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Date: May 13, 2015

To: Planning Commission

From: Cary Teague, Community Development Director

Re: Blake Woods Subdivision

This item was previously continued by the Planning Commission so the applicant could address concerns raised by the engineering department and the Commission in regard to the grading and drainage plan.

The applicant submitted revised plans on May 5, 2015. Engineering staff has reviewed the plans and found them acceptable, subject to the conditions in their attached memo dated May 8, 2015. The applicant is requesting flexibility on conditions 3, 5 and 7, curbing type, the sidewalk, and looping of the water. These are policy decisions to be decided ultimately by the City Council. Should these conditions be revised or eliminated, the proposed grading and drainage plans would not cause any increase in rate or volume to adjacent properties.

Staff continues to recommend approval subject to the conditions outlined in the Planning Commission Staff report dated April 8, 2015 and the engineering memo dated May 5, 2015.

The City has until June 16th, 2015 to take final action on the Preliminary Plat.

Attachments:

Revised plans date stamped May 5, 2015

Revised engineering memo dated May 8, 2015

Planning Commission staff report dated April 8, 2015

Planning Commission minutes from the April 8, 2015 meeting



DATE: May 8, 2015
TO: Cary Teague – Community Development Director
CC: Chad Millner PE – City Engineer
FROM: Ross Bintner PE – Environmental Engineer
RE: **Berman Subdivision – Preliminary Plat Development Review**

The Engineering Department has reviewed the subject development for street and utility connections, grading, storm water, erosion and sediment control. This review summarizes issues remaining from the February 19 review, the March 3 drainage review memo and the March 30 review memo. The reviewed plan is dated 4/23/2015.

General Comments

1. A development agreement will be required for the creation of public road, utilities and stormwater system, and private rain garden ownership and maintenance.

Survey/ Plat

2. Public easements will be required for all public infrastructures not already in platted right of way.

Traffic and Street.

3. Consider Living Streets Policy in design of street.
4. Limit parking to one side of street.
5. Use B618 curb and gutter and standard residential driveway entrances as described in city standard plate 411 and found at the following link: http://edinamn.gov/index.php?section=construction_standards

Sanitary and Water Utilities

6. Provide a looped 6" DIP from Blake Rd through to the southeast corner of lot 6 north along the property line to Evanswood Ln.

Storm Water Utility & Hydrology

7. The proposed design meets the performance standard described in previous review memos.
 - a. Final stormwater management plan will provide justification for infiltration rate, time of concentration and curve numbers in narrative.
 - b. Development agreement shall include conditions for lot imperviousness, and final plans shall include construction provisions, to ensure grading and constructed works function consistent with design assumptions.

Grading, Erosion and Sediment Control

8. Provide a State construction site permit and SWPPP at time of Final Plat.

General Comments



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9. Provide a private maintenance agreement in favor of the local Watershed District for all rain gardens at time of Final Plat.
 10. Provide an inspection and maintenance plan for all public and private stormwater practices at time of Final Plat.

Other Agency Coordination

11. A Nine Mile Creek Watershed permit is required, along with other agency permits such as MNDH, MPCA SWPPP, MCES, and a grading permit from the City of Edina Building Department at time of Final Plat

P.C.
4/8/15

VII. **C. Subdivision. Frank Berman. 5321 & 5331 Evanswood Lane, and 5320 & 5324 Blake Road, Edina, MN**

Planner Presentation

Planner Teague reported that Frank Berman is proposing to combine and subdivide his four properties at 5321 & 5331 Evanswood Lane, and 5320 and 5324 Blake Road into seven lots. The existing home at 5331 Evanswood Lane would remain, and the home at 5324 Blake Road would be removed. The other two parcels are vacant.

Teague explained that the applicant proposes to construct a 24-foot wide cul-de-sac off Blake Road within a 40-foot right-of-way. Two lots would access off Evanswood Lane, and the remaining five off the new road. The applicant has attempted to minimize tree loss and address drainage issues in the area by locating the roadway along the north lot line, and the stormwater retention areas along the street.

Planner Teague noted that this item was continued from the last Planning Commission for the applicant to revise the grading and drainage plan to address concerns raised by the city engineering department. The applicant has revised the plans to address those concerns. The engineering department and Barr Engineering, the City's engineering consultant has reviewed the plans. Teague said to accommodate the request Preliminary Plat approval is required.

Continuing, Teague said all seven of the proposed lots meet the City's minimum lot size requirements. Minimum lot size, width and depth is determined by the median of all lots within 500 feet of the subject property. Based on the surveyors calculation of the medians, the minimum lot size is 21,842 s.f. in size; 166.4 feet in depth; and 120.8 feet in width. The engineering department has reviewed the calculations and lot sizes provided by the applicant's surveyor and does find them to be accurate.

Planner Teague concluded that staff the plat meets all requirements and further recommends that the City Council approve the proposed seven lot subdivision based on the following findings:

1. The proposal meets all the required standards and ordinances for a subdivision.
2. The applicant has reduced the width of the road, and minimized the stormwater ponding on the site in an attempt to minimize tree loss.
3. In meeting all city and watershed district requirements for drainage the proposed subdivision would not have a negative impact on adjacent property.

Approval is also subject to the following conditions:

1. The City must approve the final plat within one year of preliminary approval or receive a written application for a time extension or the preliminary approval will be void. Final plat shall include a complete grading and drainage plan subject to review and approval of the city engineer.
2. At the time of final plat approval, the applicant shall enter into a Developers Agreement with the City. The Developers Agreement shall include the requirement for construction of the street as proposed, and a sidewalk on the south side of the street as recommended in the engineering memo dated March 30, 2015. The agreement shall also include all the conditions of approval.
3. Prior to release of the final plat, the following items must be submitted:
 - a. Park dedication fee of \$15,000 must be paid prior to release of the final plat.
 - b. A construction management plan will be required for the overall development of the site.
 - c. Submit evidence of a Nine Mile Creek Watershed District approval. The City may require revisions to the preliminary plat to meet the district's requirements.
4. Prior to issuance of a building permit, the following items must be submitted:
 - a. Curb-cut permits must be obtained from the Edina engineering department. Driveway plans must be consistent with the proposed grading plan to preserve as many trees as possible.
 - b. Individual homes must comply with the overall grading plan for the site. Each individual building permit will be reviewed for compliance with the overall grading plan subject to review and approval of the city engineer.
 - c. A construction management plan will be required for the construction of the new homes.
 - d. Utility hook-ups are subject to review of the city engineer.
 - e. All homes must be constructed with fire sprinkler protection in accordance to NFPA 13d or IRC 2904.
 - f. Signage stating "No Parking Fire Lane" along one side of the roadway the entire length of the road, and within the cul-de-sac.
5. Compliance with the conditions outlined in the director of engineering's memo dated March 30, 2015.
6. Compliance with the conditions outlined in the fire marshal's memo dated February 18, 2015.
7. A stop sign is required to be installed on the new street approaching Blake Road. Clear sight lines shall be maintained from the intersection.
8. Compliance with the city's newly adopted tree ordinance.
9. Compliance with the city's living streets policy.

Appearing for the Applicant

Kendra Lindale, Landform, Jack Perry, and Carrie Berman

Discussion

Planner Teague was asked to explain the loop water line suggested by engineering staff. Planner Teague responded that engineering staff recommends that the site provide a looped 6" DIP from Blake Road through to Lot 6 along the property line to Evanswood Lane; however, the applicant has not agreed to do so.

Chair Platteter asked Planner Teague if the storm water pond to the west was private or public. Planner Teague responded that is a private pond.

Applicant Presentation

Kendra Lindale introduced, Jack Perry, legal staff and Carrie Berman, daughter of applicant as part of the project team. Lindale stressed how important it was to the applicant to minimize tree loss. She noted the applicant will continue to live in his home.

Lindale informed the Commission in response to staff's recommendation of a looped water line that they are hesitant to do so because they believe it would create more tree loss. Lindale stated that as presented the storm water plan is responsive, adding there will be no net increase in rate or volume to surrounding properties. Lindale also noted that in this area Edina has a downstream issue, adding in her opinion this site shouldn't be required to fix an area issue.

Lindale further commented that they respectfully request that the suggested B618 curb and gutter be eliminated and a flush ribbon curb built in its place. She pointed out flush ribbon curbs are very common in Edina and work well with rain gardens.

Continuing, Lindale stated with regard to the sidewalk condition they are not convinced every site should be required to have a sidewalk. She pointed out there are five homes on the cul de sac and the addition of a sidewalk creates challenges for the project. Lindale said if a sidewalk is required to be built as a condition of approval they would prefer that the sidewalk was constructed on the north side.

Concluding, Lindale asked the Commission to eliminate the Fire Department's condition that the homes be sprinkled. Lindale pointed out the State already has a sprinkling requirement based on square footage, adding they would like to abide by State Statutes, questioning if other new homes were required to be sprinkled.

Discussion

Commissioner Carr commented that she could support a sidewalk on the north vs. south. Carr asked Ms. Lindale to explain "ribbon" curb. With graphics Lindale indicated ribbon curbs,

adding that the reason they want them installed on the project was to ensure water flow. Ribbon curbs are designed to handle water run-off. Carr further asked the applicant if they prefer looped or dead ended. Lindale responded they would prefer the dead ended main.

Commissioner Lee questioned if the property owner would consider reducing the number of lots from seven to six. The applicants responded that the seven lot plat meets code, adding they have not considered reducing the number of lots.

A brief discussion ensued on drainage.

Ross Bintner addressed the Commission and explained with regard to the sidewalk requirement the sidewalk is not a code requirement it's a policy. Bintner further indicated that the B618 curb is also a policy, along with looped main vs. dead ended. Continuing, Bintner reported that the sprinkler requirement was from the Fire Department. Teague interjected and explained the Fire Department requested sprinkling because of the narrower street.

Chair Platteter asked if the subdivision Acres Dubois had a looped main. Mr. Bintner responded Acres DuBois was not looped. Chair Platteter asked the applicant if the Watershed District has weighed in on the project. Ms. Lindale responded that they have been in contact with the Nine Mile Creek Watershed District; however, they will not meet on the proposal until after it receives preliminary approval from the City.

Public Hearing

Chair Platteter opened the public hearing.

The following residents expressed concerns with the proposed subdivision:

Rebecca Wallin, 6208 Parkwood Road
Charlie Gits, 5311 Evanswood Lane
Kim Gits, 5311 Evanswood Lane
Marty Wheeler, 6200 Parkwood Road
Tim Kuck, 6316 Westwood Court
Olaf Minge, 5525 Evanswood Lane
Amy Minge, 5225 Evanswood Lane

Concerns were expressed as follows:

- Storm water management. Some areas already retain water careful consideration must be given to drainage and storm water management.
- Increase in impervious surfaces – more water issues
- Change in density
- Tree loss
- Consider using existing driveway as shared vs. new street.
- Decrease in property values
- Years of living with continued construction

- Rain garden maintenance – who’s responsible, will they be maintained
- Buffer
- Visibility concerns. Site lines are compromised in this area-intersections are close and there is a grade change
- The plan as presented is too dense, lots aren’t in keeping with neighboring properties, consider reducing number of lots

Commissioner Carr moved to close the public hearing. Commissioner Olsen seconded the motion. All voted aye; motion carried.

Discussion

Commissioners expressed the opinion that issues are unresolved and acknowledged the difficulty in finding balance. It was further noted that in Edina “one size doesn’t fit all” and with no conclusions on specific drainage issues it; and other issues make it difficult to make an educated decision. It was further suggested that more creativity could be used in plat development including limiting parking to only one side of the street, etc.

Chair Platteter asked Ms. Lindale to comment on the tree loss and drainage issues raised by neighbors.

Ms. Lindale said she is unsure of the exact percentage of tree loss, but would have that calculated prior to the next meeting. Lindale explained the proposed street was aligned so the fewest number of trees would be removed. Lindale stated with regard to drainage that their proposal cannot solve the areas storm water and drainage problems; however, they can’t make it worse, adding the proposed rain gardens are a critical part of stormwater management for the site.

Chair Platteter noted that another concern expressed was sight line issues at the intersection of Blake and the new road. Platteter asked Lindale to comment on that. Ms. Lindale reported at the City’s request WSB conducted a traffic analysis. The report indicated that sight lines are sufficient. She further noted that the applicant will enter into a Developers Agreement that not only addresses sight lines and site access but addresses retaining walls, rain gardens, water and sewer too. Lindale said in the Agreement maintenance of the proposed wall, rain gardens, etc. are addressed.

In response to comments from neighbors on prior tree loss Steve Gross reported that the site was being cleared of buckthorn and dead trees.

A lengthy discussion ensued on the proposed subdivision and Engineers Memo dated March 30, 2015 with Commissioners expressing their hesitancy in supporting the preliminary plat in light of the fact that specific items in the storm water management plan were not sufficiently addressed to gain support of the Engineer. Commissioners were also divided on sidewalk or no sidewalk, style of curb/gutter and the number of lots, etc.

Mr. Bintner stated that in his opinion his concerns can be addressed before the applicant returns for final plat. Bintner said he agrees with the majority of items in the memo; specifically numbers 2 and 8 through 21. He acknowledged issues with 3, 4 and 7; however reiterated in his opinion those issues could be agreed on. Bintner stressed from an Engineering standpoint their goal is to ensure that storm water does not increase the flood risk to upstream and downstream properties

Commissioner Carr commented that she agrees all issues can be resolved; however, the Commission needs to recommend to the Council approval or denial with sufficient findings, adding some issues (curb gutter, sidewalk, etc.) need further clarification. Continuing, Carr said before final plat specific issues need to be resolved and the storm water management plan needs to be prepared in more detail. Commissioner Olsen commented that she believes if a motion is made it should include conditions that the applicant must provide adequate drawings (as mentioned by Commissioner Carr) indicating how the water is distributed and how/if the applicant can gain rain garden easements.

Mr. Gits interjected questioning if he can stub into the rain garden adjacent to his property. Planner Teague responded that he believes Mr. Gits could stub into the rain garden; however, at his expense. Teague noted he believes the easements are public.

The discussion continued on if the request should be continued allowing staff and applicants time to resolve any issues or vote the request up or down.

Motion

Commissioner Carr moved to recommend preliminary plat approval based on staff findings and conditions and subject to the following additions:

- **The developer can choose between the ribbon cut or B618 curb**
- **The developer can choose between looped or dead end water main.**
- **Water sprinklers not required (note State requirements would be enforced)**
- **Comply with the principles of Living Street with the developer choosing which side of the street the sidewalk should go**
- **Present a more detailed storm water, drainage and erosion control plan.**
- **Address rain garden issues and potential flooding issues because of expressed concerns.**

Commissioner Hobbs seconded the motion.

Commissioner Lee stated she cannot support the motion for approval. She said the conditions of approval are unclear and that she believes a decrease in the number of lots could mitigate drainage issues. Lee acknowledged the plat meets all requirements; however, in her opinion a balance must be reached.

Commissioners Hobbs and Forrest indicated they would have to vote against the motion to approve.

Mr. Perry said they would be willing to work with staff and grant a 30-day extension.

Chair Platteter called the vote. Ayes; Thorsen, Olsen, Carr. Nay; Hobbs, Lee Strauss, Nemerov, Forrest, Platteter. Motion failed. 3-6.

Commissioner Hobbs moved to continue the request for subdivision to allow time for staff and the applicant to resolve any issues. Commissioner Forrest seconded the motion. All voted aye; motion to continue carried.

VII. REPORTS AND RECOMMENDATIONS

A. Grandview Presentation

Economic Development Manager, Bill Neuendorf addressed the Commission and reported on the redevelopment planning for the former public works site.

B. Zoning Ordinance Amendment

Chair Platteter suggested because of the late hour that the discussion on the Ordinance Amendments be continued to the next Planning Commission meeting on April 22nd. Commissioners Agreed.

VIII. CORRESPONDENCE AND PETITIONS

Chair Platteter acknowledged back of packet materials.

IX. CHAIR AND COMMISSION COMMENTS

Commissioner Forrest reported that last evening (April 7) the City Council approved the Wooddale Valley View Small Area Plan.

Commissioner Hobbs informed the Commission one meeting has occurred for the France Southdale Area Work Group, adding he believes the group can craft a realistic vision of the greater Southdale area.

X. STAFF COMMENTS

None

XI. ADJOURNMENT

Commissioner Thorsen moved meeting adjournment at 12:20 am. Commissioner Strauss seconded the motion. All voted aye; motion to adjourn carried.



PLANNING COMMISSION STAFF REPORT

Originator Cary Teague Community Development Director	Meeting Date April 8, 2015	Agenda # VI.C.
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INFORMATION & BACKGROUND

Project Description

Frank Berman is proposing to combine and subdivide his four properties at 5321 & 5331 Evanswood Lane, and 5320 and 5324 Blake Road into seven lots. (See property location on pages A1–A3.) The existing home at 5331 Evanswood Lane would remain, and the home at 5324 Blake Road would be removed. The other two parcels are vacant.

The applicant proposes to construct a 24-foot wide cul-de-sac off Blake Road within a 40-foot right-of-way. Two lots would access off Evanswood Lane, and the remaining five off the new road. The applicant has attempted to minimize tree loss and address drainage issues in the area by locating the roadway along the north lot line, and the stormwater retention areas along the street. (See applicant narrative and plans on pages A4–A22a and the revised plans on A51–A71.)

This item was continued from the last Planning Commission for the applicant to revise the grading and drainage plan to address concerns raised by the city engineering department. The applicant has revised the plans to address those concerns. (See pages A51–A71.) The engineering department and Barr Engineering, the City's engineering consultant has reviewed the plans and have offered comments with recommendations on pages A35–A50.

To accommodate the request the following is required:

1. Preliminary Plat.

All seven of the proposed lots meet the City's minimum lot size requirements. Minimum lot size, width and depth is determined by the median of all lots within 500 feet of the subject property. Based on the surveyors calculation of the medians, the minimum lot size is 21,842 s.f. in size; 166.4 feet in depth; and 120.8 feet in width. (See attached median calculations on pages A22–A22a) The

engineering department has reviewed the calculations and lot sizes provided by the applicant's surveyor and does find them to be accurate.

Surrounding Land Uses

The lots on all sides of the subject properties are single-family homes, zoned and guided low-density residential.

Existing Site Features

The site is 4.31 acres in size, and contains two single-family homes. The site contains some gradual slopes and mature trees. (See pages A2-A3.)

Planning

Guide Plan designation: Single-dwelling residential
 Zoning: R-1, Single-dwelling district

Lot Dimensions

	Area	Lot Width	Depth
<u>REQUIRED</u>	<u>21,842 s.f.</u>	<u>120.8 feet</u>	<u>166.4 feet</u>
Lot 1	21,842 s.f.	126.89 feet	169.31 feet
Lot 2	21,910 s.f.	129.00 feet	169.86 feet
Lot 3	21,842 s.f.	124.70 feet	170.72 feet
Lot 4	22,328 s.f.	120.88 feet	166.64 feet
Lot 5	24,822 s.f.	121.83 feet	166.80 feet
Lot 6	30,033 s.f.	191.4 feet	190 feet
Lot 7	21,901 s.f.	128.16 feet	184.18 feet

The proposed subdivision meets all lot dimension requirements. (See median calculations done by a licensed surveyor on pages A22-A22a.)

Grading/Drainage and Utilities

Rather than constructing a traditional stormwater pond within the subdivision, in an effort to save additional trees on the site, the applicant is proposing to

manage stormwater through rain gardens on each lot. (See the revised grading plans on page A60.) The plans are not significantly changed from the original submittal.

The city engineer has reviewed the proposed plans and does have some concern given the existing drainage issues in this neighborhood. (See the engineering memo on pages A35-A38, and Barr Engineering's review on pages A39-A50.) The stormwater system downstream to the west is over capacity. The applicant will be required to meet all minimum Nine Mile Creek Watershed district standards. There shall be no increase in peak rate or volume to neighboring private properties.

Adequate drainage and utility easements are proposed along all the lot lines. A general building pad would be graded at the time the roadway is constructed. Each lot would be custom graded at the time of building permit. The detailed grading plans would be reviewed by the city engineer at the time of building permit application for each lot. A construction management plan will be required for the construction of the new homes. Any approval of the proposed plat would be subject to meeting all the conditions required by engineering in their review memo dated March 30, 2015. (See pages A35-A38.)

When considering the requirements in the engineering memo, the following City Code sections are used:

Sec. 32-106. - Public hearing by council; preliminary approval.

(1) Grant preliminary approval, with or without modification, and without conditions, or with such conditions reasonably related to the purpose and objectives of this chapter, as the council may deem necessary or desirable;

Sec. 32-130. - Considerations.

The planning commission, in reviewing proposed plats and subdivisions and in determining its recommendation to the council, and the council in determining whether to approve or disapprove of any plat or subdivision, may consider, among other matters, the following:

(2) The impact of the proposed plat or subdivision, and proposed development, on the environment, including, but not limited to, topography, steep slopes, vegetation, naturally occurring lakes, ponds and streams, susceptibility of the site to erosion and sedimentation, susceptibility of the site to flooding and water storage needs on and from the site.

- (5) The impact of the proposed plat or subdivision, and proposed development on the health, safety and general welfare of the public.
- (6) The relationship of the design of the site, or the improvements proposed and the conflict of such design or improvements, with any easements of record or on the ground.
- (7) The relationship of lots in the proposed plat or subdivision to existing streets and the adequacy and safety of ingress to and egress from such lots from and to existing streets.
- (8) The adequacy of streets in the proposed plat or subdivision, and the conformity with existing and planned streets and highways in surrounding areas. Streets in the proposed plat or subdivision shall be deemed inadequate, if designed or located so as to prevent or deny public street access to adjoining properties, it being the policy of the city to avoid landlocked tracts, parcels or lots.
- (11) Whether the physical characteristics of the property, including, without limitation, topography, vegetation, susceptibility to erosion or siltation, susceptibility to flooding, use as a natural recovery and ponding area for stormwater, and potential disturbance of slopes with a grade of 18 percent or more, are such that the property is not suitable for the type of development or use proposed.
- (13) Whether the proposed plat or subdivision, or the improvements proposed to be placed thereon are likely to cause substantial environmental damage.

Sec. 32-131. - Additional considerations.

In addition to the foregoing matters, the commission, in connection with its recommendation to the council, and the council in determining whether to approve or disapprove a proposed plat or subdivision, shall specifically and especially consider the following matters:

- (1) Whether the proposed plat or subdivision complies with the policies, objectives and goals of the comprehensive plan.
- (2) Whether the proposed plat or subdivision complies with chapter 36.
- (3) Whether the design of the proposed plat or subdivision, or the design or type of improvements proposed to be placed thereon, may be detrimental to the health, safety or general welfare of the public.

(4) Whether the proposed plat or subdivision conforms to, and complies with, the requirements of applicable state law.

Sec. 32-161. - Developer's agreement.

After preliminary approval has been given to a plat or subdivision, the applicant shall enter into a developer's agreement (herein called the "agreement") with the city, on terms and conditions determined by the city, and shall cause all street, water and sewer improvements required by the planner or engineer, or by the resolution granting preliminary or final approval, **to be completed, pursuant to the agreement and to the city's then standards and specifications for such improvements.**

Sec. 36-1257. - Drainage, retaining walls and site access.

(a) *Drainage.* No person shall obstruct or divert the natural flow of runoff so as to harm the public health, safety or general welfare. Surface water runoff shall be properly conveyed into storm sewers, watercourses, ponding areas or other public facilities. As part of the building permit, the applicant must submit a grading and erosion control plan along with a stormwater management plan that is signed by a licensed professional engineer. The stormwater management plan must detail how stormwater will be controlled to prevent damage to adjacent property and adverse impacts to the public stormwater drainage system. The plans must be approved by the city engineer and the permit holder must adhere to the approved plans.

Street Construction/Sidewalk – Traffic & Safety

The applicant is proposing to construct a cul-de-sac off Blake Road. Five of the proposed lots would access off the cul-de-sac, and two off of Evanswood Lane. (See page A8.) The street would be located generally in the same location as the two existing curb cuts for two homes that are removed. (See page A9.) The cul-de-sac would have a center island that would serve as a rain garden. Both the fire marshal and public works director believe that the center island would be acceptable, as fire trucks and snow plows will be able to adequately access the street and homes on the street.

WSB conducted a traffic study and concluded that the proposed street and additional homes in the area would not have a negative impact on the existing streets in the area. The level of service on the existing streets would not change as a result of the proposal. (See traffic study on pages A23-A31.) WSB examined the existing intersections and spacing along Blake Road, and found that while not ideal, the proposed spacing of the intersections is not a safety concern. The proposed development would generate 58 additional daily trips, 5 in the peak am, and 6 in the peak pm hours. (See page A28.)

With the reduction in the width of the roadway to 24 feet, the applicant shall be required to post one side of the street and the entire cul-de-sac for no parking for a fire lane; additionally residential fire sprinkler protection shall be required for each home subject to approval of the fire marshal. (See memo from the fire marshal dated February 18, 2015 on page A32.)

Per the city's living streets policy, the engineering department is also recommending a 5-foot sidewalk with a 5-foot boulevard to be located within the right-of-way on the south side of the street. (See engineering memo on pages A33-A34, and the living streets sidewalk map and policy on pages A75-A80.) This sidewalk would connect to the existing sidewalk across the street on the east side of Blake Road. (See page A35.)

Tree Removal

With the layout of the subdivision there would be 38 trees removed to accommodate the public street and stormwater retention areas. (See page A13.) The generic building pads and drainage areas would result in an additional 87 trees removed. (See page A12.) Based on the new tree ordinance adopted by the City Council, 80 of these trees would not have to be replaced. Any tree outside of these areas would be required for replacement per the new ordinance. Each lot would be reviewed individually at the time of building permit application to determine compliance with the city's new tree ordinance.

Park Dedication

As with all subdivision proposals, park dedication is required. Edina City Code requires a park dedication fee of \$5,000 for each additional lot created. Therefore a park dedication fee of \$15,000 would be required for the three additional lots.

Primary Issue

- **Is the proposed subdivision reasonable for the site?**

Yes. Staff believes that the proposed subdivision is reasonable for the following reasons:

1. The proposed subdivision meets all minimum zoning ordinance requirements. As such, the applicant is entitled to subdivide the property, similar to how other large properties in this area were able to subdivide in the past.
2. The applicant has designed a grading and drainage plan in an attempt to save more trees on the site.

3. The applicant has designed a 24-foot wide street, rather than the traditional 27-foot wide street, to reduce impervious surface.
4. Upon compliance with all city and watershed district requirements for grading and drainage, the proposed subdivision would not have a negative impact on adjacent property.

Staff Recommendation

Because the proposed subdivision meets all of Edina's Zoning Ordinance requirements, recommend that the City Council approve the proposed seven lot subdivision.

