

**CITY OF HANOVER
PLANNING COMMISSION MEETING
MARCH 25, 2019
AGENDA**

CHAIR
STAN KOLASA

COUNCIL LIAISON
KEN WARPULA, Alternate

BOARD MEMBERS
JIM SCHENDEL
MICHAEL CHRISTENSON
MICHELLE ARMSTRONG
DEAN KUITUNEN

- 1. Call to Order and Pledge of Allegiance: 7:00 p.m.**
- 2. Approval of Agenda**
- 3. Approval of Minutes from January 28, 2019, Regular Meeting**
- 4. Citizen's Forum**
- 5. Public Hearing**
 - a. Rezoning, Planned Unit Development (PUD), and Preliminary Plat for the Development to be known as River Town Villas**
- 6. Unfinished Business**
- 7. New Business**
 - a. Riverside Acres Concept Plan**
- 8. Reports and Announcements**
 - a. Planning Commission Reports**
 - b. Liaison Report**
 - c. Staff Reports**
- 9. Adjournment**

**CITY OF HANOVER
PLANNING COMMISSION MEETING
JANUARY 28, 2019
DRAFT MINUTES**

Call to Order/Pledge of Allegiance

Stan Kolasa called the January 28, 2018, Planning Commission Meeting to order at 7:00 pm. Members present were Stan Kolasa, Jim Schendel, Michelle Armstrong (arrived at 7:07 pm), Dean Kuitunen and Mike Christenson. Also present City Planner Cindy Nash, City Engineer Justin Messner, Alternate Council Liaison Jim Zajicek and Administrative Assistant Amy Biren. Many guests were present.

Oath of Office

Jim Schendel and Mike Christenson took the Oath of Office with Biren acting as the witness for the City.

Selection of Chair and Vice Chair

MOTION: Kuitunen moved to nominate Stan Kolasa for chair seconded by Schendel.

Motion carried unanimously.

MOTION: Kuitunen moved to nominate Jim Schendel for vice chair seconded by Christenson.

Motion carried unanimously.

Kolasa suggested moving New Business ahead of Unfinished Business to make the meeting more efficient.

Approval of Agenda

MOTION by Schendel to approve the amended agenda, seconded by Christenson.

Motion carried unanimously.

Approval of Minutes from the December 17, 2018 Regular Meeting

MOTION by Schendel to approve the December 17, 2018, minutes, seconded by Christenson.

Motion carried unanimously.

Citizen's Forum

Jim Zajicek, Alternate Council Liaison, addressed the audience with the information that he has attended meetings where Senator Mary Kiffmeyer was in attendance. He expressed his concern regarding the I-94 Corridor Construction project that will be starting this year and continuing for the next three years and how it will impact the traffic load going through Hanover. Senator Kiffmeyer suggested that residents voice their concerns to their county commissioners, Hennepin County Commissioner Jeff Johnson and Wright County Commissioner Mike Potter, by sending them emails and letters. Kiffmeyer suggested communicating as a community and asking them for a face-to-face meeting. An audience member asked what the impact would be by doing the suggested things. Zajicek said that it shows the elevated concern of the community and raise awareness of the heavy traffic that CSAH 19 experiences. He said that it may lead to the counties advertising alternate routes rather than having everyone funnel through Hanover.

Armstrong arrived at 7:07 pm.

Public Hearing

None

Kolasa reminded the audience that there is not a public hearing on any topic tonight at which residents would speak. He would acknowledge audience members to allow them to speak.

New Business

River Town Villas Concept Plan

Nash introduced a proposal to redevelop a four-acre parcel on the corner of Church Street and River Road into villa homes. She reminded the Commission and audience that a concept plan is not a legal binding agreement, but rather an opportunity for a developer to gather information, likes and dislikes, and suggestions from the Commission and residents.

Andy Weitnauer, Wits Land Company; Tim Bellin, Bellin Construction; and Paul Kangas, Loucks Associates, presented PowerPoint slides explaining the concept of the River Town Villas. A copy of the PowerPoint presentation was included in the agenda packet and attached at the end of the minutes. The plan is to build 18 single-level detached villas with options for a basement on the 4.3 acre site. The villas are intended to be luxury villas with two to three different floor plans and exterior styles in multiple colors and textures. Bellin Construction will be the exclusive builder and the homes will generally run between \$325,000 and \$425,000. They will be located on a private street and placed in a meandering pattern.

Claudia Pingree, 11711 Riverview Road, commented that the price point may be too high for some, but that the villas presented are beautiful and she loves the look of the development. Bellin responded that this is a general price point, but that they do not want to suffer quality in exchange for a lower price.

An audience member asked if this would be an HOA. They responded yes, it would.

David Seiler, 11354 Riverview, asked if they would be sound-proof as there were neighboring properties that conducted business that involved crushing rock. He was thanked for his suggestion.

Nash asked the Commission for their feedback and if they would like to provide specific suggestions.

Kangas addressed the Commission stating that their group had met with staff to hear initial reaction to the concept plan and had already made some changes. Concern was expressed about the drive being private as well as utilities. Setbacks have already been addressed since initially the villas were close together. The redesign showed that the villas would meet garage to garage and house to house with the side setback being larger at the house than the garage. Kangas also said that in 2003 there was a development proposed on the same site that Loucks also helped with, but that little information remained from that plan. He indicated that the present concept plan was better than the past one.

Armstrong asked where guest would park. Kangas showed the parking spots on the concept plan map, indicating that some of them were covered by the tree line.

Christenson asked about the width of the private drive. Kangas replied that it is 26 feet in width. They chose to go with that width in order to minimize the appearance of all garage with a little front house. The lots themselves are 55 foot wide.

Kuitunen asked to whom were they marketing and if it was to be single families? Weitnauer responded that anyone could live there and they were not looking at an age-restricted development.

Christenson asked if families did live there, would the kids need to walk to Church Street to get on the bus. Nash replied yes, that a bus would not travel a private street.

Nash asked the Commission for their feedback on the private drive. Armstrong said she was not against it and Kuitunen agreed, stating that on a parcel that size, it would need to be a private drive. Schendel expressed concern that should something in the future happen where the City would need to assume responsibility for it, it would be tough to maintain. Kolasa asked Nash if this is a common occurrence. Nash responded that there have been occurrences where an HOA would ask for a private street to be assumed by a city, but that it is usually where an HOA did not plan for the future maintenance of it. She indicated that language would be included in the developer's agreement so that this would not occur.

Kuitunen asked about private utilities versus public utilities. Nash said that Hanover does not have a history of private utilities and conditions would need to be included in the developer's agreement. Messner added that this is common in such a plan as this one. Easements would be required by the City, but that the HOA would be responsible for maintaining them. Armstrong asked if this makes the HOA fees higher. Messner replied that they may since they need to put money away for future maintenance. He echoed Nash stating that there will be specific language included in the developer's agreement.

Pingree asked about how emergency vehicles would be able to turn around in the development. Nash replied that the Fire Department has started looking at the plan and will verify that turning movements would work in the development. She also explained how the hammerhead turn arounds work.

An audience member asked about how a special needs student would be picked up as they need to be picked up at their house and cannot walk to Church Street. Nash said that the smaller buses, such as those used to transport special needs people, should be able to turn around as it is smaller than a fire truck. Messner added that full-size buses have specific rules for turning and prohibiting backing up in reverse.

Armstrong said she likes the staggered look of the homes and it appears to be thoughtfully laid out. She also likes having the living area matching the living area and the garage to garage aspect.

Christenson said that it seems that the homes are a little close together.

Kuitunen said he is concerned about fire safety.

Kangas was asked about parking. He said that the driveway will allow two parking spots and there will be guest parking available.

Kuitunen and Armstrong asked about garage size. Bellin said that he realizes that 576 square feet is the ideal. They would like a garage size a bit smaller, but that is still large enough for a bigger vehicle. Armstrong stated she would like it as close to the 576 as possible. Kuitunen agreed.

Pingree asked about snow removal. Kangas said that would be privately handled.

Christenson asked about the square footage of the homes. Kangas said that it would more than likely be around 1900 square feet and then there would be more square footage if the home had a basement. He said that not all buyers want a basement and some homes would be slab on grade.

Kangas went on to say that this development is not intended to be entry level housing. They are looking at having a higher level of finish versus a lower price point.

Christenson asked if there was going to be demand for this type of housing. Armstrong said that this will appeal to many buyers as it is a private area and less traffic.

Nash said to the Commission that a recommendation to Council is needed.

Kolasa asked about the garage size. Nash said that the developer will be looking at a planned unit development (PUD) and more than likely will have a reduced garage size.

Kolasa expressed concern that the City will end up with the private drive in the future. Nash said that tends to happen in older HOA neighborhoods because it may not have been adequately documented.

Kangas spoke to the garage size concern. He said that since the HOA was maintaining the development, maintenance equipment would not need to be stored in a garage. Second, if the garage is too large, it limits the aesthetics of the home. He suggested that a garage size could be around 480 square feet, but added that he has not discussed this with the client.

Armstrong said that people need a place to store stuff. Christenson suggested making the garage deeper. Kuitunen said that they don't want the garage to be the dominant feature seen when looking at the house.

Schendel said he would like the street wider and for it to be a public street, but if it is to be a private drive, then the HOA language needs to be very strong and very specific. Nash replied that any development on this parcel will have to have a private drive due to the size of the parcel.

Kangas said that the private drive will be built to high standards, possibly even city standards, and that having a good HOA will provide for future maintenance.

Nash said that with the private drive, they will be able to maintain the 30 foot rear yard setback.

Kuitunen asked if an environmental assessment worksheet (EAW) would be needed. Nash replied that it was not required for a development of this size.

Kuitunen asked who would be in charge of the stormwater ponds. Messner said that it is preferred that the City owns and maintains the stormwater ponds because the City is held to maintain water quality and keep up with MS4 requirements.

MOTION by Armstrong to forward the River Town Villas Concept Plan to Council for approval with the notes that were taken, seconded by Christenson.

Motion carried unanimously.

Unfinished Business

Rezoning, Planned Unit Development and Preliminary Plat for the Development to be known as Hanover Cove

Nash updated the Commission on events that have occurred since the December Planning Commission meeting:

- The City has received comments in emails and showed a summary of the concerns in a slide of a PowerPoint presentation. These occurred after the Public Hearing and all will be included in the review and all will go to Council.
- The developer has made changes to the plans including some engineering items; flex lots to narrow patio homes; reducing the number of lots by five; adding parking areas; and decided not to change the 38 foot wide lots to 50 foot wide lots as requested.

Nash reminded the Commission that a PUD can deviate from current ordinances for the purpose of creating better overall design, environmental protection and an improved living environment. A PUD cannot be granted solely for the economic advantage to the developer.

Nash went over what is being requested in the PUD versus current zoning. Each housing type was explained. A copy of the PowerPoint presentation is attached to the minutes.

Nash explained that a higher density request in a PUD may be compensated for by providing additional private amenities and increasing the efficiency in public facilities and services. This can be achieved by the location, amount and proposed use of common open space; the location, design, and type of dwelling units; and the physical characteristics of the site.

Nash told the Commission that staff is asking for a recommendation tonight from Planning Commission. She explained that legally the City has 120 days to review the proposal and the deadline is approaching. By making a recommendation tonight, Planning Commission will give Council time to make a decision and the ability to discuss it at more meetings. There are three possible recommendations that the Planning Commission may give: 1) recommend approval as presented; 2) recommend approval with changes; or 3) recommend denial.

Nash said that she has made a table for each request and if the Commission would like, she will go through it step by step in order to help them make a decision.

Armstrong stated that the Commission had issues with the smaller patio homes and it appears that desire to make changes was ignored by the developer.

Alan Roessler, Paxmar, stated that the narrow lots remained because as the phases occur, they wanted to be able to offer multiple types of housing during each phase. If the narrow lots were removed, that would result in only three lots being removed and the developer would have limited housing types to offer.

Armstrong asked about the phasing of the development. Roessler showed the Commission how the phasing would occur and the types of housing offered by using the phasing map included in the Preliminary Plat.

Kuitunen said that the lots appear to very close together. Schendel agreed, saying that the width of the lot is not 38 feet. Nash said that is true and was called out in comment #8 of her memo.

Roessler said he feels that the narrow lots will be in demand because of the price point of \$225,000.

Christenson asked about enlarging the garage size. Roessler said they are still asking for the size that was initially requested which is smaller than the current ordinance.

Christenson suggested that the lots be made wider.

Nash said that building design has the house work with the size of garage presented.

Roessler said that buyers will be aware of the size of the garage when purchasing the home. He indicated that if a home owner has more stuff they will look for a bigger home or get off-site storage. Armstrong responded that people do not realize how small a garage is until they move in and their stuff needs to be put somewhere.

Christenson asked why smaller lots are being included. Armstrong replied that is the price point people want.

Pingree said that a small garage size is not the issue, rather it is the houses being on top of one another.

Nate Brown, 11794 Riverview Road, asked what is the price point with the garage being increased in size. Roessler said that the infrastructure costs are constant, but by including narrower lots, the cost is dispersed among more people. Brown replied that was an answer to his question.

Gretchen Barrett, 10580 106th Avenue North, said that people do not move to Hanover for a small lot.

Brown asked what will be the lot prices. Roessler responded that a smaller lot will be \$50,000, but that a wider lot does not increase in price foot by foot.

Kuitunen asked if there are still issues with the road width. Messner replied that the City Standard is 36 foot wide streets and the road do not meet the standard. He went on to say that the way the lots are configured, parking would not be possible on both sides of the street. Parking could be signed for only one side of the street, but that would have to be done by City resolution. He added that some additional parking (off-street) was added.

Armstrong asked what is Nash's thoughts on parking and is it sufficient. Nash replied that driveways will accommodate some parking. If the street is widened, driveway footage will be lost and possible parking spots.

Heather Sandberg, 11578 Riverview Road, asked who was going to enforce the no parking. Messner replied that law enforcement would need to do. Sandberg stated that the City has limited policing hours and did not believe this was a viable option.

Armstrong made the observation that the Planner's comments in this meeting's memo seemed to be the same as those for the December meeting. Nash replied that was correct.

Armstrong questioned the purpose of the outlot that was added. Nash replied that it does not have a purpose.

MaryAnn Hallstein, 339 Jandel Avenue, asked who takes care of the outlots with parking spaces. Nash replied that it would be outlined in the developer's agreement that the HOA would maintain them. Messner agreed that it would need to be discussed with the developer.

Armstrong asked Messner what his thoughts about the street width. Messner said that the City needs to stand firm on the street width meeting the City Standard. She asked him if the streets could be different widths rather than only one width. Messner showed on the plat map where possible street widths could deviate from the City Standard. His concern with the narrower widths would if emergency vehicles would be able to access the area and believes that it would be possible if the parking was restricted. He stated that the City Standard does allow a minimum width of 28 feet, but that would make street parking extremely difficult. Messner went on to say that the right of way is not changed at all even if the street width changes. If the width is changed, the front yard will be perceived to be less or smaller.

Kuitunen said that there are lots of cars on the streets, particularly in the summer, in many of the neighborhoods. He believes it will not be different in this neighborhood and where is everyone going to park.

Kuitunen asked if there is anything in Messner or Nash's comments that could change. Nash replied that nothing that would impact the streets. She continued that comments could change by decreasing the number of lots.

Armstrong said she understands the phasing which needs to include the narrow patio homes, but isn't really thrilled with three lots toward the south and believes that larger patio homes would make more sense.

An audience member asked if there were any existing developments residents could visit and see how it looks. Biren answered that at the December meeting, Roessler had provided the name of a development, Parkside North, in Blaine. Biren confirmed with Roessler that was correct.

Christenson said that he did drive over to Parkside North and did not like it. He said he saw little parking, there was rock between some houses instead of grass, the houses were built on top of one another, and the space between the houses was just enough for a utility box.

Christenson said he would like to see the 38-40 foot lots eliminated from the plan.

Schendel said that the only reason those were kept was because of the price point. He agreed with Christenson in not liking the narrower lots.

Nash reminded the Commission that they if they dislike parts of the plan, they are able to recommend denial or approval with exceptions or conditions.

Armstrong asked Roessler if the narrow lots were taken out, how many lots would be lost. Roessler said that it would be one lot for every four, so it was approximately eight to nine lots. Armstrong asked if single family homes would be possible in this area. He replied that it is nice to have the same type of housing in one area for ease of maintenance.

Kuitunen said that the Commission had made recommendations of what Paxmar was supposed to change and it was ignored. He reiterated that he is still concerned about parking.

Nash suggested walking through the PUD to help figure out recommendations.

The Commission started with street width. Nash brought up the slide which showed that the City Standard is 36 feet wide. The PUD is asking for 32 feet wide. Based on discussion, a combination of 36 foot wide streets on main thoroughfares with a few streets less traveled being 32 feet wide was reached. Jason Ver Steeg, Duinick Bros, asked if some of the streets such as the cul de sac could go down to 28 feet wide. Messner said that 28 feet wide streets are usually allowed when it is a "service" street. All parking would need to be eliminated if that happened.

Kuitunen stated that 32 feet wide was as low as he wanted to go.

The Commission moved onto the large single family lots. Armstrong commented that based on the floor plan provided, the homes are not that large. Kuitunen said that they do not meet the 1,000 square footage required. If the homes increase in size, the lots would need to increase and then lots would need to be taken out.

Christenson made the comment that he is at the point to make a recommendation and that was to deny the development.

MOTION by Christenson to recommend denial of the rezoning, PUD, and preliminary plat for Hanover Cove based on it having too many units; the lot size is too small; the developer's lack of compliance with recommended garage size; minimum side yard setbacks not being met; very limited parking; the street width is not in compliance with City Standards; and issues or comments of the Planner and Engineer have not been adequately addressed, seconded by Schendel.

Motion carried with Armstrong dissenting.

Barrett stated from the audience that residents know a development will go in at this location, but that they do not think this particular development is a good fit.

Reports and Announcements

Schendel would like to see No Parking signs put up along River Road by the River Inn because people cannot see the yellow curb due to the snow. Kuitunen asked one of the Wright County deputies in attendance if tickets were being given out to people parking illegally. He replied that he had not given any parking tickets in that area.

Nash said that another concept plan had been received by the City which involved a possible annexation. It is being presented at the Council meeting on February 5th to see if there is interest in the annexation. If there is, it will come before the Planning Commission in February.

Biren said that Crow River Heights West Third has builders continuing to pull new construction permits. Current builders include Drake Construction, Homes Plus, Regency Homes and Fieldstone Family Homes.

Zajicek commented that Senator Kiffmeyer suggested Hanover request having one police/law enforcement entity that would be able to cross county lines and only be able to work within the borders of Hanover. Kiffmeyer is working on a bill that would allow cities to do this.

Adjournment

MOTION by Schendel to adjourn, seconded by Armstrong.

Motion carried unanimously.

Meeting adjourned at 9:18 pm.

ATTEST:

Amy L. Biren
Administrative Assistant

DRAFT

Hanover Planning Commission

Hanover Cove Concept Plan April 2018

Updates since December Meeting

- ▶ Several comment letters/emails were received. These were generally in opposition to the development, particularly with respect to:
 - ▶ Reduced setback sizes
 - ▶ Reduced street pavement width
 - ▶ Lack of green space
 - ▶ Higher density, cookie cutter neighborhood
 - ▶ Traffic
 - ▶ Impact on school district (class sizes)
 - ▶ Pedestrian safety
 - ▶ Stress on public utilities
- ▶ Comment letters received since the public hearing will be included in the record for review by City Council. Planning Commission was provided copies for their consideration as well.

Updates since December Meeting

- ▶ Flex lots were removed and narrow single-family lots were added (with increase in lot width from 38 feet to 50 feet)
- ▶ Changes made resulted in a loss of 5 lots.
- ▶ Parking areas were added to various locations near the small villa units.
- ▶ The developer reviewed the idea of changing the 38' wide villa lots (except in the cut-de-sac), but decided against it for the following reasons:
 - ▶ Could not provide that product in more than one development phase
 - ▶ Resulted in only 3 lots being removed
 - ▶ Provides a more affordable product on the lots that back to River Road, which will be less desirable for larger single-family homes

Hanover Cove Planned Unit Development

- ▶ Planned unit developments may be excluded from certain requirements of the Zoning Ordinance and Subdivision Regulations when specifically approved as part of the planned unit development. Such exclusions shall only be granted for the purpose of creating better overall design, environmental protection, and an improved living environment and not solely for the economic advantage of the developer.

