

EXHIBIT "H"

1 of 1

MINNESOTA LAND TRUST

August 11, 2017

To:

City of Afton, City Administrator, 3033 St. Croix Trail S., Afton, MN 55001
J.P. Bush Homes, Developer, 1980 Quasar Avenue South, Lakeland, MN 55043
Will Carlson, Landowner

Re: Afton Creek Preserve Conservation Easement- Letter of Acknowledgement

Dear Sirs:

The Minnesota Land Trust (Land Trust) has reviewed the design of the Preliminary Plat (dated August 7, 2017) of Afton Creek Preserve, a proposed Preservation and Land Conservation Development (PLCD) within the City of Afton designed by J.P. Bush Homes (Developer) for Albert Wilmer Carlson (Landowner). In addition, the Land Trust has had various discussions with the City of Afton and Developer.

At this time, the Land Trust acknowledges that it is willing and able to accept a conservation easement over Open Space granted by the Landowner, as identified on the attached Preliminary Plat of Afton Creek Preserve contingent upon the following:

- approval of the proposed Preservation and Land Conservation Development by the City of Afton,
- approval of the conservation easement project by the Land Trust Board,
- execution of an engagement letter between the Developer and Land Trust that governs the conservation easement project and process and establishes the funding and costs necessary to both complete the easement project and funds the long-term stewardship of the conservation easement,
- agreement between the Developer, City of Afton and Land Trust on the terms of the easement,
- approval by the Land Trust of final Homeowner's Association Bylaws, Restrictive Covenants, title work and other documents and due diligence regarding the development and the easement,
- receipt of required funding prior to closing and successful closing on the easement.

Sincerely,

Kris Larson
Executive Director

EXHIBIT "I" Date: 8/11/2017

Proposal to Create a Native Landscape at the
Afton Creek Park Reserve
Afton, MN

Prepared for:
Joe Bush – Developer

Site Address:
14220 60th St
Afton, MN

Prepared by:
Jeff West
Site Manager
jwest@prairieresto.com

Project Area:
Conservation Easement Area: Approx 60 acres
Future Residential Area: Approx 75 acres

Prairie Restorations, Inc. 

Two Oaks Office
PO Box 95
Scandia MN 55073
www.prairieresto.com

A. Company Background: <http://www.prairieresto.com/mission.shtml> (Follow the blue links to learn more)

Prairie Restorations, Inc. (PRI) has been dedicated to the restoration and management of native plant communities for over 40 years. We are fortunate to have worked with thousands of clients on a wide variety of projects in both the public and private sectors throughout the Upper Midwest.

The PRI staff currently consists of 54 full-time professionals and about an equal number of seasonal employees which operate out of six Minnesota locations. Most of the staff has B.S. degrees in natural resource related fields such as biology, forestry, horticulture or wildlife. As a full service restoration company, PRI is able to provide our clients expertise and service in all facets of native landscape restoration. Along with consulting, design, installation and land management services, we also produce our own local ecotype seed and plant materials which are used on all of our projects.

The PRI Team is committed to and passionate about protecting and enhancing our valuable natural resources. It is this dedication that is brought to each and every one of our projects. We are proud to offer the best expertise, services and products available in the industry and appreciate the opportunity to provide you with this proposal.

B. Project Overview:

1. Establishing a native landscape (http://www.prairieresto.com/establish_landscape.shtml) in this area will provide a long term, ecologically sound landscape that is adapted to the existing conditions of the site. This native landscape will not require irrigation, black dirt or other soil amendments. It will add a distinctive look to the property as well as provide valuable habitat for songbirds, butterflies, bees and other pollinators.
2. To establish this planting, the site will be seeded using a drill seeder after the row crops are removed. Only areas currently in row crops will be seeded at this time. If additional weedy or fallow areas need to be seeded a different process may be required.
3. An estimate for 3 years of Establishment Period Vegetation Management is included in this proposal.

C. Project Dimensions and Planting Zones:

1. For purposes of vegetation restoration, the project area is separated into two zones, the **Conservation Easement Area** and the **Residential Lots Area**.
2. **The Conservation Easement Area** in total is 109.7 acres. Approximately 60 of these acres are currently in row crops and will be seeded.
3. **The Residential Lots Area** in total is 100.6 acres. Approximately 75 of these acres are currently in row crops and will be seeded as a part of this plan. As the lots are developed the construction disturbance will be limited to less than 50% of the prairie area leaving the remaining in prairie. Areas beyond the 50% can and will be reseeded as necessary after construction of each house/property.

D. Site preparation: http://www.prairieresto.com/installation_preparation.shtml

1. The project area will be harvested for crops before seeding. In addition it should be stalk chopped (especially the corn) to allow for easier seeding. If possible the corn field areas could be baled to remove crop residue as the corn leaves much more debris behind than the bean fields and this can cause issues with the seeding.

E. Seed and Seeding: http://www.prairieresto.com/installation_seeding.shtml

1. Acceptable seeding dates for native species are in the spring or summer before August 10th or in the fall between September 20th and freeze-up.
2. All grass seed will be applied with a seed drill designed for native seeding (Truax[®] or equivalent).
3. All flower seed will be broadcast with a tractor broadcast seeder designed for native seeding (Vicon[®] or equivalent).

4. The seed mixes will consist of the following species and amounts:

Grass Seed **lbs / acre**

PRI Mixed Height Mesic Grass Mix:

35% Big bluestem, 23% Little bluestem, 22% Indian grass,	
12% Side oats grama, 5% Canada wild rye, 2% June grass,	
1% Switch grass all by PLS weight.....	10

<http://www.prairieresto.com/CategoryList.php?cid=12>

Note: A cover crop will be sown along with the native grasses at a rate of approximately 25 lbs./acre. Cover crop is an annual grass species that germinates quickly and will reduce the risk of soil erosion on the site. Oats will be used for a spring or summer seeding, and winter wheat will be used for a fall seeding.

Wildflower Seed **oz / acre**

Butterfly weed (<i>Asclepias tuberosa</i>).....	1/4
Partridge pea (<i>Chamaecrista fasciculata</i>)	1/2
Wild lupine (<i>Lupinus perennis</i>)	1
Yellow coneflower (<i>Ratibida pinnata</i>)	1/2

PRI Mixed Height Mesic Wildflower Mix:

19% Purple prairie clover, 18% Hoary vervain, 15% Black-eyed Susan,	
10% Leadplant, 8% Common ox-eye, 6% Golden Alexander,	
3% Canada milk vetch, 3% White prairie clover, 3% Canada tick trefoil,	
3% Wild bergamot, 3% Stiff goldenrod, 3% Blue vervain,	
2% Common milkweed, 1% Yarrow, 1% Prairie rose,	
1% Gray goldenrod, 1% Western spiderwort, all by PLS weight.....	24

<http://www.prairieresto.com/CategoryList.php?cid=13>

F. Erosion Control: http://www.prairieresto.com/installation_erosion.shtml

1. Cover crop will be sown along with the native grasses.

G. Management: http://www.prairieresto.com/management_overview.shtml

1. Management (maintenance) plays a vital role in the eventual success of any native landscape installation, especially during the establishment period. Active management of your native landscape is highly recommended to give the project the best opportunity for long term success.
2. During the germination year, the project area may need to be mowed to control annual weed development. If a "closed" canopy of weed cover develops, it should be mowed to aid in the growth of the prairie seedlings by reducing competition. Mowing may also be necessary if the weeds are about to set seed. Optimum cutting height, depending on the wildflower species present, is typically 4 to 6 inches. It is important that the clippings are finely mulched in order to prevent smothering. PRI can provide the mowing services if desired. Please refer to the cost section of this proposal for a mowing quote.
3. In years following the first growing season, Integrated Plant Management (IPM) services are utilized to control annual, biennial and perennial weed species within the developing native landscape. Typical IPM services include spot herbicide spraying, spot mowing, herbicide wicking or hand weeding. These services are billed on a per trip cost agreed upon prior to the growing season. Rough estimates are provided in the cost section of this proposal for these future management activities.
4. Prescribed burning is a highly effective management tool and may be recommended for your project as it matures. Burning stimulates native species to grow more robustly and also help to deter the presence of many non-native and/or woody species. Prescribed burning, when recommended, will be provided as a separate lump sum cost.
5. In lieu of burning, or during years when the site is not burned, a Spring Dormant Mowing can be used to "clean up" previous year's growth and set the table for the new growing season. This mowing would occur early in the spring, as soon as conditions permit. Spring Dormant Mowing, when recommended, will be provided as a separate lump sum cost.

H. Anticipated Management:

The following table conveys the anticipated management procedures for your project during the first 4 growing seasons. Estimates for these procedures are provided in the cost section of this proposal.

Year	Projected Management Procedures
2018	Complete site mowings to control annual weed canopy (2 or 3 mowings as needed). Project monitoring
2019	Complete site mowing Integrated Plant Management (IPM) – includes spot spraying, spot mowing, wicking, hand weeding, and other techniques to control weeds and invasive species (3 visits are typical) Project monitoring
2020	Integrated Plant Management (IPM) – includes spot spraying, spot mowing, wicking, hand weeding, and other techniques to control weeds and invasive species (3 visits are typical) Project monitoring
2021	Spring burn to encourage native plant growth and to help deter the presence of non-native and woody species. Integrated Plant Management (IPM) – 3 visits are typical Project monitoring

I. Costs:

Project Installation:

Unit Pricing

Seeding.....	\$175 / acre
Seed as specified	\$625 / acre
Erosion blanket (if necessary)	\$1.25 / sq yd
Straw Mulching (if necessary)	\$850 / acre

Conservation Easement Area (est 60 acres)

Seeding 60 acres @ \$175/acre.....	\$10,500
Seed as specified 60 acres @ \$625/acre	\$37,500

Conservation Easement Installation Total.....\$48,000

Residential Lots Area (est 75 acres)

Seeding 75 acres @ \$175/acre.....	\$13,125
Seed as specified 75 acres @ \$625/acre	\$46,875

Residential Lots Installation Total..... \$60,000

Conservation Easement Vegetation Management:

Germination year management quote (2018):

Complete site mowings as needed (1-3 is typical)	\$100/acre
Full site mow (60 acres @ \$90/acre).....	\$6,000

Future Management Estimates:

Growing season 2019 (<i>assumes 3 IPM visits</i>).....	\$30,000
Growing season 2020 (<i>assumes 3 IPM visits</i>).....	\$30,000
Growing season 2021 (<i>assumes 3 IPM visits and a prescribed burn</i>)	\$36,000

Please note: The *Future Management Estimates* are meant to convey typical management costs for projects of similar size and characteristics. Prior to each growing season, you will receive a specified quote from your project manager detailing the recommended management strategies and associated costs for your project.

PRI will provide a follow-up consultation approximately 1 month after the completion of the project (if the project was seeded in the fall, the consultation will occur the following spring). The Restorationist (or salesperson) will meet with the project owner to assess the status of the project, answer any questions, and provide any necessary recommendations. This follow-up consultation will be provided at no additional cost.

- J. Guarantee:** Prairie Restorations, Inc. (PRI) has a great tradition of successfully installing native landscapes throughout the Upper Midwest. We feel our expertise in this industry is second to none and we stand behind every one of our projects. Because we are confident in our abilities to provide you with the best possible materials and services, we are proud to offer the following guarantee:

On projects installed by PRI crews within the specified dates, we will guarantee successful establishment within three full growing seasons, given the following conditions:

- 1. That PRI materials and PRI installation services are used on the project.*
- 2. That the failure of the project is not due to the actions of others.*
- 3. That PRI staff has been consistently involved with the maintenance of the project (consultation with the client or direct utilization of PRI management services) from the time of germination until the end of the third growing season (i.e. mowing, spot spraying, and controlled burning).*

This outline provides a step-by-step plan for accomplishing the restoration of this site. If successful establishment does not occur within three full growing seasons, all necessary steps will be taken to ensure the eventual success of the project, at no additional charge. For purposes of this guarantee, successful establishment is defined as follows: That the presence of at least 75% of the original seeded or planted species can be found on site, and that the overall density of vegetation is comprised of no less than 75% native species.

K. Contract:

If you accept the proposal as written and want to proceed with the project, please sign the contract below.

Owner (print): _____ **Date:** _____

Signed: _____ **Title:** _____

Project Name: _____ **Contract Value: \$** _____

Contractor: *Prairie Restorations, Inc.*

Signed: _____ **Date:** _____

Jeff West – Site Manager
Prairie Restorations, Inc.
PO Box 95
21120 Ozark Court North
Scandia MN 55073

- L. Notes:** Please note that this proposal is valid for 1 month (from the date on the proposal). If the proposal is accepted after the 1 month period, PRI reserves the right to modify the proposal based on cost fluctuations and material availability.

Restoration outline prepared by Prairie Restorations, Inc. (PRI), Princeton, Minnesota

EXHIBIT 'I'

Prairie
Restorations Inc. 

Two Oaks Office
PO Box 95, Scandia MN 55073
Office: 651.433.1435 Fax: 651.433.1436

1 of 1

August 3, 2017

To: Joe Bush
Afton Creek Park Reserve Developer

From: Jeff West
Two Oaks Office Site Manager
Prairie Restorations Inc.

RE: Former Schuster Property Project Recap

To whom it may concern,

This letter is a summary of the work that has been completed at the former Schuster property at 14220 60th St., Afton MN. The project was proposed, approved and contracted in late summer of 2015 in coordination with Washington conservation district. Site prep, seeding, and 2 years of maintenance were included in the contract. One additional maintenance visit in 2017 is planned. After this final visit our contracted work is complete. We would however recommend continued maintenance in 2018 and beyond to ensure successful establishment of the native planting area.

2015:

9/14 Site Prep Spray
9/22 Touch up of site prep spray
10/27 Soil prep, seeding and straw mulching.

2016:

Monthly site visits for monitoring
6/22 Complete site mow

2017:

Monthly site visits for monitoring
7/26 Complete site mow
1 additional visit schedule for 2017

Please let me know if you need any additional information.

Thank you,

Jeff West



DNR

EXHIBIT "J"

m DEPARTMENT
NATURAL RESOURCES

Minnesota Department of Natural Resources
Ecological and Water Resource
1200 Warner Road
St. Paul, MN 55106

1 of 2

May 24, 2017

Transmitted Electronically

Ronald Moorse
City Administrator
3033 St. Croix Trail S
Afton, MN 55001

Re: Afton Creek Preserve EAW

Dear Ronald Moorse,

The Minnesota Department of Natural Resources (DNR) has reviewed the Environmental Assessment Worksheet (EAW) for the Afton Creek Preserve residential development located in Afton, MN. We offer the following comments for your consideration.

Land Use - Page 6 (Question 9.b.):

- The current placement of the access road into the development is located at the southeast corner of the property, which avoids the need to construct a crossing over Trout Brook. If the road into the development were located elsewhere along 60th Street South, construction of a road crossing over Trout Brook would be required, potentially impacting the stream itself and associated adjacent wetland areas, including areas where groundwater recharges the stream. Groundwater is an important source of cold water to streams like Trout Brook that support coldwater fish species (i.e. trout).
- Provide a narrative to justify the statement made that this development is in concert with Afton's comprehensive plan and growth plan.

Water Resources - Page 8 (Question 11.a.ii.):

- In this section, note whether the woodland area located adjacent to Trout Brook in the open space conservation easement and Lots 3 and 4 was examined for springs and if any springs were identified. Include a narrative in this section describing the potential for increased groundwater flow at this location due to topography and proximity to the water table. Woodland areas like this, with steeper topography draining toward a stream, may have springs where groundwater is coming to the surface. Even if there is not surface water in the form of springs, the likelihood is high that this area has shallow groundwater that is migrating toward Trout Brook and which provides groundwater recharge to the stream.
- In agricultural areas that have been farmed for 160 years, old wells are often found that no one knew existed. If any unknown wells are found on site, these must be sealed in accordance with the regulations of the Minnesota Department of Health.

Water Resources – Page 8 (Question 11.b.ii.)

- Show on a map where the vegetative buffer strips will be located on Lots 1 – 10 and Lots 16 – 17.

Water Resources – Page 9 (Question 11.b.iii.)

"J"

2 of 2

- Please note that any dewatering of volumes that exceed 10,000 gallons per day, or one million gallons per year need to be approved by a DNR Water Appropriation Permit. This includes dewatering for grading; installing footings for structures; and to install pipes for sanitary systems. The use of more than 10,000 gallons of water per day for watering trees, grass, and landscaping using watering trucks needs approval under a DNR Water Appropriation Permit as well. A Water Appropriation Permit may be applied for online using the following website: <http://www.dnr.state.mn.us/mpars/>
- Lot sizes in this development are approximately 5 acres. During drought, the irrigation of 1.5 acres of landscaping will use more than 1 million gallons of water per year. The new homes should be designed to minimize irrigated landscaping to avoid the need to obtain a DNR Water Appropriation Permit.

Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features) – Page 13 (Question 13.c):

- Provide a more detailed explanation of how the buffer plan will assist with onsite erosion and sedimentation created by development. Describe how the buffer will enhance wildlife habitat. Explain what types of invasive species management will be done on disturbed areas and what plant communities will be located in these disturbed areas post-development. Explain what specific habitat enhancement will be done to protect state listed species during construction.

Figure 3 – Site Sketch – Page 21:

- The shoreland district boundary shown on the concept plan should be 300 feet wide on both sides of Trout Brook (the width of shoreland districts for rivers and streams), not 1,000 feet wide.
- The conservancy overlay boundary, which designates sensitive areas within Afton, is shown as approximate. Adjust this boundary to reflect the terrain and resources on this specific site.
- There are sensitive areas covering much of Lots 3 and 4 (wooded areas and steep slopes). This woodland area is directly adjacent to Trout Brook and likely contains springs that supply cold groundwater to the stream. DNR recommends inclusion of these sensitive areas into the open space conservation easement to protect this habitat and source of groundwater to the stream.

Appendix B – Lot Buffer Plan

- The buffer plan is not complete and needs to include a narrative and maps that explain the details of the plan. Why are individual landowners responsible for planting buffers rather than the developer? Wouldn't it make more sense to get the buffers established early rather than at an unknown point in the future when lots are sold? How will the buffers be monitored over time to ensure that they become established? Will there be a buffer easement that keeps the buffers in place long-term and prevents encroachment into the buffer areas?

Thank you for the consideration of our comments.

Sincerely,

/s/ Rebecca Horton

CC: Jen Sorenson, Area Hydrologist

Joe Richter, Appropriations Hydrologist

EXHIBIT "K"

Joe Bush

From: Schilling, Andrew <andrew.schilling@woodburymn.gov>
Sent: Thursday, August 10, 2017 2:49 PM
To: Joe Bush
Subject: Efforts to date on conservation projects on former Schuster Property
Attachments: Former Schuster Property_Cost-share Projects.pdf

Hello Joe –

I am writing to provide a status update on the two conservation projects implemented on the former Schuster property. Maintenance of the turf conversion is ongoing through 2017. Buckthorn resprout management is scheduled for week of September 18th using the Minnesota Conservation Corp.

See attached document for more information.

Thanks,

Andy

Andy Schilling

Watershed Restoration Specialist

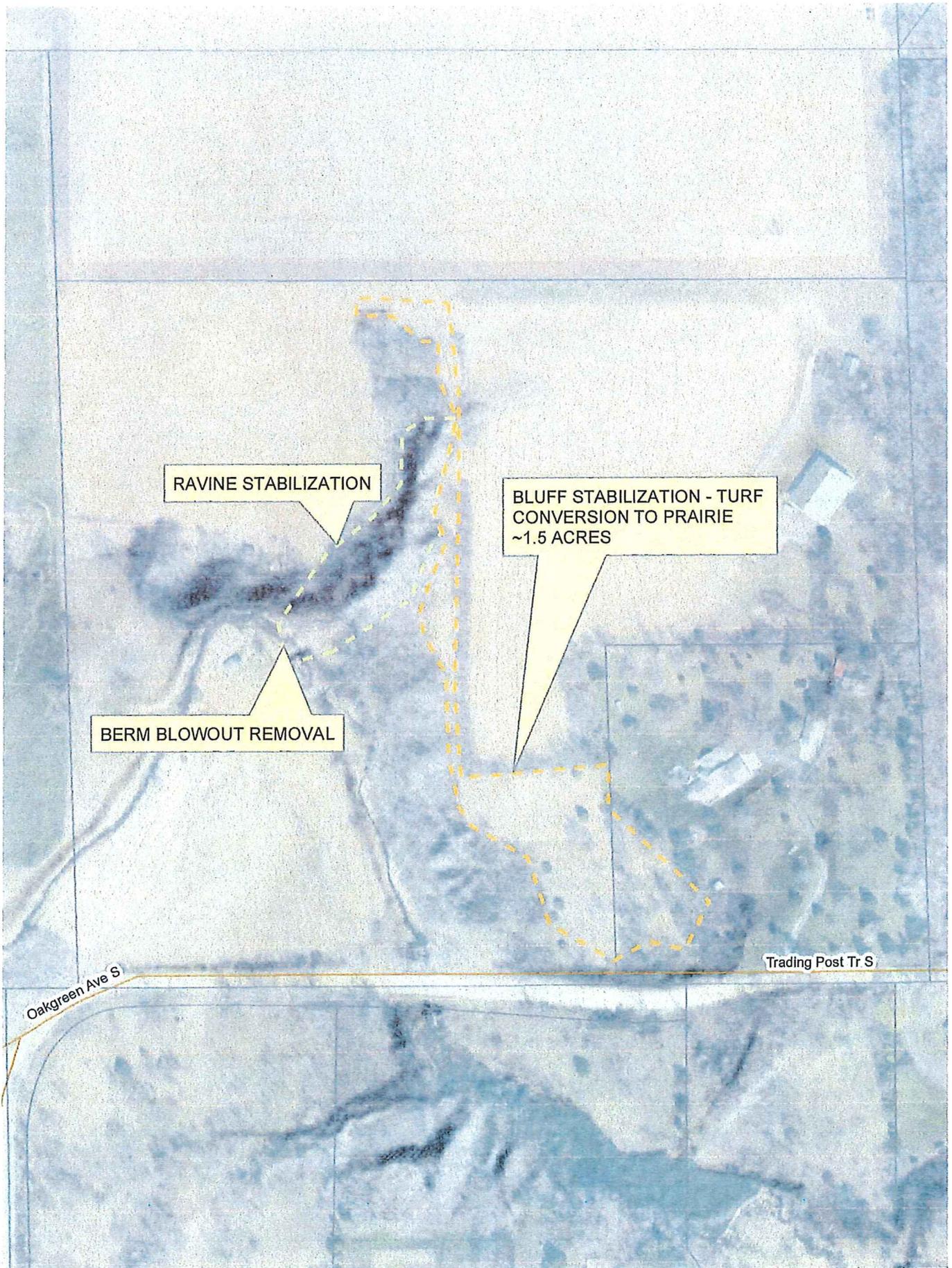


aschilling@ci.woodbury.mn.us

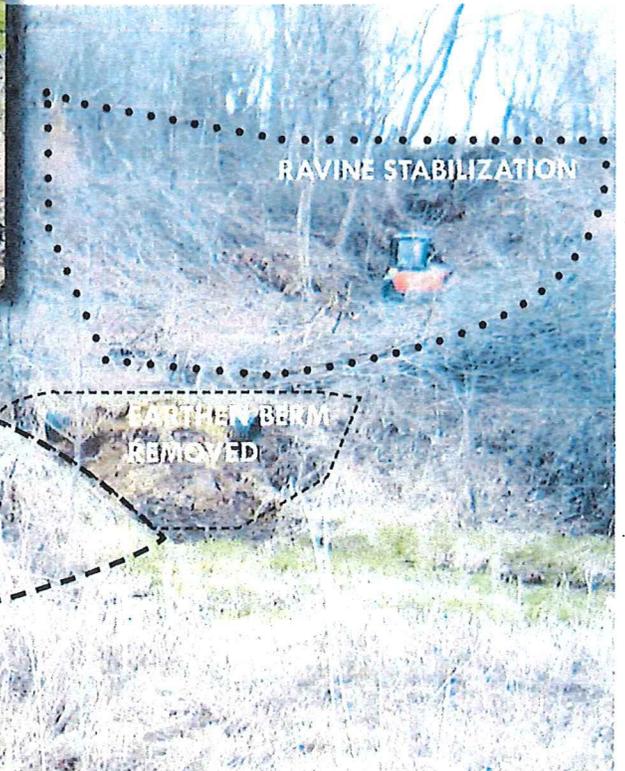
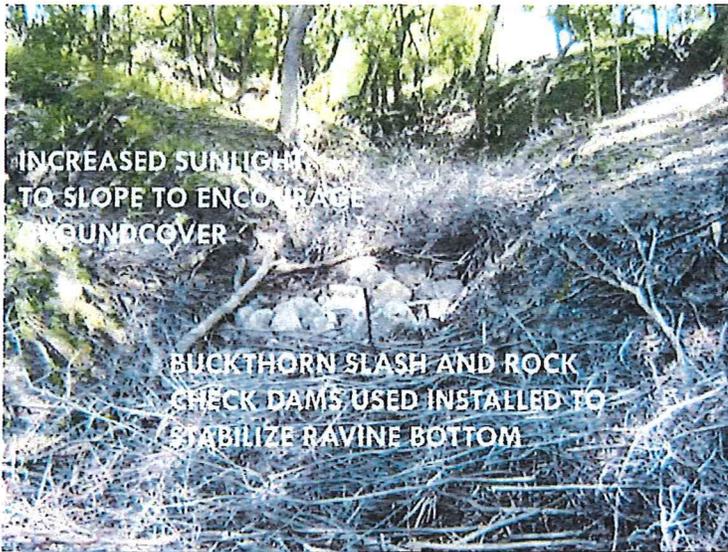
651-714-3717

[Click for Directions](#)

FORMER SCHUSTER PROPERTY: COST-SHARE PROJECTS OVERVIEW



SCHUSTER: RAVINE AND TROUT BROOK IMPROVEMENTS, 2014



SCHUSTER: TOP OF BLUFF TURF CONVERSION TO PRAIRIE, 2015



COST-SHARE AGREEMENTS



WATER QUALITY COST SHARE APPLICATION/CONTRACT

General Information (to be completed by SWWD)

Organization SWWD	Contract Number	Other federal or other state funds? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Amendment <input type="checkbox"/> Board meeting date(s) _____	Canceled <input type="checkbox"/> Board meeting date: _____
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*If contract amended, attach amendment form(s) to this contract.

Applicant

Land Occupier Name Robert Schuster	Address 14220 60th St.	City/State Afton	Zip code 55033
Email N/A	Phone 651-436-5436 651-334-2430		

*If a group contract, this must be filed and signed by the group spokesperson as designated in the group agreement and the group agreement attached to this form.

Project Location (if different)

Address	City/State	Zip code

Contract Information

I (we), the undersigned, do hereby request cost-share assistance to help defray the cost of installing the following practice(s) listed on the second page of this contract. It is understood that:

- SWWD's Water Quality Cost Share Program is a Reimbursement Program.** Applicants will be reimbursed for the contract amount upon successful completion of the project and submission of all required documentation.
- The land occupier is responsible for full establishment, operation, and maintenance of all practices and upland treatment criteria applied under this program to ensure that the conservation objective of the practice is met and the effective life, a **minimum of 10 years**, is achieved. The specific operation and maintenance requirements for the conservation practice listed are described in the operation and maintenance plan prepared for this contract by the organization technical representative.
- Should the land occupier fail to maintain the practice during its effective life, the land occupier is liable to the South Washington Watershed District for the amount up to 100% of the amount of financial assistance received to install and establish the practice unless the failure was caused by reasons beyond the land occupier's control, or if conservation practices are applied at the land occupier's expense that provide equivalent protection of the soil and water resources.
- Practice(s) must be planned and installed in accordance with technical standards and specifications of the Technical Representative.
- Increases in the practice units or cost must be approved by the organization board through amendment of this contract as a condition to increase the cost share payments.
- This contract, when approved by the SWWD board, will remain in effect unless canceled by mutual agreement, except where installations of practices covered by this contract have not been started within **1 year following Board approval of this contract**, this contract will be automatically terminated on that date. Practices will be installed by **2 years following Board approval of this contract** unless this contract is amended by mutual consent to reschedule the work and funding.
- Items of cost for which reimbursement is claimed are to be supported by invoices/receipts for payments and will be verified by the organization board as practical and reasonable. The organization board has the authority to make adjustments to the costs submitted for reimbursement.

Applicant Signatures

The land occupier's signature indicates agreement to:

1. Grant the organization's representative(s) access to the parcel where the conservation practice will be located.
2. Obtain all permits required in conjunction with the installation and establishment of the practice prior to starting construction of the practice.
3. Be responsible for the operation and maintenance of conservation practices applied under this program in accordance with an operation and maintenance plan prepared by the organization technical representative.
4. Not accept cost-share funds, from state and federal sources combined, that are in excess of 100% percent of the total cost to establish the conservation practice and provide copies of all forms and contracts pertinent to any other state or federal programs that are contributing funds toward this project.

Date <i>04-22-15</i>	Land Occupier <i>Robert W. Schuster</i>
Date	Landowner, if different from applicant: Address, if different from applicant information:

Conservation Practice (to be completed by Technical Representative)

The primary practice for which cost-share is requested is Turf to Prairie

Practice standards or eligible component(s) <i>Turf conversion to native</i>	<i>1.50 acres</i>	Engineered Practice (<input type="checkbox"/> yes or <input type="checkbox"/> no) Ecological practice (<input checked="" type="checkbox"/> yes or <input type="checkbox"/> no)	Total Project Cost Estimate <i>\$9,300.⁰⁰</i>
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The estimated benefits of this project are:

Total Phosphorus Captured <i>0.75 lb yr</i>	Nitrogen Captured <i>2.5 lbs.</i>	Runoff Volume Reduction <i>N/A</i>
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Technical Assessment and Cost Estimate

I have the appropriate technical expertise and have reviewed the site where the above listed practice is to be installed and find it is needed and that the estimated benefits and costs are practical and reasonable.

Date <i>4/20/15</i>	Technical Representative <i>[Signature]</i>
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Amount Authorized for Financial Assistance (to be completed by SWWD)

The SWWD Board has authorized the following for financial assistance, total not to exceed the overall percent listed indicated in 4, above.

\$ 2,325.⁰⁰ from South Washington WD Cost Share 2015 25%
Enter program name and fiscal year

~~\$ 6,975.⁰⁰~~ from ~~FY 2013 MN Clean Water Fund Grant~~ ~~75%~~

~~Enter program name and fiscal year~~

\$ _____ from _____
Enter program name and fiscal year

Board Meeting Date	Authorized Signature	Total Amount Authorized \$
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RAVINE STABILIZATION AND BERM BLOWOUT REMOVAL
PROJECT - 2014

WATER QUALITY FUNDING CONTRACT

General Information (to be completed by SWWD)

Organization SWWD	Contract Number CWF-TB01	Other federal or other state funds? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Amendment <input type="checkbox"/> Board meeting date(s) _____	Canceled <input type="checkbox"/> Board meeting date: _____
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*If contract amended, attach amendment form(s) to this contract.

Applicant

Land Occupier Name Robert W. Schuster	Address PO Box 337	City/State Afton, MN	Zip code 55001
Email		Phone 651-436-5436	

*If a group contract, this must be filled and signed by the group spokesperson as designated in the group agreement and the group agreement attached to this form.

Project Location (if different)

Address 14220 60 th St. S.	City/State Afton, MN	Zip code 55001
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Contract Information

I (we), the undersigned, do hereby request funding to install the following practice(s) listed on the second page of this contract. It is understood that:

1. The land owner grants permission to SWWD staff and its representatives to access the property to implement, inspect, and maintain the practice(s).
2. The land owner will ensure the practice(s) remains in place for the effective life of the practice(s), a **minimum of 10 years**.
3. Should the land owner remove the practice(s) during its effective life, the land owner is liable to the South Washington Watershed District for the amount up to 100% of the amount of the project cost to install and establish the practice unless the removal was caused by reasons beyond the land owner's control, or if conservation practices are applied at the land owner's expense that provide equivalent protection of the soil and water resources.
4. SWWD will implement the practice(s) and inspect and maintain the practice(s) for a minimum of 10 years.
5. This contract is void if the project is not underway prior to June 1, 2014.

Robert Schuster

Signatures

Date	Land Occupier
Date	Landowner, if different from applicant Address, if different from applicant information:

Conservation Practice (to be completed by Technical Representative)

The primary practice for which cost-share is requested is _____

Practice standards or eligible component(s) Grade Stabilization Structure, Brush Management	Engineered Practice <input checked="" type="checkbox"/> yes or <input type="checkbox"/> no Ecological practice <input checked="" type="checkbox"/> yes or <input type="checkbox"/> no	Total Project Cost Estimate \$33,018.80
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The estimated benefits of this project are:

Total Phosphorus Captured 19 lbs	Nitrogen Captured	Runoff Volume Reduction
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Technical Assessment and Cost Estimate

I have the appropriate technical expertise and have reviewed the site where the above listed practice is to be installed and find it is needed and that the estimated benefits and costs are practical and reasonable.

Date	Technical Representative
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Amount Authorized for Funding (to be completed by SWWD)

The SWWD Board has authorized the following for funding, total not to exceed.

Keep Funding separate

\$ 24,764.10 from FY 2012 MN Clean Water Assistance Grant (75%) - 02.05.4200 - Expense Acct
Enter program name and fiscal year
 \$ 8,254.70 from SWWD LSC SUF (25%) - 02.05.4200
Enter program name and fiscal year
 \$ _____ from _____
Enter program name and fiscal year

Board Meeting Date 11/12/13	Authorized Signature 	Total Amount Authorized \$ 33,018.80
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MAINTENANCE RECORDS

TURF TO PRAIRIE PROJECT

- The prairie installation contractor - Prairie Restorations, Inc. - is contracted for maintenance for the 2016 and 2017 growing season
- attached is an incomplete record of mtc. efforts to date

RAVINE STABILIZATION

- Contractor buckthorn resprout management, using cut-stump treatment method, is scheduled for week of September 18th, 2017

Prairie Restorations, Inc. 

Work Record

#3895

09/07/2016

Prairie Restorations, Inc.
31646 128th Street
Princeton MN 55371
United States
763-389-4342

Amount Due

\$0.00

Bill To

Tara Kelly
South Washington Watershed District
Office
2302 Tower Dr.
Woodbury MN 55125
United States

PO #

Sales Rep

ETF

Ship To

Tara Kelly
South Washington Watershed District Office
2302 Tower Dr.
Woodbury MN 55125
United States

Project

Item

Options

PRJ2087 Schuster (SWWD) 2016-2017 IPM WRO	Schuster Residence (SWWD) - 2016 Integrated Plant Management Work Record Only: See Memo for Work Information
--	---

Memo

Complete Site Mowing on 6/29/2016 to Reduce Noxious Weeds in New Prairie Planting.

Prairie Restorations, Inc.

Work Record

#7890

Prairie Restorations, Inc.
31646 128th Street
Princeton MN 55371
United States
763-389-4342

08/02/2017

Bill To

Tara Kelly
South Washington Watershed District
2302 Tower Dr.
Woodbury MN 55125
United States

Amount Due

\$0.00

Ship To

Tara Kelly
South Washington Watershed District
2302 Tower Dr.
Woodbury MN 55125
United States

PO #

Sales Rep

ETF

Project

Item

Options

PRJ4248 Mgmt 2017 IPM Prairie Management on 7/25/2017
WRO Schuster

Complete Site Mowing at the Schuster Prairie Planting to Reduce Non-Native Weed Cover.

Memo

EXH: BWT "K"

Joe Bush

From: Schilling, Andrew [andrew.schilling@woodburymn.gov]
Sent: Thursday, June 08, 2017 1:04 PM
To: Joe Bush
Subject: RE: Joe Bush

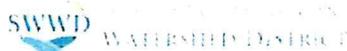
Joe,

During our site analysis and construction of the ravine stabilization and turf conversion to prairie above the bluff, we did not identify any fresh water springs.

Thanks,

Andy

Andy Schilling
Watershed Restoration Specialist



aschilling@ci.woodbury.mn.us

651-714-3717

[Click for Directions](#)

From: Joe Bush [mailto:joe@joebushmn.com]
Sent: Thursday, June 8, 2017 8:14 AM
To: Schilling, Andrew <andrew.schilling@woodburymn.gov>
Subject: Joe Bush

Andrew

Thank you for the feedback about the restoration project on the ravine and bluff. After reading comments back from you and Jen I understand that a meeting may not be needed.

The answer I was trying to obtain is; during the restoration project did any on site reports show fresh water springs?

If not I will proceed without additional concern. Is that a question you can answer?

Joe

Joseph Bush
Real Estate Professional
Designer & Builder
of Memorable Homes
Direct: [651.775.4222](tel:651.775.4222)
jpbushhomes.com

6/15/2017

SWWD

EXHIBIT "K"

Joe Bush

From: Loomis, John [john.loomis@woodburymn.gov]
Sent: Monday, June 05, 2017 2:52 PM
To: Joe Bush
Cc: Schilling, Andrew
Subject: RE: Joe Bush and Afton Creek Preserve 1of2 emails

Joe, we agree that the development as proposed will help to protect Trout Brook, as was intended with the previous SWWD/WCD/CWF projects.

John Loomis/SWWD
651-714-3714

From: Joe Bush [mailto:joe@joebushmn.com]
Sent: Monday, June 05, 2017 1:07 PM
To: 'Sorensen, Jenifer (DNR)'; 'Walsh, Rick J (DNR)'; Loomis, John; Schilling, Andrew
Subject: Joe Bush and Afton Creek Preserve 1of2 emails

Jenifer, Rick, John, Andy

I found the document I was looking for. Attached is a copy of the information. Do you think that the work performed and the agreement helps the concerned comments in the DNR report to the EAW?

I have also attached a copy of the DNR report that is highlighted to show my reference.

The attached site plan shows lot 4 has a portion of the improved areas on the improved areas.

It is my opinion; our proposed restrictive covenants (attached and highlighted on page 8) will enhance the Bluff stabilization program and actually help improve The program. I am interested in your opinion and or comments to that affect. I am meeting with The city planning Commission tonight

In addition, would appreciate anything you could add to what I am referencing.

Sincerely

Joe Bush.

Sincerely

Joe bush

Joseph Bush

Real Estate Professional
Designer & Builder
of Memorable Homes
Direct: [651.775.4222](tel:651.775.4222)
jpbushhomes.com

6/20/2017

EXHIBIT "K"

Joe Bush

From: Loomis, John [john.loomis@woodburymn.gov]
Sent: Thursday, May 25, 2017 8:54 AM
To: 'joe@joebushmn.com'
Subject: Trout Brook overlook at Afton Preserve

Joe,

Got your message. I have no problem with an overlook within the easement. I will just want to make sure it meets bluff setback rules—ours is 60 feet from edge of bluff—and doesn't concentrate runoff anywhere running toward the bluff. Shouldn't be a problem.

John Loomis

Water Resources Program Manager
[South Washington Watershed District](#)
[@SoWashWD](#)
2302 Tower Drive
Woodbury, MN 55125
P: (651) 714-3714

EXHIBIT "K"

From: Loomis, John [<mailto:john.loomis@woodburymn.gov>]
Sent: Thursday, August 10, 2017 2:02 PM
To: 'joe@joebushmn.com' <joe@joebushmn.com>; inthefield@frontiernet.net
Cc: Schilling, Andrew <andrew.schilling@woodburymn.gov>
Subject: RE: Joe Bush and Afton creek

Joe,

We have no requirements for streams to be delineated in the field for a preliminary plat (or final). Nor do we have any requirements for wetland to be delineated at this stage of development. SWWD and the State do have requirements protecting streams and wetlands from disturbance activities. From that standpoint, you may be best served by having your environmental consultant write a letter stating that the stream and any associated wetlands are within the proposed easement area and not in the proposed lots.

John Loomis
Water Resources Program Manager
South Washington Watershed District
@SoWashWD
2302 Tower Drive
Woodbury, MN 55125
P: (651) 714-3714

SWWD



EXHIBIT "K"
SOUTH WASHINGTON
WATERSHED DISTRICT



May 22, 2017

VIA EMAIL

Mr. Ron Moore
Administrator
3033 St. Croix Trail S
Afton, MN 55001

RE: Afton Creek Preserve EAW

Dear Mr. Moore:

I am writing in regards to the Environmental Assessment Worksheet prepared for the Afton Creek Preserve project. The EAW as prepared is generally accurate and complete. Further, we would agree that there is low likelihood for adverse environmental impact resulting from the project and that further investigation through an Environmental Impact Statement is not necessary.

It is our hope that this effort serves as a model for future developments in Afton and the surrounding communities in southern Washington County. The proposed project will protect and improve not only the water quality of Trout Brook, but the surrounding terrestrial habitat as well. The City of Afton is to be commended for the development and promotion of its Preservation and Land Conservation Development ordinance. We greatly appreciate the efforts of the developer and City to protect Trout Brook by locating the easement in the areas most critical for protection of the stream. To maintain the habitat and protection benefits of the proposed easement, we strongly discourage development of any infrastructure within its currently identified boundaries.

If you have questions or need additional information please contact me at 651-714-3714 or jloomis@ci.woodbury.mn.us.

Sincerely,
South Washington Watershed District

John Loomis
Water Resources Program Manager

Cc: Joe Bush/J.P. Bush.Homes.



EXHIBIT "L"

1 of 2

Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

May 17, 2017

Mr. Ronald Moorse, Administrator
City of Afton
3033 St. Croix Trail South
Afton, MN 55001

Re: Afton Creek Preserve Environmental Assessment Worksheet

Dear Mr. Moorse:

Thank you for the opportunity to review and comment on the Environmental Assessment Worksheet (EAW) for the Afton Creek Preserve project (Project) located in the city of Afton, Washington County, Minnesota. The Project consists of an approximately 100-acre residential development. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA staff has the following comments for your consideration.

Low Impact Design

The MPCA advocates the use of Low Impact Design (LID) practices to aid in the minimization of stormwater impacts. LID is a stormwater management approach and site-design technique that emphasizes water infiltration, values water as a resource, and promotes the use of natural systems to treat water runoff. Examples include:

- Special ditches, arranged in a series, that soak up more water
- Vegetated filter strips at the edges of paved surfaces
- Trees or swales between rows of cars
- Residential or commercial rain gardens designed to capture and soak in stormwater
- Porous pavers, concrete, and asphalt for sidewalks and parking lots
- Narrower streets
- Rain barrels and cisterns
- Green roofs

LID concepts may be found in the [State of Minnesota Stormwater Manual](http://www.pca.state.mn.us/water/stormwater/stormwater-manual.html) dated November 2005 located on the MPCA website at: <http://www.pca.state.mn.us/water/stormwater/stormwater-manual.html>.

In addition, the MPCA LID webpage provides a description and examples of LID features such as permeable pavement, rain gardens, and green roofs. Links to other resources on LID are available as well. The website is located at: <https://www.pca.state.mn.us/water/stormwater-management-low-impact-development-and-green-infrastructure>.

Mr. Ronald Moorse
Page 2
May 17, 2017

We appreciate the opportunity to review this Project. Please provide your specific responses to our comments and notice of decision on the need for an Environmental Impact Statement. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this EAW, please contact me at 651-757-2508.

Sincerely,



Karen Kromar
Planner Principal
Environmental Review Unit
Resource Management and Assistance Division

KK:bt

cc: Dan Card, MPCA, St. Paul
Teresa McDill, MPCA, St. Paul

EXHIBIT "M"

Joe Bush

From: Ron Moorse [rmoorse@ci.afton.mn.us]
Sent: Wednesday, June 07, 2017 4:50 PM
To: Joe Bush
Subject: RE: Alleged soil contamination

1 of 2

Thanks Joe.

From: Joe Bush [mailto:joe@joebushmn.com]
Sent: Wednesday, June 07, 2017 11:33 AM
To: Ron Moorse <rmoorse@ci.afton.mn.us>
Subject: FW: Alleged soil contamination

RON
HERE IS INFORMATION THAT WILL HELP THE NRCG AND THE PLANNING
COMMISSION.
JOE

From: Joe Bush [mailto:joe@joebushmn.com]
Sent: Monday, June 05, 2017 11:40 PM
To: Joe Bush
Subject: Fwd: Alleged soil contamination

Sent from my iPhone.

Begin forwarded message:

From: "CARLSON, WILL" <will@customdrywall.net>
Date: May 10, 2017 at 6:05:51 PM CDT
To: "joe@joebushmn.com" <joe@joebushmn.com>, Sandra Carlson <spograce1@comcast.net>
Subject: Fwd: Alleged soil contamination

Sent from my iPhone

Begin forwarded message:

From: "Haiker, Paul (MDA)" <paul.haiker@state.mn.us>
Date: May 10, 2017 at 2:52:15 PM CDT
To: "will@customdrywall.net" <will@customdrywall.net>
Subject: Alleged soil contamination

Will,

6/20/2017

It was a pleasure speaking with you yesterday. Per your request, I will summarize the information I presented you with yesterday.

About 3 weeks ago the MDA received a report alleging that sometime around the year 2000, the complainant noted a chemical smell in the air around their residence. The complainant observed an application being made to a nearby corn field located west of Odell Ave S and north of Trading post road. The complainant stated he spoke with the applicator who said they accidentally applied 50 gallons of atrazine to 40 acres of corn thus the strong odor. The complainant stated that you are now in possession of the field and intend to develop it soon.

If what the complainant is saying is true, the application would have been 2-3 times the intended rate. While this would have been excessive and should have been reported to the state at the time, there is no reason to suspect that this product could still be found in the subject field these 17 years later.

If you have further concerns or questions feel free to contact me.

Sincerely,

Paul Haiker

Agricultural Chemical Advisor

Pesticide & Fertilizer Management Division

651-201-6247

www.mda.state.mn.us

 Square-logo-
for-email-
signature-
100x82



EXHIBIT "O"

9A2

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date June 20, 2017

Council Action Memo

1 of 3

To: Mayor Bend and Members of the City Council
From: Ron Moorse, City Administrator
Date: June 8, 2017
Re: Will Carlson Afton Creek Preserve Sketch Plan for a Preservation and Land Conservation Development Subdivision North of 60th Street and West of Trading Post Trail – Resolution 2017-XX

Will Carlson has applied for a Preservation and Land Conservation Development (PLCD) Subdivision on a 219 acre site north of 60th Street and West of Trading Post Trail. The proposed subdivision would preserve 110 acres of open space through a conservation easement, and would create twenty 5-acre lots on the remainder of the site. Attached is a report regarding the PLCD proposal by Bob Kirmis, the City's Planning Consultant, as well as a number of related materials. The list of materials is as follows:

- Letter from the Neighborhood Group adjacent to the PLCD dated 2/3/2017
- Letter from the Neighborhood Group dated 2/14/2017
- Letter from the Neighborhood Group dated 3/29/2017
- Letter from the Neighborhood Group dated 5/23/2017
- Agency comment letters regarding the Environmental Assessment Worksheet (EAW)
- Minutes of the April 4, 2017 Natural Resources and Groundwater Committee (NRGC) meeting, at which the Committee approved recommendations regarding the PLCD sketch plan
- Meeting notes from the May 24 Park Committee meeting at which the Carlson PLCD was discussed.
- Memo from Kathy and Randy Graham regarding a possible easement to provide adequate sight distance for the proposed access to the subdivision off 60th Street in the southeast corner of the subdivision site
- Materials related to proposed park and trail amenities to be provided by the developer
- Letter from the adjacent Neighborhood Group to the Park Committee regarding the proposed bike trail plan
- Email from Paul Haiker of the Minnesota Department of Agriculture regarding an atrazine over-application in the year 2,000.
- Emails from John Loomis and Andrew Schilling of the South Washington Watershed District indicating no evidence of springs along the bluff on lots 3 and 4.
- Technical Memorandum from Bryant Ficek, with Spack Consulting, a traffic consultant for the developer, regarding a review of the access for the subdivision.
- Proposed covenants to be placed on each lot in the subdivision.

Environmental Assessment Worksheet (EAW)

An Environmental Assessment Worksheet (EAW) was prepared for the proposed subdivision. Rather than providing a hard copy of the EAW in the Council's meeting packet, the following is a link to the EAW on the City's website.

[http://www.ci.afton.mn.us/vertical/sites/%7B255148F5-88B9-45F6-9726-](http://www.ci.afton.mn.us/vertical/sites/%7B255148F5-88B9-45F6-9726-DD95D24AA11D%7D/uploads/Afton_Creek_Preserve_Environmental_Assessment_Worksheet.pdf)

[DD95D24AA11D%7D/uploads/Afton_Creek_Preserve_Environmental_Assessment_Worksheet.pdf](http://www.ci.afton.mn.us/vertical/sites/%7B255148F5-88B9-45F6-9726-DD95D24AA11D%7D/uploads/Afton_Creek_Preserve_Environmental_Assessment_Worksheet.pdf)

The EAW was published in the EQB Monitor and a notice of this publication and the opportunity and timing for providing comments regarding the EAW was published in the City's Official Newspaper. The period for providing comments expires on May 24. Comment letters received from agencies responsible for commenting on the EAW are attached.

Recommendations from the NRG

The NRG recommendations are set out in the minutes of the April 4, 2017 NRG meeting, which are attached.

Recommendations from the Park Committee

The Park Committee discussed the PLCD Sketch Plan at its May 24 meeting, and its recommendations are as follows:

“Based on the current development plan presented, the Committee recommends dedication of limited land to the City as a park for the purpose of future use and the balance as a park dedication fee. This assumes the developer will provide public access at the end of the cul-de-sac and along 60th street to the open space areas. Access points will have infrastructure, such as benches, off street parking off 60th and natural informational signage.” Approved Unanimously by the Committee

Public Hearing

A public hearing was held at the June 5 Planning Commission meeting. The minutes of the Planning Commission meeting, which are included in the Council meeting packet, include an outline of the public comments regarding the proposal. A summary of the public comments is as follows.

Public Comments

- Does the proposed street access require grading in an area of 18% slope to meet sightline requirements?
- Is the bridge on 60th and Trading Post adequate for the additional traffic that would be generated by the proposal?
- Concerns were expressed regarding the safety of the access intersection
- It was suggested that the City obtain land vs. a cash contribution for the park dedication requirement
- The length of cul de sac streets proposed to serve the development is substantially longer than is generally allowed by ordinance, although the PLCD allows flexibility in cul de sac length.
- The five-acre lots will have a negative effect on the rural character of the area.
- The proposal does not match the purpose of the PLCD ordinance, which includes preserving the health, safety and welfare of adjacent residents.
- Much of the land included in the PLCD is environmentally sensitive
- Neighbors to the east of the proposed development have an erosion issue due to drainage coming from the PLCD site. There is no indication on the sketch plan regarding a solution to this problem
- The proposal undermines the Comprehensive Plan in regard to the preservation of rural character and open space

Planning Commission Review of the PLCD Sketch Plan

As indicated in the planning consultant’s report, the Planning Commission was not asked to provide a recommendation regarding the PLCD proposal at this time, but was asked to provide comments to guide the applicant in preparing the Preliminary Plat application, which is the next step in the PLCD application process.

Planning Commission Comments

The Planning Commission raised a number of questions regarding the proposal. These are outlined in the Planning Commission meeting minutes, and are also summarized below.

- Vegetative Buffers should be installed by the developer, not by the owners of the individual lots. [The developer indicated vegetative buffers would be installed on all vacant lots by the developer]
- Can the City limit the amount of trees that can be removed? (The City’s Shoreland Management regulations allow trees to be removed to construct a house, septic system and driveway. [Other cities have more strict tree preservation regulations, or place conditions on subdivisions, that minimize the amount of tree removals for homes and driveways, and that require driveways to be located in a way that screens the houses from the street.]
- Atrazine spill (over-application). [Please see the attached email from Paul Haiker, Agricultural Chemical Advisor with the State Department of Agriculture indicating that if the atrazine over-application occurred about 17 years ago, it would no longer be in the soil.]

- What is the planned use of the 16.5 foot wide strip owned by the developer that runs from the PLCD property to Trading Post Trail? [The developer has indicated the use has not been determined. The developer has suggested it could be a public bike trail or an emergency access for public safety vehicles. The City Attorney has indicated the strip is owned in fee by the developer and could be used for a number of uses, including a pedestrian and/or bike trail. It cannot be used as a public road. The use of this strip should be determined as part of the preliminary plat process, so that any special conditions deemed necessary for the use can be addressed as part of the preliminary plat review process.]
- How will the accelerated run-off from the increased impervious surface be managed? [The developer will be required to manage the drainage from all new impervious surfaces through a grading and drainage plan. The developer has been provided with the City's Stormwater Management Ordinance which incorporates Minimal Impact Design Standards.]
- Who will own and maintain the open space area? [The Home Owners Association will own and maintain the open space area.]
- Do all changes to architectural controls in the covenants require city approval? The conditions of approval of the plat and the CUP, as well as the development agreement, could require city approval of changes to architectural controls and particularly the items of most interest to the City.]
- Who will enforce the maintenance of plantings? [The Home Owners Association will be responsible for the maintenance of plantings. The City would also enforce the maintenance of plantings through conditions placed on the plat and the CUP.]
- Any public access to the open space area needs to be clearly and strongly set out in the conservation easement and in any approval documents
- Lots 3 and 4 have steep slopes and potential springs that feed the trout stream. The DNR expressed the same concern. [Please see the attached emails from John Loomis and Andrew Schilling of the South Washington Watershed District (SWWD) indicating the SWWD completed a ravine stabilization project in this area and did not find any evidence of springs.]
- Is the Home Owners Association (HOA) responsible for the maintenance of trails, etc? [Yes.]
- It is important to ensure the safety of the intersection that provides the access to the development. [Please see the attached technical memorandum from Bryant Ficek of Spack Consulting. The City Engineer is reviewing this memorandum and will provide comments for the Council meeting.]
- The 5-acre RR-zoned parcel in the southeast corner of the sketch plan needs to be rezoned prior to action regarding the preliminary plat
- Much more detail needs to be provided regarding the buffer zones as part of the preliminary plat
- How are unbuilt lots going to be vegetated? [The developer will seed all lots with a seed mix based on the seed mix used by the DNR and the South Washington Watershed District (SWWD). This seeding will be included in the development agreement, which includes an escrow deposit to ensure it is completed.]
- Lot 20 has a very irregular shape. [The City code, in 12-1387 Lot requirements, provides that "Side lot lines shall be substantially at right angles to straight street lines or radial to curved street lines or radial to lake or stream shores unless topographic conditions necessitate a different arrangement.]
- Do the covenants require 50% of the buildable area to be vegetated or only 50% of the total lot? [The developer indicated 50% of the total lot needs to be vegetated]
- Do the covenants allow barns, farm animals (chickens, etc.) and similar rural/agricultural items? [The developer indicated these would be restricted]

Council Direction Requested

The Council is not being asked to take action regarding the PLCD proposal at this time, but is being asked to provide comments to guide the applicant in preparing the Preliminary Plat application, which is the next step in the PLCD application process. It is important that, if the Council has significant questions, concerns or objections regarding the proposal, they should be communicated to the applicant at this time, so that they can be considered by the applicant in the preparation of a preliminary plat.

EXHIBIT "Q"

1 of 2

Joe Bush

From: Ron Moore <rmoorse@ci.afton.mn.us>
Sent: Thursday, August 10, 2017 11:27 AM
To: Wayne Ostlie; Joe Bush
Subject: RE: Joe bush Afton creek

Wayne and Joe,

Regarding who is to have an interest in the conservation easement, here is the language from our PLCD ordinance.

"The applicant(s) shall grant a Conservation Easement which shall run with the land in perpetuity to the City of Afton, all of the owners of the lots and parcels to be created in the PLCD, all land owners of property within Afton abutting the PLCD and the Minnesota Land Trust (or similar independent third party approved by the City of Afton), which restricts the lots and parcels, as well as the development rights on the undeveloped parcel(s), within the PLCD to the number of dwelling units approved for the PLCD and the land cover and use approved by the City of Afton as a part of this PLCD."

Regarding who will own and maintain the area in the conservation easement, this will be the Homeowners Association. The ordinance language is as follows:

"All land shown on the final development plan as an undeveloped parcel must be conveyed to a homeowners association or similar organization provided in an indenture establishing an association or similar organization for the maintenance of the planned development. The undeveloped parcel must be conveyed to the homeowners association or similar organization subject to covenants to be approved by the City Council which restrict the undeveloped parcel to the uses specified on the final development plan and which provide for the maintenance of the undeveloped parcel in a manner which assures it continuing use for its intended purpose."

Ron

-----Original Message-----

From: Wayne Ostlie [mailto:wayneostlie@minnesotalandtrust.org]
Sent: Wednesday, August 09, 2017 9:48 PM
To: Joe Bush <joe@joebushmn.com>
Cc: Ron Moore <rmoorse@ci.afton.mn.us>
Subject: Re: Joe bush Afton creek

Thanks Joe.

And Ron, one additional question as well. Is the City of Afton intending to co-hold the easement with the Minnesota Land Trust, or would the Land Trust be sole holders?

Thanks much!

Wayne

> On Aug 9, 2017, at 9:45 PM, Joe Bush <joe@joebushmn.com> wrote:

>

> Ron

> I have an important question that was raised by Wayne at Minnesota
> land trust

>

> I need the very specific language or close to the specific language in regards to the
ownership of the conservation land after Minnesota land trust is contracted.

>

> If I am correct the property ownership is deeded to the homeowners association as the
property owners.

>

EXHIBIT "Q"

2 of 2

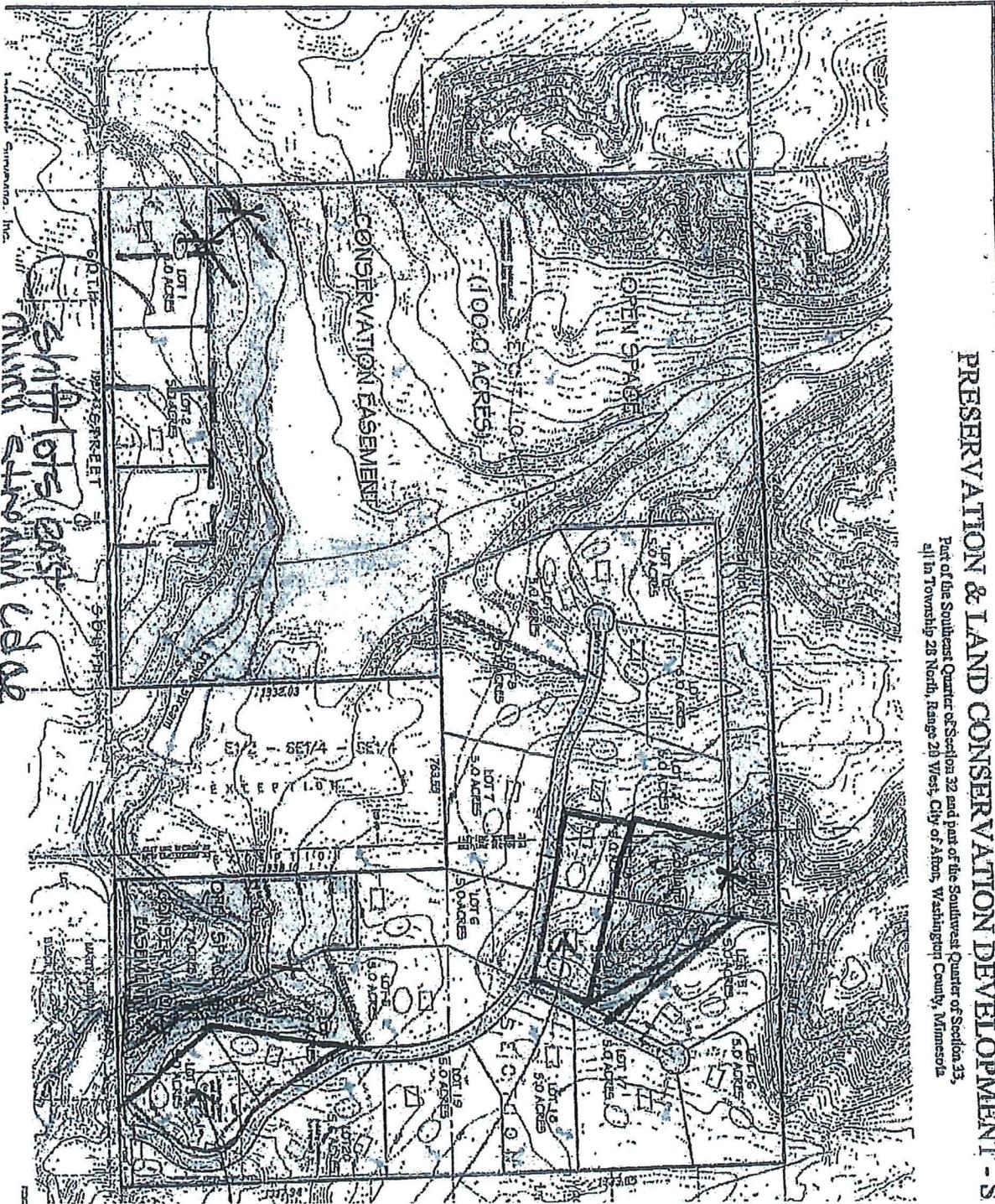


Figure 3 - Post-Construction Site Plan

PRESERVATION & LAND CONSERVATION DEVELOPMENT - S
Part of the Southeast Quarter of Section 32 and part of the Southwest Quarter of Section 33,
all in Township 28 North, Range 28 West, City of Alton, Washington County, Minnesota

EXHIBIT "Q"

Joe Bush

From: Ron Moorse <rmoorse@ci.afton.mn.us>
Sent: Thursday, August 03, 2017 3:25 PM
To: Joe Bush
Subject: 60th Street paving

Joe,

I talked to our Public Works Supervisor about the segment of 60th Street that was removed from the 2017 paving project. The segment is from the end of the pavement on Trading Post Trail to the "Y" at Oakgreen in Denmark Township. The segment was removed from the project for two reasons. One was that we found that a portion of that segment was saturated with groundwater and we didn't have time to resolve that problem in time to be ready for the paving project. The second reason is that some or all of 60th street is located in Denmark Township. Particularly, the segment near the "Y" is located 100% in Denmark Township.

