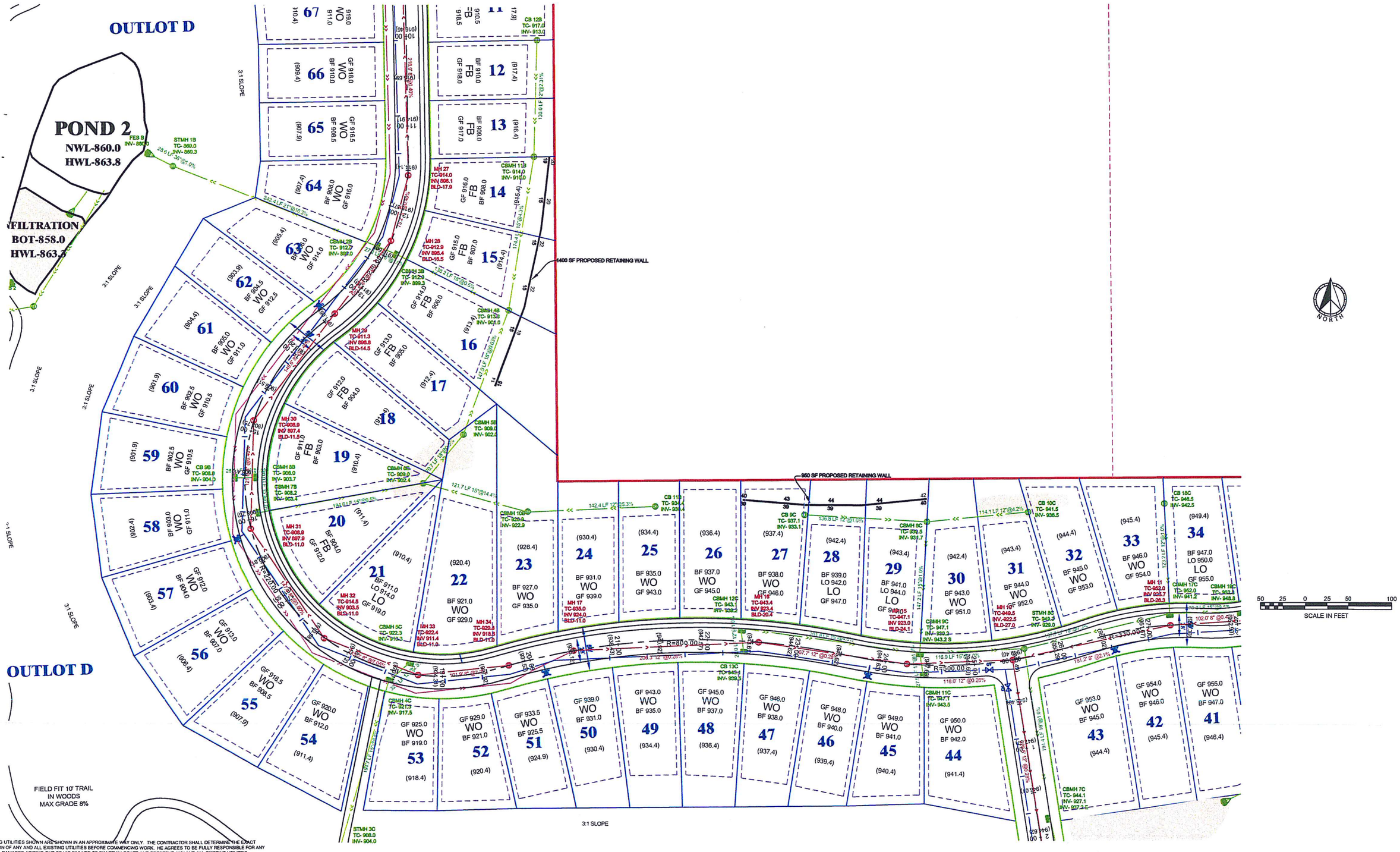
INVER GROVE HEIGHTS, MINNESOTA

# PRELIMINARY UTILITY PLAN
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO.
1920-013
UP2
UP6

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INVER GROVE HEIGHTS, MINNESOTA

PRELIMINARY UTILITY PLAN

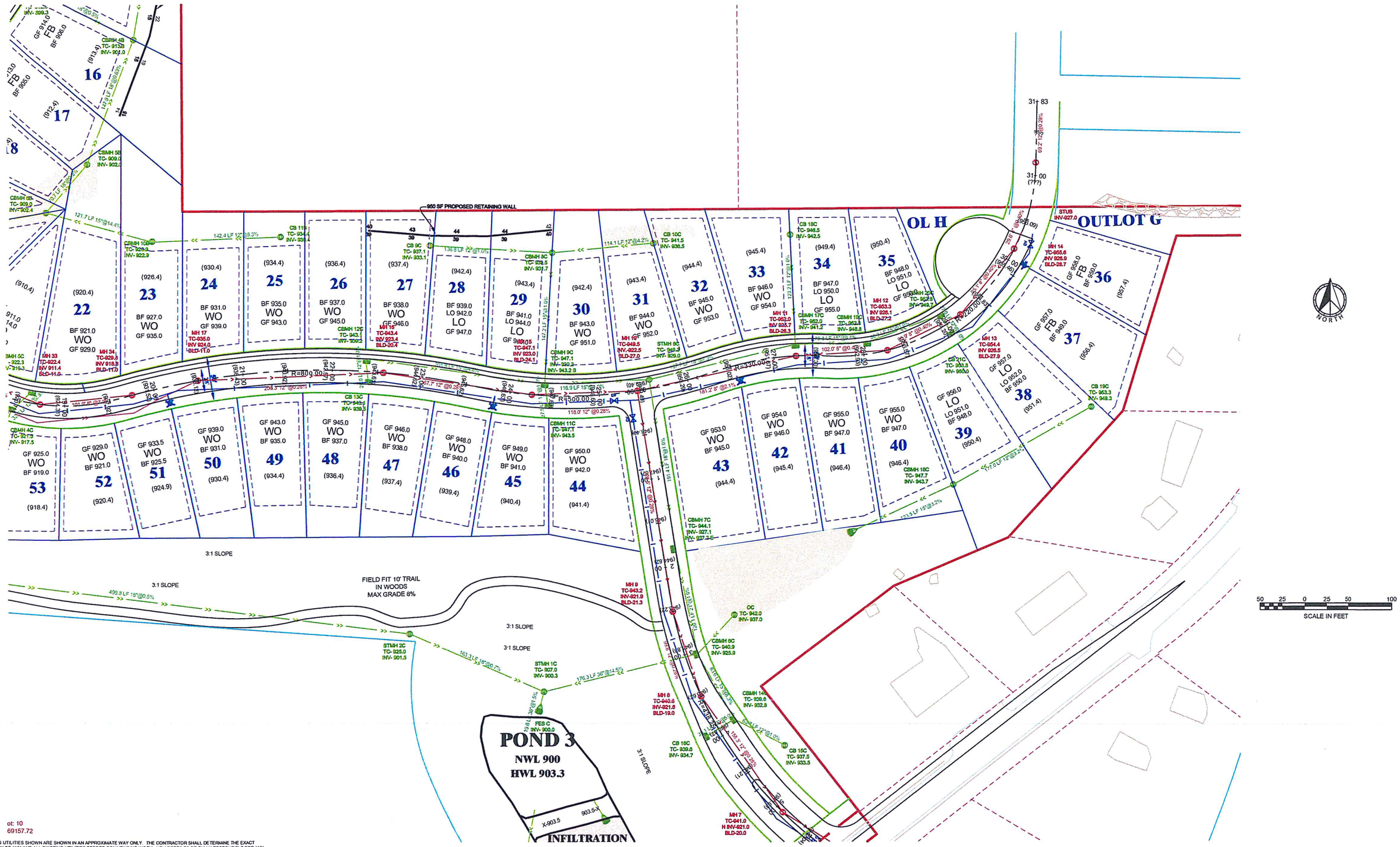
BLACKSTONE VISTA

JIM DEANOVIC

FILE NO. 1920-013

UP3 / UP6

BROCKTON EAST 5401-661

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PRELIMINARY UTILITY PLAN
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JIM DEANOVIC

FILE NO.
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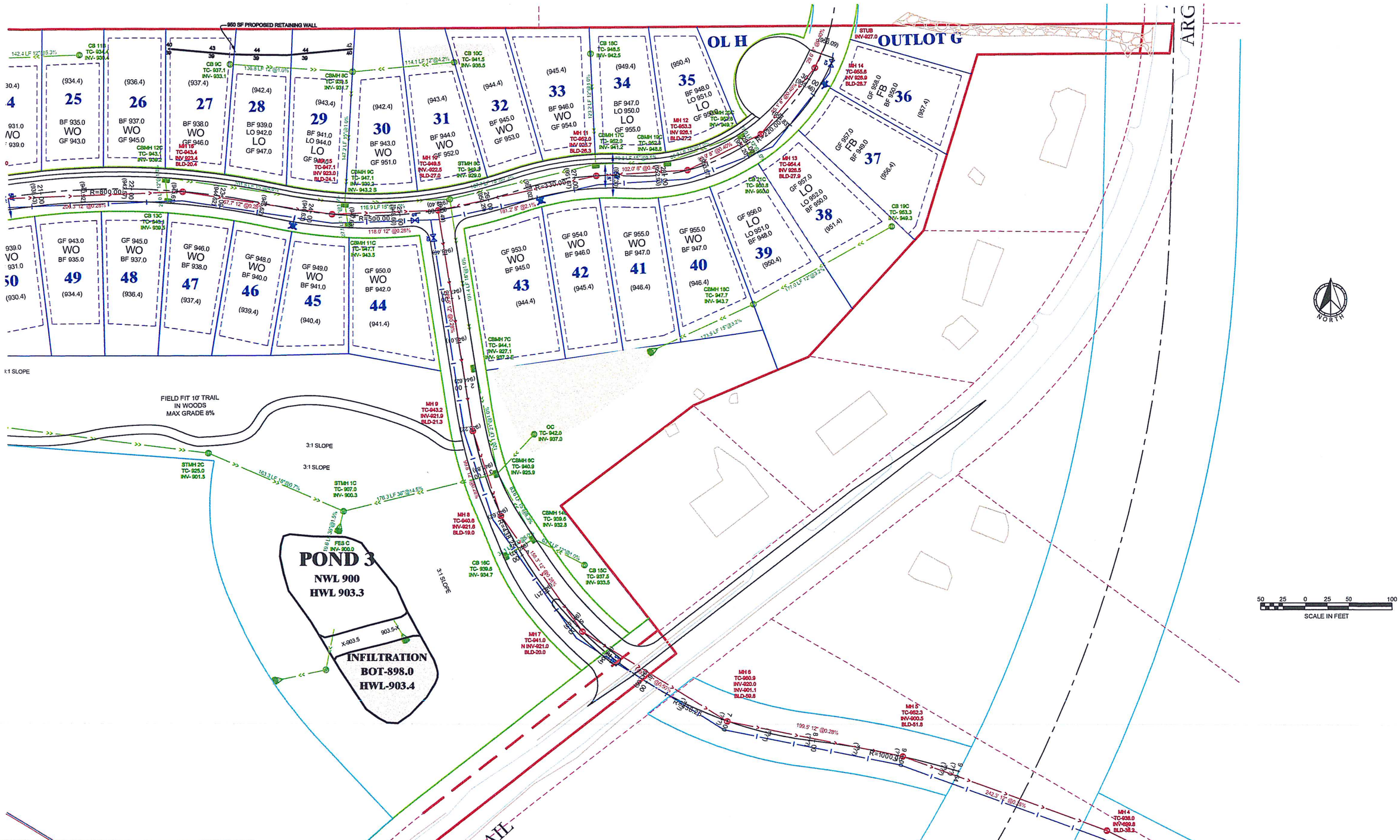
UP4
UP6

BLACKSTONE VISTA 1920-013

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INVER GROVE HEIGHTS, MINNESOTA

# PRELIMINARY UTILITY PLAN
## BLACKSTONE VISTA
## JIM DEANOVIC

FILE NO.
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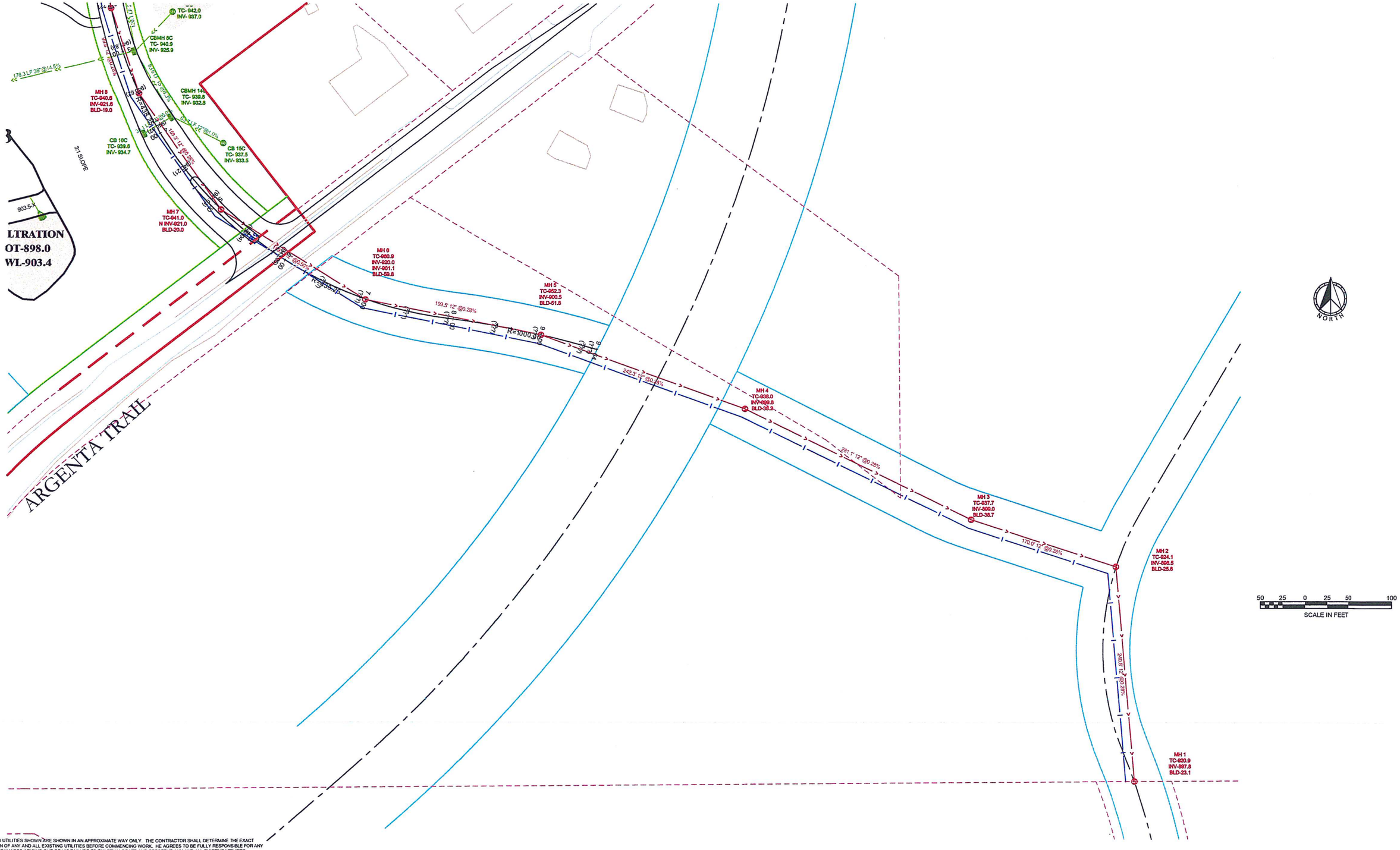
UP5 / UP6

BLACKSTONE VISTA 1920-013

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| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| BASE SCHMIDT | 01 | DSG | 06/09/14 | PRELIMINARY REVISIONS |
| DRAWN BY | 02 | DLS | 07/07/14 | PRELIMINARY REVISIONS |
| CAW | 03 | DLS | 08/13/14 | PRELIMINARY REVISIONS |
| CHECKED BY | | | | |
| DLS | | | | |
| DATE | | | | |
| 05/12/14 | | | | |

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Daniel L. Schmidt

Name, P.E.

Date: 05/18/14 Lic. No. 26147

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

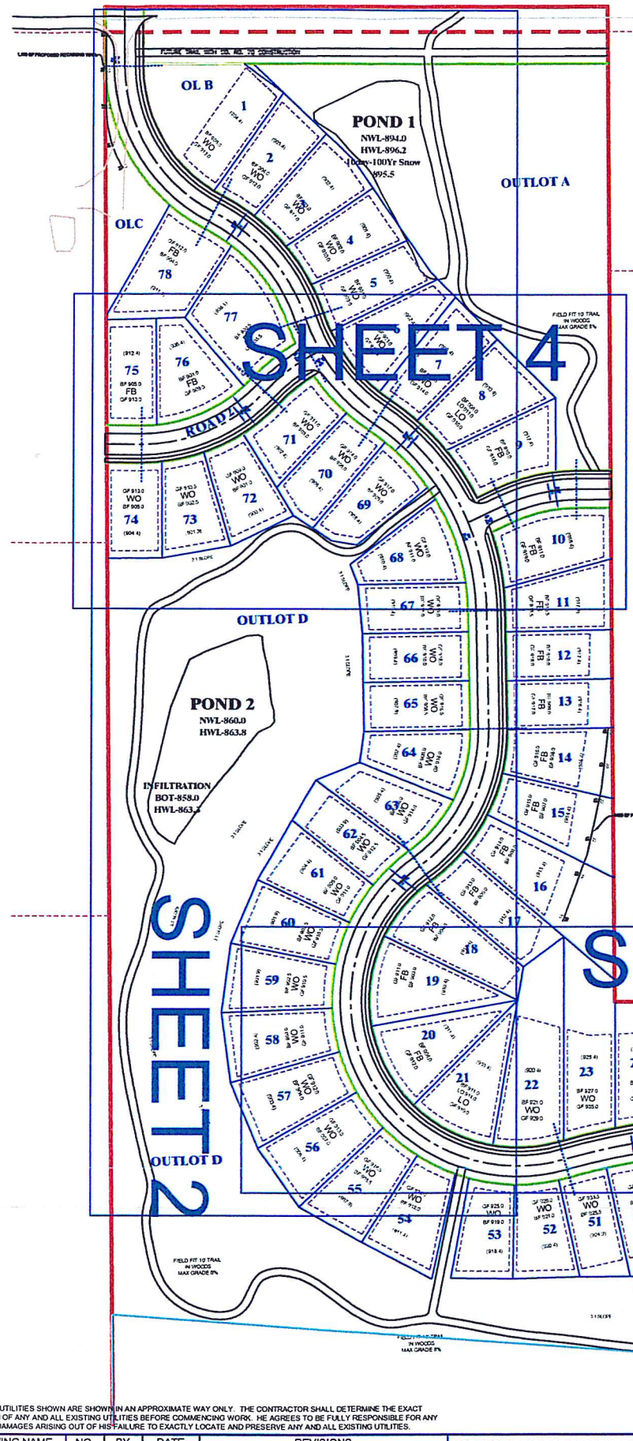
CITY PROJECT NO.
---

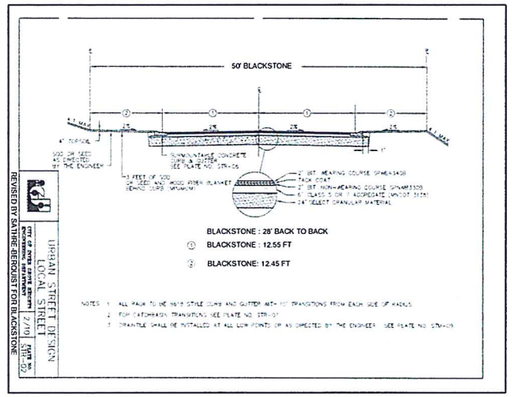
INVER GROVE HEIGHTS, MINNESOTA

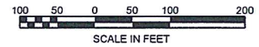
# PRELIMINARY UTILITY PLAN
## BLACKSTONE VISTA
## JIM DEANOVIC

FILE NO.
1920-013

UP6 / UP6




FUTURE HIGHWAY RIGHT OF WAY

ARGENTA TRAIL

| SYMBOL LEGEND | | |
|---|---|---|
| EXISTING | DESCRIPTION | PROPOSED |
| 958 | MINOR CONTOUR | 972 |
| 960 | MAJOR CONTOUR | 970 |
| | LOT LINE | |
| | BUILDING SETBACK BOUNDARY | |
| | PARCEL BOUNDARY LINE | |
| | CURB AND GUTTER | |
| | RIGHT-OF-WAY | |
| | STANDARD SILT FENCE | |
| N/A | SILT FENCE BOX | |
| N/A | ORANGE CONSTRUCTION FENCE | |
| EOF | EMERGENCY OVERFLOW SWALE (MAJ) | |
| | CATCH BASIN | |
| | STORM SEWER MANHOLE | |
| | FLARED END SECTION | |
| | WATERMAIN LINE | |
| | SANITARY LINE | |

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| CAW | 03 | DLS | 08/13/14 | PRELIMINARY REVISIONS |
| CHECKED BY | | | | |
| DLS | | | | |
| DATE | | | | |
| 05/12/14 | | | | |

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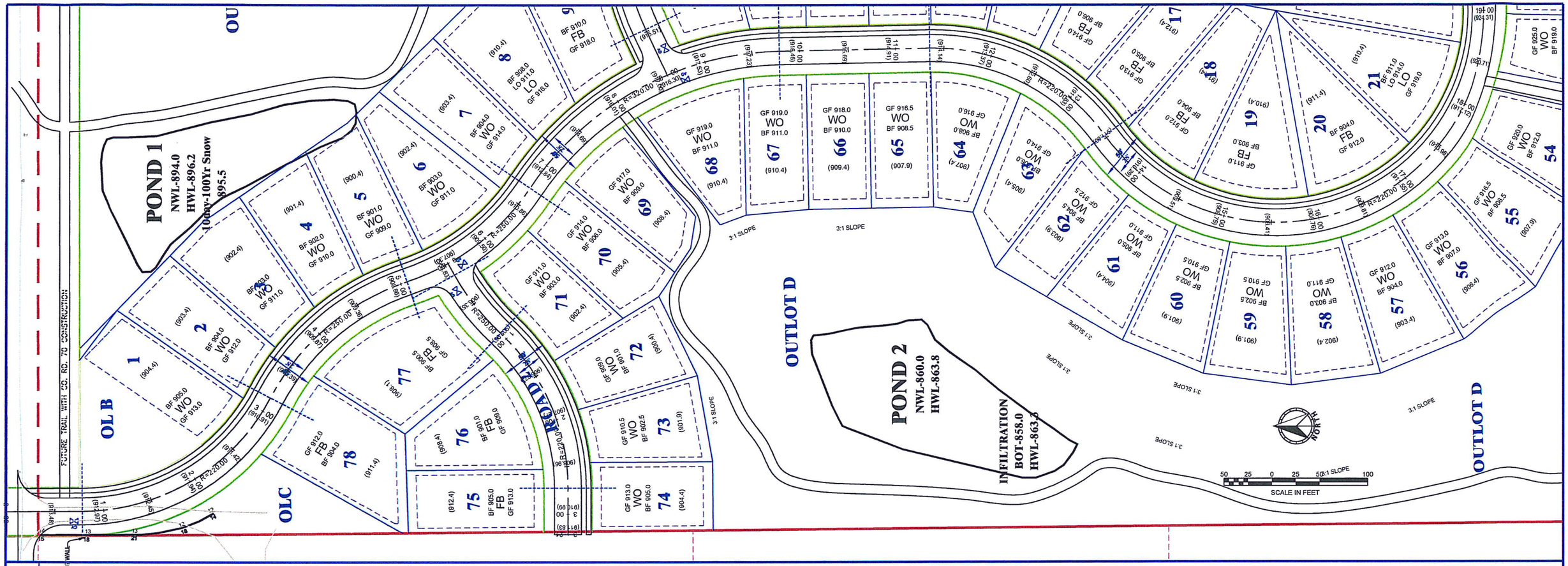
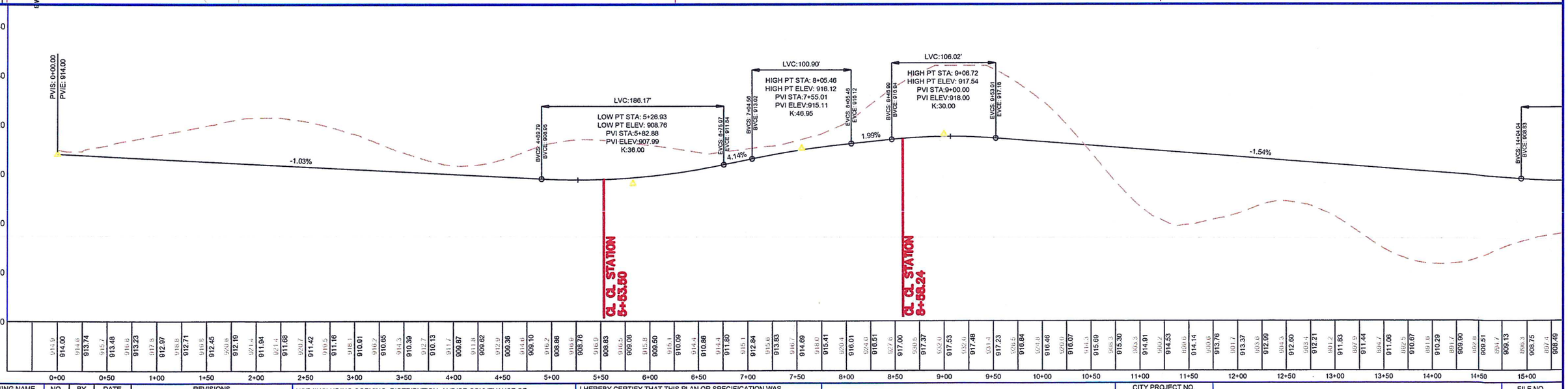
CITY PROJECT NO.
---
INVER GROVE HEIGHTS, MINNESOTA

# PRELIMINARY STREET PLAN
## BLACKSTONE VISTA
## JIM DEANOVIC

FILE NO. 1920-013

ST1 / ST4

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|---|---|---|---|---|
| BASE SCHMIDT | 01 | DSG | 06/09/14 | PRELIMINARY REVISIONS |
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| CAW | 03 | DLS | 08/13/14 | PRELIMINARY REVISIONS |
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| DATE | | | | |
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150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
---

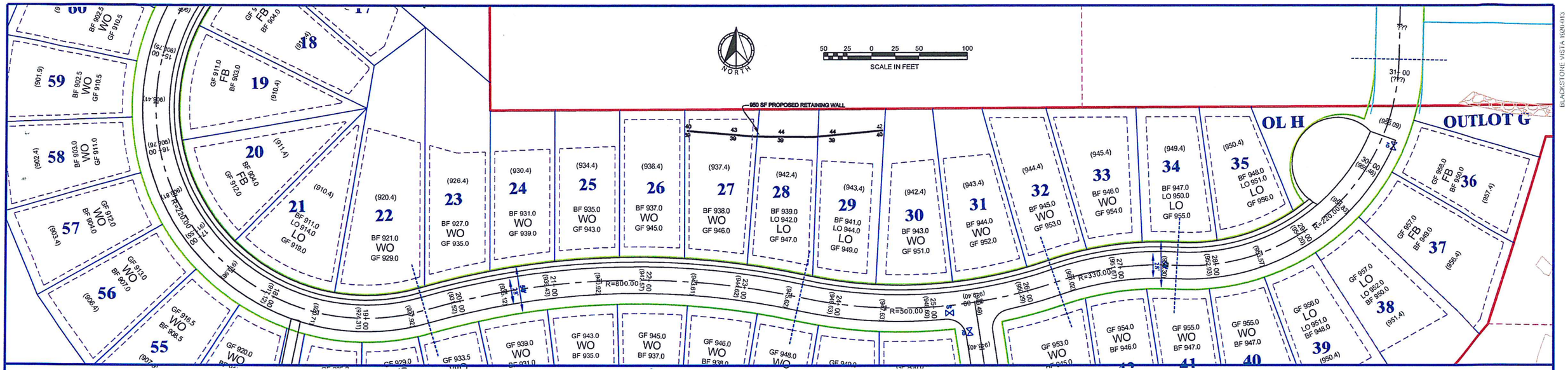
INVER GROVE HEIGHTS, MINNESOTA

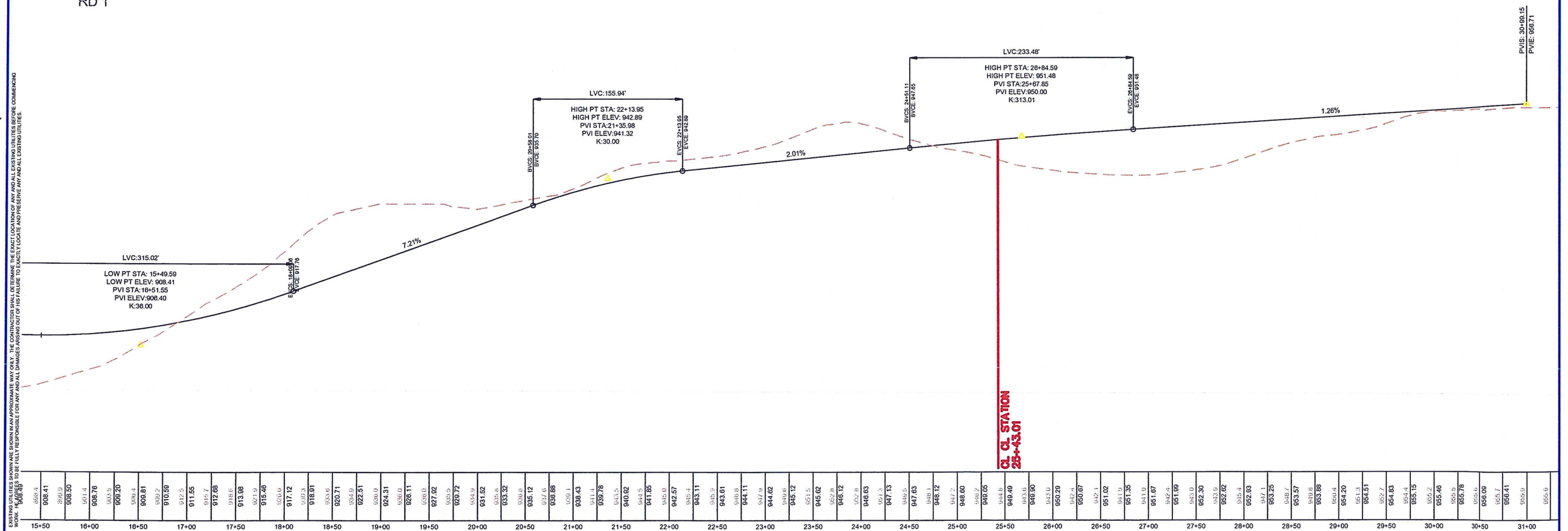
# PRELIMINARY STREET PLAN
## BLACKSTONE VISTA
## JIM DEANOVIC

FILE NO. 1920-013

ST2 / ST4

BLACKSTONE VISTA 1920-013

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BLACKSTONE VISTA 1920-013

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|---|---|---|---|---|
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| CAW | 03 | DLS | 08/13/14 | PRELIMINARY REVISIONS |
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150 SOUTH BROADWAY WAYZATA, MN 55391 (952) 476-6000

CITY PROJECT NO.
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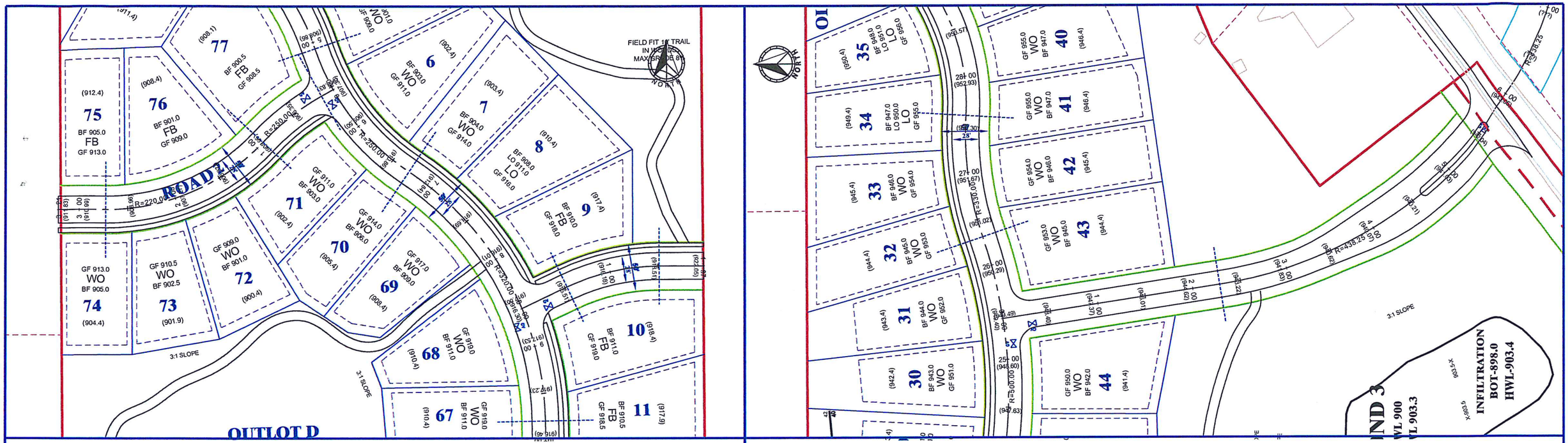
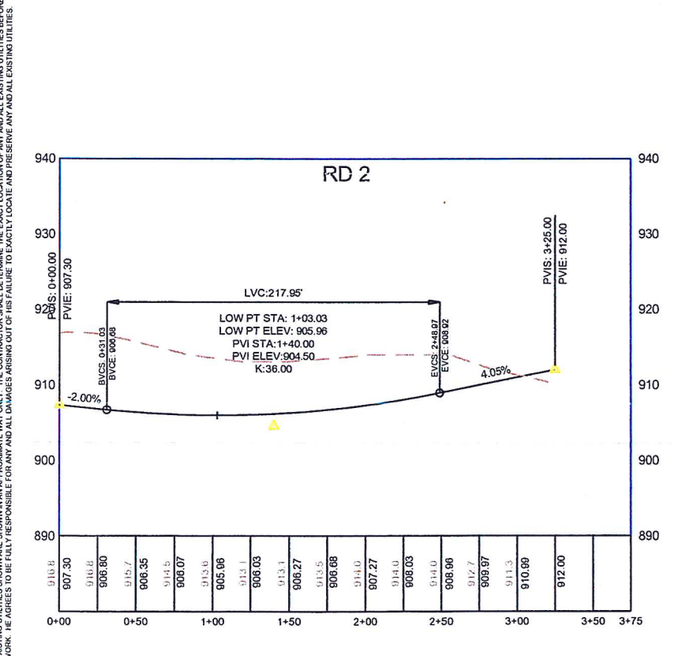
INVER GROVE HEIGHTS, MINNESOTA

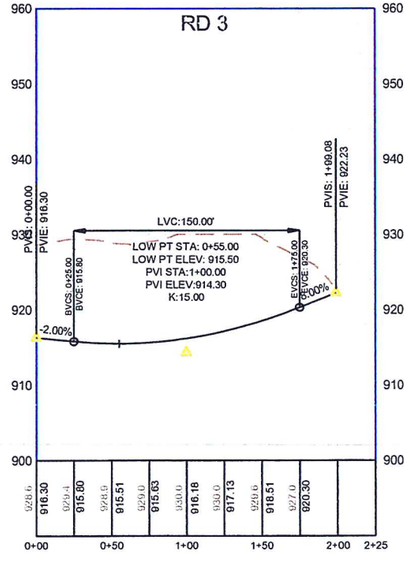
# PRELIMINARY STREET PLAN
## BLACKSTONE VISTA
## JIM DEANOVIC

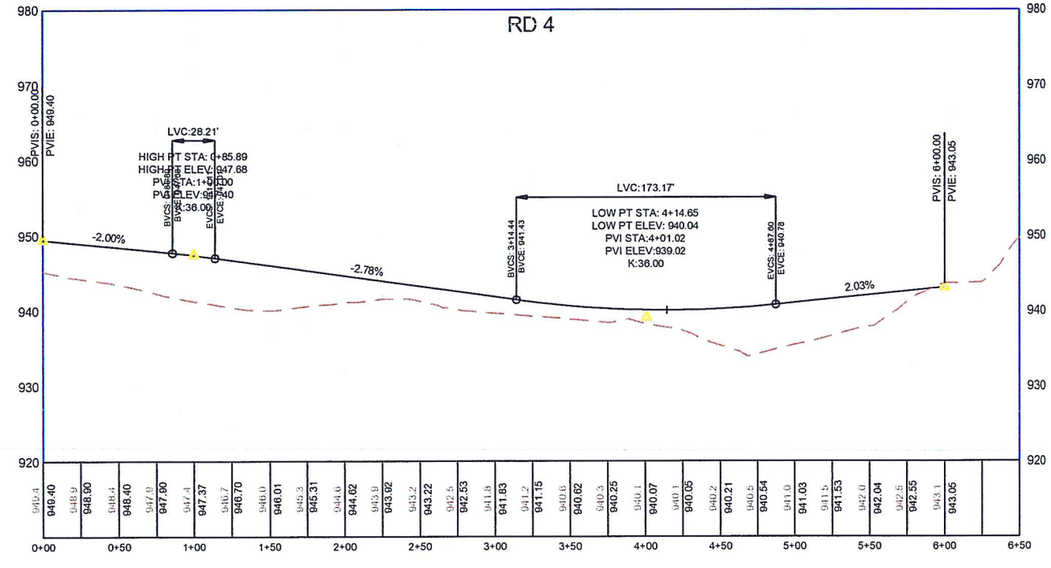
FILE NO. 1920-013

ST3 / ST4

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| DRAWN BY | 02 | DLS | 07/07/14 | PRELIMINARY REVISIONS |
| CAW | 03 | DLS | 08/13/14 | PRELIMINARY REVISIONS |
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Name, P.E.

Date: 05/18/14 Lic. No. 26147

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN 55391 (952) 476-6000

CITY PROJECT NO.
–
INVER GROVE HEIGHTS, MINNESOTA

# PRELIMINARY STREET PLAN
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO.
1920-013
ST4
ST4

# SHEET TP3

# SHEET TP2

LEGEND

- TREES TO BE SAVED
- TREES TO BE REMOVED
- TREES TO BE EXEMPT
- TREES IN PUBLIC UTILITY TO BE REMOVED - EXEMPT

NORTH

100 50 0 50 100 200

SCALE IN FEET

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| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| JEFFERS POND TREE | 1 | DLS | 06-16-2014 | REVISED TREE COUNT |
| DRAWN BY | 2 | DLS | 08/13/2014 | CITY REVISIONS |
| DLS | | | | |
| CHECKED BY | | | | |
| DLS | | | | |
| DATE | | | | |
| 05/21/14 | | | | |

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Daniel L Schmidt

DANIEL L. SCHMIDT, P.E.
Date: 06-09-2014 Lic. No. 26147

ENGINEERS SURVEYORS DESIGNERS PLANNERS

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

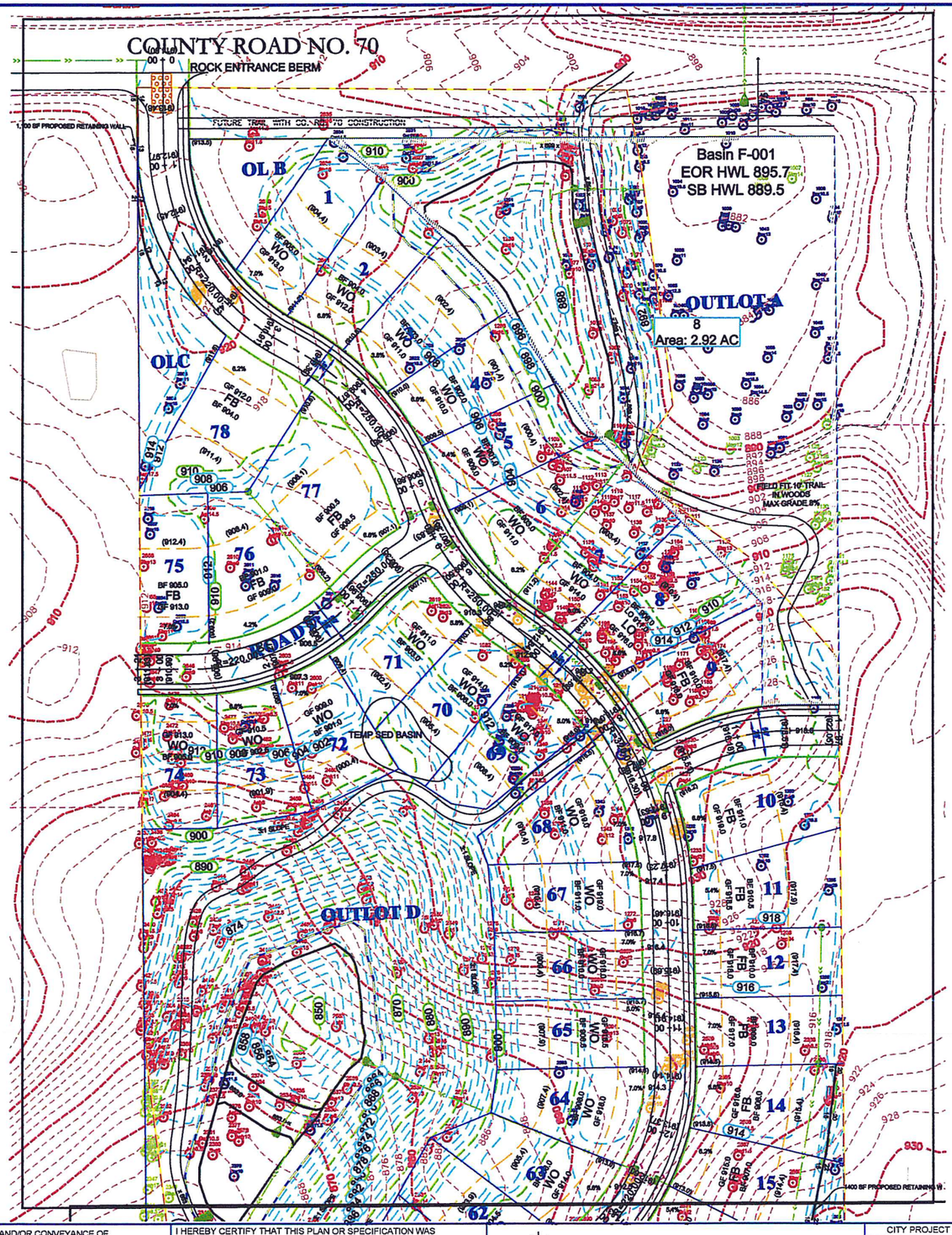
CITY PROJECT NO.

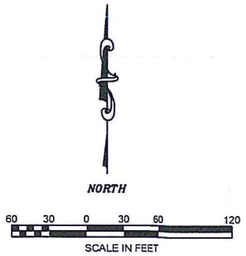
INVER GROVE HEIGHTS, MINNESOTA

TREE SURVEY
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO. 1920-013

TS1 / TS5




| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| JEFFERS POND TREE | 01 | DLS | 06/13/2014 | REVISED SITE PLAN AND TREE CALCS |
| DRAWN BY | 2 | DLS | 08/13/2014 | CITY REVISIONS |
| DLS | | | | |
| CHECKED BY | | | | |
| DLS | | | | |
| DATE | | | | |
| 05/21/14 | | | | |

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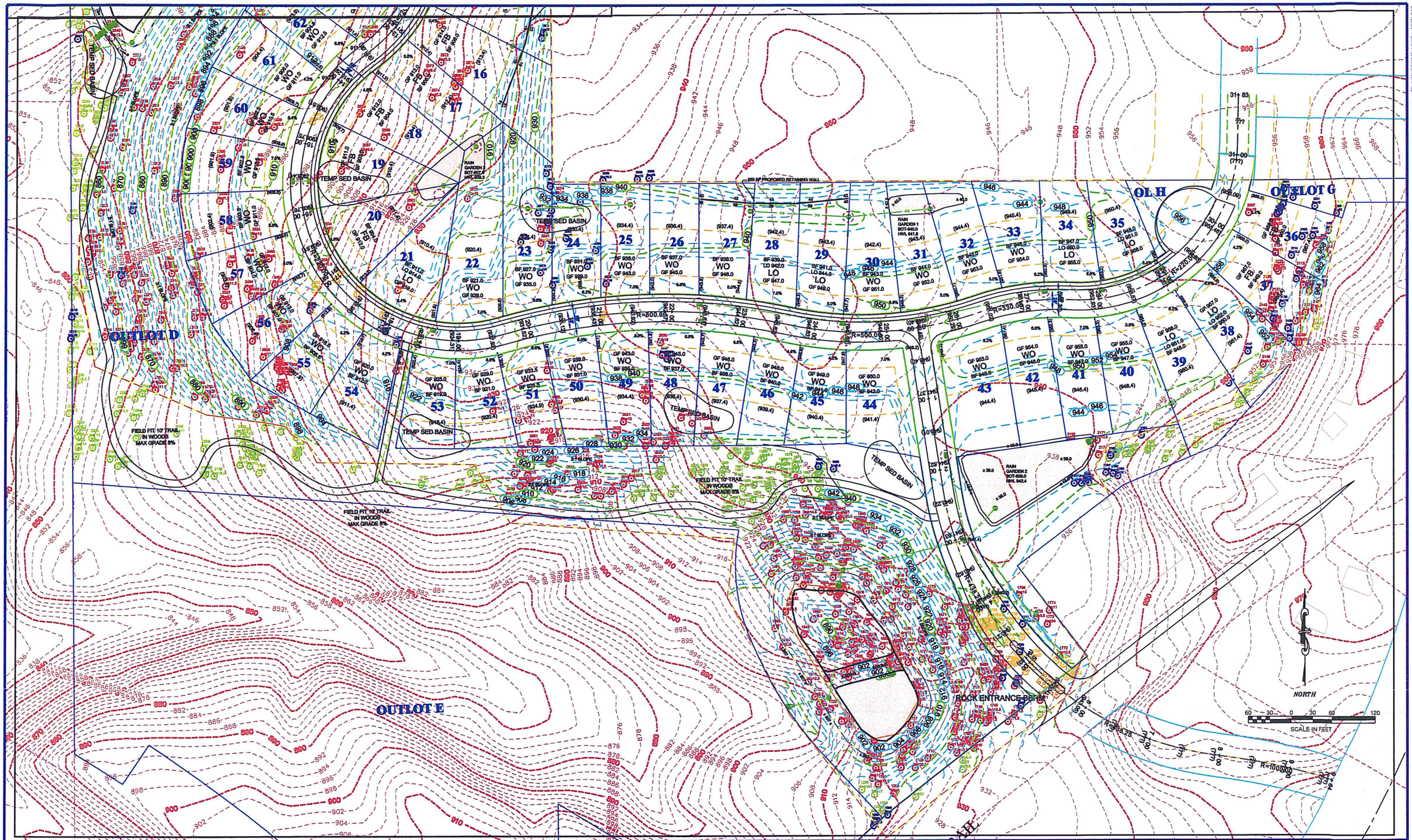
CITY PROJECT NO.