Hanover Cove Planned Unit Development

PUD- Large Lot Single Family

Housing Examples and Locations Hanover Cove

	R-1A	Large Lot SF
Lot Area	12000	9840
Lot Width	80	80
Side Yard Setback	10	7.5
Corner Side Setback	30	25
Front Yard Setback	30	25
Rear Yard Setback	30	30
Garage Area	576	576
Home Floor Area	1000	1400



Large Lot Single Family - 80'

Homes will consist of traditional multi-story single family
*Minimum 1,400 sqft Home floor area above grade

PUD- Medium Lot Single Family

Housing Examples and Locations Hanover Cove

	R-1A	Medium Lot SF
Lot Area	12000	6815
Lot Width	80	65
Side Yard Setback	10	7.5
Corner Side Setback	30	25
Front Yard Setback	30	25
Rear Yard Setback	30	30
Garage Area	576	576
Home Floor Area	1000	1300



Medium Lot Single Family: 65'-70'

Homes will consist of traditional multi-story single family
*Minimum 1,300 sqft Home floor area above grade

PUD- Narrow Single Family

Housing Examples and Locations Hanover Cove

	R-1A	Narrow SF
Lot Area	12000	4940
Lot Width	80	50
Side Yard Setback	10	6
Corner Side Setback	30	25
Front Yard Setback	30	25
Rear Yard Setback	30	20
Garage Area	576	576
Home Floor Area	1000	1200



Narrow Lot Single Family: 50'-65'

Homes will consist of traditional multi-story single family with 2 or 3 car garages
*Minimum 1,200 sqft Home floor area above grade

PUD- Large Patio

Housing Examples and Locations Hanover Cove

	R-1A	Large Patio
Lot Area	12000	8315
Lot Width	80	75
Side Yard Setback	10	6
Corner Side Setback	30	25
Front Yard Setback	30	25
Rear Yard Setback	30	20
Garage Area	576	440
Home Floor Area	1000	1500



Large Patio: 75'

Homes will consist of one level or rancher with full basements
HOA maintain yard/landscaping/etc
*Minimum 1,500 sqft Home floor area above grade

PUD- Medium Patio

Housing Examples and Locations Hanover Cove

	R-1A	Medium Patio
Lot Area	12000	5750
Lot Width	80	50
Side Yard Setback	10	6
Corner Side Setback	30	25
Front Yard Setback	30	25
Rear Yard Setback	30	20
Garage Area	576	440
Home Floor Area	1000	1400



Medium Patio Lot: 50'-70'

Homes will consist of one level, 2 and 3 car garages
HOA maintain yard/landscaping/etc
*Minimum 1,400 sqft Home floor area above grade

PUD- Narrow Patio

Housing Examples and Locations Hanover Cove

	R-1A	Narrow Patio
Lot Area	12000	5250
Lot Width	80	38
Side Yard Setback	10	6
Corner Side Setback	30	25
Front Yard Setback	30	25
Rear Yard Setback	30	20
Garage Area	576	440
Home Floor Area	1000	1200



Narrow Patio Lot: 38'-49'

Homes will consist of one level
HOA maintain yard/landscaping/etc
*Minimum 1,200 sqft Home floor area above grade



PUD- Analysis - Density

Density greater than can fit when using base zoning regulations may be allowed with findings related to the following:

- The excess will not have an undue and adverse impact on existing public facilities and on the reasonable enjoyment of neighboring property.
- Increase density may be compensated for by providing additional private amenities and by increase of efficiency in public facilities and services to be achieved by:
 - 1. The location, amount and proposed use of common open space;
 - 2. The location, design and type of dwelling units; and
 - 3. The physical characteristics of the site.

PUD- Analysis - Generally

The consistency of the proposed PUD with the comprehensive plan.

The extent to which the proposed PUD is designed to form a desirable and unified environment within its own boundaries in terms of relationship of structure and open space, circulation patterns, visual character and sufficiency of drainage and utilities.

The extent to which the proposed uses will be compatible with present and planned uses in the surround area.

PUD- Analysis - Generally

That any exceptions to this article are justified by the design of the development.

The sufficiency of each planned unit development phase's size, composition, and arrangement in order that its construction, and operation is feasible without dependence upon subsequent phases.

The burden or impact created by the PUD on parks, schools, streets, and other public facilities and utilities.

PUD- Analysis - Generally

The impact of the PUD on environmental quality and on the reasonable enjoyment of the surrounding properties.

Planning Commission Recommendation

- ▶ Under Minnesota Statute, the City only has a maximum of 120 days to review an application and make a decision.
- ▶ The application was considered complete for review on November 21, 2018. The City has already extended the timeframe to make a decision to March 21, 2019.
- ▶ The Planning Commission should take one of the following actions this evening in order to allow the City Council sufficient time for consideration of the application:
 - ▶ Recommend approval of the PUD subject to addressing the comments in the City Planner and City Engineer memos.
 - ▶ Recommend approval of the PUD subject to changes specified by the Planning Commission and the comments in the City Planner and City Engineer memos.
 - ▶ Recommend denial of the PUD with reasons for the recommendation.

General PUD

PUD Variation Request	City Ordinance Standard	Requested	
Reduced street pavement width	36 feet	32 feet	36 foot on Street D, Street F and Street G; 32 foot on other streets

Large Single Family Lots

PUD Variation Request	City Ordinance Standard	Requested	
Large SF lot area	12,000 square feet	9,840 square feet	
Large SF - side yard setback	10 feet	7.5 feet	
Large SF - front yard setback	30 feet	25 feet	
Large SF - corner side setback	30 feet	25 feet	

Medium Single Family Lots

PUD Variation Request	City Ordinance Standard	Requested	
Medium SF - lot area	12,000 square feet	6,815 square feet	
Medium SF - lot width	80 feet	65 feet	
Medium SF - side yard setback	10 feet	7.5 feet	
Medium SF front yard setback	30 feet	25 feet	
Medium SF - corner side yard setback	30 feet	25 feet	

Narrow Single Family Lots

PUD Variation Request	City Ordinance Standard	Requested	
Narrow SF - lot area	12,000 square feet	4,940 square feet	
Narrow SF - lot width	80 feet	50 feet	
Narrow SF - side yard setback	10 feet	6 feet	
Narrow SF front yard setback	30 feet	25 feet	
Narrow SF - corner side yard setback	30 feet	25 feet	
Narrow SF - rear yard setback	30 feet	25 feet	

Large Patio Lots

PUD Variation Request	City Ordinance Standard	Requested	
Large patio - lot area	12,000 square feet	8,315 square feet	
Large Patio - Lot width	80 feet	75 feet	
Large Patio - side yard setback	10 feet	6 feet	
Large Patio - front yard setback	30 feet	25 feet	
Large Patio - corner side setback	30 feet	25 feet	
Large Patio - rear yard setback	30 feet	20 feet	
Large Patio - garage size	576 square feet	440 square feet	

Medium Patio Lots

PUD Variation Request	City Ordinance Standard	Requested	
Medium patio - lot area	12,000 square feet	5,750 square feet	
Medium Patio - Lot width	80 feet	50 feet	
Medium Patio - side yard setback	10 feet	6 feet	
Medium Patio - front yard setback	30 feet	25 feet	
Medium Patio - corner side setback	30 feet	25 feet	
Medium Patio - rear yard setback	30 feet	20 feet	
Medium Patio - garage size	576 square feet	440 square feet	

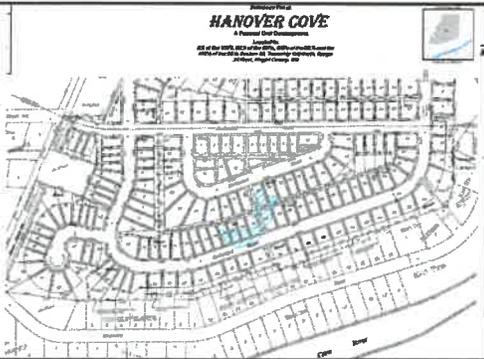
Narrow Patio Lots

PUD Variation Request	City Ordinance Standard	Requested
Narrow patio- lot area	12,000 square feet	5,250 square feet
Narrow Patio - Lot width	80 feet	38 feet
Narrow Patio - side yard setback	10 feet	6 feet
Narrow Patio - front yard setback	30 feet	25 feet
Narrow Patio - corner side setback	30 feet	25 feet
Narrow Patio - rear yard setback	30 feet	20 feet
Narrow Patio - garage size	576 square feet	440 square feet

Hanover Cove Preliminary Plat



Hanover Cove Preliminary Plat



Hanover Cove - Rezoning

- ▶ Propose to rezone southern portion of property from I-1 and I-2 to R-1 A.
- ▶ Previously regulated this portion of the property from Industrial to Neighborhood Residential in the Comprehensive Plan.



Collaborative Planning, LLC

MEMORANDUM

TO: Planning Commission

FROM: Cindy Nash, AICP, City Planner

DATE: March 20, 2019

SUBJECT: **River Town Villas of Hanover** for (1) Rezoning; (2) Planned Unit Development; and (3) Preliminary Plat

APPLICANT: Wits Realty

LOCATION: Generally located west of River Road, and north of Church Street

COMPREHENSIVE PLAN: Multi-Family Residential

Description of Request

Wits Realty has submitted applications for a rezoning, planned residential development and preliminary plat. The property consists of approximately 4.08 acres and is located west of River Road and north of Church Street.

The Developer is proposing to develop the site into 18 detached residential units. All of the housing units would be villas and would have associated-maintained yards and driveways. The proposed builder is Bellin Construction.

This development is requesting the following approvals:

1. Rezoning of part of the property from B-1A to R-1A
2. Planned Unit Development
3. Preliminary Plat.

Patio homes will occupy all lots on the site. A characteristic of this type of development is that not only are the lots smaller, but the homes are constructed closer together with a reduced side yard setback. This is a type of unit that allows for higher density construction, but in an ownership that does not share walls as a townhome neighborhood would. A homeowner's association provides exterior maintenance of snow removal and lawn care. The buildings are maintained by the property owner.

The following items are included in the packet for review:

1. City Engineer Comment letter
2. City Planner Comment letter
3. Plat Narrative
4. Architectural Renderings
5. Preliminary Plat and Plan Set

Item 1: Rezoning

Public Hearing: March 25, 2019 Planning Commission

Request

The Developer is requesting to rezone the property from B-1A to R-1A. A rezoning is an amendment to the zoning map, which changes the zoning district that a particular property is located within.

Analysis

The City Council may adopt an ordinance amending the Zoning Map (rezoning) as a means to reflect change in the goals and policies of the community as reflected in the Comprehensive Plan. The Comprehensive Plan was updated in the Fall of 2019, and that update included regarding this property from a commercial use to multi-family residential.

There is not currently a zoning district that is a perfect match for this type of use (villas on smaller lots) as the R-2 zoning that would typically be associated with Multi-Family Residential Comp Plan guidance does not currently allow for detached villas (single-family homes). The suggested zoning district for this request would either be 1) R-1A, which would then require a PUD for the various exceptions needed for lot size and setbacks, or 2) R-2, which would also require a text amendment to allow villa lots in the R-2 District and would likely still require a PUD. The applicant is applying to rezone to R-1A, which is a category that permits single-family detached homes. A villa/patio home most closely resembles a single-family detached home.

Staff Recommendation

Staff recommends approving the rezoning subject to the conditions below:

1. Adoption and publication of the ordinance as required by law.

Item 2: Planned Unit Development (PUD)

Public Hearing: March 25, 2019 Planning Commission

Request

The Developer is proposing to redevelop the site into an 18-lot subdivision for the site. The properties on the east, south, and west of the proposed development contain existing uses. The property to the north is vacant. The subject property contains a single-family home which would be demolished as a part of the construction.

Analysis

Density

Per the City's ordinances, the total number of dwelling units allowed in a planned unit development shall be determined by either:

"a. The standards of the applicable base zoning or overlay district in which the proposed development is to be located; or

*b. The density specified by the City Council consistent with the intent of the comprehensive plan. A plan may provide for a greater number of dwelling units per acre than would otherwise be permitted by the regulations otherwise applicable to the site; however, the applicant shall show that such excess will not have an undue and adverse impact on existing public facilities and on the reasonable enjoyment of neighboring property. **The council, in determining the reasonableness of the increase in the authorized dwelling units per acre, shall recognize that increase density may be compensated for by additional private amenities and by increase efficiency in public facilities and services to be achieved by:***

- 1) The location, amount and proposed use of common open space;*
- 2) The location, design and type of dwelling units; and*
- 3) The physical characteristics of the site."*

The Developer is proposing the density in a manner consistent with the Comprehensive Plan, which would permit between 4 to 12 dwelling units per acre. The villa home product could be considered a detached townhome. Townhomes are a permitted use in the R-2 zoning district and the total number of units proposed would be consistent with that which would be permitted under that zoning district. While still meeting the minimum density of the Comprehensive Plan, the total number of units is less than could be permitted if the applicant proposed either attached townhomes or an apartment building under R-2 zoning.

PUD Generally

A PUD is intended to allow for the development of residential areas under a flexible regulatory process that allows for a joint planning design effort by the developer and the City. This process should result in benefits that preserve natural resources and amenities, assure a higher quality living environment, and develop a variety of housing types and densities as a single planned entity. The City may authorize departures from the strict requirements of the underlying zoning district and subdivision regulations after finding that the proposal is consistent with the Comprehensive Plan, the general purposes of the Zoning Ordinance, and if the project complies with the requirements outlined below (discussion should occur on each of these items, along with feedback for redesign that would bring the plan into greater compliance with these standards).

1. The consistency of the proposed PUD with the comprehensive plan.
2. The extent to which the proposed PUD is designed to form a desirable and unified environment within its own boundaries in terms of relationship of structure and open space, circulation patterns, visual character and sufficiency of drainage and utilities.
3. The extent to which the proposed uses will be compatible with present and planned uses in the surround area.
4. That any exceptions to this article are justified by the design or the development.
5. The sufficiency of each planned unit development phase's size, composition, and arrangement in order that its construction, and operation is feasible without dependence upon subsequent phases.
6. The burden or impact created by the PUD on parks, schools, streets, and other public facilities and utilities.
7. The impact of the PUD on environmental quality and on the reasonable enjoyment of the surrounding properties.

Variances from Zoning Requirements in Planned Unit Developments

The City may vary the regulations of the Zoning Ordinance in PUDs, and the development is requesting the following variations from the standard zoning requirements:

Requirement	Standard Zoning	Variance Requested
Lot Size	12,000 square feet	3,500 square feet
Lot Width (at front setback)	80 feet	50 feet

Garage Size	576 square feet	480 square feet
Front Yard Setback	Minimum 30 feet from property line	Not measuring to property line. Measuring instead to back of curb. Garage needs to be at least 25 feet from back of curb and home needs to be at least 20 feet from back of curb.
Rear Yard Setback	Minimum 30 feet from property line	Not measuring to property line. Homes must fit within lot shown on plans – 0-foot setback from actual property line.
Side Yard Setback	Minimum 10 feet from property line.	Not measuring to property line – 0-foot setback from actual property line. Homes are measured relative to location to each other – 10 feet between garages, 15 feet between garage and living side, or 20 feet between two living sides
Public Streets meeting City standards for ROW and pavement width	36' wide pavement in a 66' wide right of way	Private street so no ROW proposed. 28' wide pavement.
Cul-de-sac meeting city standards		Hammerhead style turn-around. Turning movements for a fire truck shown on Sheet C2-1

A narrative of why the applicant feels these changes are beneficial is included within the PUD narrative.

Staff Recommendation

If the Planning Commission determines the proposed PUD should be recommended for approval to the City Council, staff recommends including the conditions below:

1. A final plat is submitted and approved that is in substantial conformance with the Site Plans. A Developer's Agreement acceptable to the City is entered into by and between the

Developer and the City.

2. Adoption and publication of the ordinance as required by law.
3. All conditions of the City Engineer, City Attorney and City Planner are met.
4. The development must be constructed in substantial conformance with the Site Plans.
5. Villa homes are the permitted use on Lots 1 – 18, Block 1.
6. Ownership and maintenance of the outlots shall be addressed to the satisfaction of the City prior to submission of the Final Plat application.
7. The street shall be privately owned and maintained.
8. The developer must submit foundation and grading as-builts for each home constructed for the review of the Building Official.
9. Variations from the City's Zoning Ordinance requirements are approved as follows:
 - a. The lot size is reduced to 3,500 square feet.
 - b. The lot width is reduced to 50 feet.
 - c. A 0-foot setback is approved from the individual property lines for structures on Lots 1 through 18. However, the structures shall be required to maintain the following minimum setbacks:
 - i. The garage of any structure shall be setback no less than 25 feet from the back of curb of the private driveway.
 - ii. The living portion of any structure shall be setback not less than 20 feet from the back of curb of the private driveway.
 - iii. The minimum building separations to be maintained are the following:
 1. 10-foot minimum separation from foundation walls if garage side to garage side
 2. 15-foot minimum separation from foundation walls if garage side to living side
 3. 20-foot minimum separation from foundation walls if living side to living side
 - d. Structures may not be constructed in any easement.
 - e. Garage size shall be not less than 480 square feet.
 - f. Even if in conflict with the above, the following setbacks shall be maintained:
 - i. A setback of not less than 35 feet from the property line with Church Street shall be maintained for Lots 1 and 18.
 - ii. A setback of not less than 30 feet from the western property line of the Subject Property shall be maintained for Lots 1 through 6.

- iii. A setback of not less than 15 feet from the western property line of the Subject Property shall be maintained for Lot 7.
- iv. A setback of not less than 30 feet from the eastern property line of the Subject Property shall be maintained for Lots 12 through 18.
- v. A setback of not less than 15 feet from the eastern property line of the Subject Property shall be maintained for Lot 11.
- vi. A setback of not less than 30 feet from the northern property line of the Subject Property shall be maintained for Lots 7 through 11.

10. All other requirements of the City's Zoning Ordinance not specifically exempted above must be met.

Item 3: Recommendation on Preliminary Plat

Public Hearing: March 25, 2019 Planning Commission

Preliminary plats provide the layout for lots and blocks for future sale and ownership of specific parcels. The preliminary plat is “preliminary”, however approval of a preliminary plat gives the property rights by State law.

Land Use

The proposed land use is 18 single-family lots, and outlots for stormwater ponding and private neighborhood amenities (driveway, parking and landscaping).

Access, Roads, Guest Parking Pedestrian Circulation

Two private streets are proposed to be constructed. Instead of cul-de-sacs, the end of the private driveway is proposed to function as a hammerhead style turn-around.

The proposed 25-foot front yard setbacks for garages will typically provide room for 2 cars to park on the driveway. There are also 13 parking spaces proposed.

No sidewalks or trails are proposed. When interior to the development, this is acceptable with the low traffic volume. A sidewalk should be added to that portion of Church Street fronting the Subject Property to provide pedestrian access to the existing trail/sidewalk network on River Road.

Utilities

Utilities are proposed to be installed within the rights of way.

Ponding is located in outlots that will be deeded to the City.

Park Dedication

Park dedication is required for this plat, and will be calculated at the time of execution of the developer’s agreement. No parks are proposed for this area in the Comprehensive Plan, and this development is within walking distance of Settler’s Park. Estimated park dedication is 18 units at \$3,272 per unit for a total of \$58,896.

Landscaping and Tree Preservation

Sheet L1-1 contains the proposed landscaping plan. The landscaping plans generally identify more than 2 trees per lot to be planted, but given lot size the trees are proposed to be installed in the HOA owned area rather than on the individual lots. This variation can be approved as part of the PUD.

Information on tree removal proposed is included in the plan set on Sheet L2-1. All existing trees are proposed to be removed in order to grade the site.

Engineering and Planning

The development should comply with the requirements of the City Engineer's and City Planner's memos.

Staff Recommendation

If the Planning Commission finds the preliminary plat meets ordinances as modified by any recommended PUD, staff recommends approving the Preliminary Plat subject to the conditions below:

1. Villas are the permitted use on Lots 1 – 18, Block 1.
2. Ownership and maintenance of the outlots shall be addressed in a manner satisfactory to the City.
3. All comments contained within the memo from the City Engineer dated ____, 2019, and the memo from the City Planner dated ____, 2019 are incorporated herein (collectively referred to as the "Staff Memos").
4. The Subject Property shall be constructed in substantial compliance with the Site Plans as revised to conform to the requirements of the Staff Memos.
5. If the updated Site Plans addressing the comments of the resolutions, Staff Memos, or outside agencies necessitate revisions to any of the lot lines or easements on the Subject Property, then those revisions shall be incorporated into the Final Plat submitted by the Developer. If an off-site easement is required to address a comment, then a separate easement document shall be provided to the City for review and approval prior to release of the Final Plat for recording.
6. To the extent that there are differences or conflicts between updated Site Plans and this resolution, the terms of this resolution shall be controlling.

