STAFF REPORT

DATE: 5/2/17
REGULAR
ITEM #: 6

TO: City Council

FROM: Stephen Wensman, Planning Director

AGENDA ITEM: Royal Golf Club at Lake Elmo Preliminary Plat/PUD

REVIEWED BY: Kristina Handt, City Administrator
Sarah Sonsalla, City Attorney
Emily Becker, City Planner
Jack Griffin, City Engineer
Greg Malmquist, Fire Chief
Mike Bent, Building Official

BACKGROUND:

HC Golf Course Development made application for preliminary plat and preliminary planned unit development (PUD) plans on 2/10/2017. The Planning Commission held a public hearing on March 13, 2017 and recommended approval on March 27, 2017. The City has 120 days to complete its review of the preliminary plat, therefore the City Council is required to make a determination by June 10, 2017. The City Council should not approve the preliminary plat until the Metropolitan Council has reviewed the comprehensive plan amendment that will allow the development to proceed. The Metropolitan Council's Community Development Committee meets on May 15th and the Metropolitan Council will meet on May 24th. Staff is not recommending any action on this agenda item tonight. The purpose of the meeting is to allow the Council to review the application and to provide feedback to the developer if warranted.

ISSUE BEFORE COUNCIL:

The issue is to review the Royal Golf Club at Lake Elmo preliminary plat and PUD plans, but not to approve or deny them.

PROPOSAL DETAILS/ANALYSIS:

Since the Planning Commission review, City Staff requested the developer update his preliminary plat and PUD plans to address some of the comments and issues raised prior to and during the Planning Commission meeting. Although it is not customary to request changes prior to City Council review, there were a number of issues that Staff felt were potentially critical to the preliminary plat layout. Many of the issues related to the Valley Branch Watershed District review as it pertains to the floodplain replacement and the stormwater modelling in the northeast portion of the development and the lift station site designs. The developer submitted revised plans to the VBWD for their review and to the City on April 10, 2017, in conjunction with the phase 1 grading permit application. As of the writing of this report, the VBWD has not completed its review of the resubmitted preliminary plans. Until the VBWD review is substantially complete and the VBWD key issues are addressed, the City cannot complete its review. In addition, the City will be retaining BMI to design the 3 lift stations proposed to serve this development. Therefore the City has retained BMI to review the proposed lift station site plans to verify whether the developer's

proposed outlots are of adequate size and configuration. At the time of the writing of this report, BMI's review was not complete.

The updated plans received on April 10, 2017 addressed several of the conditions of preliminary plat recommended by the Planning Commission:

Condition #2: Lots 1, Block 1 and Lot 3, Block 1 were combined into a single lot - combining the area for future "cottages" with the clubhouse lot.
Condition #3: Providing frontage for Lot 1, Block 1 onto 20th Street N – giving the clubhouse street frontage without having to pass into a park property.
Condition #15: An 8 ft. concrete public trail was provided in the right-of-way in front of Lots 1-11, Block 13.
Condition #18: Sidewalks were provided along one side of all streets except for Street C (Annie Avenue).

Additionally, the revised plans show revisions to the proposed lots on Annie Avenue discussed during the 3/27 Planning Commission meeting.

FISCAL IMPACT:

The fiscal impact will be determined with the developer agreement after final plat approval.

OPTIONS:

None, the City Council should review the preliminary plat/preliminary PUD plans and take no action.

RECOMMENDATION:

Staff is recommending no action be taken at tonight's meeting, however, the City Council can ask questions of the developer or staff and can provide feedback to the developer if it is warranted.

ATTACHMENTS:

- Planning Commission report for 3/13/17
- Planning Commission report for 3/27/17
- Planning Commission minutes 3/13/17
- Planning Commission minutes 3/27/16
- RGC at Lake Elmo preliminary plat and plans submitted 4.10.17

STAFF REPORT

PLANNING COMMISSION
DATE: 03/13/2017
AGENDA ITEM: 4C & 4D– PUBLIC HEARING
CASE # 2017-07

TO: Planning Commission

FROM: Stephen Wensman, Planning Director

AGENDA ITEM: Zoning Map Amendment to Golf Course Community, and the Royal Golf Club at Lake Elmo Preliminary Plat and Preliminary PUD Plans

REVIEWED BY: Stephen Wensman, Planning Director
Emily Becker, City Planner
Mike Bent, Building Official
Jack Griffin, City Engineer
Greg Malmquist, Fire Chief
Kristina Handt, City Administrator
Sarah Sonsalla, City Attorney

BACKGROUND:

HC Golf Course Development is requesting approval of:

1. A zoning map amendment rezoning from PF – Public Facilities to GCC – Golf Course Community; and
2. Preliminary Plat and Preliminary PUD Plans for the Royal Golf Club at Lake Elmo golf course/residential development.

The Royal Golf Course Planned Unit Development is being proposed for the former 3M Tartan Park properties in Lake Elmo. The former 3M Tartan Park property was purchased from 3M in March, 2016. The Royal Golf Club at Lake Elmo received Concept PUD Plan approval on September 6, 2016. A Comprehensive Plan Amendment was approved on January 9, 2017 by the City Council contingent on Metropolitan Council approval and Preliminary Plat approval. An Environmental Assessment Worksheet (EAW) was prepared and the City Council gave a negative declaration for an Environmental Impact Statement (EIS) on January 17, 2017. The applicant applied for a zoning text amendment creating the GCC zoning district which was approved on February 7, 2017. The GCC zoning district is the district that corresponds to the new comprehensive land use guidance for the properties. The former Tartan Park properties are currently zoned PF-Public Facilities and to develop the property into a golf course/residential development, the applicant is requesting a rezoning to the new GCC – Golf Course Community Zoning District to be consistent with the new comprehensive plan designation. If the rezoning is approved, the GCC regulations will be base zoning district which will be used to evaluate the PUD development and to evaluate any proposed deviations from the base zoning regulations.

The Preliminary Plat and Preliminary Planned Unit Development is being proposing to redevelopment of the 27-hole golf course and recreational facility into an18-hole golf course with 292 single family residential lots and corresponding open space. The City can review the preliminary plat, but it cannot be approved until the Metropolitan Council approves the Comprehensive Plan.

ISSUE BEFORE THE COMMISSION:

The issue before the Commission is review and make recommendations to the City Council on:

1) A zoning map amendment, rezoning the former Tartan Park from PF to GCC; and
2) The Preliminary Plat and Preliminary PUD Plans for the Royal Golf Club at Lake Elmo.

GENERAL INFORMATION:

Applicant:	HC Golf Course Development, LLC
Property Owner:	HC Golf Course Development, LLC, 11074 Radisson Road NE, Blaine, MN 55449
Location:	Former 3M Tartan Park, PIDs: 25-029-21-12-0001, 25-029-21-13-0001, 25-029-21-14-0001, 25-029-21-21-0001, 25-029-21-31-0001, 25-029-21-42-0001, 25-029-21-43-0001, 25-029-21-43-0002, and 25-029-21-44-0002
Request:	Zoning Map Amendment to GCC Preliminary Plat and Preliminary PUD Plans approval
Development Site Area:	+/-428.06 acres
Land Use Guidance:	Public/Park
Current Zoning:	PF-Public Facility
Proposed Zoning:	GCC/PUD-Golf Course Community/Planned Unit Development
Surrounding Zoning:	OP and Rural Single Family to the southwest, Rural Single Family and Rural Residential to the North, Rural Single Family, Rural Residential and West Lake Land Township to the east.
History:	Tartan Park was purchased by HC Golf Course Development, LLC in March of 2016. A Concept PUD Plan was approved on September 6, 2016**.** Comprehensive Plan Amendment was approved on January 11, 2017 by the City Council contingent on Metropolitan Council approval and Preliminary Plat Approval, EAW negative declaration by the Council was on January 17, 2017, Zoning Text Amendment creating the GCC Zoning was approved on February 7, 2017.

Deadline for Action:	Application Complete – 2/10/17 60 Day Deadline – 4/11/17 Extension Letter Mailed – No 120 Day Deadline – 6/10/17
Applicable Code:	Article XII – Urban Residential Districts Article XVIII – Planned Unit Development Regulations Chapter 153 – Subdivision Regulations §150.270 Storm Water, Erosion, and Sediment Control

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PROPOSAL DETAILS/ANALYSIS:

The Royal Golf Club at Lake Elmo is a unique development designed to incorporate a the renovation of the former 27- hole 3M Tartan Park into an 18-hole golf course and 292 single family residential development on roughly 428 acres. The proposed development is within the Shorelands of Lake Elmo, Rose, Downs and Horseshoe Lakes, requiring the development to be compliant with the City's shoreland ordinance and developed as a Planned Unit Development. The area recently received approval from the City Council for a comprehensive plan amendment guiding the property from Public/Park to Golf Course Community and the inclusion of the land area into the City's (MUSA) Municipal Urban Service Area, subject to Metropolitan Council approval and contingent on the approval of the Preliminary Plat.

The Royal Golf Club Concept PUD Plans were approved on September 9, 2017 with recommendations for changes. Since the Concept PUD Plans, the developer has incorporated many of the recommendations into this preliminary plat submittal. The most notable changes include:

- A provision for access to the south connecting the residential development to 10th Street.
- A provision for a public trail connection from 10th Street to 20th Street.
- Elimination of cul-de-sacs exceeding City ordinance.
- Additional access from 20th Street to the east neighborhood
- Elimination of 11 lots in the area east of Homestead and north of Tartan Meadows.
- Connection of the NW neighborhood to the west-central neighborhood while leaving a 100' green corridor.
- Removal of 19 lots (cul-de-sac) in the Lake Elmo shoreland in the NW portion of the site.

Zoning Map Amendment

The Tartan Park property is currently zoned PF – Public Facilities. Based on the recently approved comprehensive plan amendment, the property is now guided as Golf Course Community. The corresponding zoning district is the recently approved GCC – Golf Course Community district. In order for the development to proceed, the property needs to be rezoned to GCC to be consistent with the comprehensive plan. The GCC will be the based zoning district to which the development will be reviewed against. Subsequent to the rezoning, and with the preliminary plat, the applicant is applying for Preliminary PUD Plan approval. The PUD is an overlay zoning. With the PUD Plans, the developer is requesting some deviations, or flexibility from the GCC regulations as part of the preliminary plat and PUD submittal, which if approved will be the overlay regulations that apply to specifically to this development or PUD.

Preliminary Plat/PUD Plans

Site Data. The Royal Golf Club at Lake Elmo consists of an 18-hole golf club and a residential development of 292 single family homes over 428.06 acres. The residential portion of the development is over 231.25 acres. The lots average size is 13,499 sq. ft. with the largest lot being 38,814 sq. ft. and the smallest, 6,600 sq. ft. in size. The minimum lots size allowed in the GCC zoning district is 9,000 sq. ft.

Total Site Area	428.06 acres
Residential Site Area	231.25 acres
Outlot Area	288.78 acres
Right-of-Way	37.61 acres
Wetlands	19.71 acres
Residential Lot Area	90.49 acres
Golf Course Lot Area	11.18 acres
Gross Density	.068 du/acre
Net Density	1.56 du/acre

The calculation of net density is as follows:

Development Area	231.25 acres
10th Street Right-of-Way	2.88 acres
Lake Elmo Avenue Right-of-Way	2.82 acres
Wetlands	19.71 acres
Wetland Buffers	9.81 acres
Open Water (area of easement)	1.61acres
Park Trail Easement	6.66 acres
Bluff	0.85 acres
Floodway	
Net Residential Area	186.92 acres
Total Number of Lots	292 units
Net Density	1.56 du/acre

Planned Unit Development Overlay. The Royal Golf development is required by the shoreland regulations to develop as a Planned Unit Development. The intent of the shoreland PUD is to allow flexibility from strict zoning provisions by allowing residential density to transfer away from the shoreland in tiers, allowing density transfer away from the DNR designated water body. The PUD allows the flexibility for this transfer of density such as allowing smaller lot sizes. PUDs can also provide flexibility from other zoning district regulations such as, setbacks, impervious surfaces, etc. The PUD zoning regulations are a negotiation intended to provide more creativity and higher quality design in exchange for the flexibility. According to the Royal Golf application narrative the developer is requesting PUD flexibility from the underlying zoning regulations:

1. To allow a single driveway entrance to the clubhouse on the golf course.
2. To allow smaller lot sizes for some villa lots, less than the 9,000 required by zoning.
3. To allow impervious surfaces on some lots greater than the 30% maximum allowed by zoning.
4. To allow 20 foot front yard setbacks for villa lots (the underlying zoning district requires 25').
5. To allow the "trail" in the front yards to be 6 feet wide rather than 8 feet.
6. To allow R/W to be 50 feet wide for Street C for a villa enclave, rather than the 60' standard width.
7. To allow 4 subdivision signs rather than the 2 allowed by ordinance. The developer would also like to have up to 6 neighborhood identification to identify the villa enclaves.
8. To allow streets without sidewalks in two areas in the development, whereas the street standards require sidewalks on one side of the street.
9. To allow garages greater than 1,000 sq. ft. as a permitted use. The developer is accepting of other restrictions on garages, such as limiting the amount of garage facing a public street.

In addition to the items identified by the developer, Staff is suggesting the PUD flexibility be used to address other issues within the Preliminary Plat/Preliminary PUD Plans:

1. To allow an alternative to tree replacement required by the Tree Preservation Plan.
2. To waive some of the landscape requirements in exchange for enhanced forest management and landscape screening as needed.

Each of these is discussed further in the Staff report below. Any special overlay regulations approved by the Council will be codified within the City Council's Resolution of approval.

Shoreland Evaluation. As stated above, the Royal Golf Course development is within the shorelands of Lake Elmo, Rose, Downs and Horseshoe Lakes, requiring the development to be compliant with the City's shoreland ordinance and developed as a Planned Unit Development. The Royal Golf residential development proposes 100 units within the shorelands with 59.9% of the shoreland to be left as open space, protected by a conservation easement. The development protects steep slopes and shoreland impact zones of Lake Elmo and Downs Lake and the shoreland impact zones of Lake Rose and Horseshoe Lake will be at least 70% open space. The shorelands were evaluated according to the DNR's rules. The developer divided the shoreland into tiers based on the DNR's tier dimensions. Suitable areas were calculated by subtracting regulated wetlands and bluffs from shoreland areas. Suitable areas were divided by required lot sizes to calculate the allowable density for each tier. Proposed densities were tallied from the number of lots on the Site Plan (See Table 1). Open space was calculated by subtracting areas of street right-of-ways, residential lots, and the entry monument lot from total shoreland areas (See Table 2.)

Table 1. Overall Shoreland Density Evaluation

Shoreland	Total Area		Regulated Wetlands (sq.ft.)	Bluffs (sq.ft.)	Net Suitable		Required Lot Size (sq. ft.)	Allowable Base Density	Proposed Density
	Sq. Ft.	Acres			Sq. Ft.	Acres			
Lake	1,240,208	28.47	2,057	39,287	1,198,864	27.52	15,000	79.9	21
Downs Lake	338,333	7.77	27,364	0	310,969	7.14	20,000	15.5	3
Lake Rose	1,799,640	41.31	16,443	0	1,783,197	40.94	20,000	89.2	41
Horseshoe	886,313	20.35	12,032	0	874,281	20.07	20,000	43.7	35
Total	4,264,494	97.90	57,896	39,287	4,167,311	95.67		228.3	100

Table 2. Overall Shoreland Open Space Calculation

Shoreland	Total Area (sq.ft.)	Not Open Space		Net Open Space (sq.ft.)	% Open Space
		Lots (sq.ft.)	Street Right-of-Way (sq.ft.)		
Lake Elmo	1,240,208	317,994	179,618	742,596	59.9
Downs Lake	338,333	27,048	78,225	233,060	68.9
Lake Rose	1,799,640	506,747	377,169	915,724	50.9
Horseshoe Lake	886,313	507,334	117,552	261,427	29.5
Total	4,264,494	1,359,123	752,564	2,152,807	50.5

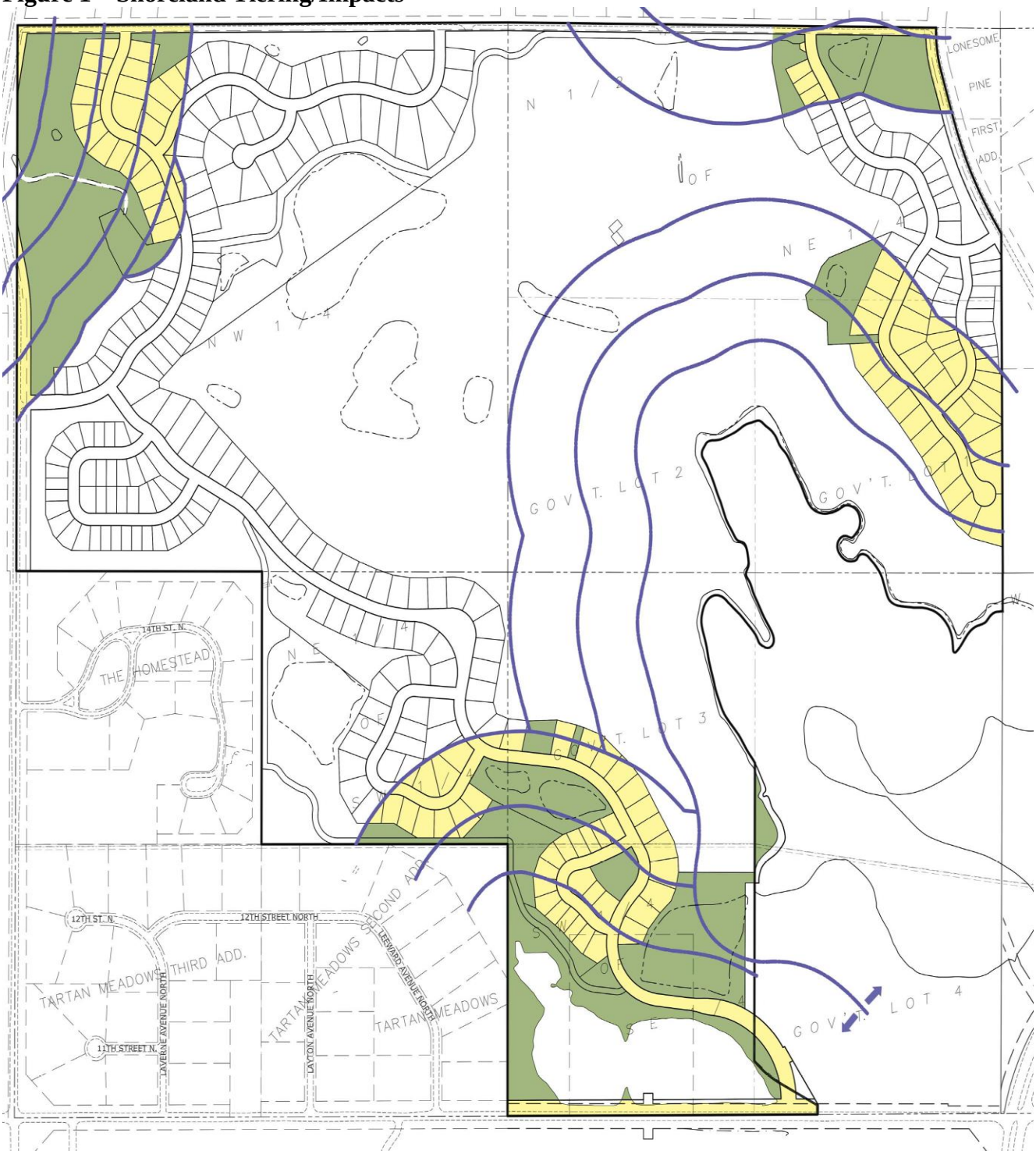
Since the Concept phase, the developer has (see Figure 1):

- reduced the overall shoreland density from 111 to 100 single-family lots, resulting in a PUD that has only 44% of the allowed residential density;
- Removing 10 residential lots and the related street from the Lake Elmo shoreland to increase protection of steep slopes, open space, and natural communities;
- Increased the open space proportion of the Lake Elmo shoreland from 49.8 to 59.9%;
- Improved street connectivity and community connectivity in the Lake Elmo and Downs Lake shorelands;
- Decreased the residential density of the Downs Lake shoreland from 7 to 3 residential lots and increasing the open space proportion of the Downs Lake shoreland from 52.3% to 68.9%;
- Refined the residential design of the Lake Rose shoreland to reduce the depth of selected lots and increase the open space; and
- Removed the narrow ribbon of open space previously proposed along the shoreline of Horseshoe Lake on the golf course portion of the development from the calculation, yet still exceeded the minimum requirements.

The DNR allows the required open space to preserved across the entire shoreland area and not specific to any single shoreland within the development. The development barely meets the minimum shoreland openspace requirement, however, the developer has exceeded the required open space in the most pristine shoreland of Lake Elmo, protecting the trees, slopes and desireable wildlife corridor. The development exceeds the minimum 50% open space

requirement in all but the Horseshoe Lake shoreland which brings the average down. The Horseshoe Lake, Downs Lake and Rose Lake shorelands all have very degraded woodlands and much of which is existing golf course.

Figure 1 – Shoreland Tiering/Impacts



Lot Sizes. The lots within the development will have a range of widths and lengths with the villa lots being the smallest, and the custom-built golf course lots being the largest. Typically, the villa lots will have two different sized lots, 55 ft. wide and 65 ft. wide. The average lot size is 13,499 sq. ft. with the largest lot being 38,814 sq. ft. and the smallest, 6,600 sq. ft. in size. The minimum lots size allowed in the GCC zoning distict is 9,000 sq. ft. Although some of the villa lots are less than 9,000 sq. ft. in size, it is the intent of the shoreland PUD to allow density to tier away from the shoreland transferring this density. Therefore, the smaller lots are consistent with the intent of the shoreland ordinance and the purpose of the shoreland PUD. On average the residential lots within the development exceed the minimum requirements of the GCC Zoning District.

GCC District Setbacks. The GCC zoning district establishes setbacks as:

Front – 25 feet
House side – 10 feet
Garage side – 5 feet
Corner side-15 feet
Rear – 20 feet

Consistent with the other urban districts, the City allows the side yard setbacks to be averaged such that each side has a minimum 7.5 feet in lieu of the 5 ft. / 10 ft. side yard setbacks provided there are no encroachments into drainage and utility easements. The 7.5 ft. setback have proven to be problematic for builders planning for egress windows in basements in some instances. The developer/builder will need to be aware of the "no encroachment" policy. The developer is requesting PUD flexibility to allow the front setbacks for proposed homes with some villa lots to be 20 feet from the front property line in instances when the garages are side-loaded and not facing the public street. Staff is comfortable with the request, because with a side loaded garage, there should be adequate space in the driveway to allow a car to be parked without encroachment into the public right-of-way, provided the garages are adorned with windows or other architectural features are part of the architecture for sides of garages facing the public R/W.

The proposed Royal Golf Club PUD proposes the following setbacks for their development:

Royal Golf Club at Lake Elmo Planned Setbacks

	100 Ft. Wide Lots	80-90 Ft. Wide Lots	55-65 Ft. Wide Lots
Front	30 ft.	30 ft.	20 ft. for side loaded garages, or 25'
Side	15 ft.	10 ft.	7.5 ft.
Corner Side	15 ft.	15 ft.	15 ft.
Rear	30 ft.	30 ft.	20 ft.

For the most part, the Royal Golf Club's planned setbacks exceed the setbacks in the GCC zoning district. As is typical, some encroachments into the side setback will be allowed for bump-outs, egress windows, and eaves, as defined by the Code, but in no case will the encroachment be allowed in the drainage and utility easements. The developer and builders will need to plan accordingly.

Impervious Surfaces. The allowed impervious surfaces within the GCC district is 30% of the lot area. This is consistent with the impervious surfaces allowed per lot within the shoreland. The developer is unsure as the actual impervious surface amount that will be needed, but they anticipate it will need to be greater on the smaller villa lots. The developer is requesting PUD flexibility for an increase in the impervious surface maximums for the villa products, up to 40% impervious, consistent with the LDR zoning. Staff supports this request and recommends approval of a 40% impervious for the smaller villa lots within the development.

Sidewalks. The City's standard street detail requires a 6 ft wide public sidewalk be constructed on one side of any public street and to accommodate a sidewalk, the standard right-of-way width is 60 feet wide. The developer is requesting PUD flexibility and has identified several areas where they wish to forgo the public sidewalk requirement. The areas are:

- Along Street C -The developer has proposed a 50 foot right-of-way for this street which limits the ability to construct a public sidewalk. According to the developer, the right-of-way was narrowed from 60 feet to 50 feet to increase the buffer along the east edge of the development and to preserve trees. This request would impact 18 lots that front on the Street.
- Along Street K cul-de-sac. The cul-de-sac is short and the request would impact 9 lots. The right-of-way is 60 feet wide and is adequate right-of-way to install a sidewalk.
- Along the cul-de-sac end of Street A. This request would impact 10 lots. There is adequate right-of-way proposed to accommodate a public sidewalk.
- Along Street H – This request would impact 17 lots. There is adequate right-of-way to accommodate a public sidewalk. The street is very curvilinear which also makes for poor site-lines and a perceived narrowing of the street.

In general, staff is not supportive of the elimination of the public sidewalk requirement on any of the above streets; except for Street C; the developer has provided a narrower right-of-way in order to maximize lot creation in an area squeezed between the planned golf course and the property boundary. Staff is willing to compromise by allowing Street C to be constructed without a sidewalk.

Garages. The GCC district allows a 1,000 sq. ft. maximum for an attached garage and larger with a conditional use permit. The developer is seeking PUD flexibility from this requirement as they anticipate many homes will have 4-stall garages. The developer feels the additional garage area is necessary as many of the homes will have golf carts to shelter in addition to cars. This increase will not increase the amount of garage face to house face allowed. The developer intends to comply with the requirement that the garage door will not exceed 60% of the principal building façade fronting the primary street. Staff is agreeable to this request provided that the lot coverage requirements are complied with and that an upper limit be established. Staff recommends an upper limit of 1,300 sq. ft.

Buffers. The GCC district regulations require a minimum 100 ft. buffer from external residential lots within the City of Lake Elmo residential properties. The proposed development exceeds this requirement. The locations where the development is closest to adjacent residential lots are as follows:

Lot 6, Block 9 is 310 ft. to the nearest Tartan Meadows lot
Lots 4-7, Block 10 are 100 ft. to the nearest Tartan Meadows lot
Lots 6-14, Block 14 are 150 ft. to the nearest Homestead lot
Lot 13, Block 17 and Lot 1, Block 18 are 100 ft. to the nearest Schwartz Martinco Addition lots.
Lot 1, Block 2 is 190 ft. from the Eden Park 2nd Addition Lots

Parks and Trails. The City's park dedication ordinance, Section 153.14 requires parkland dedication, up to 10% of the development area, or a park dedication fee in lieu of park land. The golf course portion of the development is essentially unchanged from a land use perspective; it remains a golf course, so it is being excluded from the park dedication requirements. The Parks Commission reviewed the Royal Golf development and recognizes the golf course provides a significant recreational amenity that will serve this future development. In previous meetings discussing the development, the Commission discussed the need for a playground in the development, but that the need could be fulfilled by an HOA facility. The developer is considering an HOA tot lot for Outlot R, although no specific equipment or design for Outlot R has been provided. The Parks Commission endorsed the north-south trail corridor through the development including the short segment that will be within the front yards of Lots 4-12, Block 16 (9 lots). The Commission was asked whether the trail segment should be 6 ft. or 8 ft. wide and the consensus was that it should be 8 ft. wide, or that the trail segment might be located on-street (the developer is requesting 6 ft. wide trail per PUD flexibility). This trail segment has been located on the right-of-way because of severe topography and the desire to save trees. Except for in the right-of-way in front of these 9 lots and in the Street D right-of-way south of Outlot T, the developer is proposing dedicating 6.65 acres of park land within Outlots B and T. Typically, the city requires a 30 ft. wide park area centered on the trail. The proposed trail dedication area is not centered on the trail in some areas and it includes areas of wetland buffer. A six foot mow strip should be maintained along all public trails. Staff recommends that the parkland dedication be given for only a 30 ft. wide corridor centered on the trail, but not including any area that is wetland or wetland buffer.

The developer will also be constructing the trail with each corresponding phase of the development. The phasing of trail construction needs to be clarified. The trail corridor park land dedication and the cost of constructing the public trails will be deducted from any fees in lieu of park land dedication. As allowed by ordinance, the City will be hiring an appraiser to determine the market value of the development land for the purposes of determining the park dedication fee. The cost of the appraisal shall be paid by the developer as per City Ordinance.

The City/County Comprehensive Trails Plans show the need for trails along 10th, 20th and Lake Elmo Avenue. The trails within the development are intended to provide the access along 20th and Lake Elmo Avenue as it is unclear whether trails could be provided along these collector roadways without significant impact to existing trees and without significant grading and stormwater impacts. Washington County is not requesting any dedication for trails, nor requiring any trails. The developer will also be widening the 20th Street shoulder to accommodate the need for bike and pedestrian access to the roadway.

In addition to the public trails on the site, there are roughly 2 miles of HOA owned nature and exercise trails in the northwest corner of the site, Outlot DD, that remain from the former Tartan Park.

Open Space. The shoreland ordinance requires shoreland PUDs to set aside a minimum of 50% of the shoreland area as protected open space. The Royal Golf development proposes to set aside 2,152,807 sq. ft., or 49.42 acres (50.5%) of the shoreland within the residential portion of the site as protected open space. In addition to the shoreland open space the plat will include 182 acres of golf course area (Outlots C and D) and outlots containing wetlands, wetland buffers, easements and landscape outlots. The total combined open space on the site is 288.60, which represents 67% of the plat area.

Restrictive Covenants. The development will be encumbered by a number of restrictive covenants for the benefit of the residents including architectural guidelines, use restrictions, exterior storage requirements, vehicle parking (RV, etc). In addition, the open space within the shoreland is required to be protected with a conservation easement. The developer is proposing to develop the HOA documents incorporating any concerns that might arise during the development review process and submitting them prior to final plat for approval.

Subdivision Signs. Section 154.212 allows a maximum of 2 subdivisions signs per residential development with a maximum sign area of 24 sq. ft. per sign. The developer is requesting PUD flexibility from this regulation in order to allow four subdivision signs. In addition to the subdivision signs, the developer would like to install up to 6 neighborhood markers to identify the villa enclaves within the development. These neighborhood markers will consist of 2 ft x 2 ft pillars with the Royal Golf Course Logo and the name of the neighborhood. The development is unique due to its size and the number of access points onto adjacent collector roadway, therefore, Staff believes the request for flexibility has merit. The subdivision signs would be located at the intersection of Street a and 20th Street, at the Clubhouse entrance, at Lake Elmo Ave, and another about 600 feet north of the south entrance on Street D.

Streets. The Royal Golf development is proposing new streets A-I. The streets are all proposed to have the standard 60 ft. right-of-way width with the exception of Street C on the east side in the villa area, and near entrances to accommodate landscaped islands, and turnlanes. The City's Engineering Standards show a standard street right-of-way to be 60 feet wide to accommodate a six foot sidewalk on one side, a 28 ft wide back-to-back paved surface, and street trees, all with proper setbacks from each other for safety and maintenance considerations. The developer is requesting 50 ft. wide rights-of-way for Street C without a sidewalk on one side. The need for right-of-way width is determined by the improvements being installed in the right-of-way. If no sidewalk is required, then a 50 foot right-of-way is sufficient. The City Engineer has identified issues related to street width to accommodate landscaped medians, trails and turnlanes near the development entrances. The developer will also need to update the Typical Street Sections in the preliminary plat submittal to accurately depict the proposed street right-of-ways in the development.

Street Parking. All streets within the development are proposed to be 28 feet wide, back to back, except where lanes are separated by a median. Other than where there are medians, the 28 foot wide streets will accommodate parking on both sides of the street.

Street Names. The developer is proposing a unique theme for street naming within the development as allowed in the most recent update to the City's street naming ordinance. Staff has reviewed the proposed street names and finds them to be consistent with the ordinance.

Architecture. The Royal Golf Course residential development contemplates a range of single family homes providing a range of lifestyle choices and price points, from HOA maintained villa products to high-end custom homes. The villas are in 5 different neighborhood areas, 3 on the west side of the golf course and 2 on the east. The villa homes are anticipated to have 1,800-2,000 sq. ft. of floor area on the main level and full basements. The neighborhood toward the south of the development is intended to have a new housing type for "new families on the go" that will be two stories, but HOA maintained. The developer has suggested that there will be an architectural review committee that will approve all house plans in accordance with a prescribed set of architectural guidelines including 4-sided architecture, minimum roof pitches and materials, wrapped windows and doors, Hardie-board siding and Anderson Windows. The developer anticipates up to 7 custom builders for the traditional homes and 2-3 for the villas.

Tree Preservation. The developer has submitted a tree preservation plan as required. The tree replacement plan is based on individual surveyed trees and areas where tree density and type are determined by random tree plots. Staff reviewed the tree plots and has determined the methodology to be consistent with City Code. Staff has also reviewed the grading for the site to determine whether grading the site differently, for instance, creating lookout lots rather than walkout lots to save trees. The developer has already done a relatively decent job determining the types of homes for each lot to minimize grading and tree removal. All the lots will be custom graded with the hope of minimizing tree loss during the building permit stage of the project. The Developer is interpreting the development as a "mixed-use" development in order to use the tree replacement for required landscaping. Staff has interpreted the City code such that the development is not a mixed use development (commercial/residential), but rather it's essentially an open space/recreation/residential development. The commercial aspect of the clubhouse is accessory to the golf course. This interpretation is consistent with the City Attorney's interpretation (see attached email). Furthermore, the due to the quantity of forest on the site, it is has been difficult for the developer to develop the site without significant tree removal. The tree replacement has become an issue because it is difficult to find suitable placement for all the required trees. Staff is recommending PUD flexibility from the tree preservation ordinance such that the developer receives some credit for forest management and establishment of pollinator friendly native seeding. In the northwest portion of the development, there exists a mature oak forest, however, the understory has been increasingly choked out by invasive specifies. By managing the understory, removing buckthorn and other species, and introducing native grasses, the forest will likely be able to regenerate and result in a more sustainable landscape than simply requiring tree replacement trees.

Landscaping. The developer has submitted preliminary landscape plans as required; however, until the tree preservation requirements are established, it is difficult to determine the overall landscape requirements.

Landscape Walls. Throughout the development, the developer has proposed landscape walls to control grades. These walls cross residential property lines and HOA property and some are shown

within public rights-of-ways and City outlots. Staff recommends that any walls that cross residential property lines or residential property lines and HOA property be owned and maintained by the HOA. Staff also recommends that the walls shown within City Outlots and Rights-of-way be moved to HOA owned outlots, or maintained by the HOA.

Golf Cart Friendly Neighborhood. Central to the developer's golf course community concept is to have all of the development accessible by golf cart. According to the developer, they would like to have golf carts be allowed on internal public streets and the off-street trails that connect the neighborhood to the club house, some of which are to be public trails. No golf cart access is proposed for sidewalks, or trails that do not connect to the clubhouse. The city's current ordinances do not allow for the use of golf carts on public streets or trails. The developer is interested in pursuing an ordinance that would permit such use on public streets and trails, often referred to as a "slow moving vehicle ordinance"

Emerson Property and 10th Street Access. The access to 10th Street was achieved through negotiation with Terry Emerson, the property owner to the south-east. The negotiated agreement will result in a land swap with Outlot P being transferred to Mr. Emerson in exchange for the Street D access onto 10th Street and Outlot N. Mr. Emerson has granted permission to have this portion of his property to be included in the preliminary plat with his signature on the preliminary plat application. Access to 10th Street should be a condition of preliminary plat.

Development Phasing/Grading Phasing. The developer is planning to begin the first phase of the development on the east side along with a small portion in the south-west corner of the development. All of the first phase utilities will be contained in Phase 1 except for a sewer force main along 10th Street and its intersection with Lake Elmo Ave and a watermain along the south side of 20th Street to its intersection with Lake Elmo Ave. The grading phasing is being driven by the need to provide public sere and water to the clubhouse within 2 years of its opening, which is expected to be the summer of 2017. The pace of the phasing will be determined by market demand, but future phases are expected to proceed from the from the south-west corner to 20th Street. Further discussions related to phasing are needed with such a large development as it pertains to public infrastructure such as streets, utilities and trails. The approximate timing of phasing is:

Phase 1, 2017
Phase 2, 2019
Phase 3, 2021
Phase 4 – 2023

Grading, Stormwater Management and Storm Sewer System Improvements. The City Engineer provided comment on the grading, stormwater management and storm sewer system improvements and raised a number of issues that may require changes to the preliminary plat (See Engineer's report dates March 8, 2017) including:

- Pond 60 on Outlot V Pond 60 on Outlot V proposes storm water ponding over the existing dual gas pipeline and easement area. It is the City's understanding that this improvement will not be allowed as proposed and if allowed would pose undue maintenance and ownership burden on the City. The plans should be revised to remove this encroachment or the applicant must provide written correspondence to the City from the gas main utility owner stating that the proposed improvements are acceptable as proposed including no ongoing maintenance restrictions to the City.

- Revisions to the Preliminary Plat may be required for the plat to obtain VBWD and State stormwater permit approvals.

Sewer Utility Lift Stations. Outlots M, N and EE do not appear to be adequate for City owned/maintained lift stations. Preliminary Plat approval should be contingent upon expanding Outlots M, N, and EE, or otherwise revising the Preliminary Plat/Plans to the City's satisfaction such that the proposed sanitary lift station sites are acceptable to the City's lift station consulting engineer and Public Works staff.

Outlots.

- Outlots E, H, M, N, V, W, AA, EE, GG and HH contain stormwater ponds, infiltration basins, sanitary lift stations and utility easement and should be dedicated to the City with the plat.
- Outlots B and T contain public trails and should be dedicated to the City for parkland with the plat (see parkland dedication).

Transportation Improvements. The City Engineer's report dated March 8, 2017 includes the following review comments related to required right-of-way dedication and improvements for transportation:

- 40 feet of R/W is being dedicated along the entire length of 20th Street.
- 50-55 ft. of R/W is being dedicated along Manning Trail North within the city limits.
- An additional 17' of right-of-way is required along 10th Street north.
- Turnlane improvements are required at Street D and Street E at intersections with County roads meeting Washington County standards and paid for solely by the developer.
- The City requires right turnlanes meeting City State Aid design standards along 20th Street North at Streets E, J, A, the golf course entrance and Manning Trail to be paid for soley by the developer. No turnlanes are required at the Manning Trail/Street B intersection.

HOA Fitness Center. Near the golf course clubhouse, on the west side of the parking lot on Lot 2, Block 1, the developer has proposed a private fitness center and swimming pool that will be HOA owned and maintained. The fitness center is a conditional use, so prior to any construction; a conditional use permit will be required. Access to the lot will utilize the clubhouse entrance drive and parking lot. A cross access easement will be needed between the clubhouse and HOA to ensure access to the property which will be under different ownership than the golf club.

Golf Course Amenities.

- Cottages. The developer and owner of the golf club has suggested that there may be up to four "cottages" to be located to the east of the golf club parking lot on what is labeled as Lot 3, Block 1. Based on images provided of cottages found on other golf courses outside the city, the cottages will be more or less entertainment homes for the private use of the golf club owners and guests. The use in the GCC zoning district will be regulated as Semi-Transient Accommodations, which are an accessory conditional use. Because they use is allowed only as an accessory to the club house, the clubhouse and the cottages need to be on the same platted lot. The preliminary plat will need to be revised such that Lot 1, Block 1 and Lot 3, Block 1 are combined. Staff believes this is important so that once constructed the cottages remain under ownership of the golf club and cannot be sold off separately.

- Clubhouse and Access. The former 3M Tartan Park clubhouse is presently being renovated. The renovation began prior to the platting process. The renovated club house uses will remain essentially the same and will include a restaurant and pro-shop. An intensification of the site or use will require a conditional use permit. Access to the clubhouse is via a single driveway; the secondary entrance was displaced by residential development. The City code requires two entrances. The developer has modified the single entrance by introducing an island which divides the drivelanes. The Building Official and Fire Chief Staff have no objections to a single entrance as the clubhouse will be have fire suppression sprinklers installed. Staff is therefore recommending flexibility to the requirements to allow a single entrance to the clubhouse.
- Golf Course. The former 3M Tartan Park golf course was a 27-hole facility that is being transformed into an public 18-hole facility with a driving range. The developer has suggested that there will also be a small par 3 youth course. During the concept phase, the developer indicated that this course would be open to the public for no charge. The excess land being developed into the residential development.
- Maintenance Building. The former 3M Tartan Park golf course maintenance building will remain in its current location and purpose and is shown to be located on Lot 1, Block 1.
- Parking. The parking for the clubhouse will serve the clubhouse restaurant, proshop, golf course, HOA fitness center and cottages. At present, no additional parking has been provided or planned for other than what existed with the former 3M Tartan Park clubhouse. With any expansion to the clubhouse, cottages, or fitness center, a conditional use permit will be required and the need for parking will be evaluated among other items. A cross access easement will be required between the HOA and the club house owners to ensure access to both over the clubhouse entrance drive and parking lot.
- HOA/Clubhouse Trails. There are trails owned by the golf course and trails owned by the HOA. A cross access easement is needed between the HOA and the golf course to allow the HOA to access the clubhouse over the trails.

PRELIMINARY PLAT RECOMMENDED CONDITIONS OF APPROVAL

Staff recommends the Planning Commission recommend approval of the preliminary plat and preliminary PUD plan approval with the following suggested conditions:

1. That cross access easements be recorded between the owner of the golf course/golf club and the HOA to permit HOA and resident access to the future fitness center, clubhouse and other amenities by the HOA residents over the clubhouse entrance drive and parking lot and trails.
2. That the preliminary plat be revised such that the Lot 1, Block 1 and Lot 3, Block 1 are combined into a single lot.
3. That the preliminary plat be revised such that Lot 1, Block 1 has frontage onto 20th Street without crossing through the public park on Outlot B.
4. Any expansion to the Royal Golf Club clubhouse or intensification of its use shall require a conditional use permit.

5. That there shall be no encroachments to drainage and utility easements on residential lots other than those reviewed and approved by the City Engineer and upon execution of an easement encroachment agreement.
6. That the developer prepare an exhibit that clearly identifies the proposed setbacks for specific lots within the development.
7. That the PUD overlay zoning allow for the following:
    a. Setbacks:

    Royal Golf Club at Lake Elmo Setbacks

	100 Ft. Wide Lots	80-90 Ft. Wide Lots	55-65 Ft. Wide Lots
Front	30 ft.	30 ft.	20 ft. for side loaded garages, or 25’
Side	15 ft.	10 ft.	7.5 ft.
Corner Side	15 ft.	15 ft.	15 ft.
Rear	30 ft.	30 ft.	20 ft.

    b. Maximum Impervious Coverage: The maximum impervious coverage for 55-65’ wide lots shall be 40%. All other lots shall have a maximum impervious coverage of 30%.
    c. Lot Sizes: The minimum lot size for Villa lots (55-65’ wide) in the development shall be 6,600 sq. ft.
    d. Attached Garages: That attached garages shall not exceed 1,300 sq. ft. in area at the ground floor level except by conditional use permit. The width of the visible garage door area when closed shall not exceed 60% of the principal building façade (including garage) fronting on the primary street.
    e. Subdivision Identification Signs: the Royal Golf Club at Lake Elmo residential subdivision shall be allowed up to a maximum of 4 subdivison identification signs, including the identification sign for the golf course entrance, not to exceed 24 sq. feet in sign area each, located no closer than 10 feet to any public right-of-way. In addition neighborhood identification markers (pillars) shall be permitted to be no larger than 2 ft. x 2 ft. to identify the development logo and the name of the neighborhood.
8. Prior to the execution of a Final Plat for any phase of the development by City officials, the Developer shall enter into a Developer’s Agreement for that phase acceptable to the City Attorney and approved by the City Council that delineates who is responsible for the design, construction, and payment of the required improvements with financial guarantees therefore.
9. Each phase of the Royal Golf Club at Lake Elmo shall be incorporated into the Common Interest Agreement concerning management of the common areas and establish a homeowner’s association which shall be submitted in final form to the Planning Director

before any building permit may be issued for any structure in any phase of the development. Said agreement shall comply with Minnesota Statues 515B-103, and specifically the provisions concerning the transfer of control to the future property owners. The HOA documents shall include required maintenance of wetland buffers.

10. That the HOA documents include architectural requirements that require 4-sided architecture and garages facing the public right-of-ways to have windows and/or other architectural features.

11. The applicant shall enter into a landscape license and maintenance agreement with the City that clarifies the individuals or entities responsible for any landscaping installed in areas outside of land dedicated as public park and open space for each platted phase of the development.

12. That the HOA be responsible for the maintenance of all landscape walls that cross residential property lines or publicly owned Outlots or rights-of-ways, and that the walls be contained within a landscape easement.

13. The developer shall provide for an HOA owned and maintained children's play structure or other similar improvement on Outlot R as discussed by the developer during the PUD concept review.

14. That a fee in lieu of park land dedication be paid to the City based upon an appraisal by an appraiser to be chosen by the City and paid for by the developer. Also that a 30 ft. wide trail corridor be dedicated to the City centered on public trails in the development and that the value of the dedicated land be credited toward any fees in lieu of parkland dedication. The park land dedication shall not include wetlands, wetland buffer area, and no credit will be given for land beyond the 30 ft. centered on public trails. And lastly, that the cost of constructing any public trails within the dedicated park land be credited towards any fees in lieu of park dedication.

    a. Outlots B, and T shall be dedicated to the City as parkland for trails.

15. That the PUD Plans provide an 8 ft. public trail (concrete or bituminous) in the right-of-way in front of Lots 4-12, Block 16.

16. That a trail phasing plan be submitted by the developer to be approved by City Staff and that the public trails be constructed within each phase prior to building permits being issued for that phase of development.

17. That a 10' wide trail segment be provided from Street D to the east edge of the plat within the County Right-of-Way.

18. That a sidewalk be provided on one side of every street in the development with the exception of Street C.

19. That the Tree Preservation Plans and Preliminary Landscape Plans be updated to comply with the City's tree preservation requirements and the City's landscape requirements for review and approval by the City prior to recording the final plat.

20. The developer shall provide woodland management and pollinator friendly native seeding in lieu of some required tree preservation replacement tree requirements as recommended by the City's Landscape Architect.
21. All changes and modifications to the plans requested by the City Engineer in the Engineer's report dated, March 8, 2017 shall be incorporated into the preliminary plat and PUD plans.
22. The Preliminary Plat approval is conditioned upon the applicant meeting all City standards and design requirements unless specifically addressed otherwise in this resolution.
23. The developer shall comply with all comments identified within the Washington County letter dated March 6, 2017, including providing an additional 17 feet of right-of-way along 10th Street N. and constructing turn lane improvements meeting Washington County standards at the developer's sole expense.
24. The applicant shall provide evidence that all conditions attached the Valley Branch Watershed District permit for the final plat and associated grading work have been met prior to the commencement of any grading activity.
25. That all openspace within the shorelands be protected with a conservation easement and that conservation easements be provided for review by the City Attorney and to be executed prior to final plat approval.
26. That golf carts shall be prohibited on city streets and city trails unless specifically allowed by City Ordinance.
27. Prior to the issuance of building permits all wetland buffers shall be delineated and identified via staking or signage that is acceptable to the City.
28. The applicant must provide the city a letter of approval to perform the proposed work in the gas pipeline easement within the development area as a condition of preliminary plat approval.
29. Prior to the construction of any subdivision identification signs or neighborhood markers within the development, the developer shall submit sign plans for review and obtain a sign permit from the Planning Department.
30. That the preliminary plat be updated to include street names that are consistent with the City's street naming ordinance and approved by the City Council.
31. The developer shall follow all of the rules and regulations spelled out in the Wetland Conservation Act, and shall acquire the needed permits from the appropriate watershed districts prior to the commencement of any grading or development activity on the site.
32. The developer shall enter into a separate grading agreement with the City prior to the commencement of any grading activity in advance of final plat and PUD plan approval. The City Engineer shall review any grading plan that is submitted in advance of a final plat, and said plan shall document extent of any proposed grading on the site.
33. The developer shall submit a revised preliminary plat and plans meeting all conditions of approval. All of the above conditions shall be met prior to the City accepting an application for final plat and prior to the commencement of any grading activity on the site.
34. That approval of the preliminary plat be contingent on Street D access to 10th Street.

RECOMMENDED FINDINGS FOR REZONING:

1) That the rezoning is consistent with the comprehensive plan

RECOMMENDED FINDINGS FOR PRELIMINARY PLAT/PRELIMINARY PUD:

Staff is recommending that the Planning Commission consider the following findings with regards to the proposed Royal Golf Club at Lake Elmo preliminary plat and PUD plans:

- That the Royal Golf Club at Lake Elmo PUD General Concept Plan was approved by the City on September 6, 2016 and the submitted Preliminary Plat and Preliminary PUD Plan is consistent with the approved PUD General Concept Plan.
- That the Royal Golf Club at Lake Elmo preliminary plat and preliminary PUD plan are consistent with the Lake Elmo Comprehensive Plan and the Future Land Use Map for this area.
- That the Royal Golf Club at Lake Elmo preliminary plat and preliminary PUD plan generally comply with the City's GCC - Golf Course Community zoning districts as modified by the PUD regulations.
- That the Royal Golf Club at Lake Elmo preliminary plat and preliminary PUD plan comply with the City's subdivision ordinance.
- That the Royal Golf Club at Lake Elmo preliminary plat and preliminary PUD plan comply with the City's Planned Unit Development Regulations.
- That the Royal Golf Club at Lake Elmo preliminary plat and preliminary PUD plan comply with City's Engineering Standards, except where noted in the review memorandum from the City Engineer dated March 8, 2017 and modified by the PUD regulations.
- That the Royal Golf Club at Lake Elmo preliminary plat and preliminary PUD plan comply with other City zoning ordinances, such as landscaping, tree preservation, shoreland, and erosion and sediment control, except as noted in this staff report review memorandum from the City Engineer dated March 8, 2017.
- That the Royal Golf Club at Lake Elmo preliminary plat and preliminary PUD plan achieve multiple identified objectives for planned developments within Lake Elmo.

RECOMMENDATION:

Staff recommends the Planning Commission recommend approval of the 1) Rezoning of the former 3M Tartan Park properties from PF – Public Facilities to GCC – Golf Course Community with the following motion:

"Move to recommend approval of the rezoning of the Royal Golf Course Development properties from PF-Public Facilities to GCC-Golf Course Community based on the findings identified in the Staff report."

Staff recommends the Planning Commission recommend approval of the Preliminary Plat and Preliminary PUD Plans for the Royal Golf Club at Lake Elmo with the following motion (this item cannot be approved by the Council until the Metropolitan Council approves the comprehensive plan amendment):

"Move to recommend approval of the Preliminary Plat and Preliminary Planned Unit Development Plans for the Royal Golf Club at Lake Elmo with 33 conditions based on the findings identified in the Staff report."

ATTACHMENTS:

1. Application Narrative
2. Preliminary Plat
3. Tree Preservation Plans
4. Preliminary Landscape Plan
5. Phasing Plan
6. Shoreland Evaluation
7. City Engineer's Report, dated March 8, 2017
8. Washington County's Report, dated March 6,2017
9. Street Names Exhibit
10. Concept Plan Staff Report

City of Lake Elmo
Planning Commission Meeting
Minutes of March 13, 2017

Chairman Kreimer called to order the meeting of the Lake Elmo Planning Commission at 7:00 p.m.

COMMISSIONERS PRESENT: Kreimer, Dodson, Dorschner, Emerson, Larson, Williams, Lundquist and Hartley

COMMISSIONERS ABSENT: Fields

STAFF PRESENT: Planning Director Wensman and City Administrator Handt

Approve Agenda:

M/S/P: Dodson/Williams, move to approve the agenda as presented, ***Vote: 7-0, motion carried, unanimously.***

Approve Minutes: January 23, 2017

M/S/P: Dodson/Larson, move to approve the January 23, 2017 minutes as presented, ***Vote: 7-0, motion carried unanimously.***

Approve Minutes: February 27, 2017

M/S/P: Williams/Lundquist, move to approve the February 27, 2017 minutes as amended, ***Vote: 4-0, motion carried unanimously.***

Public Hearing – PUD Concept Plan – Lakewood Crossing 2nd

Wensman started his presentation regarding the Lakewood Crossing 2nd Addition PUD Concept Plan. This will be a 3 lot subdivision on 3.82 acres. The proposal is for a full service restaurant, chiropractic and other retail activities. This property is currently vacant but is guided for commercial. This PUD Concept Plan is intended to be intended to provide the applicant guidance so that they can adjust the proposal if necessary. The PUD will give flexibility to maximize the use of the property when straight zoning does not work. There is a requirement that 20% of the project area be open space. There are no open space calculations which must be provided. Lot dimensions and Bulk requirements are largely met, but flexibility is being requested for the following 1) minimum lot width 2) Impervious surface 3) Parking setbacks.

There are some deviations from the commercial design standards. Some of the standards do not apply to this site and the unique shape of the lot make some of them a challenge. There is not much landscaping proposed, especially along the exterior streets. Most of the review comments come from engineering and have to do with traffic and access management. Hudson Blvd is a main collector and there is spacing limitations to 660 feet spacing for full access intersections. That would put the West access in the Ebertz property. The City is suggesting working with the Ebertz to develop together.

There are 18 recommended conditions of approval including meeting all engineering comments, a comprehensive sign plan, open space calculations, amended landscape plan to meet city standards, financial security, obtain necessary permits, etc.

Kreimer asked if this could be done with one entrance or if there would need to be two for safety. Wensman stated that to his knowledge there would not need to be two, but should be run by the fire chief and city engineer.

Williams asked why there would be no deed restriction on the shared parking as part of this as it states it is at the time of sale. Wensman stated that there should be a cross access agreement with the plat, not at time of sale.

Hartley asked if the city engineer reviewed this for drainage. Wensman stated that at the concept plan, they are looking at the bigger picture and the issue is the access management.

Kreimer asked why this property would need to provide the sewer and water. Is it not in Hudson Road? Wensman stated that the sewer access does not extend all the way down to Ebertz property.

Bruce Miller, CM Properties, they are building on speculation and hope that the businesses will come. They are asking for some flexibility from the code so that they can bring a much more quality development forward. The drive through component is a CUP in the Commercial code through the PUD process and they would like to get those approvals now so that they can market to those types of businesses with confidence. He feels that the allowed signage is limiting and signs would be difficult to see. They have been working on some signage proposals for a comprehensive sign plan. Miller stated that rather than the 20% open space required with a PUD, he is proposing upgraded architectural features. He is confident that there will be enough parking. It is to there benefit to make sure there is adequate parking to meet the needs of their tenants.

Hartley asked about a shared driveway on the West side with the Ebertz. Miller stated that the first phase would not need the second access point unless the fire chief

requires it. He stated that he does not control the Ebertz property, but he is willing to give them an easement for access.

Public Hearing opened at 7:52 pm

No one spoke and there were no written comments

Public Hearing closed at 7:52 pm

Williams feels that this is a good development and good for this spot. He does have concerns about the access spacing, traffic flow for all the drive thru and parking needs to be more detailed. The offsets to open space he is willing to discuss, but needs to be convinced with more details of landscaping and architectural design. Dodson agrees with Williams and would like to see an agreement worked out with the property owner to the West. There was discussion regarding concern with the traffic flow of the drive thru. Kreimer would like to see a couple of islands in the center of parking lot to break it up a little bit. He is also concerned about the turn radius for the multiple drive-thru and is concerned about the access spacing.

Lundquist thinks this will be a great addition to the community and she is not concerned about the drive-thru radius. Hartley is uncomfortable permitting some of these activities without knowing what the actual use or scale will be. He would like to see them as Conditional Use Permits as the use comes in. Kreimer would like to add condition #19 that the applicant shall be limited to 4 drive thru accesses and 2 of these must be low intensity uses. Miller stated that the approval or denial for a drive thru would impact how you lay out the site and construct the building. Dodson is wondering if the design of the buildings limits what types of businesses would go in there. Miller stated that the design would dictate what types of businesses would go in there.

Williams is wondering if with the next phase the developer could give them information regarding the drive thru traffic. Hartley stated that the drive thru traffic could be part of the parking space analysis.

M/S/P: Dodson/Williams, move to add condition of approval #19 that an analysis be done on the drive thru traffic volume, including any impact on the parking areas as well as the secondary access and overall development, ***Vote: 7-0, motion carried unanimously.***

Dorschner feels that this would be self-managing as businesses will pick a location that will accommodate their needs. He doesn't see the concern with the parking as this development doesn't seem any more dense than in other communities. Lundquist agrees. She sees the traffic going around with a flow.

M/S/P: Dorschner/Lundquist, move to recommend approval of the Lakewood Crossing 2nd addition PUD Concept Plan with the 19 conditions of approval as drafted by staff and amended by the Planning Commission, based on the findings of fact listed in the staff report, ***Vote: 7-0, motion carried unanimously.***
Williams would like a friendly amendment to #14 that the word "for" be inserted at the beginning of the sentence. This friendly amendment was accepted. Wensman suggested that for condition #17, the first part of sentence should be struck and it should read "a deed restriction that guarantees access to the parking for all uses must be submitted." This friendly amendment was accepted.

Public Hearing – Final Plat and PUD Plans – Inwood 5th Addition

Wensman started his presentation regarding Inwood 5th Addition final plat and PUD Plans. This is the last addition of the residential portion of the development. This is a replatting of Outlots A, B, F and G of Inwood 3rd Addition. They are proposing 101 Single family lots. In 2014, Washington County conducted a Preliminary Plat review and requested an additional 32 ft of ROW from future 10th Street improvements. This condition was a condition of approval documented in several locations. It is in the 2014 Preliminary Plat report, the resolution approving Preliminary Plat and the signed developer's agreement. At one point the Developer was talking with the County about ROW to the north. That never transpired and plans were never updated. The County has control over the proposed Island Trail and 10th street intersection and they want the 32 ft of dedicated ROW with this plat.

Another condition of preliminary plat approval is that the developer install a multi-purpose trail along 10th street between Island Trail and Inwood Ave. Staff was supportive of removal of this trail, but the Commission and Council's resolution of approval required this trail. Preliminary Plat was never updated and it is not included in Inwood 5th Plat submittal. There are some Landscaping and engineering revisions that are required, such as removal of certain trees and berms and required water main easements.

Kreimer asked if there is room to build the homes if they do the 32 foot ROW dedication. Wensman stated that those are deep lots, but the back yards will have part of the berms and it will tighten things up. Williams is wondering why the application is not deemed incomplete without that ROW dedication. Wensman stated that it was originally deemed incomplete. The Developer provided more information and upon the City Attorney's advice, it can be dealt with through conditions. There was discussion about the advantage of the trail ROW to the North vs. the South. The trail would be located within the 32 feet of ROW being required. Wensman stated that from a Planning perspective, the trail is desirable to move people to the future commercial properties to the West. Dodson asked if the segment of trail along 10th street would be a City trail. Wensman stated that he thinks it is HOA owned and maintained, but he is not sure.

Williams stated that condition #4 should be South Washington instead of Valley Branch watershed district.

Hartley is wondering if this was reviewed by the Fire Chief, specifically if the Circles that dead end are wide enough. Wensman stated that it was a concern of the City Engineer and he would like the pavement widened there so that they function better.

John Rask, MI Homes, stated that the cul-de-sacs are standard radius for cul-de-sacs so they would accommodate a fire truck. He does not necessary disagree with the conditions of approval of Preliminary Plat, but what is missing is that there were subsequent approvals granted for final plats and grading that didn't have this trail. They had discussions with the County and they agreed to take the ROW and trail to the North. Rask feels that with the staff turnover, some things have fallen through the cracks. Rask stated that these discussions were held after the Preliminary Plat was approved. He feels that the County has changed the requirements. When Inwood was approved, it was known and stated that both Inwood and 10th Street would someday be 4 lane roads with trails on one side. Rask stated that if they grant the ROW, they will need to take out the berm and the trail was never once shown on any of their plans. The berm was installed at expense to the developer to make the development look better. They graded the berm with a grading permit and no one ever mentioned that the trail wasn't on the plan. Rask feels they are consistent with the City's trail plan and added trails at the City's request. Rask is making the following request that 1) the Planning Commission find that the trail along 10th street is inconsistent with the City's Comprehensive Plan 2) Strike the conditions requiring additional ROW and a trail along 10th Street 3) Reconfirm that the trail and additional Row should be on the north side of 10th Street 4) allow the existing berm to remain as approved in the Development contract approved by the City Council.

Dodson asked what would happen to the berm if the additional 32 feet of ROW is given. Rask stated that they would need to take out the berm. Williams asked why it couldn't be moved to the south. Rask stated that the whole row of lots would be lost as it couldn't remain in the ROW. Williams asked when the developer was made aware of the staff's analysis of the ROW issue. Rask stated that it was probably in December. What happened is they went to County for an access permit to construct the road and then they were told about the trail and additional ROW. Rask doesn't believe that the County has that authority. Williams doesn't see that the City should be involved in this other than dealing with what is in written record which is the condition of approval. Wensman stated that the trail and the ROW were conditions of approval that are in multiple locations and were carried over from Preliminary Plat. It is typical for the County to require these things with access and typical for the City to require that as part of the plat.

Public Hearing opened at 9:00 pm

No one spoke and there were no written comments

Public Hearing closed at 9:00 pm

Williams thinks that the trail and ROW issue is more complicated than they can deal with tonight. He would suggest that under condition #9 that at the end add "unless the County submits written permission for less ROW". He feels that the written record shows that the ROW should be dedicated, but it is up to the County. Wensman stated that the County has reaffirmed their letter from November 17, 2014, that they would still need that ROW. Handt stated that if the City does not get that ROW at the time of plat, when the County does need to acquire the land, they will come back and charge the City for the acquisition of the ROW. Rask disagrees with that statement.

M/S/P: Williams/Dodson, move to add finding #8 that the legal issues surrounding the additional 32 feet of ROW and the trail from Island to Inwood along 10th Street are beyond the scope of the Planning Commission, ***Vote: 6-1, motion carried, with Lundquist opposed. Lundquist feels that they have an obligation to remain consistent with what the County is asking for.***

M/S/P: Kreimer/Dodson, move to add finding #9 that the Planning Commission finds significant value to the existing berm that the developer built along 10th Street and the County should be requested to retain the berm regardless of the ROW issue, ***Vote: 6-1, motion carried, with Lundquist opposed.***

Wensman stated that the County is fine with the berm staying as long as there is a wall once it gets to the ROW. They don't want to have to move or restore the berm if improvements need to be made. Lundquist stated that 10th street is a major thorough fare with plans to go to a 4 lane and they need the space.

M/S/P: Dodson/Williams, move to recommend removing condition number 11 requiring a multi-purpose trail along 10th Street between Island Trail and Inwood Ave be removed, ***Vote: 7-0, motion carried unanimously.***

Kreimer remembers the discussion about the trails and he remembers giving up the requirement for a trail on Inwood, but that they decided that they wanted the trail along 10th Street. Larson stated that there is already a trail through the development to the commercial so it is not like there is no trail at all. Dorschner remembers the developer stating that they could get easements on the North side of 10th for the trail. He feels it makes sense to make the connection. Rask stated that to give more ROW and build the trail, he would have to remove the berm. Rask stated that when they sat down with the County, he felt that there was no compromise. He feels that the County wants everything and is willing to give nothing.

M/S/P: Kreimer/Williams, move to add a condition requiring that the section of trail from Island trail to the eastern buffer is built, ***Vote: 7-0, motion carried unanimously.***

M/S/P: Dodson/Williams, move to add a finding #10 that the City consider any trail required to be implemented by the development from Island Trail to Inwood be credited towards parkland dedication, ***Vote: 7-0, motion carried unanimously.***

M/S/P: Williams/Dorschner, move to recommend approval of Inwood 5th Addition Final Plat and Final PUD plans with 11 conditions of approval based on the findings as amended in the staff report, ***Vote: 7-0, motion carried unanimously.***

Public Hearing – Zoning Map Amendment and Preliminary Plat and PUD Plans - Royal Golf

Wensman started his presentation regarding the rezoning from PF to GCC – Golf Course Community and the Preliminary Plat and PUD Plans. Wensman went through the issues from the Concept plan that were addressed with the Preliminary plan. With the PUD Overlay, the developer has requested flexibility. They would like single access to the clubhouse, lot sizes smaller than 9000 for villa lots, 40% impervious and 20 ft front yard setbacks on villa lots, 50 ft ROW on Street C, add'l subdivision and neighborhood signs, and garages greater than 1000 sq ft to be permitted rather than a CUP.

With the Shoreland evaluation, there are 100 lots within the shoreland area, the development is preserving 50.5% or the shoreland, where 50% is required, less than allowed base density within each shoreland, shoreland impact zones and steep slopes preserved in Lake Elmo and Downs Lake, 70% of shoreland impact preserved for Rose and Horseshoe, 59.9% of Lake Elmo shoreland preserved, and preserved a wildlife/drainage corridor from NW to SE. The developer needs to maintain a 100 ft Natural Corridor outside of lot areas. They have 89 feet, so staff has made the 100 foot corridor a condition of approval. The GCC minimum lot size is 9000 sq feet. The PUD flexibility sought is 6,600 sq ft on some lots. The average lot size is 13,499 sq feet because of some of the larger lots. There is also a request for PUD flexibility for 20' front setback and 7.5' setbacks. The 7.5' setback averaging is already allowed by policy. Staff is requesting there be an exhibit which clearly shows specific lots and setbacks, no encroachments into D & U easements and lots with 20' setbacks should have garages adorned with windows or other architectural features for sides of garages facing the public ROW. The GCC maximum impervious per lot is 30%, the request for PUD flexibility is for 40%. Staff feels this is ok as it matches LDR zoning and will be limited to the villa lots. The developer is asking to forego the sidewalk requirement on a number of streets. Staff is only supportive of street C having no sidewalk because of site limitations. Dodson would like the exhibit showing the setbacks to also show which lots can have the larger garage.

GCC allows 1000 sq ft maximum garage and the developer is asking for a deviation for a larger garage to store golf carts. Staff is supportive of the request, provided that the garage doors will not exceed 60% of the principal building façade fronting a public road, impervious surface limits are not exceeded, and that the upper limit of permitted garages is 1300 square feet.

