Item 5Biii.
BCWMC 8-17-17

From: my_attic_mn@comcast.net
To: Laura Jester; Derek Asche; Lucius N. Jonett; Jim Prom
Cc: Ed A. Matthiesen; Murphy, Jan; kslavik@plymouthmn.gov; council@plymouthmn.gov
Subject: Plymouth Creek Restoration Project
Date: Wednesday, August 9, 2017 4:50:56 PM
Attachments: WENCK-DRAFT Plans 070117 (City Property)Page 39 ClearCut.pdf
Email-Dr. Frelich,UM.pdf
F2014-10PlymouthBusinessCenter.jpg
F2014-10x.jpg

Laura,
Please include this in the next meeting minutes packet.

Attached:
Email-Dr. Frelich,UM.pdf
WENCK-DRAFT Plans 070117 (City Property)Page 39 ClearCut.pdf - Map of seeded area
Attached google photos:
F2014-10x.jpg stand of trees which includes Conservation Area and residential properties
F2014-10PlymouthBusinessCenter.jpg - view of Plymouth Business Center and small stand of trees which includes Conservation Area and residential properties

The Plymouth Creek Restoration project had a goal that we supported wholeheartedly - restoring the creek and the creek habitat. We questioned the "prairie" method, but did not think it applied to the protected areas. We did not realize there would be large seeded areas that would prevent future growth of trees in the forested area. Also, we did not realize that there would be a "harvest" area of trees in a Conservation Area to supply Reachs 1, 2 and 3. We did not find out until much later that work could be done in a 50 foot work area on each side of the creek. (The seeded area drawing actually shows "clear cut" and seeding as much as 60 feet from creek centerline). We did not realize that the maintenance would be open ended, and trees could be taken out in the future.

A Clean Water Project should not have such a drastic impact on adjoining properties. If the conservation agreement is not honored and tree removal and/or grading is used, the project will significantly affect the values and functions of the residents' and the commercial property owner's properties.

The development of the Plymouth Business Center Phase VI with respect to the residents involved zoning, access to Fernbrook and the fact that residents are completely surrounded by St. Paul Properties. There are additional plans for the area. The Conservation Area, referred to as a significant natural buffer, was and is our protection as long time residents. During the Conservation Agreement development, we were supported from the beginning by the Plymouth City Council. We only found out at the June 26 public meeting that no one in the project realized there was a conservation agreement on this area, even though we mentioned it at the earlier public meetings. We did not realize that one of the "significant assumptions" was there was no need for a title search for project work. At the July 20 BCWMC meeting, it seemed to be the first time most were introduced to the fact that the Plymouth Business Center property surrounded the creek almost entirely in Reach 3. In the early studies, the City of Plymouth claimed property ownership with the Creek

and easements and a 50 foot buffer. This "property" would include St. Paul Companies property. We would like to mention that our property juts into the creek on our NE corner, also having an extensive area of property in the buffer.

At a meeting at the site with the neighbors it was directed that we talk about 3 specific areas, since the BCWMC has said they need not enforce our land agreement with the property owner. Basically BCWMC and City of Plymouth are telling us they do not have to enforce an agreement we have with the Property Owner of the Plymouth Business Center who dedicated the Conservation Area by requirement of the City of Plymouth in order to achieve rezoning to build the Plymouth Business Center Phase VI. Due to the conversations at the BCWMC meeting about what this easement was, we feel we need to note that the City of Plymouth was fully involved during the Conservation Agreement development from the beginning and required the Plymouth Business Center project to accommodate the natural area in their planning and zoning applications. There was always to be no grading or tree removal in this area. In addition, the trees were used in a tree count that was filed as part of the site plans for the commercial development. Currently, City of Plymouth and St. Paul Companies are teaming as "the Property" and ignoring Conservation Area rules. We feel the City of Plymouth should not be partnering with St. Paul Companies in Reach 3 of this project. There are too many questions of legalities, too many questions of conflicts of interest. They should be considering all aspects including protection of clean water, old growth sugar maple - basswood forest, habitat, as well as rights of a property owner. We feel there is a strong conflict of interest in St. Paul Companies helping define grading, vegetation changes, etc. in this Conservation Area.