Ron



J.P. Bush
H O M E S

August 14, 2017

SUPPLEMENTARY NARRATIVE FOR PARK DEDICATION, LAND TRUST, AND CITY CODE

Property: 14220 60th St S Afton MN 55001
Will Carlson owned 218.6 Acres

Usage: Previously operated under Agriculture Zoning.
Request to Use Ordinance Article XII Sec. 12-2371
PRESERVATION AND LAND CONSERVATION DEVELOPMENTS

Proposer: Will Carlson, Land Owner.
JP Bush Homes, Developer.

Afton Creek Preserve Owner Will Carlson Dedicated Land, Open Space, and Conservation Easements to The City of Afton, Minnesota Land Trust, and HOA. The Site Plan and Development Plan include "Open Space" "Public Access in Three Locations" "Conservancy" "Waterway Protection" "Wildlife Protection" "Scenic Easements" "Trails" "Benches" "Wild Flower Buffers" "Walking Trails" "Permanent Protection and HOA funded maintenance" "Elimination of Lot #1. To Protect the Scenic views per the NRCG"

Per the City code and Parks Plan. The following documents are evidence That the Dedicated land in the Afton Creek Preserve Meets the requirements of City Code for Park Dedication Fees and or Land acquisition for Park or open Space.

Afton Creek Preserve dedication of, Conservancy, Land Trust, Open Space are by "definition" listed in the **2012 Afton Parks Plan.**

Highlighted pages and Language. From 2012 Parks Plan

1. (Page 6) Due to this fact, the committee feels that most parcels the city owns are not suitable for development as parks, either active or passive, and as a whole do not meet the intention of the Park Dedication requirement. The exceptions to these findings are noted below. For this reason the committee recommends the city very carefully consider accepting land donations in the future, and have a clear and defined use for any land received in lieu of park dedication funds.

2. (Page 6) Per the 2008 Comprehensive Plan, a priority for the acceptance of land in lieu of Park Dedication funds should be to obtain designated open spaces to provide for wildlife corridors, as well as to protect locally important water resources and scenic and natural features.
3. (Page 7) In all areas, and as resources permit, the city should work to reduce the negative impact of invasive species, most notably buckthorn in our parks
4. (Page 8) The preservation of appropriate recreational and scenic areas, natural resources, wildlife habitat and unique landforms is a vital responsibility for all sectors of government. This obligation becomes increasingly apparent as the Twin Cities Metropolitan Area expands outwards and reduces open space.
5. (Page 8) Open space is defined as public land owned by the city and/or private land leased by the city for use by the general public. Open space can be used as a buffer between uses, a connector of recreational facilities or simply a natural area, which is preserved for its resources, landforms, wildlife habitat or aesthetic value. Open space can be a visual entity as well as a physical entity. Such an area need not be a vast expanse of land to be considered open space. A narrow strip of land, in some cases, can afford the visual effect of openness, while acting as a physical connector. Scenic roadways, trails and bicycle paths, although not extremely wide, can supply visual open space and act as linkage between recreational areas, thus providing the active aspect of recreation, while at the same time providing the passive form - open space. Afton's approach toward building a parks, recreation and open space system is to evaluate open space for its recreational and scenic values, natural resources, wildlife habitat and unique landforms, and to coordinate acquisition and development. The plan is intended to chart a course and provide a framework for developing and maintaining the Afton Park system. The Plan will also serve as a guide for city commissioners, the City Council and the citizens of Afton. Afton will coordinate its planning efforts with other governmental units, foundations, agencies and individuals that plan or provide recreational or open space affecting Afton.
6. (Page 9) C. Conservancy Park - Park that has unusual topography, flood plain, shore line, fragile soils, wetland, unique soil or rock formations, ravines. Serves limited passive use, trails, plant and animal viewing, interpretation, areas, canoe landings, swimming areas, picnicking
7. (Page 9) E. Open Space Park - Open space can be thought of as a divider of uses, a connector to active or passive recreation or simply a natural area that is preserved for its aesthetic, natural or scenic value. It also may be parkland the city has acquired in the past and elected not to develop
8. (Page 22) **FUTURE CONSERVANCY PARK**
The 2008 Afton Comprehensive Plan Highlights several areas for preservation and protection. These are Creeks, coulees and Mounds.

9. (Page 24-25) **SUMMARY OF RECOMMENDATIONS**
Entire Paragraph Letter "A" "D" "E" "K" "L" "O"

10. Page (26) **ADDENDUM:**
Items 1, 2, 7, 8 of "Open Space Goals"
Items 1, 5 of City of Afton Established Parks and Open Space Policies:

The above Listed Items Show, City of Afton's desires, Policy and Code to Protect and Preserve.

AFTON CREEK PRESERVE

The Development is not a Burden to the Parks System and is actually a significant Contributor to the Parks System. **Therefore:** No Park Dedication Fee or Park dedication of land is required by the Owner and Developer.

Joseph P Bush
J.P. Bush Homes

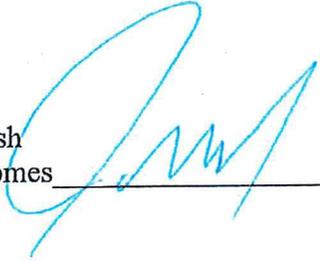

_____ Will Carlson _____

EXHIBIT "S"

Secs. 12-2356 – 12-2370. Reserved.⁴⁵²

ARTICLE XII. PRESERVATION AND LAND CONSERVATION DEVELOPMENTS.⁴⁵³

Sec. 12-2371. Scope.

This article applies to Preservation and Land Conservation Developments (PLCD) in the Agricultural (AG) zoning district.

Sec. 12-2372. General provisions.

A PLCD is a tract of land that is developed as a unit under single or unified ownership or controls. A Preservation and Land Conservation Development may be allowed in the AG zoning district to preserve prime agricultural land, woodland, wildlife habitat, vistas, groundwater recharge areas, areas with sensitive soils or geological limitations and areas identified in the Comprehensive Plan. Uses not otherwise allowed in the zoning district are prohibited within a planned development unless specifically permitted by provisions of this ordinance.

Sec. 12-2373. Purpose.

The purposes of this article are:

- A. To permit subdivisions in the Agricultural Zoning District which require the construction of a new public street.
- B. To encourage a more creative and efficient development of land and its improvements through the preservation of agricultural land, natural features and amenities than is possible under the more restrictive application of zoning requirements, while at the same time, meeting the standards and purposes of the comprehensive plan and preserving the health, safety, and welfare of the citizens of the City.
- C. To preserve open space, to preserve the natural resources of the site and to preserve wildlife habitat and corridors.
- D. To facilitate the economical provision of streets and public utilities.
- E. To allow the transfer of development rights (density) within a subdivision in order to preserve agricultural land, open space, natural features and amenities.

Sec. 12-2374. Permitted uses.

The Permitted Uses are:

- A. Those uses that are permitted in the underlying zoning district;
- B. Subdivisions that require the construction of a new public street in the AG zoning district;

Sec. 12-2375. General standards for approval.

- A. A Conditional Use Permit shall be required for all preservation and land conservation developments. The City may approve the preservation and land conservation development only if it finds that the development satisfies all of the following standards:
 1. The preservation and land conservation development is consistent with the comprehensive plan of the City.

⁴⁵² Ord. 97-55, 6/18/02, Ord 04-2009, 5/19/2009

⁴⁵³ Ord 06-2008, 4/15/2008; Ord 02-2014, 5/20/2014

AFTON CODE

2. The preservation and land conservation development is an effective and unified treatment of the development possibilities on the project site and the development plan provides for the preservation of unique natural amenities.
 3. The preservation and land conservation development can be planned and developed to harmonize with any existing or proposed development in the areas surrounding the project site.
- B. The tract is a minimum of eighty (80) contiguous acres in size and that all of the following conditions exist:
1. The proposal better adapts itself to the physical and aesthetic setting of the site and with the surrounding land uses than could be developed using strict standards and land uses allowed within the underlying zoning district.
 2. The proposal would benefit the area surrounding the project to a greater degree than development allowed within the underlying zoning district.
 3. The proposal would provide land use and/or site design flexibility while enhancing site or building aesthetics to achieve an overall higher quality of development than would otherwise occur in the underlying zoning district.
 4. The proposal would ensure the concentration of open space into more workable or usable areas and would preserve the natural resources of the site more effectively than would otherwise occur in the underlying zoning district.
- C. At least fifty (50) percent of the total tract is preserved as an undeveloped parcel.

Sec. 12-2376. Density, Frontage on a Public Street and Length of Cul-de-sac requirements.⁴⁵⁴

- A. The average density over the proposed PLCD shall not exceed the maximum density permitted in the underlying zoning district.
- B. The maximum length of cul-de-sacs may be exceeded to accommodate curvilinear streets and other design elements that tend to preserve the rural character or other resources within the PLCD.

Sec. 12-2377. Coordination with subdivision regulations.

- A. It is the intent of this article that subdivision review under Chapter 12 be carried out simultaneously with the review of a planned development under this article.
- B. The plans required under this article must be submitted in a form that will satisfy the requirements of Chapter 12 for the preliminary and final plats.
- C. Parcels which contain their maximum permitted density or have been previously subdivided to their permitted density may not be joined to a PLCD.

Sec. 12-2378. Pre-application meeting.

Prior to the submission of any plan to the Planning Commission, the potential applicant is encouraged to meet with the City Administrator to discuss the contemplated project relative to community development objectives for the area in question and to learn the procedural steps and exhibits required. This includes the procedural steps for an Administrative Permit and a preliminary plat. The potential applicant may submit a simple sketch plan at this stage for informal review and discussion. The potential applicant is urged to seek the advice and assistance of the City staff to facilitate the informal review of the simple sketch plan. The pre-application meeting process is entirely optional for the potential applicant and does not constitute an application within the meaning of this section.

Sec. 12-2379. General development plan.

- A. An applicant shall make an application for an Administrative Permit following the procedural steps as set forth in Section 12-78.
- B. In addition to the criteria and standards set forth in Sec. 12-78 of this article for the granting of Administrative Permits, the following additional findings shall be made before the approval of the outline development plan:

⁴⁵⁴ Ord 02-2014, 5/20/2014

CONVEYANCE
AFTON CODE

- D. The City Council shall review the final development plan and final plat. If the final development plan is approved by the City Council, the City Administrator shall issue a Conditional Use Permit to the applicant.
- E. The applicant(s) shall grant a Conservation Easement which shall run with the land in perpetuity to the City of Afton, all of the owners of the lots and parcels to be created in the PLCD, all land owners of property within Afton abutting the PLCD and the Minnesota Land Trust (or similar independent third party approved by the City of Afton), which restricts the lots and parcels, as well as the development rights on the undeveloped parcel(s), within the PLCD to the number of dwelling units approved for the PLCD and the land cover and use approved by the City of Afton as a part of this PLCD. If neither Minnesota Land Trust nor any comparable organization will accept the Conservation Easement the City of Afton, in its sole discretion, may upon a specific finding that no conservation organization will accept a Conservation Easement, waive such requirement. In the case of such waiver, the applicant(s) shall be required to extend the grant of a Conservation Easement to the owners of property that abuts all abutting property to the PLCD.

Sec. 12-2381. Enforcement of development schedule.

The construction and provisions of all of the common open spaces and public and recreational facilities that are shown on the final development plan must proceed at the same phase as the construction of dwelling units. At least once every six (6) months following the approval of the final development plan, the City Administrator shall review all of the building permits issued for the planned development and examine the construction which has taken place on the site. If he shall find that the rate of construction of dwelling units is greater than the rate at which common open space and public and recreational facilities have been constructed and provided, he shall forward this information to the City Council, which may revoke the PLCD permit.

Sec. 12-2382. Conveyance and maintenance of undeveloped parcel.

- A. All land shown on the final development plan as an undeveloped parcel must be conveyed to a homeowners association or similar organization provided in an indenture establishing an association or similar organization for the maintenance of the planned development. The undeveloped parcel must be conveyed to the homeowners association or similar organization subject to covenants to be approved by the City Council which restrict the undeveloped parcel to the uses specified on the final development plan and which provide for the maintenance of the undeveloped parcel in a manner which assures its continuing use for its intended purpose.
- B. If a homeowners association is created, the applicant shall submit plans at the time of final plan of development and documents which explain:
 - 1. Ownership and membership requirements.
 - 2. Articles of incorporation and bylaws.
 - 3. Time at which the developer turns the association over to the homeowners.
 - 4. Specific listing of items owned in common including such items as roads, recreation facilities, parking, common open space grounds, and utilities.

Sec. 12-2383. Standards for undeveloped parcel.

No open area may be approved as common undeveloped parcel under the provisions of this article unless it meets the following standards:

- A. The location, shape, size, and character of the undeveloped parcel must be suitable for the planned development.
- B. The undeveloped parcel must be used for amenity or recreational purposes. The uses authorized for the undeveloped parcel must be appropriate to the scale and character of the planned development, considering its size, density, expected population, topography, and the number and type of dwellings to be provided.
- C. The undeveloped parcel must be suitably improved for its intended use but common space containing natural features worthy of preservation may be left unimproved. The buildings, structures and improvements which are permitted in the undeveloped parcel must be appropriate to the uses which are authorized for the

AFTON CODE

- B. Economic considerations alone shall not constitute a practical difficulty if reasonable use for the property exists under the terms of this article.
- C. Applications for any such variance shall be made in writing by the subdivider at the time when the plat is filed for consideration. Such application shall state fully all facts relied upon by the subdivider, and shall be supplemented with maps, plans or other additional data which may aid the Planning Commission and the City Council in the analysis of the proposed project. Such variances shall be considered at the next regular meeting held by the Planning Commission. The plans for such development shall include any covenants, restrictions, or other legal provisions necessary to guarantee the full achievement of the proposed plat. Any variance or modifications thus granted shall be recorded and entered in the minutes setting forth the reasons for granting the variance.

Sec. 12-1267. Security interest.³⁴⁶

Creation of a security interest in a portion of a parcel less than the entire parcel does not entitle the property to subdivision even upon foreclosure of the security interest, unless otherwise approved by the City Council and the parcel is in conformance with this article and the zoning ordinance, article II of this chapter.

Sec. 12-1268. Building permits.³⁴⁷

No building permit shall be issued for any construction, enlargement, alteration, or repair, demolition or moving of any building or structure on any lot or parcel until all the requirements of this article have been fully met.

Sec. 12-1269. Violation and penalties.³⁴⁸

Any person who violated any of the provisions of this article, or who sells, or offers for sale any lot, block or tract of land herewith regulated before all the requirements of this article have been complied with shall be guilty of a misdemeanor, and upon conviction thereof be subject to fine and/or imprisonment. Each day that a violation is permitted to exist shall constitute a separate offense.

Sec. 12-1270. Park and open space dedication.³⁴⁹

- A. *Purpose.* The City Council recognizes that it is essential to the health, safety, and the welfare of the residents of this City to provide for the preservation of land for parks, playgrounds, public open space, and trails. The City Council also finds that it is appropriate that each subdivision within the City contribute toward the City's parks, playgrounds, open spaces, and trails in proportion to the burden it will place upon the City's park and open space system. Therefore, this park and open space dedication requirement is established to require new developments at the time of subdivision to contribute toward the City's park and open space system in rough proportion to the relative burden they will place upon that system, and:
 - 1. To develop a limited number of major public green spaces which shall retain the natural and scenic features of the land and serve as a wilderness environment for City residents to enjoy; and
 - 2. To create multiple use, non-motorized trails along roads or as a link between various points of interest and public facilities where such trails would enhance the recreational opportunities for residents and provide a safe alternative means of travel within the City; and
 - 3. If future development creates a need for a neighborhood park, land may be acquired for that purpose pursuant to this article.
- B. *Requirements.* Subdividers, as a prerequisite to approval of a subdivision, shall dedicate to the City for park or playground purposes or for public open space or trail systems a reasonable portion of the land being subdivided or in lieu thereof a cash equivalent. The form of dedication, land or cash, (or any combination) shall be decided by the City and dedicated or paid prior to City signing the final plat, or prior to final City Council approval of minor subdivisions.

³⁴⁶ Code 1982, § 305.1011

³⁴⁷ Code 1982, § 305.1100, Cross reference(s)--Building permits, inspections and fees, § 12-1804.

³⁴⁸ Code 1982, § 305.1102

³⁴⁹ Ord 47-2004, 8/17/2004

LAND USE

1. Reasonable portion of land shall be that portion of land which could be purchased with the amount of park dedication fee payment owed by the subject subdivision on a per dwelling unit basis.
 2. Land to be dedicated shall be reasonably adaptable to use for active park and recreation purposes, shall be at a location convenient to the people to be served, and shall be consistent with the general locations as indicated in the official parks map and/or comprehensive parks plan. Factors used in evaluating the adequacy of proposed park and recreation areas shall include size, shape, topography, geology, hydrology, tree cover, access and location.
 3. Where a proposed park, playground, recreational area, or open space that has been indicated in the official park map and/or comprehensive park plan is located in whole, or in part, within a proposed subdivision the site must be dedicated to the City. If the subdivider chooses not to dedicate an area in excess of the land required hereunder for such proposed public site, the City shall not be required to act to approve or disapprove the preliminary plat of the subdivision for a period of sixty (60) days after the subdivider meets all the provisions of the Subdivision Ordinance in order to permit the Council to consider the proposed plat and to consider taking steps to acquire, through purchase or condemnation, all or part of the public site proposed under the official park map in the comprehensive parks plan.
 4. Land area conveyed or dedicated hereunder may not be included by a subdivider as an allowance for purposes of calculating the density requirements of the subdivision as set out in the City Zoning Ordinance and shall be in addition to and not in lieu of scenic easement, conservation easements, and open space requirements pursuant to the City Zoning Ordinance.
 5. The City may determine that land not distinguished in its official parks map and/or comprehensive parks plan is needed as a neighborhood park. Should this determination be made, an amendment to the official parks map and/or comprehensive parks plan shall be made identifying the neighborhood park. Should the City determine that land in excess of what can be obtained via Section 12-1270 (B) (1) is required, the remaining area shall be purchased from the applicant by the City via its park and trail fund at a fair market value.
 6. When a cash park dedication fee is paid in lieu of a dedication of land, the subdivider shall pay a per dwelling unit fee as described in Section 12-1270 (C) (3) and (D).
 7. The City shall maintain a separate fund into which all cash park dedication fees received from owners or subdividers in lieu of conveyance or dedication of land for park or playground, public open space or trail purposes shall be deposited and shall make, from time to time, appropriations from such fund for acquisition of land for park and playground purposes, for developing existing park and playground sites, for public open space and trails, or for debt retirement in connection with land previously acquired for parks and playgrounds, which will benefit the residents of the City.
- C. *Administrative Procedure.* When an application for subdivision is submitted, the City Administrator and City Planner shall evaluate its location with that of the official parks map and the comprehensive parks plan to determine whether land is to be recommended for dedication.
1. Should the subject site be located within an area designated for future parkland, open space, or trail corridor, as designated in the official parks map and comprehensive parks plan, the City Administrator and City Planner shall submit the proposed subdivision to the Park Committee for its review and recommendation.
 2. The Park Committee shall make a determination as to what portion or portions of the site may be dedicated to the City for parkland, open space, or trail use as described in the official park map in the City's Comprehensive Park plan. The subdivider shall be made aware of this recommendation which will be forwarded to the Planning Commission for their review and recommendation to the City Council.
 3. Should the subject site be outside of any future proposed parkland, open space, trail or wildlife corridors, or wildlife habitat areas as defined in the official park map and the comprehensive park plan, the City Administrator shall inform the subdivider and the process will continue with the recommendation for a cash park dedication fee in lieu of land dedication in a per dwelling unit amount as defined in Section 12-1270 (D).
 4. Though the subject site may not be located in an area identified for future parkland, open space, trail or wildlife corridor, or wildlife habitat area in the official park map and comprehensive park plan, the Planning Commission may recommend and the City Council may require that a reasonable portion of the land be dedicated to the City, at which time the subdivision will be sent to the Parks Committee for their review and recommendation as to the sites location. Reasonable portion of the land shall be defined as that portion of land in which could be purchased with the amount of park dedication fee payment owed by the subject subdivision per dwelling unit being proposed.

LAND USE

- B. The annual probability of increased rate of surface runoff due to new construction shall not exceed one percent.
1. Annual probability shall not exceed one percent means that a 100-year storm of appropriate duration should be used for design but that storms of lesser magnitude (e.g., two-year or ten-year storms) should be examined as well.
 2. Surface runoff is the water leaving the property on or very near the surface (e.g., including the gravel subgrade of a parking lot).
 3. Surface runoff rate is the peak discharge as calculated by the S.C.S. T R 20 for a storm of critical duration.

Sec. 12-1384. Easements.³⁷²

- A. *Provided for utilities.* Easements of at least 20 feet wide, centered on rear and other lot lines as required, shall be provided for utilities where necessary as recommended by the City Engineer. Where underground utilities are being installed, a ten-foot wide front or side yard easement may be required.
- B. *Provided for drainage.* Easements shall be provided along each side of the centerline of any watercourse or drainage channel, whether or not shown on the comprehensive plan, to a sufficient width to provide proper maintenance and protection and to provide for stormwater runoff and installation and maintenance of storm sewers.
- C. *Dedication.* Utility and drainage easements shall be dedicated for the required use.
- D. *Trails.* Trail easements shall be provided as required by the City Council in compliance with the comprehensive plan.
- E. *Scenic easements.* Scenic easements shall be required on slopes of 18 percent and greater, wetlands, drainageways, and other lands and soils judged to be fragile by the soil conservation service. Scenic easements also shall be required on slopes greater than 12 percent if the land is unbuildable or heavily wooded and would be affected adversely by development. Such easements shall be required as a condition of subdivision approval, and shall prohibit the following activities: Dumping, burning, grading, grazing of domesticated farm animals, vegetative cutting in excess of prudent forestry practices as approved by the Forestry Division of the Minnesota Department of Natural Resources, motorized vehicles, construction of any structure including driveways. Such scenic easements shall be recorded against the affected lots in the subdivision.
1. The City shall have the right to reasonable access to easement areas to verify compliance with the restrictions, and to cross adjacent lands in common ownership with the easement area to obtain such access.
 2. A scenic easement prohibits the owner from engaging in harmful activities in the area subject to the easement, but does not grant the general public any right of access to the land.

Sec. 12-1385. Street names.³⁷³

Names of new streets shall not duplicate existing or platted street names unless a new street is a continuation of or in alignment with the existing or platted street, if it shall bear the same name of the existing or platted street so in alignment. Street names shall conform to the county uniform street naming and property numbering system as applicable.

Sec. 12-1386. Block design.³⁷⁴

- A. Block length and width or acreage within bounding streets shall be such as to accommodate the size of residential lots required in the area by the zoning ordinance, article II of this chapter, and to provide for convenient access, circulation control, and safety of street traffic.

³⁷² Code 1982, § 305.711; Res 1997-16, § 20, 6-17-97, Ord 1997-13, 9-22-98

³⁷³ Code 1982, § 305.713, Cross reference – Streets and sidewalks, Ch. 20.

³⁷⁴ Code 1982, § 305.714

Exhibit N

Joe Bush

From: Jim Stanley - Lower St. Croix Valley Fire Dept. <Jim.Stanley@lscvfd.com>
Sent: Friday, August 11, 2017 1:35 PM
To: Joe Bush
Cc: rmorris@ci.afton.mn.us
Subject: Roads

1 of 1

Joe To answer your question about roads and FD response. We have worked with city of Afton to develop there road specs with our response in mind. They developed these specifications with our vehicle size, weight, and turning radius. So as far as the fire deptment is concerned if you follow the road specs from the city of Afton there should be no issues with our response.

Jim Stanley, Chief
Lower St. Croix Valley Fire Dept.
1560 St. Croix Tr. S. P.O. Box 234
Lakeland, Minnesota 55043
Phone: (651) 436-7033 Fax: (651) 436-1682
Direct Phone: (651) 248-5103

EXHIBIT "T"

1 of 2

May 17, 2017

Ronald Morse, City Administrator
City of Afton
3033 St. Croix Trail S
Afton, MN 55001

RECEIVED
MAY 23 2017
CITY OF AFTON

RE: **City of Afton Environmental Assessment Worksheet (EAW) – Afton Creek Preserve**
Metropolitan Council Review No. 21714-1
Metropolitan Council District 12

Dear Mr. Morse:

The Metropolitan Council received an EAW for a proposed residential project on April 17, 2017. The EAW is for a proposed residential cluster (20) lot single-family development on 218.6 acres with 109.7 acres of conservation easement protection for Trout Brook. The development will have individual wells and septic systems, and special vegetative buffers protecting steep slopes. The development site was previously used for farming, pasture, hay land and forest land.

The proposed project area is zoned Agriculture, along with Shoreland Management areas and a Conservancy Overlay. The City's 2030 Comprehensive Plan Current Land Use Map identifies this area as including existing land uses such as deciduous tree cover, cultivated, pasture, grassland, residential, bluff areas, streams and wetlands. The City's 2030 Future Land Use Map guides this area as Agriculture which allows a maximum density of 4 units per 40 acres.

Council staff has conducted a review of this EAW to determine its adequacy and accuracy in addressing regional concerns and the potential for significant environmental impact. The staff review finds that the EAW is complete and accurate with respect to regional concerns and does not raise issues of consistency with Council policies. The following section offers advisory comments for the City's consideration.

Item 13 – Fish, wildlife, plant communities, and sensitive ecological resources (rare features)
(Jim Larsen, 651-602-1159)

The EAW states that the proposed 60-foot vegetative "backyard" lot buffers will protect steep slope areas (identified as "bluff areas of over 18% slopes" on page 12, and "steep slope areas" of unspecified slope elsewhere in the document) against erosion, and increase wooded/forest and brush/grassland areas on lots within the development. Appendix B is referenced for plans of the buffer program, but it is not clear from the information provided, if all lots or only a portion will contain 60-foot buffer protection areas, precisely where the boundaries of the buffer will begin, and what level of preservation will be extended to site amenities "behind" the buffer. It appears from the Council's GIS database slope overlay information, that the only proposed lots containing existing mapped slopes in excess of 18% are lots 3 and 4 in the southeast corner (lot 3 contains an existing home which is to remain), the very north edge of lots 15 and 16 in the northeast portion of the site, and a few isolated areas within the proposed 100-acre open space conservation easement area in the northwest corner of the site.

While we agree that avoiding impacts to steep slope areas on the site by application of a protection buffer to those areas will be beneficial, Council staff is also concerned about protection of areas within proposed lots to be developed that are dominated by mature native oak woodlands. The woodlands have been mapped by the Council and Minnesota Department of Natural Resources in their Natural Resources Inventory/Assessment program as supporting native red and white oak and sugar maple communities of "moderate" assessed quality. Large portions of lots 10 through 14 along the northern site boundary – in some cases, more than half of each lot's platted area, and smaller portions of lots 15 and 16, consist of these mature woodlands. We recommend these woodland areas be specifically protected from impacts by future land owners within the development, either by redrawing of proposed lot lines to include (more or all of) the wooded areas within the proposed development's conservation easement area, or by affording them a similar level of protection as provided by the conservation easement from future impacts in some fashion.

While we understand the importance of and mechanism by which the stream channel areas within the proposed 100-acre open space conservation easement area will be protected, we do not have a similarly clear understanding of precisely what protection mechanisms will be utilized with the 60-foot buffers to protect natural resource woodland stands behind those buffers that will be located on privately held land.

This concludes the Council's review of the EAW. The Council will not take formal action on the EAW. If you have any questions or need further information, please contact Corrin Wendell, Principal Reviewer, at 651-602-1832.

Sincerely,

 for:
LisaBeth Barajas, Manager
Local Planning Assistance

CC: Steve O'Brien, MHFA
Tod Sherman, Development Reviews Coordinator, MnDOT - Metro Division
Harry Melander, Metropolitan Council District 12
Corrin Wendell, Sector Representative/Principal Reviewer
Raya Esmaeili, Reviews Coordinator



EXHIBIT "U"

NORTHWEST ASSOCIATED CONSULTANTS, INC.

4800 Olson Memorial Highway, Suite 202, Golden Valley, MN 55422
Telephone: 763.231.2555 Facsimile: 763.231.2561 planners@nacplanning.com

PLANNING REPORT

TO: Afton Planning Commission
FROM: Bob Kirmis
DATE: May 22, 2017
SUBJECT: Afton - Afton Creek Preserve Sketch Plan
CASE NO: 280.02 - 17.02

BACKGROUND

Joe Bush, on behalf of J.P. Bush Homes, has submitted a sketch plan for a preservation and land conservation development (PLCD) entitled "Afton Creek Preserve." The subject site overlays 219 acres of land located north of 60th Street South (along the City's southern boundary) and west of Trading Post Trail South.

The subdivision calls for the creation of 20 single family residential lots all of which measure 5 acres in size and are mainly located on the eastern half of the site. Of the 219 acres which comprise the subject site, 110 acres are proposed to lie within a conservation easement (intended to protect a trout stream and protect open space).

The subject site overlays seven individual parcels of land. With the exception of a 5-acre parcel located in the extreme southeast corner of the site (14220 60th Street), all parcels which comprise the subject site are zoned A, Agricultural. Conservation subdivisions (PLCD's) are allowed within Agricultural zoning districts as a conditional use. The 5-acre parcel in the southeast corner is zoned RR, Rural Residential.

That portion of the site which overlays the trout stream and adjacent flowage lie within the City's Shoreland Management Area, the boundaries of which measure 1,000 feet from each side of stream banks.

Also, to be noted is that the trout stream, as well as flowage which lies along stream, lies within the City's Conservancy Overlay District, the intent of which is to manage areas with unique natural and biological characteristics.

The purpose of the sketch plan review procedure is to inform applicants of the City's procedural requirements for subdivision and applicable zoning and subdivision standards and convey the extent to which proposed subdivisions conform with such regulations. In this regard, no formal action on the submitted sketch plan will be taken. Informal feedback on the submitted sketch plan is intended to precede the preparation of a formal preliminary plat application.

Attached for Reference:

- Exhibit A: Applicant Narrative
- Exhibit B: Site Location
- Exhibit C: Sketch Plan
- Exhibit D: Concept Plan Alternative (prepared by Natural Resources and Groundwater Committee)

ISSUES

Environmental Assessment Worksheet (EAW). According to both Minnesota Statutes (Rules 4410.4300 Subpart 36) and the Afton City Code, an Environmental Assessment Worksheet (EAW) must be prepared for projects which result in the permanent conversion of 80 or more acres of agricultural, native prairie, forest, or naturally vegetated land to a more intensive developed land use. Thus, the proposed subdivision has prompted the preparation of an EAW.

The purpose of the EAW process is to disclose information about potential environmental impacts of a project. Information disclosed in the EAW process is intended to determine whether a more detailed Environmental Impact Statement (EIS) is needed and to indicate how the project can be modified to lessen its environmental impacts. To be specifically noted is the EAW process is not intended to represent project approval.

The completed EAW has been sent to various agencies as identified on the Environmental Quality Board's distribution list for review and comment. The 30-day comment period for the EAW ends on May 24, 2017. Thus, comments will be received prior to the June 6, 2017 Planning Commission meeting. Such comments should be taken into account by the applicant as part of the development (refinement) of various plans to be provided with forthcoming preliminary and final plat applications.

Based on information provided in the EAW, the preparation of an Environmental Impact Statement (EIS) is not expected. To be noted however, is that comments and recommendations received on the EAW related to the mitigation of potential environmental impacts should be taken into account by the applicant in the preparation of detailed subdivision plans. Received comments can be made conditions of forthcoming subdivision approval by the City.

Processing. Following sketch plan review, the following approvals are minimally necessary to accommodate the project:

1. Subdivision (preliminary plat and final plat)
2. Conditional use permit for PLCD development

Issues associated with the possible rezoning of the 5-acre parcel (14220 60th Street) from RR, Rural Residential to A, Agricultural in conjunction with the forthcoming subdivision application shall be discussed in a later section of this report.

Purpose of PLCD. According to the City Code (section 12-2373), preservation and land conservation developments (PLCD), are intended to:

A. *Permit subdivisions in the Agricultural Zoning District which require the construction of a new public street.*

 B. *Encourage a more creative and efficient development of land and its improvements through the preservation of agricultural land, natural features and amenities than is possible under the more restrictive application of zoning requirements, while at the same time, meeting the standards and purposes of the comprehensive plan and preserving the health, safety, and welfare of the citizens of the City.*

 C. *Preserve open space, to preserve the natural resources of the site and to preserve wildlife habitat and corridors.*

D. *Facilitate the economical provision of streets and public utilities.*

E. *Allow the transfer of development rights (density) within a subdivision in order to preserve agricultural land, open space, natural features and amenities.*

While it appears that the proposed subdivision fulfills the preceding objectives, such finding should be made by City Officials as part of formal action on the forthcoming subdivision and conditional use permit applications.

Comprehensive Plan. According to the City's 2008 Land Use Plan, the majority of the 219-acre subject site is guided for "Agricultural" use. Such land use designation directs a maximum density of one dwelling unit per 10 acres of land.

The Land Use Plan also directs "Rural Residential" use of the five-acre parcel located in the extreme southeast corner of the site. Such land use designation imposes a minimum 5-acre lot size requirement with a minimum of 2.5 acres of contiguous buildable area.

Zoning. Reflective of its designation within the Comprehensive Plan, the majority of land within the subject site is zoned A, Agricultural. Within A, Agricultural Districts,

conservation subdivisions (PLCD's) are allowed by conditional use permit.

As indicated, the existing 5-acre parcel located in the southeast corner of the site (14220 60th Street) is zoned RR, Rural Residential. While minimum lot area standards in the A, Agricultural District for PLCD subdivisions are the same as those imposed within the RR, Rural Residential District (5 acres), it should be recognized that the zoning of the existing RR parcel is tied to its current legal description. The submitted sketch plan calls for the reconfiguration of the RR parcel such that it includes public right-of-way as well as the conveyance of a portion of the lot to abutting Lot 20 to the north. Without a rezoning action, proposed Lots 3 and 20 would have two zoning designations (A and RR). This is typically an undesirable condition.



To ensure that all proposed lots within the subdivision are afforded the same property rights (via zoning), consideration should be given to the rezoning of the 14220 60th Street parcel from RR, Rural Residential to A, Agricultural as part of the formal application for subdivision.

While the City's Land Use Plan (map) designates the parcel in question for "Rural Residential" use, it is believed the following findings can be made in support zoning change without the need for the processing a Land Use Plan amendment.

1. The guided density of the 5-acre "area" in question is consistent with that proposed via the PLCD and no change to the existing use is proposed.
2. The 5-acre parcel is clearly part of the proposed PLDC and its land area has been used in the calculation of allowed development density.
3. PLCD's are not listed as a permitted use in the RR zoning district.
4. The parcel in question lies between lands guided "Rural Residential" and "Agricultural" uses. The original intent related to the separation of these uses would not change as a result of the rezoning.
5. The land use categories depicted on the Land Use Plan map correspond to individual parcels. The configuration of the parcel in question will change slightly as a result of the proposed subdivision. Without the zoning change, Lots 3 and 20 will hold two zoning designations and be inconsistent with the balance of the lots within the subdivision.

This issue, and specifically the need for such action and Land Use Plan impacts, should be subject to further comment and recommendation by the City Attorney.

Streets

Access. As shown on Exhibit B, access to the majority of the lots (18) within the subdivision is proposed via two cul-de-sacs which intersect 60th Street at a single

point near Trading Post Trail. The acceptability of the street intersection location should be subject to comment and recommendation by the City Engineer.

To be noted is that some concerns exist related to the proximity of the access to steep slopes in the immediate area. As a condition of subdivision approval, an assurance should be made that slopes in excess of 18 percent will not be disturbed. This issue should be subject to further comment and recommendation by the City Engineer.

Aside from the 18 lots proposed to be accessed via the 60th Street cul-de-sac, two additional lots in the extreme southwest corner of the site are proposed to be provided direct driveway access via 60th Street.

Cul-de-Sac Length. As mentioned, 18 lots within the subdivision are proposed to be accessed via two cul-de-sacs. The 60th Street roadway access technically splits into two cul-de-sacs. The longest of the two cul-de-sacs measures approximately 3,400 feet in length which significantly exceeds the maximum cul-de-sac requirement of 1,320 feet imposed in the City's Subdivision Ordinance.

While the Ordinance states that cul-de-sac lengths within PLCD subdivisions may exceed the referenced cul-de-sac length requirement (provided that the preservation of the rural character and natural resources will result), immediate feedback on the acceptability of the proposed cul-de-sac length is requested of City Officials.

In the opinion of Planning Staff, there are both pros and cons associated with the cul-de-sac as currently proposed. These are summarized below:

Pros:

1. Flexibility from the referenced cul-de sac length requirement of the Ordinance is allowed in PLCD subdivisions provided preservation of natural resources will result. Remedy to the excessive cul-de-sac length would likely be the creation of a street connection to Odell Avenue. Such street connection could have negative impacts upon natural resources in the area.
2. Numerous cul-de-sacs presently exist within the City which exceed the maximum 1,320-foot length requirement of the Subdivision Ordinance. Thus, the proposed condition does not differ from that previously allowed by the City.
3. A second access to the subdivision via Odell Avenue may introduce negative traffic impacts on residents located east of the subject site along Trading Post Trail and Odell Avenue.
4. A second access to Odell Avenue would result in increased street

In addition, a minimum width and depth requirement of 300 feet is imposed. All proposed lots meet minimum area, width and depth requirements of the A, Agricultural District and Shoreland Management District.

To be noted is that the applicant will be required to demonstrate that each proposed single family lot will have a buildable area of at least 2.5 acres. The Zoning Ordinance defines "buildable area" as land having a slope of 13 percent or less and having enough suitable soil for the installation of two on-site sewage treatment systems. The Ordinance also notes that "buildable area" may include required building setbacks.

In regard to the proposed lot configuration, it is important to note that the Natural Resources and Groundwater Committee has suggested that the subdivision design be modified to better preserve environmentally sensitive lands (steep slopes and the trout stream). Specifically, the Committee has recommended that the open space area be expanded to include the following areas:



- The northern one-half of Lots 13 and 14
- The western one-half of Lot 4
- The western one-third of Lot 3

The Natural Resources and Groundwater Committee has also prepared an alternative concept plan which incorporates the preceding recommendations (attached as Exhibit C): The alternative concept plan calls for the elimination of two lots within the subdivision.

The recommendations of the Natural Resources and Groundwater Committee should be taken into account as part of the forthcoming formal application for subdivision.

Jennifer Sorensen, East Metro Hydrologist for the Department of Natural Resources (DNR), has indicated the comments from the DNR will also include increased protection of the stream and the areas from which the stream is spring-fed, which include Lots 3 and 4.

Setbacks. Within the A, Agricultural District and the Shoreland Management District, the following minimum setbacks apply:

Side Yard:	50 feet
Front Yard:	105 feet (from roadway centerline).
Rear Yard:	50 feet
From OHWL of Trout Stream:	200 feet

It appears that all proposed lots illustrate an ability to meet the aforementioned setbacks (via illustrated building pads).

Use of Open Space. As part of formal subdivision processing, the intended use of the designated open space should be conveyed by the applicant. Of specific interest are

any intended recreational purposes and the future construction of facilities intended to accompany such uses.

According to the PLCD requirements of the Ordinance (Section 12-2383), buildings, structures and improvements located upon the undeveloped parcel must be designed in a manner which conserve and enhance the amenities of the parcel in regard to its topography and its unimproved condition.

Also to be noted is that Section 12-2381 of the Ordinance stipulates that construction of recreational facilities shown on the PLCD development plan must proceed at the same time as the construction of the dwelling units.

Homeowner's Association Requirements. Section 12-2382 of the Ordinance states that, if a homeowner's association is to be created, its various requirements (ownership requirements, bylaws, etc.) must be submitted as part of the PLCD for City review.

The applicant has provided a copy of proposed covenants, restrictions and conditions which would apply to property owners within the subdivision. Requirements include, but are not limited to, the following:

- Association duties
- Assessments
- Architectural controls
- Use of common properties
- Prohibited uses
- Water maintenance/management

Homeowner's association-related issues should be subject to further comment by the City Attorney.

Wetlands. According to the EAW, wetlands comprise 13 acres of the 219-acre subject site. Such wetlands lie along the trout stream and presently lie within the proposed conservation easements. In this regard, the proposed lot layout is not expected to impact any existing wetlands.

Wetland-related issues should be subject to further comment and recommendation by the City Engineer.

Easements. As a condition of subdivision approval, a conservation easement must be established over the designated open space. Such easement must run with the land in perpetuity to the following:

- The City of Afton
- All owners of the lots within the PLCD
- Landowners within Afton which abut the PLCD
- Minnesota Land Trust

In addition to the referenced conservation easement, easements for drainage, utilities and scenic preservation should be provided over individual lots as may be recommended by the City Engineer.

Septic Systems. As part of the forthcoming preliminary plat submission, primary and secondary septic sites must be illustrated in compliance with City specifications as provided in Section 12-413 of the Zoning Ordinance.

Permits for individual sewage treatment systems will be issued by the Washington County Department of Public Health. In this regard, review of proposed septic designs and final septic permits must be received from Washington County prior to building permit approval.

Park Dedication. According to Section 12-1270 of the Subdivision Ordinance, subdividers must dedicate to the City a reasonable portion of the land being subdivided for park purposes or in lieu thereof, a cash equivalent. The form of dedication, land or cash, (or any combination) must be decided by the City and dedicated or paid prior to City signing the final plat.

To be noted is that the Natural Resources and Groundwater Committee has recommended that the southwest corner of the subject site, south of the trout stream, be dedicated as City parkland.

Prior to preliminary plat consideration by the Planning Commission, the submitted sketch plan must be subject to review and recommendation by the City's Park Committee.

The City's 2012 Park Plan does not illustrate any future parks or trails within the subject site. With this in mind, a calculation of a possible cash contribution (as opposed to land dedication) is considered worthwhile. According to the Ordinance, a cash park dedication fee, in lieu of land dedication, shall be equivalent to 7.5 percent of the predevelopment value of the land to be subdivided, subject to a minimum fee of \$5,000 per dwelling unit and a maximum fee of \$10,000 per dwelling unit.

Preliminary Plat Data Requirements. As part of preliminary plat processing, informational requirements as provided in Section 12-1328 of the Subdivision Ordinance must be satisfied. Required information includes, but is not limited to, the following:

- Existing Conditions (site survey)
- Preliminary Plat
- Grading and Drainage Plan
- Erosion/Sediment Control Plan

Additional Comments. In addition to the comments provided above, any comments received from the following must also be considered as part of the sketch plan

evaluation and in the preparation of the preliminary plat:

- City Engineer
- City Attorney
- Natural Resources and groundwater Committee
- Park Committee
- Washington Soil and Water Conservation District
- Watershed District
- Natural gas, electric and cable communications utilities
- Fire District
- School District
- Other agencies not identified above but included on the EAW distribution list.

This material is scheduled to be discussed at the forthcoming June 5, 2017 Planning Commission meeting.

pc. Ron Moore, City Administrator

EXHIBIT "V"

2012 Afton Parks Plan

Planning Commission review 1/7/2013
Public Hearing scheduled 2/4/2013
Edit to Pop chart, p.10 2/5/2013
City Council meeting 2/19/2013

2011-2012 PARK COMMITTEE MEMBERS

Bill Palmquist, Council Member Ward 1

Randy Nelson, Council Member Ward 4

Ken Johnson, Afton Public Works Supervisor

Bonnie-Lee Blackley

Julianne Berg

Darcy Cernohous

Steve Dorgan

Nathan Shaw

Karen Weiss

Sara Irvine, City Administrator (2011)

Ron Moore, City Administrator (2012)

CITY OF AFTON, MINNESOTA

Afton City Hall — 3033 St. Croix Trail South — P.O. Box 219

Afton, Minnesota 55001

Phone — 651-436-5090 Fax — 651-436-1453

AFTON PARKS, RECREATION AND OPEN SPACE PLAN

1. 2012 SUMMARY:

In preparation for this update to Afton's Park Plan, the Park Committee met monthly for one year to review the existing plan and to tour each of the listed parks. In discussions, it became clear that, historically, the city had accepted marginal land from developers in lieu of paying the park dedication fee. Due to this fact, the committee feels that most parcels the city owns are not suitable for development as parks, either active or passive, and as a whole do not meet the intention of the Park Dedication requirement. The exceptions to these findings are noted below. For this reason the committee recommends the city very carefully consider accepting land donations in the future, and have a clear and defined use for any land received in lieu of park dedication funds. Areas of the city where land donations would be encouraged are the western edge of the city along Manning Avenue and the southwest area of the city. Currently no city parkland is located in either of these areas. Per the 2008 Comprehensive Plan, a priority for the acceptance of land in lieu of Park Dedication funds should be to obtain designated open spaces to provide for wildlife corridors, as well as to protect locally important water resources and scenic and natural features.

The committee attempted to view city property as it related to planned trail expansion by other government agencies or potential trail construction by the city and found little ability to map out a way to use many of these parcels as part of a larger trail system. The committee did identify three additional trail routes to those already part of the trail plan. These trail routes would be off road trails and serve to connect with existing and planned trails or access to locally significant natural resources. Adding these routes would allow Afton residents access to an expansive system of trails throughout the city and neighboring communities. These routes would be located along Manning Avenue, Hudson Road/Industrial Boulevard, 50th Street and Old Putnam Road.

The Park Committee recommends the city use available Park Dedication funds to mark the city's existing parks with signage as "Afton City Park Land," noting that the parcel is "permanently protected as open space" and marking the corners of each parcel to indicate where the public space ends and private property begins. These signs should also include a map of the parcel to assist any residents who enter the park to remain within the park

boundary. One sign is recommended at the following locations: Steamboat Park, Meadow Ridge Park, Aftonwood Park and Rinta Park. Two signs are recommended for Remus Park. This process could begin immediately. The committee believes most residents are unaware that the city owns these park areas, therefore it recommends making an announcement in the city newsletter that park locations have been marked.

The Park Committee also felt that the city should consider marking historical sites within the city. Although not included as part of the Park Plan the committee felt that some of these sites are of regional significance and should be noted as an addendum to this plan. An effort should be made to coordinate with the Afton Historical Society to create the appropriate text for the signage of these historic sites and the city should work with private landowners to gauge their interest in participating and having their buildings or land included in this effort. For sites within existing city parks this process could start immediately.

In all areas, and as resources permit, the city should work to reduce the negative impact of invasive species, most notably buckthorn in our parks. Although not a named park in this plan, special attention should be paid to the public land on which Mount Hope Cemetery is located, as the presence of buckthorn there is seriously threatening the survival of that historic site.

Of the parcels noted in this plan, three stood out as having potential to meet the intent of the park dedication process in providing residents with public open spaces; they are:

1. Meadow Ridge - This park is the second largest park in the city at 10.4 acres. The committee recommends development of this park to include off street parking, adding walking trails and benches.
2. Remus - This park is restricted to passive uses until 2026. The committee felt the city could work with the neighborhood to see if adding park benches along the current trail would be desirable.
3. Rinta - This park is the location for a community garden initiative begun in the fall of 2012 with first planting scheduled for the spring of 2013.

2. INTRODUCTION AND PURPOSE:

This plan has been prepared by the Afton Parks Committee and incorporates the goals and policies of past plans, the 2008 Afton Comprehensive Plan, the Washington County 2005 Master Plan for the St. Croix Valley Trail, the Green Corridor Project, and the Metropolitan Council 2030 Regional Parks Policy. The preservation of appropriate recreational and scenic areas, natural resources, wildlife habitat and unique landforms is a vital responsibility for all sectors of government. This obligation becomes increasingly apparent as the Twin Cities Metropolitan Area expands outwards and reduces open space.

Recreational needs are not limited to any age group. Recreational needs and desires are constantly changing. New interests create a demand for new facilities that will satisfy the needs of the community. The challenge is to provide a system, which satisfies a broad range of both passive and active recreational needs for all age participants.

Open space is defined as public land owned by the city and/or private land leased by the city for use by the general public. Open space can be used as a buffer between uses, a connector of recreational facilities or simply a natural area, which is preserved for its resources, landforms, wildlife habitat or aesthetic value. Open space can be a visual entity as well as a physical entity. Such an area need not be a vast expanse of land to be considered open space. A narrow strip of land, in some cases, can afford the visual effect of openness, while acting as a physical connector. Scenic roadways, trails and bicycle paths, although not extremely wide, can supply visual open space and act as linkage between recreational areas, thus providing the active aspect of recreation, while at the same time providing the passive form - open space.

Afton's approach toward building a parks, recreation and open space system is to evaluate open space for its recreational and scenic values, natural resources, wildlife habitat and unique landforms, and to coordinate acquisition and development. The plan is intended to chart a course and provide a framework for developing and maintaining the Afton Park system. The Plan will also serve as a guide for city commissioners, the City Council and the citizens of Afton. Afton will coordinate its planning efforts with other governmental units, foundations, agencies and individuals that plan or provide recreational or open space affecting Afton.

3. **DEFINITIONS:**

A. Belwin Conservancy - Foundation for Nature Conservancy and Land Preservation and a Minnesota non-profit organization.

B. Community Park - Serves community-wide active and passive recreation needs as well as preserving unique landscapes and open space. Active uses include ball fields, courts, informal play space, skating, play equipment etc. Passive use includes trails, picnicking, and nature study gardens.

C. Conservancy Park - Park that has unusual topography, flood plain, shore line, fragile soils, wetland, unique soil or rock formations, ravines. Serves limited passive use, trails, plant and animal viewing, interpretation, areas, canoe landings, swimming areas, picnicking.

D. Neighborhood Park - Serves active, passive and social uses for those living within 1/2 mile of the park (neighborhood walking distance). Active park uses are informal and include, for example, pick-up baseball, soccer, and playing catch.

E. Open Space Park - Open space can be thought of as a divider of uses, a connector to active or passive recreation or simply a natural area that is preserved for its aesthetic, natural or scenic value. It also may be parkland the city has acquired in the past and elected not to develop.

F. Recreation - Any form of play, amusement or diversion used for refreshment of body and mind.

G. SCVAP - St. Croix Valley Athletic Partnership. SCVAP is a volunteer athletic association and a Minnesota non-profit corporation.

H. State Park - Land owned by the State for nature-oriented recreation.

I. Trail - Trails may have a variety of topping materials including pavement, gravel, woodchips, dirt or grass. Serves non-motorized travel, walking, bicycling, horseback riding, roller-blading, roller-skiing, jogging.

9. FUTURE CONSERVANCY PARK

The 2008 Afton Comprehensive Plan highlights several areas for preservation and protection. These areas are creeks, coulees and mounds.

Bissel Mounds is good candidate to start the process to establish a conservancy park. Bissel Mounds are several large hills found in the northwest section of Afton. The Mounds are all held in private ownership. The mounds (erosional outliers) are unique to Washington County and are a recognized landmark to the city. Due to the unusual formation of the mounds and topography there is an interest in preserving and protecting the mounds. One avenue to preservation is to obtain the property and designate it as a Conservancy Park. Any facilities or activities would be passive.

The reality of this park is totally dependent upon availability of the property and an acceptable purchase price. The owners have met with the Afton City Administrator and were interested in subdividing the property, but because of the Mounds a Minor Subdivision was not feasible.

SIZE: 5 to 10 acres

EXPECTED COMPLETION: If the City decides to purchase any of this property it should do so within 5 years, before land prices are unaffordable. The City may want to consider acquiring Conservation Easements over the Mounds as an alternative. They would preserve the Mounds and the vista at a much-reduced cost.

COST: \$120,000 (projected cost estimate based on land prices)

AFTON CREEK PRESERVE HOA
FUNDS

11. SUMMARY OF RECOMMENDATIONS:

- A. Use available ~~Park Dedication~~ funds to mark these public lands with signage as "Afton City Park Land", noting that the parcel is "permanently protected as open space" and marking the corners or each parcel to indicate where the public space ends and private property begins. These signs should also include a map of the parcel to assist any residents who enter the park to remain within the park boundary.
- B. Consider adding historical sites within the city as part of the Park Plan. The City should encourage property owners to participate in having their historical structures or land included.
- C. Coordinate with the Afton Historical Society to create the appropriate text for the signage of historic sites in Afton.
- D. Work to reduce the negative impact of invasive species, most notably Buckthorn.
- E. Identify and recommend preservation of open space and wildlife habitat; local historic and cultural features or landmarks; unique, scenic or environmentally sensitive areas.
- F. Recommend park land acquisition at an early date, so that appropriate parcels or sites can be obtained to meet long-range needs before developmental pressures render the property too expensive.
- G. Recommend parkland acquisition through collection of park dedication fees in subdivisions, appropriations from the General Fund, donations and government grants.
- H. Plan parks based on input from residents and a needs assessment to develop goals and priorities for acquisition, development and use of parks, open space and recreational facilities. Information about present and future parks and recreational needs will be collected and evaluated on a regular basis. Because recreational needs and practices change over time, a periodic review and update of the Park Plan including these objectives and recommendations will be needed.
- I. Provide a forum for public participation and open discussion of issues to ensure early and continuing public support and participation in park planning.
- J. Cooperate with other governmental units, commissions, foundations, and athletic associations, agencies and individuals that plan or provide recreation or open space affecting Afton.
- K. Develop parks and recreational facilities with respect to existing conditions, natural features, wildlife habitat and environmentally sensitive areas; and provide a variety of facilities. Wherever practical, parks will include open space areas that preserve and protect wetlands, natural habitat diversity, unique landforms and cultural resources that have

recreational potential, scenic and environmentally sensitive areas.

- L. Provide a safe, convenient and coordinated system of trails for non-motorized use throughout the city.
- M. Develop non-motorized trails according to public safety concerns and to be environmentally sensitive. Width, location and surfacing shall be adjusted for the terrain and amount and type of projected trail use, with a preference being for low-maintenance impervious surfaces.
- N. Link trails, where possible, to existing or planned regional, state and adjacent community trails and to connect public open space areas. Mark trail routes where they utilize roadways. Seek private, county, state, and federal funds to develop trails along and parallel to city, county, and state roads.
- O. Coordinate efforts with the Minnesota Department of Natural Resources to improve fish and wildlife habitat.
- P. Coordinate efforts with the Design Review & Historic Preservation Commission to preserve and enhance locally significant cultural and historic resources.
- Q. Develop a Master Plan for Town Square Park, Steamboat Park and the new parkland acquired as part of the Flood Mitigation Project to have a unified plan of use and design when Main Street is reconstructed.

12. **ADDENDUM: (from the 2008 Afton Comprehensive Plan)**

A. Parks and Open Space Goals, Policies and Strategies

The City of Afton establishes the following parks and open space goals:

1. Preserve adequate amounts of open space to maintain a rural atmosphere (from Afton's 2000 Park Plan).
2. Obtain and maintain designated open spaces to provide for wildlife habitat and migration.
3. Reconnect Afton's historical linkages to the St. Croix River.
4. Provide expanded access to the City docks to all residents.
5. Provide safe areas to ride bicycles within the City.
6. Provide safe areas to ride horses within the City.
7. Provide pedestrian friendly means of enjoying Afton's scenic views, wildlife, and connections to the St. Croix River.
8. Preserve locally important water resources, natural and scenic features.
9. Periodically identify the recreational needs of Afton citizens and evaluate ways to meet them.
10. Consider using the Afton Bluffs Regional Trail to create an east-west connection from Afton's Old Village to the City of Woodbury.

The City of Afton establishes the following parks and open space policies:



1. Preserve open spaces and natural resources for passive use and create non-motorized trails through direct purchase, subdivision, scenic and/or conservation easements and other means to include the seeking of grants and the use of matching funds when they are available, but not the use of eminent domain.
2. Maintain central community places.
3. Maintain safe environments for children to play and for the community to gather.
4. Maintain designated open spaces to provide for wildlife habitat and migration.
5. Work cooperatively with Washington County, the Belwin Conservancy, the Science Museum of Minnesota, and other quasi-public and private entities to preserve sensitive lands and open space.
6. Develop a park plan to provide for the five small parcels obtained by the City through park dedication.

The City of Afton establishes the following parks and open space strategies:

1. Develop signage and pedestrian-friendly connections to the St. Croix River.
2. Protect Steamboat Park as a nature preserve and passive use area.

Inspect Minnesota & Midwest Soil Testing

Brian Humpal - President - MPCA Licensed Designer, Inspector, Installer, and Pumper

July 7, 2017

Mr. Joe Bush
Joe Bush Homes
1980 Quasar Ave S
Lakeland, MN 55043

Subject: Sub-surface sewage treatment system site evaluations Carlson Sub-Division - Part of the southeast quarter of section 32 and part of the southwest quarter of section 33, township 28 north, range 20 west, City of Afton, Washington County, MN

Dear Joe:

Please find the soil testing logs, soil survey data, and a copy of the survey showing the soil test locations relative to the subject property. Four soil borings surrounding an area of approximately 12,000 square feet were performed on each of the twenty proposed lots. Washington County requires each lot to contain at least 10,000 square feet of area with suitable soils for long-term sewage treatment.

It is my opinion that each of the proposed lots will support primary and future sub-surface sewage treatment systems that will meet state and county requirements. Of the twenty lots, one boring on each of the proposed lots two; three (existing house lot), and four indicated less than twelve inches of suitable soil. The additional three borings on each of these lots indicated suitable soils. I feel that a significant amount of adjacent area with suitable soils exists and the bedrock areas could be isolated. Additionally, based on past experience as well as information gathered while performing the testing, I was able to confirm that the downslope areas contained more soil overlying the bedrock. This thicker layer of soil in the downslope areas most likely occurred during the glacial and postglacial periods and was caused by wind moving the fine soil particles and re-depositing this soil in downslope areas; this condition is referred to as loess.

Should the proposed lots or building sites change, based on the soil tests, it is my opinion that nearly all areas on the property within the set-backs will support sub-surface sewage treatment systems. Percolation rates in the upper 12-24 inches, where most systems would be installed, are expected to be less than 45 minutes per inch. After the exact lot configurations have been determined and the location/size of the homes have been determined, a complete system design showing tank sizes, soil treatment system size and location, etc. will be required by the county. Additional soil borings and percolation tests will be required once the exact locations of improvements to the property have been determined.

Areas that may be used for sewage treatment systems must be fenced off prior to construction to prevent access by construction equipment, which may harm the soils, rendering the area(s) unsuitable for a sub-surface sewage treatment system.

Please be advised that the findings herein are based on my interpretation of the site and soils. In no way can I guarantee that Washington County will approve the installation of sub-surface sewage treatment systems on this property. I recommend obtaining a soil review from

Washington County to insure that they will approve the soils for the installation of sub-surface sewage treatment systems on this property; a Washington County soil review application is attached. In addition, no interpretation of the soils relative to the construction of roads, drainage features, building footings, etc. has been given. Nor has any indication been given relative to the future use of this property beyond the suitability of the soils for sub-surface sewage treatment systems. I recommend contacting Washington County and The City of Afton to verify that the proposed property improvements will be acceptable.

Thank you very much for allowing me to do this work. Please contact me should you have any questions.

Sincerely,

Brian Humpal

Brian Humpal

Cc: Mr. Milo Horak, Landmark Surveying

Additional Exhibits

Materials labeled "City Council Meeting for 10-17-17 Afton Creek Preserve from the Applicant"

Citizens Concerned for Afton Letter Regarding the Rezoning Request

Email from Joe Bush withdrawing the proposal regarding the subdivision entrance sign

Copies of the submitted Rezoning, Preliminary Plat and CUP application forms

Citizens Concerned for Afton Letter Regarding the Preliminary Plat Application

Response by Planning Consultant and City Attorney regarding comments from Citizens Concerned for Afton concerning the Density Calculation



J.P. Bush
H O M E S

October 10, 2017

City Council Meeting for 10-17-17 Afton Creek Preserve.