INVER GROVE HEIGHTS, MINNESOTA

TREE SURVEY
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO. 1920-013

TS2 / TS5




| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| JEFFERS POND TREE | 01 | DLSH | 06/12/2014 | REVISED SITE GRADING AND TREE CALCS |
| DRAWN BY | 2 | DLS | 08/13/2014 | CITY REVISIONS |
| DLS | | | | |
| CHECKED BY | | | | |
| DLS | | | | |
| DATE | | | | |
| 05/21/14 | | | | |

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150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.

INVER GROVE HEIGHTS, MINNESOTA

# TREE SURVEY
## BLACKSTONE VISTA
## JIM DEANOVIC

FILE NO. 1920-013

TS3 / TS5

| Tag # | SPECIES | | | | Class A saved inches (DBH) | Class A cut inches (DBH) | Class B saved inches (DBH) | Class B cut inches (DBH) | Class C saved inches (DBH) | Box Elder inches (DBH) | Cottonwood inches (DBH) | Except Public Ut. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 997 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 998 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 999 | Box14 | Boxelder | 14.0 | Good | | | | | | 14.0 | | |
| 1000 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 1001 | Box8.5 | Boxelder | 8.5 | Fair | | | | | | 8.5 | | |
| 1002 | Cot36 | Cottonwood | 36.0 | Good | | | | | | | 36.0 | |
| 1003 | Cot34 | Cottonwood | 34.0 | Good | | | | | | | 34.0 | |
| 1004 | Cot24 | Cottonwood | 24.0 | Good | | | | | | | 24.0 | |
| 1005 | Cot30 | Cottonwood | 30.0 | Good | | | | | | | 30.0 | |
| 1006 | Cot25 | Cottonwood | 25.0 | Fair | | | | | | | 25.0 | |
| 1007 | Elm14 | Elm, American | 14.0 | Fair | 14.0 | | | | | | | |
| 1008 | Box10.5 | Boxelder | 10.5 | Fair | | | | | | 10.5 | | |
| 1009 | Hac12 | Hackberry | 12.0 | Good | | | 12.0 | | | | | |
| 1010 | Box10.5 | Boxelder | 10.5 | Fair | | | | | | 10.5 | | |
| 1011 | Box11 | Boxelder | 11.0 | Fair | | | | | | 11.0 | | |
| 1012 | Box9 | Boxelder | 9.0 | Poor | | | | | | 9.0 | | |
| 1013 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 1014 | Box16 | Boxelder | 16.0 | Fair | | | | | | 16.0 | | |
| 1015 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 1016 | Elm10 | Elm, American | 10.0 | Fair | 10.0 | | | | | | | |
| 1017 | Box8.5 | Boxelder | 8.5 | Fair | | | | | | 8.5 | | |
| 1018 | Box8.5 | Boxelder | 8.5 | Fair | | | | | | 8.5 | | |
| 1019 | Box12 | Boxelder | 12.0 | Fair | | | | | | 12.0 | | |
| 1020 | Box8.5 | Boxelder | 8.5 | Fair | | | | | | 8.5 | | |
| 1021 | Box24 | Boxelder | 24.0 | Fair | | | | | | 24.0 | | |
| 1022 | Cot19 | Cottonwood | 19.0 | Good | | | | | | | 19.0 | |
| 1023 | Asp8 | Aspen | 8.0 | Fair | | 8.0 | | | | | | |
| 1024 | Asp8 | Aspen | 8.0 | Fair | | 8.0 | | | | | | |
| 1025 | Asp8.5 | Aspen | 8.5 | Good | | 8.5 | | | | | | |
| 1026 | Asp8 | Aspen | 8.0 | Fair | | 8.0 | | | | | | |
| 1027 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 1028 | Box8 | Boxelder | 8.0 | Fair | | | | | | 8.0 | | |
| 1029 | Box8 | Boxelder | 8.0 | Fair | | | | | | 8.0 | | |
| 1030 | Ash9 | Ash, green | 9.0 | Good | | | | 9.0 | | | | |
| 1031 | Box8.5 | Boxelder | 8.5 | Fair | | | | | | 8.5 | | |
| 1032 | Box11 | Boxelder | 11.0 | Fair | | | | | | 11.0 | | |
| 1033 | Box8.5 | Boxelder | 8.5 | Good | | | | | | 8.5 | | |
| 1034 | Box19.5 | Boxelder | 19.5 | Good | | | | | | 19.5 | | |
| 1035 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 1036 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 1037 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 1038 | Box11 | Boxelder | 11.0 | Excellent | | | | | | 11.0 | | |
| 1039 | Box10 | Boxelder | 10.0 | Good | | | | | | 10.0 | | |
| 1040 | Box10.5 | Boxelder | 10.5 | Fair | | | | | | 10.5 | | |
| 1041 | Box17 | Boxelder | 17.0 | Fair | | | | | | 17.0 | | |
| 1042 | Box19 | Boxelder | 19.0 | Fair | | | | | | 19.0 | | |
| 1043 | Box13 | Boxelder | 13.0 | Fair | | | | | | 13.0 | | |
| 1044 | Box15 | Boxelder | 15.0 | Fair | | | | | | 15.0 | | |
| 1045 | Box11.5 | Boxelder | 11.5 | Fair | | | | | | 11.5 | | |
| 1046 | Box35 | Boxelder | 35.0 | Fair | | | | | | 35.0 | | |
| 1047 | Box13 | Boxelder | 13.0 | Fair | | | | | | 13.0 | | |
| 1048 | Box15.5 | Boxelder | 15.5 | Fair | | | | | | 15.5 | | |
| 1049 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 1050 | Asp11 | Aspen | 11.0 | Fair | 11.0 | | | | | | | |
| 1051 | Box15 | Boxelder | 15.0 | Fair | | | | | | 15.0 | | |
| 1052 | Box9.5 | Boxelder | 9.5 | Fair | | | | | | 9.5 | | |
| 1053 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 1054 | Box14.5 | Boxelder | 14.5 | Fair | | | | | | 14.5 | | |
| 1055 | Box18.5 | Boxelder | 18.5 | Fair | | | | | | 18.5 | | |
| 1056 | Box14 | Boxelder | 14.0 | Good | | | | | | 14.0 | | |
| 1057 | Box18 | Boxelder | 18.0 | Fair | | | | | | 18.0 | | |
| 1058 | Box10.5 | Boxelder | 10.5 | Good | | | | | | 10.5 | | |
| 1059 | Box15 | Boxelder | 15.0 | Fair | | | | | | 15.0 | | |
| 1060 | Box22 | Boxelder | 22.0 | Good | | | | | | 22.0 | | |
| 1061 | Box8 | Boxelder | 8.0 | Fair | | | | | | 8.0 | | |
| 1062 | Box13.5 | Boxelder | 13.5 | Fair | | | | | | 13.5 | | |
| 1063 | Box15 | Boxelder | 15.0 | Fair | | | | | | 15.0 | | |
| 1064 | Box16 | Boxelder | 16.0 | Fair | | | | | | 16.0 | | |
| 1065 | Box12.5 | Boxelder | 12.5 | Fair | | | | | | 12.5 | | |
| 1066 | Elm12.5 | Elm, American | 12.5 | Fair | | 12.5 | | | | | | |
| 1067 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 1068 | Box11 | Boxelder | 11.0 | Fair | | | | | | 11.0 | | |
| 1069 | Box9.5 | Boxelder | 9.5 | Fair | | | | | | 9.5 | | |
| 1070 | Box10.5 | Boxelder | 10.5 | Fair | | | | | | 10.5 | | |
| 1071 | Che8.5 | Cherry, black | 8.5 | Fair | | | | 8.5 | | | | |
| 1072 | Elm17 | Elm, Siberian | 17.0 | Good | | 17.0 | | | | | | |
| 1073 | Box8.5 | Boxelder | 8.5 | Fair | | | | | | 8.5 | | |
| 1074 | Box12.5 | Boxelder | 12.5 | Fair | | | | | | 12.5 | | |
| 1075 | Box14 | Boxelder | 14.0 | Fair | | | | | | 14.0 | | |
| 1076 | Elm24 | Elm, Siberian | 24.0 | Fair | | 24.0 | | | | | | |
| 1077 | Che13 | Cherry, black | 13.0 | Good | | | | 13.0 | | | | |
| 1078 | Box7 | Boxelder | 7.0 | Fair | | | | | | 7.0 | | |
| 1079 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 1080 | Che12 | Cherry, black | 12.0 | Good | | | | 12.0 | | | | |
| 1081 | Box11 | Boxelder | 11.0 | Fair | | | | | | 11.0 | | |
| 1082 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 1083 | Elm21.5 | Elm, American | 21.5 | Good | | 21.5 | | | | | | |
| 1084 | Box8 | Boxelder | 8.0 | Fair | | | | | | 8.0 | | |
| 1085 | Box11 | Boxelder | 11.0 | Fair | | | | | | 11.0 | | |
| 1086 | Box8 | Boxelder | 8.0 | Fair | | | | | | 8.0 | | |
| 1087 | Box16.5 | Boxelder | 16.5 | Fair | | | | | | 16.5 | | |
| 1088 | Box16 | Boxelder | 16.0 | Fair | | | | | | 16.0 | | |
| 1089 | Box19 | Boxelder | 19.0 | Fair | | | | | | 19.0 | | |
| 1090 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 1091 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 1092 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 1093 | Mas12 | Maple, silver | 12.0 | Good | 12.0 | | | | | | | |
| 1094 | Box8 | Boxelder | 8.0 | Good | | | | | | 8.0 | | |
| 1095 | Elm12.5 | Elm, American | 12.5 | Good | | | | 12.5 | | | | |
| 1096 | Che8.5 | Cherry, black | 8.5 | Fair | | | | 8.5 | | | | |
| 1097 | Mas10 | Maple, amur | 10.0 | Fair | | | | 10.0 | | | | |
| 1098 | Box8 | Boxelder | 8.0 | Fair | | | | | | 8.0 | | |
| 1099 | Che9 | Cherry, black | 9.0 | Good | | | | 9.0 | | | | |
| 1100 | Elm15.5 | Elm, American | 15.5 | Good | | 15.5 | | | | | | |
| 1101 | Che12 | Cherry, black | 12.0 | Good | | | | 12.0 | | | | |
| 1102 | Elm20 | Elm, American | 20.0 | Fair | | 20.0 | | | | | | |
| 1103 | Bir12.5 | Birch, paper | 12.5 | Good | | | | 12.5 | | | | |
| 1104 | Oak11 | Oak, red | 11.0 | Good | | | | 11.0 | | | | |
| 1105 | Oak11.5 | Oak, red | 11.5 | Good | | | | 11.5 | | | | |
| 1106 | Bir14.5 | Birch, paper | 14.5 | Fair | | | | 14.5 | | | | |
| 1107 | Oak11.5 | Oak, red | 11.5 | Good | | | | 11.5 | | | | |
| 1108 | Bir14 | Birch, paper | 14.0 | Good | | | | 14.0 | | | | |
| 1109 | Cot13 | Cottonwood | 13.0 | Good | | | | | | | 13.0 | |
| 1110 | Bir8.5 | Birch, paper | 8.5 | Good | | | | 8.5 | | | | |
| 1111 | Bir12 | Birch, paper | 12.0 | Good | | | | 12.0 | | | | |
| 1112 | Oak9 | Oak, red | 9.0 | Good | | | | 9.0 | | | | |
| 1113 | Oak13 | Oak, red | 13.0 | Good | | | | 13.0 | | | | |
| 1114 | Bir9 | Birch, paper | 9.0 | Good | | | | 9.0 | | | | |
| 1115 | Bir8 | Birch, paper | 8.0 | Good | | | | 8.0 | | | | |
| 1116 | Bir17 | Birch, paper | 17.0 | Fair | | | | 17.0 | | | | |
| 1117 | Asp11.5 | Aspen | 11.5 | Good | | 11.5 | | | | | | |
| 1118 | Elm11 | Elm, American | 11.0 | Good | | 11.0 | | | | | | |
| 1119 | Oak15 | Oak, red | 15.0 | Good | | | | 15.0 | | | | |
| 1120 | Apl10.5 | Crabapple | 10.5 | Good | | | | 10.5 | | | | |
| 1121 | Oak13 | Oak, red | 13.0 | Fair | | | | | 13.0 | | | |
| 1122 | Box16 | Boxelder | 16.0 | Fair | | | | | | 16.0 | | |
| 1123 | Ash25 | Ash, green | 25.0 | Fair | | | 25.0 | | | | | |
| 1124 | Box14 | Boxelder | 14.0 | Fair | | | | | | 14.0 | | |
| 1125 | Asp12 | Aspen | 12.0 | Fair | 12.0 | | | | | | | |
| 1126 | Asp10.5 | Aspen | 10.5 | Fair | 10.5 | | | | | | | |
| 1127 | Asp12 | Aspen | 12.0 | Fair | 12.0 | | | | | | | |
| 1128 | Asp11 | Aspen | 11.0 | Good | 11.0 | | | | | | | |
| 1129 | Asp10 | Aspen | 10.0 | Fair | 10.0 | | | | | | | |
| 1130 | Asp10 | Aspen | 10.0 | Good | 10.0 | | | | | | | |
| 1131 | Asp8.5 | Aspen | 8.5 | Fair | 8.5 | | | | | | | |
| 1132 | Elm13 | Elm, American | 13.0 | Fair | 13.0 | | | | | | | |
| 1133 | Oak11 | Oak, red | 11.0 | Good | | | | | 11.0 | | | |
| 1134 | Oak8.5 | Oak, red | 8.5 | Good | | | | 8.5 | | | | |
| 1135 | Bir8.5 | Birch, paper | 8.5 | Good | | | | 8.5 | | | | |
| 1136 | Bir8 | Birch, paper | 8.0 | Good | | | | 8.0 | | | | |
| 1137 | Bir10 | Birch, paper | 10.0 | Fair | | | | 10.0 | | | | |
| 1138 | Bir8.5 | Birch, paper | 8.5 | Good | | | | 8.5 | | | | |
| 1139 | Oak13 | Oak, red | 13.0 | Fair | | | | 13.0 | | | | |
| 1140 | Bir12 | Birch, paper | 12.0 | Good | | | | 12.0 | | | | |
| 1141 | Bir13 | Birch, paper | 13.0 | Good | | | | 13.0 | | | | |
| 1142 | Apl9 | Crabapple | 9.0 | Fair | | | | 9.0 | | | | |
| 1143 | Bir11.5 | Birch, paper | 11.5 | Good | | | | 11.5 | | | | |
| 1144 | Asp11.5 | Aspen | 11.5 | Good | | 11.5 | | | | | | |
| 1145 | Bir9 | Birch, paper | 9.0 | Good | | | | 9.0 | | | | |
| 1146 | Bir13 | Birch, paper | 13.0 | Good | | | | 13.0 | | | | |
| 1147 | Asp9 | Aspen | 9.0 | Good | | 9.0 | | | | | | |
| 1148 | Bir23 | Birch, paper | 23.0 | Good | | | | 23.0 | | | | |
| 1149 | Bir18 | Birch, paper | 18.0 | Good | | | | 18.0 | | | | |
| 1150 | Bir10 | Birch, paper | 10.0 | Good | | | | 10.0 | | | | |
| 1151 | Asp8 | Aspen | 8.0 | Good | | 8.0 | | | | | | |
| 1152 | Bir10 | Birch, paper | 10.0 | Good | | | | 10.0 | | | | |
| 1153 | Oak16 | Oak, red | 16.0 | Good | | | | 16.0 | | | | |
| 1154 | Bir11 | Birch, paper | 11.0 | Good | | | | 11.0 | | | | |
| 1155 | Che8.5 | Cherry, black | 8.5 | Good | | | | 8.5 | | | | |
| 1156 | Bir8 | Birch, paper | 8.0 | Fair | | | | 8.0 | | | | |
| 1157 | Cot8.5 | Cottonwood | 8.5 | Good | | | | | | | 8.5 | |
| 1158 | Bir16.5 | Birch, paper | 16.5 | Good | | | | 16.5 | | | | |
| 1159 | Oak9.5 | Oak, red | 9.5 | Good | | | | 9.5 | | | | |
| 1160 | Bir10 | Birch, paper | 10.0 | Good | | | | 10.0 | | | | |
| 1161 | Cot14 | Cottonwood | 14.0 | Good | | | | | | | 14.0 | |
| 1162 | Asp12 | Aspen | 12.0 | Good | | 12.0 | | | | | | |
| 1163 | Oak8.5 | Oak, red | 8.5 | Good | | | | 8.5 | | | | |
| 1164 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 1165 | Cot10 | Cottonwood | 10.0 | Good | | | | | | | 10.0 | |
| 1166 | Bir9 | Birch, paper | 9.0 | Good | | | | 9.0 | | | | |
| 1167 | Cot18.5 | Cottonwood | 18.5 | Good | | | | | | | 18.5 | |
| 1168 | Bir8.5 | Birch, paper | 8.5 | Good | | | | 8.5 | | | | |
| 1169 | Bir11.5 | Birch, paper | 11.5 | Fair | | | | 11.5 | | | | |
| 1170 | Bir11 | Birch, paper | 11.0 | Good | | | | 11.0 | | | | |
| 1171 | Apl12 | Crabapple | 12.0 | Fair | | | | 12.0 | | | | |
| 1172 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 1173 | Oak12 | Oak, red | 12.0 | Good | | | | 12.0 | | | | |
| 1174 | Oak11 | Oak, red | 11.0 | Good | | | | 11.0 | | | | |
| 1175 | Asp9 | Aspen | 9.0 | Good | 9.0 | | | | | | | |
| 1176 | Asp8 | Aspen | 8.0 | Good | 8.0 | | | | | | | |
| 1177 | Asp8 | Aspen | 8.0 | Good | 8.0 | | | | | | | |
| 1178 | Asp8.5 | Aspen | 8.5 | Good | 8.5 | | | | | | | |
| 1179 | Asp8 | Aspen | 8.0 | Good | 8.0 | | | | | | | |
| 1180 | Asp8 | Aspen | 8.0 | Fair | 8.0 | | | | | | | |
| 1181 | Oak14.5 | Oak, red | 14.5 | Good | | | | | 14.5 | | | |
| 1182 | Asp8 | Aspen | 8.0 | Good | 8.0 | | | | | | | |
| 1183 | Box15 | Boxelder | 15.0 | Fair | | | | | | 15.0 | | |
| 1184 | Oak9.5 | Oak, red | 9.5 | Good | | | | 9.5 | | | | |
| 1185 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 1186 | Asp9.5 | Aspen | 9.5 | Good | | 9.5 | | | | | | |
| 1187 | Asp8 | Aspen | 8.0 | Good | | 8.0 | | | | | | |
| 1188 | Asp9 | Aspen | 9.0 | Good | | 9.0 | | | | | | |
| 1189 | Bir13 | Birch, paper | 13.0 | Good | | | | 13.0 | | | | |
| 1190 | Bir9.5 | Birch, paper | 9.5 | Good | | | | 9.5 | | | | |
| 1191 | Bir13 | Birch, paper | 13.0 | Good | | | | 13.0 | | | | |
| 1192 | Asp9.5 | Aspen | 9.5 | Good | | 9.5 | | | | | | |
| 1193 | Bir13 | Birch, paper | 13.0 | Fair | | | | 13.0 | | | | |
| 1194 | Bir16 | Birch, paper | 16.0 | Good | | | | 16.0 | | | | |
| 1195 | Bir9 | Birch, paper | 9.0 | Good | | | | 9.0 | | | | |
| 1196 | Asp9.5 | Aspen | 9.5 | Good | | 9.5 | | | | | | |
| 1197 | Asp8.5 | Aspen | 8.5 | Good | | 8.5 | | | | | | |
| 1198 | Bir9 | Birch, paper | 9.0 | Good | | | | 9.0 | | | | |
| 1199 | Bir10 | Birch, paper | 10.0 | Good | | | | 10.0 | | | | |
| 1200 | Bir19 | Birch, paper | 19.0 | Fair | | | | | | | | 19 |
| 1201 | Asp8.5 | Aspen | 8.5 | Good | | | | | | | | 8.5 |
| 1202 | Asp8 | Aspen | 8.0 | Good | | | | | | | | 8 |
| 1203 | Bir15 | Birch, paper | 15.0 | Fair | | | | | | | | 15 |
| 1204 | Asp8.5 | Aspen | 8.5 | Good | | 8.5 | | | | | | |
| 1205 | Asp8 | Aspen | 8.0 | Good | | 8.0 | | | | | | |
| 1206 | Asp10 | Aspen | 10.0 | Fair | | | | | | | | 10 |
| 1207 | Asp11 | Aspen | 11.0 | Fair | | | | | | | | 11 |
| 1208 | Box11 | Boxelder | 11.0 | Fair | | | | | | 11.0 | | |
| 1209 | Asp15 | Aspen | 15.0 | Fair | | 15.0 | | | | | | |
| 1210 | Bir12 | Birch, paper | 12.0 | Good | | | | 12.0 | | | | |
| 1211 | Asp12 | Aspen | 12.0 | Fair | | 12.0 | | | | | | |
| 1212 | Bir10 | Birch, paper | 10.0 | Good | | | | 10.0 | | | | |
| 1213 | Asp8 | Aspen | 8.0 | Fair | | 8.0 | | | | | | |
| 1214 | Asp9 | Aspen | 9.0 | Fair | | 9.0 | | | | | | |
| 1215 | Asp10.5 | Aspen | 10.5 | Fair | | 10.5 | | | | | | |
| 1216 | Bir13 | Birch, paper | 13.0 | Good | | | | | | | | 13 |
| 1217 | Bir8 | Birch, paper | 8.0 | Good | | | | 8.0 | | | | |
| 1218 | Bir17.5 | Birch, paper | 17.5 | Fair | | | | | | | | 17.5 |
| 1219 | Asp12 | Aspen | 12.0 | Fair | | | | | | | | 12 |
| 1220 | Asp8.5 | Aspen | 8.5 | Good | | | | | | | | 8.5 |
| 1221 | Bir11 | Birch, paper | 11.0 | Good | | | | 11.0 | | | | |
| 1222 | Cot17.5 | Cottonwood | 17.5 | Fair | | | | | | | 17.5 | |
| 1223 | Bir12.5 | Birch, paper | 12.5 | Good | | | | | | | | 12.5 |
| 1224 | Bir12 | Birch, paper | 12.0 | Good | | | | | | | | 12 |
| 1225 | Bir10.5 | Birch, paper | 10.5 | Good | | | | | | | | 10.5 |
| 1226 | Asp9.5 | Aspen | 9.5 | Good | | | | | | | | 9.5 |
| 1227 | Bir12 | Birch, paper | 12.0 | Good | | | | 12.0 | | | | |
| 1228 | Bir16 | Birch, paper | 16.0 | Good | | | | | | | | 16 |
| 1229 | Ced8 | Redcedar | 8.0 | Good | | | | 8.0 | | | | |
| 1230 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 1231 | Ced4 | Redcedar | 4.0 | Good | | | | 4.0 | | | | |
| 1232 | Cot10 | Cottonwood | 10.0 | Good | | | | | | | 10.0 | |
| 1233 | Ced3 | Redcedar | 3.0 | Fair | | | | 3.0 | | | | |
| 1234 | Ced5.5 | Redcedar | 5.5 | Good | | | | | | | | 5.5 |
| 1235 | Ced3.5 | Redcedar | 3.5 | Good | | | | | | | | 3.5 |
| 1236 | Cot9.5 | Cottonwood | 9.5 | Good | | | | | | | 9.5 | |
| 1237 | Ced2 | Redcedar | 2.0 | Good | | | | 2.0 | | | | |
| 1238 | Oak11 | Oak, red | 11.0 | Good | | | | 11.0 | | | | |
| 1239 | Oak12.5 | Oak, red | 12.5 | Good | | | | | | | | 12.5 |
| 1240 | Cot9.5 | Cottonwood | 9.5 | Good | | | | | | | 9.5 | |
| 1241 | Oak18 | Oak, red | 18.0 | Good | | | | | | | | 18 |
| 1242 | Cot9 | Cottonwood | 9.0 | Good | | | | | | | 9.0 | |
| 1243 | Oak12 | Oak, red | 12.0 | Good | | | | 12.0 | | | | |
| 1244 | Ced6 | Redcedar | 6.0 | Good | | | | 6.0 | | | | |
| 1245 | Cot9 | Cottonwood | 9.0 | Good | | | | | | | 9.0 | |
| 1246 | Che9 | Cherry, black | 9.0 | Good | | | | 9.0 | | | | |
| 1247 | Asp12 | Aspen | 12.0 | Good | | 12.0 | | | | | | |
| 1248 | Asp9.5 | Aspen | 9.5 | Good | | 9.5 | | | | | | |
| 1249 | Apl8 | Crabapple | 8.0 | Good | | | | 8.0 | | | | |
| 1250 | Asp11 | Aspen | 11.0 | Good | | 11.0 | | | | | | |
| 1251 | Box12 | Boxelder | 12.0 | Fair | | | | | | 12.0 | | |
| 1252 | Box8 | Boxelder | 8.0 | Fair | | | | | | 8.0 | | |
| 1253 | Cot16 | Cottonwood | 16.0 | Good | | | | | | | 16.0 | |
| 1254 | Bir12 | Birch, paper | 12.0 | Fair | | | | 12.0 | | | | |
| 1255 | Cot12 | Cottonwood | 12.0 | Good | | | | | | | 12.0 | |
| 1256 | Bir13.5 | Birch, paper | 13.5 | Fair | | | | 13.5 | | | | |
| 1257 | Box8 | Boxelder | 8.0 | Fair | | | | | | 8.0 | | |
| 1258 | Bir21 | Birch, paper | 21.0 | Good | | | | 21.0 | | | | |
| 1259 | Ced5 | Redcedar | 5.0 | Good | | | | 5.0 | | | | |
| 1260 | Elm10 | Elm, American | 10.0 | Good | | 10.0 | | | | | | |
| 1261 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 1262 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 1263 | Box9 | Boxelder | 9.0 | Good | | | | | | 9.0 | | |
| 1264 | Box19.5 | Boxelder | 19.5 | Good | | | | | | 19.5 | | |
| 1265 | Box29 | Boxelder | 29.0 | Good | | | | | | 29.0 | | |
| 1266 | Box22 | Boxelder | 22.0 | Good | | | | | | 22.0 | | |
| 1267 | Box12.5 | Boxelder | 12.5 | Good | | | | | | 12.5 | | |
| 1268 | Mas24 | Maple, amur | 24.0 | Fair | | 24.0 | | | | | | |
| 1269 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 1270 | Elm10 | Elm, American | 10.0 | Good | | 10.0 | | | | | | |
| 1271 | Ced4.5 | Redcedar | 4.5 | Good | | | | 4.5 | | | | |
| 1272 | Elm8 | Elm, American | 8.0 | Fair | | 8.0 | | | | | | |
| 1273 | Ced3.5 | Redcedar | 3.5 | Good | | | | 3.5 | | | | |
| 1274 | Ced5 | Redcedar | 5.0 | Good | | | | 5.0 | | | | |
| 1275 | Pin9 | Pine, white | 9.0 | Good | | | | 9.0 | | | | |
| 1276 | Che13 | Cherry, black | 13.0 | Good | | | | 13.0 | | | | |
| 1277 | Ced1.5 | Redcedar | 1.5 | Good | | | | 1.5 | | | | |
| 1278 | Ced2 | Redcedar | 2.0 | Good | | | | 2.0 | | | | |
| 1279 | Ced5 | Redcedar | 5.0 | Good | | | | 5.0 | | | | |
| 1280 | Bir12.5 | Birch, paper | 12.5 | Good | | | | 12.5 | | | | |
| 1281 | Box13 | Boxelder | 13.0 | Good | | | | | | 13.0 | | |
| 1282 | Bir13 | Birch, paper | 13.0 | Good | | | | 13.0 | | | | |
| 1283 | Bir11 | Birch, paper | 11.0 | Good | | | | | | | | 13 |
| 1284 | Bir28 | Birch, paper | 28.0 | Good | | | | 28.0 | | | | |
| 1285 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 1286 | Bir12 | Birch, paper | 12.0 | Good | | | | 12.0 | | | | |
| 1287 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 1288 | Bir16.5 | Birch, paper | 16.5 | Good | | | | 16.5 | | | | |
| 1289 | Bir18 | Birch, paper | 18.0 | Good | | | | 18.0 | | | | |
| 1290 | Bir20 | Birch, paper | 20.0 | Good | | | | 20.0 | | | | |
| 1291 | Cot16 | Cottonwood | 16.0 | Fair | | | | | | | 16.0 | |
| 1292 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 1293 | Box11.5 | Boxelder | 11.5 | Fair | | | | | | 11.5 | | |
| 1294 | Oak16.5 | Oak, red | 16.5 | Good | | | | | 16.5 | | | |
| 1295 | Oak19 | Oak, bur | 19.0 | Good | | | | | 19.0 | | | |
| 1296 | Che17 | Cherry, black | 17.0 | Good | | | 17.0 | | | | | |
| 1297 | Oak32 | Oak, bur | 32.0 | Good | | | | | 32.0 | | | |
| 1298 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 1299 | Asp9 | Aspen | 9.0 | Fair | 9.0 | | | | | | | |
| 1300 | Box9 | Boxelder | 9.0 | Good | | | | | | 9.0 | | |
| 1701 | Oak16.5 | Oak, bur | 16.5 | Good | | | | 16.5 | | | | |
| 1702 | Oak11.5 | Oak, bur | 11.5 | Good | | | | 11.5 | | | | |
| 1703 | Oak12.5 | Oak, bur | 12.5 | Good | | | | 12.5 | | | | |
| 1704 | Oak15.5 | Oak, red | 15.5 | Poor | | | | 15.5 | | | | |
| 1705 | Oak24.5 | Oak, red | 24.5 | Good | | | | 24.5 | | | | |
| 1706 | Oak14 | Oak, bur | 14.0 | Fair | | | | 14.0 | | | | |
| 1707 | Oak12 | Oak, bur | 12.0 | Fair | | | | 12.0 | | | | |
| 1708 | Oak12 | Oak, bur | 12.0 | Fair | | | | 12.0 | | | | |
| 1709 | Oak20.5 | Oak, bur | 20.5 | Good | | | | 20.5 | | | | |
| 1710 | Asp9 | Aspen | 9.0 | Good | | 9.0 | | | | | | |
| 1711 | Asp9 | Aspen | 9.0 | Good | | 9.0 | | | | | | |
| 1712 | Asp11 | Aspen | 11.0 | Good | | 11.0 | | | | | | |
| 1713 | Asp8.5 | Aspen | 8.5 | Fair | | 8.5 | | | | | | |
| 1714 | Asp8 | Aspen | 8.0 | Good | | 8.0 | | | | | | |
| 1715 | Oak12 | Oak, red | 12.0 | Good | | | | 12.0 | | | | |
| 1716 | Oak14.5 | Oak, bur | 14.5 | Good | | | | 14.5 | | | | |
| 1717 | Asp10 | Aspen | 10.0 | Good | | 10.0 | | | | | | |
| 1718 | Oak20 | Oak, white | 20.0 | Good | | | | 20.0 | | | | |
| 1719 | Bir11 | Birch, paper | 11.0 | Fair | | | | 11.0 | | | | |
| 1720 | Asp14.5 | Aspen | 14.5 | Good | | 14.5 | | | | | | |
| 1721 | Che10.5 | Cherry, black | 10.5 | Fair | | | | 10.5 | | | | |
| 1722 | Asp16 | Aspen | 16.0 | Good | | 16.0 | | | | | | |
| 1723 | Elm14.5 | Elm, American | 14.5 | Good | | 14.5 | | | | | | |
| 1724 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 1725 | Elm9.5 | Elm, American | 9.5 | Good | | 9.5 | | | | | | |
| 1726 | Oak18 | Oak, bur | 18.0 | Fair | | | | 18.0 | | | | |
| 1727 | Oak18 | Oak, bur | 18.0 | Good | | | | 18.0 | | | | |
| 1728 | Asp12 | Aspen | 12.0 | Good | | 12.0 | | | | | | |
| 1729 | Elm11.5 | Elm, American | 11.5 | Excellent | | 11.5 | | | | | | |
| 1730 | Oak13.5 | Oak, red | 13.5 | Good | | | | 13.5 | | | | |
| 1731 | Elm8.5 | Elm, American | 8.5 | Good | 8.5 | | | | | | | |
| 1732 | Oak28 | Oak, bur | 28.0 | Good | | | | | 28.0 | | | |
| 1733 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 1734 | Oak17.5 | Oak, bur | 17.5 | Fair | | | | 17.5 | | | | |
| 1735 | Oak11.5 | Oak, red | 11.5 | Good | | | | 11.5 | | | | |
| 1736 | Oak24 | Oak, red | 24.0 | Fair | | | | 24.0 | | | | |
| 1737 | Oak13 | Oak, red | 13.0 | Good | | | | 13.0 | | | | |
| 1738 | Oak10.5 | Oak, bur | 10.5 | Fair | | | | 10.5 | | | | |
| 1739 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 1740 | Oak14 | Oak, red | 14.0 | Good | | | | 14.0 | | | | |
| 1741 | Oak8.5 | Oak, red | 8.5 | Good | | | | 8.5 | | | | |
| 1742 | Oak18 | Oak, bur | 18.0 | Good | | | | 18.0 | | | | |
| 1743 | Oak11.5 | Oak, bur | 11.5 | Fair | | | | 11.5 | | | | |
| 1744 | Oak19 | Oak, bur | 19.0 | Good | | | | 19.0 | | | | |
| 1745 | Oak15.5 | Oak, bur | 15.5 | Good | | | | 15.5 | | | | |
| 1746 | Oak16 | Oak, bur | 16.0 | Good | | | | 16.0 | | | | |
| 1747 | Oak16.5 | Oak, bur | 16.5 | Good | | | | 16.5 | | | | |
| 1748 | Oak14.5 | Oak, bur | 14.5 | Good | | | | 14.5 | | | | |
| 1749 | Oak12 | Oak, bur | 12.0 | Good | | | | 12.0 | | | | |
| 1750 | Oak16 | Oak, red | 16.0 | Good | | | | 16.0 | | | | |
| 1751 | Oak14.5 | Oak, bur | 14.5 | Good | | | | 14.5 | | | | |
| 1752 | Oak14.5 | Oak, bur | 14.5 | Good | | | | 14.5 | | | | |
| 1753 | Elm9.5 | Elm, American | 9.5 | Good | | 9.5 | | | | | | |
| 1754 | Oak29 | Oak, bur | 29.0 | Fair | | | | | 29.0 | | | |
| 1755 | Che11 | Cherry, black | 11.0 | Good | | | | 11.0 | | | | |
| 1756 | Box9 | Boxelder | 9.0 | Good | | | | | | 9.0 | | |
| 1757 | Oak13 | Oak, red | 13.0 | Fair | | | | 13.0 | | | | |
| 1758 | Box11 | Boxelder | 11.0 | Good | | | | | | 11.0 | | |
| 1759 | Elm14 | Elm, American | 14.0 | Good | | 14.0 | | | | | | |
| 1760 | Che11 | Cherry, black | 11.0 | Good | | | | 11.0 | | | | |
| 1761 | Asp10 | Aspen | 10.0 | Fair | | 10.0 | | | | | | |
| 1762 | Asp10.5 | Aspen | 10.5 | Fair | | 10.5 | | | | | | |
| 1763 | Oak15.5 | Oak, bur | 15.5 | Good | | | | 15.5 | | | | |
| 1764 | Elm12 | Elm, American | 12.0 | Good | | 12.0 | | | | | | |
| 1765 | Oak17.5 | Oak, red | 17.5 | Good | | | | | | | | 17.5 |
| 1766 | Oak27 | Oak, bur | 27.0 | Good | | | | | | | | 27.0 |
| 1767 | Che10.5 | Cherry, black | 10.5 | Fair | | | | | | | | 10.5 |
| 1768 | Che9 | Cherry, black | 9.0 | Fair | | | | | | | | 9.0 |
| 1769 | Ced4.5 | Redcedar | 4.5 | Good | | | | | | | | 4.5 |
| 1770 | Asp10 | Aspen | 10.0 | Fair | | 10.0 | | | | | | 10 |
| 1771 | Asp10.5 | Aspen | 10.5 | Fair | | 10.5 | | | | | | |
| 1772 | Asp10.5 | Aspen | 10.5 | Fair | | 10.5 | | | | | | |
| 1773 | Oak34 | Oak, bur | 34.0 | Good | | | | 34.0 | | | | |
| 1774 | Elm11 | Elm, American | 11.0 | Fair | | 11.0 | | | | | | |
| 1775 | Che9.5 | Cherry, black | 9.5 | Fair | | | | 9.5 | | | | |
| 1776 | Oak23 | Oak, bur | 23.0 | Good | | | | | | | | 23 |
| 1777 | Box11.5 | Boxelder | 11.5 | Fair | | | | | | 11.5 | | |
| 1778 | Elm12 | Elm, American | 12.0 | Excellent | | | | | | | | 12 |
| 1779 | Bas12 | Basswood | 12.0 | Good | | | | | | | | 12 |
| 1780 | Box8 | Boxelder | 8.0 | Good | | | | | | 8.0 | | |
| 1781 | Bas15 | Basswood | 15.0 | Fair | | | | | | | | 15 |
| 1782 | Bas9 | Basswood | 9.0 | Good | | | | 9.0 | | | | 9 |
| 1783 | Box8 | Boxelder | 8.0 | Good | | | | | | 8.0 | | |
| 1784 | Che10 | Cherry, black | 10.0 | Good | | | | 10.0 | | | | |
| 1785 | Che11.5 | Cherry, black | 11.5 | Fair | | | | 11.5 | | | | |
| 1786 | Bas10 | Basswood | 10.0 | Good | | | | 10.0 | | | | |
| 1787 | Bas12 | Basswood | 12.0 | Fair | | | | | | | | 12.0 |
| 1788 | Oak13 | Oak, red | 13.0 | Good | | | | | | | | 13.0 |