7. The Site Plans have not been approved for permitting under the Wetlands Conservation Act. Compliance with these requirements may result in the changes to or the removal of lots, outlots, or right of way, in which case the Developer shall revise the Final Plat as necessary.
8. The timing of the construction of the infrastructure improvements on the Subject Property will be subject to the conditions of a Developer's Agreement between the City and the Developer, and City staff is authorized to negotiate and execute such Developers Agreement.
9. A title commitment shall be provided for the review of the City Attorney before the final plat is released for recording.
10. Homeowners association documents shall be provided for the review of the City Attorney before the final plat is released for recording.
11. Retaining walls are not permitted to be in any outlots that will be owned by the City. In the event retaining walls are shown within any drainage and utility easements, they must be owned and maintained by either the property owner or the HOA.
12. The Developer must reimburse the City for all costs incurred by the City and its consultants in relation to review of the proposed development plans, inspection of improvements, and the preparation of the Developer's Agreement.
13. Developer shall be responsible for securing necessary easements and for constructing utility improvements as shown on the attached plans, unless otherwise agreed to with the City in writing. The cost of constructing utility improvements shown on the Site Plans shall be borne solely by the Developer. However, to the extent that such utilities are oversized at the request of the City, the City shall reimburse the Developer for the cost of the extra diameter of the pipe. The location of such utility lines within the Subject Property shall be as designated and approved by the City Engineer.
14. Prior to the release of the Final Plat for recording, a Developer's Agreement must be entered into which Agreement(s) will include, but not be limited to, the following:
 - a. PRD details and information.
 - b. Street and utility construction details, processes, plans and financial guaranties.
 - c. Park dedication requirements.
 - d. All required approvals from other governmental agencies.
 - e. Final grading and drainage plans.
 - f. Maintenance requirements during construction.

- g. Landscaping plans.
 - h. Financial guaranties.
 - i. Other planning and engineering items, as appropriate.
15. Utility lines are required to be placed underground at the sole expense of the developer.
 16. The Developer shall be responsible for obtaining and complying with all necessary permits from any other governmental agencies.
 17. The Developer may not commence construction of any improvements on the Subject Property until the City Engineer has approved both the detailed grading plan and the detailed construction plan and issued written confirmation to the City and the Developer of the approval of such plans.
 18. The Developer must submit details on corrected building pads including compaction tests, limits of the pads and elevations of the excavations. The general soils report for the development must also be submitted to the City Engineer for review and approval prior to the issuance of building permits.
 19. The developer must submit foundation and grading as-builts for each home constructed for the review of the City Engineer.
 20. The Developer shall survey all storm water holding ponds as required by the City. The Developer shall be responsible for storm sewer cleaning and holding pond dredging, as required, by the City prior to completion of the development of the Subject Property.
 21. The approval of the preliminary plat shall terminate if either a final plat has not been approved or a Developer's Agreement has not been entered into between the City and Developer in the timeframe as required by the Subdivision Ordinance.
 22. Additional conditions as determined necessary by the City Planner, City Engineer, and City Attorney as review of the project progresses and is completed.

Memorandum

To: *Cindy Nash – Hanover City Planner*

From: *Justin Messner, PE – Hanover City Engineer*

Cc: *Brian Hagen – Hanover City Administrator*
Todd McLouth, PE – Loucks, Inc.

Date: *March 6, 2019*

Re: *River Town Villas of Hanover Preliminary Plat Submittal Review*
WSB Project No. 013676-000

As requested, we have reviewed the River Town Villas of Hanover preliminary plat documents as prepared by Loucks Inc., dated February 22, 2019 and we offer the following comments:

Stormwater Management

General Comments

1. The rate control requirement for the City listed in Chapter 9 of the City Code is as follows, *“the proposed post-development runoff rate must not exceed 0.1 cubic feet per second per acre.”* The project consists of a parcel approximately 4.1 acres in size and would only be allowed a discharge of 0.41 cubic feet per second. Currently, the project is not meeting this rate control requirement.
2. An operations and maintenance plan for the proposed stormwater management system should be included with future submittals. Applicant should callout maintenance access location for the stormwater BMPs to the plans.
3. The SWMP states an infiltration rate of 0.8 inches per hour was used for design purposes and that the infiltration rate would be verified with a double-ring infiltrometer test later in the spring. The City requests the results of the double-ring infiltrometer test be submitted when obtained.
4. A NPDES permit will need to be obtained prior to the start of construction.

Pond/ Basin /Rain Garden Comments

5. The contours in the corner of the ponding areas should be smoothed out to make them constructible.
6. Side slopes for the pond shall be no greater than 5:1 between the permanent water level and the top of the slope per Chapter 9 of the City Code.
7. The soil borings provided show there are permeable soils throughout the site. A pond liner should be added to the stormwater pond to ensure water does not infiltrate into the underlying soil from the pond.

8. The property to the northwest of the proposed development is currently landlocked. Additional consideration should be given for discharges onto this property.
9. A note should be added to the plans stating that the infiltration basin and raingarden shall be kept offline until impervious area construction is completed and vegetation has been established, per the Minnesota Stormwater Manual.
10. Riprap should be shown on the plans at all FES outlets.
11. It is recommended the applicant consider dropping the invert of the pipe leaving CBMH 101 to flatten the pipe and reduce the velocity of water entering the pond.
12. The outlet from Pond 1 is shown right at or slightly over the parcel boundary. Applicant should move the outlet so that the entire outlet (including FES and riprap) will be within the parcel boundary.
13. The Pond 1 EOF elevation is called out as 904.5 on the north side of the pond however the berm surrounding the pond on the north, west and southwest sides all show a max elevation of 904.5. Applicant should update the grading so the EOF is a defined spillway which would direct water in one direction rather than allowing water to overtop the berm of the pond in multiple directions.

Modeling Comments

14. The SWPPP and the narrative in the SWMP list 1.67 acres of new impervious for the project but the HydroCAD model is only showing an increase in 1.51 acres of impervious. Applicant should update the model so the increase in impervious matches what is shown in the plans.
15. From the hydrographs provided it appears that there are oscillations occurring between the infiltration basin and the pond. It is recommended the infiltration basin and the pond be modeled together in one node with an exfiltration outlet starting at the overflow elevation between the two basins (currently 902.5) to remove the oscillations. No overflow between the infiltration basin/pond would be included in this updated model.
16. The EOF for the rain garden is shown on the plans at 916.3 but is being modeled at 916. Applicant should update the elevation of the EOF in the model to match what is shown in the plans.
17. It is unclear if water quality requirements are being met at this time. The removal efficiencies may be overestimated with the way the stormwater pond and infiltration basin are being modeled in MIDS currently. With the current design shown in the plans only the volume of the pond between 902.5 and 902.6 will be routed to the infiltration basin, but the way MIDS is currently configured all of the outflow from the pond is being routed through the infiltration basin. It is recommended that the applicant model the system in P8 to accurately model the two outlets from the stormwater pond. Alternatively, the outlet for the pond could be raised so that the majority of the pond's outflow is routed to the infiltration basin rather than out the pipe or the piped outlet could be moved from the pond to the infiltration basin.

Preliminary Plan Set

Landscape Plan Comments

18. There are trees proposed within a few feet of the storm sewer (e.g. west end of Street B near CBMH-104). All trees should be a minimum of 10 feet from the storm sewer system to protect the storm sewer and prevent trees from needing to be removed with future maintenance.
19. Verify boulevard site distances are being met with the two trees located at the entrance (see City Detail STR-26).

Existing Conditions Comments

20. Show any existing sanitary sewer and water facilities that are proposed to be removed or abandoned with the removal of the existing house.

Grading Plan Comments

21. Basement floor, garage floor, and low opening elevations should be added on the plans.
22. We are unable to confirm freeboard requirements are being met with respect to the proposed raingarden, stormwater pond, and observed groundwater until elevations are shown on the plans. Lots 15-18 at a minimum, will most likely need to be shown as 'SOG' only.
23. Retaining walls exceeding 4' in height will require structural design calculations and certification of licensed engineer with experience in retaining wall design.
24. We recommend the developer define ownership and responsibility for future retaining wall maintenance.
25. The retaining wall on the north end is shown within 10 feet of Lot 10 with a greater than 3:1 slope coming off the back of the house.
26. There are some areas with surface grades greater than 3:1 (e.g. at the ends of the eastern retaining wall, east end of Street B, north of lots 7-10, etc.). Revise proposed contours or modify proposed retaining walls to eliminate these areas.
27. There are some areas with surface grades less than 2% (e.g. west of Lots 4 and 5, etc.). Revise proposed contours to eliminate areas.
28. The spot elevations shown between lots do not appear to always be the high point (e.g. between Lots 13-14, 5-6, etc.). Adjust the spot elevations and possibly add drainage arrows to define the grade breaks between the lots and throughout the development. Maintain minimum 2% and maximum 3:1 slope requirements with the adjacent lots.
29. Provide additional detail showing the drainage on the east side of Lot 11 and how it gets away from and around the house.
30. Provide the EOF for the low point in Street B.
31. FES-401 for the pipe discharging to the infiltration pond is missing on several sheets (e.g. C3-1).

32. Describe the purpose of the 906.00 spot elevation west of Lot 7. It is between the proposed 906 and 908 contours.

Utility Plan Comments

33. Describe and show the proposed extents of the roadway restoration associated with the connections to the existing utilities.
34. The proposed utility plan shows an 8" watermain connecting to the existing 6" watermain on Church Street NE. Verify the upsizing will maintain adequate pressures within the proposed development.
35. Show all water services on the upstream side of the sanitary services (e.g. lots 5,6,8,13,14).
36. Show a gate valve after the connection to the existing watermain at Church Street NE in accordance with City Detail WAT-03.
37. Show proposed curb stops for the development. Place them 10' behind the back of curb in accordance with City Detail WAT-04.
38. Replace the 8" stub at the west end of Street B with a hydrant and gate valve.
39. Provide an additional gate valve at the intersection of Street A and Street B.
40. Provide service risers for the sanitary sewer services on Street A.
41. The two middle sanitary sewer segments (MH 3-MH 2, MH 4-MH 3) are at minimum grade while the upstream and downstream segments have grade available to give.
42. CB-201 & CB-202 are only 2' deep which presents concerns with frost heave. Consider using structures with filled or unfilled sumps to provide additional depth.
43. There is as little as 1' of cover over portions of the pipe from CB-201 to FES-200.
44. With the submittal of final plat and construction plans a minimum 18 inches of separation and insulation per City Detail WAT-06 will need to be shown between the watermain and all sewer crossings.

Miscellaneous Comments

45. The street section shows 24" of select granular but does not show draitile. Draitile will be needed in accordance with City Detail STO-15 "PVC Perforated Pipe Installation".
46. Limit standard detail plates to 8 per page for minimal legibility at half size (11x17) print.
47. Include City Detail SAN-07 "Sanitary Sewer Junction Manhole".
48. Include City Detail WAT-08 "Insulation Detail". Insulation will be needed between the storm sewer and watermain at the intersection of Street A & Street B and where the watermain goes under CB-107.
49. Include City Detail BED-01, BED-02, BED-03.

Collaborative Planning, LLC

MEMORANDUM

To: Brian Hagen, City Administrator

From: Cindy Nash, City Planner

Date: March 21, 2019

Subj: Planning Review Comments – River Town Villas
Preliminary Plat and Plans dated February 22, 2019

I have reviewed the preliminary plat and plans dated February 22, 2019 and have the following comments.

1. Density is preliminarily calculated at 4.82 units per acre, which is within the range allowed under the Comprehensive Plan (4 to 12 units per net acre in Multi-Family Residential). Comments in this memo and the City Engineer's memo may impact the density calculation, which will be recalculated at resubmission.
2. Addressing the comments contained in the City Planner and City Engineer staff memos may result in changes to or the removal of lots, outlots or easements.
3. The stormwater pond should be shown in an outlot and would be maintained by the City. City staff will need to review to ensure that acceptable access to maintain the pond is provided. This access shall be suitable to drive maintenance vehicles upon it, and shall be kept free of structures and landscaping.
4. Additional discussion will need to occur regarding the maintenance and ownership of the infiltration basin and rain garden.
5. A sidewalk shall be constructed on the portion of the property that fronts Church Street, along with pedestrian ramps provided at intersection of Church Street and River Road.
6. It is our understanding that certain lots may have a greater depth when shown in the final plat. Please verify that under that revised scenario that the structures can still meet the setbacks as proposed in the PUD conditions prepared by the City Planner.

7. Street trees are required in addition to two trees per lot (30-08-06, A.33). Verify that all street trees are at least 30 feet from the any intersection. In addition, on the side of any street without a sidewalk, street trees must be at least five feet from the curb. This requirement will be reviewed for compliance with final plat submissions.
8. Locations for mailbox clusters should be identified on the plans.
9. A foundation and grading as-built for each home will be required as a condition of approval of the Planned Unit Development.
10. Signage approved by the City will need to be placed along lot lines or corners next to storm ponds or wetlands.
11. Deeds for conveyance of the stormwater outlots to the City shall be coordinated with final plat recording.

cc: Justin Messner, WSB



February 22, 2019

Cindy Nash – City Planner

City of Hanover
11250 5th Street NE
Hanover, MN 55341

RE: Preliminary Plat Submittal for RIVER TOWN VILLAS OF HANOVER Development

Dear Ms. Nash:

On behalf of the Applicant/Developer, Wits Realty, Loucks is submitting the attached Preliminary Plat documents for RIVER TOWN VILLAS OF HANVOER, a new single family detached villa residential subdivision. We offer the following comments regarding this submittal:

Preliminary Plat:

The existing site currently has one single family residential dwelling that will be demolished. The proposed Preliminary Plat includes a total of eighteen (18) new single family villa lots. The plat includes a common private roadway with one access from Church Street. An ingress/egress easement will be obtained for all lots for access rights.

Rezoning:

The current zoning is B-1A (Downtown River). The applicant is requesting rezoning to a residential PUD as the proposed lot size & type is not currently allowed under current zoning categories.

The proposed rezoning to R1-A is consistent with the land use plan and compatible with the zoning of adjacent properties.

Development Data & Proposed Setbacks:

The development has been laid out to achieve an appropriate mix of retained green space, building pads, and necessary utility and stormwater infrastructure. Proposed dimensional requirements are as follows:

- Platted Lot Size = 50 x 70'
- Building Pad = 40' W x 60' D
- Side Yard Setbacks = 10' minimum if house side
5' Minimum if garage side
10' between buildings if garage to garage
- Front Yard Setback = 20' from curb to building face
25' from curb to garage face
- Rear Yard Setback = 30' Minimum
- Church Street Setback = 35'
- Garage Size = 480 SF Minimum – 24' Depth Minimum

Wetlands:

There are no delineated wetlands on the site.

Homeowner's Association Governance:

The proposed homes will be part of an HOA agreement. Snow removal, trash collection, and lawn maintenance will be handled by contract services hired by the HOA. The HOA will have strong requirements related to exterior uses and maintenance.

Housing Style & Quality

The proposed homes are intended to appeal to a wide range of buyers that desire a maintenance free living arrangement. While not age-restricted, we anticipate the development will be popular with empty nesters and appeal to home buyers that appreciate the amenity and convenience offered by Downtown Hanover.

Vehicle Access & Circulation:

A 26' wide private drive is intended to access each property. A single, full movement intersection is planned with Church Street and is adequately set back from River Road. A 'hammer head' style turnaround meets the navigational needs of emergency vehicles including ambulance and fire trucks. Bus traffic is not expected to occur within the private drive and would likely have a single pick-up point at Church Street.

Parking:

Each unit will have a two car garage with room for another two cars in each driveway. Guest parking is further addressed via dedicated parking spots scattered throughout the neighborhood. No on-street parking is planned.

Stormwater Management:

The RIVER TOWN VILLAS OF HANVOER development has been designed to efficiently and sensitively handle stormwater management concerns. A storm pond & infiltration basin are used to address the runoff from the site. The overall effect meets pre-development runoff for both rate and volume while protecting adjoining parcels from negative drainage concerns.

Landscaping:

Each unit will be landscaped in keeping with the intended quality and price point of the proposed homes. In addition to foundation plantings around individual homes, the project will also use tree plantings scattered throughout the site with special emphasis along the private drive, along the east & west site boundaries to help buffer existing homes, and along the north line to help screen long views to the disturbed area to the north. Tree species were chosen both for their compatibility with the surrounding trees and aesthetic qualities.

Existing Tree Cover:

Trees are preserved where possible, but significant grading is necessary to develop this site. Significant new landscaping is proposed to mitigate tree loss.

Phasing:

The development is expected to be platted and built in one phase as market conditions allow.

We look forward to your comments on the proposed plans. Please let us know if there is other information you need from the development team.

Sincerely

Loucks

A handwritten signature in black ink, appearing to read "Paul Kangas". The signature is fluid and cursive, with a large initial "P" and a long, sweeping underline.

Paul Kangas, LA

Principal Landscape Architect

CC: Josh Jacobs - Wits Realty

From: [Cindy Nash](#)
To: [Amy Blinn](#)
Subject: FW: River Town Villas: Architecture Notes
Date: Thursday, March 21, 2019 10:34:54 AM

Hi Amy – Can you please include the email below in the packet as it shows their intention for architecture? Thanks!

From: josh@witsrealty.com <josh@witsrealty.com>
Sent: Wednesday, March 20, 2019 11:22 AM
To: Cindy Nash <cnash@collaborative-planning.com>
Subject: River Town Villas: Architecture Notes

Hi Cindy,

Here are exterior renderings with the garage set back further than the home front portion at 25' from the curb. Green space on each side is approx 15' so a good representation of the house to house sides and obviously the garage sides would be closer.

Other notes:

- Neutral color palette
- Stone Accents
- Decorative garage doors with gridded windows
- Decorative top windows in peaks or dormers
- Peaks broken up with other peaks and/or different colors and textures (shakes, vertical board and batten mixed with horizontal elements) - Corbels in Peaks
- Front door with side or transom window
- Windows, doors, garage door wrapped in wide white trim
- Decorative shutters where appropriate
- Architectural shingles
- Representative front landscaping

I will get some floor plans over ASAP

Thanks,

Josh





Josh Jacobs
Owner | Realtor | Land Development at Wits Realty
A [11238 River Rd NE, Hanover, MN 55341](#)
M [612-859-0354](tel:612-859-0354) W www.WitsRealty.com

CONFIDENTIALITY AND SECURITY NOTICE: The contents of this message and any attachments may be privileged, confidential and proprietary and also may be covered by the Electronic Communications Privacy Act. If you are not an intended recipient, please inform the sender of the transmission error and delete this message immediately without reading, disseminating, distributing or copying the contents.

DESCRIPTION OF PROPERTY SURVEYED

(Per Schedule A of the Owners Policy OX12633839, File No. 1811-1298-BF, issued by Liberty Title, Inc. as agent for Old Republic National Title Insurance Company, effective date January 8, 2019.)