Property: 14220 60th St S Afton MN 55001
Will Carlson owned 218.6 Acres

Proposer: Will Carlson, Land Owner.
JP Bush Homes, Developer.

JP Bush Homes designed AFTON CREEK PRESERVE PLCD with coordinated efforts by The City of Afton.

1. City of Afton Residence
2. Planning Commission
3. City Council
4. City Staff (Admin and Ron Moorse)
5. WSB Engineering
6. Northwest Associated Consultants (City Planner)
7. Parks Committee
8. NRGK Committee
9. Minnesota land Trust
10. Minnesota DNR
11. South Washington County Watershed

And the Professionals from:

1. Landmark Survey
2. Plowe Engineering
3. Spack Consulting (road study)
4. Jacobson Environmental EAW
5. ITCO Engineering soils
6. Midwest Soil consultants (Septic)

The current Design and application has many revisions. JP Bush has used the Recommendations from every meeting formal and informal. Attached are some written recommendations that JP Bush has used to revise and consider in the final Design.

1. Parks Committee April 4, 2017
2. NRGC May 14, 2017
3. City Council June 20, 2017
4. Neighborhood list June 29, 2017

The fundamentals of design approval appear to be mostly.

1. Road entry design and safety.
2. Zoning compliance with City code.
3. Comprehensive plan and City Ordinance PLCD overall land usage.

ROAD STUDY:

The road study was engineered by Spack Consulting and performed to the strictest standards of Minnesota law. WSB has coordinated with Spack on the methods, timing, and requirements for acceptance by the City of Afton. WSB has written its overall approval of the Study to be accurate and safe. WSB has indicated the study has met Preliminary Plat criteria. JP Bush adds an additional document to the question at Planning Commission Meeting October 2, 2017. The attached document demonstrates satisfactory traffic site distances westbound on 60th. As shown both vertical and horizontal distances of 330 feet are met.

ZONING COMPLIANCE WITH CITY CODE:

JP Bush submitted application for rezoning the existing homestead 5 acre property from R/R to AG. The application has met the City Planners requirements and has his written recommendation for approval.

In addition: JP Bush would like to add the following information.

Afton City Ordinances

The land use provisions of the Afton City Ordinances are found in Chapter 12. Section 12-80 of the ordinances is titled "Amendments and Rezoning." According to section 12-80, in order to rezone land, an application must be filed with the city administrator that is accompanied by development plans, if any, for the use which requires rezoning. The process following application includes consideration by the planning commission at its next meeting, a public hearing, a report by the planning commission

following the public hearing recommending a grant or denial, and finally council action on the application. The council is required to make written findings. The ordinance does not list any criteria for the council to consider other than the following: “In granting or recommending any rezoning provided for in this article, the Planning Commission and Council shall find that the proposed development conforms substantially to the policies, goals and standards of the comprehensive plan.”

Minnesota courts have ruled on a number of zoning cases with related subjects.

I. Rezoning Case Law

Minnesota recognizes that when a municipality makes a decision on rezoning, they are acting in a quasi-legislative capacity. Therefore, “a zoning or rezoning classification must be upheld unless opponents prove that the classification is unsupported by any rational basis related to promoting the public health, safety, morals, or general welfare.” Curtis Oil v. City of North Branch, 364 N.W.2d 880, 883 (Minn. Ct. App. 1985). As an example of what constitutes a rational basis, in one case, the Minnesota Court of Appeals upheld a finding of a rational basis on the grounds that the zoning decision furthered “regional recreational interests, protect[ed] wetlands and trees, and improve[d] water quality.” Gayl v. City of Rosemount, 2016 WL 4162873 at *4 (Minn. Ct. App. Aug. 8, 2016). If a decision is unreasonable, arbitrary or capricious it will not pass rational basis. St. Criox Development, Inc. v. City of Apple Valley, 446 N.W.2d 392, 398 (Minn. Ct App. 1989)

Conclusion

The procedural requirements for amending a zoning classification are explained in the city ordinances. The City Council will be required to make factual findings, and based on the zoning case law in Minnesota, the decision will be upheld against a legal challenge unless those findings are not legally sufficient with a factual basis in the record and whether or not the use fits into the comprehensive plan.

COMPREHENSIVE PLAN AND CITY ORDINANCE PLCD OVERALL LAND USAGE

JP Bush Homes has passion for the Citizens, City of Afton and Comprehensive plan in the Preliminary Plat design. It is our belief that this application has fulfilled the City Comprehensive Plan and City Code of the PLCD ordinance.

Joseph P Bush
J.P. Bush Homes

A handwritten signature in black ink, appearing to read 'JP Bush', is written over a horizontal line. The signature is stylized and cursive.

① PARKS

2 of 3

Recommendations from the NRGC

The NRGC recommendations are set out in the minutes of the April 4, 2017 NRGC meeting, which are attached.

Recommendations from the Park Committee

The Park Committee discussed the PLCD Sketch Plan at its May 24 meeting, and its recommendations are as follows:

"Based on the current development plan presented, the Committee recommends dedication of limited land to the City as a park for the purpose of future use and the balance as a park dedication fee. This assumes the developer will provide public access at the end of the cul-de-sac and along 60th street to the open space areas. Access points will have infrastructure, such as benches, off street parking off 60th and natural informational signage." Approved Unanimously by the Committee

Public Hearing

PARKS RECOMMENDATION 04-04-17

A public hearing was held at the June 5 Planning Commission meeting. The minutes of the Planning Commission meeting, which are included in the Council meeting packet, include an outline of the public comments regarding the proposal. A summary of the public comments is as follows.

Public Comments

- Does the proposed street access require grading in an area of 18% slope to meet sightline requirements?
- Is the bridge on 60th and Trading Post adequate for the additional traffic that would be generated by the proposal?
- Concerns were expressed regarding the safety of the access intersection
- It was suggested that the City obtain land vs. a cash contribution for the park dedication requirement
- The length of cul de sac streets proposed to serve the development is substantially longer than is generally allowed by ordinance, although the PLCD allows flexibility in cul de sac length.
- The five-acre lots will have a negative effect on the rural character of the area.
- The proposal does not match the purpose of the PLCD ordinance, which includes preserving the health, safety and welfare of adjacent residents.
- Much of the land included in the PLCD is environmentally sensitive
- Neighbors to the east of the proposed development have an erosion issue due to drainage coming from the PLCD site. There is no indication on the sketch plan regarding a solution to this problem
- The proposal undermines the Comprehensive Plan in regard to the preservation of rural character and open space

Planning Commission Review of the PLCD Sketch Plan

As indicated in the planning consultant's report, the Planning Commission was not asked to provide a recommendation regarding the PLCD proposal at this time, but was asked to provide comments to guide the applicant in preparing the Preliminary Plat application, which is the next step in the PLCD application process.

Planning Commission Comments

The Planning Commission raised a number of questions regarding the proposal. These are outlined in the Planning Commission meeting minutes, and are also summarized below.

- Vegetative Buffers should be installed by the developer, not by the owners of the individual lots. [The developer indicated vegetative buffers would be installed on all vacant lots by the developer]
- Can the City limit the amount of trees that can be removed? (The City's Shoreland Management regulations allow trees to be removed to construct a house, septic system and driveway. [Other cities have more strict tree preservation regulations, or place conditions on subdivisions, that minimize the amount of tree removals for homes and driveways, and that require driveways to be located in a way that screens the houses from the street.]
- Atrazine spill (over-application). [Please see the attached email from Paul Haiker, Agricultural Chemical Advisor with the State Department of Agriculture indicating that if the atrazine over-application occurred about 17 years ago, it would no longer be in the soil.]

(2.) NRGW

3. Groundwater recharge related to the springs supporting trout stream (highlighted as paramount concern by Jen at DNR).
4. On-site storm water management
 - a. Rainfall design standard – modify up to 200-500 year flood
 - b. Release rate (flow)
 - c. Quality
5. Septic design
6. Consolidation of neighbor and committee comments (key issues and themes).
7. Careful attention and guidance given to future covenants – buffers for stream management, open space and woodland management, evasive species and storm water management and maintenance, lawn restriction, septic system maintenance review, HOA organization/funding/capital reserve, and fertilizer/herbicide restrictions.

xix. **Annie made a motion** recommending the Planning Commission consider Bake's revised sketch plan shifting lots 1 and 2, and including other revisions as noted, such as consolidating lots as stated above in 5.a.1 (down to 18 lots), and as illustrated in Bake's submitted revised sketch plan (also as noted above). **Additionally included in motion:** Planning Commission be diligent in considering xviii concerns listed above, as well as addressing 1) Feb. 3, 2017 Neighborhood letter conditions for approval: #1-25; 2) March 29, 2017 Neighborhood response letter to E.A.W; 3) Annie's previously submitted comments; 4) Susan's previously submitted comments. Perry seconded the motion. Susan made a recommendation for an amendment to have Bake and Jack distill items in Neighborhood letters identifying themes for the NRGW to review at next month's committee meeting. Discussion included Annie suggesting we follow up with that exercise as an additional submittal to tonight's recommendation. Jack said it can't go that way and either the amendment is accepted or not. It was voted to move forward without amendment so not to delay another month or longer. Motion passed 4 to 3 - Bake, Susan and Jack (*I believe*) opposed.

- b. **Development of a Template** for the Committee's Review of Future Major Subdivisions and Particularly PLCD's – Bake found and will forward documents for template. Bake, Keith, Mark and Annie on sub-committee.
- c. **Well Testing Update** – Keith hold off until fall due to construction and that Kim is gone. Logistically speaking could be difficult to conduct test right now. Mark suggested it's important to continue testing this spring, with the committee members working with the county regarding testing as the City is currently short-staffed.
- d. **Update on Council and Planning Commission Business** – Council Member Palmquist – City Council approved MIDS to be approved in ordinances. Adopted what most watersheds have adopted. Approved bond issues for roads and going ahead with trail. Suggests checklist/template we're working on is super valuable to keep our NRGW

NRGW
MAY 14
RECOMMENDATION

3. CITY COUNCIL

104 2. Will Carlson Afton Creek Preserve Sketch Plan for a Preservation and Land Conservation Development
105 (PLCD) Subdivision North of 60th Street and West of Trading Post Trail.

106 Steve Whitman (attending for Bob Kirmis, City Planner) provided an overview of the sketch plan. Intent
107 of sketch plan is to provide feedback to the developer. Steve reviewed the purpose of PLCD developments
108 and noted that the City can mitigate and modify all aspects of design including length of cul-de-sac,
109 protections, management of disturbed areas, park/open space credit, lot count, and management of open
110 space.

111 Mayor Pro Tem Ross stated that he had reports that the developer is intimidating the neighbors.

112 Council Member Richter stated that he feels like this was designed to have a parcel for the MN Land
113 Trust. Would like to start over with the design of lots 1,2,3 & 4. Would prefer the traffic and access be
114 moved west off of 60th for traffic safety. Also concerns over the buffers and preservation of oak stands.

115 Council Member Nelson stated he would like to tour the property. He stated that having the MN Land
116 Trust involved is what makes this a PLCD and creates permanent conservation.

117 Council Member Richter stated he would like to work with the land trust. However the City can also hold
118 land in perpetuity under MN law.

119 City Attorney Knaak provided the example of a city park held in trust for stated purpose. A conservation
120 easement would also be held for purpose of original dedication.

121 Council Member Palmquist indicated he would like more clarification if a road is possible in that area if
122 it is park land.

123 City Engineer Hankee indicated that the next step is to have the land surveyed to enable development and
124 review of access options.

125 Joe Bush, JD Bush Homes, stated that a line-of-sight easement will be needed from Grahams at the
126 proposed road access. The location of the road was developed as a result of NRGC meetings.

127 Mayor Pro Tem Ross stated he would like to see all of the people involved get together and work
128 something out that all could agree to. He cannot support the proposal when all of the neighbors are upset.

129 Council Member Richter proposed forming a subcommittee of 1-2 from each committee along with the
130 developer.

131 Council Member Palmquist stated that months of NRGC meetings went into this sketch plan. He feels it
132 is time for the City Council to weigh in on this.

133 Council Member Nelson asked whether the MN Land Trust adds a level of protection over and above
134 what the city can do alone?

135 City Attorney Knaak responded yes, and it is significant.

136 Council Member Nelson proposed going to tour the site as a group.

137 **Motion: Richter/ . To form a subcommittee to work with residents and Mr. Bush to work on re-**
138 **design, including 2 from each committee plus 3 residents.**

139 Discussion

140 Mayor Pro Tem Ross suggested amending the motion or putting a time limit in place

141 Administrator Moorse stated that it is the responsibility of the developer to work with neighbors on key
142 items. Also the developer needs to provide the City Engineer a concept plan for access that can be
143 reviewed. The Council can give clear direction on what the developer needs to provide along with a
144 timeline.

145 **Motion fails / no second**

JUNE 20TH CITY COUNCIL SKETCH

147 **Motion/Second: Palmquist/Nelson. To direct staff to work with the developer on traffic design,**
148 **buffer issues, and issues on lots 1-4. Motion passed 4-0-0.**

149 Administrator Moorse stated that if the Neighborhood Group has specific questions or concerns to please
150 list their top 3-5 and get to him.

151
152 **B. Engineering Report – (Engineer Staff Report & Council Update)**

153 Extend Gehrke Temporary Easement at 3561 St Croix Trail

154 The Gehrke easement expired on December 31, 2016. An extension through December 31, 2017 in the
155 amount of \$12,000.00 is part of the overall project funding.

4.

Joe Bush

From: Ron Moorse <rmoorse@ci.afton.mn.us>
Sent: Thursday, June 29, 2017 3:55 PM
To: Joe Bush
Subject: FW: neighborhood Group key issues of concern

Joe,
Can you have an access solution developed and reviewed by our City Engineer prior to the meeting with the Neighborhood Group?
Thanks,
Ron

From: Ron Moorse
Sent: Thursday, June 29, 2017 9:59 AM
To: 'Joe Bush' <joe@joebushmn.com>
Subject: neighborhood Group key issues of concern

Joe,
The Neighborhood Group has provided the following list of key issues of concern. I want to schedule a meeting with the neighborhood group, you and me late the week of July 10 or mid to late the week of July 17.
Ron

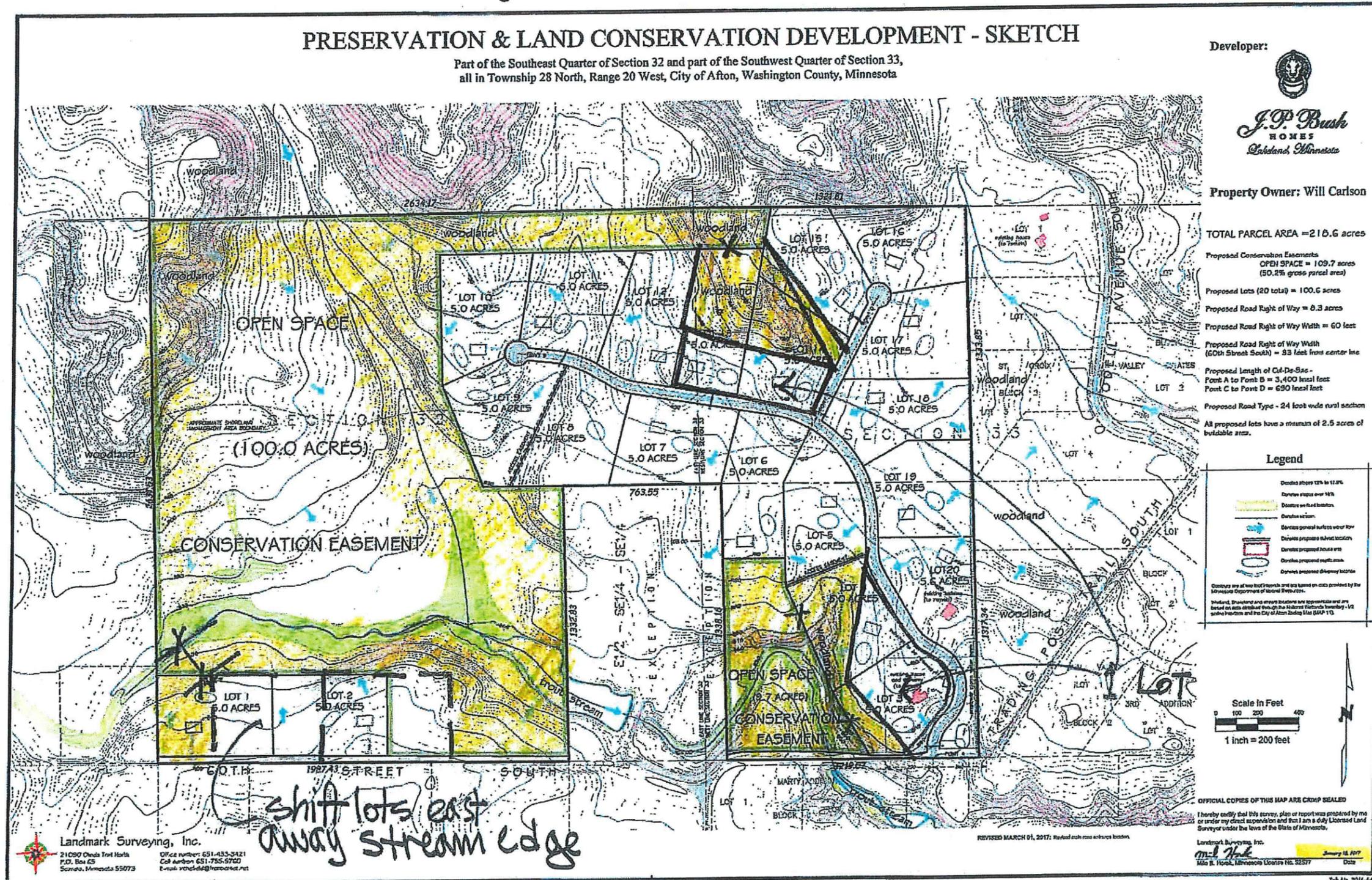
Neighborhood Group Issues of Concern Re: Carlson PLCD

- Safety of road access and alternative locations
- Density of development given topography, soils and other environmental features
- Buffer strips: location, dimensions, developer v. homeowner installed
- Stormwater drainage into stream and onto existing adjacent properties
- Park dedication: land v. fee, location and use

NEIGHBOR ITEMS PER JUNE 20TH
CITY COUNCIL SKETCH PLAN REVIEW

*Bake Baker's
Layout modifications*

Figure 3 - Post-Construction Site Plan



- on-site/on-parcel stormwater mgmt. - 2 Lots
- lot revision (- 2 lots)
- water quality/water detention
- buffer

PRESERVATION & LAND CONSERVATION DEVELOPMENT - SKETCH

Part of the Southeast Quarter of Section 32 and part of the Southwest Quarter of Section 33,
all in Township 28 North, Range 20 West, City of Afton, Washington County, Minnesota

Developer:



J.P. Bush
HOMES
Lakeland, Minnesota

Property Owner: Will Carlson

TOTAL PARCEL AREA = 218.6 acres

Proposed Conservation Easements
OPEN SPACE = 109.5 acres
(50.1% gross parcel area)

Proposed Lots (20 total) = 100.3 acres

Proposed Road Right of Way = 8.8 acres

Proposed Road Right of Way Width = 60 feet

Proposed Road Right of Way Width
(60th Street South) = 33 feet from center line

Proposed Length of Cul-De-Sac = 1495 feet

Proposed Road Type - 24 foot wide rural section
All proposed lots have a minimum of 2.5 acres of buildable area.

Legend

- Denotes slopes 12% to 17.9%
- Denotes slopes over 18%
- Denotes wetland location.
- Denotes stream.
- Denotes general surface water flow.
- Denotes proposed culvert location.
- Denotes proposed house site.
- Denotes proposed septic area.
- Denotes proposed driveway location.

Contours are at two foot intervals and are based on data provided by the Minnesota Department of Natural Resources.

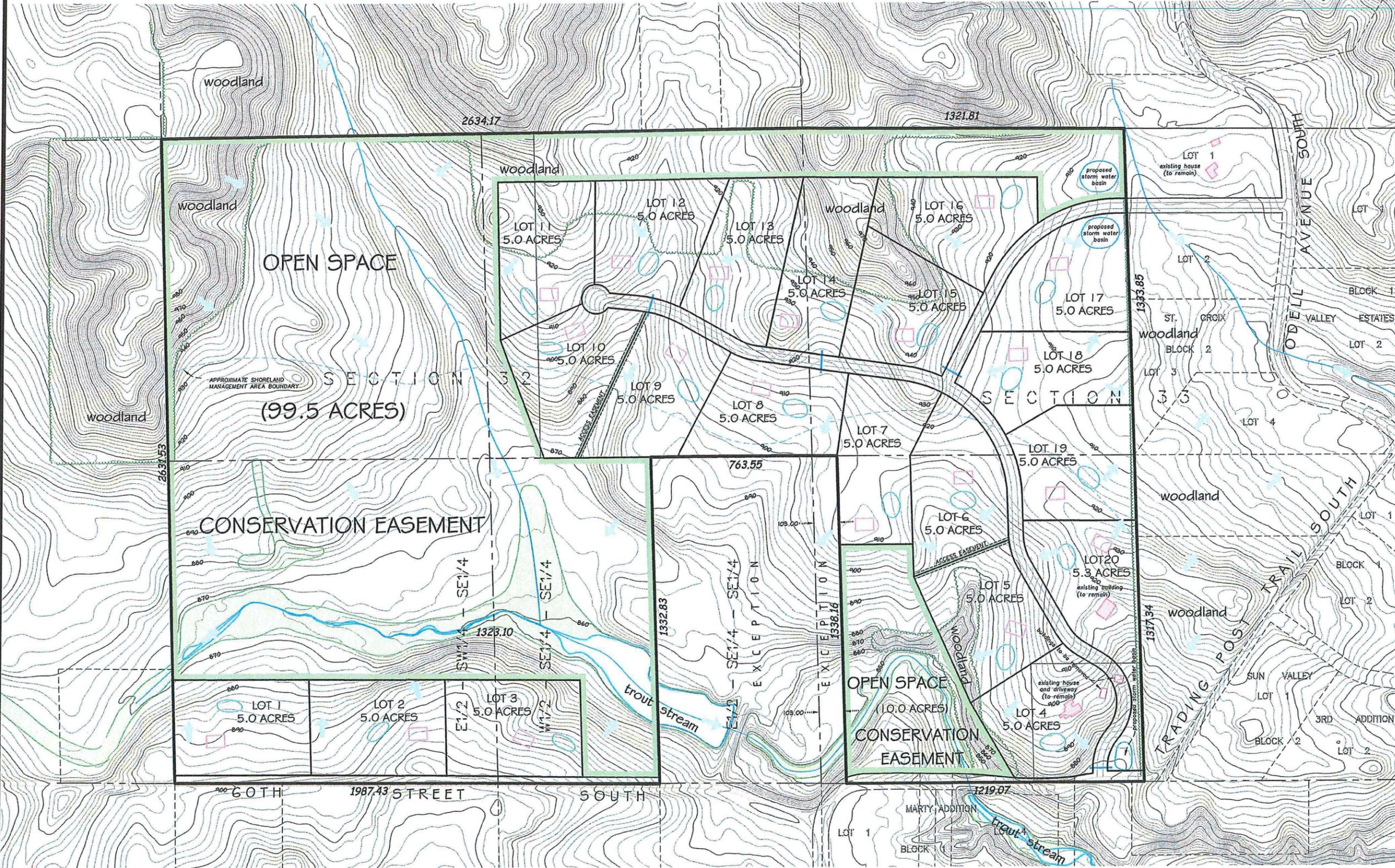
Wetland, Shoreland and stream locations are approximate and are based on data obtained through the National Wetlands Inventory - V2 online interface and the City of Afton Zoning Map (MAP 11).

Scale in Feet
0 100 200 400
1 inch = 200 feet

OFFICIAL COPIES OF THIS MAP ARE CRIMP SEALED

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.

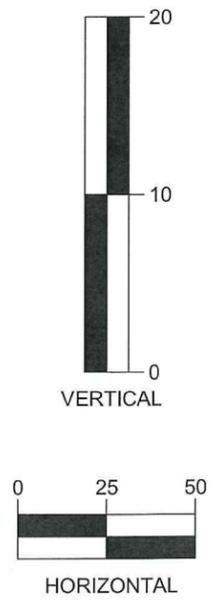
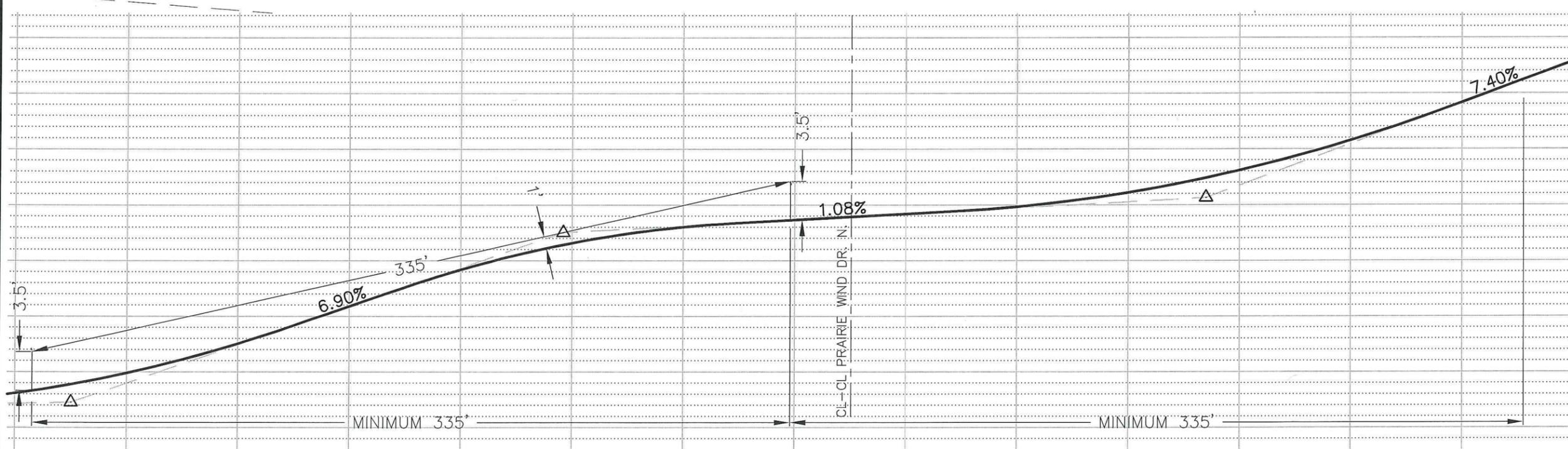
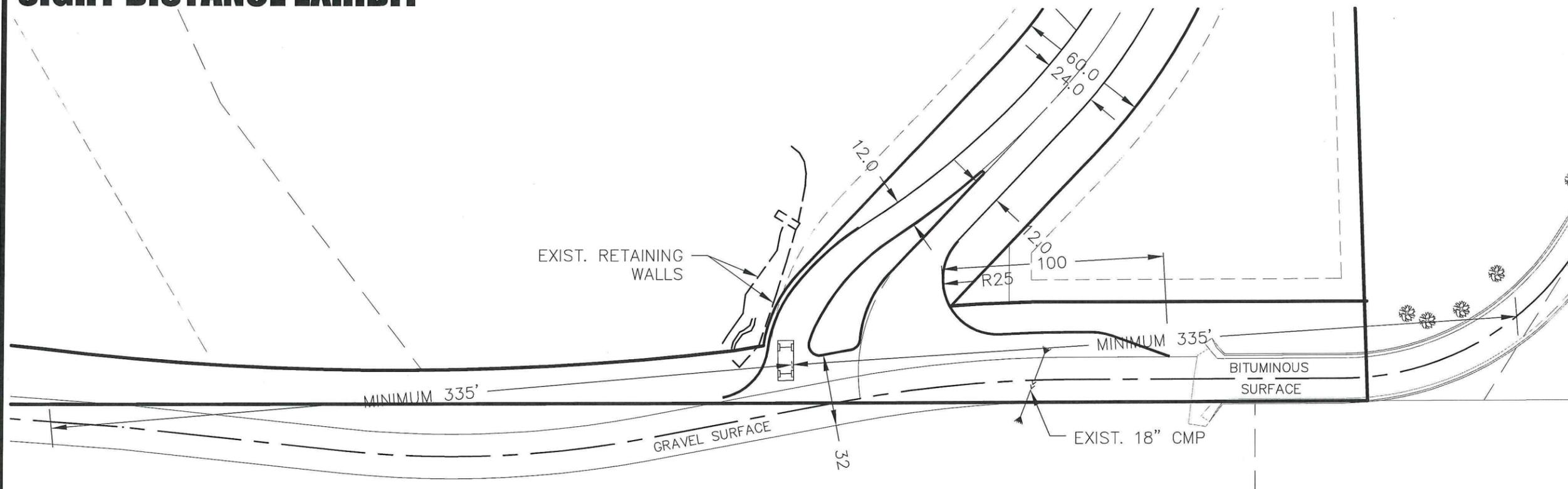
Landmark Surveying, Inc.
Milo B. Horak
Milo B. Horak, Minnesota License No. 52577
December 19, 2016
Date



Landmark Surveying, Inc.
21000 Olinda Trail North
P.O. Box 65
Scandia, Minnesota 55073
Office number: 651-433-3421
Cell number: 651-755-5760
E-mail: inthefield@frontier.net

AFTON CREEK PRESERVE SIGHT DISTANCE EXHIBIT

NORTH





Department of Public Health and Environment

Lowell Johnson
Director

Sue Hedlund
Deputy Director

October 3, 2017

GEO Code: 33.028.20.33.0002

JP Bush Homes
1980 Quasar AVE S
Lakeland MN 55043

SUBDIVISION APPROVAL

On August 14, 2017, the Department received a Septic Permit Application for a 10 Lot Subdivision located at 14220 60th ST S in the City of Afton, Minnesota, GeoCode 32.028.20.33.0002 On September 22, 2017 the Department conducted a site review of the proposed lots. Based on the observations on September 22, 2017, and Brian Humpal's soil observation logs on each lot, the proposed subdivision appears to have suitable soil for individual sewage treatment systems and the Department is approving the proposed subdivision as suitable to accommodate long-term sewage treatment.

It should be noted that the soil testing conducted by Brian Humpal was preliminary and was conducted only for the purpose of determining suitability of this lot to support long-term sewage treatment. Section 9.5 of the Washington County Development Code, Chapter Four, Individual Sewage Treatment System Regulations (Washington County Ordinance #179) states:

Complete testing on each individual lot will be required prior to permit issuance independent of any prior approved subdivision testing. A minimum of four (4) satisfactory soil borings outlining an area of 5,000 square feet are required.

Before permits will be issued by this Department for a specific subsurface sewage treatment system design on a specific lot, at least four additional soil borings and at least one percolation test must be conducted by a designer licensed by the Minnesota Pollution Control Agency. The preliminary soil borings conducted by Brian Humpal may not be used by another designer for a specific SSTS design.

For each lot, rope off and protect the area reserved for the primary and secondary individual sewage treatment system from all traffic. Any excavation in the primary and secondary individual sewage treatment system would nullify this approval and may subsequently cause the lot to be declared unbuildable. The minor subdivision is approved only for the lot configuration submitted in the application. Any changes to the lot configurations will nullify this approval.

If you have any questions or comments, please contact me at 651-430-6673.

Sincerely,

Christopher W. LeClair, R.E.H.S.
Senior Environmental Specialist
Washington County Department of
Public Health & Environment
Chris.LeClair@co.washington.mn.us

October 11, 2017

To: Afton City Council and Planning Commission

From: Citizens Concerned for Afton

RE: Rezoning Request by Joe Bush regarding Carlson PLCD/Afton Creek Preserve

SUMMARY

We are opposed to the application by Joe Bush to rezone a 5-acre parcel from rural residential (RR) to agricultural in conjunction with the proposed Carlson PLCD/Afton Creek Preserve. The subject parcel is not used for agricultural purposes, nor is there any proposal for it to be used for agricultural purposes in the future. A rezoning under these circumstances would be a shocking precedent in Afton that will have long term implications. Not only does it not meet the legal hurdles for a rezoning, but it would be strictly for the convenience of a developer and to promote his economic interests at the expense of the public safety and welfare.

DETAILED REASONS FOR OBJECTION

Purpose of the Rezoning. Joe Bush has asked to rezone a 5-acre parcel from rural residential (RR) to agricultural in conjunction with the proposed Carlson PLCD/Afton Creek Preserve. The existing parcel has an existing home on it (the old Schuster home) that has been used as a residential property for many years and would continue to be used for residential purposes if rezoned.

The sole purpose of the rezoning this parcel is for the convenience of Mr. Bush so he can: (1) reconfigure the subject parcel with other lots on his proposed PLCD so that the parcel can be used to build a road access from/to the PLCD from 60th Street just west of Trading Post and (2) to add this parcel to his proposed PLCD development which would not otherwise be allowed because the RR zone does not allow a PLCD. Overall, the rezoning will allow Mr. Bush to maximize the number of homes in the PLCD and allow him to use his preferred road access location to the development even though there is a safer alternative farther down 60th Street.

Legal Standards for Reviewing Rezoning. Minnesota law and Afton ordinances govern the standards by which rezoning applications must be judged. The Municipal Planning Act at Minn. Stat. 462.357, subd. 1, allows municipalities to approve zonings and rezonings that promote the "public health, safety, morals and general welfare." Afton Ordinance 12.81.J states that "in granting or recommending any rezoning the Council shall find that the proposed development conforms substantially to the policies, goals and standards of the Comprehensive Plan."

When interpreting state law, the courts have found "[W]hen an application is made for reclassification from one zone to another, there is a presumption that the original zoning was well planned and was intended to be more or less permanent. Before a zoning board rezones property there should be proof either that there was some mistake in the original zoning or that the character of the neighborhood had changed to such an extent that reclassification ought to be made. The burden of proof is upon the proponents of the change." Hardesty v. Zoning Board, 211 Md. 172, 177, 126 A.2d 621, 623 (1956). The courts have also found in reviewing rezonings that "The general welfare of the public is paramount in

importance to the pecuniary stake of the individual.” Beck v. City of St. Paul, 304 Minn. 438, 449, 231 N.W.2d 919, 925 (1975).

The League of Minnesota Cities also provides guidance on the review of a rezoning. The League’s Information Memo: Zoning Guide for Cities dated July 6, 2017 at page 34 states: “The law presumes an existing zoning ordinance constitutional, and an applicant only is entitled to a change if they can demonstrate that the existing zoning is unsupported by any rational basis related to the public health, safety and welfare.” https://www.lmc.org/media/document/1/zoning_guide.pdf?inline=true

Public health, safety, and welfare. There is no provision in the law or ordinance that allows approvals for rezoning requests like the one Mr. Bush makes here—one that is merely for convenience purposes and for the economic interests of the developer at the expense of the public. The character of the neighborhood surrounding the subject parcel hasn’t changed requiring a rezoning. Nor does the rezoning of this parcel promote the public health, safety, morals and general welfare as required. In fact, the rezoning would allow the developer to pursue his preferred road access location that will add potentially 200 more car trips onto a section of Trading Post that has significant safety problems related to substandard road width (only 18 feet in spots), steep grade, blind curve, and reduced site lines.

While Bush’s economic interests or “pecuniary stake” may be promoted with a rezoning, it comes at a substantial cost to the general welfare and safety of the public inconsistent with law that requires the public interest to be paramount as discussed above. Even if the rezoning were denied, Mr. Bush has feasible alternatives. He is not precluded from reconfiguring his lot design to meet the conditions of the ordinances or moving the entrance to the PLCD to the safer alternative farther down 60th Street. He has publicly stated on several occasions that an entrance farther down 60th Street would be about the same cost to him.

In addition to the public safety problems, the rezoning would also have a negative impact on the general public in the surrounding area by allowing the developer to increase development density by reconfiguring lots to increase the number of homes built. Of the 13 existing neighborhood parcels abutting the proposed PLDC, only 3 are 5 acres and most are much larger. For example, to the east the abutting parcel acreages are as follows: Dawson/Lewandowski 6.5, Graham 9.2, McConnell 5.45, Rickard 5, Dickes 5. To the south the abutting parcel acreage is: Rhode/Turner 23.5. To the west the abutting parcel is: Wallace 160 acres plus. To the north the abutting parcel acreages are: Swanson 78, Forbes 19.8, Berggren 68.4, Belz 14, and Brannan 5.96. Yet all but one of the lots in the Carlson PLCD will be 5 acres. By using the PLCD ordinance the developer is increasing the housing density in the area to a greater degree than if the development was restricted to one home per ten acres as allowed under the underlying agricultural zoning district. This is particularly true on this acreage because much of it is not developable at all because of steep slopes and limited access so there would never be one home per ten acres actually constructed.

As noted at the Planning Commission meeting on October 2, 2017, there is a high bar for rezoning from agricultural to RR. Some may interpret rezoning from RR to agricultural as a lesser bar because it may be a less intense use. But here, there will be no change to a less intense use. It is residential now and

will continue to be in the future. So, the rezoning is in name only merely to avoid the restrictions in the RR district.

Afton Comprehensive Plan. Finally, the rezoning does not conform substantially to the policies, goals and standards of the Afton Comprehensive Plan as required.

- Page 22, paragraph 3 of the Comprehensive Plan, states that PLCDs should have “minimum impact to the character of the community.” As discussed above, the Carlson PLCD maximizes density and has a substantial impact on the overall density in the immediately surrounding community.
- On page 26, the top 3 Comprehensive Plan Landuse Goals, Policies and Strategies are listed as:
 1. Maintain the city's overall low density;
 2. Preserve the rural character of Afton;
 3. Encourage agricultural uses.The rezoning will facilitate results that are contrary to these principles.
 - The Carlson PLCD will actually result in a net gain of density because the City is intending to allow the developer to take credit for already undevelopable land when determining how many acres must be set aside in a conservation easement under the PLCD. These undevelopable wetlands, streams, steep slopes are already “preserved” and only the developer gains by taking credit for these to reduce the amount of land he has to put in a conservation easement so he can maximize density on the remaining land.
 - The development does not preserve the rural character or encourage agricultural uses. It converts over 100 acres of existing farmland to 5-acre housing parcels in a surrounding community made up of primarily very large multiacre parcels contributing to the rural character of southwest Afton.
- Page 27, paragraph 8 of the Comprehensive Plan states the Afton states:

“8. Discourage residential development on lands suitable for agricultural use and adhere to Planning practices that will allow farms to operate without external pressures.” The rezoning will facilitate the conversion of agricultural land to residential by allowing the developer to reconfigure land parcels to maximize 5-acre housing density in the proposed PLCD.
- Page 21 of the Comprehensive Plan states: “The residents of the City of Afton value the agricultural economy and rural character that an agricultural environment provides. This Plan intends to preserve agricultural land for permanent agricultural use, and does not accept the belief held by some that agricultural use is merely a temporary use or that agricultural lands are merely a holding area for future residential or other development. Moreover, the community values agricultural land as open space in an increasingly urban environment, a sanctuary for a rural lifestyle that Afton residents have consistently desired to maintain.” The rezoning will further facilitate the conversion of agricultural land to residential development.

Ron Moore

From: Joe Bush <joe@joebushmn.com>
Sent: Wednesday, October 11, 2017 1:40 PM
To: Ron Moore
Subject: RE: Entrance sign

Ron
Respectfully we are withdrawing the proposal for a subdivision entry sign for Afton Creek Preserve. This e-mail services as our official withdraw from the application for such entry sign request.
Joe bush

From: Ron Moore [mailto:rmoorse@ci.afton.mn.us]
Sent: Tuesday, October 10, 2017 4:34 PM
To: Joe Bush <joe@joebushmn.com>
Subject: Entrance sign

Joe,
Because the zoning code prohibits subdivision entrance signs, it would be easiest for you to withdraw your proposal for the entrance sign rather than the Council having to take an action to deny the sign proposal. Please send an email withdrawing the subdivision entrance sign proposal.
Thanks,
Ron

217-19

RECEIVED
AUG 14 2017
CITY OF AFTON

CITY OF AFTON SKETCH AND PRELIMINARY PLAT FOR MAJOR SUBDIVISION APPLICATION

Owner	Address	City	State	Zip	Phone
ALBERT WILMER CARLSON	2534 STAGE COACH TR	MN	AFTON		
Applicant (if different than owner)	Address	City	State	Zip	Phone
J.P. BOW HOME S	1930 QUASAN AVE S.	LAKELAND	MN	651-775-4222	
Project Address					
14220 60TH ST	AFTON	MN	55001		

Zoning Classification	Existing Use of Property	PID# or Legal Description
	AG	SEE SITE PLAN

Description of Request
DEVELOPE 1218 ACRES FROM AG TO PLCD

By signing this application, the applicant agrees to pay all expenses incurred by the City of Afton.
 In connection with this request, your signature constitutes permission for a representative of the City of Afton to enter your property, during business hours, to evaluate this request. This may involve minor excavating or soil borings. If you would like to be present during this evaluation, please contact the City.

Signature of Owner/Applicant	Date
	8/14/17

Make checks payable to: **City of Afton**

<u>FEES: (Major Subdivision)</u>	<u>DEPOSITS:</u>	<u>TOTAL:</u>
0-5ac \$500 + \$100/lot	\$2,500	_____
6-40ac \$1,000 + \$100/lot	\$5,000	_____
41-80ac \$2,000 + \$100/lot	\$7,500	_____
81+acres <u>\$5,000</u> + <u>\$100/lot x 19 lots</u>	<u>\$10,000</u>	<u>\$16,900</u>
Other _____		

DATE PAID: 8-14-17
 CHECK #: 0221
 RECVD. BY: [Signature]

ATTACH COPY OF DEED OR PROOF OF OWNERSHIP TO APPLICATION

RECEIVED
AUG 14 2017
CITY OF AFTON

Z17-20

City of Afton
ZONING PERMIT APPLICATION

REZONING APPLICATION
(Reference Code Section: 12-80)

Owner	Address	City	State	Zip	Phone
ALBERT WILMERE CARLSON 2534 STATE COACH TRL AFTON					
Applicant (if different than owner)	Address	City	State	Zip	Phone
JPRUSH HOMES 1780 QUASAR AVE S LAKELAND MN 651775-4222					
Project Address					
14220 60TH ST		AFTON	MN	55001	
Zoning Classification	Existing Use of Property	PID# or Legal Description			
	RR	SEE SITE PLAN			
Description of Request					
REZONE EXISTING HOMESTEAD ZONED RR TO PLCD					
By signing this application, the applicant agrees to pay all expenses incurred by the City of Afton. In connection with this request, your signature constitutes permission for a representative of the City of Afton to enter your property, during business hours, to evaluate this request. This may involve minor excavating or soil borings. If you would like to be present during this evaluation, please contact the City.					
Signature of Owner/Applicant					Date
[Signature]					8/14/17
FEES:		ESCROW:			
Rezoning Fee	\$350.00	Rezoning Escrow	\$1500.00	TOTAL:	\$1850.00
				DATE PAID:	8-14-17
				CHECK #:	6221
Make checks payable to: City of Afton				RECVD. BY:	[Signature]
ATTACH COPY OF DEED OR PROOF OF OWNERSHIP TO APPLICATION					

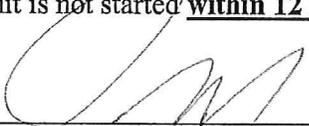
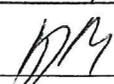
I understand and hereby agree that the work for which the permit is issued shall be performed according to the following: (1) the conditions of the permit, (2) the approved plans and specifications, (3) the applicable city approvals, ordinances and codes, and (4) the state building code.

I understand that the permit will expire if work is not started within 180 days, or if work is suspended or abandoned for a period of 180 anytime after work has commenced; and that I am responsible for ensuring that all required inspections are requested in conformance with the state building code.

RECEIVED
AUG 14 2017
CITY OF AFTON

Z17-21
Updated April, 2012

**CITY OF AFTON
CONDITIONAL USE PERMIT APPLICATION**

Owner	Address	City	State	Zip	Phone
ALBERT WILMER CARLSON 2534 STAGE COACH TRL AFTON					
Applicant (if different than owner)	Address	City	State	Zip	Phone
J.P. BUSH HOMES 1980 QUASAR AVE S. LAWRENCE 651-775-9222					
Project Address					
14220 GOTH ST.		AFTON	MN	55001	
Zoning Classification	Existing Use of Property	PID# or Legal Description			
	AG	SEE SITE PLAN			
Description of Request					
DEVELOPE 218 ACRES TO P&D					
<p>By signing this application, the applicant agrees to pay all expenses incurred by the City of Afton. In connection with this request, your signature constitutes permission for a representative of the City of Afton to enter your property, during business hours, to evaluate this request. This may involve minor excavating or soil borings. If you would like to be present during this evaluation, please contact the City. If work authorized by this Conditional Use Permit is not started <u>within 12 months of the date issued</u>, this CUP will EXPIRE and be INVALID.</p>					
					
Signature of Owner/Applicant					Date
Make checks payable to City of Afton :					
FEES:		ESCROW DEPOSIT:			
CUP	\$250	CUP Escrow	\$600	TOTAL:	\$850
Amended CUP	\$250	Amend CUP Escrow	\$350	DATE PAID:	8-14-17
City Engineer	_____	Engineer Escrow	_____	CHECK #:	6221
Other	_____	Other	_____	RECVD. BY:	
ATTACH COPY OF DEED OR PROOF OF OWNERSHIP TO APPLICATION					

To: Ron Moorse

Date: September 21, 2017

From: Carlson PLCD Neighborhood Group and Citizens Concerned for Afton

RE: Carlson PLCD-Preliminary Plat Application

This provides preliminary comments on the Preliminary Plat Application map dated August 14, 2017 and associated materials that were provided to us in early September, 2017. We understand evaluations of the application are underway by the City Planner and City engineer regarding road safety and slopes but we have not had the opportunity to review those and may have additional comments.

We note that the August 17, 2017 plat map shows different slope information than the previous iterations of the plat maps. In particular, the pink areas that previously denoted 18 percent slopes are either missing or are no longer visible compared with previous maps. The developer should be required to provide a map with 18 percent slopes clearly identifiable and provide acreage calculations of all land in these areas.

In summary, as currently configured, the preliminary plat does not meet the requirements of the PLCD ordinance. Specifically, under 12-2373.B, C and E, it does not preserve the health and safety of the citizens nor does it fully protect open space because of the unaddressed storm water problems, road safety issues and density considerations further discussed below. It also does not meet 12-2375. 1, 2 and 4 because it does not meet all the requirements of the Comprehensive Plan and it will have an adverse impact on the reasonable enjoyment of neighboring property and surrounding land uses because of the unaddressed issues discussed below. It will also have an excessive burden on streets because of the existing safety issues associated with the location of its access road.

Density. First, the PLCD site is located in an area that is simply too sensitive to allow 19 homes. It is located in Landscape Unit 28 and 29 identified in the Afton Natural Resources Inventory dated June 2001 (NRI) by Emmons & Oliver. This Landscape Unit 28 is ranked as "High" for rare features potential on Page II-2 of the NRI. The site is also located in an area with many steep slopes, many in excess of 18 percent, and half the site has soil types that have a "severe" erosion hazard ranking according to the USDA soil maps included in EAW Figure 7. PLCD Lots 2, 3, 9, 12 and 13 (former PLCD Lots 3, 4, 10, 13, and 14) appear to be completely within the area identified with a "severe" erosion hazard. The PLCD is also adjacent to Trout Brook and wetlands adjacent to Trout Brook, a DNR protected water identified as a candidate for stream restoration for a trout fishery. Further, much of the property is in an Afton Conservation and Shoreland Overlay District.

There are few sites in Afton, if any, that have this combination of environmentally sensitive features. The City has wide discretion in the PLCD ordinance to reduce density and should do so. All land is not created equal--the ordinance is a guide and the City has the discretion within it to address the unique features of this site.

As previously mentioned, we agree with the DNRs comments to the EAW where it suggested elimination of current Lots 3 and 4 partly because of the extreme slopes adjacent to Trout Brook. Although there

may be no evidence of surface water springs, the DNR letter also notes as support for its recommendation that this area is highly likely to have shallow groundwater migrating towards Trout Brook. The Natural Resources and Groundwater Committee (NRGC) also expressed concerns about lots formerly identified as Lots 3, 4, 13 and 14. The NRGC recommended consolidation of Lots 3 and 4 into one lot and the consolidation of Lots 13 and 14 into one lot. Based on the new plat map, this would translate to the consolidation of current Lots 2 and 3 and the consolidation of Lots 12 and 13 into one lot. Comments by the NRGC in January 2017 (see S. Winsor and A. Perkins thoughtful narrative comments) also recommended the elimination of Lots 1 and 2 given these lots are in the Trout Brook stream corridor. At the City Council meeting on June 20 there was also discussion about elimination of Lots 1 and 2 and we have been told that these concerns were primarily about viewshed looking into and from the proposed conservation easement. We agree that viewshed is an important consideration and is shared by the Minnesota Land Trust. But there are environmental considerations as well given the location of the lots in the Trout Brook corridor and the particularly steep slopes on proposed Lot 2. In the preliminary plat application, Bush has now removed Lot 2 but Lot 1 remains. Lot 1 should also be removed and be considered as part of the developer's park dedication requirement.

Second, as stated before, we believe that Afton Ordinance 12-2375 does not allow the developer to take credit for land that would be undevelopable under the existing Agricultural zoning district when determining how much land he must put in the conservation easement under the PLCD ordinance. A more thorough legal analysis of this interpretation was provided under separate cover and is also attached hereto as Attachment A. We understand this concept was a foundational principal during the development of the PLCD ordinance because the developer is asking for the special privileges under this ordinance. For example, he should not be able to count the acres with slopes in excess of 18 percent towards the acreage equaling 50 % of the total development he must put in the conservation easement under 12-2375.C. This is because under the underlying district these lands are subject to a scenic easement and could not be developed anyway so there is no benefit to the City to give him credit for these lands to maximize development elsewhere. Allowing them to be considered so that he can maximize density in the remaining portions of the development, would have a negative effect on the surrounding area in violation of 12-2375.B. and be inconsistent with the Comprehensive Plan. Acres of other undevelopable land such as wetland, stream, and shoreland should be treated the same way. Until we have detailed slope, wetland, stream, and shoreland acreage information, we do not know how many acres might be affected under this analysis.

Buffer Strips.

The proposal evaluated in the EAW Appendix B suggested there would be native grass plantings in addition to woody buffer strips to address erosion or runoff. The plan mandated a minimum of 12 trees and 8 bushes of any size and native grasses throughout the site. Mr. Bush has also at various times represented that he would plant a buffer of trees along the eastern boundary of the PLCD in an area that abuts the properties of existing homes. Currently, the landscape plan only has native grasses planted on the site and a minimum of trees and bushes as landscaping around the homes. The 'buffer strip' of trees/bushes to address erosion and runoff as stated in the EAW and the trees along the eastern boundary should be required as previously promised.

Stormwater Drainage. As highlighted by the community many times before, overland sheet flow drainage during snowmelt and heavy rainfalls currently presents a drainage problem on existing

properties to the east of the project site and adjacent to proposed PLCD Lots 16, 17, and 18. These impacted adjacent properties border Odell Avenue and are located at 5650 and 5680 Odell. The developer ignored this issue in the EAW and the stormwater drainage plan submitted in the preliminary plat application also ignores it.

Drainage from the proposed Carlson PLCD flows downhill and overland to a low point where it intersects with the boundary line of existing adjacent properties at the eastern edge of PLCD Lot 17 and 18. The erosion from this runoff has cut a drainage channel at this intersection as it flows east and the runoff ultimately flows in a large swath between these adjacent properties during snowmelt and rainfall. Rocks have been placed in this channel to try to prevent continuing erosion. See attached map showing approximate location and pictures showing runoff during a May 2017 rain event. In addition to runoff into this low point, sheet flow and erosion flows down a strip of land owned by Will Carlson and currently used as a farm access road on the southern boundary of 5680 Odell. This runoff ultimately flows onto the property at 5680 Odell. See attached pictures. All of this runoff ultimately flows into a tributary of Trout Brook identified by the Minnesota DNR that flows under Odell Avenue.

In addition to the drainage channels above, stormwater from the Carlson property also flows over the property just north of 5650 Odell owned by the Dickes family.

The proposed development needs to specifically address this drainage problem and present a plan by a qualified engineer to retain its storm water on the project site and away from these adjacent properties. The stormwater plan provided the developer suggests that mere planting with native grasses will prevent this overland sheet flow. However, even during the heavily vegetated times of the year, stormwater still flows onto these properties from the Carlson property. Further, many times the crop of plantings on the eastern side of PLCD are totally washed out during rains so it will take extra maintenance efforts to get ensure native grasses grow in this area. At a minimum, in addition to native grasses, special vegetative buffer strips, corrective grading, berms and stormwater ponds should be considered to address erosion and overland sheet flow on the eastern portions of proposed PLCD lots 16, 17, 18 and 19.

The developer should be required to address this problem at early development stages given the erosion and stormwater runoff risk being aggravated without a cover crop on the property.

Fish, wildlife, plant communities, and sensitive ecological resources (rare features). The City must address the Afton NRI when making land use decisions as required by the Comprehensive Plan. The EAW did not address the rare features potential of the site as identified in the Afton Natural Resources Inventory dated June 2001 by Emmons & Oliver (NRI). The project site is located in a highly sensitive area of Afton. It is located in Landscape Unit 28 and 29 identified in the Afton NRI. Landscape Unit 28 is rated "High" for rare features potential on Page II-2 of the NRI. This has been pointed out to the developer and his consultants on numerous occasions but he has ignored it. The Afton Comprehensive Plan Environmental Resources Goals and Policies on page 19, paragraph 12 states "Utilize data from the Natural Resources Inventory when considering all land use applications." The City's consultant should update the NRI at the developer's expense. Given the lack of professionalism in the EAW prepared by the developer's consultant, the City must take control over this evaluation at the developer's expense.

Farm Access Road. Carlson, the owner of the PLCD site, owns a 16.5-foot wide farm access driveway between two existing adjacent properties contiguous to the eastern boundary of PLCD Lot 18. The owner has previously illegally cleared land on these adjacent properties he does not own to widen this access to over 25 feet in certain areas. Based on a recent survey, the entire farm access driveway was illegally constructed on one of these adjacent properties at its intersection with Trading Post. Carlson does not own the property where the farm access driveway was constructed at Trading Post and he has not been given permission to use it. Any use of this illegal farm access road during construction would have a substantial negative impact on these adjacent properties from vehicle emissions, dust, odor and noise. The developer should be prohibited from using this illegal road for any purpose during construction to avoid these impacts.

Further, the developer continues to try to use the farm access road to negotiate resolution of neighborhood concerns about the PLCD. He has inappropriately tried to get the neighbors to forgo expressing concerns about the PLCD in exchange for resolving the farm access road. He continues to do so by highlighting it on his preliminary plat map but leaving his intentions for the land unclear. He has at various times in the past had different proposals for this land including a bike trail, emergency access, and most recently park dedication. We have addressed in separate correspondence the neighborhood objections to the bike trail and emergency access. We also voiced our objection to use of this land to satisfy the developer's park dedication obligation. This is unusable land from a City parks standpoint (goes nowhere and too narrow for use) and its value is only \$400 on the Washington County property tax records website which is not a meaningful park fee for a development of this size. Further, if donated and not maintained by the City, it will become a dense buckthorn strip because of the illegal clearing the owner did without proper treatment of buckthorn.

The farm access road has no value to the PLCD and it is worth only \$400 market value based on County records. The use of the farm access road should be abandoned and the strip conveyed to adjacent property owners so that it can be restored to native vegetation.

Road Access and Transportation. The EAW wrongly concludes there would be no measurable effect on transportation related issues. The approaches along Trading Post and 60th street to the proposed road access point for the PLCD are some of the most dangerous existing road areas in Afton given a combination of reduced site lines, sharp curves, steep grade, several high adjacent road embankments, inadequate road width, and gravel road surface. The development is expected to add 200 plus car trips a day onto Trading Post to the north and 60th street to the south. Within a few feet of this access on Trading Post, traffic must travel around a blind curve that does not meet current DOT or AASHTO standards, plus the road width at certain areas in this location is only 18 feet in width requiring cars to stop before going around the blind curve. Without significant modifications and removal of large hillsides to eliminate the blind curve and widen the road, the addition of proposed PLCD road access point here would present substantial safety hazards. Further, there are environmental impacts at this location because of the associated runoff from over 200 cars per day over the highest quality area of Trout Brook. An access farther west on 60th at or near proposed PLCD Lots 1 is a better alternative overall from a safety and environmental standpoint and the developer has stated that it is no more expensive for him.

The surface of 60th Street is currently gravel and the City has indicated that it may pave it to encourage traffic to stay away from the safety problems for cars exiting/entering the proposed development from

the north on Trading Post. However, there is no assurance that cars will avoid going north if it is an inconvenience to the driver. Further, it is poor public policy in the face of a safety problem, to hope that drivers will avoid an unsafe area instead fixing the safety problem in the first place.

The burden of presenting a safe access road falls on the developer. The PLCD ordinance at Sec. 12-2373.B states the proposal must preserve the health and safety and welfare of the citizens of the City. Sec. 12-2379.4 states the PLCD must not create an excessive burden on streets. Here, the citizens will be put at greater safety risk and there is an excessive burden on an already unsafe road. The community should not be burdened by an unsafe access road at the proposed location just because an owner/developer has not purchased land with good access especially when the owner/developer has safer alternatives available farther west along 60th street.

Culdesac Length. Sec 12.1379.B states "A cul-de-sac street shall not exceed 1,320 feet in length and shall serve no more than nine lots. A variance may be granted on the length limitation only when it is clearly demonstrated that the length greater than 1,320 feet is necessary for reasons of unfavorable land topography. No variance shall be granted which would allow more than nine lots to be created on a cul-de-sac street." (emphasis added) While Sec. 12-2376.B allows a variance on the length of the cul-de-sac, it does not allow a variance for more than nine lots that is strictly prohibited by 12-1379.B. The lots submitted on the PLCD proposal do not appear to comply with ordinance 12-1379.B. because there are more than 9 lots on the cul-de-sac and, therefore, the proposed culdesac can not be allowed under the ordinance.

Miscellaneous

The Shoreland and Conservancy overlay boundaries are not delineated on the south side of Trout Brook. Lot 1 on the south side of Trout Brook appears to be in the Shoreland district and subject to its requirements.

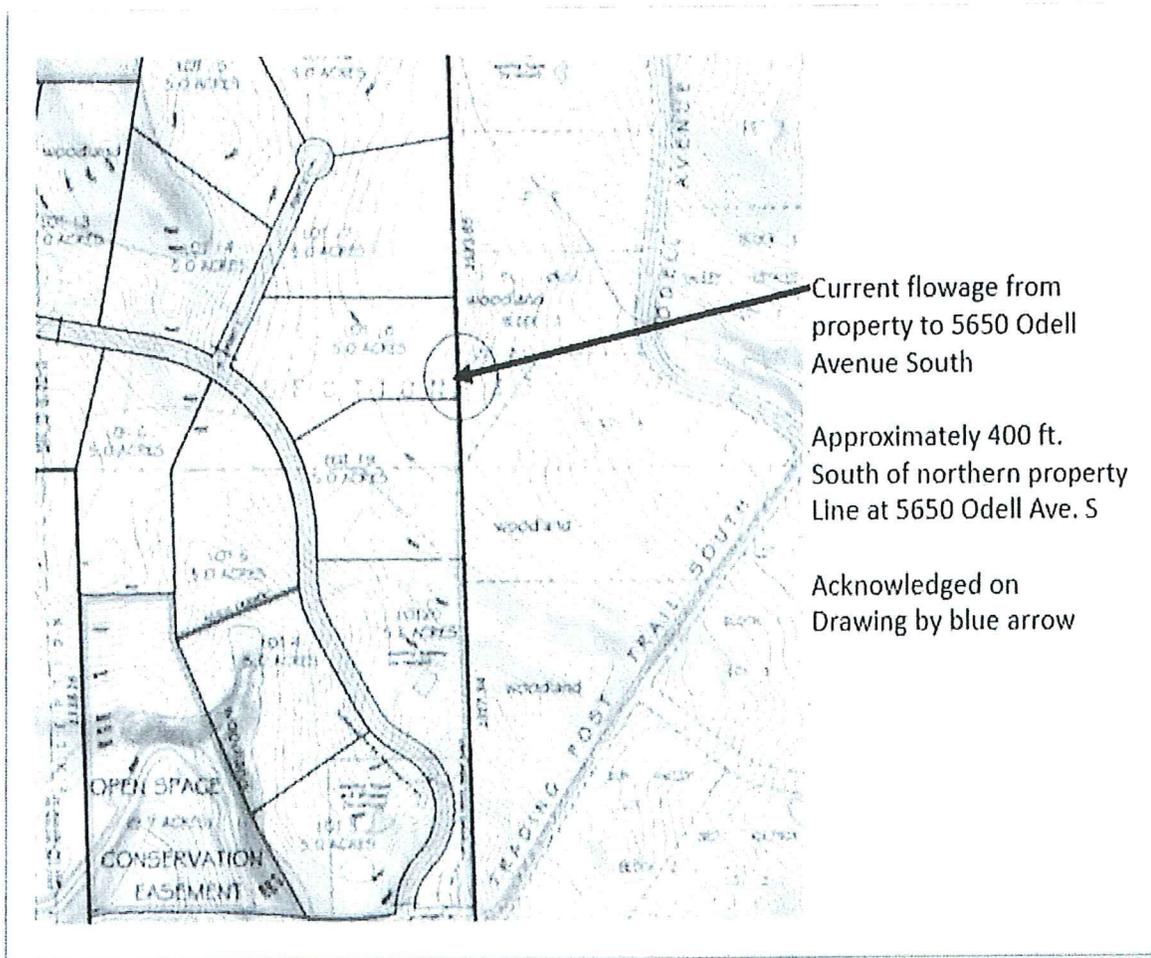
Lot 1 septic system is shown outside of Lot 1.