Even though we lived here 15 years before the property purchase and rezoning by St. Paul Companies, we now have been reguided and have inherited potentially limited ability to do what we wish with our property.

Only very recently did we go into the archived Plymouth Planning Commission records and also watch our 25 year old tapes of the City Council Meetings. The online archived City of Plymouth planning for 1990 details the process. This protected conservation area was required by the City of Plymouth as a buffer for the residents as part of rezoning for the business center and was part of the final plat for Plymouth Business Center 5th Addition Phase VI. This is file # 90063. We have a copy of the proposed building plan, since we were involved.

Information from proposed building plan: access easement area per doc no. 5853924 (this is the # of the conservation agreement). North conservation easement per doc no. 5853924 & 2250308. We do not have the final building plans. I am using the documents we have here.

From Plymouth current city code:

530.01. Subd. 2. The purposes of these tree preservation regulations include, but are not limited to, 1) prevention of soil erosion and sedimentation, 2) improved air quality, 3) reduced noise pollution, 4) energy conservation through natural insulation and shading, 5) control of the urban heat island effect, 6) increased property values, ***7) protection of privacy by maintaining and establishing buffers between***

conflicting land uses, *and 8) providing habitat for wildlife.*
530.03. Scope. The regulations contained in this section shall apply to all properties involving 1) a preliminary plat application received after August 15, 1995, or 2) a lot division application resulting in the creation of one or more new development parcels, received after August 15, 1995. The City does, however, strongly encourage preservation of healthy trees on all properties within the City. (Ord. 2009-08, 5/12/2009)
811.03. Procedures to Establish a Natural Preserve. Subd. 2. Designation as part of platting for site plan approval. If a property owner requests natural preserve designation in conjunction with a plat or site plan approval, the property owner shall follow the same requirements set forth in Subd. 1(b) through Subd. 1(f) above. ***However, approval of a natural preserve that is requested with the platting or site plan approval process will occur as part of the Council approval of the tree preservation plan or landscaping plan associated with such request rather than in a separate resolution.*** *(Ord. 2008- 08, 3/25/2008; Ord. 2009-08, 5/12/2009)*

We were supportive in the beginning for the task of the project -- clean water. But we then realized that trees from the Conservation Area would be used for **material** to achieve this goal. The creek and immediate banks need maintenance. We do note that the photos at Reach 1 and 2 show an area with lots of foot traffic, resulting in bare dirt next to the creek. In Reach 3, when you go past the immediate banks there are 100's of sugar maples (large and small) that have their own contributions to clean water with layered leaves that percolate the absorption of water. In the current plan, these trees would be clear cut under 8 inch diameters. These areas would be seeded and they are large enough to open the perimeter of the forest to buckthorn which would not be removed since it is a Conservation Area and the hardwood forest would be destroyed.

Our Conservation Agreement prevents us from agreeing to tree removal. However, all research supports that this undisturbed hardwood forest is better for clean water than the current plan with tree removal in Reach 3. We can agree with a clean water approach that falls within the guidelines of the Conservation Agreement.

There is literally no foot traffic here. We have been here 40 years. It has been an ideal site for conservation of a sugar maple-basswood forest stand (F2014-10x.jpg shows the combined residential properties and conservation area) of an originally much larger stand of the "Big Woods". As you can see from the aerial view - commercial area (F2014-10PlymouthBusinessCenter.jpg), there has been a significant reduction in forest due to the developed commercial area. It can also be seen that the conservation area is very small relative to the developed commercial area (considering that a significant portion of the canopy shown is on the residential properties). The current hardwood stand provides a unique clean water and wildlife habitat. Based on our experience, we are convinced that the clear cut and seeded plan is not a good fit to the tall tree environment.