The South 656.60 feet of the East 284.93 feet of the Northwest Quarter of the Southwest Quarter of Section 36, Township 120, Range 24, except the South 33 feet, Wright County, Minnesota

SURVEY REPORT

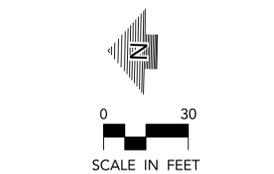
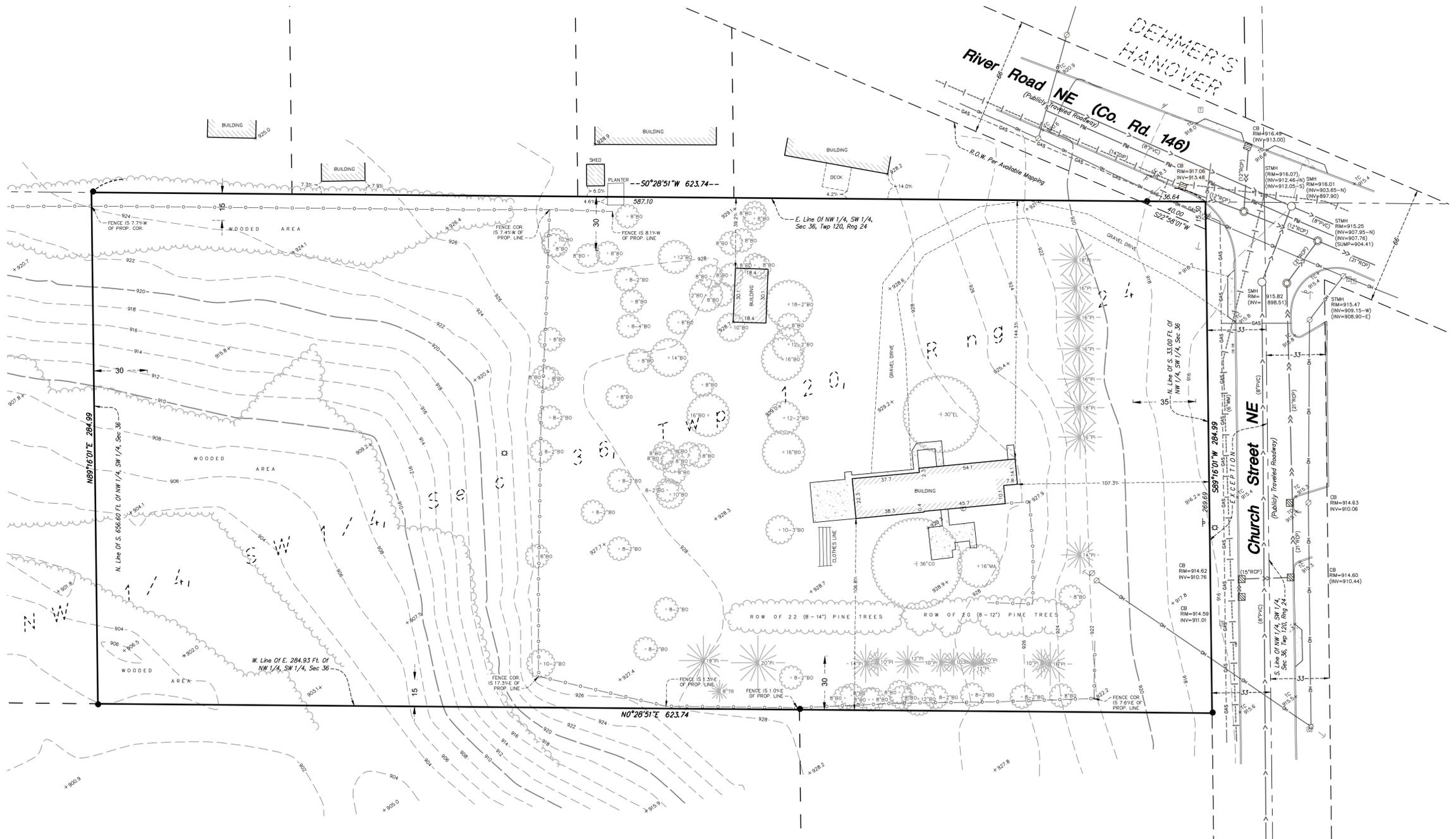
- The Surveyor was not provided utility easement documents for the subject property except for those shown on the Survey. The location of River Road NE shown hereon, is per available mapping.
- The address, if disclosed in documents provided to or obtained by the surveyor, or observed while conducting the fieldwork is 11216 Church Street NE, Hanover, MN 55341.
- The bearings for this survey are based on the Wright County Coordinate System NAD 83 (1986 Adjust).
- Benchmark: MnDOT Concrete Monument - ESTERLY 2
2.5 miles southeast of Saint Michael; 1.5 miles south along Labeaux Ave NE from junction of Labeaux Ave NE & 30th St NE in Saint Michael, then 0.35 mile west on 15th St NE to driveway to house number 10621; in garden on right; 181 feet south of road; 76.22 feet south-southeast of reference mark 6; 65.25 feet north-northwest of reference mark 5; 57.0 feet west of the northwest corner of a metal building; 3.5 feet northeast of witness post.
Elevation = 1026.51 Feet (NGVD'29)

Site Benchmark:
Top nut of hydrant located at intersection of Church St NE & River Road NE, as shown hereon.
Elevation = 920.32 Feet (NGVD'29)
- This property is contained in Zone X (areas determined to be outside the 0.2% annual chance floodplain) per Flood Insurance Rate Map No. 27053C0016F, Community Panel No. 270540 0016 F, effective date of November 4, 2016 and Flood Insurance Rate Map No. 27053C0018F, Community Panel No. 270540 0018 F, effective date of November 4, 2016.
- The field work was completed on April 19, 2005.

- The wetlands information on this plan was provided and delineated by Pinnacle Engineering, dated October 7, 2003. (NO wetlands on site)
- Individual trees as shown are measured diameter in inches at breast height (DBH) in 2005.
- We have shown underground utilities on and/or serving the surveyed property per Gopher State One-Call Ticket No's 190430195 and 190430197. The following utilities and municipalities were notified:

COMCAST (800)778-9140
CENTURYLINK (855)742-6062
XCEL ENERGY (800)848-7558

VEOLIA WATER (763)497-3611
CENTER POINT ENERGY (608)223-2014
ZAYO BANDWIDTH (888)267-1063
- Utility operators do not consistently respond to locate requests through the Gopher State One Call service for surveying purposes such as this. Those utility operators that do respond, often will not locate utilities from their main line to the customer's structure or facility. They consider those utilities "private" installations that are outside their jurisdiction. These "private" utilities on the surveyed property or adjoining properties, may not be located since most operators will not mark such "private" utilities. A private utility locator may be contacted to investigate these utilities further, if requested by the client.
- The locations of underground utility lines shown hereon is an approximation based on available maps, unless otherwise noted on the survey.
- Maps provided by those notified above, either along with a field location or in lieu of such a location, are very often inaccurate or inconclusive. **EXTREME CAUTION MUST BE EXERCISED BEFORE AN EXCAVATION TAKES PLACE ON OR NEAR THIS SITE. BEFORE DIGGING, YOU ARE REQUIRED BY LAW TO NOTIFY GOPHER STATE ONE CALL AT LEAST 48 HOURS IN ADVANCE AT 811 or (651) 454-0002.**



SURVEY LEGEND

- FOUND OPEN IRON MONUMENT UNLESS SHOWN OTHERWISE
- SET 1/2 INCH X 14 INCH IRON MONUMENT, MARKED "LS 48988"
- △ SET NAIL
- (INFO) INFORMATION AS SHOWN ON PLAN - NOT FIELD VERIFIED
- S --- STORM SEWER
- SS --- SANITARY SEWER
- W --- WATER MAIN - MAPPED
- WS --- SANITARY SEWER SERVICE
- W --- WATER SERVICE
- FM --- FORCE MAIN - MAPPED
- CTV --- UG CABLE TV - MAPPED
- ELE --- UG ELECTRIC - MAPPED
- GAS --- UG GAS - MAPPED
- TEL --- UG TELEPHONE - MAPPED
- OH --- OVERHEAD UTILITY
- X --- BARBED WIRE FENCE
- ○ --- CHAIN LINK FENCE
- --- CONCRETE CURB
- --- CONCRETE
- --- CONTOUR
- --- TREE LINE
- --- CONIFEROUS TREE
- --- DECIDUOUS TREE
- --- CATCH BASIN
- --- STORM MANHOLE
- --- SANITARY MANHOLE
- --- HYDRANT
- --- GATE VALVE
- --- LIGHT POLE
- --- POWER POLE
- --- CABLE TV PEDESTAL
- --- ELECTRIC METER
- --- GUY WIRE
- --- MAILBOX
- --- SIGN
- --- TELEPHONE PEDESTAL
- --- BOXELDER
- --- COTTONWOOD
- --- ELM
- --- MAPLE
- --- PINE
- --- TREE (GENERAL)
- --- CURB CUT
- --- TOP OF CURB
- --- TH50 ELEV @ THRESHOLD
- --- TNH TOP NUT HYDRANT
- --- 972.5 SPOT ELEVATION
- 12 SCHEDULE B II ITEM

RIVER TOWN VILLAS OF HANOVER
11218 CHURCH STREET NE
HANOVER, MN 55341

WITS REALTY
1010 W. LAKE STREET
SUITE 200
MINNEAPOLIS, MN 55408

LOUCKS
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksin.com

CADD QUALIFICATION
CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of these CADD files for use in information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS
02/22/19 PRELIMINARY SUBMITTAL

PROFESSIONAL SIGNATURE
I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.
Henry D. Nelson
Henry D. Nelson, L.S.
License No. 17255
Date 2/22/19

QUALITY CONTROL
Loucks Project No. 03128A
Project Lead HDN
Drawn By SFM
Checked By HDN
Field Crew VN/JT

SHEET INDEX

C1-1	EXISTING CONDITIONS
C1-2	PRELIMINARY PLAT
C2-1	SITE PLAN
C3-1	GRADING PLAN
C3-2 - C3-3	SWPPP PLAN & NOTES
C4-1	UTILITY PLAN
C8-1 - C8-2	CIVIL DETAILS
L1-1	LANDSCAPE PLAN
L2-2	TREE INVENTORY PLAN

EXISTING CONDITIONS
C1-1

Preliminary Plat Of: RIVER TOWN VILLAS OF HANOVER

LEGAL DESCRIPTION

The South 656.60 feet of the East 284.93 feet of the Northwest Quarter of Section 36, Township 120, Range 24, except the South 33 feet, Wright County, Minnesota

SITE DATA

AREAS
 Lots 1 through 18 (3,500 +/- sq. ft.) = 63,000 +/- square feet or 1.45 +/- acres
 Lot 19 = 112,247 +/- square feet or 2.57 +/- acres
 Right of Way Dedication Area = 2,475 +/- square feet or 0.06 +/- acres
 Total Property Area = 177,722 +/- square feet or 4.08 +/- acres

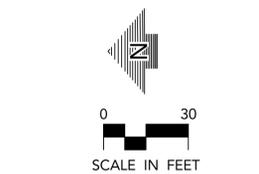
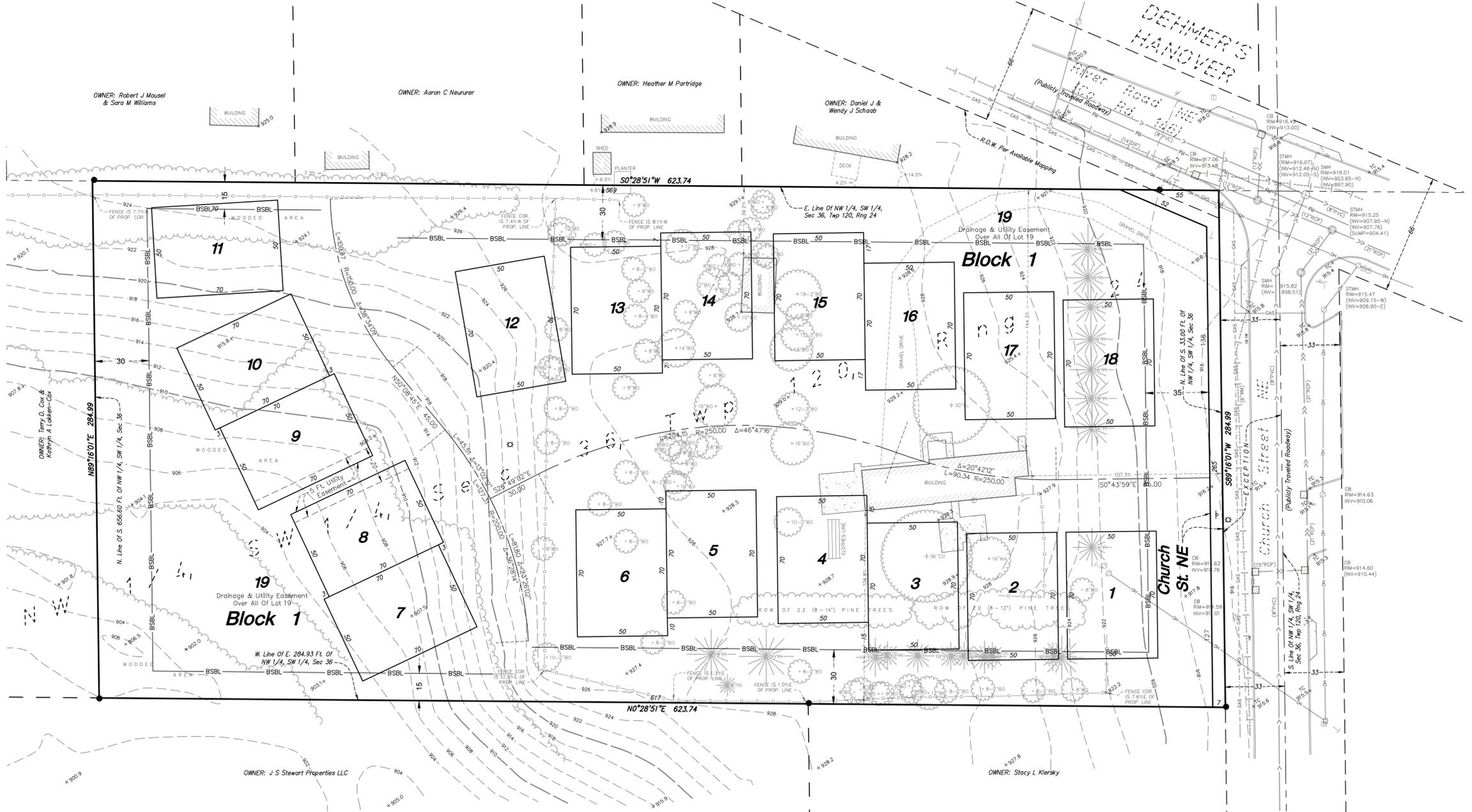
GENERAL NOTES

- SURVEYOR:**
 Loucks
 7200 Hemlock Lane, Suite 300
 Maple Grove, MN 55330
 763-424-5505
- OWNER/DEVELOPER:**
 Wits Realty
 1010 W. Lake Street, Suite 200
 Minneapolis, MN 55408
 612-656-9487
- Prepared February 2019.
 - The address, if disclosed in documents provided to or obtained by the surveyor, or observed while conducting the fieldwork is 11218 Church Street NE, Hanover, MN 55341.
 - The bearings for this survey are based on the Wright County Coordinate System NAD 83 (1986 Adjust).
 - Benchmark: MnDOT Concrete Monument - ESTERLY 2
 2.5 miles southeast of Saint Michael; 1.5 miles south along Labeaux Ave NE from junction of Labeaux Ave NE & 30th St NE in Saint Michael, then 0.35 mile west on 15th St NE to driveway to house number 10621; in garden on right; 181 feet south of road; 76.22 feet south-southeast of reference mark 6; 65.25 feet north-northwest of reference mark 5; 57.0 feet west of the northwest corner of a metal building; 3.5 feet northeast of witness post.
 Elevation = 1026.51 Feet (NGVD'29)
 Site Benchmark:
 Top nut of hydrant located at intersection of Church St NE & River Road NE, as shown hereon.
 Elevation = 920.32 Feet (NGVD'29)
 - This property is contained in Zone X (areas determined to be outside the 0.2% annual chance floodplain) per Flood Insurance Rate Map No. 27053C0016F, Community Panel No. 270540 0016 F, effective date of November 4, 2016 and Flood Insurance Rate Map No. 27053C0018F, Community Panel No. 270540 0018 F, effective date of November 4, 2016.
 - The field work was completed on April 19, 2005.
 - The wetlands information on this plan was provided and delineated by Pinnacle Engineering, dated October 7, 2003. (NO wetlands on site)
 - Individual trees as shown are measured diameter in inches at breast height (DBH) in 2005.

ZONING INFORMATION

Current Zoning: B1-A (Downtown River District)
 Any zoning classification, setback requirements, height and floor space area restrictions, and parking requirements, shown hereon, was researched to the best of our ability and is open to interpretation. Per the City of Hanover Zoning Map and City Code, on February 14, 2019, information for the subject property is as follows:

- Current Setbacks:
 Front 30 feet (20 feet on River Road & Main Street)
 Side 0 feet
 Rear 0 feet
 Height 2-1/2 Stories or 35 feet
- Proposed Zoning: R1-A (Single Family Residential) with PUD (Planned Unit Development)
- Proposed Setbacks:
 Front 20 feet
 Side 15 feet (5 ft Garage/10 ft House)
 Rear 30 feet
 Church St NE 35 feet



SURVEY LEGEND

- FOUND OPEN IRON MONUMENT UNLESS SHOWN OTHERWISE
- SET 1/2 INCH X 14 INCH IRON MONUMENT, MARKED "LS 48988"
- △ SET NAIL
- (INFO) INFORMATION AS SHOWN ON PLAN - NOT FIELD VERIFIED
- STORM SEWER
- SANITARY SEWER
- WATERMAIN - MAPPED
- SANITARY SEWER SERVICE
- WATER SERVICE
- FM --- FORCE MAIN - MAPPED
- CITY --- UG CABLE TV - MAPPED
- ELE --- UG ELECTRIC - MAPPED
- GAS --- UG GAS - MAPPED
- TEL --- UG TELEPHONE - MAPPED
- OVERHEAD UTILITY
- BARBED WIRE FENCE
- CHAIN LINK FENCE
- CONCRETE CURB
- CONCRETE
- CONTOUR
- TREE LINE
- CONIFEROUS TREE
- DECIDUOUS TREE
- CATCH BASIN
- STORM MANHOLE
- SANITARY MANHOLE
- HYDRANT
- GATE VALVE
- LIGHT POLE
- POWER POLE
- CABLE TV PEDESTAL
- ELECTRIC METER
- GUY WIRE
- MAILBOX
- SIGN
- TELEPHONE PEDESTAL
- BOXELDER
- COTTONWOOD
- ELM
- MAPLE
- PINE
- TREE (GENERAL)
- CURB CUT
- TOP OF CURB
- TH50 ELEV @ THRESHOLD
- TmH TOP NUT HYDRANT
- 972.5 SPOT ELEVATION
- 12 SCHEDULE B ITEM

RIVER TOWN VILLAS OF HANOVER
 11218 CHURCH STREET NE
 HANOVER, MN 55341

WITS REALTY
 1010 W. LAKE STREET
 SUITE 200
 MINNEAPOLIS, MN 55408

LOUCKS
 PLANNING
 CIVIL ENGINEERING
 LAND SURVEYING
 LANDSCAPE ARCHITECTURE
 ENVIRONMENTAL
 7200 Hemlock Lane, Suite 300
 Maple Grove, MN 55369
 763.424.5505
 www.louckscinc.com

CADD QUALIFICATION
 CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of these CADD files for use in information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS
 02/22/19 PRELIMINARY SUBMITTAL

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

 License No. Henry D. Nelson - PL 17255
 Date

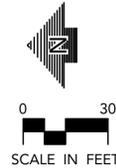
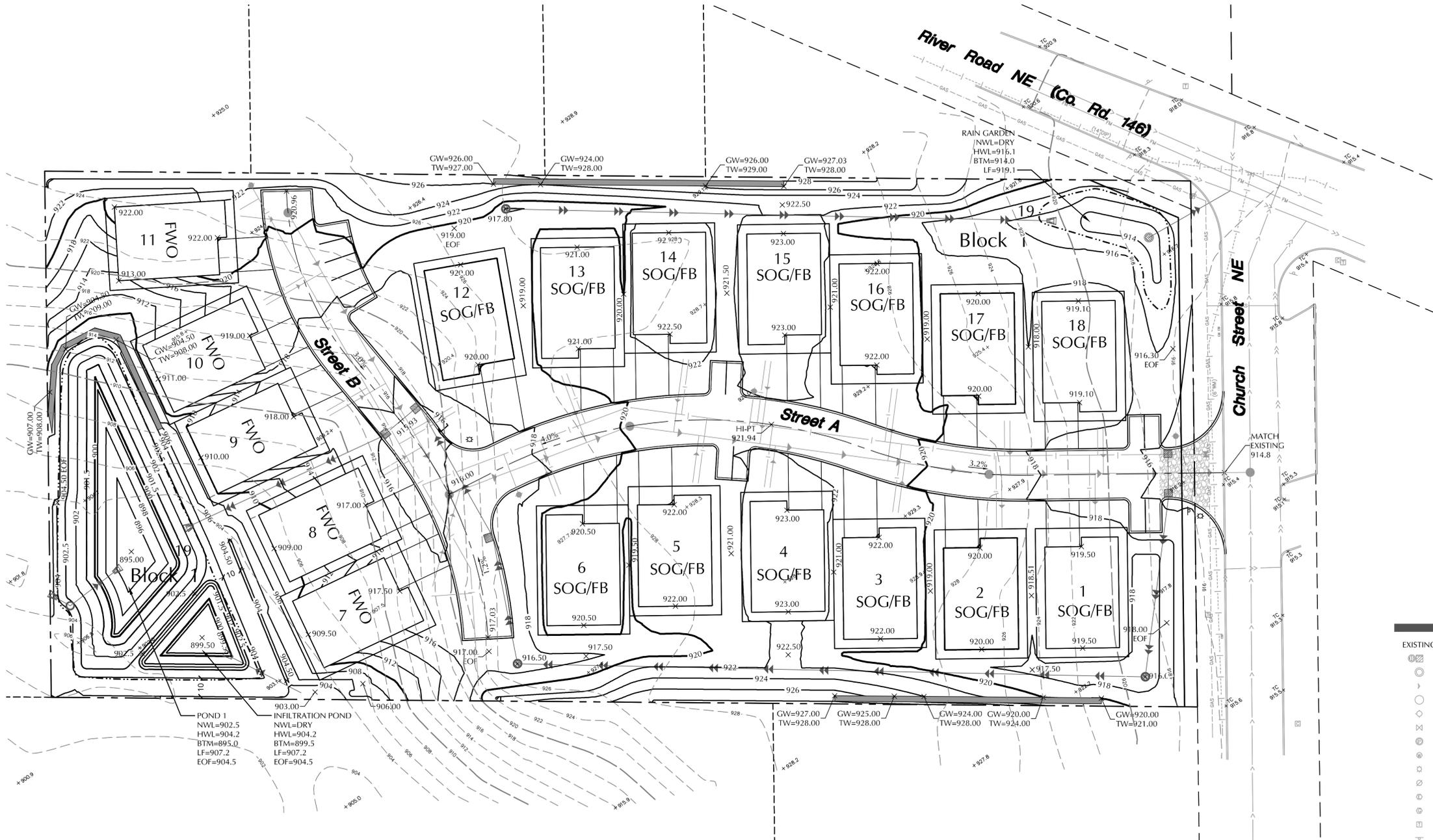
QUALITY CONTROL
 Loucks Project No. 03-128A
 Project Lead HDN
 Drawn By SFM
 Checked By HDN
 Field Crew VN/UT

SHEET INDEX

C1-1	EXISTING CONDITIONS
C1-2	PRELIMINARY PLAT
C2-1	SITE PLAN
C3-1	GRADING PLAN
C3-2 - C3-4	SWPPP PLAN & NOTES
C4-1	UTILITY PLAN
C8-1	CIVIL DETAILS
L1-1 - C8-2	LANDSCAPE PLAN
L2-2	TREE INVENTORY PLAN

PRELIMINARY PLAT
C1-2

Plotted: 02/21/2019 9:57 AM W:\2003\03128A\CADD DATA\SURVEY_dwg Sheet Files\03128A_PrelPlat



LEGEND	
EXISTING	PROPOSED

GRADING, DRAINAGE & EROSION CONTROL NOTES

- ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE MINIMUM OF 6 INCHES OF TOP SOIL AND SOD OR SEED. THESE AREAS SHALL BE WATERED BY THE CONTRACTOR UNTIL THE SOD OR SEED IS GROWING IN A HEALTHY MANNER.
- STABILIZING VEGETATION MUST BE PLACED IN DISTURBED AREAS WITHIN 2 WEEKS OF ROUGH GRADING.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASE OF THIS PROJECT. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGES TO ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASE OF THIS PROJECT.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE APPROPRIATE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARDS.
- IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- THE DUTY OF THE ENGINEER OR THE DEVELOPER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTORS PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTORS SAFETY MEASURES IN, OR NEAR THE CONSTRUCTION SITE.
- BEFORE BEGINNING CONSTRUCTION THE CONTRACTOR SHALL INSTALL A TEMPORARY ROCK ENTRANCE PAD AT ALL POINTS OF VEHICLE EXIT FROM THE PROJECT SITE. SAID ROCK ENTRANCE PAD SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT. SEE DETAILS SHOWN ON SHEET C8-1 OF THE PROJECT PLANS.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE ESTABLISHED AROUND THE ENTIRE SITE PERIMETER AND IN ACCORDANCE WITH NPDES PERMIT REQUIREMENTS, BEST MANAGEMENT PRACTICES, CITY REQUIREMENTS AND THE DETAILS SHOWN ON SHEET C8-1 OF THE PROJECT PLANS.
- ALL ENTRANCES AND CONNECTIONS TO CITY STREETS SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND NOTIFICATIONS AS REQUIRED BY THE CITY.
- SEE UTILITY PLAN AND STORM SEWER PROFILES FOR FURTHER DETAIL REGARDING THE STORM SEWER.
- A POST CONSTRUCTION TEST MUST BE DONE ON ALL FILTRATION BASINS. BASINS SHALL BE FILLED TO A MINIMUM DEPTH OF 6 INCHES AND MONITORED FOR TIME TO DRAIN. THE COON CREEK WATERSHED DISTRICT SHALL BE NOTIFIED PRIOR TO THE TEST TO WITNESS THE RESULTS.