Williams stated that in a PUD process the City is supposed to get something to give something. He is wondering what we are getting for all of these deviations. Wensman stated that a large part of what the City is getting is less impact to the Shoreland. There are other things in the presentation and they can discuss the give and take at the end of the presentation. GCC zoning requires a 100 foot buffer from external residential lots. They are meeting or exceeding that buffer. Note that the City does not require the buffer to properties outside of the City limits. There was some discussion about parkland dedication and trails. The Park Commission is not recommending a park on this property, but would like to see trail dedication. The trails in the development connect all of the neighborhoods which was a goal. Wensman would like a trail phasing plan as trails need to be constructed with each corresponding phase of the development. The development exceeds the open space requirements both for GCC zoning and for shoreland. There are restrictive covenants that need to be submitted prior to final plat. These would include conservation easements over shoreland areas and HOA/CIC documents.

The subdivision code allows for two 24 square foot subdivision signs per development. Developer is requesting flexibility to have up to 4 subdivision signs (including one at clubhouse entrance) and up to 6 neighborhood markers to identify the villa enclaves within the development. Staff is supportive of the flexibility due to the unique layout and size of the development and the multiple entrances. A sign permit is required prior to construction. The developer is proposing unique street names that have a golf theme. Wensman stated that it does not meet the County street naming conventions, but does meet the City's street naming ordinance. The allowed architecture would be addressed in the HOA documents. For tree preservation and tree replacement, the developer is interpreting the site as mixed-use which would allow replacement trees to be used as landscape required trees. The City attorney and staff interpretation is that it is not a mixed use. The landscape plan cannot be evaluated until tree replacement is determined. Landscape walls crossing residential property lines shall be owned and maintained by the HOA and within the maintenance easements. Williams asked if there was a definition of "forest management and natural seeding". He feels that it needs to be clearly defined.

The developer's vision is to have all the development accessible by golf cart. The public ROW and trails would need to allow golf carts. This would require a special City ordinance as it is currently prohibited. An agreement has been reached with the Emerson property to provide access to 10th Street. Wensman talked about phasing of the development. It is anticipated to be done in 4 phases from 2017-2023. Phase one

is a big phase as the infrastructure must be put in and the golf club is required to be sewered within 2 years. There are some engineering issues that will need to be addressed such as infiltration ponds located in gas line easement, lift stations on outlots that do not appear large enough to accommodate them, outlots need to be dedicated and others on the engineers report. There are some transportation requirements including dedicating ROW and supplying turn lanes.

The Golf Course is planning to put in clubhouse cottages. The location is currently shown as a separate lot. Staff is recommending that the lot be combined with the clubhouse lot as these cottages are accessory to the clubhouse and will require a CUP. Hartley asked if this property is then considered commercial. Larson feels that the zoning is confusing when the golf course is taken out of it. There are a lot of different things going on with this development and he is wondering why it would not be mixed use. Wensman stated that the City Attorney does not feel it is a mixed use.

Wensman went through the 34 conditions of approval and findings of fact. Staff is recommending rezoning from Public Facilities to GCC based on the findings identified in the staff report. Staff is also recommending approval of the Preliminary Plat and PUD plans with the 34 conditions with the understanding that the City Council cannot approve this until the Met Council approves the comprehensive Plan amendment. Wensman stated that the jurisdictional review period ends on March 24th. Once that ends, the Comprehensive Plan Amendment can be submitted to the Met Council. The Met Council has 60 days to review it and get back to the City.

Dodson is asking about impervious surface and drainage around the villas. Wensman stated that the engineering plans were not included but the water has been addressed through the engineering plans. Dorschner asked about reductions of golf fees and six figures for replacing ball fields. He is wondering if it is not a condition, where would that be captured for the City. Schroeder, HC Golf, stated that it would be in the developer's agreement. Kreimer asked if the Park Commission weighed in about the Tot lot location. It seems in a location that would not serve many people. Wensman stated that the Park Commission did not really talk about it. The developer is actually talking about moving it where the more millennial product is located. Dodson is concerned about the drive into the clubhouse. If there is a big tournament, people might try to park along that driveway. Is there a way to mitigate that? Wensman stated that it could be signed no parking.

Rick Packer & Clark Schroeder, Royal Golf, are not in favor of the sidewalk/trail and prefer 6 ft. He does not like the look of sidewalks in a cul-de-sac and they do not help with connectivity because they would dead end. Sidewalks are not typically put in a cul-de-sac. There is discussion regarding the tree preservation. This is clearly a commercial use and should be treated as a mixed use. They are not opposed to the forest management. The golf cart access is very important to them as a golf course community.

Lundquist stated that at one time there was talk about putting an 8 foot shoulder on the south side of 20th street to make it safer. She is wondering if they still plan to do that. Schroeder stated that they will be dedicating ROW, but what that is used for, they are not sure. Packer stated that they will be building right turn lanes at 4 locations. There will be widening at the turn lanes. Packer stated that the speed limit is 45 mph on the road. If there is a concern about safety, maybe the speed limit should be reduced to 30 mph. Williams stated that a trail in the NW corner from 20th Street to Lake Elmo Ave would be very useful. Packer stated that they could look at that and it would take tree removal. Larson would like to discuss the zoning for the golf course as public facility vs. golf course community. Packer stated that was the route the City Council chose to go with. He feels that it helps preserve the golf course and the open space.

Kreimer asked about the tot lot location. Would it work by street "F". Packer stated that it might work there or in the Southern area, but they are trying to be sensitive to the Homestead neighborhood. Packer stated that maybe it could go up with the pool and fitness center on HOA maintained property.

Public Hearing opened at 11:10 pm

Michael Biebl, 12020 18th Street N, representing people on the East side of the development, he feels some of the things that the City is asking for, such as increased sidewalks, decreases the buffers. The City has no requirements to provide buffers to anyone outside of the City. The tightest units are the one that border West Lakeland and there are no buffers. Even though there have been traffic studies, he is concerned that development traffic and wedding venue traffic will be too much for this road. Would like to see a good give and take with the developer to make this a good plan.

Michael Zwiefel, 2055 Manning Trail, the common theme of this development is flexibility. He would like to point out that this property was purchased with the only use allowed a golf course. He heard at the very first presentation that a well-run golf course is sustainable on its own, so everything else being mentioned is not necessary. He feels with all of the uses on the site, close to 300 homes, restaurant, fitness center, wedding venue, etc., the traffic count will increase 10, 20 or even 30%. The events held at this location will be very hard on the community surrounding it. There are a lot of Villa lots and it seems that there is an exception being asked for with almost all of them. Lot sizes are being asked to be smaller, setbacks reduced, larger garages and less impervious surface. All of these things seem to be counterproductive for what the City should be looking for. He feels that to meet City requirements, they should reduce the density and they could easily meet the standards.

Jim Voeller, 11314 12th Street N, it is hard to stay on top of this development as it continues to change. He does not like the trail that goes to the northern of the existing neighborhoods. He does not see the benefit of it with people running along their

backyards. The City has agreed to sewer and do all of these extra things. When is the City going to say no to something? He feels the answer to the cottages should be no. He feels that this development is totally inconsistent with the neighborhood. It seems that the City is too willing to give the developer everything that they want. He feels that if the golf course would not have been a part of this, the development would have been done as an open space development as 18 units per 40 acres. Even if the golf course property was included as an open space development, there would have been 200 houses vs 300 houses. Voeller feels that the neighbors are not being listened to as there was a petition signed by 160 neighbors that were not in favor of the density here.

Ellen Johnson, 11050 14th Street, board member for Homestead community. Her neighborhood feels that having the trail so close to their neighborhood infringes on their privacy. Their neighborhood is currently in negotiations with the developer to provide a custom shielding. They have an agreement in spirit, but would like it in writing so it is clear. They are wondering if the neighbors will have access to Royal Golf if the shielding isn't adequate and they want to add to it.

Dana Smith, 2121 Legion Lane N, he likes the forest management and the fact that about 60% of the trees are being preserved. He likes the idea of reducing the speed limit on 20th Street to 30 mph because the safety of bikers and walkers is a big concern. All of the deviations stem from the number of units being put in. He feels that if the number of units are reduced, the deviations would be fewer. He is not sure why the density discussion has been abandoned. He feels that the safety of 20th street is very important and he feels that the developer saying that they have done the best that they can is not good enough. He is concerned about the light pollution from the lights. He is wondering if there are regulations surrounding lighting.

Mary Leslie, 11546 20th Street, her husband negotiated the original purchase agreement with the original property owner when 3M purchased the property. She is very concerned with how steep the banks are on 20th Street and the fog that is on the road from Lake Elmo Lake. She feels with the intensity of the things going in at Tartan Park, the speed limit should be reduced. She is concerned about the water and the ponding.

Public Hearing closed at 11:53 pm

Dorchner is still not clear why the golf course needs to be rezoned. Wensman stated that it is currently public facilities. If it stays that way, there would be no development and the comprehensive plan approved by the City Council guides it for a golf course community zoning. Dorschner stated that when they approved the golf course community zoning he did not understand that to be adding all of the commercial type uses such as the clubhouse, rental units, restaurant and the fitness center. Williams stated that as much as he is opposed to this development, the City Council has decided on the direction and this proposal meets the GCC zoning.

M/S/P: Lundquist/Larson, move to recommend approval of the rezoning of the Royal Golf Course Development properties from PF-Public Facilities to GCC-Golf Course Community based on the findings identified in the staff report, and changing the finding on page 19 to say "that the rezoning is consistent with the Comprehensive plan approved by the City", ***Vote: 7-0, motion carried unanimously.***

M/S/P: Williams/Dodson, move to add condition #35 that a sidewalk be constructed along the south side of 20th Street from what is labeled street E, West to Lake Elmo Ave, ***Vote: 7-0, motion carried unanimously.***

Lundquist was going to make a proposal or finding of fact that we do a little more work on 20th Street as it doesn't have any shoulders on either side. In all the public hearings, people talk about the safety on 20th Street with current traffic, let alone adding more to it. Dodson feels that the sidewalk is needed to get to the Park Preserve.

M/S/P: Lundquist/Larson, move to add finding of fact #9 that there has been a significant amount of testimony that 20th Street is already dangerous because it has no shoulders and poor line of site without any additional traffic and the City and developer need to explore ways to make the road safer, ***Vote: 7-0, motion carried unanimously.***

M/S/P: Dodson/Williams, move that the Royal Golf Development will not have any street lighting, except at street intersections and that there be a photometric analysis to ensure that any current lights in the parking lot meet the dark sky ordinance, ***Vote: 7-0, motion carried unanimously.***

Williams asked about the photometric analysis of the parking lot near the clubhouse. Wensman stated that they are not making any changes. The position of the City is that any intensification would require a CUP amendment. Wensman stated the current City code does not require lighting, but there are standards for when they are placed. This might be a topic that the Planning Commission looks at in the future. Packer stated that they do not have a strong feeling one way or the other in regards to street lights. They would like to see the street lights at intersections for safety however.

M/S/P: Dorschner/Lundquist, move to add condition #36 that the developer work with all adjacent properties to get an agreement for shielding in place for screening and that it be incorporated into the final landscape plan, ***Vote: 7-0, motion carried unanimously.***

Williams stated that there was testimony from a West Lakeland resident that there was not adequate screening and it is not shown on the plan for the Eastern border. Packer stated that there is an email agreement with the resident for a septic and landscaping agreement. Schroeder stated that the person that spoke regarding not having adequate screening, actually lives across Manning Trail and is not actually an adjacent property owner.

Dodson wanted to discuss the forest management proposal. Wensman stated that one of the builders for the development is proposing different lot lines for the eastern portion of the development. Wensman stated that staff would like to review this and bring it back to the Planning Commission in the future. The developer is requesting that this be tabled to the next meeting to give staff time to review the changes with revised plans. The forest management discussion can also be brought forward at that meeting. There was some discussion regarding the irregular shaped lots.

Williams wanted to comment on the number of units for the development and the fact that the time has passed to try to lower the number.

Dodson is wondering if the trail in outlot "T" can be re-routed to go along the new homes of the development. Packer stated that there are wetland buffers that do not allow trails and there is a retention basin. There is no way to get a trail closer to those homes.

M/S/P: Williams/Larson, move to postpone consideration of the preliminary plat and PUD plans until the next meeting, ***Vote: 7-0, motion carried unanimously.***

Wensman asked about the forest management plan. Williams stated that buckthorn is a big concern of his. Hartley stated that it should be a continuing effort and not a one shot deal and there should be some assurance that the woodlands is preserved.

Williams reminded everyone to bring all of the data for Royal Golf to the next meeting for Royal Golf so that the City doesn't have to reproduce it.

City Council Updates – March 7, 2017 Meeting

i) Hammes Estates 2nd Addition Final Plat Extension –Passed
ii) Approve SHC Comp Plan Update Agreement – Passed
iii) Shoreland Management Overlay District Ordinance Amendment – Passed
iv) Planning Commission Appointment – Terry Emerson 2nd Alternate

Staff Updates

1. Upcoming Meetings
    a. March 27, 2017
        i. Comp Plan Amendment hearing for Tri-Lakes MUSA
        ii. VMX rezoning hearing
        iii. Possibly Hidden Meadows Final Plat
    b. April 10, 2017
2. MAC CEP Report

Commission Concerns

Dodson is concerned that the commercial code was not adequate for the commercial development that was brought forward tonight. He is concerned with the number of PUD's that keep coming forward. Wensman stated that once the PUD ordinance is in place it will be easier and is a tool that is used to make development better.

Dodson mentioned that another thing that was not talked about with Royal Golf was the use of golf carts. He is in favor of the use of golf carts in this development. Wensman stated that it would be an ordinance amendment.

Lundquist is wondering if the City Engineer works with a hydrologist. Wensman stated that they work with Valley Branch which is probably a hydrologist. Goose Lake is filling up and probably can't take much more.

Meeting adjourned at 12:47 pm

Respectfully submitted,

Joan Ziertman
Planning Program Assistant

City of Lake Elmo
Planning Commission Meeting
Minutes of March 27, 2017

Chairman Williams called to order the meeting of the Lake Elmo Planning Commission at 7:00 p.m.

COMMISSIONERS PRESENT: Larson, Dorschner, Emerson, Williams, Lundquist and Hartley

COMMISSIONERS ABSENT: Fields, Kreimer and Dodson

STAFF PRESENT: Planning Director Wensman and City Administrator Handt

Approve Agenda:

The agenda was accepted as presented**.**

Approve Minutes: March 13, 2017

M/S/P: Lundquist/Dorschner, move to approve the March 13, 2017 minutes as amended, ***Vote: 6-0, motion carried unanimously.***

Public Hearing – Zoning Map Amendment – General Business to Village Mixed Use

Wensman started his presentation regarding the rezoning of properties from GB to VMX. Since 2013, there have only been 3 properties rezoned to VMX based on applications received by the City. In 2016, the Planning Commission discussed rezoning all of the properties to VMX, but tabled it for the following reasons 1) densities within this area are guided too high 2) VMX standards are less restrictive 3) form based code should be created 4) updated population and development projections for area needed. The rational for the rezoning is to bring the subject perperties' land use consistent with the Comprehensive Plan. Without the rezoning at this tiem, many improvements to these properties would require owners to rezone to VMX and obtain variances.

Wensman went through the differences between GB and VMX such as lot width, lot area and impervious surface maximum. There are 83 parcels currently zoned general business. There are some parcels that are guided RS that are guided for VMX and there are a number of parcels zoned RS being used for business, not single family homes. The residential properties being used for business were not noticed, but should be included in this rezoning. Re-publication of the public hearing to include these properties would be needed. The properties that are guided for VMX, but currently used as single family

residences, staff is not recommending rezoning at this time. Staff feels that single family residences should be an allowed use in the VMX. If that is the case, those existing single family homes could be rezoned to VMX as it would have no impact on them. New and existing homes should be treated the same.

Hartley is wondering why there is long list of condition uses as part of the VMX district. Wensman stated it is the choice of the City Council to decide what is permitted and conditional. Some uses are conditional to allow greater scrutiny of those uses. In the Village, the lots and structures are very close to each other, so there could be uses that should have greater scrutiny with conditions put in place to mitigate unforeseen situations. Hartley thinks the veterinary services should be more specific to small animals, not large animal services.

Wensman stated that if there are specific changes to the code, that code be discussed through the public hearing for the zoning. Williams is wondering if the City Council responded to the June Planning Commission request for updated population projections for the Village area. Wensman stated that they did not specifically respond. They have now launched into the Comprehensive Plan process and it will be addressed through the process. Williams is asking if there were 2 houses fairly far apart on existing lots, could they then subdivide and build another house. Wensman thinks there are greater requirements for single family homes, but he will look at it. Williams asked about the status of the form based code. Wensman stated that with the Comprehensive Plan update, the priority for form based code was lowered. Emerson asked how many single family homes would be affected if they change them to VMX. Wensman thought maybe around 30 properties. Williams asked what the downside would be of those properties being legal non-conforming. Wensman stated if the home burned down, they could only rebuild on the footprint and would not be able to expand without a variance. Williams is wondering about making single family homes conditional uses. Wensman stated that might be a good solution.

Public Hearing opened at 7:32 pm

Sue Dunn, 11018 Upper 33rd Street, she would like the Commission to really think about what things should be conditional uses. She is concerned about surface water and impervious surface. She thinks the VMX could possibly add an additional 10,000 people in the Village Area. She is concerned about the existing businesses. She thinks single family homes are important to the Village Area. She thinks it is important to know what the projections are for 2040 and how close we are to meeting those projections. There is also a huge section to the East that is considered part of the Village area.

There were no written comments

M/S/P: Dorschner/Williams, move to continue the public hearing for the Zoning Map Amendment Discussion to rezone properties to VMX – Village Mixed Use to the next

possible meeting in order to properly notice the public hearing to include the additional properties in the Zoning Map Amendment, Vote***: 6-0, motion carried unanimously.***

Public Hearing – Comprehensive Plan Amendment to add 2 properties to RSF Sewered

Wensman started his presentation regarding adding 2 properties to the Olson Lake Trail sewer area and re-guiding them to Rural Single Family sewered. This would add 4497 & 4473 Olson Lake Trail to the MUSA. The feedback from the Met Council is that it would just be an administrative review and would be similar to what was done in the Village to add additional properties. This does not require any jurisdictional review as we have a joint powers agreement with Oakdale. We have not received any comments from the public notice sent out and advertised.

Dorschner asked what the Oakdale capacity would be for hooking up the rest of the properties around Olson Lake on that road. Wensman stated that they are not in the MUSA so there has been no talk about Oakdale picking them up. Wensman stated that they do not know, because there is no plan for it and the property owners are not requesting it. Handt stated that the Engineers did reach out to neighboring properties to see if they wanted to be included, and these were the only 2 properties interested in being included.

Williams is wondering if there is a Zoning Text that is actually rural single family sewered. Wensman stated that the City does not have that specific zoning, but it is probably something that could be created. Wensman stated that there really is no problem leaving them as Rural Single Family zoning, but the change to the land use designation was something the City Council was interested in to distinguish those properties within the MUSA. Met Council was only concerned with land use designation in the Comprehensive Plan allowing for sewer connection.

Emerson is wondering if they would move the MUSA line without the property owners asking for it. Wensman stated that the City has not required properties to be sewered unless the property owner has petitioned for it and signed a waiver.

Public Hearing opened at 7:44 pm

No one spoke and there were no written comments

Public Hearing closed at 7:45 pm

M/S/P: Dorschner/Lundquist, move to recommend approval of the amendment to the City's Wastewater Facilities Plan by adding PID #'s 090292132001 & 080292140059 to the Olson Lake Trail MUSA, ***Vote: 6-0, motion carried unanimously.***

Hartley stated that they are adding these properties because they specifically requested it. Looking at the map, there are potentially 4-5 properties that would seem to fit the same characteristics of the other properties and why they requested it. Why is the City not adding those properties? Williams stated it is because they did not request it and according to Handt, they actively declined by not responding. Wensman stated that there was one additional parcel that was thinking about it, but after further discussion with the Engineer, they declined. Dorschner is wondering if we have the means through the MUSA to require connection. Wensman stated that with the joint powers with Oakdale, we have the means to connect these properties. Dorschner is concerned that properties along the lake are still on old septic systems and what that means for the future. Hartley stated that he is concerned because the City does not have a very good mechanism to catch when drainfield fail and so we end up with even one house affecting the Lake. Handt stated that most septic problems are caught when the properties are sold or a building permit is issued. Williams stated that the same logic for the additional properties could be applied to the whole Tri-Lakes area. If the MUSA was opened up to the whole Tri-Lakes area, there would be numerous people speaking against it. Wensman stated that there are a number of 201 septic systems in this area that have been created to deal with some of the failing septic systems.

M/S/P: Lundquist/Dorschner, move to recommend approval of a Comprehensive Plan Amendment re-guiding PID #'s 090292132001 & 080292140059 to Rural Single Family Sewered on the City's Land Use Plan, ***Vote: 6-0, motion carried unanimously.***

Dorschner wanted to confirm that there was no Rural Single Family Sewered zoning. Handt stated that there was not, but this is just guiding it as such in the Comprehensive Plan. Hartley wanted to reinforce his concern from the standpoint of the Comprehensive Plan, they do not have the potential pollution issues under control for all of these properties that have individual septic systems and the inspection of them comes well after the fact that they have failed. Williams doesn't disagree, but doesn't feel that it will change anytime soon as he has heard the same discussion for 40 years.

Business Item –Preliminary Plat and PUD Plans - Royal Golf

Wensman started his presentation by stating that the Planning Commission approved the rezoning to GCC on 3/13/17 and tabled the approval for the Preliminary Plan and Preliminary PUD Plans. At the last meeting, the developer was proposing some changes to the NW neighborhood. They have withdrawn those changes at this time. The Planning Commission requested addition information on forest management, but the developer is no longer interested in doing that. The developer has indicated he will comply with the tree replacement requirements, but there is still dispute as to whether the project is a mixed use. Since 3/13, the VBWD has raised concerns regarding some of the infiltration basins. The developer is working through those issues and is confident there are adequate solutions that will not impact the plat. Staff has slightly modified

the condition pertaining to VBWD approval. Staff added a missing condition that the green corridor in the NW neighborhood be a minimum of 100' wide outside of the lot area. Right now there is one area that is shown at 84' with one of the lot lines.

Staff is recommending the same conditions with some corrections and additions. A correction to #15, correcting the Lots and Block it pertained to. Condition #20 pertains to the woodland management. It doesn't hurt to keep that condition if the developer changes his mind, but it is up to the Planning Commission how to handle that. Condition #24 was reworded to make it clearer. #35 was added to capture the 100' green corridor. #36, #37 & #38 are the 3 conditions added by the Planning Commission regarding the sidewalk along the South side of 20th street and that there would be no street lights except at street intersections to meet the dark sky ordinance and to work with adjacent property owners to come up with screening that gets incorporated into the landscape plans. The recommended findings are the same with the addition of #9 that a significant amount of public testimony regarding that 20th street is already dangerous without the additional traffic and the developer needs to explore ways to make the road safer. Staff is recommending approval with 38 conditions of approval and the 9 findings identified.

Dorschner asked what the dispute is around mixed use. Wensman stated that the tree preservation plan has a provision that requires mitigation as well as landscape requirements for residential development. For commercial and mixed use developments there is an exception that all trees with the exception of ornamental trees may be counted towards tree replacement requirements. The developer is saying that this site is mixed use with the golf course being the commercial piece. They are arguing that it the case so that all of the replacement trees will count towards their landscaping requirements. Staff is saying that the golf course is the principle use; open space. It was a public facility in the past and it had an accessory commercial use, which is not the primary use. They will be creating a separate parcel for the more commercial site, and possibly that could be exempted, but exempting the whole golf course is not consistent with past practice and the City attorney does not support the mixed use interpretation. Wensman stated the difference would be a large cost to the developer in tree replacement or a significant loss of trees for the City. Staffs solution for this was the idea of forest management to better serve the development. The developer likes the tree preservation better because it is more quantifiable vs the forest management which is kind of a gray area.

Rick Packer, Royal Golf, stated that the attorneys were discussing the mixed use concept and they had hoped that they could come to a compromise. They did not feel that the forest management was a compromise, but an exchange for the tree preservation requirement. The Royal Golf attorney opinion is that this development is mixed use. There is economic incentive that the City has provided to commercial development. There is currently no definition of mixed use in the City code. In the absence of a definition, those terms are supposed to be given their plan and ordinary meaning. The

Royal Golf Community has 4 different types of uses on the property. There is residential, business services, food service and outdoor recreation. They feel that the golf course is clearly a commercial use. This is a wooded site vs a cornfield, so the number is really large. There are 8500 trees on this site, with about 3000 trees being removed. They are allowed to remove roughly 2500 trees or 30%. They are removing about 35% or 418 trees more than what is allowed. Based on the City code without the mixed use exemption, they would need to plant 3024 trees or 10 trees per lot. Packer states it would cost them $1.5 million dollars for trees alone. They had proposed 900 trees or 3 trees per lot. Packer stated that staff rejected that as there was no way for them to inspect them. They are planting 214 trees that are ornamental which do not count either. They feel that they legally qualify for a mixed use and should get the exemption. They were looking for some compromise that they did not get.

Royal Golf is proposing to construct a wide shoulder between Street E and Lake Elmo Ave vs a trail on 20th Street that has no shoulders. There is a significant grade change where the trail would need to go and a loss of trees. They would argue that it would be better served with adding a shoulder to the road that is wide enough to walk and bike on. Packer talked about the alternate Villa design and would like that to move forward to the City Council. There is one driveway that is in the sanitary sewer easement which is a concern to the city engineer. They can enter something into documents recorded against the property. Packer stated that this plan has one less unit than proposed with plat, but is essentially the same grading plan.

Lundquist asked why the proposed sidewalk on 20th only goes just past the clubhouse. Packer stated that there are places that are very steep and would be very disruptive to that area. Williams asked why the City would not accept the sidewalk within the ROW. Wensman stated that MSA standards would require the sidewalk to be located on the outer edge of the ROW.

Larson asked what the status of the tree replacement is. Wensman stated that there is the landscape requirement and the street tree requirement. The City is going the more lenient interpretation, requiring landscaping based on the disturbed area calculation. Street trees will go in with the road when the improvement goes in. In terms of the development trees with 4 trees going in with the home, as long as the City has escrow to ensure the trees go in, the timing isn't as important. There is a difference between the developer and the City of approximately 1000 trees. That difference hinges on the Mixed Use issue as the City and developer have failed to come to a compromise. Williams asked if they are opposed to any forest management in exchange for relief of the tree replacement. Packer stated that there is no compromise if it is dollar for dollar exchange they would not be interested. Williams stated that he is willing to relax the tree replacement provisions from 1000 to 500 in return for a program of buckthorn removal for 3 years after construction has started. Hartley thinks that it is problematic as it is not just the individual home owners. Dorschner stated that buckthorn is very difficult to manage and is good screening. Hartley feels that the City is better off having

new trees vs a management plan based on the possible tree diseases. Emerson feels that the uses out there are mixed use and that is what they need to decide. Williams feels that they need to go with the City Attorney's opinion on that issue, but also feels that there should be some relaxation of the number of trees with buckthorn removal.

M/S/P: Williams/Lundquist, move to add an additional condition that the tree replacement requirement based on residential use be relaxed by 50% in return for the developer controlling buckthorn by cutting stems and treating the remaining stumps by either physical pulling or by herbicide application for a period of three years beyond the date for which construction begins for the adjacent phase, ***Vote: 4-2, motion carried with Hartley and Dorschner voting no.***

Wensman stated that this motion would replace condition #20 in the packet. Dorschner asked how many trees this would leave them to replace. Half would be around 500. Dorschner feels there would be more value in trees vs. the forest management. He feels the real issue is the mixed use interpretation vs. residential, but feels they need to go with the attorney's opinion. Jim Felton talked about what they did for the wildlife corridor and what was required by the VBWD. His estimate of cost for what they have done is about 50K.

Dorschner inquired about developer talking to property owners on the East side regarding screening.

Williams doesn't believe there are any West Lakeland properties that they need to be concerned about in regards to screening. Packer stated that they have an agreement with the Homestead development. Williams feels that the City should allow the golf carts on the streets for the GCC. Wensman stated that a separate ordinance would be required that is not part of the zoning code. They could recommend that staff bring one forward. Hartley stated that personally he is not in favor of the golf carts because they are often driven irresponsibly and rules are not followed. Emerson doesn't have a problem with golf carts and maybe an age limit could be put on it. Dorschner was in Arizona and many of the communities there have them. Larson stated that the golf carts would have destinations such as the clubhouse, restaurant, etc. Schroeder stated that they have looked at many ordinances in different cities and they address such things as age, speed, hours of operation, lights, etc.

M/S/P: Williams/Dorschner, move to propose an additional finding #10 that the Planning Commission determines that it would be desirable to allow golf carts on the public streets within a golf course community, ***Vote: 5-1, motion carried, with Hartley voting no.***

Williams asked if the Fire Chief commented on the street names. Wensman stated that the Fire Chief does not like the new street naming policy, and is going to be taking the

whole street naming policy back to the public safety committee. This street naming complies with the current ordinance.

In regards to the street lights, the City Engineer stated that there is no requirement to have street lights in a development.

Packer is wondering if they have addressed the Villa area. Handt stated that as of Friday, the developer was pulling that section, but tonight included it in the presentation. Wensman stated that one clear problem based on their limited review is the driveway with a storm pipe underneath it which will need to change.

M/S/P: Williams/Dorschner, move to recommend condition #39 that staff reviews and approves the new plans presented tonight regarding the Villas and that the developer complies with all of the staff recommendations, ***Vote: 6-0, motion carried unanimously.***

M/S/P: Lundquist/Larson, move to recommend approval of the Preliminary Plat and Preliminary Planned Unit Development Plans for the Royal Golf Club at Lake Elmo with the 39 conditions based on the 10 findings identified in the staff report and amended by the Planning Commission, ***Vote: 6-0, motion carried unanimously.***

Business Item – Zoning Text Amendment – Village Low Density Residential Zoning

Wensman started his presentation regarding the Village Low Density Residential Zoning. Since the last meeting, there were density ranges added, the impervious calculation was added to 35%, struck the maximum setback standard, allows free standing multi-family dwellings as a CUP to match the comprehensive plan, and clarified the setbacks for other residential uses. There was a desire at the last meeting to have a build to line incorporated into the VMX and the staff thinks that they have addressed that by the prevailing setback of the street to have consistency. If it is a new street, it can be decided at that time. Wensman went through some of the other standards.

Williams asked about the garage standards and why that need to be called out specifically. Wensman thinks that it for existing homes that might want to build an additional garage. There was some information regarding tiny houses and if the City wants to alter its minimum home size. Wensman thinks more research needs to be done regarding this for the next meeting. Another consideration is would we want to have different standards for the urban vs rural areas. There was discussion if the Planning Commission thinks the VMDR zoning should just use the standards for LDR and have that reference made in the Comprehensive Plan.

Hartley is wondering how the City determines in the VMX what is a permitted use and what requires a condition use permit. Wensman stated that there is not a straight

criteria that determines if it is permitted vs a CUP. Typically the City makes uses conditional if it is perceived that the type of use could potentially create issues so the city wants to put conditions on the use. Williams stated that if there were recommendations of uses that should be permitted, the Commission could take up that discussion in the future.

Business Item – Zoning Text Amendment – Solar Ordinance

Wensman started his presentation regarding the solar ordinance. Some of the reasons for a solar ordinance are to protect neighbors from glare, that it meets imperious surface, area and size requirements and that there is a decommissioning plan. There is also a solar farm definition, which is not currently outlined in the Zoning Code as allowed permitted or condition primary use. Where should they be allowed as a primary use if anywhere? Some of the standards are that it must comply with accessory structure setback, height, lot coverage, etc. Should solar energy systems be exempt from certain standards in certain areas? Hartley is wondering if the City wants to add to the ordinance that an HOA can't prohibit the use of solar panels. Wensman stated that would be unusual, but the City could put that restriction on. Currently solar farms are not allowed as the primary use anywhere, should they be? Staff is looking for any other additional standards that the Commission would like to include.

Hartley thinks a large commercial installation is very different than a residential one. He also feels that in residential, if it is limited to the rooftop, that is different issue than if it takes up a whole back yard. Williams suggested a slightly different definition of solar farm from "wholesale sales" to "offsite customers". Williams wants "off-grid systems" defined in the interconnection agreement section. Williams would like to eliminate "using a reflector to enhance solar production" from the reflectors section. Hartley stated that the commercial operations are probably the only ones to use reflectors. Williams is also confused about "screening to the North side of the solar array". He thinks they need to look at that. Hartley suggested just striking the word north.

Williams thinks that it needs to be stated that solar panels are considered impervious for calculations. Emerson doesn't feel that the whole thing should be considered impervious. Williams feels that especially in commercial operations, you have compaction of the soils and it is no longer like a vacant field. There are also access roads and maintenance to consider. Wensman stated that it is creating a concentrated flow and runoff. Williams feels that it is easier for the City to manage and not inconsistent with the codes of other Cities if it is considered impervious. Hartley stated that maybe the total area could be calculated and 50% is considered impervious.

Williams would like to add a provision that HOA's and CIC's are not allowed to prohibit solar systems. He is wondering if they should add solar systems as an incentive in the PUD bonus table. Williams asked if these systems would require a city building permit. Wensman stated that they would because of the footings. Hartley stated that screening

and such would need to be reviewed by the City. Wensman stated that it might not be a building permit, but a zoning compliance review. Williams stated that there is a reference to building code in the code requirements section and it should say all rooftop or building integrated systems. Williams would like to add the words "and/or screened" to item #7 Visibility to be consistent with other rooftop structures. For storm water management, Williams would like to add "Watershed Districts requirements".

City Council Updates – March 21, 2017 Meeting

i) Wildflower 2nd Developer Agreement - passed
ii) Lakewood Crossing 2nd Addition Concept Plan PUD - passed
iii) Noise Ordinance – on hold

Staff Updates

1. Upcoming Meetings
    a. April 10, 2017
    b. April 24, 2017
2. MAC CEP Report

Commission Concerns

Hartley would like to reinforce the idea that the meetings not be too long and that the Commission get out at a reasonable hour. If the meeting gets too long, they are not at their best.

Dorschner wants to finalize the rural single family sewered. Wensman stated that the ordinance states that the rural single family should be predominately individual septic, but does not require it to be so. If they are designated in the comprehensive plan by the MUSA, it is allowed. Dorschner feels there should be different standard for when you are sewered and when you aren't. Wensman will look at it more detail and report back. Williams is concerned that there has been nothing done as a City regarding form based code. He recognizes that it takes a long time, but it just keeps being pushed down the road. Wensman stated that through the Comp Plan amendment process, the vision will be reaffirmed.

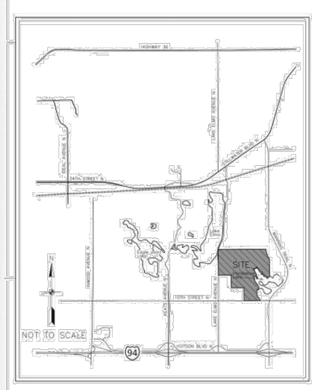
Meeting adjourned at 10:45 pm

Respectfully submitted,

Joan Ziertman
Planning Program Assistant

Royal Golf Club





VICINTY MAP

SHEET INDEX:

1. Cover
2-7. Existing Conditions
8. Preliminary Plat Index
9-27. Preliminary Plat
28. Site Index
29-45. Preliminary Site and Utility Plan
46. Grading Index
47-59. Preliminary Grading and Erosion Control Plan
60-62. Details
63-65. Retaining Wall Profiles
L1-L9. Landscape Plans
T1-T25. Tree Preservation Plan
P1-P3. Phasing Plan

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) = Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) = Top of Control Disk Elevation = 913.04 (NAVD 88).

CALL BEFORE YOU DIG

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

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www.carlsonmccain.com

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

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 09/21/16 License #: 25063

Drawn: SDB
Designed: BJK
Date: 09/21/16

Revisions:
1. 02/10/17 Revise per City Comments
2. 02/28/17 Revise per City Comments
3. 04/07/17 Revise per City Comments

H.C. Golf Course Development, LLC.
11074 Radisson Rd NE,
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

COVER

1 of 65

Save Date: 05/04/16 | f:\jobs\6021 - 6040\6036 - tartan park\cad\pa\6036 renderbase.dwg

LEGAL DESCRIPTION

The North Half of the Northeast Quarter (N 1/2 of NE 1/4) of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota, except therefrom that portion of the Northeast Quarter lying North and East of the public highway known as County State Aid Road No. 15.

And

Government Lot 2 of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota.

And

Government Lot 1 of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota.

And

The Northwest Quarter (NW 1/4) of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota.

And

The Northeast Quarter of the Southwest Quarter (NE 1/4 of SW 1/4) of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota.

And

Government Lot 3 of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota.

And

The Southwest Quarter of the Southeast Quarter (SW 1/4 of SE 1/4) of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota, EXCEPT the Easterly 660 feet of the Westerly 990 feet of the Southerly two-thirds (2/3) of said Southwest Quarter of the Southeast Quarter.

And

The Easterly 660 feet of the Westerly 990 feet of the Southerly two-thirds (2/3) of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota.

And

(Proposed Legal Description, which may be subject to City approved parcel subdivision)
That part of Government Lot 4, Section 25, Township 29, Range 21, Washington County, Minnesota, described as follows:

Commencing at the Southwest corner of said Government Lot 4; thence North 00 degrees 08 minutes 17 seconds East, assumed bearing, along the West line of said Government Lot 4, a distance of 1119.38 feet to the point of beginning of the parcel to be described; thence continuing northerly along said West line of Government Lot 4, a distance of 579 feet, more or less, to the shoreline of Horseshoe Lake; thence southeasterly, southerly, and southwesterly along said shoreline to the intersection of a line that bears South 89 degrees 51 minutes 43 seconds East from the point of beginning; thence North 89 degrees 51 minutes 43 seconds West, 23 feet, more or less, to the point of beginning.

And

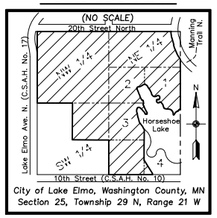
(Proposed Legal Description, which may be subject to City approved parcel subdivision)
That part of Government Lot 4, Section 25, Township 29, Range 21, Washington County, Minnesota, lying southwesterly, southerly, and westerly of the following described line:

Commencing at the Southwest corner of said Government Lot 4; thence North 00 degrees 08 minutes 17 seconds East, assumed bearing, along the West line of said Government Lot 4, a distance of 482.61 feet to the point of beginning of the line to be described; thence southeasterly 221.89 feet along a non-tangential curve concave to the southwest having a radius of 490.00 feet, a central angle of 25 degrees 56 minutes 46 seconds, a chord length of 220.00 feet, and a chord bearing of South 43 degrees 56 minutes 35 seconds East; thence North 63 degrees 42 minutes 45 seconds East, not tangent to the last described curve, a distance of 10.23 feet; thence South 32 degrees 27 minutes 51 seconds East, 334.35 feet; thence South 00 degrees 08 minutes 17 seconds West, 45.00 feet to the South line of Government Lot 4 and said line there terminating.

NOTES

1) The field work for this survey was completed on September 16, 2016.
2) For individual tree locations, please see the Tree Preservation Plan.
3) Surveyed property address – 11455 20th Street North, Lake Elmo, MN 55042.
4) Above ground utilities have been field located as shown. All underground locations shown hereon are APPROXIMATE. Prior to any excavations or digging, contact Gopher State One Call for an on-site location (651-454-0002).
5) Topography shown is a combination of field observations and LIDAR which was provided by the Minnesota Department of Natural Resources.
6) Improvements shown are a combination of field observations as well as improvements as shown an an ALTA/ACSM Survey prepared by Landmark Surveying, Inc. and dated January 13, 2016.
7) Site is currently under construction.
8) Wetlands were delineated by Kjolhaug Environmental Services Company in 2016.
9) The Ordinary High Water elevation for Horseshoe Lake is ±876.9 Feet NAVD 88 (876.8 Feet NGVD 29).
10) No Title Work has been furnished for this survey, property is subject to all easements of record, if any.
11) NSP Easement per Document No. 167143 is currently in the process of being confined.

VICINITY MAP



SITE DATA

TOTAL SITE AREA	±428.06 AC.
EXISTING ZONING	P/PF
UTILITIES	AVAILABLE
OVERLAY DISTRICT	SHORELAND

LEGEND

- ◉ – Denotes Washington County Monument
- ● – Denotes Found Monument
- ○ – Denotes Set Iron Pipe, Marked with RLS 40361
- ◉ PK – Denotes Set *PK Nail*

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).
2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

0 150 300 600
(SCALE IN FEET)

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

Print Name: Thomas R. Balluff, L.S.
Signature:
Date: 09/21/2016 License #: 40361

DRAWN BY: JAB
ISSUE DATE: 09/21/2016
FILE NO: 384

Revisions:
02-10-2017 Revised Layout
02-28-2017 City Comments
04-07-2017 City Comments

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

EXISTING CONDITIONS INDEX

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LEGEND

- ◉ – Denotes Washington County Monument
- ● – Denotes Found Iron Pipe or Drill Hole, as noted
- ○ – Denotes Set Iron Pipe, Marked with RLS 40361
- ◉ PK – Denotes Set PK Nail
- FH – Denotes Fire Hydrant
- GP – Denotes Guard Post
- ⋈ – Denotes Gate Valve
- ☼ – Denotes Light Pole
- MB – Denotes Mailbox
- → – Denotes Guy Wire
- SMH – Denotes Sanitary Manhole
- SIGN – Denotes Miscellaneous Sign
- EB – Denotes Electric Box
- TV – Denotes Television Box
- UP – Denotes Utility Pole
- FES – Denotes Flared End Section
- CB or DI – Denotes Catch Basin
- TRD 500 + – Denotes Existing Tree
- STMH – Denotes Storm Manhole
- – Denotes Overflow Control Structure
- >> – Denotes Storm Sewer
- W – Denotes Watermain
- FM – Denotes Forcemain
- ug ug – Denotes Underground Gas
- ohe – Denotes Overhead Electric
- ue ue – Denotes Underground Electric
- x x – Denotes Existing Fence as noted
- – Denotes Concrete Surface
- – Denotes Bituminous Surface
- 000 – Denotes Existing 2 Ft. Contour
- 000 – Denotes Existing 10 Ft. Contour

Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

N

0 50 100 200

(SCALE IN FEET)

SCHMIETZ-MARTINCO ADDITION

Northwest corner of Section 25, Township 29, Range 21

OWNER: KOEHNLE RONALD W. & LAURIE S PID:24.029.21.33.0012

OWNER: COOK CHRISTOPHER P. & KAREN F. PID:24.029.21.33.0011

OWNER: MORGAN DIANE TRUDEAU PID: 24.029.21.33.0008

20TH COURT NORTH

20TH STREET NORTH

North line of the Northwest Quarter of Section 25, Township 29, Range 21

N89°41'47"E 2615.71

OWNER: DURAND MARY JEAN TRS PID:24.029.21.34.0001

LAKE ELMO AVENUE NORTH (COUNTY STATE AID HIGHWAY NO. 17)

SECTION 25,

North Quarter corner of Section 25, Township 29, Range 21

Sand Volleyball Court

Utility Area

Existing Building

~ Bituminous Surface ~

Minnesota DNR protected waters (No. 82-417W)

Surface Water Drainage Easement per Doc. No. 623371

STRUCTURE NOT LOCATED (UNDER WATER)

30" RCP (APPROXIMATE LOCATION PER VALLEY BRANCH WATERSHED DISTRICT)

30" RCP

Surface Water Drainage Easement per Doc. No. 623371

East line of the Northwest Quarter of Section 25, Township 29, Range 21

West line of the North half of the Northwest Quarter of Section 25, Township 29, Range 21

West line of the Northwest Quarter of Section 25, Township 29, Range 21

OWNER: WASHINGTON COUNTY PID: 26.029.21.11.0003

OWNER: WASHINGTON COUNTY PID: 26.029.21.11.0002

N00°08'14"E 2636.21

TOWNSHIP 29,

RANGE 21

Existing Building

Retaining Wall

West line of Government Lot 2, Section 25, Township 29, Range 21

SEE SHEET 4 OF 65 SHEETS

SEE SHEET 7 OF 65 SHEETS

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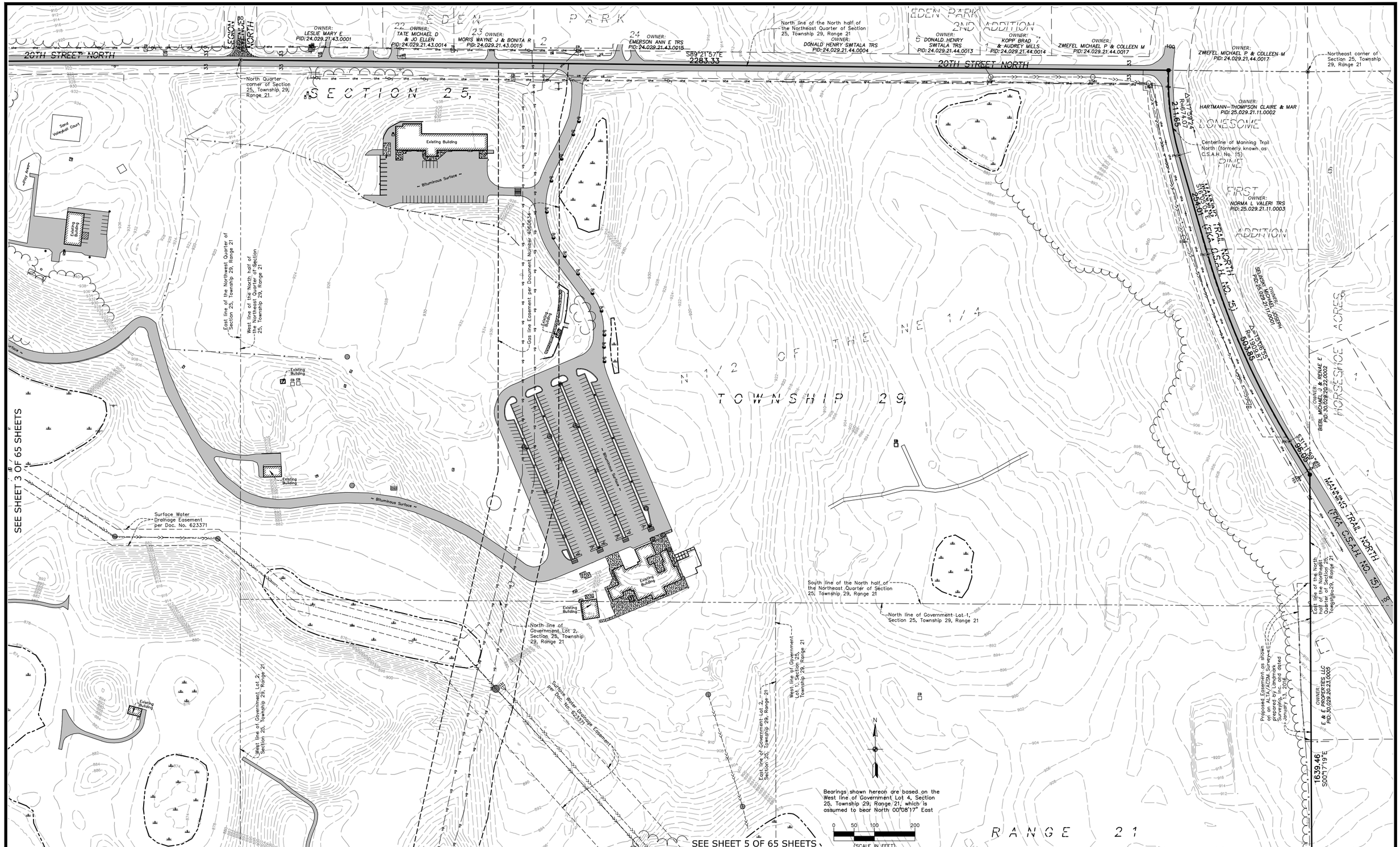
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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

EXISTING CONDITIONS

3 of 65

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4 of 65

Save Date: 04/08/17 F:\jobs\6021 - 6040\6036 - tartan park\cad\survey\prel_plat\6036_excon-sheets.dwg

SEE SHEET 4 OF 65 SHEETS

SECTION 25

TOWNSHIP 29

RANGE 21

GOV'T. LOT 2

GOV'T. LOT 1

GOV'T. LOT 3

SW 1/4

Existing Building

East line of the Northwest Quarter of Section 25, Township 29, Range 21

West line of Government Lot 2, Section 25, Township 29, Range 21

Gas line Easement per Document Number 4606634

South line of the Northwest Quarter of Section 25, Township 29, Range 21

South line of Government Lot 2, Section 25, Township 29, Range 21

North line of Government Lot 3, Section 25, Township 29, Range 21

North line of the Northeast Quarter of the Southwest Quarter of Section 25, Township 29, Range 21

Gas line Easement per Document Number 4606635

West line of Government Lot 3, Section 25, Township 29, Range 21

East line of the Northeast Quarter of the Southwest Quarter of Section 25, Township 29, Range 21

Shoreline of Horseshoe Lake

Shoreline of Horseshoe Lake

Shoreline of Horseshoe Lake

OWNER:
H C GOLF COURSE DEVELOPMENT LL
PID:30.029.20.32.0001

East line of Government Lot 1, Section 25, Township 29, Range 21

East Quarter corner of Section 25, Township 29, Range 21

97.74
S00°12'25"W

Meander corner on East line of Section 25, Township 29, Range 21

±84
N00°15'25"E

HORSESHOE LAKE
Minnesota DNR protected waters
(No. 82-74P)
OHW=876.9 Feet NAVD 88
(876.8 Feet NGVD 29)

East line of Government Lot 3, Section 25, Township 29, Range 21

±579

Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

0 50 100 200
(SCALE IN FEET)

N

SEE SHEET 7 OF 65 SHEETS

SEE SHEET 6 OF 65 SHEETS

Carlson McCain
• environmental
• engineering
• surveying

3890 Pheasant Ridge Drive NE, Suite 100
Blaine, MN 55014
Phone: (763) 489-7900
Fax: (763) 489-7959
www.carlsonmccain.com

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 Land Surveyor under the laws of the State of Minnesota

Print Name: Thomas R. Balluff, L.S.
Signature:
Date: 09/21/2016 License #: 40361

DRAWN BY: JAB
ISSUE DATE: 09/21/2016
FILE NO: 384

Revisions:
02-10-2017 Revised Layout
02-28-2017 City Comments
04-07-2017 City Comments

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

EXISTING CONDITIONS

5 of 65

[Save Date: 04/08/17] F:\jobs\6021 - 6040\6036 - tartan park\cad\survey\prel. plat\6036_excon-sheets.dwg

SEE SHEET 5 OF 65 SHEETS

THE SOUTHWEST QUARTER OF SECTION 25, TOWNSHIP 29, RANGE 21

GOV'T. LOT 3

East line of the Northeast Quarter of the Southwest Quarter of Section 25, Township 29, Range 21

South line of Government Lot 3, Section 25, Township 29, Range 21

East line of Government Lot 3, Section 25, Township 29, Range 21

±579

North line of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21

1312.83
S89°57'48"W

West line of the Southwest Quarter of Section 25, Township 29, Range 21

OWNER:
VOGEL DENNIS E & KIM M
PID: 25.029.21.34.0013

OWNER:
CITY OF LAKE ELMO
PID: 25.029.21.34.0001

PARK

OWNER:
JOHNSON CRAIG R & LINDA E
PID: 25.029.21.34.0002

OWNER:
NIELSEN JERRY DEAN
PID: 25.029.21.34.0003

OWNER:
GERGEN ROBERT J & ANN L
PID: 25.029.21.34.0004

OWNER:
JONES TIMOTHY J & ROXANNE H
PID: 25.029.21.34.0005

OWNER:
SCHUMACHER JAMES V & LORI E
PID: 25.029.21.34.0006

OWNER:
VANLIESHOUT LAWRENCE A & BARBA
PID: 25.029.21.34.0007

LEEWARD AVENUE NORTH

N00°01'31"E
1313.47

Gas line Easement per Document Number 4606615

TOWNSHIP 29,

RANGE 21

North line of the Southerly Two-Thirds of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21

West line of the Easterly 660 feet of the Westerly 990 feet of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21

East line of the Westerly 990 feet of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21

660

990

LAKE ROSE

Minnesota DNR protected waters
(No. 82–112W)

Minnesota DNR protected waters
(No. 82–112W)

±23
S89°51'43"E

OWNER:
EMERSON GROUP LP
PID: 25.029.21.44.0001

636.77
N00°08'17"E

East line of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21 also the East line of Government Lot 4, Section 25, Township 29, Range 21

HORSESHOE LAKE

Minnesota DNR protected waters
(No. 82–74P)
OHW=876.9 Feet NAVD 88
(876.8 Feet NGVD 29)

C.B.=S43°56'35"E
C.L.=220.00
Δ=25°56'46"
R=490.00
221.89

N67°42'45"E
10.23

S54°14'52"E
34.35

N00°08'17"E
482.61

Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

0 50 100 200
(SCALE IN FEET)

WASHINGTON COUNTY HIGHWAY RIGHT OF WAY PLAT NO. 1 AS AMENDED

45.00
S00°08'17"W

South Quarter corner of Section 25, Township 29, Range 21

South line of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21

1657.34
S89°43'40"W

10TH STREET
(COUNTY STATE AID HIGHWAY NO. 10)

Southeast corner of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21 also the Southwest corner of Government Lot 4, Section 25, Township 29, Range 21

South line of Government Lot 4, Section 25, Township 29, Range 21

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Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

EXISTING CONDITIONS

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SEE SHEET 3 OF 65 SHEETS

SEE SHEET 5 OF 65 SHEETS

SECTION 25, TOWNSHIP 29, RANGE 21

Bituminous Surface
Baseball field
Bocce Ball Courts
Shelter Building
Existing Building
Existing Garage
Existing Shelter
Existing Gazebo
Existing Trees

West Quarter corner of Section 25, Township 29, Range 21

South line of the Northwest Quarter of Section 25, Township 29, Range 21

1310.41
N89°53'18"W

East line of the Northwest Quarter of Section 25, Township 29, Range 21

West line of Government Lot 1, 2, Section 25, Township 29, Range 21

Gas line Easement per Document Number 4060634

Gas line Easement per Document Number 4060635

North line of the Northeast Quarter of the Southwest Quarter of Section 25, Township 29, Range 21

West line of the Northeast Quarter of the Southwest Quarter of Section 25, Township 29, Range 21

1316.87
N00°07'49"E

West line of Government Lot 3, Section 25, Township 29, Range 21

East line of the Northeast Quarter of the Southwest Quarter of Section 25, Township 29, Range 21

South line of the Northeast Quarter of the Southwest Quarter of Section 25, Township 29, Range 21

1312.83
S89°57'48"W

South line of Government Lot 3, Section 25, Township 29, Range 21

LAKE ELMO AVENUE NORTH (COUNTY STATE AID HIGHWAY NO. 17)

14TH ST. N.

OUTLOT A
OUTLOT B
OUTLOT C
OUTLOT D
OUTLOT E
OUTLOT F

HOMESTEAD

TARTAN MEADOWS 2ND ADDITION

GOVT. LOT 3

Lot	Owner	PID
OUTLOT A	HOMESTEAD HOMEOWNERS ASSOC	25.029.21.32.0002
OUTLOT F	HOMESTEAD HOMEOWNERS ASSOC	25.029.21.32.0007
1	NEUBAUER STEVEN W & KRISTINA J	25.029.21.32.0015
2	DELKOSKI MICHAEL P & STEPHANIE L MANOS-DELKOSKI	25.029.21.32.0010
3	MCKAY THOMAS S	25.029.21.32.0011
4	CLIFF GERRY & LILLIAN	25.029.21.32.0012
5	HAZELTON BRIAN	25.029.21.32.0013
6	KLUGE JEFFREY T & VICTORIA J	25.029.21.32.0014
7	YETTER BRIAN J & CYNTHIA RAE SOBIECH	25.029.21.32.0016
8	BAILEY VICKI L & JOSEPH L SPELTZ	25.029.21.32.0017
9	RICE DANIEL & CHRISTINE P	25.029.21.32.0018
10	HOULE JOHN R & DIANE M	25.029.21.32.0027
11	CARLSON JAMES G & JANET L	25.029.21.34.0010
12	VOELLER JAMES & CLOYCE	25.029.21.34.0011
13	TOFT RODNEY A & JUDY A	25.029.21.34.0012
14		

Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

0 50 100 200
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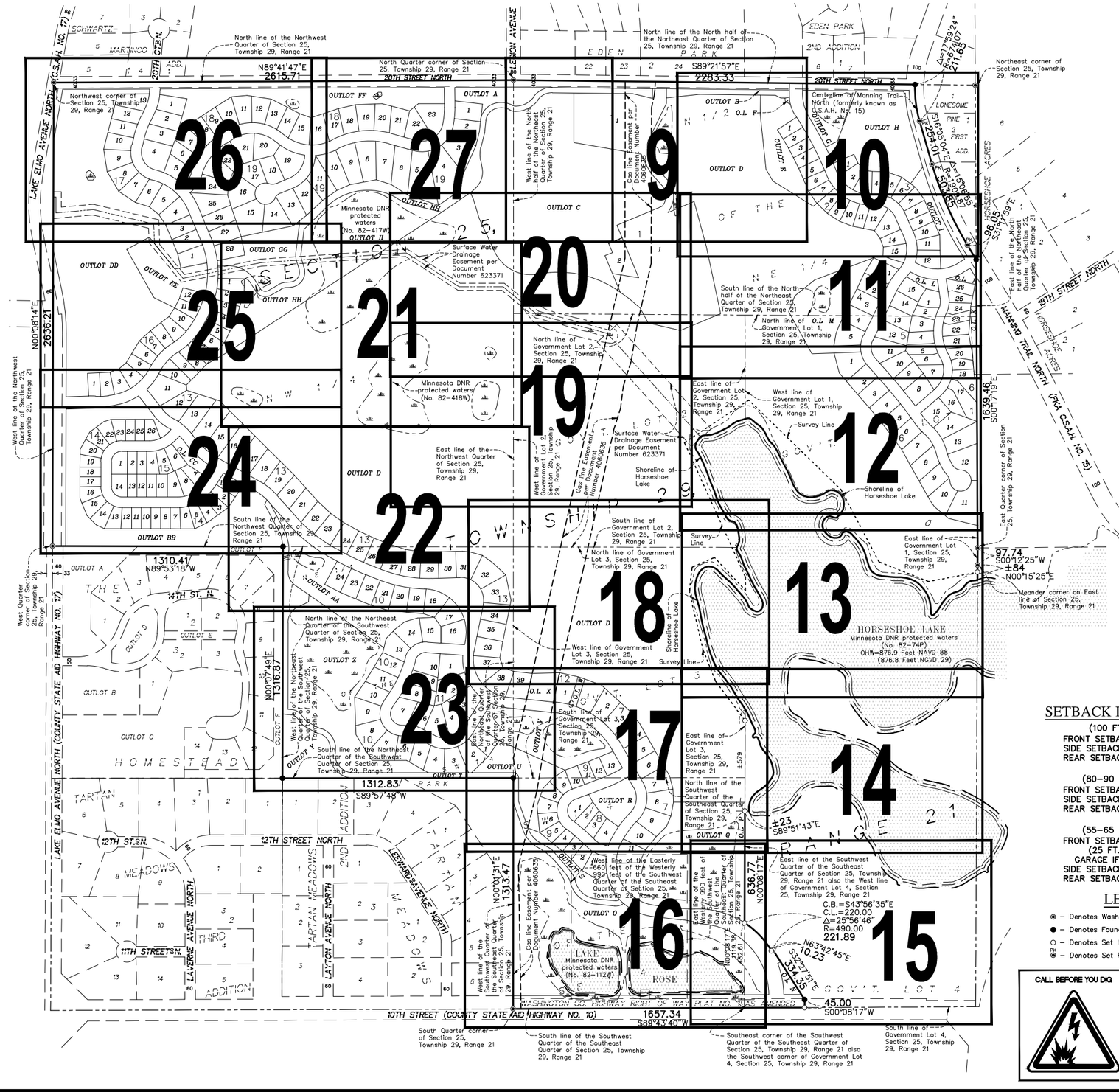
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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

EXISTING CONDITIONS

7 of 65

[Save Date: 04/08/17] F:\Jobs\6021 - 6040\6036 - tartan park\cad\survey\grad. plat\6036_excon-sheets.dwg



LEGAL DESCRIPTION

The North Half of the Northeast Quarter (N 1/2 of NE 1/4) of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota, except therefrom that portion of the Northeast Quarter lying North and East of the public highway known as County State Aid Road No. 15.

And

Government Lot 2 of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota.

And

Government Lot 1 of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota.

And

The Northwest Quarter (NW 1/4) of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota.

And

The Northeast Quarter of the Southwest Quarter (NE 1/4 of SW 1/4) of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota.

And

Government Lot 3 of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota.

And

The Southwest Quarter of the Southeast Quarter (SW 1/4 of SE 1/4) of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota, EXCEPT the Easterly 660 feet of the Westerly 990 feet of the Southerly two-thirds (2/3) of said Southwest Quarter of the Southeast Quarter.

And

The Easterly 660 feet of the Westerly 990 feet of the Southerly two-thirds (2/3) of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29 North, Range 21 West, Washington County, Minnesota.

And

(Proposed Legal Description, which may be subject to City approved parcel subdivision)
That part of Government Lot 4, Section 25, Township 29, Range 21, Washington County, Minnesota, described as follows:

Commencing at the Southwest corner of said Government Lot 4; thence North 00 degrees 08 minutes 17 seconds East, assumed bearing, along the West line of said Government Lot 4, a distance of 1119.38 feet to the point of beginning of the parcel to be described; thence continuing northerly along said West line of Government Lot 4, a distance of 579 feet, more or less, to the shoreline of Horseshoe Lake; thence southeasterly, southerly, and southwesterly along said shoreline to the intersection of a line that bears South 89 degrees 51 minutes 43 seconds East from the point of beginning; thence North 89 degrees 51 minutes 43 seconds West, 23 feet, more or less, to the point of beginning.

And

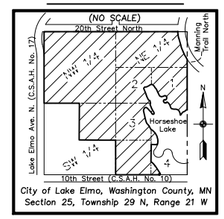
(Proposed Legal Description, which may be subject to City approved parcel subdivision)
That part of Government Lot 4, Section 25, Township 29, Range 21, Washington County, Minnesota, lying southwesterly, southerly, and westerly of the following described line:

Commencing at the Southwest corner of said Government Lot 4; thence North 00 degrees 08 minutes 17 seconds East, assumed bearing, along the West line of said Government Lot 4, a distance of 482.61 feet to the point of beginning of the line to be described; thence southeasterly 221.89 feet along a non-tangential curve concave to the southwest having a radius of 490.00 feet, a central angle of 25 degrees 56 minutes 46 seconds, a chord length of 220.00 feet, and a chord bearing of South 43 degrees 56 minutes 35 seconds East; thence North 63 degrees 42 minutes 45 seconds East, not tangent to the last described curve, a distance of 10.23 feet; thence South 32 degrees 27 minutes 51 seconds East, 334.35 feet; thence South 00 degrees 08 minutes 17 seconds West, 45.00 feet to the South line of Government Lot 4 and said line there terminating.

NOTES

1) The field work for this survey was completed on September 16, 2016.
2) Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East
3) Surveyed property address – 11455 20th Street North, Lake Elmo, MN 55042.
4) Above ground utilities have been field located as shown. All underground locations shown hereon are APPROXIMATE. Prior to any excavations or digging, contact Gopher State One Call for an on-site location (651-454-0002).
5) Wetlands were delineated by Kjolhaug Environmental Services Company in 2016.
6) The Ordinary High Water elevation for Horseshoe Lake is ±876.9 Feet NAVD 88 (876.8 Feet NGVD 29).
7) No Title Work has been furnished for this survey, property is subject to all easements of record, if any.
8) NSP Easement per Document No. 167143 is currently in the process of being confined.

VICINITY MAP



SITE DATA

TOTAL SITE AREA		±428.06 AC.
TOTAL ROW AREA		±37.81 AC.
TOTAL OUTLOT AREA		±288.43 AC.

OUTLOT	(OWNERSHIP)	(MAINTENANCE)	AREA
OUTLOT A	(HOA)	(HOA/CITY)	±1.01 AC.
OUTLOT B	(CITY)	(HOA/CITY)	±0.55 AC.
OUTLOT C	(GOLF COURSE)	(GOLF COURSE)	±17.22 AC.
OUTLOT D	(GOLF COURSE)	(GOLF COURSE)	±163.90 AC.
OUTLOT E	(CITY)	(HOA/CITY)	±2.04 AC.
OUTLOT F	(HOA)	(HOA)	±0.02 AC.
OUTLOT G	(HOA)	(HOA)	±1.42 AC.
OUTLOT H	(CITY)	(HOA/CITY)	±4.17 AC.
OUTLOT I	(HOA)	(HOA)	±0.93 AC.
OUTLOT J	(HOA)	(HOA)	±0.16 AC.
OUTLOT K	(BARNES)	(BARNES)	±0.35 AC.
OUTLOT L	(HOA)	(HOA)	±0.21 AC.
OUTLOT M	(CITY)	(HOA/CITY)	±2.98 AC.
OUTLOT N	(CITY)	(CITY)	±0.23 AC.
OUTLOT O	(HOA)	(HOA)	±17.17 AC.
OUTLOT P	(EMERSON)	(EMERSON)	±0.71 AC.
OUTLOT Q	(HOA)	(HOA)	±8.38 AC.
OUTLOT R	(HOA)	(HOA)	±1.00 AC.
OUTLOT S	(HOA)	(GOLF COURSE/HOA)	±0.95 AC.
OUTLOT T	(CITY)	(CITY/HOA)	±2.94 AC.
OUTLOT U	(HOA)	(HOA)	±2.05 AC.
OUTLOT V	(CITY)	(HOA/CITY)	±3.75 AC.
OUTLOT W	(CITY)	(GOLF COURSE/CITY)	±0.15 AC.
OUTLOT X	(CITY)	(GOLF COURSE/CITY)	±0.56 AC.
OUTLOT Y	(HOA)	(HOA)	±1.93 AC.
OUTLOT Z	(HOA)	(HOA)	±7.83 AC.
OUTLOT AA	(CITY)	(HOA/CITY)	±3.33 AC.
OUTLOT BB	(HOA)	(HOA)	±6.72 AC.
OUTLOT CC	(HOA)	(HOA)	±0.43 AC.
OUTLOT DD	(HOA)	(HOA)	±16.53 AC.
OUTLOT EE	(CITY)	(HOA/CITY)	±1.99 AC.
OUTLOT FF	(HOA)	(HOA)	±3.75 AC.
OUTLOT GG	(CITY)	(HOA/CITY)	±2.29 AC.
OUTLOT HH	(CITY)	(HOA/CITY)	±3.19 AC.
OUTLOT II	(HOA)	(HOA)	±7.59 AC.