We did seek some expert opinion on the value of the forest from Dr. Lee Frelich, Director, University of Minnesota Center for Forest Ecology; Fellow - Institute of the

Environment. He acknowledges the need for stabilization and clean water, but supports a better way to do it. He appreciated the diversity of habitat, wetlands on the west side of Plymouth creek park lead downstream to big woods forest ½ mile downstream. I have attached a follow up letter.

We disagree with the current plan. We would support a Reach 3 plan that honors the Conservation Agreement. A compromise has legal risks.

Best Regards,

John & Jeanne Starr
3450 Fernbrook Lane N
Plymouth, MN 55447

Footnote:
There are archived planning commission meetings, tapes and notes, audio tapes of resident/developer meetings, etc.

XFINITY Connect **my_attic_mn@comcast.net**

+ Font Size -

Re: Forest Preservation Photos Attached

From : Lee Frelich <freli001@umn.edu> Mon, Aug 07, 2017 08:49 AM

Subject : Re: Forest Preservation Photos Attached

To : my attic mn <my_attic_mn@comcast.net>

Thanks for the information and photographs; the photo showing the larger perspective makes it clear how rare wooded habitat is in that part of the metro area. Good luck with your effort.

Lee

Lee E. Frelich
Director, The University of Minnesota Center for Forest Ecology
Fellow, Institute on the Environment
Phone: 612-624-3671, cell: 612-991-1359
http://cffe.cfans.umn.edu/

On Sat, Aug 5, 2017 at 2:22 PM, <my_attic_mn@comcast.net> wrote:

> Hello again. We wanted to send you an accurate representation of the forested area we spoke about yesterday. We live on the edge at 3450 Fernbrook. You can clearly see the maples in Oct. 2014. This is a google maps photo. The trees a little south of us are already zoned for commercial use of the property. We are hoping to keep this habitat!
>
> ---
>
> **From:** "my attic mn" <my_attic_mn@comcast.net>
> **To:** freli001@umn.edu
> **Sent:** Saturday, August 5, 2017 12:16:13 AM
> **Subject:** Forest Preservation
>
> Dear Dr. Frelich,
>
> Thank you for your time and interest today in discussing the unique habitat and features of the small sugar maple/basswood forest adjacent to our home. Tree removal and understory grading is part of the Basset Creek Watershed project plan for Plymouth Creek Restoration that will be voted on August 17, 2017. The goal of the project is clean water.
>
> Our limited experience, as lifetime city types, comes from 40 years of living on the edge of this beautiful forest and creek, plus about a month's worth of research on the web about forest characteristics and the benefit of trees to clean water.
>
> We have been trying to share our experience with the City of Plymouth as a means of revising the current plan that, at best, will degrade this forest and possibly even destroy its natural means of recovery. We have sent information to people involved describing our wildlife and bird habitat (red & grey fox dens, deer, raccoon, bats, great horned owl nests, barred owls, red tailed hawk nests, pileated woodpecker nests, and others).
>
> Of particular interest to me was hearing of the hundreds of species of pollinators and bees that require unique habitats -- some require a forest. The Plymouth Creek Park wetlands area is greatly different than the forest downstream and presents maximum diversity in the pollinators and each has unique habitats for mammals and birds. Perhaps it is a rare remnant stand leftover from the Big Woods of Minnesota.
>
> We will be working very hard to present to everyone the importance of the remaining Forest with its contribution to clean water, and wish everyone to honor the current Conservation Area agreement that is already in place. We are trying to facilitate clean water without taking trees in the process.
>
> We are reach 3 in the project.
>
> Here are the relevant links:

Project:
http://www.bassettcreekwmo.org/index.php?cID=284

Ecologically significant area:
https://gis.hennepin.us/naturalresources/map/default.aspx?C=463846.9045000002,4985390.21645&L=9&T=road&D=true&LID=2&PID=2211822220030&VIS=