PROJECT BENCHMARK

SITE BENCHMARK: TOP NUT OF HYDRANT LOCATED AT INTERSECTION OF CHURCH ST NE & RIVER ROAD NE. ELEVATION = 920.32 FEET (NGVD'29)

CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

WARNING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.
THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

02/22/19 PRELIMINARY SUBMITTAL

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer in the State of Minnesota.

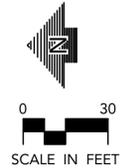
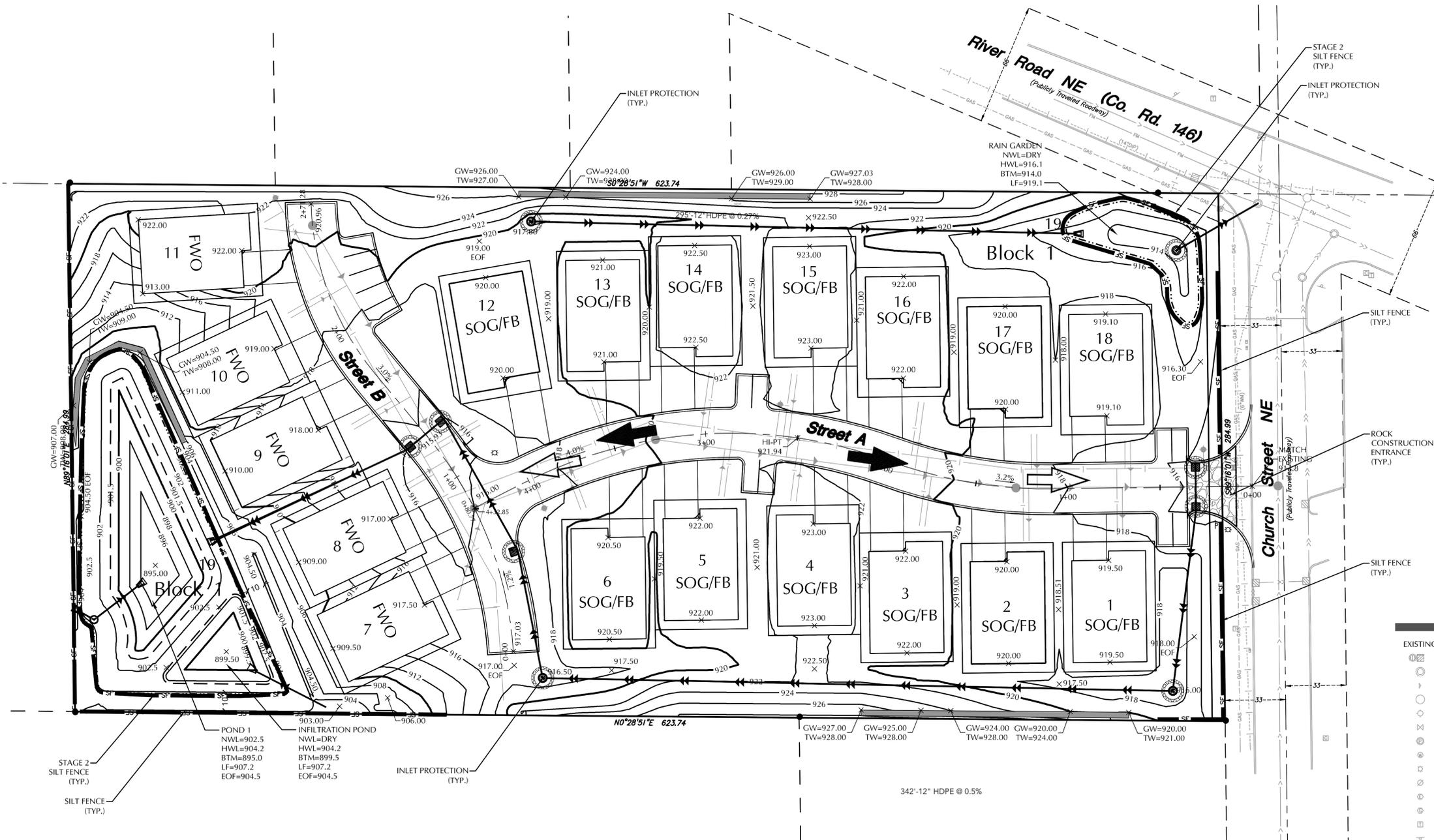
PRELIMINARY
Todd W. McLaugh - PE License No. 20383 Date

QUALITY CONTROL

Loucks Project No. 03128A
Project Lead TWM
Drawn By KMM
Checked By TWM
Review Date

SHEET INDEX

C1-1	EXISTING CONDITIONS
C1-2	PRELIMINARY PLAT
C2-1	SITE PLAN
C3-1	GRADING PLAN
C3-2 - C3-3	SWPPP PLAN & NOTES
C4-1	UTILITY PLANS
C8-1 - C8-2	CIVIL DETAILS
L1-1	LANDSCAPE PLAN
L2-2	TREE INVENTORY PLAN



LEGEND	
EXISTING	PROPOSED

SITE PLAN LEGEND	
	SILT FENCE
	BIOROLL
	EXISTING DRAINAGE PATTERN
	PROPOSED DRAINAGE PATTERN
	ROCK CONSTRUCTION ENTRANCE
	INLET PROTECTION
	WOODFIBER BLANKET

NOTE: ALL OTHER DISTURBED AREAS SHALL BE SEED & MULCHED

PROJECT BENCHMARK
SITE BENCHMARK: TOP NUT OF HYDRANT LOCATED AT INTERSECTION OF CHURCH ST NE & RIVER ROAD NE. ELEVATION = 920.32 FEET (NGVD'29)

CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

WARNING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.
THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of these CADD files for informational and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

02/22/19 PRELIMINARY SUBMITTAL

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer in the State of Minnesota.
PRELIMINARY
Todd W. McLoth - PE

License No. 20383
Date

QUALITY CONTROL

Loucks Project No. 03128A
Project Lead TWM
Drawn By KMM
Checked By TWM
Review Date

SHEET INDEX

C1-1	EXISTING CONDITIONS
C1-2	PRELIMINARY PLAT
C2-1	SITE PLAN
C3-1	GRADING PLAN
C3-2 - C3-3	SWPPP PLAN & NOTES
C4-1	UTILITY PLAN
C8-1 - C8-2	CIVIL DETAILS
L1-1	LANDSCAPE PLAN
L2-2	TREE INVENTORY PLAN

SWPPP NOTES

- PROJECT DESCRIPTION**
THE NATURE OF THIS PROJECT WILL CONSIST OF CONSTRUCTING SINGLE FAMILY RESIDENTIAL LOTS AND HOMES, UTILITIES AND STREETS.
- SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES ARE AS FOLLOWS:**
 - INSTALL VEHICLE TRACKING BMP
 - INSTALL SILT FENCE AROUND SITE
 - INSTALL PROTECTIVE FENCE AROUND INFILTRATION AREAS
 - CLEAR AND GRUB SITE
 - STRIP AND STOCKPILE TOPSOIL
 - REMOVE PAVEMENTS AND UTILITIES
 - CONSTRUCT STORMWATER MANAGEMENT BASINS
 - INSTALL SILT FENCE AROUND BASINS
 - ROUGH GRADE SITE
 - IMPORT CLEAN FILL FOR REPLACEMENT AND BALANCE
 - INSTALL UTILITIES
 - INSTALL BUILDING FOUNDATIONS
 - INSTALL CURB AND GUTTER
 - INSTALL PAVEMENTS AND WALKS
 - INSTALL SMALL UTILITIES (GAS, PHONE, ELECTRIC, CABLE, ETC.)
 - FINAL GRADE SITE
 - REMOVE ACCUMULATED SEDIMENT FROM BASINS
 - CONSTRUCT INFILTRATION BASIN
 - SEED AND MULCH
 - WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.
- SITE DATA:**
 - AREA OF DISTURBANCE: ±4.10 AC
 - PRE-CONSTRUCTION IMPERVIOUS AREA: ±0.00 AC
 - POST-CONSTRUCTION IMPERVIOUS AREA: ±1.67 AC

GENERAL SOIL TYPE: SEE GEOTECHNICAL REPORT IN SPECIFICATIONS
- THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE IDENTIFIED WITH FLAGS, STAKES, SIGNS, SILT FENCE, ETC. BEFORE CONSTRUCTION BEGINS.
- ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN (7) OR MORE DAYS SHALL BE STABILIZED BY SEEDING OR SODDING (ONLY AVAILABLE PRIOR TO SEPTEMBER 15) OR BY MULCHING, OR COVERING OR OTHER EQUIVALENT CONTROL MEASURE. AT A RATE OF 1.5 TIMES STANDARD SEEDING/FINAL STABILIZATION TO BE DONE PER LANDSCAPE PLAN, SEE SHEET L1-L4.
- ON SLOPES 3:1 OR GREATER MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES, SLOPE LENGTHS CAN NOT BE GREATER THAN 75 FEET
ALL 3:1 SLOPES TO BE STABILIZED WITH EROSION CONTROL BLANKET
- ALL STORM DRAINS AND INLETS MUST BE PROTECTED UNTIL ALL SOURCES OF POTENTIAL DISCHARGE ARE STABILIZED.
- TEMPORARY SOIL STOCKPILES MUST HAVE EFFECTIVE SEDIMENT CONTROL AND CAN NOT BE PLACED IN SURFACE WATERS OR STORM WATER CONVEYANCE SYSTEMS. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT AMOUNT OF SILT, CLAY, OR ORGANIC COMPOUNDS ARE EXEMPT EX: CLEAN AGGREGATE STOCK PILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES.
- SEDIMENT LADEN WATER MUST BE DISCHARGED TO A SEDIMENTATION BASIN WHENEVER POSSIBLE. IF NOT POSSIBLE, IT MUST BE TREATED WITH THE APPROPRIATE BMPS.
- SOLID WASTE MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.
- THE WATERSHED DISTRICT OR THE CITY MAY HAVE REQUIREMENTS FOR INSPECTIONS OR AS-BUILT DRAWINGS VERIFYING PROPER CONSTRUCTION OF THE BMPS.
- THE OWNER WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITEE AND IS RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THE PERMIT. THE OPERATOR (CONTRACTOR) WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITEE FOR PARTS II.B., PART II.C., PART II.F., PART V., PART IV. AND APPLICABLE CONSTRUCTION ACTIVITY REQUIREMENTS FOUND IN APPENDIX A, PART C. OF THE NPDES PERMIT AND IS JOINTLY RESPONSIBLE WITH THE OWNER FOR COMPLIANCE WITH THOSE PORTIONS OF THE PERMIT.
- TERMINATION OF COVERAGE-PERMITEE(S) WISHING TO TERMINATE COVERAGE MUST SUBMIT A NOTICE OF TERMINATION (NOT) TO THE MPCA. ALL PERMITEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ONE OR MORE OF THE FOLLOWING CONDITIONS HAVE BEEN MET:**
 - FINAL STABILIZATION, PER NPDES PERMIT PART IV.G., HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITEE IS RESPONSIBLE.
 - TRANSFER OF OWNERSHIP AS DESCRIBED IN THE PERMIT.
- INSPECTIONS**
 - INITIAL INSPECTION FOLLOWING SILT FENCE INSTALLATION BY CITY REPRESENTATIVE IS REQUIRED.
 - EXPOSED SOIL AREAS: ONCE EVERY 7 DAYS AND WITHIN 24 HOURS FOLLOWING A RAINFALL EVENT GREATER THAN OR EQUAL TO 0.2" IN 24 HOURS.
 - STABILIZED AREAS: ONCE EVERY 30 DAYS
 - FROZEN GROUND: AS SOON AS RUNOFF OCCURS OR PRIOR TO RESUMING CONSTRUCTION.
 - INSPECTIONS AND MAINTENANCE RECORDS MUST BE RETAINED FOR 3 YEARS AFTER FILING OF THE NOTICE OF TERMINATION AND MUST INCLUDE DATE AND TIME OF ACTION, NAME OF PERSON(S) CONDUCTING WORK, FINDING OF INSPECTIONS AND RECOMMENDATIONS FOR CORRECTIVE ACTION, DATE AND AMOUNT OF RAINFALL EVENTS GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD.
- MINIMUM MAINTENANCE**
 - SILT FENCE TO BE REPAIRED, REPLACED, SUPPLEMENTED WHEN NONFUNCTIONAL, OR 1/3 FULL; WITHIN 24 HOURS
 - SEDIMENT BASINS DRAINED AND SEDIMENT REMOVED WHEN REACHES 1/2 STORAGE VOLUME. REMOVAL MUST BE COMPLETE WITHIN 72 HOURS OF DISCOVERY.
 - SEDIMENT REMOVED FROM SURFACE WATERS WITHIN 72 SEVEN DAYS
 - CONSTRUCTION SITE EXITS INSPECTED, TRACKED SEDIMENT REMOVED WITH 24 HOURS.
 - PROVIDE COPIES OF EROSION INSPECTION RESULTS TO CITY ENGINEER FOR ALL RAIN EVENTS GREATER THAN 0.5" OVER 24 HOURS
- THE SWPPP, INCLUDING ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION ACTIVITY BY THE PERMITEES WHO HAVE OPERATIONAL CONTROL OF THE SITE.
- OWNER MUST KEEP RECORDS OF ALL PERMITS REQUIRED FOR THE PROJECT, THE SWPPP, ALL INSPECTIONS AND MAINTENANCE, PERMANENT OPERATION AND MAINTENANCE AGREEMENTS, AND REQUIRED CALCULATIONS FOR TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS. THESE RECORDS MUST BE RETAINED FOR THREE YEARS AFTER FILING NPDES NOTICE OF TERMINATION.
- SWPPP MUST BE AMENDED WHEN:**
 - THERE IS A CHANGE IN DESIGN, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT HAS A SIGNIFICANT EFFECT ON DISCHARGE
 - INSPECTIONS INDICATE THAT THE SWPPP IS NOT EFFECTIVE AND DISCHARGE IS EXCEEDING WATER QUALITY STANDARDS.
 - THE BMPS IN THE SWPPP ARE NOT CONTROLLING POLLUTANTS IN DISCHARGES OR IS NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THE PERMIT
 - AT ANY TIME AFTER PERMIT COVERAGE IS EFFECTIVE, THE MPCA MAY DETERMINE THAT THE PROJECT'S STORMWATER DISCHARGES MAY CAUSE, HAVE REASONABLE POTENTIAL TO CAUSE, OR CONTRIBUTE TO NON-ATTAINMENT OF ANY APPLICABLE WATER QUALITY STANDARD, OR THAT THE SWPPP DOES NOT INCORPORATE THE APPLICABLE REQUIREMENTS IN PART III.A.8., IMPAIRED WATERS AND TDS(S). IF A WATER QUALITY STANDARD CHANGES DURING THE TERM OF THIS PERMIT, THE MPCA WILL MAKE A DETERMINATION AS TO WHETHER A MODIFICATION OF THE SWPPP IS NECESSARY TO ADDRESS THE NEW STANDARD. IF THE MPCA MAKES SUCH DETERMINATION(S) OR ANY OF THE DETERMINATIONS IN PARTS III.B.1.-3., THE MPCA WILL NOTIFY THE PERMITEE(S) IN WRITING. IN RESPONSE, THE PERMITEE(S) MUST AMEND THE SWPPP TO ADDRESS THE IDENTIFIED CONCERNS AND SUBMIT INFORMATION REQUESTED BY THE MPCA, WHICH MAY INCLUDE AN INDIVIDUAL PERMIT APPLICATION. IF THE MPCA'S WRITTEN NOTIFICATION REQUIRES A RESPONSE, FAILURE TO RESPOND WITHIN THE SPECIFIED TIMEFRAME CONSTITUTES A PERMIT VIOLATION.
- CONCRETE WASHOUT AREA**
 - CONTRACTOR TO PROVIDE PREFABRICATED CONCRETE WASH-OUT CONTAINER WITH RAIN PROTECTION PER PLAN.
 - CONCRETE WASH-OUT TO BE IDENTIFIED WITH SIGNAGE STATING "CONCRETE WASHOUT AREA DO NOT OVERFILL"
 - CONCRETE WASHOUT WATER NEEDS TO BE PUMPED WITHIN 24 HOURS OF STANDING WATER IN WASHOUT AREA.
- IN THE EVENT OF ENCOUNTERING A WELL OR SPRING DURING CONSTRUCTION CONTRACTOR TO CEASE CONSTRUCTION ACTIVITY AND NOTIFY ENGINEER.
- PIPE OUTLETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS AFTER CONNECTION TO SURFACE WATER.
- TEMPORARY AND PERMANENT SOIL STABILIZATION**
 - TEMPORARY SOIL STABILIZATION MEASURES SHALL CONSIST OF SEEDING.
 - PERMANENT SOIL STABILIZATION SHALL CONSIST OF HYDRO MULCH OR STRAW MULCH.
 - 7 DAY STABILIZATION TIME FRAME IS REQUIRED FOR ALL EXPOSED SOILS THAT ARE DORMANT OR NOT BEING WORKED WITHIN THE 7 DAY WINDOW.
- FINAL STABILIZATION**
FINAL STABILIZATION REQUIRES THAT ALL SOIL DISTURBING ACTIVITIES HAVE BEEN COMPLETED AND THAT DISTURBED AREAS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH 70% OF THE EXPECTED FINAL DENSITY, AND THAT ALL PERMANENT PAVEMENTS HAVE BEEN INSTALLED. ALL TEMPORARY BMPS SHALL BE REMOVED, DITCHES