Lots 1, 2, and 3 show septic systems in the Shoreland district. Verify that all structures are set back a minimum of 20 feet from the crest of all slopes exceeding 18 percent as required by Sec. 12-46.

Lot 19 is a highly irregular-shaped lot with a stormwater pond on the south side. An easement for maintenance of this pond should be created in favor of the homeowners' association for the development.

The roads through the development appear to travel through slopes in excess of 12 and 18 percent. We understand roads in the development must be at 8 percent grade or lower. Clarify how road grades of 8 percent or lower will be met on these slopes.

Verify that wells for 19 homes will not affect aquifer and wells in adjacent areas.



Approximate location of start of drainage channel created by overland flow from Carlson property



Start of drainage channel from proposed PLCD onto 5650 Odell property



Drainage from proposed Carlson PLCD onto 5650 Odell property looking towards Carlson property

Drainage from proposed Carlson PLCD looking towards Odell





Drainage and erosion from proposed Carlson PLCD flowing towards farm access strip and 5680 Odell



Stormwater drainage flowing from proposed Carlson PLCD down farm access road and onto 5680 Odell

Attachment A to Comments on Carlson PLCD Preliminary Plat Application

Carlson PLCD—Density Determination under Afton PLCD Ordinance

1. First, a developer should not be allowed to include existing undevelopable land under Afton ordinances (for example, land in excess of 18% slopes, wetlands, streams, etc.) in the proposed conservation easement to satisfy the PLCD requirement that “50 percent of the total tract be preserved as an undeveloped parcel.” To do so defeats the purpose and provisions of the PLCD ordinance.

The stated purpose of the PLCD ordinance is to preserve open space as set forth in 12-2373.C and E (See PLCD ordinance provisions below highlighted in yellow). It allows a developer of a parcel to put a portion of land that would otherwise be developable into conservation easement in exchange for allowing greater density on the remaining portion of the parcel. This makes sense and is consistent with the City’s Comprehensive Plan because it overall protects open space for Afton by preserving land that would otherwise be developable while still allowing wise development on the remaining parcel.

However, allowing a developer to take credit for undevelopable land in a conservation easement to maximize density on the remaining parcel is a net loss of open space for Afton and a windfall for the developer. This land is already undevelopable and “preserved” under Afton ordinances. The only way the open space preservation purpose of the PLCD ordinance is met is if land that is currently at risk for development is preserved. To do otherwise gives a developer credit for land he can’t develop anyway so that he can maximize density on the remaining parcel—a win-win for a developer but a net loss for Afton. Thus, all undevelopable land that is proposed for the conservation easement under the PLCD ordinance must be excluded from the calculation determining whether 50 percent of the total tract is preserved as an undeveloped parcel.

Some may argue that in other land use decisions in Afton, undevelopable land is included in determining overall lot sizes. However, in those instances, the landowner is not seeking the special privileges under the PLCD ordinance. Under the PLCD ordinance a developer is seeking permission to gain the benefit of greater density on a portion of his parcel in exchange for giving something up in the form of a conservation easement on the other portion of a parcel. The City of Afton only benefits from this exchange if the developer actually gives something up in the bargain and preserves land that is otherwise developable. Likewise, the preservation of open space purposes of the PLCD ordinance is only met if the exchange preserves land that is otherwise developable.

In the instance of the Carlson PLCD, the developer is attempting to take credit for acres of undevelopable land in a conservation easement in order to maximize density on the remaining developable parcel. Specifically, he includes in his 50 percent conservation easement calculation wetlands, the Trout Brook stream corridor, and slopes in excess of 18%, all of which are already preserved under Afton ordinance and undevelopable. To comply with the PLCD ordinance he should be required to exclude all undevelopable land under Afton ordinance from the calculation to determine if he has met the 50 percent preservation requirement.

Of note, in most instances of agricultural land, this type of analysis would make no difference because typical agricultural land has low to moderate slopes and no water features. As appropriate because of the sensitivity of this particular parcel, it would make a difference here because so much of the site is unique with a trout stream, wetlands, steep slopes, and highly erodible soils.

2. Second, PLCD ordinance 12-2375.B.2 states that the development must benefit the area surrounding the project to a greater degree than development allowed within the underlying zoning district. See highlighted area below.

In the instance of the Carlson PLCD, the underlying zoning district is agricultural allowing one home per ten acres. Given large portions of the parcel are already undevelopable because they include the stream corridor of Trout Brook, wetlands, and slopes in excess of 18 percent, there seemingly is little to no benefit to the surrounding area to allow the developer to use the PLCD ordinance to maximize density with 5-acre lots on the developable portions of the parcel. This is particularly true if the developer is allowed to include the already undevelopable portions of his parcel in the conservation easement to demonstrate he has met the 50 percent test.

Furthermore, the Carlson PLCD parcel is surrounded primarily by large parcels in excess of 5 acres. To the east the abutting parcel acreages are as follows: Dawson/Lewandowski 6.5, Graham 9.2, McConnell 5.45, Rickard 5, Dickes 5. To the south the abutting parcel acreage is: Rhode/Turner 23.5. To the west the abutting parcel is: Wallace 160 acres plus. To the north the abutting parcel acreages are: Swanson 78, Forbes 19.8, Berggren 68.4, Belz 14, and Brannan 5.96. So, the Carlson PLCD will not benefit the surrounding area. In fact, it will have a negative affect on the density of the surrounding area to a greater degree than if the development was restricted to one home per ten acres allowed under the underlying agricultural zoning district. This is particularly true when taking into account the large portions of the property that are not developable at all.

Excerpts from Afton PLCD Ordinance

Sec. 12-2373. Purpose.

The purposes of this article are:

- A. To permit subdivisions in the Agricultural Zoning District which require the construction of a new public street.
- B. To encourage a more creative and efficient development of land and its improvements through the preservation of agricultural land, natural features and amenities than is possible under the more restrictive application of zoning requirements, while at the same time, meeting the standards and purposes of the comprehensive plan and preserving the health, safety, and welfare of the citizens of the City.
- C. To preserve open space, to preserve the natural resources of the site and to preserve wildlife habitat and corridors.
- D. To facilitate the economical provision of streets and public utilities.

E. To allow the transfer of development rights (density) within a subdivision in order to preserve agricultural land, open space, natural features and amenities

Sec. 12-2375. General standards for approval.

A. A Conditional Use Permit shall be required for all preservation and land conservation developments. The City may approve the preservation and land conservation development only if it finds that the development satisfies all of the following standards:

1. The preservation and land conservation development is consistent with the comprehensive plan of the City.

2. The preservation and land conservation development is an effective and unified treatment of the development possibilities on the project site and the development plan provides for the preservation of unique natural amenities.

3. The preservation and land conservation development can be planned and developed to harmonize with any existing or proposed development in the areas surrounding the project site.

B. The tract is a minimum of eighty (80) contiguous acres in size and that all of the following conditions exist:

1. The proposal better adapts itself to the physical and aesthetic setting of the site and with the surrounding land uses than could be developed using strict standards and land uses allowed within the underlying zoning district.

2. The proposal would benefit the area surrounding the project to a greater degree than development allowed within the underlying zoning district.

3. The proposal would provide land use and/or site design flexibility while enhancing site or building aesthetics to achieve an overall higher quality of development than would otherwise occur in the underlying zoning district.

4. The proposal would ensure the concentration of open space into more workable or usable areas and would preserve the natural resources of the site more effectively than would otherwise occur in the underlying zoning district.

C. At least fifty (50) percent of the total tract is preserved as an undeveloped parcel

Hi Ron.

Ms. McConnel's correspondence (attached) contends that "unbuildable" land should be excluded from the minimum 50 percent open space requirement for PLCD developments for the purpose of determining allowed density. Specifically, Ms. McConnel raises a concern that the developer of the Afton Creek Preserve subdivision is attempting to take credit for undevelopable land in a conservation easement to maximize to number of lots proposed within his subdivision.

In consideration of the issue, the following comments are offered:

1. The Ordinance does not include a definition of "unbuildable" land. Section 12-55 of the Ordinance does however, include the following definition of "buildable area" from which features considered "unbuildable" may be determined.

Buildable area means all land having a slope of 13 percent or less having enough suitable soil : two on-site sewage treatment systems and that land having a slope between 13 and 18 requirements of Section 12-132(B)(11). Buildable area does not include floodplains, wetlands, p bodies of water; parks, scenic and conservation easements or other unbuildable easements; stee way. Buildable area may include required building setbacks.¹⁰

Based on the preceding definition, the proposed Afton Creek Preserve subdivision includes a significant amount of land area considered "unbuildable."

2. Section 12-2372 of the Ordinance states that PLCDs may be allowed in the A, Agricultural zoning district to preserve the following:
 - Prime agricultural lands
 - Woodlands
 - Wildlife habitat
 - Vistas
 - Groundwater recharge areas
 - Areas with sensitive soils
 - Areas with geological limitations

Based on the preceding provision, it is considered typical for PLCDs to include and preserve unbuildable lands such as groundwater recharge areas, areas with sensitive soils and geological limitations etc.

3. Section 12-2375.C of the Ordinance states that 50 percent of the total tract of land which comprises the PLCD must be preserved as an undeveloped parcel. Section 12-2383 specifically lists the various standards which must apply to the undeveloped parcel. These standards are as follows:

Sec. 12-2383. Standards for undeveloped parcel.

No open area may be approved as common undeveloped parcel under the provision following standards:

- A. The location, shape, size, and character of the undeveloped parcel in development.
- B. The undeveloped parcel must be used for amenity or recreational purpose. The undeveloped parcel must be appropriate to the scale and character of the project, its size, density, expected population, topography, and the number and type of uses.
- C. The undeveloped parcel must be suitably improved for its intended use but features worthy of preservation may be left unimproved. The buildings, structures, and other improvements permitted in the undeveloped parcel must be appropriate to the use of the undeveloped parcel and must conserve and enhance the amenities of the parcel in its natural and unimproved condition.

The PLCD standards do not reference a required exclusion of unbuildable land from that area of a PLCD devoted to open space (for the purpose of determining allowable density). With this in mind, the City lacks the formal authority to impose such a requirement.

- 4. The underlying A, Agricultural zoning district (applicable to the Afton Creek Preserve project) imposes a minimum lot size of 5 acres. Of the provided 5 acres, the Ordinance states that at least 2.5 acres of the lot must be buildable. With this in mind, the Ordinance recognizes the likelihood that a portion of all proposed lots will include unbuildable areas. Therefore, the presumption that only buildable land would be considered when calculating the 50% open space requirement would appear to be contrary to the way that the Ordinance normally treats land parcels. Gross land area is used for overall lot size, and only buildable land may be disturbed for building purposes, but both buildable and unbuildable land is used as the overall baseline.
- 5. Should the City wish to impose a requirement that only "buildable" land be considered in the dedication of open space within PLDC projects, an Ordinance amendment would need to be processed which specifically imposes such a standard.

I hope this helps.

Let me know if you have any questions.

Bob

Bob Kirmis
Northwest Associated Consultants, Inc.

4150 Olson Memorial Highway, Suite 320
Golden Valley, MN 55422

Hi, Ron.

You tasked this with me earlier and asked
for an opinion by Tuesday.

Looks to me like Bob nailed it. My review
gives me the same conclusion: the City would
need express authority to impose such a restriction
and there is no such language in any its ordinances or
state law.

In other words, otherwise unbuildable land can be
included in overall calculations for purposes of determining
allowed densities unless the City's ordinances *expressly*
provide for a different method being used.

I just saw one up in Stillwater where a developer was able
to use what was, in effect, a platted lake bottom in order
to calculate density, which is probably the most extreme
example of this I can think of.

Frederic W. ("Fritz") Knaak, Esq.
Attorney in Minnesota, Wisconsin and Colorado
HOLSTAD & KNAAK, PLC
4501 Allendale Drive
North Oaks, MN 55127

Ron Moore

From: Karen LFF email <karen@littlefootfarm.com>
Sent: Thursday, September 28, 2017 11:27 AM
To: Ron Moore; publicworks; lkaye71@msn.com; ward3
Cc: sdorgan@cresa.com; Nittie8@yahoo.com; rickpung4@gmail.com; Randy
Subject: PLCD Park Comittee Recommendation

Ron,

Park Committee recommendation for PLDC Sketch Plan (preliminary Plat- Afton Creek Preserve)

The Park Committee discussed the PLCD Preliminary Plat at its September 27, 2017b meeting. In our discussions prior to a vote, we assumed a land value of the entire property to be 2.8 million (based on Washington Co. property records for the 7 individual plats that make up this development). The following recommendation was made.

"Based on the current development plan presented, the committee recommends that the required Park Dedication Payment be in the form of a cash fee. This assumes the developer will provide, as stated on the plat drawing, public access via a walking path at the end of the cul-de-sac, and "overlook" access along 60th st, to the 102 ac. Open Space Conservation Easement. Access points will have infrastructure, to include: benches, parking and natural informational signage." Approved unanimously by the Committee.

Members in attendance

Karen Weiss, Nathan Shaw, Rick Pung, Lynne Kaye, Ken Johnson, Randy Nelson



Memorandum

To: *Honorable Mayor and City Council, City of Afton*

From: *Nick Guilliams, PE, Project Manager*

Date: *October 17, 2017*

Re: *October Engineering Staff Report
WSB Project No. 1856-560*

1. Request for Scope Increase to WSB for Construction Services for the 2017 Pavement Management Project

WSB is requesting a budget amendment in the amount of \$38,510 for construction services for the 2017 Pavement Management Project. At the September City Council meeting it was requested that additional justification be provided and brought back to the Council. The attached memorandum provides some background and justification for the request.

Action: Consider budget amendment to WSB and Associates in the amount of \$38,510 for construction services for the 2017 Pavement Management Project.

2. 2017 Annual Bridge Safety Inspections

There are seven bridges for which the City has inspection-reporting jurisdiction. Six of these bridges are due for inspection during the 2017 inspection cycle. WSB has attached a proposal to perform the inspections and prepare the necessary reporting documentation. These inspections are a federal requirement and must be completed in October. WSB proposes to complete this work for a lump sum cost of \$5,700.

Action: Consider approval of proposal from WSB and Associates in the amount of \$5,700 to perform 2017 annual bridge safety inspections.

If you have any questions, please contact me at 612-419-3589 or nguilliams@wsbeng.com.

**Memorandum****To: Ron Moore, City of Afton****From: Nick Guilliams, PE****Date: October 17, 2017****Re: Budget Amendment – 2017 Pavement Management Project**

This memo is a request for a budget amendment for engineering and inspection services for the 2017 Pavement Management Project.

- \$150,995 was originally approved for design and surveying. Due to Council concerns regarding budget, WSB reduced this amount to \$100,000 with the remaining \$50,995 for construction services. Our scope of services included only part-time inspection per Council's request.
- The initial project scope included 9.2 miles of roadway and 1.2 miles of Mill and Overlay.
- An additional \$77,495 was approved for surveying, inspection, and construction administration for the supplemental agreement which included over 2.4 miles of additional roadway reclamation. This budget was also assumed to be part-time inspection.
- Several roads that were planned to receive a mill and overlay were changed to reclamation due to the poor condition of the roads (Tomahawk Drive, Oakgreen Avenue, and Oakgreen Circle). This amounted to 1.7 miles of additional reclamation. Reclamation increases the duration and complexity of construction resulting in additional staff time. Furthermore, reclamation requires additional surveying work to establish a new centerline and grades.
- Upon the start of construction, staff heard concerns from the Council about the importance of the project and the need to ensure the City receives an excellent product. This level of effort requires full-time inspection which we've provided throughout. To assist in this effort, WSB has brought in senior construction staff to assist with the project to ensure a quality product and prevent cost overruns.
- There have been unexpected challenges working with the Contractor. The project was bid very low and the contractor has been aggressively trying to recoup costs throughout construction. This has resulted in additional inspection,

project management, and construction administration time to keep costs under control and prevent cost overruns.

- The numerous contract changes extended the completion date from August 4th, 2017 to September 29, 2017. This 2-month increase in time for inspection and project management is greater than initially estimated.
- Our total approved fees to date is \$228,490 which represents approximately 8.6% of the total construction cost. Typical fees for design and construction services for a project of this nature is 12%.
- Our job to date costs are \$279,000 which equates to approximately \$51,000 over our approved budget. We anticipate an additional \$3,000 is needed for project closeout.
- WSB is requesting additional fees in the amount **\$38,510** which would increase the total fees to **\$267,000**. This equates to approximately 9.6% of the total construction amount. By providing full-time inspection, WSB has been able to prevent cost overruns and save the City money. Final construction costs are anticipated to be approximately \$150,000 below the as-bid contract amount.

Thank you for the opportunity to provide professional consulting services to the City of Afton. Please do not hesitate to contact me if you have any questions.



September 20th , 2017

Mr. Ron Moore
3033 St. Croix Trail South
PO Box 219
Afton, MN 55001

Re: 2017 Annual Bridge Safety Inspections
City of Afton

Dear Mr. Moore

On behalf of WSB & Associates, Inc. (WSB), I am pleased to submit this proposal to provide professional engineering services as they relate to bridge inspections in the City of Afton. MnDOT has recently upgraded their SIMS bridge management program to be in compliance with the new FHWA bridge inspection standards for 2017 which implements element level inspections of all structures. This new program as lead to slight increase in the amount of time necessary to inspect and report on each structure as MnDOT transitions to the new program over the next two years.

There are seven bridges for which the City has inspection-reporting jurisdiction. 6 of these bridges are due for inspection during the 2017 inspection cycle. These bridges are:

- Bridge L8167, TRADG PT TR S (22) over STREAM
- Bridge L8170, VALLEY CRK TR (53) over VALLEY CREEK (TRIBUTARY)
- Bridge 82505, Mun 53 over Valley Creek
- Bridge 82J01, 60th Street S over Trout Brook
- Bridge 91976, Valley Creek Trail over Valley Creek
- Bridge L8173, Mun 26 over Valley Creek

WSB & Associates, Inc. is proposing to provide the following scope of services:

- We will perform bridge inspections and submit inspection reports to MnDOT for the two bridges outlined in the attached inspection due report.
- A qualified and certified Bridge Safety Inspector from Minnesota will perform the work as required by MnDOT.
- WSB will update structure information in the MnDOT SIMS system.
- The inspection will be in accordance with current MnDOT and FHWA inspection procedures.
- Program administrator duties as required by MnDOT such as audits and scour reporting.
- WSB will make recommendations for repair and maintenance of the structures and will submit the final reports to the City for their records.

Ron Moorse
9/20/17
Page 2

The proposed work will be completed before the required inspection due dates in October. Your inspection team leader will be one of the following:

Craig Alberg, PE
Inspection Team Leader/Underwater Inspection Diver

- FHWA Certified Bridge Safety Inspector
- MnDOT Certified Bridge Safety Inspection Team Leader
- FHWA Certified Underwater Inspector

Daniel Flittie, PE
Inspection Team Leader

- FHWA Certified Bridge Safety Inspector
- MnDOT Certified Bridge Safety Inspection Team Leader

WSB will complete the above tasks for lump sum cost of \$5,700. If you agree with the above proposal, please sign below and return one copy to our office.

Thank you for the opportunity to be of service to you. Please do not hesitate to contact me at (763) 286-6141 with any questions or comments.

Sincerely,

WSB & Associates, Inc.



Craig Alberg, PE
Bridge Inspection Program Manager

cc: Nick Guilliams, PE, WSB & Associates

City of Afton

Date

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Oct. 17, 2017

Council Action Memo

To: Mayor Bend and Members of the City Council
From: Ron Moorse, City Administrator
Date: October 12, 2017
Re: Price Quote Increase from Top Notch for Cleaning and Televising the River Road Sanitary Sewer Lines

Attached is a revised price quote from Top Notch reflecting a price increase from \$10,237.50 to \$14,864 for cleaning and televising the River Road sanitary sewer lines. The price increase is due to the need to add four new couplings for access to the forcemain line and due to the runs between manholes for cleaning and televising being substantially longer than was expected.

Council Action Requested:

Motion regarding the revised price quote from Top Notch reflecting a price increase from \$10,237.50 to \$14,864 for cleaning and televising the River Road sanitary sewer lines.

Top Notch Sewer

7600 Boone Ave N, Ste 2
Minneapolis, MN 55428
(612) 827-4148
info@topnotchsewer.com | https://www.topnotchsewer.com/



RECIPIENT:

City of Afton

3033 St. Croix Tr S
PO Box 219
Afton, MN 55001

SERVICE ADDRESS:

3752 River Rd S
Afton, MN 55001

Estimate #2017465

Sent On 09/06/2017

Rep/Technician Andy

Total \$10,237.50

Service / Product	Description	Qty	Unit Cost	Total
Pumping	Commercial pumping: Pressure wash and pump debris from sanitary manholes (10) to prepare for jetting/inspecting city sewer.	8	\$192.00	\$1,536.00*
Hydro-Jetting	Pressure wash and assist in evacuating debris from sanitary manholes (10) in preparation for jetting/inspecting city sewer.	8	\$175.50	\$1,404.00*
Pumping	Pump/evacuate water/debris from jetting process to inspect sanitary sewer drains on River Road S.	16	\$192.00	\$3,072.00*
Hydro-Jetting	Hydro-jet sanitary sewer from manholes on River Road S to remove build-up and debris.	16	\$175.50	\$2,808.00*
Camera Inspection	Televise and record city sanitary sewer from manholes on River Road S to inspect condition of pipe.	5	\$175.50	\$877.50*
Liquid disposal	Disposed waste off site in compliance with MCES and/or MPCA guidelines. Per 1000 gallons.	6	\$90.00	\$540.00*

Total \$10,237.50

* Non-taxable

Proposal/estimate includes only work as described above. It does not include additional labor, time or materials that may become necessary due to unforeseen circumstances. While preventive maintenance reduces the likelihood of mainline backups, it cannot guarantee against them.

Signature: _____ Date: _____

Top Notch Sewer

7600 Boone Ave N, Ste 2
 Minneapolis, MN 55428
 (612) 827-4148
 info@topnotchsewer.com | https://www.topnotchsewer.com/



Sewer & Drain Cleaning Inc.

RECIPIENT:

City of Afton

3033 St. Croix Tr S
 PO Box 219
 Afton, MN 55001

SERVICE ADDRESS:

3752 River Rd S
 Afton, MN 55001

Estimate #2017465

Sent on 09/06/2017

Rep/Technician Andy

Total \$14,864.00

SERVICE / PRODUCT	DESCRIPTION	QTY.	UNIT COST	TOTAL
Pumping	Commercial pumping: Pressure wash and pump debris from sanitary manholes (10) to prepare for jetting/inspecting city sewer.	8	\$192.00	\$1,536.00*
Hydro-Jetting	Pressure wash and assist in evacuating debris from sanitary manholes (10) in preparation for jetting/inspecting city sewer.	8	\$175.50	\$1,404.00*
Pumping	Pump/evacuate water/debris from jetting process to inspect sanitary sewer drains on River Road S.	24	\$192.00	\$4,608.00*
Hydro-Jetting	Hydro-jet sanitary sewer from manholes on River Road S to remove build-up and debris.	24	\$175.50	\$4,212.00*
Camera Inspection	Televise and record city sanitary sewer from manholes on River Road S to inspect condition of pipe.	8	\$175.50	\$1,404.00*
Liquid disposal	Disposed waste off site in compliance with MCES and/or MPCA guidelines. Per 1000 gallons.	6	\$90.00	\$540.00*
Parts	4" Ductile Iron repair couplings	4	\$290.00	\$1,160.00*

Extra cost for hardware to access and repair 4 couplings

Total \$14,864.00

* Non-taxable

Proposal/estimate includes only work as described above. It does not include additional labor, time or materials that may become necessary due to unforeseen circumstances. While preventive maintenance reduces the likelihood of mainline backups, it cannot guarantee against them.

Signature: _____ Date: _____

Top Notch Sewer

7600 Boone Ave N, Ste 2
 Minneapolis, MN 55428
 (612) 827-4148
 info@topnotchsewer.com | https://www.topnotchsewer.com/



RECIPIENT:

City of Afton
 3033 St. Croix Tr S
 PO Box 219
 Afton, MN 55001

SERVICE ADDRESS:

3752 River Rd S
 Afton, MN 55001

Estimate #2017465

Sent on 09/06/2017
 Rep/Technician Andy

Total \$14,864.00

SERVICE / PRODUCT	DESCRIPTION	QTY.	UNIT COST	TOTAL
Pumping	Commercial pumping: Pressure wash and pump debris from sanitary manholes (10) to prepare for jetting/inspecting city sewer.	8	\$192.00	\$1,536.00*
Hydro-Jetting	Pressure wash and assist in evacuating debris from sanitary manholes (10) in preparation for jetting/inspecting city sewer.	8	\$175.50	\$1,404.00*
Pumping	Pump/evacuate water/debris from jetting process to inspect sanitary sewer drains on River Road S.	24	\$192.00	\$4,608.00*
Hydro-Jetting	Hydro-jet sanitary sewer from manholes on River Road S to remove build-up and debris.	24	\$175.50	\$4,212.00*
Camera Inspection	Televise and record city sanitary sewer from manholes on River Road S to inspect condition of pipe.	8	\$175.50	\$1,404.00*
Liquid disposal	Disposed waste off site in compliance with MCES and/or MPCA guidelines. Per 1000 gallons.	6	\$90.00	\$540.00*
Parts	4" Ductile Iron repair couplings	4	\$290.00	\$1,160.00*

Total \$14,864.00

* Non-taxable

Proposal/estimate includes only work as described above. It does not include additional labor, time or materials that may become necessary due to unforeseen circumstances. While preventive maintenance reduces the likelihood of mainline backups, it cannot guarantee against them.

Signature: _____ Date: _____

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Oct. 17, 2017

Council Action Memo

To: Mayor Bend and Members of the City Council
From: Ron Moorse, City Administrator
Date: October 12, 2017
Re: Downtown Village Improvement Project Update

Staff will provide an update regarding the project at the Council meeting.

Council Action Requested:

No Action Requested

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Oct. 17, 2017

Council Action Memo

To: Mayor Bend and Members of the City Council
From: Ron Moorse, City Administrator
Date: October 12, 2017
Re: 2017 Pavement management Project Update

Staff will provide an update regarding the project at the Council meeting.

Council Action Requested:

No Action Requested

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Oct. 17, 2017

Council Action Memo

To: Mayor Bend and Members of the City Council
 From: Ron Moose, City Administrator
 Date: October 9, 2017
 Re: Establish Sanitary Sewer User Fee

The funding of the operating costs for the Wastewater Treatment System is planned to be provided through a user fee charged to all users of the system. The volume of flow to the system during 2018 will be much lower than the system capacity, which was used to develop an estimated operating budget. The Afton House, the largest user of the system, has indicated its average daily volume averages approximately one-third of the volume that was projected for it. Some users have high volume during the summer months and low volume during the winter months. Other users have the opposite volume levels. In addition, only a portion of those eligible to connect to the system will do so in the first year. While the lower volumes and lower participation will reduce the operating costs, the low participation will also reduce the revenues.

The system operator has indicated the lower volume will have some significant impacts on operating costs, but he wants to be conservative in regard to projecting significant operating cost reductions. While he indicated that a 50% reduction in volume could result in a 30 to 40% reduction in the larger operating costs, such as chemicals and electricity, he was reluctant to guarantee that projection.

The sanitary sewer user fee is based on Equivalent Residential Units (ERU's). A single family home is assigned one ERU. Commercial properties are assigned ERU's based on projections of volume based on number of fixtures, number of employees, number of square feet, number of seats, etc. The user fee is a fee per ERU. The user fee is determined by dividing the estimated operating costs by the number of ERU's. Without any operational experience with the system, it is difficult to project the operating costs. Without clear information regarding the number of properties that will connect to the system during the first year, it is difficult to project the number of ERU's. The following are calculations of estimated revenues and operating expenses.

Revenue Estimate

The following is an estimate of revenues in the first 12 months based on a user fee of \$50 per ERU per month.

Known properties who will connect in 2017

	<u>ERU's</u>	<u>First 12 months revenue @50/ERU</u>
Afton House	35	\$21,000
Selma's	6	\$ 3,600
Afton Leather	1	\$ 600
Calli Lily	5	\$ 3,000
Bank Building	4	\$ 2,400
12 properties on River Road	12	\$ 7,200
<u>Estimated additional connections in 2017</u>	<u>2</u>	<u>\$ 1,200</u>
Subtotal	65	

<u>Estimated additional</u>		
<u>Connections in spring of 2018</u>	<u>12</u>	<u>\$ 3,600</u>
Total	77	\$42,600

Operating Expense Estimate

Based on the average daily volume of the Afton House being at less than 50% of the amount projected, based on Selma's and Afton Leather being seasonal users, and based on 12 of the connections not being made until the spring of 2018, an estimate of actual average daily flows for the first 12 months is approximately 12,000 gallons vs. the 50,000 gallon volume on which the operating budget was based. This estimated volume is 25% of the operating budget volume projection. The system operator has indicated that if the volume was at 50% of the projected volume, the large expenditure items for electricity and chemicals could be reduced by 30 to 40%. Based on the volume being at 25% of the volume on which the operating budget was based, the large expense items for electricity and chemicals were conservatively reduced by 50%. This results in an estimated operating cost of \$45,000. There is a significant probability that the actual costs could be lower.

Recommended Sewer User Fee.

Based on the estimated revenues and expenses, it is recommended that the sewer fee be set at \$50.00 per ERU per month. This is the amount that has been estimated and communicated to the public throughout the project discussions. This fee could result in expenditures exceeding revenues or revenues exceeding expenditures by a relatively small amount.

Council Action Requested:

Motion regarding establishing a sanitary sewer user fee.

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Oct. 17, 2017

Council Action Memo

To: Mayor Bend and Members of the City Council
From: Ron Moorse, City Administrator
Date: October 12, 2017
Re: Highland Sanitation Fee Increase Request

Attached are materials related to a request from Highland Sanitation for increased fees for Solid waste and recycling services. The proposed increases are a 5% increase on the base hauling rates, an 8.5% increase in dumpster pricing, a 3.5% increase in commercial recycling fees and a number of large percentage increases in the fees for the collection of a number of extra items. The contract with Highland Sanitation allows rate increases based on increases in tipping fees. The City's solid waste and recycling consultant has advised that the City obtain additional financial information from Highland Sanitation to enable the city to make an informed decision regarding the fee increase request. Staff is meeting with the City's consultant on October 18 to review the fee increase request. It is recommended that the Council continue action on the fee increase request until the November 21 Council meeting to enable an analysis of the fee increase request.

Council Action Requested:
Motion regarding the Highland Sanitation fee increase request.



Honesty Integrity Family

To:

City of Afton
3033 St. Croix Tr.
Afton, MN 55001

Proposal for 2018 Rate Increases

September 25th, 2017

From:

Highland Sanitation & Recycling Inc.
1811 Century Ave.
Newport, MN 55055
(651) 458-0043

Prepared by: Robert J Stewart
Bob.Stewart@highland sanitation.com

Thank you for choosing us as the trash and recycling provider in Afton for the past 20 years!

Introduction & Information

It is now known that the rates at the Washington & Ramsey County Recycling and Energy Center for per ton tipping fees are increasing for 2018. The current rates are \$70/ton, with a \$12/ton rebate available to haulers who are in an agreement with the R&E Center (so \$58/ton). In 2018, the rates are increase to \$77/ton and a \$11/ton rebate (so \$66/ton). This is an 13.8% increase in our disposal costs, which we need to reflect with an increase to our rates of service for the City of Afton residents and businesses.

In addition, we adhere to a cost of living increase which covers the expense of new equipment, general inflation and raises annually for our employees. Fuel is also an increasing expense, the newer trucks are cleaner and generate less problematic emissions, but this results in a loss in miles per gallon efficiency of the engine. These changes are captured best by the Trash/Sewer/Water CPI index maintained by the Bureau of Labor Statistics.

We compiled data on 20 different collection days in 5 different months and over 155 tons of trash collected; the resulting average weight per gallon was .58 lbs. This is what our disposal cost weights are based off of for the proposed 2018 increase in disposal costs.

In addition, the trash/sewer/water CPI index for 2015 to 2016 increased by 3.5% and our fuel costs increased by 2% from 2015 to 2016. Due to these increases, we are asking for a 5% increase on the base hauling rates.

We are requesting an increase on some of the extra items as well, to cover the expense of hauling those items from outside of the carts. We are working towards transitioning to automated trucks, which are the trucks with the robotic arm on them for dumping carts. Extra items or trash outside of the cart due to insufficient cart volume at a home is a more significant expense for this style of trucks, as it triples the amount of time needed to service a single address. The increase in these few extra items covers the additional expense of getting out to haul these items with an automated system, as well as helps encourage people to have the right sized trash & recycling carts to eliminate trash & recycling outside of the carts.

See current versus proposed rate information on the next page:

The Rates

Current 2017 City of Afton Hauling Rates (Taxes Not Included)

	35 Gallon	64 Gallon	96 Gallon	Seasonal Yard Waste
Hauling Rate	\$6.70	\$7.33	\$8.00	\$10.00
Disposal Rate	\$2.55	\$4.67	\$7.00	N/A
Recycling Rate	\$5.50	\$5.50	\$5.50	N/A
Monthly Total	\$14.75	\$17.50	\$20.50	\$10.00

Proposed 2018 City of Afton Hauling Rates (Taxes Not Included)

	35 Gallon	64 Gallon	96 Gallon	Seasonal Yard Waste
Hauling Rate	\$7.04	\$7.70	\$8.69	\$10.50
Disposal Rate	\$2.90	\$5.31	\$7.97	N/A
Recycling Rate	\$5.78	\$5.78	\$5.78	N/A
Monthly Total	\$15.72	\$18.79	\$22.44	\$10.50

Current 2017 MSW Dumpster Pricing (Taxes Not Included)

Frequency	2YD	4YD	6YD	8YD
1x/week	\$65.00	\$100.00	\$120.00	\$165.00
2x/week	\$110.00	\$140.00	\$182.00	Not set as part of the contract

Proposed 2018 Pricing MSW Dumpster Pricing (8.5% Increase)

Frequency	2YD	4YD	6YD	8YD
1x/week	\$70.53	\$108.50	\$130.20	\$179.03
2x/week	\$119.35	\$151.90	\$197.47	Not set as part of the contract

Current 2017 Monthly Commercial Recycling & Organics Pricing

Freq	96 Gallon	2YD	4YD	2YD-Organics	4YD-Organics
1x/week	\$10.00	\$35.00	\$60.00	\$55.00	\$100.00
2x/week	\$25.00	Not Set	Not Set	\$125.00	Not Set

Proposed 2018 Monthly Commercial Recycling & Organics Pricing

Freq	96 Gallon	2YD	4YD	2YD-Organics	4YD-Organics
1x/week	\$10.35	\$36.23	\$62.10	\$60.00	\$110.00
2x/week	\$25.88	Not Set	Not Set	\$132.50	Not Set

Extra Item	Current 2017 Price (Before Tax)	Proposed 2018 Price (Before Tax)
30 Gal Bag Trash	\$3.00	\$3.50
30 Gal Bag Yard Waste	\$3.00	\$3.50
Vacuum	\$7.50	\$10.00
Bikes	\$12.00	\$15.00
Car Tire	\$15.00	\$20.00
Carpet & Pad - Sm Rm	\$30.00	\$35.00
Carpet & Pad - Sm Rm	\$60.00	\$70.00

This concludes the rate changes for 2018 that Highland Sanitation & Recycling Inc. is proposing.

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Oct. 17, 2017

Council Action Memo

To: Mayor Bend and Members of the City Council
From: Ron Moorse, City Administrator
Date: October 12, 2017
Re: Replacement of Public Works Snow Blower

The snow blower attachment for the Public Works tractor is in need of replacement. The current unit is 15+ years old and is experiencing increased breakdowns. A new snow blower would provide increased width for the new wider sidewalks downtown. Staff has obtained two price quotes for a replacement snow blower. While staff obtained price quotes on both new and used snow blowers, the cost difference was minimal. The two attached price quotes are for new snow blowers. Staff is recommending approving the price quote from Frontier Ag and Turf in the amount of \$2,434.57. The existing snow blower can be sold for approximately \$400. There is sufficient funding available from several Street Maintenance line items for the remainder of the cost.

Council Action Requested:

Motion regarding the approval of the price quote from Frontier Ag and Turf for a replacement snow blower in the amount of \$ 2,434.57.



Quote Summary

Prepared For:

City Of Afton
Po Box 219
Afton, MN 55001
Business: 651-436-1969

Prepared By:

Timothy Moore
Frontier Ag & Turf
730 Deere Drive
New Richmond, WI 54017
Phone: 715-246-6565
timm@frontieragturf.com

Quote Id: 16124556
Created On: 26 September 2017
Last Modified On: 03 October 2017
Expiration Date: 03 October 2017

Equipment Summary	Suggested List	Selling Price	Qty	Extended
JOHN DEERE 47 In. Quick-Hitch Two-Stage Snow Blower	\$ 2,397.00	\$ 2,049.92 X	1 =	\$ 2,049.92
JOHN DEERE 54 In. Quick-Hitch Two-Stage Snow Blower	\$ 2,891.69	\$ 2,434.57 X	1 =	\$ 2,434.57
Equipment Total				\$ 4,484.49

Quote Summary

Equipment Total	\$ 4,484.49
SubTotal	\$ 4,484.49
Est. Service Agreement Tax	\$ 0.00
Total	\$ 4,484.49
Down Payment	(0.00)
Rental Applied	(0.00)
Balance Due	\$ 4,484.49

Salesperson : X _____

Accepted By : X _____



JOHN DEERE

Selling Equipment



Quote Id: 16124556

Customer: CITY OF AFTON

JOHN DEERE 47 In. Quick-Hitch Two-Stage Snow Blower				
Hours:				Suggested List
Stock Number:				\$ 2,397.00
				Selling Price
				\$ 2,049.92
Code	Description	Qty	Unit	Extended
1474M	47 In. Quick-Hitch Two-Stage Snow Blower	1	\$ 2,130.00	\$ 2,130.00
Standard Options - Per Unit				
2010	Less Front Quick-Hitch	1	\$ 0.00	\$ 0.00
3010	Less Power Take Off	1	\$ 0.00	\$ 0.00
4013	Implement Drive and Upstop	1	\$ 267.00	\$ 267.00
Standard Options Total				\$ 267.00
Suggested Price				\$ 2,397.00
Customer Discounts				
Customer Discounts Total				\$ -347.08
Total Selling Price				\$ 2,049.92

JOHN DEERE 54 In. Quick-Hitch Two-Stage Snow Blower				
Hours:				Suggested List
Stock Number:				\$ 2,891.69
				Selling Price
				\$ 2,434.57
Code	Description	Qty	Unit	Extended
02C1M	54 In. Quick-Hitch Two-Stage Snow Blower	1	\$ 2,550.00	\$ 2,550.00
Standard Options - Per Unit				
2010	Less Front Quick-Hitch	1	\$ 0.00	\$ 0.00
3010	Less Power Take Off	1	\$ 0.00	\$ 0.00
4013	Implement Drive and Upstop	1	\$ 267.00	\$ 267.00
Standard Options Total				\$ 267.00
Other Charges				
	Freight	1	\$ 74.69	\$ 74.69
Other Charges Total				\$ 74.69
Suggested Price				\$ 2,891.69
Customer Discounts				
Customer Discounts Total				\$ -457.12



JOHN DEERE

Selling Equipment



Quote Id: 16124556

Customer: CITY OF AFTON

Total Selling Price

\$ 2,434.57



Quote Summary

Prepared For:

City Of Afton
Po Box 219
Afton, MN 55001
Business: 651-436-1969

Prepared By:

Gregory Gruber
Gruber Power Equipment
1762 White Bear Ave.
Maplewood, MN 55109
Phone: 651-770-7680
gregory@gruberspower.com

Quote Id: 16161381
Created On: 02 October 2017
Last Modified On: 02 October 2017
Expiration Date: 30 November 2017

Equipment Summary	Suggested List	Selling Price	Qty	Extended
JOHN DEERE 54 In. Quick-Hitch Two-Stage Snow Blower	\$ 2,817.00	\$ 2,428.45 X	1 =	\$ 2,428.45
Equipment Total				\$ 2,428.45

Quote Summary

Equipment Total	\$ 2,428.45
Finance Fee	\$ 0.00
SubTotal	\$ 2,428.45
Est. Service Agreement Tax	\$ 0.00
Total	\$ 2,428.45
Down Payment	(0.00)
Rental Applied	(0.00)
Balance Due	\$ 2,428.45

Salesperson : X _____

Accepted By : X _____



JOHN DEERE

Selling Equipment



Quote Id: 16161381

Customer: CITY OF AFTON

JOHN DEERE 54 In. Quick-Hitch Two-Stage Snow Blower				
Hours:				Suggested List
Stock Number:				\$ 2,817.00
				Selling Price
				\$ 2,428.45
Code	Description	Qty	Unit	Extended
02C1M	54 In. Quick-Hitch Two-Stage Snow Blower	1	\$ 2,550.00	\$ 2,550.00
Standard Options - Per Unit				
2010	Less Front Quick-Hitch	1	\$ 0.00	\$ 0.00
3010	Less Power Take Off	1	\$ 0.00	\$ 0.00
4013	Implement Drive and Upstop	1	\$ 267.00	\$ 267.00
Standard Options Total				\$ 267.00
Suggested Price				\$ 2,817.00
Customer Discounts				
Customer Discounts Total			\$ -388.55	\$ -388.55
Total Selling Price				\$ 2,428.45



Quote Id: 16161381

Prepared For:
City Of Afton

Prepared By: **Gregory Gruber**
Gruber Power Equipment
1762 White Bear Ave.
Maplewood, MN 55109
Tel: 651-770-7680
Fax: 651-770-7714
Email: gregory@gruberspower.com

Date: 02 October 2017

Offer Expires: 30 November 2017

Confidential

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Oct. 17, 2017

Council Action Memo

To: Mayor Bend and Members of the City Council
From: Ron Moorse, City Administrator
Date: October 12, 2017
Re: Michael Pofahl Proposal for 2017 Audit Report

Michael Pofahl has submitted the attached proposal for the preparation of the 2017 audit report. The cost is \$5,850 plus \$100 for processing fees. Staff is recommending hiring Michael Pofahl for the preparation of the 2017 audit report.

Council Action Requested:

Motion regarding hiring Michael Pofahl to prepare the 2017 audit report at a cost not to exceed \$5,950.

Michael W. Pofahl
Certified Public Accountant
10780 North Avenue, 14E
Chisago Lake, Minnesota 55013
(651) 213-6632

August 2, 2017

City of Afton
3303 St. Croix Trail S
Afton, MN 55001

Re: Proposal for December 31, 2017 Audits

I will perform an audit of the financial statements for the various funds of the City of Afton for the year ending December 31, 2017. My examination will be in accordance with generally accepted auditing standards and will include such tests of the accounting records and such other auditing procedures, as I consider necessary in the circumstances.

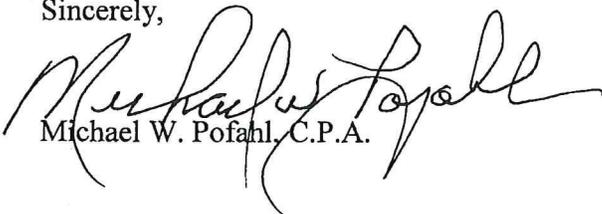
The audit would also include certain procedures designed to disclose defalcations and illegal actions and, should either of these types of findings be discovered, the normal scope of the audit may have to be expanded. If these types of findings were discovered, the City Council would be immediately advised before the audit would continue.

As part of the financial audit, my work will include an evaluation of the city's structure of internal control for the purpose of planning the audit and assessing control risk.

My examination of compliance with Minnesota statutes will be made in accordance with generally accepted accounting standards and the provisions of the Legal Compliance Audit Guide promulgated by the Legal Compliance Task Force pursuant to Minnesota Statutes 6.65.

My fee for the above audits shall not exceed \$5,850.00 plus \$100 for processing fees.

Sincerely,



Michael W. Pofahl, C.P.A.

Signature of approval of audit services

By: _____

Title: _____

Date: _____

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Oct. 17, 2017

Council Action Memo

To: Mayor Bend and Members of the City Council
From: Ron Moorse, City Administrator
Date: October 12, 2017
Re: Hiring of Thomas Paul for City Hall Janitorial Services and Seasonal Public Works Maintenance

Staff has interviewed Thomas Paul for a part-time position performing janitorial tasks at City Hall and for a summer seasonal maintenance position. Mr. Paul has worked in the area of facility maintenance for over 20 years and is experienced with a broad range of equipment. Staff is recommending the hiring of Thomas Paul for a part-time janitorial position at a rate of \$25 per hour for approximately two hours per week, and for a seasonal maintenance position at a rate of \$11.50/hr. Mr. Paul's employment application will be provided in a confidential envelope.

Council Action Requested:

Motion regarding the hiring of Thomas Paul for a part-time janitorial position at a rate of \$25 per hour for approximately two hours per week, and for a seasonal maintenance position at an hourly rate of \$11.50.

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Oct. 17, 2017

Council Action Memo

To: Mayor Bend and Members of the City Council
From: Ron Moorse, City Administrator
Date: October 11, 2017
Re: Pay Voucher No. 6 from Geislinger and Sons, Inc. for the Downtown Village Improvement Project

Attached is Pay Voucher No. 6 from Geislinger and Sons, Inc. for the Downtown Village Improvement Project in the amount of \$981,263.02. This Pay Voucher has been provided to both Washington County and the PFA for reimbursement of these costs. Tom Niedzwiecki, in his monthly report, will provide an explanation of the sources of funding for this payment request.

Council Action Requested:

Motion regarding the payment of Pay Voucher No. 6 from Geislinger and Sons, Inc. for the Downtown Village Improvement Project in the amount of \$981,263,.02.



October 11, 2017

Mr. Ron Moorse
City of Afton
3033 St. Croix Trail South
Afton, MN 55001

Mr. Kevin Peterson
Washington County
14949 62nd Street North
Stillwater, MN 55082

Re: Construction Pay Voucher No. 6
Downtown Village Improvement Project
City of Afton / Washington County
WSB Project No. 1856-52

Dear Mr. Moorse and Mr. Peterson:

Please find enclosed Construction Pay Voucher No. 6 for the above referenced project in the amount of \$981,263.02. The quantities completed to date have been reviewed and agreed upon by the contractor, and we hereby recommend that the City of Afton and Washington County approve Construction Pay Voucher No. 6 for Geislinger and Sons, Inc.

The amount indicated above reflects work certified to date through September 30, 2017, with a 5% retainage applied. Please include one executed copy of the signed voucher with the payment to Geislinger and Sons, Inc. and return one executed copy to our office for our file. If you have any questions or comments regarding this voucher, please contact me at (651) 286-8453. Thank you.

Sincerely,

WSB & Associates, Inc.

Nick Guilliams, PE
Project Manager

Enclosures

kkp



CITY OF AFTON

3033 Saint Croix Trail
Afton, MN 55001

Project 01856-52 - AFTON - Downtown Village Improvement Project
Pay Voucher No. 6

Contractor: Geislinger and Sons, Inc.
511 Central Avenue South
Watkins, MN 55369

Contract No.
Vendor No.
For Period 9/1/2017 - 9/30/2017
Warrant # _____ Date _____

Contract Amounts

Original Contract	\$12,542,476.71
Contract Changes	\$23,182.96
Revised Contract	\$12,565,659.67

Funds Encumbered

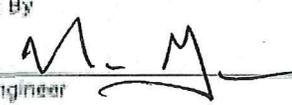
Original	\$12,542,476.71
Additional	N/A
Total	\$12,542,476.71

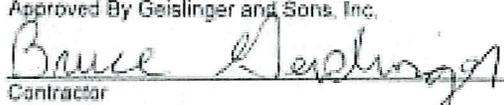
Work Certified To Date

Base Bid Items	\$6,938,841.05
Backsheet	(\$1,000.00)
Change Order	\$0.00
Supplemental Agreement	\$0.00
Work Order	\$0.00
Material On Hand	\$0.00
Total	\$6,937,841.05

	Work Certified This Pay Voucher	Work Certified To Date	Less Amount Retained	Less Previous Payments	Amount Paid This Pay Voucher	Total Amount Paid To Date
01856-52	\$1,032,908.44	\$6,937,841.05	\$346,892.05	\$5,609,685.98	\$981,263.02	\$6,590,949.00
			Percent Retained: 5%		Percent Complete: 55.2127%	
Amount Paid This Pay Voucher					\$981,263.02	

This is to certify that the items of work shown in this certificate of Pay Voucher have been actually furnished for the work comprising the above mentioned projects in accordance with the plans and specifications heretofore approved.

Approved By

 Project Engineer
 October 11, 2017
 Date

Approved By Geislinger and Sons, Inc.

 Contractor
 10-11-17
 Date

Approved By

 City of Afton

 Date

Approved By

 Washington County

 Date

CITY OF AFTON
3033 Saint Croix Trail
Afton, MN 55001
Project No. 01856-52
Pay Voucher No. 6

01856-52 Payment Summary

No.	From Date	To Date	Work Certified Per Pay Voucher	Amount Retained Per Pay Voucher	Amount Paid Per Pay Voucher
1	03/13/2017	04/30/2017	\$1,202,028.58	\$60,101.43	\$1,141,927.15
2	05/01/2017	05/31/2017	\$1,594,172.45	\$79,708.62	\$1,514,463.83
3	06/01/2017	06/30/2017	\$1,481,064.15	\$74,053.21	\$1,407,010.94
4	07/01/2017	07/31/2017	\$896,312.39	\$44,815.62	\$851,496.77
5	08/01/2017	08/31/2017	\$731,355.04	\$36,567.75	\$694,787.29
6	09/01/2017	09/30/2017	\$1,032,908.44	\$51,645.42	\$981,263.02
Totals:			\$6,937,841.05	\$346,892.05	\$6,590,949.00

01856-52 Funding Category Report

Funding Category No.	Work Certified To Date	Less Amount Retained	Less Previous Payments	Amount Paid This Pay Voucher	Total Amount Paid To Date
001	827,935.21	41,396.76	682,616.70	103,921.75	786,538.45
002	502,177.90	25,108.89	280,347.47	196,721.54	477,069.01
003	217,974.05	10,898.70	207,075.35	0.00	207,075.35
004	1,879,008.40	93,950.42	1,607,509.63	177,548.35	1,785,057.98
005	229,401.68	11,470.08	169,457.85	48,473.75	217,931.60
006	208,313.48	10,415.67	184,114.92	13,782.89	197,897.81
007	1,630,372.36	81,518.62	1,189,798.14	359,055.60	1,548,853.74
008	722,209.58	36,110.48	628,165.48	57,933.62	686,099.10
009	196,036.00	9,801.80	182,339.67	3,894.53	186,234.20
010	241,604.05	12,080.20	209,592.85	19,931.00	229,523.85
011	165,920.39	8,296.02	157,624.37	0.00	157,624.37
012	116,887.95	5,844.40	111,043.55	0.00	111,043.55
Totals:	\$6,937,841.05	\$346,892.04	\$5,609,685.98	\$981,263.03	\$6,590,949.01

01856-52 Funding Source Report

Accounting No.	Funding Source	Amount Paid This Pay Voucher	Revised Contract Amount	Funds Encumbered To Date	Paid To Contractor To Date
01	Local	526,665.38	7,412,617.47	7,312,999.47	3,473,672.38
02	State	454,597.64	4,527,903.40	4,604,328.44	2,848,608.70
03	State	0.00	625,148.80	625,148.80	268,667.92
Totals:		\$981,263.02	\$12,565,669.67	\$12,542,476.71	\$6,590,949.00

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Oct. 17, 2017

Council Action Memo

To: Mayor Bend and Members of the City Council
From: Ron Moose, City Administrator
Date: October 11, 2017
Re: Pay Voucher No.4 from Park Construction Co. for the 2017 Pavement Management Project

Attached is Pay Voucher No. 4 from Park Construction Co. for the 2017 Pavement Management Project in the amount of \$465,770.04. Tom Niedzwiecki, in his monthly report, will provide an explanation of the sources of funding for this pay voucher.

Council Action Requested:

Motion regarding the payment of Pay Voucher No. 4 from Park Construction Co. for the 2017 Pavement Management Project in the amount of \$465,770.04.



October 11, 2017

Ron Moorse
City of Afton
3033 St. Croix Trail South
Afton, MN 55001

Re: 2017 Pavement Management Project
City of Afton, MN
WSB Project No. 01856-54

Dear Mr. Moorse:

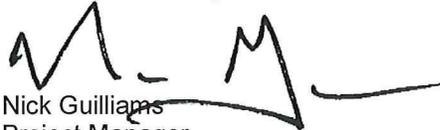
Please find enclosed Construction Pay Voucher No. 4 for the above referenced project in the amount of \$465,770.04. The quantities completed to date have been reviewed and agreed upon by the contractor, and we hereby recommend that the City of Afton approve Construction Pay Voucher No. 4 for Park Construction Company.

The amount indicated above reflects work certified to date through September 30, 2017, with a 5% retainage applied. Please include one executed copy with the payment to Park Construction and return one executed copy to our office for our file.

If you have any questions, please contact me at 651-286-8468.

Sincerely,

WSB & Associates, Inc.



Nick Guilliams
Project Manager

Enclosures

Cc: Diane Hankee, WSB & Associates, Inc.

kkp



CITY OF AFTON
 3033 Saint Croix Trail
 Afton, MN 55001
 Project 01856-54 - AFTON - 2018 City Engineering
 Pay Voucher No. 4

Contractor: Park Construction Company - Mpls
 1481 81st Avenue NE
 Spring Lake Park, MN 55432

Contract No.
 Vendor No.
 For Period: 9/1/2017 - 9/30/2017
 Warrant # _____ Date _____

Contract Amounts

Original Contract	\$2,225,894.34
Contract Changes	\$759,705.38
Revised Contract	\$2,985,599.72

Work Certified To Date

Base Bid Items	\$1,801,818.90
Backsheet	\$0.00
Change Order	\$380,430.39
Supplemental Agreement	\$452,963.98
Work Order	\$0.00
Material On Hand	\$0.00
Total	\$2,635,213.27

Funds Encumbered

Original	\$2,225,894.34
Additional	N/A
Total	\$2,225,894.34

	Work Certified This Pay Voucher	Work Certified To Date	Less Amount Retained	Less Previous Payments	Amount Paid This Pay Voucher	Total Amount Paid To Date
01856-54	\$490,284.25	\$2,635,213.27	\$131,760.66	\$2,037,682.57	\$465,770.04	\$2,503,452.61
Percent Retained: 5%				Percent Complete: 88.2641%		
Amount Paid This Pay Voucher					\$465,770.04	

This is to certify that the items of work shown in this certificate of Pay Voucher have been actually furnished for the work comprising the above mentioned projects in accordance with the plans and specifications heretofore approved.

Approved By

 Project Engineer

October 11, 2017

 Date

Approved By Park Construction Company - Mpls

 Contractor

10/11/17

 Date

Approved BY

 City of Afton

10/11/17

 Date

CITY OF AFTON
 3033 Saint Croix Trail
 Afton, MN 55001
 Project No. 01856-54
 Pay Voucher No. 4

01856-54 Payment Summary

No.	From Date	To Date	Work Certified Per Pay Voucher	Amount Retained Per Pay Voucher	Amount Paid Per Pay Voucher
1	04/18/2017	07/07/2017	\$965,531.85	\$48,276.59	\$917,255.26
2	07/08/2017	07/31/2017	\$286,125.36	\$14,306.27	\$271,819.09
3	08/01/2017	08/31/2017	\$893,271.81	\$44,663.59	\$848,608.22
4	09/01/2017	09/30/2017	\$490,284.25	\$24,514.21	\$465,770.04
Totals:			\$2,635,213.27	\$131,760.66	\$2,503,452.61

01856-54 Funding Category Report

Funding Category No.	Work Certified To Date	Less Amount Retained	Less Previous Payments	Amount Paid This Pay Voucher	Total Amount Paid To Date
UNF	2,635,213.23	131,760.66	2,037,682.55	465,770.02	2,503,452.57
Totals:	\$2,635,213.23	\$131,760.66	\$2,037,682.55	\$465,770.02	\$2,503,452.57

01856-54 Funding Source Report

Accounting No.	Funding Source	Amount Paid This Pay Voucher	Revised Contract Amount	Funds Encumbered To Date	Paid To Contractor To Date
UNF	Unfunded	465,770.02	2,985,599.72	2,225,894.34	2,503,452.57
Totals:		\$465,770.02	\$2,985,599.72	\$2,225,894.34	\$2,503,452.57

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Oct. 17, 2017

Council Action Memo

To: Mayor Bend and Members of the City Council
From: Ron Moose, City Administrator
Date: October 11, 2017
Re: Payment Request No. 7 from Ellingson, Inc. for the Wastewater Treatment System Project

Attached is Payment Request No. 7 from Ellingson, Inc. for the Wastewater Treatment System Project, in the amount of \$26,346.78. This Payment Request has been provided to the PFA for reimbursement of these costs. Tom Niedzwiecki, in his monthly report, will provide an explanation of the sources of funding for this payment request.

Council Action Requested:

Motion regarding the payment of Payment Request No.76 from Ellingson, Inc. for the Wastewater Treatment System Project in the amount of \$26,346.78.

PAYMENT REQUEST FORM

OWNER: City of Afton, MN
PROJECT: City of Afton Large Subsurface Sewage Treatment System
CONTRACTOR: Ellingson Drainage, Inc
DATE: October 3, 2017

PAY ESTIMATE NO. 7

Original Contract Amount	<u>\$ 1,831,985.00</u>
Contract Changes approved to Date.....	<u>\$ 152,324.00</u>
Revised Contract Price	<u>\$ 1,984,309.00</u>
Work Completed to Date (see attached)	<u>\$ 1,934,927.20</u>
Stored Materials to Date (see attached)	<u>\$ 0.00</u>
Retainage to Date, 5%	<u>\$ 96,746.36</u>
Work Completed & Stored Materials to Date Less Retainage to Date	<u>\$ 1,838,180.84</u>
Total Amount Previously Certified	<u>\$ 1,811,834.06</u>
Payment Request This Estimate	<u>\$ 26,346.78</u>

I declare under penalty of perjury that this account, claim, or demand is just and correct and that no part of it has been paid.

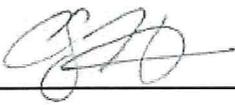


CONTRACTOR

CERTIFICATE OF CONTRACTOR

I hereby certify that the work and the materials supplied to date, as shown on the request for payment, represents the actual value of accomplishment under the terms of the contract dated March 10, 2017 between City of Afton, MN (OWNER) and Ellingson Drainage, Inc (CONTRACTOR) and all authorized changes thereto.

SIGNATURES:

CONTRACTOR:  Ellingson Drainage, Inc Date: 10/10/2017

Name: Andy Henslin

ENGINEER:  Wenck Associates, Inc. Date: October 3, 2017

Name: Eric M. Blasing

OWNER: City of Afton, MN Date: _____

Name: _____

END OF SECTION

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Oct. 17, 2017

Council Action Memo

To: Mayor Bend and Members of the City Council
From: Ron Moorse, City Administrator
Date: October 12, 2017
Re: Scheduling a Work Session

Wenck Associates would like to schedule a tour of the new wastewater treatment facility with the Council. This requires the scheduling of a work session.

Council Action Requested:
Select a date for a work session

City of Afton
3033 St. Croix Trl, P.O. Box 219
Afton, MN 55001

Meeting Date Oct. 17, 2017

Council Action Memo

To: Mayor Bend and Members of the City Council
From: Ron Moorse, City Administrator
Date: October 12, 2017
Re: Blondo Consulting Invoicing

The Council had requested additional information from Blondo Consulting for their invoicing related to the archeological monitoring they are doing for the Downtown Village Improvement Project. Attached are materials provided in response to the request. Blondo Consulting is proposing to reduce their hourly rate from \$75/hr to \$65/hour. In addition, a number of corrections were made to recent invoices, resulting in reduced costs.