TOTAL GOLF COURSE LOT AREA	±11.28 AC.
TOTAL SINGLE FAMILY LOT AREA	±90.54 AC.
LARGEST LOT	±38,814 SQ.FT.
SMALLEST LOT	±6,600 SQ.FT.
AVERAGE LOT	±13,553 SQ.FT.
TOTAL NUMBER OF LOTS	328
SINGLE FAMILY LOTS	291
OUTLOTS	35
GOLF COURSE LOTS	2
GROSS DENSITY	±0.68 LOTS/AC.
NET DENSITY	±1.56 LOTS/AC.
EXISTING ZONING	P/PF
PROPOSED ZONING	GCC/PUD
UTILITIES	AVAILABLE

* HOA IS AN ABBREVIATION FOR HOME OWNERS ASSOCIATION

SETBACK INFORMATION

(100 FT. WIDE LOTS)
FRONT SETBACK——30 FT.
SIDE SETBACK——15 FT.
REAR SETBACK——30 FT.

(80–90 FT. WIDE LOTS)
FRONT SETBACK——30 FT.
SIDE SETBACK——10 FT.
REAR SETBACK——30 FT.

(55–65 FT. WIDE LOTS)
FRONT SETBACK——20 FT.
(25 FT. SETBACK TO GARAGE IF FRONT LOADED)
SIDE SETBACK——7.5 FT.
REAR SETBACK——20 FT.

LEGEND

- ◉ – Denotes Washington County Monument
- ● – Denotes Found Monument
- ○ – Denotes Set Iron Pipe, Marked with RLS 40361
- PK – Denotes Set PK Nail

CALL BEFORE YOU DIG

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

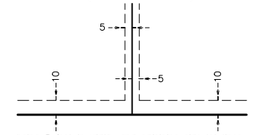
N

0 150 300 600
(SCALE IN FEET)

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).
2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

PROPOSED DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS: (Not to Scale)



being 5 feet in width, and adjoining side lot lines, and 10 feet in width and adjoining right of way lines and rear lot lines unless otherwise shown on this plat.

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PRELIMINARY PLAT INDEX

(Save Date: 04/08/17) F:\Jobs\6021 - 6040\6036 - tartan park\cad\survey\prel_plat\6036_prp-index.dwg

LEGION AVENUE NORTH

OWNER: LESLIE MARY E
PID: 24.029.21.43.0001

22 EDEN PARK 2

OWNER: TATE MICHAEL D & JO ELLEN
PID: 24.029.21.43.0014

23
OWNER: MORIS WAYNE J & BONITA R
PID: 24.029.21.43.0015

24
OWNER: EMERSON ANN E TRS
PID: 24.029.21.43.0015

OWNER: DONALD HENRY SWITALA TRS
PID: 24.029.21.44.0004

North Quarter corner of Section 25, Township 29, Range 21

S89°21'57"E 2283.33

20TH STREET NORTH

North line of the North half of the Northeast Quarter of Section 25, Township 29, Range 21

OUTLOT HH ±138,921 sq.ft.

OUTLOT B ±23,938 sq.ft.

OUTLOT F ±791 sq.ft.

Drainage & Utility Easement

SECTION 25, TOWNSHIP 29, RANGE 21

1 1 ±467,505 sq.ft.

OUTLOT D ±7,139,499 sq.ft.

N 1/2 OF THE NE 1/4

1 ±8,413 sq.ft.

2 ±8,194 sq.ft.

3 ±8,165 sq.ft.

OUTLOT E ±89,000 sq.ft.
Drainage & Utility Easement (Over all of Outlot E)

Gas line Easement per Document Number 4060634

OUTLOT C ±750,206 sq.ft.

1 1 ±467,505 sq.ft.

2

NE 1/4

SEE SHEET 27 OF 65 SHEETS

SEE SHEET 10 OF 65 SHEETS

SEE SHEET 20 OF 65 SHEETS

SEE SHEET 11 OF 65 SHEETS

West line of the North half of the Northeast Quarter of Section 25, Township 29, Range 21

N

0 25 50 100
(SCALE IN FEET)

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◉ – Denotes Washington County Monument
● – Denotes Found Monument
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PRELIMINARY PLAT

9 of 65

[Save Date: 04/08/17] T:\jobs\6021 - 6040\6036 - tartan park\cad\survey\prel. plat\6036_prp.dwg

OWNER: EMERSON ANN E TRS
PID: 24.029.21.43.0015

OWNER: DONALD HENRY SWITALA TRS
PID: 24.029.21.44.0004

EDEN PARK 2ND ADDITION

OWNER: DONALD HENRY SWITALA TRS
PID: 24.029.21.44.0013

OWNER: KOPP BRAD & AUDREY MILLS
PID: 24.029.21.44.0014

OWNER: ZWEFEL MICHAEL P & COLLEEN M
PID: 24.029.21.44.0017

OWNER: ZWEFEL MICHAEL P & COLLEEN M
PID: 24.029.21.44.0017

20TH STREET NORTH

North line of the North half of the Northeast Quarter of Section 25, Township 29, Range 21

S89°21'57"E 2283.33

20TH STREET NORTH

20TH STREET NORTH

OUTLOT B ±23,938 sq.ft.

Drainage & Utility Easement

OUTLOT F ±791 sq.ft.

OUTLOT G ±61,850 sq.ft.
Drainage & Utility Easement
(Over all of Outlot G)

OUTLOT H ±181,795 sq.ft.
Drainage & Utility Easement
(Over all of Outlot H)

OUTLOT D ±7,139,499 sq.ft.

OUTLOT E ±89,000 sq.ft.
Drainage & Utility Easement
(Over all of Outlot E)

N 1/2 OF THE NE 1/4 OF SECTION 25, TOWNSHIP 29, RANGE 21

ANNIKA WAY NORTH

ANNIKA WAY

MANNING TRAIL NORTH

Utility Easement per Document Number 337771

Centerline of Manning Trail North (formerly known as C.S.A.H. No. 15)

Δ=17°59'24" R=674.01 211.65

S16°05'04"E 254.01

MANNING TRAIL NORTH (FKA C.S.A.H. NO. 15)

OUTLOT I ±401,703 sq.ft.

Utility Easement per Document Number 337771

OWNER: HARTMANN-THOMPSON CLAIRE & MAR
PID: 25.029.21.11.0002

LONESOME PINE 1ST ADD.

OWNER: NORMA L VALERI TRS
PID: 25.029.21.11.0003

OWNER: SEVERU MICHAEL JOSEPH
PID: 25.029.21.11.0001

Δ=15°06'55" R=1900.57 501.35

1 ±8,413 sq.ft.
2 ±8,194 sq.ft.
3 ±8,165 sq.ft.
4 ±9,159 sq.ft.
5 ±9,239 sq.ft.
6 ±8,762 sq.ft.
7 ±9,091 sq.ft.
8 ±9,160 sq.ft.
9 ±9,166 sq.ft.
10 ±9,007 sq.ft.
11 ±8,332 sq.ft.
12 ±12,055 sq.ft.
13 ±13,210 sq.ft.
14 ±9,052 sq.ft.
15

1 ±8,681 sq.ft.
2 ±10,952 sq.ft.
3 ±10,536 sq.ft.
4 ±9,068 sq.ft.
5 ±9,672 sq.ft.
6 ±9,651 sq.ft.
7 ±9,611 sq.ft.
8 ±8,543 sq.ft.
9 ±8,219 sq.ft.
10 ±9,329 sq.ft.
11 ±9,332 sq.ft.

1 ±467,505 sq.ft.

SEE SHEET 9 OF 65 SHEETS

SEE SHEET 11 OF 65 SHEETS

Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

◉ – Denotes Washington County Monument
● – Denotes Found Monument
○ – Denotes Set Iron Pipe, Marked with RLS 40361
PK – Denotes Set PK Nail

0 25 50 100
(SCALE IN FEET)

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

Print Name: Thomas R. Balluff, L.S.
Signature:
Date: 09/21/2016 License #: 40361

DRAWN BY: JAB
ISSUE DATE: 09/21/2016
FILE NO: 384

Revisions:
02-10-2017 Revised Layout
02-28-2017 City Comments
04-07-2017 City Comments

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY PLAT

[Save Date: 04/08/17] T:\Jobs\6021 - 6040\6036 - tartan park\cad\survey\prel. plat\6036_prp.dwg

SEE SHEET 10 OF 65 SHEETS

SEE SHEET 20 OF 65 SHEETS

SECTION 25, TOWNSHIP 29, RANGE 21

N 1/2 OF THE NE 1/4

GOV'T. LOT 1

GOV'T. LOT 2

OUTLOT D
±7,139,499 sq.ft.

OUTLOT M
±129,866 sq.ft.
Drainage & Utility Easement
(Over all of Outlot M)

OUTLOT I
±40703 sq.ft.

OUTLOT J
±7,085 sq.ft.

OUTLOT K

OUTLOT L
±9,008 sq.ft.

MANNING TRAIL NORTH (FKA C.S.A.H. NO. 15)

QUEENS STREET NORTH

ANNIKA WAY NORTH

ANNIE AVENUE

Utility Easement per Document Number 537771

Drainage & Utility Easement

Utility Easement

Proposed Easement as shown on an exhibit prepared by Jason A. Wagner, Alliant Engineering, Inc. and dated January 13, 2016.

South line of the North half of the Northeast Quarter of Section 25, Township 29, Range 21

North line of Government Lot 1, Section 25, Township 29, Range 21

West line of Government Lot 1, Section 25, Township 29, Range 21

East line of Government Lot 2, Section 25, Township 29, Range 21

East line of the North half of the Northeast Quarter of Section 25, Township 29, Range 21

1639.46 S00°17'19"E

OWNER:
BIEBL, MICHAEL J & RENAE E
PID: 30.029.20.22.0002

OWNER:
E & E PROPERTIES LLC
PID: 30.029.20.23.0005

Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

(SCALE IN FEET)

- ◉ – Denotes Washington County Monument
- ● – Denotes Found Monument
- ○ – Denotes Set Iron Pipe, Marked with RLS 40361
- PK – Denotes Set PK Nail

SEE SHEET 12 OF 65 SHEETS

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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY PLAT

11 of 65

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SEE SHEET 11 OF 65 SHEETS

SEE SHEET 19 OF 65 SHEETS

GOV'T. LOT 2

GOV'T. LOT 1

SECTION 25, TOWNSHIP 29, RANGE 21

West line of Government Lot 4, Section 25, Township 29, Range 21

East line of Government Lot 2, Section 25, Township 29, Range 21

Drainage & Utility Easement

Surface Water Drainage Easement per Document Number 623371

HORSESHOE LAKE
Minnesota DNR protected waters
(No. 82-74P)
OHW=876.9 Feet NAVD 88
(876.8 Feet NGVD 29)

Shoreline of Horseshoe Lake

Survey Line

OUTLOT D
±7,139,499 sq.ft.

ANNIKA WAY NORTH

ANNIE AVENUE

ANNIKA WAY NORTH

1	±19,128 sq.ft.	
2	±15,065 sq.ft.	6
3	±15,184 sq.ft.	
4	±15,159 sq.ft.	
5	±15,102 sq.ft.	
6	±15,150 sq.ft.	
7	±16,693 sq.ft.	
8	±16,435 sq.ft.	
9	±15,569 sq.ft.	
10	±17,805 sq.ft.	6
11	±29,525 sq.ft.	
12	±16,035 sq.ft.	5
5	±17,487 sq.ft.	
11	±18,076 sq.ft.	
10	±14,829 sq.ft.	
9	±13,647 sq.ft.	
8	±15,934 sq.ft.	
7	±12,595 sq.ft.	
6	±9,626 sq.ft.	
5	±10,133 sq.ft.	
4	±10,482 sq.ft.	
±10,998 sq.ft.		
22	±10,896 sq.ft.	
21	±10,693 sq.ft.	
20	±8,710 sq.ft.	
19	±7,305 sq.ft.	
6	18	±14,821 sq.ft.
17	±17,442 sq.ft.	
16	±11,646 sq.ft.	
15	±15,117 sq.ft.	
14	±18,095 sq.ft.	
13	±20,485 sq.ft.	
12	±21,110 sq.ft.	
9	±15,569 sq.ft.	
8	±16,435 sq.ft.	
7	±16,693 sq.ft.	
6	±15,150 sq.ft.	
5	±15,102 sq.ft.	
4	±15,159 sq.ft.	
3	±15,184 sq.ft.	
2	±15,065 sq.ft.	
1	±19,128 sq.ft.	

Drainage & Utility Easement

Proposed Easement as shown on an ALTA/ACSM Survey prepared by Landmark Surveying, Inc. and dated January 13, 2016.

OWNER:
E & E PROPERTIES LLC
PID:30.029.20.23.0005

OWNER:
H C GOLF COURSE DEVELOPMENT LL
PID:30.029.20.12.0001

1639.46
S00°17'19"E

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0 25 50 100
(SCALE IN FEET)

● – Denotes Washington County Monument
● – Denotes Found Monument
○ – Denotes Set Iron Pipe, Marked with RLS 40361

SEE SHEET 13 OF 65 SHEETS

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Signature:
Date: 09/21/2016 License #: 40361

DRAWN BY: JAB
ISSUE DATE: 09/21/2016
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H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY PLAT

12 of 65

(Save Date: 04/08/17) I:\Jobs\6021 - 6040\6036 - tartan park\cad\survey\prel. plat\6036_prp.dwg

SEE SHEET 12 OF 65 SHEETS

SEE SHEET 18 OF 65 SHEETS

GOV'T. LOT 2

SECTION 25, TOWNSHIP 29, RANGE 21

GOV'T. LOT 1

OUTLOT D
±7,139,499 sq.ft.

OUTLOT D
±7,139,499 sq.ft.

10
±17,805 sq.ft.

6

11
±29,525 sq.ft.

OWNER:
H C GOLF COURSE DEVELO
PID 30.029.20.32.0

N

0 25 50 100
(SCALE IN FEET)

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Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

1639.46
S00°17'19"E

East line of Government Lot 1, Section 25, Township 29, Range 21

East Quarter corner of Section 25, Township 29, Range 21

97.74
S00°12'25"W
Meander corner on East line of Section 25, Township 29, Range 21

±84
N00°15'25"E

Survey Line

Survey Line

HORSESHOE LAKE
Minnesota DNR protected waters
(No. 82-74P)
OHW=876.9 Feet NAVD 88
(876.8 Feet NGVD 29)

Shoreline of Horseshoe Lake

SEE SHEET 14 OF 65 SHEETS

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H.C. Golf Course Development, LLC
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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY PLAT

13 of 65

[Save Date: 04/08/17] F:\jobs\6021 - 6040\6036 - tartan park\cad\survey\prel. plat\6036_prp.dwg

SEE SHEET 13 OF 65 SHEETS

SEE SHEET 17 OF 65 SHEETS

eshoe Lake

184.1

Survey Line

280.3

OUTLOT D
±7,139,499 sq.ft.

East line of Government Lot 3, Section 25, Township 29, Range 21

463.3

OWNER:
EMERSON PROP LP
PID:25.029.21.44.0001

L O T 4

±579

G O V ' T .

L O T 3

of the Southeast
Range 21

406.1

50.0

423
S89°51'43"E

OUTLOT Q
±364,979 sq.ft.

y Easement

HORSESHOE LAKE
Minnesota DNR protected waters
(No. 82-74P)
OHW=876.9 Feet NAVD 88
(876.8 Feet NGVD 29)

N

0 25 50 100
(SCALE IN FEET)

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SEE SHEET 15 OF 65 SHEETS

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H.C. Golf Course Development, LLC
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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY PLAT

14 of 65

[Save Date: 04/08/17] F:\jobs\6021 - 6040\6036 - tartan park\cad\survey\prel. plat\6036_prp.dwg

SEE SHEET 14 OF 65 SHEETS

SEE SHEET 16 OF 65 SHEETS

SECTION 25, TOWNSHIP 29, RANGE 21

OUTLOT P
±31,097 sq.ft.

OUTLOT N
±9,861 sq.ft.

Drainage & Utility Easement (Over all of Outlot N)

OWNER:
EMERSON PROP LP
PID: 25.029.21.44.0001

East line of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21 also the West line of Government Lot 4, Section 25, Township 29, Range 21

N00°08'17"E 636.77

524.9

608.4

N00°08'17"E 1119.38

169.2

57.5

457.6

CB=S43°56'35"E
CL=220.00'
Δ=25°56'40"
R=490.00'
221.59

DRIVE

65.1
R=460

586.1

N00°08'17"E 482.61

N63°42'45"E 10.23

40

45

52.9

40.2

18.9

S32°27'51"E 334.35

218.4

180.8

195.5

NORTH

45

40

99.8

35.4

75

73.3

75

75

45.00
S00°08'17"W

158.3

Southeast corner of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21 also the Southwest corner of Government Lot 4, Section 25, Township 29, Range 21

South line of Government Lot 4, Section 25, Township 29, Range 21

N

0 25 50 100
(SCALE IN FEET)

Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

◉ – Denotes Washington County Monument
● – Denotes Found Monument
○ – Denotes Set Iron Pipe, Marked with RLS 40361

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H.C. Golf Course Development, LLC
11074 Radisson Rd NE
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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY PLAT

15 of 65

[Save Date: 04/08/17] T:\Jobs\6021 - 6040\6036 - tartan park\cad\survey\prel. plat\6036_prp.dwg

SEE SHEET 17 OF 65 SHEETS

SEE SHEET 15 OF 65 SHEETS

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● – Denotes Washington County Monument
● – Denotes Found Monument
○ – Denotes Set Iron Pipe, Marked with RLS 40361

N

0 25 50 100
(SCALE IN FEET)

SECTION 25, TOWNSHIP 29, RANGE 21

OUTLOT S
±41,279 sq.ft.

OUTLOT T
±127,879 sq.ft.

OUTLOT O
±747,941 sq.ft.

OUTLOT Q
±364,979 sq.ft.

OUTLOT P
±31,097 sq.ft.

OUTLOT N
±19,951 sq.ft.

1 ±14,308 sq.ft.
2 ±8,922 sq.ft.
3 ±7,522 sq.ft.
11 ±15,694 sq.ft.

LAKE ROSE
Minnesota DNR protected waters
(No. 82–112W)

PALMER DRIVE

10TH STREET (COUNTY STATE AID HIGHWAY NO. 10)

WASHINGTON COUNTY HIGHWAY RIGHT OF WAY PLAT NO. 1 AS AMENDED

Drainage & Utility Easement

Drainage & Utility Easement (Over all of Outlot O)

Drainage & Utility Easement (Over all of Outlot N)

North line of the Southerly Two-Thirds of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21

West line of the Easterly 660 feet of the Westerly 990 feet of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21

East line of the Westerly 990 feet of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21

East line of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21 also the West line of Government Lot 4, Section 25, Township 29, Range 21

Gas line Easement per Document Number 4060635

OWNER: JONES, TIMOTHY J. & ROXANNE H
PID: 25.029.21.41.0008

OWNER: SCHUMACHER, JAMES J & LORI E
PID: 25.029.21.34.0006

OWNER: VANLIESHOUT LAWRENCE A & BARBA
PID: 25.029.21.34.0007

OWNER: EMERSON PROP LP
PID: 25.029.21.44.0001

TARTAN MEADOWS
TARTAN MEADOWS

N00°01'31"E 1313.47

N00°08'17"E 636.77

N00°08'17"E 1119.38

N00°08'17"E 482.61

S89°43'40"W 1657.34

S32°27'51"E 354.35

N63°42'45"E 10.23

C=S43°36'05"E
CL=220.05
Δ=25°20'06"
R=498.00
221.89

990

660

1499.0

725.3

678.7

50.0

524.9

608.4

457.6

South Quarter corner of Section 25, Township 29, Range 21

South line of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21

Southeast corner of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21 also the Southwest corner of Government Lot 4, Section 25, Township 29, Range 21

South line of Government Lot 4 Section 25, Township 29, Range 21

Carlson McCain • environmental • engineering • surveying	3890 Pheasant Ridge Drive NE, Suite 100 Blaine, MN 55014 Phone: (763) 489-7900 Fax: (763) 489-7959 www.carlsonmccain.com	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 Land Surveyor under the laws of the State of Minnesota Print Name: Thomas R. Balluff, L.S. Signature: Date: 09/21/2016 License #: 40361	DRAWN BY: JAB ISSUE DATE: 09/21/2016 FILE NO: 384	Revisions: 02-10-2017 Revised Layout 02-28-2017 City Comments 04-07-2017 City Comments	**H.C. Golf Course Development, LLC** 11074 Radisson Rd NE Blaine, MN 55449	**THE ROYAL GOLF CLUB AT LAKE ELMO** Lake Elmo, Minnesota	**PRELIMINARY PLAT**	16 of 65

[Save Date: 04/08/17] I:\obs\6021 - 6040\6036 - tartan park\cad\survey\prel_plat\6036_prp.dwg

SEE SHEET 23 OF 65 SHEETS

SEE SHEET 18 OF 65 SHEETS

SEE SHEET 14 OF 65 SHEETS

SEE SHEET 16 OF 65 SHEETS

◉ – Denotes Washington County Monument
● – Denotes Found Monument
○ – Denotes Set Iron Pipe, Marked with RLS 40361

Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

0 25 50 100
(SCALE IN FEET)

PALMER DRIVE 276.2 NORTH

PALMER DRIVE 247.2

ARNIE 182.4 WAY

ARNIE WAY

TOWNSHIP 29,

SECTION 25,

GOV'T. LOT 4

GOV'T. LOT 3

OUTLOT V
±163,406 sq.ft.
Drainage & Utility Easement
(Over all of Outlot V)

OUTLOT U
±89,487 sq.ft.

OUTLOT R
±43,590 sq.ft.

OUTLOT T
±27,875 sq.ft.

OUTLOT S
±41,279 sq.ft.

OUTLOT D
±7,139,499 sq.ft.

OUTLOT Q
±364,979 sq.ft.

Gas line Easement per Document Number 4060635

Drainage & Utility Easement

East line of the Northeast Quarter of the Southwest Quarter of Section 25, Township 29, Range 21

South line of Government Lot 3, Section 25, Township 29, Range 21

West line of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21

North line of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21

East line of Government Lot 3, Section 25, Township 29, Range 21

North line of the Southerly Two-Thirds of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21

East line of the Southwest Quarter of the Southeast Quarter of Section 25, Township 29, Range 21 and the East line of Government Lot 4, Section 25, Township 29, Range 21

OWNER:
LAKE ELMO
29.21.34.0001

OWNER:
EMERSON PROP LP
PID:25.029.21.44.0001

OWNER:
NELSON, BERRY J BEAN
PID:25.029.21.34.0003

OWNER:
GERDEN, ROBERT & A
PID:25.029.21.34.0

OWNER:
& LINDA E
0002

PARK

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• engineering
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Print Name: Thomas R. Balluff, L.S.
Signature:
Date: 09/21/2016 License #: 40361

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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY PLAT

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SEE SHEET 19 OF 65 SHEETS

SEE SHEET 22 OF 65 SHEETS

SEE SHEET 23 OF 65 SHEETS

SEE SHEET 13 OF 65 SHEETS

SEE SHEET 17 OF 65 SHEETS

GOV'T. LOT 2

SECTION 25,

TOWNSHIP 29,

RANGE 21

GOV'T. LOT 3

N

0 25 50 100
(SCALE IN FEET)

Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

◉ – Denotes Washington County Monument
● – Denotes Found Monument
○ – Denotes Set Iron Pipe, Marked with RLS 40361

South line of Government Lot 2, Section 25, Township 29, Range 21

North line of Government Lot 3, Section 25, Township 29, Range 21

Gas line Easement per Document

Gas line Easement per Document Number 4060635

Drainage & Utility Easement

West line of Government Lot 3, Section 25, Township 29, Range 21

Survey Line

Shoreline of Horseshoe Lake

SW 1/4

32
±19,108 sq.ft.

33
±19,228 sq.ft.

13

34
±15,726 sq.ft.

35
±15,000 sq.ft.

36
±15,359 sq.ft.

37
±17,493 sq.ft.

38
±17,048 sq.ft.

39
±16,917 sq.ft.

OUTLOT X
±24,411 sq.ft.
Drainage & Utility Easement
(Over all of Outlot X)

OUTLOT D
±7,139,499 sq.ft.

12

1
±16,629 sq.ft.

OUTLOT W
Drainage & Utility Easement
(Over all of Outlot W)
±6,611 sq.ft.

1
±17,817 sq.ft.

3
,162 sq.ft.

NORTH

PALMER

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• engineering
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PRELIMINARY PLAT

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SEE SHEET 20 OF 65 SHEETS

SEE SHEET 21 OF 65 SHEETS

SEE SHEET 22 OF 65 SHEETS

SEE SHEET 12 OF 65 SHEETS

SEE SHEET 18 OF 65 SHEETS

Minnesota DNR protected waters (No. 82-416W)

SECTION 25, TOWNSHIP 29, RANGE 21

OUTLOT D
±7,139,499 sq.ft.

West line of Government Lot 2, Section 25, Township 29, Range 21

East line of the Northwest Quarter of Section 25, Township 29, Range 21

Surface Water Drainage Easement per Document Number 4253771

Drainage & Utility Easement

Gas line Easement per Document Number 4060634

GOV'T. LOT 2

NW 1/4

NE 1/4

40

40

40

91.8

North line of the Northeast Quarter of

South line of Government Lot 2, Section 25, Township 29, Range 21

- ◉ – Denotes Washington County Monument
- ● – Denotes Found Monument
- ○ – Denotes Set Iron Pipe, Marked with RLS 40361

Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

N

0 25 50 100

(SCALE IN FEET)

Carlson McCain
• environmental
• engineering
• surveying

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Blaine, MN 55014
Phone: (763) 489-7900
Fax: (763) 489-7959
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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota

Print Name: Thomas R. Balluff, L.S.
Signature:
Date: 09/21/2016 License #: 40361

DRAWN BY: JAB
ISSUE DATE: 09/21/2016
FILE NO: 384

Revisions:
02-10-2017 Revised Layout
02-28-2017 City Comments
04-07-2017 City Comments

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY PLAT

[Save Date: 04/08/17] F:\jobs\6021 - 6040\6036 - tartan park\cad\survey\prel. plat\6036_prp.dwg

SEE SHEET 27 OF 65 SHEETS

SEE SHEET 9 OF 65 SHEETS

SEE SHEET 21 OF 65 SHEETS

SEE SHEET 10 OF 65 SHEETS

SEE SHEET 11 OF 65 SHEETS

SEE SHEET 19 OF 65 SHEETS

DNR protected waters (No. 82-417W)

SECTION 25, TOWNSHIP 29, RANGE 21

West line of the North half of the Northwest Quarter of Section 25, Township 29, Range 21

West line of the North half of the Northwest Quarter of Section 25, Township 29, Range 21

West line of Government Lot 2, Section 25, Township 29, Range 21

North line of Government Lot 2, Section 25, Township 29, Range 21

Surface Water Drainage Easement per Document Number 623371

Gas line Easement per Document Number 4960634

Drainage & Utility Easement

Drainage &

211.3

293.3
R=226

75.8
R=864

420.2
R=599

279.7

78.2

40

40

40

83.0

56.3

45.9

245.7

110.0

224.7

151.4

114.7

64.0

80.9

97.1

188.3

35.5

1
1
±467,505 sq.ft.

2
±23,972 sq.ft.

OUTLOT D
±7,139,499 sq.ft.

Minnesota DNR protected waters (No. 82-418W)

N

0 25 50 100
(SCALE IN FEET)

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Lake Elmo, Minnesota

PRELIMINARY PLAT

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SEE SHEET 26 OF 65 SHEETS

SEE SHEET 27 OF 65 SHEETS

SEE SHEET 25 OF 65 SHEETS

SEE SHEET 20 OF 65 SHEETS

SEE SHEET 19 OF 65 SHEETS

SEE SHEET 22 OF 65 SHEETS

Surface Water Drainage Easement per Document Number 623371

OUTLOT HH
±38,921 sq.ft.

1
±10,798 sq.ft.

2
±10,492 sq.ft.

3
95 sq.ft.

OUTLOT II
±330,779 sq.ft.

Drainage & Utility Easement

Minnesota DNR protected waters
(No. 82-417W)

OUTLOT D
±7,139,499 sq.ft.

Minnesota DNR protected waters
(No. 82-118W)

SECTION 25, TOWNSHIP 29, RANGE 21

West line of the Northeast Quarter of the Northeast Quarter of Section 25, Township 29, Range 21

West line of Government Lot 2, Section 25, Township 29, Range 21

N

0 25 50 100
(SCALE IN FEET)

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- ● – Denotes Found Monument
- ○ – Denotes Set Iron Pipe, Marked with RLS 40361

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H.C. Golf Course Development, LLC
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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY PLAT

21 of 65

[Save Date: 04/08/17] I:\Jobs\6021 - 6040\6036 - tartan park\cad\survey\prel. plat\6036_prp.dwg

SEE SHEET 21 OF 65 SHEETS

SEE SHEET 24 OF 65 SHEETS

SEE SHEET 19 OF 65 SHEETS

SEE SHEET 18 OF 65 SHEETS

SEE SHEET 23 OF 65 SHEETS

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● – Denotes Found Monument
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N

0 25 50 100
(SCALE IN FEET)

East line of the Northwest Quarter of Section 25, Township 29, Range 21

North line of the Northeast Quarter of the Southwest Quarter of Section 25, Township 29, Range 21

SECTION 25, TOWNSHIP 29, RANGE 21

NW 1/4 OF THE NE 1/4

NE 1/4 OF THE SW 1/4

SW 1/4 OF THE NW 1/4

SE 1/4 OF THE NW 1/4

OUTLOT D
±7,139,499 sq.ft.

OUTLOT AA
±145,106 sq.ft.
Drainage & Utility Easement (Over all of Outlot AA)

OUTLOT T
±127,875 sq.ft.

OUTLOT F
OWNER:
HOMESTEAD HOMEOWNERS ASSOC
PID: 25.029.21.32.0007

OWNER:
HAZELTON BRIAN
PID: 25.029.21.32.0013

OWNER:
KLUGE JEFFREY T & VICTORIA J
PID: 25.029.21.32.0014

OWNER:
NEUBAUER STEVEN W & KRISTINA J
PID: 25.029.21.32.0015

OWNER:
HOMESTEAD HOMEOWNERS ASSOC
PID: 25.029.21.32.0007

HOMESTEAD TRAIL

PALMER DRIVE NORTH

PALMER DRIVE

Drainage & Utility Easement

Drainage Easement per Document Number 3124108

N00°07'49"E 1316.87

1 ±10,427 sq.ft.
2 8,073 sq.ft.
10 ±14,158 sq.ft.
11 ±14,216 sq.ft.
12 ±13,842 sq.ft.
13 ±13,651 sq.ft.
17 ±20,016 sq.ft.
18 ±17,272 sq.ft.
19 ±16,225 sq.ft.
20 ±15,128 sq.ft.
21 ±15,191 sq.ft.
22 ±15,158 sq.ft.
23 ±15,507 sq.ft.
24 ±15,240 sq.ft.
25 ±15,277 sq.ft.
26 ±15,110 sq.ft.
27 ±15,578 sq.ft.
28 ±15,626 sq.ft.
29 ±15,396 sq.ft.
30 ±15,000 sq.ft.
31 ±18,007 sq.ft.
32 ±19,108 sq.ft.
33 ±19,228 sq.ft.
34 ±15,726 sq.ft.
35

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H.C. Golf Course Development, LLC
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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY PLAT

22 of 65

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SEE SHEET 22 OF 65 SHEETS

SEE SHEET 18 OF 65 SHEETS

SEE SHEET 17 OF 65 SHEETS

OUTLOT T
±127,875 sq.ft.

OUTLOT Z
±341,196 sq.ft.
Drainage & Utility Easement
(Over all of Outlot Z)

OUTLOT Y
±83,991 sq.ft.

OUTLOT X
±24,411 sq.ft.
Drainage & Utility Easement
(Over all of Outlot X)

OUTLOT U
±89,487 sq.ft.

OUTLOT T
±127,875 sq.ft.

SECTION 25, TOWNSHIP 29, RANGE 21

THE HOMESTEAD

TARTAN MEADOWS 1 THIRD ADDITION

TARTAN MEADOWS 2ND ADDITION

LATROBE CIRCLE NORTH

PALMER DRIVE NORTH

1	±14,795 sq.ft.
2	±17,125 sq.ft.
3	±15,313 sq.ft.
4	±14,407 sq.ft.
5	±13,179 sq.ft.
6	±13,244 sq.ft.
7	±20,015 sq.ft.
8	±19,247 sq.ft.
9	±17,248 sq.ft.
10	±15,340 sq.ft.
11	±14,466 sq.ft.
12	±13,547 sq.ft.
13	±15,438 sq.ft.
14	±17,574 sq.ft.
15	±15,061 sq.ft.
16	±17,035 sq.ft.
17	±15,393 sq.ft.
34	±15,726 sq.ft.
35	±15,000 sq.ft.
36	±15,359 sq.ft.
37	±17,493 sq.ft.
38	±17,048 sq.ft.
39	±16,917 sq.ft.

OWNER: NEUBAUER STEVEN W & KRISTINA J
PID: 25.029.21.32.0015

OWNER: YETTER BRIAN J & CYNTHIA RAE SOBIECH
PID: 25.029.21.32.0016

OWNER: BAILEY VICKI L & JOSEPH L SPELTZ
PID: 25.029.21.32.0017

OWNER: HOMESTEAD HOMEOWNERS ASSOC
PID: 25.029.21.32.0007

OWNER: RICE DANIEL & CHRISTINE P
PID: 25.029.21.32.0018

OWNER: HOULE JOHN R & DIANE M
PID: 25.029.21.32.0027

OWNER: CARLSON JAMES G & JANET L
PID: 25.029.21.34.0010

OWNER: VOELLER JAMES & CLOYCE
PID: 25.029.21.34.0011

OWNER: TOFT RODNEY A & JUDY A
PID: 25.029.21.34.0012

OWNER: CITY OF LAKE ELMO
PID: 25.029.21.34.0001

West line of the Northeast Quarter of the Southwest Quarter of Section 25, Township 29, Range 21

West line of Government Lot 3, Section 25, Township 29, Range 21

East line of the Northeast Quarter of the Southwest Quarter of Section 25, Township 29, Range 21

South line of the Northeast Quarter of the Southwest Quarter of Section 25, Township 29, Range 21

South line of Government Lot 3, Section 25, Township 29, Range 21

N00°07'49"E 1316.87

1312.83 S89°57'48"W

952.2

492.1

364.6

403.7

427.1

909.1

909.1

238.1

Drainage & Utility Easement

Gas line Easement per Document Number 4066635

Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

0 25 50 100
(SCALE IN FEET)

● – Denotes Washington County Monument
● – Denotes Found Monument
○ – Denotes Set Iron Pipe, Marked with RLS 40361

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H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY PLAT

23 of 65

[Issue Date: 04/08/17] F:\Jobs\6021 - 6040\6036 - tartan park\cad\survey\prel_plat\6036_prp.dwg

SEE SHEET 25 OF 65 SHEETS

SEE SHEET 21 OF 65 SHEETS

SEE SHEET 22 OF 65 SHEETS

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N

0 25 50 100
(SCALE IN FEET)

LAKE ELMO AVENUE NORTH (COUNTY STATE AID HIGHWAY NO. 17)

OWNER:
WASHINGTON COUNTY
PID: 25.029.21.11.0003

West line of the Northwest Quarter of Section 25, Township 29, Range 21
N00°08'14"E
2636.21

809.4

779.4

West Quarter corner of Section 25, Township 29, Range 21

ROYAL BOULEVARD NORTH
144.3
R=2663
159.0
R=1000
144.9

PALMER DRIVE NORTH
R=265
R=500
R=175
R=90
R=200

KINGS LANE NORTH
155.1
149.0
141.3
141.4
317.6
128.7
113.0

SECTION 25, TOWNSHIP 29, RANGE 21

Drainage & Utility Easement

1 ±8,944 sq.ft.
2 ±9,371 sq.ft.
±10,019 sq.ft.
11 ±22,588 sq.ft.
12 ±18,893 sq.ft.
13 ±21,360 sq.ft.
14 ±25,251 sq.ft.
15 ±25,018 sq.ft.
16 ±22,769 sq.ft.
17 ±20,016 sq.ft.
18 ±17,272 sq.ft.
19 ±16,225 sq.ft.
20 ±15,128 sq.ft.
21 ±15,191 sq.ft.
22 ±15,158 sq.ft.
23 ±15,507 sq.ft.
20 ±8,722 sq.ft.
21 ±8,855 sq.ft.
22 ±8,944 sq.ft.
23 ±8,095 sq.ft.
24 ±6,681 sq.ft.
25 ±6,701 sq.ft.
26 ±8,371 sq.ft.
19 ±7,472 sq.ft.
18 ±6,600 sq.ft.
17 ±6,710 sq.ft.
16 ±8,770 sq.ft.
15 ±9,699 sq.ft.
14 ±10,427 sq.ft.
13 ±8,856 sq.ft.
12 ±6,860 sq.ft.
11 ±6,600 sq.ft.
10 ±6,600 sq.ft.
9 ±6,600 sq.ft.
8 ±6,600 sq.ft.
7 ±6,819 sq.ft.
6 ±8,023 sq.ft.
5 ±8,265 sq.ft.
1 ±10,798 sq.ft.
2 ±7,150 sq.ft.
3 ±7,150 sq.ft.
4 ±8,240 sq.ft.
5 ±9,427 sq.ft.
6 ±9,798 sq.ft.
7 ±9,233 sq.ft.
8 ±9,912 sq.ft.
9 ±10,319 sq.ft.
10 ±8,125 sq.ft.
11 ±7,150 sq.ft.
12 ±7,150 sq.ft.
13 ±7,150 sq.ft.
14 ±10,804 sq.ft.
1 ±10,427 sq.ft.
2 ±8,073 sq.ft.
3 ±7,892 sq.ft.
4 ±7,838 sq.ft.
5 ±8,265 sq.ft.

OUTLOT CC
±18,601 sq.ft.

OUTLOT D
±7,139,499 sq.ft.

OUTLOT T
±127,875 sq.ft. - 186.3

OUTLOT BB
±292,553 sq.ft.

Drainage & Utility Easement

Utility Easement

Drainage

Drainage Easement per Document Number 3124108

OUTLOT A
OWNER:
HOMESTEAD HOMEOWNERS ASSOC
PID: 25.029.21.32.0002

THE HOMESTEAD

1310.41
N89°53'18"W

South line of the Northwest Quarter of Section 25, Township 29, Range 21

OUTLOT F
OWNER:
HOMESTEAD HOMEOWNERS ASSOC
PID: 25.029.21.32.0007

3 OWNER:
DELKOSKI MICHAEL P & STEPHANIE L MANOS-DELKOSKI
PID: 25.029.21.32.0010

4 OWNER:
MCKAY THOMAS S
PID: 25.029.21.32.0011

5 OWNER:
CLIFF GERRY & LILLIAN
PID: 25.029.21.32.0012

6 OWNER:

RANGE 21

1235.4

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SEE SHEET 26 OF 65 SHEETS

SEE SHEET 21 OF 65 SHEETS

SEE SHEET 24 OF 65 SHEETS

OUTLOT DD
±719,934 sq.ft.

OUTLOT EE
±86,510 sq.ft.
Drainage & Utility Easement
(Over all of Outlot EE)

OUTLOT GG
±99,737 sq.ft.
Drainage & Utility Easement
(Over all of Outlot GG)

OUTLOT HH
±136,221 sq.ft.

OUTLOT II
±330,779 sq.ft.

OUTLOT D
±7,139,499 sq.ft.

Surface Water Drainage Easement per Document Number 623371

Drainage & Utility Easement

Minnesota DNR protected waters (No. 82-417W)

SECTION 25, TOWNSHIP 29, RANGE 21

LAKE ELMO AVENUE NORTH
(COUNTY STATE AID HIGHWAY NO. 17)

ROYAL BOULEVARD NORTH

PALAMER DRIVE

OWNER:
WASHINGTON COUNTY
PID:26.029.21.11.0003

OWNER:
WASHINGTON COUNTY
PID:26.029.21.11.0002

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◉ – Denotes Washington County Monument
● – Denotes Found Monument
○ – Denotes Set Iron Pipe, Marked with RLS 40361

(SCALE IN FEET)

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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY PLAT

25 of 65

[Save Date: 04/08/17] F:\jobs\6021 - 6040\6036 - tartan park\cad\survey\prel. plat\6036_prp.dwg

SCHWARTZ-MARTINCO ADDITION

OWNER: KOEHNLE RONALD W & LAURIE S
PID: 24.029.21.33.0012

OWNER: COOK CHRISTOPHER P & KAREN F
PID: 24.029.21.33.0011

20TH COURT NORTH

SCHWARTZ-MARTINCO ADDITION

OWNER: MORGAN DIANE TRUDEAU
PID: 24.029.21.33.0008

OWNER: DURAND MARY JEAN TRS
PID: 24.029.21.34.0001

Northwest corner of Section 25, Township 29, Range 21

20TH STREET NORTH

North line of the Northwest Quarter of Section 25, Township 29, Range 21

N89°41'47"E 2615.71

575.0

1676.4

1616.4

SECTION 25, TOWNSHIP 29, RANGE 21

LAKE ELMO AVENUE NORTH (C.S.A.H. NO. 17)

West line of the Northwest Quarter of Section 25, Township 29, Range 21

OWNER: WASHINGTON COUNTY
PID: 26.029.21.11.0003

N00°08'14"E 2636.21

ROYAL BOULEVARD NORTH

MASTERS LANE NORTH

MASTERS COURT NORTH

RANGE LINE

Drainage & Utility Easement

Surface Water Drainage Easement per Document Number 623371

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0 25 50 100 (SCALE IN FEET)

OUTLOT DD ±719,934 sq.ft.

OUTLOT GG ±99,737 sq.ft.

OUTLOT ±163,

OUTLOT ±138,921 sq.

SEE SHEET 25 OF 65 SHEETS

SEE SHEET 27 OF 65 SHEETS

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[Save Date: 04/08/17] T:\Jobs\6021 - 6040\6036 - tartan park\cad\survey\prel. plat\6036_prp.dwg

OWNER:
DURAND MARY JEAN TRS
PID: 24.029.21.34.0001

N89°41'47"E
2615.71

20TH STREET NORTH

North line of the Northwest Quarter of Section 25, Township 29, Range 21

LEGION AVENUE NORTH

North Quarter corner of Section 25, Township 29, Range 21

OWNER:
LESLIE MARY E
PID: 24.029.21.43.0001

OWNER:
TATE MICHAEL D
& JO ELLEN
PID: 24.029.21.43.0014

S89°21'57"E
2283.33

1676.4

364.3

20TH STREET NORTH

Drainage & Utility Easement

OUTLOT FF
±163,254 sq.ft.

SECTION 25,

OUTLOT A
±43,973 sq.ft.

Drainage & Utility Easement

16
±15,139 sq.ft.

17
±14,152 sq.ft.

18
±14,090 sq.ft.

19
±14,810 sq.ft.

20
±14,187 sq.ft.

21
±14,505 sq.ft.

22
±18,273 sq.ft.

23
±21,046 sq.ft.

1
±15,297 sq.ft.

2
±17,567 sq.ft.

3
±21,852 sq.ft.

4
±38,814 sq.ft.

5
±36,237 sq.ft.

6
±23,843 sq.ft.

7
±21,923 sq.ft.

8
±21,751 sq.ft.

9
±21,664 sq.ft.

10
±21,434 sq.ft.

11
±19,630 sq.ft.

12
±17,321 sq.ft.

MASTERS LANE NORTH

TOWNSHIP 29,

RANGE 21

OUTLOT HH
±138,921 sq.ft.

OUTLOT HH
±138,921 sq.ft.

OUTLOT II
±330,779 sq.ft.

Minnesota DNR protected waters
(No. 82-417W)

Drainage & Utility Easement

OUTLOT C
±750,206 sq.ft.

West line of the North half of the Northwest Quarter of Section 25, Township 29, Range 21

Bearings shown hereon are based on the West line of Government Lot 4, Section 25, Township 29, Range 21, which is assumed to bear North 00°08'17" East

◉ – Denotes Washington County Monument
● – Denotes Found Monument
○ – Denotes Set Iron Pipe, Marked with RLS 40361

0 25 50 100
(SCALE IN FEET)

SEE SHEET 26 OF 65 SHEETS

SEE SHEET 9 OF 65 SHEETS

SEE SHEET 21 OF 65 SHEETS

SEE SHEET 20 OF 65 SHEETS

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www.carlsonmccain.com

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 Land Surveyor under the laws of the State of Minnesota

Print Name: Thomas R. Balluff, L.S.
Signature:
Date: 09/21/2016 License #: 40361

DRAWN BY: JAB
ISSUE DATE: 09/21/2016
FILE NO: 384

Revisions:
02-10-2017 Revised Layout
02-28-2017 City Comments
04-07-2017 City Comments

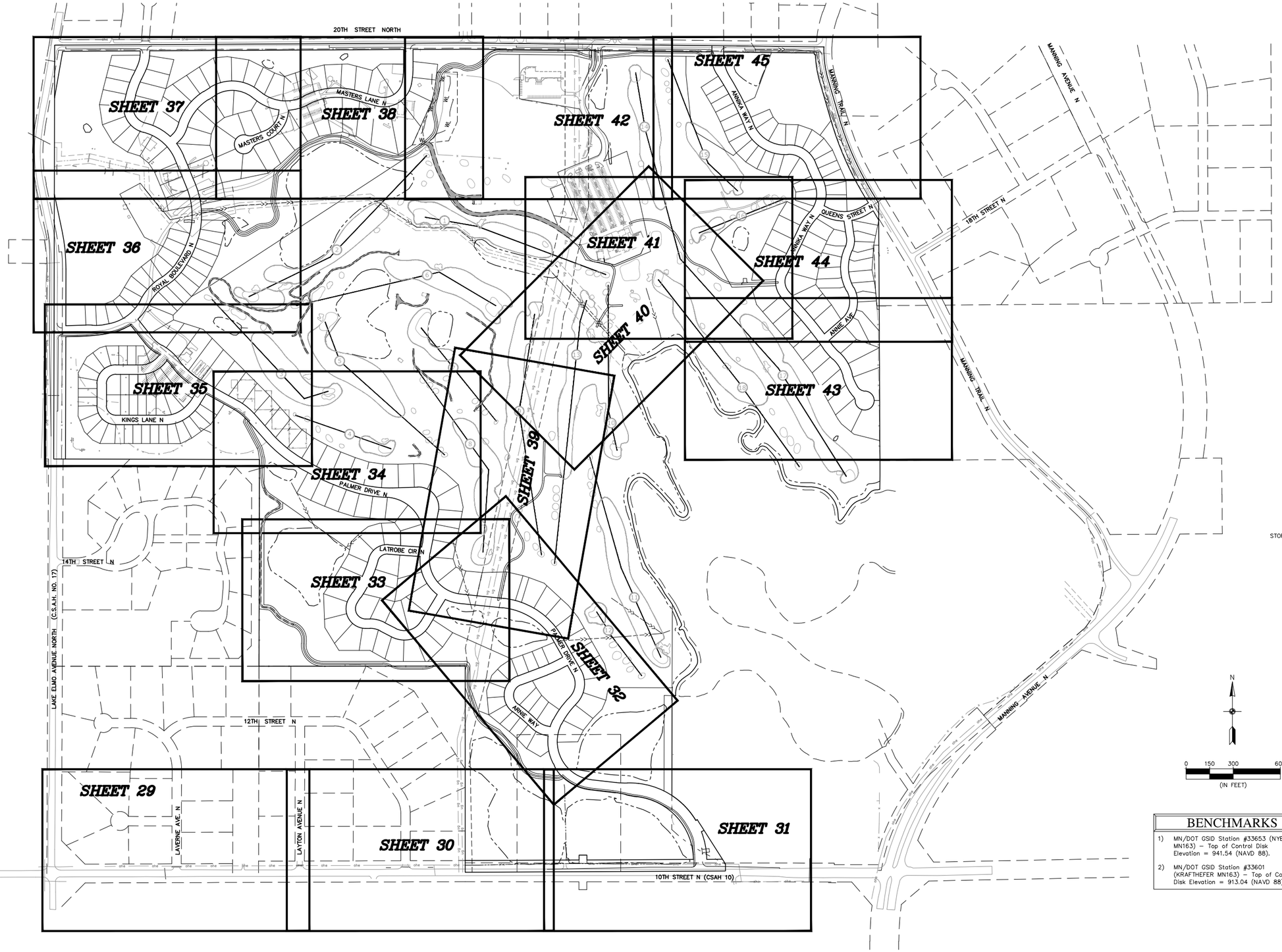
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11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY PLAT

27 of 65

[Save Date: 04/08/17] F:\Jobs\6021 - 6040\6036 - tartan park\cad\survey\prel. plat\6036_prp.dwg



SITE PLAN LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
EASEMENT		
SETBACK LINE		
CURB		
BITUMINOUS		
CONCRETE		
SANITARY SEWER		
WATER MAIN		
STORM SEWER		
FENCE	x x x	
OVERHEAD ELECTRIC	ohe ohe	
UNDERGROUND TELEPHONE	ut ut	
UNDERGROUND TELEVISION	utv utv	
UNDERGROUND GAS	ug ug	
STORM CATCH BASIN & MANHOLE		
OUTLET CONTROL STRUCTURE		
MANHOLE		
HYDRANT		
GATE VALVE		
LIGHT POLE		
ELECTRIC BOX		
TELEPHONE BOX		
TELEVISION BOX		
POWER POLE		

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

CALL BEFORE YOU DIG

811

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

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

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Print Name: Brian J. Krystofiak, P.E.
Signature: [signature]
Date: 9/21/16 License #: 25063

Drawn: JJO
Designed: BJK
Date: 9/21/16

Revisions:
1. 2/10/17 Revise Per City Comments
2. 2/28/17 Revise Per City Comments
3. 4/07/17 Revise Per City & Watershed Comments

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Lake Elmo, Minnesota

SITE INDEX

28 of 65

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LAKE ELMO AVENUE NORTH (C.S.A.H. NO. 17)

LAVERNE AVE. N

LAYTON AVENUE N

SEE SHEET 30

BUILT MANHOLE OVER EXISTING FORCEMAIN AND CONNECT TO EXISTING.

EX. 16" HDPE FORCEMAIN

EX. 16" HDPE WATERMAIN

6" HDPE FORCEMAIN (DIRECTIONAL DRILL)

AIR RELEASE MH

AIR RELEASE MH

6" HDPE FORCEMAIN (DIRECTIONAL DRILL)

10TH STREET N (CSAH 10)

BENCHMARKS

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N

0 25 50 100

(IN FEET)

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PRELIMINARY SITE & UTILITY PLAN

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SEE SHEET 32

SEE SHEET 30

RE= 894.95
INV. 875.60
INV. 875.50

RE= 891.20
INV. 874.91
INV. 874.81

RE= 889.32
INV. 873.51
INV. 873.41

RE= 889.70
INV. 872.33
INV. 872.23

RE= 890.72
INV. 871.42–NW
INV. 871.42–NE
INV. 871.32–S

PLUG
INV. 871.62

RE= 891.32
INV. 870.74–N
INV. 870.64–E
INV. 870.64–S (PLUG)

RE= 892.50
INV. 870.00

PLUG
INV. 870.25

6" CONCRETE SIDEWALK

8' BIT. TRAIL

PALMER DRIVE N

OUTLOT P

OUTLOT O

OUTLOT N

LAKE ROSE
WL–1 100 YR HWL = 883.4
MN DNR# 82011200

8" PVC SAN SEWER

12" DIP WM

12" PLUG

AIR RELEASE MH

6" HDPE FORCEMAIN (DIRECTIONAL DRILL)

8' PAVED SHOULDER
12' THROUGH LANE
13' LEFT TURN LANE
12' THROUGH LANE

12' RIGHT TURN LANE
12' THROUGH LANE
12' THROUGH LANE

FUTURE GRAVITY SEWER

10TH STREET N (CSAH 10)

650' 195' 300' 100' 300' 180' 650'

50:1 15:1 50:1

BENCHMARKS

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N

0 25 50 100
(IN FEET)

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PRELIMINARY SITE & UTILITY PLAN

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SEE SHEET 39

SEE SHEET 33

SEE SHEET 31

HORSESHOE LAKE – (NGVD 29)
MN DNR #82-0074P
OHW = 876.8
100 YR HWL = 877.4
[NAVD 88 = (NGVD 29)+0.10]

WL-2 (INCIDENTAL WCA)

OUTLOT Q

OUTLOT D

OUTLOT X

OUTLOT U

OUTLOT T

OUTLOT R

OUTLOT S

OUTLOT O

OUTLOT I

PALMER DRIVE N

ARNIE WAY

POND WL-3 (INCIDENTAL)

POND WL-4 (INCIDENTAL)

RETAINING WALL

STORM SEWER

8" PVC SAN SEWER

12" DIP WM

8" DIR WM

6' CONCRETE SIDEWALK

4' SUMP

30' FRONT SETBACK LINE

25' FRONT SETBACK LINE

30' SIDE SETBACK LINE

25' SIDE SETBACK LINE

10' TYP

20'R (TYP.)

STATION 44+50 RIGHT OF CURB TO 10TH STREET

10' BITUMINOUS TRAIL

8' BIT TRAIL

0 25 50 100
(IN FEET)

BENCHMARKS

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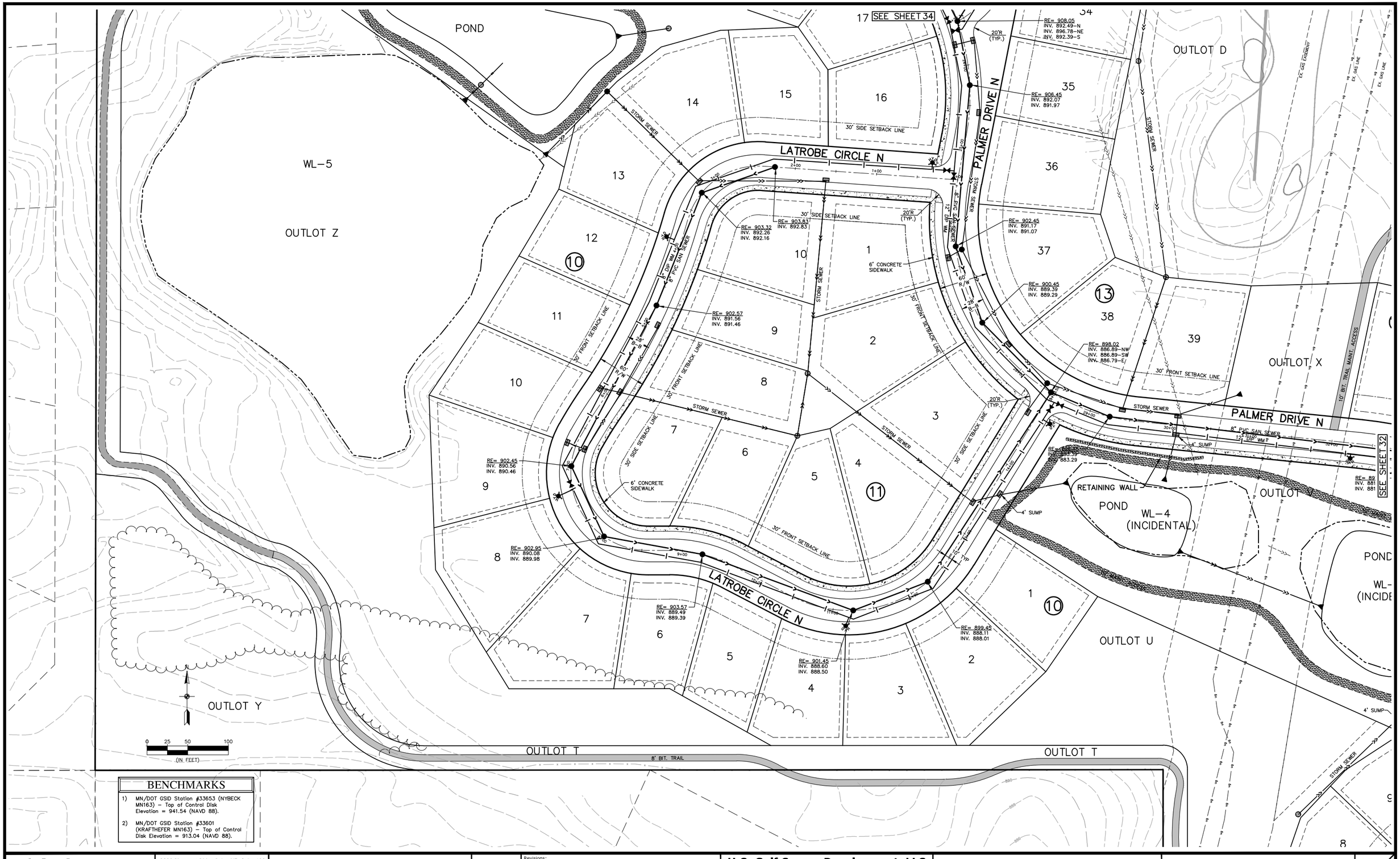
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PRELIMINARY SITE & UTILITY PLAN

32 of 65

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PRELIMINARY SITE & UTILITY PLAN

33 of 65

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SEE SHEET 35
1-8-NW
8-SW
8-SE

PALMER DRIVE N

30' FRONT SETBACK LINE

TRACK LINE

STORM SEWER

6' BIT. TRAIL

RE= 911.33
INV. 900.72
INV. 900.62

RE= 908.82
INV. 897.82
INV. 897.72

RE= 909.07
INV. 896.72
INV. 896.62

RE= 910.20
INV. 895.72
INV. 895.62

8" PVC SAN SEWER

12" DIP WM

10' BIT. TRAIL/MAINT ACCESS

6" CONCRETE SIDEWALK

RETAINING WALL

OUTLOT AA

WL-6
(INCIDENTAL)
POND

EX. 12" HDPE STORM SEWER

INV. 92.45

EX. OUTLET CONTROL STRUCTURE/ INV. 893.14

4' SUMP

OUTLOT T

8' BIT. TRAIL

OUTLOT AA
POND

OUTLOT D

RE= 911.70
INV. 894.42
INV. 894.32

RE= 911.45
INV. 893.42
INV. 893.32

RE= 913.69
INV. 902.69

RE= 909.45
INV. 892.87
INV. 892.77

RE= 910.95
INV. 899.97
INV. 899.87

RE= 908.05
INV. 892.49-N
INV. 896.78-NE
INV. 892.39-S

20'R (TYP.)

SEE SHEET 33

N
0 25 50 100
(IN FEET)

BENCHMARKS

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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY SITE & UTILITY PLAN

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SEE SHEET 36

ROYAL BOULEVARD N

PALMER DRIVE N

KINGS LANE N

OUTLOT BB

OUTLOT CC

WL-7

LAKE ELMO AVENUE NORTH (C.S.A.H. NO. 17)

6' PAVED SHOULDER
12' THROUGH LANE
13' LEFT TURN LANE
12' THROUGH LANE
12' THROUGH LANE
12' RIGHT TURN LANE
300'
180'
10'
50:1

REMOVE & REPLACE ROADWAY SECTION IN KIND

CONNECT TO EXISTING 16" WATERMAIN WITH WET TAP.

8" DIP WM
8" PVC SAN SEWER
12" DIP WM
4" PVC FORCEMAIN
STORM SEWER
8' BIT. TRAIL
10' BIT. TRAIL/MAINT. ACCESS
6' CONCRETE SIDEWALK
RETAINING W

30'R (TYP.)
20'R (TYP.)
20'S (TYP.)

30' FRONT SETBACK LINE
20' FRONT SETBACK LINE
25' FRONT SETBACK LINE
20' SIDE SETBACK LINE
30' SIDE SETBACK LINE
20' FRONT SETBACK LINE (SIDE LOAD GARAGE)
25' FRONT SETBACK LINE (FRONT LOAD GARAGE)

RE= 917.45
INV. 906.42
INV. 906.32

RE= 918.29
INV. 907.27
INV. 907.17

RE= 921.45
INV. 909.87
INV. 909.77

RE= 928.37
INV. 917.37

RE= 920.82
INV. 909.82

RE= 921.76
INV. 909.43-NW
INV. 909.43-SW
INV. 909.33-SE

RE= 923.43
INV. 912.39
INV. 912.29

RE= 919.95
INV. 908.41
INV. 908.31

RE= 918.01
INV. 906.38-NW
INV. 906.38-SW
INV. 906.28-SE

RE= 925.31
INV. 913.97
INV. 913.87

RE= 930.57
INV. 919.57

RE= 930.57
INV. 919.28
INV. 919.18

RE= 930.82
INV. 918.38
INV. 918.28

RE= 930.45
INV. 917.99
INV. 917.89

RE= 922.95
INV. 910.41
INV. 910.31

RE= 919.56
INV. 908.47
INV. 908.37

RE= 911.33
INV. 900.72
INV. 900.62

RE= 908.82
INV. 897.82
INV. 897.72

N

0 25 50 100
(IN FEET)

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SEE SHEET 37

SEE SHEET 35

LAKE ELMO AVENUE NORTH (C.S.A.H. NO. 17)

6' PAVED SHOULDER | 13' LEFT TURN LANE | 12' THROUGH LANE | 12' THROUGH LANE | 6' PAVED SHOULDER

1087.5' RADIUS

ROYAL BOULEVARD N

OUTLOT DD

OUTLOT EE

OUTLOT GG

OUTLOT B

OUTLOT HH

OUTLOT II

POND

INF. BASIN

WL-8 (INCIDENTAL)

WL-7

RETAINING WALL

LIFT STATION

VALVE MH

4' SUMP

STORM SEWER

8" PVC SAN SEWER

8" DIP WM

6' SIDEWALK

10' BIT. TRAIL/MAINT. ACCESS

8' CONCRETE SIDEWALK

20' FRONT SETBACK LINE (SIDE LOAD GARAGE)

30' FRONT SETBACK LINE

30" RCP

42" RCP

(APPROXIMATE LOCATION PER VALLEY BRANCH WATERSHED DISTRICT)

RE= 896.45
INV. 885.42
INV. 885.32

RE= 894.33
INV. 882.82
INV. 882.72

RE= 896.57
INV. 881.32-N
INV. 884.76-S
INV. 881.22-W

RE= 900.95
INV. 889.81
INV. 889.71

RE= 905.95
INV. 894.91
INV. 894.81

RE= 909.95
INV. 898.51
INV. 898.41

RE= 915.70
INV. 904.58
INV. 904.48

RE= 917.45
INV. 906.42
INV. 906.32

RE= 918.29
INV. 907.27
INV. 907.17

N

0 25 50 100
(IN FEET)

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20TH STREET NORTH

RIGHT TURN LANE

CONNECT TO EXISTING 16" WATERMAIN WITH WET TAP.

REMOVE & REPLACE ROADWAY SECTION IN KIND

12" HDPE (DIRECTIONAL DRILL)

12" HDPE (DIRECTIONAL DRILL)

LAKE ELMO AVENUE NORTH (C.S.A.H. NO. 17)

ROYAL BOULEVARD N

MASTERS LANE N

MASTERS COURT N

OUTLOT DD

OUTLOT FF

OUTLOT GG

WL-9

WL-21

INF. BASIN

10' BIT. TRAIL/MAINT. ACCESS

4' SUMP

STORM SEWER

6' CONCRETE SIDEWALK

30' FRONT SETBACK LINE

30' SIDE SETBACK LINE

60' R/W

20'R (TYP.)

8" DIP WM

8" PVC SAN SEWER

RE= 920.75
INV. 909.75

RE= 911.95
INV. 900.78
INV. 900.68

RE= 908.95
INV. 897.74
INV. 897.64

RE= 903.95
INV. 892.82
INV. 892.72

RE= 902.19
INV. 889.19-NW
INV. 889.19-NE
INV. 889.09-SE

RE= 900.95
INV. 888.78
INV. 888.68

RE= 910.95
INV. 891.87
INV. 891.77

RE= 908.45
INV. 892.47
INV. 892.37

RE= 908.57
INV. 890.98
INV. 890.88

RE= 903.51
INV. 889.99
INV. 889.89

RE= 906.45
INV. 893.46
INV. 893.36

RE= 906.87
INV. 893.90-E
INV. 893.90-S
INV. 893.80-W

RE= 908.20
INV. 894.70
INV. 894.60

RE= 908.57
INV=895.10
INV. 895.00

RE= 907.82
INV. 894.30
INV. 894.20

RE= 910.85
INV. 898.85

RE= 896.45
INV. 885.42
INV. 885.32

RE= 894.33

SEE SHEET 38

SEE SHEET 36

N

0 25 50 100
(IN FEET)

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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Signature:
Date: 9/21/16 License #: 25063

Drawn: JJO
Designed: BJK
Date: 9/21/16

Revisions:
1. 2/10/17 Revise Per City Comments
2. 2/28/17 Revise Per City Comments
3. 4/07/17 Revise Per City & Watershed Comments

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY SITE & UTILITY PLAN

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20TH STREET NORTH

RIGHT TURN LANE

30'R (TYP.)

12" HDPE (DIRECTIONAL DRILL)

OUTLOT FF

WL-20

WL-21

RETAINING WALL

STORM SEWER

MASTERS LANE N

OUTLOT A

REMOVE EXISTING ENTRANCE

10' BIT. TRAIL/MAINT. ACCESS

SEE SHEET 37

SEE SHEET 42

OUTLOT C

30' FRONT SETBACK LINE

30' SIDE SETBACK LINE

6' CONCRETE SIDEWALK

10' TYP.

8" DIP WM

8" PVC SAN SEWER

RE= 928.07
INV. 917.07

RE= 931.47
INV. 916.67
INV. 915.57

RE= 932.41
INV. 915.17
INV. 915.07

RE= 930.56
INV. 914.67
INV. 914.57

RE= 917.95
INV. 904.67
INV. 904.57

RE= 907.36
INV. 895.87
INV. 895.77

RE= 906.87
INV. 893.90-E
INV. 893.90-S
INV. 893.80-W

RE= 906.45
INV. 893.46
INV. 893.36

RE= 910.95
INV. 891.87
INV. 891.77

RE= 908.45
INV. 892.47
INV. 892.37

RE= 908.57
INV. 890.98
INV. 890.88

RE= 908.20
INV. 894.70
INV. 894.60

RE= 908.57
INV. 895.10
INV. 895.00

RE= 907.82
INV. 894.30
INV. 894.20

RE= 906.57
INV. 895.17
INV. 895.07

RETAINING WALL

RETAINING WALL

OUTLOT HH

OUTLOT II

OUTLOT GG

INF. BASIN

WL-11

MASTERS COURT N

60' R/W

46' B.O.C.