Approval is based on the following findings:

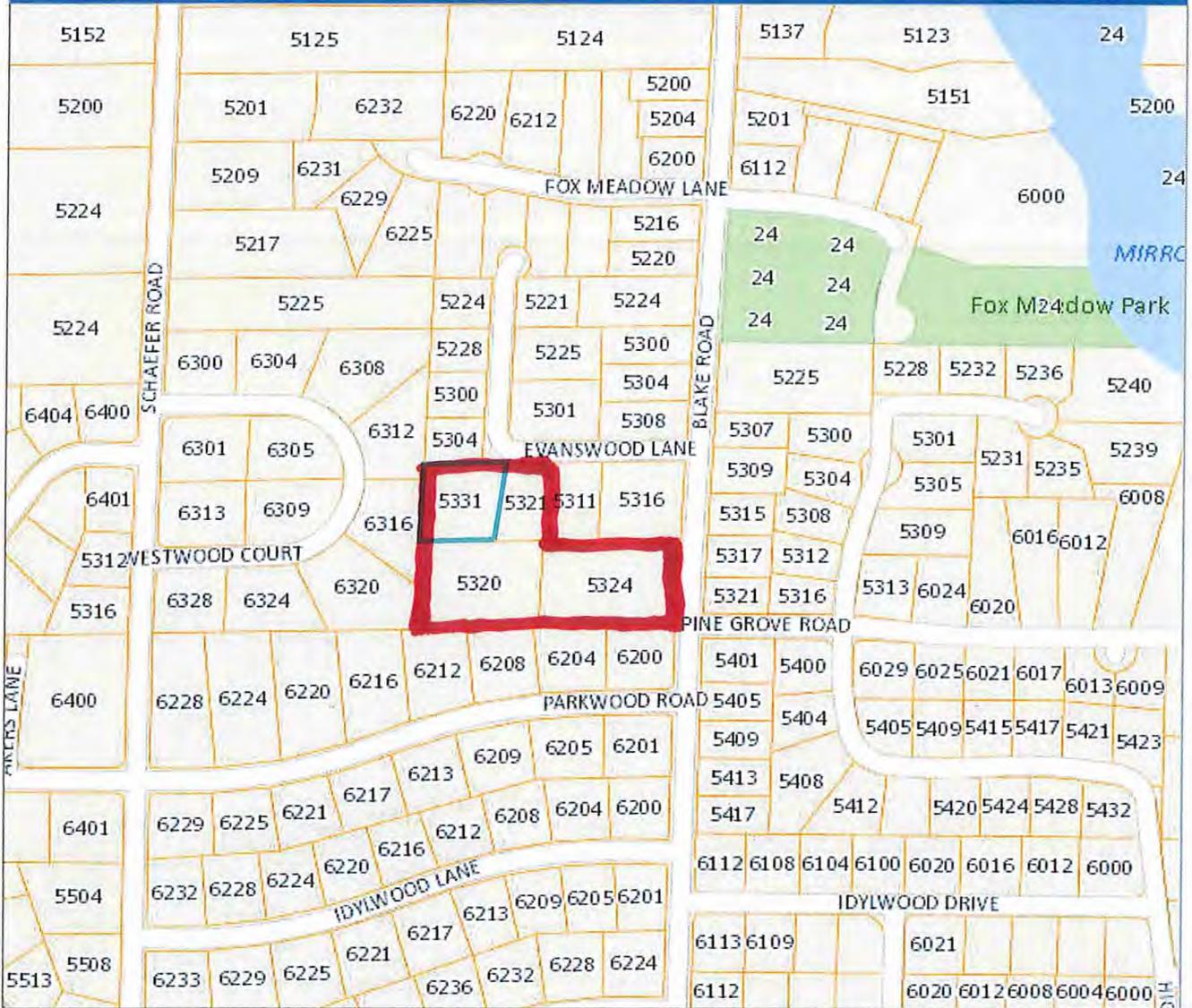
1. The proposal meets all the required standards and ordinances for a subdivision.
2. The applicant has reduced the width of the road, and minimized the stormwater ponding on the site in an attempt to minimize tree loss.
3. In meeting all city and watershed district requirements for drainage the proposed subdivision would not have a negative impact on adjacent property.

Approval is subject to the following conditions:

1. The City must approve the final plat within one year of preliminary approval or receive a written application for a time extension or the preliminary approval will be void. Final plat shall include a complete grading and drainage plan subject to review and approval of the city engineer.
2. At the time of final plat approval, the applicant shall enter into a Developers Agreement with the City. The Developers Agreement shall include the requirement for construction of the street as proposed, and a sidewalk on the south side of the street as recommended in the engineering memo dated March 30, 2015. The agreement shall also include all the conditions of approval.
3. Prior to release of the final plat, the following items must be submitted:
 - a. Park dedication fee of \$15,000 must be paid prior to release of the final plat.

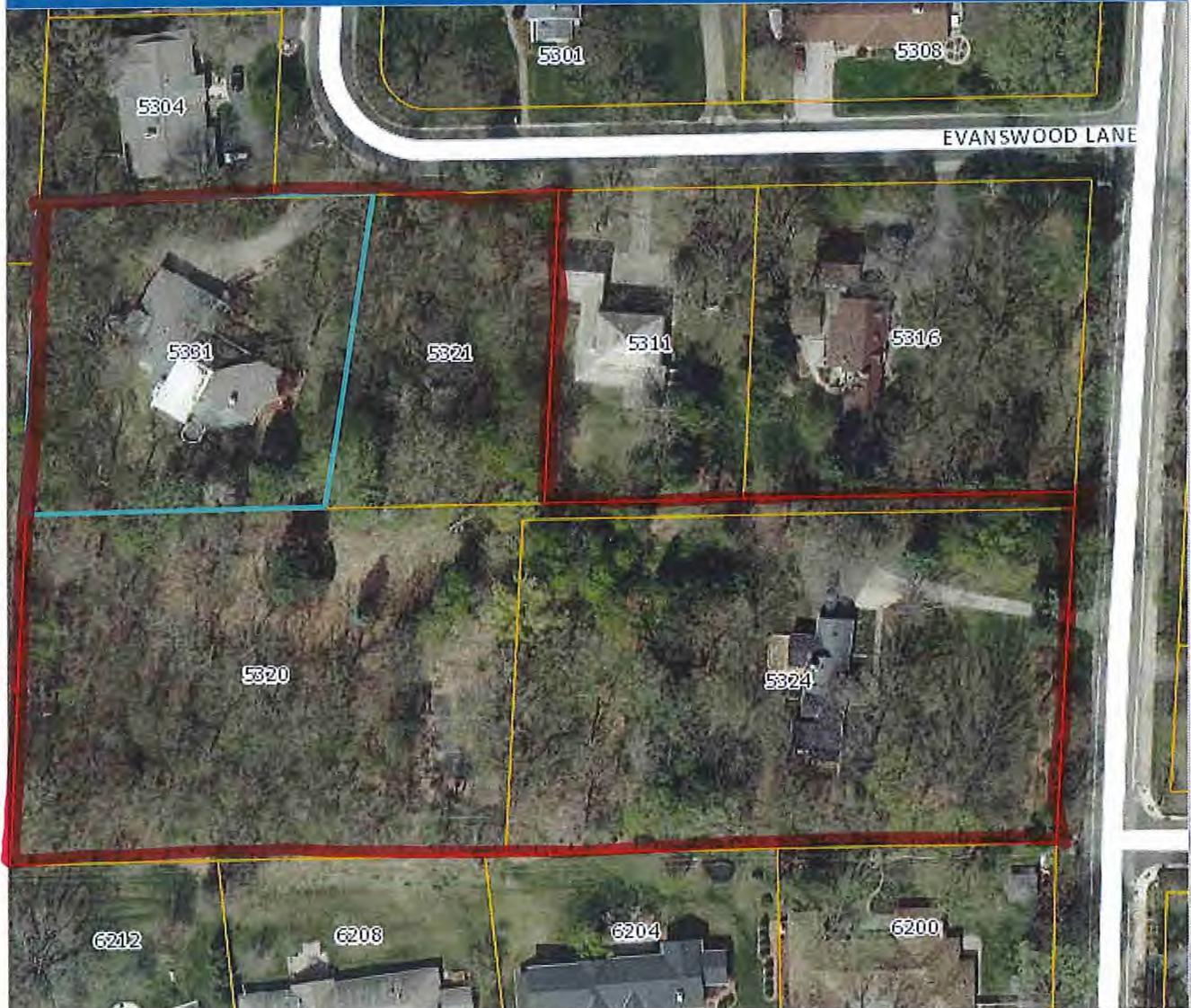
- b. A construction management plan will be required for the overall development of the site.
 - c. Submit evidence of a Nine Mile Creek Watershed District approval. The City may require revisions to the preliminary plat to meet the district's requirements.
 4. Prior to issuance of a building permit, the following items must be submitted:
 - a. Curb-cut permits must be obtained from the Edina engineering department. Driveway plans must be consistent with the proposed grading plan to preserve as many trees as possible.
 - b. Individual homes must comply with the overall grading plan for the site. Each individual building permit will be reviewed for compliance with the overall grading plan subject to review and approval of the city engineer.
 - c. A construction management plan will be required for the construction of the new homes.
 - d. Utility hook-ups are subject to review of the city engineer.
 - e. All homes must be constructed with fire sprinkler protection in accordance to NFPA 13d or IRC 2904.
 - f. Signage stating "No Parking Fire Lane" along one side of the roadway the entire length of the road, and within the cul-de-sac.
 5. Compliance with the conditions outlined in the director of engineering's memo dated March 30, 2015.
 6. Compliance with the conditions outlined in the fire marshal's memo dated February 18, 2015.
 7. A stop sign is required to be installed on the new street approaching Blake Road. Clear sight lines shall be maintained from the intersection.
 8. Compliance with the city's newly adopted tree ordinance.
 9. Compliance with the city's living streets policy.

Deadline for a City Decision: May 20, 2015



Parcel ID:	A-T-B:	Map Scale: 1" ≈ 400 ft. Print Date: 2/11/2015
Owner Name:	Market Total:	
Parcel Address:	Tax Total:	
Property Type:	Sale Price:	
Home-stead:	Sale Date:	<p>This map is a compilation of data from various sources and is furnished "AS IS" with no representation or warranty expressed or implied, including fitness of any particular purpose, merchantability, or the accuracy and completeness of the information shown.</p> <p>COPYRIGHT © HENNEPIN COUNTY 2015</p> 
Parcel Area:	Sale Code:	

A1



<p>Parcel ID:</p> <p>Owner Name:</p> <p>Parcel Address:</p> <p>Property Type:</p> <p>Home-stead:</p> <p>Parcel Area:</p>	<p>A-T-B:</p> <p>Market Total:</p> <p>Tax Total:</p> <p>Sale Price:</p> <p>Sale Date:</p> <p>Sale Code:</p>	<p>Map Scale: 1" ≈ 100 ft.</p> <p>Print Date: 2/11/2015</p>  <p>This map is a compilation of data from various sources and is furnished "AS IS" with no representation or warranty expressed or implied, including fitness of any particular purpose, merchantability, or the accuracy and completeness of the information shown.</p> <p>COPYRIGHT © HENNEPIN COUNTY 2015</p> 
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A3

Applicant
Narrative

**BLAKE WOODS
SUBDIVISION**

Edina, MN

**APPLICATION FOR
PRELIMINARY PLAT**

January 23, 2014

PLANNING DEPARTMENT
JAN 23 2015
CITY OF EDINA

• •
• L A N D F O R M •
• • •
From Site to Finish

AF

INTRODUCTION

On behalf of Frank Berman, Landform is pleased to submit this preliminary plat application to create seven residential lots from four existing lots at Blake Road and Evanswood Lane. We are excited about this environmentally sensitive design and anticipate that it will be a great addition to the neighborhood.

PRELIMINARY PLAT APPROVAL

Frank Berman is requesting approval of a preliminary plat to subdivide four lots (PID #30-11-72-144-0053, #3011721440052, #30-11-72-144-0008, #30-11-72-144-0009) to create seven lots. Mr. Berman plans to sell the lots for future construction of single-family detached residential dwelling units. There were three homes on these four parcels. One home was removed and two homes—including Mr. Berman's home—remain.

The proposed subdivision is located in the R-1 Zoning District and is guided low-density residential in the Comprehensive Plan. The design team has worked to ensure that plans are consistent with City's zoning standards. The proposed subdivision will help the city achieve its goals of supporting redevelopment opportunities that complement the neighborhood and optimize use of the City's infrastructure.

Lot standards:

Section 36-438 of the Zoning Ordinance establishes a minimum lot size of 9,000 square feet in the R-1 District, but requires that the minimum lot area be calculated by averaging the median lot area, lot width and lot depth of the lots in the surrounding neighborhood. The average median parcel area for surrounding lots is 21,842 sq. ft., the average median lot width is 120.8 ft and the average median lot depth is 166.4 ft. Lot standards for the proposed subdivision comply with the lot standards as defined in Chapter 36 and referenced in Section 32-73.

Transportation:

We are proposing a 24 foot road in a 40 foot wide right-of-way that will provide access to the proposed lots, connect with existing infrastructure, and minimize tree loss. This new road will replace the two existing curb cuts (one for the existing home and one for the driveway easement for the home that was removed). It is anticipated that the additional seven lots will generate minimal traffic on surrounding roads. The subdivision application requires that a traffic analysis be performed. We request that the study be initiated to fulfill this requirement.

PLANNING DEPARTMENT
JAN 23 2015
CITY OF EDINA

Tree preservation:

The landowners plan to remain in their home, so preserving trees is a priority for them. The proposed lots have been designed to maximize the preservation of trees on the site. The tree survey shows that 82.6% of trees have been saved. The proposed street was aligned along the north edge of proposed Lots 1-5, where the fewest number of trees would be removed. This is the location of the existing driveway easement that served the previous home on the site. Building area and driveway placement are sited to meet setback standards and to remove the fewest number of trees. Trees coverage will remain largely intact along the southern edge of proposed Lots 1-5.

Stormwater management:

Stormwater management is a critical part of the proposed design. In order to preserve as many trees as possible, stormwater will be managed using rain gardens on each lot. Each lot will provide easement access to the rain garden and homeowners will be required to maintain the rain gardens using appropriate plantings and best management strategies.

SUMMARY

We respectfully request approval of a preliminary plat application for the creation of seven lots and associated infrastructure at Blake Road and Evanswood Lane in Edina, MN. We look forward to receiving feedback on the proposed design from the neighborhood on February 3, 2015 and presenting plans to both the Planning Commission on February 25, 2015 and to the City Council on March 17, 2015.

CONTACT INFORMATION

This document was prepared by:

Mary Matze, Planner

Landform

105 South Fifth Street, Suite 513

Minneapolis, MN 55330

Any additional questions regarding this application can be directed to Reid Schulz at rschulz@landform.net or 612.638.0245.

PLANNING DEPARTMENT
JAN 23 2015
CITY OF EDINA



EXISTING CONDITIONS

BACKGROUND INFORMATION SHOWN IS FROM SURVEY BY WESTWOOD PROFESSIONAL SERVICES ON DECEMBER 29TH, 2014, EXPRESSLY FOR THE PROJECT: CITY OF EDINA, MINNESOTA RECORD DRAWINGS AND UTILITY SERVICES PROVIDED. LANDSCAPE OFFERS NO WARRANTY, EXPRESSED OR IMPLIED, FOR INFORMATION PROVIDED BY OTHERS. EXISTING PROJECT CONDITIONS SHALL BE VERIFIED PRIOR TO BEGINNING CONSTRUCTION. UNUSUAL, UNEXPECTED, OR UNDISCOVERED CONDITIONS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

FRANK BERMAN
 533 EVANSWOOD LANE
 EDINA, MN 55438
 TEL: 612/779-4229

MUNICIPALITY



PROJECT
BLAKE WOODS
SUBDIVISION
EDINA, MN

SHEET INDEX

NO.	TITLE
C01	PLAN TITLE SHEET
C02	PLAN PRELIMINARY
C03	EXISTING CONDITIONS
C04	PROPOSED
C05	CONCRETE, SEWERAGE AND EROSION CONTROL PLAN
C06	STREET PLAN AND PROFILE
C07	LANDSCAPE CONSTRUCTION DETAILS
C08	LANDSCAPE CONSTRUCTION DETAILS
C09	LANDSCAPE CONSTRUCTION DETAILS
C10	LANDSCAPE CONSTRUCTION DETAILS
C11	LANDSCAPE CONSTRUCTION DETAILS
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C15	LANDSCAPE CONSTRUCTION DETAILS
C16	LANDSCAPE CONSTRUCTION DETAILS
C17	LANDSCAPE CONSTRUCTION DETAILS
C18	LANDSCAPE CONSTRUCTION DETAILS
C19	LANDSCAPE CONSTRUCTION DETAILS
C20	LANDSCAPE CONSTRUCTION DETAILS

REVISION HISTORY

NO.	DATE	DESCRIPTION	BY	CHK
01	23 JUN 2015	PRELIMINARY PLAN SUBMITTAL	FB	MC

PROJECT MANAGER REVIEW

DATE: 01/23/2015

CERTIFICATION

PRELIMINARY NOT FOR CONSTRUCTION

IF THE ORIGINAL PLAN OR ANY PART THEREOF IS DAMAGED OR LOST, THE ENGINEER SHALL BE RESPONSIBLE FOR REPRODUCING THE ORIGINAL PLAN AND FOR THE ACCURACY OF THE REPRODUCED COPY.

PRELIMINARY PLAT
 01/23/2015

LANDFORM
 from Site to Finish

105 South Fifth Avenue Tel: 612-252-0070
 Suite 513 Fax: 612-252-9077
 Minneapolis, MN 55461 Web: landform.net

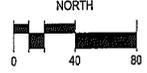
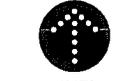
FILE NAME: C10-122317
 PROJECT NO.: 22214317

EXISTING CONDITIONS
C1.1
 SHEET NO. 1/14

PLANNING DEPARTMENT
JAN 23 2015
CITY OF EDINA



Know what's Below.
 Call before you dig.





- OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WITHIN OR USE OF PUBLIC RIGHT-OF-WAY.
- THE DIGITAL FILE WHICH CAN BE OBTAINED FROM THE ENGINEER SHALL BE USED FOR STAKING. DISCREPANCIES BETWEEN THE DRAWINGS AND THE DIGITAL FILE SHALL BE REPORTED TO THE ENGINEER. THE BUILDING FOOTPRINT, AS SHOWN ON THESE DRAWINGS, AND THE DIGITAL FILE, SHALL BE COMPARED TO THE STRUCTURAL DRAWINGS PRIOR TO STAKING.
- DIMENSIONS SHOWN ARE TO BACK OF CURB UNLESS NOTED OTHERWISE.

AREA SUMMARY

EXISTING	PERVIOUS	PERVIOUS	TOTAL (4330 AC)
PERVIOUS	67,668 S.F.	59.4%	
PERVIOUS	18,868 S.F.	16.6%	
TOTAL (4330 AC)	86,536 S.F.	100.0%	

PROPOSED (NOT INCLUDING FUTURE HOUSES AND DRIVEWAYS)	PERVIOUS	PERVIOUS	TOTAL (4330 AC)
PERVIOUS	86,500 S.F.	89.6%	
PERVIOUS	21,476 S.F.	18.4%	
TOTAL (4330 AC)	108,000 S.F.	100.0%	

ZONING AND SETBACK SUMMARY

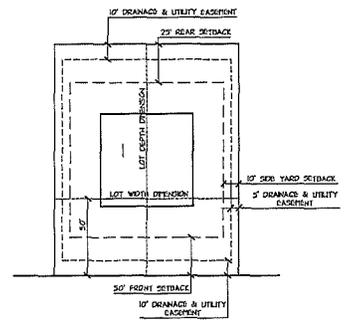
THE PROPERTY IS CURRENTLY ZONED SINGLE FAMILY ONE-LAID.

BUILDING SETBACK INFORMATION IS AS FOLLOWS:
 FRONT YARD = 50 FT.
 SIDE = 25 FT.
 REAR = 10 FT.

LOT COVERAGE INFORMATION IS AS FOLLOWS:
 LOT AREA THRESHOLD = GREATER THAN THE FEDERAL LOT AREA IN THE NEIGHBORHOOD (120,417 S.F.)
 LOT WIDTH THRESHOLD = GREATER THAN THE FEDERAL LOT WIDTH IN THE NEIGHBORHOOD (100 FT.)
 LOT DEPTH THRESHOLD = GREATER THAN THE FEDERAL LOT DEPTH IN THE NEIGHBORHOOD (100 FT.)
 MAX. BUILDING COVERAGE = 25%

PROPOSED LOT AREAS

LOT	LOT AREA	LOT AREA	LOT AREA
LOT 1	20,842 SQ. FT.	0.501 ACRES	
LOT 2	20,780 SQ. FT.	0.500 ACRES	
LOT 3	20,842 SQ. FT.	0.501 ACRES	
LOT 4	20,780 SQ. FT.	0.500 ACRES	
LOT 5	24,892 SQ. FT.	0.570 ACRES	
LOT 6	24,892 SQ. FT.	0.570 ACRES	
LOT 7	21,100 SQ. FT.	0.500 ACRES	
RIGHT-OF-WAY RESERVATION	22,078 SQ. FT.	0.507 ACRES	
TOTAL	187,897 SQ. FT.	4.31 ACRES	



TYPICAL LOT LAYOUT
NO SCALE

PLANNING DEPARTMENT
 JAN 23 2015
 CITY OF EDINA
 811
 Know what's Below. Call before you dig.
 NORTH
 0 40 80

FRANK BERMAN
 3331 EVANSWOOD LANE
 EDINA, MN 55435
 TEL: 952.755.2295



PROJECT
BLAKE WOODS SUBDIVISION
 EDINA, MN

SHEET INDEX

NO.	TITLE
1001	CONTRACT AND PERMITS
1002	PRELIMINARY PLAN
1003	ENGINEERING
1004	SET PLAN
1005	GENERAL NOTES AND DESIGN CONTROL PLAN
1006	UTILITY
1007	SET PLAN AND PROFILES
1008	CONSTRUCTION DETAILS
1009	CONSTRUCTION DETAILS
1010	CONSTRUCTION DETAILS
1011	CONSTRUCTION DETAILS
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1100	CONSTRUCTION DETAILS

REVISION HISTORY

NO.	DATE	DESCRIPTION
1	01/23/2015	PRELIMINARY PLAN SUBMITTAL

PROJECT MANAGER REVIEW

DATE: 01/23/2015

CERTIFICATION

PRELIMINARY NOT FOR CONSTRUCTION

IF THE PROPERTY, SOLUTION OR DESIGN IS SUBJECT TO ANY OTHER PERMITS OR REGULATIONS, THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND REGULATIONS PRIOR TO CONSTRUCTION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND REGULATIONS PRIOR TO CONSTRUCTION.

PRELIMINARY PLAT
 01/23/2015

LANDFORM
 From Site to Finish

105 South Fifth Avenue Tel: 612-252-0070
 Suite 513 Fax: 612-252-9077
 Minneapolis, MN 55401 Web: landform.net

FILE NAME: C081E22317
 PROJECT NO.: 22214317

SITE PLAN
C2.1
 SHEET NO. 42/1A



NO.	DESCRIPTION
1	PRELIMINARY PLAT
2	PRELIMINARY PLAT
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80	PRELIMINARY PLAT

PRELIMINARY NOT FOR CONSTRUCTION

155 South Fifth Avenue
 Minneapolis, MN 55401
 Tel: 612-232-0076
 Fax: 612-232-8977
 Web: landform.net

1. CONTACT UTILITY SERVICES PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.

2. REMOVE TOPSOIL FROM GRAVING AREAS AND STORE/PILE SEPARATELY QUANTITY FOR REUSE.

3. REMOVE STORMWATER AND GRAVING WATER FROM EXCAVATION.

4. DRAINAGE PANS WILL BE INSTALLED QUANTITIES BY GRADE AT THE TOP OF HOLE.

5. EXCAVATION SHALL BE TO THE SHALLOWEST PERMISSIBLE GRADE AND SHALL BE PROTECTED FROM COLLAPSE AND CONSTRUCTION AND PROVIDE PROTECTIVE RAMPING.

6. GRAVING AREAS SHALL BE PROTECTED FROM COLLAPSE BY STAKE AT THE TOP AND THE GRADE.

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24. GRAVING AREAS SHALL BE PROTECTED FROM COLLAPSE BY STAKE AT THE TOP AND THE GRADE.



811
 CITY OF EDINA
 JAN 28 2015
 PLANNING DEPARTMENT

Call before you dig.

Know what's Below.

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4

KNOLLS

3RD

ADDITION

5

3

BLOCK

WETLANDS
100'-1R HWL=437.93
10'-1R HWL=433.84
OUTLET=422.00
(FRONT CITY OF EDNA)

RAIN GARDEN C7.4
HWL=444.10
BTM=441.10
OUTLET=422.00
E.O.=441.90

5

NET PROTECTION C7.2

RAIN GARDEN C7.4

RAIN GARDEN C7.4
HWL=446.00
BTM=443.25
OUTLET=444.10
E.O.=445.50

RAIN GARDEN C7.4
HWL=445.00
BTM=442.25
OUTLET=443.25
E.O.=445.50

RAIN GARDEN C7.4
HWL=446.00
BTM=443.25
OUTLET=444.10
E.O.=445.50

ZUPPEKWOOD

EVANSWOOD LANE

2

2ND ADDITION

BLAKE ROAD

PINE

DOYLE

INSTALL NET PROTECTION ON NEAREST DOWN STREAM CATCH BASIN

10

Tree Removal
Buildy Pads
XXX

Tree Removal!
Revised Grading Plan
XXXX

A12

7

3

4

1

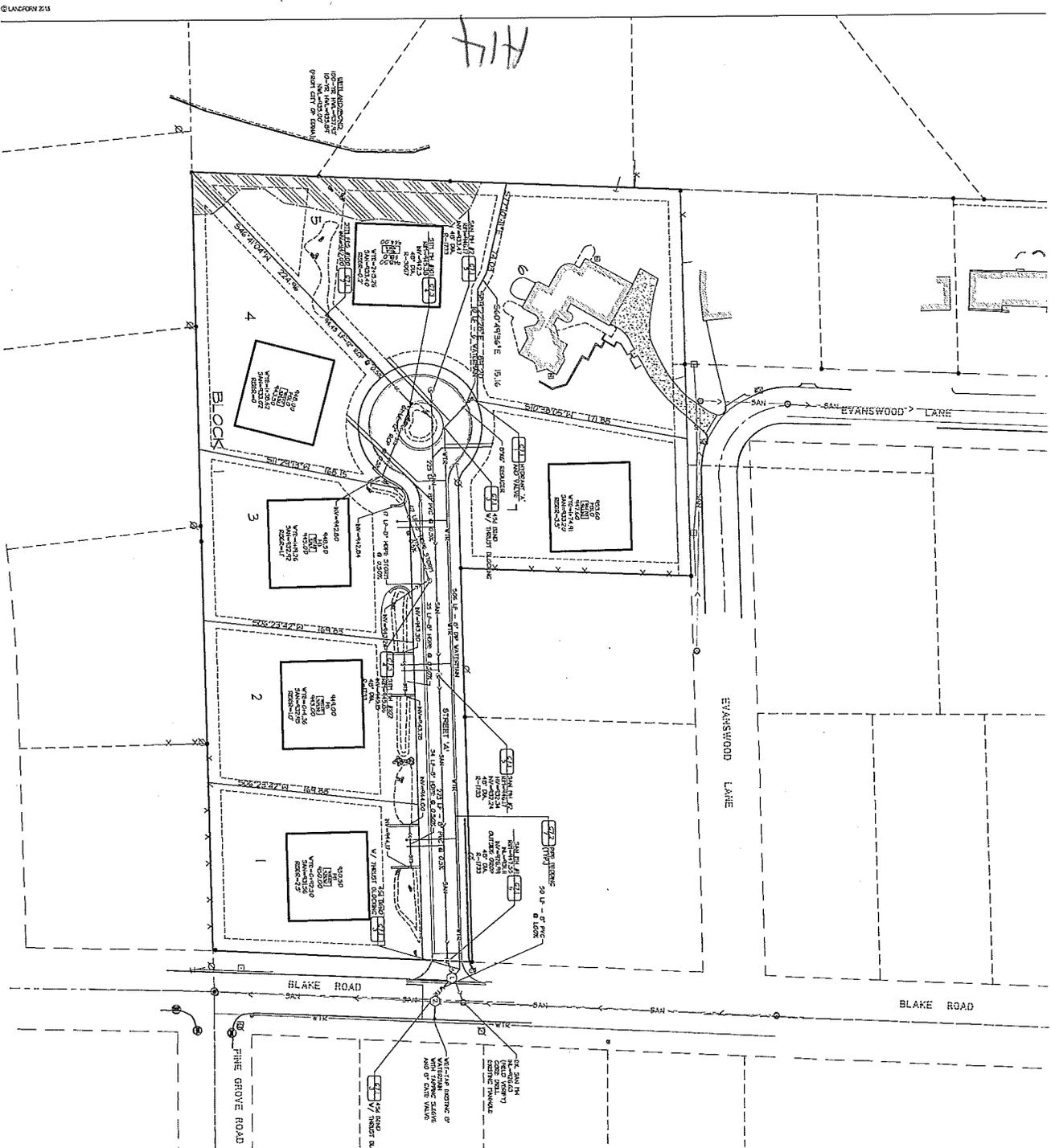
2

10

A13

WETLAND/POND
100-YR HWL=937.93'
10-YR HWL=935.84'
NWL=935.00'
(FROM CITY OF EDINA)