| 1789 | Bas8 | Basswood | 8.0 | Good | | | | | | | | 8.0 |
| 1790 | Bas11 | Basswood | 11.0 | Fair | | | | | | | | 11.0 |
| 1791 | Bas16 | Basswood | 16.0 | Good | | | | | | | | 16.0 |
| 1792 | Bas9.5 | Basswood | 9.5 | Fair | | | | | | | | 9.5 |
| 1793 | Box11 | Boxelder | 11.0 | Good | | | | | | 11.0 | | |
| 1794 | Ash11 | Ash, green | 11.0 | Good | | | | | | | | 11 |
| 1795 | Bas16 | Basswood | 16.0 | Fair | | | | 16.0 | | | | |
| 1796 | Bas12 | Basswood | 12.0 | Good | | | | | | | | 12 |
| 1797 | Bas9 | Basswood | 9.0 | Good | | | | | | | | 9 |
| 1798 | Bas16 | Basswood | 16.0 | Fair | | | | | | | | 16 |
| 1799 | Oak15.5 | Oak, red | 15.5 | Fair | | | | | | | | 15.5 |
| 1800 | Bas11 | Basswood | 11.0 | Good | | | | | | | | 11 |
| 1801 | Oak17.5 | Oak, bur | 17.5 | Good | | | | 17.5 | | | | |
| 1802 | Oak21.5 | Oak, red | 21.5 | Fair | | | | 21.5 | | | | |
| 1803 | Bas22 | Basswood | 22.0 | Fair | | | | 22.0 | | | | |
| 1804 | Oak12 | Oak, red | 12.0 | Good | | | | 12.0 | | | | |
| 1805 | Elm10.5 | Elm, American | 10.5 | Fair | | 10.5 | | | | | | |
| 1806 | Bas10 | Basswood | 10.0 | Excellent | | | | 10.0 | | | | |
| 1807 | Asp9.5 | Aspen | 9.5 | Good | | 9.5 | | | | | | |
| 1808 | Asp10 | Aspen | 10.0 | Good | | 10.0 | | | | | | |
| 1809 | Asp11.5 | Aspen | 11.5 | Good | | 11.5 | | | | | | |
| 1810 | Asp12 | Aspen | 12.0 | Good | | 12.0 | | | | | | |
| 1811 | Asp10 | Aspen | 10.0 | Good | | 10.0 | | | | | | |
| 1812 | Asp11.5 | Aspen | 11.5 | Good | | 11.5 | | | | | | |
| 1813 | Asp16 | Aspen | 16.0 | Fair | | 16.0 | | | | | | |
| 1814 | Asp16.5 | Aspen | 16.5 | Good | | 16.5 | | | | | | |
| 1815 | Asp12.5 | Aspen | 12.5 | Fair | | 12.5 | | | | | | |
| 1816 | Asp15 | Aspen | 15.0 | Good | | 15.0 | | | | | | |
| 1817 | Oak25 | Oak, white | 25.0 | Good | | | | 25.0 | | | | |
| 1818 | Che12.5 | Cherry, black | 12.5 | Fair | | | | 12.5 | | | | |
| 1819 | Elm9 | Elm, American | 9.0 | Fair | | 9.0 | | | | | | |
| 1820 | Asp10 | Aspen | 10.0 | Good | | 10.0 | | | | | | |
| 1821 | Asp15.5 | Aspen | 15.5 | Good | | 15.5 | | | | | | |
| 1822 | Asp12.5 | Aspen | 12.5 | Excellent | | 12.5 | | | | | | |
| 1823 | Asp9.5 | Aspen | 9.5 | Good | | 9.5 | | | | | | |
| 1824 | Asp12.5 | Aspen | 12.5 | Good | | 12.5 | | | | | | |
| 1825 | Asp14 | Aspen | 14.0 | Good | | 14.0 | | | | | | |
| 1826 | Asp14.5 | Aspen | 14.5 | Fair | | 14.5 | | | | | | |
| 1827 | Asp12.5 | Aspen | 12.5 | Good | | 12.5 | | | | | | |
| 1828 | Asp12.5 | Aspen | 12.5 | Good | | 12.5 | | | | | | |
| 1829 | Asp12 | Aspen | 12.0 | Fair | | 12.0 | | | | | | |
| 1830 | Asp14 | Aspen | 14.0 | Good | | 14.0 | | | | | | |
| 1831 | Asp9 | Aspen | 9.0 | Good | | 9.0 | | | | | | |
| 1832 | Asp13 | Aspen | 13.0 | Good | | 13.0 | | | | | | |
| 1833 | Asp13 | Aspen | 13.0 | Good | | 13.0 | | | | | | |
| 1834 | Asp9 | Aspen | 9.0 | Good | | 9.0 | | | | | | |
| 1835 | Asp11.5 | Aspen | 11.5 | Good | | 11.5 | | | | | | |
| 1836 | Asp11 | Aspen | 11.0 | Good | | 11.0 | | | | | | |
| 1837 | Asp8.5 | Aspen | 8.5 | Good | | 8.5 | | | | | | |
| 1838 | Asp11 | Aspen | 11.0 | Good | | 11.0 | | | | | | |
| 1839 | Asp11 | Aspen | 11.0 | Fair | | 11.0 | | | | | | |
| 1840 | Oak18 | Oak, red | 18.0 | Good | | | | 18.0 | | | | |
| 1841 | Che10 | Cherry, black | 10.0 | Fair | | | | 10.0 | | | | |
| 1842 | Oak19.5 | Oak, red | 19.5 | Good | | | | 19.5 | | | | |
| 1843 | Elm8 | Elm, American | 8.0 | Fair | | 8.0 | | | | | | |
| 1844 | Irn20.5 | Ironwood | 20.5 | Fair | | | | 20.5 | | | | |
| 1845 | Oak14 | Oak, red | 14.0 | Fair | | | | 14.0 | | | | |
| 1846 | Asp9.5 | Aspen | 9.5 | Fair | | 9.5 | | | | | | |
| 1847 | Asp10 | Aspen | 10.0 | Good | | 10.0 | | | | | | |
| 1848 | Asp9.5 | Aspen | 9.5 | Fair | | 9.5 | | | | | | |
| 1849 | Asp10 | Aspen | 10.0 | Fair | | 10.0 | | | | | | |
| 1850 | Asp11 | Aspen | 11.0 | Good | | 11.0 | | | | | | |
| 1851 | Asp9 | Aspen | 9.0 | Good | | 9.0 | | | | | | |
| 1852 | Asp8 | Aspen | 8.0 | Good | | 8.0 | | | | | | |
| 1853 | Asp8 | Aspen | 8.0 | Fair | | 8.0 | | | | | | |
| 1854 | Asp11 | Aspen | 11.0 | Good | | 11.0 | | | | | | |
| 1855 | Asp12.5 | Aspen | 12.5 | Fair | | 12.5 | | | | | | |
| 1856 | Oak18.5 | Oak, red | 18.5 | Fair | | | | 18.5 | | | | |
| 1857 | Asp9 | Aspen | 9.0 | Good | | 9.0 | | | | | | |
| 1858 | Che9 | Cherry, black | 9.0 | Fair | | | | 9.0 | | | | |
| 1859 | Oak18 | Oak, red | 18.0 | Good | | | | 18.0 | | | | |
| 1860 | Che8 | Cherry, black | 8.0 | Fair | | | | 8.0 | | | | |
| 1861 | Bas28 | Basswood | 28.0 | Fair | | | | 28.0 | | | | |
| 1862 | Bas15 | Basswood | 15.0 | Fair | | | | | | | | 15 |
| 1863 | Bas9.5 | Basswood | 9.5 | Good | | | | | | | | 9.5 |
| 1864 | Elm12 | Elm, American | 12.0 | Fair | | 12.0 | | | | | | |
| 1865 | Bas36 | Basswood | 36.0 | Fair | | | | 36.0 | | | | |
| 1866 | Bas23.5 | Basswood | 23.5 | Fair | | | | 23.5 | | | | |
| 1867 | Oak8.5 | Oak, red | 8.5 | Good | | | | 8.5 | | | | |
| 1868 | Oak9 | Oak, red | 9.0 | Good | | | | 9.0 | | | | |
| 1869 | Bas26 | Basswood | 26.0 | Fair | | | | 26.0 | | | | |
| 1870 | Bas15 | Basswood | 15.0 | Fair | | | | 15.0 | | | | |
| 1871 | Oak16 | Oak, red | 16.0 | Good | | | | 16.0 | | | | |
| 1872 | Bas9.5 | Basswood | 9.5 | Fair | | | | 9.5 | | | | |
| 1873 | Bas40 | Basswood | 40.0 | Fair | | | | 40.0 | | | | |
| 1874 | Oak11.5 | Oak, red | 11.5 | Excellent | | | | 11.5 | | | | |
| 18 | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | |
| 1877 | Asp8 | Aspen | 8.0 | Good | | 8.0 | | | | | | |
| 1878 | Asp9 | Aspen | 9.0 | Fair | | 9.0 | | | | | | |
| 1879 | Asp9.5 | Aspen | 9.5 | Good | | 9.5 | | | | | | |
| 1880 | Asp11.5 | Aspen | 11.5 | Good | | 11.5 | | | | | | |
| 1881 | Oak11 | Oak, bur | 11.0 | Fair | | | | 11.0 | | | | |
| 1882 | Che17 | Cherry, black | 17.0 | Fair | | | | 17.0 | | | | |
| 1883 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 1884 | Asp9.5 | Aspen | 9.5 | Good | | 9.5 | | | | | | |
| 1885 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 1886 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 1887 | Oak16 | Oak, red | 16.0 | Good | | | | 16.0 | | | | |
| 1888 | Asp11 | Aspen | 11.0 | Good | | 11.0 | | | | | | |
| 1889 | Asp9 | Aspen | 9.0 | Good | | 9.0 | | | | | | |
| 1890 | Asp9.5 | Aspen | 9.5 | Good | | 9.5 | | | | | | |
| 1891 | Oak35 | Oak, white | 35.0 | Fair | | | | 35.0 | | | | |
| 1892 | Oak20.5 | Oak, bur | 20.5 | Fair | | | | 20.5 | | | | |
| 1893 | Irn8 | Ironwood | 8.0 | Good | | | | 8.0 | | | | |
| 1894 | Oak15.5 | Oak, bur | 15.5 | Good | | | | 15.5 | | | | |
| 1895 | Oak23 | Oak, bur | 23.0 | Good | | | | 23.0 | | | | |
| 1896 | Asp10.5 | Aspen | 10.5 | Fair | | 10.5 | | | | | | |
| 1897 | Asp11 | Aspen | 11.0 | Good | | 11.0 | | | | | | |
| 1898 | Asp8 | Aspen | 8.0 | Fair | | 8.0 | | | | | | |
| 1899 | Asp11 | Aspen | 11.0 | Good | | 11.0 | | | | | | |
| 1900 | Asp9 | Aspen | 9.0 | Good | | 9.0 | | | | | | |
| 1901 | Elm10 | Elm, American | 10.0 | Good | | 10.0 | | | | | | |
| 1902 | Asp9.5 | Aspen | 9.5 | Good | | 9.5 | | | | | | |
| 1903 | Asp9.5 | Aspen | 9.5 | Good | | 9.5 | | | | | | |
| 1904 | Asp8 | Aspen | 8.0 | Fair | | 8.0 | | | | | | |
| 1905 | Asp9 | Aspen | 9.0 | Good | | 9.0 | | | | | | |
| 1906 | Asp8.5 | Aspen | 8.5 | Fair | | 8.5 | | | | | | |
| 1907 | Asp8.5 | Aspen | 8.5 | Good | | 8.5 | | | | | | |
| 1908 | Oak19 | Oak, bur | 19.0 | Good | | | | 19.0 | | | | |
| 1909 | Oak15 | Oak, red | 15.0 | Good | | | | 15.0 | | | | |
| 1910 | Oak18 | Oak, red | 18.0 | Good | | | | 18.0 | | | | |
| 1911 | Oak11.5 | Oak, red | 11.5 | Good | | | | 11.5 | | | | |
| 1912 | Oak21.5 | Oak, bur | 21.5 | Good | | | | 21.5 | | | | |
| 1913 | Oak19 | Oak, red | 19.0 | Good | | | | 19.0 | | | | |
| 1914 | Oak11.5 | Oak, red | 11.5 | Good | | | | 11.5 | | | | |
| 1915 | Oak12 | Oak, red | 12.0 | Fair | | | | 12.0 | | | | |
| 1916 | Che10.5 | Cherry, black | 10.5 | Good | | | | 10.5 | | | | |
| 1917 | Bas22.5 | Basswood | 22.5 | Fair | | | | 22.5 | | | | |
| 1918 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 1919 | Che8 | Cherry, black | 8.0 | Fair | | | | 8.0 | | | | |
| 1920 | Che9 | Cherry, black | 9.0 | Fair | | | | 9.0 | | | | |
| 1921 | Oak13.5 | Oak, red | 13.5 | Good | | | | 13.5 | | | | |
| 1922 | Che8.5 | Cherry, black | 8.5 | Fair | | | | 8.5 | | | | |
| 1923 | Asp10 | Aspen | 10.0 | Good | | 10.0 | | | | | | |
| 1924 | Asp10 | Aspen | 10.0 | Good | | 10.0 | | | | | | |
| 1925 | Elm10 | Elm, American | 10.0 | Good | | 10.0 | | | | | | |
| 1926 | Asp10 | Aspen | 10.0 | Fair | | 10.0 | | | | | | |
| 1927 | Che9 | Cherry, black | 9.0 | Fair | | | | 9.0 | | | | |
| 1928 | Elm10 | Elm, American | 10.0 | Good | | 10.0 | | | | | | |
| 1929 | Asp12.5 | Aspen | 12.5 | Fair | | 12.5 | | | | | | |
| 1930 | Oak15.5 | Oak, red | 15.5 | Good | | | | 15.5 | | | | |
| 1931 | Oak21.5 | Oak, red | 21.5 | Fair | | | | 21.5 | | | | |
| 1932 | Elm8.5 | Elm, American | 8.5 | Fair | | 8.5 | | | | | | |
| 1933 | Che11 | Cherry, black | 11.0 | Good | | | | 11.0 | | | | |
| 1934 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 1935 | Asp9.5 | Aspen | 9.5 | Fair | | 9.5 | | | | | | |
| 1936 | Oak10.5 | Oak, red | 10.5 | Good | | | | 10.5 | | | | |
| 1937 | Asp11 | Aspen | 11.0 | Good | | 11.0 | | | | | | |
| 1938 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 1939 | Asp8 | Aspen | 8.0 | Good | | 8.0 | | | | | | |
| 1940 | Asp11 | Aspen | 11.0 | Good | | 11.0 | | | | | | |
| 1941 | Oak25.5 | Oak, red | 25.5 | Good | | | | 25.5 | | | | |
| 1942 | Oak13 | Oak, bur | 13.0 | Good | | | | 13.0 | | | | |
| 1943 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 1944 | Oak12.5 | Oak, bur | 12.5 | Fair | | | | 12.5 | | | | |
| 1945 | Oak14 | Oak, bur | 14.0 | Good | | | | 14.0 | | | | |
| 1946 | Oak15 | Oak, bur | 15.0 | Good | | | | 15.0 | | | | |
| 1947 | Oak15.5 | Oak, bur | 15.5 | Good | | | | 15.5 | | | | |
| 1948 | Oak14.5 | Oak, bur | 14.5 | Good | | | | 14.5 | | | | |
| 1949 | Elm9 | Elm, American | 9.0 | Good | | 9.0 | | | | | | |
| 1950 | Che9 | Cherry, black | 9.0 | Fair | | | | 9.0 | | | | |
| 1951 | Asp10 | Aspen | 10.0 | Good | | 10.0 | | | | | | |
| 1952 | Asp9 | Aspen | 9.0 | Good | | 9.0 | | | | | | |
| 1953 | Che8.5 | Cherry, black | 8.5 | Fair | | | 8.5 | | | | | |
| 1954 | Elm9.5 | Elm, American | 9.5 | Good | 9.5 | | | | | | | |
| 1955 | Asp10 | Aspen | 10.0 | Fair | | 10.0 | | | | | | |
| 1956 | Asp8 | Aspen | 8.0 | Fair | | 8.0 | | | | | | |
| 1957 | Oak14 | Oak, bur | 14.0 | Fair | | | | 14.0 | | | | |
| 1958 | Elm11 | Elm, American | 11.0 | Good | 11.0 | | | | | | | |
| 1959 | Box9.5 | Boxelder | 9.5 | Fair | | | | | | 9.5 | | |
| 1960 | Oak13 | Oak, bur | 13.0 | Good | | | | | 13.0 | | | |
| 1961 | Oak8 | Oak, bur | 8.0 | Fair | | | | | 8.0 | | | |
| 1962 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 1963 | Oak13 | Oak, bur | 13.0 | Good | | | | | 13.0 | | | |
| 1964 | Oak12 | Oak, bur | 12.0 | Good | | | | | 12.0 | | | |
| 1965 | Oak12 | Oak, bur | 12.0 | Good | | | | | 12.0 | | | |
| 1966 | Oak15 | Oak, bur | 15.0 | Good | | | | | 15.0 | | | |
| 1967 | Asp14 | Aspen | 14.0 | Fair | 14.0 | | | | | | | |
| 1968 | Elm8 | Elm, American | 8.0 | Good | 8.0 | | | | | | | |
| 1969 | Oak13.5 | Oak, bur | 13.5 | Good | | | | | 13.5 | | | |
| 1970 | Oak13 | Oak, bur | 13.0 | Fair | | | | | 13.0 | | | |
| 1971 | Elm19 | Elm, red | 19.0 | Good | 19.0 | | | | | | | |
| 1972 | Elm9 | Elm, American | 9.0 | Good | 9.0 | | | | | | | |
| 1973 | Oak8.5 | Oak, bur | 8.5 | Good | | | | | 8.5 | | | |
| 1974 | Oak11 | Oak, bur | 11.0 | Good | | | | | 11.0 | | | |
| 1975 | Elm12 | Elm, American | 12.0 | Fair | 12.0 | | | | | | | |
| 1976 | Asp11.5 | Aspen | 11.5 | Fair | 11.5 | | | | | | | |
| 1977 | Oak14 | Oak, bur | 14.0 | Good | | | | | 14.0 | | | |
| 1978 | Oak17.5 | Oak, bur | 17.5 | Good | | | | | 17.5 | | | |
| 1979 | Asp9.5 | Aspen | 9.5 | Good | 9.5 | | | | | | | |
| 1980 | Asp9 | Aspen | 9.0 | Good | 9.0 | | | | | | | |
| 1981 | Asp12 | Aspen | 12.0 | Fair | 12.0 | | | | | | | |
| 1982 | Asp11.5 | Aspen | 11.5 | Fair | 11.5 | | | | | | | |
| 1983 | Oak10.5 | Oak, bur | 10.5 | Good | | | | | 10.5 | | | |
| 1984 | Oak21.5 | Oak, bur | 21.5 | Good | | | | | 21.5 | | | |
| 1985 | Oak17.5 | Oak, bur | 17.5 | Fair | | | | | 17.5 | | | |
| 1986 | Oak13 | Oak, bur | 13.0 | Good | | | | | 13.0 | | | |
| 1987 | Oak12 | Oak, bur | 12.0 | Good | | | | | 12.0 | | | |
| 1988 | Oak11 | Oak, bur | 11.0 | Good | | | | | 11.0 | | | |
| 1989 | Oak13 | Oak, bur | 13.0 | Good | | | | | 13.0 | | | |
| 1990 | Oak17 | Oak, bur | 17.0 | Good | | | | | 17.0 | | | |
| 1991 | Oak8 | Oak, bur | 8.0 | Good | | | | | 8.0 | | | |
| 1992 | Oak14 | Oak, bur | 14.0 | Good | | | | | 14.0 | | | |
| 1993 | Oak9 | Oak, bur | 9.0 | Fair | | | | | 9.0 | | | |
| 1994 | Asp10.5 | Aspen | 10.5 | Good | 10.5 | | | | | | | |
| 1995 | Asp11.5 | Aspen | 11.5 | Good | 11.5 | | | | | | | |
| 1996 | Asp13 | Aspen | 13.0 | Good | 13.0 | | | | | | | |
| 1997 | Asp8 | Aspen | 8.0 | Fair | 8.0 | | | | | | | |
| 1998 | Apl8.5 | Crabapple | 8.5 | Good | | | 8.5 | | | | | |
| 1999 | Elm10 | Elm, American | 10.0 | Good | 10.0 | | | | | | | |
| 2000 | Oak10 | Oak, red | 10.0 | Good | | | | | 10.0 | | | |
| 2001 | Oak9.5 | Oak, red | 9.5 | Good | | | | | 9.5 | | | |
| 2002 | Elm12.5 | Elm, American | 12.5 | Fair | | 12.5 | | | | | | |
| 2003 | Oak10.5 | Oak, bur | 10.5 | Good | | | | 10.5 | | | | |
| 2004 | Oak19 | Oak, bur | 19.0 | Good | | | | 19.0 | | | | |
| 2005 | Oak9.5 | Oak, bur | 9.5 | Good | | | | | 9.5 | | | |
| 2006 | Oak12.5 | Oak, bur | 12.5 | Good | | | | | 12.5 | | | |
| 2007 | Oak13.5 | Oak, bur | 13.5 | Good | | | | | 13.5 | | | |
| 2008 | Oak22.5 | Oak, white | 22.5 | Excellent | | | | | 22.5 | | | |
| 2009 | Oak10.5 | Oak, bur | 10.5 | Fair | | | | | 10.5 | | | |
| 2010 | Oak8 | Oak, bur | 8.0 | Fair | | | | 8.0 | | | | |
| 2011 | Oak14.5 | Oak, red | 14.5 | Good | | | | 14.5 | | | | |
| 2012 | Ash10 | Ash, green | 10.0 | Good | | | | 10.0 | | | | |
| 2013 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 2014 | Che10 | Cherry, black | 10.0 | Good | | | | 10.0 | | | | |
| 2015 | Oak12.5 | Oak, red | 12.5 | Good | | | | 12.5 | | | | |
| 2016 | Ash9 | Ash, green | 9.0 | Good | | | | 9.0 | | | | |
| 2017 | Oak20.5 | Oak, bur | 20.5 | Good | | | | 20.5 | | | | |
| 2018 | Oak15 | Oak, red | 15.0 | Fair | | | | 15.0 | | | | |
| 2019 | Oak20 | Oak, red | 20.0 | Fair | | | | 20.0 | | | | |
| 2020 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 2021 | Che10 | Cherry, black | 10.0 | Good | | | | 10.0 | | | | |
| 2022 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 2023 | Oak10.5 | Oak, red | 10.5 | Good | | | | 10.5 | | | | |
| 2024 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 2025 | Bir13.5 | Birch, paper | 13.5 | Good | | | | 13.5 | | | | |
| 2026 | Oak8.5 | Oak, bur | 8.5 | Good | | | | | 8.5 | | | |
| 2027 | Oak14 | Oak, bur | 14.0 | Good | | | | | 14.0 | | | |
| 2029 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 2030 | Oak8.5 | Oak, red | 8.5 | Good | | | | 8.5 | | | | |
| 2031 | Oak10.5 | Oak, red | 10.5 | Good | | | | 10.5 | | | | |
| 2032 | Che15.5 | Cherry, black | 15.5 | Good | | | | 15.5 | | | | |
| 2033 | Che10 | Cherry, black | 10.0 | Fair | | | | 10.0 | | | | |
| 2034 | Che10 | Cherry, black | 10.0 | Fair | | | | 10.0 | | | | |
| 2035 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 36 | Box24.5 | Boxelder | 24.5 | Fair | | | | | | 24.5 | | |
| 37 | Box8.5 | Boxelder | 8.5 | Fair | | | | | | 8.5 | | |
| 2038 | Elm16 | Elm, Siberian | 16.0 | Good | | 16.0 | | | | | | |
| 2039 | Oak11.5 | Oak, red | 11.5 | Good | | | | 11.5 | | | | |
| 2040 | Oak10.5 | Oak, red | 10.5 | Good | | | | 10.5 | | | | |
| 2041 | Hac10 | Hackberry | 10.0 | Good | | | | 10.0 | | | | |
| 2042 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 2043 | Oak26 | Oak, bur | 26.0 | Fair | | | | 26.0 | | | | |
| 2044 | Oak21.5 | Oak, red | 21.5 | Good | | | | 21.5 | | | | |
| 2045 | Elm8 | Elm, American | 8.0 | Fair | | 8.0 | | | | | | |
| 2046 | Ash12 | Ash, green | 12.0 | Good | | | | 12.0 | | | | |
| 2047 | Oak9.5 | Oak, red | 9.5 | Good | | | | 9.5 | | | | |
| 2048 | Oak13.5 | Oak, red | 13.5 | Good | | | | 13.5 | | | | |
| 2049 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 2050 | Ash11 | Ash, green | 11.0 | Good | | | | 11.0 | | | | |
| 2051 | Oak9 | Oak, red | 9.0 | Good | | | | 9.0 | | | | |
| 2052 | Oak15 | Oak, red | 15.0 | Good | | | | 15.0 | | | | |
| 2053 | Oak15 | Oak, red | 15.0 | Good | | | | 15.0 | | | | |
| 2054 | Ash10 | Ash, green | 10.0 | Good | | | | 10.0 | | | | |
| 2055 | Che11 | Cherry, black | 11.0 | Fair | | | | 11.0 | | | | |
| 2056 | Oak23 | Oak, red | 23.0 | Good | | | | 23.0 | | | | |
| 2057 | Oak12.5 | Oak, red | 12.5 | Fair | | | | 12.5 | | | | |
| 2058 | Che9 | Cherry, black | 9.0 | Fair | | | | 9.0 | | | | |
| 2059 | Oak9 | Oak, red | 9.0 | Good | | | | 9.0 | | | | |
| 2060 | Oak12 | Oak, red | 12.0 | Good | | | | 12.0 | | | | |
| 2061 | Oak17 | Oak, red | 17.0 | Fair | | | | 17.0 | | | | |
| 2062 | Apl11 | Crabapple | 11.0 | Fair | | | | 11.0 | | | | |
| 2063 | Ash10 | Ash, green | 10.0 | Good | | | | 10.0 | | | | |
| 2064 | Oak10.5 | Oak, red | 10.5 | Good | | | | 10.5 | | | | |
| 2065 | Ash13 | Ash, green | 13.0 | Fair | | | | 13.0 | | | | |
| 2066 | Che12.5 | Cherry, black | 12.5 | Fair | | | | 12.5 | | | | |
| 2067 | Che9 | Cherry, black | 9.0 | Good | | | | 9.0 | | | | |
| 2068 | Elm10 | Elm, American | 10.0 | Good | | | | | | | | 10 |
| 2069 | Box15 | Boxelder | 15.0 | Fair | | | | | | 15.0 | | |
| 2070 | Box15 | Boxelder | 15.0 | Fair | | | | | | 15.0 | | |
| 2071 | Box10.5 | Boxelder | 10.5 | Good | | | | | | 10.5 | | |
| 2072 | Box11 | Boxelder | 11.0 | Good | | | | | | 11.0 | | |
| 2073 | Box8 | Boxelder | 8.0 | Good | | | | | | 8.0 | | |
| 2074 | Elm9 | Elm, Siberian | 9.0 | Good | | 9.0 | | | | | | |
| 2075 | Box8.5 | Boxelder | 8.5 | Fair | | | | | | 8.5 | | |
| 2076 | Box8.5 | Boxelder | 8.5 | Good | | | | | | 8.5 | | |
| 2077 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 2078 | Box8.5 | Boxelder | 8.5 | Good | | | | | | 8.5 | | |
| 2079 | Elm11 | Elm, American | 11.0 | Fair | | 11.0 | | | | | | |
| 2080 | Elm15 | Elm, Siberian | 15.0 | Fair | | 15.0 | | | | | | |
| 2081 | Elm10.5 | Elm, American | 10.5 | Good | | 10.5 | | | | | | |
| 2082 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 2083 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 2084 | Box24 | Boxelder | 24.0 | Fair | | | | | | 24.0 | | |
| 2085 | Box10 | Boxelder | 10.0 | Good | | | | | | 10.0 | | |
| 2086 | Box13 | Boxelder | 13.0 | Good | | | | | | 13.0 | | |
| 2087 | Box40 | Boxelder | 40.0 | Fair | | | | | | 40.0 | | |
| 2088 | Box19.5 | Boxelder | 19.5 | Fair | | | | | | 19.5 | | |
| 2089 | Box15 | Boxelder | 15.0 | Fair | | | | | | 15.0 | | |
| 2090 | Box30 | Boxelder | 30.0 | Good | | | | | | 30.0 | | |
| 2091 | Box18 | Boxelder | 18.0 | Fair | | | | | | 18.0 | | |
| 2092 | Box24 | Boxelder | 24.0 | Fair | | | | | | 24.0 | | |
| 2093 | Pin11 | Pine, red | 11.0 | Fair | | | 11.0 | | | | | |
| 2094 | Box16 | Boxelder | 16.0 | Fair | | | | | | 16.0 | | |
| 2095 | Box8 | Boxelder | 8.0 | Good | | | | | | 8.0 | | |
| 2096 | Elm26 | Elm, Siberian | 26.0 | Fair | 26.0 | | | | | | | |
| 2097 | Elm19 | Elm, Siberian | 19.0 | Good | | 19.0 | | | | | | |
| 2098 | Box26 | Boxelder | 26.0 | Fair | | | | | | 26.0 | | |
| 2099 | Box25 | Boxelder | 25.0 | Fair | | | | | | 25.0 | | |
| 2100 | Elm16 | Elm, Siberian | 16.0 | Fair | | 16.0 | | | | | | |
| 2101 | Elm23 | Elm, Siberian | 23.0 | Fair | | 23.0 | | | | | | |
| 2102 | Elm12 | Elm, Siberian | 12.0 | Fair | | 12.0 | | | | | | |
| 2103 | Box12 | Boxelder | 12.0 | Fair | | | | | | 12.0 | | |
| 2104 | Box13 | Boxelder | 13.0 | Fair | | | | | | 13.0 | | |
| 2105 | Elm9 | Elm, Siberian | 9.0 | Fair | | 9.0 | | | | | | |
| 2106 | Box11 | Boxelder | 11.0 | Fair | | | | | | 11.0 | | |
| 2107 | Elm9 | Elm, Siberian | 9.0 | Fair | | 9.0 | | | | | | |
| 2108 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 2109 | Box32 | Boxelder | 32.0 | Good | | | | | | 32.0 | | |
| 2110 | Mas30 | Maple, silver | 30.0 | Fair | 30.0 | | | | | | | |
| 2111 | Elm9.5 | Elm, Siberian | 9.5 | Fair | | 9.5 | | | | | | |
| 2112 | Elm12.5 | Elm, Siberian | 12.5 | Good | | 12.5 | | | | | | |
| 2113 | Elm9.5 | Elm, Siberian | 9.5 | Fair | | 9.5 | | | | | | |
| 2114 | Box13.5 | Boxelder | 13.5 | Fair | | | | | | 13.5 | | |
| 2115 | Che8 | Cherry, black | 8.0 | Fair | | | | 8.0 | | | | |
| 2116 | Che14 | Cherry, black | 14.0 | Good | | | | 14.0 | | | | |
| 2117 | Elm11.5 | Elm, American | 11.5 | Good | | 11.5 | | | | | | |
| 2118 | Box11 | Boxelder | 11.0 | Fair | | | | | | 11.0 | | |
| 2119 | Box8 | Boxelder | 8.0 | Good | | | | | | 8.0 | | |
| 2120 | Elm13.5 | Elm, Siberian | 13.5 | Fair | | 13.5 | | | | | | |
| 2121 | Box12.5 | Boxelder | 12.5 | Fair | | | | | | 12.5 | | |
| 2122 | Elm33 | Elm, American | 33.0 | Fair | | 33.0 | | | | | | |
| 2123 | Elm12 | Elm, Siberian | 12.0 | Fair | | 12.0 | | | | | | |
| 2124 | Elm10 | Elm, Siberian | 10.0 | Good | | 10.0 | | | | | | |
| 2125 | Ash9 | Ash, green | 9.0 | Good | | | | 9.0 | | | | |
| 2126 | Elm10 | Elm, Siberian | 10.0 | Fair | | 10.0 | | | | | | |
| 2127 | Elm11.5 | Elm, Siberian | 11.5 | Fair | | 11.5 | | | | | | |
| 2128 | Box16 | Boxelder | 16.0 | Fair | | | | | | 16.0 | | |
| 2129 | Che15 | Cherry, black | 15.0 | Good | | | | 15.0 | | | | |
| 2130 | Elm9.5 | Elm, Siberian | 9.5 | Good | | 9.5 | | | | | | |
| 2131 | Elm9.5 | Elm, Siberian | 9.5 | Good | 9.5 | | | | | | | |
| 2132 | Elm10.5 | Elm, American | 10.5 | Good | | 10.5 | | | | | | |
| 2133 | Box8 | Boxelder | 8.0 | Fair | | | | | | 8.0 | | |
| 2134 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 2135 | Elm8.5 | Elm, American | 8.5 | Good | | 8.5 | | | | | | |
| 2136 | Elm10 | Elm, American | 10.0 | Fair | | 10.0 | | | | | | |
| 2137 | Elm23 | Elm, Siberian | 23.0 | Fair | | 23.0 | | | | | | |
| 2138 | Elm11 | Elm, American | 11.0 | Good | | 11.0 | | | | | | |
| 2139 | Elm9 | Elm, American | 9.0 | Good | | 9.0 | | | | | | |
| 2140 | Elm13 | Elm, American | 13.0 | Good | 13.0 | | | | | | | |
| 2141 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 2142 | Elm9 | Elm, Siberian | 9.0 | Excellent | | 9.0 | | | | | | |
| 2143 | Elm14.5 | Elm, Siberian | 14.5 | Fair | | 14.5 | | | | | | |
| 2144 | Elm11 | Elm, Siberian | 11.0 | Excellent | | 11.0 | | | | | | |
| 2145 | Elm12 | Elm, American | 12.0 | Fair | | 12.0 | | | | | | |
| 2146 | Elm8.5 | Elm, Siberian | 8.5 | Fair | | 8.5 | | | | | | |
| 2147 | Box9 | Boxelder | 9.0 | Good | | | | | | 9.0 | | |
| 2148 | Box14 | Boxelder | 14.0 | Fair | | | | | | 14.0 | | |
| 2149 | Elm14 | Elm, Siberian | 14.0 | Fair | 14.0 | | | | | | | |
| 2150 | Elm13 | Elm, American | 13.0 | Fair | 13.0 | | | | | | | |
| 2151 | Elm12 | Elm, Siberian | 12.0 | Fair | 12.0 | | | | | | | |
| 2152 | Elm9 | Elm, American | 9.0 | Good | 9.0 | | | | | | | |
| 2153 | Elm12.5 | Elm, Siberian | 12.5 | Fair | 12.5 | | | | | | | |
| 2154 | Elm10.5 | Elm, American | 10.5 | Good | 10.5 | | | | | | | |
| 2155 | Oak8 | Oak, red | 8.0 | Fair | | | 8.0 | | | | | |
| 2156 | Oak17 | Oak, bur | 17.0 | Good | | | 17.0 | | | | | |
| 2157 | Oak21 | Oak, bur | 21.0 | Good | | | 21.0 | | | | | |
| 2158 | Oak20 | Oak, bur | 20.0 | Fair | | | 20.0 | | | | | |
| 2159 | Oak38 | Oak, bur | 38.0 | Good | | | | | 38.0 | | | |
| 2160 | Oak13 | Oak, bur | 13.0 | Fair | | | 13.0 | | | | | |
| 2161 | Box8.5 | Boxelder | 8.5 | Fair | | | | | | 8.5 | | |
| 2162 | Elm16 | Elm, American | 16.0 | Excellent | 16.0 | | | | | | | |
| 2163 | Elm12 | Elm, American | 12.0 | Fair | 12.0 | | | | | | | |
| 2164 | Oak21 | Oak, bur | 21.0 | Fair | | | 21.0 | | | | | |
| 2165 | Box12.5 | Boxelder | 12.5 | Good | | | | | | 12.5 | | |
| 2166 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 2167 | Elm8.5 | Elm, American | 8.5 | Fair | 8.5 | | | | | | | |
| 2168 | Oak12 | Oak, bur | 12.0 | Good | | | 12.0 | | | | | |
| 2169 | Box22 | Boxelder | 22.0 | Fair | | | | | | 22.0 | | |
| 2170 | Che12.5 | Cherry, black | 12.5 | Fair | | | | 12.5 | | | | |
| 2171 | Elm10.5 | Elm, American | 10.5 | Fair | | 10.5 | | | | | | |
| 2172 | Elm13 | Elm, American | 13.0 | Good | | 13.0 | | | | | | |
| 2173 | Elm14 | Elm, American | 14.0 | Fair | | 14.0 | | | | | | |
| 2174 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 2175 | Box14 | Boxelder | 14.0 | Fair | | | | | | 14.0 | | |
| 2176 | Box16 | Boxelder | 16.0 | Fair | | | | | | 16.0 | | |
| 2177 | Box25 | Boxelder | 25.0 | Fair | | | | | | 25.0 | | |
| 2178 | Box14.5 | Boxelder | 14.5 | Good | | | | | | 14.5 | | |
| 2179 | Box9.5 | Boxelder | 9.5 | Fair | | | | | | 9.5 | | |
| 2180 | Box12 | Boxelder | 12.0 | Fair | | | | | | 12.0 | | |
| 2181 | Box14 | Boxelder | 14.0 | Fair | | | | | | 14.0 | | |
| 2182 | Elm8 | Elm, American | 8.0 | Fair | | 8.0 | | | | | | |
| 2183 | Che18 | Cherry, black | 18.0 | Fair | | | 18.0 | | | | | |
| 2184 | Che10 | Cherry, black | 10.0 | Fair | | | 10.0 | | | | | |
| 2185 | Ash16 | Ash, green | 16.0 | Fair | | | 16.0 | | | | | |
| 2186 | Ced2 | Redcedar | 2.0 | Good | | | 2.0 | | | | | |
| 2187 | Che11 | Cherry, black | 11.0 | Fair | | | 11.0 | | | | | |
| 2188 | Ash8.5 | Ash, green | 8.5 | Fair | | | 8.5 | | | | | |
| 2189 | Ash11 | Ash, green | 11.0 | Good | | | 11.0 | | | | | |
| 2190 | Ash10 | Ash, green | 10.0 | Fair | | | 10.0 | | | | | |
| 2191 | Ash16 | Ash, green | 16.0 | Good | | | 16.0 | | | | | |
| 2192 | Ash10.5 | Ash, green | 10.5 | Good | | | 10.5 | | | | | |
| 2193 | Ash16 | Ash, green | 16.0 | Good | | | 16.0 | | | | | |
| 2194 | Ash9 | Ash, green | 9.0 | Good | | | 9.0 | | | | | |
| 2195 | Che11 | Cherry, black | 11.0 | Good | | | 11.0 | | | | | |