Thank you again,

Jeanne & John Starr
3450 Fernbrook Lane N
Plymouth, MN 55447
763-559-0489

LEGEND

- XXX DECIDUOUS TREE
- ACCESS ROUTE BOUNDARY
- EXISTING FENCE
- PROPERTY LINE
- STRAW MULCH W/ DISK ANCHORING AND MN SEED MIX 34-262
- EROSION CONTROL BLANKET AND MN SEED MIX 34-262
- WATER EDGE
- RETAINING WALL
- PROPOSED CHANNEL CENTERLINE
- PROJECT AREA LIMITS
- FLOTATION SILT CURTAIN
- INLET PROTECTION
- BIOROLL
- SILT FENCE

0 30 60
GRAPHIC SCALE IN FEET

REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	90% DESIGN	SJB	EAM	06/30/17
0	60% DESIGN	SJB	EAM	04/20/17

SEAL

NOT FOR CONSTRUCTION

PRIME CONSULTANT

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

PROJECT TITLE

PLYMOUTH CREEK CHANNEL RECONSTRUCTION

CITY OF PLYMOUTH

3400 PLYMOUTH BOULEVARD
PLYMOUTH, MN 55447

SHEET TITLE

EROSION AND SEDIMENT CONTROL PLAN
9+00 TO 0+00

DWN BY	CHK'D	APP'D	DWG DATE
SJB	LNJ	EAM	MAR 2017

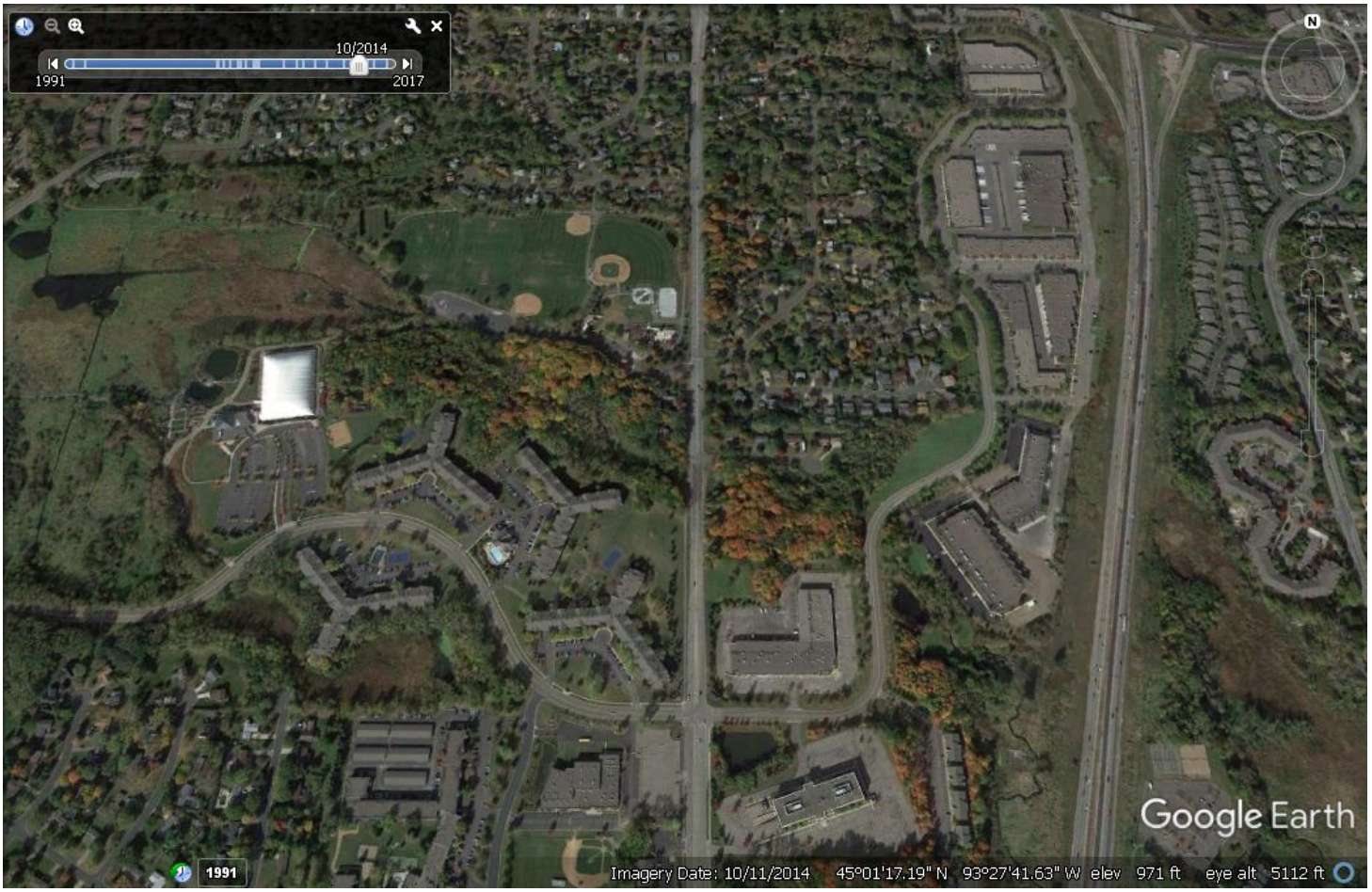
SCALE AS SHOWN

PROJECT NO.	SHEET NO.	REV NO.
1756-10	EC-104	1

Plot Date & Time: 30 June 2017 1:23 PM

M:\1756\101\CAD\CIVIL\C-102 Erosion & Sediment Control.dwg


10/2014
N
Google Earth
1991
Imagery Date: 10/11/2014 45°01'12.82" N 93°27'35.28" W elev 1002 ft eye alt 1734 ft


10/2014
1991
2017
N
Google Earth
1991
Imagery Date: 10/11/2014 45°01'17.19" N 93°27'41.63" W elev 971 ft eye alt 5112 ft

After having everyone out to the site today, we wanted to express our interest in the relationship between trees, forest and water quality. There are also clean air benefits. Some information that seemed directly relevant is included in:

http://urbanforestrynetwork.org/benefits/index.htm

Trees Increase Water Retention and Quality