- STABILIZED, AND SEDIMENT SHALL BE REMOVED FROM PERMANENT CONVEYANCES AND SEDIMENTATION BASINS IN ORDER TO RETURN THE POND TO DESIGN CAPACITY.
- TEMPORARY SEDIMENTATION BASINS**
 - THE TEMPORARY SEDIMENTATION BASINS SHALL BE CONSTRUCTED AND MADE OPERATIONAL PRIOR TO DISTURBANCE OF 10 OR MORE ACRES DRAINING TO A COMMON LOCATION.
 - TEMPORARY SEDIMENTATION BASINS ARE REQUIRED PRIOR TO RUNOFF LEAVING THE CONSTRUCTION SITE OR ENTERING SURFACE WATERS WHEN 5 OR MORE ACRES OF DISTURBED SOILS DRAIN TO A COMMON LOCATION. SINCE THE SITE IS WITHIN ONE MILE OF IMPAIRED WATER BODY, THE BASIN MUST PROVIDE 3,600 CUBIC FEET OF STORAGE BELOW THE OUTLET PER ACRE DRAINED. IF HYDRAULIC CALCULATIONS ARE AVAILABLE, THE TEMPORARY SEDIMENTATION BASIN MUST PROVIDE A STORAGE VOLUME EQUIVALENT TO THE 2-YEAR, 24-HOUR STORM, BUT IN NO CASE LESS THAN 1800 CUBIC FEET PER ACRE DRAINED. THE TEMPORARY SEDIMENTATION BASIN MUST BE CONSTRUCTED AND MADE OPERATIONAL CONCURRENT WITH THE START OF SOIL DISTURBANCE UP GRADIENT OF THE POND. THE TEMPORARY SEDIMENTATION BASIN SHALL BE DESIGNED TO PREVENT SHORT CIRCUITING, THE OUTFALL SHALL BE DESIGNED TO REMOVE FLOATABLE DEBRIS, ALLOW FOR COMPLETE DRAWDOWN OF THE POND FOR MAINTENANCE ACTIVITIES, AND HAVE ENERGY DISSIPATION. THE EMERGENCY SPILLWAY SHALL BE STABILIZED.
 - TEMPORARY SEDIMENTATION BASINS SHALL BE SITUATED OUTSIDE OF SURFACE WATERS AND ANY REQUIRED BUFFER ZONE, AND MUST BE DESIGNED TO AVOID DRAINING WETLANDS, UNLESS THE IMPACT IS IN COMPLIANCE WITH THE REQUIREMENTS OF THIS PERMIT.
 - EXCESSIVE SEDIMENT-LADEN WATER THAT IS NOT PROPERLY FILTERED WILL NOT BE PERMITTED TO DISCHARGE FROM SITE.
- DEWATERING AND BASIN DRAINING**
 - TURBID OR SEDIMENT-LADEN WATERS RELATED TO DEWATERING OR BASIN DRAINING SHALL BE DISCHARGED TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN ON THE PROJECT SITE UNLESS INFEASIBLE. THE TEMPORARY OR PERMANENT BASIN MAY DISCHARGE TO SURFACE WATERS IF THE BASIN WATER HAS BEEN VISUALLY CHECKED TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED IN THE BASIN AND THAT THE NUISANCE CONDITIONS WILL NOT RESULT FROM THE DISCHARGE. DISCHARGE POINTS SHALL BE ADEQUATELY PROTECTED FROM EROSION AND PROPER VELOCITY DISSIPATION PROVIDED.
 - ALL WATER FROM DEWATERING OR BASIN-DRAINING ACTIVITIES MUST BE DISCHARGED IN A MANNER THAT DOES NOT CAUSE NUISANCE CONDITIONS, EROSION IN THE RECEIVING CHANNELS OR ON DOWN SLOPE FOR DISPOSAL, OR INUNDATION IN WETLANDS CAUSING SIGNIFICANT ADVERSE IMPACTS TO THE WETLAND.
 - IF FILTERS WITH BACKWASH WATERS ARE USED, THE BACKWASH WATER SHALL BE HAULED AWAY FOR DISPOSAL, RETURNED TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATED INTO SITE IN A MANNER THAT DOES NOT CAUSE EROSION. BACKWASH WATER MAY BE DISCHARGED TO SANITARY SEWER IF PERMISSION IS GRANTED BY THE SANITARY SEWER AUTHORITY.
- POLLUTION PREVENTION**
 - BUILDING PRODUCTS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS MUST BE UNDER COVER TO PREVENT DISCHARGE OR PROTECTED BY AN EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
 - PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPE MATERIALS MUST BE UNDER COVER.
 - HAZARDOUS MATERIALS AND TOXIC WASTE CONTAINER MUST BE PROVIDED TO PREVENT VANDALISM.
 - SOLID WASTE MUST BE STORED, COLLECTED AND DISPOSED OF IN COMPLIANCE WITH MINN. R. CH 7035.
 - PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE DISPOSED OF PROPERLY IN ACCORDANCE WITH MINN. R. CH 7041.
 - DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED SHALL BE PREVENTED USING DRIP PANS OR ABSORBENTS. SUPPLIES SHALL BE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS AND THAT AN APPROPRIATE DISPOSAL METHOD MUST BE AVAILABLE FOR RECOVERED SPILLED MATERIALS.
- DESIGN CALCULATIONS**
TEMPORARY & PERMANENT STORMWATER TREATMENT ARE DESIGNED TO MEET MPCA GENERAL & SPECIAL WATER REQUIREMENTS. CALCULATIONS ARE PART OF THE HYDROLOGY REPORT, WHICH IS TO BE CONSIDERED PART OF THE SWPPP DOCUMENTS. SEE HYDROLOGY REPORT FOR ADDITIONAL INFORMATION.
- GENERAL STORMWATER DISCHARGE REQUIREMENTS**
ALL REQUIREMENTS LISTED IN PART III OF THE PERMIT FOR DESIGN OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM AND DISCHARGE HAVE BEEN INCLUDED IN THE PREPARATION OF THIS SWPPP. THESE INCLUDE BUT ARE NOT LIMITED TO:
 - THE EXPECTED AMOUNT, FREQUENCY, INTENSITY, AND DURATION PRECIPITATION.
 - THE NATURE OF STORMWATER RUNOFF AND RUN-ON AT THE SITE.
 - PEAK FLOW RATES AND STORMWATER VOLUMES TO MINIMIZE EROSION AT OUTLETS AND DOWNSTREAM CHANNEL AND STREAM BANK EROSION.
 - THE RANGE OF SOIL PARTICLE SIZES EXPECTED TO BE PRESENT ON THE SITE.
- CONSTRUCTION OF FILTRATION BASINS**
 - NO HEAVY TRAFFIC ON FILTRATION AREAS. CONSTRUCTION TO BE DONE WITH MINIMAL COMPACTION TO FILTRATION AREAS. IF COMPACTION IS ENCOUNTERED, BASIN SOILS MUST BE REMOVED & RELAND.
 - INFILTRATION SYSTEMS MUST NOT BE EXCAVATED TO FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAD BEEN CONSTRUCTED AND FULLY STABILIZED UNLESS RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS ARE PROVIDED (PART III.D.1.C.).
 - WHEN AN INFILTRATION SYSTEM IS EXCAVATED TO FINAL GRADE (OR WITHIN THREE (3) FEET OF FINAL GRADE), THE PERMITEES MUST EMPLOY RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS (E.G., DIVERSION BERM(S) TO KEEP SEDIMENT AND RUNOFF COMPLETELY AWAY FROM THE INFILTRATION AREA. THE AREA MUST BE STAKED OFF AND MARKED SO THAT HEAVY CONSTRUCTION VEHICLES OR EQUIPMENT WILL NOT COMPACT THE SOIL IN THE PROPOSED INFILTRATION AREA.
 - TO PREVENT CLOGGING OF THE INFILTRATION OR FILTRATION SYSTEM, THE PERMITEES MUST USE A PRE-TREATMENT DEVICE SUCH AS A VEGETATED FILTER STRIP, SMALL SEDIMENTATION BASIN, OR WATER QUALITY INLET (E.G., GRIT CHAMBER) TO SETTLE PARTICULATES BEFORE THE STORMWATER DISCHARGES INTO THE INFILTRATION OF FILTRATION SYSTEM.
- POST CONSTRUCTION**
THE WATER QUALITY VOLUME THAT MUST BE RETAINED ON SITE BY THE PROJECT'S PERMANENT STORMWATER MANAGEMENT SYSTEM DESCRIBED IN PART III.D, SHALL BE ONE (1) INCH OF RUNOFF FROM THE NEW IMPERVIOUS SURFACES CREATED BY THE PROJECT. SEE PART III.D.1. FOR MORE INFORMATION ON INFILTRATION DESIGN, PROHIBITIONS AND APPROPRIATE SITE CONDITIONS.
- RESPONSIBILITIES**
 - THE OWNER MUST IDENTIFY A CONTRACTOR WHO WILL OVERSEE THE SWPPP IMPLEMENTATION AND THE PERSON RESPONSIBLE FOR INSPECTION AND MAINTENANCE.
 - THE OWNER MUST IDENTIFY THE A PERSON WHO WILL BE RESPONSIBLE FOR LONG TERM OPERATIONS AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM.
 - UPON ACCEPTANCE BY THE CITY, ALL STORMWATER FACILITIES WILL BE PUBLIC AND MAINTAINED BY THE CITY.
- TRAINING REQUIREMENTS**
THE PERMITEE(S) SHALL ENSURE THE FOLLOWING INDIVIDUALS IDENTIFIED IN THIS PART HAVE BEEN TRAINED IN ACCORDANCE WITH THIS PERMIT'S TRAINING REQUIREMENTS.
 - WHO MUST BE TRAINED:
 - INDIVIDUAL(S) PREPARING THE SWPPP FOR THE PROJECT
 - INDIVIDUAL(S) OVERSEEING IMPLEMENTATION, OR, REVISING, AND AMENDING THE SWMP AND INDIVIDUAL(S) PERFORMING INSPECTIONS AS REQUIRED IN PART IV.E. ONE OF THESE INDIVIDUAL(S) MUST BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE MPCA.
 - INDIVIDUAL(S) PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF BMPS, AT LEAST ONE INDIVIDUAL ON A PROJECT MUST BE TRAINED IN THE JOB DUTIES.
 - TRAINING CONTENT:
 - THE CONTENT AND EXTENT OF TRAINING MUST BE COMMENSURATE WITH THE INDIVIDUAL'S JOB DUTIES AND RESPONSIBILITIES WITH REGARD TO ACTIVITIES COVERED UNDER THIS PERMIT FOR THE PROJECT. AT LEAST ONE INDIVIDUAL PRESENT ON THE PERMITTED PROJECT SITE OR AVAILABLE TO THE PROJECT SITE IN 72 HOURS MUST BE TRAINED IN THE JOB DUTIES DESCRIBED IN PART III.F.1.B. AND PART III.F.1.C.
 - THE PERMITEE(S) SHALL ENSURE THAT THE INDIVIDUALS ARE TRAINED BY LOCAL, STATE, FEDERAL AGENCIES, PROFESSIONAL OR OTHER ENTITIES WITH EXPERTISE IN EROSION PREVENTION, SEDIMENT CONTROL, PERMANENT STORMWATER MANAGEMENT AND THE MINNESOTA NPDES/SOCS CONSTRUCTION STORMWATER PERMIT. AN UPDATE REFRESHER TRAINING MUST BE ATTENDED EVERY THREE (3) YEARS STARTING THREE (3) YEARS FROM THE ISSUANCE DATE OF THIS PERMIT.

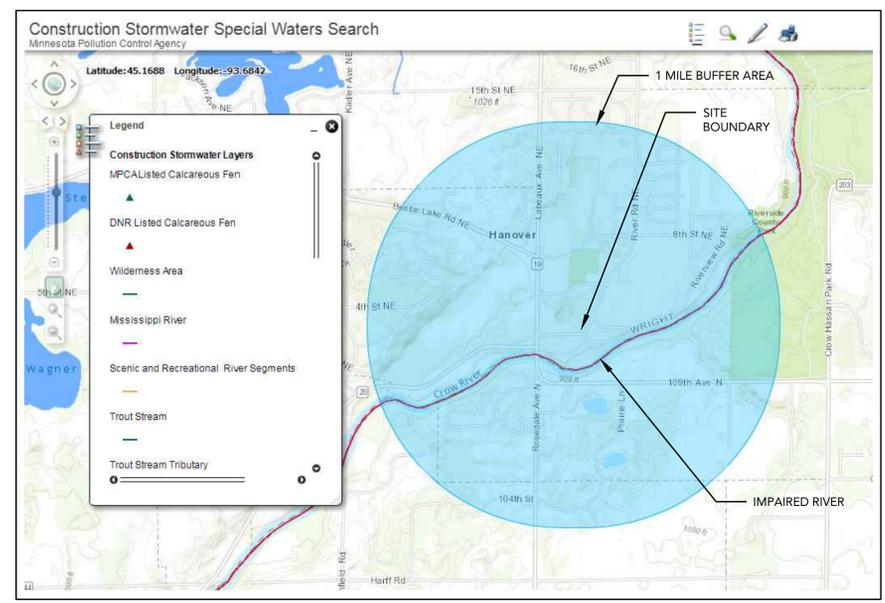
LIST OF CONTACTS

TITLE	CONTACT	COMPANY	PHONE NUMBER
OWNER	JOSH JACOBS	WITS REALTY	612-859-0354
PROJECT MANAGER	TODD MCLOUTH	LOUCKS	763-496-6742
SWPPP DESIGNER	ZACH WEBBER	LOUCKS	763-496-6753
CONTRACTOR	TBD		
SITE MANAGER	TBD		

UNIVERSITY OF MINNESOTA
Zachary H. Webber
Design of Construction SWPPP (May 31 2021)

* MPCA 24HR. HAZARDOUS SPILL HOTLINE: 651-649-5457 OF 80420798

SPECIAL AND IMPAIRED WATERS MAP



ESTIMATED QUANTITIES

DESCRIPTION	UNIT	QUANTITY
TEMPORARY ROCK CONSTRUCTION ENTRANCE	EA	1
SILT FENCE (STANDARD)	LF	±730
STAGE 2 SILT FENCE (STANDARD)	LF	±745
INLET PROTECTION	EA	12
WOODFIBER BLANKET	SY	-
CONCRETE WASHOUT	EA	-
BIOROLL	LF	-

PERMANENT STORMWATER MANAGEMENT

X	INFILTRATION
	STORMWATER HARVEST AND REUSE
	FILTRATION
X	WET SEDIMENTATION BASIN
	REGIONAL PONDING

RECEIVING WATERS

NAME OF WATER BODY	TYPE OF WATER BODY	SPECIAL WATER	IMPAIRED WATER	TYPE OF SPECIAL WATER

EROSION CONTROL NOTES

- ALL STREETS IN AND ADJACENT TO THE PROJECT SHALL REMAIN CLEAN AND PASSABLE AT ALL TIMES.
- A STABILIZED CONSTRUCTION ENTRANCE WILL BE PLACED AT ALL ENTRANCES THAT LEAD TO THE PROJECT SITE IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN AND THE APPROVED DETAILS.
- SEDIMENT CONTROLS MUST BE IN PLACE AND APPROVED BY THE ENGINEER BEFORE ANY PHASE OF CONSTRUCTION CAN BEGIN.
- INLET PROTECTION WILL BE INSTALLED AT ALL CATCH BASINS WITHIN THE PROJECT AREA PER STANDARD DETAILS UNTIL THE SITE IS STABILIZED.
- PIPE OUTLETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS AFTER CONNECTION TO SURFACE WATER.
- STABILIZATION OF DISTURBED AREAS SHALL BE DONE BY PERMANENT TURF ESTABLISHMENT WHENEVER POSSIBLE.
- IN THE EVENT THAT PERMANENT STABILIZATION CANNOT BE IMPLEMENTED WITHIN 7 DAYS AFTER CONSTRUCTION ACTIVITY IN THE DISTURBED AREA HAS CEASED, TEMPORARY STABILIZATION BMPS MUST BE SCHEDULED TO OCCUR WITHIN THAT 7 DAY TIME FRAME. RAPID STABILIZATION METHOD 4 SHALL BE EMPLOYED WITHIN 200 FEET OF THE NORMAL WETTED PERIMETER OF ALL DISCHARGE POINTS WITHIN 24 HOURS.
- ALL STOCKPILES MUST HAVE PERIMETER SEDIMENT CONTROL IMPLEMENTED AND MAINTAINED AT ALL TIMES. STOCKPILES SHALL RECEIVE TEMPORARY STABILIZATION IF UNWORKED FOR 7 DAYS.
- CONCRETE SLURRY FROM REMOVAL OPERATIONS MUST BE VACUUMED UP IMMEDIATELY. NO CONCRETE WASHOUT SHALL COME IN CONTACT WITH THE GROUND AND MUST BE PROPERLY DISPOSED OF.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MAY BE ADDED DURING ANY PHASE OF CONSTRUCTION AS DIRECTED BY THE ENGINEER.
- CONTRACTOR MUST SUBMIT A DEWATERING PLAN TO THE ENGINEER FOR APPROVAL 10 DAYS PRIOR TO ANY DEWATERING ON SITE. THE PLAN MUST INCLUDE A DEWATERING SYSTEM PRIOR TO DISCHARGING INTO RECEIVING WATER. THE DEWATERING PLAN MUST ENSURE THAT THE DISCHARGE WATER IS FREE OF SEDIMENT AND TURBID WATER IN ACCORDANCE WITH THE PROJECT SPEC. THE DEWATERING PLAN MUST ALSO INCLUDE A COMPONENT FOR ONSITE TESTING AND MONITORING OF TURBIDITY AND PH.
- RAPID STABILIZATION #4 WITH CATEGORY 3N BLANKET ON SIDE SLOPES 3:1 OR STEEPER.
- TEMPORARY OR PERMANENT STABILIZATION AND DOWN GRADIENT PERIMETER SEDIMENT CONTROL IS NEEDED ON ROW, CURB, AND GUTTER LINE.

RIVER TOWN VILLAS OF HANOVER
11218 CHURCH STREET NE
HANOVER, MN 55341

WITS REALTY
1010 W. LAKE STREET
SUITE 200
MINNEAPOLIS, MN 55408

LOUCKS
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksin.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional service for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

02/22/19 PRELIMINARY SUBMITTAL

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer in the State of Minnesota.
Todd W. McLouth - PE
License No. 20383
Date

QUALITY CONTROL

Loucks Project No. 03128A
Project Lead TWM
Drawn By KMM
Checked By TWM
Review Date

SHEET INDEX

C1-1	EXISTING CONDITIONS
C1-2	PRELIMINARY PLAT
C2-1	SITE PLAN
C3-1	GRADING PLAN
C3-2, C3-3	SWPPP PLAN & NOTES
C4-1	UTILITY PLAN
C8-1, C8-2	CIVIL DETAILS
L1-1	LANDSCAPE PLAN
L2-2	TREE INVENTORY PLAN

SWPPP NOTES
C3-3

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

02/22/19 PRELIMINARY SUBMITTAL

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer in the State of Minnesota.