- UTILITY CROSSINGS**
- 1. 50' UTILITY EASEMENT FOR 15' DIAMETER WATER MAIN
 - 2. 50' UTILITY EASEMENT FOR 15' DIAMETER WATER MAIN
 - 3. 50' UTILITY EASEMENT FOR 15' DIAMETER WATER MAIN
 - 4. 50' UTILITY EASEMENT FOR 15' DIAMETER WATER MAIN
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 - 13. 50' UTILITY EASEMENT FOR 15' DIAMETER WATER MAIN
 - 14. 50' UTILITY EASEMENT FOR 15' DIAMETER WATER MAIN
 - 15. 50' UTILITY EASEMENT FOR 15' DIAMETER WATER MAIN

811
Know what's Below.
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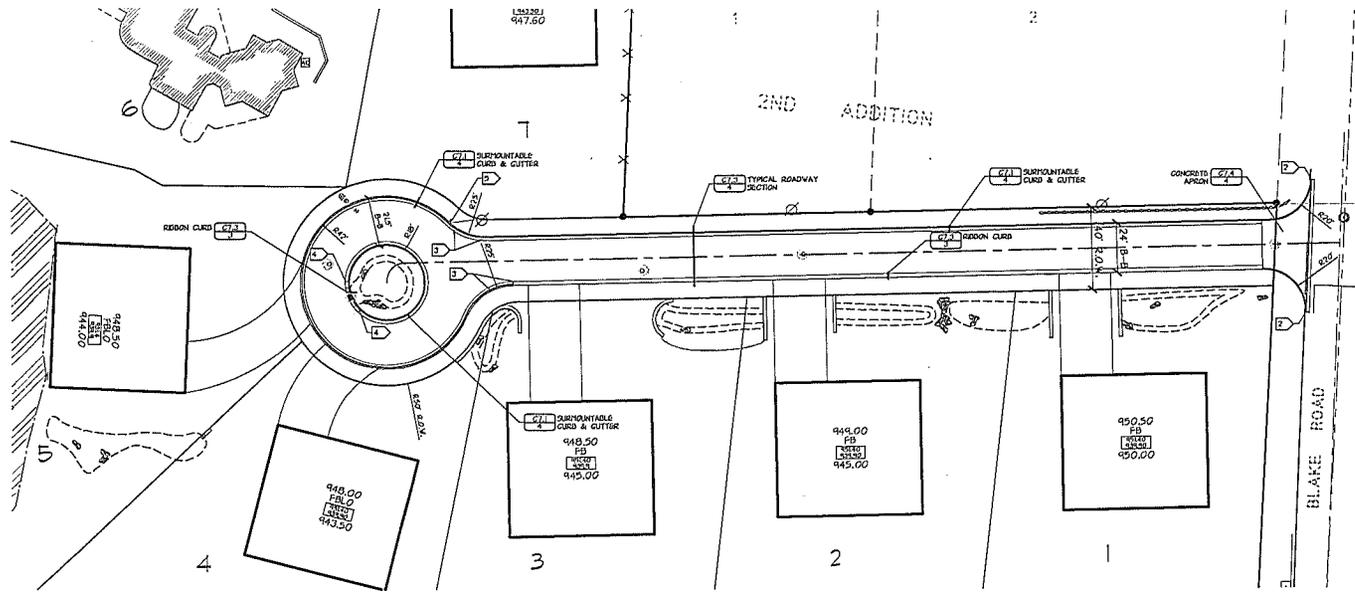
LANDFORM
PROJECT NO. 2215151
UTILITYS
C4.1

PRELIMINARY PLAT
01/29/2015
PLANNING DEPARTMENT
JAN 29 2015
CITY OF EDINA

PROJECT MANAGER REVIEW
REVISION HISTORY
DATE: 01/29/2015
PROJECT: BLAKE WOODS SUBDIVISION

BLAKE WOODS SUBDIVISION EDINA, MN
PROJECT SUBMITTER
FRANK BERWMAN
3331 EVANSWOOD LANE
EDINA, MN 55425

FRANK BERWMAN
3331 EVANSWOOD LANE
EDINA, MN 55425
TEL: 952.941.1111



- PAVING NOTES**
- SEE SHEET C11 FOR FINISHED GROUND SPOT ELEVATIONS, SEE SHEET C41 FOR C&G ELEVATIONS OF CATCH BASINS.
 - TEXT AND MATCH EXISTING CURB. PROVIDE 10 FOOT TRANSITION.
 - 10 FOOT CURB TRANSITION.
 - 3 FOOT NOSE DOWN CURB, SEE DETAIL 2 ON C7.3
 - COORDINATE WITH UTILITY OWNER TO ADJUST LOCATION OF POLE ANCHOR.

OWNER
FRANK BERMAN
 5231 DUNDYWOOD LANE
 EDINA, MN 55426
 TEL: 612/707-0271

MUNICIPALITY



PROJECT
BLAKE WOODS SUBDIVISION
EDINA, MN

SHEET INDEX

SHEET	TITLE
C01	PLAN TITLE SHEET
C02	PRELIMINARY PLAN
C03	EXISTING CONDITIONS
C04	PROPOSED CONDITIONS
C05	GRADE, DRAINAGE AND GROUND CONTROL PLAN
C06	UTILITY
C07	CONCRETE PLAN AND PROFILE
C08	CONSTRUCTION DETAILS
C09	CONSTRUCTION DETAILS
C10	CONSTRUCTION DETAILS
C11	CONSTRUCTION DETAILS
C12	CONSTRUCTION DETAILS
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C96	CONSTRUCTION DETAILS
C97	CONSTRUCTION DETAILS
C98	CONSTRUCTION DETAILS
C99	CONSTRUCTION DETAILS
C100	CONSTRUCTION DETAILS

REVISION HISTORY

NO.	REVISION	DATE
1	ISSUE FOR PERMIT	01/23/2015

PROJECT MANAGER REVIEW

CERTIFICATION

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PLAT
 01/23/2015

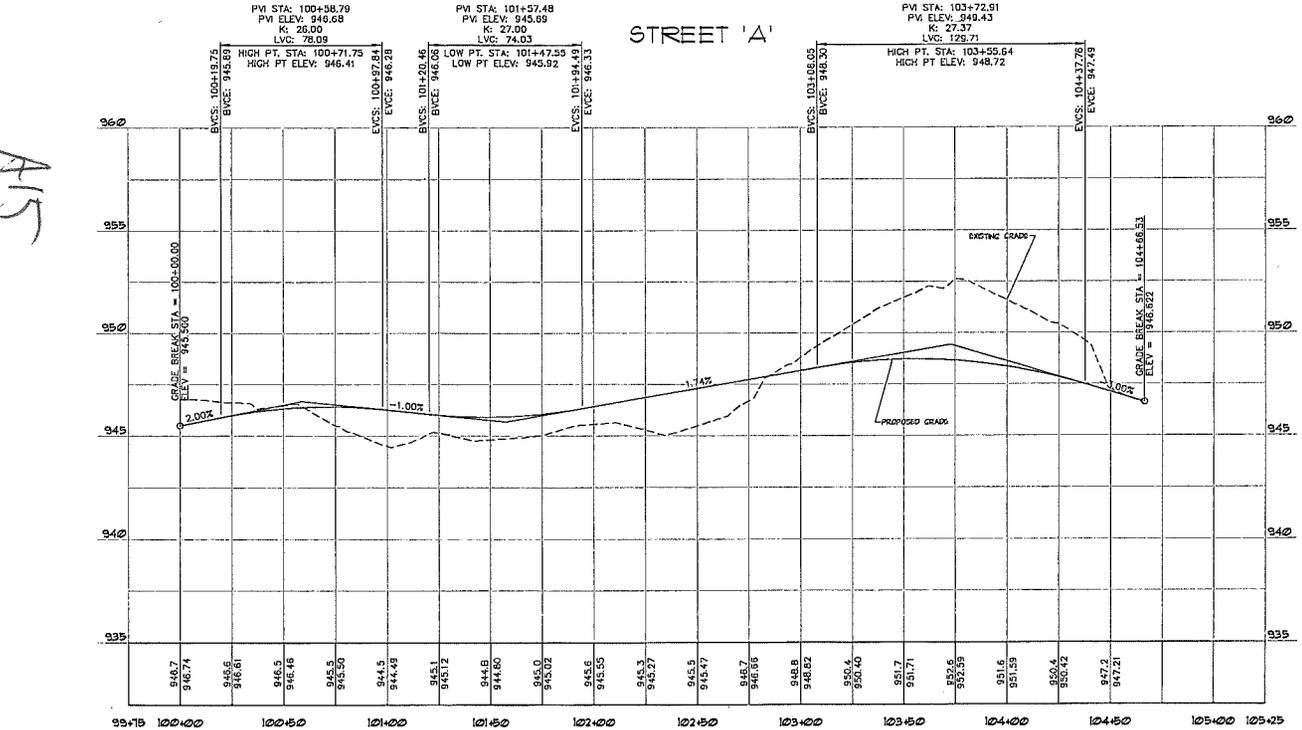
LANDFORM
 From Site to Finish

105 South Fifth Avenue Tel: 612-252-0070
 Suite 613 Fax: 612-252-0077
 Minneapolis, MN 55401 Web: landform.net

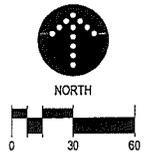
FILE NAME: C02122317
 PROJECT NO.: 22214311

STREET PLAN & PROFILE - STREET A
C6.1

SHEET NO. 9/16



PLANNING DEPARTMENT
 JAN 23 2015
 CITY OF EDINA



© LANDFORM 2015

SHEET INDEX

NO.	DESCRIPTION
001	CITY TITLE SHEET
002	PRELIMINARY PLAN
003	EXISTING CONDITIONS
004	PROPOSED SANITARY SEWER
005	PROPOSED STORM SEWER
006	PROPOSED WATER MAIN
007	PROPOSED GAS MAIN
008	PROPOSED ELECTRIC MAIN
009	PROPOSED TELEPHONE MAIN
010	PROPOSED CABLE TV MAIN
011	PROPOSED FIBER OPTIC MAIN
012	PROPOSED LANDSCAPE PLAN
013	PROPOSED UTILITY LOCATIONS
014	PROPOSED CONSTRUCTION DETAILS
015	PROPOSED CONSTRUCTION DETAILS
016	PROPOSED CONSTRUCTION DETAILS
017	PROPOSED CONSTRUCTION DETAILS
018	PROPOSED CONSTRUCTION DETAILS
019	PROPOSED CONSTRUCTION DETAILS
020	PROPOSED CONSTRUCTION DETAILS

REVISION HISTORY

NO.	DESCRIPTION	DATE	BY
01	CONTRACT ENCLASER FOR ANY PROVISIONS		
02	PROPOSED SANITARY SEWER	12/22/2015	JK

PROJECT MANAGER REVIEW

CERTIFICATION

PRELIMINARY
NOT FOR
CONSTRUCTION

JAN 28 2015
CITY OF EDINA

PRELIMINARY PLAN
01/23/2015

LANDFORM
From Site to Finish

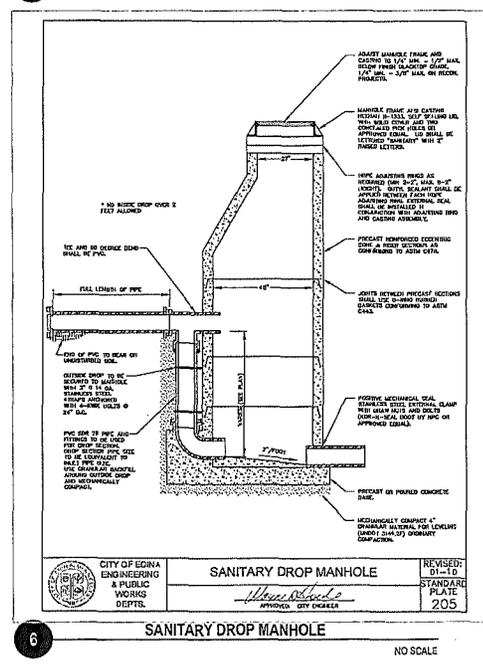
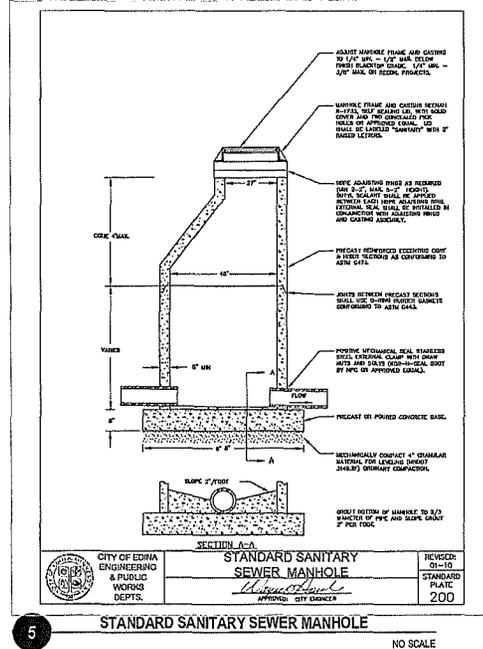
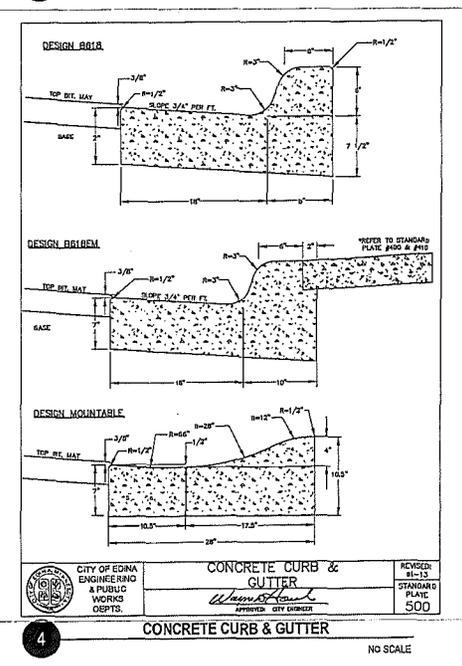
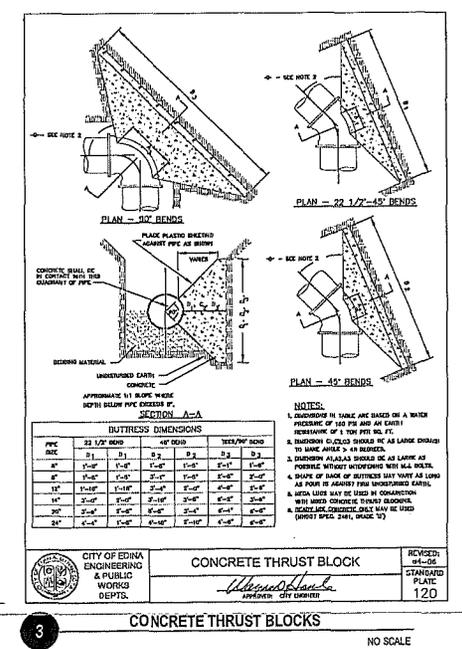
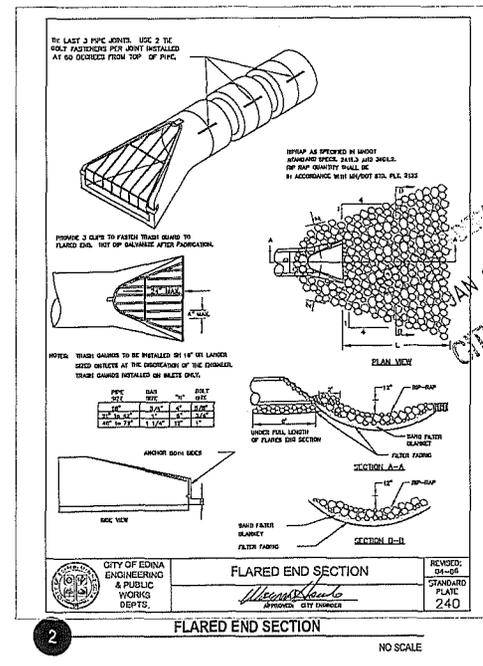
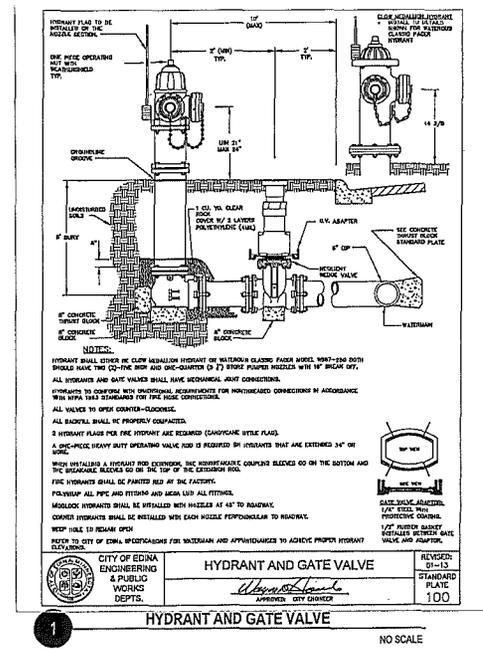
105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401

Tel: 612-252-9070
Fax: 612-252-9077
Email: landform.mn

FILE NAME: C17122217
PROJECT NO.: 2221431T

CIVIL CONSTRUCTION
DETAILS
C7.1

SHEET NO. 0118



A16

MUNICIPALITY



PROJECT
**BLAKE WOODS
 SUBDIVISION
 EDINA, MN**

SHEET INDEX

SHEET	TITLE
C01	CON. TIE-BEAM
C02	IMPERMEABLE PLAT
C03	ASPHALT CURBS
C04	CONCRETE CURBS
C05	CONCRETE CURBS AND PROFILES
C06	CONCRETE CURBS AND PROFILES
C07	CONCRETE CURBS AND PROFILES
C08	CONCRETE CURBS AND PROFILES
C09	CONCRETE CURBS AND PROFILES
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C14	CONCRETE CURBS AND PROFILES
C15	CONCRETE CURBS AND PROFILES
C16	CONCRETE CURBS AND PROFILES
C17	CONCRETE CURBS AND PROFILES
C18	CONCRETE CURBS AND PROFILES
C19	CONCRETE CURBS AND PROFILES
C20	CONCRETE CURBS AND PROFILES

REVISION HISTORY	
NO.	DATE
1	12/14/10
2	01/23/11
3	01/23/11
4	01/23/11
5	01/23/11
6	01/23/11
7	01/23/11
8	01/23/11
9	01/23/11
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14	01/23/11
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16	01/23/11
17	01/23/11
18	01/23/11
19	01/23/11
20	01/23/11

PROJECT MANAGER REVIEW	
DATE	SCALE
01/23/11	AS SHOWN

CERTIFICATION

**PRELIMINARY
 NOT FOR
 CONSTRUCTION**

PRELIMINARY PLAT
 01/23/2015

LANDFORM
 From Site to Finish

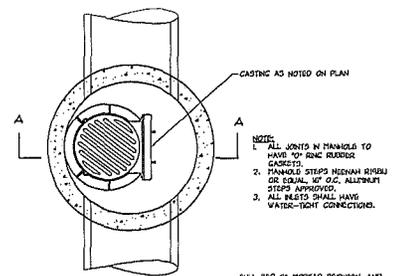
105 South Fifth Avenue
 Suite 513
 Minneapolis, MN 55401

Tel: 012-252-0070
 Fax: 012-252-0077
 Web: landformllp.com

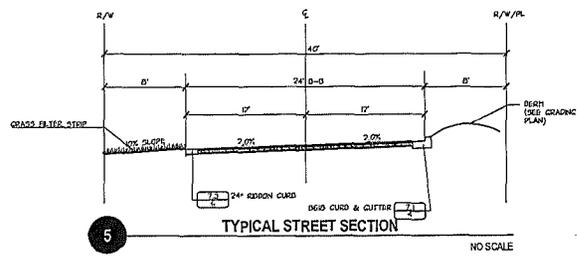
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 PROJECT NO.: ZZZ14317

CIVIL CONSTRUCTION
 DETAILS
C7.3

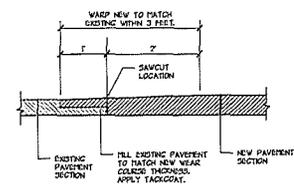
SHEET NO. 1119R



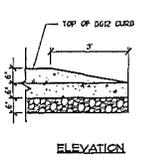
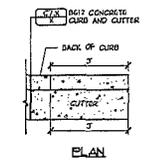
4 STORM SEWER CATCH BASIN MANHOLE
 NO SCALE



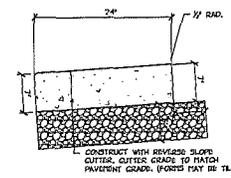
5 TYPICAL STREET SECTION
 NO SCALE



1 ASPHALT PAVEMENT TRANSITION
 NO SCALE



2 NOSE DOWN CURB
 NO SCALE



3 24" CONCRETE RIBBON CURB
 NO SCALE

FLUSHED TO FINISH
 JAN 23 2015
 CITY OF EDINA

A17

01/23/2015

Property Description

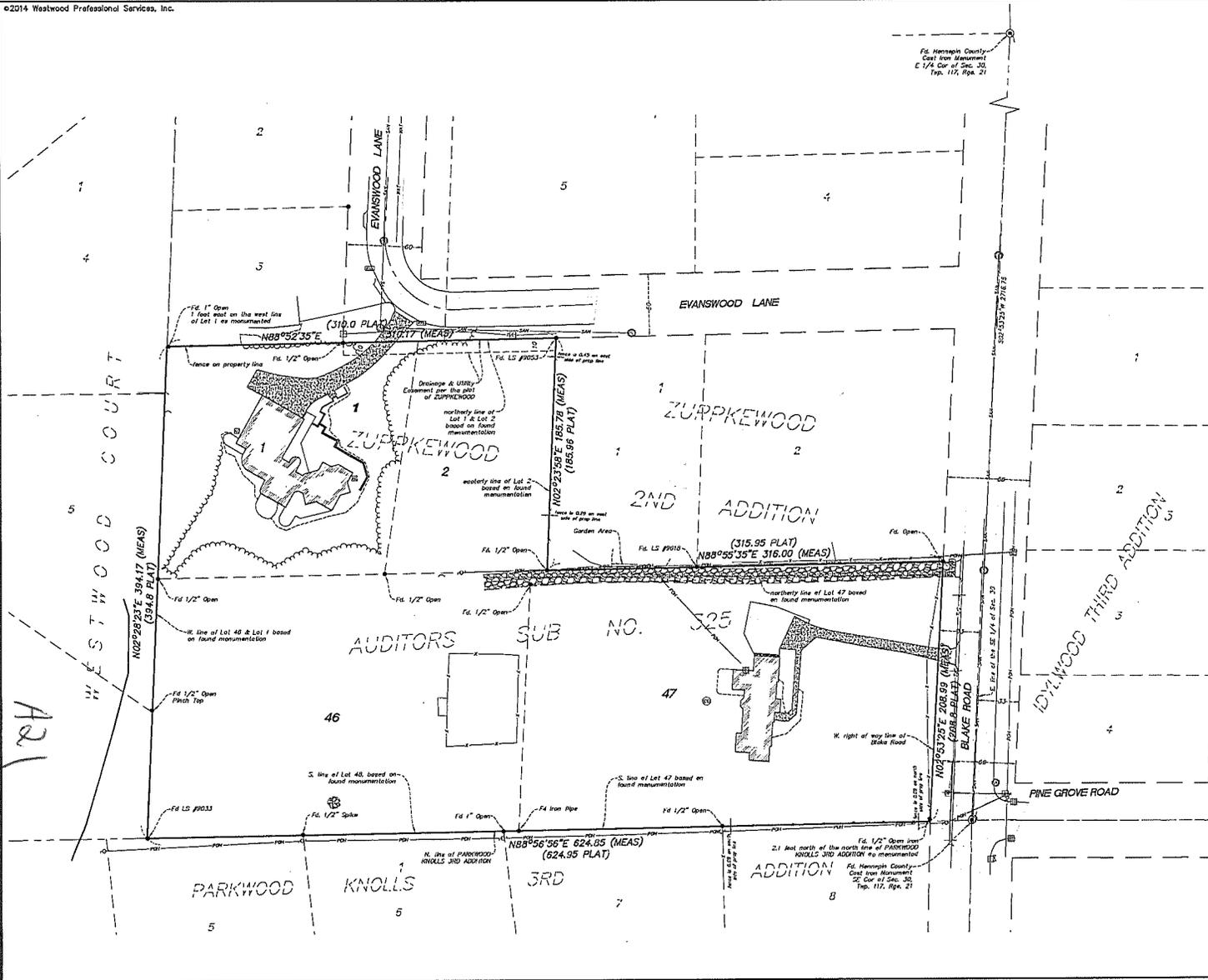
Lot 1 and Lot 2 Block 1, ZUPPKEWOOD, according to the recorded plat thereof, Hennepin County, Minnesota

AND

Lot 46 and Lot 47, AUDITORS SUBDIVISION NO. 325, according to the recorded plat thereof, Hennepin County, Minnesota.

General Notes:

- 1.) No title work or easements have been reviewed for this survey.
- 2.) Horizontal Datum is based on Hennepin County coordinate system, 1983NAD (1986adj), US Survey Feet.
- 3.) This survey summarizes the field monumentation involved for the subject property.
- 4.) Copies of the Adjoiner's Deeds have not been reviewed as part of this survey. Adjoiner's tax descriptions as shown on Hennepin County website were reviewed to research adjoiner's record descriptions only. No gaps or overlaps were found in description provided by client and tax record descriptions.



Legend

- | | | | |
|---|--------------------------|---|----------------------|
| ○ | BRUSH/SHRUB | ⊗ | STREET LIGHT |
| ⊗ | CONIFEROUS TREE | — | CUT WIRE |
| ⊗ | DECIDUOUS TREE | ⊗ | POWER HOLE |
| ⊗ | WETLAND | ⊗ | ELECTRIC BOX |
| ⊗ | STEEL/WOOD POST | ⊗ | ELECTRIC METER |
| — | SIGN-TRAFFIC/OTHER | ⊗ | ELECTRIC MANHOLE |
| — | SIGN-TRAFFIC/OTHER | ⊗ | ELECTRIC TOWER |
| ⊗ | MAIL BOX | ⊗ | SANITARY MANHOLE |
| ⊗ | HANGAR/STALL | ⊗ | SILVER CLEANOUT |
| ⊗ | PERG TEST | ⊗ | DEED/CATCH BASIN |
| ⊗ | MONITORING WELL | ⊗ | CATCH BASIN |
| ⊗ | CABLE TV BOX | ⊗ | FLARED END SECTION |
| ⊗ | GAS METER | ⊗ | CONCRETE SURFACE |
| ⊗ | GULVERT | ⊗ | GRAVEL SURFACE |
| — | GAS LINE | ⊗ | STORM MANHOLE |
| — | POWER OVERHEAD | ⊗ | TELEPHONE BOX |
| — | POWER UNDERGROUND | ⊗ | TELEPHONE MANHOLE |
| — | SANITARY SINKER | ⊗ | TRAFFIC CONTROL BOX |
| — | STORM SINKER | ⊗ | HAND HOLE |
| — | TELEPHONE OVERHEAD | ⊗ | TRAFFIC LIGHT |
| — | TELEPHONE UNDERGROUND | ⊗ | GATE VALVE |
| — | WATERMETER | ⊗ | UNDERGROUND |
| ⊗ | WATER METER | ⊗ | FENCE LINE |
| ⊗ | CURB STOP BOX | ⊗ | DECORATIVE TREE LINE |
| ⊗ | WATER MANHOLE | ⊗ | CONCRETE TREE LINE |
| ⊗ | WELL | ⊗ | WIRE & BUTTER |
| ⊗ | CABLE TV | ⊗ | IRREGULAR SURFACE |
| ⊗ | SOIL BORING | | |
| ⊗ | FOUND CORNER | | |
| ⊗ | FOUND CAST IRON MONUMENT | | |

Berman Edina
Edina, Minnesota

Date 12/22/2014 Sheet 1 OF 1

Certificate of Survey

Westwood

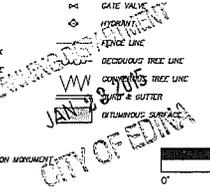
Phone (952) 832-5150 7600 Arapago Drive
Fax (952) 832-0222 6200 Prairie Ave. #204
Toll Free (877) 894-6160 www.westwoodpa.com
Westwood Professional Services, Inc.