Council Action Requested:

Motion regarding the \$65/hr rate proposed by Blondo Consulting, and regarding the payment of past invoices.

Ron Moore

From: Steven Blondo <steven@blondoconsulting.com>
Sent: Wednesday, October 04, 2017 10:34 AM
To: Ron Moore
Cc: Steven Blondo
Subject: Afton Invoicing Revisions and Timesheets
Attachments: Afton Invoicing.pdf

Ron -

I revisited the July and August invoicing and have attached a revised amount due and copies of timesheets for July and August.

Among the revisions I made were adjustments to time reported removing project management time and some travel time I overlooked. I would also offer a 10% discount if these past due invoices could be paid before the October 17 meeting. Not sure if that is possible but it is something I can offer. The revised amounts total \$6,585.00 for July and \$7,950.00 for August (totaling \$14,535.00). In the end (including the 10% discount), savings to the city in the amount of \$4,061.39 are possible.

Please let me know if this makes sense or if you need additional information.

I will be invoicing September shortly. I will include copies of timesheets and a monitoring report. I would be willing to invoice at \$65/hour for September and moving forward if that helps. This hourly rate adjustment will also save the city money in the end. Other adjustments for cost savings we have put into place or are trying to put into place include - not attending Tuesday meetings and improvements with communications with excavation and construction crews to allow for increased daily call ins versus onsite visits. Anything you can do to assist with the communication portion would be greatly appreciated. Do we need an adjusted proposal to cover moving forward?

I think we all knew that we were being optimistic assuming three weeks of monitoring but no one was thinking that monitoring would last months.

Steven Blondo
steven@blondoconsulting.com

Afton Invoicing - Blondo Consulting, LLC - October 4, 2017

July

Time Reported on Timesheets - 109.8 hours
Travel Time Adjustment - (22 hours)
Adjusted Hours - 87.8
Invoice Amount (based on \$75/hour) - \$6,585.00

Invoice # 2017-047-004 - submitted August 16, 2017 - due September 16, 2017
Hours Invoiced - 110.25 (includes project management time and travel time)
Total Amount Due (based on \$75/hour) - \$8,268.75

Adjustments

July Invoice - \$8,268.75
Past Due Penalty (1.25% based on contract) - \$103.36
Total Due Now - \$8,372.11

Cost Adjustment - (\$1,683.75) - (removal of project management time and travel time)
Past Due Penalty Adjustment (\$103.36)
***Adjusted Total Due Now - \$6,585.00** (savings of \$1,787.11)

August

Time Reported on Timesheets - 132 hours
Travel Time Adjustment - (26 hours)
Adjusted Hours - 106
Invoice Amount (based on \$75/hour) - \$7,950.00

Invoice # 2017-047-004 - submitted August 31, 2017 - due September 30, 2017
Hours Invoiced - 115.5 (includes project management time and some travel time)
Total Amount Due (based on \$75/hour) - \$8,662.50

Adjustments

July Invoice - \$8,662.50
Past Due Penalty (1.25% based on contract) - \$108.28
Total Due Now - \$8,770.78

Cost Adjustment - (\$712.50) - (removal of project management time and travel time)
Past Due Penalty Adjustment (\$108.28)
***Adjusted Total Due Now - \$7,950.00** (savings of \$820.78)

ADJUSTED Total of Overdue Invoices

July - \$6,585.00
August - \$7,950.00
TOTAL - \$14,535.00

**if paid before October 17, 2017 meeting - 10% discount on total offered - bringing total savings/adjustments to \$4,061.39

Afton Invoicing - Blondo Consulting, LLC - October 4, 2017

July

Time Reported on Timesheets - 109.8 hours
Travel Time Adjustment - (22 hours)
Adjusted Hours - 87.8
Invoice Amount (based on \$75/hour) - \$6,585.00

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Past Due Penalty Adjustment (\$103.36)
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August

Time Reported on Timesheets - 132 hours
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Adjustments

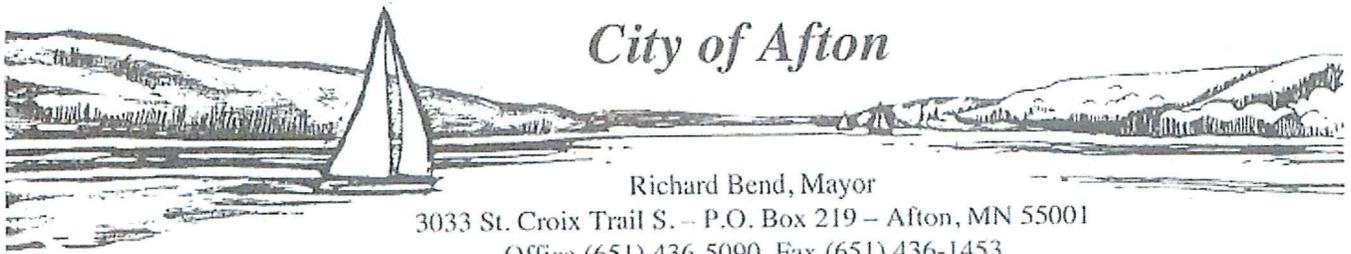
July Invoice - \$8,662.50
Past Due Penalty (1.25% based on contract) - \$108.28
Total Due Now - \$8,770.78

Cost Adjustment - (\$712.50) - (removal of project management time and travel time)
Past Due Penalty Adjustment (\$108.28)
***Adjusted Total Due Now - \$7,950.00 (savings of \$820.78)**

ADJUSTED Total of Overdue Invoices

July - \$6,585.00
August - \$7,950.00
TOTAL - \$14,535.00

**if paid before October 17, 2017 meeting - 10% discount on total offered - bringing total savings/adjustments to \$4,061.39



City of Afton

Richard Bend, Mayor

3033 St. Croix Trail S. -- P.O. Box 219 -- Afton, MN 55001

Office (651) 436-5090 Fax (651) 436-1453

www.ci.afton.mn.us

Bill Palmquist - Ward 1
Joe Richter - Ward 2

Stan Ross - Ward 3
Randy Nelson - Ward 4

April 3, 2017

Steven Blondo
Blondo Consulting LLC
3939 Sand Hill Road
Kettle River, MN 55757

RE: Archeological Construction Monitoring Proposal

Dear Steven;

The Afton City Council, at its March 21, 2017 meeting, approved your proposal dated March 16, 2017 for archeological construction monitoring services at the hourly rate of \$75 per hour, and in the estimated amount of \$12,000, subject to the City paying only for hours during which excavation is occurring. Attached is the signed agreement reflecting your proposal.

Sincerely,

Ronald J. Moore
City Administrator
City of Afton

BLONDO CONSULTING, LLC SERVICES AGREEMENT

This Services Agreement ("Agreement") is made as of the 16 day of March, 2017 between Blondo Consulting, LLC (the "Company"), and City of Afton (the "Client"). The parties agree as follows:

1. **SERVICES.** Upon the terms and subject to the conditions set forth in this Agreement, Blondo Consulting shall provide cultural resources consulting to the Client, the specific scope and nature of which are set forth in the attached Letter Proposal, which is incorporated in to this Agreement by reference (the "Services"). The Client agrees to answer questions and/or supply Blondo Consulting with information and materials that are reasonably necessary or advisable to properly perform the Services. In the event that the scope and/or nature of the Services changes during such time as this Agreement is in effect, with the Client's approval, Blondo Consulting will undertake the performance of the additional and/or modified Services at Blondo Consulting's standard hourly rate(s) and this Agreement shall govern such Services, unless the parties agree to alternate terms by separate written agreement signed by them both.

2. **PAYMENT.** In consideration of the Services, the Client agrees to pay Blondo Consulting according to specific terms set forth in the Letter Proposal. Unless the Letter Proposal states otherwise, Blondo Consulting will prepare and submit to the Client a monthly invoice showing the amounts due under the terms of this Agreement. **The Client agrees to pay each invoice within 30 days of receipt. If the Client fails to remit payment in full within 30 days, Blondo Consulting reserves the right to charge interest on the outstanding amount at the rate of no less than 1.25% and no more than the highest, non-usurious rate permitted by law.** In addition, upon seven days written notice to the Client, Blondo Consulting may, without liability, suspend services under this Agreement until all invoices have been paid in full. Payments will be credited first to interest and then to principal.

The Client will pay Blondo Consulting on an hourly basis at the applicable rates as set forth in the Letter Proposal. Alternatively, Blondo Consulting may agree to undertake work on a flat-fee basis, and shall pay the portion of the flat-fee due upon the intervals set forth in the Letter Proposal. In addition to the payment of fees for services, the Client agrees to reimburse Blondo Consulting for all non-ordinary, out-of-pocket expenses incurred by Blondo Consulting or its affiliates in connection with the Services rendered by them hereunder, provided, however, that the non-ordinary, out-of-pocket expenses are pre-approved by the Client before Blondo Consulting incurs them.

3. **TERMINATION AND SUSPENSION.** Either party may terminate this Agreement upon providing written notice to the other party of that party's default under this Agreement and the breaching party's failure to cure such default within 30 days of such notice. Blondo Consulting may, without liability, terminate this Agreement upon seven days written notice if (a) Blondo Consulting, in its reasonable discretion, believes that the Client has requested Blondo Consulting to furnish or perform services contrary to Blondo Consulting's responsibilities as a licensed professional or (b) the Services are delayed or suspended for more than 90 days for reasons beyond Blondo Consulting's control. The Client may terminate this Agreement for convenience, upon 30 days written notice to Blondo Consulting.

8. **LIABILITY.** Blondo Consulting is not liable for any cost, damage, expense, or loss of Client or any other person or entity arising or resulting, directly or indirectly, from the failure of Blondo Consulting to perform any of the Services described hereunder or the misperformance of any such Services, except to the extent such failure to perform or such misperformance is the result of Blondo Consulting's willful misconduct or gross negligence, in which event Blondo Consulting's liability shall not exceed its fee for such Services hereunder for the period in question.

9. **INDEMNIFICATION.** Each party agrees to indemnify and hold harmless the other party from any and all damages, liabilities, costs, losses, or expenses arising out of any claim, demand, or action by a third party arising out of any breach of the indemnifying party's responsibilities, obligations, representations or warranties under this Agreement. Client specifically acknowledges that the use of investigative equipment and practices may unavoidably alter the existing site conditions and affect the environment in the area being studied, despite, the use of reasonable care and, Client shall indemnify and hold Blondo Consulting harmless from claims of any kind and nature related to the alteration of the project site by Blondo Consulting during the provisions of the Services. Each party hereby waives against the other party, including that party's employees, officers, directors, agents, insurers, partners, and consultants, any and all claims for entitled to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to the Project. Blondo Consulting's total liability to client under this Agreement shall be limited to the total amount of compensation received by Blondo Consulting under this Agreement.

10. **RELATIONSHIP.** Blondo Consulting is an independent contractor of the Client. This Agreement does not create an employment, agency, partnership, or joint venture relationship as between the parties. In performing the Services set forth in this Agreement, Blondo Consulting will have neither express nor implied power to execute agreements on the Client's behalf or in any manner bind the Client as to any matter not within the scope of this Agreement.

11. **EXCLUSIVITY.** The parties expressly acknowledge that this Agreement does not create an exclusive relationship between the parties. The Client is free to engage, and Blondo Consulting is free to offer and to perform, services of the same or similar nature to the Services under this Agreement.

12. **NOTICES.** All notices provided for in this Agreement shall be in writing and shall be deemed to have been duly given if delivered personally, via email, facsimile, or US mail return receipt requested and postage prepaid. Any party may change the address to which notices hereunder are to be sent to it by giving written notice of such change of address in the manner herein provided for giving notice. Any notice delivered personally, via email or facsimile shall be deemed to have been given on the date it is so delivered, and any notice delivered by US mail shall be deemed to have been duly given three business days after it is sent to the intended recipient at the address set forth above.

13. **APPLICABLE LAW.** This agreement shall be construed in accordance with and governed by the laws of the State of Minnesota without regard to the conflict of law provisions thereof.



CULTURAL
HERITAGE
CONSULTING

STEVEN J. BLONDO, MA
3939 SAND HILL RD., KETTLE RIVER, MN 55757
218-485-1174 + STEVEN@BLONDOCONSULTING.COM
WWW.BLONDOCONSULTING.COM

August 16, 2017

INVOICE #2017-047-004

For Professional Services through July 31, 2017

City of Afton
Archaeological Site Monitoring
Mr. Ron Moorse, Project Manager

Blondo Consulting Project Number: 2017-047
Contract Dated April 2017

Invoice Breakdown

Archaeological Monitoring - \$75/hour based on time spent onsite

TOTAL HOURS ON SITE FOR INVOICING - 110.25

Total Amount Due: \$8,268.75

Please remit payment by: September 16, 2017.

Please feel free to contact me should you have any questions or comments.
Thank You,

Steven J. Blondo, MA
Owner
Blondo Consulting, LLC

WEEKLY TIMESHEET

EMPLOYEE NAME:

Early WMI

WEEK (Monday-Sunday):

July 3- July 9, 2017

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		Take Photos		4.0	site photos
		Kimberly		1.0	site photos
				0.0	
TUESDAY				0.0	
		4th of July		0.0	
				0.0	
WEDNESDAY		Alan		12.0	monitoring
				0.0	
				0.0	
THURSDAY		Wesley		12.0	fieldwork/research
				0.0	
				0.0	
FRIDAY		Alan		14.0	monitoring
				0.0	
				0.0	
SATURDAY			0.0		
SUNDAY			0.0		
Total Hours:				43.0	

MILLAGE (Note Projects)

Alan	15.0 miles	monitoring
Wesley	14.0 miles	fieldwork/research

EXPENSES (Note Projects)

DATE & CHECK # FOR EXPENSES:

SUBMITTED TO PAYROLL:

WEEKLY TIMESHEET

EMPLOYEE NAME: Lindsey Reiners

WEEK (Monday-Sunday):

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY				0.0	
	7/3/17	Waconia	30	5.0	working on database
TUESDAY				0.0	
	7/4/17	Holiday		8.0	
WEDNESDAY				0.0	
	7/5/17			0.0	
THURSDAY				0.0	
	7/6/17	Afton	20	12.3	construction monitoring
FRIDAY				0.0	
	7/7/17	Waconia search	30	3.5	working on database
			11 and 12	3.0	
SATURDAY				0.0	
	8-Jul			0.0	
SUNDAY				0.0	
	7/9/17			0.0	
Total Hours:				31.75	

MILEAGE (Note Projects) Afton: 37 miles Waconia: 38 miles Total: 75 miles

EXPENSES (Note Projects) Food: 91.43

DATE & CHECK # FOR EXPENSES:
SUBMITTED TO PAYCHEX:

WEEKLY TIMESHEET

EMPLOYEE NAME:

Katy Wall

WEEK (Monday-Sunday):

Aug 10-16, 2011

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		Cherokee Mill Pond		4.0	report draft
		Kirkland		2.0	site form
				0.0	
TUESDAY		Abbe		3.0	meeting
		Kirkland		3.0	site form
		Wacoona		1.0	research
		Udon Preston		2.0	meeting
WEDNESDAY		Kirkland		1.0	meeting
		Wacoona		6.0	research
				0.0	
				0.0	
THURSDAY		Wacoona		11.0	report update/research
				0.0	
				0.0	
				0.0	
FRIDAY		Wacoona		6.0	report draft
				0.0	
				0.0	
				0.0	
SATURDAY			0.0		
SUNDAY			0.0		
Total Hours:				39.0	

MILEAGE (Note Projects)

Abbe	22 miles	meeting
Wacoona	132 miles	research

EXPENSES (Note Projects)

DATE & CHECK # FOR EXPENSES:
 SUBMITTED TO PAYROLL:

WEEKLY TIMESHEET

EMPLOYEE NAME:

Lindsey Rainers

WEEK (Monday-Sunday):

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		Afton	20	4.0	construction monitoring
	7/10/17	Waconia	30	4.0	database
TUESDAY	7/11/17	Afton	20	4.0	construction monitoring
		waconia	30	4.0	database
WEDNESDAY	7/12/17	Afton	21-Jan	4.0	construction monitoring
		waconia	30	4.0	
THURSDAY	7/13/17	Afton	20	2.5	construction monitoring
		waconia	30	4.0	database and working on percentages
FRIDAY	7/14/17	Cell Towers	40	2.0	
		Afton	20	3.0	construction monitoring
SATURDAY	15-Jul	eagle view	40	4.5	
				0.0	
SUNDAY	7/16/17			0.0	
				0.0	
Total Hours:				40	

MILEAGE (Note Projects)

Afton miles: 230

EXPENSES (Note Projects)

Food: 144.75

DATE & CHECK # FOR EXPENSES:

SUBMITTED TO PAYCHEX:

WEEKLY TIME SHEET

EMPLOYEE NAME:

Gdy Wolf

WEEK (Monday-Sunday):

July 17-23, 2017

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		Wacoia		8.0	report draft
				0.0	site form
				0.0	
TUESDAY		Alan		3.0	meeting
		cell towers		1.0	training with Lindsey
		Wacoia		2.0	research report draft
WEDNESDAY		MN07 Wilson RW SC and MN07 Wilson OI SC/LWS		1.0	spreadsheets
		Wacoia		7.0	research report draft
				0.0	
THURSDAY		Grey		1.5	calls by Lindsey
		Blue Lake		5.0	fieldwork with Lindsey
		Wacoia		1.0	research report draft
FRIDAY		Wacoia		8.0	research report draft
		Spreadsheets		0.5	cell towers
				0.0	
SATURDAY				0.0	
SUNDAY				0.0	
Total Hours:				40.0	

MILEAGE (Note Projects)

Alan	76 miles	meeting
Blue Lake	128 Miles	fieldwork with Lindsey

EXPENSES (Note Projects)

cell towers	\$7.05	training with Lindsey
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DATE & CHECK # FOR EXPENSES:

SUBMITTED TO PAYCHEX

WEEKLY TIMESHEET

EMPLOYEE NAME:

Lindsay Reiners

WEEK (Monday-Sunday):

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		Afton	20	3.0	construction monitoring
	7/17/17	Gary	40	3.0	
		Eagle View	40	2.0	
TUESDAY	7/18/17	Afton	20	4.5	construction monitoring
		Eagle View	40	1.0	
		Gary		2.0	
WEDNESDAY	7/19/17	Afton		2.5	construction monitoring
		Lake Ida	40	5.5	
				0.0	
THURSDAY	7/20/17	Afton	20	2.0	construction monitoring
		Rice Lake	21/22	7.0	
				0.0	
FRIDAY	7/21/17	Afton	20	2.0	construction monitoring
		Rice Lake	40	5.0	
		Gary	42	0.5	
SATURDAY	22-Jul			0.0	
				0.0	
				0.0	
SUNDAY	7/23/17			0.0	
				0.0	
				0.0	
Total Hours:				40	

MILEAGE (Note Projects)

Afton miles: 207 Rice Lake: 77 miles Total: 284 miles

EXPENSES (Note Projects)

Food: 111.30

DATE & CHECK # FOR EXPENSES:

SUBMITTED TO PAYCHEX:

WEEKLY TIMESHEET

EMPLOYEE NAME:

Katy W. H.

WEEK (Monday-Sunday):

July 24-30, 2017

Not in field

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		Waconia		7.0	report draft
		Afton		0.5	meeting
				0.0	
				0.0	
TUESDAY		Afton		2.5	meeting
		Waconia		3.0	SPCC Research
		Lake Ma		1.5	Table for display
WEDNESDAY		Waconia		8.0	report draft
				0.0	
				0.0	
				0.0	
THURSDAY		Waconia		10.0	
		Yank SOW		0.5	
				0.0	
				0.0	
FRIDAY		Waconia		10.0	
				0.0	
				0.0	
				0.0	
SATURDAY		Waconia		2.0	report draft
SUNDAY				0.0	
Total Hours:				45.0	

MLEAGE (Note Projects)

Afton	10 miles	meeting
Waconia	70 miles	SPCC Research

EXPENSES (Note Projects)

Waconia	\$28.16	report printing/SHPS
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DATE & CHECK # FOR EXPENSES:

SUBMITTED TO PAYABLE:

WEEKLY TIMESHEET

EMPLOYEE NAME:

Lindsay Reiners

WEEK (Monday-Sunday):

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		Afton	20	2.5	construction monitoring
	7/24/17	Lake Ida	40	2.8	
		Rice Lake	40	2.8	
TUESDAY		Afton	20	4.5	construction monitoring
	7/25/17	Eagle, Rice, Lake Ida	42	3.0	
		NE Goehner	40	1.0	
WEDNESDAY		Afton	21 Jan	2.5	construction monitoring
	7/26/17	NE Goehner	40	1.5	
		4 cell towers	42	4.0	
THURSDAY		Afton	20	12.0	construction monitoring
	7/27/17	NE Goehner	40	0.5	
				0.0	
FRIDAY		Afton	20	6.5	construction monitoring
	7/28/17	Lin Crusaders	40	1.5	
				0.0	
SATURDAY				0.0	
	29-Jul			0.0	
				0.0	
SUNDAY				0.0	
	7/30/17			0.0	
				0.0	
Total Hours:				45	

MILEAGE (Note Projects)

Mileage: 210

EXPENSES (Note Projects)

Food: 78.95

DATE & CHECK # FOR EXPENSES:

SUBMITTED TO PAYCHEX:

WEEKLY TIMESHEET

EMPLOYEE NAME:

Katy Witt

WEEK (Monday-Sunday):

July 31-August 6, 2017

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		Wacoia		5.0	report edit
		Alton		3.5	monitoring
				0.0	
TUESDAY		Alton		5.0	monitoring
		Wacoia		3.0	report edit
		cell towers		1.0	check in with Lindsay SHFO
WEDNESDAY		Alton		3.0	monitoring
		IA spreadsheet		2.5	spreadsheet
		Lin Crusaders		1.0	edit for Lindsey
				0.0	
THURSDAY		Alton		3.0	monitoring
		Illness Coordinator		3.0	NGO
		MN25 Butler		1.0	edit for Laura
		Parkers Prairie		1.0	edit for Laura
FRIDAY		Alton		3.0	monitoring
		OMA Keystone		1.0	edit for Lindsey
		MN25 Nelson		1.0	edit for Laura
SATURDAY				0.0	
SUNDAY				0.0	
Total Hours:				37.0	

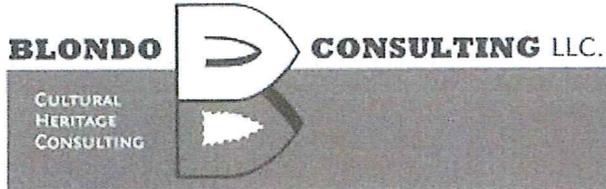
MILEAGE (Note Projects)

Alton	390 miles	monitoring
cell towers	22 miles	check in with Lindsay SHFO

EXPENSES (Note Projects)

cell towers	\$2.00	SHFO parking
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DATE & CHECK # FOR EXPENSES:
 SUBMITTED TO PAYEE:



CULTURAL
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CONSULTING

STEVEN J. BLONDO, MA
3939 SAND HILL RD., KETTLE RIVER, MN 55757
218-485-1174 • STEVEN@BLONDOCONSULTING.COM
WWW.BLONDOCONSULTING.COM

August 31, 2017

INVOICE #2017-047-05

For Professional Services through August 31, 2017

City of Afton
Archaeological Site Monitoring
Mr. Ron Moorse, Project Manager

Blondo Consulting Project Number: 2017-047
Contract Dated April 2017

Invoice Breakdown

Archaeological Monitoring - \$75/hour based on time spent onsite
Total Hours Submitted: 135.5
Travel Time Deduction: (20 hours)
TOTAL HOURS ON SITE FOR INVOICING: 115.5
Total Amount Due: \$8,662.50

Please remit payment by: September 30, 2017.

Please feel free to contact me should you have any questions or comments.
Thank You,

Steven J. Blondo, MA
Owner
Blondo Consulting, LLC

WEEKLY TIMESHEET

EMPLOYEE NAME:

Kelly Wolf

WEEK (Monday-Sunday):

July 31 - August 6, 2017

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		Wierola		4.0	report edit
		Alton		3.5	monitoring
				0.0	
TUESDAY		Alton		2.0	monitoring
		Wagon		3.0	report edit
		cell towers		1.0	check in with Lindsey SFD
WEDNESDAY		Alton		3.0	monitoring
		Wagon/Alton		2.5	report edit
		cell towers		1.0	with Lindsey
THURSDAY		Alton		3.0	monitoring
		Finco/Gudalinet		3.0	NFO
		MNCS Butler		1.0	edit for Laura
FRIDAY		Alton		3.0	monitoring
		OMA Keyzone		1.0	edit for Lindsey
		MNCS Nelson		1.0	edit for Laura
SATURDAY				0.0	
SUNDAY				0.0	
Total Hours:				37.0	

MILEAGE (Note Projects)

Alton	20 miles	monitoring
cell towers	22 miles	check in with Lindsey SFD

EXPENSES (Note Projects)

cell towers	\$2.00	SFD parking
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DATE & CHECK # FOR EXPENSES:

SUBMITTED TO FWH/BLA:

WEEKLY TIMESHEET

EMPLOYEE NAME:

Katy Wolf

WEEK (Monday-Sunday):

August 7-13, 2017

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		Alton		3.0	monitoring
		Ilwaco		5.0	report template
				0.0	
TUESDAY		Alton		5.5	monitoring/meeting
		Wacosta		2.0	conference call
				1.0	NOO
WEDNESDAY		AK Nelson		1.0	calls for leads
		Alton		3.0	monitoring
		Ilwaco		3.0	NOO table
THURSDAY		Ilwaco		1.5	report template
				0.0	
		Alton		3.0	monitoring
FRIDAY		Wacosta		4.0	report edit
				0.0	
		Alton		3.0	monitoring
SATURDAY		New Richmond		3.0	field work
		Yacok		3.0	field visit
				0.0	
SUNDAY		Wacosta		3.0	report edit
				0.0	
Total Hours:				44.0	

MILEAGE (Note Projects)

Alton	20 miles	monitoring
New Richmond	50 miles	field work
Yacok	115 miles	field visit

EXPENSES (Note Projects)

DATE & CHECK # FOR EXPENSES:

SUBMITTED TO PAYROLL:

WEEKLY TIMESHEET

EMPLOYEE NAME:

Katy Wolf

WEEK (Monday-Sunday):

August 14-20, 2017

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		Attn		3.0	meeting
		SPD2 meeting		4.0	
		Bojo		1.0	edit for Laura
TUESDAY		Willow Grove		1.0	edit for Laura
		Attn		6.0	meeting/meeting
		Maya Gross Rural		1.0	edit for Laura
		New Richmond		0.5	edit for Laura
WEDNESDAY		Griffel		3.5	memo edit
		Attn		3.0	meeting
		Empal		0.5	memo edit
		Wierola		4.0	meeting memo
THURSDAY				0.0	
		Attn		3.5	meeting
		MD11 Out		1.0	report edit for Lindsay
		Lakewood		1.0	edit for Laura
		Estata		1.0	edit for Laura
FRIDAY		Mullato/Barnwell		1.0	edit for Laura
		Attn		3.0	meeting
				0.0	
SATURDAY				0.0	
SUNDAY				0.0	
Total Hours:				37.0	

MILEAGE (Note Projects)

Attn 150 miles meeting

EXPENSES (Note Projects)

DATE & CHECK # FOR EXPENSES:

SUBMITTED TO PAYCHECK

WEEKLY TIMESHEET

EMPLOYEE NAME:

gary will

WEEK (Monday-Sunday):

August 21-27, 2017

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		Aston		11.0	meeting
				0.0	
				0.0	
TUESDAY		Aston		10.0	meeting/planning
				0.0	
				0.0	
WEDNESDAY		Aston		11.0	meeting
				0.0	
				0.0	
THURSDAY		TIC lease Greenwood		1.0	with for Lease
				1.0	with for Lease
				0.0	
FRIDAY				0.0	
				0.0	
				0.0	
SATURDAY				0.0	
				0.0	
				0.0	
SUNDAY				0.0	
				0.0	
				0.0	
Total Hours:				34.0	

MILEAGE (Note Projects)

Aston 240 miles meeting

EXPENSES (Note Projects)

DATE & CHECK # FOR EXPENSES:

SUBMITTED TO PAYROLL:

WEEKLY TIMESHEET

EMPLOYEE NAME:

Lindsey Reiners

WEEK (Monday-Sunday):

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		notes	20	0.5	notes sent to Barry labeled photos
	8/21/17	Brookings	40	6.5	
		CRST Reports	2	1.0	
TUESDAY	8/22/17	Afton	20	10.5	construction monitoring
				0.0	
WEDNESDAY		Brookings	42	3.0	
	8/23/17	Afton	20	4.5	construction monitoring
		CRST List	2	2.0	
THURSDAY		Afton	20	9.0	construction monitoring
	8/24/17			0.0	
					0.0
FRIDAY		Afton	20	2.5	construction monitoring
	8/25/17	CRST list	2	1.0	
					0.0
SATURDAY	8/26/17			0.0	
				0.0	
SUNDAY	8/27/17			0.0	
				0.0	
Total Hours:				40.5	

MILEAGE (Note Projects) 125 miles

EXPENSES (Note Projects) Food: 8.64

DATE & CHECK # FOR EXPENSES:

SUBMITTED TO PAYCHEX:

WEEKLY TIMESHEET

EMPLOYEE NAME:

Lindsay Rainers

WEEK (Monday-Sunday):

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY				0.0	
	8/28/17	Fargo Oxbow	20	4.5	construction monitoring
		Alton	20	1.5	construction monitoring
TUESDAY				0.0	
	8/29/17	Fargo Oxbow	20	12.0	construction monitoring
				0.0	
WEDNESDAY				0.0	
	8/30/17	Fargo Oxbow	20	11.0	construction monitoring
				0.0	
THURSDAY				0.0	
	8/31/17	Fargo Oxbow	20	12.5	construction monitoring
				0.0	
FRIDAY				0.0	
	9/1/17	Fargo Oxbow	20	7.5	construction monitoring
				0.0	
SATURDAY				0.0	
	9/2/17			0.0	
				0.0	
SUNDAY				0.0	
	9/3/17			0.0	
				0.0	
				0.0	
Total Hours:				49	

MILEAGE (Note Projects) 660 miles

EXPENSES (Note Projects) food:90.33

DATE & CHECK # FOR EXPENSES:

SUBMITTED TO PAYCHECK:

WEEKLY TIMESHEET

EMPLOYEE NAME: Laura Koski
 WEEK (Monday-Sunday): 8/28-9/3/17

Day	Project Number	Project Name	Task Order	Hours	Notes
MONDAY		Alton		3.5	
		MN06 Grindstone	41, 42	2.0	
		MN09 Edna	41, 42	2.0	
TUESDAY		MN02 Bemidji HS	41	0.25	
		MN11 Altura	41	0.25	
		MN06 Grindstone	77, 21, 22, 41, 42, 43	9.0	
WEDNESDAY		Fairmont Real Estate			
		RL	41, 42, 43	2.0	
		MN02 Bemidji HS	11, 12, 77, 3	1.5	
		MN11 Altura	11, 12, 77, 3	1.5	
		Finlayson	11, 12, 77, 3, 42	1.5	
		MN11 Racine	11, 77, 3	1.5	
THURSDAY		Outstanding CR51 Projects	42, 99	2.0	Mapped, double checked info between checklist and dropbox and what I already had, made plan, organized info received from Lindsey and Steven later in the day
		Finalizing UNH projects	42	0.5	
		MN Verizon Nodes	41, 13	1.0	
		Fairmont Real Estate			
		RL	41, 42, 43	2.0	
		IA08 Kiron	99	0.1	Downloading and organizing info
		IA09 Thomas	99	0.1	Downloading and organizing info
		IA14 Forest City DT	99	0.1	Downloading and organizing info
		Greenville	99	0.1	Downloading and organizing info
		MN09 Edna	21, 22, 77	7.0	
FRIDAY		MN09 Sherburn	21, 22, 77	5.5	
		MN09 Edna	42	2.0	
		IA08 Kiron	41	0.5	
		IA09 Thomas	41	0.5	
		IA14 Forest City DT	41	0.5	
		MN09 Butterfield	21, 22, 77	8.0	
SATURDAY		X	0.0		
			0.0		
			0.0		
SUNDAY		X	0.0		
			0.0		
			0.0		
Total Hours:				54.9	

MILEAGE (Note Projects)

MN06 Grindstone	170 miles
MN09 Edna	228 miles
MN09 Sherburn	233 miles
MN09 Butterfield	276 miles
Wednesday	30 miles

EXPENSES (Note Projects)

Wednesday	\$3.5 SHPO parking
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DATE & CHECK # FOR EXPENSES:
 SUBMITTED TO PAYCHEX:

Holstad & Knaak, PLC
 4501 Allendale Drive
 St. Paul, MN 55127
 651-490-9078

September 30, 2016

City of Afton
 ATTN: Accounting
 3033 St. Croix Trail
 P.O. Box 219
 Afton, MN 55001

STATEMENT OF SERVICES RENDERED
Monthly Fee for General Legal Services
Flat Fee of \$4,000.00* (see Summary)

CIVIL

9-8-17	Miscellaneous file review; research	1.00
9-11-17	Miscellaneous correspondence; file review; research	1.25
9-14-17	File review; attend meeting; miscellaneous correspondence	5.75
9-15-17	Telephone conference with council member; research	1.00
9-19-17	Prepare for and attend council meeting; research	5.25
9-25-17	Telephone conferences with staff; revise document drafts; research	<u>1.25</u>
	HOURS	15.50

CRIMINAL

8-29-17	Stillwater calendar	3.50
9-5-17	Stillwater criminal calendar	2.25
9-7-17	Miscellaneous correspondence and review	1.00
9-12-17	Stillwater prosecution calendar	4.00
9-14-17	Omnibus calendar	1.50
9-19-17	Stillwater prosecution calendar	3.00
9-21-17	Omnibus calendar	2.00
9-25-17	Calendar review and preparation	<u>1.00</u>
	HOURS	21.25

LITIGATION

9-15-17	Multiple telephone conferences with opposing attorney;	
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	review file; hearing prep	1.75
9-17-17	Research regarding condemnation issue	2.00
9-20-17	Research and draft motion documents	2.25
9-22-17	Draft easement document	<u>2.00</u>
	HOURS	8.00

Paralegal:

Review court notices, emails, requests for records and respond to same, correspondence to court, State Patrol, Washington County Sheriff's Department, and defense attorneys regarding reports, files and court appearances, compile records, reports and draft new case file sheet for court, miscellaneous correspondence, discuss prosecution files with attorney Knaak, review files in MNCIS and update files regarding same, prepare files for prosecutor, research addresses, continue to review disposition tracking problems, reports, investigation, conferences with BCA, prepare files for court, miscellaneous criminal prosecution duties.

CRIMINAL HOURS: 24.25

Assist with various civil files, correspondence, documents, ordinance matters, research, miscellaneous, personnel issues and drafting documents, correspondence and telephone conferences regarding same, miscellaneous civil matters; locate and review city ordinances, print various research results, conference with counsel; multiple telephone conferences with court personnel.

CIVIL HOURS: 24.00

COSTS: \$0

SUMMARY

TOTAL HOURS:	Civil:	39.50 (Attorney and Paralegal hours)
	Criminal:	45.50 (Attorney and Paralegal hours)
	Litigation:	<u>8.00</u> (condemnation)
TOTAL HOURS:		93.00

Monthly Amount: \$4,000.00

Additional attorney time (condemnation)

***10 hours of litigation included in contract**

I certify that this bill is accurate and correct.

s/s Frederic W. Knaak

Frederic W. Knaak
Attorney at Law

PLEASE MAKE YOUR CHECK PAYABLE TO HOLSTAD & KNAAK, PLC

THANK YOU!

Please Note!!

Additional Exhibits On-Line

While staff had planned to make hardcopies of all exhibits, the packet was already very large prior to including several large exhibits. The decision was made to place several large applicant exhibits on-line with the remainder of the agenda packet, and to not make hardcopies for the packet. The exhibits that are on-line are as follows:

Exhibit D: Geotechnical soils report

Exhibit E: Spack Engineering Traffic Report

Exhibit F: EAW-related materials

Exhibit G: Homeowners Association Restrictive Covenants

Additional Applicant Exhibits

The applicant's Exhibits D,E, F and G were not included in the hardcopy of the agenda packet provided to Planning Commission members. These exhibits are attached here.

EXHIBIT "D"

Report of Geotechnical Exploration

Afton Project

Afton, Minnesota

August 11, 2017

Allied Project 17068

ITCO Allied Engineering Company

7125 West 126th Street, Suite 500

Savage, Minnesota 55378

Ph: 952-890-5909

Fax: 952-890-5883

SUBGRADE EXPLORATION

FOR

AFTON PROJECT

Afton, Minnesota

Allied Project No. 17068

August 11, 2017

INTRODUCTION

This report presents the results of subgrade exploration performed by our firm for a proposed large lot residential development. This work was requested by Mr. Charles Plowe of Plowe Engineering, Inc. on July 26, 2017 and authorized by Mr. Joseph Bush of J.P. Bush Homes on July 27, 2017. Our work was performed as described in our proposal for subgrade exploration dated July 26, 2017.

PROJECT INFORMATION

The project site is approximately 200 acres in size and is located in the NW quadrant of the intersection of Trading Post Trail and 60th Street South, Afton, Washington County, Minnesota. A twenty lot residential development, a roadway, and 100 acres of open space are proposed for the project. Our work consisted of soil borings and a geotechnical report for the proposed roadway.

BORING LOCATIONS AND ELEVATIONS

The borings were located as shown on the site plan included in the appendix. The boring locations were marked in the field by Landmark Surveying, Inc. Ground elevations at the boring locations were provided on the site plan. The elevations listed on the boring logs are in accordance with the ground elevations at each boring location.

FIELD EXPLORATION

Twelve Standard Penetration Test (SPT) borings were put down to a depth of 10 feet. One SPT boring was put down to a depth of 15 feet. Three additional SPT borings were intended to be drilled to either 10 or 15 feet, but auger refusal occurred and they were actually drilled to depths of 9.5 feet, 6.5 feet, and 5.3 feet of depth. The borings were put down in accordance with ASTM 1586-99: "Standard Method for Penetration Test and Split-Barrel Sampling of Soils". Using this procedure, a 2" O.D. split barrel sampler is driven into the soil by a 140-lb weight falling a distance of 30 inches. After an initial set of 6", the number of blows required to drive the sampler an additional 12 inches is known as the standard penetration resistance or N-value. The N-value provides an indication of the relative density of cohesionless (coarse grained) soils or of the consistency of cohesive (fine-grained) soils.

As the samples were obtained in the field, they were visually and manually classified. Representative portions of the samples were then sealed in clean glass soil jars and returned to the laboratory for further examination and verification of the field classification. The recovered soil samples were classified in accordance with the Unified Soil Classification System, ASTM D: 2488-00. A chart illustrating this classification method is included in the appendix to this report. Logs of the test borings indicating the depth and identification of the various strata, measured penetration resistances, soil classifications and the results of water level checks are included in the appendix to this report.

Bag samples were obtained from the 10 feet deep borings from the soil layers just below the topsoil. Four of the borings were intended to be drilled to 15 feet because an approximate cut of 5 feet was shown on the profile: borings 2559, 2560, 2564, and 2566. Bag samples from these borings were obtained at 5-6.5 feet. Gradation tests and plasticity index tests were run on some of the samples in order to make pavement recommendations for the roadway. Not all samples were tested, however, because they were the same as samples that were tested.

SUBSURFACE CONDITIONS

Boring B-2557

Boring B-2557 consisted of 24 inches of topsoil, underlain by silty clay (AASHTO A-6) from at least 2.5 feet to at least 5 feet of depth, clayey sand from at least 5 feet to 6 feet of

depth, medium sand with clay to at least 9 feet of depth, and sandy clay from at least 10 feet to 11.5 feet of depth.

Boring B-2558

Boring B-2558 consisted of 8 inches of topsoil, underlain by silty sand with gravel (AASHTO A-2-4) to 7.5 feet of depth, fine sand to at least 9 feet of depth, medium sand with clay from at least 10 feet to 10.25 feet of depth, and clayey sand to 11.5 feet of depth.

Boring B-2559

Boring B-2559 consisted of 6 inches of topsoil, underlain by slightly organic sandy silt to at least 2 feet of depth, silt (loess) to 5 feet of depth, silt with sandstone pieces to 7.5 feet of depth, silty sand with sandstone pieces to at least 9 feet of depth, and fine to medium sand and sandstone pieces from at least 9.5 feet to 11 feet of depth.

Boring B-2560

Boring B-2560 consisted of 5 inches of topsoil, underlain by silt (loess) to 5 feet of depth, silt with sandstone pieces (AASHTO A-4) to 7.5 feet of depth, sandy silt with sandstone pieces to at least 11.5 feet of depth, silty sand with sandstone pieces from at least 12.5 feet to 15 feet of depth, and silty sand with sandstone pieces to 16.5 feet of depth.

Boring B-2561

Boring B-2561 consisted of 6 inches of topsoil, underlain by moist clay to 2.7 feet of depth, fine sand with silt to 5.25 feet of depth, moist sandy silt (AASHTO A-4) to 8 feet of depth, silt to 10 feet of depth, and sandy silt with some sandstone pieces to 11.5 feet of depth.

Boring B-2562

Boring B-2562 consisted of 8 inches of topsoil, underlain by 10 inches of moist clay to 1.5 feet of depth, sandy silt to 2.5 feet of depth, and silty fine sand to 6.5 feet of depth. Auger refusal occurred at 5.3 feet of depth.

Boring B-2563

Boring B-2563 consisted of 16 inches of topsoil, underlain by clay (AASHTO A-6) to at least 2.5 feet of depth, silty sandy clay with some gravel to 4 feet of depth, clay/silt (AASHTO A-4) to 6 feet of depth, silt with some gravel from at least 7.5 feet to 9 feet of depth, and silty sandy clay from at least 10 feet to 11.5 feet of depth.

Boring B-2564

Boring B-2564 consisted of 10 inches of topsoil, underlain by moist clay to at least 2 feet of depth, silt with sandstone pieces from at least 2.5 feet to at least 4 feet of depth, and silty

sand with sandstone pieces from at least 5 feet to 6.5 feet of depth, and auger refusal at 6.5 feet of depth.

Boring B-2565

Boring B-2565 consisted of 4 inches of topsoil, underlain by silty clay to at least 2 feet of depth, sandy silt (loess) from at least 2.5 feet to 5 feet of depth, sandy silt with sandstone pieces to 7.5 feet of depth, sandy silt to 10 feet of depth, and sandy silt with sandstone pieces to 10.9 feet of depth.

Boring B-2566

Boring B-2566 consisted of 10 inches of topsoil, underlain by moist silt to at least 2 feet of depth, sandy silt (loess) to 7.5 feet of depth, sandy silt with sandstone pieces to 10 feet of depth, and sandy silt with some sandstone pieces to 11.5 feet of depth.

Boring B-2567

Boring B-2567 consisted of 14 inches of topsoil, underlain by sandy clay to at least 2 feet of depth, sandy silt from at least 2.5 feet to 2.83 feet of depth, sandy silt with sandstone pieces to at least 4 feet of depth, sandy silt from at least 5 feet to 5.5 feet of depth, sandy silt with sandstone pieces to at least 6.5 feet of depth, silt from at least 7.5 feet to at least 9 feet of depth, sandy silt from at least 10 feet to 10.33 feet of depth, and sandy silt with sandstone pieces to 11.5 feet of depth.

Boring B-2568

Boring B-2568 consisted of 6 inches of topsoil, underlain by slightly organic silt to at least 2 feet of depth, moist silt from at least 2.5 feet to at least 6.5 feet of depth, silty sand from at least 7.5 feet to 10 feet of depth, and silty sand with some sandstone pieces to 11.5 feet of depth.

Boring B-2569

Boring B-2569 consisted of at least 2 feet of topsoil, underlain by clayey sandy silt (AASHTO A-4) from at least 2.5 feet to 5 feet of depth, moist silty sandy clay with some sandstone pieces to 8.4 feet of depth, silty clay to at least 9 feet of depth, and silt with some sandstone pieces from 10 feet to 11.5 feet of depth.

Boring B-2570

Boring B-2570 consisted of 8 inches of topsoil, underlain by slightly organic clay to at least 2 feet of depth, silt (loess) from at least 2.5 feet to 5 feet of depth, silt with some sandstone

pieces to 7.5 feet of depth, silty sand with some sandstone pieces to 10 feet of depth, and silty sand and sandstone pieces to 10.9 feet of depth.

Boring B-2571

Boring B-2571 consisted of 10 inches of topsoil, underlain by clay to at least 2 feet of depth, clayey sand from at least 2.5 feet to 2.75 feet of depth, silt (loess) to 10.75 feet of depth, and silty sand and sandstone pieces to 11.5 feet of depth.

Boring B-2572

Boring B-2572 consisted of 8 inches of topsoil, underlain by slightly organic clay to 2 feet of depth, silt (loess) from at least 2.5 feet to 7.5 feet of depth, silt with some sandstone pieces to 10.6 feet of depth, and silt with sandstone pieces to 11.5 feet of depth.

N-values ranged from 5 to 72, indicating that the soils ranged from medium to very dense in consistency.

Groundwater was not encountered in the borings. Groundwater conditions may vary both seasonally and annually based on precipitation amounts, patterns, and both surface and subsurface drainage in the local area.

Included in the appendix to this report are logs of the test borings, which describe the conditions, encountered at each drilling location. The depth of the individual strata of soil may vary at and between the drilling locations due to unsampled intervals, the occurrence of transitions between soil layers and the natural variability of the subsurface conditions.

CONCLUSIONS AND RECOMMENDATIONS

Organic topsoil, peat, organic soils, and any soft soil layers, which may be encountered, should not be relied upon for support of the proposed roadway or controlled fills that will support the roadway. These materials should be removed and replaced below the proposed roadway. A qualified soil technician should examine the excavated areas before suitable fill material is placed. ITCO Allied Engineering can provide this service during construction.

The non-root infested and inorganic on-site soils would generally be suitable for reuse as controlled and compacted fill material. The topsoil or other materials, which would not be suitable for use as

controlled fill, may be able to be used as surface fill in the lawn and landscaping areas. Additional recommendations are presented in the following sections:

1. EXCAVATION

In general, grubbing and stripping operations should remove all significantly organic or root infested soils from the areas to be worked. Frozen material, soft consistency clays or otherwise unsuitable soil and debris should be removed. Where undocumented fill or otherwise unsuitable soils are exposed in the base of excavations, which will support slabs, pavements or footings, these materials should also be removed. Frozen soils resulting from frost penetration may turn soft upon thawing and would need to be removed.

For the support of fill sequences, slabs, or footings it will be important to remove unsuitable soils prior to the placement of the controlled and compacted fill to make grade for concrete foundations and slabs. Once the organic topsoil layers and otherwise unsuitable materials have been removed, the completed excavations should be observed by an experienced soil engineer or technician and the conditions judged to be suitable prior to the placement of controlled and compacted fill to make grade for concrete footings or slabs. The following areas should be observed at the time of construction and unsuitable soil removed and replaced as necessary to obtain suitable soil and adequate compaction of the soil for the proposed roadway or other facilities.

Soil Boring	Soil depth associated with soils requiring modification
B-2557	Remove topsoil to 24"
B-2558	Remove topsoil to 8"
B-2559	Remove to roadway subgrade
B-2560	Remove to roadway subgrade
B-2561	Remove topsoil to at least 6"*
B-2562	Remove topsoil to at least 8"*
B-2563	Remove topsoil to at least 14"*
B-2564	Remove to roadway subgrade
B-2565	Remove topsoil to at least 4"*

B-2566	Remove to roadway subgrade
B-2567	Remove topsoil to at least 14''*
B-2568	Remove topsoil to at least 6''*
B-2569	Remove topsoil to at least 24''
B-2570	Remove topsoil to at least 8''*
B-2571	Remove topsoil to at least 10''*
B-2572	Remove topsoil to at least 8''*

*The layers immediately below the topsoil in these borings are dark clays and are likely "Horizon B" layers, which can be variable as far as organic content. A decision will need to be made as to whether or not to remove these layers or to use them for roadway subgrade.

2. FILL PLACEMENT

In the event that unsuitable soils are encountered and need to be replaced, the fill material should be mineral soil, preferably granular, and free of debris, boulders and organic material. The non-organic on-site soils would be suitable for reuse as controlled fill material provided that they are dry enough to meet compaction requirements. It may be difficult to dry wet soils sufficiently and it may be necessary to replace some of this material with off site material.

Fill should be placed and compacted in a manner that will allow complete compaction of the entire fill layer to a minimum of 95% of the Standard Proctor Density according to ASTM D: 698 in the building pad area. Required compaction should be increased to 98% for the top 4 feet of fill below final grade and below all footings. For roadway construction, the top 3 feet of roadway subgrade should be compacted to 100%. A minimum of one representative field density test should be performed for each two feet of fill placed at a time in a given work area. Density tests in mass fill areas should be performed at a rate judged sufficient to represent the fill sequence as a whole. Where sand fills are to be compacted, smooth "drum" type vibratory equipment would be preferred, however, a sheepsfoot roller with short wide pads may provide adequate compaction.

Fill areas should be properly oversized to provide for adequate distribution of the imposed loads. The fill supporting structural elements should extend at least one foot horizontally beyond the structure, slab or edge of the footing. Fill surfaces should extend downward and outward on a 1:1

slope to competent soil. If the fill slope is unconfined by other soils, the downward and outward slope should be flattened and stabilized. Also, no unremediated excavations should be carried out within the fill oversize areas.

3. PAVEMENT

The results of our work indicate that conditions are suitable for the construction of flexible bituminous pavements if the design of the roadway sections and preparation of the subgrades take into account the nature of the subsurface soils present. The material types most influencing the pavement design would be the soil layers located just below the layers that will be removed. The classifications of these layers are as follows:

<u>AASHTO Classification</u>	<u>USC Classification</u>	<u>Boring Nos.</u>
A-2-4	Silty Sand, SM	2558, 2559
A-4	Silt, ML & Silty Sand, SM	2560, 2564, 2566, 2568, 2569
A-6	Silty Sandy Clay, CL	2557, 2561*, 2562*, 2563*, 2565*, 2567*, 2568*, 2570*, 2571*, 2572*

*If the layer immediately below the topsoil ends up being removed, then the soil layer below the removed layer would dictate the pavement section. These would be A-4 soils.

The AASHTO A-2-4 material would likely provide a soil factor of 75 or an R-value of 30. Using MnDOT's soil factor design method and a light traffic 7-ton design (less than 400 Average Daily Traffic) with a soil factor of 75 would require a Granular Equivalent (G.E) of 9.38 inches. A pavement section consisting of a 1½-inch wear course (MnDOT 2360), a 2-inch base course (MnDOT 2360), and 6 inches of class 5 aggregate (MnDOT 3138) would provide a G.E. that would exceed the required value. For a 9-ton design, using a soil factor of 75, the minimum G.E. is 13.9 inches for a light traffic roadway (less than 150 Heavy Commercial Average Annual Daily Traffic). A pavement section consisting of a 1½-inch wear course (MnDOT 2360), a 2-inch base course (MnDOT 2360), and 7 inches of class 5 aggregate (MnDOT 3138) would provide a G.E. that would exceed the required value

The AASHTO A-4 material would likely provide a soil factor of 130 or an R-value of 20. Using MnDOT's soil factor design method and a light traffic 7-ton design (less than 400 Average Daily

Traffic) with a soil factor of 130 would require a Granular Equivalent (G.E) of 14 inches. A pavement section consisting of a 1½-inch wear course (MnDOT 2360), a 2-inch base course (MnDOT 2360), and 7 inches of class 5 aggregate (MnDOT 3138) would provide a G.E. that would exceed the required value. For a 9-ton design, using a soil factor of 130, the minimum G.E. is 22 inches for a light traffic roadway (less than 150 Heavy Commercial Average Annual Daily Traffic). A pavement section consisting of a 1½-inch wear course (MnDOT 2360), a 2-inch base course (MnDOT 2360), and 15 inches of class 5 aggregate (MnDOT 3138) would provide a G.E. that would exceed the required value. AASHTO A-4 soils are frost susceptible and silts can wick up moisture from lower layers. Several local communities require a 2 feet sand layer be placed on top of the silt, then at least 6 inches of class 5 and the asphalt layers previously described. The City of Afton should be contacted to determine their requirements. If they do not require a two feet sand layer this should still be considered.

The AASHTO A-6 material would likely provide a soil factor of 100 or an R-value of 12. Using MnDOT's soil factor design method and a light traffic 7-ton design (less than 400 Average Daily Traffic) with a soil factor of 100 would require a Granular Equivalent (G.E) of 11.5 inches. A pavement section consisting of a 1½-inch wear course (MnDOT 2360), a 2-inch base course (MnDOT 2360), and 6 inches of class 5 aggregate (MnDOT 3138) would provide a G.E. that would exceed the required value. For a 9-ton design, using a soil factor of 100, the minimum G.E. is 17.5 inches for a light traffic roadway (less than 150 Heavy Commercial Average Annual Daily Traffic). A pavement section consisting of a 1½-inch wear course (MnDOT 2360), a 2-inch base course (MnDOT 2360), and 10.5 inches of class 5 aggregate (MnDOT 3138) would provide a G.E. that would exceed the required value

In using the soil factor method for pavement design, it is essential that the subgrade be constructed of uniform soil across the pavement section and compacted at a moisture content and to a density in accordance with MN/DOT spec. 2105 and be capable of passing test rolling, in accordance with MN/DOT Spec. 2111. The completed subgrade should be observed and judged suitable by an experienced individual prior to the placement of the aggregate base or paving. Compaction of the upper 3 feet of the subgrade to a minimum of 100% of the standard proctor density within appropriate moisture limits, (65 to 102% of optimum), should provide the necessary stability required for proof rolling.

4. FINAL SITE TOPOGRAPHY

The final soil surfaces should be graded to provide adequate drainage away from structures and pavements in order to minimize deleterious effects associated with water infiltration. The areas adjacent to footing walls should be adequately compacted (not loosely placed) and provided with drainage outlets to avoid this zone acting as a "sump" and creating nuisance water conditions.

Compliance with the building code provision for positive surface drainage away from the structure should also aid in reducing the quantity of infiltration into the backfill zones adjacent to foundation walls.

STANDARD OF CARE

The recommendations contained in this report are professional opinions. These opinions were arrived at in accordance with generally accepted engineering practices currently in use at this time, location and for projects of this type. Other than this, no warranty is implied or intended. Soil samples recovered from the test borings will be retained in our offices for a period of thirty days from the date of this report. After that time they will be discarded unless prior written instructions to the contrary are received.

I hereby certify that this report and/or specification has been prepared by me or under my direct supervision and that I am a duly registered Professional Engineer under the laws of the State of Minnesota. If you have any further questions or we can be of any further assistance, please do not hesitate to phone or write.

ITCO ALLIED ENGINEERING COMPANY


Robert Sullentrop, P.E.

Minnesota Registration No. 17823

APPENDIX A

Boring Location Plan

FIELD WORKSHEET - JULY 31, 2017

City of Afton, Washington County, Minnesota

PROPOSED ROAD BORING LOCATIONS - PNEZD FORMAT

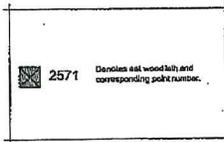
Point Number, Northing, Easting, Elevation, Description

Coordinates are based on the Washington County Coordinate System,
Nad 83, 1986 Adjustment.

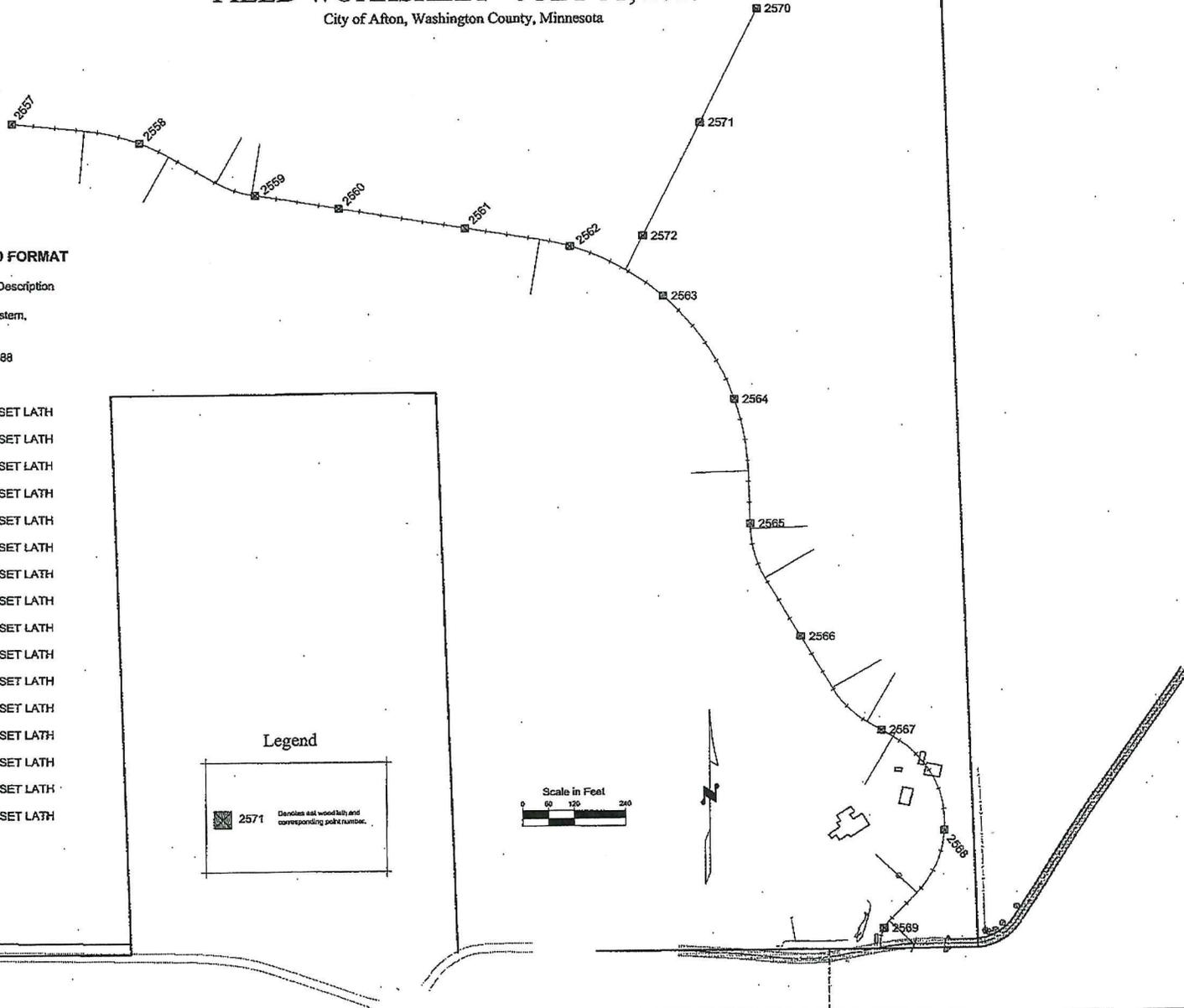
Elevations are based on the North American Vertical Datum of 1988

2557,	144308.7130,	502074.8630,	904.3260,	SET LATH
2558,	144259.7270,	502371.1150,	899.3340,	SET LATH
2559,	144134.7950,	502641.8200,	918.8710,	SET LATH
2560,	144102.8260,	502839.1310,	928.0530,	SET LATH
2561,	144054.8480,	503135.0130,	922.6760,	SET LATH
2562,	144008.5730,	503383.5580,	937.5790,	SET LATH
2563,	143890.6510,	503598.0300,	920.3240,	SET LATH
2564,	143644.2020,	503764.4180,	917.1580,	SET LATH
2565,	143348.1420,	503800.4860,	908.3380,	SET LATH
2566,	143078.1510,	503917.7520,	909.6970,	SET LATH
2567,	142851.1880,	504105.8360,	911.9870,	SET LATH
2568,	142609.8530,	504252.2190,	880.2560,	SET LATH
2569,	142376.4640,	504109.5170,	869.2210,	SET LATH
2570,	144570.7630,	503819.6090,	917.2810,	SET LATH
2571,	144302.3310,	503685.5870,	919.8570,	SET LATH
2572,	144034.1130,	503551.5510,	926.2360,	SET LATH

Legend



Scale in Feet
0 60 120 240



Landmark Surveying, Inc.