BLACKSTONE VISTA 1920-013

| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| JEFFERS POND TREE | 1 | DLS | 06-16-2014 | REVISED TREE COUNT |
| DRAWN BY | 2 | DLS | 08/13/2014 | CITY REVISIONS |
| DLS | | | | |
| CHECKED BY | | | | |
| DLS | | | | |
| DATE | | | | |
| 05/21/14 | | | | |

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Daniel L. Schmidt

DANIEL L. SCHMIDT, P.E.
Date: 06-09-2014 Lic. No. 26147

ENGINEERS SURVEYORS DESIGNERS PLANNERS

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.

INVER GROVE HEIGHTS, MINNESOTA

TREE SURVEY
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO. 1920-013

TS4 / TS5

| Tag# | SPECIES | | | | Class A saved inches (DBH) | Class A cut inches (DBH) | Class B saved inches (DBH) | Class B cut inches (DBH) | Class C saved inches (DBH) | Box Elder inches (DBH) | Cottonwood inches (DBH) | Except Public Ut. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2196 | Ash15 | Ash, green | 15.0 | Good | | | 15.0 | | | | | |
| 2197 | Che10 | Cherry, black | 10.0 | Good | | | 10.0 | | | | | |
| 2198 | Apl5.5 | Crabapple | 5.5 | Fair | | | 5.5 | | | | | |
| 2199 | Che9 | Cherry, black | 9.0 | Fair | | | 9.0 | | | | | |
| 2200 | Ash12 | Ash, green | 12.0 | Good | | | 12.0 | | | | | |
| 2201 | Che11 | Cherry, black | 11.0 | Fair | | | 11.0 | | | | | |
| 2202 | Ash14 | Ash, green | 14.0 | Good | | | 14.0 | | | | | |
| 2203 | Ash9.5 | Ash, green | 9.5 | Good | | | 9.5 | | | | | |
| 2204 | Ash8.5 | Ash, green | 8.5 | Good | | | 8.5 | | | | | |
| 2205 | Ash15 | Ash, green | 15.0 | Good | | | 15.0 | | | | | |
| 2206 | Ash13 | Ash, green | 13.0 | Good | | | 13.0 | | | | | |
| 2207 | Ash28.5 | Ash, green | 28.5 | Good | | | 28.5 | | | | | |
| 2208 | Ash19.5 | Ash, green | 19.5 | Fair | | | 19.5 | | | | | |
| 2209 | Ash26 | Ash, green | 26.0 | Fair | | | 26.0 | | | | | |
| 2210 | Che12 | Cherry, black | 12.0 | Good | | | 12.0 | | | | | |
| 2211 | Che12 | Cherry, black | 12.0 | Good | | | 12.0 | | | | | |
| 2212 | Box13 | Boxelder | 13.0 | Fair | | | | | | 13.0 | | |
| 2213 | Ash14 | Ash, green | 14.0 | Excellent | | | 14.0 | | | | | |
| 2214 | Che12 | Cherry, black | 12.0 | Fair | | | | 12.0 | | | | |
| 2215 | Ash14 | Ash, green | 14.0 | Good | | | 14.0 | | | | | |
| 2216 | Box18 | Boxelder | 18.0 | Fair | | | | | | 18.0 | | |
| 2217 | Ash17.5 | Ash, green | 17.5 | Excellent | | | | 17.5 | | | | |
| 2218 | Ash10 | Ash, green | 10.0 | Good | | | | 10.0 | | | | |
| 2219 | Ash9 | Ash, green | 9.0 | Good | | | | 9.0 | | | | |
| 2220 | Che13 | Cherry, black | 13.0 | Fair | | | 13.0 | | | | | |
| 2221 | Oak8.5 | Oak, red | 8.5 | Fair | | | | | 8.5 | | | |
| 2222 | Elm8 | Elm, American | 8.0 | Good | 8.0 | | | | | | | |
| 2223 | Che13.5 | Cherry, black | 13.5 | Good | | | 13.5 | | | | | |
| 2224 | Che12 | Cherry, black | 12.0 | Good | | | | 12.0 | | | | |
| 2225 | Che14 | Cherry, black | 14.0 | Good | | | | 14.0 | | | | |
| 2226 | Che12 | Cherry, black | 12.0 | Good | | | | 12.0 | | | | |
| 2227 | Ash12.5 | Ash, green | 12.5 | Fair | | | | 12.5 | | | | |
| 2228 | Che9.5 | Cherry, black | 9.5 | Fair | | | | 9.5 | | | | |
| 2229 | Ash8.5 | Ash, green | 8.5 | Good | | | | 8.5 | | | | |
| 2230 | Ash10.5 | Ash, green | 10.5 | Good | | | | 10.5 | | | | |
| 2231 | Oak20 | Oak, red | 20.0 | Fair | | | 20.0 | | | | | |
| 2232 | Che9 | Cherry, black | 9.0 | Excellent | | | 9.0 | | | | | |
| 2233 | Che14 | Cherry, black | 14.0 | Fair | | | | 14.0 | | | | |
| 2234 | Che10 | Cherry, black | 10.0 | Good | | | 10.0 | | | | | |
| 2235 | Che9.5 | Cherry, black | 9.5 | Good | | | | 9.5 | | | | |
| 2236 | Oak18 | Oak, red | 18.0 | Good | | | 18.0 | | | | | |
| 2237 | Oak16.5 | Oak, red | 16.5 | Good | | | 16.5 | | | | | |
| 2238 | Oak16.5 | Oak, red | 16.5 | Good | | | 16.5 | | | | | |
| 2239 | Oak17 | Oak, red | 17.0 | Good | | | | 17.0 | | | | |
| 2240 | Che21 | Cherry, black | 21.0 | Fair | | | | 21.0 | | | | |
| 2241 | Che9 | Cherry, black | 9.0 | Good | | | 9.0 | | | | | |
| 2242 | Ash12 | Ash, green | 12.0 | Good | | | 12.0 | | | | | |
| 2243 | Che13 | Cherry, black | 13.0 | Fair | | | 13.0 | | | | | |
| 2244 | Oak13.5 | Oak, red | 13.5 | Good | | | 13.5 | | | | | |
| 2245 | Che10 | Cherry, black | 10.0 | Good | | | 10.0 | | | | | |
| 2246 | Elm9 | Elm, American | 9.0 | Fair | 9.0 | | | | | | | |
| 2247 | Elm9.5 | Elm, American | 9.5 | Fair | 9.5 | | | | | | | |
| 2248 | Che9 | Cherry, black | 9.0 | Fair | | | | 9.0 | | | | |
| 2249 | Apl8.5 | Crabapple | 8.5 | Fair | | | | 8.5 | | | | |
| 2250 | Ash13.5 | Ash, green | 13.5 | Good | | | 13.5 | | | | | |
| 2251 | Che9.5 | Cherry, black | 9.5 | Fair | | | 9.5 | | | | | |
| 2252 | Che9.5 | Cherry, black | 9.5 | Good | | | 9.5 | | | | | |
| 2253 | Ash10.5 | Ash, green | 10.5 | Good | | | 10.5 | | | | | |
| 2254 | Che8 | Cherry, black | 8.0 | Good | | | 8.0 | | | | | |
| 2255 | Ash9.5 | Ash, green | 9.5 | Good | | | 9.5 | | | | | |
| 2256 | Apl12 | Crabapple | 12.0 | Fair | | | | 12.0 | | | | |
| 2257 | Che14 | Cherry, black | 14.0 | Fair | | | | 14.0 | | | | |
| 2258 | Che8.5 | Cherry, black | 8.5 | Fair | | | | 8.5 | | | | |
| 2259 | Ash8 | Ash, green | 8.0 | Good | | | | 8.0 | | | | |
| 2260 | Ced3.5 | Redcedar | 3.5 | Good | | | | 3.5 | | | | |
| 2261 | Che14 | Cherry, black | 14.0 | Good | | | | 14.0 | | | | |
| 2262 | Ash9 | Ash, green | 9.0 | Good | | | | 9.0 | | | | |
| 2263 | Ced5 | Redcedar | 5.0 | Good | | | | 5.0 | | | | |
| 2264 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 2265 | Che17 | Cherry, black | 17.0 | Good | | | | 17.0 | | | | |
| 2266 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 2267 | Ash10 | Ash, green | 10.0 | Good | | | | 10.0 | | | | |
| 2268 | Ash12 | Ash, green | 12.0 | Good | | | | 12.0 | | | | |
| 2269 | Che32 | Cherry, black | 32.0 | Fair | | | | 32.0 | | | | |
| 2270 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 2271 | Box9 | Boxelder | 9.0 | Fair | | | | | | 9.0 | | |
| 2272 | Ash11 | Ash, green | 11.0 | Good | | | | 11.0 | | | | |
| 2273 | Ash12 | Ash, green | 12.0 | Good | | | | 12.0 | | | | |
| 2274 | Ash8 | Ash, green | 8.0 | Good | | | | 8.0 | | | | |
| 2275 | Elm8 | Elm, American | 8.0 | Fair | | 8.0 | | | | | | |
| 2276 | Ash8.5 | Ash, green | 8.5 | Good | | | | 8.5 | | | | |
| 2277 | Ash12 | Ash, green | 12.0 | Good | | | | 12.0 | | | | |
| 2278 | Che10 | Cherry, black | 10.0 | Good | | | | 10.0 | | | | |
| 2279 | Ash12.5 | Ash, green | 12.5 | Good | | | | 12.5 | | | | |
| 2280 | Ash8 | Ash, green | 8.0 | Good | | | | 8.0 | | | | |
| 2281 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 2282 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 2283 | Ash8.5 | Ash, green | 8.5 | Good | | | | 8.5 | | | | |
| 2284 | Ash12.5 | Ash, green | 12.5 | Good | | | | 12.5 | | | | |
| 2285 | Ash11.5 | Ash, green | 11.5 | Good | | | | 11.5 | | | | |
| 2286 | Ash10 | Ash, green | 10.0 | Good | | | | 10.0 | | | | |
| 2287 | Ash8 | Ash, green | 8.0 | Good | | | | 8.0 | | | | |
| 2288 | Ash12.5 | Ash, green | 12.5 | Good | | | | 12.5 | | | | |
| 2289 | Ash11.5 | Ash, green | 11.5 | Good | | | | 11.5 | | | | |
| 2290 | Che9.5 | Cherry, black | 9.5 | Good | | | 9.5 | | | | | |
| 2291 | Ash12.5 | Ash, green | 12.5 | Good | | | 12.5 | | | | | |
| 2292 | Ash13.5 | Ash, green | 13.5 | Good | | | 13.5 | | | | | |
| 2293 | Ash10.5 | Ash, green | 10.5 | Fair | | | 10.5 | | | | | |
| 2294 | Che8.5 | Cherry, black | 8.5 | Fair | | | 8.5 | | | | | |
| 2295 | Ash10.5 | Ash, green | 10.5 | Good | | | | 10.5 | | | | |
| 2296 | Ash11 | Ash, green | 11.0 | Good | | | | 11.0 | | | | |
| 2297 | Ash20 | Ash, green | 20.0 | Fair | | | | 20.0 | | | | |
| 2298 | Ash12.5 | Ash, green | 12.5 | Fair | | | | 12.5 | | | | |
| 2299 | But14 | Butternut | 14.0 | Fair | | | 14.0 | | | | | |
| 2300 | Ash9.5 | Ash, green | 9.5 | Good | | | 9.5 | | | | | |
| 2301 | Elm8 | Elm, American | 8.0 | Good | 8.0 | | | | | | | |
| 2302 | Elm8 | Elm, American | 8.0 | Good | 8.0 | | | | | | | |
| 2303 | Ash9 | Ash, green | 9.0 | Fair | | | 9.0 | | | | | |
| 2304 | Ash8 | Ash, green | 8.0 | Good | | | 8.0 | | | | | |
| 2305 | Ash9.5 | Ash, green | 9.5 | Good | | | 9.5 | | | | | |
| 2306 | Elm12 | Elm, American | 12.0 | Good | 12.0 | | | | | | | |
| 2307 | Ash12.5 | Ash, green | 12.5 | Fair | | | 12.5 | | | | | |
| 2308 | Ash14.5 | Ash, green | 14.5 | Good | | | 14.5 | | | | | |
| 2309 | Elm11.5 | Elm, American | 11.5 | Good | 11.5 | | | | | | | |
| 2310 | Elm14 | Elm, Siberian | 14.0 | Fair | | 14.0 | | | | | | |
| 2311 | Ash10.5 | Ash, green | 10.5 | Fair | | | | 10.5 | | | | |
| 2312 | Ash10 | Ash, green | 10.0 | Good | | | | 10.0 | | | | |
| 2313 | Ash16 | Ash, green | 16.0 | Good | | | | 16.0 | | | | |
| 2314 | Che8.5 | Cherry, black | 8.5 | Good | | | | 8.5 | | | | |
| 2315 | Che8 | Cherry, black | 8.0 | Fair | | | | 8.0 | | | | |
| 2316 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 2317 | Ash8 | Ash, green | 8.0 | Good | | | | 8.0 | | | | |
| 2318 | Ash13 | Ash, green | 13.0 | Good | | | | 13.0 | | | | |
| 2319 | Ash9 | Ash, green | 9.0 | Good | | | | 9.0 | | | | |
| 2320 | Elm11 | Elm, American | 11.0 | Fair | | 11.0 | | | | | | |
| 2321 | Che8 | Cherry, black | 8.0 | Fair | | | | 8.0 | | | | |
| 2322 | Ash8 | Ash, green | 8.0 | Good | | | | 8.0 | | | | |
| 2323 | Ash11 | Ash, green | 11.0 | Good | | | | 11.0 | | | | |
| 2324 | Ash8 | Ash, green | 8.0 | Good | | | | 8.0 | | | | |
| 2325 | Che11 | Cherry, black | 11.0 | Good | | | | 11.0 | | | | |
| 2326 | Ash12 | Ash, green | 12.0 | Good | | | | 12.0 | | | | |
| 2327 | Che8.5 | Cherry, black | 8.5 | Good | | | | 8.5 | | | | |
| 2328 | Ash11.5 | Ash, green | 11.5 | Good | | | | 11.5 | | | | |
| 2329 | Che8 | Cherry, black | 8.0 | Fair | | | | 8.0 | | | | |
| 2330 | Che8.5 | Cherry, black | 8.5 | Fair | | | | 8.5 | | | | |
| 2331 | Che14 | Cherry, black | 14.0 | Fair | | | | 14.0 | | | | |
| 2332 | Ced2 | Redcedar | 2.0 | Good | | | | 2.0 | | | | |
| 2333 | Ced1.5 | Redcedar | 1.5 | Good | | | | 1.5 | | | | |
| 2334 | Ced8 | Redcedar | 8.0 | Fair | | | | 8.0 | | | | |
| 2335 | Ced3 | Redcedar | 3.0 | Good | | | | 3.0 | | | | |
| 2336 | Ash8 | Ash, green | 8.0 | Good | | | | 8.0 | | | | |
| 2337 | Che13.5 | Cherry, black | 13.5 | Fair | | | | 13.5 | | | | |
| 2338 | Elm8.5 | Elm, American | 8.5 | Good | | 8.5 | | | | | | |
| 2339 | Che10.5 | Cherry, black | 10.5 | Good | | | | 10.5 | | | | |
| 2340 | Oak13.5 | Oak, red | 13.5 | Fair | | | | 13.5 | | | | |
| 2341 | Elm12.5 | Elm, American | 12.5 | Good | | 12.5 | | | | | | |
| 2342 | Ash15 | Ash, green | 15.0 | Good | | | 11.5 | | | | | |
| 2343 | Box11.5 | Boxelder | 11.5 | Fair | | | | | | 11.5 | | |
| 2344 | Che8.5 | Cherry, black | 8.5 | Good | | | 8.5 | | | | | |
| 2345 | Ash9 | Ash, green | 9.0 | Good | | | 9.0 | | | | | |
| 2346 | Che8 | Cherry, black | 8.0 | Fair | | | 8.0 | | | | | |
| 2347 | Ash17 | Ash, green | 17.0 | Good | | | 17.0 | | | | | |
| 2348 | Ash10 | Ash, green | 10.0 | Good | | | 10.0 | | | | | |
| 2349 | Ash11.5 | Ash, green | 11.5 | Fair | | | 11.5 | | | | | |
| 2350 | Ash11 | Ash, green | 11.0 | Good | | | 11.0 | | | | | |
| 2351 | Ash12 | Ash, green | 12.0 | Fair | | | 12.0 | | | | | |
| 2352 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 2353 | Ash20 | Ash, green | 20.0 | Good | | | 20.0 | | | | | |
| 2354 | Ash8.5 | Ash, green | 8.5 | Good | | | 8.5 | | | | | |
| 2355 | Che20.5 | Cherry, black | 20.5 | Fair | | | 20.5 | | | | | |
| 2356 | Oak8 | Oak, red | 8.0 | Good | | | 8.0 | | | | | |
| 2357 | Elm22.5 | Elm, American | 22.5 | Good | 22.5 | | | | | | | |
| 2358 | Ash18.5 | Ash, green | 18.5 | Good | | | | 18.5 | | | | |
| 2359 | Ash18 | Ash, green | 18.0 | Good | | | | 18.0 | | | | |
| 2360 | Oak18 | Oak, red | 18.0 | Good | | | | 18.0 | | | | |
| 2361 | Che10 | Cherry, black | 10.0 | Good | | | | 10.0 | | | | |
| 2362 | Che11 | Cherry, black | 11.0 | Good | | | | 11.0 | | | | |
| 2363 | Oak18.5 | Oak, red | 18.5 | Good | | | | 18.5 | | | | |
| 2364 | Asp8 | Aspen | 8.0 | Good | | 8.0 | | | | | | |
| 2365 | Asp8.5 | Aspen | 8.5 | Good | | 8.5 | | | | | | |
| 2366 | Asp10 | Aspen | 10.0 | Good | | 10.0 | | | | | | |
| 2367 | Asp8 | Aspen | 8.0 | Good | | 8.0 | | | | | | |
| 2368 | Che10 | Cherry, black | 10.0 | Good | | | | 10.0 | | | | |
| 2369 | Oak11 | Oak, red | 11.0 | Good | | | | 11.0 | | | | |
| 2370 | Ash8 | Ash, green | 8.0 | Good | | | | 8.0 | | | | |
| 2371 | Apl8 | Crabapple | 8.0 | Fair | | | | 8.0 | | | | |
| 2372 | Oak11.5 | Oak, red | 11.5 | Good | | | | 11.5 | | | | |
| 2373 | Box11.5 | Boxelder | 11.5 | Good | | | | | | 11.5 | | |
| 2374 | Ash24 | Ash, green | 24.0 | Fair | | | | 24.0 | | | | |
| 2375 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 2376 | Apl16 | Crabapple | 16.0 | Fair | | | | 16.0 | | | | |
| 2377 | Che8 | Cherry, black | 8.0 | Fair | | | | 8.0 | | | | |
| 2378 | Ash10 | Ash, green | 10.0 | Excellent | | | | 10.0 | | | | |
| 2379 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 2380 | But8 | Butternut | 8.0 | Fair | | | | 8.0 | | | | |
| 2381 | Oak11.5 | Oak, red | 11.5 | Good | | | | 11.5 | | | | |
| 2382 | Ash8.5 | Ash, green | 8.5 | Good | | | | 8.5 | | | | |
| 2383 | Ced8 | Redcedar | 8.0 | Good | | | | 8.0 | | | | |
| 2384 | Che11 | Cherry, black | 11.0 | Fair | | | | 11.0 | | | | |
| 2385 | Ced4 | Redcedar | 4.0 | Good | | | | 4.0 | | | | |
| 2386 | Ced4 | Redcedar | 4.0 | Good | | | | 4.0 | | | | |
| 2387 | Pin8.5 | Pine, white | 8.5 | Good | | | | 8.5 | | | | |
| 2388 | Ash8.5 | Ash, green | 8.5 | Fair | | | | 8.5 | | | | |
| 2389 | Che8.5 | Cherry, black | 8.5 | Good | | | | 8.5 | | | | |
| 2390 | Elm8.5 | Elm, American | 8.5 | Good | | 8.5 | | | | | | |
| 2391 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 2392 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 2393 | Box11 | Boxelder | 11.0 | Fair | | | | | | 11.0 | | |
| 2394 | Box11 | Boxelder | 11.0 | Fair | | | | | | 11.0 | | |
| 2395 | Elm8 | Elm, Siberian | 8.0 | Fair | | 8.0 | | | | | | |
| 2396 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 2397 | Ash11 | Ash, green | 11.0 | Good | | | | 11.0 | | | | |
| 2398 | Oak15 | Oak, red | 15.0 | Good | | | | 15.0 | | | | |
| 2399 | Che11 | Cherry, black | 11.0 | Fair | | | | 11.0 | | | | |
| 2400 | Ash10 | Ash, green | 10.0 | Good | | | | 10.0 | | | | |
| 2401 | Oak14 | Oak, red | 14.0 | Good | | | | 14.0 | | | | |
| 2402 | Che11 | Cherry, black | 11.0 | Fair | | | | 11.0 | | | | |
| 2403 | Elm18.5 | Elm, American | 18.5 | Fair | | 18.5 | | | | | | |
| 2404 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 2405 | Elm8.5 | Elm, American | 8.5 | Good | | 8.5 | | | | | | |
| 2406 | Ash8.5 | Ash, green | 8.5 | Good | | 8.5 | | | | | | |
| 2407 | Che8 | Cherry, black | 8.0 | Fair | | | | 8.0 | | | | |
| 2408 | Che8.5 | Cherry, black | 8.5 | Fair | | | | 8.5 | | | | |
| 2409 | Ash24 | Ash, green | 24.0 | Good | | | | 24.0 | | | | |
| 2410 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 2411 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 2412 | Ash8.5 | Ash, green | 8.5 | Good | | | | 8.5 | | | | |
| 2413 | Ash8 | Ash, green | 8.0 | Fair | | | | 8.0 | | | | |
| 2414 | Elm10 | Elm, American | 10.0 | Fair | | 10.0 | | | | | | |
| 2415 | Asp8 | Aspen | 8.0 | Fair | | 8.0 | | | | | | |
| 2416 | Ash10.5 | Ash, green | 10.5 | Good | | | | 10.5 | | | | |
| 2417 | Asp8 | Aspen | 8.0 | Fair | | 8.0 | | | | | | |
| 2418 | Che8.5 | Cherry, black | 8.5 | Good | | | | 8.5 | | | | |
| 2419 | Oak15.5 | Oak, red | 15.5 | Good | | | | 15.5 | | | | |
| 2420 | Oak11 | Oak, red | 11.0 | Good | | | | 11.0 | | | | |
| 2421 | Elm24.5 | Elm, American | 24.5 | Fair | | 24.5 | | | | | | |
| 2422 | Ash8.5 | Ash, green | 8.5 | Good | | | | 8.5 | | | | |
| 2423 | Ash8.5 | Ash, green | 8.5 | Good | | | | 8.5 | | | | |
| 2424 | Che11 | Cherry, black | 11.0 | Fair | | | | 11.0 | | | | |
| 2425 | Ash11 | Ash, green | 11.0 | Good | | | | 11.0 | | | | |
| 2426 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 2427 | Asp8 | Aspen | 8.0 | Good | | 8.0 | | | | | | |
| 2428 | Ash9 | Ash, green | 9.0 | Good | | | | 9.0 | | | | |
| 2429 | Oak15 | Oak, red | 15.0 | Good | | | | 15.0 | | | | |
| 2430 | Elm15.5 | Elm, American | 15.5 | Good | | 15.5 | | | | | | |
| 2431 | Oak15.5 | Oak, red | 15.5 | Good | | | | 15.5 | | | | |
| 2432 | Ash10.5 | Ash, green | 10.5 | Good | | | | 10.5 | | | | |
| 2433 | Oak11 | Oak, red | 11.0 | Good | | | | 11.0 | | | | |
| 2434 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 2435 | Asp8 | Aspen | 8.0 | Good | | 8.0 | | | | | | |
| 2436 | Oak11 | Oak, red | 11.0 | Good | | | | 11.0 | | | | |
| 2437 | Che11 | Cherry, black | 11.0 | Good | | | | 11.0 | | | | |
| 2438 | Che8.5 | Cherry, black | 8.5 | Fair | | | | 8.5 | | | | |
| 2439 | Asp8 | Aspen | 8.0 | Good | | 8.0 | | | | | | |
| 2440 | Elm8 | Elm, American | 8.0 | Fair | | 8.0 | | | | | | |
| 2441 | Elm10 | Elm, American | 10.0 | Good | | 10.0 | | | | | | |
| 2442 | Ash24 | Ash, green | 24.0 | Good | | | | 24.0 | | | | |
| 2443 | Asp8 | Aspen | 8.0 | Fair | | 8.0 | | | | | | |
| 2444 | Elm10 | Elm, American | 10.0 | Good | | 10.0 | | | | | | |
| 2445 | Che8.5 | Cherry, black | 8.5 | Good | | | | 8.5 | | | | |
| 2446 | Elm10 | Elm, American | 10.0 | Good | | 10.0 | | | | | | |
| 2447 | Che11 | Cherry, black | 11.0 | Fair | | | | 11.0 | | | | |
| 2448 | Elm12.5 | Elm, American | 12.5 | Good | | 12.5 | | | | | | |
| 2449 | Oak18 | Oak, red | 18.0 | Good | | | | 18.0 | | | | |
| 2450 | Ash10 | Ash, green | 10.0 | Good | | | | 10.0 | | | | |
| 2451 | Che8.5 | Cherry, black | 8.5 | Good | | | | 8.5 | | | | |
| 2452 | Che9.5 | Cherry, black | 9.5 | Fair | | | | 9.5 | | | | |
| 2453 | Oak11 | Oak, red | 11.0 | Good | | | | 11.0 | | | | |
| 2454 | Pin8 | Pine, white | 8.0 | Good | | | | 8.0 | | | | |
| 2455 | Che8.5 | Cherry, black | 8.5 | Fair | | | | 8.5 | | | | |
| 2456 | Oak11 | Oak, red | 11.0 | Good | | | | 11.0 | | | | |
| 2457 | Elm9 | Elm, American | 9.0 | Good | | 9.0 | | | | | | |
| 2458 | Che8 | Cherry, black | 8.0 | Fair | | | | 8.0 | | | | |
| 2459 | Oak18 | Oak, red | 18.0 | Good | | | | 18.0 | | | | |
| 2460 | Oak10.5 | Oak, red | 10.5 | Good | | | | 10.5 | | | | |
| 2461 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 2462 | Che11 | Cherry, black | 11.0 | Good | | | | 11.0 | | | | |
| 2463 | Ash8 | Ash, green | 8.0 | Good | | | | 8.0 | | | | |
| 2464 | Elm8.5 | Elm, American | 8.5 | Good | | 8.5 | | | | | | |
| 2465 | Elm27 | Elm, American | 27.0 | Good | | 27.0 | | | | | | |
| 2466 | Che11 | Cherry, black | 11.0 | Good | | | | 11.0 | | | | |
| 2467 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 2468 | Ash13 | Ash, green | 13.0 | Good | | | | 13.0 | | | | |
| 2469 | Oak16 | Oak, red | 16.0 | Fair | | | | 16.0 | | | | |
| 2470 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 2471 | Oak11 | Oak, red | 11.0 | Good | | | | 11.0 | | | | |
| 2472 | Oak8.5 | Oak, red | 8.5 | Good | | | | 8.5 | | | | |
| 2473 | Oak9 | Oak, bur | 9.0 | Good | | | | 9.0 | | | | |
| 2474 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 2475 | Oak10.5 | Oak, red | 10.5 | Good | | | | 10.5 | | | | |
| 2476 | Oak16 | Oak, red | 16.0 | Good | | | | 16.0 | | | | |
| 2477 | Elm10.5 | Elm, American | 10.5 | Good | | 10.5 | | | | | | |
| 2478 | Ced3 | Redcedar | 3.0 | Good | | | | 3.0 | | | | |
| 2479 | Cot18.5 | Cottonwood | 18.5 | Good | | | | | | | 18.5 | |
| 2480 | Ced4.5 | Redcedar | 4.5 | Good | | | | 4.5 | | | | |
| 2481 | Che8.5 | Cherry, black | 8.5 | Good | | | | 8.5 | | | | |
| 2482 | Elm11 | Elm, American | 11.0 | Fair | | 11.0 | | | | | | |
| 2483 | Oak11.5 | Oak, red | 11.5 | Fair | | | | 11.5 | | | | |
| 2484 | Mac11 | Maple, silver | 11.0 | Fair | | 11.0 | | | | | | |
| 2485 | Oak13 | Oak, red | 13.0 | Good | | | | 13.0 | | | | |
| 2486 | Oak11 | Oak, red | 11.0 | Good | | | | 11.0 | | | | |
| 2487 | Ash8.5 | Ash, green | 8.5 | Good | | | | 8.5 | | | | |
| 2488 | Che9 | Cherry, black | 9.0 | Good | | | | 9.0 | | | | |
| 2489 | Ash8 | Ash, green | 8.0 | Good | | | | 8.0 | | | | |
| 2490 | Che9 | Cherry, black | 9.0 | Fair | | | | 9.0 | | | | |
| 2491 | Che10 | Cherry, black | 10.0 | Good | | | | 10.0 | | | | |
| 2492 | Oak15 | Oak, red | 15.0 | Good | | | | 15.0 | | | | |
| 2493 | Oak8.5 | Oak, red | 8.5 | Good | | | | 8.5 | | | | |
| 2494 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 2495 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 2496 | Che9 | Cherry, black | 9.0 | Fair | | | | 9.0 | | | | |
| 2497 | Oak18 | Oak, red | 18.0 | Good | | | | 18.0 | | | | |
| 2498 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 2499 | Ash11 | Ash, green | 11.0 | Good | | | | 11.0 | | | | |
| 2500 | Ash13 | Ash, green | 13.0 | Fair | | | | 13.0 | | | | |
| 2501 | Ash8 | Ash, green | 8.0 | Fair | | | | 8.0 | | | | |
| 2502 | Ash10 | Ash, green | 10.0 | Fair | | | | 10.0 | | | | |
| 2503 | Ced2 | Redcedar | 2.0 | Good | | | | 2.0 | | | | |
| 2504 | Ced1.5 | Redcedar | 1.5 | Good | | | | 1.5 | | | | |
| 2505 | Ced2 | Redcedar | 2.0 | Good | | | | 2.0 | | | | |
| 2506 | Ash11 | Ash, green | 11.0 | Fair | | | | 11.0 | | | | |
| 2507 | Elm13 | Elm, American | 13.0 | Fair | | 13.0 | | | | | | |
| 2508 | Ced2 | Redcedar | 2.0 | Good | | | | 2.0 | | | | |
| 2509 | Ced1.5 | Redcedar | 1.5 | Good | | | | 1.5 | | | | |
| 2510 | Ash9 | Ash, green | 9.0 | Good | | | | 9.0 | | | | |
| 2511 | Ash10.5 | Ash, green | 10.5 | Fair | | | | 10.5 | | | | |
| 2512 | Ash8.5 | Ash, green | 8.5 | Good | | | 8.5 | | | | | |
| 2513 | Che18 | Cherry, black | 18.0 | Fair | | | 18.0 | | | | | |
| 2514 | Apl10 | Crabapple | 10.0 | Fair | | | 10.0 | | | | | |
| 2515 | Oak9.5 | Oak, red | 9.5 | Good | | | | 9.5 | | | | |
| 2516 | Cot18.5 | Cottonwood | 18.5 | Fair | | | | | | | 18.5 | |
| 2517 | Cot22 | Cottonwood | 22.0 | Fair | | | | | | | 22.0 | |
| 2518 | Che11 | Cherry, black | 11.0 | Fair | | | | | | | | 11 |
| 2519 | Che10 | Cherry, black | 10.0 | Fair | | | | | | | | 10 |
| 2520 | Ash11.5 | Ash, green | 11.5 | Good | | | | | | | | 11.5 |
| 2521 | Che11.5 | Cherry, black | 11.5 | Fair | | | | 11.5 | | | | |
| 2522 | Bir13 | Birch, paper | 13.0 | Excellent | | | | | | | | 12 |
| 2523 | Cot12 | Cottonwood | 12.0 | Good | | | | | | | 12.0 | |
| 2524 | Che10 | Cherry, black | 10.0 | Fair | | | | 10.0 | | | | |
| 2525 | Ash11 | Ash, green | 11.0 | Good | | | | 11.0 | | | | |
| 2526 | Ash10 | Ash, green | 10.0 | Good | | | | 10.0 | | | | |
| 2527 | Ash8.5 | Ash, green | 8.5 | Good | | | | 8.5 | | | | |
| 2528 | Ced2.5 | Redcedar | 2.5 | Good | | | | 2.5 | | | | |
| 2529 | Che10.5 | Cherry, black | 10.5 | Good | | | | 10.5 | | | | |
| 2530 | Ash10 | Ash, green | 10.0 | Good | | | | 10.0 | | | | |
| 2531 | Che14 | Cherry, black | 14.0 | Good | | | | 14.0 | | | | |
| 2532 | Che11.5 | Cherry, black | 11.5 | Good | | | | 11.5 | | | | |
| 2533 | Box11.5 | Boxelder | 11.5 | Fair | | | | | | 11.5 | | |
| 2534 | Elm12.5 | Elm, Siberian | 12.5 | Fair | | 12.5 | | | | | | |
| 2535 | Che10 | Cherry, black | 10.0 | Good | | | | 10.0 | | | | |
| 2536 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 2537 | Che10 | Cherry, black | 10.0 | Good | | | | 10.0 | | | | |
| 2538 | Che8.5 | Cherry, black | 8.5 | Good | | | | 8.5 | | | | |
| 2539 | Ash13 | Ash, green | 13.0 | Good | | | | 13.0 | | | | |
| 2540 | Pin8.5 | Pine, white | 8.5 | Good | | | | 8.5 | | | | |
| 2541 | Che14 | Cherry, black | 14.0 | Fair | | | | 14.0 | | | | |
| 2542 | Elm14 | Elm, American | 14.0 | Fair | | 14.0 | | | | | | |
| 2543 | Che11 | Cherry, black | 11.0 | Good | | | | 11.0 | | | | |
| 2544 | Ced1.5 | Redcedar | 1.5 | Good | | | | 1.5 | | | | |
| 2545 | Elm13 | Elm, American | 13.0 | Fair | | 13.0 | | | | | | |
| 2546 | Ash10 | Ash, green | 10.0 | Good | | | | 10.0 | | | | |
| 2547 | Elm13 | Elm, American | 13.0 | Good | | 13.0 | | | | | | |
| 2548 | Che13.5 | Cherry, black | 13.5 | Good | | | | 13.5 | | | | |
| 2549 | Ced3 | Redcedar | 3.0 | Good | | | | 3.0 | | | | |
| 2550 | Ced2 | Redcedar | 2.0 | Good | | | | 2.0 | | | | |
| 2551 | Ced2 | Redcedar | 2.0 | Good | | | | 2.0 | | | | |
| 2552 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 2553 | Ash9 | Ash, green | 9.0 | Good | | | | 9.0 | | | | |
| 2554 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 2555 | Pin4 | Pine, white | 4.0 | Good | | | | 4.0 | | | | |
| 2556 | Ash13.5 | Ash, green | 13.5 | Fair | | | | 13.5 | | | | |
| 2557 | Ced3 | Redcedar | 3.0 | Good | | | | 3.0 | | | | |
| 2558 | Ash8 | Ash, green | 8.0 | Good | | | | 8.0 | | | | |
| 2559 | Ash12 | Ash, green | 12.0 | Good | | | | 12.0 | | | | |
| 2560 | Ced3 | Redcedar | 3.0 | Good | | | | | | | | 3.0 |
| 2561 | Ash13 | Ash, green | 13.0 | Good | | | | | | | | 13.0 |
| 2562 | But11.5 | Butternut | 11.5 | Good | | | | | | | | 11.5 |
| 2563 | Ash13 | Ash, green | 13.0 | Good | | | | | | | | 12 |
| 2564 | Che28 | Cherry, black | 28.0 | Good | | | | 28.0 | | | | |
| 2565 | Che10 | Cherry, black | 10.0 | Good | | | | 10.0 | | | | |
| 2566 | Ced4.5 | Redcedar | 4.5 | Fair | | | | 4.5 | | | | |
| 2567 | Ced1.5 | Redcedar | 1.5 | Good | | | | 1.5 | | | | |
| 2568 | Ced2.5 | Redcedar | 2.5 | Good | | | | 2.5 | | | | |
| 2569 | Elm8 | Elm, American | 8.0 | Fair | | 8.0 | | | | | | |
| 2570 | Apl14 | Crabapple | 14.0 | Good | | | | 14.0 | | | | |
| 2571 | Ced2 | Redcedar | 2.0 | Good | | | | 2.0 | | | | |
| 2572 | Ced3.5 | Redcedar | 3.5 | Good | | | | 3.5 | | | | |
| 2573 | Ced5.5 | Redcedar | 5.5 | Good | | | | 5.5 | | | | |
| 2574 | Ced3.5 | Redcedar | 3.5 | Good | | | | 3.5 | | | | |
| 2575 | Ced5.5 | Redcedar | 5.5 | Good | | | | 5.5 | | | | |
| 2576 | Ash18 | Ash, green | 18.0 | Fair | | | | 18.0 | | | | |
| 2577 | Ced2 | Redcedar | 2.0 | Good | | | | 2.0 | | | | |
| 2578 | Ced3.5 | Redcedar | 3.5 | Good | | | | 3.5 | | | | |
| 2579 | Ced3 | Redcedar | 3.0 | Good | | | | 3.0 | | | | |
| 2580 | Ced4 | Redcedar | 4.0 | Good | | | | 4.0 | | | | |
| 2581 | Ced7 | Redcedar | 7.0 | Good | | | | 7.0 | | | | |
| 2582 | Ced6 | Redcedar | 6.0 | Good | | | | 6.0 | | | | |
| 2583 | Che8.5 | Cherry, black | 8.5 | Good | | | | 8.5 | | | | |
| 2584 | Ced3 | Redcedar | 3.0 | Good | | | | 3.0 | | | | |
| 2585 | Che10 | Cherry, black | 10.0 | Good | | | | 10.0 | | | | |
| 2586 | Ced5 | Redcedar | 5.0 | Good | | | | 5.0 | | | | |
| 2587 | Ced4.5 | Redcedar | 4.5 | Good | | | | 4.5 | | | | |
| 2588 | Pin4 | Pine, white | 4.0 | Fair | | | | 4.0 | | | | |
| 2589 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 2590 | Che8.5 | Cherry, black | 8.5 | Fair | | | | 8.5 | | | | |
| 2591 | Ash15 | Ash, green | 15.0 | Fair | | | | | | | | 15 |
| 2592 | Box8 | Boxelder | 8.0 | Good | | | | | | 8.0 | | |
| 2593 | Box13 | Boxelder | 13.0 | Fair | | | | | | 13.0 | | |
| 2594 | Che13 | Cherry, black | 13.0 | Good | | | | 13.0 | | | | |
| 2595 | Elm11 | Elm, American | 11.0 | Good | | | | | | | | 11 |
| 2596 | Ced1.5 | Redcedar | 1.5 | Good | | | | | | | | 1.5 |
| 2597 | Ced2 | Redcedar | 2.0 | Good | | | | 2.0 | | | | |
| 2598 | Elm8 | Elm, American | 8.0 | Fair | | 8.0 | | | | | | |
| 2599 | Ced2 | Redcedar | 2.0 | Good | | | | 2.0 | | | | |
| 2600 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 2601 | Oak11 | Oak, red | 11.0 | Good | | | | 11.0 | | | | |
| 2602 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 2603 | Ced6.5 | Redcedar | 6.5 | Good | | | | 6.5 | | | | |
| 2605 | Box11 | Boxelder | 11.0 | Fair | | | | | | 11.0 | | |
| 2606 | Box15 | Boxelder | 15.0 | Fair | | | | | | 15.0 | | |
| 2607 | Box20 | Boxelder | 20.0 | Fair | | | | | | 20.0 | | |
| 2608 | Ash27.5 | Ash, green | 27.5 | Good | | | | 27.5 | | | | |
| 2609 | Apl24.5 | Crabapple | 24.5 | Fair | | | | 24.5 | | | | |
| 2610 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 2611 | Box8 | Boxelder | 8.0 | Good | | | | | | 8.0 | | |
| 2612 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 2613 | Box10 | Boxelder | 10.0 | Fair | | | | | | 10.0 | | |
| 2614 | Box11.5 | Boxelder | 11.5 | Fair | | | | | | 11.5 | | |
| 2615 | Bir13 | Birch, paper | 13.0 | Fair | | | | 13.0 | | | | |
| 2616 | Box8 | Boxelder | 8.0 | Good | | | | | | 8.0 | | |
| 2617 | Asp8 | Aspen | 8.0 | Good | | 8.0 | | | | | | |
| 2618 | Asp12.5 | Aspen | 12.5 | Good | | 12.5 | | | | | | |
| 2619 | Apl13 | Crabapple | 13.0 | Fair | | | | 13.0 | | | | |
| 2620 | Bir13 | Birch, paper | 13.0 | Fair | | | | 13.0 | | | | |
| 2621 | Ced11 | Redcedar | 11.0 | Good | | | | | | | | 10 |
| 2622 | Box10.5 | Boxelder | 10.5 | Fair | | | | | | 10.5 | | |
| 2623 | Box8 | Boxelder | 8.0 | Fair | | | | | | 8.0 | | |
| 2624 | Box8 | Boxelder | 8.0 | Fair | | | | | | 8.0 | | |
| 2625 | Ced11 | Redcedar | 11.0 | Fair | | | | 11.0 | | | | |
| 2626 | Cot11.5 | Cottonwood | 11.5 | Good | | | | | | | 11.5 | |
| 2627 | Che8.5 | Cherry, black | 8.5 | Fair | | | | 8.5 | | | | |
| 2628 | Cot12 | Cottonwood | 12.0 | Good | | | | | | | 12.0 | |
| 2629 | Ced7 | Redcedar | 7.0 | Good | | | | 7.0 | | | | |
| 2630 | Che8 | Cherry, black | 8.0 | Good | | | | 8.0 | | | | |
| 2631 | Cot11.5 | Cottonwood | 11.5 | Good | | | | | | | 11.5 | |
| 2632 | Bir8 | Birch, paper | 8.0 | Good | | | | 8.0 | | | | |
| 2633 | Box8 | Boxelder | 8.0 | Fair | | | | | | 8.0 | | |
| 2634 | Cot24.5 | Cottonwood | 24.5 | Good | | | | | | | 24.5 | |
| 2635 | Bir16 | Birch, paper | 16.0 | Fair | | | | 16.0 | | | | |
| 2636 | Bir20 | Birch, paper | 20.0 | Fair | | | | 20.0 | | | | |
| 2637 | Asp11.5 | Aspen | 11.5 | Good | | 11.5 | | | | | | |
| 2638 | Bir11.5 | Birch, paper | 11.5 | Fair | | | | 11.5 | | | | |
| 2639 | Bir13 | Birch, paper | 13.0 | Good | | | | 13.0 | | | | |
| 2640 | Bir8.5 | Birch, paper | 8.5 | Good | | | | 8.5 | | | | |
| 2641 | Bir11 | Birch, paper | 11.0 | Good | | | | 11.0 | | | | |
| 2642 | Ced8 | Redcedar | 8.0 | Good | | | | | | | | 8 |
| 2643 | Ced6 | Redcedar | 6.0 | Good | | | | | | | | 6 |
| 2644 | Ced10 | Redcedar | 10.0 | Good | | | | | | | | 10 |
| 2645 | Ced7 | Redcedar | 7.0 | Good | | | | | | | | 7 |
| 2646 | Oak8 | Oak, red | 8.0 | Good | | | | 8.0 | | | | |
| 2647 | Oak10 | Oak, red | 10.0 | Good | | | | 10.0 | | | | |
| 2648 | Oak13 | Oak, bur | 13.0 | Good | | | | 13.0 | | | | |
| 2649 | Oak12 | Oak, red | 12.0 | Good | | | | 12.0 | | | | |
| 2650 | Oak8.5 | Oak, bur | 8.5 | Good | | | | 8.5 | | | | |
| 2651 | Elm8 | Elm, American | 8.0 | Good | | 8.0 | | | | | | |
| 2652 | Elm11 | Elm, American | 11.0 | Good | | 11.0 | | | | | | |
| 2653 | Cot15.5 | Cottonwood | 15.5 | Good | | | | | | | 15.5 | |
| 2654 | Cot22 | Cottonwood | 22.0 | Good | | | | | | | 22.0 | |
| 2655 | Elm14 | Elm, American | 14.0 | Fair | | 14.0 | | | | | | |
| 2656 | Che13 | Cherry, black | 13.0 | Fair | | | | 13.0 | | | | |
| 2657 | Box13 | Boxelder | 13.0 | Fair | | | | | | 13.0 | | |
| 2658 | Box8 | Boxelder | 8.0 | Fair | | | | | | 8.0 | | |
| 2659 | Che9 | Cherry, black | 9.0 | Fair | | | | 9.0 | | | | |
| | | | | | 894.3 | 2613.5 | 1252.5 | 6436.5 | 818.5 | 2298.0 | 460.5 | 720.0 |

| | INCHES SAVED | TOTAL INCHES | INCHES REMOVED | Ratio | | Replacement inches |
|---|---|---|---|---|---|---|
| Class A | 894.0 | 2273.0 | 2613.5 | 0.5 | | 1306.8 |
| Class B | 1152.5 | 7589.0 | 6436.5 | 1.0 | | 6436.5 |
| Class C | 818.5 | 818.5 | 0.0 | 2.0 | | -1222.0 |
| Boxelder | 0.0 | 2298.0 | 168.5 | 0.0 | | 0.0 |
| Cottonwood | 0.0 | 460.5 | 0.0 | 0.0 | | 0.0 |
| Public Utility | | 720.0 | | | | |
| Allowable 20% | | | | | | -2719.2 |
| TOTAL | 2423.5 | 14272.0 | 9218.5 | | | 3720.2 |

| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| JEFFERS POND TREE | 1 | DLS | 06-16-2014 | REVISED TREE COUNT |
| DRAWN BY | 2 | DLS | 08/13/2014 | CITY REVISIONS |
| DLS | | | | |
| CHECKED BY | | | | |
| DLS | | | | |
| DATE | | | | |
| 05/21/14 | | | | |

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Daniel L. Schmidt

DANIEL L. SCHMIDT, P.E.
Date: 06-09-2014 Lic. No. 26147

ENGINEERS SURVEYORS DESIGNERS PLANNERS
SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.

INVER GROVE HEIGHTS, MINNESOTA

TREE SURVEY
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO. 1920-013

TS5 / TS5

BLACKSTONE VISTA 1920-013

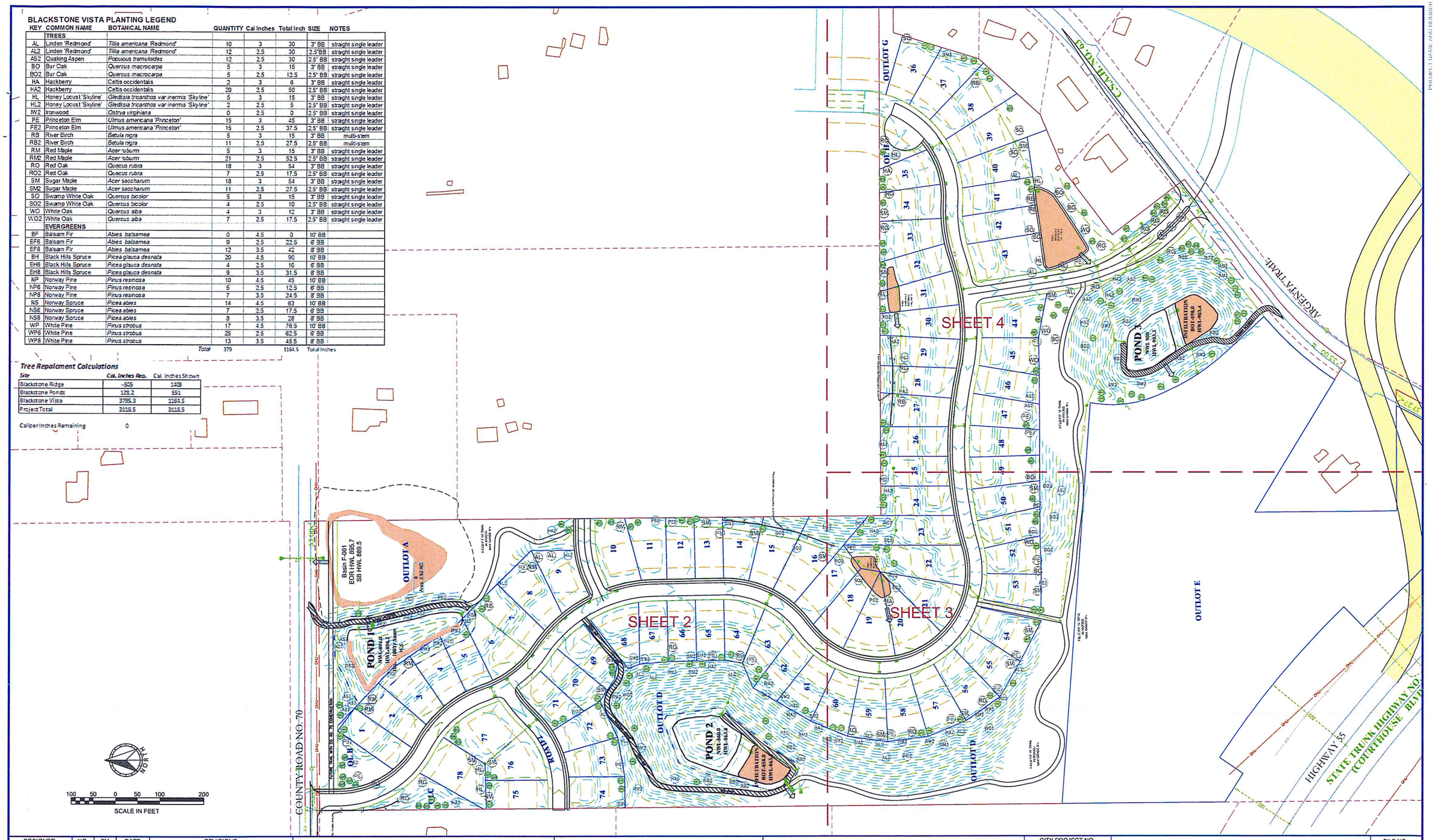
## BLACKSTONE VISTA PLANTING LEGEND

| KEY | COMMON NAME | BOTANICAL NAME | QUANTITY | Cal Inches | Total Inch | SIZE | NOTES |
|---|---|---|---|---|---|---|---|
| | **TREES** | | | | | | |
| AL | Linden 'Redmond' | *Tilia americana 'Redmond'* | 10 | 3 | 30 | 3" BB | straight single leader |
| AL2 | Linden 'Redmond' | *Tilia americana 'Redmond'* | 12 | 2.5 | 30 | 2.5"BB | straight single leader |
| AS2 | Quaking Aspen | *Popuous tremuloides* | 12 | 2.5 | 30 | 2.5" BB | straight single leader |
| BO | Bur Oak | *Quercus macrocarpa* | 5 | 3 | 15 | 3" BB | straight single leader |
| BO2 | Bur Oak | *Quercus macrocarpa* | 5 | 2.5 | 12.5 | 2.5" BB | straight single leader |
| HA | Hackberry | Celtis occidentalis | 2 | 3 | 6 | 3" BB | straight single leader |
| HA2 | Hackberry | Celtis occidentalis | 20 | 2.5 | 50 | 2.5" BB | straight single leader |
| HL | Honey Locust 'Skyline' | *Gleditsia tricanthos var inermis 'Skyline'* | 5 | 3 | 15 | 3" BB | straight single leader |
| HL2 | Honey Locust 'Skyline' | *Gleditsia tricanthos var inermis 'Skyline'* | 2 | 2.5 | 5 | 2.5" BB | straight single leader |
| IW2 | Ironwood | *Ostrya virginiana* | 0 | 2.5 | 0 | 2.5" BB | straight single leader |
| PE | Princeton Elm | *Ulmus americana 'Princeton'* | 15 | 3 | 45 | 3" BB | straight single leader |
| PE2 | Princeton Elm | *Ulmus americana 'Princeton'* | 15 | 2.5 | 37.5 | 2.5" BB | straight single leader |
| RB | River Birch | *Betula nigra* | 5 | 3 | 15 | 3" BB | multi-stem |
| RB2 | River Birch | *Betula nigra* | 11 | 2.5 | 27.5 | 2.5" BB | multi-stem |
| RM | Red Maple | *Acer ruburm* | 5 | 3 | 15 | 3" BB | straight single leader |
| RM2 | Red Maple | *Acer ruburm* | 21 | 2.5 | 52.5 | 2.5" BB | straight single leader |
| RO | Red Oak | *Quecus rubra* | 18 | 3 | 54 | 3" BB | straight single leader |
| RO2 | Red Oak | *Quecus rubra* | 7 | 2.5 | 17.5 | 2.5" BB | straight single leader |
| SM | Sugar Maple | *Acer saccharum* | 18 | 3 | 54 | 3" BB | straight single leader |
| SM2 | Sugar Maple | *Acer saccharum* | 11 | 2.5 | 27.5 | 2.5" BB | straight single leader |
| SO | Swamp White Oak | *Quercus bicolor* | 5 | 3 | 15 | 3" BB | straight single leader |
| SO2 | Swamp White Oak | *Quercus bicolor* | 4 | 2.5 | 10 | 2.5" BB | straight single leader |
| WO | White Oak | *Quercus alba* | 4 | 3 | 12 | 3" BB | straight single leader |
| WO2 | White Oak | *Quercus alba* | 7 | 2.5 | 17.5 | 2.5" BB | straight single leader |
| | **EVERGREENS** | | | | | | |
| BF | Balsam Fir | *Abies balsamea* | 0 | 4.5 | 0 | 10' BB | |
| EF6 | Balsam Fir | *Abies balsamea* | 9 | 2.5 | 22.5 | 6' BB | |
| EF8 | Balsam Fir | *Abies balsamea* | 12 | 3.5 | 42 | 8' BB | |
| BH | Black Hills Spruce | *Picea glauca desnata* | 20 | 4.5 | 90 | 10' BB | |
| EH6 | Black Hills Spruce | *Picea glauca desnata* | 4 | 2.5 | 10 | 6' BB | |
| EH8 | Black Hills Spruce | *Picea glauca desnata* | 9 | 3.5 | 31.5 | 8' BB | |
| NP | Norway Pine | *Pinus resinosa* | 10 | 4.5 | 45 | 10' BB | |
| NP6 | Norway Pine | *Pinus resinosa* | 5 | 2.5 | 12.5 | 6' BB | |
| NP8 | Norway Pine | *Pinus resinosa* | 7 | 3.5 | 24.5 | 8' BB | |
| NS | Norway Spruce | *Picea abies* | 14 | 4.5 | 63 | 10' BB | |
| NS6 | Norway Spruce | *Picea abies* | 7 | 2.5 | 17.5 | 6' BB | |
| NS8 | Norway Spruce | *Picea abies* | 8 | 3.5 | 28 | 8' BB | |
| WP | White Pine | *Pinus strobus* | 17 | 4.5 | 76.5 | 10' BB | |
| WP6 | White Pine | *Pinus strobus* | 25 | 2.5 | 62.5 | 6' BB | |
| WP8 | White Pine | *Pinus strobus* | 13 | 3.5 | 45.5 | 8' BB | |
| | | *Total* | 379 | | 1164.5 | Total Inches | |

### *Tree Repalcment Calculations*

| Site | Cal. Inches Req. | Cal. Inches Shown |
|---|---|---|
| Blackstone Ridge | -805 | 1408 |
| Blackstone Ponds | 128.2 | 551 |
| Blackstone Vista | 3795.3 | 1164.5 |
| Project Total | 3118.5 | 3118.5 |

Caliper Inches Remaining 0




| DESIGNER | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| | 1 | NM | 6-20-14 | Reduction in Trees |
| DRAWN BY | 2 | TW | 8-14-14 | Update base and calculatons |
| | | | | |
| CHECKED BY | | | | |
| | | | | |
| DATE | | | | |

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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.

Signed

Date Registration #

Norby & Associates
Landscape Architects, Inc.
100 Esst Second Street Chaska, MN 55318 (952) 361-0644

CITY PROJECT NO.

INNER GROVE HEIGHTS, MINNESOTA

# PLANTING PLAN

## BLACKSTONE VISTA

FILE NO.

TRP 1

TRP 4

PROPERTY NAME AND NUMBER

COUNTY ROAD NO. 70

FUTURE TRAIL WITH CO. RD. 70 CONSTRUCTION

33.00'

EOF BHE

Basin F-001
EOR HWL 895.7
SB HWL 889.5

OUTLOT A
8
Area: 2.92 AC

POND 1
NWL-894.0
HWL-896.2
100Yr. Snow
95.5

FIELD FIT 10' TRAIL IN WOODS MAX GRADE 8%

ROAD ACCESS

ROAD 'B'

ROAD 'C'

ROAD 'D'

1400 SF PROPOSED RETAINING WALL

SHEET TRP 2
SHEET TRP 3

RAIN GARDEN BOT-860.2 WL-863.2

OUTLOT D

POND 2
NWL-860.0
HWL-863.8

INFILTRATION
BOT-858.0
HWL-863.8

SS SWR 8INCH

75LF 18"

48 max

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78

NORTH

50 25 0 25 50 100
SCALE IN FEET

| DESIGNER | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| | 1 | NM | 6-20-14 | Reduction in Trees |
| DRAWN BY | 2 | TW | 8-14-14 | Update base and calculations |
| | | | | |
| CHECKED BY | | | | |
| | | | | |
| DATE | | | | |

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CITY PROJECT NO.