RE= 910.85
INV. 898.85

4' SUMP

RE= 896.45
INV. 885.42
INV. 885.32

RE= 894.33

STRUCTURE NOT LOCATED

N

0 25 50 100
(IN FEET)

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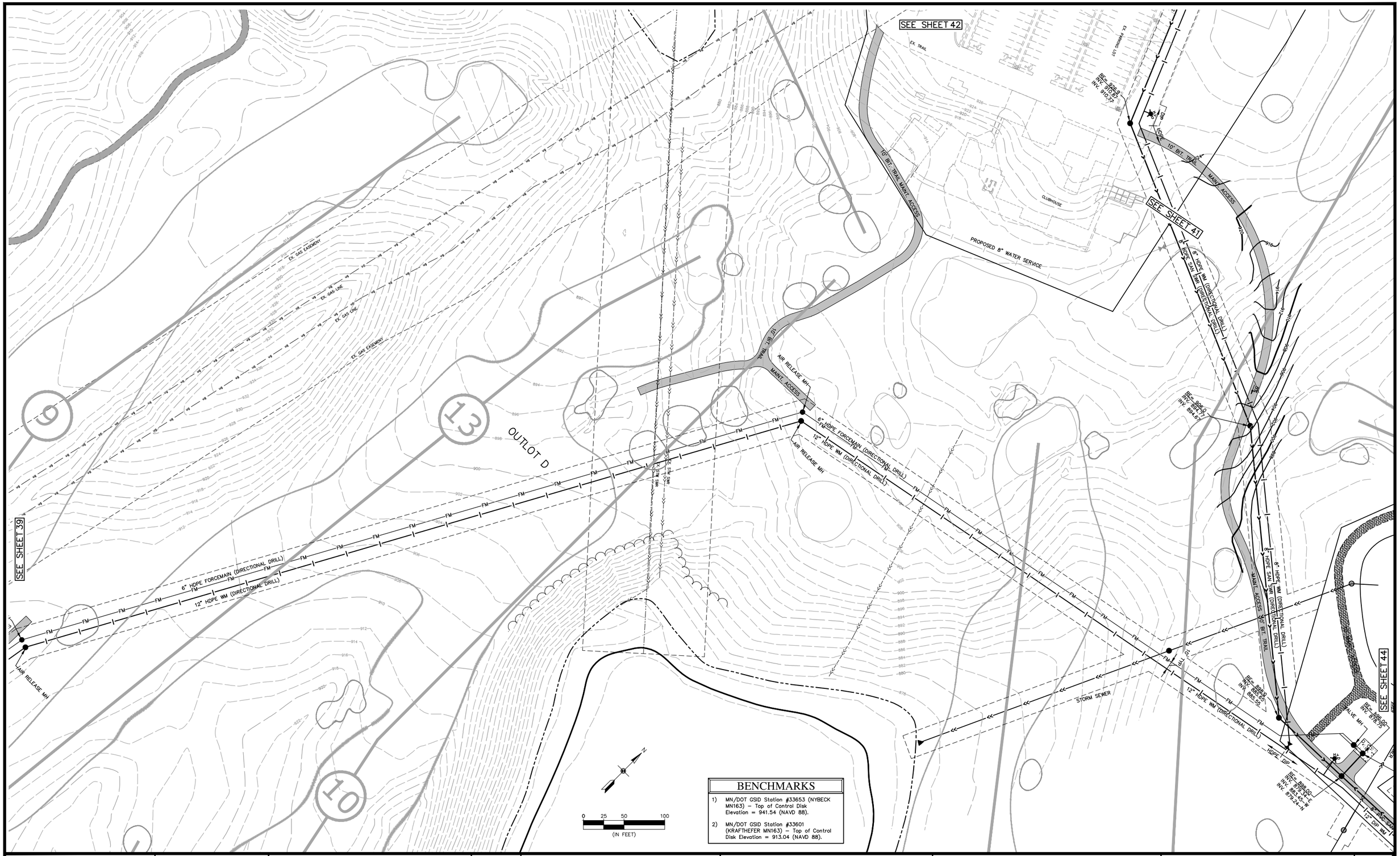
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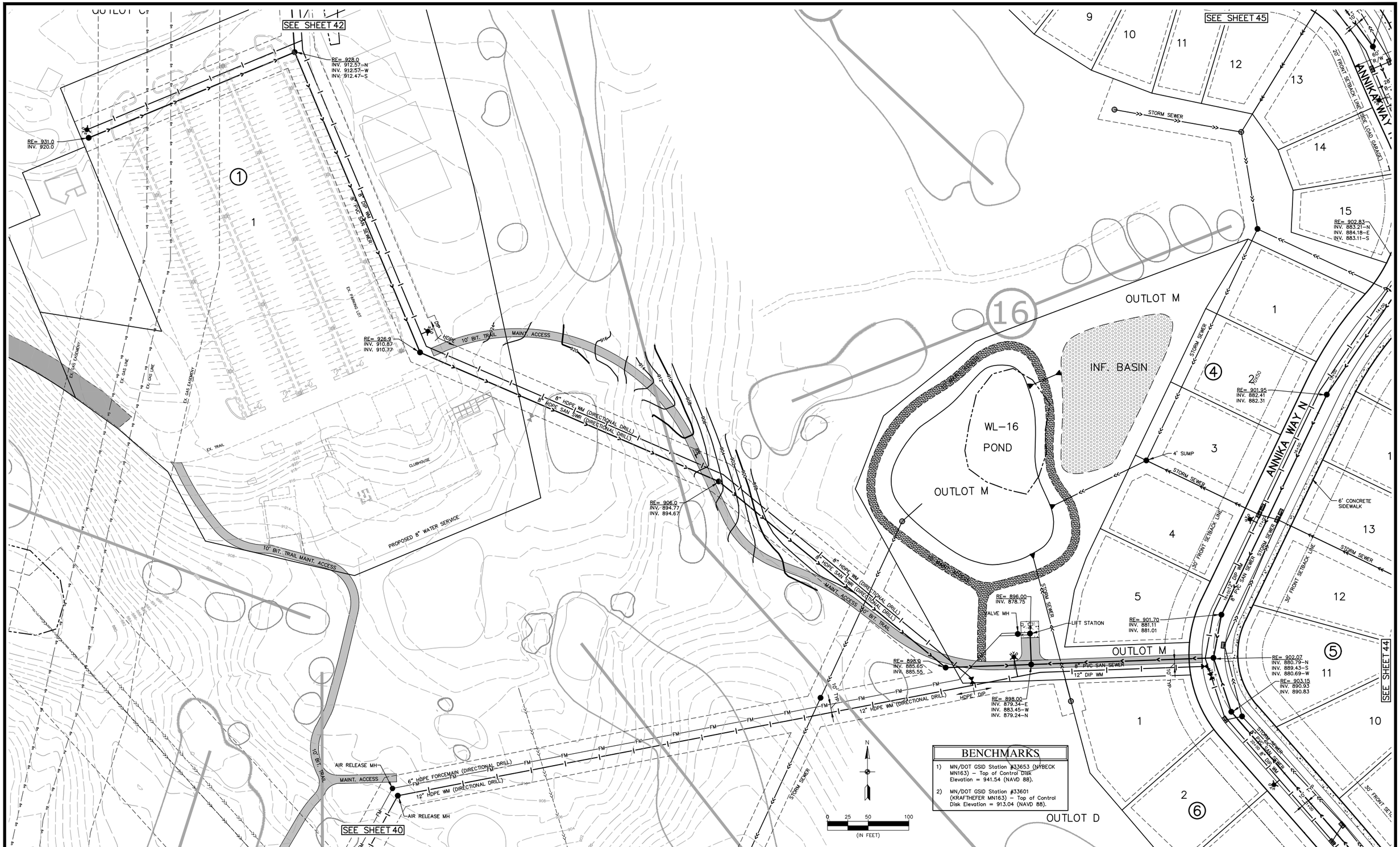
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PRELIMINARY SITE & UTILITY PLAN

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20TH STREET NORTH

MASTERS LANE N

SEE SHEET 38

SEE SHEET 45

SEE SHEET 41

OUTLOT A

OUTLOT B

OUTLOT C

OUTLOT HH

EXISTING PARKING LOT

EXISTING DRIVING RANGE

EXISTING BUILDING

WL-18

WL-19

RETAINING WALL

REMOVE EXISTING ENTRANCE

RIGHT TURN LANE

12" HDPE (DIRECTIONAL DRILL)

10' BIT. TRAIL/MAINT. ACCESS

8' BIT. TRAIL

STORM SEWER

6" DIP WM

8" PVC SAN. SEWER

EXISTING DRIVE

EX. GAS LINE

EX. GAS EASEMENT

EX. CATV EASEMENT

RE= 928.07
INV. 917.07

RE= 931.47
INV. 916.67
INV. 915.57

RE= 932.41
INV. 915.17
INV. 915.07

RE= 924.0
INV. 915.0

RE= 924.0
INV. 913.64
INV. 913.54

RE= 928.0
INV. 912.57-N
INV. 912.57-W
INV. 912.47-S

RE= 931.0
INV. 920.0

0 25 50 100
(IN FEET)

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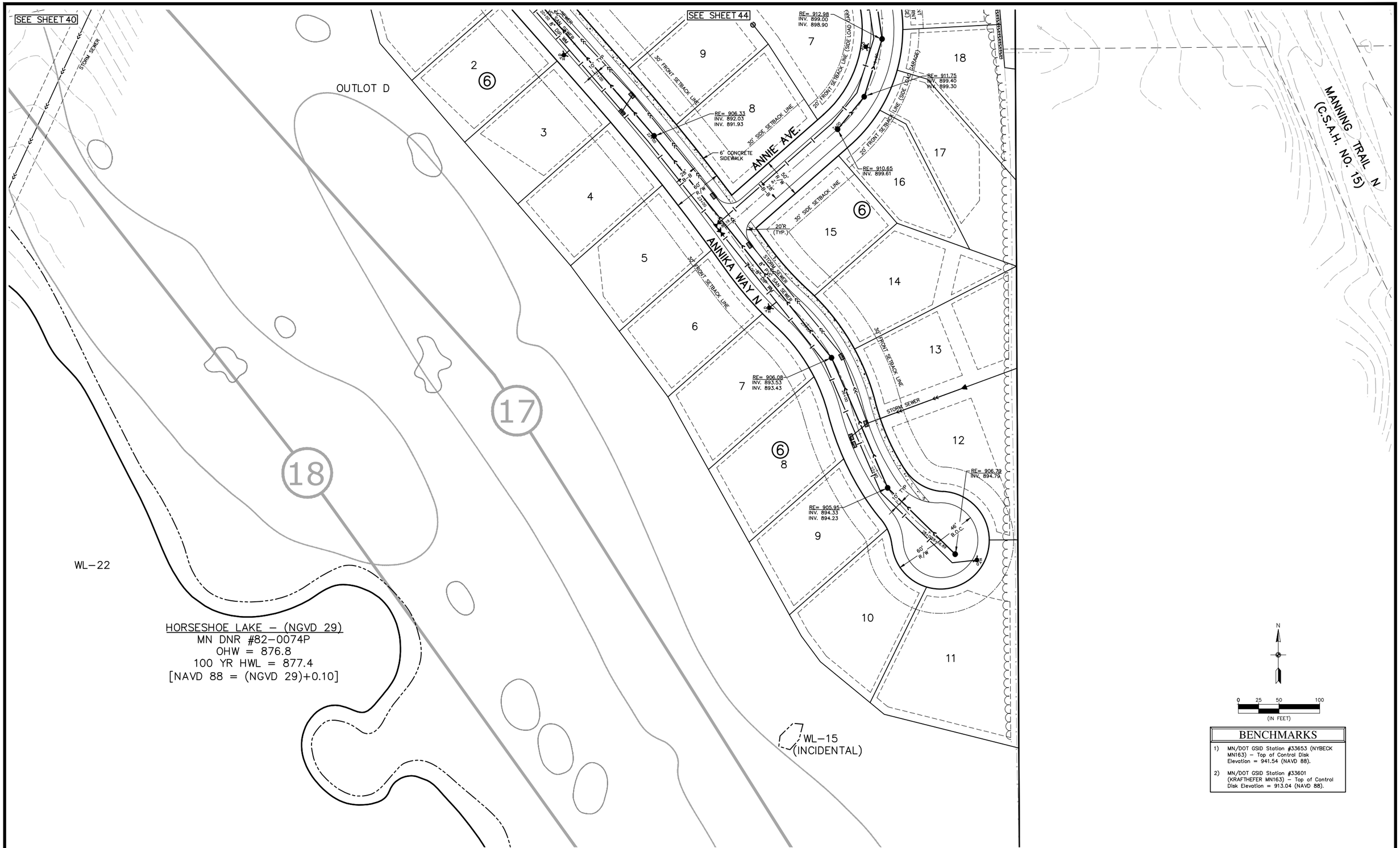
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Lake Elmo, Minnesota

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SEE SHEET 45

SEE SHEET 41

SEE SHEET 40

SEE SHEET 43

OUTLOT M

OUTLOT D

OUTLOT I

OUTLOT J

OUTLOT K

OUTLOT L

INF. BASIN

WL-16 POND

QUEENS STREET N

ANNIKA WAY N

ANNIE AVE.

RETAINING WALL

REMOVE EXISTING CULVERT, NEW CULVERTS TO MATCH EXISTING CULVERT SIZE

LIFT STATION

MAINT. ACCESS 10' BIT. TRAIL

6" CONCRETE SIDEWALK

4' SUMP

RE= 902.08
INV. 884.01
INV. 883.91

RE= 902.45
INV. 883.61
INV. 883.51

RE= 902.83
INV. 883.21-N
INV. 884.18-E
INV. 883.11-S

RE= 901.95
INV. 882.41
INV. 882.31

RE= 897.22
INV. 886.22
INV. 886.12

RE= 900.83
INV. 889.02
INV. 889.92

RE= 909.03
INV. 898.00
INV. 897.90

RE= 912.44
INV. 898.60
INV. 898.50

RE= 911.75
INV. 899.40
INV. 899.30

RE= 910.65
INV. 899.61

RE= 912.98
INV. 899.00
INV. 898.90

RE= 906.33
INV. 892.03
INV. 891.93

RE= 907.02
INV. 880.79-N
INV. 889.43-S
INV. 880.69-W

RE= 903.15
INV. 890.93
INV. 890.83

RE= 901.70
INV. 881.11
INV. 881.01

RE= 896.00
INV. 878.75

RE= 898.9
INV. 885.65
INV. 885.55

RE= 898.00
INV. 879.34-E
INV. 883.45-W
INV. 879.24-N

RE= 906.0
INV. 894.77
INV. 894.67

BENCHMARKS

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0 25 50 100
(IN FEET)

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20TH STREET NORTH

RIGHT TURN LANE

12" DIP WM

8' BIT. TRAIL

75' R/W

45'

19' B-B

19' B-B

10' B-B

OUTLOT F

OUTLOT G

WL-17

RETAINING WALL

OUTLOT H

OUTLOT E

OUTLOT D

INF. BASIN

ANNIKA WAY N

MANNING TRAIL N

RIGHT TURN LANE

24" RCP

RE= 896.70
INV. 888.70

4' SUMP

RE= 902.36
INV. 888.00
INV. 887.90

RE= 901.45
INV. 886.90
INV. 886.80

6' CONCRETE SIDEWALK

RE= 901.95
INV. 886.21
INV. 886.11

RE= 902.20
INV. 885.41
INV. 885.31

RE= 901.95
INV. 885.11
INV. 885.01

RE= 901.67
INV. 884.71
INV. 884.61

RE= 902.08
INV. 884.01
INV. 883.91

RE= 902.45
INV. 883.61

RE= 902.83

STORM SEWER

8" PVC SAN SEWER

12" DIP WM

5' PVC SAN SEWER

20' FRONT SETBACK LINE (SIDE LOAD GARAGE)

20' FRONT SETBACK LINE

SEE SHEET 42

SEE SHEET 44

OUTLOT I

30'R

N

0 25 50 100
(IN FEET)

BENCHMARKS

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LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
EASEMENT LINE		
CURB LINE		
BITUMINOUS		
CONCRETE		
SANITARY SEWER		
STORM SEWER		
WATER MAIN		
OVERHEAD UTILITY	ohe	
STORM CATCH BASIN		DENOTES INLET PROTECTION
STORM MANHOLE		
OUTLET CONTROL STRUCTURE		
MANHOLE		
HYDRANT		
GATE VALVE		
TELEVISION BOX		
TELEPHONE BOX		
UTILITY POLE		
RETAINING WALL		
FENCE	x	
10' CONTOUR		
2' CONTOUR		
FEMA FLOOD PLAIN		
WETLAND LINE		
SPOT ELEVATION	00.0	00.0
EMERGENCY OVERFLOW		E.O.F. 000.0
SILT FENCE		
TREE FENCE		
TREELINE		
SOIL BORING	TH	
GRADING LIMITS		
STORM CATCH BASIN		DENOTES INLET PROTECTION
WETLAND BUFFER SIGN		DENOTES SIGN, DENOTES POST

WETLAND FILL SUMMARY

	AREA
WETLAND FILL:	3097 S.F.
WETLAND EXCAVATION:	12,032 S.F.
TOTAL WETLAND IMPACT:	15,129 S.F.

NOTE: WETLAND REPLACEMENT CREDITS TO BE PURCHASED IN LIEU OF ONSITE REPLACEMENT.

NORTHEAST FLOODPLAIN SUMMARY

EXISTING FLOODPLAIN:	81.3 AC/FT
PROPOSED FLOODPLAIN:	81.3 AC/FT

SOUTH FLOODPLAIN SUMMARY

FLOODPLAIN FILL:	2500 CY
FLOODPLAIN MITIGATION:	3200 CY

N

0 150 300 600
(IN FEET)

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CALL BEFORE YOU DIG. 811. Know what's below. Call before you dig.

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

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20TH STREET NORTH

EXISTING OUTLET FOR WETLAND 17 (887.6)

BUFFER AREA: 75' AVERAGE
REQUIRED: 66,982 SQ.FT.
PROVIDED: 67,355 SQ.FT.

OUTLOT B

OUTLOT F

OUTLOT G

RETAINING WALL #12

WL-17
100 YR HWL = 893.8
(FROM DOWNS LAKE)

RETAINING WALL #13

100 YR HWL = 893.8
(FROM DOWNS LAKE)

OUTLOT H

MANNING TRAIL N

ANNIKA WAY N

OUTLOT E

INFILTRATION BASIN
POND 20
100 YR HWL = 886.5 (MODEL)
NWL = 881.8
OUTLET = 882.3
100 YR HWL = 893.8
(FROM DOWNS LAKE)

100 YR HWL= 894.7

100 YR HWL= 893.8

FLOODPLAIN STORAGE

SEE SHEET 50

SEE SHEET 48

MATCH EXISTING CULVERT SIZE

N

0 25 50 100
(IN FEET)

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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• engineering
• surveying

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www.carlsonmccain.com

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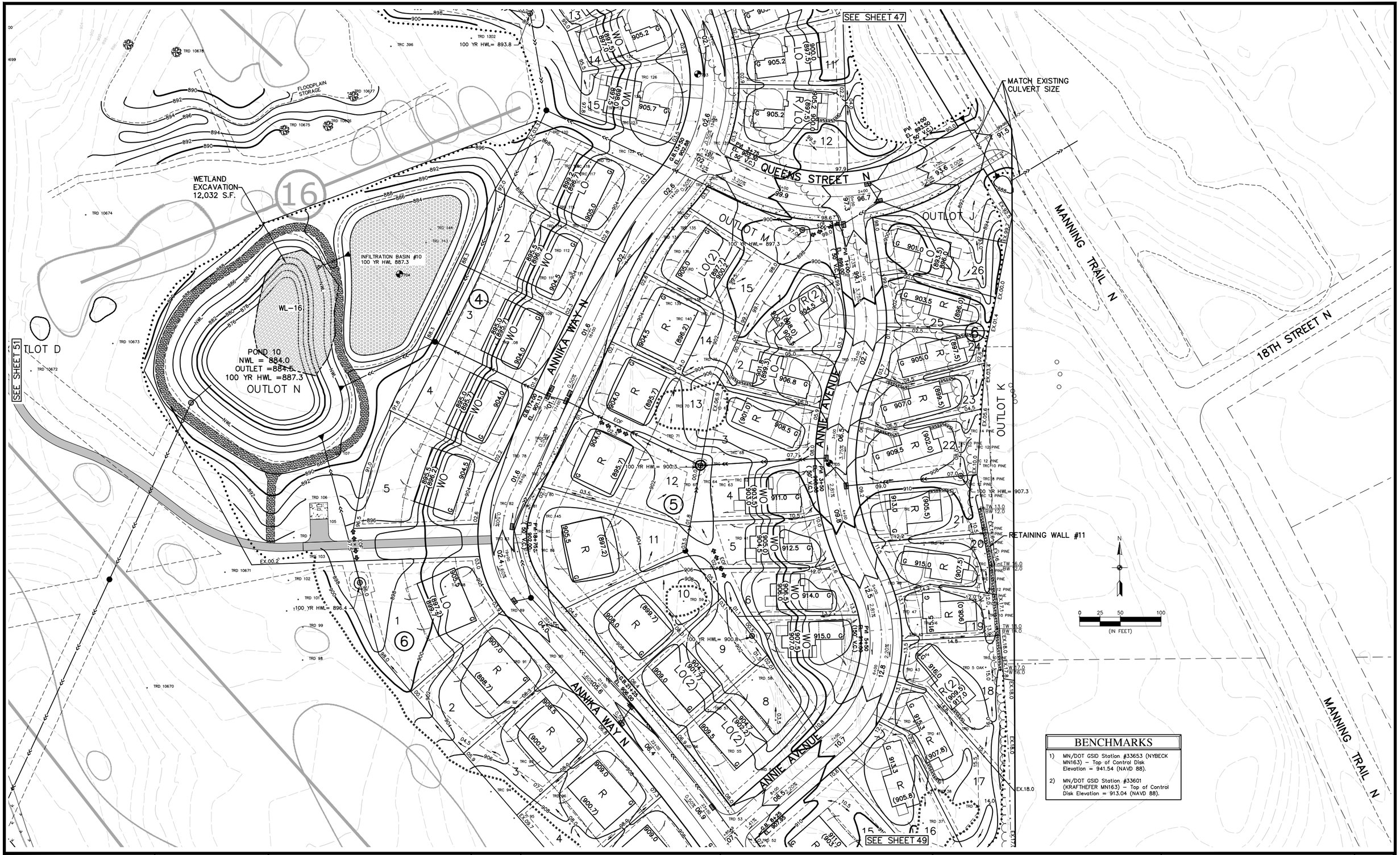
Revisions:
1. 2/10/17 Revise Per City Comments
2. 2/28/17 Revise Per City Comments
3. 4/07/17 Revise Per City & Watershed Comments

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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

PRELIMINARY GRADING & EROSION CONTROL PLAN

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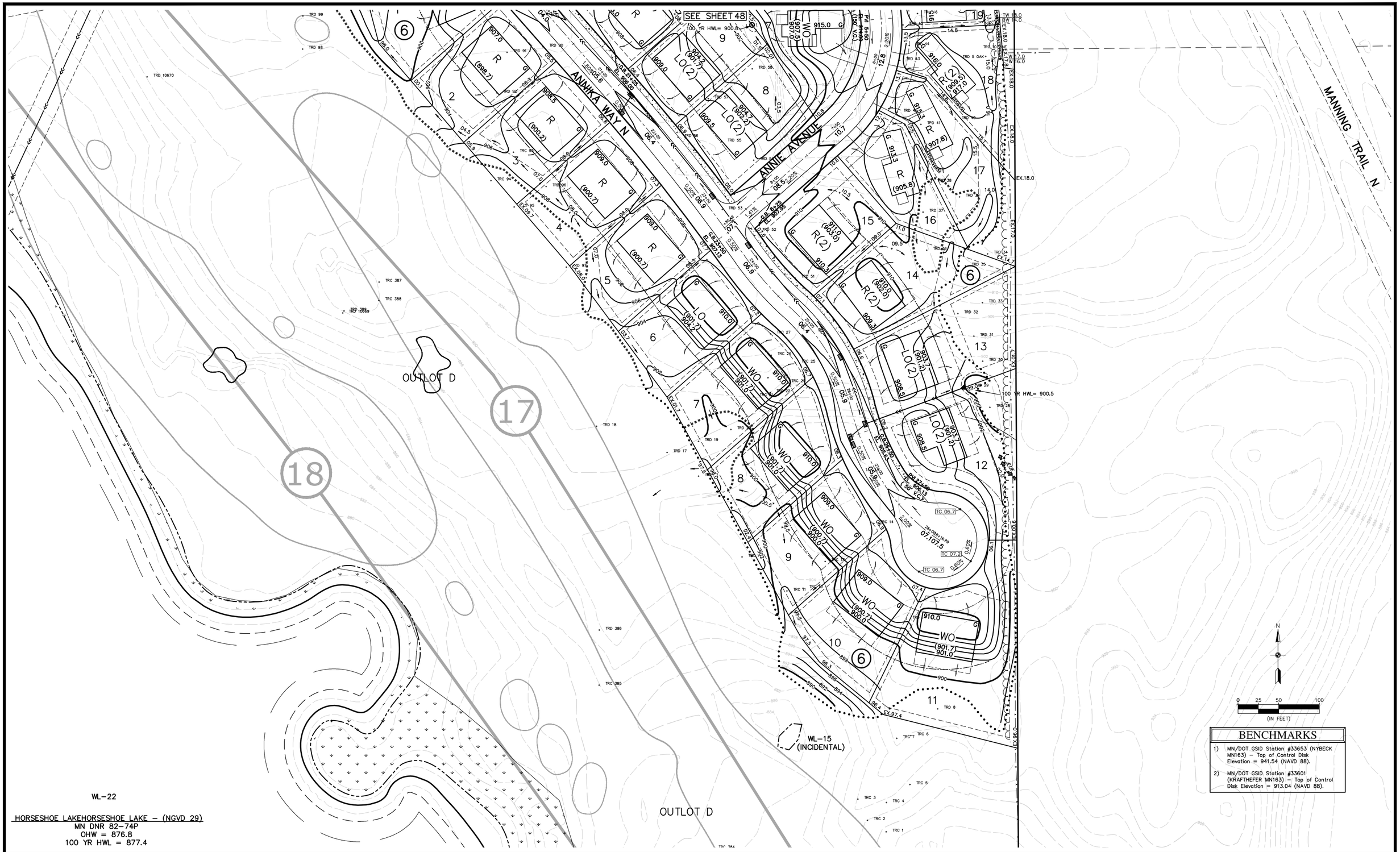
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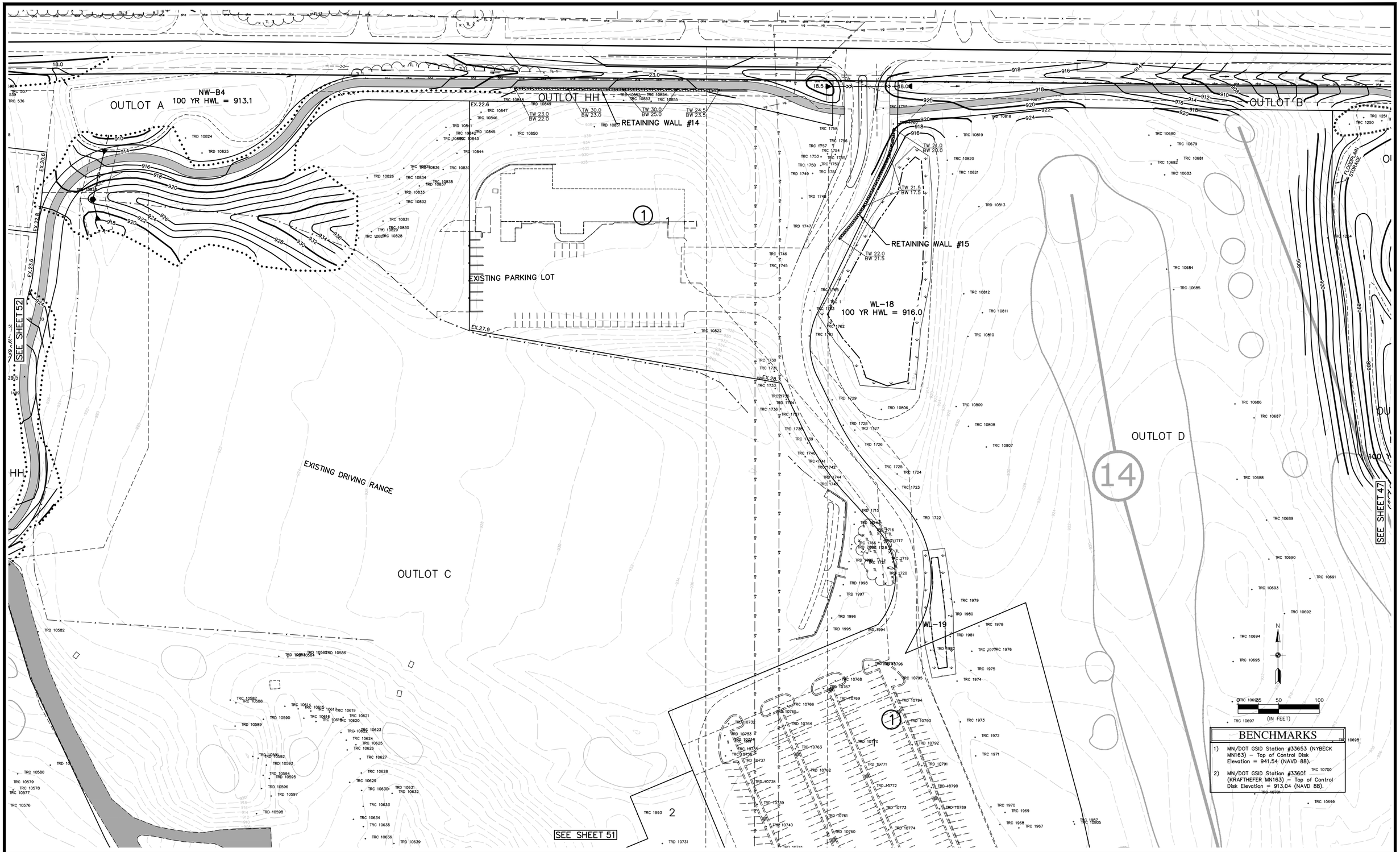
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SEE SHEET 50

SEE SHEET 52

SEE SHEET 48

WL-19

WL-14

WL-13

OUTLOT D

OUTLOT D

N

0 25 50 100
(IN FEET)

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20TH STREET NORTH

GRAVEL CONSTRUCTION ENTRANCE

WETLAND 21
100 YR HWL = 898.0

WETLAND FILL
3,097 S.F.

WL-21

OUTLOT FF

RETAINING WALL #1

WETLAND 20
100 YR HWL = 909.7

BUFFER AREA: 50' AVERAGE
REQUIRED: 16,266 SQ.FT.
PROVIDED: 16,270 SQ.FT.

OUTLOT A

NW-B4
100 YR HWL =

MASTERS LANE N

MASTERS COURT N

SEE SHEET 53

SEE SHEET 50

RETAINING WALL #3

RETAINING WALL #2

OUTLOT HH

OUTLOT II

OUTLOT GG

WL-11

WETLAND NW-B5
MN DNR 82-417W
100 YR HWL = 877.3 (NGVD 29)

[NAVD 88 = (NGVD 29)+0.10]

OUTLOT A
BUFFER AREA: 50' AVERAGE
REQUIRED: 76,099 SQ.FT.
PROVIDED: 101,125 SQ.FT.

INFILTRATION BASIN #30
100 YR HWL 883.6

SEE SHEET 54

0 25 50 100
(IN FEET)

BENCHMARKS

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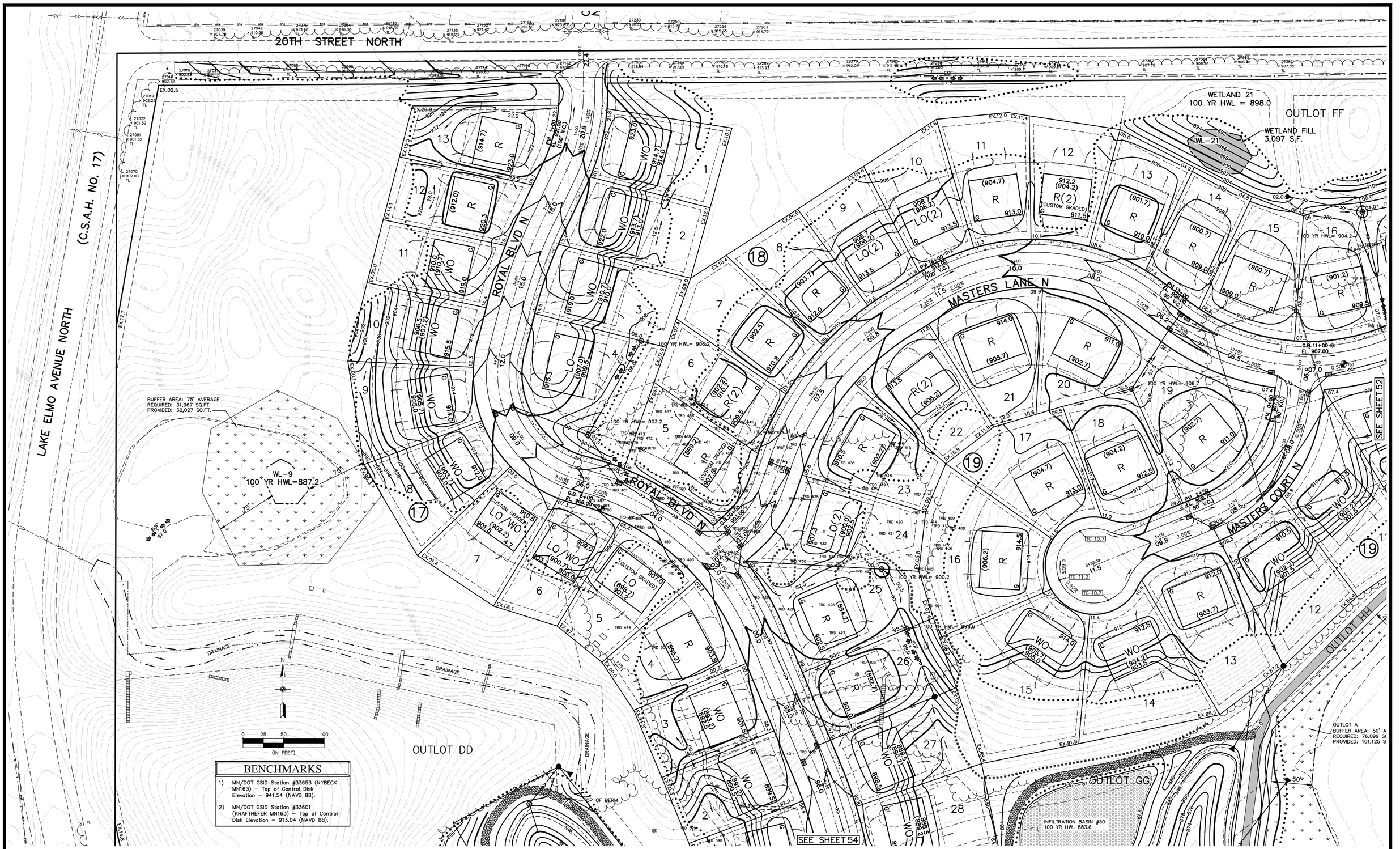
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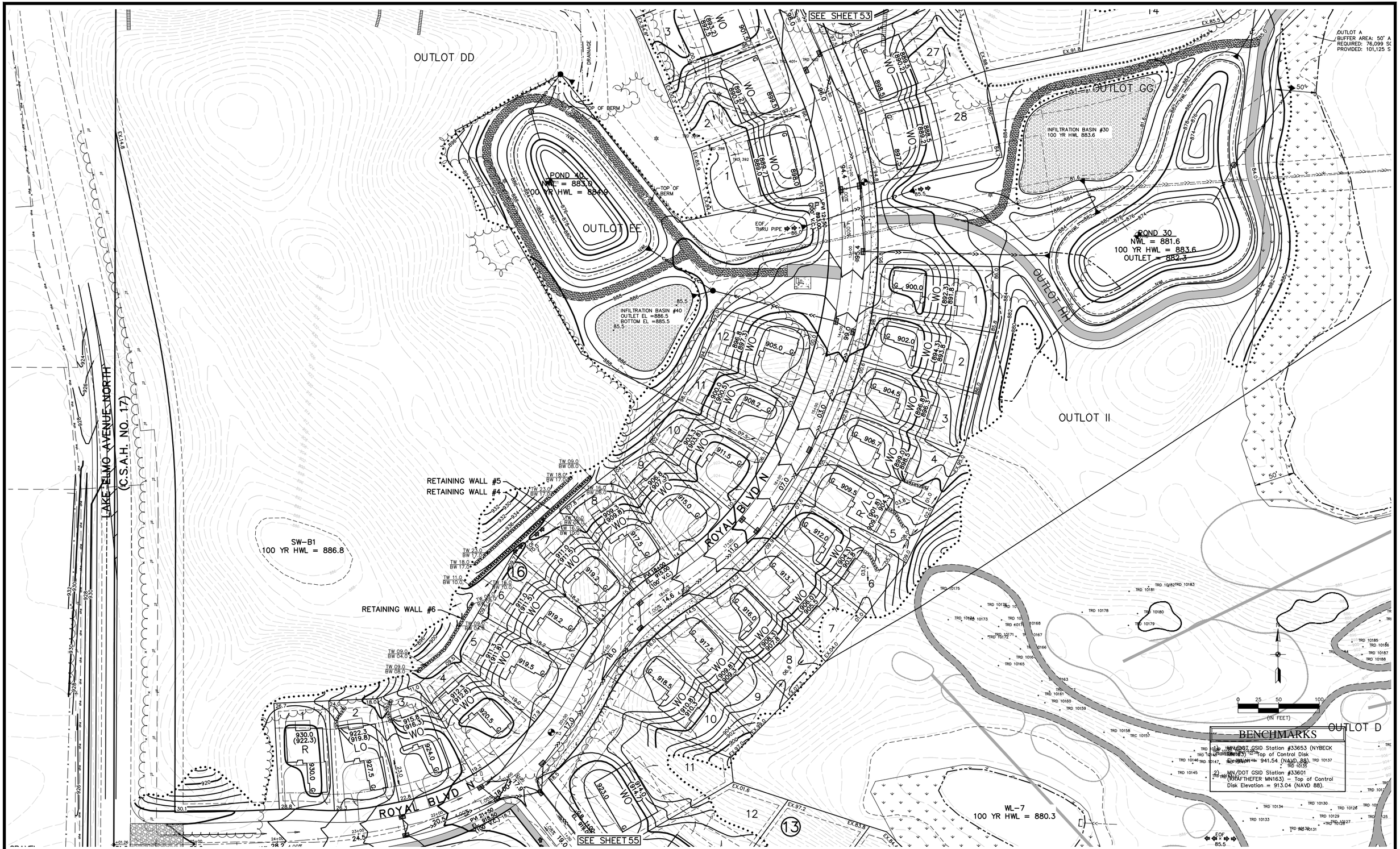
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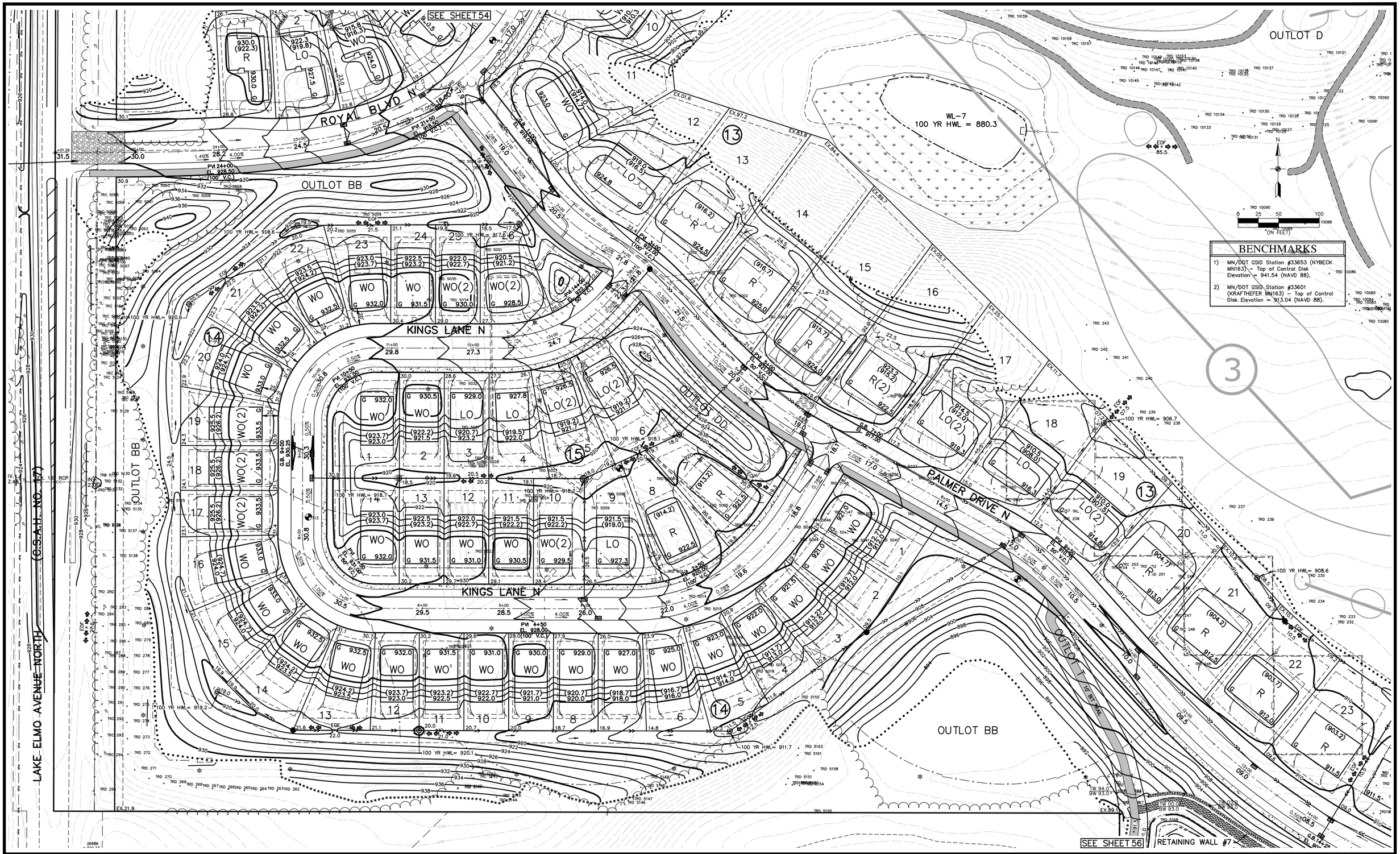
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PRELIMINARY GRADING & EROSION CONTROL PLAN

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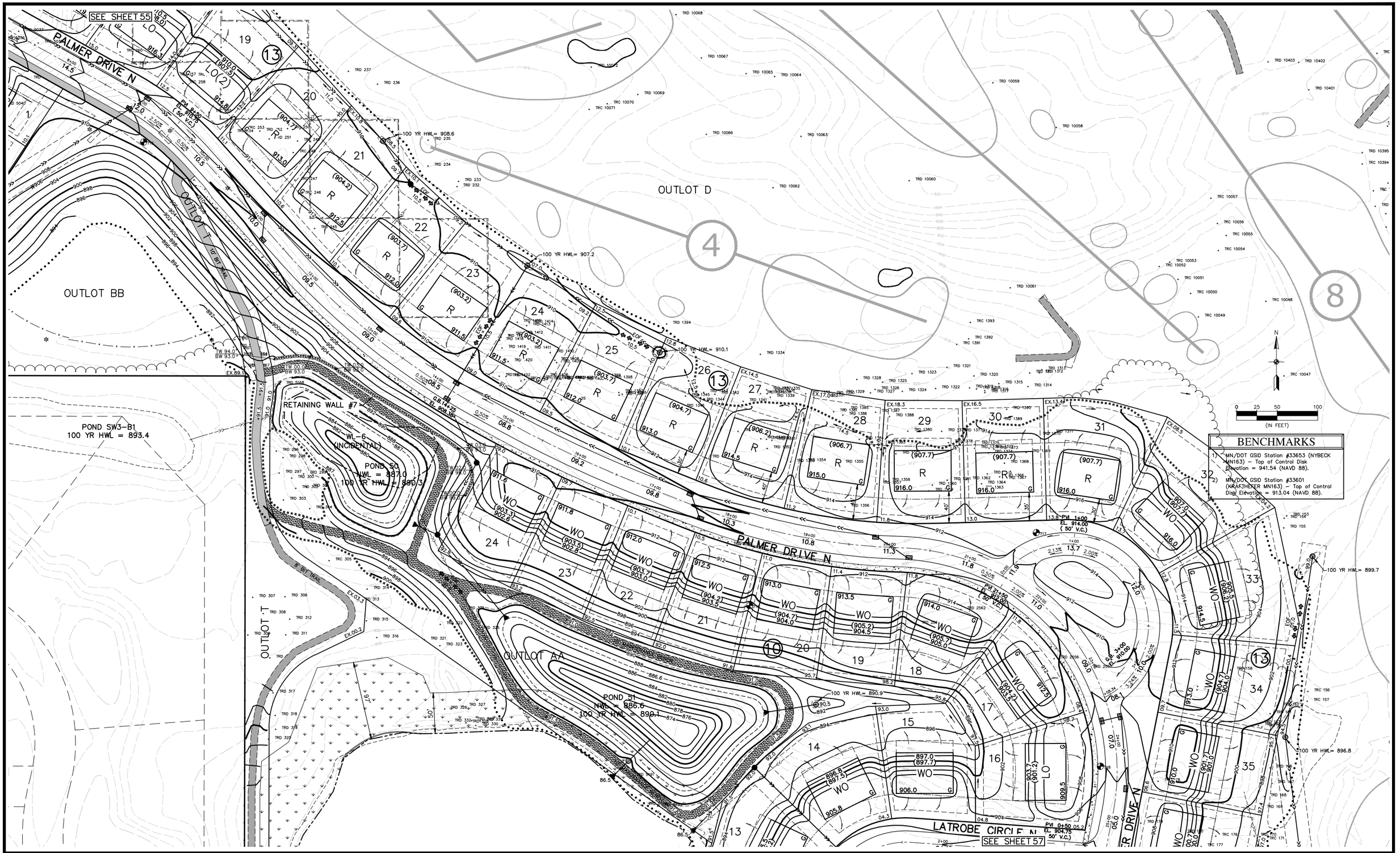
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POND 51
NWL = 886.6
100 YR HWL = 890.1

WL-5
WETLAND 5
NWL = 886.5
100 YR HWL = 888.5

OUTLOT Z

BUFFER AREA: 50' AVERAGE
REQUIRED: 85,765 SQ.FT.
PROVIDED: 99,620 SQ.FT.

OUTLOT Y

OUTLOT X

OUTLOT V

OUTLOT U

OUTLOT T

WL-4
(INCIDENTAL)
POND 60
NWL = 883.0
100 YR HWL = 887.5

RETAINING WALL #8

LATROBE CIRCLE N

PALMER DRIVE N

SEE SHEET 56

SEE SHEET 58

0 25 50 100
(IN FEET)

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

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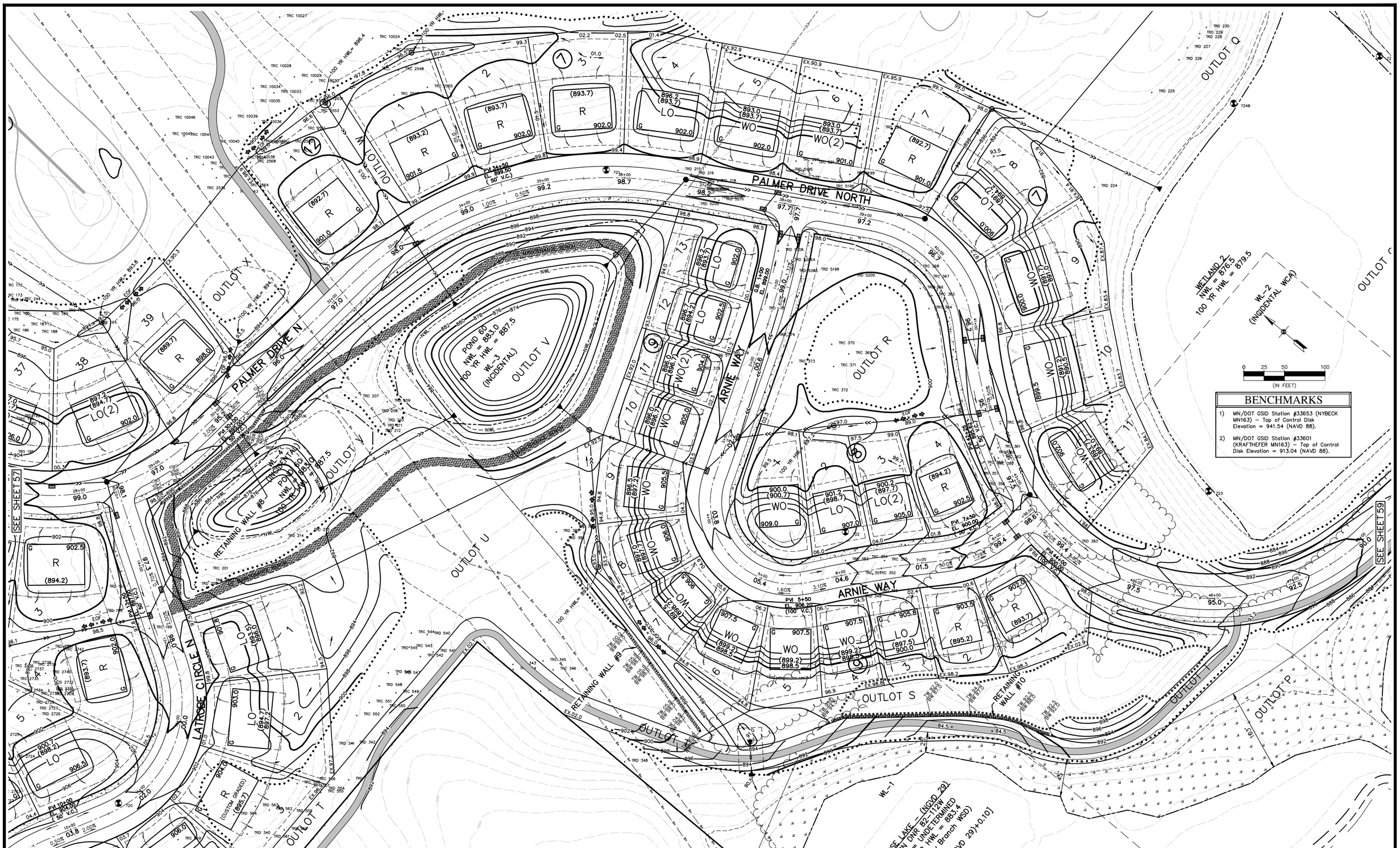
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WL-22
HORSESHOE LAKEHORSESHOE LAKE - (NGVD 29)
MN DNR 82-74P
OHW = 876.8
100 YR HWL = 877.4
[NAVD 88 = (NGVD 29)+0.10]

OUTLOT Q

OUTLOT P

OUTLOT O

OUTLOT T

OUTLOT S

WETLAND 2
NWL = 876.5
100 YR HWL = 879.5

WL-2
(INCIDENTAL WCA)

FLOODPLAIN MITIGATION
3200 C.Y.

FLOODPLAIN FILL
2500 C.Y.

BUFFER AREA: 30' AVERAGE
REQUIRED: 146,556 SQ.FT.
PROVIDED: 134,969 SQ.FT.

WL-1
ROSE LAKE - (NGVD 29)
MN DNR 82-112W
OHW = UNDETERMINED
100 YR HWL = 883.4
(Per Valley Branch WSD)
[NAVD 88 = (NGVD 29)+0.10]

PALMER DRIVE N

STREET I

10TH STREET (COUNTY STATE AID HIGHWAY NO. 10)

RETAINING WALL #10

SEE SHEET 58

0 25 50 100
(IN FEET)

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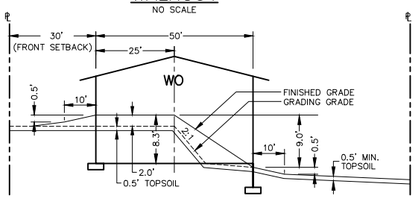
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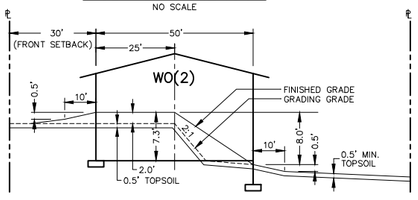
SINGLE FAMILY HOLDDOWNS FOR 80–100' LOTS

L1–5 B4, L8–15 B5, L1–15 B6, L1–11 B7, L1–24 B10, L1–10 B11, L1 B12, L11–39 B13, L1–13 B17, L1–23 B18, L1–28 B19

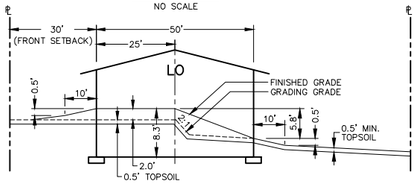
WALKOUT
NO SCALE



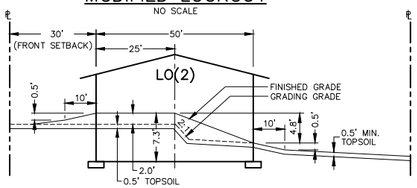
MODIFIED WALKOUT
NO SCALE



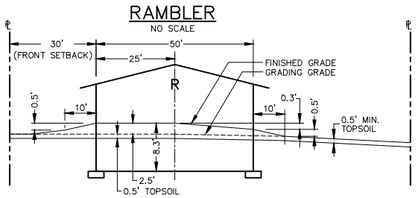
LOOKOUT
NO SCALE



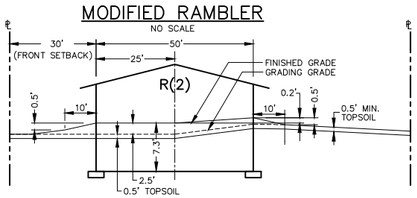
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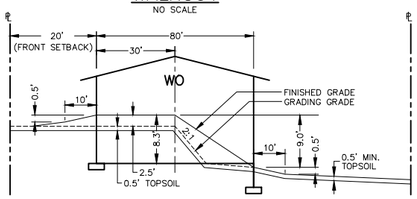
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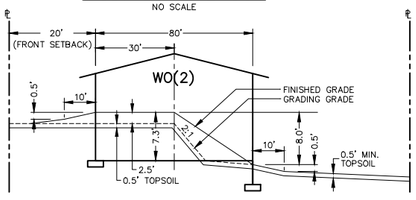
SINGLE FAMILY HOLDDOWNS FOR 55' – 65' LOTS

L1–26 B14, L1–14 B15

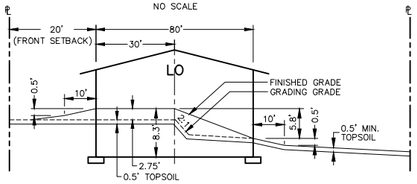
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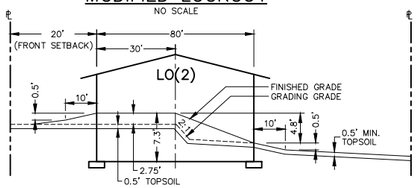
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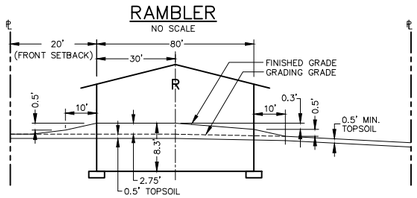
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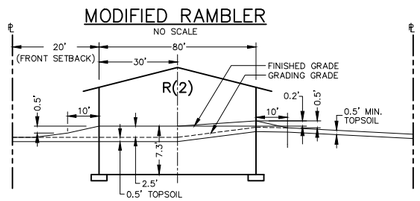
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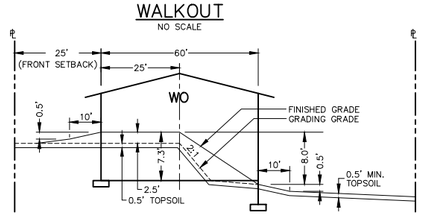
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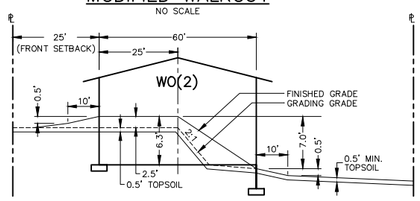
SINGLE FAMILY HOLDDOWNS FOR 65' LOTS

L1–4 B8, L1–13 B9

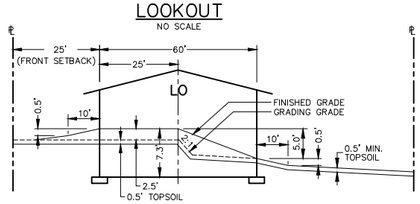
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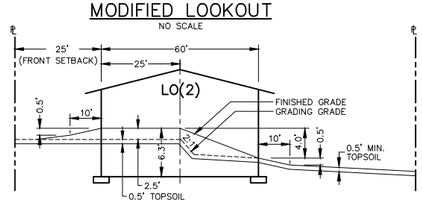
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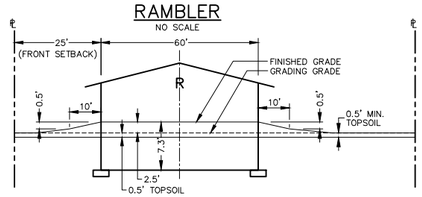
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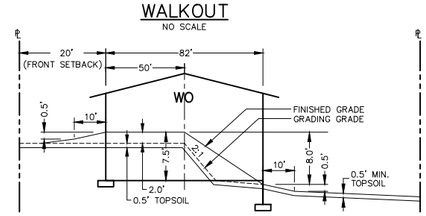
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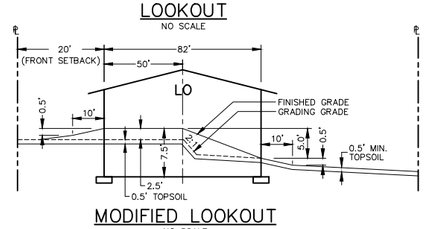
SINGLE FAMILY HOLDDOWNS FOR 55' – 65' LOTS (PRATT)

L1–7 B5, L16–26 B6

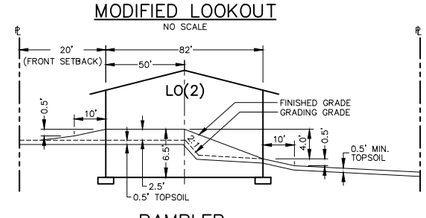
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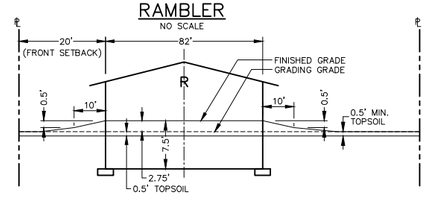
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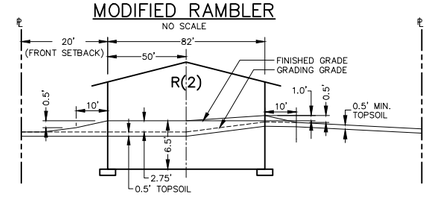
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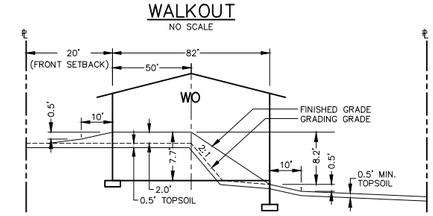
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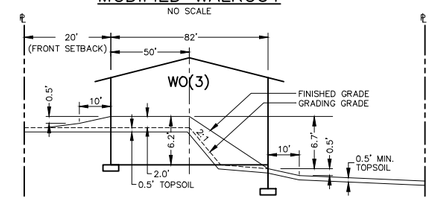
SINGLE FAMILY HOLDDOWNS FOR 60' LOTS (GORHAM)

L1–15 B2, L1–12 B3, L1–10 B13, L1–12 B16

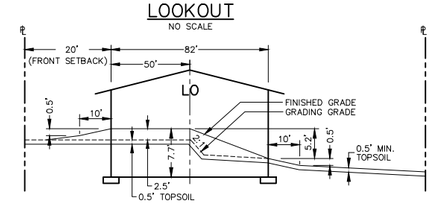
WALKOUT
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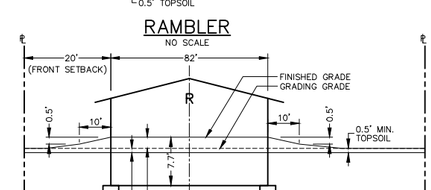
MODIFIED WALKOUT
NO SCALE



LOOKOUT
NO SCALE



RAMBLER
NO SCALE



TURF ESTABLISHMENT

TURF ESTABLISHMENT SHALL APPLY TO ALL DISTURBED AREAS AND SHALL BE ACCORDING TO MnDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION (LATEST EDITION) EXCEPT AS MODIFIED BELOW.

TURF ESTABLISHMENT SHALL OCCUR AS SOON AS POSSIBLE BUT IN NO CASE MORE THAN 14 DAYS.

TOPSOIL: MINIMUM OF 6" OF TOPSOIL.

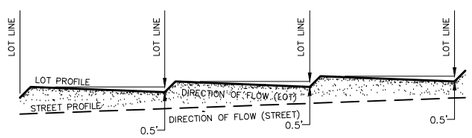
SEED: MnDOT MIXTURE 25–141 AT 60 POUNDS PER ACRE.

DORMANT SEED: SHALL BE APPLIED AT TWICE THE NORMAL RATE AFTER NOVEMBER 1ST.

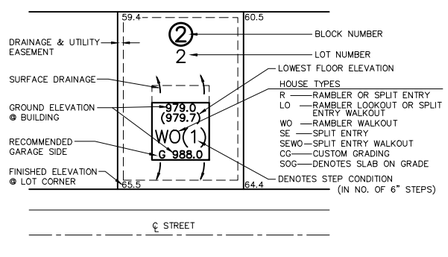
MULCH: TYPE 1 AT 2 TONS PER ACRE (DISK ANCHORED).

FERTILIZER: TYPE 1 10–10–10 AT 200 POUNDS PER ACRE.

LOT BENCHING DETAIL



GRADING PLAN LOT KEY



Carlson McCain
• environmental
• engineering
• surveying

3890 Pheasant Ridge Drive NE, Suite 100
Blaine, MN 55449
Phone: (763) 489-7900
Fax: (763) 489-7959
www.carlsonmccain.com

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

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 9/21/16 License #: 25063

Drawn: ADB
Designed: BJK
Date: 9/21/16

Revisions:
1. 2/10/17 Revise Per City Comments
2. 2/28/17 Revise Per City Comments
3. 4/07/17 Revise Per City & Watershed Comments

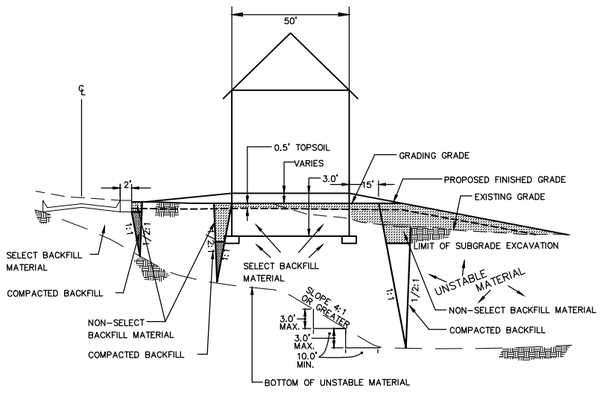
H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

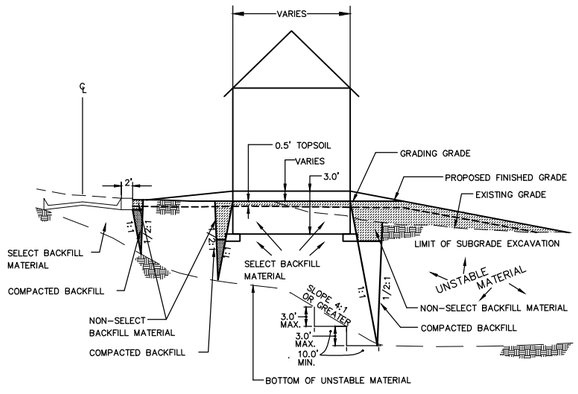
DETAILS

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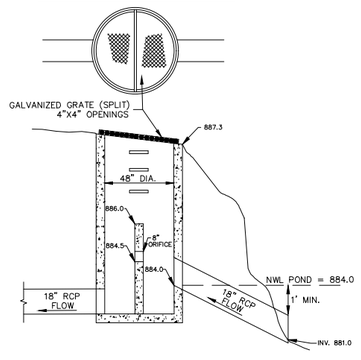
SUBGRADE CORRECTION (80–100' LOTS)



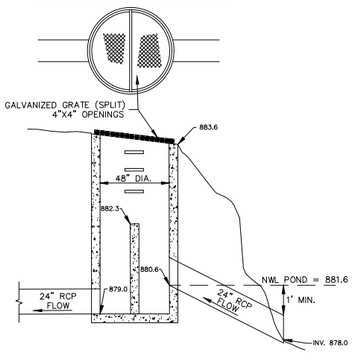
SUBGRADE CORRECTION (55' – 65' LOTS)



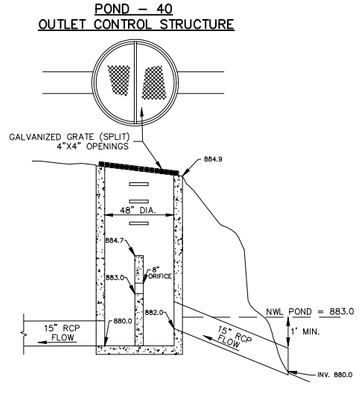
POND – 10
OUTLET CONTROL STRUCTURE



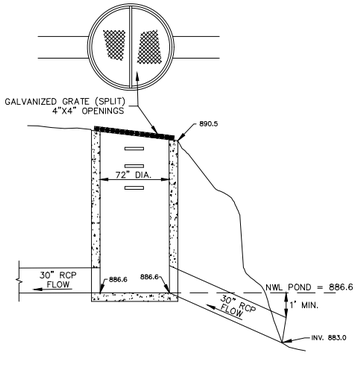
POND – 30
OUTLET CONTROL STRUCTURE



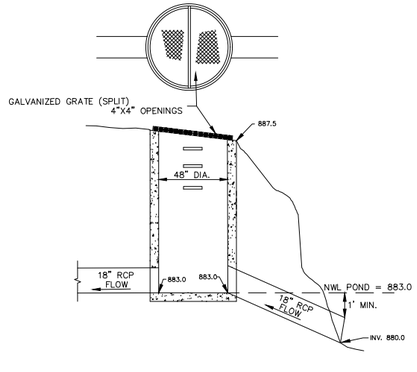
POND – 40
OUTLET CONTROL STRUCTURE



POND – 51
OUTLET CONTROL STRUCTURE



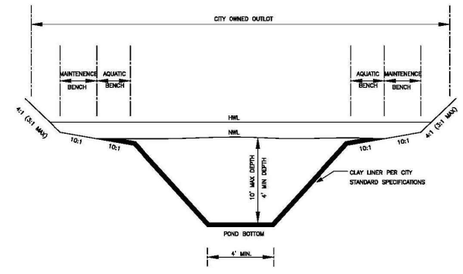
POND – 60
OUTLET CONTROL STRUCTURE



CITY OF LAKE ELMO

FEBRUARY 2015

TYPICAL POND SECTION



STANDARD DRAWING NO. 416
LAKE ELMO

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND IMPLEMENT MINNESOTA POLLUTION CONTROL AGENCY (MPCA) BEST MANAGEMENT PRACTICES (BMP) TO CONTROL SITE SILTATION AND EROSION INTO DRAINAGE WAYS. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS AND COMPLETION DATES RELATIVE TO ALL PERMITS ISSUED FOR THE WORK TO BE COMPLETED. THE ENGINEER MAY ISSUE A STOP WORK ORDER FOR ALL DEVELOPMENT WORK AND BUILDING CONSTRUCTION FOR NONCOMPLIANCE WITH THESE MEASURES.