21090 Olinda Trail North
P.O. Box 65
Scandia, Minnesota 55073
Office number: 651-433-3421
Cell number: 651-725-0760
E-mail: ushufuku@landmark.net

July 31, 2017

Job No. 2016-04

APPENDIX B

Boring Logs

ITCO ALLIED ENGINEERING CO.

LOG OF BORING **B-2557**

Sheet 1 of 16

Project: Afton Project

DRILLER Mike

TECHNICIAN Tom

BORING NO. / LOCATION

B-2557

DRY ON COMPLETION ?

Yes

DATE August 2, 2017 SURFACE ELEV. 904.3 FT.

REFUSAL: No DEPTH _____ FT. ELEV. _____ FT.

SAMPLED 11.5 FT. 3.5 M

BORING TIME: 11:40 AM

BOTTOM OF HOLE DEPTH 10.0 FT. ELEV. 894.3 FT.

BORING ADVANCED BY: POWER AUGERING X

WATER LEVEL DATA (IF APPLICABLE)

DRILLING: DEPTH _____ FT.

ELEV. _____ FT.

After 24 Hours DEPTH _____ FT.

ELEV. _____ FT.

Cave-in DEPTH 9.9 FT.

STRATUM DEPTH		SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION
		FROM	TO			N-Value	Qp	LL	PI	%M	
FT.	ELEV.	FT.	FT.								
0.0	904.3										24" Dark Brown Clayey Topsoil
		0.0	2.0	1	Grab						
2.5	901.8										Brown Silty Clay, CL AASHTO A-6
		2.5	4.0	2	SS	10					
5.0	899.3										Reddish Brown Clayey Sand, SC
		5.0	6.5	3	SS	19					Reddish Brown Medium Sand W/Clay, SP-SC
7.5	896.8										
		7.5	9.0	4	SS	18					
10.0	894.3										Reddish Brown Sandy Clay, CL
		10.0	11.5	5	SS	10					

REMARKS:

ITCO ALLIED ENGINEERING CO.

Project: Afton Project

LOG OF BORING **B-2558**

Sheet 2 of 16

DRILLER Mike

TECHNICIAN Tom

DRY ON COMPLETION? Yes

BORING NO. / LOCATION B-2558

DATE August 2, 2017 SURFACE ELEV. 899.3 FT.

REFUSAL: No DEPTH FT. ELEV. FT.

SAMPLED 11.5 FT. 3.5 M

BORING TIME: 12:30 PM

BOTTOM OF HOLE DEPTH 10.0 FT. ELEV. 889.3 FT.

BORING ADVANCED BY: POWER AUGERING X

WATER LEVEL DATA (IF APPLICABLE)

DRILLING: DEPTH FT.

ELEV. FT.

After 24 Hours DEPTH FT.

ELEV. FT.

Cave-in DEPTH 9.9 FT.

STRATUM DEPTH	SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION	
	FROM	TO			N-Value	Qp	LL	PI	%M		
FT.	ELEV.	FT.	FT.								
0.0	899.3	0.0	2.0	1	Grab						8" Dark Brown Sandy Silty Topsoil Reddish Brown Silty Sand W/Gravel, SM AASHTO A-2-4
2.5	896.8	2.5	4.0	2	SS	10					Brown Silty Sand & Gravel, SM AASHTO A-2-4
5.0	894.3	5.0	6.5	3	SS	9					
7.5	891.8	7.5	9.0	4	SS	16					Brown Fine Sand, SP
10.0	889.3	10.0	11.5	5	SS	14					3" Brn Med Sand W/Clay, SP-SC Brown Clayey Sand, SC

REMARKS: _____

ITCO ALLIED ENGINEERING CO.

LOG OF BORING **B-2559**

Sheet 3 of 16

Project: Afton Project

DRILLER Mike

TECHNICIAN Tom

BORING NO. / LOCATION

B-2559

DRY ON COMPLETION ?

Yes

DATE August 2, 2017

SURFACE ELEV. 918.9 FT.

REFUSAL: Yes DEPTH 9.5 FT.

ELEV. _____ FT.

SAMPLED 11.0 FT. 3.4 M

WATER LEVEL DATA (IF APPLICABLE)

DRILLING: DEPTH _____ FT.

ELEV. _____ FT.

After 24 Hours DEPTH _____ FT.

ELEV. _____ FT.

Cave-in DEPTH 9.6 FT.

BORING TIME: 1:10 PM

BOTTOM OF HOLE DEPTH 9.5 FT.

ELEV. 909.4 FT.

BORING ADVANCED BY:

POWER AUGERING X

STRATUM DEPTH		SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION
		FROM	TO			N-Value	Qp	LL	PI	%M	
FT.	ELEV.	FT.	FT.								
0.0	918.9										6" Dark Brown Silty Topsoil
		0.0	2.0	1	Grab						Brown Slightly Organic Sandy Silt, ML
2.5	916.4										Yellow/Brown Silt, ML (Loess)
		2.5	4.0	2	SS	15					
5.0	913.9										Yellow/Brown Silt W/Sandstone Pieces, ML
		5.0	6.5	3	SS	15					
7.5	911.4										Red/Brown Silty Sand W/Sandstone Pieces, SM
		7.5	9.0	4	SS	7					
9.5	909.4										Brown Fine to Medium Sand & Sandstone Pieces, SP
		9.5	11.0	5	SS	51					

REMARKS:

ITCO ALLIED ENGINEERING CO.

LOG OF BORING **B-2560**

Sheet 4 of 16

Project: Afton Project

DRILLER Mike

TECHNICIAN Tom

BORING NO. / LOCATION B-2560

DRY ON COMPLETION ? Yes

DATE August 2, 2017 SURFACE ELEV. 928.1 FT.

REFUSAL: No DEPTH FT. ELEV. FT.

SAMPLED 16.5 FT. 5.0 M

BORING TIME: 3:00 PM

BOTTOM OF HOLE DEPTH 15.0 FT. ELEV. 913.1 FT.

BORING ADVANCED BY: POWER AUGERING X

WATER LEVEL DATA (IF APPLICABLE)

DRILLING: DEPTH FT.
ELEV. FT.

After 24 Hours DEPTH FT.
ELEV. FT.

Cave-in DEPTH 14.8 FT.

STRATUM DEPTH		SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION
		FROM	TO			N-Value	Qp	LL	PI	%M	
FT.	ELEV.	FT.	FT.								
0.0	928.1										5" Brown Silty Sandy Topsoil
		0.0	2.0	1	Grab.						Yellow Silt, ML (Loess)
2.5	925.6										Yellow/Brown Silt, ML (Loess)
		2.5	4.0	2	SS	72					
5.0	923.1										Red Silt W/Sandstone Pieces, SM AASHTO A-4
		5.0	6.5	3	SS	12					
7.5	920.6										Yellow Sandy Silt W/Sandstone Pieces, ML
		7.5	9.0	4	SS	11					
10.0	918.1										Yellow/Brown Silty Sand W/Sandstone Pieces, SM
		10.0	11.5	5	SS	18					
12.5	915.6										Red Silty Sand W/Sandstone Pieces, SM
		12.5	14.0	6	SS	31					
15.0	913.1										
		15.0	16.5	7	SS	24					

REMARKS: _____

ITCO ALLIED ENGINEERING CO.

LOG OF BORING **B-2561**

Sheet 5 of 16

Project: Afton Project

DRILLER Mike
TECHNICIAN Tom

BORING NO. / LOCATION B-2561

DRY ON COMPLETION? Yes

DATE August 7, 2017 SURFACE ELEV. 922.7 FT.
REFUSAL: No DEPTH FT. ELEV. FT.
SAMPLED 11.5 FT. 3.5 M

WATER LEVEL DATA (IF APPLICABLE)

DRILLING: DEPTH FT.
ELEV. FT.

After 24 Hours DEPTH FT.
ELEV. FT.

Cave-in DEPTH FT.

BORING TIME: 2:20 PM

BOTTOM OF HOLE DEPTH 10.0 FT. ELEV. 912.7 FT.

BORING ADVANCED BY: POWER AUGERING X

STRATUM DEPTH		SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION
FT.	ELEV.	FROM FT.	TO FT.			N-Value	Qp	LL	PI	%M	
0.0	922.7	0.0	2.0	1	Grab						6" Dark Brown Clayey Topsoil Moist Brown Clay, CL
2.5	920.2	2.5	4.0	2	SS	5					2" Moist Brown Clay, CL Brown Fine Sand W/Silt, SP-SM
5.0	917.7	5.0	6.5	3	SS	10					3" Brown Fine Sand W/Silt, SP-SM Moist Yellow Sandy Silt, SM AASHTO A-4
7.5	915.2	7.5	9.0	4	SS	14					Light Grey Silt, ML
10.0	912.7	10.0	11.5	5	SS	15					Moist Grey Sandy Silt W/Some Sandstone Pieces, ML

REMARKS:

ITCO ALLIED ENGINEERING CO.

LOG OF BORING **B-2563**

Sheet 7 of 16

Project: Afton Project

DRILLER Mike

TECHNICIAN Tom

BORING NO. / LOCATION

B-2563

DRY ON COMPLETION ?

Yes

DATE August 8, 2017 SURFACE ELEV. 920.3 FT.

REFUSAL: No DEPTH _____ FT. ELEV. _____ FT.

SAMPLED 11.5 FT. 3.5 M

BORING TIME: 9:20 AM

BOTTOM OF HOLE DEPTH 10.0 FT. ELEV. 910.3 FT.

BORING ADVANCED BY: POWER AUGERING X

WATER LEVEL DATA (IF APPLICABLE)

DRILLING: DEPTH _____ FT.

ELEV. _____ FT.

After 24 Hours DEPTH _____ FT.

ELEV. _____ FT.

Cave-in DEPTH _____ FT.

STRATUM DEPTH		SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION
		FROM	TO			N-Value	Qp	LL	PI	%M	
FT.	ELEV.	FT.	FT.								
0.0	920.3	0.0	2.0	1	Grab						14" Dark Brown Sandy Clayey Topsoil
											Dark Brown Clay, CL
2.5	917.8	2.5	4.0	2	SS	14					Yellow Sandy Silt, ML (Loess)
5.0	915.3	5.0	6.5	3	SS	17					Yellow/Grey Sandy Silt W/Some Sandstone Pieces, ML
7.5	912.8	7.5	9.0	4	SS	22					Yellow/Brown Sandy Silt W/Sandstone Pieces, ML
10.0	910.3	10.0	11.5	5	SS	41					Yellow/Brown Silty Sand W/ Sandstone Pieces, SM

REMARKS:

ITCO ALLIED ENGINEERING CO.

LOG OF BORING **B-2565**

Sheet 9 of 16

Project: Afton Project

DRILLER Mike

TECHNICIAN Tom

BORING NO. / LOCATION B-2565

DRY ON COMPLETION? Yes

DATE August 8, 2017 SURFACE ELEV. 908.3 FT.

REFUSAL: No DEPTH FT. ELEV. FT.

SAMPLED 10.9 FT. 3.3 M

WATER LEVEL DATA (IF APPLICABLE)

DRILLING: DEPTH FT.
ELEV. FT.

After 24 Hours DEPTH FT.
ELEV. FT.

Cave-in DEPTH FT.

BORING TIME: 10:00 AM

BOTTOM OF HOLE DEPTH 10.0 FT. ELEV. 898.3 FT.

BORING ADVANCED BY: POWER AUGERING X

STRATUM DEPTH		SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION
FT.	ELEV.	FROM FT.	TO FT.			N-Value	Qp	LL	PI	%M	
0.0	908.3										4" Brown Sandy Clayey Topsoil Reddish Brown Silty Clay, CL
		0.0	2.0	1	Grab						
2.5	905.8										Grey/Brown Sandy Silt, ML (Loess)
		2.5	4.0	2	SS	17					
5.0	903.3										White/Grey Sandy Silt W/ Sandstone Pieces, ML
		5.0	6.5	3	SS	17					
7.5	900.8										Yellow/Grey Sandy Silt, ML
		7.5	9.0	4	SS	62					
10.0	898.3										Brown/Grey Sandy Silt W/ Sandstone Pieces, ML
		10.0	10.9	5	SS	50+					

REMARKS: An N-value of 50+ means that the sampler didn't advance at least 6 inches after 50 blows and is likely due to a rock or bedrock.

ITCO ALLIED ENGINEERING CO.

Project: Afton Project

LOG OF BORING **B-2566**

Sheet 10 of 16

DRILLER Mike
TECHNICIAN Tom

DRY ON COMPLETION? Yes

BORING NO. / LOCATION: B-2566

DATE August 7, 2017 SURFACE ELEV. 909.9 FT.

REFUSAL: Yes DEPTH 11.3 FT. ELEV. _____ FT.

SAMPLED 11.3 FT. 3.4 M

BORING TIME: 12:30 PM

BOTTOM OF HOLE DEPTH 10.0 FT. ELEV. 899.9 FT.

BORING ADVANCED BY: POWER AUGERING X

WATER LEVEL DATA (IF APPLICABLE)

DRILLING: DEPTH _____ FT.
ELEV. _____ FT.

After 24 Hours DEPTH _____ FT.
ELEV. _____ FT.

Cave-in DEPTH _____ FT.

STRATUM DEPTH		SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION
		FROM	TO			N-Value	Qp	LL	PI	%M	
FT.	ELEV.	FT.	FT.								
0.0	909.9	0.0	2.0	1	Grab						10" Dark Brown Silty Clayey Topsoil Reddish Brown Silty Clay, CL Moist Brown Silt, ML
2.5	907.4	2.5	4.0	2	SS	12					Yellow/Brown Sandy Silt, ML (Loess)
5.0	904.9	5.0	6.5	3	SS	28					2" Yellow/Brown Sandy Silt, ML White/Grey Sandy Silt, ML
7.5	902.4	7.5	9.0	4	SS	58					Yellow/Grey Sandy Silt, ML W/Sandstone Pieces
10.0	899.9	10.0	11.3	5	SS	50+					Yellow/ Grey Sandy Silt W/Some Sandstone Pieces, ML

REMARKS: An N-value of 50+ means that the sampler didn't advance at least 6 inches after 50 blows and is likely due to a rock or bedrock.

ITCO ALLIED ENGINEERING CO.

LOG OF BORING **B-2567**

Sheet 11 of 16

Project: Afton Project

DRILLER Mike

TECHNICIAN Tom

BORING NO. / LOCATION

B-2567

DRY ON COMPLETION ?

Yes

DATE August 7, 2017

SURFACE ELEV. 912.0 FT.

REFUSAL: No DEPTH FT.

ELEV. FT.

SAMPLED 11.5 FT. 3.5 M

WATER LEVEL DATA (IF APPLICABLE)

DRILLING: DEPTH FT.

ELEV. FT.

After 24 Hours DEPTH FT.

ELEV. FT.

Cave-in DEPTH FT.

BORING TIME: 11:40 AM

BOTTOM OF HOLE DEPTH 10.0 FT.

ELEV. 902.0 FT.

BORING ADVANCED BY:

POWER AUGERING X

STRATUM DEPTH		SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION
		FROM	TO			N-Value	Qp	LL	PI	%M	
FT.	ELEV.	FT.	FT.								
0.0	912										14" Dark Brown Silty Topsoil
		0.0	2.0	1	Grab						Light Brown Sandy Clay, CL
2.5	909.5										4" Brown Sandy Silt, ML
		2.5	4.0	2	SS	13					Yellow/Brown Sandy Silt W/ Sandstone Pieces, ML
5.0	907.0										Dark Brown Sandy Silt, ML
		5.0	6.5	3	SS	6					Yellow/Brown Sandy Silt W/Sandstone Pieces, ML
7.5	904.5										Yellow/Grey Silt, ML
		7.5	9.0	4	SS	24					
10.0	902.0										4" Brown Sandy Silt, ML
		10.0	11.5	5	SS	19					White/Grey Sandy Silt W/ Sandstone Pieces, ML

REMARKS:

ITCO ALLIED ENGINEERING CO.

LOG OF BORING **B-2568**

Sheet 12 of 16

Project: Afton Project

DRILLER Mike

TECHNICIAN Tom

BORING NO. / LOCATION

B-2568

DRY ON COMPLETION ?

Yes

DATE August 8, 2017 SURFACE ELEV. 880.3 FT.

REFUSAL: No DEPTH FT. ELEV. FT.

SAMPLED 11.5 FT. 3.5 M

BORING TIME: 11:00 AM

BOTTOM OF HOLE DEPTH 10.0 FT. ELEV. 870.3 FT.

BORING ADVANCED BY: POWER AUGERING X

WATER LEVEL DATA (IF APPLICABLE)

DRILLING: DEPTH FT.

ELEV. FT.

After 24 Hours DEPTH FT.

ELEV. FT.

Cave-in DEPTH FT.

STRATUM DEPTH	SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION
	FROM	TO			N-Value	Qp	LL	PI	%M	
FT. ELEV.	FT.	FT.								
0.0 880.3	0.0	2.0	1	Grab						6" Dark Brown Silty Topsoil Dark Brown Slightly Organic Silt, ML
2.5 877.8	2.5	4.0	2	SS	6					Moist Brown Silt, ML
5.0 875.3	5.0	6.5	3	SS	6					
7.5 872.8	7.5	9.0	4	SS	14					Reddish Brown Silty Sand, SM
10.0 870.3	10.0	11.5	5	SS	20					Reddish Brown Silty Sand W/Some Sandstone Pieces, SM

REMARKS:

ITCO ALLIED ENGINEERING CO.

LOG OF BORING **B-2569**

Sheet 13 of 16

Project: Afton Project

DRILLER Mike

TECHNICIAN Tom

BORING NO. / LOCATION B-2569

DRY ON COMPLETION ? Yes

DATE August 7, 2017 SURFACE ELEV. 869.2 FT.

REFUSAL: No DEPTH FT. ELEV. FT.

SAMPLED 11.5 FT. 3.5 M

BORING TIME: 11:00 AM

BOTTOM OF HOLE DEPTH 10.0 FT. ELEV. 859.2 FT.

BORING ADVANCED BY: POWER AUGERING X

WATER LEVEL DATA (IF APPLICABLE)

DRILLING: DEPTH FT.
ELEV. FT.

After 24 Hours DEPTH FT.
ELEV. FT.

Cave-in DEPTH FT.

STRATUM DEPTH		SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION
		FROM	TO			N-Value	Qp	LL	PI	%M	
FT.	ELEV.	FT.	FT.								
0.0	869.2	0.0	2.0	1	Grab						Dark Brown Sandy Clayey Topsoil
2.5	866.7	2.5	4.0	2	SS	6					Brown Clayey Sandy Silt, CL-ML AASHTO A-4
5.0	864.2	5.0	6.5	3	SS	6					Moist Brown Silty Sandy Clay W/Some Sandstone Pieces, CL
7.5	861.7	7.5	9.0	4	SS	22					11" Moist Brown Silty Sandy Clay W/Some Sandstone Pieces, CL Brown Silty Clay, CL
10.0	859.2	10.0	11.5	5	SS	23					Yellow/Brown Silt W/Some Sandstone Pieces, ML

REMARKS: _____

ITCO ALLIED ENGINEERING CO.

LOG OF BORING **B2570**

Sheet 14 of 16

Project: Afton Project

DRILLER Mike

TECHNICIAN Tom

BORING NO. / LOCATION B-2570

DRY ON COMPLETION? Yes

DATE August 7, 2017 SURFACE ELEV. 917.3 FT.

REFUSAL: Yes DEPTH 11.3 FT. ELEV. _____ FT.

SAMPLED 10.9 FT. 3.3 M

BORING TIME: 4:30-PM

BOTTOM OF HOLE DEPTH 10.0 FT. ELEV. 907.3 FT.

BORING ADVANCED BY: POWER AUGERING X

WATER LEVEL DATA (IF APPLICABLE)	
DRILLING:	DEPTH _____ FT. ELEV. _____ FT.
After 24 Hours	DEPTH _____ FT. ELEV. _____ FT.
Cave-in	DEPTH _____ FT.

STRATUM DEPTH	SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION	
	FROM	TO			N-Value	Qp	LL	PI	%M		
FT.	ELEV.	FT.	FT.								
0.0	917.3	0.0	2.0	1	Grab						8" Dark Brown Silty Sandy Topsoil Dark Brown Slightly Organic Clay, CL
2.5	914.8	2.5	4.0	2	SS	17					Yellow/Grey Silt, ML (Loess)
5.0	912.3	5.0	6.5	3	SS	11					Grey/Brown Silt W/Some Sandstone Pieces, ML
7.5	909.8	7.5	9.0	4	SS	37					Brown Silty Sand W/ Some Sandstone Pieces, SM
10.0	907.3	10.0	10.9	5	SS	50+					Yellow/Brown Silty Sand & Sandstone Pieces, SM

REMARKS: An N-value of 50+ means that the sampler didn't advance at least 6 inches after 50 blows and is likely due to a rock or bedrock.

ITCO ALLIED ENGINEERING CO.

Project: Afton Project

LOG OF BORING **B-2571**

Sheet 15 of 16

DRILLER Mike
TECHNICIAN Tom

BORING NO. / LOCATION B-2571

DRY ON COMPLETION ? Yes

DATE August 7, 2017 SURFACE ELEV. 919.9 FT.

REFUSAL: No DEPTH FT. ELEV. FT.

SAMPLED 11.5 FT. 3.5 M

BORING TIME: 3:40 PM

BOTTOM OF HOLE DEPTH 10.0 FT. ELEV. 909.9 FT.

BORING ADVANCED BY: POWER AUGERING X

WATER LEVEL DATA (IF APPLICABLE)

DRILLING: DEPTH FT.
ELEV. FT.

After 24 Hours DEPTH FT.
ELEV. FT.

Cave-In DEPTH FT.

STRATUM DEPTH		SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION
		FROM	TO			N-Value	Qp	LL	PI	%M	
FT.	ELEV.	FT.	FT.								
0.0	919.9										10" Dark Brown Clayey Topsoil
		0.0	2.0	1	Grab						Brown Clay, CL
2.5	917.4										3" Brown Clayey Sand, SC
		2.5	4.0	2	SS	11					Yellow Silt, ML (Loess)
5.0	914.9										Yellow/Brown Silt, ML
		5.0	6.5	3	SS	13					
7.5	912.4										Grey/Green Silt, ML
		7.5	9.0	4	SS	17					
10.0	909.9										9" Grey/Green Silt, ML
		10.0	11.5	5	SS	42					Reddish Brown Silty Sand & Sandstone Pieces. SM

REMARKS: _____

ITCO ALLIED ENGINEERING CO.

Project: Afton Project

LOG OF BORING **B-2572**

sheet 16 of 16

DRILLER Mike
TECHNICIAN Tom

BORING NO. / LOCATION B-2572 DRY ON COMPLETION? Yes

DATE August 7, 2017 SURFACE ELEV. 926.2 FT.
REFUSAL: No DEPTH FT. ELEV. FT.
SAMPLED 11.5 FT. 3.5 M

WATER LEVEL DATA (IF APPLICABLE)

DRILLING: DEPTH FT.
ELEV. FT.

After 24 Hours DEPTH FT.
ELEV. FT.

Cave-in DEPTH FT.

BORING TIME: 5:10 PM

BOTTOM OF HOLE DEPTH 10.0 FT. ELEV. 916.2 FT.

BORING ADVANCED BY: POWER AUGERING X

STRATUM DEPTH		SAMPLE DEPTH		SAMPLE NUMBER	SAMPLE TYPE	FIELD RESULTS		LABORATORY RESULTS			STRATUM DESCRIPTION
		FROM	TO			N-Value	Qp	LL	PI	%M	
FT.	ELEV.	FT.	FT.								
0.0	926.2	0.0	2.0	1	Grab						8" Dark Brown Clayey Topsoil Brown Slightly Organic Clay, CL
2.5	923.7	2.5	4.0	2	SS	11					Light Yellow/Grey Silt, ML (Loess)
5.0	921.2	5.0	6.5	3	SS	12					Orange Silt, ML
7.5	918.7	7.5	9.0	4	SS	17					Yellow/Grey Silt W/ Some Sandstone Pieces, ML
10.0	916.2	10.0	11.5	5	SS	26					7" Orange Silt W/Some Sandstone, ML Light Yellow/Grey Silt W/ Sandstone Pieces, ML

REMARKS: _____

APPENDIX C

Labratory Test Results

ITCO ALLIED ENGINEERING CO.

AN ALLIANCE OF INSTANT TESTING COMPANY AND ALLIED TEST DRILLING
Jobsite and Laboratory Testing, Geotechnical Services, Commercial, Residential and Municipal
7125 West 126th Street, Suite #500 - Savage, MN 55378

Telephone: (952) 890-7366

Fax: (952) 890-5883

GRADATION and PLASTICITY INDEX TEST REPORT

Mr. Joseph Bush
J.P. Bush Homes
1989 Quasar Avenue South
Lakeland, Minnesota 55043

Re: Revised Afton Project

Reported: 8-10-017
Sample By: ITCO Allied Engineering Co. Project 17068

Performed By: Dale Schmiesing

Sieve Size	Lab. No. 2017-102 % Passing
Sampled From Boring No:	2557
Sample Depth:	2.5' - 5'
4.75mm=#4	100
2.00mm=#10	100
850 μ m=#20	100
425 μ m=#40	99
180 μ m=#80	96
75 μ m=#200	93.6
Liquid Limit	37
Plastic Limit	22
Plasticity Index	15
AASHTO Soil Classification	A-6
Unified Soil Classification	CL

Remarks:

Signed: 
Gordon J. Kopacek, Professional Engineer - Registration No. 7254

Copies To:
Charge Codes: Gradation #314 - 1, 308-1

ITCO ALLIED ENGINEERING CO.

AN ALLIANCE OF INSTANT TESTING COMPANY AND ALLIED TEST DRILLING
Jobsite and Laboratory Testing, Geotechnical Services, Commercial, Residential and Municipal
7125 West 126th Street, Suite #500 - Savage, MN 55378

Telephone: (952) 890-7366

Fax: (952) 890-5883

GRADATION and PLASTICITY INDEX TEST REPORT

Mr. Joseph Bush
J.P. Bush Homes
1989 Quasar Avenue South
Lakeland, Minnesota 55043

Re: Revised Afton Project

Reported: 8-10-017

Sample By: ITCO Allied Engineering Co. Project 17068

Performed By: Dale Schmiesing

Sieve Size	Lab. No. 2017-103 % Passing
Sampled From Boring No:	2558
Sample Depth:	8" - 5'
4.75mm=#4	81
2.00mm=#10	77
850 μ m=#20	73
425 μ m=#40	58
180 μ m=#80	30
75 μ m=#200	19.1
Liquid Limit	Couldn't be Determined
Plastic Limit	Couldn't be Determined
Plasticity Index	NP
AASHTO Soil Classification	A-2-4
Unified Soil Classification	SM

Remarks:

Signed:



Gordon J. Kopacek, Professional Engineer - Registration No. 7254

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GRADATION and PLASTICITY INDEX TEST REPORT

Mr. Joseph Bush
J.P. Bush Homes
1989 Quasar Avenue South
Lakeland, Minnesota 55043

Re: Revised Afton Project

Reported: 8-10-017
Sample By: ITCO Allied Engineering Co. Project 17068

Performed By: Dale Schmiesing

Sieve Size	Lab. No. 2017-104 % Passing
Sampled From Boring No:	2560
Sample Depth:	5' - 9'
4.75mm=#4	91
2.00mm=#10	85
850 μ m=#20	82
425 μ m=#40	79
180 μ m=#80	72
75 μ m=#200	37.9
Liquid Limit	Couldn't be Determined
Plastic Limit	Couldn't be Determined
Plasticity Index	NP
AASHTO Soil Classification	A-4
Unified Soil Classification	SM

Remarks:

Signed:



Gordon J. Kopacek, Professional Engineer - Registration No. 7254

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GRADATION and PLASTICITY INDEX TEST REPORT

Mr. Joseph Bush
J.P. Bush Homes
1989 Quasar Avenue South
Lakeland, Minnesota 55043

Re: Revised Afton Project

Reported: 8-10-017

Sample By: ITCO Allied Engineering Co. Project 17068

Performed By: Dale Schmiesing

Sieve Size	Lab. No. 2017-107 % Passing
Sampled From Boring No:	2561
Sample Depth:	5' - 6.5'
4.75mm=#4	96
2.00mm=#10	95
850 μ m=#20	93
425 μ m=#40	84
180 μ m=#80	60
75 μ m=#200	38.6
Plasticity Index	NP
AASHTO Soil Classification	A-4
Unified Soil Classification	SM

Remarks:

Signed: 

Gordon J. Kopacek, Professional Engineer - Registration No. 7254

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GRADATION and PLASTICITY INDEX TEST REPORT

Mr. Joseph Bush
J.P. Bush Homes
1989 Quasar Avenue South
Lakeland, Minnesota 55043

Re: Revised Afton Project

Reported: 8-10-017
Sample By: ITCO Allied Engineering Co. Project 17068

Performed By: Dale Schmiesing

Sieve Size	Lab. No. 2017-106 % Passing
Sampled From Boring No:	2566
Sample Depth:	5' - 6.5'
4.75mm=#4	100
2.00mm=#10	100
850 μ m=#20	97
425 μ m=#40	95
180 μ m=#80	92
75 μ m=#200	72.9
Plasticity Index	NP
AASHTO Soil Classification	A-4
Unified Soil Classification	ML

Remarks:

Signed:


Gordon J. Kopacek, Professional Engineer - Registration No. 7254

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GRADATION and PLASTICITY INDEX TEST REPORT

Mr. Joseph Bush
J.P. Bush Homes
1989 Quasar Avenue South
Lakeland, Minnesota 55043

Re: Revised Afton Project

Reported: 8-10-017
Sample By: ITCO Allied Engineering Co. Project 17068

Performed By: Dale Schmiesing

Sieve Size	Lab. No. 2017-108 % Passing
Sampled From Boring No:	2569
Sample Depth:	2.5' -5'
4.75mm=#4	98
2.00mm=#10	96
850 μ m=#20	95
425 μ m=#40	90
180 μ m=#80	75
75 μ m=#200	55.3
Liquid Limit	23
Plastic Limit	16
Plasticity Index	7
AASHTO Soil Classification	A-4
Unified Soil Classification	CL-ML

Remarks:

Signed:



Gordon J. Kopacek, Professional Engineer – Registration No. 7254

Copies To:
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APPENDIX D

Soil Classification System

ALLIED TEST DRILLING COMPANY SOIL CLASSIFICATION SYSTEMS

Unified Soil Classification System ASTM: D 2488-84				
Major Divisions			Group Symbol	Typical Group Names
COARSE-GRAINED SOILS Granular soils More than 50% retained on the No. 200 sieve	GRAVELS More than 50% of coarse fraction retained on No. 4 sieve	Clean gravels < 5% passing No. 200 sieve	GW	Well-graded gravels, Well-graded gravel with sand ¹
		Gravel with fines >12% passing No. 200 sieve	GP	Poorly-graded gravel, Poorly-graded gravel with sand ¹
			GM	Silty gravel, Silty gravel with sand ¹
		GC	Clayey gravel, Clayey gravel with sand ¹	
	SANDS 50% or more of coarse fraction passes No. 4 sieve	Clean sands < 5% passing No. 200 sieve	SW	Well-graded sand, Well-graded sand with gravel ²
		Sand with fines >12% passing No. 200 sieve	SP	Poorly-graded sand, Poorly graded sand with gravel ²
			SM	Silty sand, Silty sand with gravel ²
			SC	Clayey sand, Clayey sand with gravel ²
FINE-GRAINED SOILS Cohesive soils 50% or more passes the No. 200 sieve	SILTS AND CLAYS Liquid limit less than 50	ML	Silt, Silt with sand ³ , Sandy silt ⁴	
		CL	Lean clay, Lean clay with sand ³ , Sandy lean clay ⁴	
		OL	Organic silt, Organic clay	
	SILTS AND CLAYS Liquid limit more than 50	MH	Elastic silt, Elastic silt with sand ³ , Sandy elastic silt ⁴	
		CH	Fat clay, Fat clay with sand ³	
		OH	Organic clay, Organic silt	
HIGHLY ORGANIC SOILS			PT	Peat

Boundary classifications are designated by dual group symbols. For example, (SP-SM) for Poorly-graded sand with silt.
¹More than 15% sand ²More than 15% gravel ³15% to 30% retained on No. 200 sieve ⁴30% retained on No. 200 sieve

AASHTO Soil Classification System

	Granular Materials (35% or less passing No. 200 sieve)							Silt-Clay Materials (>35% passing No. 200 sieve)				A-8
	A-1		A-3	A-2				A-4	A-5	A-6	A-7	
	A-1-a	A-1-b		A-2-4	A-2-5	A-2-6	A-2-7					
Sieve Analysis: Percent Passing												
No. 10	50 max		51 min									
No. 40	30 max	50 max	10 max	35 max	35 max	35 max	35 max	36 min	36 min	36 min	36 min	
No.200	15 max	25 max										
Characteristics of Fraction Passing No. 40:												
Liquid limit				40 max	41 min	40 max	41 min	40 max	41 min	40 max	41 min	
Plastic Limit Index	6 max		NP	10 max	10 max	11 min	11 min	10 max	10 max	11 min	11 min	
Usual Types of Significant Constituents	stone fragments gravel and sand		fine sand	silty or clayey gravel and sand				silty soils		clayey soils		Peat, highly organic soils
General Subgrade Rating	Excellent to good							Fair to poor				Unsatisfactory

Technical Memorandum

To: Joe Bush, JP Bush Custom Homes
From: Bryant Ficek, P.E., P.T.O.E.
Date: July 26, 2017
Re: Technical Memorandum - Afton Homes Sight Distance Review

JP Bush has proposed a 20-lot residential home development in Afton, Minnesota on the north side of Trading Post Trail. A previous memorandum by Spack Consulting, dated June 2, 2017, discussed the proposed access to the development, specifically, sight distance issues and improvement options. The necessary sight distances discussed in this previous memorandum were based upon a 30-mph vehicle speed and an available sight distance of 260 feet roughly measured off a site drawing. The purpose of this memorandum is to complete field measurements for the westbound approach to the proposed access to better determine the necessary sight distance requirements based upon actual conditions on-site.

Conclusions and Recommendations

Field data was collected to determine actual vehicle speeds and sight distance for the proposed driveway location. Based on this data, the following was concluded:

- The 85th percentile vehicle speed was measured at 25 mph on Trading Post Trail just west of the curve and east of the proposed driveway.
- Drivers implicitly account for the roadway factors in this area, pavement, grades, roadway width, etc. in choosing their vehicle speeds regardless of posted, statutory, or assumed speed limits.
- At 25-mph, the necessary intersection sight distance based on Minnesota Department of Transportation (MnDOT) policy is 275 feet for left turn movements and 240 feet for right turn movements.
- The sight distance for the proposed driveway location is 280 to 290 feet as measured in the field.
- Measuring on the design plan for the proposed driveway, the sight distance is at least 275 feet, satisfying the requirement for a 25-mph vehicle.

Based on these measurements of actual vehicle speeds and sight distance, the proposed driveway satisfies the requirement for sight distance and is expected to have safe intersection movements. Safety could be further improved by paving Trading Post Trail from the existing paved section west through the proposed driveway location, which is the intended plan of the development.

Field Work

Sight distance requirements are provided by the American Association of State Highway and Transportation Officials' (AASHTO) *A Policy on Geometric Design of Highways and Streets*. In this AASHTO manual, sight distance requirements are provided in terms of a time gap in the major road traffic and are related to the speed of approaching vehicles. For approaching vehicles at any speed, a vehicle stopped at an intersection requires a minimum time gap of 7.5 seconds in either direction to complete a left turn movement. In other words, an average driver needs to see an approaching vehicle at least 7.5 seconds away to know if they have sufficient time to complete a left turn. In order to complete a right turn movement, the time gap is reduced by one second to 6.5 seconds. MnDOT adopted these measurements and distances as official policy in 2013.

To translate this time factor into a distance, the AASHTO formula is:

$$\text{Intersection Sight Distance} = 1.47 * \text{Major Street Vehicle Speed (mph)} * \text{time gap}$$

As mentioned, the previous work assumed a 30-mph vehicle speed. Field work therefore focused on measurements to determine the actual speed of the vehicles on Trading Post Trail, including:

- the radius of the roadway curve to determine the corresponding vehicle speed.
- the actual vehicle speeds of approaching vehicles.

A field survey completed for the development including Trading Post Trail and its curve to the east of the proposed driveway. Every roadway curve is associated with a design speed based upon the length of the curve radius. The survey indicated the Trading Post Trail curve to the east of the proposed site access has a centerline radius of 125 feet. Using chapter 3 of the MnDOT Road Design Manual, the corresponding design speed of the roadway curve is between 20- and 25-mph depending upon the exact factors assumed, such as urban or rural and side friction factor.

Road tube counters were installed on Trading Post Trail, west side of the roadway curve. These tube counters captured vehicle counts and speeds over the course of one week, which included weekdays and weekend days. The road tube counter collected the vehicle speeds of over 700 vehicles during the course of the week. Using data for the westbound vehicles only, the 85th percentile speed (speed at which 85 percent of the vehicles are traveling at or below) was calculated at 25.0 mph. The 85th percentile speed is an important value as MnDOT generally uses the 85th percentile speed as its determinant in posting regulatory speed limits.

Sight Distance Impacts

The two measurements confirm that, regardless of posted, statutory, or assumed speed limit, vehicles are travelling around the Trading Post Trail curve at a lower rate of speed. This field result speed should therefore be considered in determining sight distance. Using 25 mph as the approaching vehicle speed, the necessary sight distance is approximately 275 feet for a left turn movement (needing 7.5 seconds) and approximately 240 feet for a right turn movement (needing 6.5 seconds).

The available sight distance to the east from the proposed driveway access was then measured in the field. Standing at the location of a vehicle on the proposed driveway and measuring distance to when a vehicle could be seen approaching from the east provided a sight distance of between 280 and 290 feet depending upon the exact height of eye and height of object. This distance is above the necessary sight distance based upon a 25-mph vehicle speed.

The minimum distance of 275 feet was further confirmed through the computer design work. The attached drawing shows the required sight distance for the proposed driveway based upon the measured 25-mph vehicle speeds. Thus, the proposed driveway has sufficient sight distance for intersection movements.

Other Factors

Other factors that could impact the travel speeds, and thus the sight distance requirements, such as grades, roadway width, and other characteristics are already accounted for in the field measurements. Drivers implicitly account for these factors and drive their vehicle accordingly.

However, the gravel section on Trading Post Trail could be an issue if mainline drivers would be forced to slow or stop due to another driver miscalculating the appropriate gap in traffic for their turn. Due to the relatively low traffic on Trading Post Trail, less than 150 vehicles per day, the opportunities for conflicts between vehicles exiting the proposed development and mainline vehicles are minimal. Upon further discussion with the development, the intent is to pave this section from the existing paved road by the Trading Post Trail curve west through the proposed driveway location. Paving the road will eliminate this potential risk.

Attachments

- Tube Counter Results
- Site Plan with Measurements

Daily West Bound Speeds (MPH)

Study Date: Thursday, 06/29/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00 - 04:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00 - 06:59	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
07:00 - 07:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 - 08:59	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
09:00 - 09:59	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
10:00 - 10:59	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	5
11:00 - 11:59	1	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2
12:00 - 12:59	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
13:00 - 13:59	1	2	5	0	0	0	0	0	0	0	0	0	0	0	0	6
14:00 - 14:59	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	7
15:00 - 15:59	1	1	2	3	0	0	0	0	0	0	0	0	0	0	0	4
16:00 - 16:59	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	6
17:00 - 17:59	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	9
18:00 - 18:59	1	1	5	1	1	0	0	0	0	0	0	0	0	0	0	7
19:00 - 19:59	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	3
20:00 - 20:59	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00 - 21:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
22:00 - 22:59	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00 - 23:59	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Totals	10	15	27	16	2	0	70									
Percent of Total	14.3	21.4	38.6	22.9	2.9	0.0	100									
Percent of AM	21.4	28.6	14.3	28.6	7.1	0.0	100									
Percent of PM	12.5	19.6	44.6	21.4	1.8	0.0	100									

Standard Deviation:	6.1 MPH	Ten Mile Pace:	20 to 29 MPH	85th Percentile:	27.2 MPH
Mean Speed:	21.1 MPH	Percent in Ten Mile Pace:	61.4%	15th Percentile:	15.0 MPH
Median Speed:	21.8 MPH			90th Percentile:	28.3 MPH
Modal Speed:	22.5 MPH			95th Percentile:	29.4 MPH

Daily West Bound Speeds (MPH)

Study Date: Friday, 06/30/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 - 06:59	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
07:00 - 07:59	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	4
08:00 - 08:59	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
09:00 - 09:59	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
10:00 - 10:59	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:00 - 11:59	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:00 - 12:59	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
13:00 - 13:59	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5
14:00 - 14:59	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
15:00 - 15:59	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	5
16:00 - 16:59	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	10
17:00 - 17:59	2	2	5	1	0	0	0	0	0	0	0	0	0	0	0	3
18:00 - 18:59	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
19:00 - 19:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
20:00 - 20:59	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1
21:00 - 21:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22:00 - 22:59	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
23:00 - 23:59	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
Totals	17	19	14	9	2	0	61									
Percent of Total	27.9	31.1	23.0	14.8	3.3	0.0	100									
Percent of AM	52.6	21.1	10.5	10.5	5.3	0.0	100									
Percent of PM	16.7	35.7	28.6	16.7	2.4	0.0	100									

Standard Deviation:	6.8 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	25.8 MPH
Mean Speed:	18.5 MPH	Percent in Ten Mile Pace:	54.1%	15th Percentile:	10.1 MPH
Median Speed:	18.4 MPH			90th Percentile:	27.4 MPH
Modal Speed:	17.5 MPH			95th Percentile:	29.1 MPH

Daily West Bound Speeds (MPH)

Study Date: Saturday, 07/01/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 - 06:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:00 - 07:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00 - 08:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
09:00 - 09:59	1	0	4	1	0	0	0	0	0	0	0	0	0	0	0	6
10:00 - 10:59	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3
11:00 - 11:59	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
12:00 - 12:59	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
13:00 - 13:59	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4
14:00 - 14:59	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	4
15:00 - 15:59	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	2
16:00 - 16:59	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
17:00 - 17:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
18:00 - 18:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
19:00 - 19:59	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3
20:00 - 20:59	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:00 - 21:59	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:00 - 22:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00 - 23:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals	5	12	18	7	0	0	0	0	0.0	100						
Percent of Total	11.9	28.6	42.9	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of AM	5.6	38.9	38.9	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of PM	16.7	20.8	45.8	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100

Standard Deviation:	5.3 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	25.1 MPH
Mean Speed:	20.4 MPH	Percent in Ten Mile Pace:	71.4%	15th Percentile:	15.3 MPH
Median Speed:	21.0 MPH			90th Percentile:	26.6 MPH
Modal Speed:	22.5 MPH			95th Percentile:	28.1 MPH

Daily West Bound Speeds (MPH)

Study Date: Sunday, 07/02/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 - 06:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 - 07:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 - 08:59	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
09:00 - 09:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
10:00 - 10:59	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:00 - 11:59	0	3	5	3	0	0	0	0	0	0	0	0	0	0	0	11
12:00 - 12:59	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	5
13:00 - 13:59	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
14:00 - 14:59	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	5
15:00 - 15:59	1	0	3	2	0	0	0	0	0	0	0	0	0	0	0	6
16:00 - 16:59	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
17:00 - 17:59	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	6
18:00 - 18:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
19:00 - 19:59	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
20:00 - 20:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
21:00 - 21:59	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:00 - 22:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00 - 23:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals	4	13	23	12	0	52										
Percent of Total	7.7	25.0	44.2	23.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of AM	0.0	35.3	47.1	17.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of PM	11.4	20.0	42.9	25.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100

Standard Deviation:	5.0 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	26.5 MPH
Mean Speed:	21.4 MPH	Percent in Ten Mile Pace:	69.2%	15th Percentile:	16.3 MPH
Median Speed:	21.8 MPH			90th Percentile:	27.6 MPH
Modal Speed:	22.5 MPH			95th Percentile:	28.7 MPH

Daily West Bound Speeds (MPH)

Study Date: Monday, 07/03/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 - 06:59	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:00 - 07:59	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 - 08:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 - 09:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 10:59	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:00 - 11:59	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	6
12:00 - 12:59	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	5
13:00 - 13:59	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
14:00 - 14:59	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
15:00 - 15:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
16:00 - 16:59	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
17:00 - 17:59	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3
18:00 - 18:59	1	1	4	1	0	0	0	0	0	0	0	0	0	0	0	7
19:00 - 19:59	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
20:00 - 20:59	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21:00 - 21:59	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22:00 - 22:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00 - 23:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	11	16	8	5	0	40										
Percent of Total	27.5	40.0	20.0	12.5	0.0	100										
Percent of AM	27.3	45.5	18.2	9.1	0.0	100										
Percent of PM	27.6	37.9	20.7	13.8	0.0	100										

Standard Deviation:	6.1 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	24.1 MPH
Mean Speed:	17.7 MPH	Percent in Ten Mile Pace:	60.0%	15th Percentile:	10.0 MPH
Median Speed:	17.7 MPH			90th Percentile:	25.5 MPH
Modal Speed:	17.5 MPH			95th Percentile:	27.5 MPH

Daily West Bound Speeds (MPH)

Study Date: Tuesday, 07/04/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 - 06:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:00 - 07:59	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
08:00 - 08:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 - 09:59	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
10:00 - 10:59	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:00 - 11:59	0	0	5	3	0	0	0	0	0	0	0	0	0	0	0	8
12:00 - 12:59	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	4
13:00 - 13:59	1	2	5	2	0	0	0	0	0	0	0	0	0	0	0	10
14:00 - 14:59	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
15:00 - 15:59	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	4
16:00 - 16:59	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3
17:00 - 17:59	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
18:00 - 18:59	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5
19:00 - 19:59	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
20:00 - 20:59	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:00 - 21:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
22:00 - 22:59	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00 - 23:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Totals	6	20	19	13	0	0	0	0	0	0	0	0	0	0	0	58
Percent of Total	10.3	34.5	32.8	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of AM	0.0	37.5	37.5	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of PM	14.3	33.3	31.0	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100

Standard Deviation:	5.4 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	26.5 MPH
Mean Speed:	20.6 MPH	Percent in Ten Mile Pace:	67.2%	15th Percentile:	15.6 MPH
Median Speed:	20.7 MPH			90th Percentile:	27.6 MPH
Modal Speed:	17.5 MPH			95th Percentile:	28.7 MPH

Daily West Bound Speeds (MPH)

Study Date: Wednesday, 07/05/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 - 06:59	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
07:00 - 07:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 - 08:59	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
09:00 - 09:59	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
10:00 - 10:59	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	4
11:00 - 11:59	1	1	4	1	0	0	0	0	0	0	0	0	0	0	0	7
12:00 - 12:59	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	5
13:00 - 13:59	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	4
14:00 - 14:59	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	5
15:00 - 15:59	2	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1
16:00 - 16:59	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
17:00 - 17:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
18:00 - 18:59	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
19:00 - 19:59	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	4
20:00 - 20:59	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
21:00 - 21:59	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	5
22:00 - 22:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00 - 23:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	7	13	18	11	3	0	0	0	0	0	0	0	0	0	0	52
Percent of Total	13.5	25.0	34.6	21.2	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of AM	15.0	15.0	50.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of PM	12.5	31.3	25.0	28.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100

Standard Deviation:	6.3 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	27.6 MPH
Mean Speed:	21.2 MPH	Percent in Ten Mile Pace:	59.6%	15th Percentile:	15.1 MPH
Median Speed:	21.5 MPH			90th Percentile:	28.8 MPH
Modal Speed:	22.5 MPH			95th Percentile:	29.8 MPH

Daily East Bound Speeds (MPH)

Study Date: Thursday, 06/29/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
06:00 - 06:59	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
07:00 - 07:59	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00 - 08:59	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
09:00 - 09:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 10:59	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:00 - 11:59	3	0	0	2	0	0	0	0	0	0	0	0	0	0	0	5
12:00 - 12:59	1	0	3	2	0	0	0	0	0	0	0	0	0	0	0	6
13:00 - 13:59	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
14:00 - 14:59	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
15:00 - 15:59	2	2	2	4	0	0	0	0	0	0	0	0	0	0	0	10
16:00 - 16:59	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	7
17:00 - 17:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:00 - 18:59	1	1	3	3	0	0	0	0	0	0	0	0	0	0	0	8
19:00 - 19:59	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
20:00 - 20:59	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
21:00 - 21:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
22:00 - 22:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00 - 23:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	17	9	20	17	1	0	64									
Percent of Total	26.6	14.1	31.3	26.6	1.6	0.0	100									
Percent of AM	53.3	0.0	6.7	33.3	6.7	0.0	100									
Percent of PM	18.4	18.4	38.8	24.5	0.0	100										

Standard Deviation:	7.1 MPH	Ten Mile Pace:	20 to 29 MPH	85th Percentile:	27.3 MPH
Mean Speed:	19.9 MPH	Percent in Ten Mile Pace:	57.8%	15th Percentile:	10.4 MPH
Median Speed:	21.4 MPH			90th Percentile:	28.3 MPH
Modal Speed:	22.5 MPH			95th Percentile:	29.2 MPH

Daily East Bound Speeds (MPH)

Study Date: Friday, 06/30/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00 - 04:59	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1
05:00 - 05:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
06:00 - 06:59	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
07:00 - 07:59	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00 - 08:59	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
09:00 - 09:59	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
10:00 - 10:59	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
11:00 - 11:59	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	6
12:00 - 12:59	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
13:00 - 13:59	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5
14:00 - 14:59	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	7
15:00 - 15:59	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	7
16:00 - 16:59	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	7
17:00 - 17:59	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
18:00 - 18:59	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
19:00 - 19:59	0	0	3	1	0	1	0	0	0	0	0	0	0	0	0	5
20:00 - 20:59	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
21:00 - 21:59	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
22:00 - 22:59	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
23:00 - 23:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Totals	21	17	14	9	3	1	0	65								
Percent of Total	32.3	26.2	21.5	13.8	4.6	1.5	0.0	100								
Percent of AM	42.9	28.6	9.5	14.3	4.8	0.0	100									
Percent of PM	27.3	25.0	27.3	13.6	4.5	2.3	0.0	100								

Standard Deviation:	7.5 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	26.5 MPH
Mean Speed:	18.5 MPH	Percent in Ten Mile Pace:	47.7%	15th Percentile:	9.4 MPH
Median Speed:	18.2 MPH			90th Percentile:	28.3 MPH
Modal Speed:	10.0 MPH			95th Percentile:	30.4 MPH

Daily East Bound Speeds (MPH)

Study Date: Saturday, 07/01/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00 - 06:59	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:00 - 07:59	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00 - 08:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
09:00 - 09:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:00 - 10:59	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3
11:00 - 11:59	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
12:00 - 12:59	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
13:00 - 13:59	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
14:00 - 14:59	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
15:00 - 15:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
16:00 - 16:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
17:00 - 17:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
18:00 - 18:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
19:00 - 19:59	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
20:00 - 20:59	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
21:00 - 21:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00 - 22:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00 - 23:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Totals	4	11	17	2	0	34										
Percent of Total	11.8	32.4	50.0	5.9	0.0	100										
Percent of AM	25.0	33.3	33.3	8.3	0.0	100										
Percent of PM	4.5	31.8	59.1	4.5	0.0	100										

Standard Deviation:	4.8 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	23.9 MPH
Mean Speed:	19.7 MPH	Percent in Ten Mile Pace:	82.4%	15th Percentile:	15.3 MPH
Median Speed:	20.4 MPH			90th Percentile:	24.4 MPH
Modal Speed:	22.5 MPH			95th Percentile:	24.5 MPH

Daily East Bound Speeds (MPH)

Study Date: Sunday, 07/02/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 - 06:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:00 - 07:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 - 08:59	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
09:00 - 09:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
10:00 - 10:59	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
11:00 - 11:59	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	4
12:00 - 12:59	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	4
13:00 - 13:59	0	1	3	0	1	0	0	0	0	0	0	0	0	0	0	5
14:00 - 14:59	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
15:00 - 15:59	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	6
16:00 - 16:59	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3
17:00 - 17:59	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:00 - 18:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
19:00 - 19:59	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
20:00 - 20:59	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
21:00 - 21:59	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
22:00 - 22:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00 - 23:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	9	16	14	7	1	0	47									
Percent of Total	19.1	34.0	29.8	14.9	2.1	0.0	100									
Percent of AM	15.4	46.2	30.8	7.7	0.0	100										
Percent of PM	20.6	29.4	29.4	17.6	2.9	0.0	100									

Standard Deviation:	6.1 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	25.3 MPH
Mean Speed:	19.3 MPH	Percent in Ten Mile Pace:	63.8%	15th Percentile:	12.3 MPH
Median Speed:	19.4 MPH			90th Percentile:	27.0 MPH
Modal Speed:	17.5 MPH			95th Percentile:	28.7 MPH

Daily East Bound Speeds (MPH)

Study Date: Monday, 07/03/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 - 06:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 - 07:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 - 08:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 - 09:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 10:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:00 - 11:59	1	2	4	0	1	0	0	0	0	0	0	0	0	0	0	8
12:00 - 12:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13:00 - 13:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
14:00 - 14:59	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
15:00 - 15:59	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
16:00 - 16:59	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
17:00 - 17:59	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	3
18:00 - 18:59	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	2
19:00 - 19:59	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:00 - 20:59	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21:00 - 21:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00 - 22:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00 - 23:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals	8	11	12	3	2	1	0	37								
Percent of Total	21.6	29.7	32.4	8.1	5.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of AM	11.1	22.2	55.6	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of PM	25.0	32.1	25.0	10.7	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100

Standard Deviation:	7.1 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	24.9 MPH
Mean Speed:	19.6 MPH	Percent in Ten Mile Pace:	62.2%	15th Percentile:	11.3 MPH
Median Speed:	19.5 MPH			90th Percentile:	28.0 MPH
Modal Speed:	22.5 MPH			95th Percentile:	31.6 MPH

Daily East Bound Speeds (MPH)

Study Date: Tuesday, 07/04/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 - 06:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 - 07:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 - 08:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 - 09:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
10:00 - 10:59	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	7
11:00 - 11:59	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	3
12:00 - 12:59	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1
13:00 - 13:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
14:00 - 14:59	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8
15:00 - 15:59	3	1	2	2	0	0	0	0	0	0	0	0	0	0	0	3
16:00 - 16:59	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1
17:00 - 17:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
18:00 - 18:59	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
19:00 - 19:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
20:00 - 20:59	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21:00 - 21:59	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
22:00 - 22:59	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
23:00 - 23:59	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	46
Totals	10	12	15	9	0	0.0	0.0	0.0	100							
Percent of Total	21.7	26.1	32.6	19.6	0.0	100										
Percent of AM	8.3	33.3	25.0	33.3	0.0	100										
Percent of PM	26.5	23.5	35.3	14.7	0.0	100										

Standard Deviation: 6.3 MPH
 Mean Speed: 19.4 MPH
 Median Speed: 20.2 MPH
 Modal Speed: 22.5 MPH

Ten Mile Pace: 15 to 24 MPH
 Percent in Ten Mile Pace: 58.7%

85th Percentile: 25.9 MPH
 15th Percentile: 11.4 MPH
 90th Percentile: 27.2 MPH
 95th Percentile: 28.4 MPH

Daily East Bound Speeds (MPH)

Study Date: Wednesday, 07/05/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00 - 06:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:00 - 07:59	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00 - 08:59	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
09:00 - 09:59	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
10:00 - 10:59	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	6
11:00 - 11:59	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	6
12:00 - 12:59	1	3	1	1	0	0	0	0	0	0	0	0	0	0	0	4
13:00 - 13:59	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	4
14:00 - 14:59	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	3
15:00 - 15:59	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	2
16:00 - 16:59	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
17:00 - 17:59	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
18:00 - 18:59	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:00 - 19:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
20:00 - 20:59	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
21:00 - 21:59	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00 - 22:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00 - 23:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals	5	23	20	3	0	51										
Percent of Total	9.8	45.1	39.2	5.9	0.0	100										
Percent of AM	0.0	44.4	55.6	0.0	100											
Percent of PM	15.2	45.5	30.3	9.1	0.0	100										

Standard Deviation:	4.5 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	23.7 MPH
Mean Speed:	19.3 MPH	Percent in Ten Mile Pace:	84.3%	15th Percentile:	15.5 MPH
Median Speed:	19.3 MPH			90th Percentile:	24.4 MPH
Modal Speed:	17.5 MPH			95th Percentile:	24.9 MPH

Daily Total Speeds (MPH)

Study Date: Thursday, 06/29/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00 - 04:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00 - 05:59	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
06:00 - 06:59	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
07:00 - 07:59	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
08:00 - 08:59	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3
09:00 - 09:59	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	5
10:00 - 10:59	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	10
11:00 - 11:59	4	2	0	4	0	0	0	0	0	0	0	0	0	0	0	8
12:00 - 12:59	3	0	3	2	0	0	0	0	0	0	0	0	0	0	0	10
13:00 - 13:59	1	2	6	1	0	0	0	0	0	0	0	0	0	0	0	11
14:00 - 14:59	0	1	8	2	0	0	0	0	0	0	0	0	0	0	0	17
15:00 - 15:59	3	3	4	7	0	0	0	0	0	0	0	0	0	0	0	11
16:00 - 16:59	0	2	7	2	0	0	0	0	0	0	0	0	0	0	0	7
17:00 - 17:59	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	17
18:00 - 18:59	2	2	8	4	1	0	0	0	0	0	0	0	0	0	0	11
19:00 - 19:59	3	5	3	0	0	0	0	0	0	0	0	0	0	0	0	6
20:00 - 20:59	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
21:00 - 21:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
22:00 - 22:59	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00 - 23:59	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	134
Totals	27	24	47	33	3	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of Total	20.1	17.9	35.1	24.6	2.2	0.0	100									
Percent of AM	37.9	13.8	10.3	31.0	6.9	0.0	100									
Percent of PM	15.2	19.0	41.9	22.9	1.0	0.0	100									

Standard Deviation:	6.6 MPH	Ten Mile Pace:	20 to 29 MPH	85th Percentile:	27.3 MPH
Mean Speed:	20.5 MPH	Percent in Ten Mile Pace:	59.7%	15th Percentile:	12.3 MPH
Median Speed:	21.6 MPH			90th Percentile:	28.3 MPH
Modal Speed:	22.5 MPH			95th Percentile:	29.4 MPH

Daily Total Speeds (MPH)

Study Date: Friday, 06/30/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3
05:00 - 05:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00 - 06:59	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
07:00 - 07:59	2	2	0	2	0	0	0	0	0	0	0	0	0	0	0	6
08:00 - 08:59	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	7
09:00 - 09:59	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	7
10:00 - 10:59	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	5
11:00 - 11:59	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	8
12:00 - 12:59	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	6
13:00 - 13:59	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	8
14:00 - 14:59	6	4	1	1	0	0	0	0	0	0	0	0	0	0	0	12
15:00 - 15:59	1	4	3	2	0	0	0	0	0	0	0	0	0	0	0	10
16:00 - 16:59	1	3	5	3	0	0	0	0	0	0	0	0	0	0	0	12
17:00 - 17:59	3	2	6	1	0	0	0	0	0	0	0	0	0	0	0	12
18:00 - 18:59	1	2	0	1	2	0	0	0	0	0	0	0	0	0	0	6
19:00 - 19:59	0	0	3	1	0	1	0	0	0	0	0	0	0	0	0	5
20:00 - 20:59	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	5
21:00 - 21:59	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
22:00 - 22:59	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
23:00 - 23:59	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	4
Totals	38	36	28	18	5	1	0	100								
Percent of Total	30.2	28.6	22.2	14.3	4.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of AM	47.5	25.0	10.0	12.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of PM	22.1	30.2	27.9	15.1	3.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100

Standard Deviation:	7.2 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	26.3 MPH
Mean Speed:	18.5 MPH	Percent in Ten Mile Pace:	50.8%	15th Percentile:	9.8 MPH
Median Speed:	18.4 MPH			90th Percentile:	28.0 MPH
Modal Speed:	10.0 MPH			95th Percentile:	29.8 MPH

Daily Total Speeds (MPH)

Study Date: Saturday, 07/01/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00 - 04:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 - 05:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
06:00 - 06:59	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
07:00 - 07:59	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00 - 08:59	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
09:00 - 09:59	1	1	4	1	0	0	0	0	0	0	0	0	0	0	0	6
10:00 - 10:59	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	7
11:00 - 11:59	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	4
12:00 - 12:59	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	9
13:00 - 13:59	1	5	3	0	0	0	0	0	0	0	0	0	0	0	0	7
14:00 - 14:59	0	2	4	1	0	0	0	0	0	0	0	0	0	0	0	4
15:00 - 15:59	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
16:00 - 16:59	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	4
17:00 - 17:59	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	2
18:00 - 18:59	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	5
19:00 - 19:59	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
20:00 - 20:59	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1
21:00 - 21:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00 - 22:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
23:00 - 23:59	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	76
Totals	9	23	35	9	0	100										
Percent of Total	11.8	30.3	46.1	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of AM	13.3	36.7	36.7	13.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100
Percent of PM	10.9	26.1	52.2	10.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100