INNER GROVE HEIGHTS, MINNESOTA

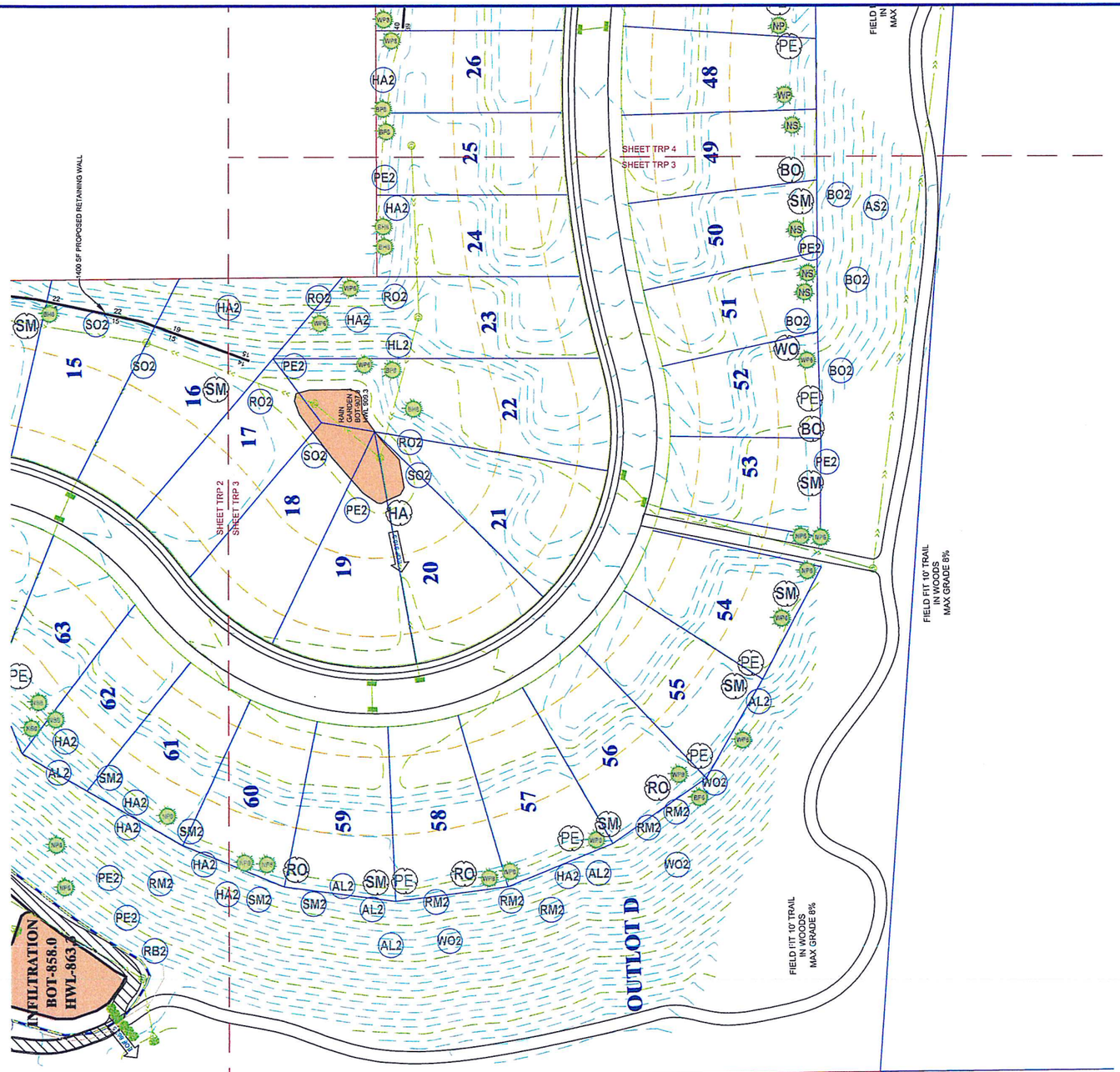
PLANTING PLAN

BLACKSTONE VISTA

FILE NO.

TRP 2 / TRP 4

PROJECT TEAM - MEMBERS




NORTH

50 25 0 25 50 100

SCALE IN FEET

| DESIGNER | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| | 1 | NM | 6-20-14 | Reduction in Trees |
| DRAWN BY | 2 | TW | 8-14-14 | Update base and calculations |
| | | | | |
| CHECKED BY | | | | |
| | | | | |
| DATE | | | | |
| | | | | |

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Signed:

Date: Registration #:

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100 Esst Second Street Chaska, MN 55318 (952) 361-0644

CITY PROJECT NO.

INNER GROVE HEIGHTS, MINNESOTA

# PLANTING PLAN

## BLACKSTONE VISTA

FILE NO.

TRP 3

TRP 4

OUTLOT G

OUTLOT E

950 SF PROPOSED RETAINING WALL

RAIN GARDEN 3
BOT-907.6
HWL 909.3

RAIN GARDEN 1
BOT-940.0
HWL 941.8

RAIN GARDEN 2
BOT-939.0
HWL 942.4

POND 3
NWL 900
HWL 903.3

INFILTRATION
BOT-898.0
HWL-903.4

FIELD FIT 10' TRAIL
IN WOODS
MAX GRADE 8%

FIELD FIT 10' TRAIL
IN WOODS
MAX GRADE 8%

SHEET TRP 4
SHEET TRP 3

POND ACCESS

C.S.A.H. NO. 63

NORTH

50 25 0 25 50 100
SCALE IN FEET

PROJECT NAME AND NUMBER

| DESIGNER | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| | 1 | NM | 6-20-14 | Reduction in Trees |
| DRAWN BY | 2 | TW | 8-14-14 | Update base and calculations |
| CHECKED BY | | | | |
| DATE | | | | |

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Signed
Date Registration #

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100 Esst Second Street Chaska, MN 55318 (952) 361-0644

CITY PROJECT NO.

INNER GROVE HEIGHTS, MINNESOTA

PLANTING PLAN

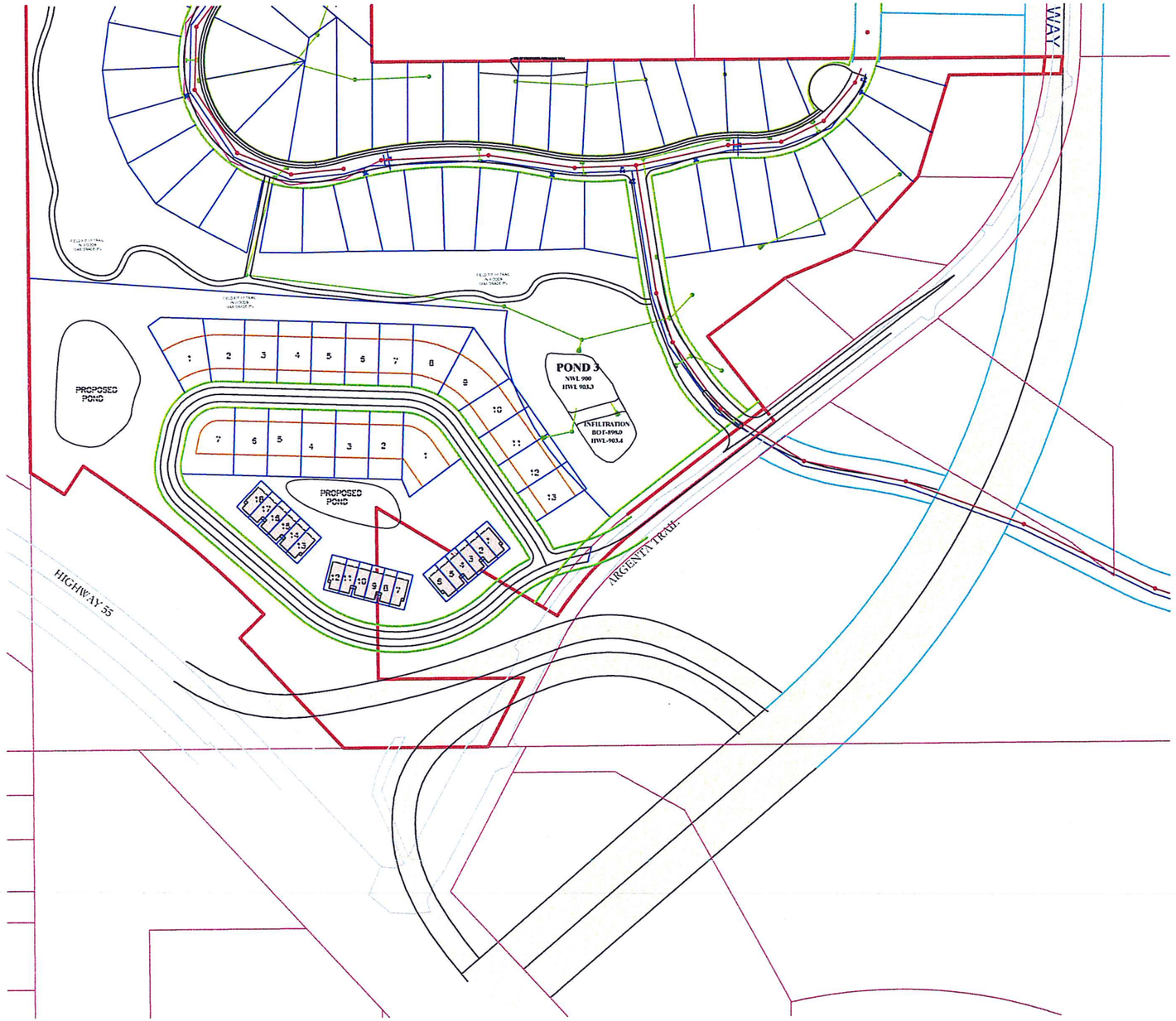
BLACKSTONE VISTA

FILE NO.

TRP 4

TRP 4

# RESIDENTIAL CONCEPT




NORTH

60 30 0 30 60 120
SCALE IN FEET

EXISTING UTILITIES SHOWN ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES ARISING OUT OF HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.

| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| BASE SCHMIDT | 01 | DSG | 06/09/14 | PRELIMINARY REVISIONS |
| DRAWN BY | 02 | DLS | 07/07/14 | PRELIMINARY REVISIONS |
| CAW | 03 | DLS | 08/13/14 | PRELIMINARY REVISIONS |
| CHECKED BY | | | | |
| DLS | | | | |
| DATE | | | | |
| 05/12/14 | | | | |

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Daniel L. Schmidt

Name, P.E.
Date: 05/18/14 Lic. No. 26147

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

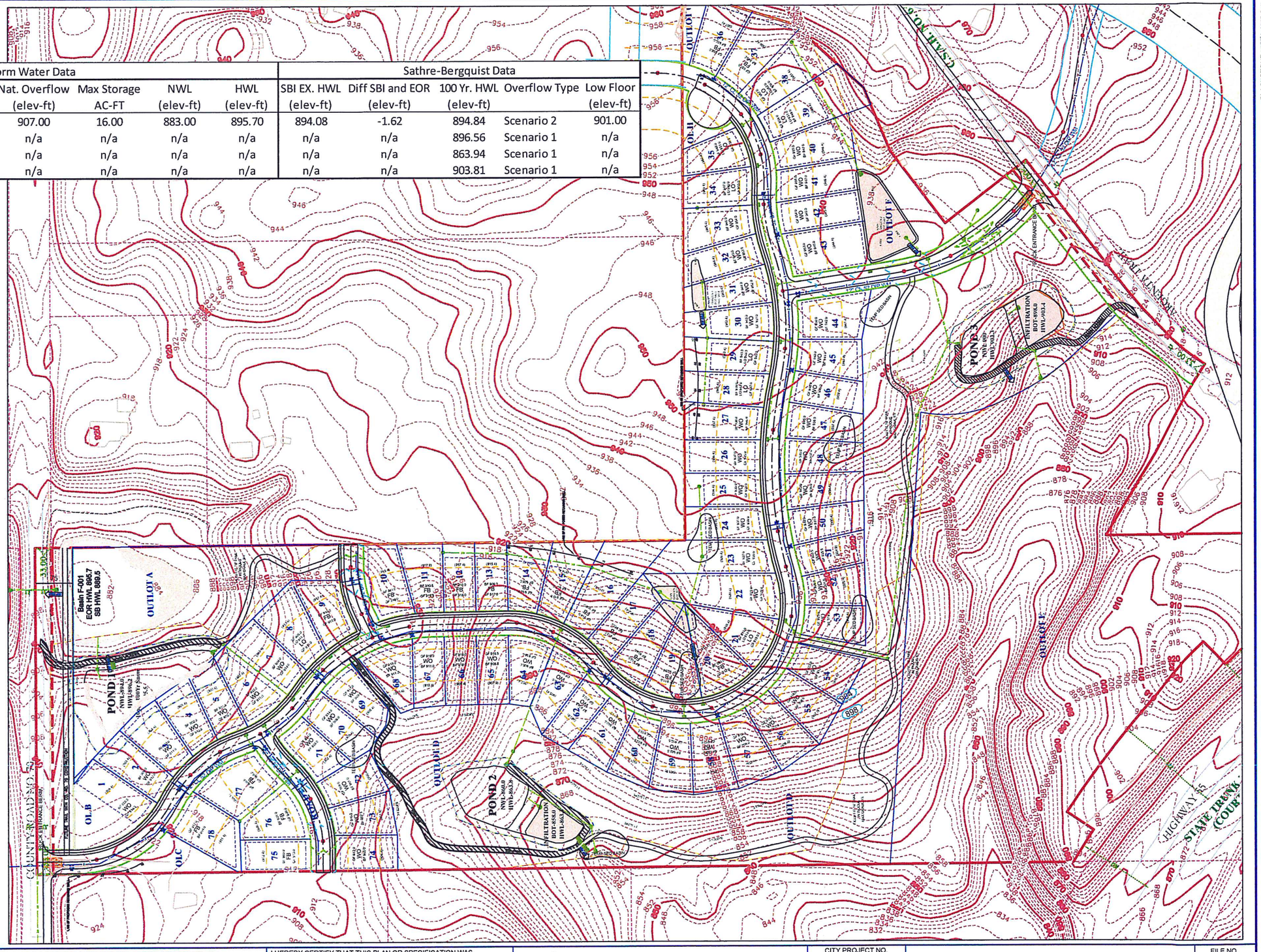
CITY PROJECT NO.
---
INVER GROVE HEIGHTS, MINNESOTA

OUTLOT E CONCEPT SKETCHES
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO.
1920-013
1
1

BROCKTON EAST 5401 861

| Emmons and Oliver Storm Water Data | | | | | | | | | Sathre-Bergquist Data | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Basin | Site | Wetland Class | Basin Type | Low Floor (elev-ft) | Nat. Overflow (elev-ft) | Max Storage AC-FT | NWL (elev-ft) | HWL (elev-ft) | SBI EX. HWL (elev-ft) | Diff SBI and EOR (elev-ft) | 100 Yr. HWL (elev-ft) | Overflow Type | Low Floor (elev-ft) |
| F-001 | Vista | 1 | 2 | 901.70 | 907.00 | 16.00 | 883.00 | 895.70 | 894.08 | -1.62 | 894.84 | Scenario 2 | 901.00 |
| P-1 | Vista | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 896.56 | Scenario 1 | n/a |
| P-2 | Vista | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 863.94 | Scenario 1 | n/a |
| P-3 | Vista | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | 903.81 | Scenario 1 | n/a |

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| CAW | 03 | DLS | 08/13/14 | PRELIMINARY REVISIONS |
| CHECKED BY | | | | |
| DLS | | | | |
| DATE | | | | |
| 05/12/14 | | | | |

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Name, P.E.

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150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
—
INVER GROVE HEIGHTS, MINNESOTA

BASIN MAP
BLACKSTONE VISTA
JIM DEANOVIC

FILE NO.
1920-013
B1
B1

BLACKSTONE VISTA 1920-013

# CONCEPT SKETCH DATA

## LOT STANDARDS

MULTIFAMILY UNITS - DANCING WATERS UNITS
25' WIDE BY 52' DEEP

SETBACKS-
PRIVATE DRIVE - 22' FROM BACK OF CURB
PUBLIC STREET - 15' FROM ROW, 26' FROM BACK OF CURB

FRANKE LAKE - 75'

WETLANDS:
WETLAND BUFFER=DEPENDENT ON CLASS
BUFFER SETBACK 15'

PROPOSED ZONING: NORTHWEST AREA CORRIDOR - PUD

## NOTES:

1. A WETLAND DELINEATION HAS NOT BEEN PREPARED FOR THIS PROPERTY. AN ACCURATE WETLAND DELINEATION COULD DRASTICALLY REDUCE THE NUMBER OF LOTS.

Franke Lake

Water

Basin F-018
EOR HWL-888.8

OUTLOT A

POND 1
NWL 890.0
HWL 892.3

POND 2
NWL 890.0
HWL 893.3

OUTLOT B
Basin F-002
HWL 994.1

1,250 SF PROPOSED RETAINING WAL

3: 1 SLOPE

219.1
12" RCP @ 0.50%

22.8
3: 1 SLOPE 15" RCP @ 1.00%

300 FT TURN LANE

180 FT TAPPER

60 30 0 30 60 120
SCALE IN FEET

NORTH

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| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| BASE SHANAHAN | 01 | DSG | 06/09/14 | PRELIMINARY REVISIONS |
| DRAWN BY | 02 | DSG | 07/07/14 | PRELIMINARY REVISIONS |
| CAW | 03 | DLS | 08/13/14 | CITY REVISIONS |
| CHECKED BY | | | | |
| DLS | | | | |
| DATE | | | | |
| 05/16/14 | | | | |

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Daniel L Schmidt

Name, P.E.
Date: 05/12/14 Lic. No. 26147

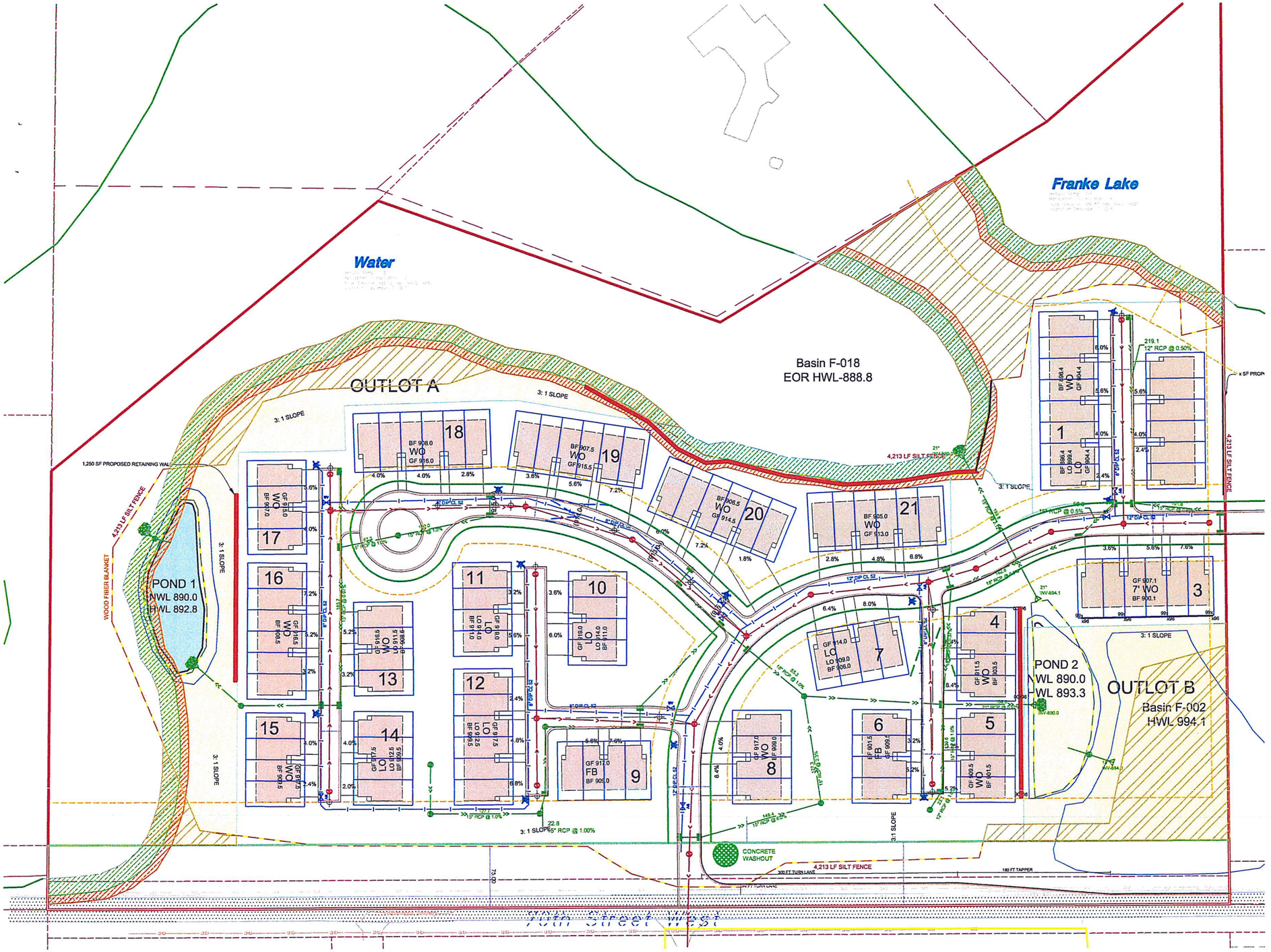
SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
—

INVER GROVE HEIGHTS, MINNESOTA

# CONCEPT SKETCH
# BLACKSTONE PONDS
JIM DEANOVIC

FILE NO.
1920-012
CS1
CS1




LEGEND:

- OPEN SPACE
- UNDISTURBED

| | Blackstone Ponds |
|---|---|
| | Low-Med |
| Gross Area | 24.82 |
| 75' - 70th Street West | 2.38 |
| Wetland/Lake | 5.61 |
| Net Area | 16.83 |
| Required Min Density | 50 |
| ROW HOMES | 104 |
| | Total |
| Net Area | 16.8 |
| Required Dedication(20%) | 3.4 |
| Undisturbed Dedication (10%) | 1.7 |
| Provided Dedication | 4.9 |
| Provided Undisturbed | 2.4 |

| | Total Area | Open Space | Undisturbed |
|---|---|---|---|
| Outlot A | 13.35 | 3.5 | 1.7 |
| Outlot B | 2.99 | 1.4 | 0.7 |
| TOTAL | 16.34 | 4.9 | 2.4 |

All values in Acres

60 30 0 30 60 120
SCALE IN FEET

NORTH

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Daniel L Schmitt

Name, P.E.
Date: 05/12/14 Lic. No. 26147

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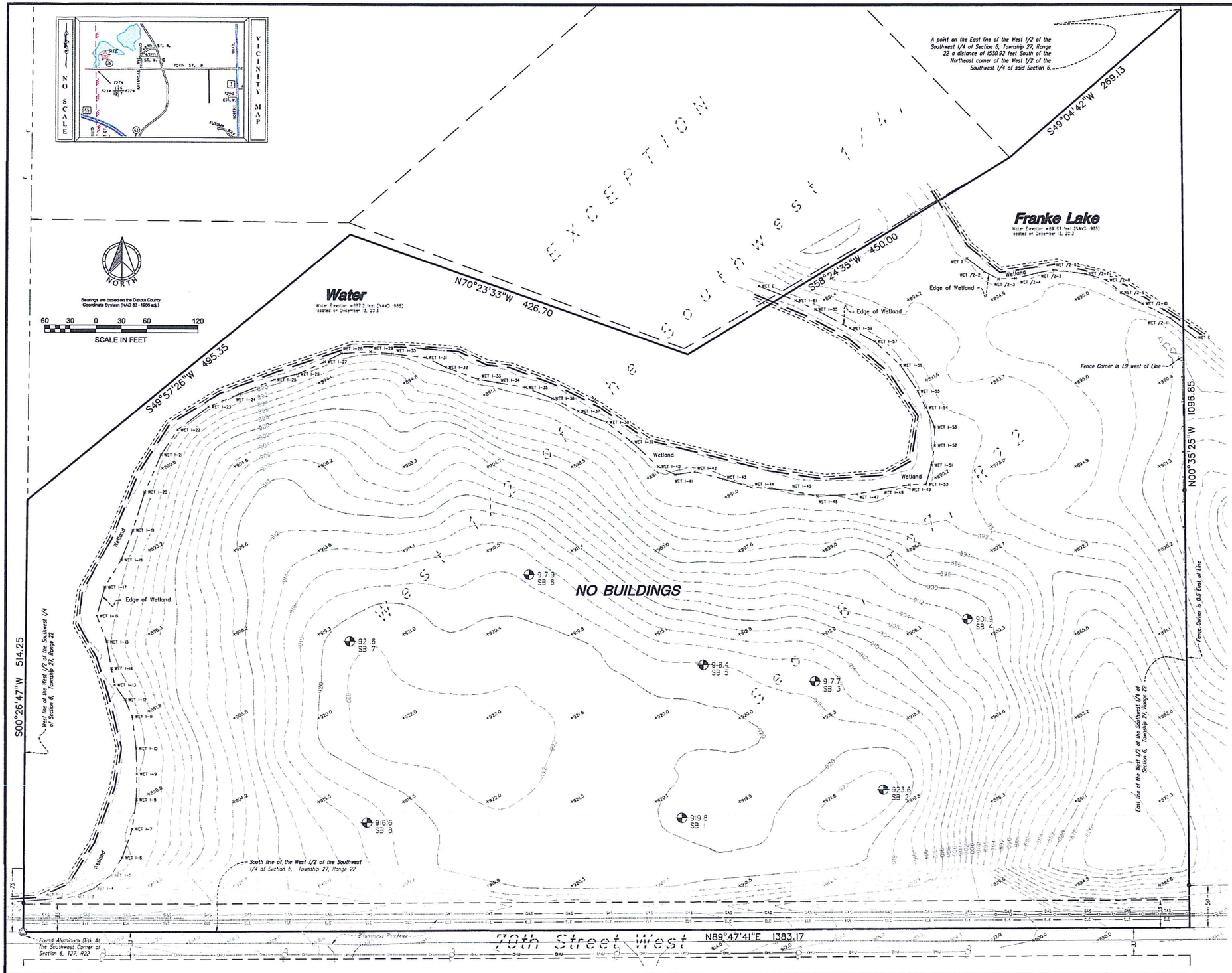
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
—

INVER GROVE HEIGHTS, MINNESOTA

# OPEN SPACE
# BLACKSTONE PONDS
JIM DEANOVIC

FILE NO.
1920-012
OS1
OS1




**DESCRIPTION OF PROPERTY SURVEYED**
(Per Schedule A of the herein referenced Title Commitment)

All that part of "The Land" hereinafter described lying South of "The Line" hereinafter described,
"The Land"
The West 1/2 of the Southwest 1/4, Section 6, Township 27, Range 22,
Excepting therefrom the following parcels:
A traverse lying in the West 1/2 of the Southwest 1/4 and the Northeast 1/4 of the Southwest 1/4 of Section 6, Township 27, Range 22, described by: Commencing at the Southwest corner of Section 6; thence Northerly along the West line of Section 6, a distance of 1180.53 feet to the point of beginning; thence Easterly deflecting 90 degrees to the right 300.00 feet; thence deflecting 44 degrees 01 minutes 43 seconds to the left 514.02 feet; thence deflecting 72 degrees 03 minutes 24 seconds to the left 149.31 feet; thence deflecting 89 degrees 00 minutes 16 seconds to the right 1009.36 feet to the centerline of State Aid Road No. 63 (also known as Delaware Avenue- now known as Argenta Trail West); thence Northerly along the centerline of said State Aid Road to a point on the West line of the East 1/2 of the of the Southwest 1/4 of Section 6, said point being 210 feet South of the Northwest corner of said East 1/2 of the Southwest 1/4; thence Northerly 210 feet to the Northwest corner of said East 1/2 of the Southwest 1/4; thence Westerly along the quarter section line to the West line of Section 6; thence Southerly along the West line of Section 6 to the point of beginning.
AND Except
That part of the West 1/2 of the Southwest 1/4 of Section 6, Township 27, Range 22, described as follows: Commencing at the Southwest corner of said West 1/2 of the Southwest 1/4; thence North (assumed bearing) along the West line of said West 1/2 of the Southwest 1/4 a distance of 850.00 feet; thence on a bearing of East a distance of 375.00 feet to the point of beginning of the land to be described; thence North 48 degrees 09 minutes 40 seconds East a distance of 620.63 feet; thence South 44 degrees 29 minutes 50 seconds East a distance of 462.00 feet; thence South 59 degrees 00 minutes 00 seconds West a distance of 450.00 feet; thence North 69 degrees 48 minutes 08 seconds West a distance of 426.70 feet to the point of beginning.
"The Line"
Commencing at a point of the East line (said East line having an assumed bearing of 0 degrees 0 minutes 00 seconds) of the West 1/2 of the Southwest 1/4 of Section 6, Township 27, Range 22 a distance of 1530.92 feet South of the Northeast corner of the West 1/2 of the Southwest 1/4 of said Section 6; thence South 49 degrees 40 minutes 07 seconds West a distance of 269.13 feet; thence South 59 degrees 00 minutes 00 seconds West a distance of 450.00 feet; thence North 69 degrees 48 minutes 08 seconds West a distance of 426.70 feet; thence Southwesterly on a direct line to a point on the West line of the West 1/2 of the Southwest 1/4 of said Section 6, 514.25 feet North of the Southwest corner of the West 1/2 of said Section and there terminating.

**ALTA/ACSM OPTIONAL TABLE A NOTES**
(The following items reference Table A optional survey responsibilities and specifications)

2) Site Address: Unassigned, 70th Street West, Inver Grove Heights, Dakota County, Minnesota

3) This property is contained in Flood Insurance Rate Map, Community Panel No. 27037C0105E. This panel is no longer a printed panel. According to Dakota County Index map No. 27037CIND1A dated 12-2-2011, Maps that are no longer printed have no special flood areas.

4) The land area: Gross is 1,080,999+/- Sq. Ft. or 24,82 +/- Acres
R/W= 45,635+/- Sq. Ft. or 1.04+/- Acres
Water= 209,737+/- Sq. Ft. or 4.81+/- Acres
Net = 825,705+/- Sq. Ft. or 18.96+/- Acres

5) Elevations are based on the Found Aluminum Disk located at the southwest corner of the site, as shown hereon, having an elevation of 896.19 Feet (NAVD 1988). The contours as shown hereon are based on a combination of spot shots taken in the field and contours obtained from the Minnesota Department of Natural Resources GIS database.

6) The current Zoning for the subject property is A, Agricultural as well as thr Shoreland & Critical Area Overlay Districts per the City of Inver Grove Heights's zoning map dated July 2011. The setback, height, and floor space area restrictions for Agricultural zoning designation were obtained from 10-7-2 found on their web site on the date of 12-16-13 and are as follows: Lot Area - 5 Acres; Lot Width - 200 feet; Front yard setbacks - 30 feet; Side yard setbacks - 25 feet; Rear yard - 60 feet; Height - 35 feet. For restrictions of the shoreland overlay district please see Chapter13 article B of the city ordinance

Please note that the general restrictions for the subject property may have been amended through a city process. We could be unaware of such amendments if they are not in a recorded document provided to us. We recommend that a zoning letter be obtained from the Zoning Administrator for the current restrictions for this site.

11)(b) This survey does not purport to show all underground utilities. The source of information from plans and markings will be combined with observed evidence of utilities to develop a view of those underground utilities. However, lacking excavation, the exact location of underground features cannot be accurately, completely and reliably depicted. Where additional or more detailed information is required, the client is advised that excavation may be necessary. Contact GOPHER STATE ONE CALL at 651-454-0002 for precise onsite location of utilities prior to any excavation. Gopher State One Call Ticket Number 133440251 referenced for this site.

19) The wetlands, as shown hereon were delineated by Kjolhaug Environmental Services, and they were field located on May 23, 2014.

**SURVEY REPORT**

This map and report was prepared with the benefit of a Commitment for Title Insurance issued by Stewart Title Guaranty Company, File No. 01040-2116, dated June 13, 2013 at 8:00 A.M.

1) We note the following with regards to Schedule B of the herein referenced Title Commitment:
   a) Item No. 12 Subject to easements for roadway and utility purposed as set forth in Quit Claim Deed dated 11-16-1999, filed 4-25-1989, as Document No. 885880. ***This easement lies approximately 300 feet north of the subject property and does not affect the site.***
2) There is a fence along the east side if the site that encroaches the subject property, apparently without an easement.

3) We have shown the right-of-way of 70th Street West over the southerly portion of the site. We have surveyed it as a right-of-way that extends 33 feet north from the center line of the traveled road. This is per the historic practice of providing 66 feet of right-of-way on roads that develop via prescriptive rights. Based upon contemporary case law this right-of-way could be construed to be of more or less width based upon a determination of what area is actually being utilized for highway purposes including drainage and possibly slopes.

**CERTIFICATION**

To P.A. Development, LLC; Patrick S. Shanahan and Stewart Title Guaranty Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS in 2011, and includes Items 1 - 4, 7a, 8, 9 and 11(b) of Table A thereof. The field work was completed on 12-13-13.

Date of Plat or Map: 12-16-13

Rory L. Synstelien, PLS Minnesota License No. 44565
rory@sathre.com

**SURVEY LEGEND**

| | | |
|---|---|---|
| CAST IRON MONUMENT | A/C UNIT | BITUMINOUS |
| CATCH BASIN | CABLE TV PEDESTAL | CTV — CABLE TV |
| FLARED END SECTION | ELECTRIC TRANSFORMER | CONCRETE CURB |
| GATE VALVE | ELECTRIC MANHOLE | CONCRETE |
| GUY WIRE | ELECTRIC METER | 895 CONTOUR EXISTING |
| HYDRANT | GAS METER | (895) CONTOUR PROPOSED |
| IRON PIPE SET | GAS VALVE | DT — DRAIN TILE |
| IRON PIPE FOUND | GUARD RAIL | ELC — ELECTRIC UNDERGROUND |
| LIGHT POLE | HAND HOLE | X — X — FENCE |
| POWER POLE | SOIL BORING | FO — FIBER OPTIC UNDERGROUND |
| SANITARY MANHOLE | TREE CONIFEROUS | GAS — GAS UNDERGROUND |
| SANITARY CLEANOUT | TREE DECIDUOUS | OHU — OVER-HEAD UTILITY |
| SIGN | TELEPHONE MANHOLE | RAILROAD TRACKS |
| 903.5 GROUND ELEVATION | TELEPHONE PEDESTAL | SAN — SANITARY SEWER |
| STORM DRAIN | TRAFFIC SIGNAL | STORM SEWER |
| STORM MANHOLE | UTILITY MANHOLE | TEL — TELEPHONE UNDERGROUND |
| YARD LIGHT | UTILITY PEDESTAL | UTL — UTILITY UNDERGROUND |
| | | WATERMAIN |

| FIELD CREW | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| CL | 1 | DLS | 1-08-2014 | ADDED SOIL BORINGS |
| DRAWN BY | 2 | JML | 06-02-14 | Wetland delineated by Kjolhaug Environmental Services |
| RLS | | | | |
| CHECKED BY | | | | |
| DBP | | | | |
| DATE | | | | |
| 12-16-13 | | | | |

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

Dated this 16th day of December, 2013.

Rory L. Synstelien, Professional Land Surveyor
Minnesota License No. 44565

ENGINEERS SURVEYORS DESIGNERS PLANNERS
SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

TWP.27 - RGE.22 - SEC.06
Dakota County
BOOK XXX/PAGE XXX
Inver Grove Heights, MINNESOTA

# ALTA/ACSM Land Title Survey for Jim Denovic and Stewart Title Guaranty Company

FILE NO. 1920-012

1/1

## DESCRIPTION OF PROPERTY SURVEYED

All that part of "The Land" hereinafter described lying South of "The Line" hereinafter described, "The Land"

The West 1/2 of the Southwest 1/4, Section 6, Township 27, Range 22,

Excepting therefrom the following parcels:

A traverse lying in the West 1/2 of the Southwest 1/4 and the Northeast 1/4 of the Southwest 1/4 of Section 6, Township 27, Range 22, described by: Commencing at the Southwest corner of Section 6; thence Northerly along the West line of Section 6, a distance of 1180.53 feet to the point of beginning; thence Easterly deflecting 90 degrees to the right 300.00 feet; thence deflecting 44 degrees 01 minutes 43 seconds to the left 514.02 feet; thence deflecting 72 degrees 03 minutes 24 seconds to the left 149.31 feet; thence deflecting 89 degrees 00 minutes 16 seconds to the right 1009.36 feet to the centerline of State Aid Road No. 63 (also known as Delaware Avenue- now known as Argenta Trail West); thence Northerly along the centerline of said State Aid Road to a point on the West line of the East 1/2 of the of the Southwest 1/4 of Section 6, said point being 210 feet South of the Northwest corner of said East 1/2 of the Southwest 1/4; thence Northerly 210 feet to the Northwest corner of said East 1/2 of the Southwest 1/4; thence Westerly along the quarter section line to the West line of Section 6; thence Southerly along the West line of Section 6 to the point of beginning.

AND Except
That part of the West 1/2 of the Southwest 1/4 of Section 6, Township 27, Range 22, described as follows: Commencing at the Southwest corner of said West 1/2 of the Southwest 1/4; thence North (assumed bearing) along the West line of said West 1/2 of the Southwest 1/4 a distance of 850.00 feet; thence on a bearing of East a distance of 375.00 feet to the point of beginning of the land to be described; thence North 48 degrees 09 minutes 40 seconds East a distance of 620.63 feet; thence South 44 degrees 29 minutes 50 seconds East a distance of 462.00 feet; thence South 59 degrees 00 minutes 00 seconds West a distance of 450.00 feet; thence North 69 degrees 48 minutes 08 seconds West a distance of 426.70 feet to the point of beginning.

"The Line"
Commencing at a point of the East line (said East line having an assumed bearing of 0 degrees 0 minutes 00 seconds) of the West 1/2 of the Southwest 1/4 of Section 6, Township 27, Range 22 a distance of 1530.92 feet South of the Northeast corner of the West 1/2 of the Southwest 1/4 of said Section 6; thence South 49 degrees 40 minutes 07 seconds West a distance of 269.13 feet; thence South 59 degrees 00 minutes 00 seconds West a distance of 450.00 feet; thence North 69 degrees 48 minutes 08 seconds West a distance of 426.70 feet to the point of beginning; thence Southwesterly on a direct line to a point on the West line of the West 1/2 of the Southwest 1/4 of said Section 6, 514.25 feet North of the Southwest corner of the West 1/2 of said Section and there terminating.

## GENERAL NOTES

1) Site Address: Unassigned, 70th Street West, Inver Grove Heights, Dakota County, Minnesota

2) This property is contained in Flood Insurance Rate Map, Community Panel No. 27037C0105E. This panel is no longer a printed panel. According to Dakota County Index map No. 27037CIND1A dated 12-2-2011, Maps that are no longer printed have no special flood areas.

3) The land area: Gross is 1,080,999+/- Sq. Ft. or 24.82 +/- Acres
R/W= 45,635+/- Sq. Ft. or 1.04+/- Acres
Water = 209,737+/- Sq. Ft. or 4.81+/- Acres
Net = 825,705+/- Sq. Ft. of 18.96+/- Acres

4) Elevations are based on the Found Aluminum Disk located at the southwest corner of the site, as shown hereon, having an elevation of 896.19 Feet (NAVD 1988). The contours as shown hereon are based on a combination of spot shots taken in the field and contours obtained from the Minnesota Department of Natural Resources GIS database.

5) The current Zoning for the subject property is A, Agricultural as well as thr Shoreland & Critical Area Overlay Districts per the City of Inver Grove Heights's zoning map dated July 2011. The setback, height, and floor space area restrictions for Agricultural zoning designation were obtained from 10-7-2 found on their web site on the date of 12-16-13 and are as follows: Lot Area - 5 Acres; Lot Width - 200 feet; Front yard setbacks - 30 feet; Side yard setbacks - 25 feet; Rear yard - 60 feet; Height - 35 feet. For restrictions of the shoreland overlay district please see Chapter13 article B of the city ordinance

Please note that the general restrictions for the subject property may have been amended through a city process. We could be unaware of such amendments if they are not in a recorded document provided to us. We recommend that a zoning letter be obtained from the Zoning Administrator for the current restrictions for this site.

6) This survey does not purport to show all underground utilities. The source of information from plans and markings will be combined with observed evidence of utilities to develop a view of those underground utilities. However, lacking excavation, the exact location of underground features cannot be accurately, completely and reliably depicted. Where additional or more detailed information is required, the client is advised that excavation may be necessary. Contact GOPHER STATE ONE CALL at 651-454-0002 for precise onsite location of utilities prior to any excavation. Gopher State One Call Ticket Number 133440281 referenced for this site.

7) We have not been provided any information regarding wetland areas as delineated by appropriate authorities for this site.

## SYMBOL LEGEND

| DESCRIPTION | PROPOSED |
|---|---|
| LOT LINE | |
| WATERMAIN | |
| BUILDING SETBACK BOUNDARY | |
| PARCEL BOUNDARY LINE | |
| DRAINAGE AND UTILITY EASEMENTS | |
| CURB AND GUTTER | |
| RIGHT-OF-WAY | |
| BACKYARD CATCH BASIN | |
| CATCH BASIN | |
| STORM SEWER MANHOLE | |
| FLARED END SECTION W/RIP-RAP | |
| SANITARY SEWER MANHOLE | |
| HYDRANT | |
| GATE VALVE | |

## SURVEY LEGEND

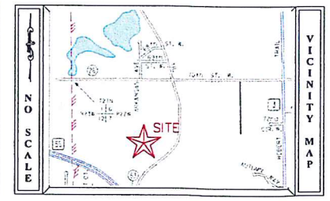
GUY WIRE
IRON PIPE SET
IRON PIPE FOUND
POWER POLE
GROUND ELEVATION
SOIL BORING
BITUMINOUS
CONTOUR EXISTING
FENCE
OVERHEAD ELECTRIC
OVERHEAD UTILITY

| PREPARED BY | PREPARED FOR |
|---|---|
| ENGINEER<br>SATHRE-BERGQUIST, INC.<br>150 SOUTH BROADWAY<br>WAYZATA, MINNESOTA 55391<br><br>PHONE: (952) 476-6000<br>FAX: (952) 476-0104<br><br>CONTACT : Daniel L. Schmidt, P.E<br>EMAIL: schmidt@sathre.com | DEVELOPER<br>Jim Deanovic<br>5118 Mirror Lakes Drive<br>Edina, MN 55436<br><br>CONTACT: Jim Deanovic<br>PHONE: 612-799-5309<br>EMAIL: jimdeanovic@me.com |

104 MULTI FAMILY LOTS

| LOT AREA | SIZE: | FRONT: | SIDE: | CORNER: | REAR: |
|---|---|---|---|---|---|
| 1,725 SQ. FT. | | 70' | | | |
| 2,070 SQ. FT. | | 70' | | | |

NO SCALE




VICINITY MAP

| FIELD CREW | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| CL | 1 | DBP | 06/06/14 | Lot revisions/Area/Pond/etc. |
| DRAWN BY | 2 | JML | 08/13/14 | Revised site layout |
| DBP | | | | |
| CHECKED BY | | | | |
| DBP | | | | |
| DATE | | | | |
| 12-16-13 | | | | |

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

Dated this 15th day of May, 2014.