> *Trees have been shown to influence the flow of water. Trees reduce topsoil erosion by catching precipitation with their leaf canopies. This lessens the force of storms and slows down water runoff which in turn ensures that our groundwater supplies are continually being replenished. Research has indicated that 100 mature trees intercept approximately 100,000 gallons of rainfall per year and for every 5 percent of tree cover added to a community, storm water runoff is reduced by approximately 2 percent. Along with breaking the fall of rainwater, tree roots remove nutrients that are harmful to water ecology and quality. Leaves that have fallen from the trees and begun to decay form an organic layer that allows water to percolate into the soil which also aids in the reduction of runoff and soil erosion. All of this also helps reduce street flooding and sedimentation in streams.*

Observed today were some quite interesting plants in our backyard that are unique to hardwood forests or adjacent areas, types of sedges and also ferns. This was just a quick look.

This is a Conservation Area and includes part of the Ecologically Significant Area: 4.05 Acres Maple-Basswood Forest as listed on the Hennepin County Website for this property, PID 22-118-22-22-0030.

The creek in this area is in need of maintenance. We have felt that the new culvert in 2014 has contributed to recent changes. The yellow boom discarded on the land was used to direct flow during the construction process. It captured a large number of trees and debris. When the boom was removed and left in the woods, there was no cleanup of the debris that was accumulated in the creek. There hasn't been this kind of a backup in our 40 years here.

Addressing this project, we think that clearcutting in the forest has no definable benefit to clean water. Protecting the banks is an obvious need, but cutting the understory trees and harvest of mature trees would undermine the lifecycle of this forest. The invasive species, mostly buckthorn, will move into the Conservation Areas and no one will remove them. This would be counterproductive to the existing forest benefit to clean air and clean water.