Standard Deviation:	5.1 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	24.6 MPH
Mean Speed:	20.1 MPH	Percent in Ten Mile Pace:	76.3%	15th Percentile:	15.4 MPH
Median Speed:	20.8 MPH			90th Percentile:	25.5 MPH
Modal Speed:	22.5 MPH			95th Percentile:	27.6 MPH

Daily Total Speeds (MPH)

Study Date: Sunday, 07/02/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00 - 06:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:00 - 07:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
08:00 - 08:59	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
09:00 - 09:59	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
10:00 - 10:59	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	15
11:00 - 11:59	1	4	7	3	0	0	0	0	0	0	0	0	0	0	0	9
12:00 - 12:59	1	2	2	4	0	0	0	0	0	0	0	0	0	0	0	8
13:00 - 13:59	0	1	5	1	1	0	0	0	0	0	0	0	0	0	0	9
14:00 - 14:59	1	4	3	1	0	0	0	0	0	0	0	0	0	0	0	12
15:00 - 15:59	4	1	5	2	0	0	0	0	0	0	0	0	0	0	0	5
16:00 - 16:59	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	7
17:00 - 17:59	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	2
18:00 - 18:59	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6
19:00 - 19:59	1	3	1	1	0	0	0	0	0	0	0	0	0	0	0	4
20:00 - 20:59	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	4
21:00 - 21:59	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	2
22:00 - 22:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00 - 23:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Totals	13	29	37	19	1	0	99									
Percent of Total	13.1	29.3	37.4	19.2	1.0	0.0	100									
Percent of AM	6.7	40.0	40.0	13.3	0.0	100										
Percent of PM	15.9	24.6	36.2	21.7	1.4	0.0	100									

Standard Deviation:	5.7 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	26.2 MPH
Mean Speed:	20.4 MPH	Percent in Ten Mile Pace:	66.7%	15th Percentile:	15.2 MPH
Median Speed:	20.9 MPH			90th Percentile:	27.5 MPH
Modal Speed:	22.5 MPH			95th Percentile:	28.8 MPH

Daily Total Speeds (MPH)

Study Date: Monday, 07/03/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00 - 06:59	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:00 - 07:59	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 - 08:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 - 09:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
10:00 - 10:59	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	14
11:00 - 11:59	2	6	5	0	1	0	0	0	0	0	0	0	0	0	0	6
12:00 - 12:59	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
13:00 - 13:59	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
14:00 - 14:59	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	9
15:00 - 15:59	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	5
16:00 - 16:59	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	7
17:00 - 17:59	0	2	0	4	1	0	0	0	0	0	0	0	0	0	0	10
18:00 - 18:59	1	1	6	1	0	1	0	0	0	0	0	0	0	0	0	5
19:00 - 19:59	1	3	0	1	0	0	0	0	0	0	0	0	0	0	0	2
20:00 - 20:59	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
21:00 - 21:59	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00 - 22:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00 - 23:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	77
Totals	19	27	20	8	2	1	0	100								
Percent of Total	24.7	35.1	26.0	10.4	2.6	1.3	0.0	100								
Percent of AM	20.0	35.0	35.0	5.0	5.0	0.0	100									
Percent of PM	26.3	35.1	22.8	12.3	1.8	1.8	0.0	100								

Standard Deviation: 6.6 MPH
 Mean Speed: 18.6 MPH
 Median Speed: 18.5 MPH
 Modal Speed: 17.5 MPH

Ten Mile Pace: 15 to 24 MPH
 Percent in Ten Mile Pace: 61.0%

85th Percentile: 24.7 MPH
 15th Percentile: 10.8 MPH
 90th Percentile: 26.8 MPH
 95th Percentile: 29.2 MPH

Daily Total Speeds (MPH)

Study Date: Tuesday, 07/04/2017
 Unit ID: 08080608
 Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00 - 06:59	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
07:00 - 07:59	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 - 08:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
09:00 - 09:59	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6
10:00 - 10:59	0	3	1	2	0	0	0	0	0	0	0	0	0	0	0	15
11:00 - 11:59	1	2	7	5	0	0	0	0	0	0	0	0	0	0	0	7
12:00 - 12:59	1	1	1	4	0	0	0	0	0	0	0	0	0	0	0	11
13:00 - 13:59	1	2	6	2	0	0	0	0	0	0	0	0	0	0	0	5
14:00 - 14:59	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	12
15:00 - 15:59	4	2	2	4	0	0	0	0	0	0	0	0	0	0	0	6
16:00 - 16:59	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	4
17:00 - 17:59	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	7
18:00 - 18:59	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	4
19:00 - 19:59	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	5
20:00 - 20:59	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	6
21:00 - 21:59	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	4
22:00 - 22:59	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5
23:00 - 23:59	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	104
Totals	16	32	34	22	0	100										
Percent of Total	15.4	30.8	32.7	21.2	0.0	100										
Percent of AM	3.6	35.7	32.1	28.6	0.0	100										
Percent of PM	19.7	28.9	32.9	18.4	0.0	100										

Standard Deviation:	5.9 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	26.3 MPH
Mean Speed:	20.1 MPH	Percent in Ten Mile Pace:	63.5%	15th Percentile:	14.4 MPH
Median Speed:	20.5 MPH			90th Percentile:	27.5 MPH
Modal Speed:	22.5 MPH			95th Percentile:	28.7 MPH

Daily Total Speeds (MPH)

Study Date: Wednesday, 07/05/2017

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

	5-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-99	Total
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
06:00 - 06:59	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
07:00 - 07:59	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5
08:00 - 08:59	1	1	2	0	1	0	0	0	0	0	0	0	0	0	0	6
09:00 - 09:59	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	9
10:00 - 10:59	1	5	2	1	0	0	0	0	0	0	0	0	0	0	0	13
11:00 - 11:59	1	4	7	1	0	0	0	0	0	0	0	0	0	0	0	11
12:00 - 12:59	1	4	4	2	0	0	0	0	0	0	0	0	0	0	0	8
13:00 - 13:59	1	3	2	2	0	0	0	0	0	0	0	0	0	0	0	9
14:00 - 14:59	2	1	3	3	0	0	0	0	0	0	0	0	0	0	0	4
15:00 - 15:59	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	4
16:00 - 16:59	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	6
17:00 - 17:59	2	1	2	0	1	0	0	0	0	0	0	0	0	0	0	7
18:00 - 18:59	2	4	0	1	0	0	0	0	0	0	0	0	0	0	0	4
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21:00 - 21:59	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00 - 22:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23:00 - 23:59	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	103
Totals	12	36	38	14	3	0	100									
Percent of Total	11.7	35.0	36.9	13.6	2.9	0.0	100									
Percent of AM	7.9	28.9	52.6	5.3	5.3	0.0	100									
Percent of PM	13.8	38.5	27.7	18.5	1.5	0.0	100									

Standard Deviation:	5.6 MPH	Ten Mile Pace:	15 to 24 MPH	85th Percentile:	25.4 MPH
Mean Speed:	20.3 MPH	Percent in Ten Mile Pace:	71.8%	15th Percentile:	15.4 MPH
Median Speed:	20.4 MPH			90th Percentile:	27.2 MPH
Modal Speed:	22.5 MPH			95th Percentile:	29.1 MPH

Weekly Volumes

Unit ID: 08080608

Location: 60th St at Trading Post Rd (on straightaway)

Week of 06/29/2017

Start Time	06/29 Thursday		06/30 Friday		07/01 Saturday		07/02 Sunday		07/03 Monday		07/04 Tuesday		07/05 Wednesday		Daily Average	
	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0
05:00	0	2	0	1	0	1	0	0	0	0	0	0	0	0	0	1
06:00	1	1	1	2	1	1	0	1	1	0	1	0	1	1	1	1
07:00	1	2	4	2	2	2	0	1	1	0	3	0	1	2	2	1
08:00	1	2	4	3	1	1	2	1	1	0	0	1	3	2	2	1
09:00	3	0	5	3	6	1	2	2	0	0	1	0	4	2	3	1
10:00	2	3	3	2	3	3	2	2	2	1	3	3	4	5	3	3
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12:00	2	6	3	3	2	2	5	4	5	1	4	3	5	6	4	4
13:00	8	2	3	5	4	5	3	5	3	1	10	1	4	4	5	3
14:00	6	5	5	7	4	3	5	4	2	3	3	2	5	4	4	4
15:00	7	10	6	4	2	2	6	6	2	7	4	8	1	3	4	6
16:00	4	7	5	7	2	1	2	3	1	4	3	3	2	2	3	4
17:00	6	1	10	2	3	1	6	1	3	4	3	1	2	4	5	2
18:00	9	8	3	3	1	1	1	1	7	3	5	2	4	3	4	3
19:00	7	4	0	5	2	3	3	3	3	2	2	2	3	1	3	3
20:00	3	3	3	2	2	2	1	3	1	1	4	5	0	2	1	2
21:00	0	2	1	2	1	0	1	3	2	0	0	4	0	0	1	1
22:00	3	1	1	2	0	0	1	1	0	0	0	4	0	0	1	1
23:00	1	0	2	2	1	2	1	0	0	1	2	3	1	1	1	1
Lane Total	70	64	62	65	42	34	52	47	40	37	59	46	52	51	54	50
Day Total		134		127		76		99		77		105		103		104
AM Peak	10:41	10:25	07:02	10:57	08:43	10:56	10:30	10:27	10:43	10:52	10:53	10:58	10:17	10:07	11:00	11:00
AM Count	6	6	5	6	6	5	12	6	7	8	9	7	8	7	6	6
PM Peak	17:47	15:36	15:18	13:25	13:11	12:15	14:41	14:14	17:51	14:57	12:51	14:56	12:15	12:00	13:00	15:00
PM Count	10	13	10	8	5	5	8	7	7	7	10	8	8	6	5	6

EXHIBIT "F"

RESOLUTION NO. 17-~~XXXX~~

A RESOLUTION ISSUING A NEGATIVE DECLARATION OF NEED FOR AN ENVIRONMENTAL IMPACT STATEMENT FOR THE AFTON CREEK PRESERVE PROJECT

- WHEREAS, pursuant to Minnesota Environmental Quality Board (EQB) Rules, Chapter 4410, part 4410.1000, Subpart 2, the City of Afton as the responsible governmental unit completed an Environmental Assessment Worksheet (EAW) for the Afton Creek Preserve project; and
- WHEREAS, pursuant to Minnesota EQB Rules, Chapter 4410.4300 Subpart 36, the project meets the thresholds for an EAW for projects resulting in the permanent conversion of 80 or more acres of agricultural, native prairie, forest, or naturally vegetated land; and
- WHEREAS, copies of the EAW were distributed to all persons and agencies on the official EQB mailing list prior to April 17, 2017; and
- WHEREAS, notice of the availability of the EAW for public review for a 30-day comment period was published in the *EQB Monitor* on April 24, 2017; and
- WHEREAS, a press release was published in the *St. Paul Pioneer Press* on April 17, 2017 to announce the availability of the EAW to interested parties; and
- WHEREAS, the 30-day comment period ended on May 24, 2017 and all comments received have been considered; and
- WHEREAS, the EAW, in conjunction with comment responses, identified that the establishment of 60 foot buffers on all lots and woodland conservation easements on lots 10-16, if met, will address environmental effects caused as a result of the project.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Afton:

That it should and hereby does make a negative declaration on the need for an Environmental Impact Statement for the improvements included in the Afton Creek Preserve EAW, provided all mitigation measures of the EAW are implemented by the developer as part of the project, and all local, state, and federal environmental standards are followed and incorporated into the final site plans for the project.

Record of Decision

Afton Creek Preserve

City of Afton

July 24, 2017

Prepared by:

Wayne E Jacobson
Jacobson Environmental, PLLC
Brooklyn Center, Minnesota

I. ADMINISTRATIVE BACKGROUND

Pursuant to Minnesota Rule 4410.4500, the City of Afton has prepared an Environmental Assessment Worksheet (EAW) for the proposed Afton Creek Preserve. This Record of Decision addresses State of Minnesota environmental review requirements as established in Minnesota Rule 4410.1700. The City of Afton is the project proposer for this project. The City of Afton is also the Responsible Governmental Unit (RGU).

The EAW was filed with the Minnesota Environmental Quality Board (EQB) and circulated for review and comments to the required EAW distribution list. A Notice of Availability for the initial EAW was published in the EQB Monitor on April 24, 2017. Notices of Availability and Press Releases were published in the *St. Paul Pioneer Press* on April 17, 2017.

The public comment period ended May 24, 2017. Comments were received from the Minnesota Pollution Control Agency, the Metropolitan Council, Northwest Associated Consultants, the Southwest Washington Watershed District, and the Minnesota Department of Natural Resources. All comments were considered in determining the potential for significant environmental impacts. Summaries of the comments received, and the City of Afton's responses to those comments, are provided in Section III, below.

II. FINDINGS OF FACT AND CONCLUSIONS

As to the need for an Environmental Impact Statement (EIS) on this project and based on the record in this matter, including the EAW and comments received, the City of Afton makes the following Findings of Fact and Conclusions:

A. PROJECT DESCRIPTION

The Afton Creek Preserve project is a 20 lot single family clustered development on 218.6 acres with 109.7 acres of conservation easement to protect Trout Brook. The development will have individual wells and septic systems, and special vegetative buffers protecting steep slopes against erosion. Currently no wetland impacts are planned and over 50% of the area will remain in open space.

B. PROJECT HISTORY

- The project was subject to a mandatory EAW per Minnesota Rule 4410.4300 Subpart 36.
- The EAW was distributed to the EQB and to the EQB mailing list on April 17, 2017.
- Public notices containing information about the availability of the EAW for public review were provided to the *St. Paul Pioneer Press* for publication in the April 17, 2017 papers.
- Hard copies of the EAW were provided for public review at Afton City Hall.
- A notice was published for the EAW in the April 24, 2017 EQB Monitor. The public comment period ended May 24, 2017. Comments were received from the Minnesota Pollution Control Agency, the Metropolitan Council, Northwest Associated Consultants, the Southwest Washington Watershed District, and the Minnesota Department of Natural Resources. Copies of these comment letters are hereby incorporated for reference and included in **Attachment A**.

- Corrections to the EAW – None

C. CRITERIA FOR DETERMINING THE POTENTIAL FOR SIGNIFICANT ENVIRONMENTAL EFFECTS.

Minnesota Rule 4410.1700, subp. 1, states "An EIS [Environmental Impact Statement] shall be ordered for projects that have the potential for significant environmental effects." In deciding whether a project has the potential for significant environmental effects, the City of Afton must consider the four factors set out in Minnesota Rule 4410.1700, subpart. 7. With respect to each of these factors, the City of Afton finds the following:

1. MINNESOTA RULE 4410.1700, SUBP. 7.A - TYPE, EXTENT, AND REVERSIBILITY OF ENVIRONMENTAL EFFECTS

- a. The type of environmental impacts and mitigation efforts anticipated as part of this project include:

A summary of mitigation measures includes the establishment of 60 foot buffers on all lots and woodland conservation easements on lots 10-16.

- b. The mitigation measures were put into place to better control erosion and protect water quality while protecting and enhancing wildlife habitat on the project in an effort to make the post project condition better than the pre project condition in these key areas.

2. MINNESOTA RULE 4410.1700, SUBP. 7.B - CUMULATIVE POTENTIAL EFFECTS OF RELATED OR ANTICIPATED FUTURE PROJECTS

There are no future projects planned and no negative cumulative effects were identified in the EAW.

3. MINNESOTA RULE 4410.1700, SUBP. 7.C - THE EXTENT TO WHICH ENVIRONMENTAL EFFECTS ARE SUBJECT TO MITIGATION BY ONGOING PUBLIC REGULATORY AUTHORITY

- a) The following permits or approvals will be required for the project:

Unit of government	Type of application	Status
City of Afton	Plat approval	Pending
City of Afton	Septic system approval	Pending
Washington County	Plat/Access approval	Pending
Washington County Highway	Plan review	Pending
South Washington Watershed	Erosion/stormwater permit	Pending
MPCA	NPDES permit	Pending
MDH	Well permit	Pending

- b) The City of Afton finds that the potential impacts identified as part of the proposed Afton Creek Preserve project are minimal and can be addressed through the regulatory agencies as part of the permitting process. As a result, additional analysis of these impacts is not required.

4. MINNESOTA RULE 4410.1700, SUBP. 7.D - THE EXTENT TO WHICH ENVIRONMENTAL EFFECTS CAN BE ANTICIPATED AND CONTROLLED AS A RESULT OF OTHER AVAILABLE ENVIRONMENTAL STUDIES UNDERTAKEN BY PUBLIC AGENCIES OR THE PROJECT PROPOSER, INCLUDING OTHER EISs.

The City finds:

1. The Afton Creek Preserve project is similar in scope or nature to other nearby small housing projects.
2. An EIS has not been developed for similar small housing projects nearby recently
3. In light of the results of environmental review and permitting processes for similar projects, the City of Afton finds that the environmental effects of the project can be adequately anticipated, controlled, and mitigated.

The City of Afton finds that the environmental effects of the project can be anticipated and controlled as a result of the environmental review, planning, and permitting processes.

D. CONCLUSIONS

The Afton Creek Preserve EAW and comments received have generated information adequate to determine that the proposed project does not have the potential for significant environmental effects.

The EAW has identified areas where the potential for environmental effects exist; appropriate mitigation measures have been incorporated into the project plans and the required approvals and permits to mitigate these effects are being obtained. The project will comply with all county, city, and federal review agency requirements.

Based on the criteria established in Minnesota Rule 4410.1700, the project does not have the potential for significant environmental effects.

Based on the Findings of Fact and Conclusions, the project does not have the potential for significant environmental impacts.

Therefore, an EIS is not required for the Afton Creek Preserve project.

III. AGENCY COMMENTS AND CITY OF AFTON'S RESPONSES

A 30-day comment period for the above-referenced EAW ended on May 24, 2017. Comments were received from the Minnesota Pollution Control Agency, the Metropolitan Council, Northwest Associated Consultants, the Southwest Washington Watershed District, and the Minnesota Department of Natural Resources. On behalf of the City of Afton as the RGU, comment responses are provided below.

These letters and a response letter is included in **Attachment A**. Comments received and responses are summarized in **Attachment A**.

Attachment A

Afton Creek Preserve No EIS Determination Letter and EAW
Comment Letters

5821 Humboldt Avenue North, Brooklyn Center, MN 55430
Email: jacobsonenv@msn.com

(612) 802-6619 Cell

July 12, 2017

Ronald Moorse
Administrator
City of Afton
3033 St. Croix Trail South
Afton, MN 55001

**RE: Afton Creek Preserve EAW No EIS Determination Letter
Afton, Minnesota
Comm. No. 2017-188**

Dear Mr. Moorse:

As requested, we are submitting a letter response to the comments received on the Afton Creek Preserve EAW. We are requesting a No EIS Determination by the City of Afton.

The Afton Creek Preserve EAW was distributed to the Minnesota Environmental Quality Board (EQB) and persons and agencies on the official EQB distribution list in accordance with EQB rules. The 30 day comment period ended on May 24, 2017. The City received 5 letters on the EAW as follows:

1. Minnesota Pollution Control Agency – Letter dated May 17, 2017 from Karen Kromar, Planner Principal from the Environmental Review Unit
2. Metropolitan Council – Letter dated May 17, 2017 from LisaBeth Barajas, Manager Local Planning Assistance
3. Northwest Associated Consultants, Inc. – Letter dated May 22, 2017 from Bob Kirmis, Planner
4. South Washington Watershed District – Letter dated May 22, 2017 from John Loomis, Water Resources Program Manager
5. Minnesota Department of Natural Resources – Letter dated May 24, 2017 from Rebecca Horton, Environmental Review Specialist

The comments on the above letters and the responses are detailed below:

Letter 1: Minnesota Pollution Control Agency (MPCA)

Comment 1.1

The MPCA advocates the use of low impact design (LID) practices in construction of projects to aide in the minimization of stormwater impacts. The LID practices noted were as follows:

5821 Humboldt Avenue North, Brooklyn Center, MN 55430
Email: jacobsonenv@msn.com

(612) 802-6619 Cell

- a. Special ditches, arranged in a series, that soak up more water
- b. Vegetated filter strips at the edges of paved surfaces
- c. Trees or swales between rows of cars
- d. Residential or commercial rain gardens designed to capture and soak in stormwater
- e. Porous pavers, concrete, and asphalt for sidewalks and parking lots
- f. Narrower streets
- g. Rain barrels and cisterns
- h. Green roofs

Response 1.1

The Afton Creek Preserve project will use designed roadway ditches that will control erosion better than typical ditches in a typical development. The project will also use vegetative buffers on all of the house lots as well as minimized lawn areas in conjunction with native grass plantings to further enhance erosion control and infiltration. Native trees and shrubs will be planted in the buffer areas as well. The long cul-de-sac streets will be narrower than typical streets in the area. The project as designed is therefore using a number of LID practices.

Letter 2: Metropolitan Council:

Comment 2.1

The Met Council identified four lots that had slopes in excess of 18% which would be protected by 60' vegetated buffers, and they are concerned that these are the only areas which would be protected by the buffers.

Response 2.1

The Afton Creek Preserve project will actually protect all lots in the rear portion with 60' vegetated buffers and with minimized lawn areas to maximize erosion control and water quality protection.

Comment 2.2

The Met Council is also concerned about moderate quality woodlands being impacted by lots 10-14 and smaller portions of lots 15 and 16.

Response 2.2

The developer is proposing conservation easements to protect these woodland areas on lots 10-14 and lots 15 and 16.

Comment 2.3

The Met Council is concerned about the protection mechanisms for the 60' vegetated buffers and the moderate quality woodlands behind them.

Response 2.3

The developer will have a homeowners association that will be charged with maintaining the 60' buffers and the protection of the woodlands behind them.

Letter 3: Northwest Associated Consultants

Comment 3.1

Northwest Associated Consultants stated that the cul-de-sac length is longer than the maximum cul-de-sac length as imposed in the Cities Subdivision Ordinance.

Response 3.1

Longer cul-de-sacs have been allowed in the past by the City within PLCD subdivisions as long as there is preservation of the rural character and natural resources of the area which is the case here.

Comment 3.2

It was noted by Northwest Associated Consultants that the City of Afton Natural Resources and Groundwater Committee has suggested that the subdivision design include more open space in the following areas:

1. The northern half of lots 13 and 14
2. The western half of lot 4
3. The western one third of lot 3

Response 3.2

The developer's response is that the 60' vegetated buffers and conservation easements will protect the woodland and bluff areas on lots 13 and 14, and the western portions of lots 3 and 4.

Comment 3.3

Northwest Associated Consultants stated that the preparation of an Environmental Impact Statement (EIS) is not expected.

Response 3.3

The developer agrees that an EIS is not needed for this project.

5821 Humboldt Avenue North, Brooklyn Center, MN 55430
Email: jacobsonenv@msn.com

(612) 802-6619 Cell

Letter 4: South Washington Watershed District

Comment 4.1

The South Washington Watershed District states that this EAW serves as a model for future developments in Afton and the surrounding communities in southern Washington County. The proposed project will protect and improve not only the water quality of Trout Brook, but the surrounding terrestrial habitat as well. The City of Afton is to be commended for the development and promotion of its Preservation and Land Conservation Development ordinance.

Response 4.1

The developer thanks the South Washington Watershed District for their comments and is looking forward to building this model project.

Letter 5: Minnesota Department of Natural Resources (DNR)

Comment 5.1

The DNR states that they are in favor of an access road in its current location instead of one that would create a crossing over Trout Brook.

Response 5.1

The developer is also in favor of the access road being in its current location instead of a crossing over Trout Brook which could impact the trout stream.

Comment 5.2

The DNR is concerned about spring water protection on lots 3 and 4 adjacent to Trout Brook.

Response 5.2

The developer notes that there are no springs in this area and he reports that a project summarized in Appendix A was implemented recently in this area by the South Washington Watershed District which improved this area, and he is determined to protect these areas with conservation easements on these lots as well as with the 60' vegetated buffers.

Comment 5.3

The DNR is concerned about old wells being present in the area.

Response 5.3

The developer is not aware of any old wells in the area and if they are present they would be sealed in accordance with the regulations of the Minnesota Department of Health.

Comment 5.4

The DNR requests that the 60' vegetated buffer strips be shown on a map for lots 1-10 and 16-17.

Response 5.4

The developer would be mapping the 60' vegetated buffer strips in the preliminary plat process.

Comment 5.5

The DNR is concerned that a DNR water appropriation permit may be needed to irrigate the lawn and landscape areas on the 2.5 acre buildable portions of the lots.

Response 5.5

The developer is committed to minimizing lawn and landscape areas on each lot with a requirement that there will be large areas of native grass beyond the 60' vegetated buffer areas. Because of these minimized lawn and landscape areas, the developer does not believe that a drought condition would ever create a scenario where a DNR water appropriation permit would be necessary for lawn and landscape irrigation on this project.

Comment 5.6

The DNR wants a more detailed explanation of how the buffer plan will assist with the following four items:

1. Controlling erosion and sedimentation
2. Enhancing wildlife habitat
3. Types of invasive species management
4. Describe state listed species habitat enhancement

Response 5.6

The developer states that the native grass, tree and shrub plantings in the 60' vegetated buffer areas will assist in controlling erosion and sedimentation by intercepting overland particulates and infiltrating water in these areas. Because the buffers will be planted in a native plant community, we expect that they will enhance wildlife habitat and habitat for state listed species because of the native plant community design. The invasive species management program will include annual monitoring and maintenance which may include hand pulling, controlled burning, or chemical spraying to target and remove invasive species as they are seen.

Comment 5.7

The DNR states that the shoreland district boundary should be 300' wide on either side of Trout Brook. They also state that the conservation overlay boundary is shown as approximate and should be adjusted to reflect the terrain and natural resources on this specific site.

Response 5.7

The developer agrees with the above two comments and will show the shoreland district boundary and conservation overlay boundary as requested by DNR above.

Comment 5.8

The DNR states that the western portions of lots 3 and 4 may contain springs adjacent to Trout Brook. The DNR recommends that these areas be included as part of the open space conservation easement in this project.

Response 5.8

The developer states that the western portions of lots 3 and 4 do not contain springs that are important to Trout Brook and he feels that the 60' vegetated buffers and the conservation easements on these lots is adequate to protect these areas. This information was provided by the South Washington Watershed District and it is included as Attachment A.

Comment 5.9

The DNR states that they are concerned about the generalized nature of the buffer plans. They are also concerned about when the buffer areas will be established, how the buffers will be monitored and maintained, and whether there will be buffer easements that will keep the buffers in place long-term.

Response 5.9

Each buffer area may be slightly different and will be custom designed for that particular lot situation. The buffers will be monitored and maintained annually, and the homeowners association will be charged with keeping the buffers in place long-term. Prairie Restorations has recently repaired a ravine area in the Lot 4 area and planted a native plant mix which the developer will use in the buffer areas, and the documentation on this area is included in Appendix A.

Jacobson Environmental, PLLC
Environmental Consultants

www.jacobsonenvironmental.com
Wayne Jacobson, P.S.S., W.D.C., P.W.S., A.F.S.

5821 Humboldt Avenue North, Brooklyn Center, MN 55430
Email: jacobsonenv@msn.com

(612) 802-6619 Cell

Based on the content of the EAW and the comments received along with the above responses, we believe the City of Afton should declare that an EIS is not necessary for this project.

Thank you for the opportunity to provide environmental services on this important project.

Sincerely,



Wayne Jacobson, P.S.S., W.D.C., P.W.S., A.F.S.
Senior Scientist

cc: Joe Bush, J.P. Bush Homes

Appendix A Finding of No Springs and Ravine Repair and Bluff Prairie Establishment
Appendix B Location of Lots 3 and 4
Appendix C Comment Letters 1-5 received on EAW

APPENDIX A

Finding of No Springs and Ravine Repair and Bluff Prairie
Establishment

Joe Bush

From: Schilling, Andrew [andrew.schilling@woodburymn.gov]
Sent: Thursday, June 08, 2017 1:04 PM
To: Joe Bush
Subject: RE: Joe Bush

Joe,

During our site analysis and construction of the ravine stabilization and turf conversion to prairie above the bluff, we did not identify any fresh water springs.

Thanks,

Andy

Andy Schilling
Watershed Restoration Specialist

SWWD
aschilling@ci.woodbury.mn.us
651-714-3717
[Click for Directions](#)

From: Joe Bush [mailto:joe@joebushmn.com]
Sent: Thursday, June 8, 2017 8:14 AM
To: Schilling, Andrew <andrew.schilling@woodburymn.gov>
Subject: Joe Bush

Andrew

Thank you for the feedback about the restoration project on the ravine and bluff. After reading comments back from you and Jen I understand that a meeting may not be needed.

The answer I was trying to obtain is; during the restoration project did any on site reports show fresh water springs?

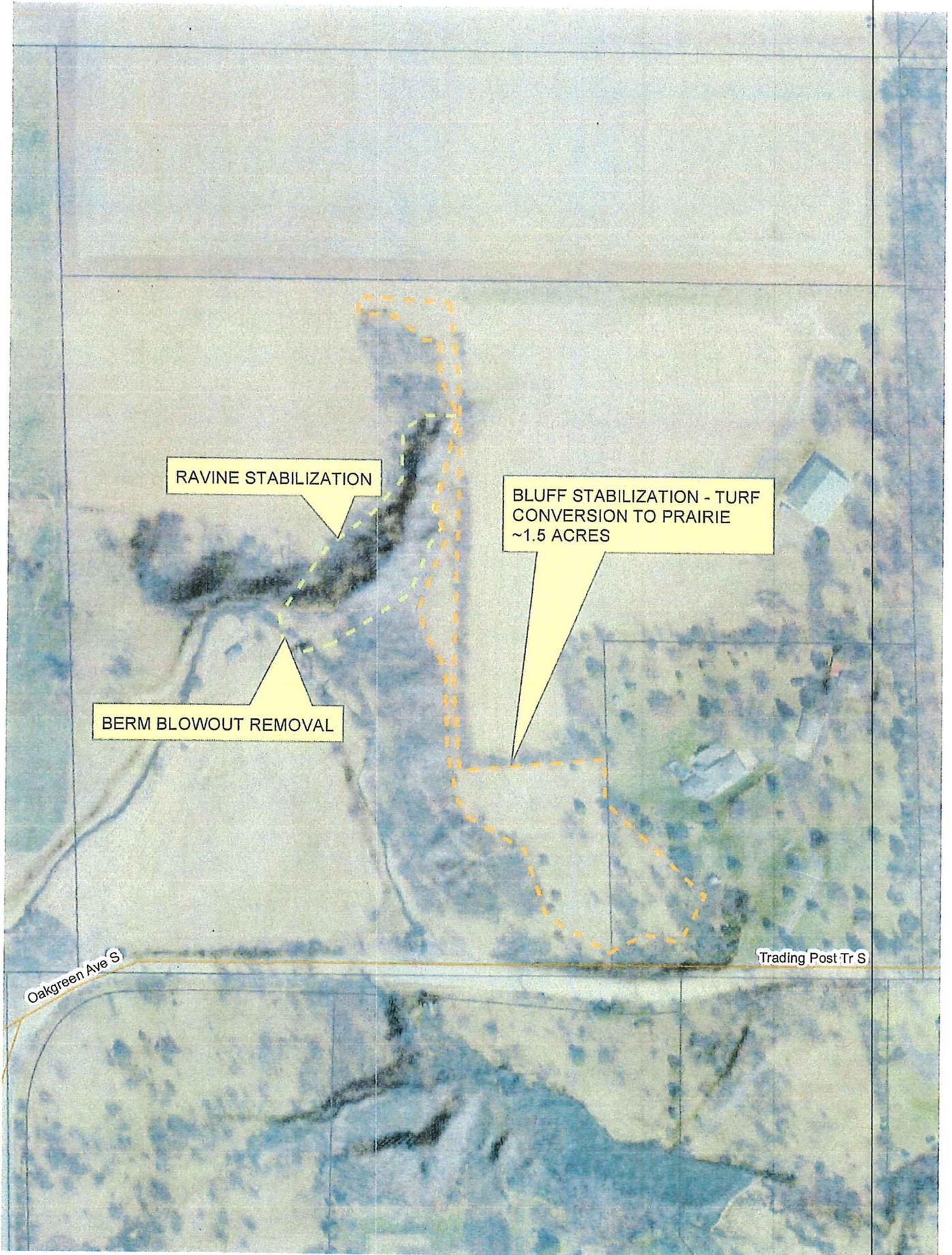
If not I will proceed without additional concern. Is that a question you can answer?

Joe

Joseph Bush
Real Estate Professional
Designer & Builder
of Memorable Homes
Direct: [651.775.4222](tel:651.775.4222)
jpbushhomes.com

6/15/2017

FORMER SCHUSTER PROPERTY: COST-SHARE PROJECTS OVERVIEW



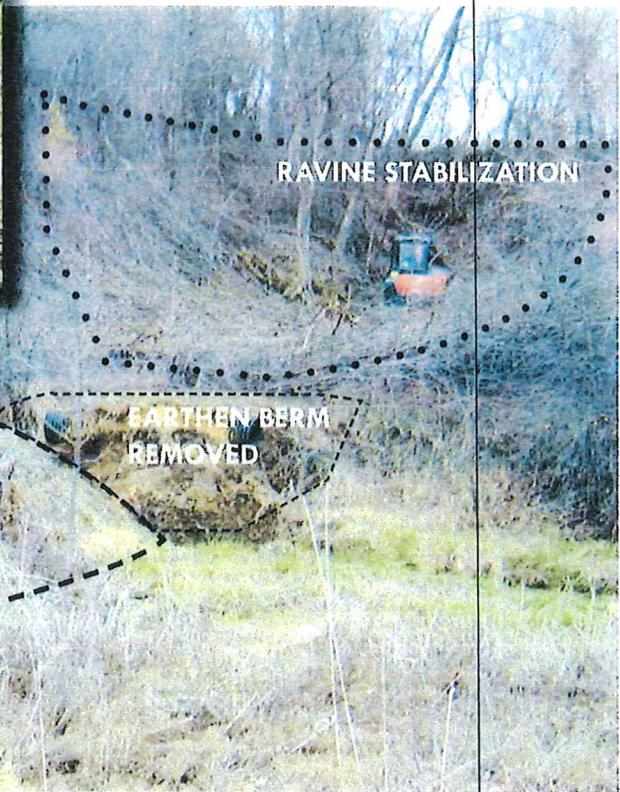
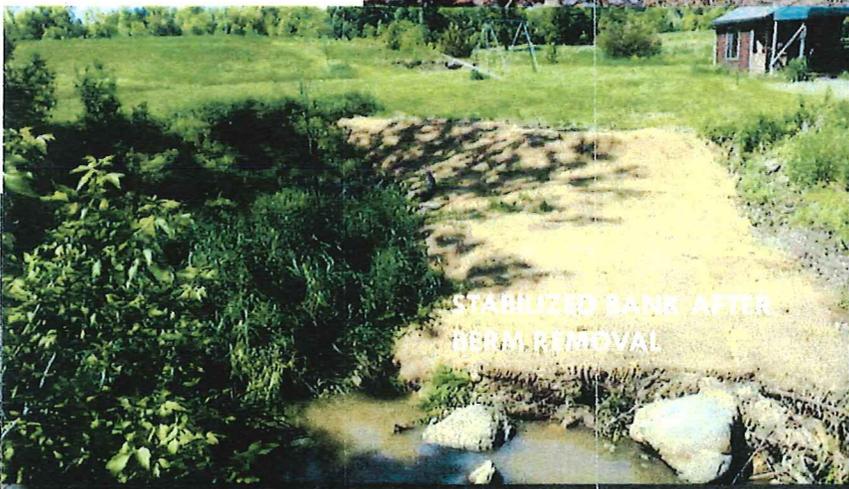
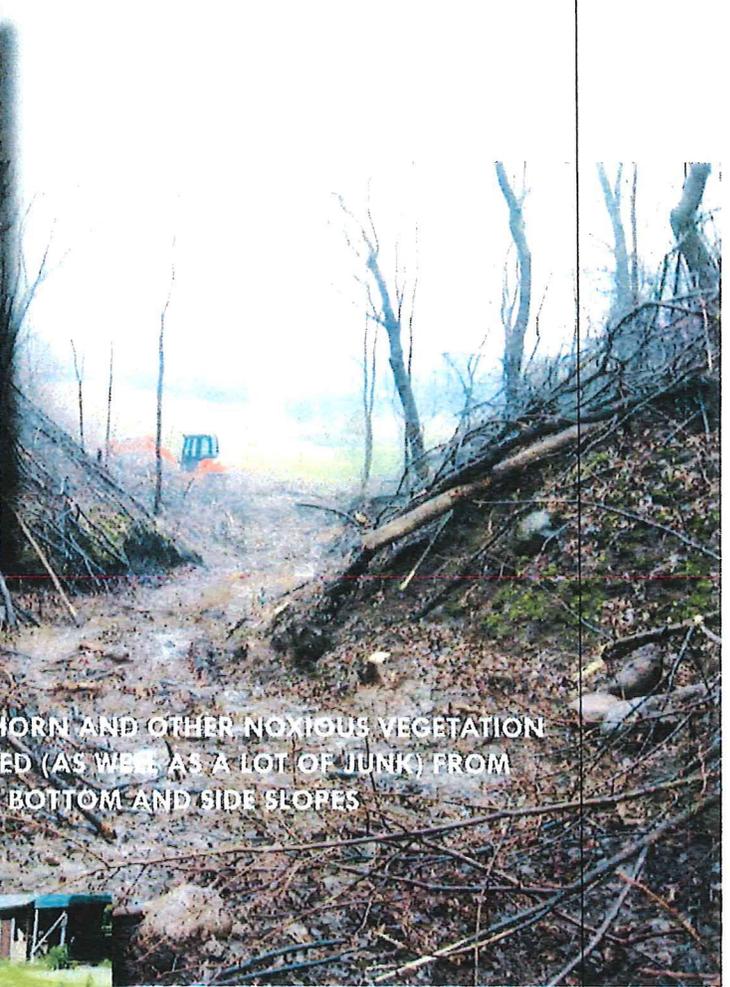
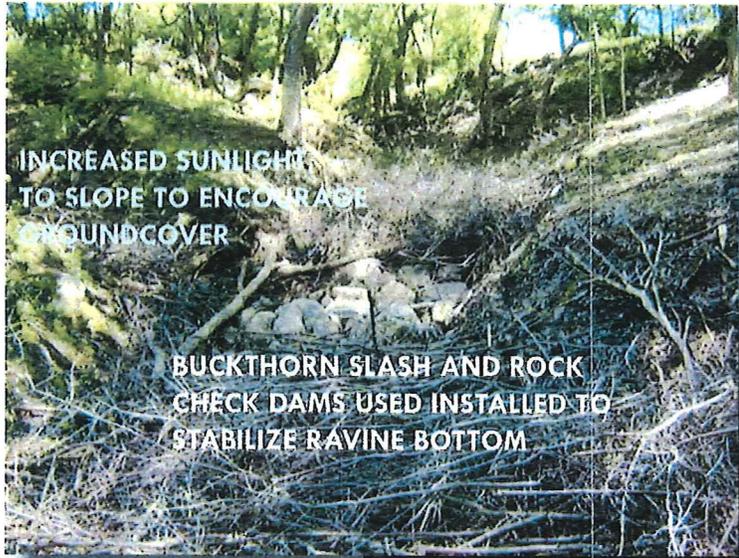
RAVINE STABILIZATION

BLUFF STABILIZATION - TURF
CONVERSION TO PRAIRIE
~1.5 ACRES

BERM BLOWOUT REMOVAL

Oakgreen Ave S

Trading Post Tr S



SCHUSTER: TOP OF BLUFF TURF CONVERSION TO PRAIRIE, 2015



COST-SHARE AGREEMENTS



WATER QUALITY COST SHARE APPLICATION/CONTRACT

General Information (to be completed by SWWD)

Organization SWWD	Contract Number	Other federal or other state funds? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Amendment <input type="checkbox"/> Board meeting date(s) _____	Canceled <input type="checkbox"/> Board meeting date: _____
----------------------	-----------------	--	---	--

*If contract amended, attach amendment form(s) to this contract.

Applicant

Land Occupier Name Robert Schuster	Address 14220 60th St.	City/State Afton	Zip code 55033
Email N/A	Phone 651-436-5436 651-334-2430		

*If a group contract, this must be filed and signed by the group spokesperson as designated in the group agreement and the group agreement attached to this form.

Project Location (if different)

Address	City/State	Zip code
---------	------------	----------

Contract Information

I (we), the undersigned, do hereby request cost-share assistance to help defray the cost of installing the following practice(s) listed on the second page of this contract. It is understood that:

- SWWD's Water Quality Cost Share Program is a Reimbursement Program.** Applicants will be reimbursed for the contract amount upon successful completion of the project and submission of all required documentation.
- The land occupier is responsible for full establishment, operation, and maintenance of all practices and upland treatment criteria applied under this program to ensure that the conservation objective of the practice is met and the effective life, a minimum of **10 years**, is achieved. The specific operation and maintenance requirements for the conservation practice listed are described in the operation and maintenance plan prepared for this contract by the organization technical representative.
- Should the land occupier fail to maintain the practice during its effective life, the land occupier is liable to the South Washington Watershed District for the amount up to 100% of the amount of financial assistance received to install and establish the practice unless the failure was caused by reasons beyond the land occupier's control, or if conservation practices are applied at the land occupier's expense that provide equivalent protection of the soil and water resources.
- Practice(s) must be planned and installed in accordance with technical standards and specifications of the Technical Representative.
- Increases in the practice units or cost must be approved by the organization board through amendment of this contract as a condition to increase the cost share payments.
- This contract, when approved by the SWWD board, will remain in effect unless canceled by mutual agreement, except where installations of practices covered by this contract have not been started within **1 year following Board approval of this contract**, this contract will be automatically terminated on that date. Practices will be installed by **2 years following Board approval of this contract** unless this contract is amended by mutual consent to reschedule the work and funding.
- Items of cost for which reimbursement is claimed are to be supported by invoices/receipts for payments and will be verified by the organization board as practical and reasonable. The organization board has the authority to make adjustments to the costs submitted for reimbursement.

Applicant Signatures

The land occupier's signature indicates agreement to:

1. Grant the organization's representative(s) access to the parcel where the conservation practice will be located.
2. Obtain all permits required in conjunction with the installation and establishment of the practice prior to starting construction of the practice.
3. Be responsible for the operation and maintenance of conservation practices applied under this program in accordance with an operation and maintenance plan prepared by the organization technical representative.
4. Not accept cost-share funds, from state and federal sources combined, that are in excess of **100%** percent of the total cost to establish the conservation practice and provide copies of all forms and contracts pertinent to any other state or federal programs that are contributing funds toward this project.

Date <i>04-22-15</i>	Land Occupier 
Date	Landowner, if different from applicant Address, if different from applicant information:

Conservation Practice (to be completed by Technical Representative)

The primary practice for which cost-share is requested is Turf to Prairie

Practice standards or eligible component(s) Turf conversion to native <i>1.50 acres</i>	Engineered Practice (<input type="checkbox"/> yes or <input type="checkbox"/> no) Ecological practice (<input checked="" type="checkbox"/> yes or <input type="checkbox"/> no)	Total Project Cost Estimate <i>\$9,300.⁰⁰</i>
---	---	---

The estimated benefits of this project are:

Total Phosphorus Captured <i>0.75 lbs/yr</i>	Nitrogen Captured <i>2.5 lbs.</i>	Runoff Volume Reduction <i>N/A</i>
---	--	---

Technical Assessment and Cost Estimate

I have the appropriate technical expertise and have reviewed the site where the above listed practice is to be installed and find it is needed and that the estimated benefits and costs are practical and reasonable.

Date <i>4/20/15</i>	Technical Representative 
------------------------	---

Amount Authorized for Financial Assistance (to be completed by SWWD)

The SWWD Board has authorized the following for financial assistance, total not to exceed the overall percent listed indicated in 4, above.

\$ 2,325.⁰⁰ from South Washington WD Cost Share 2015 25%
Enter program name and fiscal year

~~\$ 6,975.⁰⁰~~ from ~~FY 2013 MN Clean Water Fund Grant~~ ~~75%~~

~~Enter program name and fiscal year~~

\$ _____ from _____
Enter program name and fiscal year

Board Meeting Date	Authorized Signature	Total Amount Authorized \$
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RAVINE STABILIZATION AND BERM BLOWOUT REMOVAL PROJECT - 2014

WATER QUALITY FUNDING CONTRACT

General Information (to be completed by SWWD)

Organization SWWD	Contract Number CWF-TB01	Other federal or other state funds? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Amendment <input type="checkbox"/> Board meeting date(s) _____	Canceled <input type="checkbox"/> Board meeting date: _____
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* If contract amended, attach amendment form(s) to this contract.

Applicant

Land Occupier Name Robert W. Schuster	Address PO Box 337	City/State Afton, MN	Zip code 55001
Email		Phone 651-436-5436	

* If a group contract, this must be filed and signed by the group spokesperson as designated in the group agreement and the group agreement attached to this form.

Project Location (if different)

Address 14220 60 th St. S.	City/State Afton, MN	Zip code 55001
--	-------------------------	-------------------

Contract Information

I (we), the undersigned, do hereby request funding to install the following practice(s) listed on the second page of this contract. It is understood that:

1. The land owner grants permission to SWWD staff and its representatives to access the property to implement, inspect, and maintain the practice(s).
2. The land owner will ensure the practice(s) remains in place for the effective life of the practice(s), a **minimum of 10 years**.
3. Should the land owner remove the practice(s) during its effective life, the land owner is liable to the South Washington Watershed District for the amount up to 100% of the amount of the project cost to install and establish the practice unless the removal was caused by reasons beyond the land owner's control, or if conservation practices are applied at the land owner's expense that provide equivalent protection of the soil and water resources.
4. SWWD will implement the practice(s) and inspect and maintain the practice(s) for a minimum of 10 years.
5. This contract is void if the project is not underway prior to June 1, 2014.

Robert Schuster

Signatures

Date	Land Occupier
Date	Landowner, if different from applicant
Address, if different from applicant information:	

Conservation Practice (to be completed by Technical Representative)

The primary practice for which cost-share is requested is _____

Practice standards or eligible component(s) Grade Stabilization Structure, Brush Management	Engineered Practice <input checked="" type="checkbox"/> yes or <input type="checkbox"/> no Ecological practice <input checked="" type="checkbox"/> yes or <input type="checkbox"/> no	Total Project Cost Estimate \$33,018.80
--	--	--

The estimated benefits of this project are:

Total Phosphorus Captured 19 lbs	Nitrogen Captured	Runoff Volume Reduction
-------------------------------------	-------------------	-------------------------

Technical Assessment and Cost Estimate

I have the appropriate technical expertise and have reviewed the site where the above listed practice is to be installed and find it is needed and that the estimated benefits and costs are practical and reasonable.

Date	Technical Representative
------	--------------------------

Amount Authorized for Funding (to be completed by SWWD)

The SWWD Board has authorized the following for funding, total not to exceed.

Keep Funding separate

\$ 24,764.10 from FY 2012 MN Clean Water Assistance Grant (75%) - 02.05.4200
Enter program name and fiscal year
 \$ 8,254.70 from SWWD LSC SUF (25%) - 02.05.4200
Enter program name and fiscal year
 \$ _____ from _____
Enter program name and fiscal year

02.05.4200 - Expense Acct

Board Meeting Date 11/2/13	Authorized Signature <i>[Signature]</i>	Total Amount Authorized \$ 33,018.80
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TURF TO PRAIRIE CONTRACTOR MAINTENANCE RECORDS

- The prairie installation contractor - Prairie Restorations, Inc. - is contracted for maintenance for the 2016 and 2017 growing season

Prairie Restorations, Inc. 

Work Record

Prairie Restorations, Inc.
31646 128th Street
Princeton MN 55371
United States
763-389-4342

#3895

09/07/2016

Bill To

Tara Kelly
South Washington Watershed District
Office
2302 Tower Dr.
Woodbury MN 55125
United States

Amount Due

\$0.00

Ship To

Tara Kelly
South Washington Watershed District Office
2302 Tower Dr.
Woodbury MN 55125
United States

PO #

Sales Rep

ETF

Project

Item

Options

PRJ2087 Schuster (SWWD) 2016-2017 IPM WRO	Schuster Residence (SWWD) - 2016 Integrated Plant Management Work Record Only: See Memo for Work Information
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Memo

Complete Site Mowing on 6/29/2016 to Reduce Noxious Weeds in New Prairie Planting.

APPENDIX B

Location of Lots 3 and 4

PRESERVATION & LAND CONSERVATION DEVELOPMENT - SKETCH

Part of the Southeast Quarter of Section 32 and part of the Southwest Quarter of Section 33,
all in Township 28 North, Range 20 West, City of Afton, Washington County, Minnesota

Developer:



J.P. Bush
HOMES
Lakeband, Minnesota

Property Owner: Will Carlson

TOTAL PARCEL AREA = 218.6 acres

Proposed Conservation Easements
OPEN SPACE = 109.7 acres
(50.2% gross parcel area)

Proposed Lots (20 total) = 100.6 acres

Proposed Road Right of Way = 8.3 acres

Proposed Road Right of Way Width = 60 feet

Proposed Road Right of Way Width (60th Street South) = 33 feet from center line

Proposed Length of Cul-De-Sac -
Point A to Point B = 3,400 linear feet

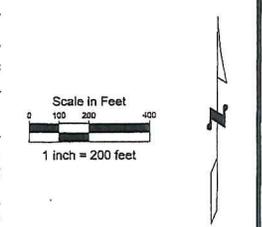
Point C to Point D = 690 linear feet

Proposed Road Type - 24 foot wide rural section

All proposed lots have a minimum of 2.5 acres of buildable area.

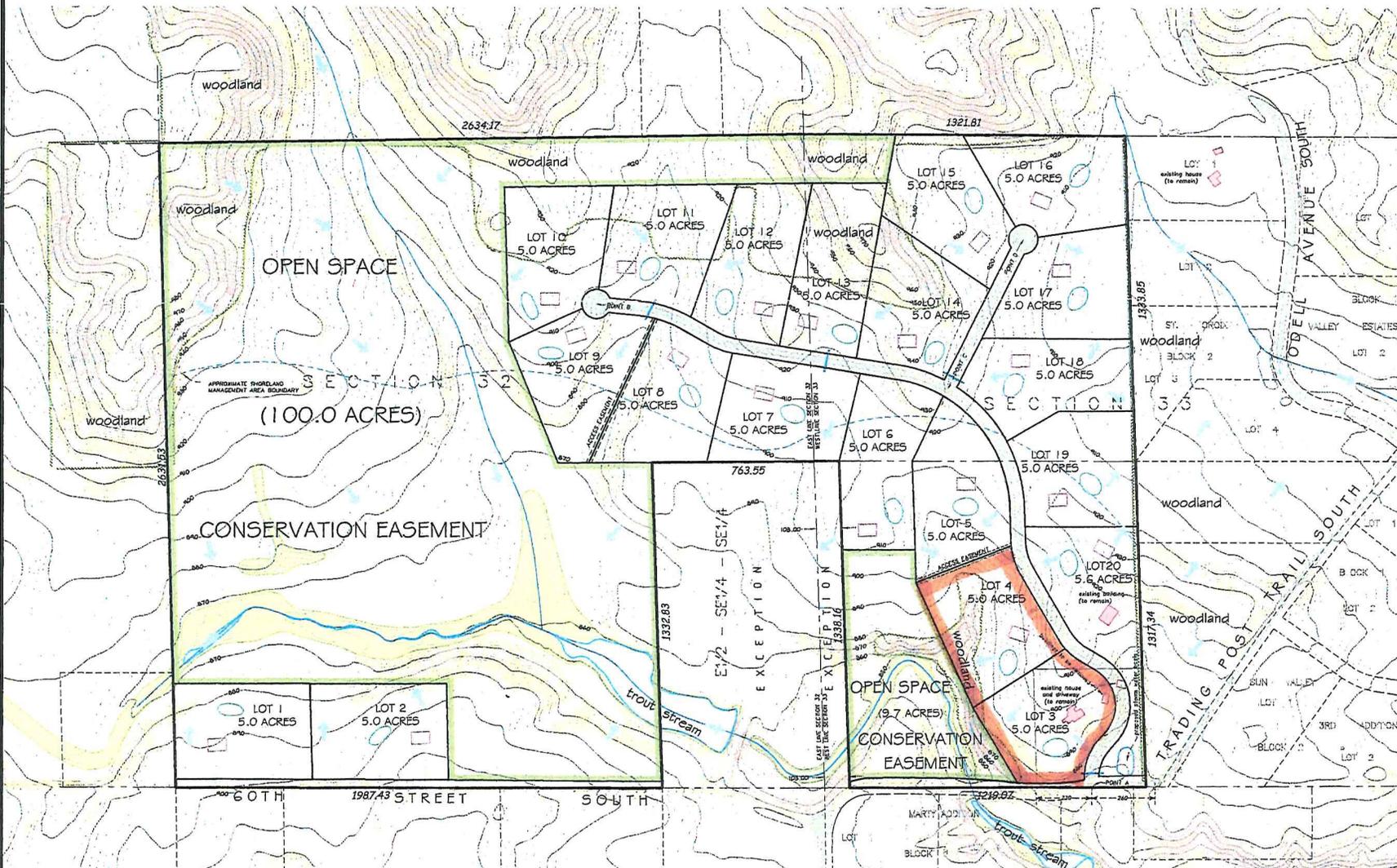
Legend

- Denotes slopes 12% to 17.3%
 - Denotes a spin over 15%
 - Denotes wetland location
 - Denotes stream
 - Denotes general surface water flow
 - Denotes proposed street location
 - Denotes proposed house site
 - Denotes proposed septic area
 - Denotes proposed driveway location
- Contours are of 10 foot intervals, and are based on data provided by the Minnesota Department of Natural Resources.
- Wetland, Shrubland and stream locations are approximate and are based on data obtained through the National Wetlands Inventory - V2 which coordinates are the City of Afton Zoning Map (ZMAP 11).



OFFICIAL COPIES OF THIS MAP ARE CRIMP SEALED
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.

Landmark Surveying, Inc.
mlh
MIG B Horak, Minnesota License No. 92577
Date



Landmark Surveying, Inc.
21080 Quaker Trail North
P.O. Box 55
Scandia, Minnesota 55073
Office phone: 651-434-3427
Cell number: 651-759-5730
Email: msheldahl@frontier.net

REVISED MARCH 01, 2017: Revised man road center to location.

APPENDIX C

Comment Letters 1-5 received on EAW



Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

May 17, 2017

Mr. Ronald Moore, Administrator
City of Afton
3033 St. Croix Trail South
Afton, MN 55001

Re: Afton Creek Preserve Environmental Assessment Worksheet

Dear Mr. Moore:

Thank you for the opportunity to review and comment on the Environmental Assessment Worksheet (EAW) for the Afton Creek Preserve project (Project) located in the city of Afton, Washington County, Minnesota. The Project consists of an approximately 100-acre residential development. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA staff has the following comments for your consideration.

Low Impact Design

The MPCA advocates the use of Low Impact Design (LID) practices to aid in the minimization of stormwater impacts. LID is a stormwater management approach and site-design technique that emphasizes water infiltration, values water as a resource, and promotes the use of natural systems to treat water runoff. Examples include:

- Special ditches, arranged in a series, that soak up more water
- Vegetated filter strips at the edges of paved surfaces
- Trees or swales between rows of cars
- Residential or commercial rain gardens designed to capture and soak in stormwater
- Porous pavers, concrete, and asphalt for sidewalks and parking lots
- Narrower streets
- Rain barrels and cisterns
- Green roofs

LID concepts may be found in the [State of Minnesota Stormwater Manual](#) dated November 2005 located on the MPCA website at: <http://www.pca.state.mn.us/water/stormwater/stormwater-manual.html>.

In addition, the MPCA LID webpage provides a description and examples of LID features such as permeable pavement, rain gardens, and green roofs. Links to other resources on LID are available as well. The website is located at: <https://www.pca.state.mn.us/water/stormwater-management-low-impact-development-and-green-infrastructure>.

Mr. Ronald Moorse
Page 2
May 17, 2017

We appreciate the opportunity to review this Project. Please provide your specific responses to our comments and notice of decision on the need for an Environmental Impact Statement. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this EAW, please contact me at 651-757-2508.

Sincerely,



Karen Kromar
Planner Principal
Environmental Review Unit
Resource Management and Assistance Division

KK:bt

cc: Dan Card, MPCA, St. Paul
Teresa McDill, MPCA, St. Paul

May 17, 2017

Ronald Morse, City Administrator
City of Afton
3033 St. Croix Trail S
Afton, MN 55001

RECEIVED
MAY 23 2017
CITY OF AFTON

RE: City of Afton Environmental Assessment Worksheet (EAW) – Afton Creek Preserve
Metropolitan Council Review No. 21714-1
Metropolitan Council District 12

Dear Mr. Morse:

The Metropolitan Council received an EAW for a proposed residential project on April 17, 2017. The EAW is for a proposed residential cluster (20) lot single-family development on 218.6 acres with 109.7 acres of conservation easement protection for Trout Brook. The development will have individual wells and septic systems, and special vegetative buffers protecting steep slopes. The development site was previously used for farming, pasture, hay land and forest land.

The proposed project area is zoned Agriculture, along with Shoreland Management areas and a Conservancy Overlay. The City's 2030 Comprehensive Plan Current Land Use Map identifies this area as including existing land uses such as deciduous tree cover, cultivated, pasture, grassland, residential, bluff areas, streams and wetlands. The City's 2030 Future Land Use Map guides this area as Agriculture which allows a maximum density of 4 units per 40 acres.

Council staff has conducted a review of this EAW to determine its adequacy and accuracy in addressing regional concerns and the potential for significant environmental impact. The staff review finds that the EAW is complete and accurate with respect to regional concerns and does not raise issues of consistency with Council policies. The following section offers advisory comments for the City's consideration.

Item 13 – Fish, wildlife, plant communities, and sensitive ecological resources (rare features)
(Jim Larsen, 651-602-1159)

The EAW states that the proposed 60-foot vegetative “backyard” lot buffers will protect steep slope areas (identified as “bluff areas of over 18% slopes” on page 12, and “steep slope areas” of unspecified slope elsewhere in the document) against erosion, and increase wooded/forest and brush/grassland areas on lots within the development. Appendix B is referenced for plans of the buffer program, but it is not clear from the information provided, if all lots or only a portion will contain 60-foot buffer protection areas, precisely where the boundaries of the buffer will begin, and what level of preservation will be extended to site amenities “behind” the buffer. It appears from the Council's GIS database slope overlay information, that the only proposed lots containing existing mapped slopes in excess of 18% are lots 3 and 4 in the southeast corner (lot 3 contains an existing home which is to remain), the very north edge of lots 15 and 16 in the northeast portion of the site, and a few isolated areas within the proposed 100-acre open space conservation easement area in the northwest corner of the site.

Ronald Morse
May 17, 2017
Page 2

While we agree that avoiding impacts to steep slope areas on the site by application of a protection buffer to those areas will be beneficial, Council staff is also concerned about protection of areas within proposed lots to be developed that are dominated by mature native oak woodlands. The woodlands have been mapped by the Council and Minnesota Department of Natural Resources in their Natural Resources Inventory/Assessment program as supporting native red and white oak and sugar maple communities of "moderate" assessed quality. Large portions of lots 10 through 14 along the northern site boundary – in some cases, more than half of each lot's platted area, and smaller portions of lots 15 and 16, consist of these mature woodlands. We recommend these woodland areas be specifically protected from impacts by future land owners within the development, either by redrawing of proposed lot lines to include (more or all of) the wooded areas within the proposed development's conservation easement area, or by affording them a similar level of protection as provided by the conservation easement from future impacts in some fashion.

While we understand the importance of and mechanism by which the stream channel areas within the proposed 100-acre open space conservation easement area will be protected, we do not have a similarly clear understanding of precisely what protection mechanisms will be utilized with the 60-foot buffers to protect natural resource woodland stands behind those buffers that will be located on privately held land.

This concludes the Council's review of the EAW. The Council will not take formal action on the EAW. If you have any questions or need further information, please contact Corrin Wendell, Principal Reviewer, at 651-602-1832.