Daniel L. Schmidt, PLS — Minnesota License No. 26147
schmidt@sathre.com

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

TWP.27 - RGE.22 - SEC.06
Dakota County

Inver Grove Heights, Minnesota

# PRELIMINARY PLAT OF BLACKSTONE PONDS

FILE NO. 1920-012

PP-1

PP-1

# BLACKSTONE PONDS

**Inver Grove Heights**

**Project #** 1920-012 **Date** August 13, 2014

**Prepared for:** Jim Deanovic
5116 Mirror Lakes Drive
Edina, MN 55436
Contact: Jim Deanovic
tel: 612-799-5399

**Prepared by:** Sathre-Bergquist, Inc.
150 Broadway Ave. S.
Wayzata, MN 55391
Contact: David Pemberton
tel: 952-476-6000

| BLOCK 1 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 5 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 6 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 7 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 8 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 14,430 | s.f. | 0.33 | acres | 0 | s.f. | 14,430 | s.f. | 0.33 | acres | | +/- | l.f. |

| BLOCK 2 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 5 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 6 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 11,040 | s.f. | 0.25 | acres | 0 | s.f. | 11,040 | s.f. | 0.25 | acres | | +/- | l.f. |

| BLOCK 3 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 5 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 6 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 10,980 | s.f. | 0.25 | acres | 0 | s.f. | 10,980 | s.f. | 0.25 | acres | | +/- | l.f. |

| BLOCK 4 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 7,530 | s.f. | 0.17 | acres | 0 | s.f. | 7,530 | s.f. | 0.17 | acres | | +/- | l.f. |

| BLOCK 5 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 7,530 | s.f. | 0.17 | acres | 0 | s.f. | 7,530 | s.f. | 0.17 | acres | | +/- | l.f. |

| BLOCK 6 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 7,530 | s.f. | 0.17 | acres | 0 | s.f. | 7,530 | s.f. | 0.17 | acres | | +/- | l.f. |

| BLOCK 7 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 7,530 | s.f. | 0.17 | acres | 0 | s.f. | 7,530 | s.f. | 0.17 | acres | | +/- | l.f. |

| BLOCK 8 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 7,530 | s.f. | 0.17 | acres | 0 | s.f. | 7,530 | s.f. | 0.17 | acres | | +/- | l.f. |

| BLOCK 9 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 7,530 | s.f. | 0.17 | acres | 0 | s.f. | 7,530 | s.f. | 0.17 | acres | | +/- | l.f. |

| BLOCK 10 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 7,530 | s.f. | 0.17 | acres | 0 | s.f. | 7,530 | s.f. | 0.17 | acres | | +/- | l.f. |

| BLOCK 11 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 7,530 | s.f. | 0.17 | acres | 0 | s.f. | 7,530 | s.f. | 0.17 | acres | | +/- | l.f. |

| BLOCK 12 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 5 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 6 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 10,980 | s.f. | 0.25 | acres | 0 | s.f. | 10,980 | s.f. | 0.25 | acres | | +/- | l.f. |

| BLOCK 13 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 7,530 | s.f. | 0.17 | acres | 0 | s.f. | 7,530 | s.f. | 0.17 | acres | | +/- | l.f. |

| BLOCK 14 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 7,530 | s.f. | 0.17 | acres | 0 | s.f. | 7,530 | s.f. | 0.17 | acres | | +/- | l.f. |

| BLOCK 15 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 7,530 | s.f. | 0.17 | acres | 0 | s.f. | 7,530 | s.f. | 0.17 | acres | | +/- | l.f. |

| BLOCK 16 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 5 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 6 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 10,980 | s.f. | 0.25 | acres | 0 | s.f. | 10,980 | s.f. | 0.25 | acres | | +/- | l.f. |

| BLOCK 17 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 7,530 | s.f. | 0.17 | acres | 0 | s.f. | 7,530 | s.f. | 0.17 | acres | | +/- | l.f. |

| BLOCK 18 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 5 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 6 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 10,980 | s.f. | 0.25 | acres | 0 | s.f. | 10,980 | s.f. | 0.25 | acres | | +/- | l.f. |

| BLOCK 19 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 5 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 6 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 10,980 | s.f. | 0.25 | acres | 0 | s.f. | 10,980 | s.f. | 0.25 | acres | | +/- | l.f. |

| BLOCK 20 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 5 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 6 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 10,980 | s.f. | 0.25 | acres | 0 | s.f. | 10,980 | s.f. | 0.25 | acres | | +/- | l.f. |

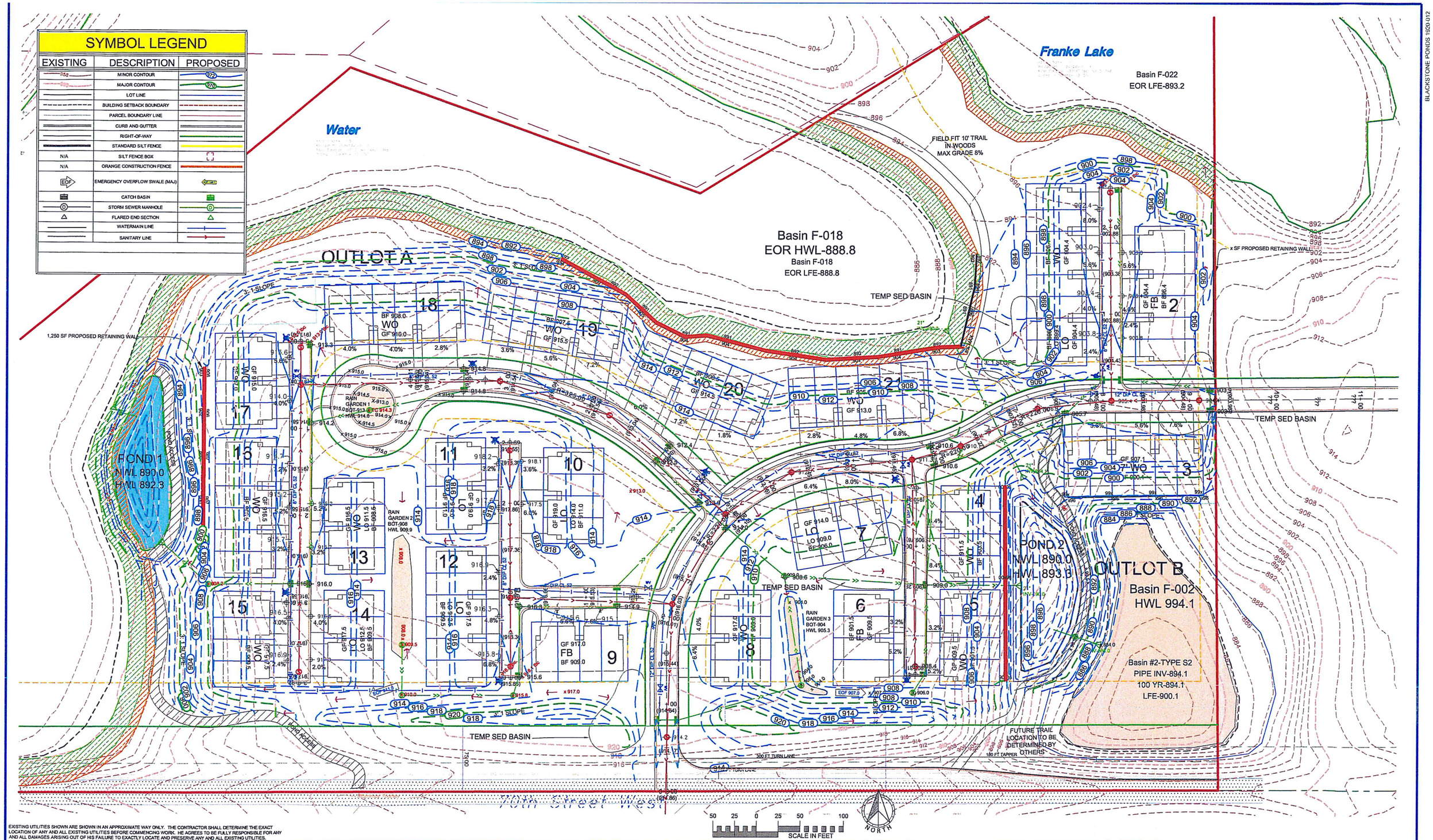
| BLOCK 21 | GROSS AREA | | | | WATER AREA | | NET AREA | | | | WIDTH @ SETBACK | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lot 1 | 2,070 | s.f. | 0.05 | acres | 0 | s.f. | 2,070 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Lot 2 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 3 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 4 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 5 | 1,725 | s.f. | 0.04 | acres | 0 | s.f. | 1,725 | s.f. | 0.04 | acres | 25 | +/- | l.f. |
| Lot 6 | 2,010 | s.f. | 0.05 | acres | 0 | s.f. | 2,010 | s.f. | 0.05 | acres | 30 | +/- | l.f. |
| Total | 10,980 | s.f. | 0.25 | acres | 0 | s.f. | 10,980 | s.f. | 0.25 | acres | | +/- | l.f. |

| Total Lots | GROSS AREA | | | | WATER AREA | | NET AREA | | |
|---|---|---|---|---|---|---|---|---|---|
| Total Lots | 192,690 | s.f. | 4.42 | acres | 208,023 | s.f. | -15,333 | s.f. | -0.35 acres |

| OUTLOTS | GROSS AREA | | | | WATER AREA | | NET AREA | | |
|---|---|---|---|---|---|---|---|---|---|
| A | 581,327 | s.f. | 13.35 | acres | 208,023 | s.f. | 373,304 | s.f. | 8.57 acres |
| B | 130,332 | s.f. | 2.99 | acres | 0 | s.f. | | s.f. | 0.00 acres |

| R/W | GROSS AREA | | | | WATER AREA | | NET AREA | | |
|---|---|---|---|---|---|---|---|---|---|
| R/W | 176,651 | s.f. | 4.06 | acres | 0 | s.f. | 176,651 | s.f. | 4.06 acres |

| TOTAL | GROSS AREA | | | | WETLAND AREA | | NET AREA | | |
|---|---|---|---|---|---|---|---|---|---|
| Site | 1,081,000 | s.f. | 24.82 | acres | 208,023 | s.f. | 872,977 | s.f. | 20.04 acres |




EXISTING UTILITIES SHOWN ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES ARISING OUT OF HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.

| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| BASE SHANAHAN | 01 | DSG | 06/09/14 | PRELIMINARY REVISIONS |
| DRAWN BY | 02 | DSG | 07/07/14 | PRELIMINARY REVISIONS |
| CAW | 03 | DLS | 08/13/14 | CITY REVISIONS |
| CHECKED BY | | | | |
| DLS | | | | |
| DATE | | | | |
| 05/16/14 | | | | |

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Daniel L Schmidt

Name, P.E.

Date: 05/12/14 Lic. No. 26147

ENGINEERS SURVEYORS DESIGNERS PLANNERS

SATHRE-BERGQUIST, INC.

150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.

INVER GROVE HEIGHTS, MINNESOTA

PRELIMINARY GRADING PLAN

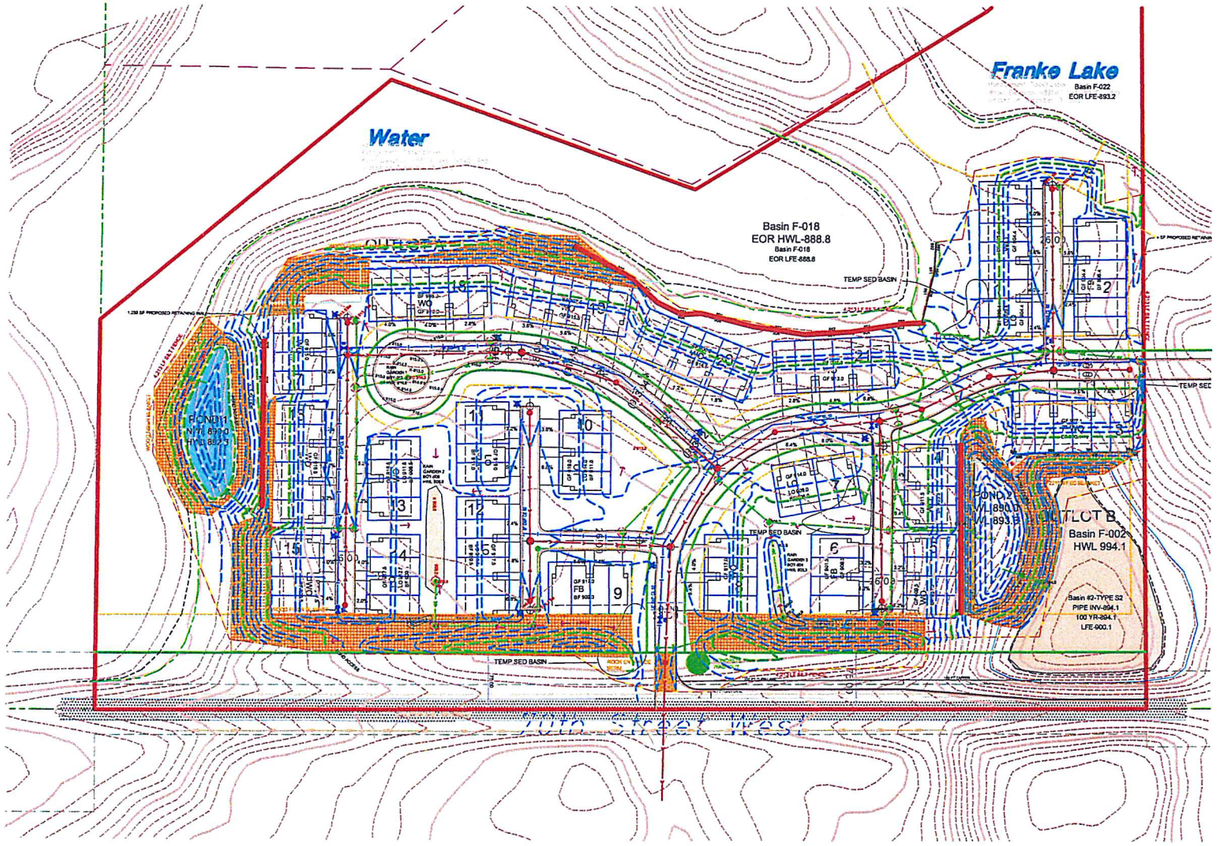
BLACKSTONE PONDS

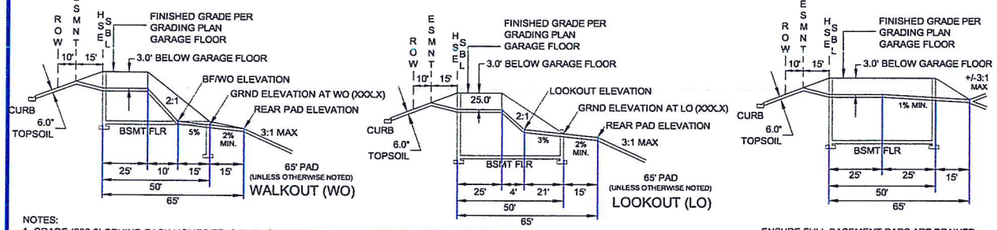
JIM DEANOVIC

FILE NO. 1920-012

GP1 / GP2

BLACKSTONE PONDS 1920-012




NOTES:
1. GRADE (999.0) BEHIND EACH HOMESITE IS THE LOW GROUND ELEVATION AND PROPOSED TOP OF TOPSOIL, SUBGRADE SHALL BE DOWN 0.50 FEET.
2. ESTABLISH FINISH GRADE AT ALL 10' FRONT YARD UTILITY EASEMENT LOCATIONS.
3. THESE DETAILS REFERENCE A 8' POURED FOUNDATION WALL, AND A 0.8' DROP FROM REAR TOP FOUNDATION TO GROUND ELEVATION FOR ALL LOOKOUTS AND WALKOUTS.

EXISTING UTILITIES SHOWN ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES ARISING OUT OF HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.

CONSTRUCTION NOTES

1. INSTALL SILT FENCE AS SHOWN ON PLAN, AS REQUIRED BY THE CITY OF INVER GROVE HEIGHTS,WATERSHED DISTRICT OR DIRECTED BY THE ENGINEER.

2. THE WATER QUALITY POND MUST BE EXCAVATED AT THE BEGINNING OF GRADING OPERATIONS TO PROVIDE TEMPORARY STORM WATER DETENTION DURING CONSTRUCTION. SAND,CLAYS, AND SILTS MUST BE REMOVED FROM THE POND AS NECESSARY DURING CONSTRUCTION AND AT THE COMPLETION OF THE PROJECT. REFER TO SECTION 2.2 OF THE STORM WATER POLLUTION PREVENTION PLAN.

3. BEGIN GRADING, INSTALL PERFORATED RISER PIPE IN PONDS WHEN POND GRADING IS COMPLETE. TEMPORARY DRAINAGE PIPE SHALL BE USED FOR INTERMEDIATE DRAINAGE DURING THE CONSTRUCTION PERIOD AS NECESSARY AND DIRECTED BY THE ENGINEER. THE TEMPORARY DRAINAGE PIPES SHALL BE INCIDENTIAL TO THE GRADING OPERATIONS. INSTALL SILT FENCE AROUND EXCAVATED POND, AFTER THE AS-BUILT ELEVATIONS HAVE BEEN VERIFIED BY THE ENGINEER.

4. INSPECT POND, SILT FENCE, AND ROCK ENTRANCE BERM AFTER ALL RAINFALL EVENTS AS REQUIRED BY THE NPDES PERMIT.

5. LINE ALL PONDS WITH A MINIMUM 3" ORGANIC SOILS & SEED SLOPES BETWEEN NWL AND 100 YR HWL WITH A WATER TOLERANT MIX. (OR AS NOTED)

6. REMOVE PERFORATED RISER PIPE WHEN STORM SEWER AND OUTLET STRUCTURE FOR PONDS ARE INSTALLED (INCIDENTAL).

7. POND - 10:1 BENCH (1 FOOT) THEN 4:1 MAX

8. FINISHED PADS SHALL BE FLATTER THAN 3:1. ALL OTHER SLOPES 4:1 MAX (UNLESS NOTED)

9. RESTORATION - ACRES PLUS WETLAND RESTORATION AREAS
   A. RESTORE ALL DISTURBED AREAS WITH 4" TO 6" OF TOPSOIL, OR EXISTING ON-SITE ORGANIC MTRL.
   B. SEED ALL DISTURBED AREAS WITH MNDOT MIXTURE #250 AT A RATE OF 100 LBS./ACRE AND FERTILIZE WITH 20-0-10 AT 100 LBS./ACRE. (UNLESS OTHERWISE NOTED) WETLAND RESTORATION - BWSR SEED MIX FOR WETLANDS (AS NOTED IN THE WETLAND REPLACEMENT PLAN APPLICATION)
   C. ONLY PHOSPHOROUS FREE FERTILIZER IS TO BE USED ON SITE.
   D. MULCH WITH TYPE 1 AT A RATE OF 2 TONS/ACRE AND DISC ANCHOR IMMEDIATELY AFTER PLACEMENT. USE WOODFIBER BLANKET ON ALL SLOPES 3:1 (FT) OR GREATER.
   E. PLACE APPROVED STORM SEWER INLET PROTECTION IN OR AROUND ALL STORM SEWER INLETS AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.
   F. MAINTAIN ALL SILT FENCE UNTIL TURF HAS BEEN ESTABLISHED.
   G. RESTORATION WORK WILL BE COMPLETED WITHIN 72 HOURS OF GRADING COMPLETION.

10. SILT FENCE, BEFORE GRADING - 4,213 LF
    AFTER GRADING - 1,518 LF

11. WOODFIBER BLANKET - 10,745 SY

12. TEMPORARY SEDIMENT BASINS WILL BE ADDED ONCE PHASING HAS BEEN DETERMINED.

13. 10' BITUMINOUS TRAIL THAT ALSO SERVES AS POND ACCESS SHALL HAVE INCREASED SECTION TO BE DETERMINED AT TIME OF FINAL PLANS.

GENERAL NOTES:

1. THE GRADING CONTRACTOR IS RESPONSIBLE FOR ALL STORM WATER INSPECTIONS ACCORDING TO THE MPCA STORM WATER PERMIT. THIS INCLUDES BOTH WEEKLY INSPECTIONS AND INSPECTIONS DONE AFTER A 0.5" RAIN EVENT. A COPY OF THE INSPECTION REPORT MUST BE EMAILED TO THE ENGINEER AND DEVELOPER ON A WEEKLY BASIS.

2. THE CONTRACTOR SHALL PLACE INLET PROTECTION DEVICES FOR ALL STORM SEWER INLETS(EXISTING AND PROPOSED) AND MAINTAIN THEM AS AN EFFECTIVE SILT CONTROL DEVICE. INLET PROTECTION SHALL BE REMOVED WHEN RESTORATION HAS BEEN ESTABLISHED.

3. ALL RETAINING WALLS WILL REQUIRE A STRUCTURAL DESIGN, A BUILDING PERMIT & A FINAL INSPECTION REPORT.(IF APPLICABLE)

4. A 1"-2" CRUSHED ROCK ENTRANCE BERM SHALL BE PLACED AT THE SITE ENTRANCE, TO REPLACE SILT FENCE, AND MINIMIZE EROSION ON TO THE STREETS. THE ROCK BERMS SHALL BE THE WIDTH OF THE ENTRANCE AND 2 FEET HIGH WITH 4:1 SLOPES.
(SEE DETAIL)

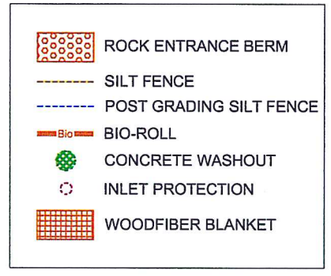
5. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM THE BUILDING PAD AND STREET AREAS THROUGHOUT CONSTRUCTION.

6. THE CONTRACTOR SHALL ATTEMPT TO PREVENT SOIL MATERIALS FROM LEAVING THE SITE BY EROSION AND VEHICLE WHEEL TRACKING. HE SHALL BE RESPONSIBLE FOR CLEANING OF STREET, BOULEVARD AND UTILITY FACILITIES THAT RECEIVE ANY ERODED OR TRACKED SOIL MATERIAL OR OTHER CONSTRUCTION DEBRIS OR MATERIAL. THE GRADING CONTRACTOR WILL BE REQUIRED TO PROVIDE STREET SWEEPING ON HUNTER DRIVE DURING THE GRADING OPERTIONS, IF REQUIRED.

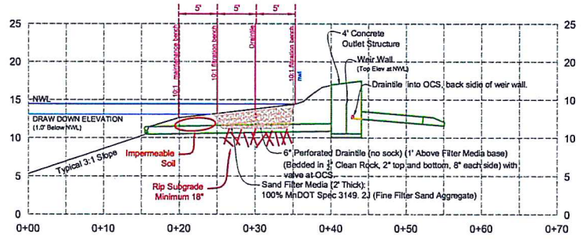
7. EXISTING UTILITIES SHOWN ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES ARISING OUT OF HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.

ON-SITE BMPS

1. NURP POND - NURP POND WILL BE UTILIZED TO MEET OR EXCEED QUALITY AND RATE CONTROL REQUIREMENTS.
2. SKIMMERS - THE POND OUTLET STRUCTURE INCLUDES A SUBMERGED INLET PIPE TO ALLOW SKIMMING.(Utility Contractor)
3. RIP RAP - RIP RAP WILL BE UTILIZED AT ALL APRONS FOR ENERGY DISSIPATION AND PROVIDE SEDIMENT CONTROL- (Utility Contractor)
4. INLET PROTECTION - INLET PROTECTION WILL BE INSTALLED AND MAINTAINED IN ALL CATCH BASINS & REAR YARD STRUCTURES. (WIMCO'S OR EQUAL)-(Utility Contractor)
5. SLOPE STABILIZATION - SILT FENCE WILL BE INSTALLED ALONG DOWN GRADIENT GRADING LIMITS AND WOODFIBER BLANKET WILL BE UTILIZED ON ALL SLOPES 3:1 OR GREATER TO PROVIDE ADEQUATE SLOPE STABILIZATION. (Grading Contractor)
6. BIOROLLS - BIOROLLS WILL BE INSTALLED ALONG REAR YARD SWALES TO PREVENT SEDIMENT FROM REACHING THE NURP POND AND ULTIMATELY DOWNSTREAM WETLANDS(Grading Contractor).
7. INFILTRATION AREAS - INFILTRATION AREAS WILL BE UTILIZED TO REDUCE THE AMOUNT OF RUNOFF FROM THE INCREASED HARDSURFACE. (Grading Contractor)
8. STREET SWEEPING - STREET SWEEPING WILL BE DONE A MINIMUM OF ONCE PER WEEK OR AS NEEDED TO MINIMIZE DUST CONTROL AND VEHICLE TRACKING.(Grading and Utility Contractor)
10. PHOSPHOROUS FREE FERTILIZER - PHOSPHOROUS FREE FERTILIZER WILL ALSO BE USED ON SITE.
11. ALL CONCRETE WASHOUT WASTE PRODUCED SHALL BE REMOVED FROM THE SITE. (Utility Contractor)




TYPICAL INFILTRATION BENCH DETAIL




| DRAWING NAME | NO. | BY | DATE | REVISIONS |
|---|---|---|---|---|
| BASE SHANAHAN | 01 | DSG | 06/09/14 | PRELIMINARY REVISIONS |
| DRAWN BY | 02 | DSG | 07/07/14 | PRELIMINARY REVISIONS |
| CAW | 03 | DLS | 08/13/14 | CITY REVISIONS |
| CHECKED BY | | | | |
| DLS | | | | |
| DATE | | | | |
| 05/16/14 | | | | |

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Daniel L Schmidt

Name, P.E.
Date: 05/12/14 Lic. No. 26147

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

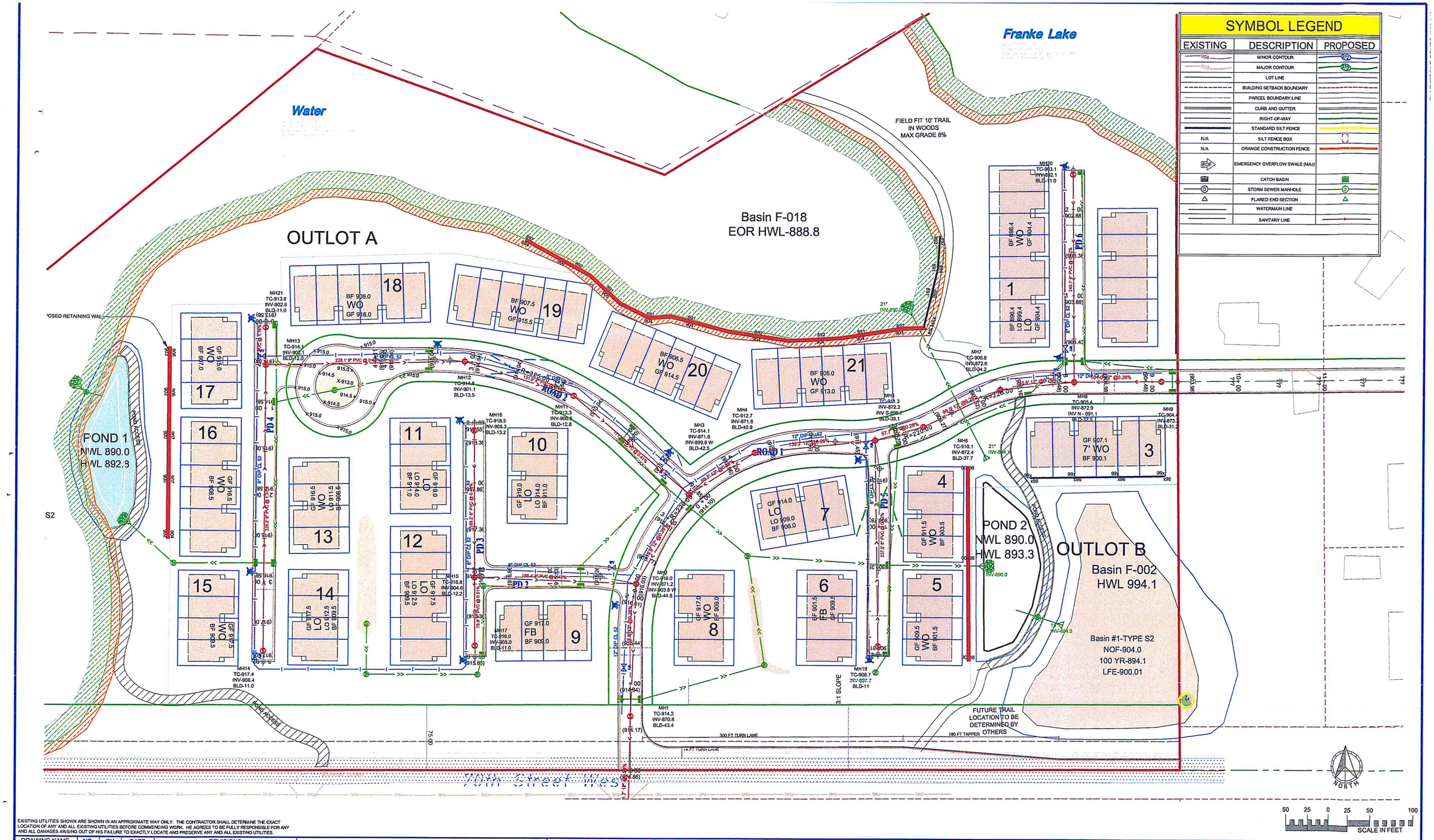
CITY PROJECT NO.
—
INVER GROVE HEIGHTS, MINNESOTA

# PRELIMINARY GRADING & EROSION CONTROL PLAN BLACKSTONE PONDS

JIM DEANOVIC

FILE NO. 1920-012

GP2 / GP2




## SYMBOL LEGEND

| EXISTING | DESCRIPTION | PROPOSED |
|---|---|---|
| | MINOR CONTOUR | |
| | MAJOR CONTOUR | |
| | LOT LINE | |
| | BUILDING SETBACK BOUNDARY | |
| | PARCEL BOUNDARY LINE | |
| | CURB AND GUTTER | |
| | RIGHT-OF-WAY | |
| | STANDARD SILT FENCE | |
| N/A | SILT FENCE BOX | |
| N/A | ORANGE CONSTRUCTION FENCE | |
| EOF | EMERGENCY OVERFLOW SWALE (MAJ) | |
| | CATCH BASIN | |
| | STORM SEWER MANHOLE | |
| | FLARED END SECTION | |
| | WATERMAIN LINE | |
| | SANITARY LINE | |

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Daniel L Schmidt

Name, P.E.

Date: 05/12/14 Lic. No. 26147

ENGINEERS SURVEYORS DESIGNERS PLANNERS

SATHRE-BERGQUIST, INC.

150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.

INVER GROVE HEIGHTS, MINNESOTA

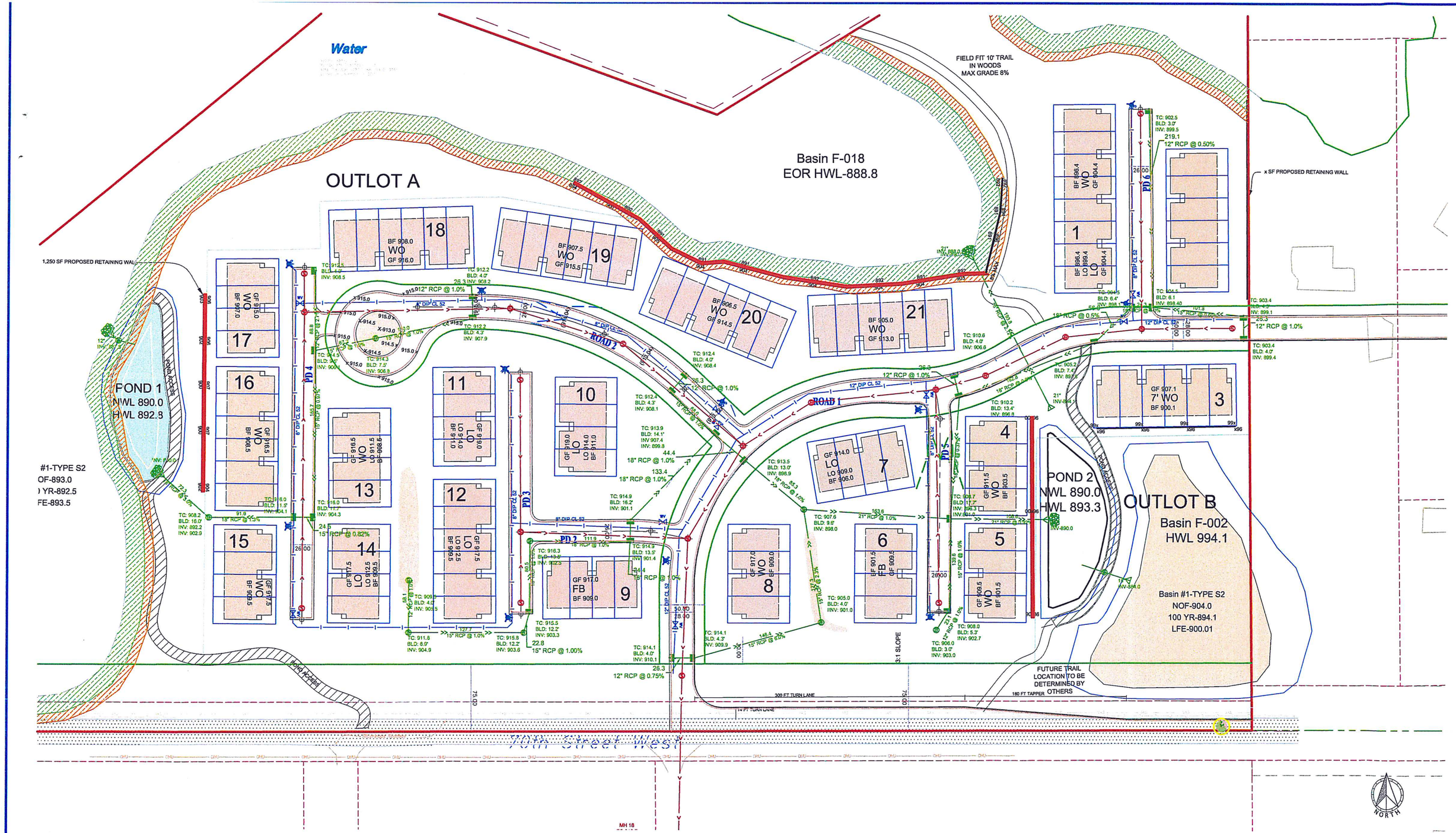
PRELIMINARY SEWER & WATERMAIN PLAN

BLACKSTONE PONDS

JIM DEANOVIC

FILE NO. 1920-012

UP1 / UP1

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CITY PROJECT NO.

—

INVER GROVE HEIGHTS, MINNESOTA

PRELIMINARY STORM SEWER PLAN

BLACKSTONE PONDS

JIM DEANOVIC

FILE NO. 1920-012

UP2 / UP2

Water

OUTLOT A

Basin F-018
EOR HWL-888.8

FIELD FIT 10' TRAIL
IN WOODS
MAX GRADE 8%

OUTLOT B

OUTLOT C
Basin F-002
HWL 994.1

POND 2
NWL 890.0
HWL 893.3

Basin #1-TYPE S2
NOF-904.0
100 YR-894.1
LFE-900.01

3:1 SLOPE

FUTURE TRAIL
LOCATION TO BE
DETERMINED BY
OTHERS

300 FT TURN LANE

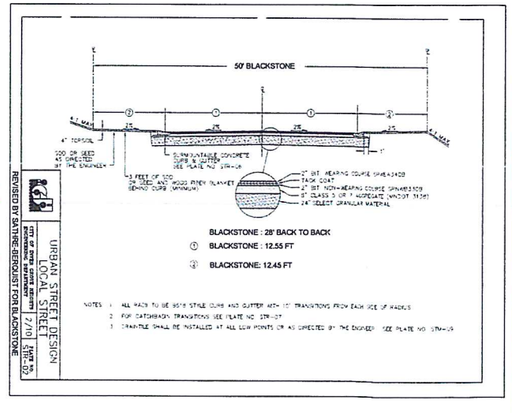
180 FT TAPPER

14 FT TURN LANE

POND ACCESS

70th Street West

SCALE IN FEET
50 25 0 25 50 100

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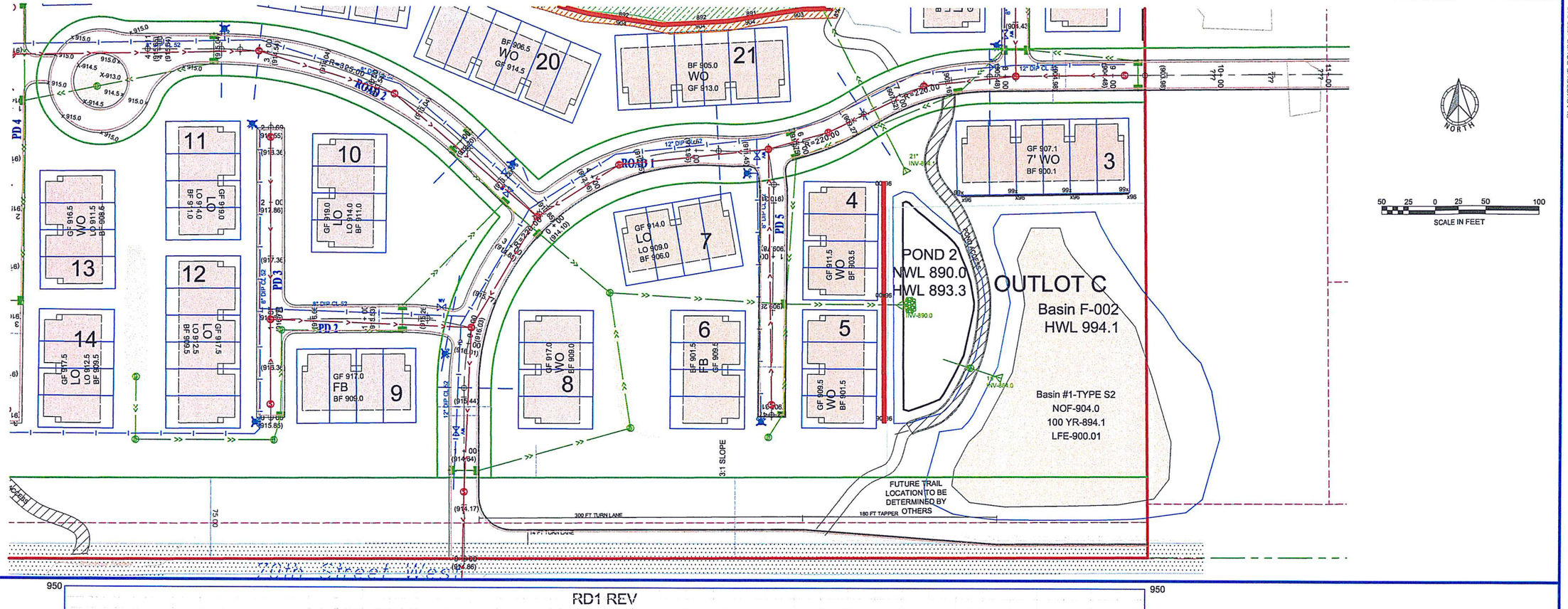
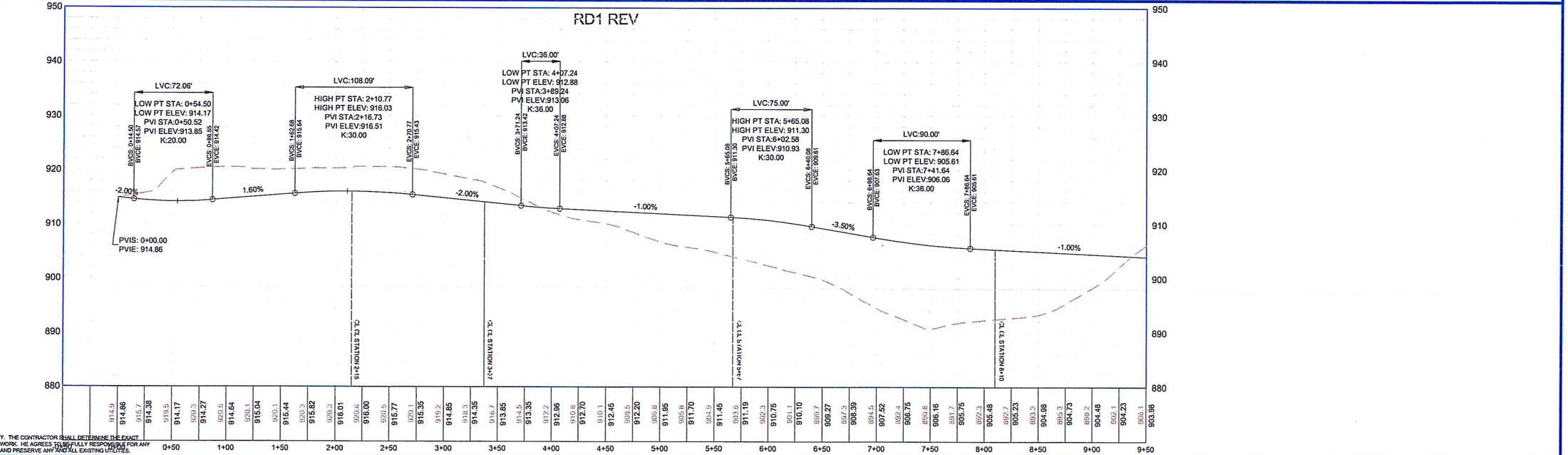
CITY PROJECT NO.
—
INVER GROVE HEIGHTS, MINNESOTA

# PRELIMINARY STREET PLAN
## BLACKSTONE PONDS
JIM DEANOVIC

FILE NO.
1920-012
ST1
ST4

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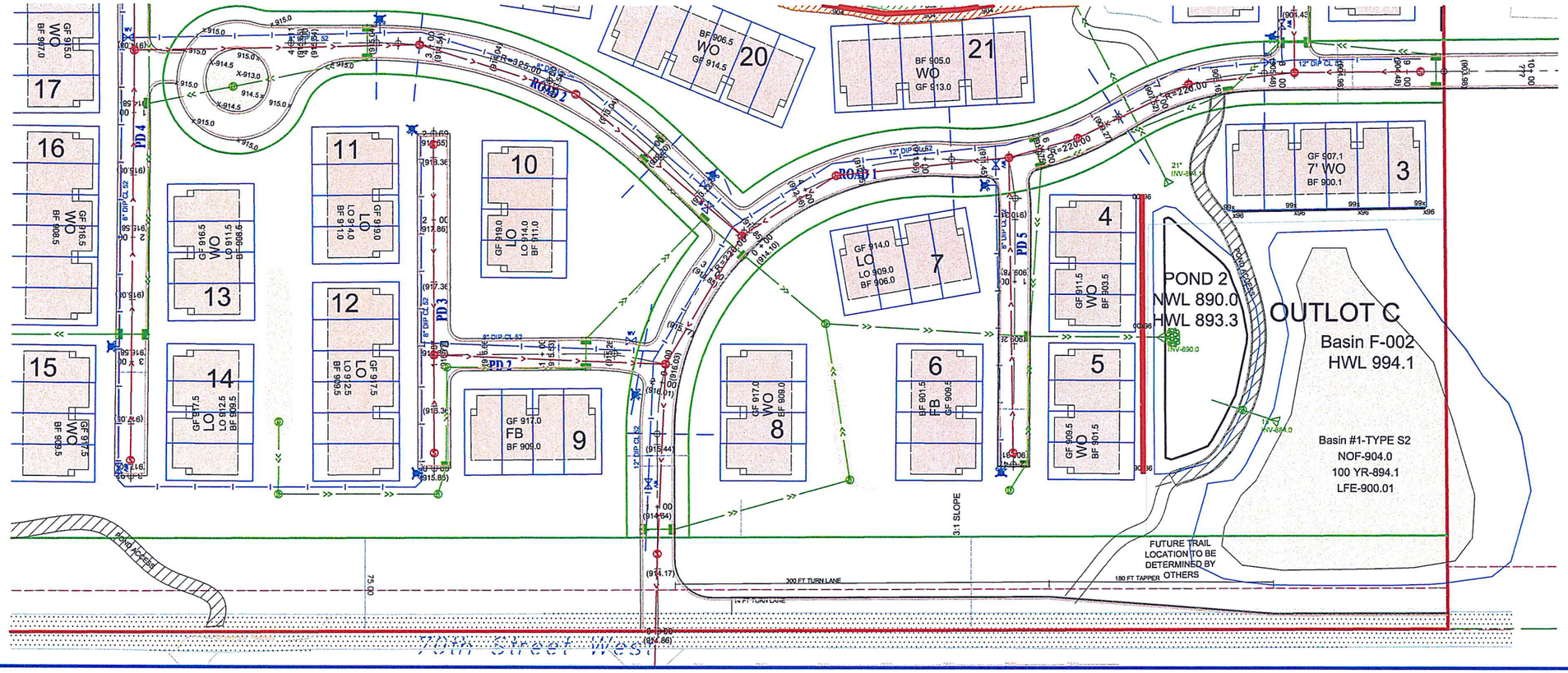
CITY PROJECT NO.
—