2. SEQUENCING. ALL SILT FENCE AND OTHER EROSION CONTROL MEASURES SHALL BE IN PLACE AND APPROVED BY ENGINEER PRIOR TO ANY REMOVALS, EXCAVATION OR CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER.

3. SILT FENCE. THE CONTRACTOR SHALL INSTALL SILT FENCE AT THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE CITY STANDARD DETAILS. SILT FENCE DAMS AND INTERIM SUMPS SHALL BE PLACED TO INTERCEPT SILT FROM CONCENTRATED RUNOFF FROM OPEN GRADED AREAS. ADDITIONAL SILT FENCE SHALL BE REQUIRED AS DIRECTED BY THE ENGINEER.

4. STOCKPILES. ALL STOCKPILE AREAS SHALL HAVE SILT FENCE OR SEDIMENT TRAPPING SYSTEMS PLACED AROUND THE ENTIRE PERIMETER.

5. INLET PROTECTION. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL EXISTING STORM SEWER INLETS IN ACCORDANCE WITH THE CITY STANDARD DETAILS. INLET PROTECTION SHALL ALSO BE PROVIDED ON ALL PROPOSED STORM SEWER INLETS IMMEDIATELY FOLLOWING CONSTRUCTION OF THE INLETS. INLET PROTECTION MUST BE INSTALLED IN A MANNER THAT WILL PREVENT STANDARD WATER FOR EXTENDED PERIODS OF TIME OR IN A MANNER THAT PRESENTS A HAZARD TO VEHICULAR OR PEDESTRIAN TRAFFIC.

6. TEMPORARY SEDIMENT BASINS. THE CONTRACTOR SHALL INCORPORATE TEMPORARY SEDIMENT BASINS THROUGHOUT THE CONSTRUCTION SITE TO CAPTURE RUNOFF AND SLOW THE FLOW OF WATER AND ALLOW SEDIMENT TO SETTLE OUT. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED AS DIRECTED BY THE CITY ENGINEER.

7. ROCK CONSTRUCTION ENTRANCE. A ROCK ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO REDUCE TRACKING OF SILT AND DIRT ONTO THE PUBLIC STREETS. A GEOTEXTILE FABRIC SHALL BE PLACED UNDERNEATH THE ROCK. THE ROCK SHALL BE PERIODICALLY REPLENISHED TO MAINTAIN THE INTENDED PERFORMANCE. MUD AND DEBRIS SHALL BE REMOVED OR SCRAPED FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.

8. STREET SWEEPING. ALL STREETS USED FOR ACCESS TO THE SITE AND HAUL ROUTES USED FOR CONSTRUCTION EQUIPMENT AND MATERIAL SUPPLIES SHALL BE CLEANED AT THE END OF EACH WORKING DAY. THE CITY OR ENGINEER MAY ORDER ADDITIONAL SWEEPING OF THE STREETS AS DEEMED REQUIRED AT DEVELOPER/CONTRACTOR EXPENSE.

STANDARD PLAN NOTES
GRADING AND EROSION CONTROL PLANS

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 600A — LAKE ELMO

9. DEWATERING. EACH EXCAVATION SHALL BE KEPT DRY DURING THE COURSE OF ALL WORK HEREIN, INCLUDING SUBGRADE CORRECTION, PIPE INSTALLATION, STRUCTURE CONSTRUCTION AND BACKFILLING, TO THE EXTENT THAT NO DAMAGE FROM HYDROSTATIC PRESSURE, FLOATATION OR OTHER DAMAGE RESULTS. ALL EXCAVATIONS SHALL BE DOWATERED TO A DEPTH OF AT LEAST 3 INCHES BELOW THE BOTTOM OF THE CONCRETE SLAB OR PIPE TO BE INSTALLED THEREIN. THE CONTRACTOR MAY USE ANY METHOD OR COMBINATION OF METHODS FOR FOR DOWATERING HE CHOOSES; HOWEVER, ALL DEWATERING METHODS AND EQUIPMENT WHICH IN THE OPINION OF THE ENGINEER, ARE INEFFECTIVE SHALL BE ABANDONED, IMPROVED, REPLACED OR OTHERWISE ALTERED TO OBTAIN EFFECTIVE DEWATERING. THE CONTRACTOR SHALL PROVIDE ALL POWER, PUMPS, MATERIALS AND APPARATUS NECESSARY, AND SHALL BE RESPONSIBLE FOR DISPOSING OF THE WATER PUMPED FROM THE EXCAVATION IN A MANNER WHICH WILL NOT INTERFERE WITH OTHER WORK WITHIN THE AREA AND NOT TO DAMAGE PUBLIC OR PRIVATE PROPERTY. THE CONTRACTOR WILL BE HOLD RESPONSIBLE FOR THE CONDITION OF ANY PIPE, CONDUIT, DITCH, CHANNEL OR NATURAL WATERCOURSE UTILIZED FOR DRAINAGE PURPOSES, AND ALL EROSION, SEDIMENT OR OTHER ADVERSE RESULTS OF THEIR USE SHALL BE REPAIRED.

10. POSITIVE DRAINAGE AND PROTECTION. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE SITE AT ALL TIMES. LOW POINTS WITHIN AND ALONG ROADWAYS ARE EXPRESSLY PROHIBITED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS TO FACILITATE PROPER DRAINAGE DURING CONSTRUCTION. TO PROTECT PREVIOUSLY GRADED AREAS FROM EROSION, WOOD FIBER BLANKET SHALL BE PLACED IMMEDIATELY ON STEEP SLOPES (1:3 OR GREATER) AND EMBANKMENTS. PERMANENT AND TEMPORARY PONDS, AND OUTLETS AND OVERFLOWS TO PROTECT THE COMPLETED GRADE AND MINIMIZE SILT IN THE RUNOFF.

11. DRAINAGE DITCHES. THE INSTALL WITTED PERMITTED OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER. STABILIZATION OF THE LAST 200 LINEAL FEET MUST BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER. STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES MUST BE COMPLETE WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER AND CONSTRUCTION IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.

12. TURF ESTABLISHMENT. ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

STANDARD PLAN NOTES
GRADING AND EROSION CONTOL PLANS

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 600B — LAKE ELMO

13. MAINTENANCE AND INSPECTION. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND UNTIL SATISFACTORY ESTABLISHMENT OF PERMANENT GROUND COVER IS OBTAINED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES, AND STORMWATER OUTFALLS MUST BE INSPECTED WEEKLY, AND WITHIN 24 HOURS OF THE SITE RECEIVING 0.5 INCHES OF RAIN. REPAIRS MUST BE MADE ON THE SAME DAY OR FOLLOWING DAY OF THE INSPECTION. UNSATISFACTORY CONDITIONS NOT REPAIRED OR CLEANED UP WITHIN 48-HOURS OF NOTIFICATION SHALL RESULT IN A STOP WORK ORDER, AND/OR SWB WORK SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE.

14. REMOVAL. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY EROSION CONTROL MEASURES, STRUCTURES AND DEVICES ONLY AFTER RECEIVING ENGINEER'S APPROVAL. ALL DEBRIS, STAKES, AND SILTS ALONG SILT FENCES SHALL BE REMOVED AND DISPOSED OFF SITE. THE CONTRACTOR SHALL HAND RAKE SILTED AREAS ALONG THE FENCE LOOKING TO PRODUCE A SMOOTH FINAL GRADE AND SHALL RESTORE THE GROUND SURFACE WITH SEED OR SOD, AS REQUIRED, TO MATCH THE FINISHED GRADE TO THE ADJACENT AREA.

15. FINAL STORM SEWER SYSTEM. AT THE COMPLETION OF THE WORK AND BEFORE THE FINAL WALK THROUGH, THE CONTRACTOR SHALL REMOVE STORM SEWER INLET PROTECTION MEASURES AND THOROUGHLY FLUSH THE STORM SEWER SYSTEM. SEDIMENT AND DEBRIS SHALL BE COMPLETELY REMOVED AND CLEANED AT THE INLETS, OUTLETS, AND DOWNSTREAM OF EACH OUTLET. RIPRAP AND GEOTEXTILE FABRIC MAY REQUIRE REPLACEMENT AS DIRECTED BY THE ENGINEER TO OBTAIN A LIKE NEW INSTALLATION ACCEPTABLE TO THE CITY.

16. DITCH CHECK (BIOROLL BLANKET SYSTEM). BIOROLL AND BLANKET SYSTEMS SHALL BE BE INSTALLED AS DITCH CHECKS ONLY IN SPECIFIED LOCATIONS AS APPROVED BY THE CITY ENGINEER. BIOROLLS ARE NOT TO BE UTILIZED IN AREAS WHERE VEHICLE AND CONSTRUCTION TRAFFIC OCCUR.

17. FLOTATION SILT CURTAIN. FLOTATION SILT CURTAIN SHALL BE UTILIZED WHEN CONSTRUCTION ACTIVITIES OCCUR DIRECTLY ADJACENT TO LAKES, STREAMS OR WETLANDS IN ORDER TO CONTAIN SEDIMENTS NEAR THE BANKS OF WORKING AREAS. THE INSTALLATION OF FLOTATION SILT CURTAINS WILL BE REQUIRED AS DIRECTED BY THE CITY ENGINEER.

18. CONCRETE WASHOUT ONSITE. ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. A COMPACTED CLAY LINER THAT DOES NOT ALLOW WASHOUT LIQUIDS TO ENTER GROUND WATER IS CONSIDERED AN IMPERMEABLE LINER. THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASH-OUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

STANDARD PLAN NOTES
GRADING AND EROSION CONTOL PLANS

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 600C — LAKE ELMO

1. RESTORE ALL DISTURBED AREAS WITH 6 INCHES OF TOPSOIL CONFORMING TO MNDOT 3877.

2. PROTECT ALL STORM SEWER INLETS AS SPECIFIED HEREIN AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.

3. MAINTAIN ALL SILT FENCE AND REPAIR OR REPLACE AS NEEDED OR REQUIRED UNTIL TURF HAS BEEN ESTABLISHED.

4. RESTORATION WORK SHALL BEGIN WITHIN 7 DAYS OF FINAL GRADING.

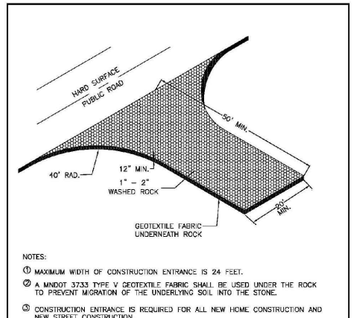
5. A MINIMUM OF 2 ROWS OF SOD SHALL BE PLACED ADJACENT TO THE BACK OF CURBS ALONG ALL BOULEVARDS. SILT FENCE SHALL BE PLACED DIRECTLY BEHIND THE SOD IN ACCORDANCE WITH THE CITY STANDARD DETAILS.

6. BOULEVARD AND DITCH RESTORATION INCLUDES FINE GRADING, WHICH INCLUDES THE REMOVAL OF ROCKS, DEBRIS AND SOIL CHUNKS, WHILE MAINTAINING POSITIVE DRAINAGE.

STANDARD PLAN NOTES
SITE RESTORATION PLANS

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 600D — LAKE ELMO

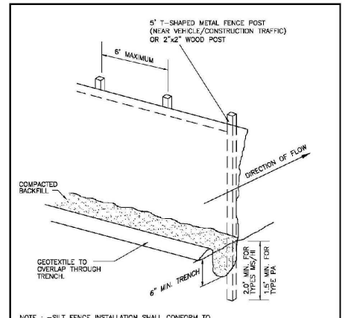


NOTES:
1. MAXIMUM WIDTH OF CONSTRUCTION ENTRANCE IS 24 FEET.
2. A MNDOT 3733 TYPE V GEOTEXTILE FABRIC SHALL BE USED UNDER THE ROCK TO PREVENT MIGRATION OF THE UNDERLYING SOIL INTO THE STONE.
3. CONSTRUCTION ENTRANCE IS REQUIRED FOR ALL NEW HOME CONSTRUCTION AND NEW STREET CONSTRUCTION.
4. CONSTRUCTION ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OF MUD ONTO ROADWAYS THAT ADJOIN THE PROJECT. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL ROCK OR REMOVAL AND REINSTALLATION OF THE ROCK ENTRANCE.
5. REMOVE MUD AND DEBRIS FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.

ROCK CONSTRUCTION ENTRANCE

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 605 — LAKE ELMO

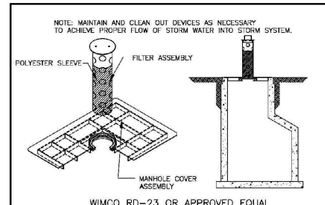


NOTE : -SILT FENCE INSTALLATION SHALL CONFORM TO MNDOT2573.3, TYPE MS/PA NEAR VEHICLE/CONSTRUCTION TRAFFIC, TYPE PA AT ALL OTHER LOCATIONS.
-MATERIALS SHALL CONFORM TO MNDOT 3886.

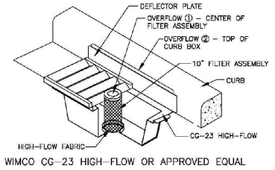
SILT FENCE

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 601 — LAKE ELMO



WIMCO RD-23 OR APPROVED EQUAL



WIMCO CG-23 HIGH-FLOW OR APPROVED EQUAL

SEDIMENT CONTROL AROUND STORM SEWER INLET

FEBRUARY 2015

CITY OF LAKE ELMO — STANDARD DRAWING NO. 604 — LAKE ELMO

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Print Name: Brian J. Krystofiak, P.E.
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Date: 9/21/16 License #: 25063

Drawn: ADB
Designed: BJK
Date: 9/21/16

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THE ROYAL GOLF CLUB AT LAKE ELMO
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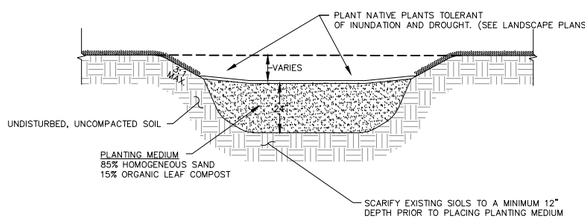
DETAILS

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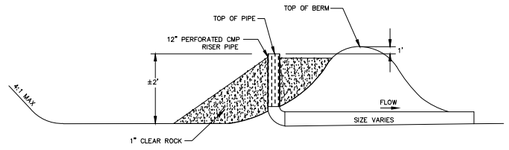
LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
EASEMENT LINE		
CURB LINE		
BITUMINOUS		
CONCRETE		
SANITARY SEWER		
STORM SEWER		
WATER MAIN		
OVERHEAD UTILITY		
STORM CATCH BASIN		DENOTES INLET PROTECTION
STORM MANHOLE		
OUTLET CONTROL STRUCTURE		
MANHOLE		
HYDRANT		
GATE VALVE		
TELEVISION BOX		
TELEPHONE BOX		
UTILITY POLE		
RETAINING WALL		
FENCE		
10' CONTOUR		
2' CONTOUR		
FEMA FLOOD PLAIN		
WETLAND LINE		
SPOT ELEVATION	00.0 x	00.0 x E.O.F.
EMERGENCY OVERFLOW		000.0
SILT FENCE		
TREE FENCE		
TREELINE		
SOIL BORING	TH	
GRADING LIMITS		
STORM CATCH BASIN		DENOTES INLET PROTECTION
WETLAND BUFFER SIGN		DENOTES SIGN, DENOTES POST

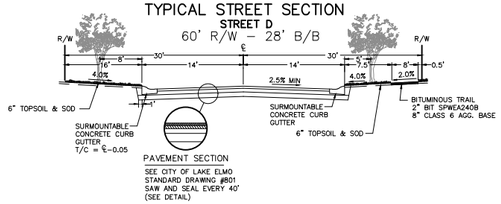
INFILTRATION BASINS



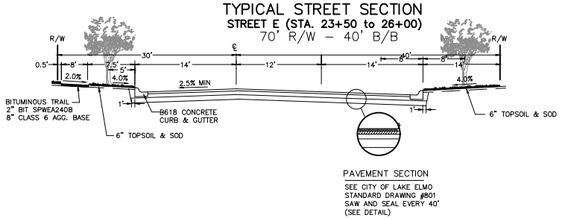
TEMPORARY SEDIMENT BASIN W/PERFORATED RISER PIPE



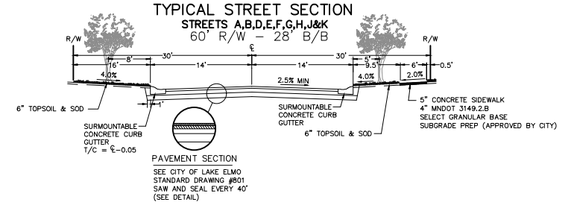
TYPICAL STREET SECTION
STREET D
60' R/W – 28' B/B



TYPICAL STREET SECTION
STREETS E (STA. 23+50 to 26+00)
70' R/W – 40' B/B



TYPICAL STREET SECTION
STREETS A,B,D,E,F,G,H,J&K
60' R/W – 28' B/B

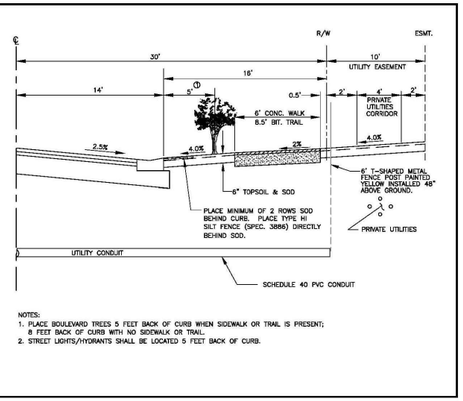


FEBRUARY 2015

CITY OF LAKE ELMO

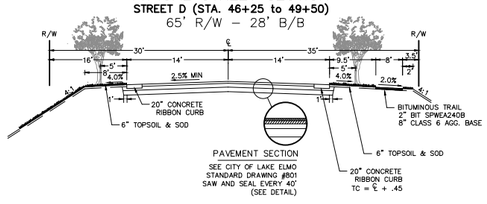
STANDARD DRAWING NO. 805

TYPICAL RIGHT OF WAY LAYOUT

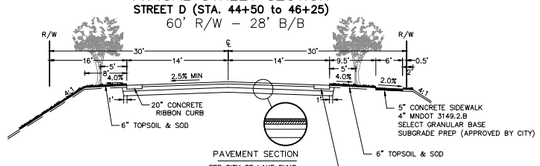


NOTES:
1. PLACE BOULEVARD TREES 5 FEET BACK OF CURB WHEN SIDEWALK OR TRAIL IS PRESENT; 8 FEET BACK OF CURB WITH NO SIDEWALK OR TRAIL.
2. STREET LIGHTS/HYDRANTS SHALL BE LOCATED 5 FEET BACK OF CURB.

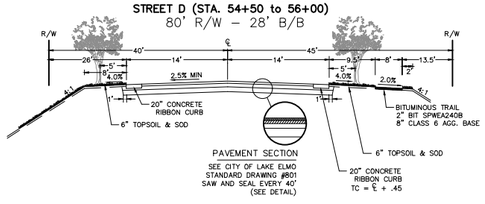
TYPICAL STREET SECTION
STREET D (STA. 46+25 to 49+50)
65' R/W – 28' B/B



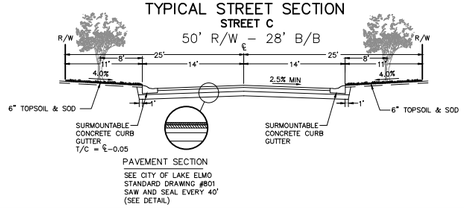
TYPICAL STREET SECTION
STREET D (STA. 44+50 to 46+25)
60' R/W – 28' B/B

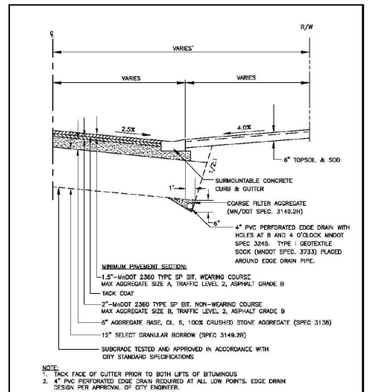


TYPICAL STREET SECTION
STREET D (STA. 54+50 to 56+00)
80' R/W – 28' B/B



TYPICAL STREET SECTION
STREET C
50' R/W – 28' B/B





NOTE:
1. TACK FACE OF GUTTER PRIOR TO BOTH LIFTS OF BITUMINOUS
2. 4" PVC PERFORATED EDGE DRAIN REQUIRED AT ALL LOW POINTS. EDGE DRAIN DESIGN PER APPROVAL OF CITY ENGINEER.

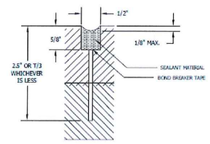
TYPICAL LOCAL RESIDENTIAL STREET SECTION
(MINIMUM 7-TON DESIGN)

FEBRUARY 2015

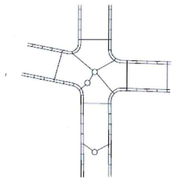
CITY OF LAKE ELMO

STANDARD DRAWING NO. 801

SAW AND SEAL FOR NEW STREETS



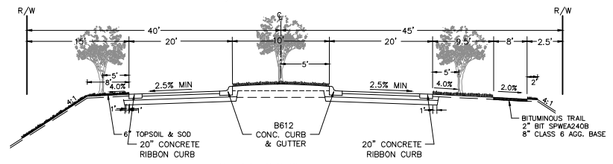
SAW AND SEAL SAMPLE LAYOUT



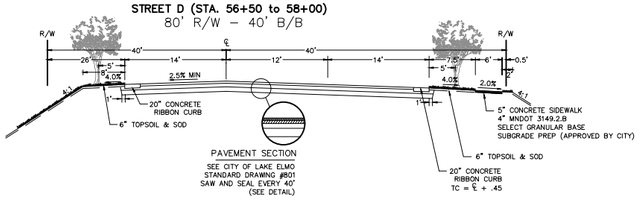
NOTES
1. SAW AND SEAL CUT LOCATIONS SHALL BE AT 10' +/- SPACING AND AT MANHOLES, OR AS DIRECTED BY THE ENGINEER.
2. SAW AND SEAL CUT SHALL BE STRAIGHT AND MATCH JOINTS IN CURB AND GUTTER.
3. JOINTS TO BE BLOWN CLEAN AND DRIED WITH A HEAT LANCE IMMEDIATELY BEFORE SEALING.
4. CONTRACTOR TO SETUP AND MAINTAIN TRAFFIC CONTROL, INCLUDING FLAGGERS, IN ACCORDANCE WITH MNUTCD, APPENDIX B.
5. BOND BREAKER TAPE IS OPTIONAL

SAW AND SEAL

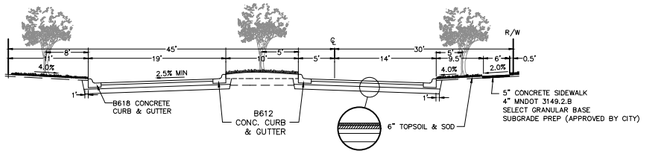
TYPICAL STREET SECTION
STREET D (CENTER ISLAND STA. 51+00 to 52+75)
85' R/W – 50' B-B



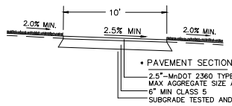
TYPICAL STREET SECTION
STREET D (STA. 56+50 to 58+00)
80' R/W – 40' B/B



TYPICAL STREET SECTION
STREET A (CENTER ISLAND STA. 0+00 to 1+25)
75' R/W – 48' B/B



10' BITUMINOUS ACCESS ROAD



• FINAL SECTION TO BE VERIFIED BY GEOTECHNICAL ENGINEER/CITY ENGINEER

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Blaine, MN 55449
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Signature:
Date: 9/21/16 License #: 25063

Drawn: ADB
Designed: BJK
Date: 9/21/16

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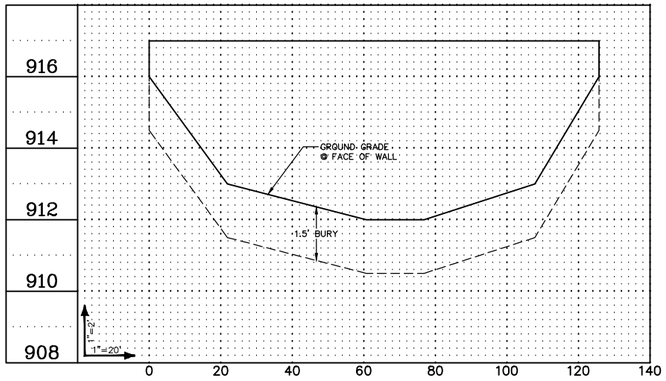
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THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

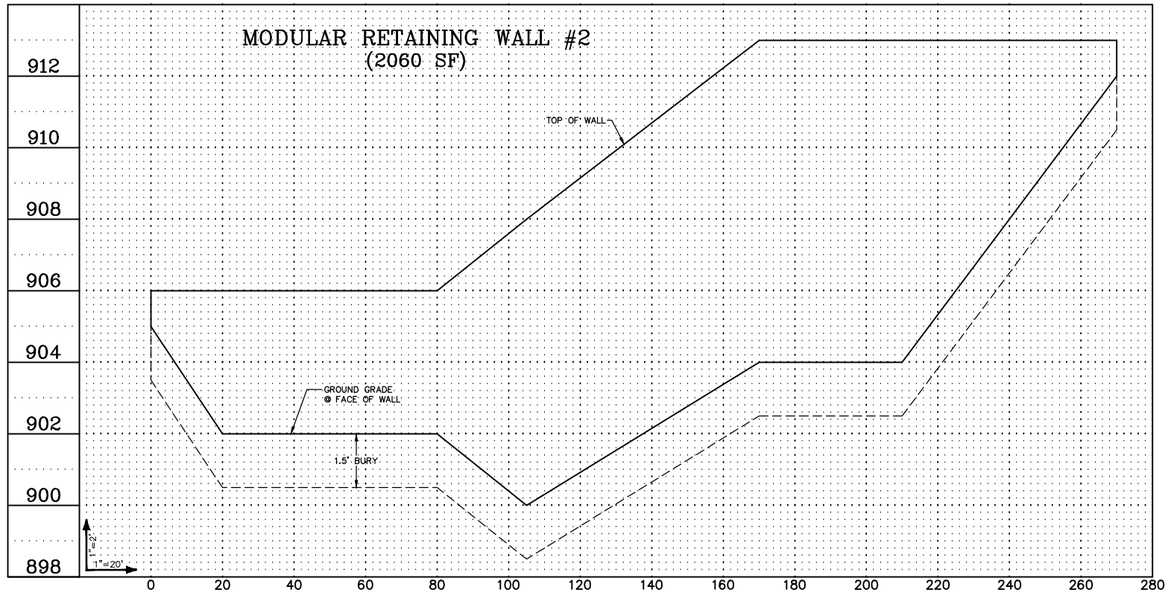
DETAILS

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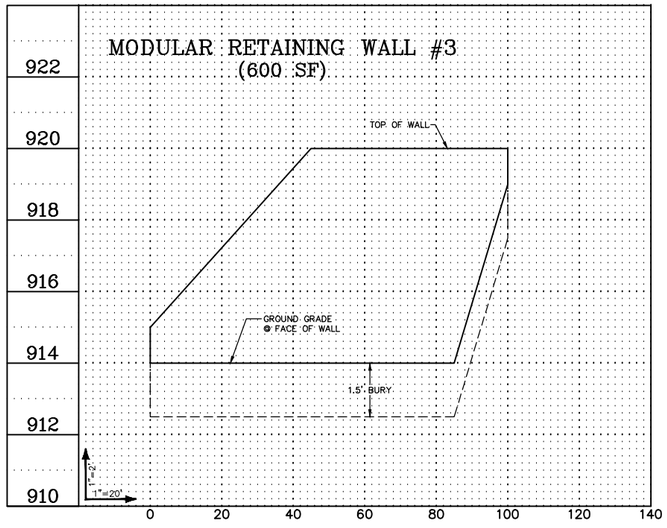
MODULAR RETAINING WALL #1
(690 SF)



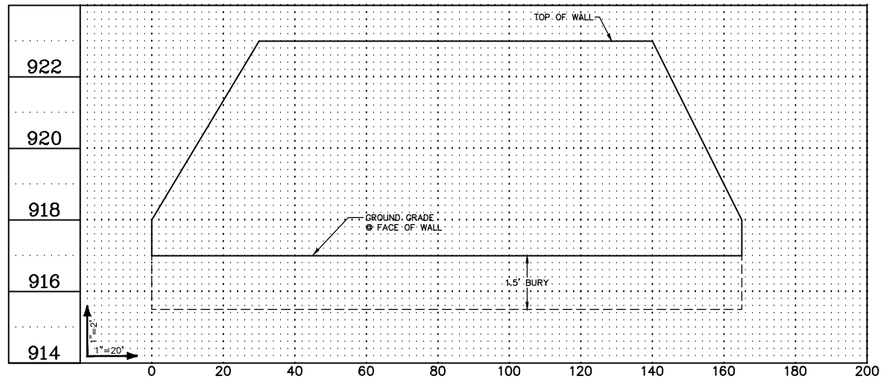
MODULAR RETAINING WALL #2
(2060 SF)



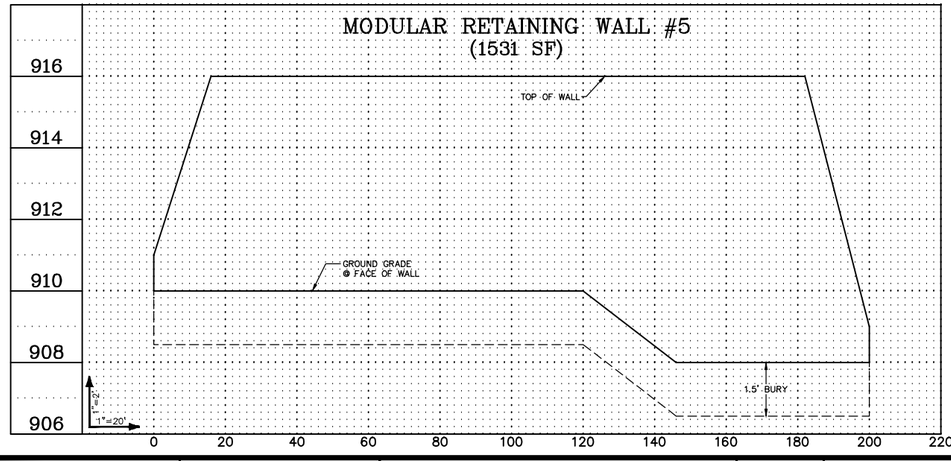
MODULAR RETAINING WALL #3
(600 SF)



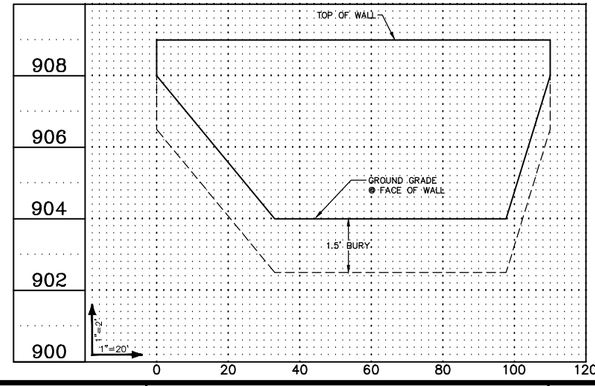
MODULAR RETAINING WALL #4
(1100 SF)



MODULAR RETAINING WALL #5
(1531 SF)



MODULAR RETAINING WALL #6
(625 SF)



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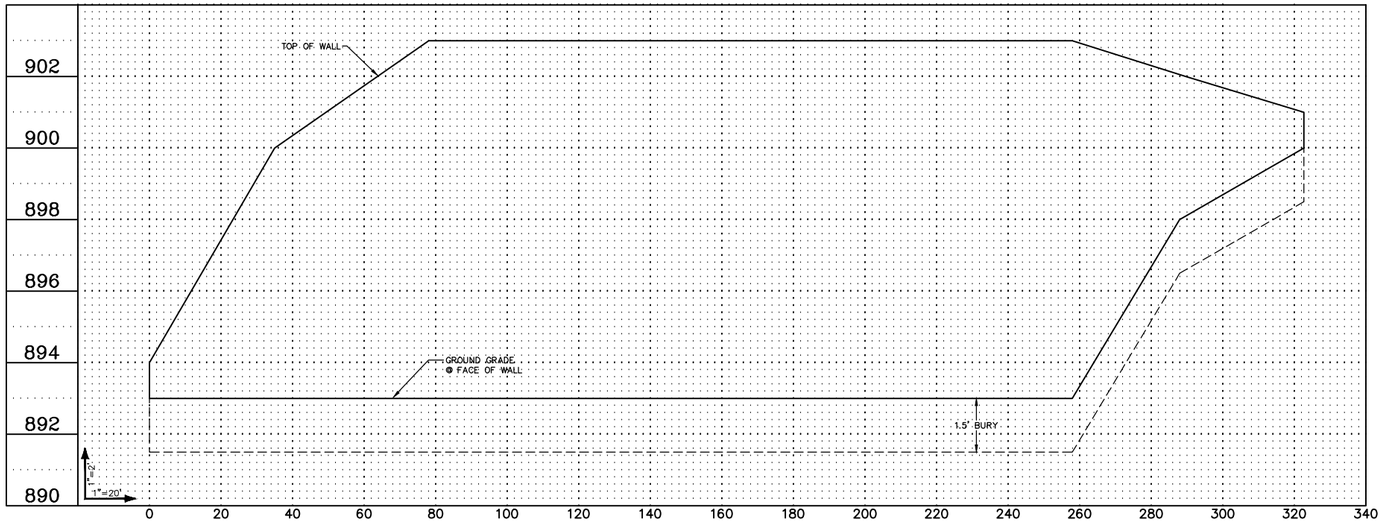
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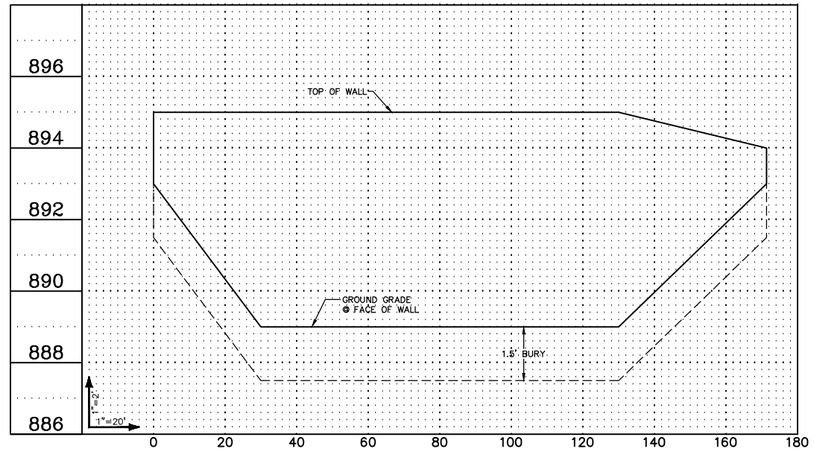
RETAINING WALL PROFILES

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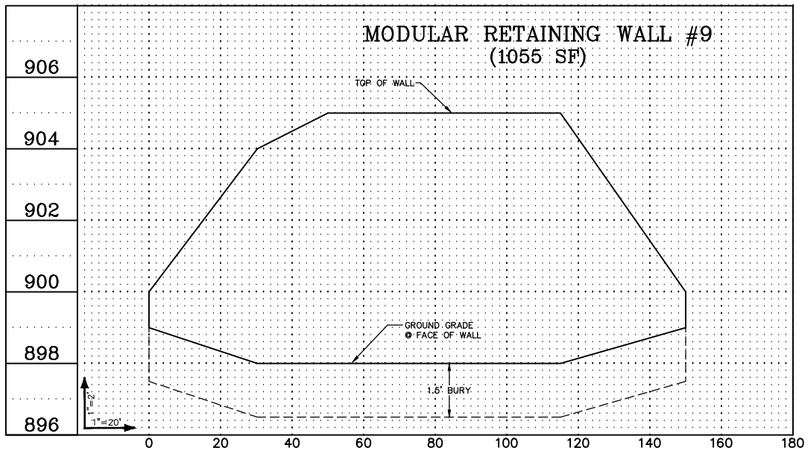
MODULAR RETAINING WALL #7
(3100 SF)



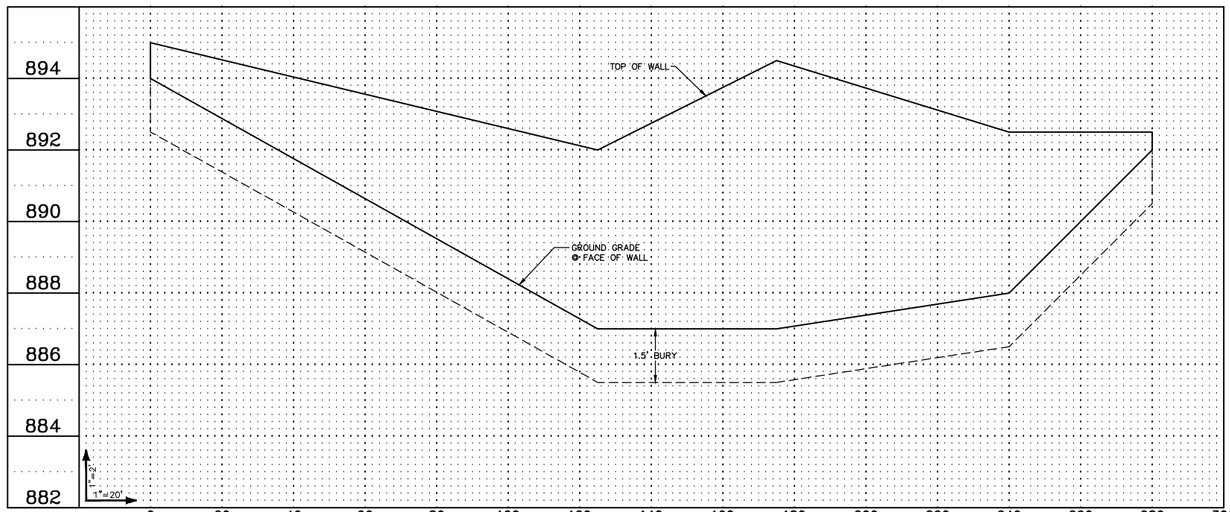
MODULAR RETAINING WALL #8
(1125 SF)



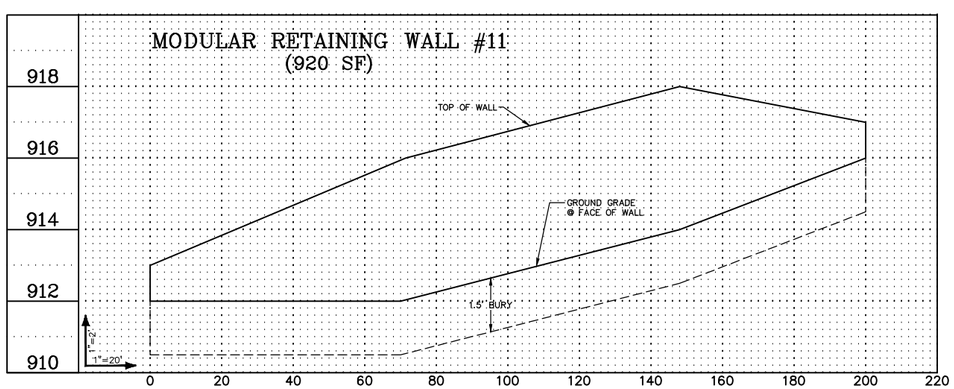
MODULAR RETAINING WALL #9
(1055 SF)



MODULAR RETAINING WALL #10
(1598 SF)



MODULAR RETAINING WALL #11
(920 SF)



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3. 4/07/17 Revise Per City & Watershed Comments

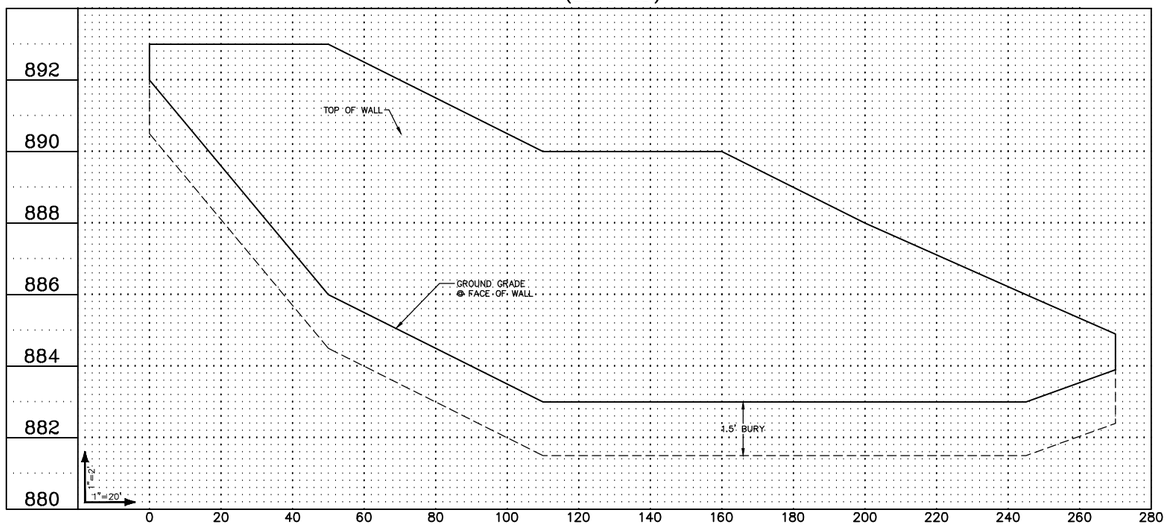
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Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

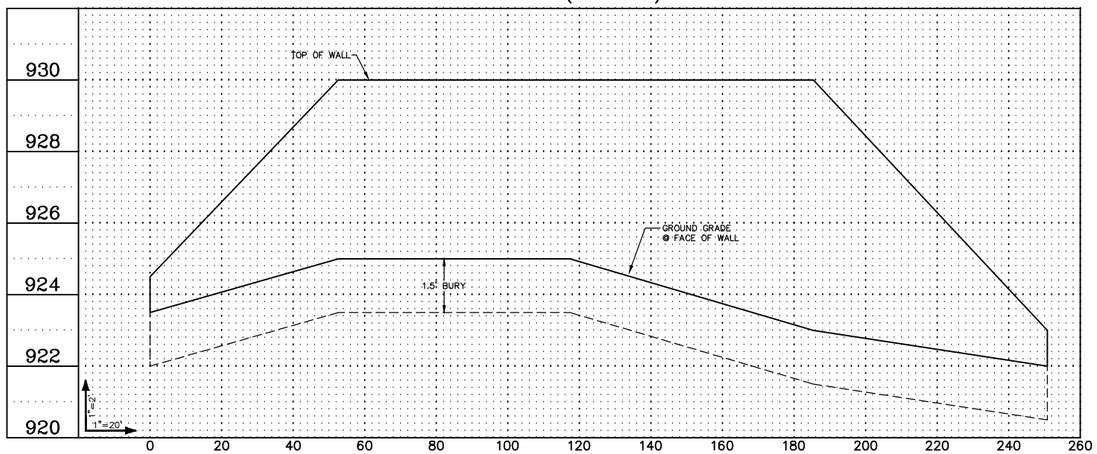
RETAINING WALL PROFILES

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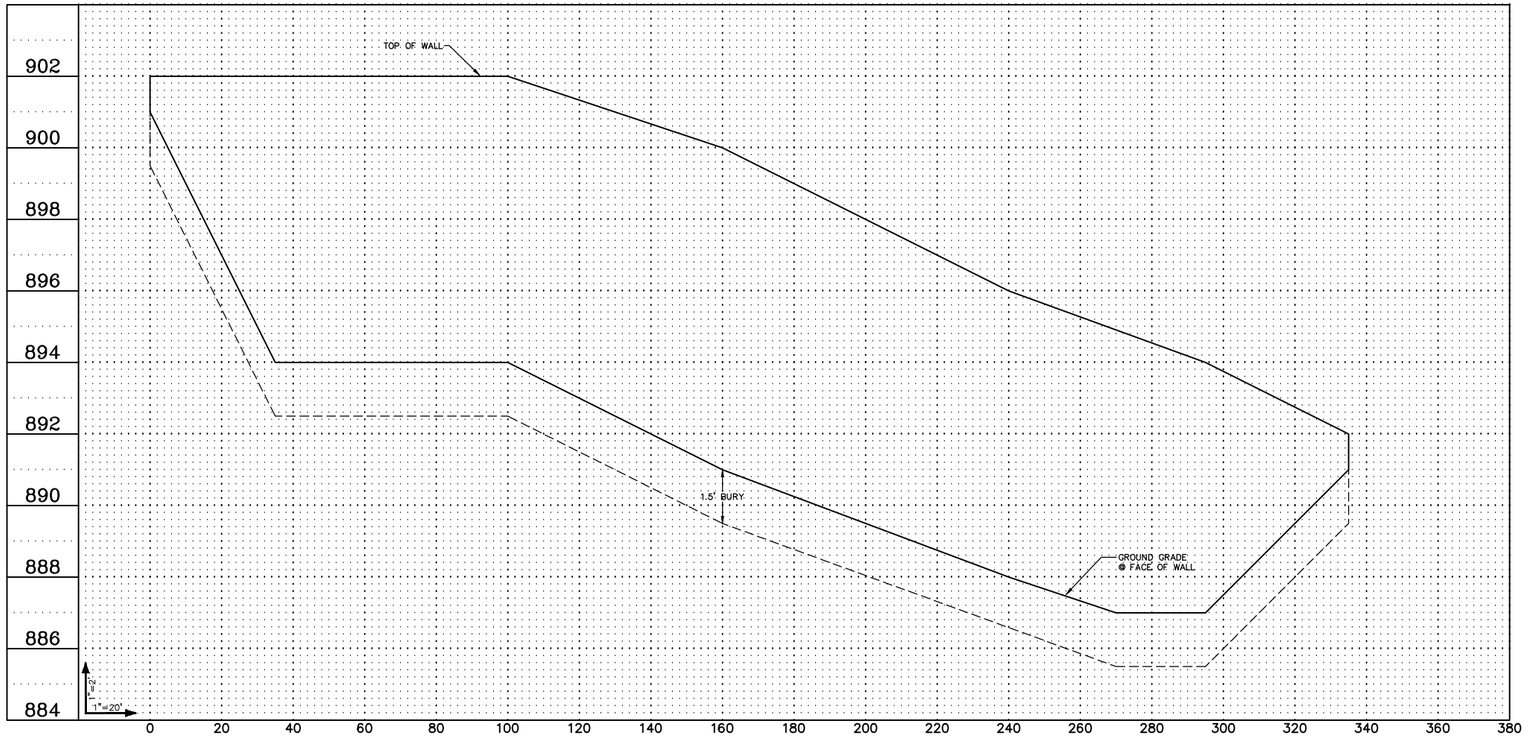
MODULAR RETAINING WALL #12
(1850 SF)



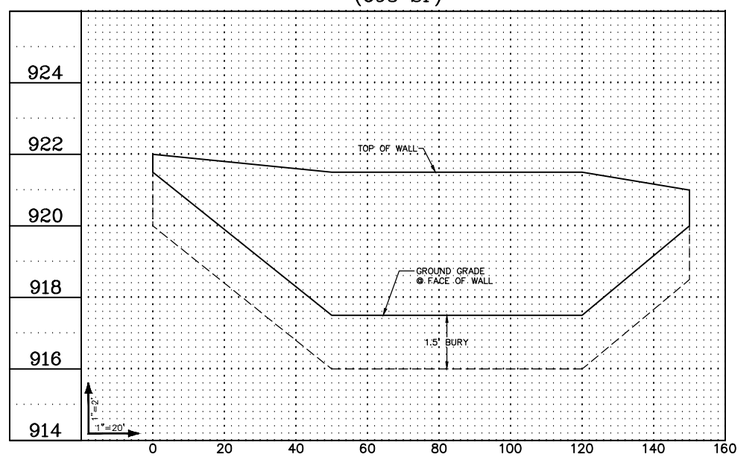
MODULAR RETAINING WALL #14
(1530 SF)



MODULAR RETAINING WALL #13
(2950 SF)



MODULAR RETAINING WALL #15
(693 SF)



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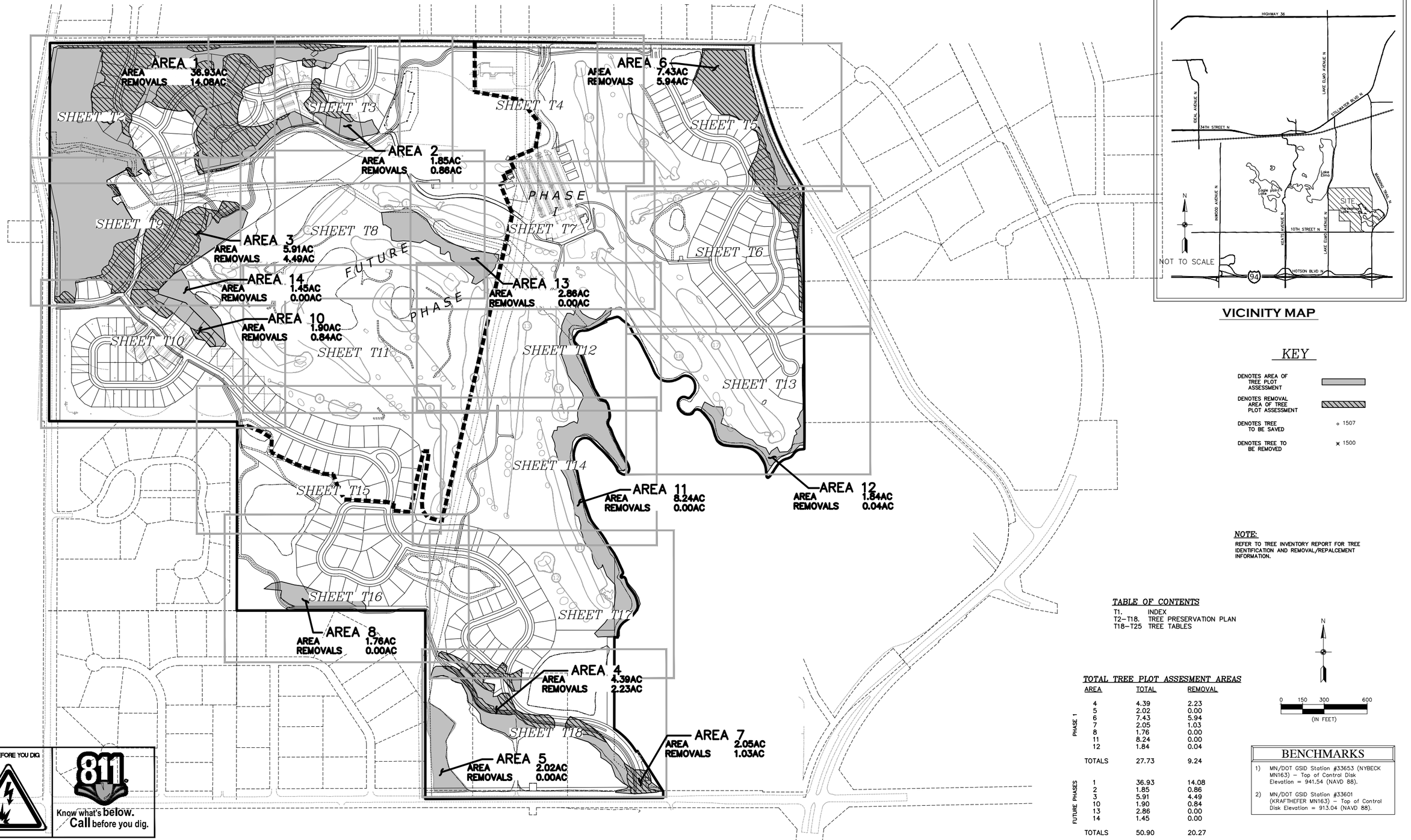
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Lake Elmo, Minnesota

RETAINING WALL PROFILES

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VICINITY MAP

KEY

DENOTES AREA OF TREE PLOT ASSESSMENT

DENOTES REMOVAL AREA OF TREE PLOT ASSESSMENT

DENOTES TREE TO BE SAVED ○ 1507

DENOTES TREE TO BE REMOVED ✕ 1500

NOTE:
REFER TO TREE INVENTORY REPORT FOR TREE IDENTIFICATION AND REMOVAL/REPLACEMENT INFORMATION.

TABLE OF CONTENTS

T1. INDEX
T2–T18. TREE PRESERVATION PLAN
T18–T25 TREE TABLES

N

0 150 300 600
(IN FEET)

TOTAL TREE PLOT ASSESMENT AREAS

	AREA	TOTAL	REMOVAL
PHASE 1	4	4.39	2.23
	5	2.02	0.00
	6	7.43	5.94
	7	2.05	1.03
	8	1.76	0.00
	11	8.24	0.00
	12	1.84	0.04
	TOTALS	27.73	9.24
FUTURE PHASES	1	36.93	14.08
	2	1.85	0.86
	3	5.91	4.49
	10	1.90	0.84
	13	2.86	0.00
	14	1.45	0.00
	TOTALS	50.90	20.27

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

NOTE:
TREE IDENTIFICATION AND TREE AREA CALCULATIONS WERE PROVIDED BY KJOLHAUG ENVIRONMENTAL SERVICES.

CALL BEFORE YOU DIG

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

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

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TREE PRESERVATION PLAN

T1 of 25

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TREE PRESERVATION PLAN

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20TH STREET NORTH

AREA 1
AREA 36.93AC
REMOVALS 14.08AC

AREA 2
AREA 1.85AC
REMOVALS 0.86AC

MASTERS LANE N

MASTERS COURT N

SEE SHEET T2

SEE SHEET T4

SEE SHEET T8

WETLAND 21
100 YR HWL = 898.0

WETLAND 20
100 YR HWL = 909.7

WETLAND NW-B5
MN DNR 82-417W
100 YR HWL = 877.3 (NGVD 29)
[NAVD 88 = (NGVD 29)+0.10]

WL-11

OUTLOT FF

OUTLOT HH

OUTLOT II

INFILTRATION BASIN #30
100 YR HWL 883.6

0 25 50 100
(IN FEET)

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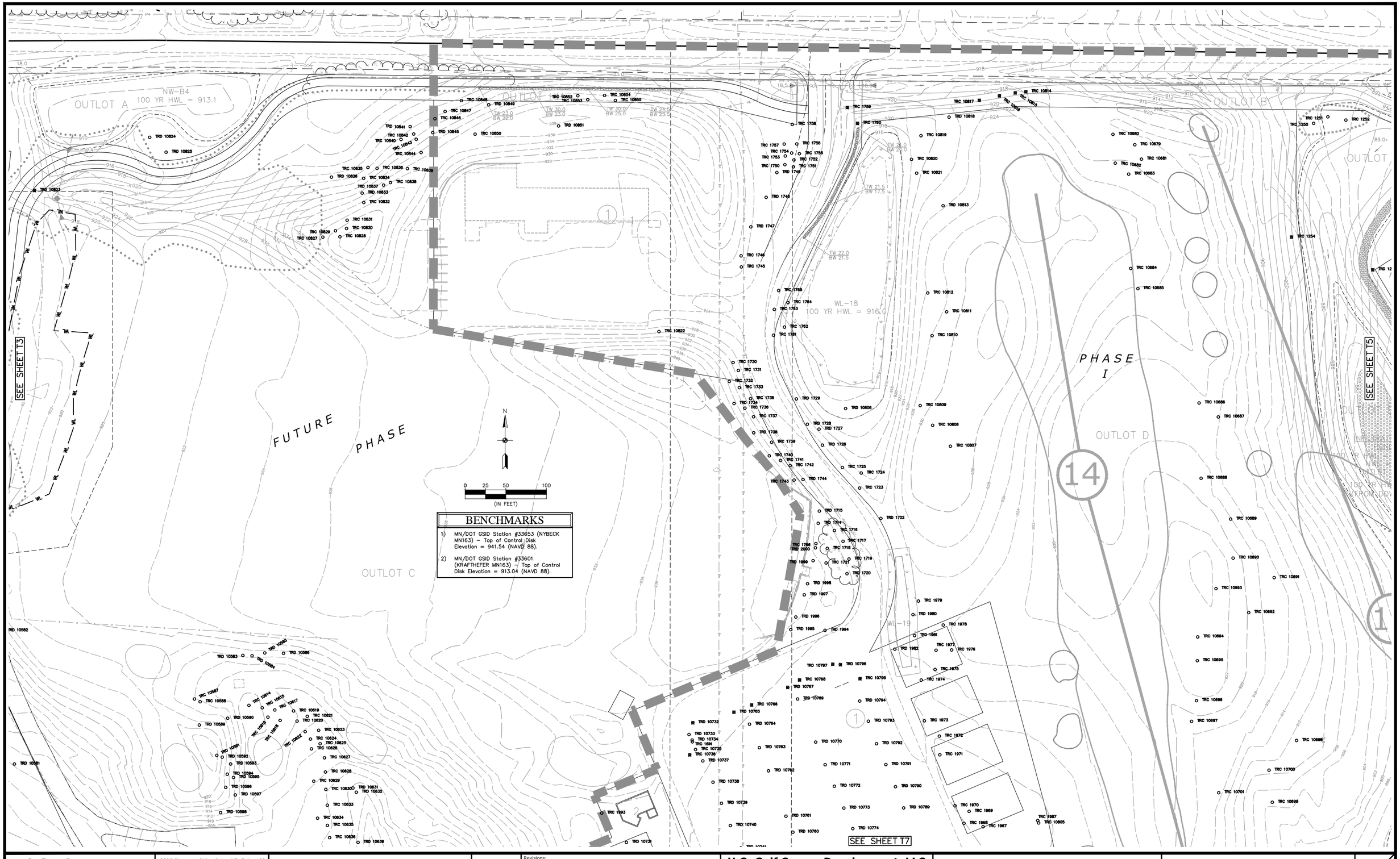
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OUTLOT B

OUTLOT G

WL-17
100 YR HWL = 893.8
(FROM DOWNS LAKE)

OUTLOT F

OUTLOT E

OUTLOT D

OUTLOT C

INFILTRATION BASIN
100 YR HWL = 895.5 (MODEL)
WL-16
100 YR HWL = 894.7
(FROM DOWNS LAKE)

ANNIKA WAY N

MANNING TRAIL N

100 YR HWL = 894.7

100 YR HWL = 893.8

15

AREA 6 7.43AC
AREA REMOVALS 5.94AC

SEE SHEET T4

SEE SHEET T6

N

0 25 50 100
(IN FEET)

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SEE SHEET T5

SEE SHEET T7

SEE SHEET T13

QUEENS STREET N

MANNING TRAIL N

18TH STREET N

ANNIKA WAY N

ANNIE AVENUE

WETLAND EXCAVATION- 12,032 S.F.