Ref: http://www.dnr.state.mn.us/forests_types/oldgrowth/importance.html

Genetic Reservoirs

> *We are just beginning to understand the full implications of preserving genetic diversity. But what is understood points toward the importance of genetic diversity for forest health, forest research, and forest restoration and conservation.*
>
> *The tallest, straightest trees in Minnesota's forests were cut between 1850 and 1920, and often their offspring were destroyed by fire, plowing, or subsequent timber cutting. We do not know whether the forest's remaining trees have the same genes as those that disappeared, but some researchers suspect they do not. Dr. Lee Frelich at the University of Minnesota who studies old trees in areas that were never clear cut, suspects that the old trees are genetically predisposed to grow taller than trees in surrounding heavily cut landscapes that are often established from seed from trees by-passed by loggers. This theory can be tested by comparing remaining old-growth stands to those managed using traditional forestry and timber practices.*
>
> *Old-growth forests can thus serve a source of biological restoration. Thousands of years of genetic heritage are embodied in these stands. Having survived under changing conditions, old-growth trees may contain genes that will enable them to survive global climate change, new diseases, and the uncertainties of the future better than their neighbors. These stands could be invaluable for the restoration of commercial forests, agricultural lands, and urban forests.*

Our main objections center around loss of forest. Removing obstructive, diseased and type of tree seem an acceptable form of clean water/forest management.

Sugar maples are a shade tolerant species. Over the years we have observed that even though the forest was not thinned, it manages to take care of itself. Each tree is not a symmetrical, big box tree, but a much taller “forest” tree. Because of the height of the trees, the size and position of the forest relative to the creek, and the wandering nature of the creek, achieving sunlight without destruction of the forest seems improbable. Seasonally the only difference of sunlight occurs when the trees have foliage for ~5 months. A question might be asked: Can selective removal of trees exceed the clean water benefits of the forest?

http://www.dnr.state.mn.us/forests_types/oldgrowth/importance.html

Species benefits

- *More kinds of lichen and fungi species live in old-growth forests than younger ones.*
- *A larger amount of nitrogen-fixing lichens--organisms providing critical nutrients--is found in old-growth forests than younger ones.*
- *Many beetles live in old-growth than other forest types.*

- *Dragonflies are more common and in greater variety where streams and lakes are next to old-growth forests.*
- *Woodpeckers and 39 species of songbirds are more frequent in older forests than younger.*
- *Several kinds of hawks and owls prefer older forests.*
- *We do not know whether the forest's remaining trees have the same genes as those that disappeared, but some researchers suspect they do not. Dr. Lee Frelich at the University of Minnesota who studies old trees in areas that were never clear-cut, suspects that the old trees are genetically predisposed to grow taller than trees in surrounding heavily cut landscapes that are often established from seed from trees by-passed by loggers. This theory can be tested by comparing remaining old-growth stands to those managed using traditional forestry and timber practices.*
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When this project began, it didn't take into consideration the existence or clean water value of the "old growth" forest.

Thank you again for taking an interest in the project site.