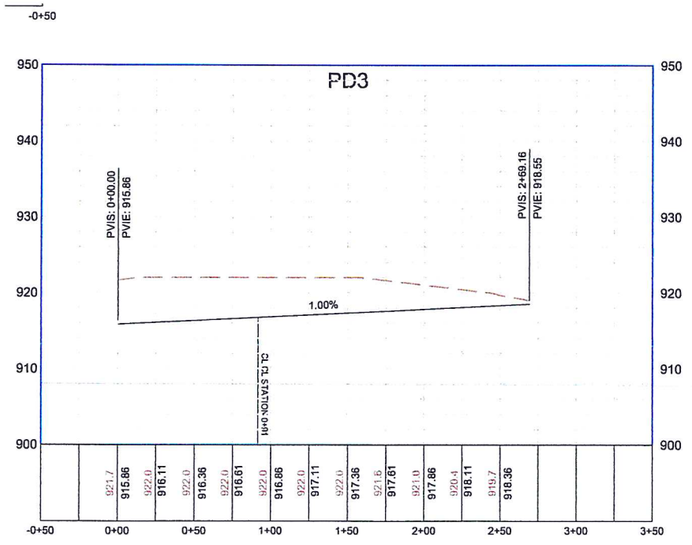
INVER GROVE HEIGHTS, MINNESOTA

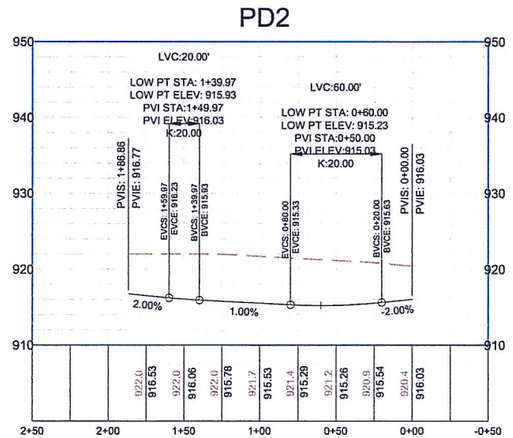
# PRELIMINARY STREET PLAN
# BLACKSTONE PONDS
JIM DEANOVIC

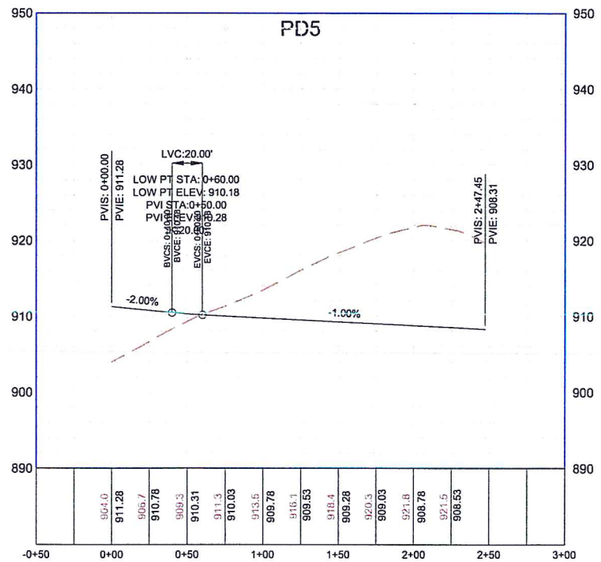
FILE NO. 1920-012

ST2 / ST4

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CITY PROJECT NO.
—

INVER GROVE HEIGHTS, MINNESOTA

# PRELIMINARY STREET PLAN
## BLACKSTONE PONDS
JIM DEANOVIC

FILE NO.
1920-012

ST3
ST4

OUTLOT A

Basin F-018
EOR HWL-888.8

ROAD 1

ROAD 2

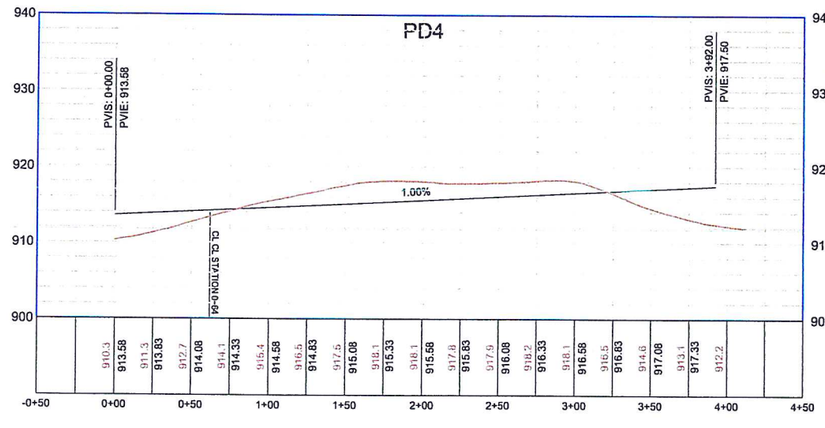
POND 2
NWL 890.0
HWL 893.3

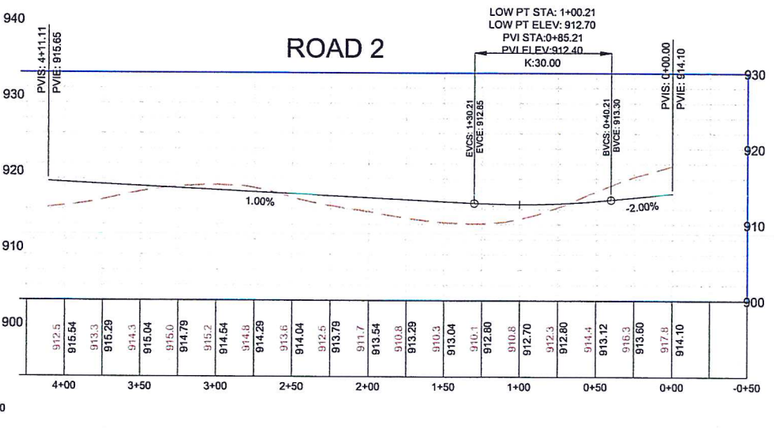
OUTLOT C
Basin F-002
HWL 994.1

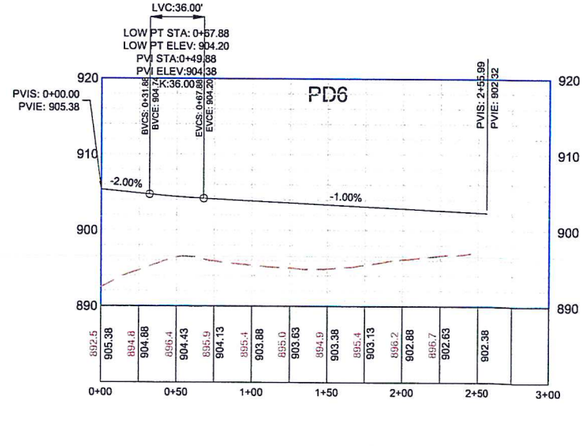
Basin #1-TYPE S2
NOF-904.0
100 YR-894.1
LFE-900.01

NORTH

SCALE IN FEET
50 25 0 25 50 100

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SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
—

INVER GROVE HEIGHTS, MINNESOTA

# PRELIMINARY STREET PLAN
## BLACKSTONE PONDS
JIM DEANOVIC

FILE NO. 1920-012

ST4 / ST4

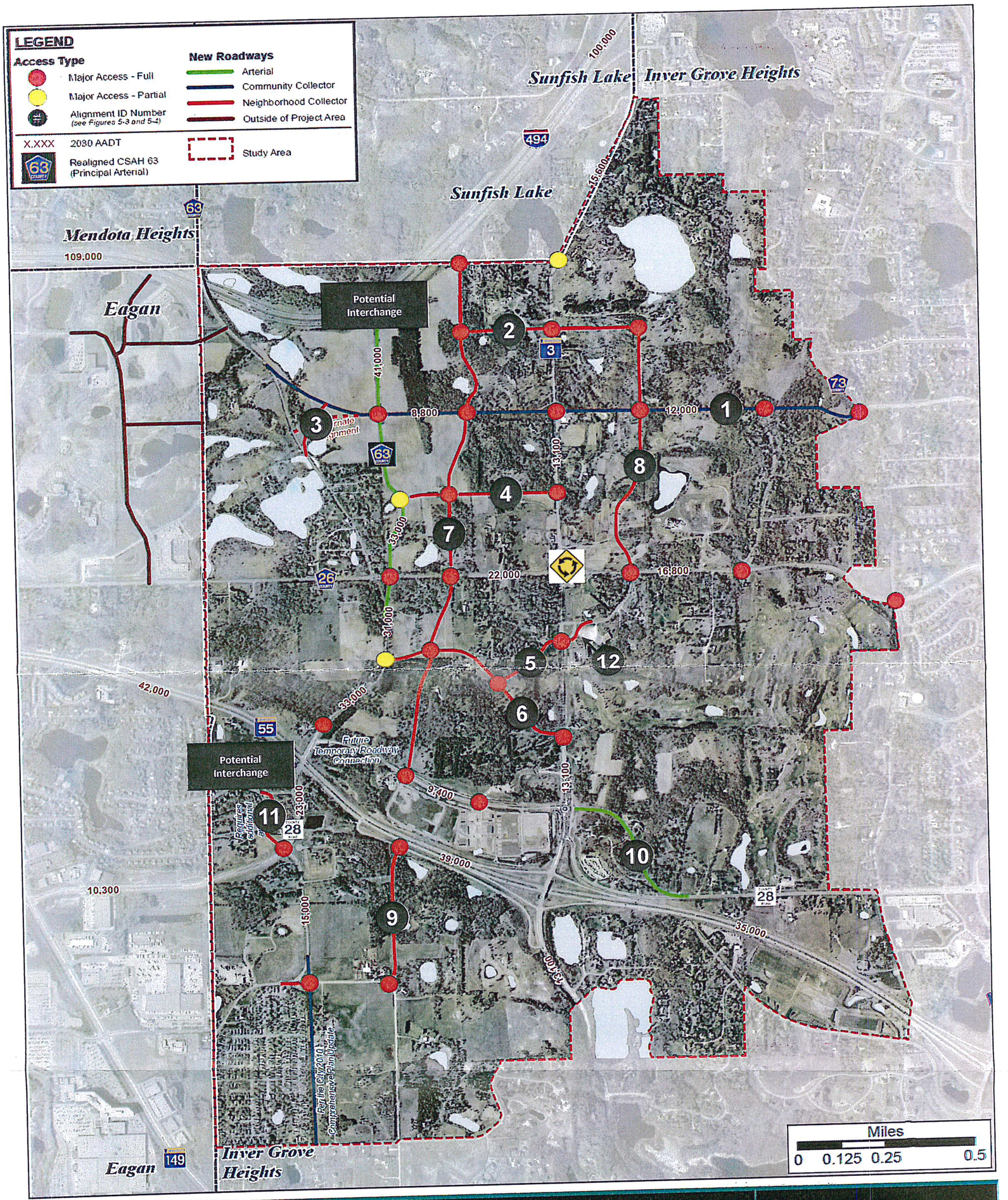



FIGURE 5-1. Recommended Collector Roadway System

NORTHWEST EXPANSION AREA COLLECTOR STREET SYSTEM STUDY

WSB & Associates, Inc.

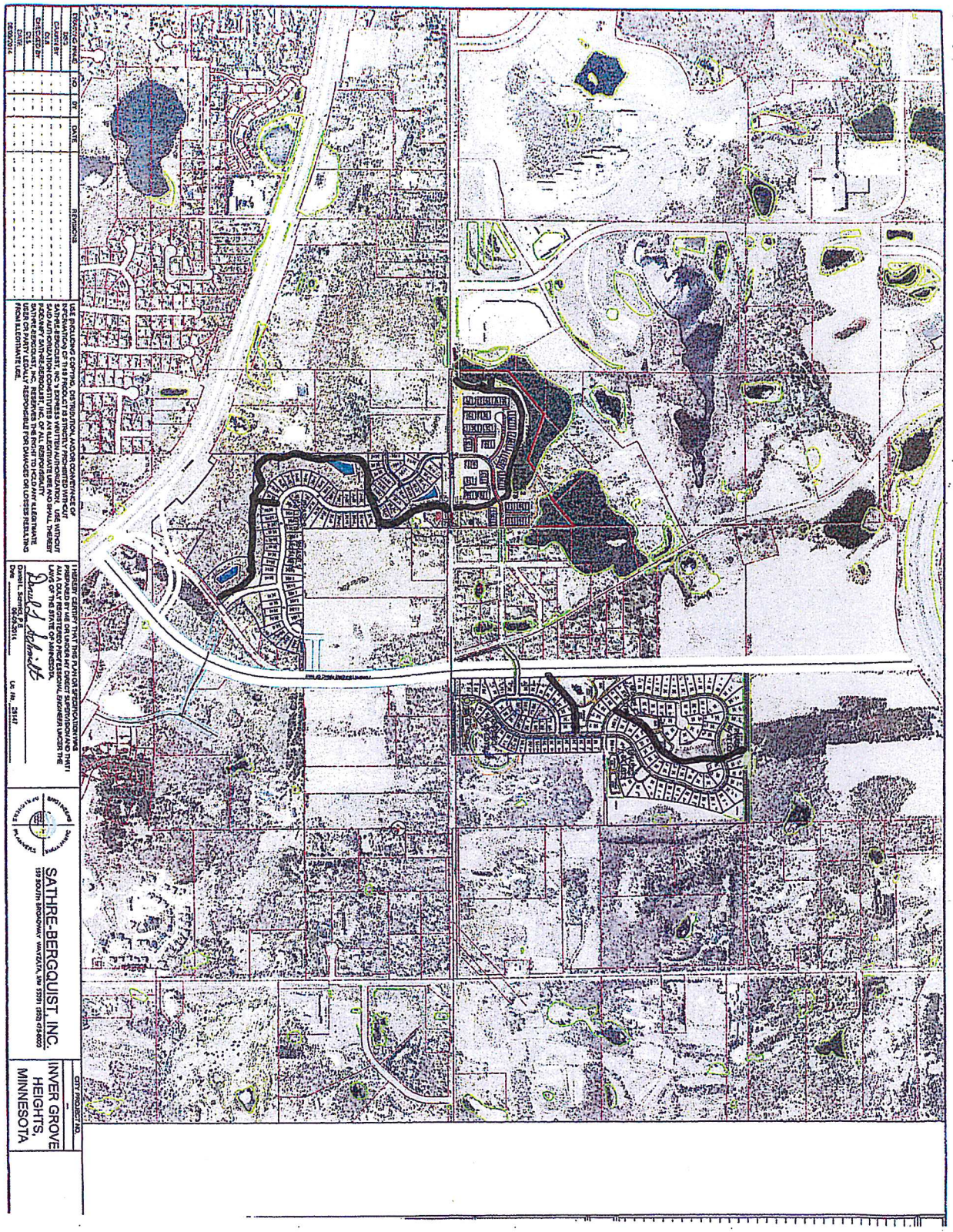
MEMO FROM DIRECTOR OF PARKS & RECREATION

**Blackstone Vista-Ponds-Ridge**
**NW Area Park & Trail Plan Comments**
**September 10, 2014**

1. The developer has done a good job of incorporating the Dakota County Mendota/Lebanon Hills Regional Greenway, the following comment serve to enhance and improve the greenway which will be a desired amenity for residents of these subdivisions.
2. Vista - it is requested that the developer explore ways to have the trail exit out of Outlot D to the street at the intersection so it lines up with the trail that runs from the street to Outlot A. (Please see attached schematic diagram)
3. Vista/Ponds - the developer shall plan for a grade separated crossing of 70th St. and must identify the location on the plan to verify that there will be enough clearance of any underground utilities with respect to the tunnel structure and the roadway above. The actual construction of the grade separated crossing will be coordinated and funded by Dakota County as a part of the Mendota/Lebanon Greenway and likely will be constructed as a part of the reconstruction of 70th St.
4. Vista - the developer should plan to accommodate the greenway trail in Outlot D to be constructed alongside the roadway that connects to Argental Trail. (Please see attached schematic diagram)
5. The developer should plan to construct the greenway trail using specifications provided by Dakota County. The developer should grade the trail as a part of the development contract without compensation.
6. County will need to determine the best way to pay for the actual construction of the bituminous trail, possibilities include:
    a. Developer constructs as a part of development contract with City and City provides credit or pays developer. In this case the City and County would have a separate agreement whereby the County reimburses the City for the construction costs
    b. Once graded by the developer the County bids out construction of the trail and manages the construction project and pays the contactor(s) directly
7. Ponds - the developer will need to make accommodations for the greenway trail in the Ponds subdivision (Please see attached schematic diagram).
8. Sidewalks should be considered by the developer for all subdivisions. The construction of sidewalks should meet ADA standards for public sidewalks.
9. Ridges – the developer should make provisions for trails as shown on the attached schematic diagram constructed by the developer for the City.
10. When the developer constructs a trail for the City the developer should construct an 8' bituminous trail (6" of compacted class V and 3" of compacted bituminous). The construction of the trail should meet ADA standards for public trails. If a trail will also be used to access a storm water facility, the trail cross section should be increased as determined by the City Engineer.
11. The developer shall be required to pay a cash park dedication for the lots developed based on the rate established at the time of final plat. Current rates are as follows:

| | | |
|---|---|---|
| Blackstone Ridge | 121 single family unites x $2,850 | $344,850 |
| Blackstone Vista | 78 single family units x $2,850 | $222,300 |
| Blackstone Ponds | 106 townhome units x $4,000 | $424,000 |
| **Total** | | **$991,150** |

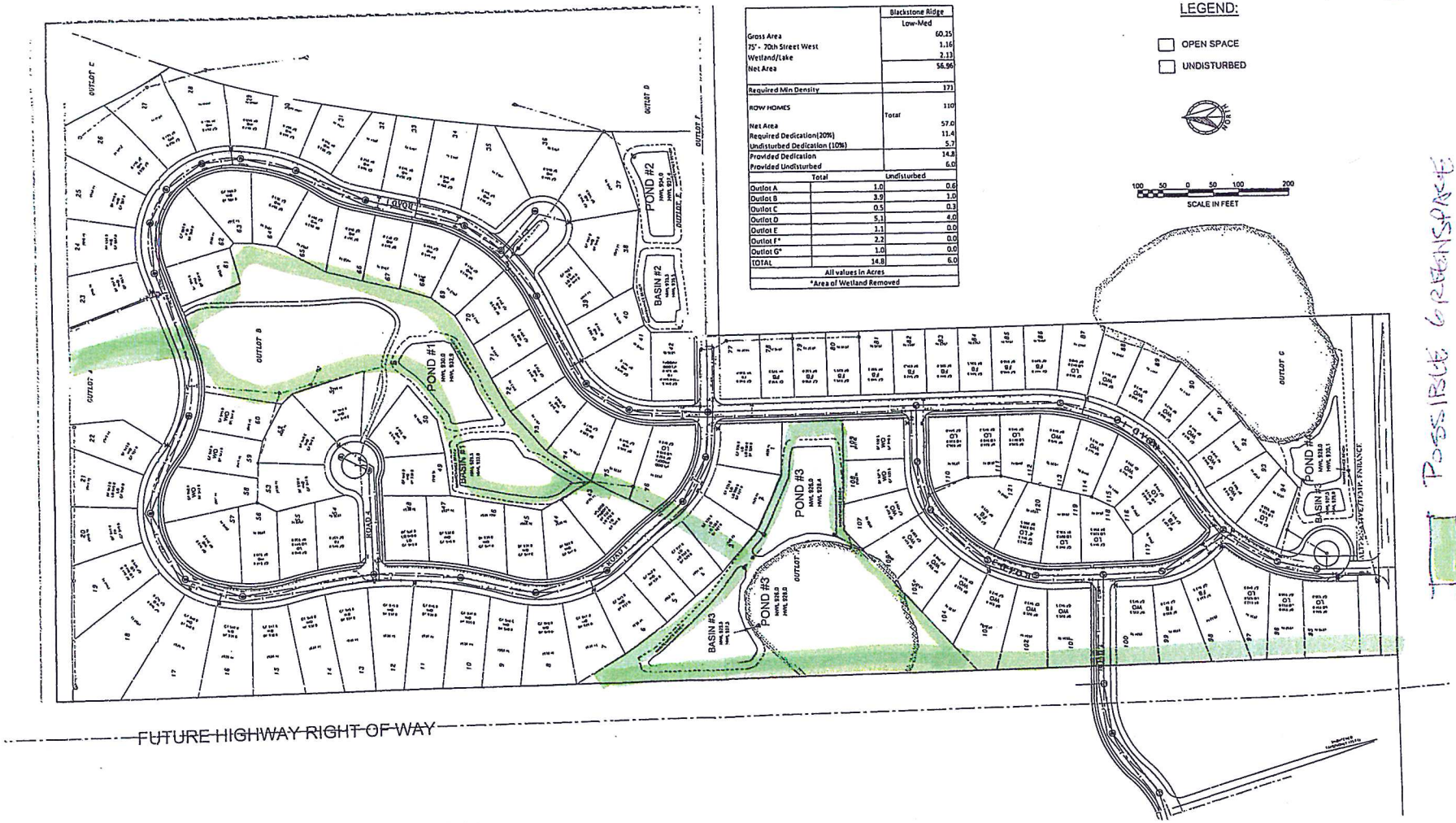
12. The issue of tree preservation is a planning issue and not a PRAC issue. However, the Planning Commission and City Council should be encouraged to make sure the City's ordinance related to tree preservation is followed and if the developer isn't replacing trees on a caliper per caliper inch as outlined that they are required to provide the necessary cash payment that would be deposited in the Tree Fund and used in public parks and open spaces. No Ash trees of any kind should be permitted to be a part of the landscape plan.




NW AREA PARKS & TRAIL PLAN COMMENTS

MAP EXHIBIT

1" = 200'




| | Blackstone Ridge |
|---|---|
| | Low-Med |
| Gross Area | 60.25 |
| 75' - 70th Street West | 1.16 |
| Wetland/Lake | 2.13 |
| Net Area | 56.96 |
| Required Min Density | 171 |
| ROW HOMES | 110 |
| | Total |
| Net Area | 57.0 |
| Required Dedication(20%) | 11.4 |
| Undisturbed Dedication (10%) | 5.7 |
| Provided Dedication | 14.8 |
| Provided Undisturbed | 6.0 |

| | Total | Undisturbed |
|---|---|---|
| Outlot A | 1.0 | 0.6 |
| Outlot B | 3.9 | 1.0 |
| Outlot C | 0.5 | 0.3 |
| Outlot D | 5.1 | 4.0 |
| Outlot E | 1.1 | 0.0 |
| Outlot F* | 2.2 | 0.0 |
| Outlot G* | 1.0 | 0.0 |
| TOTAL | 14.8 | 6.0 |

All values in Acres

*Area of Wetland Removed

LEGEND:

- OPEN SPACE
- UNDISTURBED

NORTH

100 50 0 50 100 200
SCALE IN FEET

POSSIBLE GREENSPACE CONNECTION

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| BASE JEFFERS | | | | |
| DRAWN BY | | | | |
| CAW | | | | |
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Donald J Schmidt

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150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
—

INVER GROVE HEIGHTS, MINNESOTA

OPEN SPACE
BLACKSTONE RIDGE
JIM DEANOVIC

**MEMO**

**CITY OF INVER GROVE HEIGHTS**

**TO:** Allan Hunting, City Planner

**FROM:** Thomas J. Kalduński, P.E., City Engineer TJK

**DATE:** September 12, 2014

**SUBJECT:** Engineering Review and Conditions of Approval for Blackstone Development

The City has received a PUD application for Blackstone Development. This application includes three separate and distinct areas known as:

1. Blackstone Vista
2. Blackstone Ponds
3. Blackstone Ridge

The PUD submittal was prepared by Sathre-Berquist on behalf of Mr. Jim Deanovic. This memo outlines the Engineering reviews and proposed conditions of approval for the development.

As part of this review, the City has utilized several of its engineering consultants as follows:

1. Emmons and Olivier Resources (EOR) – Northwest Area Water Resources
2. Kimley-Horn & Associates (K/H) – Overall development review
3. Bolton & Menk (B & M) – Northwest Area Argenta District Trunk Sanitary Sewer and Water Facilities

The consultants have provided review letters dated July 28, 2014, August 29, 2014 and September 12, 2014 that shall be incorporated into the conditions of approval for this development. It must be noted that the Water Resources Plan review for Blackstone Ponds has not been completed to date. All items outlined in EOR's review of this area shall be a condition of approval.

It must be noted that the Water Resources Plan for Blackstone Ridge has not been completed. A cursory review was done by EOR which indicates this area does not meet the NWA storm water manual. All comments received by our water resources consultant shall be incorporated into the project as a condition of any approval of Blackstone Ridges.

The City Engineering staff has also provided some input on the development review. City review letters dated May 30, 2014 and June 25, 2014 shall be incorporated as a condition of approval.

- All general conditions noted previously shall apply to this plat.
- The developer shall recognize that Dakota County has approved a short-term access on the existing Argenta Trail. A condition of this approval will allow the County to modify this access for Blackstone Vista based upon the results and recommendation that results from City Project No. 2014-11 – Argenta Trail/TH 55 Intersection study.

General Conditions (applicable to all areas of Blackstone Development)

- Mn/DOT has jurisdiction on TH 55. The developer shall meet all applicable Mn/DOT conditions.
- Dakota County has jurisdiction of adjacent County highways CSAH 63 (Argenta Trail) and CSAH 26 (70th Street). The developer shall meet all applicable conditions of the County. They are summarized in the attached letter dated July 25, 2014.
- Access to County highways shall be in accordance with County permits.
- Right-of-way requested by the County shall be dedicated on the plat.
- Dakota County is conducting a study of the realignment of Argenta Trail from Yankee Doodle Road to TH 55 to a point 600 feet north of T.H. 55. This study will be completed in approximately six months. This development shall be required to meet all conditions of the highway study. Note the Planning documents indicate the need for a six-lane County road.
- The City has completed its "2012 Northwest Area Collector Street Plan" and the development shall comply with the requirements of this document.
- The City has an ordinance which establishes specific codes for the Northwest Area. All terms of this Code shall be met with this development.
- The City has completed a Northwest Area basin map, dated May 9, 2014 which must be complied with.
- The City's 2006 stormwater manual for the NWA shall be complied with.
- The City's 2008 Water Resources Management Plan shall be followed where applicable.
- The City's 2006 water system model and updates shall be complied with. Note that this development includes areas that may experience water pressures exceeding 80 psi which will require pressure reducing valves in some structures. Some areas may experience water pressures less than 40 psi which will require pressure boosting systems in some structures.
- The development must comply with the trunk sanitary sewer and water main systems as outlined in the 2014 feasibility study for City Project No. 2014-13, prepared by B & M. A trunk sanitary sewer lift station and site dedication is required. The trunk watermain must be completed to effectively serve this development.
- The development will be subject to an escrow deposit for sealcoating all new pavements within 3-4 years after final wear course is constructed. The City Engineer will provide an estimate for this fee.
- The development will be responsible for installing streetlights, as approved by the City. The developer shall be responsible for electricity charges for the first two years on each plat. The landowner will assume payment of electricity charges through a fee established by the City for street lighting after the original time period.
- The developer shall be responsible for providing a Letter of Credit (surety) in an amount established by the City Engineer. The development will provide a two-year warranty on all improvements. The warranty period begins after the City accepts the improvements as completed.

- The developer shall dedicate all right-of-way (requested by the City and other agencies such as Dakota County and the MN Department of Transportation) needed to construct all infrastructure improvements. Easements shall also be provided as requested by the City. Outlots requested by the City will also be provided by the developer.

- The developer shall enter into storm water facility maintenance agreements for each plat. This agreement will require the developer and/or homeowners association to operate and maintain all stormwater facilities. In the event operations and maintenance is not done per the Northwest Area Ordinances, the City will have the ability to perform the operations and maintenance activities and bill or assess the property owners. This SWFMA shall waive the owner's rights to appeal these assessments.

- The developer will be responsible for installing the private utilities such as gas, phone, electricity, cable TV, etc. The developer will cover all costs related to private utilities.

- The developer or homeowner's association shall be responsible for all private improvements as identified in the development contract.

- The City Engineer shall approve all construction plans after appropriate review and modification to meet City standards. All construction plans must be approved by the City before construction begins.

- City authorized personnel will install signs designating "protected areas" such as conservation easements and wetlands on posts installed by the developer. These signs will be installed at the developer's cost. They are intended to identify areas that should not be disturbed.

- City authorized personnel will install all traffic signs and pavement markings in accordance with the MMUTCD at the developer's expense.

- All comments in the City Engineer's memo to the Planner dated May 30, 2014 shall apply to this development (attached).

- All comments received from Kimley-Horn (City consultant) in memos dated September 10 and 29, 2014 shall be incorporated into the development approval (attached).

- All comments received from EOR (City consultant) in memos dated July 28, 2014 and September 12, 2014 shall be incorporated into the development approval (attached).

- All water resources improvements and stormwater facilities shall be based upon the hydrologic model prepared for the City by EOR

- The development approval shall require the applicant to secure all necessary permits for the project

- Approval for the final plans and construction plans shall not be complete until all items on the stormwater review checklist are provided to the City review (see June 2014 checklist attached).

- All wetland impacts and storm water storage volume impacts shall be mitigated as a condition of approval.

- All erosion control shall be a condition of approval and the developer shall be responsible for all costs associated with erosion control.
- The developer shall provide asbuilt plans for the development in accordance with City standards.
- All improvement inspections shall be provided by the City at the developers' expense as a condition of approval.
- The developer shall indemnity the City as outlined in the Development Agreement as a condition of approval.
- The developer must provide earthwork quantities of cut/fill to the City Engineer as a condition of approval. All project sitework should balance the earthwork.
- The proposer shall provide an estimate for any material being delivered to the site or hauled off site. The City Engineer will designate approved haul routes as a condition of project approval.
- The developer shall identify all retaining walls on the projects and secure permits to build the walls early in the site grading as a condition of project approval.
- The developer shall provide for Emergency Overflow.
- Routes of stormwater runoff with an alignment and 100-year design as approved by the Ctiy Engineer as a condition of project approval.
- The street sections shall meet or exceed City standards. The minimum local street shall meet the following condition.
- Four inch bituminous on 6" class five aggregate base on 24-inch select granular subbase with draintiles and geotextile fabric to separate sand from existing soils in the subbase.
- Site triangle restrictions use easement as requested by the Public Works Department shall be a condition of approval.

TJK/kf
Attachments

**MEMO**

**CITY OF INVER GROVE HEIGHTS**

**TO:** Allan Hunting, City Planner

**FROM:** Thomas J. Kaldunski, City Engineer

**DATE:** May 30, 2014

**SUBJECT:** Preliminary PUD Submittal by Deanovic

I have reviewed the application received by the City on May 19, 2014 as given to the Engineering Division on May 22, 2014. This submittal was prepared by Sather Berquist on behalf of the developer, Jim Deanovic. It is comprised of three parcels in the Northwest Area (NWA).

Information needed for Preliminary PUD

1. A hydrologic analysis that meets the NWA standards is needed.

2. I have attached a stormwater review checklist indicating items needed in the preliminary and pre-development stage. Most items on this list have not been provided. A review of HWL shown indicates they do not meet the City NWA requirements as illustrated on the NWA basin map.

3. Some lowest floor elevations do not meet required separation from HWL. Some high water levels shown on plans to not meet HWL indicated on EOR – NWA basin map. This has lead to some lowest floor elevations below HWL, City minimum requires 2 foot separation. Some areas of NWA require 5 feet or 10 feet separation – see attached. Submit plan that provides adequate separation.

4. Impervious surface percentages should be calculated and submitted for review.

5. All stormwater management and design shall be submitted and meet the NWA standards. See Section H attached. NWA standards are more restrictive than a typical 100-year 6" rainfall. Volume control and reductions are required in the NWA storm plan for the 5-year event.

6. City Code 9-5 identifies conditions to note in the stormwater management plan, such as:
   (a) Hydrologic study of the 2 year, 10 year, 100 year events including the 10 day, 100 year snow melt
   (b) Submit all calculations and Hydro CAD stormwater models
   (c) Calculations indicate infiltration standards will be met (rates may vary from first ½ inch to first 1 inch to 2 year flow (2.6") depending on land use and zoning)

   Wetland mitigation or pond storage volume mitigation plan needed for regional basins:
   (a) F011
   (b) F013
   (c) F002
   (d) F011

7. Maintenance bench will be required around ponds with 3:1 slopes as shown on the plans.

8. Access routes and roads are required for all BMPs, basins, wetlands and lakes. Outlets shall be designed to collect floatables from stormwater facilities. Show EOF on all stormwater facilities and drainage ways.

9. Temporary sedimentation facilities will be required to protect the existing lakes, wetlands and infiltration basins. Show these locations on the E.C. plans.

10. Submittals for ground water protection are required. Pre-treatment before infiltration basins. Pre-treatment basins shall be shown for all existing basins shown on NWA basin map, and wetlands and DNR especially in Blackstone Ponds. Submit infiltration study on basins along with soils information and boring logs on PUD and utility alignments.

11. Sidewalk plans should be submitted.

12. Submit information to ensure compliance with City's NWA collector street study. Traffic impacts and projections must be submitted.

13. All streets designated as collectors or arterials shall be designed per City Standards (10.135-7). Identify all ROW widths and easements on the project.

14. Cul-de-sac shall meet City standards and include water quality features in the middle.

15. The full access point to Argenta Trail is at the top of the hill in the City study. Provide profiles to allow review of sight distances and access point. Submit infiltration study on basins along with soils information and boring logs on PUD and utility alignments.

17. A right in/right out is shown at proposed access point to Argenta Trail in the City NWA Collector study. Must meet County requirements for this access.

18. Access to County Road/70th Street must meet County requirements. Access to Argenta Trail must meet County requirements.

17. Label and annotate elevations on all contour maps. Which County contours are being used? The 2013 LIDAR contours should be used for accuracy.

19. A licensed professional engineer needs to sign all plans being submitted.

20. Lift station at OLB on 70th Street does not meet NWA study prepared by Bolten & Menk. Invert 869 is high because L.S. location shifted west along T.H. 5

21. Blackstone Ridge does not meet NWA collector street study requirements. Submit information to ensure compliance at:
    (a) N-S 6 lane road on west
    (b) 65th Street construction on the north with local access
    (c) Access to east from PUD
    (d) Access to west from PUD (2 possible sites)

22. A lighting plan should be submitted

23. Submit plan with legends to assist in review shown on proposed building pads.

24. City Code requires 4:1 slopes on grading plans unless approved by City Engineer. Show steep slopes that do not meet code for review.

25. A sign plan submittal is required.

Information needed for Final PUD Approval

1. Stormwater facility maintenance agreements (SWFMA) will be required on all facilities.

2. Submit stormwater operation and maintenance plans on all storm facilities.

3. Submit a construction cost estimate to assist City Engineer in setting surety amount.

4. Submit all permits secured for project from agencies such as:
   (a) MPCA/MCES
   (b) DNR
   (c) Dakota County
   (d) MnDOT
   (e) Other agencies as required
   (f) MDH

5. Plan and profile sheets shall be submitted for all streets, sewer and watermain utilities. All trail plans shall have profiles meeting ADA requirements.

6. Sewer trunk does not meet 12" at 0.5% for capacity. Grades must meet B & M design and capacity. Submit info to ensure compliance.

7. Utility plans are not consistent with NWA study by B & M; resubmit separate water, storm and sanitary sewer plans
   - sanitary sewer to 65th Street and to east of PUD
   - water main on 65th Street and to 62nd Street
   - Casings are required under County roads (existing and planned)

8. Plans for extending private utilities should be submitted

9. A building permit may be required for retaining walls. Submit top and bottom wall elevations; provide drainage swale at top of all walls.

10. Escrows will be needed for City consultants. Engineering review for:

| | | |
|---|---|---|
| (a) | Stormwater | $ TBD |
| (b) | Grading, erosion control, drainage, utilities, streets | $ TBD |

Plus City Engineering staff time at $2000/unit.

**MEMO**

**CITY OF INVER GROVE HEIGHTS**

**TO:** Allan Hunting, City Planner

**FROM:** Thomas J. Kaldunski, City Engineer TJK

**DATE:** June 25, 2014

**SUBJECT:** Preliminary PUD Re-submittal by Deanovic for Blackstone Ponds, Blackstone Ridge, Blackstone Vistas

A preliminary review of the PUD application with additional information received on June 13, 2014 and received by the Engineering Division on June 18, 2014 has been conducted. This submittal was prepared by Sathre-Bergquist, Inc. on behalf of the developer. The developer was informed by a May 30, 2014 memo from the Engineering Division of information required to complete the preliminary PUD application. The current submittal appears to be a traditional subdivision design that is not a low impact design (LID) that follows the NWA standards.

This memo is intended to inform all parties that the preliminary PUD application is still incomplete as outlined in the following:

1. A copy of a redlined review of the May 30, 2014 memo indicates that 18 items on the memo are still required for the application.

2. Once the application is completed, the City will need an engineering escrow for our water resources consultant, EOR, to conduct the review as summarized in the following:

| | | |
|---|---|---|
| (a) | Blackstone Ponds | $28,000 to $35,000 |
| (b) | Blackstone Vista | $26,000 to $31,000 |
| (c) | Blackstone Ridge | $35,000 to $43,000 |

Est. water resource consultant budget $89,000 to $109,000

The City will also need escrow for the City Attorney and staff time to complete the review. This amount is to be determined once the complete application is received. The City is also reviewing if a consultant will be needed to assist in the overall design review process.

3. The stormwater management report for these developments, prepared by Sathre-Bergquist, Inc. dated June 9, 2014 does not meet the NWA standards. Design criteria on regional basins including the 10-day, 100-year snow melt have not been incorporated into the plan. Main items to be submitted include:

   (a) Hydraulic analysis with the 10-day, 100-year snow melt criteria
   (b) Provide a map of all subwatersheds
   (c) Indicate how off-site drainage is managed

(d) Submittal of the Best Management Practices (BMPs) in the water treatment train is required. The use of NURP ponds meeting the Walker Model criteria and infiltration bench do not meet the NWA standards by themselves
(e) Provide map of the regional basins on the project as outlined in EOR model using the modeled HWL. This footprint of the HWL is to be protected to ensure the current infiltration capacities are not adversely impacted
(f) A map showing all BMPs and infiltration areas required to infiltrate/treat the 5-year runoff is required. Approximately 2.63 inches of runoff must be infiltrated to meet the NWA standards
(g) Identify all pretreatment BMPs planned before discharge into the regional basins and wetlands in the EOR model
(h) Design calculations will be needed in the final design before approval

4. Soils information and boring logs are needed

5. Submit the calculations and mapping of planned impervious areas

6. All EOFs needed to be shown in a manner that is easily read. Show areas and the EOF elevation. A map showing inundation at all EOFs shall be submitted

7. A wetland report shall be provided

8. The current plans indicate up to 21 lots that have lowest floor elevations (LFE) below the HWL modeled in the EOR regional basin map. This is not meeting City standards.

9. Three buildings in Blackstone Ponds are shown within the HWL footprint that is to be protected. These units may need further review before being approved

I would suggest that the developer's engineer meet with the City Engineer to go over these comments to assist in the completion of the application. A copy of some redline plans will also be provided to the developer's engineer.

TJK/kf

cc: Scott D. Thureen, Public Works Director
Brett Emmons, EOR
Dan Schmidt, Sathre-Bergquist, Inc.
Steve Dodge, Asst. City Engineer

Dakota County Surveyor's Office
Western Service Center • 14955 Galaxie Avenue • Apple Valley, MN 55124
952.891-7087 • Fax 952.891-7127 • www.co.dakota.mn.us

July 25, 2014

City of Inver Grove Heights
8150 Barbara Ave.
Inver Grove Heights, MN 55077

Re: **BLACKSTONE VISTA**

The Dakota County Plat Commission met on July 14, 2014, to consider the concept plan of the above referenced plat. The plat is adjacent to CSAH 63, and is therefore subject to the Dakota County Contiguous Plat Ordinance.

The concept plan includes residential development located in three areas: 1) single family homes from the west side of Argenta Trail (CSAH 63) north of TH 55 to the south side of 70th Street (CSAH 26) west of CSAH 63; 2) multifamily homes along the north side of CSAH 26 west of CSAH 63; and 3) single family homes along the north side of CSAH 26 and the east side of future CSAH 63. The first phase of the development is planned to begin in the first area described above due to the location of the sanitary sewer line that will be extended from the existing stub east of CSAH 63. The long term full-movement access in this area identified in the Regional Roadway System Visioning Study (RRSVS) and the City's Collector Street Plan is located approximately 2000 feet north of TH 55. The City and County are also beginning a design study for CSAH 63 that could include a realignment of CSAH 63 in the area. This study includes a public process to develop and assess possible alignments for CSAH 63 in anticipation of its reconstruction in 2016. The County and City plan to complete the study in the spring of 2015.

Access to CSAH 63 prior to its reconstruction (which is in the City and County CIP's for 2016) is a challenge due to the existing horizontal and vertical curvatures of the 45mph roadway. The long term access location identified in the RRSVS and the City's Collector Street Plan does not currently have good sight lines to the south, so the concept plan proposes a temporary access approximately 1000 feet north of TH 55, in the area of the planned sanitary sewer crossing. The County will be conducting a sight distance survey in the area to identify sight distances at a number of potential access locations.

A major challenge with the concept plan as shown is that CSAH 63 is planned to be realigned from CSAH 26 to the north to a potential future interchange along I-494, consistent with the recommendations of the RRSVS, and as shown on the Dakota County Plat Needs Map. This future realignment is not reflected on the concept plan. The location of this future roadway will need to be identified prior to final platting of this property. There are a number of factors to consider regarding the location of this future roadway including existing residential properties and an electrical transmission line. This determination will also require a public process.

The residential development north of CSAH 26 and east of future CSAH 63 is shown to connect to existing CSAH 63 approximately 550 feet north of CSAH 26. This does not meet current access spacing guidelines. It appears that the only way for this property to access an existing public roadway and meet access spacing

guidelines would be to construct a right-in/right-out access on CSAH 26 at least 1/8 mile east of existing CSAH 63. Further discussion involving the County, City and developer on the best way to access this property at the time of development will be necessary.

The Plat Commission also noted that a connection from the development to future 65th Street along the north side of the property should be considered by the developer and the City.

UPDATE: After the Plat Commission meeting, the County did complete a sight distance survey along CSAH 63. The temporary access location shown on the concept plan (1000 feet north of TH 55) does meet current sight distance requirements. The permanent full access location (2000 feet north of TH 55) does not. Although the access location shown on the concept plan is less than the County's access spacing guidelines of ¼ mile, this does appear to be the best location for temporary access prior to reconstruction of CSAH 63. An access permit will be required for construction of a temporary access, and as part of the permit conditions, left and right turn lanes will be required to be constructed with the access.

The Ordinance requires submittal of preliminary and final plats for review by the Plat Commission before a recommendation is made to the County Board of Commissioners.

Traffic volumes on CSAH 63 are 3,650 ADT and are anticipated to be 10,000 ADT by the year 2030. These traffic volumes indicate that current Minnesota noise standards for residential units could be exceeded for the proposed plat. Residential developments along County highways commonly result in noise complaints. In order for noise levels from the highway to meet acceptable levels for adjacent residential units, substantial building setbacks, buffer areas, and other noise mitigation elements should be incorporated into this development.

No work shall commence in the County right of way until a permit is obtained from the County Transportation Department and no permit will be issued until the plat has been filed with the County Recorder's Office. The Plat Commission does not review or approve the actual engineering design of proposed accesses or other improvements to be made in the right of way. The Plat Commission highly recommends early contact with the Transportation Department to discuss the permitting process which reviews the design and may require construction of highway improvements, including, but not limited to, turn lanes, drainage features, limitations on intersecting street widths, medians, etc. Please contact Gordon McConnell regarding permitting questions at (952) 891-7115 or Todd Tollefson regarding Plat Commission or Plat Ordinance questions at (952) 891-7070.

Sincerely,

Todd B. Tollefson
Secretary, Plat Commission

c:

Kimley»Horn

# MEMORANDUM

| | |
|---|---|
| To: | Allan Hunting, City Planner |
| Cc: | Tom Kaldunski, City Engineer; Steve Dodge, Assistant City Engineer<br>Dan Schmidt, Sathre-Berquist, Inc. |
| From: | Eric Fosmo, P.E. – Kimley-Horn and Associates, Inc. |
| Date: | July 28, 2014 |
| Subject: | Preliminary PUD Engineering Review – Initial Comments<br>Blackstone Vista, Ponds, and Ridge |

In preparation for the Developer Review Meeting scheduled for Tuesday, July 29, 2014, to discuss the Preliminary PUD Review for the Blackstone Ponds, Blackstone Ridge, and Blackstone Vista developments, Kimley-Horn offers the following comments and requests for clarifications prior to a full detailed review of the submittal documents:

Preliminary PUD Comments

1. Based upon our understanding of the preliminary comments provided by Emmons & Oliver Resources, Inc (the City's stormwater management consultant) in a memorandum dated July 28, 2014, significant modifications to the plans will be needed to meet the City's Northwest Area Standards. At this time it is not prudent to perform a detailed review of the following plans prior to modifications to the stormwater management approach:
    - Preliminary Plat
    - Site Plans
    - Preliminary Street Plans
    - Preliminary Grading, Drainage, and Erosion Control Plans
    - Preliminary Utility Plans

2. Comments provided to the Developer in memorandums prepared by City staff dated January 28, 2014, May 30, 2014, June 25, 2014 and any previous memorandums shall be addressed accordingly. A detailed review of the revised preliminary PUD submittal (by August 13, 2014) will be provided prior to the second Developer Review Meeting tentatively scheduled for September 3, 2014.

3. A complete up-to-date set of plans in hard copy and PDF per City submittal requirements needs to be submitted prior to a detailed engineering review. Title sheets need to be updated to show all plan sheets with correct page numbering.

The following plan sheets were not provided in the PDF submittal provided to Kimley-Horn via the Developer's consultant FTP site.

- Blackstone (Overall)
  - Title Sheet, Phasing Plan, Existing Streets, Sidewalk Plan
- Blackstone Vista
  - Outlot E Concept Sketches
- Blackstone Ponds
  - Site Plan, Open Space, Preliminary Storm Sewer Plan, Preliminary Street Plan
- Blackstone Ridge
  - Site Plan, Open Space, Preliminary Street Plan, Basin Map

The following plan sheets appear to have revision dates that do not match between the hard copy submittal and the PDF submittal provided to Kimley-Horn via the Developer's consultant FTP site.

- Blackstone Vista
  - Site Plan, Open Space, Preliminary Utility Plan, Preliminary Street Plan
- Blackstone Ponds
  - Preliminary Sewer and Watermain Plan, Preliminary Street Plan
- Blackstone Ridge
  - Preliminary Utility Plan, Preliminary Street Plan, Tree Survey

4. The developer should provide a PDF of the Blackstone Ridge wetland delineation report for review. Wetland delineation boundary verifications will be conducted this week.

5. Currently all plans have been submitted as colored drawings. Although not a requirement of the Preliminary PUD submittal, it should be noted that all final construction plans will need to be completed in black and white to conform to City as-built requirements.

# memo

| | | | |
|---|---|---|---|
| **Project** | Residential Development- Blackstone Vista | **Date** | 8-29-14 |
| **To** | Tom Kaldunski, Steve Dodge | **Contact Info** | IGH |
| **Cc** | Dan Schmidt, Charles Wiemerslage | **Contact Info** | Sathre-Bergquist, Inc. |
| **From** | Brett H. Emmons, Stephanie Hatten | **Contact Info** | EOR |
| **Regarding** | Blackstone Vista Residential Development- PRELIMINARY COMMENTS (DRAFT) | | |

The purpose of this memorandum is to provide preliminary comments on the plans and hydrologic calculations prepared by Sathre-Bergquist, Inc. for the Blackstone Vista proposed development. This is not intended to be a comprehensive review of all the possible aspects, but identifies some of the major items that have come up in the review thus far. Until the major items are addressed, it would be inefficient to review and comment on the other aspects of the proposed development.