INFILTRATION BASIN #10
100 YR HWL 887.3

POND 10
NWL = 884.0
OUTLET =884.5
100 YR HWL =887.3

OUTLOT N

OUTLOT D

AREA AREA 6 7.43AC
REMOVALS 5.94AC

N

0 25 50 100
(IN FEET)

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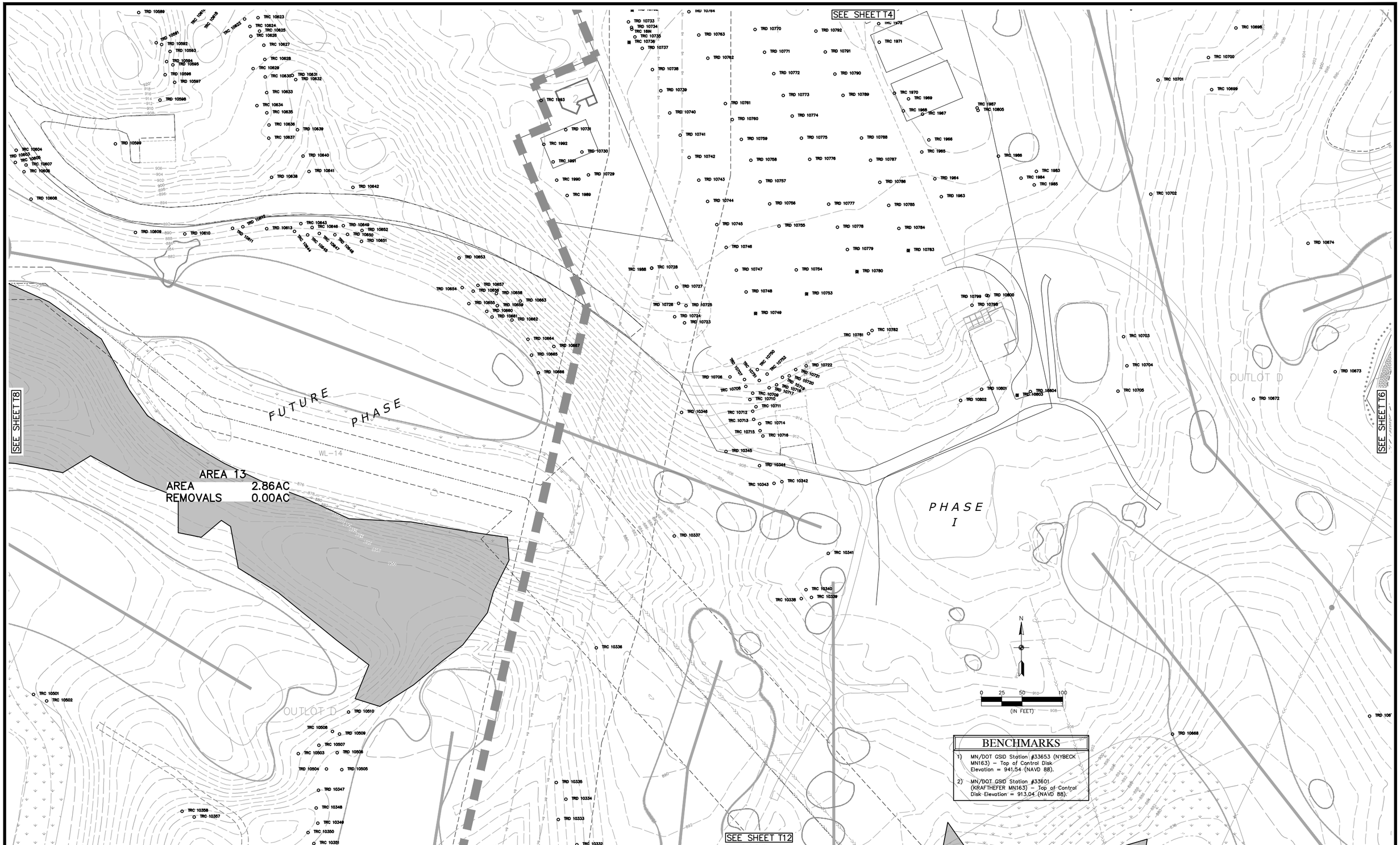
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SEE SHEET T2

SEE SHEET T8

SEE SHEET T10

LAKE ELMO AVENUE NORTH
(C.S.A.H. NO. 17)

OUTLOT DD

OUTLOT EE

OUTLOT II

OUTLOT JJ

INFILTRATION BASIN #30
100 YR HWL 883.6

INFILTRATION BASIN #40
OUTLET EL =886.5
BOTTOM EL =885.5

SW-B1
100 YR HWL = 886.8

WL-7
100 YR HWL = 880.3

ROYAL BLVD N

AREA 1
AREA 36.93AC
REMOVALS 14.08AC

AREA 3
AREA 5.91AC
REMOVALS 4.49AC

AREA 10
AREA 1.90AC
REMOVALS 0.84AC

AREA 14
AREA 1.45AC
REMOVALS 0.00AC

TOP OF BERM

EOF THRU PIPE

0 25 50 100
(IN FEET)

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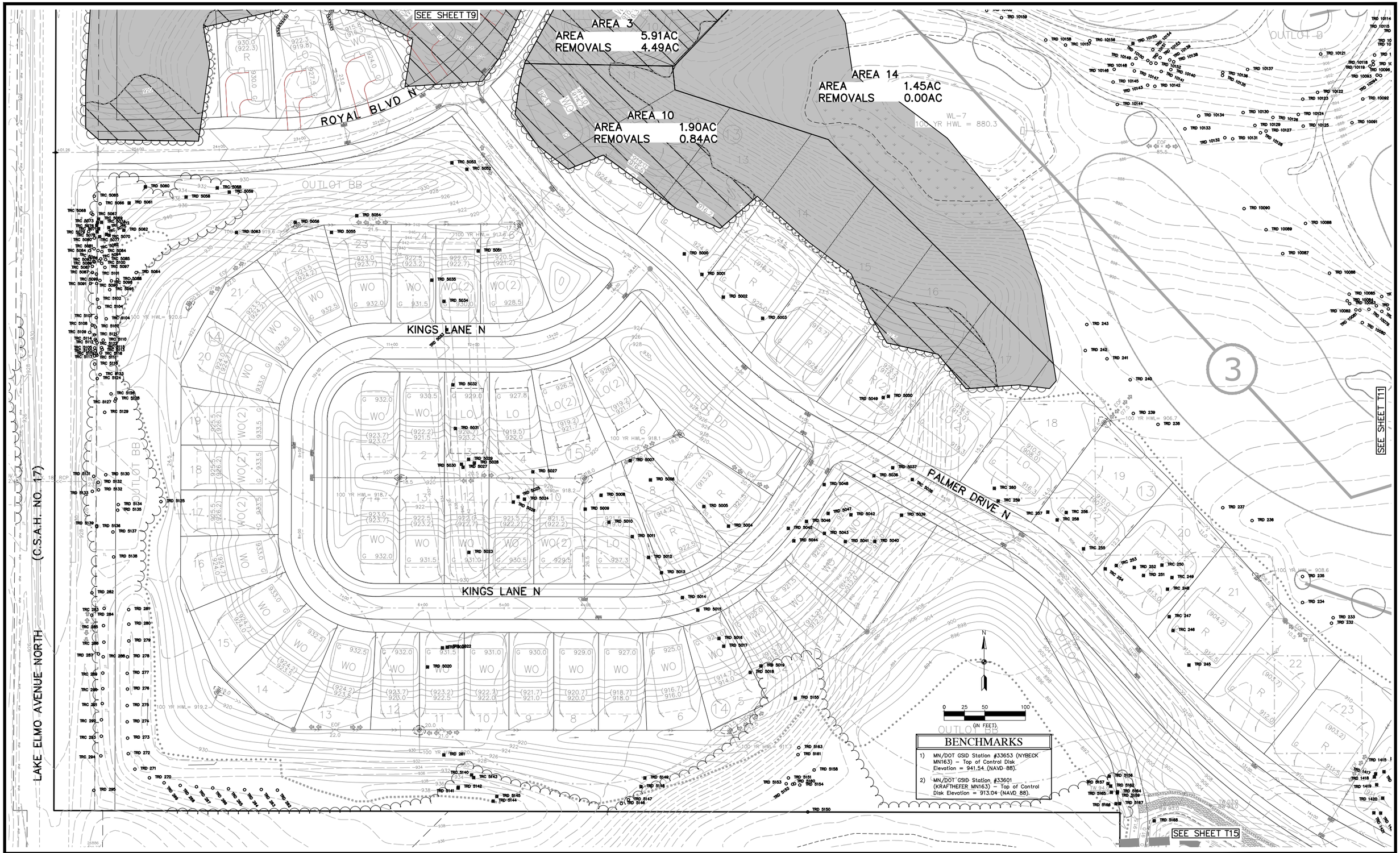
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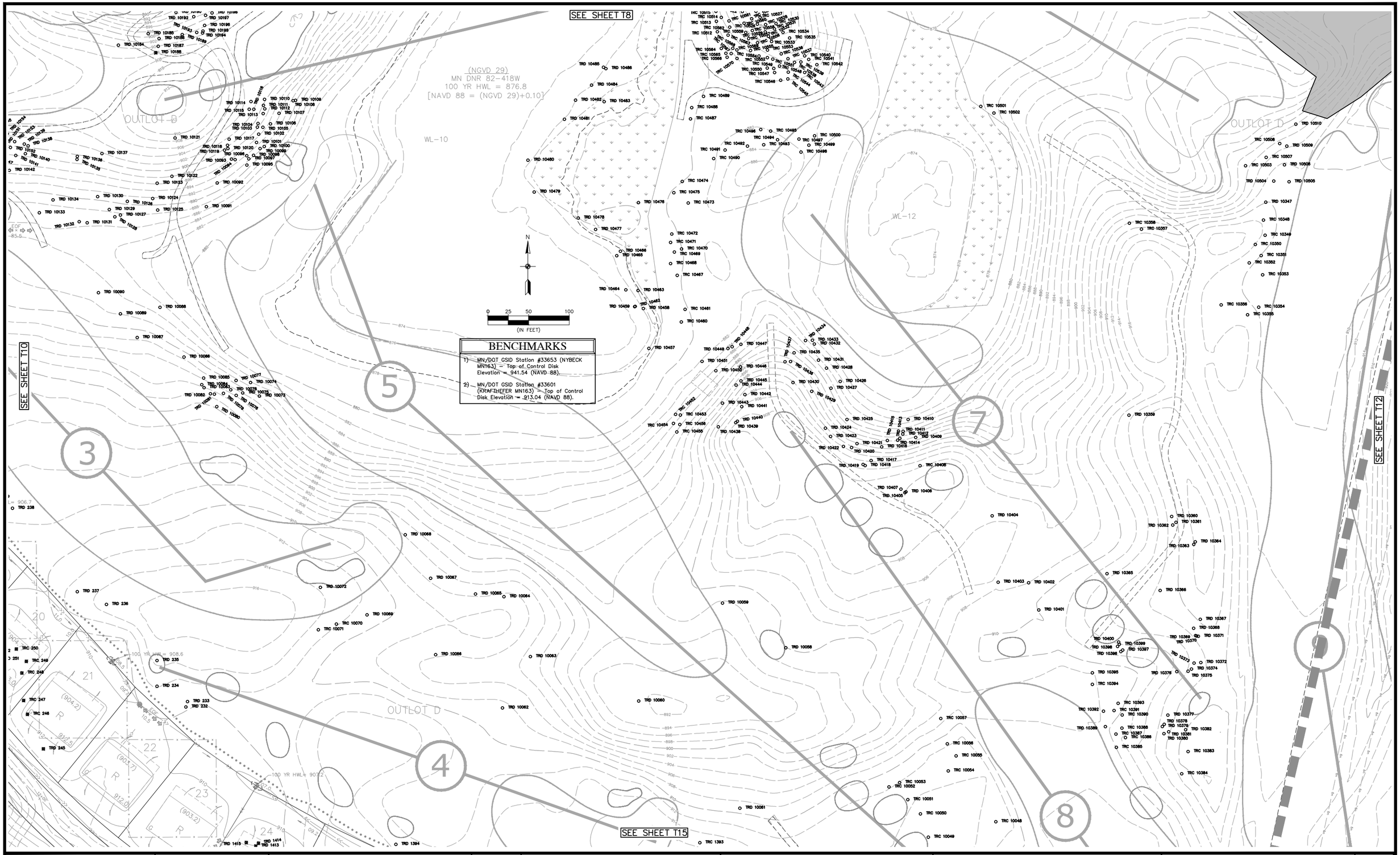
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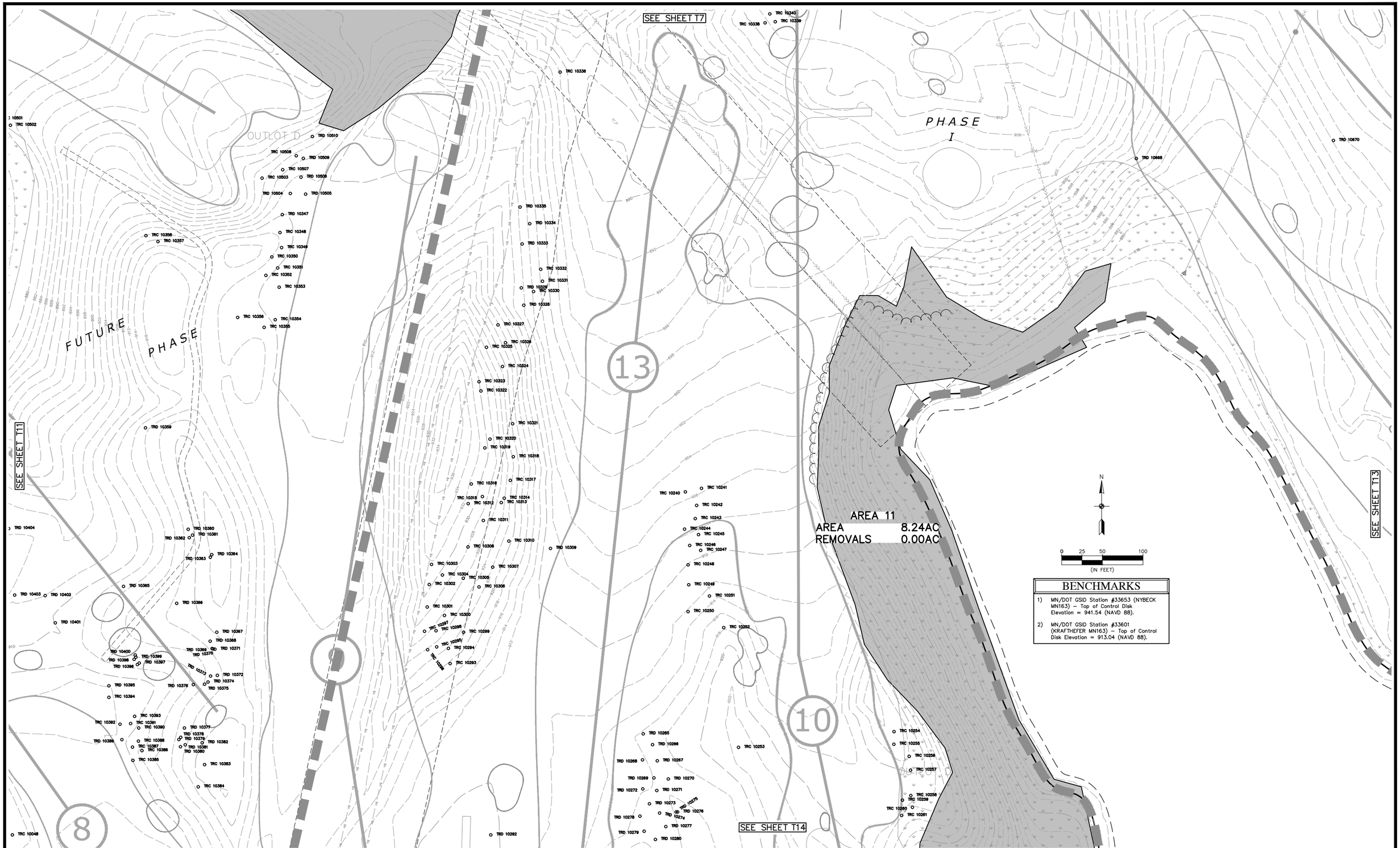
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Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 9/21/16 License #: 25063

Drawn: JJO
Designed: BJK
Date: 9/21/16

Revisions:
1. 02/10/17 Revise Layout per Owner
2. 04/07/17 Per City and Watershed Comments

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

TREE PRESERVATION PLAN

Save Date: 04/07/17 F:\Jobs\6021 - 6040\6036 - tartan park\cad\engineering\trees\6036_tree.dwg

SEE SHEET T11

SEE SHEET T14

SEE SHEET T16

OUTLOT BB

OUTLOT D

OUTLOT AA

OUTLOT Z

FUTURE PHASE 4

FUTURE PHASE 8

PHASE 1

PALMER DRIVE N

LATROBE CIRCLE N

TROBE CIRCLE N

POND SW3-B1
100 YR HWL = 893.4

POND SD
NWL = 887.0
100 YR HWL = 890.2

POND 51
NWL = 886.6
100 YR HWL = 890.1

WL-6
(INCIDENTAL)

WL-5
WETLAND 5
NWL = 886.5
100 YR HWL = 888.5

100 YR HWL= 907.2

100 YR HWL= 910.1

100 YR HWL= 890.9

100 YR HWL= 899.7

100 YR HWL= 896.8

100 YR HWL= 895.0

N

0 25 50 100
(IN FEET)

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

Carlson McCain
• environmental
• engineering
• surveying

3890 Pheasant Ridge Drive NE, Suite 100
Blaine, MN 55014
Phone: (763) 489-7900
Fax: (763) 489-7959
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TREE PRESERVATION PLAN

T15 of 25

Save Date: 04/06/17 I:\jobs\6021 - 6040\6036 - tartan park\cad\engineering\trees\6036_tree.dwg

SEE SHEET T15

SEE SHEET T17

OUTLOT Z

OUTLOT Y

OUTLOT X

OUTLOT V

OUTLOT U

OUTLOT T

LATROBE CIRCLE N

PALMER DRIVE N

STREET N

AREA 8

AREA	1.76AC
REMOVALS	0.00AC

N

0 25 50 100

(IN FEET)

BENCHMARKS

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TREE PRESERVATION PLAN

T16 of 25

[Save Date: 04/06/17] F:\jobs\6021 - 6040\6036 - tartan park\cad\engineering\trees\6036_tree.dwg



BENCHMARKS

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TREE PRESERVATION PLAN

T17 of 25

[Save Date: 04/06/17] F:\jobs\6021 - 6040\6036 - tartan park\cad\engineering\trees\6036_tree.dwg

SEE SHEET T17

AREA 4
AREA 4.39AC
REMOVALS 2.23AC

AREA 5
AREA 2.02AC
REMOVALS 0.00AC

AREA 7
AREA 2.05AC
REMOVALS 1.03AC

ARNE WAY

PALMER DRIVE N

STREET I

10TH STREET (COUNTY STATE AID HIGHWAY NO. 10)

WL-1

ROSE LAKE – (NGVD 29)
MN DNR 82–112W
OHW = UNDETERMINED
100 YR HWL = 883.4
(Per Valley Branch WSD)

[NAVD 88 = (NGVD 29)+0.10]

WL-2
(INCIDENTAL WCA)

OUTLOT Q

OUTLOT P

FLOODPLAIN
MITIGATION
3200 C.Y.

N

0 25 50 100
(IN FEET)

BENCHMARKS

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TREE PRESERVATION PLAN

T18 of 25

Save Date: 04/06/17 F:\Jobs\6021 - 6040\6036 - tartan park\cad\engineering\trees\6036_tree.dwg

PHASE I INDIVIDUAL SHOTS

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
1	Previously Removed	N/A	N/A	N/A	Exempt	-		X
2	Previously Removed	N/A	N/A	N/A	Exempt	-		X
3	Previously Removed	N/A	N/A	N/A	Exempt	-		X
4	Previously Removed	N/A	N/A	N/A	Exempt	-		X
5	Previously Removed	N/A	N/A	N/A	Exempt	-		X
6	Previously Removed	N/A	N/A	N/A	Exempt	-		X
7	Previously Removed	N/A	N/A	N/A	Exempt	-		X
8	Basswood	28	3	1	Exempt	-	X	
9	Ash, Green	8	2	1	Common Tree	No	Not Significant	
10	Previously Removed	N/A	N/A	N/A	Exempt	-		X
11	Previously Removed	N/A	N/A	N/A	Exempt	-		X
12	Previously Removed	N/A	N/A	N/A	Exempt	-		X
13	Spruce, White	20	3	1	Coniferous	Yes		X
14	Previously Removed	N/A	N/A	N/A	Exempt	-		X
15	Previously Removed	N/A	N/A	N/A	Exempt	-		X
16	Ash, Green	27.5	3	1	Common Tree	Yes	X	
17	Kentucky Coffee Tree	18	4	1	Common Tree	Yes	X	
18	Maple, Silver	38	4	1	Common Tree	Yes	X	
19	Basswood	22.5	3	1	Common Tree	Yes	X	
20	Basswood	28	2	1	Common Tree	Yes	X	
21	Previously Removed	N/A	N/A	N/A	Exempt	-		X
22	Previously Removed	N/A	N/A	N/A	Exempt	-		X
23	Previously Removed	N/A	N/A	N/A	Exempt	-		X
24	Previously Removed	N/A	N/A	N/A	Exempt	-		X
25	Previously Removed	N/A	N/A	N/A	Exempt	-		X
26	Previously Removed	N/A	N/A	N/A	Exempt	-		X
27	Previously Removed	N/A	N/A	N/A	Exempt	-		X
28	Basswood	38	3	1	Common Tree	Yes	X	
29	Basswood	22	4	1	Common Tree	Yes		X
30	Ash, Green	22	4	1	Common Tree	Yes	X	
31	Ash, Green	17	3	1	Common Tree	Yes	X	
32	Maple, Silver	20	3	1	Common Tree	Yes	X	
33	Ash, Green	20	4	1	Common Tree	Yes	X	
34	Basswood	15	3	1	Common Tree	Yes	X	
35	Ash, Green	11.5	2	1	Common Tree	No	Not Significant	
36	Basswood	15	2	1	Common Tree	Yes	X	
37	Basswood	27	3	1	Common Tree	Yes	X	
38	Ash, Green	21	2	1	Common Tree	Yes	X	
39	Ash, Green	19	2	1	Common Tree	Yes	X	
40	Ash, Green	18	2	1	Common Tree	Yes		X
41	Basswood	23	3	1	Common Tree	Yes		X
42	Maple, Silver	13	2	1	Common Tree	Yes		X
43	Maple, Silver	13.5	2	1	Common Tree	Yes		X
44	Maple, Silver	16	2	1	Common Tree	Yes		X
45	Maple, Silver	24	3	1	Common Tree	Yes		X
46	Cottonwood	23	3	1	Common Tree	Yes		X
47	Maple, Silver	14	2	1	Common Tree	Yes		X
48	Maple, Silver	40	3	1	Common Tree	Yes		X
49	Basswood	12	2	1	Common Tree	Yes		X
50	Basswood	20	2	1	Common Tree	Yes		X
51	Previously Removed	N/A	N/A	N/A	Exempt	-		X
52	Previously Removed	N/A	N/A	N/A	Exempt	-		X
53	Previously Removed	N/A	N/A	N/A	Exempt	-		X
54	Maple, Silver	13	3	1	Common Tree	Yes		X
55	Boxelder	24	2	1	Common Tree	Yes		X
56	Ash, Green	30	2	1	Common Tree	Yes		X
57	Maple, Silver	18	3	1	Common Tree	Yes		X
58	Ash, Green	19	3	1	Common Tree	Yes		X
59	Maple, Silver	34	4	1	Common Tree	Yes	X	
60	Maple, Sugar	18	3	1	Deciduous Hardwood	Yes		X
61	Maple, Silver	11	3	1	Common Tree	No	Not Significant	
62	Pine, Red	12.5	4	1	Coniferous	Yes		X
63	Pine, Red	14	3	1	Coniferous	Yes		X
64	Pine, Red	13	3	1	Coniferous	Yes		X
65	Pine, Red	14	3	1	Coniferous	Yes		X
66	Pine, Red	16	2	1	Coniferous	Yes		X
67	Pine, Red	15	2	1	Coniferous	Yes		X
68	Pine, Red	15	3	1	Coniferous	Yes		X
69	Maple, Silver	64	3	1	Common Tree	Yes	X	
70	Maple, Silver	52	3	1	Common Tree	Yes	X	
71	Ash, Green	20	3	1	Common Tree	Yes		X
72	Maple, Silver	43	3	1	Common Tree	Yes		X
73	Ash, Green	34	2	1	Common Tree	Yes		X
74	Kentucky Coffee Tree	13	3	1	Common Tree	Yes		X
75	Maple, Silver	15	3	1	Common Tree	Yes		X
76	Ash, Green	28	2	1	Common Tree	Yes		X
77	Ash, Green	26	3	1	Common Tree	Yes		X
78	Maple, Silver	25	2	1	Common Tree	Yes		X
79	Pine, Red	17	3	1	Coniferous	Yes		X
80	Pine, Red	15	3	1	Coniferous	Yes		X
81	Pine, Red	14.5	3	1	Coniferous	Yes		X
82	Maple, Silver	36	3	1	Common Tree	Yes		X
83	Pine, Scotts	17.5	2	1	Coniferous	Yes		X
84	Pine, Red	15.5	3	1	Coniferous	Yes		X
85	Pine, Red	15.5	3	1	Coniferous	Yes		X
86	Pine, Red	15	3	1	Coniferous	Yes		X
87	Spruce, White	24	4	1	Coniferous	Yes		X
88	Spruce, White	32	3	1	Coniferous	Yes		X
89	Maple, Silver	28.5	2	1	Common Tree	Yes		X
90	Maple, Silver	29	2	1	Common Tree	Yes		X
91	Maple, Silver	32	3	1	Common Tree	Yes		X
92	Ash, Green	20	2	1	Common Tree	Yes		X
93	Previously Removed	N/A	N/A	N/A	Exempt	-		X
94	Previously Removed	N/A	N/A	N/A	Exempt	-		X
95	Maple, Silver	30	2	1	Common Tree	Yes	X	
96	Maple, Sugar	17	3	1	Deciduous Hardwood	Yes		X
97	Maple, Silver	49	4	1	Common Tree	Yes	X	
98	Maple, Red	10	N/A	0	Deciduous Hardwood	Yes	X	
99	Basswood	10	N/A	0	Common Tree	No	Not Significant	
100	Basswood	11	N/A	0	Common Tree	No	Not Significant	
101	Basswood	11	N/A	0	Common Tree	No	Not Significant	
102	Basswood	14	2	1	Common Tree	Yes	X	
103	Ash, White	10	N/A	0	Common Tree	No	Not Significant	
104	Ash, White	10	N/A	0	Common Tree	No	Not Significant	
105	Ash, Green	12	4	1	Common Tree	Yes		X
106	Ash, Green	10	N/A	0	Common Tree	No	Not Significant	
107	Basswood	10	N/A	0	Common Tree	No	Not Significant	
108	Maple, Silver	17.5	3	1	Common Tree	Yes		X
109	Ash, Green	23	2	1	Common Tree	Yes		X
110	Basswood	14	3	1	Common Tree	Yes		X
111	Kentucky Coffee Tree	10	3	1	Common Tree	No	Not Significant	
112	Ash, Green	12	2	1	Common Tree	Yes		X
113	Kentucky Coffee Tree	13	3	1	Common Tree	Yes		X
114	Basswood	16	2	1	Common Tree	Yes		X
115	Basswood	13	2	1	Common Tree	Yes		X
116	Pine, Red	15	2	1	Coniferous	Yes		X
117	Spruce, Blue	12	2	1	Coniferous	Yes		X
118	Spruce, Blue	17	2	1	Coniferous	Yes		X
119	Spruce, White	11	2	1	Coniferous	Yes		X
120	Basswood	14	3	1	Common Tree	Yes		X
121	Locust, Honey	14.5	2	2	Common Tree	Yes		X
122	Pine, Scotts	22	3	1	Coniferous	Yes		X
123	Spruce, White	11	4	1	Coniferous	Yes		X
124	Spruce, White	9	3	1	Coniferous	Yes		X
125	Spruce, White	10.5	4	1	Coniferous	Yes		X
126	Spruce, White	20	4	1	Coniferous	Yes		X
127	Spruce, White	26	4	1	Coniferous	Yes		X
128	Spruce, White	17.5	3	1	Coniferous	Yes		X
129	Spruce, White	15	3	1	Coniferous	Yes		X
130	Spruce, White	15	2	1	Coniferous	Yes		X
131	Spruce, White	11.5	3	1	Coniferous	Yes		X
132	Spruce, Blue	10.5	3	1	Coniferous	Yes		X
133	Spruce, Blue	10	3	1	Coniferous	Yes		X
134	Ash, Green	20	2	1	Common Tree	Yes		X
135	Spruce, Blue	10.5	3	1	Coniferous	Yes		X
136	Ash, Green	16	2	1	Common Tree	Yes		X
137	Maple, Silver	44.5	2	1	Common Tree	Yes		X
138	Maple, Silver	18	3	1	Common Tree	Yes		X
139	Cedar, white	11.5	2	2	Common Tree	No	Not Significant	
140	Cedar, white	14	2	5	Common Tree	Yes		X
141	Locust, Honey	21.5	2	1	Common Tree	Yes		X
142	Spruce, White	20	3	1	Coniferous	Yes		X
143	Basswood	28	3	1	Common Tree	Yes		X
144	Basswood	20	4	1	Common Tree	Yes		X
145	Pine, Red	18	2	1	Coniferous	Yes		X
146	Oak, White	22	3	1	Deciduous Hardwood	Yes		X
147	Oak, Burr	20	4	1	Deciduous Hardwood	Yes		X
148	Oak, Burr	17	4	1	Deciduous Hardwood	Yes		X
149	Oak, Burr	14	4	1	Deciduous Hardwood	Yes		X
150	Oak, Burr	12	3	1	Deciduous Hardwood	Yes		X
151	Oak, Burr	14	4	1	Deciduous Hardwood	Yes		X
152	Oak, Burr	15.5	3	1	Deciduous Hardwood	Yes		X
161	Cottonwood	16	2	1	Common Tree	Yes		X
162	Ash, Green	10	2	1	Common Tree	No	Not Significant	
163	Cottonwood	14	2	1	Common Tree	Yes		X
164	Cottonwood	15	2	1	Common Tree	Yes		X
165	Cottonwood	12	2	2	Common Tree	Yes		X
166	Willow, Black	42	3	2	Common Tree	Yes		X
167	Birch, River	13	2	1	Deciduous Hardwood	Yes		X
168	Birch, River	10	2	1	Deciduous Hardwood	Yes		X
169	Birch, River	97	2	2	Deciduous Hardwood	Yes		X
170	Cottonwood	14	3	1	Common Tree	Yes		X
171	Pine, White	13	3	1	Coniferous	Yes		X
172	Pine, White	15	3	1	Coniferous	Yes	X	
173	Pine, White	12	3	1	Coniferous	Yes		X
174	Oak, White	31	4	1	Deciduous Hardwood	Yes		X
175	Pine, White	12.5	3	1	Coniferous	Yes		X
185	Pine, White	12	3	1	Coniferous	Yes		X
186	Spruce, White	8	2	1	Coniferous	Yes		X
187	Pine, White	13	3	1	Coniferous	Yes		X
188	Pine, White	12	3	1	Coniferous	Yes		X
189	Pine, White	14.5	3	1	Coniferous	Yes		X
190	Pine, White	14	3	1	Coniferous	Yes		X
191	Cottonwood	23	3	1	Common Tree	Yes		X
192	Cottonwood	12	3	1	Common Tree	Yes		X
193	Cottonwood	13	3	1	Common Tree	Yes		X
194	Pine, White	14	3	1	Coniferous	Yes		X
195	Elm, Siberian	13	3	1	Common Tree	Yes		X
196	Cottonwood	13	3	1	Common Tree	Yes		X
197	Boxelder	14	2	1	Common Tree	Yes		X
198	Boxelder	19	2	1	Common Tree	Yes		X
199	Elm, American	20	3	1	Common Tree	Yes		X
200	Boxelder	17	2	3	Common Tree	Yes	X	
201	Ash, Green	16	3	1	Common Tree	Yes	X	
202	Ash, Green	15	2	1	Common Tree	Yes	X	
203	Willow, Black	12	2	1	Common Tree	Yes		X
204	Maple, Silver	12	2	2	Common Tree	Yes		X
205	Birch, River	10	2	2	Deciduous Hardwood	Yes		X
206	Willow, Black	23	2	2	Common Tree	Yes		X
207	Willow, Black	13	2	2	Common Tree	Yes	X	
208	Elm, Siberian	10.5	2	1	Common Tree	No	Not Significant	
209	Elm, Siberian	6	2	1	Common Tree	No	Not Significant	
210	Cottonwood	12	4	1	Common Tree	Yes	X	
211	Elm, Siberian	8	1	1	Common Tree	No	Not Significant	
212	Willow, Black	11	2	1	Common Tree	No	Not Significant	
213	Willow, Black	39	2	1	Common Tree	Yes	X	
214	Aspen, Quaking	11	2	1	Common Tree	No	Not Significant	
215	Spruce, Blue	16	3	3	Coniferous	Yes		X
216	Spruce, Blue	8.5	3	2	Coniferous	Yes		X
217	Spruce, Blue	10	3	3	Coniferous	Yes		X
218	Birch, River	9.5	2	2	Deciduous Hardwood	Yes		X
219	Spruce, White	14	4	1	Coniferous	Yes		X
220	Spruce, Blue	10	2	1	Coniferous	Yes		X
221	Spruce, White	14.5	4	1	Coniferous	Yes		X
222	Spruce, Blue	14	3	1	Coniferous	Yes		X
223	Maple, Sugar	11	2	1	Deciduous Hardwood	Yes	X	
224	Locust, Honey	13	4	1	Common Tree	Yes	X	
225	Elm, Siberian	17	3	2	Common Tree	Yes	X	
226	Elm, Siberian	15	3	3	Common Tree	Yes	X	
227	Elm, American	15	4	2	Common Tree	Yes	X	
228	Elm, Siberian	11	N/A	0	Common Tree	No	Not Significant	
229	Elm, Siberian	14	3	2	Common Tree	Yes	X	
230	Elm, Siberian	10	N/A	0	Common Tree	No	Not Significant	
231	Oak, Red	16	3	1	Deciduous Hardwood	Yes	X	
244	Pine, White	13	3	1	Coniferous	Yes		X
296	Birch, River	10	3	1	Deciduous Hardwood	Yes	X	
297	Birch, River	8	2	1	Deciduous Hardwood	Yes	X	
298	Birch, River	10.5	2	1	Deciduous Hardwood	Yes	X	
299	Birch, River	10	2	1	Deciduous Hardwood	Yes	X	
300	Birch, River	8	2	1	Deciduous Hardwood	Yes	X	
301	Birch, River	11	2	1	Deciduous Hardwood	Yes	X	
302	Birch, River	9	2	1	Deciduous Hardwood	Yes	X	
303	Cottonwood	25	4	1	Common Tree	Yes	X	
304	Tamarack	11	3	1	Coniferous	Yes	X	
305	Tamarack	16	2	1	Coniferous	Yes	X	
306	Cottonwood	20	4	1	Common Tree	Yes	X	
307	Ash, Green	12	4	1	Common Tree	Yes	X	
308	Cottonwood	19	4	1	Common Tree	Yes	X	
309	Boxelder	23	3	5	Common Tree	Yes	X	
310	Cottonwood	23	4	1	Common Tree	Yes	X	
311	Cottonwood	16.5	4	1	Common Tree	Yes	X	
312	Cottonwood	16	4	1	Common Tree	Yes	X	
313	Maple, Red	13.5	3	1	Deciduous Hardwood	Yes	X	
314	Maple, Red	10	2	1	Deciduous Hardwood	Yes	X	
315	Ash, Green	13	3	1	Common Tree	Yes	X	
316	Ash, Green	15	3	1	Common Tree	Yes	X	
317	Locust, Honey	20	4	1	Common Tree	Yes	X	
318	Locust, Honey	15	4	1	Common Tree	Yes	X	
319	Maple, Sugar	9	4	1	Deciduous Hardwood	Yes	X	
320	Maple, Sugar	14	4	1	Deciduous Hardwood	Yes	X	
321	Ash, Green	15	3	1	Common Tree	Yes	X	
322	Ash, Green	10.5	3	1	Common Tree	No	Not Significant	
323	Ash, Green	10	3	1	Common Tree	No	Not Significant	
324	Hackberry, Northern	12	4	1	Common Tree	Yes		X
325	Hackberry, Northern	11	3	1	Common Tree	No	Not Significant	
326	Oak, Pin	20.5	3	1	Deciduous Hardwood	Yes	X	
327	Boxelder	18.5	4	1	Common Tree	Yes	X	
328	Boxelder	8.5	3	1	Common Tree	No	Not Significant	
329	Aspen, Quaking	12	3	1	Common Tree	Yes	X	
330	Oak, White	16	4	1	Deciduous Hardwood	Yes	X	
331	Aspen, Quaking	10.5	3	1	Common Tree	No	Not Significant	
332	Boxelder	20.5	4	1	Common Tree	Yes	X	
333	Birch, River	14	3	2	Deciduous Hardwood	Yes	X	
334	Birch, River	10	3	3	Deciduous Hardwood	Yes	X	
335	Birch, River	11	3	3	Deciduous Hardwood	Yes	X	
336	Birch, River	12	4	3	Deciduous Hardwood	Yes	X	
337	Birch, River	14	4	2	Deciduous Hardwood	Yes	X	
338	Birch, River	13	4	2	Deciduous Hardwood	Yes	X	
339	Cottonwood	18	4	1	Common Tree	Yes	X	
340	Hackberry, Northern	18	2	1	Common Tree	Yes	X	
341	Cottonwood	31	2	1	Common Tree	Yes	X	
342	Cottonwood	25	1	1	Common Tree	Yes	Bad Quality	
343	Ash, Green	8	2	1	Common Tree	No	Not Significant	
344	Ash, Green	10	2	2	Common Tree	No	Not Significant	
345	Pine, Red	13	2	1	Coniferous	Yes	X	
346	Pine, Red	14	3	1	Coniferous	Yes	X	
347	Boxelder	11	2	2	Common Tree	No	Not Significant	
348	Oak, White	12	3	1	Deciduous Hardwood	Yes	X	
349	Maple, Sugar	11	4	1	Deciduous Hardwood	Yes		X
350	Maple, Silver	12	3	1	Common Tree	Yes		X
351	Spruce, Blue	15	3	1	Coniferous	Yes		X
352	Spruce, Blue	17	4	1	Coniferous	Yes		X
353	Oak, Red	11	4	1	Deciduous Hardwood	Yes		X
354	Spruce, Blue	16	4	1	Coniferous	Yes		X
355	Spruce, Blue	14	3	1	Coniferous	Yes		X
356	Pine, White	14.5	3	1	Coniferous	Yes		X
357	Pine, White	21	4	1	Coniferous	Yes		X
358	Pine, White	14	3	1	Coniferous	Yes		X
359	Pine, White	13	3	1	Coniferous	Yes		X
360	Pine, White	15.5	3	1	Coniferous	Yes		X
361	Pine, White	16	3	1	Coniferous	Yes		X
362	Pine, White	9.5	1	1	Coniferous	Yes	Bad Quality	
363	Pine, White	15	2	2	Coniferous	Yes		X
364	Pine, White	9	2	1	Coniferous	Yes		X
365	Pine, White	16	2	1	Coniferous	Yes		X
366	Pine, White	13.5	3	1	Coniferous	Yes		X
367	Pine, White	14.5	3	1	Coniferous	Yes		X
368	Pine, Whitey	16	4	1	Coniferous	Yes		X
369	Pine, White	12	3	1	Coniferous	Yes	X	
370	Pine, White	12	3	1	Coniferous	Yes	X	
371	Pine, White	11	3	1	Coniferous	Yes	X	
372	Pine, White	11.5	3	1	Coniferous	Yes	X	
373	Pine, White	12	3	1	Coniferous	Yes		X
374	Aspen, Quaking	13	2	1	Common Tree	Yes		X
375	Aspen, Quaking	16	3	1	Common Tree	Yes		X
376	Oak, Red	13	3	1	Deciduous Hardwood	Yes		X
377	Oak, Red	11	3	1	Deciduous Hardwood	Yes		X
378	Oak, Red	15	4	1	Deciduous Hardwood	Yes		X
379	Oak, Red	16	3	1	Deciduous Hardwood	Yes		X
380	Locust, Honey	12.5	3	1	Common Tree	Yes	X	
381	Locust, Honey	15	3	1	Common Tree	Yes	X	
382	Locust, Honey	12.5	2	1	Common Tree	Yes	X	
383	Elm, Siberian	23	3	1	Common Tree	NA	Part of Plot Area 4	
384	Spruce, White	28	4	1	Coniferous	Yes	X	
385	Spruce, White	27	4	1	Coniferous	Yes	X	
386	Maple, Silver	38	4	1	Common Tree	Yes	X	
387	Previously Removed	N/A	N/A	N/A	Exempt	-	X	
388	Previously Removed	N/A	N/A	N/A	Exempt	-	X	
389	Maple, Silver	18	4	1	Common Tree	Yes	X	
390	Locust, Honey	26	4	1	Common Tree	Yes	X	
391	Spruce, White	20	4	1	Coniferous	Yes		X
393	Pine, White	13	4	1	Coniferous	Yes	X	
394	Pine, Red	15	4	1	Coniferous	Yes	X	
395	Spruce, White	26	4	1	Coniferous	Yes	X	
396	Spruce, White	13	4	1	Coniferous	Yes	X	
397	Spruce, White	22	3	1	Coniferous	Yes		X
540	Ash, Green	14	3	1	Common Tree	Yes	X	
541	Ash, Green	11	3	1	Common Tree	No	Not Significant	
542	Spruce, Blue	10.5	3	1	Coniferous	Yes	X	
543	Spruce, Blue	12	2	1	Coniferous	Yes	X	
544	Spruce, Blue	14.5	3	1	Coniferous	Yes	X	
545	Maple, Red	16	3	1	Deciduous Hardwood	Yes	X	
546	Maple, Red	12	3	1	Deciduous Hardwood	Yes	X	
547	Maple, Red	10	2	1	Deciduous Hardwood	Yes	X	
548	Maple, Red	15	3	1	Deciduous Hardwood	Yes	X	
549	Spruce, Blue	19	3	1	Coniferous	Yes	X	
550	Spruce, Blue	17	3	1	Coniferous	Yes	X	
551	Spruce, Blue	16	3	1	Coniferous	Yes	X	
552	Spruce, Blue	16	3	1	Coniferous	Yes	X	
553	Cottonwood	20.5	3	1	Common Tree	Yes	X	
554	Cottonwood	11	3	1	Common Tree	No	Not Significant	
555	Pine, White	7	3	1	Coniferous	No	Not Significant	
556	Pine, White	14	3	1	Coniferous	Yes	X	
557	Pine, White	12	3	1	Coniferous	Yes	X	
558	Pine, White	16	3	1	Coniferous	Yes	X	
559	Elm, Siberian	11	2	2	Common Tree	No	Not Significant	
560	Pine, White	11	4	1	Coniferous	Yes	X	
561	Cottonwood	14	3	2	Common Tree	Yes	X	
562	Hackberry, Northern	10	3	1	Common Tree	No	Not Significant	
563	Hackberry, Northern	9	3	1	Common Tree	No	Not Significant	
564	Hackberry, Northern	11	3	1	Common Tree	No	Not Significant	
565	Pine, White	12.5	4	1	Coniferous	Yes	X	
566	Elm, Siberian	11.5	2	1	Common Tree	No	Not Significant	
567	Elm, Siberian	10	3	1	Common Tree	No	Not Significant	
568	Elm, Siberian	12	2	1	Common Tree	Yes		X
569	Spruce, Blue	16.5	3	1	Coniferous	Yes		X
570	Spruce, Blue	15	3	1	Coniferous	Yes		X
571	Spruce, White	18	4	1	Coniferous	Yes		X
572	Elm, Siberian	24	3	1	Common Tree	Yes	X	
573	Hackberry, Northern	11	3	1	Common Tree	No	Not Significant	
574	Hackberry, Northern	13	3	1	Common Tree	Yes		X
575	Hackberry, Northern	8.5	3	1	Common Tree	No	Not Significant	
576	Hackberry, Northern	8	3	1	Common Tree	No	Not Significant	
577	Hackberry, Northern	9	3	1	Common Tree	No	Not Significant	
578	Hackberry, Northern	8	3	1	Common Tree	No	Not Significant	
579	Cottonwood	26	3	1	Common Tree	Yes		X
580	Hackberry, Northern	9	3	1	Common Tree	No	Not Significant	
581	Cottonwood	35	3	1	Common Tree	Yes	X	
582	Cottonwood	26	4	1	Common Tree	Yes	X	
583	Cottonwood	28	4	1	Common Tree	Yes	X	
584	Cottonwood	22	4	1	Common Tree	Yes	X	
585	Aspen, Quaking	12	3	1	Common Tree	Yes	X	
586	Maple, Sugar	9	3	1	Deciduous Hardwood	Yes	X	
587	Maple, Sugar	13	4	1	Deciduous Hardwood	Yes	X	
588	Maple, Sugar	13	4	1	Deciduous Hardwood	Yes	X	
589	Pine, White	23	4	1	Coniferous	Yes	X	
590	Pine, White	24	4	1	Coniferous	Yes	X	
1250	Pine, Red	17	4	1	Coniferous	Yes	X	
1251	Pine, Red	17	3	1	Coniferous	Yes	X	
1252	Pine, Red	20	3	1	Coniferous	Yes	X	
1253	Maple, Silver	23	3	2	Common Tree	Yes		X
1254	Previously Removed	N/A	N/A	N/A	Exempt	-		X
1255	Maple, Silver	37	2	1	Common Tree	Yes		X
1256	Pine, Red	20	2	1	Coniferous	Yes		X
1257	Pine, Red	16	3	1	Coniferous	Yes		X
1258	Pine, Red	17	3	1	Coniferous	Yes		X
1259	Pine, Red	13.5	3	1	Coniferous	Yes		X
1260	Pine, Red	16	3	1	Coniferous	Yes		X
1261	Pine, Red	15.5	2	1	Coniferous	Yes		X
1262	Maple, Silver	42	2	1	Common Tree	Yes		X

Carlson McCain
• environmental
• engineering
• surveying

3890 Pheasant Ridge Drive NE, Suite 100
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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 9/21/16 License #: 25063

Drawn: ADB
Designed: BJK
Date: 9/21/16

Revisions:
1. 02/10/17 Revise Layout per Owner
2. 04/07/17 Per City and Watershed Comments

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

TREE PRESERVATION PLAN

T19 of 25

[Save Date: 04/05/17] F:\jobs\6021 - 6040\6036 - tartan park\cad\engineering\trees\6036_tree_table.dwg

PHASE I INDIVIDUAL SHOTS CONT'D

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
1263	Ash, Green	18	3	1	Common Tree	Yes		X
1264	Maple, Silver	18	2	2	Common Tree	Yes		X
1265	Locust, Honey	30	2	1	Common Tree	Yes		X
1266	Pine, Red	13	3	1	Coniferous	Yes		X
1267	Pine, Red	12	3	1	Coniferous	Yes		X
1268	Pine, Red	12.5	3	1	Coniferous	Yes		X
1269	Maple, Silver	25	3	1	Common Tree	Yes		X
1270	Maple, Silver	25.5	3	1	Common Tree	Yes		X
1271	Maple, Silver	38	3	1	Common Tree	Yes		X
1272	Maple, Silver	41	2	1	Common Tree	Yes		X
1273	Ash, Green	21.5	3	1	Common Tree	Yes		X
1274	Locust, Honey	12	2	3	Common Tree	Yes		X
1275	Ash, Green	16	2	1	Common Tree	Yes		X
1276	Pine, Red	15.5	3	1	Coniferous	Yes		X
1277	Pine, Red	15	3	1	Coniferous	Yes		X
1278	Pine, Red	17	3	1	Coniferous	Yes		X
1279	Pine, Red	15	3	1	Coniferous	Yes		X
1280	Pine, Red	16	2	1	Coniferous	Yes		X
1281	Pine, Red	17	3	1	Coniferous	Yes		X
1282	Pine, Red	15	3	1	Coniferous	Yes		X
1283	Pine, Red	17	3	1	Coniferous	Yes		X
1284	Pine, Red	20	3	1	Coniferous	Yes		X
1285	Pine, Red	16	3	1	Coniferous	Yes		X
1286	Birch, River	9	2	3	Deciduous Hardwood	Yes		X
1287	Birch, River	11	2	3	Deciduous Hardwood	Yes		X
1288	Birch, River	10	2	3	Deciduous Hardwood	Yes		X
1289	Spruce, White	13	2	2	Coniferous	Yes		X
1290	Spruce, White	19	3	1	Coniferous	Yes		X
1291	Oak, Burr	14	3	1	Deciduous Hardwood	Yes		X
1292	Pine, Red	17	4	1	Coniferous	Yes		X
1293	Spruce, White	17	3	1	Coniferous	Yes		X
1294	Oak, Burr	14	3	1	Deciduous Hardwood	Yes		X
1295	Pine, Red	14	4	1	Coniferous	Yes		X
1296	Pine, Red	14	3	1	Coniferous	Yes		X
1297	Oak, Burr	13	2	2	Deciduous Hardwood	Yes		X
1298	Oak, White	14.5	3	1	Deciduous Hardwood	Yes		X
1299	Oak, Burr	13	2	1	Deciduous Hardwood	Yes		X
1300	Oak, Burr	16	0	1	Deciduous Hardwood	Yes	Dead	
1301	Oak, Burr	15	3	1	Deciduous Hardwood	Yes		X
1302	Maple, Red	8	N/A	0	Deciduous Hardwood	Yes	X	
1303	Locust, Honey	28	4	1	Common Tree	Yes	X	
1304	Maple, Silver	40	3	1	Common Tree	Yes	X	
1305	Ash, Green	30	4	1	Common Tree	Yes		X
1306	Spruce, White	28	4	1	Coniferous	Yes		X
1307	Maple, Silver	23	2	1	Common Tree	Yes		X
1308	Maple, Silver	54	1	5	Common Tree	Yes	Bad Quality	
1309	Spruce, White	40	4	1	Coniferous	Yes		X
1310	Spruce, White	28	4	1	Coniferous	Yes		X
1714	Crabapple	6	4	4	Common Tree	No	Not Significant	
1715	Crabapple	7	4	4	Common Tree	No	Not Significant	
1716	Spruce	10	4	1	Coniferous	Yes	X	
1717	Spruce	8	4	1	Coniferous	Yes	X	
1718	Spruce	10	4	1	Coniferous	Yes	X	
1719	Spruce	8	4	2	Coniferous	Yes	X	
1720	Spruce	10	4	1	Coniferous	Yes	X	
1721	Spruce	11	4	1	Coniferous	Yes	X	
1722	Maple	10	4	1	Common Tree	No	Not Significant	
1723	Spruce	10	3	3	Coniferous	Yes	X	
1724	Spruce	12	4	1	Coniferous	Yes	X	
1725	Spruce	18	4	1	Coniferous	Yes	X	
1726	Crabapple	9	4	4	Common Tree	No	Not Significant	
1727	Crabapple	7	4	3	Common Tree	No	Not Significant	
1728	Crabapple	8	4	6	Common Tree	No	Not Significant	
1729	Maple	13	4	1	Common Tree	Yes	X	
1730	Spruce	10	4	1	Coniferous	Yes	X	
1731	Spruce	10	4	1	Coniferous	Yes	X	
1732	Spruce	10	4	1	Coniferous	Yes	X	
1733	Spruce	8	4	1	Coniferous	Yes	X	
1734	Birch, river	10	4	3	Deciduous Hardwood	Yes	X	
1735	Spruce	8	4	1	Coniferous	Yes	X	
1736	Spruce	10	4	1	Coniferous	Yes	X	
1737	Spruce	12	4	1	Coniferous	Yes	X	
1738	Maple	11	4	1	Common Tree	No	Not Significant	
1739	Spruce	9	4	1	Coniferous	Yes	X	
1740	Spruce	10	4	1	Coniferous	Yes	X	
1741	Spruce	12	4	1	Coniferous	Yes	X	
1742	Spruce	6	4	1	Coniferous	No	Not Significant	
1743	Spruce	15	4	1	Coniferous	Yes	X	
1744	Birch, river	10	4	1	Deciduous Hardwood	Yes	X	
1745	Pine	18	4	1	Coniferous	Yes	X	
1746	Spruce	17	4	11	Coniferous	Yes	X	
1747	Ash	18	4	1	Common Tree	Yes	X	
1748	Ash	18	4	1	Common Tree	Yes	X	
1749	Linden, Littleleaf	14	4	2	Common Tree	Yes	X	
1750	Pine	11	4	1	Coniferous	Yes	X	
1751	Pine	18	4	1	Coniferous	Yes	X	
1752	Pine	14	4	1	Coniferous	Yes	X	
1753	Pine	14	4	1	Coniferous	Yes	X	
1754	Pine	11	4	1	Coniferous	Yes	X	
1755	Pine	13	4	1	Coniferous	Yes	X	
1756	Pine	14	4	1	Coniferous	Yes	X	
1757	Spruce	13	4	1	Coniferous	Yes	X	
1758	Spruce	18	4	1	Coniferous	Yes	X	
1759	Spruce	15	4	1	Coniferous	Yes		X
1760	Spruce	18	4	1	Coniferous	Yes		X
1761	Spruce	15	4	1	Coniferous	Yes	X	
1762	Spruce	11	4	1	Coniferous	Yes	X	
1763	Spruce	14	4	1	Coniferous	Yes	X	
1764	Spruce	11	3	1	Coniferous	Yes	X	
1765	Spruce	13	4	1	Coniferous	Yes	X	
1766	Spruce	9	4	1	Coniferous	Yes	X	
1963	Maple	8	4	1	Common Tree	No	Not Significant	
1964	Maple	10	4	1	Common Tree	No	Not Significant	
1965	Pine	14	4	1	Coniferous	Yes	X	
1966	Pine	12	4	1	Coniferous	Yes	X	
1967	Pine	11	4	1	Coniferous	Yes	X	
1968	Spruce	10	4	1	Coniferous	Yes	X	
1969	Spruce	10	3	1	Coniferous	Yes	X	
1970	Spruce	11	4	1	Coniferous	Yes	X	
1971	Maple	8	4	1	Common Tree	No	Not Significant	
1972	Maple	10	4	1	Common Tree	No	Not Significant	
1973	Maple	10	4	1	Common Tree	No	Not Significant	
1974	Maple	10	4	1	Common Tree	No	Not Significant	
1975	Maple	19	4	1	Common Tree	Yes	X	
1976	Spruce	24	4	1	Coniferous	Yes	X	
1977	Spruce	18	4	1	Coniferous	Yes	X	
1978	Spruce	18	4	1	Coniferous	Yes	X	
1979	Spruce	9	4	2	Coniferous	Yes	X	
1980	Crabapple	8	4	4	Common Tree	No	Not Significant	
1981	Crabapple	9	4	4	Common Tree	No	Not Significant	
1982	Maple, Amur	12	4	4	Deciduous Hardwood	Yes	X	
1983	Spruce	13	4	1	Coniferous	Yes	X	
1984	Pine	12	4	1	Coniferous	Yes	X	
1985	Spruce	13	4	1	Coniferous	Yes	X	
1986	Pine	12	4	1	Coniferous	Yes	X	
1987	Spruce, white	23.0	4	1	Coniferous	Yes	X	
1988	Spruce, blue	17.5	4	1	Coniferous	Yes	X	
1989	Spruce	16	4	1	Coniferous	Yes	X	
1990	Spruce	14	4	1	Coniferous	Yes	X	
1991	Spruce	17	4	1	Coniferous	Yes	X	
1992	Spruce	13	4	1	Coniferous	Yes	X	
1993	Spruce	15	4	1	Coniferous	Yes	X	
1994	Maple	13	4	1	Common Tree	Yes	X	
1995	Crabapple	8	4	4	Common Tree	No	Not Significant	
1996	Crabapple	6	4	4	Common Tree	No	Not Significant	
1997	Crabapple	6	4	4	Common Tree	No	Not Significant	
1998	Crabapple	8	4	4	Common Tree	No	Not Significant	
1999	Crabapple	9	4	4	Common Tree	No	Not Significant	
2000	Crabapple	8	4	4	Common Tree	No	Not Significant	
2536	Pine, white	10.0	4	1	Coniferous	Yes	X	
2547	Spruce, white	12.0	4	1	Coniferous	Yes		X
2548	Pine, white	18.0	4	1	Coniferous	Yes		X
2549	Pine, white	14.0	4	1	Coniferous	Yes	X	
2550	Spruce, white	14.0	4	1	Coniferous	Yes		X
2551	Spruce, blue	14.0	4	1	Coniferous	Yes		X
2552	Spruce, white	10.0	4	1	Coniferous	Yes		X
2553	Spruce, blue	12.0	4	1	Coniferous	Yes		X
2554	Spruce, white	14.0	4	1	Coniferous	Yes		X
2555	Spruce, white	12.0	4	1	Coniferous	Yes		X
2558	Spruce, blue	9.0	4	1	Coniferous	Yes		X
2559	Pine, white	10.0	4	1	Coniferous	Yes		X
2560	Aspen, Quaking	12.0	4	1	Common Tree	Yes		X
2561	Cottonwood	26.0	4	1	Common Tree	Yes		X
2563	Pine, white	10.0	4	1	Coniferous	Yes	X	
2564	Pine, white	16.0	4	1	Coniferous	Yes	X	
2567	Pine, white	20.0	4	2	Coniferous	Yes		X
2568	Pine, white	17.0	4	1	Coniferous	Yes		X
2570	Pine, white	28.0	4	2	Coniferous	Yes		X
2571	Spruce, white	16.0	4	1	Coniferous	Yes		X
2578	Spruce, white	12.0	4	1	Coniferous	Yes		X
2579	Spruce, white	12.0	4	1	Coniferous	Yes		X
2701	Cherry, black	19.0	4	1	Deciduous Hardwood	Yes		X
2702	Cottonwood	26.0	4	1	Common Tree	Yes		X
2703	Cottonwood	16.0	4	1	Common Tree	Yes		X
2704	Elm, Siberian	14.0	4	1	Common Tree	Yes		X
2705	Elm, Siberian	14.0	3	1	Common Tree	Yes		X
2706	Elm, Siberian	22.0	4	1	Common Tree	Yes		X
2707	Elm, Siberian	13.0	4	1	Common Tree	Yes		X
2708	Cottonwood	12.5	4	1	Common Tree	Yes		X
2709	Elm, Siberian	12.5	3	1	Common Tree	Yes		X
2710	Elm, Siberian	17.0	3	1	Common Tree	Yes		X
2711	Elm, Siberian	17.0	3	1	Common Tree	Yes		X
2712	Cottonwood	14.5	4	1	Common Tree	Yes		X
2713	Cottonwood	29.0	4	1	Common Tree	Yes		X
2714	Cottonwood	14.5	4	1	Common Tree	Yes		X
2715	Elm, Siberian	22.0	3	1	Coniferous	Yes		X
2716	Pine, Austrian	15.5	3	1	Coniferous	Yes		X
2717	Pine, Austrian	15.5	3	1	Coniferous	Yes		X
2718	Pine, Austrian	15.5	3	1	Coniferous	Yes		X
2719	Pine, Austrian	15.5	3	1	Coniferous	Yes		X
2720	Pine, Austrian	14.0	3	1	Coniferous	Yes		X
2721	Pine, Austrian	13.5	4	1	Coniferous	Yes		X
2722	Pine, Austrian	19.0	3	1	Coniferous	Yes		X
2723	Pine, Austrian	17.0	3	1	Coniferous	Yes		X
2724	Elm, Siberian	21.0	3	1	Common Tree	Yes		X
2725	Cottonwood	16.0	4	1	Common Tree	Yes		X
2726	Cottonwood	19.0	4	1	Common Tree	Yes		X
2727	Cottonwood	15.5	4	1	Common Tree	Yes		X
2728	Cottonwood	15.5	4	1	Common Tree	Yes		X
2729	Cottonwood	15.5	4	1	Common Tree	Yes		X
2730	Cottonwood	14.5	4	1	Common Tree	Yes		X
2731	Cottonwood	18.5	4	1	Common Tree	Yes		X
2732	Cottonwood	16.0	4	1	Common Tree	Yes		X
2733	Cottonwood	13.0	4	1	Common Tree	Yes		X
2734	Elm, American	13.0	4	1	Common Tree	Yes		X
2735	Pine, Austrian	15.0	3	1	Coniferous	Yes		X
2736	Pine, Austrian	18.0	3	1	Coniferous	Yes		X
2737	Pine, Austrian	14.5	3	1	Coniferous	Yes		X
2738	Pine, Austrian	13.0	4	1	Coniferous	Yes		X
2739	Pine, Austrian	14.0	4	1	Coniferous	Yes		X
2740	Boxelder	36.5	3	6	Common Tree	Yes		X
2741	Pine, Austrian	22.0	3	1	Coniferous	Yes		X
2742	Pine, Austrian	16.0	3	1	Coniferous	Yes		X
2743	Basswood	12.0	4	1	Common Tree	Yes		X
2744	Ash, green	15.5	4	1	Common Tree	Yes		X
2745	Ash, green	12.5	4	1	Common Tree	Yes		X
2746	Spruce, blue	16.0	4	1	Coniferous	Yes		X
2747	Spruce, blue	12.0	4	1	Coniferous	Yes		X
2748	Spruce, blue	17.0	4	1	Coniferous	Yes		X
2749	Spruce, blue	12.0	4	1	Coniferous	Yes		X
2750	Spruce, blue	14.5	4	1	Coniferous	Yes		X
2751	Spruce, blue	12.0	3	1	Coniferous	Yes		X
2752	Cottonwood	27.5	4	1	Common Tree	Yes		X
2753	Pine, white	8.5	4	1	Coniferous	Yes		X
2754	Pine, white	10.0	4	1	Coniferous	Yes		X
5169	Cottonwood	30.0	3	1	Common Tree	Yes	X	
5170	Cottonwood	20.0	4	1	Common Tree	Yes	X	
5171	Cottonwood	30.0	4	1	Common Tree	Yes	X	
5172	Cottonwood	18.0	4	1	Common Tree	Yes	X	
5173	Cottonwood	14.0	4	1	Common Tree	Yes	X	
5174	Cottonwood	14.0	4	1	Common Tree	Yes	X	
5175	Cottonwood	13.0	4	1	Common Tree	Yes	X	
5176	Cottonwood	12.0	4	1	Common Tree	Yes	X	
5177	Cottonwood	13.0	4	1	Common Tree	Yes	X	
5178	Cottonwood	16.0	4	1	Common Tree	Yes	X	
5179	Cottonwood	24.0	4	1	Common Tree	Yes	X	
5180	Cottonwood	16.0	4	1	Common Tree	Yes	X	
5181	Cottonwood	12.0	3	1	Common Tree	Yes	X	
5182	Cottonwood	12.0	4	1	Common Tree	Yes	X	
5184	Cottonwood	14.0	4	1	Common Tree	Yes	X	
5184	Cottonwood	24.0	4	1	Common Tree	Yes	X	
5185	Cottonwood	24.0	4	1	Common Tree	Yes	X	
5186	Cottonwood	22.0	4	1	Common Tree	Yes	X	
5187	Boxelder	16.0	3	1	Common Tree	Yes	X	
5188	Boxelder	16.0	3	1	Common Tree	Yes	X	
5189	Ash, green	18.0	3	1	Common Tree	Yes	X	
5190	Cottonwood	30.0	4	1	Common Tree	Yes	X	
5191	Willow, black	38.0	3	1	Common Tree	Yes	X	
5192	Willow, black	38.0	3	1	Common Tree	Yes	X	
5193	Willow, black	32.0	3	1	Common Tree	Yes	X	
5194	Birch, river	8.0	3	1	Deciduous Hardwood	Yes	X	
5195	Spruce, white	16.0	4	1	Coniferous	Yes		X
5196	Pine, Scots	8.0	4	1	Coniferous	Yes		X
5197	Cottonwood	13.0	4	1	Common Tree	Yes		X
5198	Cottonwood	16.0	4	1	Common Tree	Yes		X
5199	Pine, Scots	8.0	4	1	Coniferous	Yes		X
5200	Elm, Siberian	14.0	3	1	Common Tree	Yes		X
5201	Cottonwood	14.0	3	2	Common Tree	Yes		X
5202	Cottonwood	13.0	4	1	Common Tree	Yes		X
5203	Cottonwood	16.0	4	1	Common Tree	Yes		X
5204	Birch, river	7.0	3	3	Deciduous Hardwood	Yes		X
5205	Birch, river	8.0	3	3	Deciduous Hardwood	Yes		X
5206	Cottonwood	14.0	4	1	Common Tree	Yes		X
5207	Birch, river	9.0	3	3	Deciduous Hardwood	Yes		X
5208	Birch, river	8.0	3	3	Deciduous Hardwood	Yes		X
5210	Birch, river	11.0	3	3	Deciduous Hardwood	Yes		X
5205A	Birch, river	7.0	3	3	Deciduous Hardwood	Yes		X
5206A	Cottonwood	15.0	4	1	Common Tree	Yes		X
5207A	Birch, river	7.0	3	3	Deciduous Hardwood	Yes		X
10001	Maple, red	12.0	4	1	Deciduous Hardwood	Yes	X	
10002	Spruce, white	9.5	4	1	Coniferous	Yes	X	
10003	Spruce, white	8.0	3	1	Coniferous	Yes	X	
10004	Spruce, white	9.0	3	1	Coniferous	Yes	X	
10005	Cottonwood	31.0	4	1	Common Tree	Yes	X	
10006	Cottonwood	29.0	4	1	Common Tree	Yes	X	
10007	Pine, Austrian	15.5	4	1	Coniferous	Yes	X	
10008	Pine, Austrian	12.5	4	1	Coniferous	Yes	X	
10009	Pine, Austrian	13.0	3	1	Coniferous	Yes	X	
10010	Pine, Austrian	13.0	4	1	Coniferous	Yes	X	
10011	Pine, Austrian	13.0	4	1	Coniferous	Yes	X	
10012	Pine, Austrian	13.0	4	1	Coniferous	Yes	X	
10013	Pine, Austrian	15.5	3	1	Coniferous	Yes	X	
10014	Pine, Austrian	16.0	3	1	Coniferous	Yes	X	
10015	Pine, Austrian	13.5	4	1	Coniferous	Yes	X	
10016	Pine, white	14.0	4	1	Coniferous	Yes	X	
10017	Pine, white	11.0	4	1	Coniferous	Yes	X	
10018	Cottonwood	13.5	4	1	Common Tree	Yes	X	
10019	Cottonwood	17.5	4	1	Common Tree	Yes	X	
10020	Cottonwood	15.5	4	1	Common Tree	Yes	X	
10021	Cottonwood	15.5	4	1	Common Tree	Yes	X	
10022	Spruce, white	8.0	3	1	Coniferous	Yes	X	
10023	Spruce, blue	9.0	3	1	Coniferous	Yes	X	
10024	Spruce, blue	9.0	4	1	Coniferous	Yes	X	
10025	Spruce, blue	8.0	4	1	Coniferous	Yes	X	
10026	Spruce, blue	10.0	4	1	Coniferous	Yes	X	
10027	Spruce, blue	11.0	4	1	Coniferous	Yes	X	
10028	Spruce, blue	8.0	4	1	Coniferous	Yes	X	
10029	Spruce, blue	8.0	3	1	Coniferous	Yes	X	
10030	Spruce, blue	8.5	3	1	Coniferous	Yes	X	
10031	Spruce, blue	9.0	4	1	Coniferous	Yes		X
10032	Spruce, blue	9.5	4	1	Coniferous	Yes	X	
10033	Spruce, blue	9.0	3	1	Coniferous	Yes	X	
10034	Pine, white	16.0	3	1	Coniferous	Yes	X	
10035	Spruce, blue	12.0	4	1	Coniferous	Yes	X	
10036	Spruce, blue	9.0	4	1	Coniferous	Yes	X	
10037	Spruce, blue	10.0	4	1	Coniferous	Yes		X
10038	Spruce, white	9.0	4	1	Coniferous	Yes		X
10039	Pine, white	13.0	4	1	Coniferous	Yes	X	
10040	Pine, white	15.0	4	1	Coniferous	Yes	X	
10041	Pine, white	12.5	4	1	Coniferous	Yes	X	
10042	Pine, white	15.0	4	1	Coniferous	Yes	X	
10043	Pine, white	15.5	4	1	Coniferous	Yes	X	
10044	Pine, white	10.5	3	1	Coniferous	Yes	X	
10045	Pine, white	14.5	4	1	Coniferous	Yes	X	
10046	Pine, white	8.5	4	1	Coniferous	Yes	X	
10240	Pine, Scots	18.0	3	1	Coniferous	Yes	X	
10241	Pine, Scots	18.0	4	1	Coniferous	Yes	X	
10242	Pine, Scots	18.5	4	1	Coniferous	Yes	X	
10243	Pine, Scots	13.5	4	1	Coniferous	Yes	X	
10244	Pine, Scots	13.0	4	1	Coniferous	Yes	X	
10245	Pine, Scots	13.0	4	1	Coniferous	Yes	X	
10246	Pine, Scots	16.5	4	1	Coniferous	Yes	X	
10247	Pine, Scots	14.5	4	1	Coniferous	Yes	X	
10248	Pine, Scots	18.5	4	1	Coniferous	Yes	X	
10249	Pine, Scots	21.0	4	1	Coniferous	Yes	X	
10250	Pine, Scots	25.0	4	1	Coniferous	Yes	X	
10251	Pine, Scots	14.5	4	1	Coniferous	Yes	X	
10252	Pine, Scots	12.0	4	1	Coniferous	Yes	X	
10253	Spruce, white	8.0	3	1	Coniferous	Yes	X	
10254	Spruce, blue	11.0	3	1	Coniferous	Yes	X	
10255	Spruce, blue	14.0	4	1	Coniferous	Yes	X	
10256	Spruce, blue	11.0	4	1	Coniferous	Yes	X	
10257	Spruce, blue	15.0	3	1	Coniferous	Yes	X	
10258	Pine, white	12.0	4	1	Coniferous	Yes	X	
10259	Pine, white	16.0	4	1	Coniferous	Yes	X	
10260	Pine, white	18.0	4	1	Coniferous	Yes	X	
10261	Pine, white	14.0	4	1	Coniferous	Yes	X	
10262	Spruce, white	10.0	4	1	Coniferous	Yes	X	
10263	Spruce, white	12.0	4	1	Coniferous	Yes	X	
10264	Spruce, white	11.0	4	1	Coniferous	Yes	X	
10265	Birch, river	20.0	4	2	Deciduous Hardwood	Yes	X	
10266	Birch, river	23.5	4	3	Deciduous Hardwood	Yes	X	
10267	Birch, river	7.5	4	1	Deciduous Hardwood	Yes	X	
10268	Birch, river	26.0	4	3	Deciduous Hardwood	Yes	X	
10269	Birch, river	19.0	4	3	Deciduous Hardwood	Yes	X	
10270	Birch, river	24.0	4	3	Deciduous Hardwood	Yes	X	
10271	Birch, river	9.0	4	2	Deciduous Hardwood	Yes	X	
10272	Birch, river	13.0	4	3	Deciduous Hardwood	Yes	X	
10273	Birch, river	15.5	4	3	Deciduous Hardwood	Yes	X	
10274	Birch, river	19.0	4	3	Deciduous Hardwood	Yes	X	
10275	Birch, river	8.0	4	1	Deciduous Hardwood	Yes	X	
10276	Birch, river	8.0	4	1	Deciduous Hardwood	Yes	X	
10277	Birch, river	21.0	4	3	Deciduous Hardwood	Yes	X	
10278	Birch, river	25.0	4	3	Deciduous Hardwood	Yes	X	
10279	Birch, river	28.0	4	3	Deciduous Hardwood	Yes	X	
10280	Birch, river	25.5	4	3	Deciduous Hardwood	Yes	X	
10281	Pine, Scots	14.0	4	1	Coniferous	Yes	X	
10282	Cottonwood	17.0	4	1	Common Tree	Yes	X	
10283	Tamarack	10.5	4	1	Coniferous	Yes	X	
10284	Tamarack	10.5	4	1	Coniferous	Yes	X	
10285	Tamarack	9.5	4	1	Coniferous	Yes	X	
10286	Oak, pin	13.0	4	1	Deciduous Hardwood	Yes	X	
10287	Oak, pin	15.0	4	1	Deciduous Hardwood	Yes	X	
10288	Oak, pin	10.5	4	1	Deciduous Hardwood	Yes	X	
10289	Oak, pin	10.5	4	1	Deciduous Hardwood	Yes	X	
10290	Oak, pin	9.0	4	1	Deciduous Hardwood	Yes	X	
10291	Oak, pin	11.5	4	1	Deciduous Hardwood	Yes	X	
10292	Oak, pin	9.0	4	1	Deciduous Hardwood	Yes	X	
10293	Pine, white	10.0	4	1	Coniferous	Yes	X	
10294	Pine, white	12.0	4	1	Coniferous	Yes	X	
10295	Pine, white	8.5	4	1	Coniferous	Yes	X	
10296	Pine, white	23.0	3	2	Coniferous	Yes	X	
10297	Pine, white	14.0	4	1	Coniferous	Yes	X	
10298	Pine, white	13.5	4	1	Coniferous	Yes	X	
10299	Pine, white	16.0	4	1	Coniferous	Yes	X	
10300	Pine, white	17.0	4	1	Coniferous	Yes	X	
10301	Pine, white	17.0	4	1	Coniferous	Yes	X	
10302	Pine, white	15.5	4	1	Coniferous	Yes	X	
10303	Pine, white	14.0	4	1	Coniferous	Yes	X	
10304	Pine, white	12.5	4	1	Coniferous	Yes	X	
10305	Pine, white	12.0	4	1	Coniferous	Yes	X	
10306	Pine, white	15.0	3	1	Coniferous	Yes	X	
10307	Pine, white	13.5	4	1	Coniferous	Yes	X	
10308	Pine, white	13.0	3	1	Coniferous	Yes	X	
10309	Oak, red	19.0	4	1	Deciduous Hardwood	Yes	X	
10310	Pine, white	14.0	4	1	Coniferous	Yes	X	
10311	Pine, white	15.0	3	1	Coniferous	Yes	X	
10312	Pine, white	17.0	4	1	Coniferous	Yes	X	
10313	Pine, Scots	8.5	4	1	Coniferous	Yes	X	
10314	Pine, white	13.0	4	1	Coniferous	Yes	X	