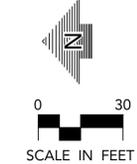
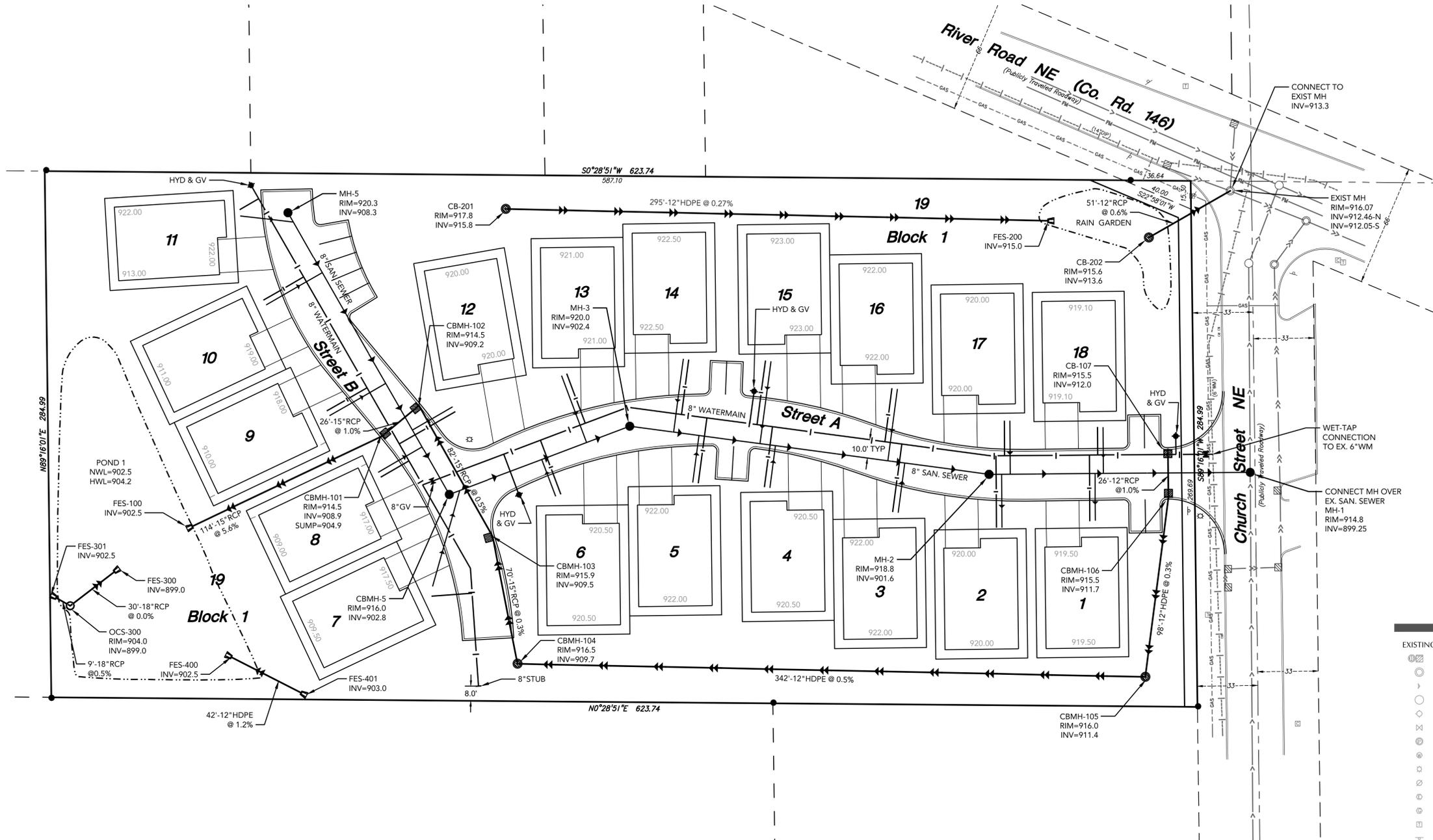
PRELIMINARY
Todd W. McLoth - PE
License No. 20383
Date

QUALITY CONTROL

Loucks Project No. 03128A
Project Lead TWM
Drawn By KMM
Checked By TWM
Review Date

SHEET INDEX

C1-1 EXISTING CONDITIONS
C1-2 PRELIMINARY PLAT
C2-1 SITE PLAN
C3-1 GRADING PLAN
C3-2 - C3-3 SWPPP PLAN & NOTES
C4-1 UTILITY PLAN
C8-1 - C8-2 CIVIL DETAILS
L1-1 LANDSCAPE PLAN
L2-2 TREE INVENTORY PLAN



EXISTING	PROPOSED	LEGEND
		CATCH BASIN
		STORM MANHOLE
		FLARED END SECTION
		SANITARY MANHOLE
		HYDRANT
		GATE VALVE
		POST INDICATOR VALVE
		WATER MANHOLE / WELL
		LIGHT POLE
		POWER POLE
		ELECTRIC METER
		GAS METER
		TELEPHONE PEDESTAL
		SIGN
		BENCHMARK
		SOIL BORING
		PARKING STALL COUNT
		ACCESSIBLE PARKING STALL
		STORM SEWER
		DRAIN TILE
		SANITARY SEWER
		FORCE MAIN
		WATERMAIN
		SANITARY SEWER SERVICE
		WATER SERVICE
		UNDERGROUND ELECTRIC
		UNDERGROUND FIBER OPTIC
		UNDERGROUND GAS
		UNDERGROUND TELEPHONE
		OVERHEAD UTILITY
		FENCE
		CHAIN LINK FENCE
		CONCRETE CURB
		RETAINING WALL
		CONCRETE
		NO PARKING
		BUILDING
		CONTOUR
		SPOT ELEVATION
		DIRECTION OF FLOW
		TREE LINE
		PARKING SETBACK LINE
		BUILDING SETBACK LINE

UTILITY NOTES

PROPOSED PIPE MATERIALS:
 WATERMAIN CL 52 DIP 6" TO 8" DIAMETER
 SANITARY SEWER PVC SDR 35 & SCH 40 6" TO 8" DIAMETER
 STORM SEWER DUAL WALL HDPE 12" TO 15" DIAMETER
 RCP, CLASS 5 12" TO 18" DIAMETER

PROJECT BENCHMARK

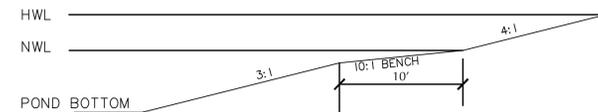
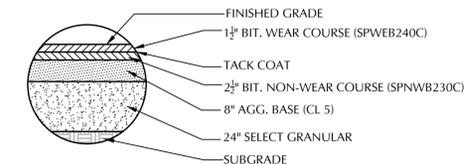
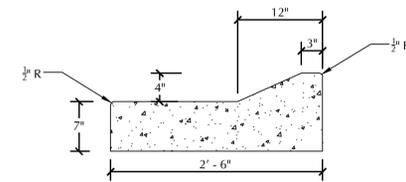
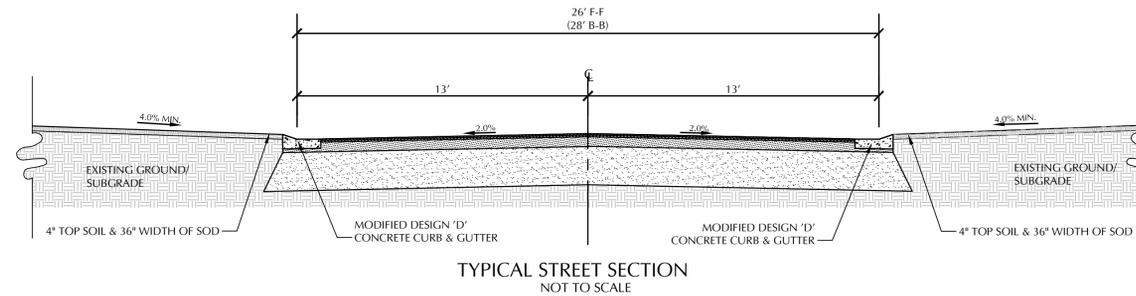
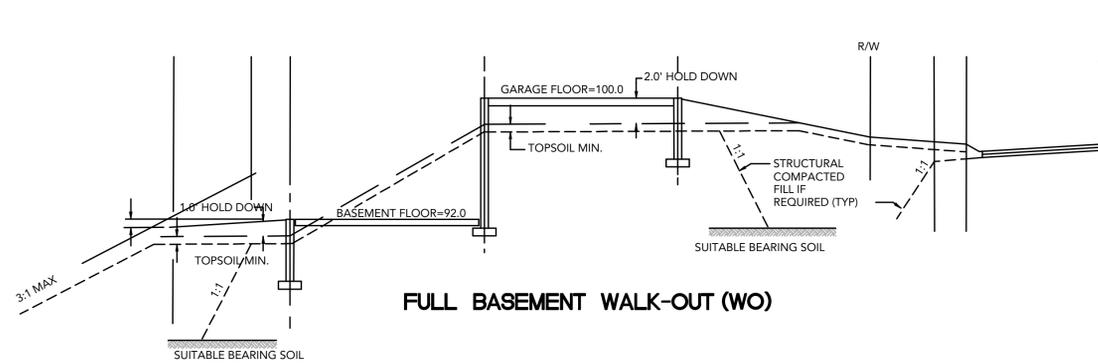
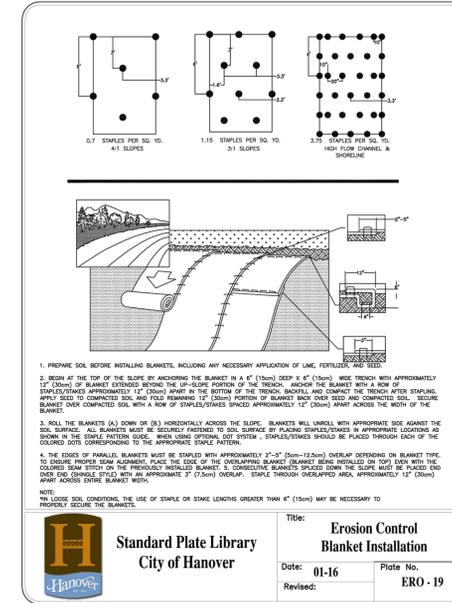
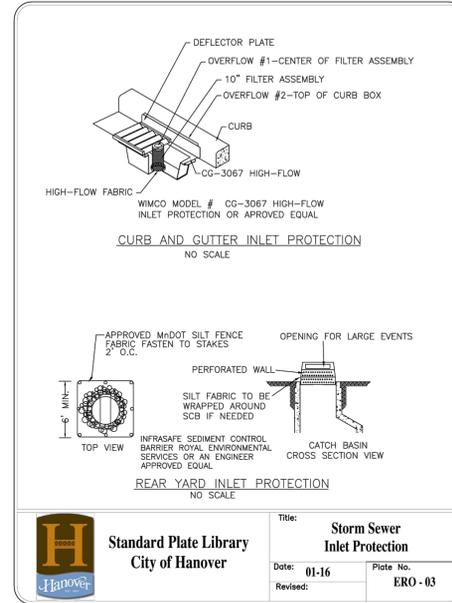
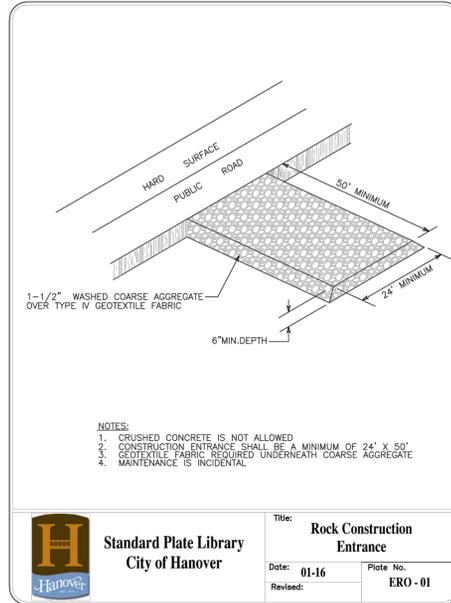
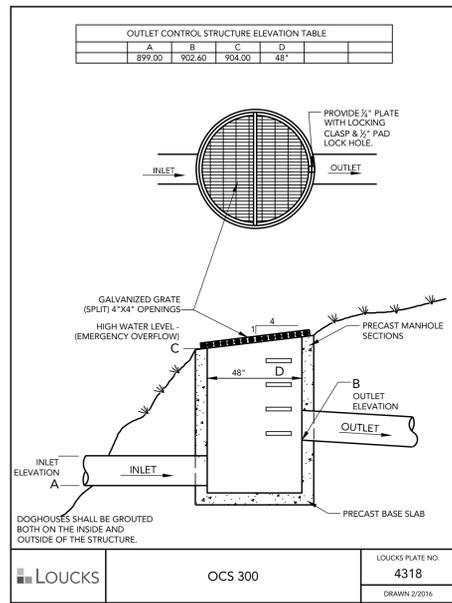
SITE BENCHMARK: TOP NUT OF HYDRANT LOCATED AT INTERSECTION OF CHURCH ST NE & RIVER ROAD NE. ELEVATION = 920.32 FEET (NGVD/29)

CALL BEFORE YOU DIG!
Gopher State One Call
 TWIN CITY AREA: 651-454-0002
 TOLL FREE: 1-800-252-1166

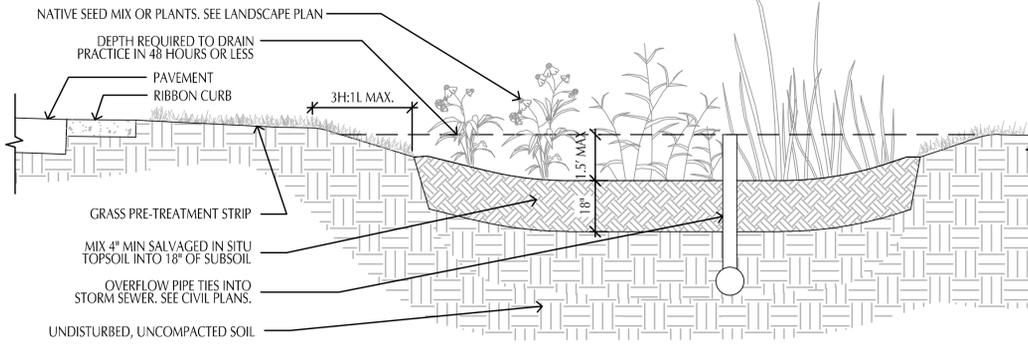
WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND /OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



- GENERAL NOTES
- IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THIS MATERIAL SHALL BE REMOVED FROM THE PRACTICE PRIOR TO CONTINUING CONSTRUCTION.
 - GRADING OF BIORETENTION DEVICES SHALL BE ACCOMPLISHED USING LOW-COMPACTION EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF UNDERLYING SOILS. ALL CONSTRUCTION OF BIORETENTION DEVICES SHOULD BE DONE FROM LOCATIONS OUTSIDE OF THE BIORETENTION DEVICE TO REDUCE COMPACTION OF SOILS, IF POSSIBLE.
 - ALL SUB MATERIALS BELOW THE SPECIFIED BIORETENTION DEPTH (ELEVATION) SHALL BE UNDISTURBED, UNLESS OTHERWISE NOTED.
- CONSTRUCTION SEQUENCING
- INSTALL SILT FENCE AND/OR OTHER APPROPRIATE TEMPORARY EROSION CONTROL DEVICES TO PREVENT SEDIMENT FROM LEAVING OR ENTERING THE PRACTICE DURING CONSTRUCTION.
 - PERFORM CONTINUOUS INSPECTIONS OF EROSION CONTROL PRACTICES.
 - INSTALL UTILITIES (WATER, SANITARY SEWER, ELECTRIC, PHONE, FIBER OPTIC, ETC) PRIOR TO SETTING FINAL GRADE OF BIORETENTION DEVICE.
 - ROUGH GRADE THE SITE. IF BIORETENTION AREAS ARE BEING USED AS TEMPORARY SEDIMENT BASINS LEAVE A MINIMUM OF 3 FEET OF COVER OVER THE PRACTICE TO PROTECT THE UNDERLYING SOILS FROM CLOGGING.
 - PERFORM ALL OTHER SITE IMPROVEMENTS. PLANT AND MULCH ALL AREAS AFTER DISTURBANCE.
 - CONSTRUCT BIORETENTION DEVICE UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA.
 - IMPLEMENT TEMPORARY AND PERMANENT EROSION CONTROL PRACTICES.
 - PLANT AND MULCH BIORETENTION DEVICE.
 - REMOVE TEMPORARY EROSION CONTROL DEVICES AFTER THE CONTRIBUTING DRAINAGE AREA IS ADEQUATELY VEGETATED.



1 BIOFILTRATION GARDEN

SCALE: 1/2" = 1'-0"

C8-2

RIVER TOWN
VILLAS OF
HANOVER

11218 CHURCH STREET NE
HANOVER, MN 55341

WITS REALTY

1010 W. LAKE STREET
SUITE 200
MINNEAPOLIS, MN 55408

LOUCKS

PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.louckscinc.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

02/22/19 PRELIMINARY SUBMITTAL

PROFESSIONAL SIGNATURE

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

PRELIMINARY

Todd W. McLaughlin - PE

License No. 20383

Date

QUALITY CONTROL

Loucks Project No. 03128A

Project Lead TWMM

Drawn By KMM

Checked By TWMM

Review Date

SHEET INDEX

C1-1 EXISTING CONDITIONS

C1-2 PRELIMINARY PLAT

C2-1 SITE PLAN

C3-1 GRADING PLAN

C3-2 - C3-3 SWPPP PLAN & NOTES

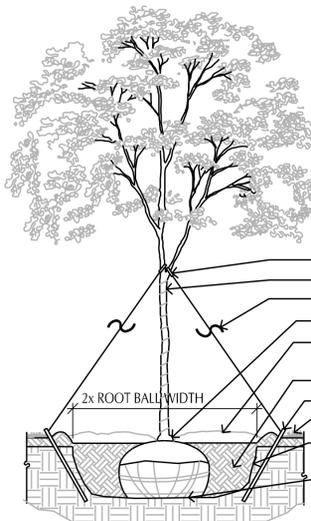
C4-1 UTILITY PLAN

C8-1 CIVIL DETAILS

L1-1 - C8-2 LANDSCAPE PLAN

L2-2 TREE INVENTORY PLAN

DETAILS
C8-2



THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TREES IN A PLUMB POSITION THROUGH THE WARRANTY PERIOD. STAKING IS SUGGESTED, BUT NOT REQUIRED. ANY STAKING MUST CONFORM WITH PRACTICES AS DEFINED IN A.N.A. GUIDELINES FOR STANDARD PRACTICES

PRUNE DAMAGED AND CROSSING BRANCHES AFTER PLANTING IS COMPLETE.

CUT BACK WIRE BASKET

WATER TREE THOROUGHLY DURING PLANTING OPERATIONS. PLACE BACKFILL IN 8-12" LIFTS AND SATURATE SOIL WITH WATER. DO NOT COMPACT MORE THAN NECESSARY TO MAINTAIN PLUMB.

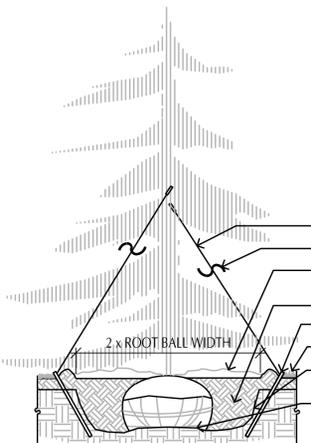
- 16"x2" POLYPROPYLENE OR POLYETHYLENE STRAP
- TREE WRAP TO FIRST BRANCH
- SAFETY FLAGGING - ONE PER WIRE
- ROOT FLARE EVEN WITH OR JUST ABOVE GRADE.
- MULCH - 4" DEEP. NO MULCH IN CONTACT WITH TRUNK - SEE NOTES OR SPECS.
- BACKFILL WITH IN SITU TOPSOIL
- WOOD STAKE (OPTIONAL)
- EDGE VARIES - SEE PLAN
- SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING
- SET PLANT ON UNDISTURBED NATIVE SOIL

CONTRACTOR IS RESPONSIBLE FOR TESTING PERCOLATION RATES PRIOR TO PLANTING. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY IF POOR DRAINAGE EXISTS.

1 DECIDUOUS TREE PLANTING DETAIL

L1-1 SCALE: 1/2" = 1'-0"

Deciduous Tree.DWG



THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TREES IN A PLUMB POSITION THROUGH THE WARRANTY PERIOD. STAKING IS SUGGESTED, BUT NOT REQUIRED. ANY STAKING MUST CONFORM WITH PRACTICES AS DEFINED IN A.N.A. GUIDELINES FOR STANDARD PRACTICES.

PRUNE ANY DAMAGED BRANCHES AFTER PLANTING IS COMPLETE.

WATER TREE THOROUGHLY DURING PLANTING OPERATIONS. PLACE BACKFILL IN 8-12" LIFTS AND SATURATE SOIL WITH WATER. DO NOT COMPACT MORE THAN NECESSARY TO MAINTAIN PLUMB.

- 16"x2" POLYPROPYLENE OR POLYETHYLENE STRAP
- SAFETY FLAGGING - ONE PER WIRE
- MULCH - 4" DEEP - SEE NOTES OR SPECS. MULCH MUST NOT BE IN CONTACT WITH TRUNK.
- BACKFILL WITH IN SITU TOPSOIL
- WOOD STAKE (OPTIONAL)
- EDGE VARIES - SEE PLAN
- SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING
- ROOT BALL SET ON UNDISTURBED SUBGRADE

CONTRACTOR IS RESPONSIBLE FOR TESTING PERCOLATION RATES PRIOR TO PLANTING. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY IF POOR DRAINAGE EXISTS.

2 CONIFEROUS TREE PLANTING DETAIL

L1-1 SCALE: 1/2" = 1'-0"

Coniferous Tree.DWG

GENERAL NOTES:

CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID. HE SHALL INSPECT SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS RELATING TO THE NATURE AND SCOPE OF WORK.

VERIFY LAYOUT AND ANY DIMENSIONS SHOWN AND BRING TO THE ATTENTION OF THE LANDSCAPE ARCHITECT ANY DISCREPANCIES WHICH MAY COMPROMISE THE DESIGN AND/OR INTENT OF THE PROJECT'S LAYOUT.

ASSURE COMPLIANCE WITH ALL APPLICABLE CODES AND REGULATIONS GOVERNING THE WORK OR MATERIALS SUPPLIED.