I hereby certify that this plat 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.
Craig W. Berman
Date 12/22/2014 License No. 23021

Drawn: JAG
Checked: CHM
Dropped: RRL
Revised/Deleted: bz/6/14

Prepared for:

Frank Berman
5331 Evanswood Lane
Edina, Minnesota 55436



LOT SUMMARY

Parcel #	Parcel Area	Lot Width	Lot Depth	PID	House No.	Street Name	Owner Name	Addition Name	Lot	Block	Metes & Bnds
1	21,354	140.2	156.1	311172110036	6200	IDYLWOOD LA	GEORGE T HOLDEN	PARKWOOD KNOLLS 07TH ADDN	009	001	
2	19,613	136.5	145.4	311172110037	6216	IDYLWOOD LA	DAVID P MCCARTHY	PARKWOOD KNOLLS 07TH ADDN	005	002	
3	20,486	145.3	138.4	311172110038	6212	IDYLWOOD LA	DANIEL & KIMBERLY NORMAN	PARKWOOD KNOLLS 07TH ADDN	006	001	
4	21,842	146.3	145.6	311172110039	6208	IDYLWOOD LA	TIMOTHY J KOEPL	PARKWOOD KNOLLS 07TH ADDN	007	001	
5	21,574	144.9	145.9	311172110040	6204	IDYLWOOD LA	R M WEATHERLY/A J WEATHERLY	PARKWOOD KNOLLS 07TH ADDN	008	001	
6	21,257	143.4	146.5	311172110041	6200	IDYLWOOD LA	GEORGE T HOLDEN	PARKWOOD KNOLLS 07TH ADDN	009	001	
7	24,306	164.1	148.9	311172110016	6201	PARKWOOD RD	W J & J E JOHNSON	PARKWOOD KNOLLS 03RD ADDN	008	002	
8	25,244	174.4	148.3	311172110015	6205	PARKWOOD RD	J P & M O ANDERSON	PARKWOOD KNOLLS 03RD ADDN	007	002	
9	25,632	172.2	152.1	311172110014	6209	PARKWOOD RD	W & N DONNELLY	PARKWOOD KNOLLS 03RD ADDN	006	002	
10	24,618	160.2	155.4	311172110013	6213	PARKWOOD RD	R W CARTHAUS ETAL	PARKWOOD KNOLLS 03RD ADDN	005	002	
11	23,277	159.4	145.8	311172110012	6217	PARKWOOD RD	R P & A L HAMES	PARKWOOD KNOLLS 03RD ADDN	004	002	
12	21,876	145.8	146.4	311172110011	6221	PARKWOOD RD	S & N MESHBESHER	PARKWOOD KNOLLS 03RD ADDN	003	002	
13	50,803	159.8	319.1	311172110002	6224	PARKWOOD RD	JASON & TREVA VOGT	PARKWOOD KNOLLS 03RD ADDN	002	001	
14	45,790	159.6	292.1	311172110003	6220	PARKWOOD RD	WILLIAM C FRASER ETAL	PARKWOOD KNOLLS 03RD ADDN	003	001	
15	38,285	160.1	245.2	311172110004	6216	PARKWOOD RD	E S & J S EASTMAN	PARKWOOD KNOLLS 03RD ADDN	004	001	
16	31,179	159.6	197.8	311172110005	6212	PARKWOOD RD	P E & L M DAHL	PARKWOOD KNOLLS 03RD ADDN	005	001	
17	26,658	159.8	166.4	311172110006	6208	PARKWOOD RD	D C DICKINSON & R L WALLIN	PARKWOOD KNOLLS 03RD ADDN	006	001	
18	25,596	165.0	152.0	311172110007	6204	PARKWOOD RD	PHILLIP M SWEETSER	PARKWOOD KNOLLS 03RD ADDN	007	001	
19	24,517	162.0	150.7	311172110008	6200	PARKWOOD RD	CARLA J ROSE	PARKWOOD KNOLLS 03RD ADDN	008	001	
20	15,657	90.0	174.0	3211721220041	5417	BLAKE RD	M J CONOVER & D P CONOVER	IDYLWOOD 5TH ADDN	005	001	
21	15,657	90.0	174.0	3211721220040	5413	BLAKE RD	MATTHEW J LERNER	IDYLWOOD 5TH ADDN	004	001	
22	15,657	90.0	174.0	3211721220039	5409	BLAKE RD	E J MILLER & R E MILLER	IDYLWOOD 5TH ADDN	003	001	
23	15,657	90.0	174.0	3211721220038	5405	BLAKE RD	MARY R EBBERT	IDYLWOOD 5TH ADDN	002	001	
24	18,267	105.0	174.0	3211721220037	5401	BLAKE RD	JMS CUSTOM HOMES LLC	IDYLWOOD 5TH ADDN	001	001	
25	17,611	126.7	137.9	3211721220028	5400	HIGHWOOD DR W	L & M JOHNSON	IDYLWOOD 3RD ADDN	001	002	
26	17,222	106.8	152.4	3211721220029	5404	HIGHWOOD DR W	T HIGEL & P LIGEL	IDYLWOOD 3RD ADDN	002	002	
27	32,215	113.6	207.2	3211721220030	5408	HIGHWOOD DR W	SUNNY SIK KIM TRUSTEE	IDYLWOOD 3RD ADDN	003	002	
28	16,266	132.6	132.6	3211721220027	5405	HIGHWOOD DR W	J P & S R ENGELBERT	IDYLWOOD 3RD ADDN	006	001	
29	19,948	138.6	138.6	3211721220047	6029	PINE GROVE RD	LARRY WOOD & JEANNE WOOD	IDYLWOOD 6TH ADDN	006	002	
30	20,799	138.4	151.9	2911721330015	5313	HIGHWOOD DR W	S R ROUSEY & G D MACMILLAN	IDYLWOOD 6TH ADDN	002	001	
31	27,481	111.1	247.2	2911721330013	5309	HIGHWOOD DR W	LA DOLAN & T J DOLAN	IDYLWOOD 4TH ADDN	009	001	
32	22,440	111.9	197.6	2911721330012	5305	HIGHWOOD DR W	JOHN C LARKIN	IDYLWOOD 4TH ADDN	008	001	
33	20,688	114.7	197.4	2911721330009	5300	HIGHWOOD DR W	C & K WHITE	IDYLWOOD 4TH ADDN	002	001	EX ROAD
34	17,175	102.8	181.4	2911721330017	5304	HIGHWOOD DR W	R A HAYMAKER & L L HAYMAKER	REPLAT IDYLWOOD 4TH-LOTS 3 TO 5 BLK 1	001	001	
35	17,174	93.6	177.2	2911721330018	5308	HIGHWOOD DR W	CHRISTOPHER D JOHNSON	REPLAT IDYLWOOD 4TH-LOTS 3 TO 5 BLK 1	002	001	
36	15,500	92.8	162.0	2911721330019	5312	HIGHWOOD DR W	PATRICIA M BOOSALIS	REPLAT IDYLWOOD 4TH-LOTS 3 TO 5 BLK 1	003	001	
37	13,845	86.1	154.5	2911721330010	5316	HIGHWOOD DR W	SUSAN J LEE	IDYLWOOD 4TH ADDN	006	001	
38	13,418	86.7	155.0	2911721330007	5321	BLAKE RD	KENDAL MASICA	IDYLWOOD 3RD ADDN	004	003	
39	15,485	100.0	155.0	2911721330006	5317	BLAKE RD	P J REICHEL & J R REICHEL	IDYLWOOD 3RD ADDN	003	003	
40	15,485	100.0	155.0	2911721330005	5315	BLAKE RD	J R LARSON & A M LARSON	IDYLWOOD 3RD ADDN	002	003	
41	19,448	110.0	177.0	2911721330004	5309	BLAKE RD	ROGER D HAUCH & KELLY HAUCK	IDYLWOOD 3RD ADDN	001	003	
42	14,851	84.0	177.0	2911721330008	5307	BLAKE RD	JON A UMHOEFER	IDYLWOOD 4TH ADDN	001	001	
43	62,012	168.5	368.4	2911721330050	5225	BLAKE RD	ALVIN E & MARY A MCQUINN	EMERALD WOODS ADDN	001	001	LOTS 1 AND 2
45	36,671	197.9	186.0	3011721440061	5316	BLAKE RD	D M BALAFAS & K G BALAFAS	ZUPPKEWOOD 2ND ADDN	002	001	
46	22,084	119.0	185.9	3011721440060	5311	EVANSWOOD LA	CHARLES J & KIM W GITS	ZUPPKEWOOD 2ND ADDN	001	001	
47	15,371	140.0	140.0	3011721440020	5304	EVANSWOOD LA	A C KOEHLER & L M KOEHLER	EVANSWOOD	003	002	
48	15,372	110.0	140.0	3011721440019	5300	EVANSWOOD LA	T J MONTGOMERY ET AL	EVANSWOOD	002	002	
49	14,600	104.4	140.0	3011721440018	5228	EVANSWOOD LA	A M CARLSON & A J BARNES	EVANSWOOD	001	002	
50	16,891	120.8	140.0	3011721440012	5224	EVANSWOOD LA	MIRIAM C OLSON	BROWNSWOOD ADDN	001	002	
51	17,965	120.1	150.0	3011721440010	5221	EVANSWOOD LA	C A FLINN & J H FLINN	BROWNSWOOD ADDN	001	001	
52	27,017	126.9	211.7	3011721440013	5225	EVANSWOOD LA	OLAF MINGE & AMY MINGE	EVANSWOOD	001	001	
53	31,147	146.6	215.6	3011721440017	5301	EVANSWOOD LA	R V MICHALETZ/J M MICHALETZ	EVANSWOOD	005	001	
54	19,513	92.3	211.6	3011721440016	5308	EVANSWOOD LA	PAUL A JAMES/AISON S JAMES	EVANSWOOD	004	001	
55	19,315	90.0	215.0	3011721440015	5304	BLAKE RD	M J & L A WADDICK	EVANSWOOD	003	001	
56	19,606	90.0	218.1	3011721440014	5300	BLAKE RD	HAIG & LINDSAY E NEWTON	EVANSWOOD	002	001	
57	33,293	118.7	280.2	3011721440011	5224	BLAKE RD	GA ANDERSON & J ANDERSON	BROWNSWOOD ADDN	002	001	
58	18,026	84.0	215.0	3011721440022	5220	BLAKE RD	JILL C SINN	EVANSWOOD 2ND ADDN	002	001	
59	17,022	100.0	168.0	3011721440048	6209	FOX MEADOW LA	LSCHOENFELD & P SCHOENFELD	OAK PONDS OF INTERLACHEN	004	002	
60	18,242	103.0	186.3	3011721440047	6215	FOX MEADOW LA	A E SULLIVAN/T T SULLIVAN TR	OAK PONDS OF INTERLACHEN	003	002	SUBJECT TO STREET
61	16,582	104.1	141.5	3011721440046	6217	FOX MEADOW LA	W T GOODNOW & S W GOODNOW	OAK PONDS OF INTERLACHEN	002	002	SUBJECT TO STREET
62	24,167	111.3	223.8	3011721440045	6221	FOX MEADOW LA	E B ESKIN & S A CARLSON	OAK PONDS OF INTERLACHEN	001	002	
63	32,493	106.5	238.9	3011721440058	6225	FOX MEADOW LA	BERNIE H & PATRICIA K BEAVER	OAK PONDS OF INTERLACHEN 2ND ADDN	004	001	
64	24,375	97.5	193.5	3011721440057	6229	FOX MEADOW LA	J S SAVAGE & J M SAVAGE	OAK PONDS OF INTERLACHEN 2ND ADDN	003	001	
65	68,487	163.4	419.4	3011721440059	5217	SCHAEFFER RD	EDWARD W GLUCKMAN	OAK PONDS OF INTERLACHEN 2ND ADDN	005	001	
66	79,001	125.5	633.3	3011721440001	5225	SCHAEFFER RD	BARBARA R DINWIDDIE ETAL TRE	AUDITOR'S SUBD. NO. 325	019		
67	26,237	169.6	155.4	3011721440024	6300	WESTWOOD CT	C & L LARSON JR	WESTWOOD COURT	001	001	
68	29,594	176.6	158.7	3011721440025	6304	WESTWOOD CT	FRANCIS DANIEL HUSSIAN III	WESTWOOD COURT	002	001	
69	46,029	157.9	225.5	3011721440026	6308	WESTWOOD CT	M H BOEHNE & T BOEHNE	WESTWOOD COURT	003	001	
70	34,001	165.8	172.3	3011721440027	6312	WESTWOOD CT	R S BONELLO & J M BONELLO	WESTWOOD COURT	004	001	
71	31,203	167.5	159.5	3011721440028	6316	WESTWOOD CT	T W KUCK & A W KUCK	WESTWOOD COURT	005	001	
72	44,507	160.6	220.3	3011721440029	6320	WESTWOOD CT	THOMAS A & DIANE C WENTZ	WESTWOOD COURT	006	001	
73	32,298	188.8	154.6	3011721440030	6324	WESTWOOD CT	ROBERT E FLYNN ET AL	WESTWOOD COURT	007	001	
74	26,204	169.9	155.6	3011721440031	6328	WESTWOOD CT	T S RITZER & K S RITZER	WESTWOOD COURT	008	001	
75	32,350	209.0	155.3	3011721440035	6313	WESTWOOD CT	DAVID E PAUTZ	WESTWOOD COURT	004	002	
76	30,928	111.9	207.6	3011721440034	6309	WESTWOOD CT	HAROLD & REBECCA LIEBERMAN	WESTWOOD COURT	003	002	
77	29,582	113.0	208.4	3011721440033	6305	WESTWOOD CT	K W & T A RAUTIO	WESTWOOD COURT	002	002	
78	32,701	214.3	153.9	3011721440032	6301	WESTWOOD CT	CHRISTY L C THIELE	WESTWOOD COURT	001	002	
Mean	25,672	131.0	189.3								
Median	21,842	120.8	166.4								

MAP NOTES

- THIS IS NOT A BOUNDARY SURVEY. THIS MAP IS FOR LOT ANALYSIS PURPOSES ONLY.
- THE METHOD OF MEASUREMENTS AND CALCULATIONS USED WERE COMPUTED PLATS AND AUTOCAD SOFTWARE.

Median Area 21,842
Width 120.8
Depth 166.4

A22g

FRANK
5331 E
ED
TI

MU



BL
WC
EDIN

SH

SHEET TITLE

REV

CONTACT ENG

DATE REVISION

PROJECT

BY MLS

CE

I hereby certify that this survey was made under my direct supervision and under the laws of the state of

M. K.



Memorandum

DATE: *February 18, 2015*

TO: *Mr. Cary Teague, Community Development Director
City of Edina*

FROM: *Charles Rickart, P.E., P.T.O.E.*

RE: *Blake Woods Residential Subdivision
Traffic Review
City of Edina, MN
WSB Project No. 1686 - 63*

Background

The purpose of this study is to determine the potential traffic and safety impacts the proposed development of the Blake Woods residential subdivision plan has on the adjacent roadway system. The site is located north of Vernon Avenue, between Pine Grove Road and Evanswood Lane off of Blake Road. The existing site includes one single family residential unit with access to Evanswood Lane. The project location is shown on **Figure 1**.

The proposed subdivision site plan includes development of seven (7) single family residential homes including maintaining the existing home and the construction of six (6) new homes. Access to five (5) of the homes will be via a new cul-de-sac street connection from Blake Road. The one existing home and one new home will have access on Evanswood Lane. The proposed site plan is shown on **Figure 2**.

The following sections of this report document the analysis and anticipated traffic and safety impacts the proposed development will have on the adjacent roadway system.

Site Trip Generation

The estimated trip generation from the proposed development is shown below in **Table 1**. The trip generation rates used to estimate the site traffic is based on extensive surveys for other similar land uses as documented in the Institute of Transportation Engineers *Trip Generation Manual*, 9th Edition. The table shows the total daily, AM peak hour and PM peak hour trip generation for the proposed six (6) new signal family homes.

Table 1 - Estimated Site Trip Generation

Use	Size	ADT			AM Peak			PM Peak		
		Total	In	Out	Total	In	Out	Total	In	Out
Single Family Residential	6 Units	58	29	29	5	1	4	6	4	2

Source: Institute of Transportation Engineers Trip Generation Manual, 9th Edition

Traffic Operations Analysis

In order to determine a base line condition, existing traffic counts were conducted on the adjacent streets the week of February 9th, 2015. Based on these counts the following traffic conditions currently exist on these streets.

Blake Road south of Parkwood Road

Average Daily Traffic (ADT) 2,600
 AM Peak Hour 208
 PM Peak Hour 211

Blake Road north of Pine Grove Road

Average Daily Traffic (ADT) 2050
 AM Peak Hour 186
 PM Peak Hour 208

Blake Road north of Evanswood Lane

Average Daily Traffic (ADT) 1950
 AM Peak Hour 176
 PM Peak Hour 199

Evanswood Lane west of Blake Road

Average Daily Traffic (ADT) 280
 AM Peak Hour 34
 PM Peak Hour 39

Pine Grove Road east of Blake Road

Average Daily Traffic (ADT) 440
 AM Peak Hour 34
 PM Peak Hour 36

Parkwood Road west of Blake Road

Average Daily Traffic (ADT) 340
 AM Peak Hour 33
 PM Peak Hour 36

Blake Road is a north/south street providing local access to Vernon Avenue and Interlachen Boulevard. This type of higher functioning street will carry slightly larger traffic than a typical local City street such as Evanswood Lane, Pine Grove Road or Parkwood Road. Typical local City streets will have traffic volumes ranging from 200 to 2000 vehicles per day (vpd) depending on the density of the area and its connection to other higher functioning streets (i.e. collectors or arterials).

The traffic operations analysis was conducted using established methodologies documented in the Transportation Research Board, *Highway Capacity Manual 2000* (HCM). The HCM provides a series of analysis techniques that are used to evaluate traffic operations. The analysis techniques defined in the HCM are different for roadway segments and intersections. Roadway segment analysis focuses on the average daily volume to capacity ratio, while intersection analysis focuses on delay caused by the AM or PM peak hour critical movements. It is therefore possible to have an efficient intersection located along a poorly operating roadway segment, or a poorly operating intersection along an otherwise free-flowing roadway.

Roadway segments or intersections are given a Level of Service (LOS) grade from "A" to "F" as defined in the HCM. LOS A is the best traffic operating condition, and drivers experience minimal delay along a roadway segment or at an intersection LOS. E represents the condition where the roadway segment or intersection is at capacity. LOS F represents a condition where there is more traffic than can be handled by the roadway segment or intersection. At a stop sign-controlled intersection, LOS F would be characterized by exceptionally long vehicle queues and/or great difficulty in finding an acceptable gap for drivers on the minor legs at a through-street intersection.

For purposes of this review, the roadway segment analysis was conducted at a planning level. The analysis consists of comparing the average daily flow rates on a roadway segments to the ADT roadway segment traffic capacity threshold volumes. A two-lane urban street with driveway and street access has a capacity threshold of 2000 vpd at LOS A and 4000 vpd at LOS E/F. The existing and anticipated (with the development) roadway segment traffic operations are displayed on **Table 2**. As shown on the table, all roadway segments are operating at LOS A or B as they exist today and with the proposed development traffic included.

Table 2 – Roadway Segment Traffic Analysis

Street	Location	Existing AADT	LOS	Projected AADT	LOS
Blake Road	South of Parkwood Road	2600	B	2650	B
Blake Road	North of Pine Grove Road	2050	B	2100	B
Blake Road	North of Evanswood Lane	1950	A	1970	A
Evanswood Lane	West of Blake Road	280	A	290	A
Pine Grove Road	East of Blake Road	440	A	450	A
Parkwood Road	West of Blake Road	340	A	350	A

A25

The LOS ranges for both signalized and un-signalized intersections are shown in **Table 3**. The threshold LOS values for un-signalized intersections are slightly less than for signalized intersections. This variance was instituted because drivers' expectations at intersections differ with the type of traffic control. A given LOS can be altered by increasing (or decreasing) the number of lanes, changing traffic control arrangements, adjusting the timing at signalized intersections, or other lesser geometric improvements. LOS also changes as traffic volumes increase or decrease.

Table 3 - Intersection Level of Service Measures

	Control Delay (Seconds)	
	Signalized	Un-Signalized
A	≤ 10	≤ 10
B	10 – 20	10 – 15
C	20 – 35	15 – 25
D	35 – 55	25 – 35
E	55 – 80	35 – 50
F	> 80	> 50

Source: Highway Capacity Manual

The existing and anticipated (with the development) intersection operations were evaluated for both the AM and PM peak hours. Synchro/SimTraffic microsimulation software was utilized to model the area intersections with the peak hour counts, lane geometry, and traffic control. The results of this analysis are illustrated on **Table 4**.

Table 4 – Intersection Traffic Analysis

Intersection	AM Peak Hour				PM Peak Hour			
	Existing Delay (sec)	LOS	Projected Delay (sec)	LOS	Existing Delay (Sec)	LOS	Projected Delay (sec)	LOS
Blake Road at Evanswood Lane	4.7	A	4.9	A	5.2	A	5.4	A
Blake Road at New Street A	NA	NA	2.3	A	NA	NA	2.7	A
Blake Road at Pine Grove Road	7.6	A	7.8	A	8.4	A	8.7	A
Blake Road at Parkwood Road	8.5	A	8.7	A	9.2	A	9.4	A

Delay and LOS = Worst case intersection movement

Results of the intersection traffic analysis shown in the above table indicate that the existing intersections in the area are operating at an acceptable LOS and would continue to operate at acceptable levels with the proposed development.

A26

Traffic Safety Review

In addition to the traffic operations analysis a traffic safety review was also conducted. This included reviewing the crash history in the area, reviewing the sight distance required at the new street intersection to Blake Road and reviewing the site plan for safety issues or concerns.

Crash History: Crash data provided from Minnesota Department of Public Safety (DPS) records from the past 10 years was reviewed for the area. Based on that review two (2) crashes have occurred on Blake Road between Evanswood Lane and Parkwood Road. One (1) rear end property damage crash with a parked car northbound around the Evanswood Lane intersection in 2005 and, one (1) right angle personnel injury crash just north of the Pine Grove Road intersection (at a driveway) in 2007.

Sight Distance Analysis: As-built plans for Blake Road were reviewed to determine if sight distance would be a concern with the construction of a new intersection from the proposed Blake Woods Subdivisions between Pine Grove Road and Evanswood Lane. The analysis included review both the horizontal and vertical profile of the existing roadway in relationship to the new intersection location and the speed of traffic on Blake Road. The Minnesota Department of Transportation (MnDOT) and the American Association of State Highway and Transportation Officials (AASHTO) guidelines were used for the analysis.

Two primary conditions were analyzed:

1. The sight distance required for a stopped vehicle at the new street intersection to safely pull out onto Blake Road. For most practical purposes, providing a 10-second decision time, from the initial detection point to the location of the critical feature, based on design speed, is adequate. Based on these criteria a sight line of approximately 440 feet from the intersection looking north or south on Blake Road should be provided where possible.

The new intersection is located between Evanswood Lane and Pine Grove Road. The intersection of Evanswood Lane is approximately 200 feet north of the new street intersection. The intersections of Pine Grove Road and Parkwood Road are approximately 200 feet and 400 feet south of the new street intersection, respectively.

Based on the review of the horizontal and vertical conditions and assuming that no trees or vegetation are restricting views, there would be sufficient sight lines to see any oncoming vehicle including vehicles turning from the adjacent intersections.

2. The sight distance required to stop for a vehicle in the street turning from Blake Road onto the new street. Based on the guideline a sight distance of 200 feet should be provided to see a vehicle or other object in the street to safely stop traveling at 30mph.

Based on the review of the roadway conditions, a vehicle traveling either northbound or southbound on Blake Road would have sufficient distance to safely stop for a vehicle turning into the new street intersection.

Site Plan Review – The site plan was reviewed with respect to the street alignment and configuration. No issues were identified however, the following should be considered:

1. A stop sign should be placed on the new street approaching Blake Road.
2. Provide a clear sight line from the intersection in both directions; keep it clear of trees or other landscaping that would be in the line of vision.
3. Clear the trees and vegetation in the right of way to provide a clear sight line at the Evanswood Lane intersection looking south.

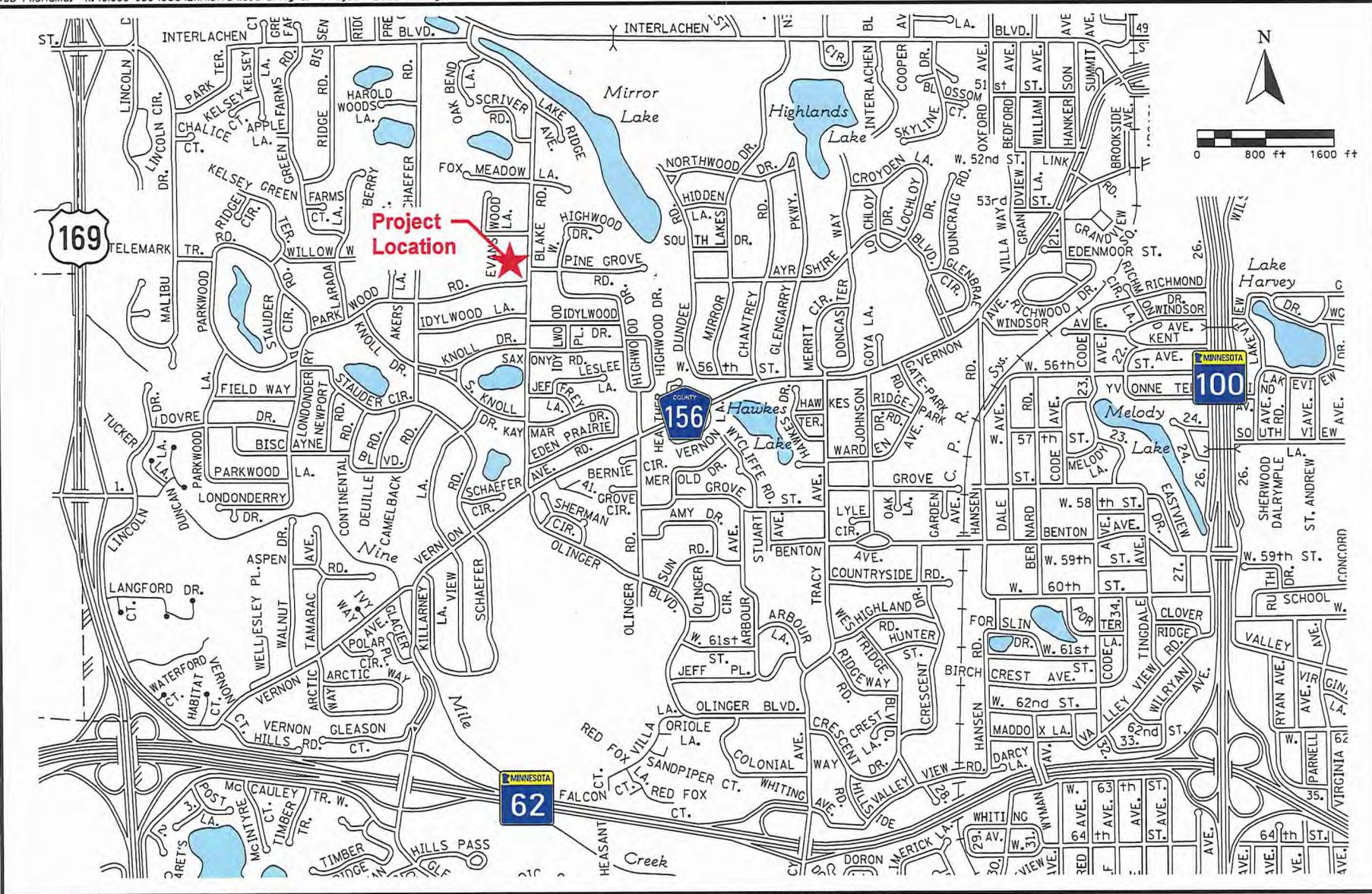
Conclusions / Recommendation

Based on the traffic review documented in this memorandum, WSB has concluded the following:

- The proposed development will generate 58 daily trips, five (5) AM peak hour trips and six (6) PM peak hour trips.
- Based on the traffic operations analysis the intersections and roadway segments on Blake Road will operate at satisfactory (LOS A or B) with the proposed site developed.
- Only two crashes have occurred in the area adjacent to the site in the past 10 years.
- Sufficient sight lines exist for traffic exiting or entering the proposed new street intersection on Blake Road.
- Safety would be improved with the installation of a stop sign for the new street approaching Blake Road and providing a clear sight line from the intersection.
- At the intersection of Evanwood Lane the safety would be improved with clearing the sight line looking south from the intersection.