Carlson McCain
• environmental
• engineering
• surveying

3890 Pheasant Ridge Drive NE, Suite 100
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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name: Brian J. Krystofiak, P.E. Date: 9/21/16 License #: 25063

Drawn: ADB Designed: BJK Date: 9/21/16

Revisions:
1. 02/10/17 Revise Layout per Owner
2. 04/07/17 Per City and Watershed Comments

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

TREE PRESERVATION PLAN

T20 of 25

[Save Date: 04/05/17] I:\jobs\6021 - 6040\6036 - tartan park\cad\

PHASE I INDIVIDUAL SHOTS CONT'D

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10315	Pine, Scots	9.5	4	1	Coniferous	Yes	X	
10316	Pine, white	18.0	4	1	Coniferous	Yes	X	
10317	Pine, white	19.0	4	2	Coniferous	Yes	X	
10318	Pine, white	12.0	4	1	Coniferous	Yes	X	
10319	Pine, Scots	13.0	3	1	Coniferous	Yes	X	
10320	Pine, white	13.0	4	1	Coniferous	Yes	X	
10321	Pine, white	19.0	3	1	Coniferous	Yes	X	
10322	Pine, Scots	12.0	4	1	Coniferous	Yes	X	
10323	Pine, white	17.0	4	1	Coniferous	Yes	X	
10324	Pine, white	13.0	4	1	Coniferous	Yes	X	
10325	Pine, white	17.0	4	1	Coniferous	Yes	X	
10326	Pine, white	15.0	4	1	Coniferous	Yes	X	
10327	Pine, white	21.0	3	2	Coniferous	Yes	X	
10328	Oak, pin	13.0	4	1	Deciduous Hardwood	Yes	X	
10329	Oak, pin	10.5	4	1	Deciduous Hardwood	Yes	X	
10330	Pine, Scots	16.0	4	1	Coniferous	Yes	X	
10331	Pine, Scots	13.5	4	1	Coniferous	Yes	X	
10332	Pine, Scots	13.5	4	1	Coniferous	Yes	X	
10333	Oak, pin	16.0	4	1	Deciduous Hardwood	Yes	X	
10334	Oak, pin	15.5	4	1	Deciduous Hardwood	Yes	X	
10335	Oak, pin	17.5	4	1	Deciduous Hardwood	Yes	X	
10336	Tamarack	9.0	4	1	Coniferous	Yes	X	
10337	Oak, bur	30.0	4	1	Deciduous Hardwood	Yes	X	
10338	Spruce, blue	9.5	4	1	Coniferous	Yes	X	
10339	Spruce, blue	13.0	4	1	Coniferous	Yes	X	
10340	Spruce, blue	12.5	4	1	Coniferous	Yes	X	
10341	Spruce, blue	22.5	4	1	Coniferous	Yes	X	
10342	Spruce, white	11.0	3	1	Coniferous	Yes	X	
10343	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10344	Honeylocust	12.0	4	1	Common Tree	Yes	X	
10345	Maple, red	12.0	4	1	Deciduous Hardwood	Yes	X	
10346	Maple, red	21.0	4	1	Deciduous Hardwood	Yes	X	
10668	Maple, silver	45.5	4	1	Common Tree	Yes	X	
10669	Maple, silver	20.0	4	1	Common Tree	Yes	X	
10670	Maple, silver	26.5	4	1	Common Tree	Yes	X	
10671	Maple, silver	35.0	4	1	Common Tree	Yes	X	
10672	Maple, silver	39.5	4	1	Common Tree	Yes	X	
10673	Maple, silver	38.0	4	1	Common Tree	Yes	X	
10674	Maple, silver	44.0	4	1	Common Tree	Yes	X	
10675	Basswood	28.0	4	1	Common Tree	Yes	X	
10676	Basswood	27.0	4	1	Common Tree	Yes	X	
10677	Basswood	33.0	4	1	Common Tree	Yes	X	
10678	Maple, sugar	26.0	4	1	Deciduous Hardwood	Yes	X	
10679	Spruce, white	10.0	4	1	Coniferous	Yes	X	
10680	Spruce, white	22.0	4	1	Coniferous	Yes	X	
10681	Spruce, white	8.0	3	1	Coniferous	Yes	X	
10682	Spruce, white	10.0	4	1	Coniferous	Yes	X	
10683	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10684	Spruce, blue	24.0	3	1	Coniferous	Yes	X	
10685	Spruce, blue	21.0	4	1	Coniferous	Yes	X	
10686	Douglasfir	24.0	4	1	Coniferous	Yes	X	
10687	Spruce, blue	8.0	4	1	Coniferous	Yes	X	
10688	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10689	Spruce, blue	20.0	3	1	Coniferous	Yes	X	
10690	Spruce, blue	26.0	3	1	Coniferous	Yes	X	
10691	Spruce, white	25.0	4	1	Coniferous	Yes	X	
10692	Spruce, white	19.0	4	1	Coniferous	Yes	X	
10693	Pine, red	14.5	4	1	Coniferous	Yes	X	
10694	Pine, Scots	29.0	4	1	Coniferous	Yes	X	
10695	Pine, red	15.0	4	1	Coniferous	Yes	X	
10696	Pine, red	15.5	4	1	Coniferous	Yes	X	
10697	Pine, red	18.0	4	1	Coniferous	Yes	X	
10698	Pine, Scots	21.0	3	1	Coniferous	Yes	X	
10699	Pine, Scots	26.0	3	1	Coniferous	Yes	X	
10700	Pine, Scots	21.0	3	1	Coniferous	Yes	X	
10701	Pine, Scots	27.0	3	1	Coniferous	Yes	X	
10702	Pine, Austrian	25.0	3	1	Coniferous	Yes	X	
10703	Pine, red	16.5	4	1	Coniferous	Yes	X	
10704	Pine, red	16.0	4	1	Coniferous	Yes	X	
10705	Pine, red	18.0	4	1	Coniferous	Yes	X	
10706	Crabapple	12.0	4	1	Common Tree	Yes	X	
10707	Crabapple	9.5	4	1	Common Tree	No	Not Significant	
10708	Spruce, white	12.0	4	1	Coniferous	Yes	X	
10709	Spruce, white	11.0	4	1	Coniferous	Yes	X	
10710	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10711	Spruce, white	12.0	3	1	Coniferous	Yes	X	
10712	Spruce, white	12.5	4	1	Coniferous	Yes	X	
10713	Spruce, white	14.0	4	1	Coniferous	Yes	X	
10714	Spruce, white	11.0	4	1	Coniferous	Yes	X	
10715	Spruce, white	12.0	4	1	Coniferous	Yes	X	
10716	Spruce, white	13.5	4	1	Coniferous	Yes	X	
10717	Birch, river	28.0	4	3	Deciduous Hardwood	Yes	X	
10718	Birch, river	27.0	4	3	Deciduous Hardwood	Yes	X	
10719	Birch, river	27.0	4	4	Deciduous Hardwood	Yes	X	
10720	Birch, river	28.0	4	4	Deciduous Hardwood	Yes	X	
10721	Birch, river	28.0	4	4	Deciduous Hardwood	Yes	X	
10722	Birch, river	28.0	4	4	Deciduous Hardwood	Yes	X	
10723	Crabapple	8.0	3	1	Common Tree	No	Not Significant	
10724	Crabapple	8.5	4	1	Common Tree	No	Not Significant	
10725	Crabapple	6.0	3	1	Common Tree	No	Not Significant	
10726	Crabapple	6.5	4	1	Common Tree	No	Not Significant	
10727	Crabapple	8.5	4	1	Common Tree	No	Not Significant	
10728	Duplicate see Tree No. 1988							
10729	Birch, river	10.0	4	4	Deciduous Hardwood	Yes	X	
10730	Birch, river	10.0	4	4	Deciduous Hardwood	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10731	Birch, river	12.0	4	4	Deciduous Hardwood	Yes	X	
10732	Crabapple	8.0	4	1	Common Tree	No	Not Significant	
10733	Crabapple	7.0	4	1	Common Tree	No	Not Significant	
10734	Crabapple	12.5	4	1	Common Tree	Yes	X	
10735	Pine, Scots	12.0	4	1	Coniferous	Yes	X	
10736	Spruce, blue	11.0	3	1	Coniferous	Yes		X
10737	Honeylocust	10.5	4	1	Common Tree	No	Not Significant	
10738	Honeylocust	13.0	4	1	Common Tree	Yes	X	
10739	Honeylocust	14.5	4	1	Common Tree	Yes	X	
10740	Honeylocust	9.0	4	1	Common Tree	No	Not Significant	
10741	Honeylocust	8.0	4	1	Common Tree	No	Not Significant	
10742	Honeylocust	10.5	4	1	Common Tree	No	Not Significant	
10743	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10744	Honeylocust	8.5	4	1	Common Tree	No	Not Significant	
10745	Honeylocust	8.5	4	1	Common Tree	No	Not Significant	
10746	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10747	Honeylocust	7.5	4	1	Common Tree	No	Not Significant	
10748	Honeylocust	6.0	4	1	Common Tree	No	Not Significant	
10749	Honeylocust	12.0	4	1	Common Tree	Yes		X
10750	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10751	Spruce, white	11.0	4	1	Coniferous	Yes	X	
10752	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10753	Honeylocust	9.5	4	1	Common Tree	No	Not Significant	
10754	Honeylocust	7.5	4	1	Common Tree	No	Not Significant	
10755	Honeylocust	7.5	4	1	Common Tree	No	Not Significant	
10756	Honeylocust	8.5	4	1	Common Tree	No	Not Significant	
10757	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10758	Honeylocust	7.0	4	1	Common Tree	No	Not Significant	
10759	Honeylocust	10.5	4	1	Common Tree	No	Not Significant	
10760	Honeylocust	10.5	4	1	Common Tree	No	Not Significant	
10761	Honeylocust	15.0	4	1	Common Tree	Yes	X	
10762	Honeylocust	15.5	4	1	Common Tree	Yes	X	
10763	Honeylocust	10.0	4	1	Common Tree	No	Not Significant	
10764	Honeylocust	11.0	4	1	Common Tree	No	Not Significant	
10765	Crabapple	11.0	4	1	Common Tree	No	Not Significant	
10766	Spruce, white	13.5	4	1	Coniferous	Yes		X
10767	Crabapple	6.0	4	1	Common Tree	No	Not Significant	
10768	Spruce, blue	16.0	4	1	Coniferous	Yes		X
10769	Honeylocust	9.0	4	1	Common Tree	No	Not Significant	
10770	Honeylocust	7.5	4	1	Common Tree	No	Not Significant	
10771	Honeylocust	9.5	4	1	Common Tree	No	Not Significant	
10772	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10773	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10774	Honeylocust	7.0	4	1	Common Tree	No	Not Significant	
10775	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10776	Honeylocust	6.5	4	1	Common Tree	No	Not Significant	
10777	Honeylocust	8.0	4	1	Common Tree	No	Not Significant	
10778	Honeylocust	6.0	4	1	Common Tree	No	Not Significant	
10779	Honeylocust	6.0	4	1	Common Tree	No	Not Significant	
10780	Honeylocust	8.0	4	1	Common Tree	No	Not Significant	
10781	Pine, Scots	12.5	4	1	Coniferous	Yes	X	
10782	Pine, Scots	21.0	4	1	Coniferous	Yes	X	
10783	Honeylocust	12.5	4	1	Common Tree	Yes		X
10784	Honeylocust	10.0	4	1	Common Tree	No	Not Significant	
10785	Honeylocust	7.0	4	1	Common Tree	No	Not Significant	
10786	Honeylocust	11.0	4	1	Common Tree	No	Not Significant	
10787	Honeylocust	6.0	4	1	Common Tree	No	Not Significant	
10788	Honeylocust	8.5	4	1	Common Tree	No	Not Significant	
10789	Honeylocust	7.0	4	1	Common Tree	No	Not Significant	
10790	Honeylocust	6.0	4	1	Common Tree	No	Not Significant	
10791	Honeylocust	7.5	4	1	Common Tree	No	Not Significant	
10792	Honeylocust	7.5	4	1	Common Tree	No	Not Significant	
10793	Honeylocust	7.0	4	1	Common Tree	No	Not Significant	
10794	Honeylocust	10.5	4	1	Common Tree	No	Not Significant	
10795	Spruce, blue	15.0	3	1	Coniferous	Yes		X
10796	Crabapple	7.5	4	1	Common Tree	No	Not Significant	
10797	Crabapple	7.5	4	1	Common Tree	No	Not Significant	
10798	Birch, paper	16.5	4	1	Deciduous Hardwood	Yes	X	
10799	Birch, paper	13.5	4	1	Deciduous Hardwood	Yes	X	
10800	Birch, paper	10.5	4	1	Deciduous Hardwood	Yes	X	
10801	Honeylocust	17.0	4	1	Common Tree	Yes	X	
10802	Honeylocust	20.5	4	1	Common Tree	Yes	X	
10803	Honeylocust	12.5	3	1	Common Tree	Yes		X
10804	Maple, sugar	10.5	4	1	Deciduous Hardwood	Yes	X	
10805	Duplicate see Tree No. 1987							
10806	Willow	46.0	4	4	Common Tree	Yes	X	
10807	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10808	Spruce, blue	16.5	4	1	Coniferous	Yes	X	
10809	Spruce, blue	15.5	4	1	Coniferous	Yes	X	
10810	Spruce, blue	14.5	4	1	Coniferous	Yes	X	
10811	Spruce, blue	16.0	4	1	Coniferous	Yes	X	
10812	Spruce, blue	19.0	4	1	Coniferous	Yes	X	
10813	Maple, silver	34.5	4	1	Common Tree	Yes	X	
10814	Spruce, Norway	13.0	4	1	Coniferous	Yes		X
10815	Spruce, Norway	12.0	4	1	Coniferous	Yes		X
10816	Spruce, Norway	13.0	3	1	Coniferous	Yes		X
10817	Douglasfir	18.0	4	1	Coniferous	Yes		X
10818	Maple, silver	39.5	4	1	Common Tree	Yes	X	
10819	Spruce, blue	14.5	4	1	Coniferous	Yes	X	
10820	Spruce, blue	15.0	4	1	Coniferous	Yes	X	
10821	Spruce, blue	13.0	4	1	Coniferous	Yes	X	
10822	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10845	Ash, green	19.0	4	1	Common Tree	Yes	X	
10846	Pine, Scots	24.0	3	1	Coniferous	Yes	X	
10847	Pine, Scots	14.5	4	1	Coniferous	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10848	Pine, Austrian	17.0	4	1	Coniferous	Yes	X	
10849	Cottonwood	30.0	4	1	Common Tree	Yes	X	
10850	Pine, Scots	8.0	4	1	Coniferous	Yes	X	
10851	Cottonwood	15.5	3	2	Common Tree	Yes	X	
10852	Pine, Austrian	17.0	4	1	Coniferous	Yes	X	
10853	Pine, Austrian	26.0	3	1	Coniferous	Yes	X	
10854	Spruce, blue	15.0	4	1	Coniferous	Yes	X	
10855	Pine, Austrian	14.0	4	1	Coniferous	Yes	X	

Note: Tree Tags 1-2000 by Carlson Mccain, Tree Tags 2536-5207A by KES and Tree Tags 10001-10855 by TreeBiz

TOTAL INDIVIDUAL TREE SHOT ASSESMENT (PHASE 1)

Total caliper inches from individual shots (Phase 1)	13,466.50
Common Tree RemovalCaliper Inches	2507.5
Coniferous Tree Removal Caliper Inches	2421.0
Deciduous Hardwood Removal Caliper Inches	586.5

Quality Rating	
4	Good
3	Fair
2	Poor
1	Bad
0	Dead

TOTAL TREE PLOT ASSESMENT AREAS (PHASE 1)

	Total Area (Acres)	Removal Area (Acres)	Caliper Inches per Acre	Total Caliper Inches	Total Caliper Inches Removed	Common Inches Removed	Conifer Inches Removed	Hardwood Inches removed
Area 4	4.39	2.23	1010.00	4433.90	2252.30	1013.54	337.85	900.92
Area 5	2.02	0.00	290.00	585.80	0.00	0.00	0.00	0.00
Area 6	7.43	5.94	1325.63	9849.39	7874.21	874.91	0.00	6999.30
Area 7	2.05	1.03	906.67	1858.67	933.87	700.40	0.00	233.47
Area 8	1.76	0.00	815.00	1434.40	0.00	0.00	0.00	0.00
Area 9	See individual tree shot information							
Area 11	8.24	0.00	1485.00	12236.40	0.00	0.00	0.00	0.00
Area 12	1.84	0.04	1707.50	3141.80	68.30	18.99	0.00	49.31
Totals:	**27.73**	**9.24**		**33540.36**	**11128.68**	**2607.83**	**337.85**	**8183.00**

Total caliper inches from all areas (Phase 1)	33,540.36
Common Tree RemovalCaliper Inches	2607.83
Coniferous Tree Removal Caliper Inches	337.85
Deciduous Hardwood Removal Caliper Inches	8183.00

SUMMARY (PHASE I)

Total caliper inches on the site	138,991.36
Allowable significant removal for the site (Allowable removal = 30% Total Significant DBH)	41,697.41
Common Tree RemovalCaliper Inches	5115.3
Coniferous Tree Removal Caliper Inches	2758.8
Deciduous Hardwood Removal Caliper Inches	8769.5
Total Removal Caliper Inches	16643.7
Total Replacement Caliper Inches for Phase 1	**0.00**

Removal for Phase 1	16643.68
Total on the site	÷ 138991.36
Percent Removed	11.97%

No replacment is required for Phase 1

Carlson McCain
• environmental
• engineering
• surveying

3890 Pheasant Ridge Drive NE, Suite 100
Blaine, MN 55014
Phone: (763) 489-7900
Fax: (763) 489-7959
www.carlsonmccain.com

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

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 9/21/16 License #: 25063

Drawn: ADB
Designed: BJK
Date: 9/21/16

Revisions:
1. 02/10/17 Revise Layout per Owner
2. 04/07/17 Per City and Watershed Comments

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

TREE PRESERVATION PLAN

T21 of 25

[Save Date: 04/05/17] F:\jobs\6021 - 6040\6036 - tartan park\cad\engineering\trees\6036_tree_table.dwg

FUTURE PHASES INDIVIDUAL SHOTS

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
153	Cottonwood	14	3	1	Common Tree	Yes	X	
154	Cottonwood	10.5	3	1	Common Tree	No	Not Significant	
155	Cottonwood	15	2	3	Common Tree	Yes	X	
156	Tamarack	7.5	2	1	Coniferous	No	Not Significant	
157	Tamarack	12.5	3	1	Coniferous	Yes		X
158	Cottonwood	16.5	2	2	Common Tree	Yes		X
159	Cottonwood	17	3	1	Common Tree	Yes		X
160	Cottonwood	8.5	2	1	Common Tree	No	Not Significant	
176	Pine, White	13	3	1	Coniferous	Yes		X
177	Pine, White	11.5	3	1	Coniferous	Yes		X
178	Willow, Black	24	2	3	Common Tree	Yes		X
179	Willow, Black	30	2	2	Common Tree	Yes		X
180	Elm, Siberian	8	2	2	Common Tree	No	Not Significant	
181	Pine, White	12	3	1	Coniferous	Yes		X
182	Aspen, Quaking	11	2	1	Common Tree	No	Not Significant	
183	Oak, White	15	4	1	Deciduous Hardwood	Yes		X
184	Pine, White	13	3	1	Coniferous	Yes		X
232	Ash, Green	28	3	1	Common Tree	Yes	X	
233	Maple, Silver	51	3	1	Common Tree	Yes	X	
234	Maple, Silver	22.5	2	1	Common Tree	Yes	X	
235	Maple, Silver	25	2	1	Common Tree	Yes	X	
236	Maple, Sugar	56	3	1	Deciduous Hardwood	Yes	X	
237	Maple, Sugar	23	3	1	Deciduous Hardwood	Yes	X	
238	Maple, Silver	42	4	1	Common Tree	Yes	X	
239	Maple, Silver	38	4	1	Common Tree	Yes	X	
240	Maple, Silver	40.5	4	1	Common Tree	Yes	X	
241	Maple, Silver	28.5	4	1	Common Tree	Yes	X	
242	Maple, Silver	32	4	1	Common Tree	Yes	X	
243	Maple, Silver	37.5	4	1	Common Tree	Yes	X	
245	Maple, Amyr	6.5	1	4	Deciduous Hardwood	Yes	Bad Quality	
246	Spruce, Blue	15	3	1	Coniferous	Yes		X
247	Spruce, Blue	12.5	2	2	Coniferous	Yes		X
248	Spruce, Blue	12	3	1	Coniferous	Yes		X
249	Spruce, Blue	11	2	1	Coniferous	Yes		X
250	Spruce, Blue	14.5	3	1	Coniferous	Yes		X
251	Maple, Amyr	4	1	8	Deciduous Hardwood	No	Not Significant	
252	Maple, Amyr	4	1	8	Deciduous Hardwood	No	Not Significant	
253	Spruce, Blue	11	2	1	Coniferous	Yes		X
254	Spruce, Blue	8	2	1	Coniferous	Yes		X
255	Spruce, Blue	11	2	1	Coniferous	Yes		X
256	Spruce, Blue	9	2	1	Coniferous	Yes		X
257	Spruce, Blue	9	2	1	Coniferous	Yes		X
258	Spruce, Blue	11.5	2	1	Coniferous	Yes		X
259	Spruce, Blue	10	3	1	Coniferous	Yes		X
260	Spruce, Blue	9.5	3	1	Coniferous	Yes		X
261	Birch, Paper	15	3	1	Deciduous Hardwood	Yes		X
262	Ash, Green	14	2	1	Common Tree	Yes	X	
263	Ash, Green	20	2	1	Common Tree	Yes	X	
264	Ash, Green	12	2	1	Common Tree	Yes	X	
265	Ash, Green	13	2	1	Common Tree	Yes	X	
266	Ash, Green	17.5	2	1	Common Tree	Yes	X	
267	Ash, Green	17.5	2	1	Common Tree	Yes	X	
268	Ash, Green	18.5	2	1	Common Tree	Yes	X	
269	Ash, Green	21	2	1	Common Tree	Yes	X	
270	Ash, Green	12.5	2	1	Common Tree	Yes	X	
271	Ash, Green	22	2	1	Common Tree	Yes	X	
272	Ash, Green	16.5	2	1	Common Tree	Yes	X	
273	Ash, Green	18	2	1	Common Tree	Yes	X	
274	Ash, Green	21	2	1	Common Tree	Yes	X	
275	Ash, Green	18	2	1	Common Tree	Yes	X	
276	Ash, Green	22	2	1	Common Tree	Yes	X	
277	Ash, Green	19	2	2	Common Tree	Yes	X	
278	Ash, Green	14	2	2	Common Tree	Yes	X	
279	Ash, Green	20.5	2	1	Common Tree	Yes	X	
280	Ash, Green	24.5	2	1	Common Tree	Yes	X	
281	Ash, Green	24.5	2	1	Common Tree	Yes	X	
282	Elm, American	11	3	1	Common Tree	No	Not Significant	
283	Pine, Red	14.5	2	1	Coniferous	Yes	X	
284	Elm, Siberian	20	3	1	Common Tree	Yes	X	
285	Pine, Red	15	3	1	Coniferous	Yes	X	
286	Pine, Red	13.5	2	1	Coniferous	Yes	X	
287	Elm, Siberian	17	2	1	Common Tree	Yes	X	
288	Pine, Red	16.5	3	1	Coniferous	Yes	X	
289	Pine, Red	15.5	3	1	Coniferous	Yes	X	
290	Pine, Red	16.5	3	1	Coniferous	Yes	X	
291	Pine, Red	13.5	3	1	Coniferous	Yes	X	
292	Pine, Red	15	2	1	Coniferous	Yes	X	
293	Pine, Red	15.5	2	1	Coniferous	Yes	X	
294	Elm, Siberian	22	2	1	Common Tree	Yes	X	
295	Boxelder	14.5	2	1	Common Tree	Yes	X	
392	Oak, White	23	3	1	Deciduous Hardwood	Yes		X
398	Oak, White	20	3	1	Deciduous Hardwood	Yes	X	
399	Oak, Red	32.5	3	1	Deciduous Hardwood	Yes	X	
400	Oak, White	21	3	2	Deciduous Hardwood	Yes		X
401	Maple, Silver	34	3	1	Common Tree	Yes		X
402	Maple, Silver	45.5	3	1	Common Tree	Yes		X
403	Basswood	14.5	0	1	Common Tree	Yes	Dead	
404	Oak, White	26	3	1	Deciduous Hardwood	Yes	X	
405	Oak, White	21.5	4	1	Deciduous Hardwood	Yes	X	
406	Oak, White	16	3	1	Deciduous Hardwood	Yes	X	
407	Oak, White	14	2	2	Deciduous Hardwood	Yes	X	
408	Oak, White	17	2	2	Deciduous Hardwood	Yes	X	
409	Oak, White	17.5	3	1	Deciduous Hardwood	Yes	X	
410	Oak, White	10	3	1	Deciduous Hardwood	Yes	X	
411	Oak, White	30	4	1	Deciduous Hardwood	Yes	X	
412	Oak, White	20	4	1	Deciduous Hardwood	Yes	X	
413	Oak, White	20.5	2	1	Deciduous Hardwood	Yes	X	
414	Oak, White	9	3	1	Deciduous Hardwood	Yes	X	
415	Oak, White	12	2	1	Deciduous Hardwood	Yes		X
416	Oak, White	16	3	1	Deciduous Hardwood	Yes		X
417	Oak, White	20	3	1	Deciduous Hardwood	Yes		X
418	Oak, White	15	2	2	Deciduous Hardwood	Yes	X	
419	Oak, White	17	2	1	Deciduous Hardwood	Yes	X	
420	Oak, White	23	3	1	Deciduous Hardwood	Yes	X	
421	Oak, White	15	3	1	Deciduous Hardwood	Yes	X	
422	Oak, Burr	10.5	4	1	Deciduous Hardwood	Yes		X
423	Oak, White	28.5	4	1	Deciduous Hardwood	Yes	X	
424	Oak, White	12.5	3	1	Deciduous Hardwood	Yes		X
425	Oak, White	20.5	3	1	Deciduous Hardwood	Yes		X
426	Oak, White	23	3	1	Deciduous Hardwood	Yes		X
427	Oak, White	16.5	4	1	Deciduous Hardwood	Yes		X
428	Oak, White	23	2	2	Deciduous Hardwood	Yes		X
429	Oak, White	14	3	1	Deciduous Hardwood	Yes		X
430	Birch, Paper	16	2	1	Deciduous Hardwood	Yes	X	
431	Oak, White	19	3	1	Deciduous Hardwood	Yes		X
432	Oak, Burr	19	3	1	Deciduous Hardwood	Yes		X
433	Oak, White	18.5	3	1	Deciduous Hardwood	Yes		X
434	Oak, White	21.5	2	1	Deciduous Hardwood	Yes		X
435	Oak, White	14.5	3	1	Deciduous Hardwood	Yes	X	
436	Oak, White	17	2	2	Deciduous Hardwood	Yes		X
437	Oak, White	22	2	1	Deciduous Hardwood	Yes		X
438	Oak, White	18	2	1	Deciduous Hardwood	Yes		X
439	Oak, White	15	3	1	Deciduous Hardwood	Yes		X
440	Oak, White	17.5	3	0	Deciduous Hardwood	Yes		X
441	Oak, White	17	3	1	Deciduous Hardwood	Yes		X
442	Oak, White	18	3	1	Deciduous Hardwood	Yes		X
443	Oak, White	12	2	1	Deciduous Hardwood	Yes		X
444	Oak, White	19.5	3	1	Deciduous Hardwood	Yes		X
445	Oak, White	12	2	1	Deciduous Hardwood	Yes		X
446	Birch, Paper	12	2	1	Deciduous Hardwood	Yes		X
447	Oak, White	17.5	3	1	Deciduous Hardwood	Yes		X
448	Oak, White	19	4	1	Deciduous Hardwood	Yes		X
449	Oak, White	15.5	3	1	Deciduous Hardwood	Yes		X
450	Oak, White	17	2	1	Deciduous Hardwood	Yes		X
451	Basswood	13	2	2	Common Tree	Yes		X
452	Basswood	15.5	3	1	Common Tree	Yes		X
453	Oak, White	17	3	1	Deciduous Hardwood	Yes		X
454	Oak, White	17.5	3	1	Deciduous Hardwood	Yes		X
455	Oak, White	14.5	2	1	Deciduous Hardwood	Yes	X	
456	Oak, White	15	2	1	Deciduous Hardwood	Yes		X
457	Oak, White	15	2	1	Deciduous Hardwood	Yes		X
458	Oak, White	13	2	1	Deciduous Hardwood	Yes		X
459	Oak, White	16	3	1	Deciduous Hardwood	Yes		X
460	Oak, White	20.5	3	1	Deciduous Hardwood	Yes		X
461	Oak, Burr	14	3	1	Deciduous Hardwood	Yes		X
462	Oak, Burr	25	3	1	Deciduous Hardwood	Yes	X	
463	Oak, White	15.5	2	1	Deciduous Hardwood	Yes	X	
464	Oak, White	13.5	3	1	Deciduous Hardwood	Yes	X	
465	Oak, White	12	2	1	Deciduous Hardwood	Yes	X	
466	Oak, White	13.5	3	1	Deciduous Hardwood	Yes	X	
467	Oak, White	11.5	2	1	Deciduous Hardwood	Yes	X	
468	Oak, White	16	3	1	Deciduous Hardwood	Yes	X	
469	Oak, White	17	3	1	Deciduous Hardwood	Yes	X	
470	Oak, White	15	2	1	Deciduous Hardwood	Yes	X	
471	Oak, White	19	2	1	Deciduous Hardwood	Yes	X	
472	Oak, Burr	18.5	3	1	Deciduous Hardwood	Yes	X	
473	Oak, White	11.5	3	1	Deciduous Hardwood	Yes	X	
474	Oak, White	14.5	2	1	Deciduous Hardwood	Yes	X	
475	Oak, White	15	3	1	Deciduous Hardwood	Yes	X	
476	Oak, White	13.5	3	1	Deciduous Hardwood	Yes	X	
477	Oak, White	16	3	1	Deciduous Hardwood	Yes		X
478	Oak, White	14	2	1	Deciduous Hardwood	Yes	X	
479	Oak, White	15	3	1	Deciduous Hardwood	Yes		X
480	Oak, Burr	20	2	1	Deciduous Hardwood	Yes		X
481	Oak, White	21	3	1	Deciduous Hardwood	Yes		X
482	Oak, White	17	3	1	Deciduous Hardwood	Yes		X
483	Oak, White	13.5	3	1	Deciduous Hardwood	Yes		X
484	Oak, White	16	3	1	Deciduous Hardwood	Yes		X
485	Maple, Red	22	3	1	Deciduous Hardwood	Yes		X
486	Oak, White	23	3	1	Deciduous Hardwood	Yes		X
487	Oak, White	23	1	1	Deciduous Hardwood	Yes	Bad Quality	
488	Oak, White	18	2	1	Deciduous Hardwood	Yes		X
489	Oak, Burr	27.5	2	1	Deciduous Hardwood	Yes		X
490	Oak, White	16.5	3	1	Deciduous Hardwood	Yes	X	
491	Oak, White	16.5	3	1	Deciduous Hardwood	Yes	X	
492	Oak, White	18.5	3	1	Deciduous Hardwood	Yes	X	
493	Oak, White	20.5	3	1	Deciduous Hardwood	Yes		X
494	Oak, White	13	2	2	Deciduous Hardwood	Yes		X
495	Oak, White	16.5	3	1	Deciduous Hardwood	Yes		X
496	Oak, White	12	2	1	Deciduous Hardwood	Yes		X
497	Oak, White	19	3	1	Deciduous Hardwood	Yes		X
498	Oak, White	15	2	1	Deciduous Hardwood	Yes	X	
499	Oak, White	17	2	2	Deciduous Hardwood	Yes	X	
500	Oak, White	24.5	3	1	Deciduous Hardwood	Yes		X
501	Oak, White	25.5	4	1	Deciduous Hardwood	Yes	X	
502	Oak, White	22.5	4	1	Deciduous Hardwood	Yes	X	
503	Oak, White	30	4	1	Deciduous Hardwood	Yes	X	
504	Oak, White	26	4	1	Deciduous Hardwood	Yes	X	
505	Oak, White	24.5	4	1	Deciduous Hardwood	Yes	X	
506	Oak, White	21	4	1	Deciduous Hardwood	Yes	X	
507	Oak, White	20.5	4	1	Deciduous Hardwood	Yes	X	
508	Oak, White	29	4	1	Deciduous Hardwood	Yes		X
509	Oak, White	26.5	4	1	Deciduous Hardwood	Yes		X
510	Oak, White	21.5	4	1	Deciduous Hardwood	Yes		X
511	Oak, White	29.5	4	1	Deciduous Hardwood	Yes	X	
512	Oak, White	28.5	4	1	Deciduous Hardwood	Yes	X	
513	Oak, White	22.5	4	1	Deciduous Hardwood	Yes		X
514	Oak, White	29	4	1	Deciduous Hardwood	Yes		X
515	Oak, White	20	4	1	Deciduous Hardwood	Yes		X
516	Oak, White	26	4	1	Deciduous Hardwood	Yes		X
517	Oak, White	23.5	4	1	Deciduous Hardwood	Yes	X	
518	Oak, White	29.5	4	1	Deciduous Hardwood	Yes	X	
519	Oak, White	23	4	1	Deciduous Hardwood	Yes		X
520	Oak, White	26.5	4	1	Deciduous Hardwood	Yes		X
521	Oak, White	22.5	4	1	Deciduous Hardwood	Yes		X
522	Oak, White	24	4	1	Deciduous Hardwood	Yes		X
523	Oak, White	27.5	4	1	Deciduous Hardwood	Yes	X	
524	Oak, White	28	4	1	Deciduous Hardwood	Yes	X	
525	Oak, White	26.5	4	1	Deciduous Hardwood	Yes	X	
526	Oak, White	30	4	1	Deciduous Hardwood	Yes	X	
527	Oak, White	19.5	4	1	Deciduous Hardwood	Yes	X	
528	Maple, Sugar	11	3	1	Deciduous Hardwood	Yes	X	
529	Oak, White	27	4	1	Deciduous Hardwood	Yes	X	
530	Ash, Green	10.5	3	1	Common Tree	No	Not Significant	
531	Oak, White	28	4	1	Deciduous Hardwood	Yes		X
532	Oak, White	20.5	4	1	Deciduous Hardwood	Yes		X
533	Maple, Amur	13.5	2	1	Deciduous Hardwood	Yes	X	
534	Maple, Amur	11	2	1	Deciduous Hardwood	Yes	X	
535	Oak, White	26	4	1	Deciduous Hardwood	Yes	X	
536	Spruce, White	18.5	3	1	Coniferous	Yes	X	
537	Spruce, White	13.5	2	1	Coniferous	Yes	X	
538	Pine, Red	27	3	1	Coniferous	Yes	X	
539	Spruce, White	19.5	4	1	Coniferous	Yes	X	
591	Elm, Siberian	13	2	1	Common Tree	Yes		X
592	Oak, White	23	3	1	Deciduous Hardwood	Yes		X
593	Oak, White	13	3	1	Deciduous Hardwood	Yes		X
594	Oak, White	18.5	3	1	Deciduous Hardwood	Yes		X
595	Oak, Burr	14	3	1	Deciduous Hardwood	Yes		X
596	Oak, White	23	3	1	Deciduous Hardwood	Yes		X
597	Oak, Burr	12.5	2	2	Deciduous Hardwood	Yes		X
598	Oak, Red	19	3	1	Deciduous Hardwood	Yes		X
599	Oak, White	31	4	1	Deciduous Hardwood	Yes		X
600	Oak, White	10.5	3	1	Deciduous Hardwood	Yes		X
601	Oak, White	19	3	1	Deciduous Hardwood	Yes		X
602	Oak, White	25	4	1	Deciduous Hardwood	Yes		X
603	Oak, White	17.5	3	1	Deciduous Hardwood	Yes		X
604	Oak, White	16.5	4	1	Deciduous Hardwood	Yes		X
605	Oak, White	20.5	3	1	Deciduous Hardwood	Yes		X
606	Oak, White	21.5	4	1	Deciduous Hardwood	Yes		X
607	Oak, White	25.5	3	1	Deciduous Hardwood	Yes		X
608	Oak, White	15	3	1	Deciduous Hardwood	Yes		X
609	Oak, White	12.5	3	1	Deciduous Hardwood	Yes		X
610	Oak, White	13	0	1	Deciduous Hardwood	Yes	Dead	
611	Oak, White	26.5	3	1	Deciduous Hardwood	Yes		X
612	Oak, Red	7.5	2	1	Deciduous Hardwood	Yes		X
613	Oak, Red	9	3	1	Deciduous Hardwood	Yes		X
614	Oak, White	24	3	1	Deciduous Hardwood	Yes		X
615	Oak, White	29.5	4	1	Deciduous Hardwood	Yes		X
616	Birch, Paper	11	1	1	Deciduous Hardwood	Yes	Bad Quality	
617	Birch, Paper	8.5	2	1	Deciduous Hardwood	Yes		X
618	Oak, White	11	2	1	Deciduous Hardwood	Yes		X
619	Oak, White	25	4	1	Deciduous Hardwood	Yes		X
620	Oak, White	12	2	1	Deciduous Hardwood	Yes		X
621	Oak, White	13	4	2	Deciduous Hardwood	Yes		X
622	Oak, White	17	2	1	Deciduous Hardwood	Yes		X
623	Basswood	16.5	3	1	Common Tree	Yes		X
624	Oak, Red	17	4	1	Deciduous Hardwood	Yes		X
625	Oak, White	16	3	1	Deciduous Hardwood	Yes		X
626	Oak, White	23.5	4	1	Deciduous Hardwood	Yes		X
627	Oak, White	26	3	1	Deciduous Hardwood	Yes		X
628	Oak, White	28	3	1	Deciduous Hardwood	Yes		X
629	Oak, White	17	3	2	Deciduous Hardwood	Yes		X
630	Oak, White	20	3	1	Deciduous Hardwood	Yes		X
631	Oak, White	14	3	1	Deciduous Hardwood	Yes		X
632	Oak, White	13.5	3	1	Deciduous Hardwood	Yes		X
633	Cherry, Black	9	3	1	Deciduous Hardwood	Yes		X
634	Cherry, Black	9.5	3	1	Deciduous Hardwood	Yes		X
635	Birch, Paper	7.5	2	2	Deciduous Hardwood	Yes		X
636	Birch, Paper	6.5	2	2	Deciduous Hardwood	Yes		X
637	Oak, White	31	3	1	Deciduous Hardwood	Yes	X	
638	Oak, Red	21	2	2	Deciduous Hardwood	Yes	X	
639	Oak, Red	15.5	3	1	Deciduous Hardwood	Yes	X	
640	Elm, Siberian	11	3	1	Common Tree	No	Not Significant	
641	Oak, Red	8	3	1	Deciduous Hardwood	Yes	X	
642	Oak, Red	7	2	1	Deciduous Hardwood	Yes	X	
643	Elm, Siberian	14	3	1	Common Tree	Yes	X	
644	Oak, Red	13.5	2	1	Deciduous Hardwood	Yes	X	
645	Oak, Red	12.5	3	1	Deciduous Hardwood	Yes		X
646	Oak, White	15	2	1	Deciduous Hardwood	Yes		X
647	Oak, White	18.5	3	1	Deciduous Hardwood	Yes		X
648	Oak, White	15.5	1	1	Deciduous Hardwood	Yes	Bad Quality	
649	Aspen, Quaking	11	3	1	Common Tree	No	Not Significant	
650	Oak, White	20	3	1	Deciduous Hardwood	Yes		X
651	Oak, White	20	3	1	Deciduous Hardwood	Yes		X
652	Oak, White	16	2	1	Deciduous Hardwood	Yes		X
1311	Ash, Green	12	2	1	Common Tree	Yes	X	
1312	Ash, Green	8	2	1	Common Tree	No	Not Significant	
1313	Ash, Green	7	2	2	Common Tree	No	Not Significant	
1314	Ash, Green	9.5	2	2	Common Tree	No	Not Significant	
1315	Ash, Green	9.5	2	1	Common Tree	No	Not Significant	
1316	Elm, Siberian	8	2	1	Common Tree	No	Not Significant	
1317	Elm, Siberian	8.5	2	1	Common Tree	No	Not Significant	
1318	Elm, Siberian	9	2	1	Common Tree	No	Not Significant	
1319	Ash, Green	7	2	2	Common Tree	No	Not Significant	
1320	Ash, Green	8	3	1	Common Tree	No	Not Significant	
1321	Ash, Green	23	3	1	Common Tree	Yes	X	
1322	Ash, Green	13	2	2	Common Tree	Yes	X	
1323	Ash, Green	16	2	1	Common Tree	Yes	X	
1324	Elm, Siberian	11.5	2	1	Common Tree	No	Not Significant	
1325	Oak, Burr	9	3	1	Deciduous Hardwood	Yes	X	
1326	Oak, Burr	7	2	1	Deciduous Hardwood	Yes	X	
1327	Oak, Burr	5.5	2	1	Deciduous Hardwood	No	Not Significant	
1328	Oak, Burr	19	3	1	Deciduous Hardwood	Yes	X	
1329	Ash, Green	8	3	1	Common Tree	No	Not Significant	
1330	Ash, Green	8.5	2	3	Common Tree	No	Not Significant	
1331	Maple, Silver	6	2	1	Common Tree	No	Not Significant	
1332	Ash, Green	6	2	1	Common Tree	No	Not Significant	
1333	Boxelder	8.5	2	2	Common Tree	No	Not Significant	
1334	Maple, Silver	37	3	1	Common Tree	Yes	X	
1335	Ash, Green	10.5	2	1	Common Tree	No	Not Significant	
1336	Ash, Green	7	2	1	Common Tree	No	Not Significant	
1337	Ash, Green	7	2	1	Common Tree	No	Not Significant	
1338	Ash, Green	10	2	1	Common Tree	No	Not Significant	
1339	Elm, American	8	2	1	Common Tree	No	Not Significant	
1340	Ash, Green	11	2	1	Common Tree	No	Not Significant	
1341	Ash, Green	8.5	2	1	Common Tree	No	Not Significant	
1342	Ash, Green	15	2	1	Common Tree	Yes	X	
1343	Elm, American	7	2	1	Common Tree	No	Not Significant	
1344	Ash, Green	7	2	2	Common Tree	No	Not Significant	
1345	Ash, Green	9	2	1	Common Tree	No	Not Significant	
1346	Ash, Green	10	3	1	Common Tree	No	Not Significant	
1347	Ash, Green	9	2	2	Common Tree	No	Not Significant	
1348	Ash, Green	11	2	1	Common Tree	No	Not Significant	
1349	Cottonwood	14	3	1	Common Tree	Yes		X
1350	Cottonwood	14	3	1	Common Tree	Yes		X
1351	Cottonwood	12	3	1	Common Tree	Yes		X
1352	Ash, Green	9	2	2	Common Tree	No	Not Significant	
1353	Ash, Green	8	2	2	Common Tree	No	Not Significant	
1354	Ash, Green	9.5	2	1	Common Tree	No	Not Significant	
1355	Ash, Green	11	2	2	Common Tree	No	Not Significant	
1356	Ash, Green	11	2	2	Common Tree	No	Not Significant	
1357	Maple, Silver	7	3	1	Common Tree	No	Not Significant	
1358	Elm, American	8	2	1	Common Tree	No	Not Significant	
1359	Elm, American	7	1	1	Common Tree	No	Not Significant	
1360	Ash, Green	8.5	2	1	Common Tree	No	Not Significant	
1361	Cottonwood	13	2	1	Common Tree	Yes		X
1362	Ash, Green	8	2	0	Common Tree	No	Not Significant	
1363	Elm, Siberian	10	2	1	Common Tree	No	Not Significant	
1364	Elm, American	7.5	2	2	Common Tree	No	Not Significant	
1365	Elm, American	9.5	3	1	Common Tree	No	Not Significant	
1366	Elm, American	8	2	1	Common Tree	No	Not Significant	
1367	Cottonwood	6	2	1	Common Tree	No	Not Significant	
1368	Elm, American	14	2	2	Common Tree	Yes		X
1369	Ash, Green	7	2	2	Common Tree	No	Not Significant	
1370	Ash, Green	8	2	1	Common Tree	No	Not Significant	
1371	Ash, Green	6	2	1	Common Tree	No	Not Significant	
1372	Ash, Green	11	2	1	Common Tree	No	Not Significant	
1373	Elm, American	11	2	1	Common Tree	No	Not Significant	
1374	Ash, Green	5.5	2	2	Common Tree	No	Not Significant	
1375	Cottonwood	13	3	1	Common Tree	Yes		X
1376	Boxelder	11	2	2	Common Tree	No	Not Significant	
1377	Cottonwood	11.5	2	1	Common Tree	No	Not Significant	
1378	Elm, American	11	2	1	Common Tree	No	Not Significant	
1379	Cottonwood	14	2	2	Common Tree	Yes	X	
1380	Cottonwood	16	2	2	Common Tree	Yes	X	
1381	Cottonwood	17	2	2	Common Tree	Yes	X	
1382	Maple, Silver	7	2	2	Common Tree	No	Not Significant	
1383	Cottonwood	12	3	1	Common Tree	Yes	X	
1384	Cottonwood	12.5	2	1	Common Tree	Yes		X
1385	Cottonwood	9	2	1	Common Tree	No	Not Significant	
1386	Elm, American	8.5	2	1	Common Tree	No	Not Significant	
1387	Elm, American	9.5	2	1	Common Tree	No	Not Significant	
1388	Elm, American	8.5	2	1	Common Tree	No	Not Significant	
1389	Elm, Siberian	17	2	1	Common Tree	Yes	X	
1390	Ash, Green	8	2	3	Common Tree	No	Not Significant	
1391	Pine, White	16	3	1	Coniferous	Yes	X	
1392	Pine, White	16	3	1	Coniferous	Yes	X	
1393	Pine, White	8	2	2	Coniferous	Yes	X	
1394	Ash, Green	15.5	3	1	Common Tree	Yes	X	
1395	Oak, Red	8	3	1	Deciduous Hardwood	Yes		X
1396	Oak, Red	10.5	3	1	Deciduous Hardwood	Yes		X
1397	Oak, Red	16	2	1	Deciduous Hardwood	Yes		X
1398	Oak, Burr	14	2	1	Deciduous Hardwood	Yes		X
1399	Oak, Burr	31	3	1	Deciduous Hardwood	Yes		X
1400	Oak, Burr	13	3	1	Deciduous Hardwood	Yes		X
1401	Oak, Burr	17	3	1	Deciduous Hardwood	Yes		X
1402	Oak, Red	22	3	1	Deciduous Hardwood	Yes		X
1403	Oak, Burr	13	3	1	Deciduous Hardwood	Yes		X
1404	Oak, Burr	13.5	2	1	Deciduous Hardwood	Yes	

FUTURE PHASES INDIVIDUAL SHOTS CONT'D

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
1406	Oak, White	16	2	3	Deciduous Hardwood	Yes		X
1407	Oak, Burr	10	2	1	Deciduous Hardwood	Yes		X
1408	Oak, Red	10	2	2	Deciduous Hardwood	Yes		X
1409	Oak, Red	10	3	1	Deciduous Hardwood	Yes		X
1410	Ash, Green	8	2	1	Common Tree	No	Not Significant	
1411	Elm, American	8.5	2	1	Common Tree	No	Not Significant	
1412	Ash, Green	14.5	2	1	Common Tree	Yes		X
1413	Boxelder	13	2	1	Common Tree	Yes		X
1414	Boxelder	17.5	2	1	Common Tree	Yes		X
1415	Boxelder	20	2	1	Common Tree	Yes		X
1416	Ash, Green	10	2	2	Common Tree	No	Not Significant	
1417	Ash, Green	10	2	1	Common Tree	No	Not Significant	
1418	Ash, Green	18	2	1	Common Tree	Yes		X
1419	Ash, Green	13	2	1	Common Tree	Yes		X
1420	Cherry, Black	11.5	2	1	Deciduous Hardwood	Yes		X
1421	Oak, Burr	23	2	1	Deciduous Hardwood	Yes		X
1422	Oak, White	33	1	1	Deciduous Hardwood	Yes	Bad Quality	
1423	Oak, Burr	11	3	1	Deciduous Hardwood	Yes		X
1424	Oak, Burr	7	2	1	Deciduous Hardwood	Yes		X
1425	Oak, Red	10	2	1	Deciduous Hardwood	Yes		X
1426	Oak, White	31.5	3	1	Deciduous Hardwood	Yes	X	
1427	Oak, Burr	23	4	1	Deciduous Hardwood	Yes	X	
1428	Oak, Burr	31	4	1	Deciduous Hardwood	Yes	X	
1429	Oak, White	35	1	1	Deciduous Hardwood	Yes	Bad Quality	
1430	Oak, White	19.5	3	1	Deciduous Hardwood	Yes	X	
1431	Basswood	14	2	1	Common Tree	Yes	X	
1432	Oak, White	27	4	1	Deciduous Hardwood	Yes	X	
1433	Ash, Green	19	2	1	Common Tree	Yes	X	
1434	Oak, White	24.5	4	1	Deciduous Hardwood	Yes	X	
1435	Maple, Sugar	28.5	3	1	Deciduous Hardwood	Yes	X	
1436	Ginkgo	13	2	1	Common Tree	Yes	X	
1437	Spruce, White	22.5	3	1	Coniferous	Yes	X	
1438	Spruce, White	19	3	1	Coniferous	Yes	X	
1439	Oak, Burr	22	4	1	Deciduous Hardwood	Yes	X	
1440	Oak, Burr	21.5	4	1	Deciduous Hardwood	Yes	X	
1441	Oak, Burr	28.5	4	1	Deciduous Hardwood	Yes		X
1442	Ash, Green	10.5	2	1	Common Tree	No	Not Significant	
1443	Ash, Green	10.5	2	1	Common Tree	No	Not Significant	
1444	Oak, Burr	29.5	3	1	Deciduous Hardwood	Yes		X
1445	Spruce, White	21.5	3	1	Coniferous	Yes		X
1446	Oak, Burr	28.5	4	1	Deciduous Hardwood	Yes		X
1447	Pine, Red	16.5	3	1	Coniferous	Yes		X
1448	Pine, Red	23.5	2	1	Coniferous	Yes		X
1449	Pine, Red	30	3	1	Coniferous	Yes		X
1450	Pine, Red	21.5	2	1	Coniferous	Yes		X
1451	Oak, White	28	3	1	Deciduous Hardwood	Yes		X
1452	Pine, Red	20	2	1	Coniferous	Yes		X
1453	Pine, Red	20	0	1	Coniferous	Yes	Dead	
1454	Oak, White	25.5	4	1	Deciduous Hardwood	Yes		X
1455	Oak, White	20	2	2	Deciduous Hardwood	Yes		X
1456	Oak, White	19.5	2	2	Deciduous Hardwood	Yes		X
1457	Oak, White	31.5	2	1	Deciduous Hardwood	Yes		X
1458	Oak, White	28.5	4	1	Deciduous Hardwood	Yes		X
1459	Oak, White	24.5	4	1	Deciduous Hardwood	Yes		X
1460	Ash, Green	12	2	1	Common Tree	Yes		X
1461	Oak, White	17	3	1	Deciduous Hardwood	Yes		X
1462	Oak, White	20	3	1	Deciduous Hardwood	Yes		X
1463	Oak, White	11	3	1	Deciduous Hardwood	Yes		X
1464	Oak, White	15	3	1	Deciduous Hardwood	Yes		X
1465	Oak, White	17.5	3	1	Deciduous Hardwood	Yes		X
1466	Oak, White	23	4	1	Deciduous Hardwood	Yes		X
1467	Oak, White	18	3	1	Deciduous Hardwood	Yes		X
1468	Oak, White	30.5	4	1	Deciduous Hardwood	Yes	X	
1469	Oak, White	20	4	1	Deciduous Hardwood	Yes	X	
1470	Oak, White	21.5	4	1	Deciduous Hardwood	Yes	X	
1471	Oak, White	27.5	4	1	Deciduous Hardwood	Yes	X	
1472	Oak, White	23	3	1	Deciduous Hardwood	Yes		X
1473	Oak, White	20	3	1	Deciduous Hardwood	Yes		X
1474	Oak, White	26	3	1	Deciduous Hardwood	Yes		X
1475	Oak, White	26.5	2	1	Deciduous Hardwood	Yes		X
1476	Oak, White	34.5	4	1	Deciduous Hardwood	Yes		X
1477	Oak, White	30.5	4	1	Deciduous Hardwood	Yes		X
1478	Oak, White	31	4	1	Deciduous Hardwood	Yes		X
1479	Oak, White	32.5	4	1	Deciduous Hardwood	Yes		X
1480	Oak, White	26	4	1	Deciduous Hardwood	Yes	X	
1481	Oak, White	26	4	1	Deciduous Hardwood	Yes	X	
1482	Oak, White	25	3	1	Deciduous Hardwood	Yes	X	
1483	Oak, White	22.5	4	1	Deciduous Hardwood	Yes	X	
1484	Oak, White	20.5	4	1	Deciduous Hardwood	Yes	X	
1485	Oak, White	22	4	1	Deciduous Hardwood	Yes	X	
1486	Oak, White	25	3	1	Deciduous Hardwood	Yes	X	
1487	Oak, White	26	4	1	Deciduous Hardwood	Yes	X	
1488	Maple, Sugar	16	2	1	Deciduous Hardwood	Yes	X	
1489	Oak, White	28	4	1	Deciduous Hardwood	Yes		X
1490	Oak, White	25	4	1	Deciduous Hardwood	Yes	X	
1491	Oak, White	31.5	4	1	Deciduous Hardwood	Yes		X
1492	Oak, White	27.5	4	1	Deciduous Hardwood	Yes	X	
1493	Ash, Green	13.5	2	1	Common Tree	Yes		X
1494	Basswood	17.5	2	1	Common Tree	Yes	X	
1495	Basswood	16	4	1	Common Tree	Yes	X	
1497	Maple, Silver	20	3	2	Common Tree	Yes		X
1498	Maple, Silver	34	2	2	Common Tree	Yes	X	
1499	Basswood	13	1	1	Common Tree	Yes	Bad Quality	
1500	Oak, White	24	3	1	Deciduous Hardwood	Yes	X	
2556	Willow, black	62.0	3	8	Common Tree	Yes		X