Below are comments for the Preliminary Plat submittal of the above project from the review of the following documents:

- Civil Plans by Sathre-Bergquist, Inc. dated 8/13/14
- Stormwater Management Plan by Sathre-Bergquist, Inc. dated 8/22/14
- Landscape Plan and Building Plan by Sathre-Bergquist, Inc. dated 8/13/14
- Overall Sketch Plan, dated 7/7/14

## EXISTING SITE CONDITIONS

Blackstone Vista

The existing site is generally undeveloped and consists primarily of wooded areas and grassland with some cropland and pasture. The site has fairly significant topographic changes with a ridge towards the south. The proposed development consists of 78 single family housing lots on the 59.34 acre site. A portion of the site drains to a Regional Basin (F-001) located in the northeast corner. According to the City's Natural Resources Inventory, there is a wetland in the regional basin classified as a Manage 1 wetland. The wetland delineation provided identifies no wetlands in this location. A subsequent field visit by the City's consultant Kimley-Horn concurs with the delineation report, that no wetlands exist here, and therefore the wetland requirements do not apply here.

## PROPOSED STORMWATER MANAGEMENT

The proposed design for the Blackstone Vista development relies on a series of stormwater ponds and infiltration basins. Curb and gutter and pipe systems are used to direct water into the ponds and rain gardens. The pond located in the northeast corner of the site is ringed by an infiltration bench before being discharged into Regional Basin F-001. Two other two-cell ponds/infiltration basins are located in the northeast and west areas of the site. Three rain gardens are also proposed in the design to provide treatment of some back yards. No soil borings have been submitted for the BMP sites.

## Compliance with the NWA ORDINANCE and STORMWATER MANUAL

Per review of the plans, the proposed plan needs to address the following items to conform with the stormwater standards as specified in the City Ordinance and Standards and the NWA Stormwater Manual. Citations for the relevant city ordinance is proved for each comment, and when appropriate corresponding NWA Stormwater Manual references, and these references should not be considered exclusive or the only

reference to the requirement. The NWA Stormwater Manual has extensive additional information for most of the comments and should also be consulted for further details. Chapter 9 of the Manual illustrates an example design process through the various steps to facilitate the designer in following the NWA standards and needed design steps.

1. **Runoff model (existing conditions) should use curve numbers (CNs) consistent with hydrologic group type A-B and B soils. [City Ordinance Section 515.80, Subd. 39 F.7.e; NWA Stormwater Manual 2-14 to 2-15 (Table 9.5)]** A new stormwater model and report have been submitted to EOR and will be reviewed prior to the September 3rd meeting. The recently submitted modeling and summary sheet appears to use CNs like those in the NWA Manual Table 9.5, but were just received this afternoon and have not yet been fully checked. The soil survey provided for the Blackstone Vista proposed site shows predominantly Kingsley and Kingsley-Mahtomedi type soils, which are in the hydrologic soil group (HSG) with an A-B and B type soils, as outlined in the NWA Stormwater Manual.

   The lower curve numbers used for post-development (proposed) conditions could be appropriate if a soil amendment plan is submitted for restoration of the disturbed soils as stated in Chapter 8 pg. 176 of the NWA Stormwater Manual. Verbally the applicant has indicated that restoration of impacted urban soils will be done, but additional documentation is needed. Grading in the southwest area of the site could be minimized in the backyard/outlots by adjusting grades and/or use of a retaining walls.

   Any road expansions due to the development, such as turn lanes on 70th St. must be included in the treatment calculations and treatment provided. Currently those do not appear to be included.

2. **Grading and fill should not occur within Regional Basins. [City Ordinance Section 515.80, Subd. 39 F.7.e; NWA Stormwater Manual 7-4 & 7-13 to 7-14]** It is proposed that 0.8 acre-feet of Regional Basin F-001 is to be filled and graded. There should be no fill in the Regional Basins and typically grading is highly restricted in its type and method unless unavoidable.

3. **Provide a consistent value that represents the HWL for the Regional Basin F-001. [City Ordinance Section 515.80, Subd. 39 F.7.a]** HWLs are inconsistent on the plans and within the stormwater management plan. EOR has identified the HWL for Regional Basin F-001 as 895.7 and if another value is proposed, then the engineer should explain why. The development's stormwater management plan gives a HWL of 894.84 and the plans show a value of 889.5 In addition, the EOF for Regional Basin F-001 should be consistent with a Category 2 basin per the NWA standards. There shall be no additional flow sent downstream from the basin under modelled/predicted scenarios.

4. **Stormwater management should be maximized through the use of an upstream treatment train process. [City Ordinance Section 515.80, Subd. 39 F.7.e; NWA Stormwater Manual 1-3, 1-6, 2-16, Chapters 3-5, 7-3, 7-5, Chapters 8-9]** The NWA Manual overall and specifically in Chapter 3, among many places in the manual, describe that stormwater management should be maximized through the use of distributed Low Impact Design (LID) practices upstream near the sources. The focus and discussion of the NWA Stormwater Manual is on the need for and use of distributed LID practices. Volume control can be better accomplished by using distributed LID practices throughout the site, rather than concentrated into large ponds and infiltration systems. The goals the City sees as realistic

is 50% - 70% of the volume control practices (by volume treated) being small-scale, distributed LID practices. The applicant has calculated 20% of the stormwater on site as being treated by LID practices. In comparison, the Argenta Hills development (1st – 9th Additions) has used approximately 65% LID practices.

By using predominantly large ponds for pretreatment and infiltration for volume control, the developer is choosing to use an approach that tends to occupy more land that could be developed. The applicant's engineer indicated that the developer is aware of this and has chosen this approach. Concerns by the developer about the burden of stormwater requirements on the site seem inconsistent with using ~20% LID practices to meet the requirements. As noted below, infiltration assumptions thus far are too high given the soils mapped. With the CN changes (see above), infiltration rates decreased to ~15% of current values (from 1.2 in/hr to 0.1-0.2 in/hr as conservative values until borings are available), and lack of utilizing LID practices, the impacts could be significant. As an illustration, using the lower infiltration rates and continuing the traditional approach of expanding ponds to address this additional volume, it could be that 8-18 lots would be significantly impacted and/or the site layout reconfigured.

5. **Determine infiltration rates by providing soil borings in the BMP locations. [City Ordinance Section 515.80, Subd. 39 F.7.a.(i)]** All Infiltration BMPs must have at least 2 soil borings/pot holes within the location, or 1 soil boring/pot hole for smaller BMPs, extending 10-15' below the bottom of the proposed excavation/over-excavation elevation, to evaluate suitability for infiltration consistent with the Manual Supplemental Guidance (EOR June24,2008). All soils evaluation should be performed by a qualified soil scientist or similar person with soils infiltration estimation experience. The proper infiltration rate is needed to ensure proper sizing and adequate drawdown times for smaller events, such as 48 hours for the 1-year event. If the soil boring logs indicate incompatibility of existing sub-soil permeability with the submitted and reviewed design plans for meeting volume control requirements, the applicant shall revise the design and/or construction plans to ensure volume control requirements are fully met. The 1.2 in/hr infiltration rate submitted is on the high end for the type of soil identified(mostly sandy loam and silty loam). A lower infiltration rate of 0.1 in/hr should be used in the model until proven otherwise with soil information.

6. **BMP phasing during construction needs to be shown on plans. [City Ordinance Section 515.80, Subd. 39 F.7.a.(iv)]** BMP construction should begin once the rest of the site has been stabilized.

7. **Additional details needed**
    a. Storm sewer details and calculations
        i. All storm sewer structures shall be 4.0 feet in depth (public and private). Verify all structures meet this requirement, specifically, please confirm the following:
            1. Blackstone Vista Structures: 11C, 12C, 13C, 21C
            2. Blackstone Ponds Structures: the drainage MH at the south end of PD 5, the inlet at the north end of PD 6
            3. Blackstone Ridge Structures: CB 12, CB 14, CB 20, CB 22, CB 23, CB 42, CB 43, CBMH 1, CBMH 6, CBMH 51, CBMH 52

ii. Provide the types of storm sewer lines proposed in the Blackstone developments. All connections to City Public System shall be RCP.
iii. Structures within boulevards shall be R-4342 with concrete collar.
iv. Provide storm sewer calculations for inlet spacing/capacity and pipe sizing for each development.
v. Not all inlets/structures in all the Blackstone developments have invert information labeled.

vi. All pipe outlets should not exceed 6 feet per second discharge velocity.

b. Mapped areas of the impervious surfaces
c. Landscape plan for stormwater
d. Erosion and Sediment control details and submittals
e. Operation and maintenance plan for BMPs per the city code
f. Other items not yet identified at this level of detail may be needed for compliance with city standards

**SUMMARY**

In summary, revisions and subsequent detail are needed in the plans addressing the comments above before the site could be developed as proposed and satisfying the City's stormwater management regulations for the Northwest Area.

Since the information for the Ponds and Ridges have been incomplete, comments will be provided for those as information is available.

Kimley»Horn

## MEMORANDUM

| | |
|---|---|
| To: | Allan Hunting, City Planner |
| Cc: | Tom Kaldunski, City Engineer; Steve Dodge, Assistant City Engineer<br>Dan Schmidt, Sathre-Berquist, Inc. |
| From: | Eric Fosmo, P.E. – Kimley-Horn and Associates, Inc. |
| Date: | September 10, 2014 |
| Subject: | Preliminary PUD Engineering Review – Preliminary PUD Comments<br>Blackstone Vista, Ponds, and Ridge |

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Kimley-Horn has completed a review of the revised Preliminary PUD Plans received on August 14, 2014 and offers the following comments and requests for clarifications. All comments provided in *Italics* are to be considered critical for Preliminary PUD consideration and approval.

General Comments

1. Outstanding comments from memorandums provided to the Developer by City staff dated January 28, 2014, May 30, 2014, and June 25, 2014, comments provided by Kimley-Horn via email dated August 4, 2014, and comments provided by Dakota County and Inver Grove Heights Parks and Recreation shall be addressed in addition to the comments provided in this memorandum.

2. Coordination with Dakota County will be of utmost importance as the project moves forward. All connections to Dakota County roadways shall be constructed per County standards. Any comments provided by the County as part of upcoming studies shall be addresses prior to final approval.

3. *The following information requested by the City of Inver Grove Heights as part of the Preliminary PUD submittal has not been received.*
   - *Geotechnical report and boring logs*
   - *Traffic Impact study*

4. Signing and Lighting plans should be submitted during as part of Final PUD submittal process.

5. Currently all plans have been submitted as colored drawings. Final construction plans will need to be completed in black and white to conform to City as-built requirements.

6. Current plan organization and readability is not sufficient for final construction plans. Plan legends should be provided for each sheet, or series of sheets for readability and review.

7. A comment response letter shall be submitted with subsequent plan submittals addressing all comments provided.

8. The City of Inver Grove Heights reserves the right to provide additional comments as further development of the plans is completed and submitted for review.

9. A construction cost estimate shall be submitted to assist the City Engineer in setting surety amount. A letter of credit will be required as part of final approval.

10. Prior to Final PUD approval, submit all permits secured for project from agencies such as:
    - MPCA/MCES
    - DNR
    - Dakota County
    - MnDOT
    - MDH
    - Other agencies as required

11. The following is a summary of the estimated engineering review fees to be paid by the developer for the three developments. Actual fees will be determined based on the hours required for the review and associated coordination.
    - EOR Stormwater Management Review
        - Blackstone Vista - $18,000
        - Blackstone Ponds - $17,000
        - Blackstone Ridge - $21,000
    - Kimley-Horn General Engineering Review
        - Blackstone Vista - $15,500
        - Blackstone Ponds - $15,500
        - Blackstone Ridge - $15,500
    - City of Inver Grove Heights review and construction inspection fees have been equal to $2,000 per lot based on other developments in the City.
        - Blackstone Vista (78) - $156,000
        - Blackstone Ponds (106) - $212,000
        - Blackstone Ridge (121) - $242,000

Plat/Easements

12. *Revise Vista Preliminary Plat eliminating Lot 1 or revise lot layout to provide adequate area for construction of proposed lift station. See Water Main comments provided below.*

13. *Provide adequate easement width for sanitary, storm, and/or water lines that run between adjacent lots. Total easement width shall be approximately three times the depth of the proposed utility to allow for the equivalent of 1.5:1 slopes from bottom of proposed utility. The following easements do not appear to meet this requirement*
    - *Vistas – between Lots 6 and 7*
    - *Vistas – between Lots 15 and 16*
    - *Vistas – between Lots 29 and 30*
    - *Vistas – between Lots 33 and 34*
    - *Vistas – between Lots 63 and 64*
    - *Ridge – between Lots 36 and 37*
    - *Ridge – between Lots 106 and 107*

14. Show and label all existing and proposed easements and property limits on the site plans. Label known addresses for adjacent properties on preliminary plat.

15. Per City Code, half street right-of-way dedications are not recommended. This is currently being shown on the north side of the Blackstone Ridge plat.

Grading and Erosion

16. *Ground floor elevations of all homes shall be 1.5' above centerline grades. The following lots do not appear to meet this standard:*
    - *Vista Lots 2-5, 7-8, 20, 61, 78*
    - *Ponds Buildings 1-2, 4(North), 5-6, 8(North), 9(West), 10-21*
    - *Ridge Lots 13, 25, 45, 71, 86-87, 94, 96-97, 99-109, 112*
    - *Centerline grades should be shown to confirm compliance for Ridge Lots 36-39 and 50-53*

17. *City Code (9-4-1-2) requires 4:1 slopes or less on grading plans unless approved by the City Engineer. Identify any areas of variance from this standard for detailed review of restoration methods.*

18. During the final design phase, developments will need to meet the Erosion and Sedimentation Control guidelines set in place by the "Supplemental Requirements for Stormwater Management Facilities and Erosion & Sedimentation Control Standards."

19. Cut/fill quantities should be shown on the grading plans.

20. Provide additional detail on proposed retaining walls for the development, including:

- Add plan note "All retaining walls shown on the grading plan shall be constructed during the grading phase."
- Provide square footages, top of wall elevations, and bottom of wall elevations for all retaining walls (currently not provided for Ponds).
- Proposed retaining walls 4' and higher in height will require a separate building permit.
- Retaining wall details shall include drainage swale at the top of the wall and fall protection where required,
- No retaining walls will be allowed within proposed or existing easements.
- A maintenance agreement will be required for all proposed retaining walls.

21. Silt fence that is installed crossing contours creates hot spots. Add "j" hooks at locations where silt fence needs to cross contours. This occurs in numerous locations where silt fence lines the limits of construction.

22. Identify all swales and confirm that they have a minimum slope of 2.0%. All swales shall be stabilized with sod, erosion mat, or intermediate erosion checks as soon as final grade is achieved. This may require phasing of the restoration. Currently, swale slopes are not labeled. Provide side lot drainage swales.

23. Add the note: "Upon completion of the site grading, a certification letter and as-built survey, from a registered Engineer or Land Surveyor shall be provided to the City certifying that the site grades are as shown."

24. A SWPPP shall be submitted at the time of final plat or at the time of submittal of other final engineering plans.

25. Separate staging and erosion control plans shall be provided for review as part of the final plan submittal process.

26. Show drainage areas for each proposed temporary sedimentation basin. Temporary sedimentation basins shall be constructed during the grading phase. Storage volumes for each temporary sedimentation basin should be shown to verify compliance to City Code which requires 1% of the disturbed area to be used at temporary sedimentation basins during construction.

27. A plan showing designated haul roads shall be submitted during final plan approval for review by the City Engineer.

Streets

28. *Several vertical roadway alignments do not meet City Code standards (11-3-2-P.2). City Code states "At intersections, the street grade shall not exceed two percent (2.0%) for the*

*first one hundred feet (100') approaching said intersection." The following locations do not meet this standard:*

- *Blackstone Vista – Grades along Road 1 at intersection with Road 4.*
- *Blackstone Vista – Grades along Road 4 at intersection with Argenta Trail.*
- *Blackstone Ponds – Grades along Road 1 at intersection with PD 5.*
- *Blackstone Ridge – Grades along Road 1 near Road 1 Extension*
- *Blackstone Ridge – Grades along Road 2 at intersection with Argenta Trail.*

29. *All streets shall conform to 30 mph design as required by the City Engineer. Minimum design radius is 220 feet (per MnDOT guidelines). Several roads in the Blackstone Ridge development do not meet this guideline.*

30. *All work required within Dakota County right-of-way should be shown on the Preliminary PUD plans. Proposed turn lanes and roadway modifications shall comply with Dakota County standards and additional direction provided.*

31. All connection to County roads and turn lanes on County roads shall be shown on plans for review and approval by Dakota County Transportation. Right-of-Way dedication shall be consistent with County requirements.

32. Currently there is a private driveway located immediately west of the proposed Vista access to 70th Street (CSAH 26). Spacing between these two access points is unacceptable and needs to be combined. Vista development shall provide access from proposed residential street to existing private drive to the west.

33. All roadways shall meet applicable requirements of the NW Area Collector Street Study.

34. Show typical sections for Blackstone Ridge development to verify compliance to City Standard Plate STR-02.

35. For all proposed intersections and cul-de-sacs, further plan detail is required for final review including: curb type labels, curb radii, all dimensions, and offset distance from the street centerlines.

36. Provide connecting street information (street widths and curb radii).

37. Drain tile shall be installed under all curb lines at the bottom of the sand section within the development where runoff is directed. Roadway stabilization fabric may be required where clay soils are encountered.

38. Centerline islands in the Blackstone Vista development shall be filled with concrete. If landscaped islands are proposed, plantings shall be selected and placed to not obstruct traffic sight lines. Any proposed plantings shall be maintained by the HOA.

39. The proposed sidewalk for the Blackstone Ponds development is only shown on the Grading Plan. Please include sidewalks on the Site and Preliminary Street Plans.

40. Show proposed striping and pavement markings in final plan submittal.

Utilities – General

41. *In some areas of the Vista Plat, the forcemain is located outside of the right-of-way (ROW). The City requires these public utilities to be located within the ROW. We would suggest placing the forcemain and watermain on opposite sides of the sanitary sewer while still maintaining separation requirements to better fit utilities within the ROW.*

42. Coordinate with Koch Petroleum Pipeline Company to verify any locations of abandoned pipelines within the development limits and have them removed per Koch requirements.

43. Provide utility information (lengths, slopes, and invert elevations) in profile view as part of the final plan submittals.

Sanitary Sewer

44. *Outlot B does not appear to have enough setback from the property line of Vista Lot 1 or from the edge of Road 1 to properly construct and allow for future maintenance of the planned lift station. The City recommends Lot 1 be removed and the lift station be located to allow at least 90 feet on either side of the structure for a reasonable excavation slope to construct the lift station. This clearance will also be needed for the City to construct a paved maintenance access road and maintenance vehicle parking area. A soil boring at this location should also be provided to confirm the required construction slopes.*

45. *For Blackstone Vista (Sheet UP2), there are two different labels for the stretch of pipe near County Road No. 70. Please confirm which is correct. Additionally, there is no label or pipe information for the sanitary sewer into the lift station. All lift station information should be consistent with Option 1B from the City's NW Area Trunk Utilities Argenta District Feasibility Study and Report. (April 2014)*

46. Provide invert in and invert out elevations for all structures to confirm proper drops are met.
    - Thru structures – 0.10 drop
    - 90-degree manholes – 0.20 drop

47. Standard manholes shall be spaced a maximum of 400 feet apart. Blackstone Ridge has one stretch of 410.1 LF of sanitary sewer.

48. Label and verify the types of sanitary sewer pipes to be utilized:
    - 0 < X <14 feet – SDR 35 PVC
    - 14 < X < 24 feet – SDR 26
    - X > 24 feet – CLASS 52 DIP

49. For Blackstone Ridge there are no labels or pipe information for the sanitary sewer pipes along Road 1 Ext. or the stub along Road 1 near the intersection with Argenta Trail.

50. Confirm the slope of the pipe into the lift station in the Blackstone Vista development. The maximum grade out of a drop structure is 1% which appears to not be met for the upstream structure from the lift station.

51. During the final design phase, drop manholes and the proposed lift station shall have a minimum of 20 feet of DIP extended out from structure.

52. Provide services extended to the property line.

Water Main

53. *Confirm the size and type of water main proposed for the Blackstone Vista and Blackstone Ridge developments. The City's NW Area Trunk Utilities – Argenta District Feasibility Study and Report (April 2014) indicates a 16" watermain shall be constructed through the Vista, Ponds, and Ridge developments connecting to an existing watermain near 63rd Street. Lateral mains shall be 8" min CL 52.*

54. Insulation is required where 30" separation is not available. Label locations in both plan and profile view. There appears to be numerous locations where this will be required.

55. Label all horizontal (plan view) and vertical (profile view) bends.

56. Plans should label and show in profile a minimum cover of 7.5 feet over all watermain.

57. Provide services extended to the property line.

58. Fire Hydrants
    - Show valves at all hydrants
    - Hydrants to be located 4' behind curb
    - Label top nut hydrant elevation or break off/ground elevation and length of 6-inch hydrant lead
    - Washed rock specification shall state "NO LIMESTONE"
    - Maximum 450' to 500' spacing on public roads. In Blackstone Vista, the road that connects with Argenta Trail has a stretch exceeding the 500-foot minimum.

Storm Sewer/Stormwater Management

59. A separate memorandum will be provided by EOR, Inc. addressing the storm sewer and stormwater management design. The Developer shall address all comments provided in that memorandum.

Wetlands

60. Wetland delineation and reports for the Blackstone Vista and Ponds appear to be acceptable and are in the final stages of approval by the regulatory agencies.

61. *The wetland delineation and report for Blackstone Ridge is under review and further action by the developer will be necessary. A TEP meeting was held on August 29, 2014 to review delineation boundaries. The determination was made by the TEP that the delineated boundaries were not sufficient and need to be revised. The revised boundaries will encroach further into the proposed development area for the Blackstone Ridge. Modifications to the plans are likely needed to maintain appropriate buffers and setbacks.*

Summary/Conclusion

Based on the review of the Preliminary PUD Submittal for the proposed Blackstone Vista and Blackstone Ponds developments, the outstanding critical issues appear to be resolvable. Final approval of the Blackstone Vista and Blackstone Ponds appears to be possible with refinement of the proposed design, including addressing the comments provided.

Based on the review of the Preliminary PUD Submittal for the proposed Blackstone Ridge development, numerous outstanding critical issues remain that require further study. Lack of conformance to City standards and policy for the street design, stormwater management design, and wetland setbacks present too many issues that do not appear resolvable within the framework of the current design of the Blackstone Ridge development.

# memo

| | | | |
|---|---|---|---|
| Project \| | Residential Development- Blackstone Vista, Ridges, Ponds | Date \| | 9-12-14 |
| To \| | Tom Kaldunski, Steve Dodge | Contact Info \| | IGH |
| Cc \| | Dan Schmidt, Charles Wiemerslage | Contact Info \| | Sathre-Bergquist, Inc. |
| From \| | Brett H. Emmons, Stephanie Hatten | Contact Info \| | EOR |
| Regarding \| | Blackstone Residential Development (Vista & Ponds)- PRELIMINARY COMMENTS<br>Blackstone Residential Development (Ridge)- CURSORY REVIEW (DRAFT) | | |

The purpose of this memorandum is to provide preliminary comments on the plans and hydrologic calculations prepared by Sathre-Bergquist, Inc. for the Blackstone proposed developments. This is not intended to be a comprehensive review of all the possible aspects, but identifies some of the major items that have come up in the review thus far. Until the major items are addressed, it would be inefficient to review and comment on the other aspects of the proposed development.

Below are comments for the Preliminary Plat submittal of the above project from the review of the following documents:

- Civil Plans by Sathre-Bergquist, Inc. dated 8/13/14
- Stormwater Management Plan by Sathre-Bergquist, Inc. dated 8/22/14
- Landscape Plan and Building Plan by Sathre-Bergquist, Inc. dated 8/13/14
- Overall Sketch Plan, dated 7/7/14
- Soil Borings by Haugo GeoTechnical, Ponds & Ridges dated 9/2/14; Vista dated 9/3/14

## EXISTING SITE CONDITIONS

Blackstone Vista

The existing site is generally undeveloped and consists primarily of wooded areas and grassland with some cropland and pasture. The site has fairly significant topographic changes with a ridge towards the south. The proposed development consists of 78 single family housing lots on the 59.34 acre site. A portion of the site drains to a Regional Basin (F-001) located in the northeast corner. According to the City's Natural Resources Inventory, there is a wetland in the regional basin classified as a Manage 1 wetland. The wetland delineation provided identifies no wetlands in this location. A subsequent field visit by the City's consultant Kimley-Horn concurs with the delineation report, that no wetlands exist here, and therefore the wetland requirements do not apply here.

Blackstone Ponds

The existing site consists of wooded areas and grassland and is entirely bordered by water along the northern perimeter. The proposed development consists of 106-108 multi-family units located on the 24.82 acre site. Drainage flows to three Regional Basins on-site; F-018, F-022, and F-002. F-108 and F-002 contain wetlands that are classified as Manage 3. F-022 contains a wetland classified as Manage 4.

Blackstone Ridge

The existing site consists of farmland, grassland, and some woodland. The proposed development consists of 121 single family housing lots. Five Regional Basins are located on site: F-011a, F-008a, F-011, F-011b, and F-013b. There are wetlands in F-011a and F-008a and are classified as Manage 4 and Manage 3 wetlands.

**PROPOSED STORMWATER MANAGEMENT**

The proposed design for the Blackstone Vista development relies on a series of stormwater ponds and infiltration basins. Curb and gutter and pipe systems are used to direct water into the ponds and rain gardens. The pond located in the northeast corner of the site is ringed by an infiltration bench before being discharged into Regional Basin F-001. Two other two-cell ponds/infiltration basins are located in the northeast and west areas of the site. Three rain gardens are also proposed in the design to provide treatment of some back yards.

The proposed design for the Blackstone Ponds development relies on two stormwater ponds and three rain gardens throughout the site. Blackstone Ridge development uses pretreatment ponds into infiltration ponds. Curb and gutter and pipe systems are used to direct water into the ponds and rain gardens for both developments.

The design for each development relies primarily on the standard approach of curb and gutter and pipe systems for routing runoff into larger ponds rather than Green Infrastructure (GI), also known as Low Impact Design (LID), approach as provided for in the NW Area Ordinance and Manual.

**Compliance with the NWA ORDINANCE and STORMWATER MANUAL**

Per review of the plans, the proposed plan needs to address the following items to conform with the stormwater standards as specified in the City Ordinance and Standards and the NWA Stormwater Manual. Citations for the relevant city ordinance is proved for each comment, and when appropriate corresponding NWA Stormwater Manual references, and these references should not be considered exclusive or the only reference to the requirement. The NWA Stormwater Manual has extensive additional information for most of the comments and should also be consulted for further details. Chapter 9 of the Manual illustrates an example design process through the various steps to detail the information needed and to facilitate the designer in following the NWA standards and needed design steps.

***General Comments for All Developments***

1. **Stormwater management should be maximized through the use of an upstream treatment train process. [City Ordinance Section 515.80, Subd. 39 F.7.e; NWA Stormwater Manual 1-3, 1-6, 2-16, Chapters 3-5, 7-3, 7-5, Chapters 8-9]** The NWA Manual overall and specifically in Chapter 3, among many places in the manual, describe that stormwater management should be maximized through the use of distributed Low Impact Design (LID) practices upstream near the sources. The focus and discussion of the NWA Stormwater Manual is on the need for and use of distributed LID practices. Volume control can be better accomplished by using distributed LID practices throughout the site, rather than concentrated into large ponds and infiltration systems. The goals the City sees as realistic is 50% - 70% of the volume control practices (by volume treated) being small-scale, distributed LID practices. The applicant has calculated 20% of the stormwater on site is being treated by LID practices. As an indication of past practice in the city, the Argenta Hills development (1st – 9th Additions) has used approximately 65% LID practices.

   By using predominantly curb and gutter and large ponds for pretreatment and infiltration, the developer is choosing to use an approach that tends to occupy more land that could otherwise be utilized. The applicant and the engineer have indicated that the developer is aware of this limitation and has chosen this approach. As an illustration, using the assumed lower infiltration rates (as described below) along with the traditional approach of primarily large ponds, the impacts to Vista

could result in 8-18 lots being significantly impacted and/or needing to reconfigure the site layout. Concerns expressed by the developer about the loss of land and burden of stormwater requirements seems inconsistent with the use of 20% upstream, LID practices.

2. **BMP phasing during construction needs to be shown on plans. [City Ordinance Section 515.80, Subd. 39 F.7.a.(iv)]** BMP construction should begin once the rest of the site has been stabilized.

3. **Additional details needed**
   a. Storm sewer details and calculations
      i. All storm sewer structures and top of pipes shall be at least 4.0 feet in depth (public and private).
      ii. Provide the types of storm sewer lines proposed in the Blackstone developments. All connections to City Public System shall be RCP.
      iii. Structures within boulevards shall be R-4342 with concrete collar.
      iv. Provide storm sewer calculations for inlet spacing/capacity and pipe sizing for each development.
      v. Not all inlets/structures in all the Blackstone developments have invert information labeled.
      vi. All pipe outlets should not exceed 6 feet per second discharge velocity.
   b. Mapped areas of the impervious surfaces
   c. Landscape plan for stormwater
   d. Erosion and Sediment control details and submittals
   e. Operation and maintenance plan for BMPs per the city code
   f. Other items not yet identified at this level of detail may be needed for compliance with city standards

***Blackstone Vista***

1. **Grading and fill should not occur within Regional Basins. [City Ordinance Section 515.80, Subd. 39 F.7.e; NWA Stormwater Manual 7-4 & 7-13 to 7-14]** It is proposed that 0.8 acre-feet of Regional Basin F-001 is to be filled and graded. There should be no fill in the Regional Basins and typically grading is highly restricted in its type and method unless unavoidable. Until the final BMP sizing and locations are determined, it is difficult to determine if Regional Basin impact minimization has been accomplished.

2. **Runoff model (existing conditions) should use curve numbers (CNs) consistent with hydrologic group type A-B and B soils. [City Ordinance Section 515.80, Subd. 39 F.7.e; NWA Stormwater Manual 2-14 to 2-15 (Table 9.5)]** The recently submitted modeling and summary sheet appears to use CNs mostly like those in the NWA Manual Table 9.5, however, pre-development CNs use the values designated in the NWA Manual for graded areas, rather than for undisturbed areas. The soil survey provided for the Blackstone Vista proposed site shows predominantly Kingsley and Kingsley-Mahtomedi type soils, which are in the hydrologic soil group (HSG) with an A-B and B type soils, as outlined in the NWA Stormwater Manual.

The lower curve numbers used for post-development (proposed) conditions could be appropriate if a soil amendment plan is submitted for restoration of the disturbed soils as stated in Chapter 8 pg. 176 of the NWA Stormwater Manual. Verbally the applicant has indicated that restoration of impacted urban soils will be done. Areas of restoration have also been shown on the grading plans around BMP locations, but additional documentation is needed. Soil restoration areas could also be expanded throughout the site to help justify the lower curve numbers as well. Grading in the southwest area of the site could be minimized in the backyard/outlots by adjusting grades and/or use of a retaining walls.

Any road expansions due to the development, such as turn lanes on 70th St. must be included in the treatment calculations and treatment provided. Currently those do not appear to be included.

3. **Provide a consistent value that represents the HWL for the Regional Basin F-001. [City Ordinance Section 515.80, Subd. 39 F.7.a]** HWLs are inconsistent on the plans and within the stormwater management plan. EOR has identified the HWL for Regional Basin F-001 as 895.7 and if another value is proposed, then the engineer should explain why. The development's stormwater management plan gives a HWL of 894.84 and the plans show a value of 890.01. In addition, the EOF for Regional Basin F-001 should be consistent with a Category 2 basin per the NWA standards. There shall be no additional flow sent downstream from the basin under modelled/predicted scenarios.

4. **Coordinate with the potential trail underpass crossing of 70th St. so that the trail crossing is above the HWL for F-001, such as HWL + FB (potentially FB = 4' for Category 2 basin as the secondary, emergency overflow).**

5. **Determine infiltration rates by providing soil borings in the BMP locations. [City Ordinance Section 515.80, Subd. 39 F.7.a.(i)]** All Infiltration BMPs must have at least 2 soil borings/pot holes within the location, or 1 soil boring/pot hole for smaller BMPs, extending 10-15' below the bottom of the proposed excavation/over-excavation elevation, to evaluate suitability for infiltration consistent with the Manual Supplemental Guidance (EOR June24,2008). A preliminary soil borings map indicate that soil borings are being done in two of the four larger infiltration BMPs and none in the raingarden areas, which needs to be addressed. All soils evaluation should be performed by a qualified soil scientist or similar person with soils infiltration estimation experience. The proper infiltration rate is needed to ensure proper sizing and adequate drawdown times for smaller events, such as 48 hours for the 1-year event. If the soil boring logs indicate incompatibility of existing sub-soil permeability with the submitted and reviewed design plans for meeting volume control requirements, the applicant shall revise the design and/or construction plans to ensure volume control requirements are fully met. The 1.2 in/hr infiltration rate submitted is on the high end for the type of soil identified(mostly sandy loam and silty loam). A lower infiltration rate of 0.1 in/hr should be used in the model until proven otherwise with soil information.

6. **All storm sewer structures and top of pipes shall be at least 4.0 feet in depth (public and private).** Verify all structures meet this requirement, specifically, please confirm the following: Blackstone Vista Structures: 11C, 12C, 13C, 21C.

*Blackstone Ponds*

7. **Provide a consistent value that represents the HWL for the Regional Basin F-002. [City Ordinance Section 515.80, Subd. 39 F.7.a]** Normal water level and high water level for Regional Basin F-002 should be consistent. EOR has a value of 882.5 as the HWL compared with the value on the plans of 994.1 (894.1 is also listed in smaller print). Provide for emergency overflows per the freeboard requirements.

8. **All storm sewer structures and top of pipes shall be at least 4.0 feet in depth (public and private).** Verify all structures meet this requirement, specifically, please confirm the following: Blackstone Ponds Structures: the drainage MH at the south end of PD 5, the inlet at the north end of PD 6

9. **Additional comments are to be added when stormwater report and model are provided.**

*Blackstone Ridge*

10. **Low floor elevations need to be met for HWLs for the Regional Basins.** Low floor elevations are not met for lots 85,86,93,94, and 1-4. Provide for emergency overflows per the freeboard requirements.

11. **Grading and fill should not occur within Regional Basins. [City Ordinance Section 515.80, Subd. 39 F.7.e; NWA Stormwater Manual 7-4 & 7-13 to 7-14]** For the Blackstone Ridge, it is proposed that Regional Basins F-013(F) and F-011b would be graded and/or filled. There should be no fill in the Regional Basins and typically grading is highly restricted in its type and method unless unavoidable.

12. **All storm sewer structures and top of pipes shall be at least 4.0 feet in depth (public and private).** Verify all structures meet this requirement, specifically, please confirm the following: Blackstone Ridge Structures: CB 12, CB 14, CB 20, CB 22, CB 23, CB 42, CB 43, CBMH 1, CBMH 6, CBMH 51, CBMH 52.

13. **Additional comments are to be added when stormwater report and model are provided.**

**SUMMARY**

In summary, revisions and subsequent detail are needed in the plans addressing the comments above before the site could be developed as proposed and satisfying the City's stormwater management regulations for the Northwest Area.

Since the information for the Ponds and Ridges have been incomplete, comments will be provided for those as information is available. Proposed impacts to Regional Basins in the Blackstone Ridges are significant and should first be addressed before the development is considered for further review and/or approval.

Dakota County Surveyor's Office
Western Service Center • 14955 Galaxie Avenue • Apple Valley, MN 55124
952.891-7087 • Fax 952.891-7127 • www.co.dakota.mn.us

September 2, 2014

City of Inver Grove Heights
8150 Barbara Ave.
Inver Grove Heights, MN 55077

Re: **BLACKSTONE**

The Dakota County Plat Commission met on August 25, 2014, to consider the preliminary plan of the above referenced plat. The plat is adjacent to CSAH 63 and CSAH 26, and is therefore subject to the Dakota County Contiguous Plat Ordinance.

The proposed Blackstone plat is one plat consisting of three areas/phases in this PUD development (Blackstone Vista, Blackstone Ponds, Blackstone Ridge). The Blackstone Vista and Blackstone Ridge projects will be impacted by the future CSAH 63 realignment. A study to determine future alignment of CSAH 63 is set to begin in September. A preliminary design will be completed Spring, 2015. As discussed, the right-of-way needs for the future realignment is planned for a six-lane divided roadway with 100 feet of half right-of-way that will connect TH 55 to I-494.

The area known as Blackstone Vista is shown as a single family residential development. The plat shows one temporary access to existing CSAH 63 (Argenta Trail) and one access to CSAH 26 (70th Street). Outlot G as shown on the plat should dedicate 100 feet of right of way from the existing centerline of CSAH 63. The right-of-way needs along CSAH 26 as a future 4-lane divided roadway is 75 feet of half right of way. Restricted access should be shown along all of CSAH 26 except for the approved openings. Restricted access does not need to be shown along CSAH 63 at this time because the alignment of CSAH 63 may change. The access to CSAH 63 will need to be applied for as a temporary access through the County permit process. The access to CSAH 26 will require right and left turn lanes be constructed along CSAH 26 at the time of the street connection to CSAH 26.

The area known as Blackstone Ponds is shown as multi-family townhomes. The plat shows one access to the site along CSAH 26, located across from the Vista access. The right-of-way needs along CSAH 26 as a future 4-lane divided roadway is 75 feet of half right of way. Restricted access should be shown along all of CSAH 26 except for the one approved opening.

The area known as Blackstone Ridge is shown as a proposed single family residential plat. A major issue with this site is the fact that the Regional Roadway System Visioning Study (adopted by both the City Council and the County Board) and the Dakota County Plat Need Map reflect the need for a future County roadway along the west side of the property. The plat as submitted does not reflect this future roadway in any way. The developer noted that the best location for this roadway is west of the west property line, where there are existing residential properties. The City and County are currently scoping a study that will identify the location of this roadway considering all costs, benefits, and impacts. With the unknowns of the future CSAH 63 realignment along the Blackstone Ridge area, the Plat Commission will not approve the entire Blackstone

development as presented. However, the Plat Commission will approve Blackstone with Blackstone Ridge as an outlot. This allows Blackstone Vista and Ponds to move forward now (or as extension of City utilities will allow), and allows Blackstone Ridge to appropriately reflect future CSAH 26 consistent with the results of the upcoming Study of Argenta Trail from south of CSAH 26 to 65th Street.

The site does not currently have enough frontage along CSAH 26 to meet County access spacing guidelines, and the southeast corner of the plat will not support construction of a roadway due to severe topography and drainage issues. Connecting to existing CSAH 63 requires acquisition of neighboring private property to connect at the current intersection of 69th Street, which is only 450' north of CSAH 26. Once the Argenta Trail Study is complete, and Blackstone Ridge is better prepared for preliminary and final platting, the following should be considered:

- A connection to existing CSAH 63 at 69th Street would only be considered as a temporary access due to inadequate spacing. If this connection were to be considered, left and right turn lanes would be required. Additional access locations should be explored.
- The proposed plat should consider a reduced movement connection to future CSAH 63 approximately ¼ mile north of CSAH 26 (on the north side of the wetland), and a connection to future 65th Street on the northeast area of the plat.

The Plat Commission has approved the preliminary plat provided that the described conditions are met. The Ordinance requires submittal of a final plat for review by the Plat Commission before a recommendation is made to the County Board of Commissioners.

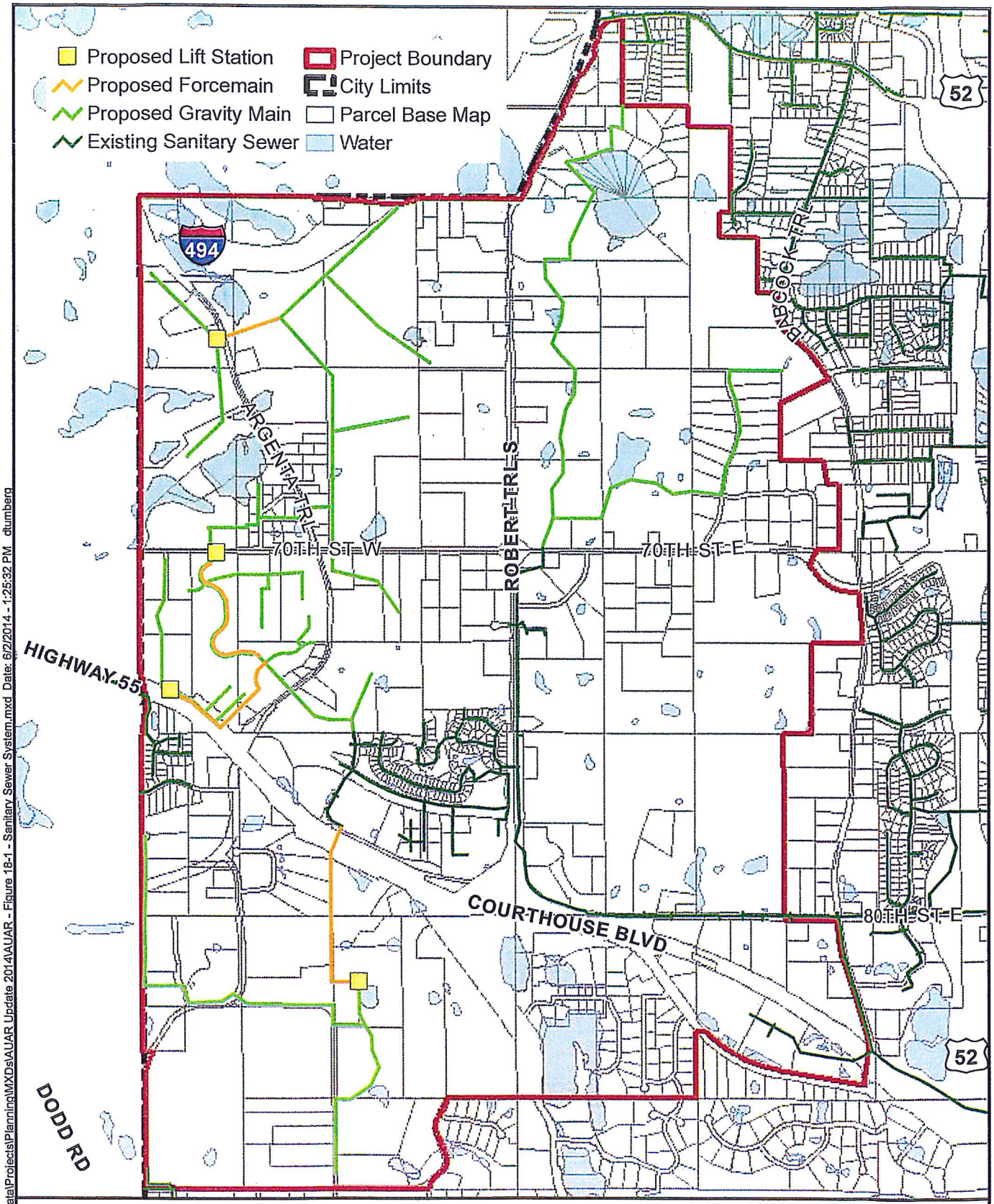
Traffic volumes on CSAH 63 are 3,650 ADT and are anticipated to be 10,000 ADT by the year 2030. The traffic volumes for CSAH 26 are 6,200 ADT and are anticipated to be 16,000 ADT by the year 2030. These traffic volumes indicate that current Minnesota noise standards for residential units could be exceeded for the proposed plat. Residential developments along County highways commonly result in noise complaints. In order for noise levels from the highway to meet acceptable levels for adjacent residential units, substantial building setbacks, buffer areas, and other noise mitigation elements should be incorporated into this development.

No work shall commence in the County right of way until a permit is obtained from the County Transportation Department and no permit will be issued until the plat has been filed with the County Recorder's Office. The Plat Commission does not review or approve the actual engineering design of proposed accesses or other improvements to be made in the right of way. The Plat Commission highly recommends early contact with the Transportation Department to discuss the permitting process which reviews the design and may require construction of highway improvements, including, but not limited to, turn lanes, drainage features, limitations on intersecting street widths, medians, etc. Please contact Gordon McConnell regarding permitting questions at (952) 891-7115 or Todd Tollefson regarding Plat Commission or Plat Ordinance questions at (952) 891-7070.

Sincerely,

Todd B. Tollefson
Secretary, Plat Commission

c:




# City of Inver Grove Heights

## *Northwest Expansion Area AUAR*

## SANITARY SEWER SYSTEM

## Figure 18-1

THIS DRAWING IS NEITHER A LEGALLY RECORDED MAP NOR A SURVEY AND IS NOT INTENDED TO BE USED AS ONE. THIS DRAWING IS A COMPILATION OF RECORDS, INFORMATION AND DATA LOCATED IN VARIOUS CITY, COUNTY AND STATE OFFICES AND OTHER SOURCES AND IS TO BE USED FOR REFERENCE PURPOSES ONLY. THE CITY OF INVER GROVE HEIGHTS IS NOT RESPONSIBLE FOR ANY INACCURACIES HEREIN CONTAINED.

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