AJG

A29



Traffic Review
Blake Woods Subdivision
City of Edina, Minnesota

Figure 1

Project Location Map

A30



- SITE PLAN NOTES**
- OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WITHIN OR USE OF, PUBLIC RIGHT-OF-WAY.
 - THE VERTICAL CLEARANCE SHALL BE OBTAINED FROM THE ENGINEER, SHALL BE USED FOR ALL CLEARANCES WITHIN THE SUBDIVISION AND THE TOTAL CLEARANCE SHALL BE REPORTED TO THE ENGINEER. THE BUILDING FOOTPRINT, AS SHOWN ON THESE DRAWINGS, AND THE EXISTING PERMITS, SHALL BE CONFORMED TO THE STRUCTURAL DRAWINGS MADE BY ENGINEER.
 - OPENINGS SHOWN ARE TO BACK OF CURB UNLESS NOTED OTHERWISE.
 - OPEN SPACE LANDSCAPE AREA
 - WETLAND BUFFER DEMAND, PER WATER-RESOURCES REQUIREMENTS

AREA SUMMARY

EXISTING	PERMITTED	PERMITTED	TOTAL (4-31-15)
PERMITTED	167,960 SQ. FT.	69,416 SQ. FT.	237,376 SQ. FT.
PERMITTED	167,960 SQ. FT.	69,416 SQ. FT.	237,376 SQ. FT.
PERMITTED	167,960 SQ. FT.	69,416 SQ. FT.	237,376 SQ. FT.

ZONING AND SETBACK SUMMARY

THE PROPERTY IS CURRENTLY ZONED SINGLE FAMILY OVERLAYS

BUILDING SETBACK INFORMATION IS AS FOLLOWS:
 FRONT SETBACK = 30 FT.
 SIDE SETBACK = 10 FT.
 REAR SETBACK = 10 FT.

LOT COVERAGE INFORMATION IS AS FOLLOWS:
 LOT AREA PERMIT = GREATER THAN THE PERMANENT LOT AREA IN THE NEIGHBORHOOD (100.00%)

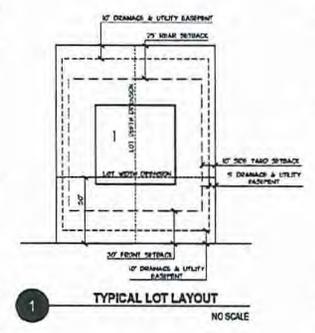
LOT WIDTH PERMIT = GREATER THAN THE PERMANENT LOT WIDTH IN THE NEIGHBORHOOD (100.00%)

LOT DEPTH PERMIT = GREATER THAN THE PERMANENT LOT DEPTH IN THE NEIGHBORHOOD (100.00%)

HILL BUILDING CONFORMS TO THE

PROPOSED LOT AREAS

LOT	LOT AREA	PERCENTAGE
LOT 1	167,960 SQ. FT.	70.78%
LOT 2	21,487 SQ. FT.	9.05%
LOT 3	21,487 SQ. FT.	9.05%
LOT 4	21,487 SQ. FT.	9.05%
LOT 5	21,487 SQ. FT.	9.05%
WETLAND BUFFER DEMAND	23,738 SQ. FT.	10.00%
TOTAL	237,376 SQ. FT.	100.00%



OWNER
FRANK BERMAN
 231 EVANSWOOD LANE
 EDINA, MINNESOTA
 55120-4308

MUNICIPALITY

PROJECT
BLAKE WOODS SUBDIVISION
 EDINA, MN

SHEET INDEX

1	PLAN
2	SECTION
3	SECTION
4	SECTION
5	SECTION
6	SECTION
7	SECTION
8	SECTION
9	SECTION
10	SECTION
11	SECTION
12	SECTION
13	SECTION
14	SECTION
15	SECTION
16	SECTION
17	SECTION
18	SECTION
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46	SECTION
47	SECTION
48	SECTION
49	SECTION
50	SECTION

REVISION HISTORY

NO.	DATE	DESCRIPTION
1	01/22/2015	PRELIMINARY PLAT

PROJECT MANAGER REVIEW

CERTIFICATION

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PLAT
01/22/2015

LANDFORM
From City to Finish

105 South 7th Avenue
 Suite 910
 Minneapolis, MN 55401

TEL: 612-223-0070
 FAX: 612-223-0077
 EMAIL: info@landform.com

FILENAME: C2122317
 PROJECT NO.: 22214117

DTC PLAN
C2.1
 SHEET NO. 5/16

Traffic Review
 Blake Woods Subdivision
 City of Edina, Minnesota

Figure 2
Site Plan



184



Traffic Review
Blake Woods Subdivision
City of Edina, Minnesota

Figure 3
Existing (2015)
Daily Traffic Volumes

Cary Teague

From: Jeff Siems
Sent: Wednesday, February 18, 2015 12:40 PM
To: Cary Teague
Cc: Brian Olson
Subject: Blake woods housing project

Hello Cary,

Per our discussion today regarding the Blake Woods housing project the fire department recommends the following:

- 1) Road width of 24' is below fire code minimums. Residential fire sprinkler system (13D or IRC 2904) required for any building regardless of square footage.
- 2) Fire hydrants should be located in two areas; at the corner of Blake road and Blake woods and at the beginning of the turn-a-round along the North side.
- 3) No Parking Fire Lane signage to be installed along the North side of Blake Woods road and around the turn-a-round on the outside radius.

Jeff Siems, Fire Marshal
Edina Fire Department
952-826-0337 | JSiems@EdinaMN.gov



DATE: February 19, 2014

TO: Cary Teague – Community Development Director

CC: Chad Millner PE – City Engineer

FROM: Ross Bintner PE – Environmental Engineer
Charlie Gerk EIT – Engineering Technician

RE: Berman Subdivision – Preliminary Development Review

The Engineering Department has reviewed the subject development for street and utility connections, grading, storm water, erosion and sediment control.

General Comments

1. All rain gardens will need to be on private property and covered by a private maintenance agreement in favor of the local Watershed District. Provide an inspection and maintenance plan that ensures future functionality.
2. A development agreement will be required for the creation of public road and utilities.
3. All maintenance for the landscaping, retaining walls and other related items located within the proposed public right-of-ways and easements will be the responsibility of the subdivisions home owners association or individual property owners.

Survey/ Plat

4. Datum for any future surveys will need to be NAVD 1929.
5. Recorded easements will be required for all public infrastructures not already in platted drainage and utility easement.

Traffic and Street

6. A traffic study will need to be completed for the impact of an entrance at Blake Rd vs. Evanswood Ln.
7. B618 curb and gutter only and standard residential driveway entrances as described in city standard plate 411 and found at the following link: http://edinamn.gov/index.php?section=construction_standards
8. Provide 5-foot wide ADA compliant sidewalks with 5-foot boulevards.
9. 24-foot wide streets will be allowed only if:
 - a. The City of Edina's largest fire truck is able to navigate the road and cul-de-sac.
 - b. Parking is limited to one side only.

Sanitary and Water Utilities

10. Describe sewer and water services and proposed abandonments of existing utilities.
11. A looped 6" DIP from Blake Rd through to the southeast corner of lot 6 north along the property line to Evanswood Ln.
12. Copper lines must be used to the curb stop.
13. Wet tap will need to be completed at night, with an approved closure plan by public works for Blake Rd.
14. Water main to cross northeast at Blake Rd.

ENGINEERING DEPARTMENT

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A33



Storm Water Utility

15. Applicant may review local drainage features at the following links: <https://maps.barr.com/edina/> and http://edinamn.gov/index.php?section=engineering_water_resource
16. A complete stormwater management plan will need to be completed for the site.
 - a. Stormwater system downstream of sub-watershed MD_29 is over capacity. On site extended detention will be required to control peak rate to the downstream storm system. Provide downstream analysis.
 - b. No increase in peak rate or volume to neighboring private properties.
17. Describe and show downstream connection to public storm sewer system. Connection must remain in public drainage and utility easement on Parkwood Knolls 3rd Addition or public right of way on Shafer Road.

Grading, Erosion and Sediment Control

18. Provide information for grading staging between the land development and individual building permits.
19. A State construction site permit and SWPPP will be required.

Other Agency Coordination

20. A Nine Mile Creek Watershed permit will be required, along with other agency permits such as MNDH, MPCA, MCES, and a grading permit from the City of Edina Building Department.

ENGINEERING DEPARTMENT

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A34



DATE: March 30, 2015
TO: Cary Teague – Community Development Director
CC: Chad Millner PE – City Engineer
FROM: Ross Bintner PE – Environmental Engineer
RE: **Berman Subdivision – Preliminary Plat Development Review**

The Engineering Department has reviewed the subject development for street and utility connections, grading, storm water, erosion and sediment control. This review summarizes issues remaining from the February 19 review and March 3 drainage review memo. The reviewed plan is dated 3/18/2015.

General Comments

1. A development agreement will be required for the creation of public road, utilities and stormwater system ownership and maintenance.

Survey/ Plat

2. Recorded easements will be required for all public infrastructures not already in platted right of way.
 - a. Drainage to the west is proposed in a flow concentration onto private property then into a private pond. Applicant must negotiate future public easement for: the flow path, any drainage infrastructure, or any increase in pond bounce with any affected private parties. Describe precautions against erosion and provide proof of easement on private property.

Traffic and Street.

3. Use B618 curb and gutter and standard residential driveway entrances as described in city standard plate 411 and found at the following link: http://edinamn.gov/index.php?section=construction_standards
4. Provide 5-foot wide ADA compliant sidewalks with 5-foot boulevards on south side of proposed road consistent with Living Streets Policy.
5. Demonstrate fire access turning movement for attached design vehicle.
6. Limited parking to one side of street.

Sanitary and Water Utilities

7. Provide a looped 6" DIP from Blake Rd through to the southeast corner of lot 6 north along the property line to Evanswood Ln.

Storm Water Utility

8. Submit a revised Stormwater Management Plan that meets the following performance standard. Design to these restrictions will ensure that either east or west flow path meet level of service and level of protection for 100 year events, and risk in downstream water body MD_25 is not increased.
9. No increase in stormwater peak rate, volume or flood stage elevation to neighboring private properties, which will be demonstrated by the following criteria:



- a. No increases in stormwater volumes to MD_29 pond (to west) for the 2-year, 10-year, and 100-year 24-hour Atlas 14 events, as compared with existing conditions.
 - b. No increases in peak stormwater rates to MD_29 pond (to west) for the 2-year, 10-year, and 100-year 24-hour Atlas 14 events, as compared with existing conditions.
 - c. No limitations to total volume runoff (to east) aside from meeting Nine Mile Creek Watershed District volume control requirements for the entire site.
10. Limit peak stormwater rates from the overall site to peak rates from existing conditions for the 2-year, 10-year, and 100-year, 24-hour Atlas 14 event, not per sub watershed (a sub watershed basis increase to the Blake Road system is allowed, as that direction has capacity to direct stormwater)
 11. Achieve compliance with Nine Mile Creek Watershed District water quality treatment requirements.

Hydrology

The Engineering Department contracted with Barr Engineering to review the hydrology calculations for this design. The Barr review is attached to this memo.

12. Provide justification for pre and post curve numbers and following guidance provided in attached Barr memorandum (Performance standard comment 2)
13. Provide revised survey or adjust model to describe existing on-site storage consistent with Barr memorandum (Performance standard comment 3, Other comment 4)
14. Future building sites can be limited by impervious surface assumptions though developers agreement. Previous submittal claimed 5,450 sf impervious per lot. Recommend more conservative impervious assumptions to provide flexibility to allow for future expansion.
15. Correct modeling error in rain garden performance (Volume control, Other comment 3)
16. Provide time of concentration justification (Other comment 1)
17. Provide infiltration rate justification (Other comment 2)

Grading, Erosion and Sediment Control

18. Provide a State construction site permit and SWPPP at time of Final Plat.

General Comments

19. Provide a private maintenance agreement in favor of the local Watershed District for all rain gardens at time of Final Plat.
20. Provide an inspection and maintenance plan that ensures future functionality at time of Final Plat.

Other Agency Coordination

21. A Nine Mile Creek Watershed permit is required, along with other agency permits such as MNDH, MPCA SWPPP, MCES, and a grading permit from the City of Edina Building Department at time of Final Plat

ENGINEERING DEPARTMENT

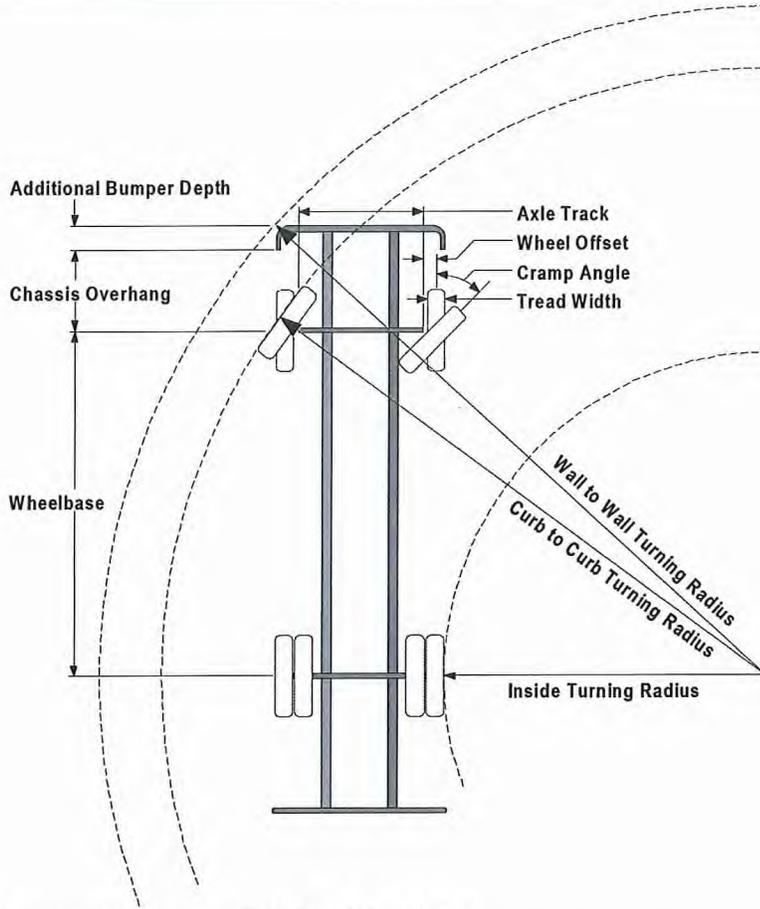
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A36



Turning Performance Analysis

5/1/2013



Parameters:

Inside Cramp Angle:	45.00 °
Axle Track:	81.92 in.
Wheel Offset:	5.25 in.
Tread Width:	16.60 in.
Chassis Overhang:	65.99 in.
Additional Bumper Depth:	19.00 in.
Front Overhang:	84.99 in.
Wheelbase:	258.00 in.

Calculated Turning Radii:

Inside Turn:	20 ft. 4 in.
Curb to Curb:	36 ft. 8 in.
Wall to Wall:	41 ft. 1 in.

Comments:

Truck 12205

Components	PRIDE #	Description
Front Tires	0078244	Tires, Michelin, 425/65R22.50 20 ply XZY 3 tread
Chassis	0070220	Dash-2000, Chassis, PAP/SkyArm/Midmount
Front Bumper	0123625	Bumper, 19" extended, Imp/Vel
Aerial Device	0006900	xxxAerial, 100' Pierce Platform

Notes:

Actual Inside Cramp Angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for a 9.00 inch curb.



Turning Performance Analysis

5/1/2013

Definitions:

Inside Cramp Angle	Maximum turning angle of the front inside tire.
Axle Track	King-pin to king-pin distance of the front axle.
Wheel Offset	Offset from the center-line of the wheel to the king-pin.
Tread Width	Width of the tire tread.
Chassis Overhang	Distance from the center-line of the front axle to the front edge of the cab. This does not include the bumper depth.
Additional Bumper Depth	Depth that the bumper assembly adds to the front overhang.
Wheelbase	Distance between the center lines of the vehicle's front and rear axles.
Inside Turning Radius	Radius of the smallest circle around which the vehicle can turn.
Curb to Curb Turning Radius	Radius of the smallest circle inside of which the vehicle's tires can turn. This measurement assumes a curb height of 9 inches.
Wall to Wall Turning Radius	Radius of the smallest circle inside of which the entire vehicle can turn. This measurement takes into account any front overhang due to the chassis, bumper extensions and/or aerial devices.



Memorandum

To: Ross Bintner, City of Edina
From: Janna Kieffer
Subject: Review of Blake Woods March 18, 2015 Stormwater Management Submittal
Date: March 30, 2015

This memo serves as a summary of Barr's review of the Stormwater Management Plan for the proposed Blake Woods subdivision, as submitted on March 18, 2015 by Landform. Barr reviewed the Stormwater Management Plan for compliance with the performance standards identified in the March 3, 2015 drainage review memo from Ross Bintner, City of Edina Engineering Department, to Cary Teague, City of Edina Community Development Director.

Performance Standard Regarding Neighboring Private Properties

Standard- No increases in stormwater volumes to MD_29 pond (to west) for the 2-year, 10-year, and 100-year 24 -hour Atlas 14 events, as compared with existing conditions.

Barr's review comments:

1. The stormwater modeling submittal indicates that under existing conditions, 172,408 ft² within the proposed development area drains west to the MD_29 pond, with 19,741 ft² of impervious surface (11.4%). Under proposed conditions, 167,669 ft² of the proposed development drains west to the MD_29 pond, with 46,664 ft² of impervious surface (27.8%). Based on this information, summarized in Table 1, the total area draining to the MD_29 pond has been reduced under proposed conditions. However, the amount of impervious surface draining to the MD_29 pond under proposed conditions is 2.4 times that of existing conditions.

Table 1. Summary of subcatchment areas draining to the MD_29 pond under existing and proposed conditions

Subcatchment	Area (ft ²)	Impervious %	Impervious area
Proposed			
Subwatershed 4S: To Pond MD-29	95,550	16.05	15,336
Raingarden B (Pond 15S)	9,748	35.73	3,483
Raingarden C (Pond 14S)	22,318	53.92	12,034
Raingarden D (Pond 12S)	6,167	83.49	5,149
Raingarden E (Pond 11S)	14,352	36.32	5,213
Raingarden F (Pond 17S)	9,847	32.24	3,175
Raingarden G (Pond 18S)	9,687	23.49	2,275
Total	167,669	28	46,664
Existing			
Subwatershed 4S: To Pond MD-29	172,408	11.45	19,741

2. Table 2 summarizes the runoff generated under existing and proposed conditions in the subcatchment(s) draining to pond MD_29, per the March 18, 2015 submittal. Note that the runoff generation summarized in Table 1 does not reflect volume reduction achieved by routing runoff through the rainwater gardens.

Table 2. Summary of runoff generated per March 18, 2015 submittal

Event	Existing Runoff Volume (ft ³)	Existing Runoff Depth per acre (in)	Proposed Runoff Volume (ft ³)	Proposed Runoff Depth per acre (in)	Difference in Runoff Generated (ft ³)
2-year	20,258	1.41	22,237	1.60	1,979
10-year	37,762	2.63	39,906	2.87	2,144
100-year	80,280	5.59	82,022	5.88	1,742

Given the significant increase in impervious surfaces draining to MD_29 pond, the increases in runoff generated under proposed conditions seem low. We recommend the following revisions to the modeling approach to ensure that the increase in impervious surface are being properly reflected in the modeling analysis:

- Use a pervious curve number for proposed conditions that is the same as or higher than existing conditions to reflect likelihood of compacted soil conditions resulting from construction. When using a pervious curve number of 82 for proposed conditions (consistent with existing conditions), the volume to MD_29 increases under the 2-, 10-, and 100-year events, and the performance standard for the 2-year and 10-year events are no longer met.

- Use the distributed curve number method, which calculates runoff separately for impervious and pervious areas.
3. Under existing site conditions, there is a low, depression area located south of the existing driveway on the Berman property. Based on the MnDNR's 2011 LiDAR, it appears that stormwater from an area of approximately 30,000 ft² drains to this low area, where runoff pools to a depth of approximately one foot before reaching the surface overflow and flowing southward and eventually west to the MD_29 pond. Based on the MnDNR's 2011 LiDAR elevation data, there is approximately 4,000 cubic feet of storage in this low area. Rough estimates indicate that during the 2-year, 24-hour event, all runoff from the direct tributary area would be stored in this low area without a surface overflow to MD_29.
- This low depression area south of the existing driveway is not included in the current existing conditions model. Including the existing low area in the modeling analysis would result in lower runoff volumes to MD_29 under the 2-, 10-, and 100-year events. The low area should be included in the modeling analysis for comparison of existing and proposed runoff volumes to the MD_29 pond if field survey verifies the presence and characteristics of the low area.

Standard- No increases in peak stormwater rates to MD_29 pond (to west) for the 2-year, 10-year, and 100-year 24-hour Atlas 14 events), as compared with existing conditions.

Table 3 summarizes the peak runoff rates to the MD_29 pond, as identified in the March 18, 2015 stormwater management plan. Based on the modeling, the proposed rainwater garden storage and infiltration/filtration results in peak flows to the MD_29 pond that are lower than peak runoff rates from existing conditions for the 2-, 10-, and 100-year events.

Table 3. Summary of peak runoff rates to MD_29 pond

Event	Existing Runoff Rate (cfs)	Proposed Runoff Rate (cfs)
2-yr, 24-hr (2.87")	8.46	6.08
10-yr, 24-hr (4.29")	15.61	10.9
100-yr, 24-hr (7.47")	32.11	25.08

Performance Standard(s) for Overall Site

Standard- limit peak stormwater rates from the overall site to peak rates from existing conditions for the 2-year, 10-year, and 100-year, 24-hour Atlas 14 events.

Table 4 summarizes the peak runoff rates from the overall site, as identified in the March 18, 2015 stormwater management plan. Based on the modeling, the proposed rainwater garden storage and

infiltration/filtration results in peak runoff rates from the overall site that are lower than peak runoff rates from existing conditions for the 2-, 10-, and 100-year events.

Table 4. Summary of peak runoff rates from overall site

Event	Existing Runoff Rate (cfs)	Proposed Runoff Rate (cfs)
2-yr, 24-hr (2.87")	9.08	6.66
10-yr, 24-hr (4.29")	16.82	11.9
100-yr, 24-hr (7.47")	34.72	27.9

Standard- Applicant must meet the Nine Mile Creek Watershed District volume control requirements for the entire site.

The Nine Mile Creek Watershed District's (NMCWD's) stormwater management rule requires retention onsite of one inch of runoff from all impervious surfaces of the parcel. The proposed site has a total of 54,638 ft² of impervious surface. One inch of runoff from 54,638 ft² of impervious surface is 4,553 ft³ of runoff.

Soils on the proposed site have been identified as Hydrologic Soil Group D, indicating poor infiltration capacity. As such, the proposed rainwater garden designs include installation of a drain tile to collect runoff that infiltrates through the approximately two feet of planting soil. The proposed rainwater gardens include a gravel bed below the drain tile to store and infiltrate runoff. Based on the combined area of the gravel beds, an infiltration rate for the native soils of 0.03 in/hr, and a 48-hour drawdown time, the volume of runoff retained and infiltrated from the proposed rainwater gardens, collectively, is 979 ft³.

While compliance with the NMCWD's volume control requirement will ultimately need to be assessed by the NMCWD, it does not appear that the volume retention achieved by the proposed rainwater gardens will meet the NMCWD volume retention requirement.

Standard- Applicant must achieve compliance with Nine Mile Creek Watershed District water quality treatment requirements.

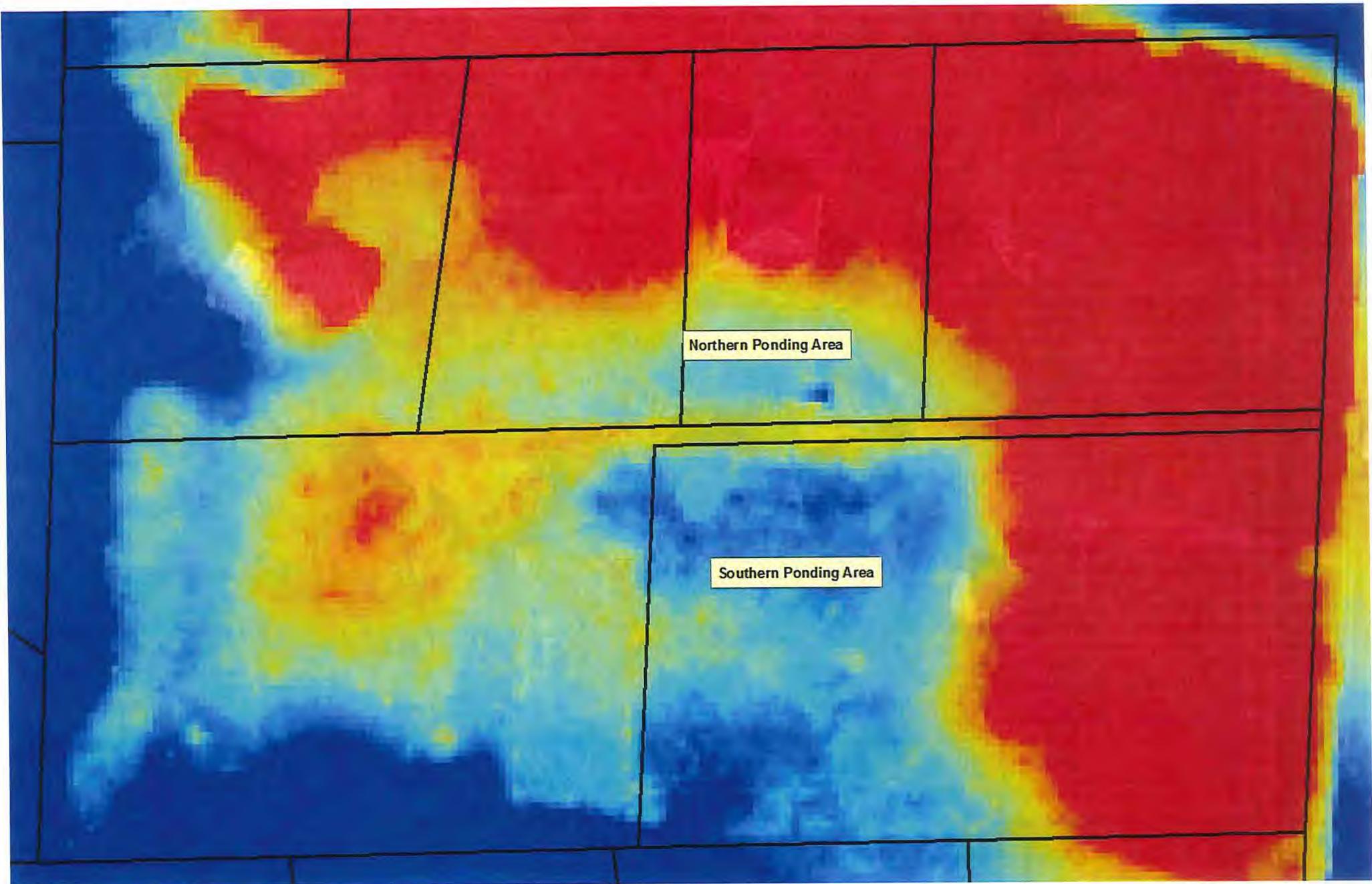
The NMCWD's stormwater management rule requires that runoff from the parcel be treated to provide at least sixty percent (60%) annual removal efficiency for phosphorus, and at least ninety percent (90%) annual removal efficiency for total suspended solids. Compliance with the NMCWD's water quality treatment requirements was not assessed as part of this review, and will need to be evaluated by NMCWD.