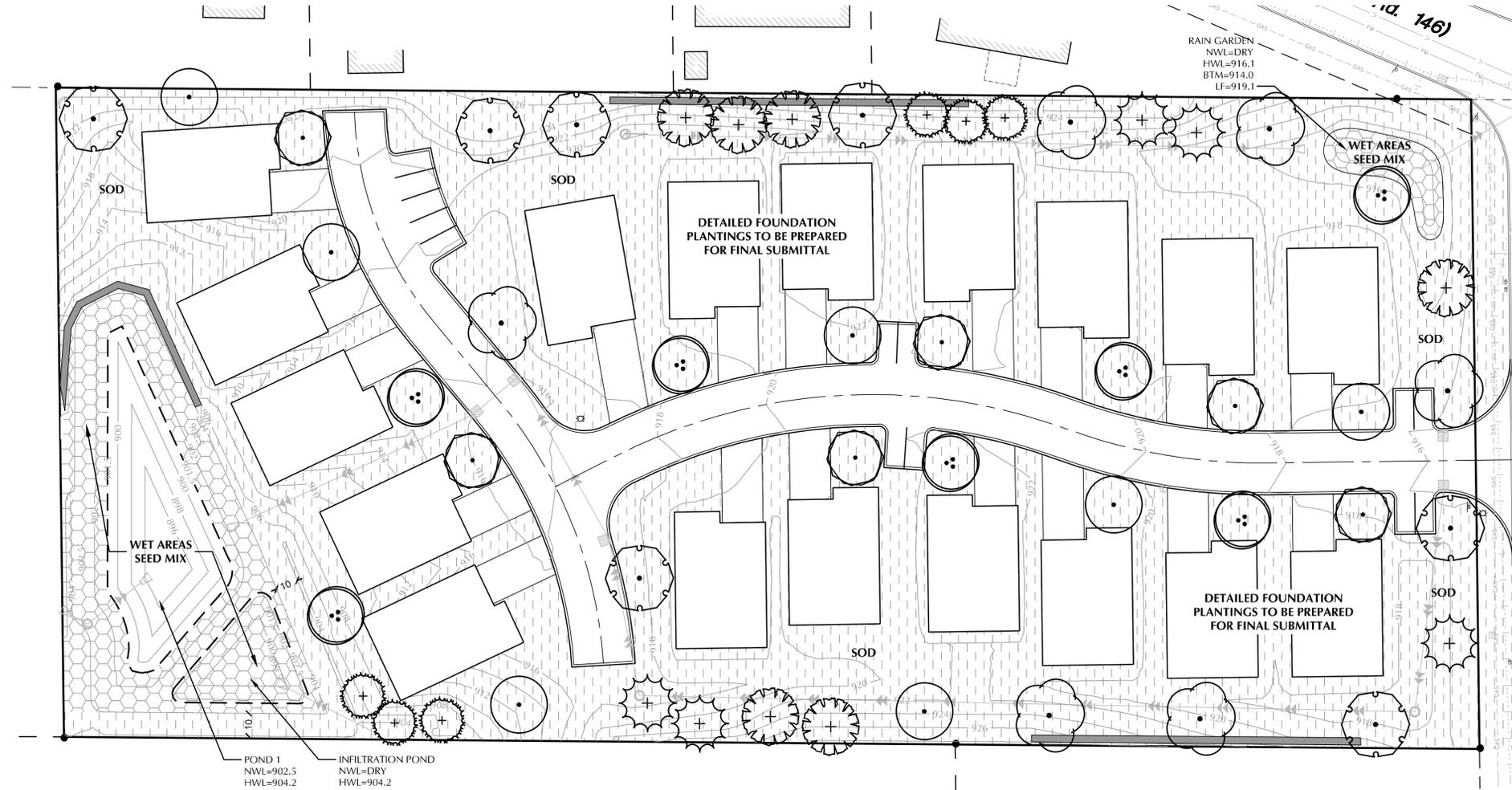
CONTRACTOR SHALL PROTECT ALL EXISTING ROADS, CURBS/GUTTERS, TRAILS, TREES, LAWNS AND SITE ELEMENTS DURING PLANTING OPERATIONS. ANY DAMAGE TO SAME SHALL BE REPAIRED AT NO COST TO THE OWNER.

CONTRACTOR SHALL VERIFY ALIGNMENT AND LOCATION OF ALL UNDERGROUND AND ABOVE GRADE UTILITIES AND PROVIDE THE NECESSARY PROTECTION FOR SAME BEFORE CONSTRUCTION / MATERIAL INSTALLATION BEGINS (MINIMUM 10' - 0" CLEARANCE).

ALL UNDERGROUND UTILITIES SHALL BE LAID SO THAT TRENCHES DO NOT CUT THROUGH ROOT SYSTEMS OF ANY EXISTING TREES TO REMAIN.

EXISTING CONTOURS, TRAILS, VEGETATION, CURB/GUTTER AND OTHER EXISTING ELEMENTS BASED UPON INFORMATION SUPPLIED TO LANDSCAPE ARCHITECT BY OTHERS. CONTRACTOR SHALL VERIFY ANY AND ALL DISCREPANCIES PRIOR TO CONSTRUCTION AND NOTIFY LANDSCAPE ARCHITECT OF SAME.

THE ALIGNMENT AND GRADES OF THE PROPOSED WALKS, TRAILS AND/OR ROADWAYS ARE SUBJECT TO FIELD ADJUSTMENT REQUIRED TO CONFORM TO LOCALIZED TOPOGRAPHIC CONDITIONS AND TO MINIMIZE TREE REMOVAL AND GRADING. ANY CHANGE IN ALIGNMENT MUST BE APPROVED BY LANDSCAPE ARCHITECT.



LANDSCAPE INSTALLATION:

COORDINATE THE PHASES OF CONSTRUCTION AND PLANTING INSTALLATION WITH OTHER CONTRACTORS WORKING ON SITE.

NO PLANTING WILL BE INSTALLED UNTIL COMPLETE GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.

WHERE SOD/SEED ABUTS PAVED SURFACES, FINISHED GRADE OF SOD/SEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC.

SEED ALL AREAS DISTURBED DUE TO GRADING OTHER THAN THOSE AREAS NOTED TO RECEIVE SOD. SEED SHALL BE INSTALLED AND MULCHED AS PER MNDOT SPECS.

SOD ALL DESIGNATED AREAS DISTURBED DUE TO GRADING. SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, THE SOD SHALL BE STAKED TO THE GROUND.

ALL PLANT MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSERYMEN. UNLESS NOTED OTHERWISE, ALL SHRUBS SHALL HAVE AT LEAST 5 CANES AT THE SPECIFIED MINIMUM SHRUB HEIGHT OR WIDTH. ORNAMENTAL TREES SHALL HAVE NO V CROTCHES AND SHALL BEGIN BRANCHING NO LOWER THAN 3' ABOVE ROOT BALL. STREET AND BOULEVARD TREES SHALL BEGIN BRANCHING NO LOWER THAN 5' ABOVE FINISHED GRADE.

ANY CONIFEROUS TREE PREVIOUSLY PRUNED FOR CHRISTMAS TREE SALES SHALL NOT BE USED. ALL CONIFEROUS TREES SHALL BE FULL FORM, NATURAL TO THE SPECIES, WITHOUT PRUNING.

PLAN TAKES PRECEDENCE OVER PLANT SCHEDULE IF DISCREPANCIES IN QUANTITIES EXIST. SPECIFICATIONS TAKE PRECEDENCE OVER NOTES.

NO PLANT MATERIAL SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL IS REQUESTED OF THE LANDSCAPE ARCHITECT BY THE LANDSCAPE CONTRACTOR PRIOR TO THE SUBMISSION OF A BID AND/OR QUOTATION.

ALL PROPOSED PLANTS SHALL BE LOCATED AND STAKED AS SHOWN ON PLAN. ADJUSTMENTS IN LOCATION OF PROPOSED PLANT MATERIALS MAY BE NEEDED IN FIELD. SHOULD AN ADJUSTMENT BE ADVISED, THE LANDSCAPE ARCHITECT MUST BE NOTIFIED.

ALL PLANT MATERIALS SHALL BE FERTILIZED UPON INSTALLATION WITH A 27-3-3 SLOW RELEASE FERTILIZER MIXED IN WITH THE PLANTING SOIL PER THE MANUFACTURER'S INSTRUCTIONS. PLANTS MAY BE TREATED FOR SUMMER AND FALL INSTALLATION WITH AN APPLICATION OF GRANULAR 27-3-3 AT 6 OZ PER 2.5" CALIPER PER TREE AND 3 OZ PER SHRUB WITH AN ADDITIONAL APPLICATION OF 27-3-3 THE FOLLOWING SPRING IN THE TREE SAUCER.

ALL PLANTING AREAS RECEIVING PERENNIALS, GROUND COVER, ANNUALS, AND/OR VINES SHALL RECEIVE A MINIMUM OF 12" DEPTH OF PLANTING SOIL CONSISTING OF 5 PARTS CLEAN TOPSOIL AND 1 PART PEAT. SHRUBS AND TREES TO BE BACKFILLED WITH SAME PLANTING SOIL.

ALL PLANTS TO BE INSTALLED AS PER PLANTING DETAILS. REMOVE ALL FLAGGING AND LABELS FROM PLANTS.

WRAPPING MATERIAL SHALL BE CORRUGATED PVC PIPING 1" GREATER IN CALIPER THAN THE TREE BEING PROTECTED OR QUALITY, HEAVY, WATERPROOF CREPE PAPER MANUFACTURED FOR THIS PURPOSE. WRAP ALL DECIDUOUS TREES PLANTED IN THE FALL PRIOR TO 12-1 AND REMOVE ALL WRAPPING AFTER 5-1.

BLACK POLY EDGER TO BE USED TO CONTAIN SHRUBS, PERENNIALS, AND ANNUALS WHERE BED MEETS SOD/SEED UNLESS NOTED OTHERWISE.

ALL ANNUAL AND PERENNIAL PLANTING BEDS TO RECEIVE 3" DEEP SHREDDED HARDWOOD MULCH WITH NO WEED BARRIER. ALL SHRUB BED MASSINGS TO RECEIVE 3" DEEP SHREDDED HARDWOOD MULCH AND FIBER MAT WEED BARRIER. ALL TREES TO RECEIVE 4" DEEP SHREDDED HARDWOOD MULCH WITH NO MULCH IN DIRECT CONTACT WITH TREE TRUNK.

SPREAD GRANULAR PRE EMERGENT HERBICIDE (GREEN OR EQUAL) PER MANUFACTURER'S RECOMMENDATIONS UNDER ALL MULCHED AREAS.

MAINTENANCE STRIPS TO HAVE EDGER AND MULCH AS SPECIFIED/INDICATED ON DRAWING OR IN SPECIFICATION.

IF THE LANDSCAPE CONTRACTOR IS CONCERNED OR PERCEIVES ANY DEFICIENCIES IN THE PLANT SELECTIONS, SOIL CONDITIONS OR ANY OTHER SITE CONDITION WHICH MIGHT NEGATIVELY AFFECT PLANT ESTABLISHMENT, SURVIVAL OR GUARANTEE, HE MUST BRING THESE DEFICIENCIES TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO PROCUREMENT AND/OR INSTALLATION.

CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR THE OWNER ACCEPTANCE INSPECTION OF ALL LANDSCAPE AND SITE IMPROVEMENTS.

CONTRACTOR IS RESPONSIBLE FOR ON-GOING MAINTENANCE OF ALL NEWLY INSTALLED MATERIALS UNTIL TIME OF OWNER ACCEPTANCE. ANY ACTS OF VANDALISM OR DAMAGE WHICH MAY OCCUR PRIOR TO OWNER ACCEPTANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL PROVIDE THE OWNER WITH A MAINTENANCE PROGRAM INCLUDING, BUT NOT NECESSARILY LIMITED TO, PRUNING, FERTILIZATION AND DISEASE/PEST CONTROL.

CONTRACTOR SHALL GUARANTEE NEW PLANT MATERIAL THROUGH ONE CALENDAR YEAR FROM THE DATE OF OWNER ACCEPTANCE.

WARRANTY (ONE FULL GROWING SEASON) FOR LANDSCAPE MATERIALS SHALL BEGIN ON THE DATE OF ACCEPTANCE BY THE LANDSCAPE ARCHITECT AFTER THE COMPLETION OF PLANTING OF ALL LANDSCAPE MATERIALS. NO PARTIAL ACCEPTANCE WILL BE CONSIDERED.

UNLESS NOTED OTHERWISE THE APPROPRIATE DATES FOR SPRING PLANT MATERIAL INSTALLATION AND SEED/SOD PLACEMENT IS FROM THE TIME GROUND HAS THAWED TO JUNE 15.

FALL SODDING IS GENERALLY ACCEPTABLE FROM AUGUST 15 - NOVEMBER 1. FALL SEEDING FROM AUGUST 15 - SEPTEMBER 15; DORMANT SEEDING IN THE FALL SHALL NOT OCCUR PRIOR TO NOVEMBER 1. FALL CONIFEROUS PLANTING MAY OCCUR FROM AUGUST 15 - OCTOBER 1 AND DECIDUOUS PLANTING FROM THE FIRST FROST UNTIL NOVEMBER 15. PLANTING OUTSIDE THESE DATES IS NOT RECOMMENDED. ANY ADJUSTMENT MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.

PROTECT ALL EXISTING OAKS ON SITE SCHEDULED TO REMAIN. IF EXISTING OAKS ARE DAMAGED IN ANY MANNER, ABOVE OR BELOW GROUND IN THE ROOT SYSTEM, AN ASPHALTIC TREE PRUNING PAINT SHOULD BE APPLIED IMMEDIATELY AFTER WOUNDING. OAKS ARE NOT TO BE PRUNED, REMOVED OR TRANSPLANTED BETWEEN APRIL 15 AND JULY 1. NOTIFY LANDSCAPE ARCHITECT IF THESE DATES ARE UNAVOIDABLE.

LANDSCAPE CONTRACTOR SHALL ESTABLISH TO HIS SATISFACTION THAT SOIL AND COMPACTION CONDITIONS ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AT AND AROUND THE BUILDING SITE.

GROUND COVER NOTES:

- SOD
- WET AREAS SEED MIXTURE

LANDSCAPE REQUIREMENTS:
TWO 2.5" CALIPER TREES REQUIRED PER DWELLING UNIT
18 DWELLING UNITS PROPOSED
36 TREES REQUIRED
50 TREES PROPOSED

PLANT SCHEDULE

DECIDUOUS TREES	QTY	COMMON NAME	BOTANICAL NAME	CONT	SIZE
	7	RIVER BIRCH CLUMP	Betula nigra	B & B	8' HGT
	7	SIENNA GLEN MAPLE	Acer freemanii 'Sienna Glen'	B & B	2.5" Cal
	6	SKYLINE HONEYLOCUST	Gleditsia triacanthos 'Skycole'	B & B	2.5" Cal
	7	SWAMP WHITE OAK	Quercus bicolor	B & B	2.5" Cal
	6	VALLEY FORGE ELM	Ulmus americana 'Valley Forge'	B & B	2.5" Cal
EVERGREEN TREES	QTY	COMMON NAME	BOTANICAL NAME	CONT	SIZE
	5	AUSTRIAN PINE FULL FORM	Pinus nigra	B & B	6' HGT
	6	BLACK HILLS SPRUCE FULL FORM	Picea glauca 'Densata'	B & B	6' HGT
	6	SCOTCH PINE FULL FORM	Pinus sylvestris	B & B	6' HGT



RIVER TOWN VILLAS OF HANOVER

11218 CHURCH STREET NE
HANOVER, MN 55341

WITS REALTY

1010 W. LAKE STREET
SUITE 200
MINNEAPOLIS, MN 55408

LOUCKS

PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

02/22/19 PRELIMINARY SUBMITTAL

PROFESSIONAL SIGNATURE

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

PRELIMINARY
Timothy J. Fedie - LA
License No. 48303
Date

QUALITY CONTROL

Loucks Project No. 03128A
Project Lead TWM
Drawn By TJF
Checked By TJF
Review Date

SHEET INDEX

- C1-1 EXISTING CONDITIONS
- C1-2 PRELIMINARY PLAT
- C2-1 SITE PLAN
- C3-1 GRADING PLAN
- C3-2 - C3-3 SWPPP PLAN & NOTES
- C4-1 UTILITY PLAN
- C8-1 - C8-2 CIVIL DETAILS
- L1-1 LANDSCAPE PLAN
- L2-2 TREE INVENTORY PLAN

LANDSCAPE PLAN

L1-1

MEMORANDUM

TO: Planning Commission

FROM: Cindy Nash, AICP, City Planner

DATE: March 21, 2019

SUBJECT: River Side Acres

APPLICANT: Kristal Sneen and Benjamin Sneen

LOCATION: 1332 Jansen Avenue SE in Rockford Township

COMPREHENSIVE PLAN: Neighborhood Residential

Requested Action:

The Planning Commission is asked to provide comments on this concept plan.

Concept Plan Revisions

The applicants have submitted an application for a concept plan as well as a petition for annexation of property located in Rockford Township that they recently purchased. The property consists of approximately 14.79 acres useable land (per County GIS records) and is bordered on the west by County Road 20, on the east by the Crow River, on the south by a single-family home, and on the north by vacant land. The property line shared with the vacant land to the north is also the line dividing Hanover from Rockford Township.

The property has one existing home, and the applicants are hoping to subdivide the property to create an additional 4 lots as shown in the attached concept plan. Staff has completed a very preliminary review of the concept plan, and it is unknown at this time if the total of 5 lots can be created on this parcel due to the following issues (may not be all inclusive):

1. The applicants have revised the previous concept plan that was reviewed by staff to show the lots being served by private driveway easements accessing the county road at 2 points. This would eliminate the public road shown in a previous concept plan, but lots served by private easements are not allowed under the city's ordinances. The

plans also show “ghost lots” that would allow for additional lots to be created in the future when municipal services are available. The applicant would be required to submit an application for a PUD for a development as shown.

2. Stormwater ponding is not shown on the concept plan, but would likely be required. The City has been requiring stormwater ponding to be in an outlot that is deeded to the City for maintenance rather than allowing it as part of a lot.
3. More information on existing topography, floodplain and the ordinary high-water level line of the Crow River will be needed to determine whether this lot configuration can work with the shoreland, floodplain and other ordinance requirements.
4. Sufficient areas will need to be reserved for the current private driveway system, along with future extension of public utilities.

Staff spoke with Wright County planning staff following the previous Council meeting where this project was discussed. Wright County will not permit the subdivision of this parcel while in the Township. We have previously reviewed a concept plan that involved a city street instead of private driveways with Wright County, and will be seeking information from them on this concept instead. Generally, however, Wright County was supportive of not more than 2 total accesses to the County Road in the locations shown on this concept plan.

Annexation Background

The City is discussing annexation of this property with the Township. Concept plan review and approval can occur prior to annexation, and can help to inform the decision-making process on the annexation itself. The annexation is a policy decision, and no recommendation on the annexation from the Planning Commission is needed.

Recommendation

The City is under no requirement to permit annexation and development of this property, and may determine that it is premature. In the event that the City Council determines it is interested in annexing the property and negotiates an agreement with the Township for annexation, this would permit interim development of the site until such time as water and sewer are available. Conditions and design of the development could be arranged to permit the future extension of utilities to the site and more densification of the property.

The Planning Commission should review the concept plan as provided and discuss opinions on this type of development that would likely be a PUD with private driveways rather than a standard subdivision with public streets.

Concept Plan



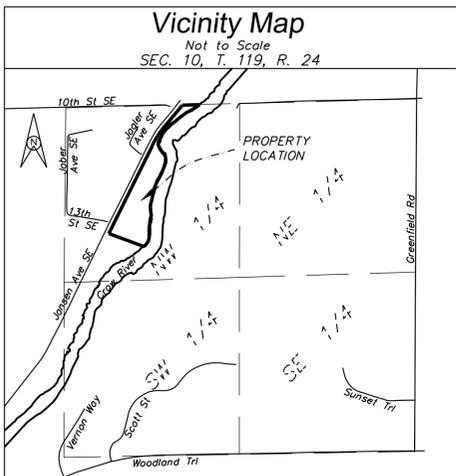
PID: 215000102302

TOTAL ACRES = 13.2±

EXISTING ZONING AG: ROCKFORD TOWNSHIP

PROPOSED ZONING: RR - RURAL RESIDENTIAL CITY OF HANOVER

MINIMUM LOT SIZE = 2.5 ACRES



GHOST LOT SUMMARIES:		
LOT	AREA	ACRES
	AREA	ACRES
LOT 1	2.9	ACRES
LOT 2	1.0	ACRES
LOT 3	1.0	ACRES
LOT 4	1.0	ACRES
LOT 5	0.9	ACRES
LOT 6	1.6	ACRES
LOT 7	1.2	ACRES
LOT 8	2.2	ACRES
LOT 9	1.7	ACRES
LOT 10	1.0	ACRES

Concept Plan on part of the NW 1/4 of Section 10, Township 119, Range 24, Wright County, Minnesota

Revised:
1-8-19 - Proposed Lots - S.O.S.
3-12-19 - Proposed Lots - S.O.S.

3-14-19

Requested By:

Kristal & Ben Sneen

Date: 12-31-18 Drawn By: E.M.S Scale: 1"=100' Checked By: P.E.O



www.ottoassociates.com
9 West Division Street
Buffalo, MN 55313
(763)682-4727
Fax: (763)682-3522

● denotes iron monument found
○ denotes 1/2 inch by 14 inch iron pipe set and marked by License #40062

Project No. 18-0540