Sincerely,

 for:
LisaBeth Barajas, Manager
Local Planning Assistance

CC: Steve O'Brien, MHFA
Tod Sherman, Development Reviews Coordinator, MnDOT - Metro Division
Harry Melander, Metropolitan Council District 12
Corrin Wendell, Sector Representative/Principal Reviewer
Raya Esmaeili, Reviews Coordinator

PLANNING REPORT

TO: Afton Planning Commission

FROM: Bob Kirmis

DATE: May 22, 2017

SUBJECT: Afton - Afton Creek Preserve Sketch Plan

CASE NO: 280.02 - 17.02

BACKGROUND

Joe Bush, on behalf of J.P Bush Homes, has submitted a sketch plan for a preservation and land conservation development (PLCD) entitled "Afton Creek Preserve." The subject site overlays 219 acres of land located north of 60th Street South (along the City's southern boundary) and west of Trading Post Trail South.

The subdivision calls for the creation of 20 single family residential lots all of which measure 5 acres in size and are mainly located on the eastern half of the site. Of the 219 acres which comprise the subject site, 110 acres are proposed to lie within a conservation easement (intended to protect a trout stream and protect open space).

The subject site overlays seven individual parcels of land. With the exception of a 5-acre parcel located in the extreme southeast corner of the site (14220 60th Street), all parcels which comprise the subject site are zoned A, Agricultural. Conservation subdivisions (PLCD's) are allowed within Agricultural zoning districts as a conditional use. The 5-acre parcel in the southeast corner is zoned RR, Rural Residential.

That portion of the site which overlays the trout stream and adjacent flowage lie within the City's Shoreland Management Area, the boundaries of which measure 1,000 feet from each side of stream banks.

Also, to be noted is that the trout stream, as well as flowage which lies along stream, lies within the City's Conservancy Overlay District, the intent of which is to manage areas with unique natural and biological characteristics.

The purpose of the sketch plan review procedure is to inform applicants of the City's procedural requirements for subdivision and applicable zoning and subdivision standards and convey the extent to which proposed subdivisions conform with such regulations. In this regard, no formal action on the submitted sketch plan will be taken. Informal feedback on the submitted sketch plan is intended to precede the preparation of a formal preliminary plat application.

Attached for Reference:

- Exhibit A: Applicant Narrative
- Exhibit B: Site Location
- Exhibit C: Sketch Plan
- Exhibit D: Concept Plan Alternative (prepared by Natural Resources and Groundwater Committee)

ISSUES

Environmental Assessment Worksheet (EAW). According to both Minnesota Statutes (Rules 4410.4300 Subpart 36) and the Afton City Code, an Environmental Assessment Worksheet (EAW) must be prepared for projects which result in the permanent conversion of 80 or more acres of agricultural, native prairie, forest, or naturally vegetated land to a more intensive developed land use. Thus, the proposed subdivision has prompted the preparation of an EAW.

The purpose of the EAW process is to disclose information about potential environmental impacts of a project. Information disclosed in the EAW process is intended to determine whether a more detailed Environmental Impact Statement (EIS) is needed and to indicate how the project can be modified to lessen its environmental impacts. To be specifically noted is the EAW process is not intended to represent project approval.

The completed EAW has been sent to various agencies as identified on the Environmental Quality Board's distribution list for review and comment. The 30-day comment period for the EAW ends on May 24, 2017. Thus, comments will be received prior to the June 6, 2017 Planning Commission meeting. Such comments should be taken into account by the applicant as part of the development (refinement) of various plans to be provided with forthcoming preliminary and final plat applications.

Based on information provided in the EAW, the preparation of an Environmental Impact Statement (EIS) is not expected. To be noted however, is that comments and recommendations received on the EAW related to the mitigation of potential environmental impacts should be taken into account by the applicant in the preparation of detailed subdivision plans. Received comments can be made conditions of forthcoming subdivision approval by the City.

Processing. Following sketch plan review, the following approvals are minimally necessary to accommodate the project:

1. Subdivision (preliminary plat and final plat)
2. Conditional use permit for PLCD development

Issues associated with the possible rezoning of the 5-acre parcel (14220 60th Street) from RR, Rural Residential to A, Agricultural in conjunction with the forthcoming subdivision application shall be discussed in a later section of this report.

Purpose of PLCD. According to the City Code (section 12-2373), preservation and land conservation developments (PLCD), are intended to:

- A. *Permit subdivisions in the Agricultural Zoning District which require the construction of a new public street.*
- B. *Encourage a more creative and efficient development of land and its improvements through the preservation of agricultural land, natural features and amenities than is possible under the more restrictive application of zoning requirements, while at the same time, meeting the standards and purposes of the comprehensive plan and preserving the health, safety, and welfare of the citizens of the City.*
- C. *Preserve open space, to preserve the natural resources of the site and to preserve wildlife habitat and corridors.*
- D. *Facilitate the economical provision of streets and public utilities.*
- E. *Allow the transfer of development rights (density) within a subdivision in order to preserve agricultural land, open space, natural features and amenities.*

While it appears that the proposed subdivision fulfills the preceding objectives, such finding should be made by City Officials as part of formal action on the forthcoming subdivision and conditional use permit applications.

Comprehensive Plan. According to the City's 2008 Land Use Plan, the majority of the 219-acre subject site is guided for "Agricultural" use. Such land use designation directs a maximum density of one dwelling unit per 10 acres of land.

The Land Use Plan also directs "Rural Residential" use of the five-acre parcel located in the extreme southeast corner of the site. Such land use designation imposes a minimum 5-acre lot size requirement with a minimum of 2.5 acres of contiguous buildable area.

Zoning. Reflective of its designation within the Comprehensive Plan, the majority of land within the subject site is zoned A, Agricultural. Within A, Agricultural Districts,

conservation subdivisions (PLCD's) are allowed by conditional use permit.

As indicated, the existing 5-acre parcel located in the southeast corner of the site (14220 60th Street) is zoned RR, Rural Residential. While minimum lot area standards in the A, Agricultural District for PLCD subdivisions are the same as those imposed within the RR, Rural Residential District (5 acres), it should be recognized that the zoning of the existing RR parcel is tied to its current legal description. The submitted sketch plan calls for the reconfiguration of the RR parcel such that it includes public right-of-way as well as the conveyance of a portion of the lot to abutting Lot 20 to the north. Without a rezoning action, proposed Lots 3 and 20 would have two zoning designations (A and RR). This is typically an undesirable condition.

To ensure that all proposed lots within the subdivision are afforded the same property rights (via zoning), consideration should be given to the rezoning of the 14220 60th Street parcel from RR, Rural Residential to A, Agricultural as part of the formal application for subdivision.

While the City's Land Use Plan (map) designates the parcel in question for "Rural Residential" use, it is believed the following findings can be made in support zoning change without the need for the processing a Land Use Plan amendment.

1. The guided density of the 5-acre "area" in question is consistent with that proposed via the PLCD and no change to the existing use is proposed.
2. The 5-acre parcel is clearly part of the proposed PLDC and its land area has been used in the calculation of allowed development density.
3. PLCD's are not listed as a permitted use in the RR zoning district.
4. The parcel in question lies between lands guided "Rural Residential" and "Agricultural" uses. The original intent related to the separation of these uses would not change as a result of the rezoning.
5. The land use categories depicted on the Land Use Plan map correspond to individual parcels. The configuration of the parcel in question will change slightly as a result of the proposed subdivision. Without the zoning change, Lots 3 and 20 will hold two zoning designations and be inconsistent with the balance of the lots within the subdivision.

This issue, and specifically the need for such action and Land Use Plan impacts, should be subject to further comment and recommendation by the City Attorney.

Streets

Access. As shown on Exhibit B, access to the majority of the lots (18) within the subdivision is proposed via two cul-de-sacs which intersect 60th Street at a single

point near Trading Post Trail. The acceptability of the street intersection location should be subject to comment and recommendation by the City Engineer.

To be noted is that some concerns exist related to the proximity of the access to steep slopes in the immediate area. As a condition of subdivision approval, an assurance should be made that slopes in excess of 18 percent will not be disturbed. This issue should be subject to further comment and recommendation by the City Engineer.

Aside from the 18 lots proposed to be accessed via the 60th Street cul-de-sac, two additional lots in the extreme southwest corner of the site are proposed to be provided direct driveway access via 60th Street.

Cul-de-Sac Length. As mentioned, 18 lots within the subdivision are proposed to be accessed via two cul-de-sacs. The 60th Street roadway access technically splits into two cul-de-sacs. The longest of the two cul-de-sacs measures approximately 3,400 feet in length which significantly exceeds the maximum cul-de-sac requirement of 1,320 feet imposed in the City's Subdivision Ordinance.

While the Ordinance states that cul-de-sac lengths within PLCD subdivisions may exceed the referenced cul-de-sac length requirement (provided that the preservation of the rural character and natural resources will result), immediate feedback on the acceptability of the proposed cul-de-sac length is requested of City Officials.

In the opinion of Planning Staff, there are both pros and cons associated with the cul-de-sac as currently proposed. These are summarized below:

Pros:

1. Flexibility from the referenced cul-de sac length requirement of the Ordinance is allowed in PLCD subdivisions provided preservation of natural resources will result. Remedy to the excessive cul-de-sac length would likely be the creation of a street connection to Odell Avenue. Such street connection could have negative impacts upon natural resources in the area.
2. Numerous cul-de-sacs presently exist within the City which exceed the maximum 1,320-foot length requirement of the Subdivision Ordinance. Thus, the proposed condition does not differ from that previously allowed by the City.
3. A second access to the subdivision via Odell Avenue may introduce negative traffic impacts on residents located east of the subject site along Trading Post Trail and Odell Avenue.
4. A second access to Odell Avenue would result in increased street

construction costs and decrease the amount of “developable” land within the subdivision.

Cons:

1. The longest of the two cul-de sacs (as proposed), is nearly three times that allowed by the City’s Subdivision Ordinance. The allowance of the proposed cul-de-sac length (as part of a new development) could establish an undesirable precedent in the City.
2. A single street access to 18 of the subdivision’s 20 lots would limit emergency vehicle accessibility to the subdivision. A primary reason for the establishment of a maximum cul-de-sac length requirement is to ensure safety via emergency vehicle access.
3. The allowance of the cul-de-sac of excessive length, as proposed, may be considered inconsistent with the following transportation goal as provided in the City's Comprehensive Plan:
 - *Provide for the possible extension of all local streets in new subdivisions to avoid the need for cul-de-sacs*

Again, it suggested that City Officials provide feedback to the applicant regarding the acceptability of the proposed cul-de-sac length.

Right-of-Way Width. Consistent with City Code requirements, right-of way widths of 60 feet are illustrated for the two internal cul-de-sacs. Such right-of-way width is consistent with local street classification requirements as outlined in the Subdivision Ordinance.

To be noted however, is that a right-of-way width of 66 feet is proposed along 60th Street. While it is assumed such dedication is intended to “match” the existing right-of-way width, this issue should be subject to further comment by the City Engineer.

Construction Requirements. Details related to street construction and any necessary improvements, including but not limited to 60th Street and/or Trading Post Trail, should be subject to comment and recommendation by the City Engineer.

Development Density. A total of 20 lots are proposed upon the 218.6 acres subject site. The A, Agricultural District imposes a minimum density requirement of one dwelling unit per 10 acres of land. This requirement has been satisfied (218.6 acres / 20 units = 10.9 acres per unit).

Lots. The A, Agricultural District imposes a minimum lot size requirement of five acres.

In addition, a minimum width and depth requirement of 300 feet is imposed. All proposed lots meet minimum area, width and depth requirements of the A, Agricultural District and Shoreland Management District.

To be noted is that the applicant will be required to demonstrate that each proposed single family lot will have a buildable area of at least 2.5 acres. The Zoning Ordinance defines "buildable area" as land having a slope of 13 percent or less and having enough suitable soil for the installation of two on-site sewage treatment systems. The Ordinance also notes that "buildable area" may include required building setbacks.

In regard to the proposed lot configuration, it is important to note that the Natural Resources and Groundwater Committee has suggested that the subdivision design be modified to better preserve environmentally sensitive lands (steep slopes and the trout stream). Specifically, the Committee has recommended that the open space area be expanded to include the following areas:

- The northern one-half of Lots 13 and 14
- The western one-half of Lot 4
- The western one-third of Lot 3

The Natural Resources and Groundwater Committee has also prepared an alternative concept plan which incorporates the preceding recommendations (attached as Exhibit C). The alternative concept plan calls for the elimination of two lots within the subdivision.

The recommendations of the Natural Resources and Groundwater Committee should be taken into account as part of the forthcoming formal application for subdivision.

Jennifer Sorensen, East Metro Hydrologist for the Department of Natural Resources (DNR), has indicated the comments from the DNR will also include increased protection of the stream and the areas from which the stream is spring-fed, which include Lots 3 and 4.

Setbacks. Within the A, Agricultural District and the Shoreland Management District, the following minimum setbacks apply:

Side Yard:	50 feet
Front Yard:	105 feet (from roadway centerline)
Rear Yard:	50 feet
From OHWL of Trout Stream:	200 feet

It appears that all proposed lots illustrate an ability to meet the aforementioned setbacks (via illustrated building pads).

Use of Open Space. As part of formal subdivision processing, the intended use of the designated open space should be conveyed by the applicant. Of specific interest are

any intended recreational purposes and the future construction of facilities intended to accompany such uses.

According to the PLCD requirements of the Ordinance (Section 12-2383), buildings, structures and improvements located upon the undeveloped parcel must be designed in a manner which conserve and enhance the amenities of the parcel in regard to its topography and its unimproved condition.

Also to be noted is that Section 12-2381 of the Ordinance stipulates that construction of recreational facilities shown on the PLCD development plan must proceed at the same time as the construction of the dwelling units.

Homeowner's Association Requirements. Section 12-2382 of the Ordinance states that, if a homeowner's association is to be created, its various requirements (ownership requirements, bylaws, etc.) must be submitted as part of the PLCD for City review.

The applicant has provided a copy of proposed covenants, restrictions and conditions which would apply to property owners within the subdivision. Requirements include, but are not limited to, the following:

- Association duties
- Assessments
- Architectural controls
- Use of common properties
- Prohibited uses
- Water maintenance/management

Homeowner's association-related issues should be subject to further comment by the City Attorney.

Wetlands. According to the EAW, wetlands comprise 13 acres of the 219-acre subject site. Such wetlands lie along the trout stream and **presently** lie within the proposed conservation easements. In this regard, the proposed lot layout is not expected to impact any existing wetlands.

Wetland-related issues should be subject to further comment and recommendation by the City Engineer.

Easements. As a condition of subdivision approval, a conservation easement must be established over the designated open space. Such easement must run with the land in perpetuity to the following:

- The City of Afton
- All owners of the lots within the PLCD
- Landowners within Afton which abut the PLCD
- Minnesota Land Trust

In addition to the referenced conservation easement, easements for drainage, utilities and scenic preservation should be provided over individual lots as may be recommended by the City Engineer.

Septic Systems. As part of the forthcoming preliminary plat submission, primary and secondary septic sites must be illustrated in compliance with City specifications as provided in Section 12-413 of the Zoning Ordinance.

Permits for individual sewage treatment systems will be issued by the Washington County Department of Public Health. In this regard, review of proposed septic designs and final septic permits must be received from Washington County prior to building permit approval.

Park Dedication. According to Section 12-1270 of the Subdivision Ordinance, subdividers must dedicate to the City a reasonable portion of the land being subdivided for park purposes or in lieu thereof, a cash equivalent. The form of dedication, land or cash, (or any combination) must be decided by the City and dedicated or paid prior to City signing the final plat.

To be noted is that the Natural Resources and Groundwater Committee has recommended that the southwest corner of the subject site, south of the trout stream, be dedicated as City parkland.

Prior to preliminary plat consideration by the Planning Commission, the submitted sketch plan must be subject to review and recommendation by the City's Park Committee.

The City's 2012 Park Plan does not illustrate any future parks or trails within the subject site. With this in mind, a calculation of a possible cash contribution (as opposed to land dedication) is considered worthwhile. According to the Ordinance, a cash park dedication fee, in lieu of land dedication, shall be equivalent to 7.5 percent of the predevelopment value of the land to be subdivided, subject to a minimum fee of \$5,000 per dwelling unit and a maximum fee of \$10,000 per dwelling unit.

Preliminary Plat Data Requirements. As part of preliminary plat processing, informational requirements as provided in Section 12-1328 of the Subdivision Ordinance must be satisfied. Required information includes, but is not limited to, the following:

- Existing Conditions (site survey)
- Preliminary Plat
- Grading and Drainage Plan
- Erosion/Sediment Control Plan

Additional Comments. In addition to the comments provided above, any comments received from the following must also be considered as part of the sketch plan

evaluation and in the preparation of the preliminary plat:

- City Engineer
- City Attorney
- Natural Resources and groundwater Committee
- Park Committee
- Washington Soil and Water Conservation District
- Watershed District
- Natural gas, electric and cable communications utilities
- Fire District
- School District
- Other agencies not identified above but included on the EAW distribution list.

This material is scheduled to be discussed at the forthcoming June 5, 2017 Planning Commission meeting.

pc. Ron Moorese, City Administrator



SOUTH WASHINGTON
WATERSHED DISTRICT

May 22, 2017

VIA EMAIL

Mr. Ron Moorse
Administrator
3033 St. Croix Trail S
Afton, MN 55001

RE: Afton Creek Preserve EAW

Dear Mr. Moorse:

I am writing in regards to the Environmental Assessment Worksheet prepared for the Afton Creek Preserve project. The EAW as prepared is generally accurate and complete. Further, we would agree that there is low likelihood for adverse environmental impact resulting from the project and that further investigation through an Environmental Impact Statement is not necessary.

It is our hope that this effort serves as a model for future developments in Afton and the surrounding communities in southern Washington County. The proposed project will protect and improve not only the water quality of Trout Brook, but the surrounding terrestrial habitat as well. The City of Afton is to be commended for the development and promotion of its Preservation and Land Conservation Development ordinance. We greatly appreciate the efforts of the developer and City to protect Trout Brook by locating the easement in the areas most critical for protection of the stream. To maintain the habitat and protection benefits of the proposed easement, we strongly discourage development of any infrastructure within its currently identified boundaries.

If you have questions or need additional information please contact me at 651-714-3714 or jloomis@ci.woodbury.mn.us.

Sincerely,
South Washington Watershed District

A handwritten signature in black ink that reads 'John Loomis'. The signature is written in a cursive style with a large initial 'J'.

John Loomis
Water Resources Program Manager

Cc: Joe Bush/J.P. Bush Homes

mn DEPARTMENT OF NATURAL RESOURCES

Minnesota Department of Natural Resources
Ecological and Water Resource
1200 Warner Road
St. Paul, MN 55106

May 24, 2017

Transmitted Electronically

Ronald Moose
City Administrator
3033 St. Croix Trail S
Afton, MN 55001

Re: Afton Creek Preserve EAW

Dear Ronald Moose,

The Minnesota Department of Natural Resources (DNR) has reviewed the Environmental Assessment Worksheet (EAW) for the Afton Creek Preserve residential development located in Afton, MN. We offer the following comments for your consideration.

Land Use - Page 6 (Question 9.b.):

- The current placement of the access road into the development is located at the southeast corner of the property, which avoids the need to construct a crossing over Trout Brook. If the road into the development were located elsewhere along 60th Street South, construction of a road crossing over Trout Brook would be required, potentially impacting the stream itself and associated adjacent wetland areas, including areas where groundwater recharges the stream. Groundwater is an important source of cold water to streams like Trout Brook that support coldwater fish species (i.e. trout).
- Provide a narrative to justify the statement made that this development is in concert with Afton's comprehensive plan and growth plan.

Water Resources - Page 8 (Question 11.a.ii.):

- In this section, note whether the woodland area located adjacent to Trout Brook in the open space conservation easement and Lots 3 and 4 was examined for springs and if any springs were identified. Include a narrative in this section describing the potential for increased groundwater flow at this location due to topography and proximity to the water table. Wood land areas like this, with steeper topography draining toward a stream, may have springs where groundwater is coming to the surface. Even if there is not surface water in the form of springs, the likelihood is high that this area has shallow groundwater that is migrating toward Trout Brook and which provides groundwater recharge to the stream.
- In agricultural areas that have been farmed for 160 years, old wells are often found that no one knew existed. If any unknown wells are found on site, these must be sealed in accordance with the regulations of the Minnesota Department of Health.

Water Resources – Page 8 (Question 11.b.ii.)

- Show on a map where the vegetative buffer strips will be located on Lots 1 – 10 and Lots 16 – 17.

Water Resources – Page 9 (Question 11.b.iii.)

- Please note that any dewatering of volumes that exceed 10,000 gallons per day, or one million gallons per year need to be approved by a DNR Water Appropriation Permit. This includes dewatering for grading, installing footings for structures, and to install pipes for sanitary systems. The use of more than 10,000 gallons of water per day for watering trees, grass, and landscaping using watering trucks needs approval under a DNR Water Appropriation Permit as well. A Water Appropriation Permit may be applied for online using the following website: <http://www.dnr.state.mn.us/mpars/>
- Lot sizes in this development are approximately 5 acres. During drought, the irrigation of 1.5 acres of landscaping will use more than 1 million gallons of water per year. The new homes should be designed to minimize irrigated landscaping to avoid the need to obtain a DNR Water Appropriation Permit.

Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features) – Page 13 (Question 13.c.):

- Provide a more detailed explanation of how the buffer plan will assist with onsite erosion and sedimentation created by development. Describe how the buffer will enhance wildlife habitat. Explain what types of invasive species management will be done on disturbed areas and what plant communities will be located in these disturbed areas post-development. Explain what specific habitat enhancement will be done to protect state listed species during construction.

Figure 3 – Site Sketch - Page 21:

- The shoreland district boundary shown on the concept plan should be 300 feet wide on both sides of Trout Brook (the width of shoreland districts for rivers and streams), not 1,000 feet wide.
- The conservancy overlay boundary, which designates sensitive areas within Afton, is shown as approximate. Adjust this boundary to reflect the terrain and resources on this specific site.
- There are sensitive areas covering much of Lots 3 and 4 (wooded areas and steep slopes). This woodland area is directly adjacent to Trout Brook and likely contains springs that supply cold groundwater to the stream. DNR recommends inclusion of these sensitive areas into the open space conservation easement to protect this habitat and source of groundwater to the stream.

Appendix B – Lot Buffer Plan

- The buffer plan is not complete and needs to include a narrative and maps that explain the details of the plan. Why are individual landowners responsible for planting buffers rather than the developer? Wouldn't it make more sense to get the buffers established early rather than at an unknown point in the future when lots are sold? How will the buffers be monitored over time to ensure that they become established? Will there be a buffer easement that keeps the buffers in place long-term and prevents encroachment into the buffer areas?

Thank you for the consideration of our comments.

Sincerely,

/s/ Rebecca Horton

CC: Jen Sorenson, Area Hydrologist

Joe Richter, Appropriations Hydrologist

EXHIBIT "G"

AFTON CREEK PRESERVE
HOMEOWNERS ASSOCIATION DRAFT AND
RESTRICTIVE COVENANTS
AUGUST 10 2017

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**DECLARATION OF COVENANTS,
CONDITIONS AND RESTRICTIONS**

AFTON CREEK PRESERVE

THIS DECLARATION, made this 8th day of May 2017 by (Developer) Custom Homes by JP Bush and (Declarant) Will Carlson as holders of the encumbrance recited in the consent and joinders attached hereto.

WITNESSETH:

WHEREAS, Declarant is the owner of the real property described in Article II of the Declaration; and

WHEREAS, Declarant desires to provide for the preservation of the values and amenities in the community and for the maintenance of the private open spaces and to this end desires to subject the real property described in Article II, Section 1 to the

easements, restrictions, covenants, conditions, charges and liens set forth in this Declaration, each and all of which is and are for the benefit of the property and each owner thereof; and

WHEREAS, Declarant has deemed it desirable for the efficient preservation of the values and amenities in the community to create an agency to which should be delegated and assigned the power of maintaining the open spaces, administering and enforcing the covenants and restrictions contained in this Declaration and collection and disbursing the assessments and charges created by this Declaration.

WHEREAS, Declarant will incorporate, under the laws of the State of Minnesota, as a non-profit corporation, Afton Creek Preserve Homeowners Association for exercising these functions;

NOW, THEREFORE, Declarant declares that the real property described in Article II Section 1 hereof is, and shall be, held, transferred, sold, conveyed and occupied subject to the following covenants, conditions, restrictions, easements, charges and liens (sometimes referred to as “covenants and restrictions”), which covenants and restrictions shall run with the real property and be binding on all parties having any right, title or interest in the hereinafter described properties or any part thereof, their heirs, successors and assigns, and shall inure to the benefit of each owner thereof.

ARTICLE 1 DEFINITIONS

The following words, when used in this Declaration (unless the context shall prohibit) shall have the following meanings:

(a) CONDITIONAL USE PERMIT SEC. 12-78

A. Purpose. The purpose of a conditional use permit is to provide the City of Afton with a reasonable degree of discretion in determining the suitability of certain designated uses upon the general welfare, public health and safety. In making this determination, whether or not the conditional use is to be allowed, the City may consider the nature of the adjoining land or buildings, the effect upon traffic into and from the

premises or on any adjoining roads, and all other factors the City shall deem a prerequisite of consideration in determining the effect of the general welfare, public health and safety. Conditional Use permits may be granted in accordance with this subdivision for any use or purpose listed as a conditional use for the zoning districts per Section 12-134 of the Zoning Ordinance.

- (b) **PLCD:** A PLCD is a tract of land that is developed as a unit under single or unified ownership or controls. A Preservation and Land Conservation Development may be allowed in the AG zoning district to preserve prime agricultural land, woodland, wildlife habitat, vistas, groundwater recharge areas, areas with sensitive soils or geological limitations and areas identified in the Comprehensive Plan.
- (c) **Minnesota Land Trust:** The Minnesota Land Trust is a member-supported, nonprofit conservation organization protecting natural and scenic land in Minnesota. *Established in 1993* working with landowners and local communities to protect shoreline on lakes, rivers, streams and wetlands.
- (d) **PLCD Land Dedication:** The land owner will grant a Conservation Easement which shall run with the land in perpetuity to the City of Afton, Homeowners Association, and the Minnesota Land Trust which restricts the lots and parcels, as well as the development rights on the undeveloped parcel, within the PLCD to the number of dwelling units approved for the PLCD and the land cover and use approved by the City of Afton as a part of the PLCD **ARTICLE XII. LAND USE SECTION OF THE CITY CODE**. In Addition: All land shown on the final development plan as an undeveloped parcel must be conveyed to a homeowners association for the maintenance of the planned development. The undeveloped parcel must be conveyed to the homeowners association to be approved by the City Council which restrict the undeveloped parcel to the uses specified on the final development plan and which provide for the maintenance of the undeveloped parcel in a manner which assures it continuing use for its intended purpose.

- (e) **Scenic Easements:** A part of the land being developed that has sensitive slopes, soils, and unique features is allowed to have a protection layer called a Scenic easement. For the purposes of this PLCD application and plan the Scenic Easements are indicated on the site plan and cover mostly the North Boundary of lots 9-15 and a part of lot 2 and 3 in the location of the restoration project by South Washington Watershed and Prairie restoration in 2015.
- (f) **Association:** Afton Creek Preserve Homeowners Association, a Minnesota non-Profit Corporation.
- (g) **Declarant:** Albert Wilmer Carlson, its successors and assigns, if such successor or assign shall acquire more than one Lot from the Declarant for the purpose of development. Notwithstanding the foregoing, no individual or entity acquiring a Lot from the Declarant shall become the Declarant solely by such acquisition, but only because of specific assignment of Declarant rights, which assignment shall be effective unless incorporated in the instrument of conveyance.
- (h) **Mortgagee:** any entity or person named as mortgagee in any mortgage deed Granting a lien (“Mortgage”) on any Lot.
- (i) **Afton Creek Preserve or the Property:** the property subject to this Declaration, and any additions subject to this Declaration or any Supplementary Declaration, pursuant to Article II.
- (j) **Living Unit:** a residential housing unit consisting of a group of rooms and Hallways and attached garage, which are designed and intended for use as Quarters for one family and located on a lot.
- (k) **Lot:** any Lot contained on a recorded plat of Afton Creek Preserve.
- (l) **Member:** each Owner entitled to membership in the Association pursuant to the provisions of Article III.
- (m) **Owner:** the record Owner or contract vendee of the fee simple title to any Lot, but excluding contract vendors, mortgagees or any others having such interest merely as security for the performance of an obligation.
- (n) **Developer:** a person or entity designated by the Declarant to supervise and manage the initial development and approval of Afton creek Preserve.
- (o) **Common Property:** Property owned by the Association.
Natural Planting Areas: Planting areas of natural and ornamental grasses, Wildflowers and groves of trees and shrubs that must cover 50% or more Of each lot and the areas shown on the site plan known as the Minnesota Land Trust Conservation, excluding the buildings and hard surface areas such as patios In addition, driveways. Areas that adjoin designated wetlands or natural drainage Swales shall be a low maintenance filter strip of grasses or vegetation In addition, ground covers mulches.

- (p) **Limited Common Areas:** Those areas of the public right-of-way and Individual lots that have landscaping or pathway easements that are Designed to benefit the owner and the Association.

ARTICLE II PROPERTY SUBJECT TO THIS DECLARATION

Section 1. **The plat Afton Creek Preserve.**

The real estate subject to this Declaration is Located in Washington County, Minnesota and is described on the attached Exhibit A,

ARTICLE III MEMBERSHIP AND VOTING RIGHTS IN THE ASSOCIATION

Section 1. **Membership.** Each Owner of a Lot is a Member of the Association. Membership shall be appurtenant to and may not be Separated from ownership.

Section 2. **Voting Rights.** The Association shall have two (2) classes of Voting membership:

Class A. Class A Members shall be all Owners of one or more Lots, except Declarant. When more than one person or entity shares ownership of a Lot, the vote shall be exercised as they determine among themselves.

Class B. The Class B Member shall be the Declarant. The Class B Member shall be entitled to three (3) votes for each Lot owned by it.

The Class B membership shall cease and be converted to Class A membership when the Declarant conveys fee title to the last of the Lots in Afton Creek Preserve which the Declarant currently owns.

Section 3. **Suspension of Voting Rights.** The right of any Member to vote shall be Suspended during any period in which such Member shall be delinquent in the Payment of any assessment levied by the Association. Such rights may also be Suspended, after notice and hearing, for a period not to exceed sixty (60) days For any infraction of any rules or regulations published by the Association.

ARTICLE IV DUTIES OF ASSOCIATION

Section 1. General Requirments for PLCD

All land shown on the final development plan as an undeveloped parcel must be conveyed to a homeowners association for the maintenance of the planned development. The undeveloped parcel must be conveyed to the Homeowners association subject to covenants to be approved by the City Council which restrict the undeveloped parcel to the uses specified on the final development plan and which provide for the maintenance of the undeveloped parcel in a manner which assures it continuing use for its intended purpose.

Section 2. Landscaping and seeding of conservation and development.

The Declarant shall initially install immediately as weather and road construction permits Landscaping and Prairie grass seeding and the Association shall maintain such landscaping

On public areas and open space (conservation areas) consisting of street islands, entrance monuments, and parts Of boulevards, and lots until such time as either lots are sold or Association takes control.

Section 3. **Collection of Garbage.** Should City of Afton not provide garbage Collection services to the Owners, the Association shall be empowered to Contract with private vendors for the collection of garbage in Afton creek Preserve.

Section 4. Enforcement of Covenants and Restrictions; Architectural Control.

The Association shall be responsible for the enforcement of the covenants and Restrictions contained in this Declaration, and of the architectural controls.

Section 5. **Common Property.** The Association, subject to the rights of the Owners set forth in this Declaration, shall be responsible for the exclusive Management and control of the Common Property, if any, and all improvements Thereon (including furnishings and equipment related thereto) and shall keep the Same in good, clean, attractive and sanitary condition order and repair.

ARTICLE V ASSESSMENTS

Section 1. **Creation of Assessments.** The Declarant, for each Lot owned by it hereby covenants, and each Owner of any Lot, by acceptance of a deed for a Lot, whether or not it shall be so expressed in the deed or any conveyance, is deemed to agree to pay to the Association: (a) annual assessments, and (b) any Individual Lot Maintenance Assessments levied against the Owner's Lot pursuant to the provisions of this Declaration.

Section 2. **Purpose of Annual Assessments.** The annual assessments shall be levied for paying the costs associated with the duties of the Association as set forth in Article IV hereof, together with the incidental costs of operating the Association.

Section 3. **Levy of Annual Assessments.** The annual assessment must be fixed at a uniform rate for each Lot. The annual assessment shall be due and payable each May 1, beginning on May 1, 2018. The annual assessment for each lot due May 1, 2018 shall not exceed \$xxx.xx plus the actual cost of garbage removal service. For the following years, the annual assessment shall be levied by the Association, based upon a proposed budget. The annual assessment may be increased, without a vote of the Membership, by not more than \$xx.xx per Lot, per year; provided that the costs of garbage removal service shall always be in addition to such increases. In order to increase the annual assessment more than the maximum amount established in this Section, a vote of 67% of the votes of each class of membership cast by the members present, in person or by proxy at a meeting of the Association called for that purpose shall be necessary. The Board of Directors of the Association shall fix the amount of the annual assessment in an amount not in excess of the maximum. The annual assessment for each year shall be fixed, and written notice provided to each Owner at least thirty (30) days prior to May 1 of the year in which the assessment is due. Failure to provide such notice, however, shall not render the assessment invalid.

Section 4. **Individual Lot Maintenance Assessments.** In the event that any Owner violates any covenant or fails to perform any condition contained in this Declaration, the Association may perform the act, remove the defect or correct the violation upon thirty (30) days written notice to the Owner, and, as appropriate, pursuant to the procedures contained in Article VI. If the Association so acts on behalf of an Owner, the Association may levy an assessment (hereinafter, "Individual Lot Maintenance Assessment") against the Lot for the cost of the performance or correction

Section 5. **Special Assessments for Capital Improvements.** In addition to the Annual Assessments authorized above, the Association may levy, in any assessment year, a special assessment applicable to that year only for the purpose of defraying, in whole or in part, the cost of any construction, repair or replacement of any capital improvement upon the Common Property, including fixtures and personal property related thereto, provided that each such assessment shall have the assent of Members holding two-thirds (2/3) of the votes in each class of voting membership who are voting in person or by proxy at a meeting duly called for this purpose.

Section 6. **Effect of Nonpayment of Assessment; Remedies of Association.** The annual assessments and Individual Lot Maintenance Assessments shall be fixed as provided in this Declaration. If any such assessment is not paid when due, it shall become delinquent and shall, together with interest at a rate of eight percent 8% per annum, any cost of collection and any attorney's fees, become a continuing lien on the Lot and shall also be the personal obligation of the Owner of the Lot at the time the assessment is made. The lien may be enforced and foreclosed by action in the same manner in which mortgages may be foreclosed in Minnesota. Each Owner, by acceptance of a deed for any Lot, shall be deemed to give full and complete power of sale to the Association and to consent to a foreclosure of the lien by advertisement. The Association may elect to bring an action at law against the Owner personally obligated to pay the assessment.

Section 7. **Subordination of Lien to First Mortgages.** The lien of assessments provided for herein shall be subordinate to the lien of any first Mortgage, and the sale or transfer of any Lot shall not affect the assessment lien. However, the sale or transfer of any Lot pursuant to the foreclosure of a First Mortgage, or pursuant to any other proceeding or arrangement in lieu of such foreclosure, shall extinguish the lien of such assessments as to installments which became due prior to the effective date of such sale, transfer or acquisition by the Mortgagee to the end that no assessment liability shall accrue to an acquiring Mortgagee except with respect to installments of assessments becoming due after possession has passed to such acquiring Mortgagee, whether such possession has passed at the termination of any period of redemption or otherwise. In the event of the extinguishment of such assessment lien as aforesaid, the entire amount of such unpaid assessment shall be reallocated and assessed against, and payable by the Owners of all other Lots exclusive of such mortgaged Lot. No such sale, transfer or acquisition of possession shall relieve an Owner or a Lot from liability for any assessments thereafter becoming due or from the lien thereof, or shall relieve the person personally obligated to pay the assessments, which were levied prior to the transfer of such property from the personal obligation to pay the same.

Section 8. **Exempt Property.** The following property subject to this Declaration shall be exempted from the assessments, charges and liens created herein:

- (a) All properties to the extent of any easement or other interest therein dedicated to and accepted by the local public authority and devoted to public use;
- (b) All properties exempted from taxation by the laws of the State of Minnesota upon the terms and to the extent of such legal exemption; and
- (c) All Common Property.

Notwithstanding any provision herein, no land or improvements devoted to Dwelling use shall be exempt from said assessments, charges or liens.

ARTICLE VI ARCHITECTURAL CONTROL

Section 1. **Architectural Control Committee.** There shall be established an Architectural Control Committee (ACC) consisting of three persons. The members of the ACC shall be appointed by Declarant until Declarant no longer owns any lots or until December 31, xxxx, whichever is sooner. For purposes of this section, "Lots" shall include any property annexed by Declarant pursuant to annexed by Declarant pursuant to Article II. After the termination of Declarant's right to appoint the ACC members, members shall be appointed and serve at the pleasure of the Board of Directors of the Association.

Section 2. **Original Construction.** A site plan, landscaping plan and plans and specifications for the construction of a Living Unit on any Lot shall be submitted to the ACC for its written approval before any construction activity is begun.

Section 3. **Review of Modifications.** After the completion of the original Living Unit on a Lot, the construction or modification of any building or structure, including fences and mailboxes or the retaining walls or monuments constructed by the Declarant, shall require prior written approval by the ACC of the plans and specifications for the construction, in accordance with the standards set forth in Section 4 hereof.

Section 4. **Standard of Review.** The ACC may promulgate detailed standards and procedures governing its areas of responsibility and practice. In addition, the following shall apply: the plans and specifications shall be reviewed as to the quality of workmanship, design and harmony of external design with existing structures, topography, and finish grade elevation. No permission or approval shall be required to repaint in accordance with an originally approved color scheme, or to rebuild in accordance with originally approved plans and specifications. Nothing contained herein shall be construed to limit the right of an Owner to remodel the interior of the owners' residence or to paint the interior of the owners' residence any color desired.

Section 5. **Procedure.** If the ACC fails to approve or disapprove plans and specifications within thirty (30) days after the submission of the same to it, approval will be deemed to have been granted. In the event of disapproval by the ACC, the requesting Owner may give written notice that the Owner wishes to appeal the ACC decision and request a hearing by the Association's Board of Directors. Such notice must be furnished to the ACC within ten (10) days of its decision. The hearing shall be at a special meeting of the Board of Directors to be held within thirty (30) days of the receipt of the Owner's notice of appeal.

Section 6. **Removal and Abatement.** The ACC or the Association shall have the right to order an Owner to remove or alter any structure on any Lot erected in violation of the terms of this Declaration, and to employ appropriate judicial proceedings to compel the alteration or demolition of any non-conforming construction or other violation. Any cost incurred by the ACC shall be levied as an Individual Lot Maintenance Assessment as provided in Article V.

Section 7. **Variances.** Reasonable variances to the covenants, conditions and restrictions may be granted by the ACC after review, in order to overcome practical difficulties or to prevent unnecessary hardship. A variance may only be granted if it is not detrimental to other property and shall not defeat the purpose of this Declaration.

ARTICLE VII

RESERVED RIGHTS OF DECLARANT IN THE COMMON PROPERTY

Declarant shall have the following rights in the Common Property:

- (a) To be determined in land agreements with Minnesota land trust and The Minnesota DNR.

ARTICLE VII

PROPERTY RIGHTS IN THE COMMON PROPERTIES

Section 1. **Easements.** Subject to the provisions of Section 2 hereof, there shall exist the following easements in favor of each Owner and appurtenant to such Owners' Lots or Outlots across and upon the Common Property:

- (a) Non-exclusive easements to construct, install, repair and replace sanitary and storm sewer, water, gas, electric, telephone, cable television and other utility lines serving such Lot or Outlot in the location the same shall be initially constructed or installed by the Declarant, or such other location as may be approved by the Board of Directors of the Association;
- (b) A non-exclusive easement for the use and enjoyment of the Common Property developed for open-space or recreational purposes;
- (c) A non-exclusive easement over the Limited Common Properties;
- (d) A non-exclusive easement for pathway and/or landscaping purposes over part of Lots described in Exhibit B.

Section 2. **Extent of Members' Easements.** The rights and easements created Hereby and the title of the Association to the Common Property shall be subject to the following, and as further provided herein:

- (a) The right of the Association, in accordance with its Articles and Bylaws, to borrow money for the purpose of improving the Common Property, and in aid thereof to mortgage said Common Property; however, the rights of such mortgagee in the Common Property shall be subordinate to the rights of the Members hereunder;
- (b) The right of the Association to take such steps as are reasonable necessary to protect the Common Property against foreclosure;
- (c) The right of the Association, as provided in its Articles and Bylaws, to suspend the voting and enjoyment rights of any Member for any period during which any assessment remains unpaid, as provided in the Association's Bylaws;
- (d) The right of the Declarant to make use of such portions of the Common Property as may be necessary and incidental to the construction of any incidental improvements upon the property and such other rights as are contained in Article IV hereof;

(e) The rights of the Association to dedicate or transfer all or any part of the Common Property to any public agency, authority or utility such purposes and subject to such conditions as may be agreed to by the Members, provided that no such dedication or transfer, determination as to the purposes or as to the conditions thereof shall be effective unless an instrument signed by Members entitled to cast two thirds (2/3) of the votes of each class of membership has been recorded agreeing to such dedication, transfer, purpose or condition, and unless written notice of the proposed agreement and action thereunder is sent to every Member at least ninety (90) days in advance of any action taken. The consent requirements of Articles XII, Section 3, if applicable, must also be satisfied to effect a valid dedication

Nothing herein contained shall be construed as a dedication of any part of the Common Property to the public or to public use.

Section 3. **Title to Common Property.** Declarant shall convey legal title to the Common Property, if any, to the Association prior to December 31, xxxx.

Section 4. **Taxes and Special Assessments on Common Property.** Taxes and special assessments that would normally be levied against the Common Property shall be divided and levied in equal amounts against the Lots or Outlots or as the governmental taxing authorities shall determine, which levies shall be a lien against such individual Lots and Outlots.

Section 5. **Delegation of Rights.** Any Owner may delegate the Owners right and easement of enjoyment in and to the Common Property to the members of the Owners family, guests or to tenants who reside on the Lot.

ARTICLE IX INSURANCE

Section 1. **Liability Insurance; Fidelity Bonds.** The Board of Directors of the Association, or its duly authorized agent, shall obtain a broad form of public liability insurance covering all of the Common Property insuring the Association, with such limits of liability as the Association shall determine to be necessary. Such insurance policy shall contain a “severability of interest” clause, which shall preclude the insurer from denying the claim of an owner because of the negligence of the Association or other Owner. Any policy or bond contained hereunder shall provide that it may not be canceled or substantially modified (including cancellation for nonpayment of premium) without at least thirty (30) days’ prior written notice to First Mortgagees.

Section 2. **Casualty Insurance on Insurable Common Property.** The Association shall keep all insurable improvements and fixtures on the Common Property insured against loss or damage by fire for the full insurance replacement cost thereof, and may obtain insurance against such other hazards and casualties, as the Association may deem desirable. The Association may also insure any other property whether real or personal, owed by the Association, against loss or damage by fire and such other hazards as the Association may deem desirable, with the Association as the owner and beneficiary of such insurance. The insurance coverage with respect to the Common Property shall be written in the name of, and the proceeds thereof shall be payable to, the Association for the repair or replacement of property for which the insurance was carried. Premiums for all insurance carried by the Association are common expense included in the annual assessments.

Section 3. **Replacement or Repairs of Common Property.** In the event of damage to or destruction of any part of the Common Property, the Association shall repair or replace the same from the insurance proceeds available. If such insurance proceeds are insufficient to cover the cost or repair or replacement of the property damaged or destroyed, the Association may make a reconstruction assessment against all Owners to cover the additional cost of repair or replacement not covered by the insurance proceeds, in addition to any other assessments made against such Owners. Mortgagees shall receive notice from the Association to n the event of any damage or destruction to the Common Property in excess of \$xxxx. Any reconstruction assessed hereunder shall be adopted in accordance with the procedures set forth in Article V of this Declaration with respect to annual assessments and special assessments, as therein provided, and the lien of any reconstruction assessment levied hereunder shall be subordinate to the lien of any Mortgage, in the same manner and to the same extent as the subordination of annual assessments and special assessments, as provided in Article V, of this Declaration.

Section 4. **Annual Review of Policies.** All insurance policies shall be reviewed at least annually by the Board of Directors in order to ascertain whether the coverage contained in the policies is sufficient to make any necessary repairs or replacements of the Common Property, which may have been damaged or destroyed.

ARTICLE X PROHIBITED USES

Section 1. **Use.** No Lot shall be used except for residential purposes; no Living Unit shall be erected, altered, placed or permitted to remain on any Lot other than one single family dwelling, not to exceed two (2) stories in height, and an attached garage for at least two (2) cars and on-site parking spaces to accommodate at least two (2) cars. No garages shall be erected on any site except attached garages and no attached garage for more than three (3) cars shall be permitted without the express written approval of the Architectural Control Committee. Provided, however, that these provisions do not apply to the existing residences and garages on Lot 3 and lot 20. Detached Garages and out buildings may be considered in this declaration at a later date.

Section 2. **Subdivision.** No Lot shall be subdivided or split by any means whatsoever into any greater number of residential Lots, nor into any residential plots of smaller size without the express written consent of Afton City.

Section 3. **Standards.** All uses of the Lots shall, as a minimum, comply with the zoning and other applicable ordinances and regulations of Afton. The standards herein contained shall be considered as requirements in addition to said zoning and other applicable ordinances and regulations.

Section 4. **Minimum Square Footage and Set Back Provisions.** The Architectural Control Committee shall have the right to restrict setbacks.

Section 5. **Signage.** No sign shall be placed on any Lot or within the Property without the express written consent of the Architectural Control Committee, except that one “for sale” sign may be placed on a Lot by an Owner of the Developer without Committee approval.

Section 6. **Pets and Animals.** TBD

Section 7. **Home Occupation.** No profession or home industry shall be conducted in any Living Unit or on any Lot without the specific written approval of the Declarant as herein before defined or by the Architectural Control Committee thereafter. The Declarant of the Committee, whichever has authority at the time in question, in its discretion, upon consideration of the circumstances in each case, and particularly the effect on surrounding property, may permit a Lot to be used in whole or in part for the conduct of a profession or home industry. No such profession or home industry shall be permitted, however, unless it is considered by the Declarant or by the Architectural Control Committee, whichever then has authority, to be compatible with the residential neighborhood. Home occupations are permitted within the home that does not create a nuisance or excessive vehicular traffic within the neighborhood.

Section 8. **Nuisances.** No clothesline or drying yards or pet control lines shall be permitted unless concealed by hedges or screening acceptable to the Committee. No weeds or other unsightly growths shall be permitted to grow or remain upon the premises. No refuse pile or unsightly objects shall be allowed to be placed or suffered to remain anywhere thereon. In the event that an Owner of any Lot shall fail or refuse to keep such premises free from weeds, or refuse piles or other unsightly objects, then the Declarant or the Association may enter upon such lands and remove the same at the expense of the Owner and such entry shall not be deemed as trespass and in the event of such a removal, a lien shall arise and be created in favor of the Association and against such Lot for the full amount chargeable to such Lot and such amount shall be due and payable within thirty days after the Owner is billed therefor. No Lot shall be used in whole or in part for the storage of rubbish of any character whatsoever, nor for the storage of any property of thing that will cause such Lot to appear in an unclean or untidy condition or that will be obnoxious to the eye; nor shall any substance, thing, or material be kept upon any Lot that will emit foul or obnoxious odors, or that will cause any noise that will or might disturb the peace, quiet, comfort, or serenity of the occupants of surrounding property. The outside storage of an unlicensed motor vehicle upon the premises shall also be considered a nuisance.

Section 10. **Leasing.** Any lease between an Owner and non-Owner occupant shall be in writing and shall provide that the terms of the lease shall be subject in all respects to the provisions of this Declaration, the Articles of Incorporation and By-Laws of the Association, and shall provide that any failure by the Non-Owner occupant to comply

with the terms of such documents shall be default under the lease. Other than the forgoing, there shall be no restrictions on the use of a Living Unit by a non-Owner occupant.

Section 11. **Fences, Walls and Hedges.** Boundary walls and fences are inconsistent with the intended plan of development for the Property. No wall or fence shall be constructed or hedge planted on any Lot until the height, type, design, and location have been approved in writing by the Committee. Under no circumstances shall a boundary wall, fence or hedge be permitted with a height of more than six (6) feet. The height or elevation of any wall, fence or hedge shall be measured from the existing elevations on the property at or along the applicable point or lines. Any question as to such heights may be completely determined by the Committee. The height limitations as set forth in this paragraph shall not be applicable to tennis courts enclosures provided such enclosures have been approved by the Committee. A refusal by the Committee to allow or permit a fence, wall or hedge (including tennis court enclosures and swimming pool fences) on any particular Lot or in any particular location shall not be construed to be an abuse of discretion.

Section 12. **Storage Tanks.** No permanent storage tanks of any kind shall be erected, placed or permitted on any Lot unless buried or effectively screened from view outside the Lot.

Section 13. **Temporary Structures.** No structure of temporary character, trailer, basement, tent, shack, garage, barn or other building shall be used on any Lot at any time as a residence, either temporarily or permanently.

Section 14. **Auxiliary Structures.** No detached dog kennels, runs or enclosures shall be permitted unless design and location of it shall be approved by the Architectural Control Committee. No detached storage buildings shall be permitted except those approved by the Architectural Control Committee as conforming in design and appearance to the dwelling, and which are located in the proximity of the dwelling or garage.

Section 15. **Driveways.** Driveways must be constructed of concrete, bituminous or other hard surface material. Material and installation shall be subject to approval of the Architectural Control Committee. Driveways must be installed within one year of the date of a Certificate of Occupancy issued for any dwelling constructed upon a Lot.

Section 16. **Exterior Lighting.** All exterior lighting fixtures and standards shall be shown on submitted plans and shall comply with the overall lighting plan of the Declarant. All forms of exterior lighting shall be subject to approval of the Committee.

Section 17. **Exterior Ornaments.** Exterior ornaments including but not limited to precast concrete, plastic or wood figurines, wishing wells and windmills shall be prohibited unless approved by the Committee prior to installation or construction.

Section 18. **Antennas.** Except with the prior written approval and authorization of the Committee, no satellite dishes over 24” in diameter, no exterior television or radio antenna of any sort shall be placed, allowed or maintained upon any portion of a Lot or the improvements or structures located thereon.

Section 19. **Completion of Construction of Improvements.** All construction work shall, upon approval of plans by the Committee, be carried on with dispatch; all improvements shall be constructed in conformity with the then existing building codes of Afton Minnesota; and all building plans shall be prepared by or under supervision of a registered architect, a builder or qualified design professional. If any structure is begun after approval of the plans provided in Article VI and is not completed within one year after the commencement of said construction, and in the judgment of the Developer of the Architectural Control Committee, it is offensive or unsightly in appearance, the Developer or the Committee, may take such steps as may be necessary to make the Property harmonious with other properties, such steps including completion of the exterior of the structure, screening or covering the structure or any combination thereof, or similar operations. The amount of any expenditure made in so doing shall be the personal, joint and several obligations of the Owner or Owners, shall be a lien on the Lot, and may be foreclosed in the same manner as proved in Article V. The lien herein shall not be valid as against a subsequent bona fide purchaser of the Lot in question unless a statement setting forth the claim had been filed for record in the office of the County

\Recorder and/or Registrar of Titles of Washington County, whichever is appropriate, or unless a suit and appropriate Lis Pendens to foreclose the lien shall have been filed of record in the office of the County Recorder and/or Registrar of Titles of Washington County prior to the recordation of the Deed conveying the Lot in question to said purchaser.

ARTICLE XI OWNER'S DUTIES

Section 1. **Minimum landscape plan.** Each owner is required to submit a landscape plan for approval. Owners shall be charges with the maintenance or enhancement of natural plantings. In addition, all lots must be sodded, seeded, mulched, or retained as natural areas within 90 days after substantial completion of the living unit, except those living units completed from November to March of each year shall have until the following June to complete the minimum landscape plan. Should an Owner fail to respect these duties, the Association reserves the right to seed, sod or plant an area and levy an Individual Lot Maintenance Assessment against such Lot for the costs incurred by the Association.

Section 2. **Mailboxes.** Each Owner shall maintain a mailbox of the design and type initially installed by the Declarant or as on file with the Association. The mailboxes shall be on public right-of-way, and may be located in groups of two (2) or more. The Association reserves the right to levy an Individual Lot Maintenance Assessment against a Lot, pursuant to the provisions of Section 4, Article V hereof, should an Owner fail to maintain the mailbox.

Section 3. **Maintenance and Repair.** In order to preserve the uniform and high-standard appearance of the Property, each Owner undertakes responsibility for maintenance and repair of the exterior of his Living Unit, private yard area and private driveway on the Lot. Such responsibility for maintaining the Lot and improvements thereon shall include, but not be limited to the following: the maintenance and repair of exterior surfaces of all buildings on the Lot, including without limitation, the painting of the same as often as necessary, the replacement of trim and caulking, the maintenance or repair of roofs, gutters, downspouts and overhangs, the maintenance and repair of exterior windows and doors, necessary painting, staining and repair of patio structures; in maintain Private Yard Areas and private driveways an Owner shall be required to mow,

trim, water or otherwise care for grass, trees or other plants located on a Lot and shall be required to remove snow from the private driveways, parking areas and walkways to the Living Unit. Maintenance, painting and construction shall be in the original colors and materials, or according to approved color boards on file with the Association. Other colors and materials may be approved by the Architectural Control Committee.

ARTICLE XII GENERAL PROVISIONS

Section 1. **Association Easement.** The Association shall have an easement to enter upon any Lot in order to perform any obligations or duties of the Association hereunder, or to exercise any right or remedy of the Association hereunder.

Section 2. **Duration of Declaration of Covenants, Restrictions and Easements.** The covenants, restrictions, and easements of this Declaration shall run with and bind the land and shall inure to the benefit of and be enforceable by the Association or the Owner of any Lot subject to this Declaration, or their respective legal representatives, heirs, successors and assigns. The easements set forth herein shall be perpetual. The covenants and restrictions herein set forth shall have a term of twenty (20) years from the date this Declaration is recorded, after which time, said covenants and restrictions shall be automatically renewed for successive periods of ten (10) years. The covenants and restrictions of this Declaration may be amended during the first twenty (20) year period by an instrument signed by not less than seventy-five percent (75%) of the Owners and thereafter by an instrument signed by not less than sixty-seven percent (67%) of the Owners. Any amendment must be properly recorded.

Section 3. **Enforcement.** In the event, any Owner fails to comply with the provisions of this Declaration, or the Bylaws or Articles of Incorporation of the Association or with decisions of the Association which are made pursuant thereto, such failure will give rise to a cause of action on the part of the Association, or any aggrieved Owner for the recovery of damages or for injunctive relief, or both. Owners shall have a similar right of action against the Association. Enforcement of these covenants and restrictions may be by any proceeding at law in equity.

Section 4. **Severability.** Invalidation of any one of these covenants or restrictions by judgment or court order shall in no wise affect any other provision, which shall remain in full force and effect.

Section 5. **Rules and Regulations.** The Board of Directors of the Association may, from time to time, adopt such rules and regulations as the Board, in its sole discretion, deems appropriate or necessary, including, without limiting the generality of the foregoing, additional rules and regulations concerning the use of parking areas, maintenance of the Common Areas, reservation policies for the tennis courts and additional rules and regulations concerning the appearance of each Lot and utilization of ponding areas. Furthermore, the Association will adopt stocking, catch, and release Policies for any fishing allowed by DNR on the Trout Brook. To help insure the continuing water quality of the Trout brook, the Association will adopt rules and regulations limiting the use of chemical fertilizers.

Section 6. **Rights of Declarant.** Until the last Lot is sold and conveyed to an Owner other than a Declarant, the following activities by Declarant or with the written consent of Declarant will not be deemed violations of restrictions contained in this Declaration:

- (a) The use of a Lot or Lots for model and sales office purposes;
- (b) The storage of a construction trailer, equipment, materials and earth during the construction of new Living Units;
- (c) The display of signs advertising the Property, or new Living Units and the maintenance of temporary fencing, walkways, landscaping and berming in the vicinity of model and sales units.

ARTICLE XII RIGHTS OF MORTGAGEES

Section 1. **Mortgagee is Rights.** Notwithstanding any other provisions of this Declaration, the Articles of Incorporation or the By-Laws of the Association, the

provisions of this Article XI shall control, and in the event of a conflict between the provision of this article and the provisions of such Declaration, Articles or By-Laws, the provisions of this article shall control.

Section 2. **Notice of Default.** Any Mortgagee holding a first Mortgage on a Lot, and who shall have previously filed a written request with the Association, shall be entitled to written notification of any default by the mortgagor or Owner of such Lot or his, or their, heirs, successors or assigns in the payment of any assessments or the performance of any other duties or obligations herein set forth which shall have remained in default for a period of thirty (30) days or more. The neglect or failure of the Association to tender such notice to the Mortgagee shall toll the running of any time limits applicable to the procedure for the collection of such assessment of remedies available to the Association because of such default.

Section 3. **Consent Required.** Without the prior written approval of sixty-six and two-thirds percent (66-2/3%) of the holders of mortgage liens against all Lots, the Association shall not be entitled to:

- (a) By act or omission, seek to abandon, partition, subdivide, encumber, sell or transfer any Property which the Association shall have acquired for the benefit of the Owners;
- (b) Change the method of determining the obligations, assessments, dues or other charges which may be levied against a Lot;
- (c) By act or omission, change, waive or abandon the scheme of exterior and architectural controls, as hereinabove set forth.

ARTICLE XIV ADDITIONAL RIGHTS OF DECLARANT

Notwithstanding the reference to the authority of the Association to levy assessments for the enforcement of covenants and restrictions hereinabove or for

maintenance, capital improvements, or any other remedies of the Association, Declarant declares that in addition to the real property which may coincident herewith or subsequent hereof be conveyed to the Association as common property, that additional properties not dedicated for such common area but rather dedicated in fee or as public easement to the municipality having jurisdiction over the premises comprising the entire subdivision of which the lots and the common area properties described hereon are a part, have nonetheless been or will be dedicated for the benefit of the individual lot owners and association. Individual lots may be contiguous to such dedicated lands, and such dedicated lands (or to be dedicated lands) may contain municipally mandated improvements. Declarant as owner is obligated pursuant to a certain "Developer's Agreement" with Afton to provide repairs for any damages to such improvements on such dedicated (or to be dedicated) properties during the period of construction and for a defined term thereafter. Declarant reserves the right to assess any individual lot owner for monies expended by Declarant to repair damage to such improvements by such lot owner, his agents, assigns, vendors, contractors and subcontractors. Such assessment shall constitute a lien in the same manner as such is described in Section 4 or Article V herein.

ARTICLE XV WATER MAINTENANCE AND MANAGEMENT

Section 1. **Access.** All owners within Afton Creek Preserve shall have access to open space and Trout Brook according to the easements described in Exhibit B of this Declaration.

Section 3. **Afton Creek Preserve Maintenance and Water Management.** In addition to Afton creek Preserve, property owners the City of Afton, The South Washington County Watershed District and the Minnesota DNR have restrictions regarding water maintenance and management. The Afton Creek Preserve Association may enter into agreement(s) for management responsibilities, which relate to the maintenance and water management for Afton Creek Preserve and especially the Trout Brook and its contribution to the Waterways down Stream.

Section 4. **Trout Brook Maintenance and Water Management.** The Association shall be responsible for maintaining the environmental quality of the congruent open space that has Trout Brook connection for the benefit of the Owner of

any Lot. Maintenance of environmental quality shall include, without limitation, testing the waters for oxygen, chemical content and clarity, aerating the water, establishing fish habitat, stocking fish, removing nuisance vegetation, and any other activities deemed appropriate by the Association and directed by the Minnesota Land trust, South Washington County Watershed District and the Minnesota DNR.

Section 5. **Surface Water Use.** The surface water of Trout Brook shall be restricted to non-petroleum fueled motors.

Section 6. **Docks.** Docks or Scenic walk ways may only be allowed if granted by the City of Afton parks, Minnesota land Trust, South Washington County Watershed, Minnesota DNR, and strictly enforces the intended use of any allowed structures for the purpose of nature viewing or education of Wildlife.

Section 7. **Water Management Rules and Regulations.** As provided in Article XII, Section 5, the Association shall promulgate rules and regulations regarding the maintenance and use of Trout Brook. Said rules may limit If necessary, erosion control policies may be adopted. Owners must adhere to the policies and regulations of the Minnesota Department of Natural Resources and the Washington County Shoreland Ordinances.

IN WITNESS WHEREOF, the undersigned, being the Declarant herein, has executed this Declaration of Covenants, Conditions and Restrictions this xxx day Of xxxx

Will Carlson