Other Review Notes

1. The time of concentration values for the Existing Conditions Subcatchment 4S (10 minutes) and Proposed Conditions Subcatchment 4S (10 minutes) are low when considering the flow length, site topography and ground cover.

2. An infiltration rate of 1.6 in/hr was used in the model to reflect infiltration through the planting media of the rainwater gardens. Based on the 50% sand soil mixture identified in the plan set, we recommend using a lower infiltration rate of 0.8 in/hr to provide a more conservative estimate of filtration rates.
3. It appears that the method used to account for infiltration through the planting media and infiltration through native soils below the gravel bed is calculating filtration/infiltration using a surface area larger than appropriate.
 - o The exfiltration rate through the planting soil should be assigned an invert elevation slightly below the bottom of the rainwater garden's surface storage area. The infiltrated volume will then be calculated based on the surface area of the ponded water, rather than the combined areas of both the surface storage and the underground gravel bed.
 - o The exfiltration rate out of the system (through the native soil below the gravel bed) should be assigned both an invert elevation slightly below the bottom of the gravel bed and a maximum elevation slightly below the bottom of the surface storage area. The infiltrated volume will then be calculated based on the surface area of the gravel bed rather than the combined surface areas of both the gravel bed and surface storage.
4. There is a low depression area on the south side of the property at 5311 Evanswood Lane, which is located just north of the proposed roadway of Berman property. The MnDNR LiDAR elevation data indicates that under existing conditions, stormwater runoff will pool in this low area until an elevation of 946.4 feet MSL, then flow west via surface overflow.

Review of the grading plan included with the March 18, 2015 submittal (sheet C3.1) indicates that the proposed site design includes a surface overflow between 5311 Evanswood Lane and the Berman property to the west at elevation 945.9 feet MSL, lower than the existing surface overflow (based on MnDNR LiDAR).



444



Memorandum

To: MIDS Work Group
From: Barr Engineering Company
Subject: Regional Hydrologic Metrics – Curve Numbers (Item 6, Work Order 1)
Date: December 14, 2010
Project: 23/62 1050 MIDS

Standard engineering practice during design of stormwater systems usually employs Curve Number methodology. Curve Number methodology is often required by municipal stormwater ordinance due to its wide and historic acceptance as an appropriate rural and urban hydrologic method. Curve Numbers are determined according to the ground cover and soil type, and are used to approximate the varying infiltration, interception and storage capacities of different land covers. A high Curve Number (such as 98 for impervious pavement) indicates low infiltration/abstraction and high runoff, while a lower Curve Number (such as 30 for certain wooded areas) indicates high infiltration/abstraction and low runoff. The Minnesota Stormwater Manual defines Curve Number as “an index combining hydrologic soil group, land use factors, treatment, and hydrologic condition. Used in a method developed by the SCS to determine the approximate amount of runoff from a rainfall event in a particular area.” (MPCA 2005).

History of Curve Number Method

Curve Number methodology as it is now used was developed beginning in the 1950s and updated in the decades since. It is an event-based empirical model developed by the Natural Resources Conservation Service (NRCS) (formerly SCS) based on outflow data collected from relatively uniform agricultural landscapes at a watershed-wide scale, using larger precipitation events and larger flood flows. It was originally developed to estimate stream flow based on calendar day storm/rainfall data. Curve Number methodology forms the theoretical basis for NRCS (formerly SCS) TR-20 and TR-55, where various regions of the nation are assigned varying intensities of design storms and varying recurrence event precipitation totals.

The method was originally developed to calculate the anticipated runoff volume from a watershed and was later adapted to estimate runoff discharge rate. The typical application is to apply a constant, dimensionless Curve Number to calculate runoff volume from rainfall volume. An assumed typical hydrograph (flow as a function of time) and calculated time-of-concentration (the time of flow from the farthest point on the watershed to the outlet) are used to calculate runoff rates. Curve Numbers generally vary from 30 to 98; the higher the Curve Number, the greater the volume of runoff is generated. Table 1 lists Curve Numbers for common Minnesota land covers (NRCS 1986).

To: MIDS Work Group
From: Barr Engineering Company
Subject: Regional Hydrologic Metrics – Curve Numbers (Item 6, Work Order 1)
Date: December 14, 2010
Page: 2
Project: 23611050 MIDS

Table 1. Curve Numbers for Selected Land Covers¹

Land Cover	Hydrologic Condition	Curve Numbers for Hydrologic Soil Groups			
		A	B	C	D
<i>Predevelopment²</i>					
Woods	Good	30 ³	55	70	77
Prairies, no grazing	Good	30	58	71	78
<i>Developed</i>					
Impervious Surfaces	NA	98	98	98	98
Turfgrass, cover < 50%	Poor	68	79	86	89
Turfgrass, cover < 50 to 75%	Fair	49	69	79	84
Turfgrass, cover > 75%	Good	39	61	74	80
<i>Agricultural</i>					
Fallow, bare soil	NA	77	86	91	94
Fallow, crop residue	Good	74	83	88	90
Row crops, straight row	Good	67	78	85	89
Small grain, straight row	Good	63	75	83	87
Pasture, grazing	Good	39	61	74	80

¹These Curve Numbers supplied by TR-55 are for Antecedent Runoff Condition II (ARC II).

²The Curve Numbers listed for Predevelopment are considered appropriate for native soil and vegetation conditions.

³TR-55 specifies a Curve Number for Woods "A" Soils as 30 for runoff calculations, while acknowledging that the actual Curve Number for this condition is lower (unspecified). Minnesota Stormwater Manual lists a presettlement Curve Number of 20 (Table 8.3).

Application of Curve Number Method

The Curve Number for each soil type and land cover dictates the expected maximum storage of the soil, S , where S is in inches.

To: MIDS Work Group
From: Barr Engineering Company
Subject: Regional Hydrologic Metrics – Curve Numbers (Item 6, Work Order 1)
Date: December 14, 2010
Page: 3
Project: 23611050 MIDS

$$S = \frac{1000}{CN} - 10$$

Abstractions, I_a , (interception, depression storage and evaporation) are generally considered to be 20% of the soil storage.

$$I_a = 0.2 * S$$

Runoff volume is then calculated using the following equation:

$$Q = \frac{(P - I_a)^2}{(P + 0.8 * S)}$$

The runoff calculated in the above equation is then applied to a rainfall frequency distribution to determine the runoff hydrograph. The NRCS method dictates a Type II 24-hour frequency distribution for Minnesota, however, the runoff volume generated can be applied to other storm durations and intensities. Curve Number methodology is even used in conjunction with continuous rainfall data to determine runoff on an annual basis, but as will be discussed later, the applicability of the Curve Number method for small storms is suspect.

Curve Number Method Advantages

The primary reason that Curve Number methodology is popular today is the ease of use (Lamont 2008). It is used in TR-20 and various software models for hydrology estimates, including water quality models (such as P8) to attempt to estimate pollutant loadings and sediment yield, and flood hydrology models (such as HydroCAD). Curve Number methodology is frequently used to estimate peak runoff flow, runoff volume and runoff hydrographs for precipitation events of all sizes. Only limited site data, such as location, soil type, land use and slope are required to complete calculations. The method is believed to be relatively accurate for larger scale planning efforts, such as regional flood storage ponds and other flood control facility sizing.

Other common hydrologic methods, including Green-Ampt and Horton Infiltration methods, do not share the advantage of ease of use, and thus are not used as often as Curve Number methodology in stormwater regulation or by developers in sizing storm sewer systems and rate and volume control stormwater best management practices (BMPs).

Curve Number Method Deficiencies

Despite its advantages and widespread acceptance, the Curve Number method presents certain disadvantages for some modeling and estimating applications. In general, these deficiencies are the result

To: MIDS Work Group
From: Barr Engineering Company
Subject: Regional Hydrologic Metrics – Curve Numbers (Item 6, Work Order 1)
Date: December 14, 2010
Page: 4
Project: 23611050 MIDS

of the nature of the method's empirical development in large non-urbanized watersheds, in contrast to the differing conditions encountered in urbanized areas. Put simply, the Curve Number method was not originally developed for the urbanized land uses where the method is now most-frequently employed.

Developed for Agricultural, Not Urban Watersheds

Classification of variable urban soils under specific Curve Numbers remains in question. The Curve Number method was developed on uniform agricultural watersheds and later adapted for urban watersheds (Peters 2010). The model performs well on rural landscapes, but was not developed to consider the complexity of a small urban site with many different land covers and BMPs (Reese 2006).

Abstractions

The Curve Number method poorly estimates initial abstraction/losses, as the method was developed focusing on the long-term conditions for daily rainfall. Initial abstraction is calculated as a function of the Curve Number, as $0.2 * S$. This does not often account for variation and complexity of smaller, flatter sites and soils within stormwater BMPs. Recent research has suggested that a value of 0.05 or 0.1 may be more appropriate than 0.2 (Reese 2006, Lamont 2008, Eli 2010) and most modeling packages allow the user to adjust this value; however, changing the abstraction value from the standard 0.2 requires the creation of new Curve Numbers for all land cover types and antecedent runoff conditions (Lamont 2008).

The most common application of the method uses a constant Curve Number and antecedent runoff condition (ARC) for an entire precipitation event, although some modeling packages allow the Curve Number to vary with time and ARC. The possible inaccuracy concerning the lack of early-event variation of Curve Number (initial losses, infiltration, etc.) and the inability of the method to account for varying antecedent moisture content are deficiencies of the method (especially for small precipitation and first flush water-quality scale events).

Small Precipitation Events and Continuous Modeling

Curve Number methodology has difficulty accurately determining runoff for small precipitation events (less than 3"), and especially for events less than 1/2 inch (Peters 2010). In the Twin Cities, storms less than 1/2 inch account for 65% of all precipitation events greater than 0.1 inches (MPCA 2005 – Appendix B). The method is believed to be more accurate for larger precipitation events.

The method was not originally developed to model snowmelt or continuous rainfall/runoff simulations, nor was it developed to describe the hydrologic communication between rainfall, soil, soil moisture, subsurface flow and stream flow, therefore has severe limitations in being used for these purposes.

Even though it is sometimes used as such, it was not developed to be used for non-point source water quality modeling calculations, such as variable infiltration rates, making a distinction between

To: MIDS Work Group
From: Barr Engineering Company
Subject: Regional Hydrologic Metrics – Curve Numbers (Item 6, Work Order 1)
Date: December 14, 2010
Page: 5
Project: 23611050 MIDS

disconnected impervious surfaces and pervious surfaces, etc. Modelers have observed inaccurate prediction of runoff volume for small precipitation events, and corresponding inaccurate estimation of pollutant/sediment delivery using this method. Inaccuracy is heightened when only a portion of the real watershed is actually contributing runoff.

Composite Curve Number Deficiencies

A composite Curve Number is the areal-weighted average Curve Number of multiple areas with different Curve Numbers, aggregated into a single area with a single curve number. A distributed method differs from a composite Curve Number in that it separates pervious and impervious areas, calculating their runoff independently to avoid undesired approximations that occur in composite Curve Number calculations. Results differ if a composite Curve Number is used in the calculations or if a distributed approach is used.

Peters calculated that for a theoretical 20-acre, 30% impervious site, and a 1.3-inch rainfall event, using the composite Curve Number approach generated only 30% of the runoff volume that a distributed Curve Number approach would generate (0.17 acre-feet versus 0.55 acre-feet). The distributed Curve Number method is generally more accurate because each land cover type is considered, enhancing the resolution of the analysis (Peters 2010). Employing the composite Curve Number method can lead to inadequate sizing of water quality and rate control stormwater BMPs.

Composite and distributed Curve Number methods generate more similar results for larger storms (5-year, 100-year, etc.); however, when evaluating small storms, composite Curve Numbers for Commercial, Industrial, and varying impervious densities Residential Sites are not recommended for use even though they are listed by the NRCS, in various models, and in Table 8.4 of the Minnesota Stormwater Manual.

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To: MIDS Work Group
From: Barr Engineering Company
Subject: Regional Hydrologic Metrics – Curve Numbers (Item 6, Work Order 1)
Date: December 14, 2010
Page: 6
Project: 23611050 MIDS

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March 17, 2015

City of Edina
Attn: Ross Bintner
Environmental Engineer
4801 W. 50th Street
Edina, MN 55424

Re: Response to City Drainage Review Comments

Dear Mr. Bintner:

We have received and reviewed the City of Edina drainage comments dated March 3, 2015. We have revised our plans, drainage report and calculation based upon those comments and below are a list of our responses address your comments. It is our intent that the changes made to the documents have addressed the City's concerns and we ask for the staff support at the March 25th planning commission meeting.

Storm Water Utility

1. Submit a revised Stormwater Management Plan, and development plan that meets the following performance standard. Design to these restrictions will ensure that either east or west flow path meet level of service and level of protection for 100 year events, and risk in downstream water body MD_25 is not increased.

We have revised our plans and calculations based upon your comments below. We do not have the capacity or data to analyze downstream catchment areas outside of our property. Our development shows both a decrease in offsite storm water rate and a decrease in offsite storm water volume.

2. Applicant must not increase stormwater peak rate or volume to neighboring private properties, which will be demonstrated by the following criteria:

- a. No increases in stormwater volumes to MD_29 pond (to west) for the 2-year, 10-year, and 100-year 24 –hour Atlas 14 events, as compared with existing conditions.

The hydrocad analysis of the existing and proposed conditions shows a decrease in storm water volume to the MD_29 pond in the proposed conditions.

- b. No increases in peak stormwater rates to MD_29 pond (to west) for the 2-year, 10-year, and 100-year 24-hour Atlas 14 events, as compared with existing conditions.

The hydrocad analysis of the existing and proposed conditions show a decrease in stormwater rate to the MD_29 pond in the proposed conditions

- c. Summarize direct offsite drainage to the south property line separately.

The revised plans indicate a swale on the south property line. This drainage will be routed to the existing MD_29 pond.



- d. No limitations to total volume runoff (to east) aside from meeting Nine Mile Creek Watershed District volume control requirements for the entire site.

The hydrocad analysis shows a reduction in storm water volume to the east in the proposed conditions for the 2-year, 10-yr and 100-yr, 24-hour storm.

- 3. Limit peak stormwater rates from the overall site to peak rates from existing conditions for the 2-year, 10-year, and 100-year, 24-hour Atlas 14 event, not per sub watershed (a sub watershed basis increase to the Blake Road system is allowed, as that direction has capacity to direct stormwater)

The hydrocad analysis shows a reduction in storm water rate to the pond in the proposed conditions for the 2-year, 10-yr and 100-yr, 24-hour storm.

- 4. Achieve compliance with Nine Mile Creek Watershed District water quality treatment requirements.

- a. The submittal indicates that the site is primarily comprised of D soils and the rain gardens will primarily serve as stormwater filtration. Given the limited infiltration and presence of drain tile in the bottom of the rain gardens, the TP removals sited in the submittal seems high.

Our initial calculations were based on Hennepin County Soils data which indicated Silty Sandy soils. We have since completed a geotechnical report that shows Clay (D) soils and our models have since been updated to reflect those. Our project will meet/exceed the watershed requirements for water quality as we will be required to obtain a permit through the watershed prior to final plat recording.

- 5. Recorded easements will be required for all public infrastructures not already in platted drainage and utility easement.

- a. Drainage to the west is proposed in a flow concentration onto private property then onto a private pond. Applicant must negotiate future public easement for: the flow path, any drainage infrastructure, or any increase in pond bounce with any affected private parties.

The applicant and Landform have been in contact with the two property owners through the design process. Both owners have indicated support for continual storm water drainage to the pond. We will continue to work with the owners to establish any required easements during the final platting process.

- 6. Road grade blocks drainage from proposed lot and private property to the north. Provide positive drainage to low area to north. Summarize any flow through areas separately in hydrology calculations.

After further analysis, the low point in the neighboring property is 13 feet outside of our property. We think it is unreasonable for the City to require the applicant to fix this existing off site condition. The proposed road is set at the elevations in the existing condition and the roadway elevations are not higher in the proposed elevation so the outlet elevation is not changing in the proposed condition. Our plans have been modified to swale our eastern drainage to a rain garden on our site which is then directed to the offsite pond.

- 7. Use NOAA Atlas 14 rainfall precipitation frequency

The hydrocad models use the Atlas 14 rainfall data for this local.



8. Provide justification for pre and post curve numbers. Previous submittal claimed curve number reductions in post development condition. Curve and drainage numbers should make conservative assumptions about activity that will occur to develop custom graded lots.

- a. The curve numbers used for the pervious areas in the existing conditions model (Woods, and Woods/grass combination) reflect “poor” conditions, whereas the curve numbers used for the pervious areas in the proposed conditions models (Woods/grass combination, >75% grass cover) reflect “good” or “fair” conditions. The selection of “poor” conditions in the existing conditions model results in generation of higher stormwater volumes under existing conditions than likely appropriate. The inconsistency in curve number selection for pervious areas should be corrected in future submittals to ensure an appropriate comparison between existing and proposed runoff volumes.

The original curve numbers were selected based on the existing site conditions and anticipated future conditions. The existing site has very little established vegetated ground cover and the curve number of “Poor” was selected. We anticipate the future homes to have established grass in the full build-out so “Good” and “Fair” conditions were selected. However we have revised the existing model to show similar “Fair” conditions similar to that in the proposed model. This will give conservative assumptions for the future condition.

9. Future building sites can be limited by impervious surface assumptions though developers agreement. Previous submittal claimed 5,450 sf impervious per lot. Recommend conservative impervious assumptions provide flexibility to allow for future expansion.

The applicant feels comfortable that 5,450 SF of impervious surface per lot is sufficient for the development. Reducing impervious area will help protect trees and other natural topographic features which has been a priority of the applicant and land owner.

10. Model results contain a significant continuity error. Correct this error.

- a. This may be a result of the model duration, time step or improper routing.

Model duration has been extended to show equal volumes. The net changes were very minimal and still below the existing conditions.

We hope this letter answers the outstanding concerns. Additionally, we have a few items that have been discussed previously in our memo to you that are pretty important to us for the development. We would like to have the City staff weigh in on these items as they greatly impact our development.

- Item 7 requests B618 curb and gutter only. Our plans propose to use B618 curb and gutter in most locations throughout the development including the north side of the new road and the cul-de-sac, however, we are proposing a flush ribbon curb on the south side of the street as part of our overall storm water management plan. The storm water from the new road will sheet drain north to south over this ribbon curb and will be pre-treated through a grass filter strip prior to entering the proposed rain gardens. Pretreatment is required for the rain gardens and we feel strongly that non-concentrated storm water, pretreated by grass filter

strips is the best choice for this application. We strongly request the City to consider our proposed ribbon curb and grass filter strips on the south side of the road for the best long term function and performance of the rain gardens. We ask that the ribbon curb on the south side of the new road be allowed as shown on the plans and incorporated in the conditions.

- Item 8 requests a 5-foot sidewalk be installed with a 5-foot boulevard. While we can revise our plans to provide this sidewalk on the north side of the street, the Planning Commission noted a number of concerns about this item. Commissioners noted that the living streets policy would not necessarily require the sidewalk on a cul de sac such as this, that the drainage issues and tree preservation should take precedent over the sidewalk and that alternative designs be considered. We would like to discuss the need, location and design of the sidewalk with you or receive written feedback so that we can prepare a plan that responds to the Commissions noted concerns.
- Item 11 requests a looped 6" DIP from Blake Road through to the Southeast corner of lot 6 north along the property line to Evanswood Lane. It is very common to have a water main dead-end in cul-de-sacs in subdivisions. We understand this was approved by the City Council in the Morningside/Acres Dubois development in 2013. Installing a looped main between lots 6 and 7 would cause the unnecessary removal of at least 13 mature trees that all parties wish to preserve. We believe that we can show that the required water pressure can be provided as designed and request that this condition be removed.

Our hope is that this letter, the revised plans and reports have addressed the outstanding Engineering comments as outlined in your memo. We ask for your support at the March 25th Planning Commission meeting.

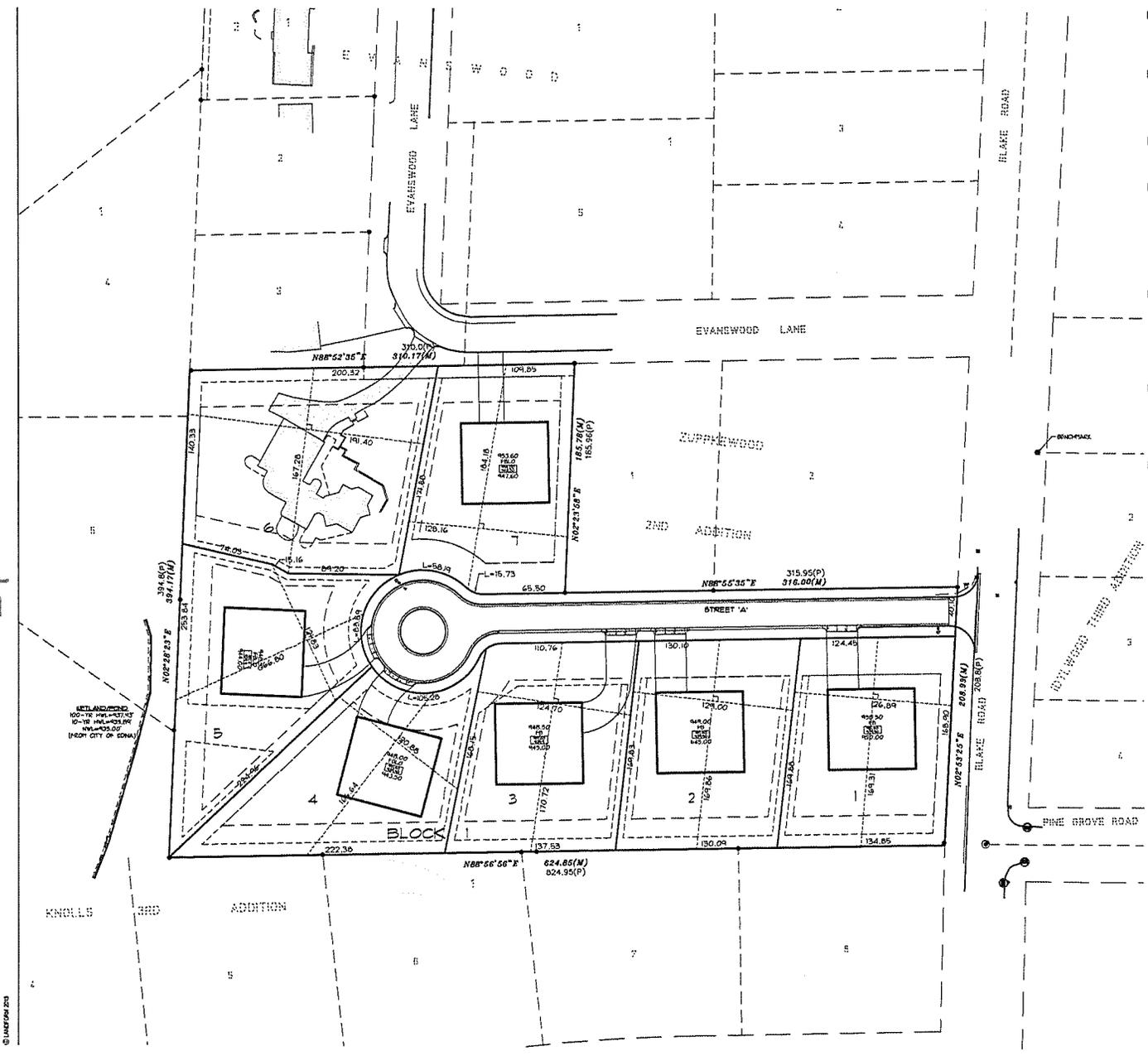
Sincerely,
Landform



Reid Schulz
Project Lead

COPY: Frank Berman
Cary Teague, City Planner
Chad Millner, City Engineer

ASG



BENCHMARK

TOP NET OF FIRE HYDRANT IN BETWEEN 5304 & 5315 BLAKE ROAD SOUTH
ELEVATION = 846.04
(MVD 1524)

SITE SUMMARY

TOTAL NUMBER OF LOTS: 7 LOTS
TOTAL PLATTED AREA: 4.31 ACRES
PROPOSED RIGHT-OF-WAY: 0.94 ACRES

ZONING

THE PROPERTY IS CURRENTLY ZONED R1-SINGLE FAMILY

SETBACK SUMMARY

BUILDING SETBACK INFORMATION IS AS FOLLOWS:
FRONT YARD = 30 FT.
REAR = 25 FT.
SIDE = 10 FT.

LOT COVERAGE INFORMATION IS AS FOLLOWS:
LOT AREA PERCENT = 20.42 %
LOT WIDTH PERCENT = 100 %
LOT DEPTH PERCENT = 86.4 %
FINAL BUILDING COVERAGE = 73%

REFER TO DETAIL L SHEETS FOR TYPICAL LOT SETBACK, DRAINAGE, AND UTILITY EASEMENT DETAILS.

PROPOSED LOT AREAS

LOT	AREA (SQ. FT.)	ACRES
LOT 1, BLOCK 1, BERMAN ADDITION	-21,842 SQ. FT.	0.501 ACRES
LOT 2, BLOCK 1, BERMAN ADDITION	-21,490 SQ. FT.	0.503 ACRES
LOT 3, BLOCK 1, BERMAN ADDITION	-21,842 SQ. FT.	0.501 ACRES
LOT 4, BLOCK 1, BERMAN ADDITION	-21,378 SQ. FT.	0.505 ACRES
LOT 5, BLOCK 1, BERMAN ADDITION	-21,378 SQ. FT.	0.505 ACRES
LOT 6, BLOCK 1, BERMAN ADDITION	-21,378 SQ. FT.	0.505 ACRES
LOT 7, BLOCK 1, BERMAN ADDITION	-21,378 SQ. FT.	0.505 ACRES
RIGHT-OF-WAY DEDICATION	-17,257 SQ. FT.	0.397 ACRES
TOTAL	-172,557 SQ. FT.	4.31 ACRES

LEGAL DESCRIPTION

LOT 1 AND LOT 2, BLOCK 1, ZUPPEWOOD, ACCORDING TO THE RECORDED PLAT THEREOF, HENNEPIN COUNTY, MINNESOTA.

AND
LOT 46 AND LOT 47, ALDENBURG SUBDIVISION NO. 375, ACCORDING TO THE RECORDED PLAT THEREOF, HENNEPIN COUNTY, MINNESOTA.