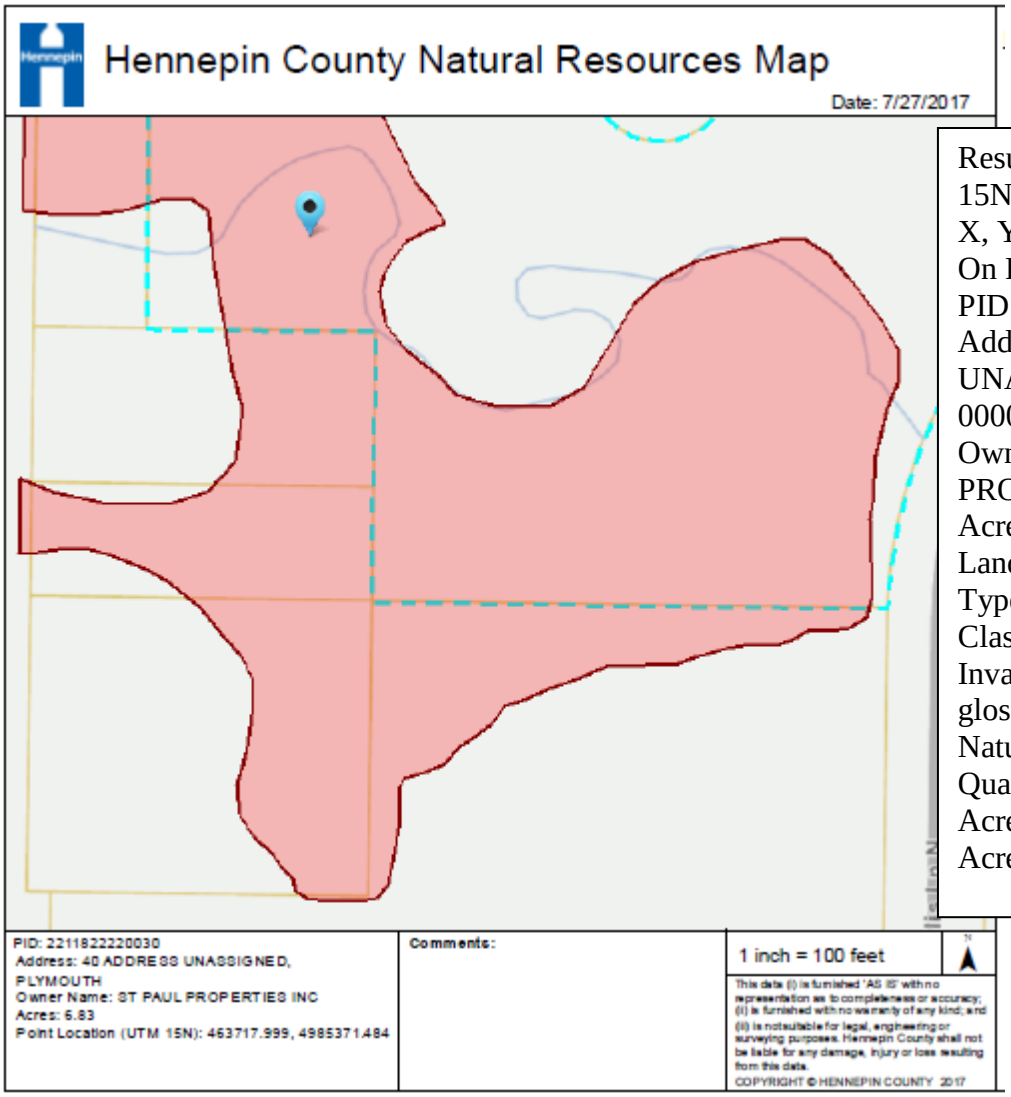
John and Jeanne Starr
3450 Fernbrook Lane N
Plymouth, MN 55447

Please see from the 2017 Plans:

http://www.bassettcreekwmo.org/application/files/5714/9790/5222/Plymouth_Cr_Resto_Project_60_Plans_April_2017.pdf

Map C-103 shows harvest area

Map ec104 extended seed and blanket areas requiring clear cut (as stated in meeting)



Results for point location (UTM 15N):
X, Y: 463717.999, 4985371.484
On Property:
PID: 2211822220030
Address: 40 ADDRESS UNASSIGNED, PLYMOUTH, 00000
Owner Name: ST PAUL PROPERTIES INC
Acres: 6.83
Land Cover
Type: Maple-basswood forest
Class: Forests
Invasive Species: Common and glossy buckthorn,Garlic mustard
Natural Area Quality: Moderate Quality
Acres: 4.05
Acres in Parcel: 2.28

Ecologically Significant Area
Type: Maple-basswood forest
Invasive Species: Common and glossy buckthorn,Garlic mustard
Natural Area Quality: Moderate Quality
Acres: 4.05
Acres in Parcel: 2.28
Soils
Name: Lester loam, 6 to 10 percent slopes, moderately eroded
Soil Type: L22C2
Drainage Class: Well drained
Hyrologic Group: C
Fema Floodplains - 100 Year
Flood Zone: AE FLOODWAY
Watershed
Name: Bassett Creek

Plymouth Creek Restoration Project: 7/29/17

At each of the early Plymouth Creek Restoration Project public meetings, we mentioned that the Reach 3 property has a conservation agreement with the adjacent residential property owners. We thought there would be some action on that information. On June 27th, after a length of time without any response or action by the project, we emailed a copy of the agreement.