SURVEY NOTE

BACKGROUND INFORMATION SHOWN IS FROM SURVEY BY WESTWOOD PROFESSIONAL SERVICES ON FEBRUARY 27TH, 2004, EXPRESSLY FOR THE PROJECT, CITY OF EDINA, MINNESOTA. RECORDED DRAWINGS AND UTILITY SERVICES PROVIDED. LANDOWNER OPINES NO WARRANTY, EXPRESS OR IMPLIED, FOR INFORMATION PROVIDED BY OTHERS. EXISTING PROJECT CONDITIONS SHALL BE VERIFIED PRIOR TO BEGINNING CONSTRUCTION. SPECIAL MODIFICATIONS, OR CHANGES RECEIVED SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

OWNER

FRANK BERMAN
0331 EVANSWOOD LANE
EDINA, MN 55426
TE: 952-929-2929

MUNICIPALITY



PROJECT

**BLAKE WOODS
SUBDIVISION
EDINA, MN**

SHEET INDEX

SHEET NO.	DESCRIPTION
C01	PLAN
C02	PLAN, TITLE SHEET
C03	CONSTRUCTION
C04	CONSTRUCTION
C05	CONSTRUCTION
C06	CONSTRUCTION
C07	CONSTRUCTION
C08	CONSTRUCTION
C09	CONSTRUCTION
C10	CONSTRUCTION
C11	CONSTRUCTION
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C99	CONSTRUCTION
C100	CONSTRUCTION

REVISION HISTORY

NO.	DATE	DESCRIPTION
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PROJECT MANAGER REVIEW

DATE: 02/18/2015

CERTIFICATION

**PRELIMINARY
NOT FOR
CONSTRUCTION**

REVISION #2 - CITY COMMENTS

03/18/2015

LANDFORM

From Site to Finish

105 South Fifth Avenue Tel: 612-252-8070
Suite 515 Fax: 612-252-8077
Minneapolis, MN 55401 Web: landform.net

FILE NAME: C02222317
PROJECT NO.: 22214317

**PRELIMINARY
PLAT
C0.2**

SHEET NO. 2/18



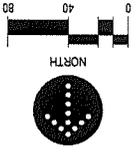
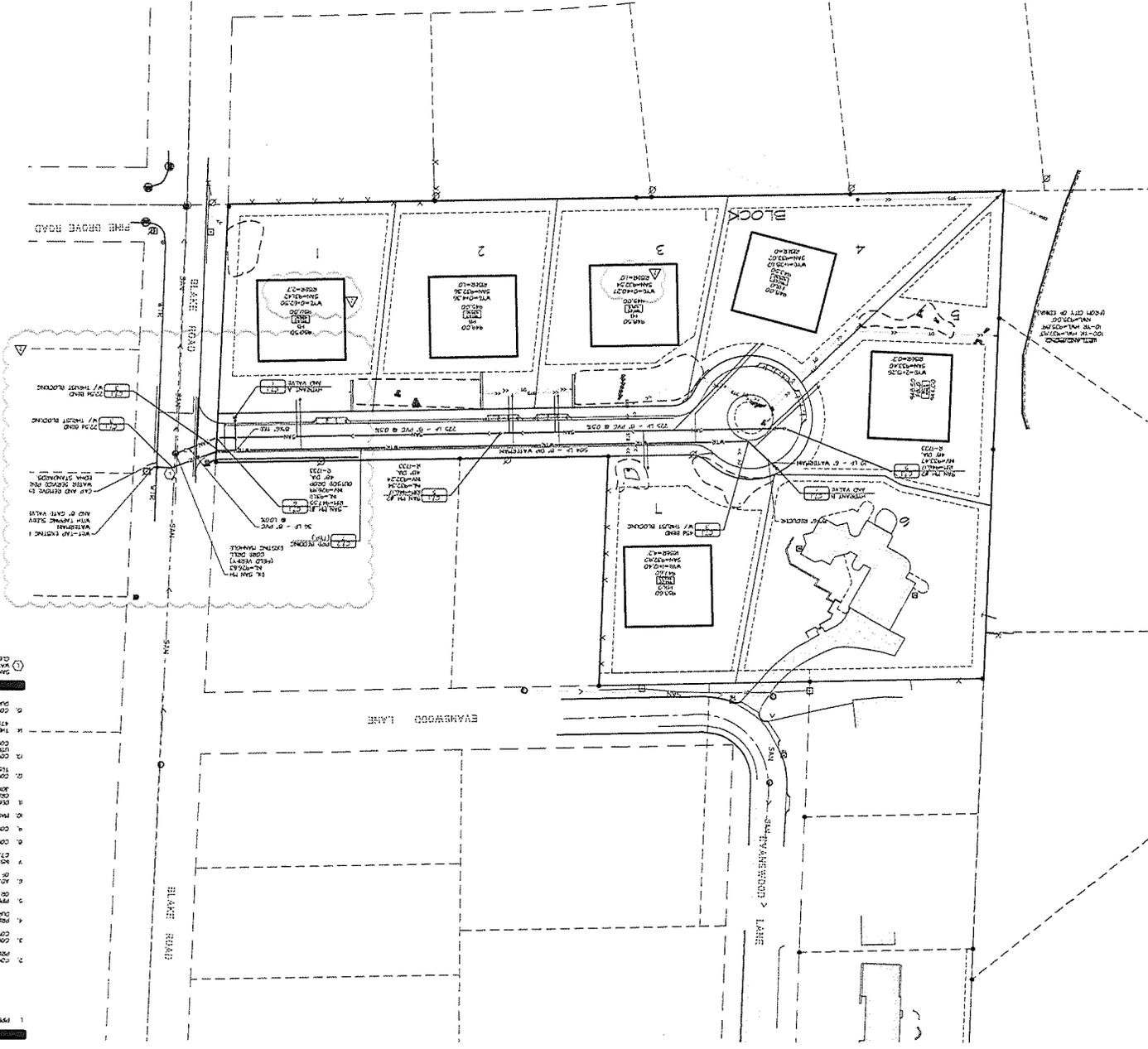
Know what's Below.
Call before you dig.



NORTH



194



UTILITY SANITARY SEWERS AND WATERMAIN
C4.1
 SHEET NO. 0718
 PROJECT NO. 2224247
 FILE NAME: C4.1.dwg
 DRAWING DATE: 04/26/2015
 DRAWING TIME: 10:00:00
 USER: JLM
 PLOT DATE: 04/26/2015
 PLOT TIME: 10:00:00
 PLOT USER: JLM
 PLOT DEVICE: HPGL
 PLOT SCALE: 1.0000
 PLOT SHEET: 1 OF 1
 PLOT STATUS: OK

REVISION #2 - CITY COMMENTS
 03/18/2015

PRELIMINARY CONSTRUCTION NOT FOR

PROJECT MANAGER REVIEW
 CERTIFICATION

REVISION HISTORY
 01/26/2015
 JLM
 1.00
 INITIAL DESIGN

BLAKE WOODS SUBDIVISION EDINA, MN
 PROJECT
 SHEET INDEX



OWNER
FRANK BERMAN
 1311 EVANSWOOD LANE
 EDINA, MN 55425
 TEL: 952.924.1234

- UTILITY NOTES**
1. PRE MATERIALS
 2. CONTRACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF EXISTING 12" DIA. AND 18" DIA. SANITARY SEWERS AND WATERMAIN (SEE SHEET C4.2 FOR SANITARY SEWERS AND WATERMAIN LOCATIONS)
 3. COORDINATE WITH PRIVATE UTILITIES TO PROVIDE EXISTING, NATIONAL CAD, AND CONFORMANCE DRAWINGS TO LOCAL USE.
 4. REMOVE TRUNK AND BRANCHES TO PROTECT EXISTING UTILITY FROM DAMAGE.
 5. DUCTS UTILITIES SHALL BE INSTALLED.
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- UTILITY CROSSINGS**
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04/20/2015

AGH

UTILITY NOTES

1. PER UTILITY NOTES AND RECORDS FOR EXISTING UTILITIES TO BE MAINTAINED OR REMOVED.
2. CONTACT UTILITY SERVICES PROVIDERS FOR EXISTING UTILITIES TO BE MAINTAINED OR REMOVED.
3. PROVIDE HAND AND RECORDS TO PROTECT ADJACENT PROPERTY FROM DAMAGE DURING UTILITY INSTALLATION.
4. PER UTILITY NOTES AND RECORDS FOR EXISTING UTILITIES TO BE MAINTAINED OR REMOVED.
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OWNER

FRANK BERMAN
1001 EDINWOOD LANE
EDINA, MN 55425
TEL: 612-223-8070



MUNICIPALITY

BLAKE WOODS SUBDIVISION EDINA, MN PROJECT

SHEET INDEX

101	UTILITY NOTES
102	GENERAL NOTES
103	PLAN
104	SECTION
105	DETAIL
106	SECTION
107	DETAIL
108	SECTION
109	DETAIL
110	SECTION
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399	DETAIL
400	SECTION

REVISION HISTORY

NO.	DATE	DESCRIPTION
1	03/18/2015	ISSUED FOR PERMIT
2	03/18/2015	REVISED PER CITY COMMENTS
3	03/18/2015	REVISED PER CITY COMMENTS
4	03/18/2015	REVISED PER CITY COMMENTS
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98	03/18/2015	REVISED PER CITY COMMENTS
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100	03/18/2015	REVISED PER CITY COMMENTS

PROJECT MANAGER REVIEW

CERTIFICATION

PRELIMINARY NOT FOR CONSTRUCTION

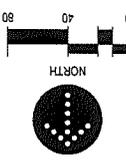
REVISION #2 - CITY COMMENTS

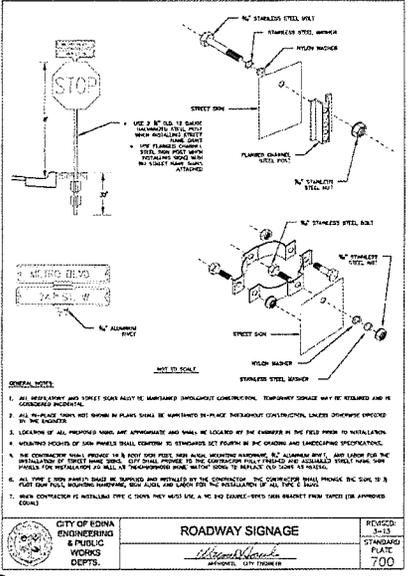
FORM

100 South Fifth Avenue
Suite 515
Edina, MN 55425
Tel: 612-223-8070
Fax: 612-223-8077
www.berman.com

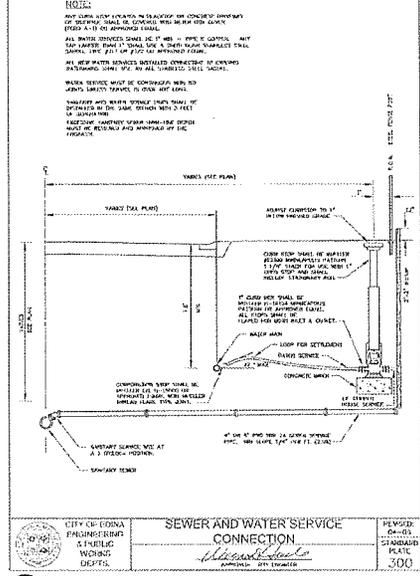
STORM SEWER
C4.2

SHEET NO. R-13

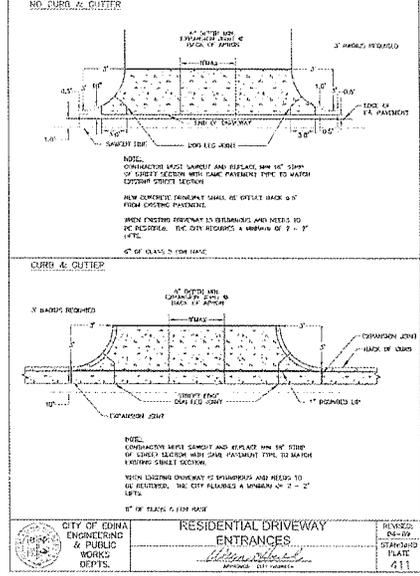




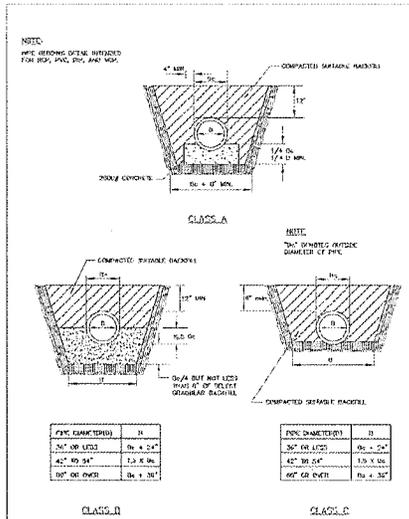
ROADWAY SIGNAGE
NO SCALE



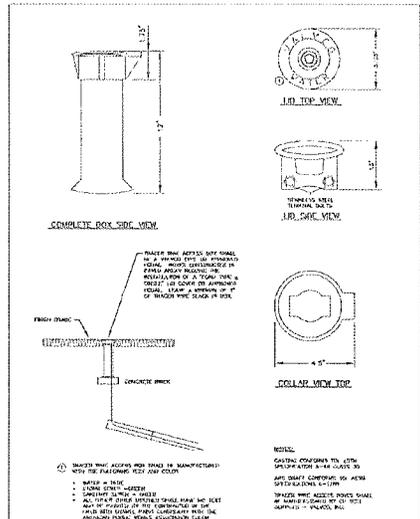
SEWER AND WATER SERVICE CONNECTION
NO SCALE



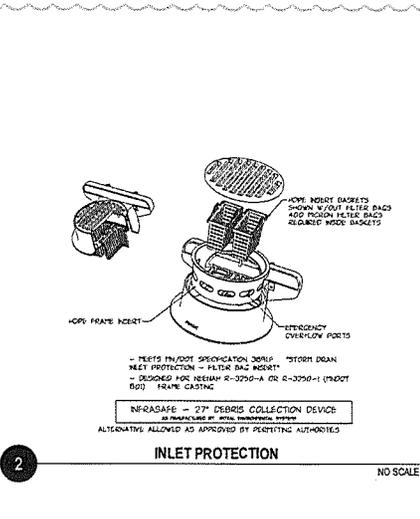
RESIDENTIAL DRIVEWAY ENTRANCE
NO SCALE



PIPE BEDDING
NO SCALE



TRACER WIRE ACCESS BOX
NO SCALE



INLET PROTECTION
NO SCALE

OWNER
FRANK BERMAN
533 EDWARDS LANE
EDINA, MN 55424
TEL: 612-739-1231



PROJECT
BLAKE WOODS
SUBDIVISION
EDINA, MN

SHEET INDEX

NO.	DESCRIPTION
001	GENERAL NOTES
002	ROADWAY SIGNAGE
003	SEWER AND WATER SERVICE CONNECTION
004	RESIDENTIAL DRIVEWAY ENTRANCE
005	PIPE BEDDING
006	TRACER WIRE ACCESS BOX
007	INLET PROTECTION
008	LANDFORM

REVISION HISTORY

NO.	REVISION	DATE
001	ISSUED FOR PERMITS	08-19-09
002	REVISION #1 - CITY COMMENTS	08-19-09

PROJECT MANAGER REVIEW
DATE: 08-19-09

CERTIFICATION
PRELIMINARY
NOT FOR
CONSTRUCTION

REVISION #2 - CITY COMMENTS
03/18/2015

LANDFORM
Form Step 15 Finish

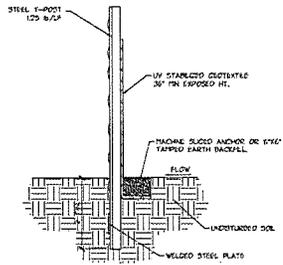
100 South Fifth Avenue Tel: 612-232-6070
Suite 513 Fax: 612-232-6077
Minneapolis, MN 55401 Web: landform.net

CIVIL CONSTRUCTION
DETAILS
C7.2

SHEET NO. 10/15

AF5

1512-000000-00



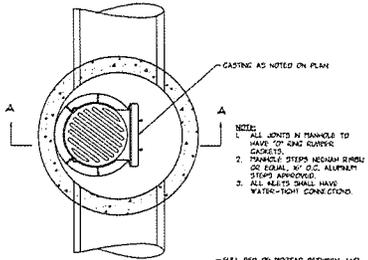
NOT ALL ON CONTROLS AT CONSTANT ELEVATION.

VERIFY LOCAL REQUIREMENTS FOR:

- SPECIFIED TYPE
- METHOD OF ATTACHMENT
- ANCHORING
- POST SPACING
- BACKFILL FOR HEAVY DUTY APPLICATIONS

SILT FENCE

NO SCALE

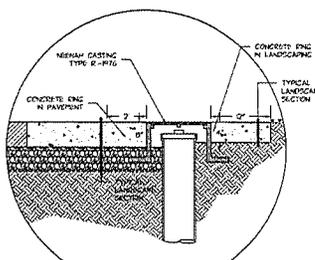


NOTE:

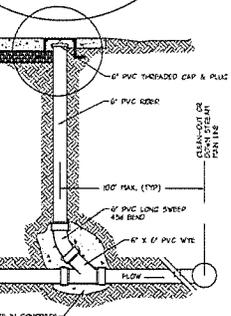
1. ALL JOINTS IN MANHOLE TO HAVE TOP EDGE CURVED CORNERS.
2. MANHOLE STEPS NEARBY SIMILAR TO EQUAL 6\"/>

STORM SEWER CATCH BASIN MANHOLE

NO SCALE

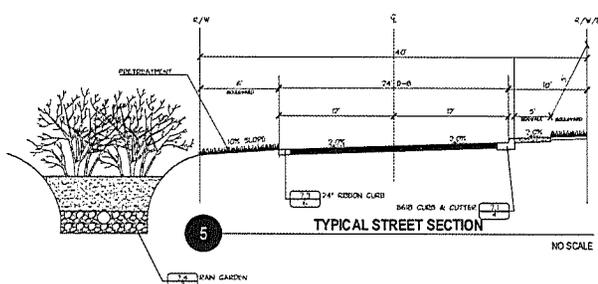


TYPICAL LANDSCAPE SECTION



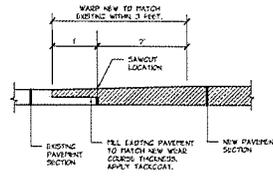
CLEAN-OUT STRUCTURE

NO SCALE



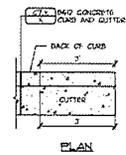
TYPICAL STREET SECTION

NO SCALE



ASPHALT PAVEMENT TRANSITION

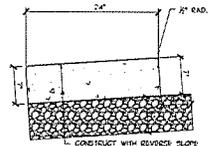
NO SCALE



ELEVATION

NOSE DOWN CURB

NO SCALE



24\"/>

NO SCALE

OWNER
FRANK BERMAN
5331 EVANWOOD LANE
EDINA, MN 55438
TEL: 612-251-1428

MUNICIPALITY



PROJECT
BLAKE WOODS SUBDIVISION
EDINA, MN

SHEET INDEX

NO.	DESCRIPTION
001	TOP
002	CONCRETE CURB AND GUTTER
003	LANDSCAPE
004	ASPHALT PAVEMENT TRANSITION
005	NOSE DOWN CURB
006	24\"/>
007	CLEAN-OUT STRUCTURE
008	STORM SEWER CATCH BASIN MANHOLE
009	SILT FENCE
010	TYPICAL STREET SECTION
011	LANDSCAPE DETAILS

REVISION HISTORY

DATE	REVISION	BY	CHK
12 FEB 2015	MANUFACTURE PLANT SUPPLIER		
24 FEB 2015	REVISED #1 - CITY COMMENTS		
07 MAR 2015	REVISED #2 - CITY COMMENTS		

PROJECT MANAGER REVIEW
BY: [] OF: []

CERTIFICATION

PRELIMINARY NOT FOR CONSTRUCTION

REVISION #2 - CITY COMMENTS
03/18/2015

LANDFORM
From Site to Finish

105 South Fifth Avenue Tel: 612-252-0070
Suite 613 Fax: 612-252-0077
Minneapolis, MN 55401 Web: landform.net

FILE NAME: C:\10222\17

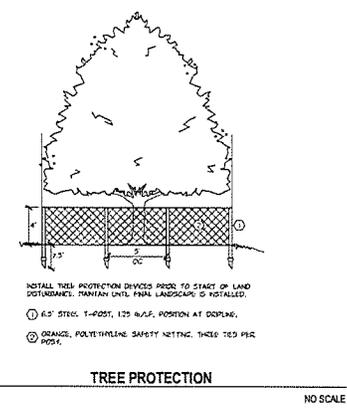
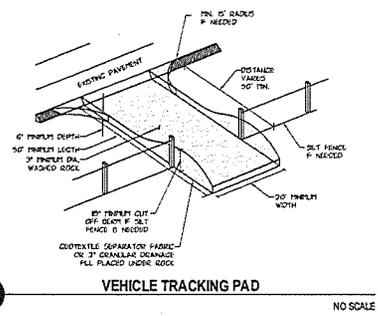
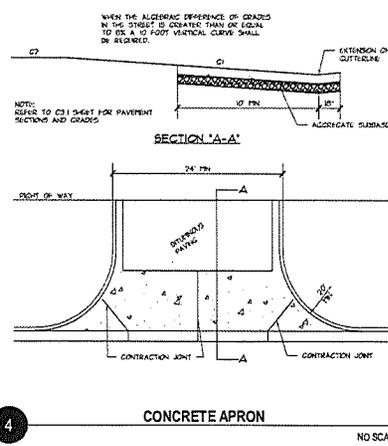
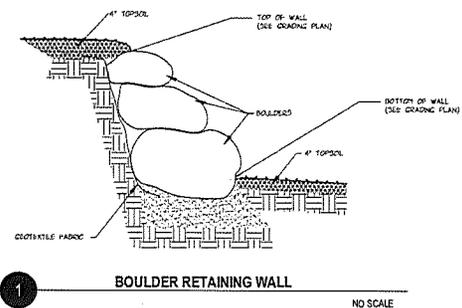
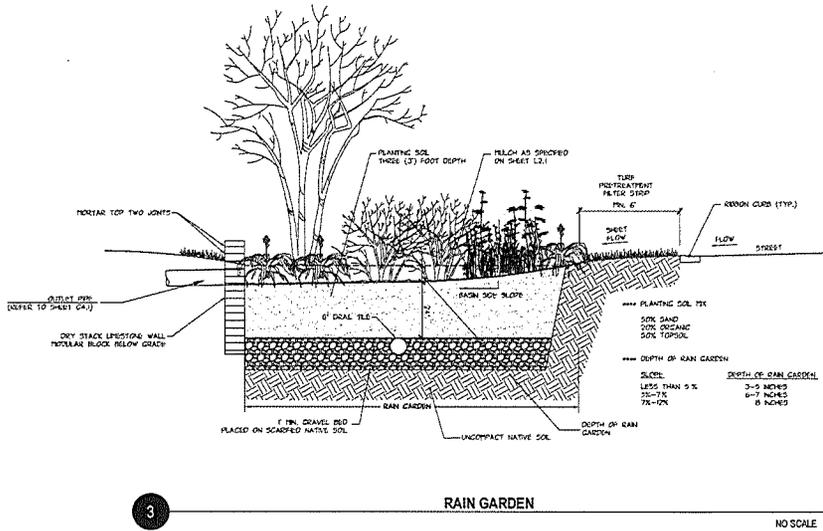
PROJECT NO: 22214317

CIVIL CONSTRUCTION DETAILS
C7.3

SHEET NO. 11/18

Handwritten initials 'HCB'

LANDFORM



AG 7

OWNER
FRANK BERMAN
531 EVANSWOOD LANE
EDINA, MN 55430
TEL: 612-232-6070



PROJECT
BLAKE WOODS SUBDIVISION
EDINA, MN

SHEET INDEX

SHEET	TYPE
C001	GEN. NOTES SHEET
C010	PROPOSED PLAN
C011	EXISTING CONDITIONS
C012	UTILITIES
C013	SOILS
C014	SEWER, STORMWATER AND INTERIOR CONTROL PLAN
C015	UTILITIES - EXISTING AND PROPOSED
C016	UTILITIES - STREET TO WALL
C017	STREET AND SIDE WALK
C018	SOILS
C019	SOILS
C020	SOILS
C021	SOILS
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REVISION HISTORY
LAST COMPLETION PROVISION

DATE	REVISION	BY	CHKD
12/10/2019	PROVISIONAL CITY SUBMITTAL	MM	MM
02/FEB/2020	REVISION #1 - CITY COMMENTS	MM	MM
04/FEB/2020	REVISION #2 - CITY COMMENTS	MM	MM

PROJECT MANAGER REVIEW
DATE: 01/08/2020
BY: MM

CERTIFICATION
PRELIMINARY NOT FOR CONSTRUCTION

REVISION #2 - CITY COMMENTS
03/18/2015

LANDFORM
From Site to Finish

105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401

Tel: 612-232-6070
Fax: 612-232-6077
Web: landform.net

FILE NAME: C104J22217
PROJECT NO.: 2221-017

CIVIL CONSTRUCTION DETAILS
C7.4
SHEET NO. 12/15

PRESERVED TREE SCHEDULE

TAG #	DIA (IN)	COMMON NAME	REMOVED	SAVED	TAG #	DIA (IN)	COMMON NAME	REMOVED	SAVED	TAG #	DIA (IN)	COMMON NAME	REMOVED	SAVED
8205	12	American Elm	X		8407	15	Arborvitae	X		8522	10	Black Cherry	X	
8206	16	Bitternut Hickory	X		8408	10	Arborvitae	X		8523	9	Boxelder	X	
8207	12	White Spruce	X		8409	12	Arborvitae	X		8524	20	Black Cherry	X	
8208	7	American Elm	X		8410	8	Arborvitae	X		8525	8	Boxelder	X	
8209	36	Red Oak	X		8411	10	Arborvitae	X		8526	9	Boxelder	X	
8210	22	White Oak	X		8412	16	Arborvitae	X		8527	9	White Oak	X	
8211	23	White Spruce	X		8422	14	Boxelder	X	X	8528	10	Arborvitae	X	
8212	7	American Elm	X		8423	14	Boxelder	X	X	8529	7	Black Cherry	X	
8213	9	White Spruce	X		8424	16	White Oak	X		8530	15	White Oak	X	
8214	8	Arborvitae	X		8425	15	Boxelder	X	X	8531	39	Red Oak	X	
8215	7	Arborvitae	X		8426	14	Boxelder	X	X	8532	7	Bitternut Hickory	X	
8216	6	Arborvitae	X		8427	11	White Oak	X		8533	11	Black Cherry	X	
8217	20	Sugar Maple	X		8428	6	Boxelder	X		8534	8	Black Cherry	X	
8218	6	Arborvitae	X		8429	33	Black Willow	X		8535	8	Red Maple	X	
8219	7	Arborvitae	X		8430	7	Boxelder	X		8536	16	Black Cherry	X	
8220	8	Arborvitae	X		8431	9	Boxelder	X		8537	11	Boxelder	X	
8221	18	White Spruce	X		8432	12	Black Cherry	X		8538	8	Black Cherry	X	X
8222	16	White Spruce	X		8433	9	Black Cherry	X		8539	40	Cottonwood	X	
8244	14	White Spruce	X		8434	28	White Oak	X		8540	7	White Spruce	X	
8245	6	Boxelder	X		8435	9	Black Cherry	X		8541	8	White Spruce	X	
8246	11	Paper Birch	X		8436	36	White Oak	X		8541	8	White Spruce	X	
8318	12	White Spruce	X		8437	6	Black Cherry	X		8543	6	Boxelder	X	
8319	12	White Spruce	X		8438	18	White Oak	X		8544	16	Boxelder	X	
8320	12	White Spruce	X		8439	10	Boxelder	X		8545	9	Boxelder	X	
8321	24	White Oak	X		8440	6	Black Cherry	X		8555	6	Boxelder	X	
8322	26	White Oak	X		8441	26	White Oak	X		8556	29	White Oak	X	
8323	19	White Oak	X		8442	26	White Oak	X		8557	8	Black Cherry	X	
8324	25	Sugar Maple	X		8443	11	Black Cherry	X		8558	9	Black Cherry	X	
8325	26	White Oak	X		8444	30	White Oak	X		8559	6	Black Cherry	X	
8326	27	White Oak	X		8445	8	Bitternut Hickory	X		8560	4	Black Cherry	X	
8333	9	Colorado Spruce	X		8446	8	Bitternut Hickory	X	X	8561	13	Black Cherry	X	
8334	7	Eastern Red Cedar	X		8447	10	Boxelder	X		8562	6	Black Cherry	X	
8335	9	Eastern Red Cedar	X		8448	10	Boxelder	X		8563	7	Black Cherry	X	
8336	15	Sugar Maple	X		8449	9	Boxelder	X		8564	22	White Oak	X	
8337	20	Sugar Maple	X		8450	10	Boxelder	X		8565	6	Black Cherry	X	
8339	22	Sugar Maple	X		8451	9	Boxelder	X	X	8566	8	Black Cherry	X	
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8345	28	White Oak	X		8486	20	Colorado Spruce	X		8572	9	Black Cherry	X	
8371	26	White Oak	X		8487	6	Bitternut Hickory	X		8573	8	Black Cherry	X	
8372	24	American Elm	X		8488	11	American Elm	X		8574	10	Boxelder	X	
8373	6	White Spruce	X		8489	19	Red Oak	X		8575	7	Boxelder	X	
8374	26	White Oak	X		8490	24	White Oak	X		8576	17	White Oak	X	
8375	12	Boxelder	X		8491	22	White Oak	X		8577	6	Boxelder	X	
8376	11	Boxelder	X		8492	33	White Oak	X		8578	6	Black Cherry	X	
8377	13	Arborvitae	X		8493	11	White Oak	X		8579	30	White Oak	X	
8378	16	Boxelder	X		8494	22	Red Oak	X		8580	21	White Oak	X	
8379	10	Sugar Maple	X		8495	20	White Oak	X		8581	20	White Oak	X	
8380	6	Sugar Maple	X		8496	6	Black Cherry	X		8582	30	White Oak	X	
8382	19	Black Walnut	X		8497	14	Red Oak	X		8583	9	Black Cherry	X	
8384	13	Boxelder	X		8498	14	Black Cherry	X		8584	9	Black Cherry	X	
8385	6	Hackberry	X		8499	10	Green and White Ash	X		8585	12	Black Cherry	X	
8386	12	American Elm	X		8501	8	Arborvitae	X		8586	22	White Oak	X	
8387	8	Arborvitae	X		8502	17	American Elm	X		8587	6	Colorado Spruce	X	
8388	10	Arborvitae	X		8503	8	Arborvitae	X		8588	11	White Spruce	X	
8389	8	White Spruce	X		8504	11	Basswood	X		8589	8	White Spruce	X	
8390	8	White Spruce	X		8505	20	Red Oak	X		8590	15	Red Norway Pine	X	
8391	8	Arborvitae	X		8506	11	Black Cherry	X		8591	13	Red Norway Pine	X	
8392	8	Arborvitae	X		8507	14	Black Cherry	X		8592	14	Red Norway Pine	X	
8393	16	Arborvitae	X		8508	10	Black Cherry	X		8593	10	Boxelder	X	X
8394	6	Arborvitae	X		8509	11	Black Cherry	X		8594	16	Aspen	X	
8395	10	Arborvitae	X		8510	7	Black Cherry	X		8595	8	Boxelder	X	
8396	18	Bitternut Hickory	X		8511	7	Arborvitae	X		8596	11	Boxelder	X	
8397	9	Boxelder	X		8512	23	White Oak	X		8597	6	American Elm	X	
8398	6	Arborvitae	X		8513	11	Aspen	X		8598	16	Boxelder	X	
8399	24	White Oak	X		8514	17	Aspen	X		8599	17	American Elm	X	
8400	10	White Spruce	X		8515	10	White Spruce	X		8600	10	Boxelder	X	
8401	20	White Oak	X		8516	20	White Oak	X		8601	6	Boxelder	X	
8402	9	White Spruce	X		8517	22	White Oak	X		8602	31	White Oak	X	
8404	17	Bitternut Hickory	X		8518	9	Black Cherry	X		8603	24	White Oak	X	
8405	9	Arborvitae	X		8519	9	Black Cherry	X		8604	24	White Oak	X	X
8406	14	Arborvitae	X		8520	7	Black Cherry	X		8605	24	White Oak	X	
					8521	7	Boxelder	X		8606	24	White Oak	X	

A-21

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OWNER
FRANK BERMAN
8331 EDWARDSWOOD LANE
EDINA, MN 55425
TEL: 952/841-2121

MUNICIPALITY



PROJECT
BLAKE WOODS SUBDIVISION
EDINA, MN

SHEET INDEX

SHEET	TITLE
001	PRELIMINARY PLAN
002	PERMITS
003	CONSTRUCTION
004	FINAL
005	AS-BUILT
006	CONSTRUCTION
007	CONSTRUCTION
008	CONSTRUCTION
009	CONSTRUCTION
010	CONSTRUCTION
011	CONSTRUCTION
012	CONSTRUCTION
013	CONSTRUCTION
014	CONSTRUCTION
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REVISION HISTORY
CITY COMMENTS

NO.	DATE	DESCRIPTION	BY
1	03/18/2015	REVISION #2 - CITY COMMENTS	

PROJECT MANAGER REVIEW
CERTIFICATION

PRELIMINARY NOT FOR CONSTRUCTION

REVISION #2 - CITY COMMENTS
03/18/2015

LANDFORM
From Site to Finish

105 South Fifth Avenue Tel: 812-252-6070
Suite 513 Fax: 612-252-6077
Minneapolis, MN 55401 Web: landform.us

FILE NAME L:\02222107
PROJECT NO. 2221-017

TREE PRESERVATION TABLE
L1.2
SHEET NO. 14/18

A discussion ensued on the merits of the proposal including ceiling height. Questions were raised on if the figures represented in the plans were correct, and if the variance was approved to ensure that all figures are the same. It was further pointed out that engineering supports the request subject to Minnehaha Creek Watershed District requirements.

Public Comment

Chair Platteter asked if anyone would like to speak to the issue; being none, Commissioner Olsen moved to close the public hearing. Commissioner Scherer seconded the motion. All voted aye; motion carried.

Discussion

Commissioner Scherer stated she supports the project as presented. Commissioner Forrest said she agrees adding this is the time to “fix” the flood plain issue. Forrest also commented in this day and age an 8-foot ceiling height is not unreasonable or excessive; adding the Commission has viewed and approved projects with higher ceilings.

Motion

Commissioner Olsen moved variance approval based on staff findings and subject to staff conditions. Commissioner Scherer seconded the motion. Commissioner Forrest offered an amendment to the motion stipulating that all figures match. Commissioner Schroeder commented that an easy way to ensure compliance is to stipulate that the first floor building elevation be met as established by staff. Commissioners Olsen and Scherer accepted those amendments. Ayes; Scherer, Schroeder, Olsen, Carr, Forrest Platteter. Nays; Lee and Hobbs. Motion carried.

C. Subdivision. Frank Berman. 5321 & 5331 Evanswood Lane and 5320 & 5324 Blake Road, Edina, MN

Planner Presentation

Planner Teague reported that Frank Berman is proposing to combine and subdivide his properties at 5321 & 5331 Evanswood Lane, and 5320 and 5324 Blake Road seven lots. The existing home at 5331 Evanswood Lane would remain, and the home at 5324 Blake Road would be removed. The other two parcels are vacant.

The applicant proposes to construct a 24-foot wide cul-de-sac off Blake Road within a 40-foot right-of-way. Two lots would access of Evanswood Lane, and the remaining five off the new road. The applicant has attempted to minimize tree loss and address drainage issues in the area by locating the roadway along the north lot line, and the stormwater retention areas along the street.

Planner Teague noted that to accommodate the request preliminary plan approval is required.

Continuing, Teague explained that all seven of the proposed lots meet the City's minimum lot size requirements. Minimum lot size, width and depth is determined by the median of all lots within 500 feet of the subject property. Based on the surveyors calculation of the medians, the minimum lot size is 21,842 s.f. in size; 166.4 feet in depth; and 120.8 feet in width.

Concluding, Teague stated that the city engineer has reviewed the proposed plans and does have some concern given the existing drainage issues in this neighborhood. The stormwater system downstream is over capacity. The applicant will be required to meet all minimum Minnehaha Creek Watershed district standards, as they are the regulatory authority in Edina in regard to grading and drainage. There shall be no increase in peak rate or volume to neighboring private properties. Teague further stated that at the time of this report, the issues raised by engineering have not been met. If the applicant has not addressed by the time of the meeting, staff would recommend continuing action on this request to the next Planning Commission meeting. Ross Bintner, from the engineering department will be at the Planning Commission meeting to discuss any revised plan that is submitted, and the issues regarding the proposal.

Teague also stated since interested residents may be present to address the proposed subdivision that the public hearing be opened this evening to allow testimony and left open so that testimony could continue to the tabled meeting date per engineering recommendation.

Appearing for the Applicant

Kendra Lyndahl

Discussion

Commissioners acknowledged the recommendation from the engineering department to table the request until drainage issues are resolved; however offered the following:

Commissioner Carr asked Planner Teague if the recently approved Tree Preservation Ordinance would apply to this subdivision. Planner Teague responded that he believes so, adding the Tree Preservation Ordinance goes into effect on July 1, 2015. Teague further noted that the applicant is very mindful of the trees on the site.

Commissioner Scherer stated that while she understands the significance of Edina promoting "Living Streets" in this instance drainage concerns have been identified and in her opinion a sidewalk just adds more hard surface; reiterating engineering has requested that this request be tabled until all parties reach an agreement. Chair Platteter said he agrees with that comment, adding he's a huge proponent of sidewalks, however, when drainage issues are identified additional hard surface could exacerbate the issue.

Applicant Comments

Ms. Lyndahl told the Commission the property owner generally supports the conditions of approval. Continuing Ms. Lyndahl said that their first priority was tree preservation and second; creating a project

that complies with city ordinances. Concluding, Lyndahl stated they would work with engineering on resolving the drainage issues prior to the next meeting.

Commissioner Carr pointed out that the sidewalk was considered in the engineers review, adding if engineering finds that drainage can be managed (with sidewalk) she would be in favor of the sidewalk. Concluding, Carr stated she encourages sidewalks for Edina.

A brief discussion ensued on the proposed location of the sidewalk with Commissioners suggesting that the sidewalk may work better on the north side; not south as proposed. Commissioners asked Mr. Bintner if he believes the drainage issues can be resolved. Mr. Bintner responded he believes so; however, at this time the issues are still unresolved.

Commissioner Forrest asked when the subdivision project goes before the Watershed District. Mr. Bintner responded the Watershed District hears the request between preliminary and final review.

Commissioner Hobbs suggested if the project moves forward with a sidewalk that the sidewalk could be constructed with pervious materials, reducing drainage impact.

Public Comment

Chair Platteter opened the public hearing.

The following spoke expressing reservations on the 7-lot subdivision proposal:

Rebecca Wallin, 6208 Parkwood Road.

Charles Gits, 5311 Evanswood Lane.

Olaf Minge, 5225 Evanswood Lane.

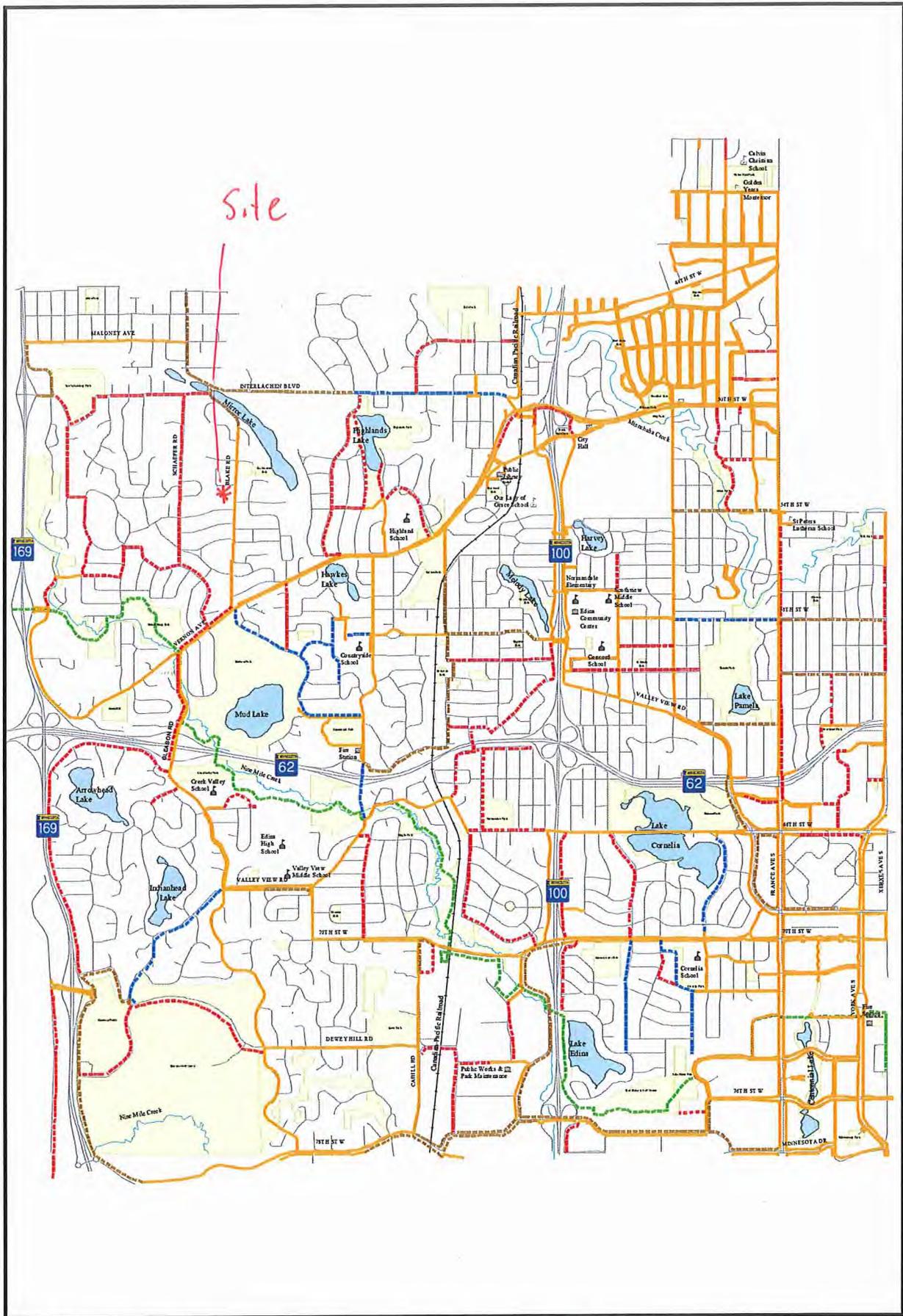
Amy Minge, 5225 Evanswood lane

Chris Johnson, 5308 West Highwood Drive.

Chair Platteter commented that since the recommendation is to table the subdivision request until the next meeting of the Planning Commission the public hearing will remain open.

Motion

Commissioner Carr moved to table the request for preliminary plat for Frank Berman 5321 & 5331 Evanswood Lane and 5320 & 5324 Blake Road to the March 11, 2015 Planning Commission meeting. Commissioner Scherer seconded the motion. All voted aye; motion carried.



Site

- Legend
- Existing Sidewalk
 - Future State-Aid Sidewalk
 - Future Active Routes To School Sidewalk
 - Future City Sidewalk
 - Future Nine Mile Creek Regional Trail



City of Edina
2008 Comprehensive Plan Update

Sidewalk Facilities



Engineering Dept
 November 2014

A75



Living Streets Policy

Introduction

Living streets balance the needs of motorists, bicyclists, pedestrians and transit riders in ways that promote safety and convenience, enhance community identity, create economic vitality, improve environmental sustainability, and provide meaningful opportunities for active living and better health. The Living Streets Policy defines Edina's vision for Living Streets and the principles and plans that will guide implementation.

The Living Street Policy ties directly to key community goals outlined in the City's 2008 Comprehensive Plan. Those goals include safe walking, bicycling and driving, reduced storm water runoff, reduced energy consumption, and promoting health. The Living Streets Policy also compliments voluntary City initiatives such as the "do.town" effort related to community health, and the Tree City USA and the Green Step Cities programs related to sustainability. In other cases, the Living Street Policy will assist the City in meeting mandatory requirements set by other agencies. For example, the Living Streets Policy will support the City's Storm Water Pollution Prevention Plan which addresses mandates established under the Clean Water Act.

The Living Streets Policy provides the framework for a Living Streets Plan. The Living Streets Plan will address how the Policy will be implemented by providing more detailed information on street design, traffic calming, bike facilities, landscaping and lighting, as well as best practices for community engagement during the design process. Lastly, existing and future supporting plans such as the Bicycle Plan, Active Routes to Schools, Sidewalk Priority Plan and the Capital Improvement Plan will help to identify which projects are priorities with respect to this Policy.

Living Streets Vision

Edina is a place where...

- Transportation utilizing all modes is equally safe and accessible;
- Residents and families regularly choose to walk or bike;
- Streets enhance neighborhood character and community identity;
- Streets are safe, inviting places that encourage human interaction and physical activity;
- Public policy strives to promote sustainability through balanced infrastructure investments;
- Environmental stewardship and reduced energy consumption are pursued in public and private sectors alike; and
- Streets support vibrant commerce and add to the value of adjacent land uses.

Living Streets Principles

The following principles will guide implementation of the Living Streets Policy. The City will incorporate these principles when planning for and designing the local transportation network and when making public and private land use decisions.

All Users and All Modes

The City will plan, design, and build high quality transportation facilities that meet the needs of the most vulnerable users (pedestrians, cyclists, children, elderly, and disabled) while enhancing safety and convenience for all users, and providing access and mobility for all modes.

Connectivity

- The City will design, operate, and maintain a transportation system that provides a highly connected network of streets that accommodate all modes of travel.
- The City will seek opportunities to overcome barriers to active transportation. This includes preserving and repurposing existing rights-of-way, and adding new rights-of-way to enhance connectivity for pedestrians, bicyclists, and transit.
- The City will prioritize non-motorized improvements to key destinations such as public facilities, public transit, the regional transportation network and commercial areas.
-  The City will require new developments to provide interconnected street and sidewalk networks that connect to existing or planned streets or sidewalks on the perimeter of the development.
- Projects will include consideration of the logical termini by mode. For example, the logical termini for a bike lane or sidewalk may extend beyond the traditional limits of a street construction or reconstruction project, in order to ensure multimodal connectivity and continuity.

Application

- The City will apply this Living Streets Policy to all street projects including those involving operations, maintenance, new construction, reconstruction, retrofits, repaving, rehabilitation, or changes in the allocation of pavement space on an existing roadway. This also includes privately built roads, sidewalks, paths and trails.
- The City will act as an advocate for Living Street principles when a local transportation or land use decision is under the jurisdiction of another agency.
- Living Streets may be achieved through single projects or incrementally through a series of smaller improvements or maintenance activities over time.
- The City will draw on all sources of transportation funding to implement this Policy and actively pursue grants, cost sharing opportunities and other new or special funding sources as applicable.
- All City departments will support the vision and principles outlined in the Policy in their work.

Exceptions

Living Streets principles will be included in all street construction, reconstruction, repaving, and rehabilitation projects, except under one or more of the conditions listed below. City staff will document proposed exceptions as part of the project proposal.

A77

Exceptions:

- A project involves only ordinary maintenance activities designed to keep assets in serviceable condition, such as mowing, cleaning, sweeping, spot repair, concrete joint repair, or pothole filling, or when interim measures are implemented on a temporary detour. Such maintenance activities, however, shall consider and meet the needs of bicyclists and pedestrians.
- The City exempts a project due to an excessively disproportionate cost of establishing a bikeway, walkway, or transit enhancement as part of a project.
- The City determines that the construction is not practically feasible or cost effective because of significant or adverse environmental impacts to waterways, flood plains, remnants or native vegetation, wetlands, or other critical areas.

Design

The City will develop and adopt guidelines as part of the Living Streets Plan to direct the planning, funding, design, construction, operation, and maintenance of new and modified streets, sidewalks, paths and trails. The guidelines will allow for context-sensitive designs.

The City's design guidelines will:

- Keep street pavement widths to the minimum necessary.
- Provide well-designed pedestrian accommodation in the form of sidewalks or shared-use pathways on all arterial and collector streets and on local connector streets as determined by context. Sidewalks shall also be required where streets abut a public school, public building, community playfield or neighborhood park. Termini will be determined by context.
- Provide frequent, convenient and safe street crossings. These may be at intersections designed to be pedestrian friendly, or at mid-block locations where needed and appropriate.
- Provide bicycle accommodation on all primary bike routes.
- Allocate right-of-way for boulevards.
- Allocate right-of-way for parking only when necessary and not in conflict with Living Streets principles.
- Consider streets as part of our natural ecosystem and incorporate landscaping, trees, rain gardens and other features to improve air and water quality.

The design guidelines in the Living Streets Plan will be incorporated into other City plans, manuals, rules, regulations, and programs as appropriate. As new and better practices evolve, the City will update the Living Streets Plan.

Context Sensitivity

Although many streets look more or less the same, every street is a unique combination of its neighborhood, adjacent land uses, natural features, street design, users, and modes. To accommodate these differences, the City will:

- Seek input from stakeholders;
- Design streets with a strong sense of place;
- Be mindful of preserving and protecting natural features, such as waterways, trees, slopes, and ravines;
- Be mindful of existing land uses and neighborhood character; and

- Coordinate with business and property owners along commercial corridors to develop vibrant commercial districts.

Benchmarks and Performance Measures

The City will monitor and measure its performance relative to this Policy. Benchmarks demonstrating success include:

- Every street and neighborhood is a comfortable place for walking and bicycling;
- Every child can walk or bike to school or a park safely;
- Seniors, children, and disabled people can cross all streets safely and comfortably;
- An active way of life is available to all;
- There are zero traffic fatalities or serious injuries;
- No unfiltered street water flows into local waterways; storm water volume is reduced; and
- Retail streets stay or become popular regional destinations.

The City will draw on the following data to measure performance. Additional performance measures may be identified as this Policy is implemented.

- Number of crashes or transportation-related injuries reported to the Police Department.
- Number and type of traffic safety complaints or requests.
- Resident responses to transportation related questions in resident surveys.
- Resident responses to post-project surveys.
- The number of trips by walking, bicycling and transit (if applicable) as measured before and after the project.
- Envision ratings from the Institute for Sustainable Infrastructure.
- Speed statistics of vehicles on local streets.

Implementation

The goal of this Policy is to define and guide the implementation of Living Streets principles. Several steps still need to be taken to reach this goal. The first step will be to develop a Living Streets Plan to guide the implementation of the Policy. The Plan will:

- Identify and implement standards or guidelines for street and intersection design, universal pedestrian access, transit accommodations, and pedestrian crossings;
- Identify and implement standards or guidelines for streetscape ecosystems, including street water management, urban forestry, street furniture, and utilities;
- Identify regulatory demands and their relationship to this Policy (ADA/PROWAG, MPCA, MNMUTCD, MnDOT state aid, watershed districts);
- Define the process by which residents participate in street design and request Living Streets improvements; and
- Define standards for bicycle and pedestrian connectivity to ensure access to key public, private and regional destinations.

Additional implementation steps include:

- Communicate this Policy to residents and other stakeholders; educate and engage on an ongoing basis;
- Update City ordinances, engineering standards, policies and guidelines to agree with this Policy;
- Inventory building and zoning codes to bring these into agreement with Living Streets principles as established by this Policy;
- Update and document maintenance policies and practices to support Policy goals;
- Update and document enforcement policies and practices to ensure safe streets for all modes;
- Incorporate Living Streets concepts in the next circulation of the City's general plans (Comprehensive Plan, Bicycle Plan, Active Routes to School Plan, etc.);
- Incorporate Living Streets as a criteria when evaluating transportation priorities in the Capital Improvement Plan (CIP);
- Review and update funding policies to ensure funding sources for Living Streets projects; and
- Coordinate with partner jurisdictions to achieve goals in this Policy.

Cary Teague

From: Joan Bonello <joanbonello@me.com>
Sent: Tuesday, February 17, 2015 10:30 AM
To: Cary Teague; Edina Mail
Subject: Blake Woods Subdivision

Mr. Teague,

I am writing to express my concern regarding the proposed Blake Woods Subdivision project.

My husband and I live on Westwood Court (6312). Our backyard abuts the Berman property on the northwest corner. I am concerned about the effects of development on the water table in the neighborhood.

We recently completed a fairly large and expensive landscaping project in our back yard which included removal of large mounts of buckthorn and replacement with more desirable species. During periods of ground saturation, as we saw last summer with large rainfalls, the south portion of our yard becomes flooded. Our neighbors south of us also experienced flooding and water in their basement last summer. The water table is very high already and building on seven new lots and the addition of a new street will create significant run off of storm water.

I attended the meeting with Landform on February 3rd at Highlands Elementary School. Reid Schulz presented the project to neighbors and answered questions. I know there are some plans for water management put forth by Landform, however I would like to make sure the city is also looking at this issue and has done due diligence to ensure the plans for water management are adequate.

I would like to know how the city is planning on ensuring that this new development will not create problems with flooding and groundwater issues for the existing neighbors. Will the neighbors have support from the city to resolve any water management issues that may arise post development?

Please consider the existing ground water issues in our neighborhood and the effect this new development will have on existing water table levels.

Thank you for your time and consideration.

Sincerely,

Joan and Robert Bonello
6312 Westwood Court
Edina, MN 55436
952-926-9057

Cary Teague

From: charles.j.gits@ubs.com
Sent: Thursday, January 29, 2015 8:21 AM
To: Ross Bintner
Cc: Cary Teague; Charlie Gerk
Subject: 5311 Evanswood Ln/ Blake Woods Subdivision ~resending my 1/29 email here in better format
Attachments: Legal Disclaimer.txt

Ross
Thanks again for spending the time answering some of my questions about the impact on our home at 5311 Evanswood Ln from the proposed sub division. I'm sending you this email and copying Mr. Gerk and Mr. Teague at your suggestion. I will briefly recall our conversation here.

We built and moved into our house 15 yrs. ago in Aug 1999. At that time there was an existing water culvert next to the telephone pole running underneath the gravel road on the southeast part of our yard.

In spring 2000 we laid sod and created a small rocky dry pond catch area in the south end of our yard and repaired our side of the culvert. Upon seeing the culvert Frank and Toby Berman plugged it up on their side and sent us a letter telling us we were diverting water onto their property. At that time I called and spoke with an Edina city engineer. He replied although there was an existing culvert before we built our home, there was nothing we/he could do and suggested we pump water up to Evanswood Ln. We then installed a sump pump in the dry pond with an underground hose that runs north and empties onto Evanswood Ln. (water then flows east, crosses street and runs south to Blake Rd sewer)

I also have an active basement sump pump that is drain tiled into the dry pond and then this water is also pumped north to street.

Every Spring melt, and after heavy rains our backyard floods, often with 20' x 60' pools that stretch into Berman's lot. (Similar to your attached screen shot area) Idle water pools are also created on the other side of the gravel road. The water appears to run west from Blake road and east from Berman's house and south from Evanswood Ln. So in addition to the sump pump running, I also roll out a 200 ft 4" hose with an extra pump to clear the water from our yard and runoff from Berman's side lot at these times. Sometimes it takes days to empty with two pumps. I have done this for 15 years. The water on the south side of the back lane (Berman 5320 and 5324) sits idle till evaporated. (Last spring green algae formed on the Evanswood Ln curb because we moved a lot of water)

Our lower level is completely furnished with hardwood floors. It has never flooded, and the grass and trees survive after we move the water. However, as I explained to you, I am very concerned about the existing proposal. The displaced water from any house built on 5321 (west lot) will be more than we can tolerate. I can show you photos and I have plenty of history.

Please keep me involved and informed about possible solutions and the project. As I told you, the first time we had heard anything about the project was when we received a 1/21/15 letter from developer Landforms about an open house.

Thanks,
--
Charlie Gits
952-933-5845 h

952-921-7920 w

Charlie Gits

Senior Vice President-Wealth Management

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