Quoting from our 7/27/17 email: "We are trying to support the project to get the task of cleaning up the creek accomplished. It seems that the clean water objective can be accomplished by avoiding violation of the Conservation Agreement." In a previous email, we referenced recent research about the significant benefit of old growth forests on water quality, including erosion and water table benefits. That research seems to suggest, everything considered, that this forest is better for water quality than an open field with full sun. C**an this project be modified to have the reach 3 area be a clean water section cleaned by nature at its best, a hardwood forest?**

This project is starting with the removal of a few healthy trees, but is open ended on future removals. The selected trees, despite some being right on the banks of the creek, might last many decades prior to falling or having any short term negative impact on water quality (if any). Removal of these trees will have little or no affect on sunlight reaching the creek area. The mature trees are 60 to 80 feet tall, with "reach" in any direction that can exceed 35 feet. We use the term reach, because tree growth seems to reach to the open areas of sunlight in these old growth forests.

In the 7/26/17 meeting at 35th Ave, John asked Derek Asche what maximum distance from the creek would be used to allow a tree to be taken. Derek's answer was 20 feet. If the goal is sunlight on the creek and creek banks, 20 feet is too small due to the height and reach / crown of the huge trees. Our decades of experience with these trees and forest is that shade tolerant plants do not grow here as expected. The understory maple and buckthorn seem to have the needed tolerance for growing under the shade canopy. If trees are removed to avoid shade on creek and banks, the needed "standoff distance" for trees is so large that destruction of this hardwood forest over time would be assured.

City of Plymouth and St. Paul Companies are allowing/promoting the removal of trees from the conservation area, which is a violation of the agreement that St. Paul Companies has with the residents. We believe that the City of Plymouth has the right to clear the creek including the banks. We do not believe they have rights beyond the banks they show in the project's 50 foot standoff. St. Paul Companies, in granting more rights beyond the creek banks, is in violation of the conservation agreement they are obligated to defend.

The statement in Derek's July 7th email: "The City is not party to the Conservation Easement (attached) as it is between you and the commercial property owner." is incorrect. The City was involved from the very development and beginnings of the conservation agreement concept, trying to protect the rights of both the residents and commercial property owner. This agreement was a result of a settlement in a zoning dispute, where it was being proposed that commercial property was going to be developed immediately adjacent to residential property. The settlement, finally giving fair treatment of the

residents, took over 6 months to achieve, with the City of Plymouth defining limits of its capabilities in these actions. At settlement, all 3 parties gained:

- Developer got the rezoning, constructed large business centers
    - Developer dedicated a small Conservation Area Buffer
- City acquired new large business centers and the associated increased property taxes
- Residents got a Conservation Area buffer backed by contract

We cannot allow removal of trees from the conservation area for the purpose of sunlight without being in violation of the agreement. St. Paul Companies has the same obligations.

A few **facts** about the project:

- The "property" does not fit within the City of Plymouth/St. Paul Companies properties plus easements.
- The statement, "The Property intersects parcels owned by the following entities: City of Plymouth and St. Paul Properties, Inc.", is incomplete.

As stated above, if Reach 3 is cleared and maintained within the limits of the conservation agreement, we can support the project and would have no basis to object. As we have summarized, based on examples from the Hurricane Katrina research and 40 years of experience of living adjacent to the old growth forest, we believe forest protection has clean water benefits in this urban environment.

John & Jeanne Starr
3450 Fernbrook Ln N
Plymouth, MN 55447
(763) 559-0489

In addition: Our use of St. Paul Companies above refers to the past and current property owners. We realize that St. Paul Companies may no longer be the official property owner and manager, and that the company may have changed over this period of time due to mergers and/or acquisitions.