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
2557	Willow, black	58.0	3	1	Common Tree	Yes		X
2562	Cottonwood	26.0	4	1	Common Tree	Yes		X
2565	Willow, black	16.0	2	3	Common Tree	Yes		X
2566	Cottonwood	16.0	4	1	Common Tree	Yes		X
5000	Maple, silver	27.0	4	1	Common Tree	Yes		X
5001	Maple, silver	25.0	4	1	Common Tree	Yes		X
5002	Maple, silver	24.0	3	1	Common Tree	Yes		X
5003	Maple, silver	34.0	4	1	Common Tree	Yes		X
5004	Ash, green	14.0	4	1	Common Tree	Yes		X
5005	Ash, green	20.0	4	1	Common Tree	Yes		X
5006	Ash, green	20.0	3	1	Common Tree	Yes		X
5007	Ash, green	12.0	3	1	Common Tree	Yes		X
5008	Ash, green	18.0	4	1	Common Tree	Yes		X
5009	Ash, green	23.0	4	1	Common Tree	Yes		X
5010	Ash, green	20.0	4	1	Common Tree	Yes		X
5011	Ash, green	22.0	4	1	Common Tree	Yes		X
5012	Ash, green	28.0	3	1	Common Tree	Yes		X
5013	Ash, green	22.0	4	1	Common Tree	Yes		X
5014	Ash, green	19.0	4	1	Common Tree	Yes		X
5015	Ash, green	22.0	4	1	Common Tree	Yes		X
5016	Ash, green	32.0	3	1	Common Tree	Yes		X
5017	Ash, green	20.0	4	1	Common Tree	Yes		X
5018	Ash, green	32.0	3	1	Common Tree	Yes		X
5019	Ash, green	26.0	4	1	Common Tree	Yes		X
5020	Birch, paper	14.0	3	1	Deciduous Hardwood	Yes		X
5021	Birch, paper	10.0	3	2	Deciduous Hardwood	Yes		X
5022	Birch, paper	11.0	3	2	Deciduous Hardwood	Yes		X
5023	Basswood	14.0	1	2	Common Tree	No	Bad Quality	
5024	Maple, silver	40.0	3	3	Common Tree	Yes		X
5025	Maple, silver	13.0	3	1	Common Tree	Yes		X
5026	Maple, silver	22.0	3	1	Common Tree	Yes		X
5027	Ash, green	20.0	4	1	Common Tree	Yes		X
5027	Maple, silver	12.0	3	1	Common Tree	Yes		X
5028	Maple, silver	14.0	3	1	Common Tree	Yes		X
5029	Maple, silver	14.0	3	1	Common Tree	Yes		X
5030	Maple, silver	18.0	2	2	Common Tree	Yes		X
5031	Maple, silver	24.0	3	1	Common Tree	Yes		X
5032	Maple, silver	58.0	3	8	Common Tree	Yes		X
5033	Ash, green	26.0	4	1	Common Tree	Yes		X
5034	Ash, green	32.0	4	1	Common Tree	Yes		X
5035	Ash, green	20.0	4	1	Common Tree	Yes		X
5036	Oak, red	18.0	4	1	Deciduous Hardwood	Yes		X
5037	Oak, red	11.0	4	1	Deciduous Hardwood	Yes		X
5038	Pine, Scots	13.0	3	1	Coniferous	Yes		X
5039	Oak, bur	28.0	4	1	Deciduous Hardwood	Yes		X
5040	Oak, red	24.0	4	1	Deciduous Hardwood	Yes		X
5041	Oak, pin	18.0	4	1	Deciduous Hardwood	Yes		X
5042	Oak, pin	25.0	4	1	Deciduous Hardwood	Yes		X
5043	Oak, red	24.0	4	1	Deciduous Hardwood	Yes		X
5044	Oak, red	24.0	4	1	Deciduous Hardwood	Yes		X
5045	Boxelder	14.0	3	1	Common Tree	Yes		X
5046	Oak, pin	27.0	3	1	Deciduous Hardwood	Yes		X
5047	Oak, red	17.0	4	1	Deciduous Hardwood	Yes		X
5048	Oak, red	27.0	4	1	Deciduous Hardwood	Yes		X
5049	Boxelder	15.0	3	1	Common Tree	Yes		X
5050	Boxelder	20.0	3	1	Common Tree	Yes		X
5051	Maple, sugar	14.0	4	1	Deciduous Hardwood	Yes		X
5052	Pine, Scots	14.0	3	1	Coniferous	Yes		X
5053	Pine, Scots	28.0	3	2	Coniferous	Yes		X
5054	Maple, red	13.0	4	1	Deciduous Hardwood	Yes		X
5055	Maple, red	15.0	4	1	Deciduous Hardwood	Yes		X
5056	Maple, red	13.0	4	1	Deciduous Hardwood	Yes		X
5058	Spruce, blue	8.0	4	1	Coniferous	Yes		X
5058	Basswood	28.0	4	1	Common Tree	Yes		X
5059	Spruce, blue	8.0	4	1	Coniferous	Yes		X
5060	Ash, green	15.0	2	1	Common Tree	Yes		X
5061	Basswood	20.0	4	1	Common Tree	Yes		X
5062	Basswood	22.0	4	1	Common Tree	Yes		X
5063	Maple, red	13.0	2	1	Deciduous Hardwood	Yes		X
5064	Basswood	17.0	3	1	Common Tree	Yes	X	
5065	Pine, red	18.0	4	1	Coniferous	Yes	X	
5066	Pine, red	14.0	4	1	Coniferous	Yes	X	
5067	Pine, red	14.0	4	1	Coniferous	Yes	X	
5068	Pine, red	14.0	4	1	Coniferous	Yes	X	
5069	Pine, red	14.0	4	1	Coniferous	Yes		X
5070	Pine, red	14.0	4	1	Coniferous	Yes		X
5071	Pine, red	10.0	4	1	Coniferous	Yes		X
5072	Pine, red	16.0	4	1	Coniferous	Yes		X
5073	Pine, red	10.0	4	1	Coniferous	Yes		X
5074	Pine, red	11.0	4	1	Coniferous	Yes		X
5075	Pine, red	10.0	4	1	Coniferous	Yes		X
5076	Pine, red	14.0	4	1	Coniferous	Yes		X
5077	Pine, red	13.0	4	1	Coniferous	Yes		X
5078	Pine, red	11.0	4	1	Coniferous	Yes		X
5079	Pine, red	10.0	3	1	Coniferous	Yes	X	
5080	Pine, red	12.0	4	1	Coniferous	Yes	X	
5081	Pine, red	14.0	4	1	Coniferous	Yes	X	
5082	Pine, red	11.0	4	1	Coniferous	Yes	X	
5084	Pine, red	16.0	3	1	Coniferous	Yes	X	
5084	Pine, red	13.0	4	1	Coniferous	Yes	X	
5085	Pine, red	13.0	4	1	Coniferous	Yes	X	
5087	Pine, red	13.0	4	1	Coniferous	Yes	X	
5087	Pine, red	8.0	3	1	Coniferous	Yes	X	
5088	Pine, red	14.0	4	1	Coniferous	Yes	X	
5089	Pine, red	13.0	4	1	Coniferous	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
5090	Pine, red	12.0	4	1	Coniferous	Yes	X	
5091	Pine, red	14.0	4	1	Coniferous	Yes	X	
5093	Pine, red	14.0	4	1	Coniferous	Yes	X	
5094	Pine, red	10.0	3	1	Coniferous	Yes	X	
5095	Pine, red	16.0	4	1	Coniferous	Yes	X	
5096	Pine, red	8.0	4	1	Coniferous	Yes	X	
5097	Pine, red	10.0	3	1	Coniferous	Yes	X	
5098	Pine, red	13.0	4	1	Coniferous	Yes	X	
5099	Pine, red	12.0	4	1	Coniferous	Yes	X	
5100	Pine, red	10.0	4	1	Coniferous	Yes	X	
5101	Pine, red	11.0	4	1	Coniferous	Yes	X	
5102	Pine, red	16.0	4	1	Coniferous	Yes	X	
5104	Pine, red	14.0	4	1	Coniferous	Yes	X	
5104	Pine, red	16.0	4	1	Coniferous	Yes	X	
5105	Pine, red	12.0	4	1	Coniferous	Yes	X	
5107	Pine, red	11.0	4	1	Coniferous	Yes	X	
5107	Pine, red	13.0	4	1	Coniferous	Yes	X	
5108	Pine, red	14.0	4	1	Coniferous	Yes	X	
5109	Pine, red	12.0	4	1	Coniferous	Yes	X	
5110	Pine, red	12.0	4	1	Coniferous	Yes	X	
5111	Pine, red	12.0	4	1	Coniferous	Yes	X	
5112	Pine, red	12.0	4	1	Coniferous	Yes	X	
5113	Pine, red	12.0	4	1	Coniferous	Yes	X	
5114	Pine, red	8.0	3	1	Coniferous	Yes	X	
5115	Pine, red	13.0	3	1	Coniferous	Yes	X	
5116	Pine, red	11.0	4	1	Coniferous	Yes	X	
5117	Pine, red	13.0	4	1	Coniferous	Yes	X	
5118	Pine, red	12.0	4	1	Coniferous	Yes	X	
5119	Pine, red	14.0	4	1	Coniferous	Yes	X	
5120	Pine, red	13.0	4	1	Coniferous	Yes	X	
5121	Pine, red	12.0	3	1	Coniferous	Yes	X	
5122	Pine, red	8.0	3	1	Coniferous	Yes	X	
5123	Pine, red	14.0	4	1	Coniferous	Yes	X	
5124	Pine, red	16.0	4	1	Coniferous	Yes	X	
5125	Boxelder	13.0	3	1	Common Tree	Yes	X	
5126	Pine, red	13.0	4	1	Coniferous	Yes	X	
5127	Pine, red	8.0	3	1	Coniferous	Yes	X	
5128	Pine, red	10.0	3	1	Coniferous	Yes	X	
5129	Pine, red	14.0	4	1	Coniferous	Yes	X	
5130	Maple, silver	47.0	1	5	Common Tree	Yes	Bad Quality	
5131	Boxelder	16.0	3	1	Common Tree	Yes	X	
5132	Boxelder	20.0	2	1	Common Tree	Yes	X	
5132	Boxelder	18.0	3	1	Common Tree	Yes	X	
5133	Boxelder	24.0	3	1	Common Tree	Yes	X	
5134	Maple, silver	12.0	3	1	Common Tree	Yes	X	
5135	Maple, silver	16.0	3	2	Common Tree	Yes	X	
5136	Boxelder	13.0	3	2	Common Tree	Yes	X	
5137	Maple, silver	28.0	4	1	Common Tree	Yes	X	
5138	Maple, silver	13.0	3	2	Common Tree	Yes	X	
5139	Boxelder	15.0	4	1	Common Tree	Yes	X	
5140	Pine, white	8.0	4	1	Coniferous	Yes		X
5141	Birch, paper	10.0	3	1	Deciduous Hardwood	Yes		X
5142	Birch, paper	8.0	3	2	Deciduous Hardwood	Yes		X
5143	Pine, white	10.0	4	1	Coniferous	Yes		X
5144	Birch, paper	10.0	3	1	Deciduous Hardwood	Yes		X
5145	Birch, paper	12.0	3	1	Deciduous Hardwood	Yes		X
5146	Oak, bur	6.0	3	1	Deciduous Hardwood	Yes		X
5147	Oak, bur	6.0	3	2	Deciduous Hardwood	Yes		X
5148	Oak, bur	6.0	3	2	Deciduous Hardwood	Yes		X
5149	Oak, bur	6.0	3	2	Deciduous Hardwood	Yes		X
5150	Boxelder	14.0	3	1	Common Tree	Yes	X	
5151	Willow, black	22.0	1	2	Common Tree	Yes	Bad Quality	
5152	Willow, black	24.0	1	2	Common Tree	Yes	Bad Quality	
5153	Willow, black	22.0	1	1	Common Tree	Yes	Bad Quality	
5154	Boxelder	13.0	3	1	Common Tree	Yes	X	
5155	Oak, bur	6.0	4	1	Deciduous Hardwood	Yes		X
5156	Boxelder	12.0	3	1	Common Tree	Yes		X
5157	Boxelder	14.0	3	1	Common Tree	Yes		X
5158	Willow, black	15.0	2	1	Common Tree	Yes	X	
5159	Boxelder	13.0	3	1	Common Tree	Yes		X
5160	Boxelder	14.0	4	1	Common Tree	Yes	X	
5161	Boxelder	14.0	3	1	Common Tree	Yes	X	
5162	Boxelder	16.0	3	1	Common Tree	Yes		X
5163	Boxelder	14.0	3	2	Common Tree	Yes	X	
5164	Boxelder	15.0	3	1	Common Tree	Yes		X
5165	Boxelder	12.0	4	1	Common Tree	Yes		X
5166	Cottonwood	26.0	3	2	Common Tree	Yes		X
5167	Cottonwood	22.0	4	1	Common Tree	Yes		X
5168	Elm, Siberian	12.0	4	1	Common Tree	Yes		X
10047	Pine, Austrian	17.5	3	1	Coniferous	Yes	X	
10048	Pine, Austrian	14.5	3	1	Coniferous	Yes	X	
10049	Spruce, blue	21.0	3	1	Coniferous	Yes	X	
10050	Spruce, blue	21.5	3	1	Coniferous	Yes	X	
10051	Spruce, blue	19.0	3	1	Coniferous	Yes	X	
10052	Spruce, blue	20.0	3	1	Coniferous	Yes	X	
10053	Spruce, blue	16.5	3	1	Coniferous	Yes	X	
10054	Tamarack	8.0	4	1	Coniferous	Yes	X	
10055	Tamarack	8.0	4	1	Coniferous	Yes	X	
10056	Tamarack	8.0	4	1	Coniferous	Yes	X	
10057	Tamarack	19.0	4	1	Coniferous	Yes	X	
10058	Maple, silver	31.0	4	1	Common Tree	Yes	X	
10059	Oak, red	33.0	3	1	Deciduous Hardwood	Yes	X	
10060	Cottonwood	81.0	4	1	Common Tree	Yes	X	
10061	Maple, silver	43.0	3	1	Common Tree	Yes	X	
10062	Maple, silver	55.0	3	1	Common Tree	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10063	Maple, silver	42.0	3	1	Common Tree	Yes	X	
10064	Maple, silver	26.5	4	1	Common Tree	Yes	X	
10065	Ash, green	21.0	4	1	Common Tree	Yes	X	
10066	Maple, silver	42.0	4	1	Common Tree	Yes	X	
10067	Maple, silver	34.0	4	1	Common Tree	Yes	X	
10068	Maple, sugar	18.5	4	1	Deciduous Hardwood	Yes	X	
10069	Maple, sugar	20.0	4	1	Deciduous Hardwood	Yes	X	
10070	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10071	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10072	Maple, sugar	22.0	4	1	Deciduous Hardwood	Yes	X	
10073	Oak, red	13.5	4	1	Deciduous Hardwood	Yes	X	
10074	Oak, red	10.5	4	1	Deciduous Hardwood	Yes	X	
10075	Oak, bur	10.0	4	1	Deciduous Hardwood	Yes	X	
10076	Oak, bur	9.0	4	1	Deciduous Hardwood	Yes	X	
10077	Oak, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10078	Oak, red	14.5	4	1	Deciduous Hardwood	Yes	X	
10079	Oak, bur	9.0	4	1	Deciduous Hardwood	Yes	X	
10080	Oak, red	7.5	4	1	Deciduous Hardwood	Yes	X	
10081	Oak, bur	10.5	4	1	Deciduous Hardwood	Yes	X	
10082	Oak, bur	6.5	3	1	Deciduous Hardwood	Yes	X	
10083	Oak, bur	34.0	4	1	Deciduous Hardwood	Yes	X	
10084	Oak, bur	15.5	4	1	Deciduous Hardwood	Yes	X	
10085	Oak, red	29.0	4	1	Deciduous Hardwood	Yes	X	
10086	Oak, bur	17.5	4	1	Deciduous Hardwood	Yes	X	
10087	Oak, bur	22.0	4	1	Deciduous Hardwood	Yes	X	
10088	Maple, silver	36.0	3	1	Common Tree	Yes	X	
10089	Oak, bur	30.0	4	1	Deciduous Hardwood	Yes	X	
10090	Oak, red	46.0	2	1	Deciduous Hardwood	Yes	X	
10091	Cherry, black	28.0	4	1	Deciduous Hardwood	Yes	X	
10092	Oak, red	11.5	4	1	Deciduous Hardwood	Yes	X	
10093	Oak, red	14.0	4	1	Deciduous Hardwood	Yes	X	
10094	Oak, red	6.5	4	1	Deciduous Hardwood	Yes	X	
10095	Oak, red	12.0	4	1	Deciduous Hardwood	Yes	X	
10096	Oak, red	13.5	4	1	Deciduous Hardwood	Yes	X	
10097	Oak, red	14.5	4	1	Deciduous Hardwood	Yes	X	
10098	Oak, red	6.5	4	1	Deciduous Hardwood	Yes	X	
10099	Oak, red	14.0	4	1	Deciduous Hardwood	Yes	X	
10100	Oak, red	6.5	4	1	Deciduous Hardwood	Yes	X	
10101	Oak, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10102	Oak, red	6.5	4	1	Deciduous Hardwood	Yes	X	
10103	Oak, red	7.5	4	1	Deciduous Hardwood	Yes	X	
10104	Oak, red	9.0	4	1	Deciduous Hardwood	Yes	X	
10105	Oak, red	10.0	4	1	Deciduous Hardwood	Yes	X	
10106	Oak, red	13.0	4	1	Deciduous Hardwood	Yes	X	
10107	Oak, red	8.5	4	1	Deciduous Hardwood	Yes	X	
10108	Oak, red	16.0	4	1	Deciduous Hardwood	Yes	X	
10109	Oak, red	22.0	4	1	Deciduous Hardwood	Yes	X	
10110	Oak, red	7.0	4	1	Deciduous Hardwood	Yes	X	
10111	Oak, red	6.0	3	1	Deciduous Hardwood	Yes	X	
10112	Oak, red	10.0	4	1	Deciduous Hardwood	Yes	X	
10113	Oak, red	14.0	4	1	Deciduous Hardwood	Yes	X	
10114	Oak, red	15.0	4	1	Deciduous Hardwood	Yes	X	
10115	Oak, red	7.0	4	1	Deciduous Hardwood	Yes	X	
10116	Oak, red	8.0	4	1	Deciduous Hardwood	Yes	X	
10117	Oak, red	9.5	4	1	Deciduous Hardwood	Yes	X	
10118	Oak, red	11.5	4	1	Deciduous Hardwood	Yes	X	
10119	Oak, red	11.5	4	1	Deciduous Hardwood	Yes	X	
10120	Oak, red	9.5	4	1	Deciduous Hardwood	Yes	X	
10121	Honeylocust	8.0	4	1	Common Tree	No	Not Significant	
10122	Boxelder	13.5	3	1	Common Tree	Yes	X	
10123	Boxelder	13.0	4	1	Common Tree	Yes	X	
10124	Oak, red	10.5	4	1	Deciduous Hardwood	Yes	X	
10125	Oak, red	26.5	4	2	Deciduous Hardwood	Yes	X	
10126	Oak, red	16.0	3	2	Deciduous Hardwood	Yes	X	
10127	Oak, red	23.0	4	2	Deciduous Hardwood	Yes	X	
10128	Oak, red	7.0	4	1	Deciduous Hardwood	Yes	X	
10129	Birch, paper	7.5	4	1	Deciduous Hardwood	Yes	X	
10130	Elm, American	13.5	4	1	Common Tree	Yes	X	
10131	Boxelder	40.0	3	3	Common Tree	Yes	X	
10132	Ash, green	8.5	3	1	Common Tree	No	Not Significant	
10133	Elm, American	13.0	3	1	Common Tree	Yes	X	
10134	Elm, American	15.0	3	1	Common Tree	Yes	X	
10135	Oak, red	8.5	4	1	Deciduous Hardwood	Yes	X	
10136	Oak, red	22.0	4	1	Deciduous Hardwood	Yes	X	
10137	Oak, red	7.5	4	1	Deciduous Hardwood	Yes	X	
10138	Oak, red	13.0	4	1	Deciduous Hardwood	Yes	X	
10139	Oak, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10140	Oak, red	9.5	4	1	Deciduous Hardwood	Yes	X	
10141	Oak, red	16.0	4	1	Deciduous Hardwood	Yes	X	
10142	Elm, American	15.0	4	1	Common Tree	Yes	X	
10143	Oak, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10144	Oak, red	28.0	4	1	Deciduous Hardwood	Yes	X	
10145	Boxelder	12.5	4	1	Common Tree	Yes	X	
10146	Oak, red	8.5	4	1	Deciduous Hardwood	Yes	X	
10147	Oak, red	16.0	4	1	Deciduous Hardwood	Yes	X	
10148	Oak, red	13.

FUTURE PHASES INDIVIDUAL SHOTS CONT'D

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10158	Oak, red	19.0	3	2	Deciduous Hardwood	Yes	X	
10159	Elm, American	12.5	4	1	Common Tree	Yes	X	
10160	Elm, American	14.0	4	1	Common Tree	Yes	X	
10161	Oak, red	7.5	4	1	Deciduous Hardwood	Yes	X	
10162	Oak, red	22.0	3	2	Deciduous Hardwood	Yes	X	
10163	Elm, American	14.0	3	1	Common Tree	Yes	X	
10164	Cherry, black	12.0	4	1	Deciduous Hardwood	Yes	X	
10165	Oak, white	30.0	4	1	Deciduous Hardwood	Yes	X	
10166	Aspen	12.5	4	1	Common Tree	Yes	X	
10167	Ash, green	8.0	4	1	Common Tree	No	Not Significant	
10168	Boxelder	12.5	4	1	Common Tree	Yes	X	
10169	Oak, white	20.5	4	1	Deciduous Hardwood	Yes	X	
10170	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10171	Oak, red	9.0	3	1	Deciduous Hardwood	Yes	X	
10172	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10173	Oak, white	22.0	3	1	Deciduous Hardwood	Yes	X	
10174	Oak, white	19.5	4	1	Deciduous Hardwood	Yes	X	
10175	Oak, bur	24.0	4	1	Deciduous Hardwood	NA	Part of Plot 3	
10176	Maple, silver	45.0	3	1	Common Tree	Yes	X	
10177	Oak, white	20.5	4	1	Deciduous Hardwood	Yes	X	
10178	Oak, red	54.0	4	2	Deciduous Hardwood	Yes	X	
10179	Oak, red	30.0	4	1	Deciduous Hardwood	Yes	X	
10180	Oak, red	31.5	4	2	Deciduous Hardwood	Yes	X	
10181	Oak, red	18.0	4	1	Deciduous Hardwood	Yes	X	
10182	Oak, white	16.0	4	1	Deciduous Hardwood	Yes	X	
10183	Oak, white	16.5	4	1	Deciduous Hardwood	Yes	X	
10184	Oak, bur	27.0	4	1	Deciduous Hardwood	Yes	X	
10185	Oak, white	23.0	4	1	Deciduous Hardwood	Yes	X	
10186	Oak, white	21.5	4	1	Deciduous Hardwood	Yes	X	
10187	Oak, bur	16.0	4	1	Deciduous Hardwood	Yes	X	
10188	Oak, bur	26.0	4	1	Deciduous Hardwood	Yes		X
10189	Birch, paper	17.0	4	3	Deciduous Hardwood	Yes	X	
10190	Oak, bur	14.0	4	1	Deciduous Hardwood	Yes	X	
10191	Oak, bur	15.0	3	1	Deciduous Hardwood	Yes	X	
10192	Oak, bur	19.0	4	1	Deciduous Hardwood	Yes	X	
10193	Oak, red	9.5	4	1	Deciduous Hardwood	Yes	X	
10194	Oak, red	13.0	4	1	Deciduous Hardwood	Yes	X	
10195	Oak, red	8.5	4	1	Deciduous Hardwood	Yes	X	
10196	Oak, red	7.5	4	1	Deciduous Hardwood	Yes	X	
10197	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10198	Oak, red	8.5	4	1	Deciduous Hardwood	Yes	X	
10199	Oak, bur	26.0	4	1	Deciduous Hardwood	Yes	X	
10200	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10201	Oak, red	9.0	4	1	Deciduous Hardwood	Yes	X	
10202	Oak, bur	15.5	4	1	Deciduous Hardwood	Yes	X	
10203	Oak, bur	17.5	3	1	Deciduous Hardwood	Yes	X	
10204	Oak, bur	16.5	4	1	Deciduous Hardwood	Yes	X	
10205	Oak, red	6.5	4	1	Deciduous Hardwood	Yes	X	
10206	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10207	Oak, red	16.0	4	2	Deciduous Hardwood	Yes	X	
10208	Oak, bur	6.5	4	1	Deciduous Hardwood	Yes	X	
10209	Oak, red	9.0	4	1	Deciduous Hardwood	Yes	X	
10210	Oak, red	29.0	4	1	Deciduous Hardwood	Yes	X	
10211	Oak, bur	17.5	4	1	Deciduous Hardwood	Yes	X	
10212	Oak, bur	22.0	4	1	Deciduous Hardwood	Yes	X	
10213	Cherry, black	9.0	3	2	Deciduous Hardwood	Yes	X	
10214	Elm, American	15.0	4	1	Common Tree	Yes	X	
10215	Oak, red	12.0	4	1	Deciduous Hardwood	Yes	X	
10216	Oak, bur	26.0	3	1	Deciduous Hardwood	Yes	X	
10217	Oak, bur	14.5	4	1	Deciduous Hardwood	Yes	X	
10218	Oak, red	9.0	4	1	Deciduous Hardwood	Yes	X	
10219	Oak, red	10.0	4	1	Deciduous Hardwood	Yes	X	
10220	Oak, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10221	Oak, bur	6.0	4	1	Deciduous Hardwood	Yes	X	
10222	Oak, bur	28.0	3	1	Deciduous Hardwood	Yes	X	
10223	Spruce, blue	10.0	4	1	Coniferous	Yes	X	
10224	Spruce, blue	10.0	4	1	Coniferous	Yes	X	
10225	Spruce, blue	14.0	4	1	Coniferous	Yes	X	
10226	Oak, red	15.0	4	1	Deciduous Hardwood	Yes	X	
10227	Oak, red	10.5	4	1	Deciduous Hardwood	Yes	X	
10228	Oak, bur	28.0	4	1	Deciduous Hardwood	Yes	X	
10229	Oak, bur	19.0	4	1	Deciduous Hardwood	Yes	X	
10230	Oak, bur	29.0	4	1	Deciduous Hardwood	Yes	X	
10231	Oak, bur	28.5	4	1	Deciduous Hardwood	Yes	X	
10232	Spruce, blue	9.0	4	1	Coniferous	Yes	X	
10233	Spruce, blue	12.0	4	1	Coniferous	Yes	X	
10234	Spruce, blue	11.0	4	1	Coniferous	Yes	X	
10235	Spruce, blue	10.0	4	1	Coniferous	Yes	X	
10236	Spruce, blue	11.0	4	1	Coniferous	Yes	X	
10237	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10238	Oak, red	40.0	4	1	Deciduous Hardwood	Yes	X	
10239	Oak, bur	26.0	4	1	Deciduous Hardwood	Yes	X	
10347	Oak, pin	10.0	4	1	Deciduous Hardwood	Yes	X	
10348	Pine, Austrian	10.5	4	1	Coniferous	Yes	X	
10349	Pine, red	10.0	4	1	Coniferous	Yes	X	
10350	Pine, red	11.0	3	1	Coniferous	Yes	X	
10351	Pine, red	12.5	4	1	Coniferous	Yes	X	
10352	Pine, red	13.0	4	1	Coniferous	Yes	X	
10353	Pine, red	11.5	4	1	Coniferous	Yes	X	
10354	Pine, red	11.0	4	1	Coniferous	Yes	X	
10355	Pine, red	10.5	4	1	Coniferous	Yes	X	
10356	Pine, red	9.5	4	1	Coniferous	Yes	X	
10357	Spruce, blue	19.0	3	1	Coniferous	Yes	X	
10358	Spruce, blue	16.0	3	1	Coniferous	Yes	X	
10359	Cottonwood	15.5	4	1	Common Tree	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10360	Cottonwood	18.5	4	1	Common Tree	Yes	X	
10361	Cottonwood	14.0	3	1	Common Tree	Yes	X	
10362	Cottonwood	19.0	4	1	Common Tree	Yes	X	
10363	Cottonwood	16.5	4	1	Common Tree	Yes	X	
10364	Cottonwood	16.0	4	1	Common Tree	Yes	X	
10365	Maple, silver	34.0	4	1	Common Tree	Yes	X	
10366	Maple, sugar	19.0	4	1	Deciduous Hardwood	Yes	X	
10367	Cottonwood	15.0	4	1	Common Tree	Yes	X	
10368	Cottonwood	14.0	4	1	Common Tree	Yes	X	
10369	Cottonwood	19.5	4	1	Common Tree	Yes	X	
10370	Cottonwood	16.5	4	1	Common Tree	Yes	X	
10371	Cottonwood	11.0	4	1	Common Tree	No	Not Significant	
10372	Ash, green	12.0	3	1	Common Tree	Yes	X	
10373	Cottonwood	15.0	4	1	Common Tree	Yes	X	
10374	Cottonwood	21.0	4	1	Common Tree	Yes	X	
10375	Ash, green	6.0	4	1	Common Tree	No	Not Significant	
10376	Elm, American	16.0	4	1	Common Tree	Yes	X	
10377	Cottonwood	14.0	4	1	Common Tree	Yes	X	
10378	Ash, green	7.0	4	1	Common Tree	No	Not Significant	
10379	Ash, green	6.5	3	1	Common Tree	No	Not Significant	
10380	Cottonwood	18.0	4	1	Common Tree	Yes	X	
10381	Cottonwood	20.0	4	1	Common Tree	Yes	X	
10382	Ash, green	16.0	4	2	Common Tree	Yes	X	
10383	Spruce, blue	14.0	4	1	Coniferous	Yes	X	
10384	Spruce, blue	14.0	4	1	Coniferous	Yes	X	
10385	Pine, Scots	16.0	4	1	Coniferous	Yes	X	
10386	Pine, Scots	15.0	3	1	Coniferous	Yes	X	
10387	Pine, Scots	15.5	4	1	Coniferous	Yes	X	
10388	Pine, Scots	17.0	3	1	Coniferous	Yes	X	
10389	Maple, sugar	14.0	4	1	Deciduous Hardwood	Yes	X	
10390	Pine, Scots	20.0	3	1	Coniferous	Yes	X	
10391	Pine, Scots	12.0	4	1	Coniferous	Yes	X	
10392	Pine, Scots	15.0	4	1	Coniferous	Yes	X	
10393	Pine, Scots	14.0	4	1	Coniferous	Yes	X	
10394	Pine, Scots	15.5	4	1	Coniferous	Yes	X	
10395	Maple, silver	12.0	3	1	Common Tree	Yes	X	
10396	Maple, silver	12.0	3	1	Common Tree	Yes	X	
10397	Maple, silver	42.0	3	5	Common Tree	Yes	X	
10398	Maple, silver	13.5	4	1	Common Tree	Yes	X	
10399	Maple, silver	20.0	3	1	Common Tree	Yes	X	
10400	Maple, silver	36.0	3	5	Common Tree	Yes	X	
10401	Elm, American	21.0	4	1	Common Tree	Yes	X	
10402	Elm, Siberian	18.0	3	1	Common Tree	Yes	X	
10403	Elm, American	14.0	4	1	Common Tree	Yes	X	
10404	Maple, silver	38.0	3	1	Common Tree	Yes	X	
10405	Birch, paper	6.0	4	1	Deciduous Hardwood	Yes	X	
10406	Birch, paper	6.0	4	1	Deciduous Hardwood	Yes	X	
10407	Birch, paper	16.0	4	4	Deciduous Hardwood	Yes	X	
10408	Spruce, blue	18.0	3	1	Coniferous	Yes	X	
10409	Oak, red	16.0	4	1	Deciduous Hardwood	Yes	X	
10410	Oak, red	13.5	4	1	Deciduous Hardwood	Yes	X	
10411	Birch, paper	10.0	4	2	Deciduous Hardwood	Yes	X	
10412	Oak, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10413	Oak, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10414	Oak, red	7.0	4	1	Deciduous Hardwood	Yes	X	
10415	Oak, red	14.5	4	1	Deciduous Hardwood	Yes	X	
10416	Ash, green	8.5	4	1	Common Tree	No	Not Significant	
10417	Elm, American	13.5	3	1	Common Tree	Yes	X	
10418	Elm, American	14.5	3	1	Common Tree	Yes	X	
10419	Elm, American	14.5	3	1	Common Tree	Yes	X	
10420	Birch, paper	30.0	3	3	Deciduous Hardwood	Yes	X	
10421	Birch, paper	13.5	3	1	Deciduous Hardwood	Yes	X	
10422	Oak, red	7.0	4	1	Deciduous Hardwood	Yes	X	
10423	Birch, paper	10.5	4	1	Deciduous Hardwood	Yes	X	
10424	Birch, paper	8.0	4	1	Deciduous Hardwood	Yes	X	
10425	Oak, red	10.5	4	1	Deciduous Hardwood	Yes	X	
10426	Oak, bur	19.0	4	1	Deciduous Hardwood	Yes	X	
10427	Basswood	12.0	3	2	Common Tree	Yes	X	
10428	Oak, red	12.0	4	1	Deciduous Hardwood	Yes	X	
10429	Elm, Siberian	25.0	3	1	Common Tree	Yes	X	
10430	Oak, red	14.0	4	1	Deciduous Hardwood	Yes	X	
10431	Oak, red	6.0	4	1	Deciduous Hardwood	Yes	X	
10432	Basswood	21.0	4	2	Common Tree	Yes	X	
10433	Maple, silver	14.5	4	1	Common Tree	Yes	X	
10434	Basswood	15.0	3	2	Common Tree	Yes	X	
10435	Basswood	15.5	4	2	Common Tree	Yes	X	
10436	Birch, paper	8.5	4	1	Deciduous Hardwood	Yes	X	
10437	Cottonwood	18.0	4	1	Common Tree	Yes	X	
10438	Cottonwood	17.5	4	1	Common Tree	Yes	X	
10439	Cottonwood	19.0	4	1	Common Tree	Yes	X	
10440	Cottonwood	13.5	4	1	Common Tree	Yes	X	
10441	Elm, American	12.5	4	1	Common Tree	Yes	X	
10442	Cottonwood	18.5	4	1	Common Tree	Yes	X	
10443	Cottonwood	34.5	4	2	Common Tree	Yes	X	
10444	Cottonwood	12.5	4	1	Common Tree	Yes	X	
10445	Cottonwood	14.0	4	1	Common Tree	Yes	X	
10446	Cottonwood	17.0	4	1	Common Tree	Yes	X	
10447	Elm, American	13.5	4	1	Common Tree	Yes	X	
10448	Cottonwood	44.0	4	1	Common Tree	Yes	X	
10449	Cottonwood	40.0	3	1	Common Tree	Yes	X	
10450	Cottonwood	14.0	4	1	Common Tree	Yes	X	
10451	Cottonwood	23.0	3	2	Common Tree	Yes	X	
10452	Pine, white	9.5	4	1	Coniferous	Yes	X	
10453	Spruce, blue	10.0	4	1	Coniferous	Yes	X	
10454	Pine, white	12.0	4	1	Coniferous	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10455	Pine, white	9.0	4	1	Coniferous	Yes	X	
10456	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10457	Willow	61.0	4	4	Common Tree	Yes	X	
10458	Cottonwood	18.0	4	1	Common Tree	Yes	X	
10459	Willow	52.0	3	1	Common Tree	Yes	X	
10460	Spruce, white	8.5	4	1	Coniferous	Yes	X	
10461	Spruce, white	13.0	4	1	Coniferous	Yes	X	
10462	Cottonwood	16.0	4	1	Common Tree	Yes	X	
10463	Willow	55.0	4	1	Common Tree	Yes	X	
10464	Cottonwood	17.0	4	1	Common Tree	Yes	X	
10465	Cottonwood	35.0	4	1	Common Tree	Yes	X	
10466	Willow	65.0	3	1	Common Tree	Yes	X	
10467	Pine, white	16.0	4	1	Coniferous	Yes	X	
10468	Pine, white	12.5	4	1	Coniferous	Yes	X	
10469	Pine, white	13.5	4	1	Coniferous	Yes	X	
10470	Pine, white	12.0	4	1	Coniferous	Yes	X	
10471	Pine, white	14.5	4	1	Coniferous	Yes	X	
10472	Pine, white	15.5	4	1	Coniferous	Yes	X	
10473	Pine, white	13.5	4	1	Coniferous	Yes	X	
10474	Pine, white	19.5	4	1	Coniferous	Yes	X	
10475	Pine, white	13.5	4	1	Coniferous	Yes	X	
10476	Cottonwood	18.0	4	1	Common Tree	Yes	X	
10477	Willow	33.0	4	1	Common Tree	Yes	X	
10478	Willow	13.0	4	1	Common Tree	Yes	X	
10479	Willow	65.0	4	1	Common Tree	Yes	X	
10480	Willow	36.0	4	4	Common Tree	Yes	X	
10481	Willow	36.0	4	1	Common Tree	Yes	X	
10482	Cottonwood	17.5	4	1	Common Tree	Yes	X	
10483	Cottonwood	16.5	4	1	Common Tree	Yes	X	
10484	Willow	23.0	4	3	Common Tree	Yes	X	
10485	Willow	13.0	4	2	Common Tree	Yes	X	
10486	Willow	47.0	4	6	Common Tree	Yes	X	
10487	Spruce, white	10.0	4	1	Coniferous	Yes	X	
10488	Spruce, white	11.0	4	1	Coniferous	Yes	X	
10489	Spruce, white	10.0	4	1	Coniferous	Yes	X	
10490	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10491	Pine, red	10.5	3	1	Coniferous	Yes	X	
10492	Spruce, white	12.0	4	1	Coniferous	Yes	X	
10493	Spruce, white	12.0	4	1	Coniferous	Yes	X	
10494	Spruce, blue	9.0	4	1	Coniferous	Yes	X	
10495	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10496	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10497	Pine, white	13.5	4	1	Coniferous	Yes	X	
10498	Pine, white	10.0	4	1	Coniferous	Yes	X	
10499	Pine, white	14.0	4	1	Coniferous	Yes	X	
10500	Pine, white	13.0	4	1	Coniferous	Yes	X	
10501	Spruce, blue	19.5	4	1	Coniferous	Yes	X	
10502	Spruce, blue	22.0	3	1	Coniferous	Yes	X	
10503	Spruce, blue	21.0	3	1	Coniferous	Yes	X	
10504	Oak, pin	19.0	4	1	Deciduous Hardwood	Yes	X	
10505	Oak, pin	15.0	4	1	Deciduous Hardwood	Yes	X	
10506	Oak, pin	14.0	4	1	Deciduous Hardwood	Yes	X	
10507	Spruce, blue	17.0	3	1	Coniferous	Yes	X	
10508	Spruce, blue	19.0	3	1	Coniferous	Yes	X	
10509	Elm, Siberian	12.0	3	1	Common Tree	Yes	X	
10510	Elm, Siberian	25.0	4	1	Common Tree	Yes	X	
10511	Oak, bur	32.0	4	1	Deciduous Hardwood	Yes	X	
10512	Pine, white	9.5	4	1	Coniferous	Yes	X	
10513	Pine, white	9.0	4	1	Coniferous	Yes	X	
10514	Pine, white	9.0	4	1	Coniferous	Yes	X	
10515	Pine, white	13.0	4	1	Coniferous	Yes	X	
10516	Pine, white	9.0	4	1	Coniferous	Yes	X	
10517	Pine, white	14.0	3	1	Coniferous	Yes	X	
10518	Pine, white	14.0	4	1	Coniferous	Yes	X	
10519	Pine, white	11.5	4	1	Coniferous	Yes	X	
10520	Pine, white	8.0	4	1	Coniferous	Yes	X	
10521	Pine, white	12.5	3	1	Coniferous	Yes	X	
10522	Pine, white	10.5	4	1	Coniferous	Yes	X	
10523	Pine, white	11.0	4	1	Coniferous	Yes	X	
10524	Pine, white	16.0	3	2	Coniferous	Yes	X	
10525	Pine, white	9.0	4	1	Coniferous	Yes	X	
10526	Pine, white	9.5	4	1	Coniferous	Yes	X	
10527	Pine, white	15.0	4	1	Coniferous	Yes	X	
10528	Pine, white	10.5	4	1	Coniferous	Yes	X	
10529	Pine, white	9.0	4	1	Coniferous	Yes	X	
10530	Pine, white	14.0	4	1	Coniferous	Yes	X	
10531	Pine, white	11.5	4	1	Coniferous	Yes	X	
10532	Pine, white	11.0	4	1	Coniferous	Yes	X	
10533	Pine, white	12.0	4	1	Coniferous	Yes	X	
10534	Pine, white	14.0	3	1	Coniferous	Yes	X	
10535	Pine, white	25.0	3	1	Coniferous	Yes	X	
10536	Pine, white	9.5	4	1	Coniferous	Yes	X	
10537	Pine, white	9.0	4	1	Coniferous	Yes	X	
10538	Pine, white	11.0	3	1	Coniferous	Yes	X	
10539	Pine, white	9.0	4	1	Coniferous	Yes	X	
10540	Pine, white	13.5	4	1	Coniferous	Yes	X	
10541	Pine, white	21.0	3	2	Coniferous	Yes	X	
10542	Pine, Austrian	19.0	3	1	Coniferous	Yes	X	
10543	Pine, white	17.0	3	1	Coniferous	Yes	X	
10544	Pine, white	10.5	4	1	Coniferous	Yes	X	
10545	Pine, white	11.0	4	1	Coniferous	Yes	X	
10546	Pine, white	14.0	4	1	Coniferous	Yes	X	
10547	Pine, white	13.5	4	1	Coniferous	Yes	X	
10548	Pine, white	10.5	4	1	Coniferous	Yes	X	
10549	Pine, white	11.0	4	1	Coniferous	Yes	X	

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10550	Pine, white	12.0	3	1	Coniferous	Yes	X	
10551	Pine, white	8.0	4	1	Coniferous	Yes	X	
10552	Pine, white	9.0	4	1	Coniferous	Yes	X	
10553	Pine, white	11.0	4	1	Coniferous	Yes	X	
10554	Pine, white	11.0	4	1	Coniferous	Yes	X	
10555	Pine, white	11.0	4	1	Coniferous	Yes	X	
10556	Pine, white	9.5	4	1	Coniferous	Yes	X	
10557	Pine, white	10.0	4	1	Coniferous	Yes	X	
10558	Pine, white	10.0	4	1	Coniferous	Yes	X	
10559	Pine, white	8.5	4	1	Coniferous	Yes	X	
10560	Pine, white	10.0	4	1	Coniferous	Yes	X	
10561	Pine, white	9.5	4	1	Coniferous	Yes	X	
10562	Pine, white	8.0	4	1	Coniferous	Yes	X	
10563	Pine, white	9.0	4	1	Coniferous	Yes	X	
10564	Pine, white	8.0	4	1	Coniferous	Yes	X	
10565	Pine, white	8.0	4	1	Coniferous	Yes	X	
10566	Pine, white	8.0	4	1	Coniferous	Yes	X	
10567	Pine, white	8.0	4	1	Coniferous	Yes	X	
10568	Pine, white	9.0	4	1	Coniferous	Yes	X	
10569	Pine, white	9.0	4	1	Coniferous	Yes	X	
10570	Pine, white	10.0	4	1	Coniferous	Yes	X	
10571	Spruce, white	9.0	4	1	Coniferous	Yes	X	
10572	Spruce, white	11.0	4	1	Coniferous	Yes	X	
10573	Spruce, Norway	10.0	4	1	Coniferous	Yes	X	
10574	Spruce, white	8.0	4	1	Coniferous	Yes	X	
10575	Spruce, white	9.5	4	1	Coniferous	Yes	X	
10576	Pine, Scots	12.0	3	1	Coniferous	Yes	X	
10577	Pine, Scots	11.0	4	1	Coniferous	Yes	X	
10578	Pine, Scots	13.0	4	1	Coniferous	Yes	X	
10579	Pine, Scots	10.0	4	1	Coniferous	Yes	X	
10580	Pine, Scots	12.5	4	1	Coniferous	Yes	X	
10581	Maple, silver	73.0	3	1	Common Tree	Yes	X	
10582	Maple, sugar	12.5	4	1	Deciduous Hardwood	Yes	X	
10583	Maple, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10584	Maple, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10585	Maple, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10586	Maple, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10587	Pine, white	16.0	4	1	Coniferous	Yes	X	
10588	Pine, white	13.0	4	1	Coniferous	Yes	X	
10589	Maple, red	13.0	4	1	Deciduous Hardwood	Yes	X	
10590	Maple, silver	30.0	4	1	Common Tree	Yes	X	
10591	Oak, bur	9.5	4	1	Deciduous Hardwood	Yes	X	
10592	Oak, bur	9.0	4	1	Deciduous Hardwood	Yes	X	
10593	Oak, red	18.0	4	1	Deciduous Hardwood	Yes	X	
10594	Oak, bur	9.5	4	1	Deciduous Hardwood	Yes	X	
10595	Oak, bur	11.5	4	1	Deciduous Hardwood	Yes	X	
10596	Oak, bur	13.0	4	1	Deciduous Hardwood	Yes	X	
10597	Oak, bur	12.0	4	1	Deciduous Hardwood	Yes	X	
10598	Oak, bur	32.0	3	1	Deciduous Hardwood	Yes	X	
10599	Maple, red	12.5	4	1	Deciduous Hardwood	Yes	X	
10600	Spruce, blue	18.5	4	1	Coniferous	Yes	X	
10601	Spruce, blue	17.5	4	1	Coniferous	Yes	X	
10602	Spruce, blue	17.5	4	1	Coniferous	Yes	X	
10603	Ginkgo	16.0	4	1	Common Tree	Yes	X	
10604	Spruce, white	9.0	3	1	Coniferous	Yes	X	
10605	Spruce, white	10.0	3	1	Coniferous	Yes	X	
10606	Spruce, white	10.0	4	1	Coniferous	Yes	X	
10607	Spruce, white	12.0	4	1	Coniferous	Yes	X	
10608	Maple, red	9.0	4	1	Deciduous Hardwood	Yes	X	
10609	Maple, red	18.0	4	1	Deciduous Hardwood	Yes	X	
10610	Maple, red	22.0	4	1	Deciduous Hardwood	Yes	X	
10611	Oak, bur	24.0	4	1	Deciduous Hardwood	Yes	X	
10612	Oak, bur	30.0	4	1	Deciduous Hardwood	Yes	X	
10613	Oak, bur	26.0	4	1	Deciduous Hardwood	Yes	X	
10614	Pine, white	14.0	4	1	Coniferous	Yes	X	
10615	Pine, white	14.5	4	1	Coniferous	Yes	X	
10616	Pine, white	14.0	4	1	Coniferous	Yes	X	
10617	Pine, white	13.5	4	1	Coniferous	Yes	X	
10618	Pine, red	16.0	3	1	Coniferous	Yes	X	
10619	Pine, red	15.5	4	1	Coniferous	Yes	X	
10620	Pine, red	14.5	4	1	Coniferous	Yes	X	
10621	Pine, red	17.5	4	1	Coniferous	Yes	X	
10622	Pine, red	14.5	4	1	Coniferous	Yes	X	
10623	Pine, red	14.0	4	1	Coniferous	Yes	X	
10624	Pine, red	13.5	4	1	Coniferous	Yes	X	
10625	Pine, red	15.5	4	1	Coniferous	Yes	X	
10626	Pine, red	12.0	4	1	Coniferous	Yes	X	
10627	Pine, red	14.5	4	1	Coniferous	Yes	X	
10628	Pine, red	13.5	3	1	Coniferous	Yes	X	
10629	Pine, red	14.5	4	1	Coniferous	Yes	X	
10630	Pine, red	11.0	4	1	Coniferous	Yes	X	
10631	Oak, bur	14.0	4	1	Deciduous Hardwood	Yes	X	
10632	Oak, bur	31.0	4	1	Deciduous Hardwood	Yes	X	
10633	Pine, red	13.0	4	1	Coniferous	Yes	X	
10634	Pine, red	12.0	4	1	Coniferous	Yes	X	
10635	Pine, red	14.0	4	1	Coniferous	Yes	X	
10636	Pine, red	14.5	4	1	Coniferous	Yes	X	
10637	Pine, red	15.0	4	1

FUTURE PHASES INDIVIDUAL SHOTS CONT'D

Tree No.	Tree Species	DBH (in.)	Quality	Stems	City Classification	Significant	Saved	Removed
10645	Spruce, white	11.5	3	1	Coniferous	Yes	X	
10646	Spruce, white	11.0	3	1	Coniferous	Yes	X	
10647	Spruce, white	11.0	3	1	Coniferous	Yes	X	
10648	Oak, pin	13.0	4	1	Deciduous Hardwood	Yes	X	
10649	Oak, pin	13.5	4	1	Deciduous Hardwood	Yes	X	
10650	Oak, pin	15.0	4	1	Deciduous Hardwood	Yes	X	
10651	Oak, pin	13.0	4	1	Deciduous Hardwood	Yes	X	
10652	Oak, pin	16.5	4	1	Deciduous Hardwood	Yes	X	
10653	Oak, bur	9.5	4	1	Deciduous Hardwood	Yes	X	
10654	Oak, red	9.0	4	1	Deciduous Hardwood	Yes	X	
10655	Oak, bur	7.0	4	1	Deciduous Hardwood	Yes	X	
10656	Oak, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10657	Oak, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10658	Oak, bur	26.0	3	1	Deciduous Hardwood	Yes	X	
10659	Elm, Siberian	15.5	4	1	Common Tree	Yes	X	
10660	Oak, bur	15.0	4	2	Deciduous Hardwood	Yes	X	
10661	Oak, red	11.0	4	1	Deciduous Hardwood	Yes	X	
10662	Oak, red	34.0	4	1	Deciduous Hardwood	Yes	X	
10663	Oak, red	10.5	4	1	Deciduous Hardwood	Yes	X	
10664	Oak, red	6.5	4	1	Deciduous Hardwood	Yes	X	
10665	Oak, red	7.5	4	1	Deciduous Hardwood	Yes	X	
10666	Oak, bur	8.5	3	1	Deciduous Hardwood	Yes	X	
10667	Oak, red	27.0	3	1	Deciduous Hardwood	Yes	X	
10823	Maple, red	14.0	4	1	Deciduous Hardwood	Yes		X
10824	Oak, bur	29.5	4	1	Deciduous Hardwood	Yes	X	
10825	Oak, bur	30.0	4	1	Deciduous Hardwood	Yes	X	
10826	Elm, Siberian	26.0	3	1	Common Tree	Yes	X	
10827	Pine, Scots	19.0	4	1	Coniferous	Yes	X	
10828	Spruce, blue	16.0	4	1	Coniferous	Yes	X	
10829	Pine, Scots	16.0	4	1	Coniferous	Yes	X	
10830	Pine, red	15.0	4	1	Coniferous	Yes	X	
10831	Pine, red	13.5	4	1	Coniferous	Yes	X	
10832	Pine, Scots	20.0	4	1	Coniferous	Yes	X	
10833	Ash, green	15.0	4	1	Common Tree	Yes	X	
10834	Pine, Austrian	9.0	3	1	Coniferous	Yes	X	
10835	Pine, Austrian	13.0	3	1	Coniferous	Yes	X	
10836	Pine, Austrian	16.0	3	1	Coniferous	Yes	X	
10837	Maple, silver	31.0	3	1	Common Tree	Yes	X	
10838	Pine, Austrian	14.0	3	1	Coniferous	Yes	X	
10839	Pine, Austrian	15.0	4	1	Coniferous	Yes	X	
10840	Pine, Austrian	12.5	4	1	Coniferous	Yes	X	
10841	Ash, green	12.0	4	1	Common Tree	Yes	X	
10842	Pine, Austrian	13.5	3	1	Coniferous	Yes	X	
10843	Pine, Austrian	12.0	4	1	Coniferous	Yes	X	
10844	Pine, Austrian	16.0	4	1	Coniferous	Yes	X	

Note: Tree Tags 1-2000 by Carlson Mccain, Tree Tags 2536-5207A by KES and Tree Tags 10001-10855 by TreeBiz

TOTAL INDIVIDUAL TREE SHOT ASSESMENT (ENTIRE SITE)

Total caliper inches from individual shots (Phase 1)	13,466.50
Common Tree RemovalCaliper Inches	2507.5
Coniferous Tree Removal Caliper Inches	2421.0
Deciduous Hardwood Removal Caliper Inches	586.5

Total caliper inches from individual shots (Future Phases)	19,057.00
Common Tree RemovalCaliper Inches	1701.0
Coniferous Tree Removal Caliper Inches	551.0
Deciduous Hardwood Removal Caliper Inches	3569.0

Quality Rating	
4	Good
3	Fair
2	Poor
1	Bad
0	Dead

TOTAL TREE PLOT ASSESMENT AREAS (ENTIRE SITE)

	Total Area (Acres)	Removal Area (Acres)	Caliper Inches per Acre	Total Caliper Inches	Total Caliper Inches Removed	Common Inches Removed	Conifer Inches Removed	Hardwood Inches removed
Area 1	36.93	14.08	1750.00	64627.50	24640.00	12320.00	12320.00	6849.92
Area 2	1.85	0.86	0.00	0.00	0.00	0.00	0.00	0.00
Area 3	5.91	4.49	1010.00	5969.10	4534.90	453.49	0.00	4081.41
Area 4	4.39	2.23	1010.00	4433.90	2252.30	1013.54	337.85	900.92
Area 5	2.02	0.00	290.00	585.80	0.00	0.00	0.00	0.00
Area 6	7.43	5.94	1325.63	9849.39	7874.21	874.91	0.00	6999.30
Area 7	2.05	1.03	906.67	1858.67	933.87	700.40	0.00	233.47
Area 8	1.76	0.00	815.00	1434.40	0.00	0.00	0.00	0.00
Area 9	See Individual tree shot information							
Area 10	1.90	0.84	0.00	0.00	0.00	0.00	0.00	0.00
Area 11	8.24	0.00	1485.00	12236.40	0.00	0.00	0.00	0.00
Area 12	1.84	0.04	1707.50	3141.80	68.30	18.99	0.00	49.31
Area 13	2.86	0.00	815.00	2330.90	0.00	0.00	0.00	0.00
Area 14	1.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals:	**78.63**	**29.51**		**106467.86**	**40303.58**	**15381.32**	**12657.85**	**19114.33**

Total caliper inches from all areas	106,467.86
Common Tree RemovalCaliper Inches	15381.3
Coniferous Tree Removal Caliper Inches	12657.8
Deciduous Hardwood Removal Caliper Inches	19114.3

SUMMARY (ENTIRE SITE)

Total caliper inches on the site	138,991.36
Allowable significant removal for the site	
(Allowable removal = 30% Total Significant DBH)	41,697.41
Common Tree RemovalCaliper Inches	19589.8
Coniferous Tree Removal Caliper Inches	15629.8
Deciduous Hardwood Removal Caliper Inches	23269.8
Total Removal Caliper Inches	58489.5
Total Replacement Caliper Inches for Site	**8396.05**

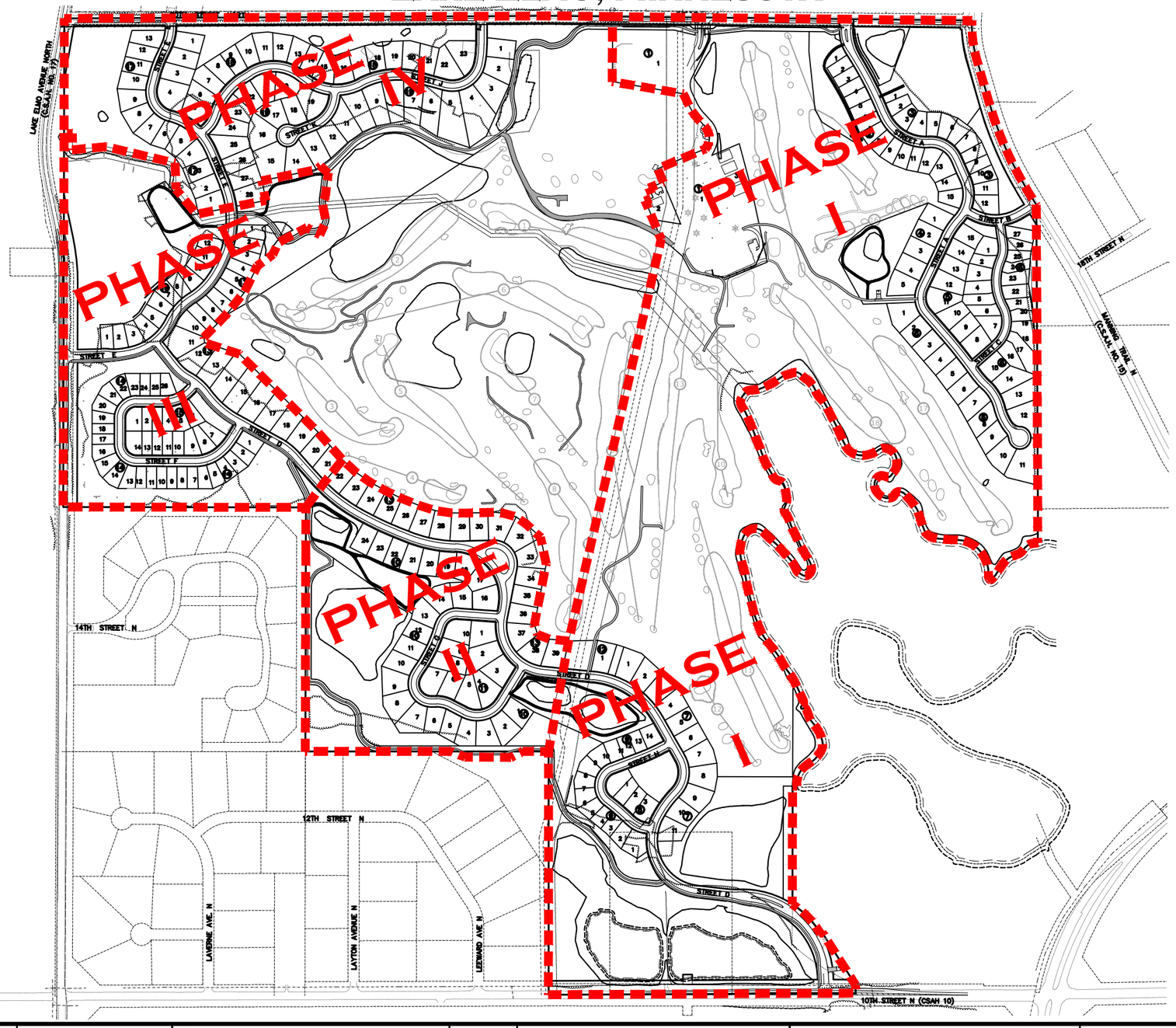
Removal Threshold (30%)	41697.4
Common Tree Removal	- 19589.8
	22107.6
Coniferous Tree Removal	- 15629.8
	6477.7
Deciduous Hardwood Removal	23269.8
	- 6477.7
Removal Over Threhold	16792.1
	x 0.5
Hardwood Replacement Requirement	8396.05

Removal over threshold shall be counted against Hardwood Trees at a rate of replacement of 1/2" mitigated per 1" removed
Mitigation requirement: 8396.05"

NOTE:

TREE IDENTIFICATION AND TREE AREA CALCULATIONS WERE PROVIDED BY KJOLHAUG ENVIRONMENTAL SERVICES.

Exhibit E
Phasing Plan - Development
Lake Elmo, Minnesota



N

0 150 300 600
(IN FEET)

BENCHMARKS
1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).
2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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Carlson McCain • environmental • engineering • surveying

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Blaine, MN 55449
Phone: (763) 489-7900
Fax: (763) 489-7959
www.carlsonmccain.com

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

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 9/21/16 License #: 25063

Drawn: ADB
Designed: BJK
Date: 9/21/16

Revisions:
1. 2/10/17 Revise Per City Comments
2. 2/20/17 Revise Per Owner
3. 4/07/17 Revise Per City & Watershed Comments

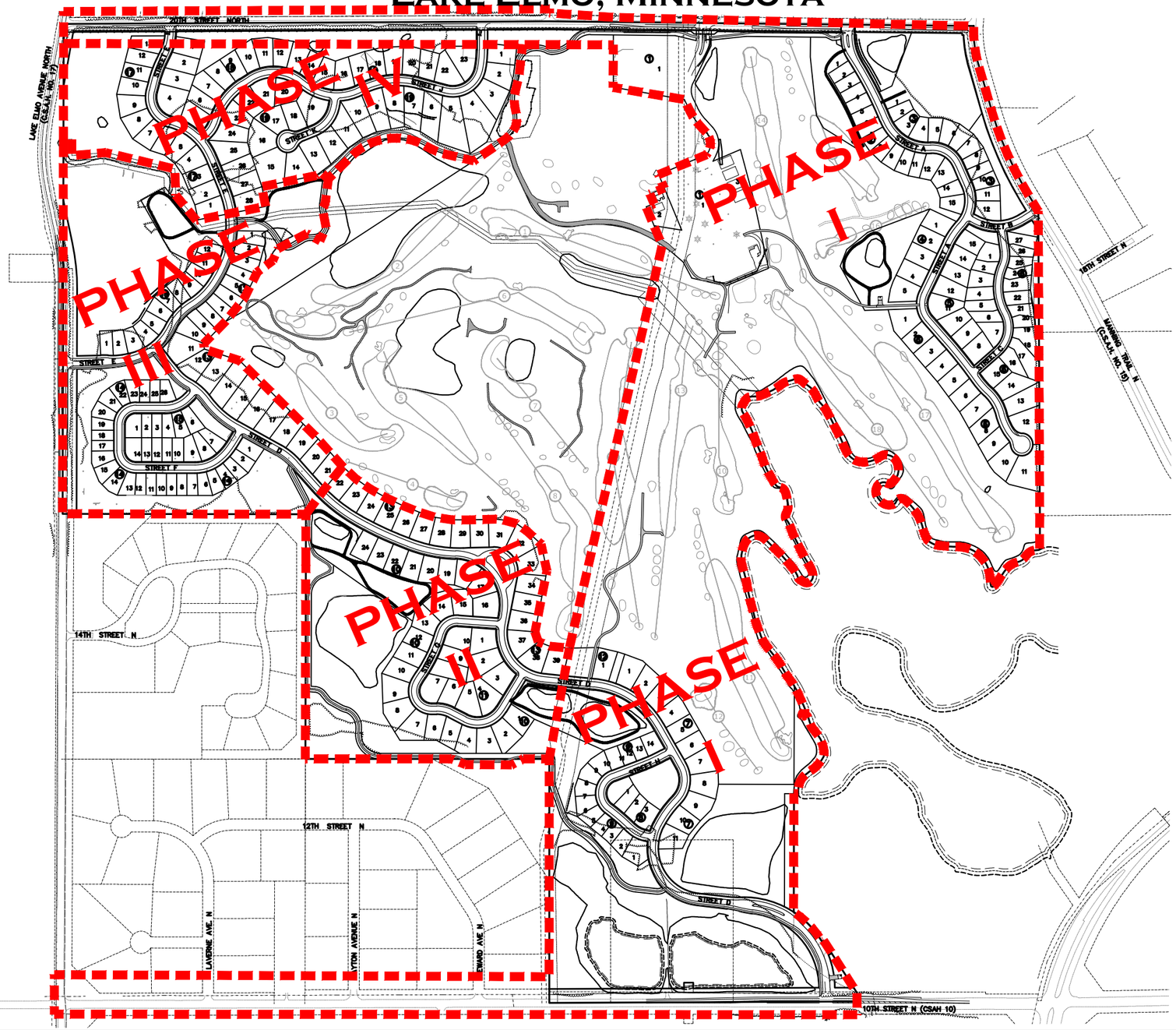
H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

EXHIBIT F
PHASING PLAN - DEVELOPMENT

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Exhibit F
Phasing Plan - Utility
Lake Elmo, Minnesota



N

0 150 300 600
(IN FEET)

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 9/21/16 License #: 25063

Drawn: ADB
Designed: BJK
Date: 9/21/16

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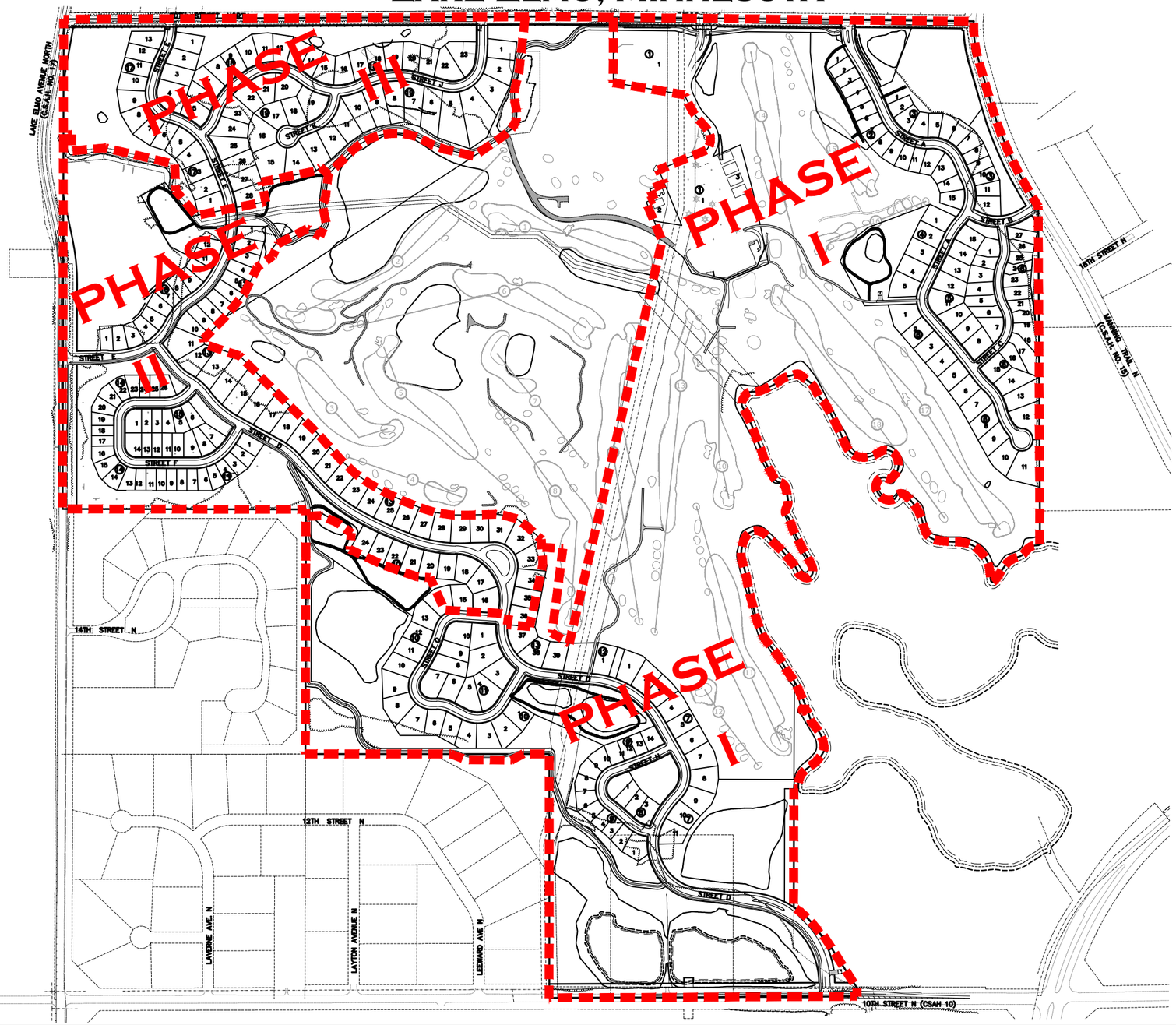
H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

EXHIBIT F
PHASING PLAN -UTILITY

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Exhibit G
Phasing Plan - GRADING
Lake Elmo, Minnesota



N

0 150 300 600
(IN FEET)

BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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Signature:
Date: 9/21/16 License #: 25063

Drawn: JJO
Designed: BJK
Date: 9/21/16

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H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

EXHIBIT G
PHASING PLAN - GRADING

P3 of 3

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Royal Golf Club

THE ROYAL GOLF CLUB

Preliminary PUD/Plat

February 10, 2017

Background

Tartan Park, 3M's private 27-hole golf course and recreational facility was purchased by H.C. Golf Course Development, LLC in March of 2016. Since that time, the golf course reconstruction and proposed clubhouse renovation have begun with an expected opening Summer of 2017. H.C. Golf applied for a Comprehensive Plan Amendment on September 12, 2016. This application was approved, conditioned on Metropolitan Council approval, January 9, 2017. The EAW for the Royal Golf Club was approved by the City Council on January 17, 2017 and the Zoning Text Amendment for the new Golf Course Community designation was approved on February 7th, 2017. The applicant has prepared a Shoreland PUD/Cluster evaluation that is in the final stages of review by the City of Lake Elmo. On September 8, 2016, H.C. Golf requested that the City undertake a Water Supply study based on the City Engineer's recommendation during the Concept Plan review. The study is complete, the recommended changes to RGC's water looping system have been made. RGC has obtained its required Wetland Alteration Permits and received approval of the Wetland Replacement Plan. This narrative accompanies the Development Stage Planned Unit Development and Preliminary Plat.

RGC and City Staff have been working on the details of the preliminary plat over the last 3 months. During this effort, the concerns raised during the concept review, the EAW, the GCC Zoning Text Amendment, and public comments have been addressed and incorporated into this submission.

11455 20th Street North

Lake Elmo, Minnesota 55042

www.royalgolfclubmn.com

Substantive Changes Since Sketch Plan Review

There have been many changes since the Planning Commission saw the original sketch plan. The substantive changes area:

1. Provision of an access to the south connecting the neighborhood to 10th Street.
2. Provision of a public trail connecting 10th Street to 20th Street.
3. Elimination of any cul-de-sacs longer than City Ordinance.
4. Addition of an access from 20th Street to the east part of the site
5. Elimination of 11 lots in the area east of Homestead and north of Tartan Meadows.
6. Connection of the NW neighborhood to the west-central neighborhood.
7. Removal of the 19 lots that had been planned on a wooded ridge along Lake Elmo Ave.

PUD Flexibility

RGC is requesting various types of flexibility based on its PUD designation. These requests are listed below and detailed in each category throughout the narrative. These requests are:

1. **The golf course is required by ordinance to have two entrances.** When submitting the grading permit for the course, this was unknown to RGC. As a result, the area where the 2nd access once existed was used as the remediation area where the mercury contaminated soils in the golf course greens was placed. To address the access concern, RCG is proposing to modify the main entrance drive to include a drive with a median at the intersection of 20th Street.
2. **Minimum Lot Size.** The minimum lot size in the GCC is 9,000 square feet. Many of the proposed Villa lots are below this requirement. Typically, an Association maintained unit would be more a LDR or MDR housing style; the smaller lot size would be compensated by common open space. We believe we have done this with our proposal and should be approved. If not allowed, the only way to meet the minimum density would be to make ***all*** the lots closer to the minimum. We believe this would be detrimental to the neighborhood and it exclusivity.
3. **Impervious Surface Area (Per lot).** While we aren't exactly sure at this point because we haven't picked our builders, we suspect that on some of the 55' villa lots we might exceed the 30% impervious coverage requirement. Like #2 above, the villa would typically be a LDR/MDR product with a 40% coverage requirement. We believe it is reasonable to ask this of our villa product as well. We will adhere to the Shoreland Ordnance in the areas covered by the Shoreland District. We are not requesting this flexibility for the Traditional Single Family.
4. **Villa Setbacks.** RGC is requesting a 20' front yard setback when a side-loaded garage is used. In this case, there should be no issue with parking cars in the driveway that will overhang the sidewalk or ROW. This is not an uncommon allowance when utilizing a side-load garage. Additionally, we are requesting 7.5'/7.5' sideyard setback (garage or

living area) for the villas. With the ordinance requirement of 10'/5' there will be instances where we will have garages with 10' of each other. We believe this creates an ugly street view.

5. **We would like "trails" in front yards to be 6' wide.** This argument is made in the Trails section.
6. **ROW width.** In the 55' wide villa area on the east side we are proposing a 50' ROW without sidewalks. This is described in the streets section.
7. **Number of "Entrance Monuments".** City ordinance allows for only 2 entrance monuments per development. We are requesting 4 entrance features – one at the intersection of Street A and 20th Street, one at the clubhouse entrance, one at the entrance on Lake Elmo Ave. and another approximately 600' north of our entrance on 10th Street. In addition, we would like to have up to 6 additional "neighborhood identifiers" used to identify the villa enclaves. There would likely be nothing more than a 2'X2' pillar with the RGC Logo and the name of the neighborhood.
8. **Sidewalks.** We are proposing two small areas where we think sidewalk is not warranted. This is explained in the Sidewalk section.
9. **Garages.** The ordinance states that there is a 1000 square foot maximum for an attached garage without a conditional use permit. It will not be at all uncommon for many of these homes to have 4-car garages, especially if they have golf carts. We would like the flexibility to have a larger garage with a much more expedient review than a CUP, or have a PUD condition that states that there can only be the equivalent of 3 single stall garage doors facing the street. We are still bound by the percentage of garage face to house face requirement.

Proposed Land Uses and Densities

Land Uses. The development contemplates detached, single family homes encompassing a broad range of lifestyles choices and price points. Anticipated homes will range from Association maintained villa products to high-end custom homes. The "villa" product has 5 different "neighborhoods" -- 3 on the west side of the golf course and 2 on the east. It is likely that the neighborhood in the Southwest corner of the site may contain a product for "new families on the go" that will be a two-story product but still Association maintained. This is an emerging buyer segment as Millennials start to form families and switch to owning their own home.

Lot Sizes.

Traditional single family lots – These lots will range from 80' – 100' in width with minimum depths between 130' to 150'. The varied lots are intermixed throughout the development depending on proximity to the golf course and orientation to existing natural features. Front setbacks for traditional single family homes will be 30' as well as the street-side setback for a corner lot. The rear setback is 30'.

Golf course lots will be a minimum of 100' wide. The rear setback will be 30' and side setbacks at proposed to be 15' each side (30' between homes). Internally, RGC may grant variances to the sideyard setback to allow for bump-outs, egress windows, wide eaves and the like. These would be granted only on a case by case basis to allow for unusual architectural elements. In no case, will the setback be less than 10'. No encroachments into utility easements will be allowed. There are 79 Golf Course lots; the average lot area 17,800 square feet.

Off-course lots with 80-90' widths will have the same front and rear setbacks but have 10' sideyard setbacks. Typical City-allowed encroachments into setbacks will be allowed but in no instance will encroachments into utility easements be allowed. There are 88 off-course lots. The 90'+ lots have an average size of 15,600 square feet; the average area for a 80'+ lots is 13,713 square feet.

Association Maintained Villa Lots -- There are essentially two different villa lots – 55' wide and 65' wide. These will be located on public streets in 5 different enclaves or pods. As negotiations are completed with the two or three custom builders for these homes, plans will be brought forward for City review. Generally, the homes will be 1800 – 2000 square feet on the main level. All units will have full basements. The front setback is proposed to be 20' for side-load garage units and 25' for front loaded garages. The proposed side setbacks are 7.5' from each side (15' between homes).

The lot areas for the 55' lot range from 6900 square feet to 14,700 square feet, averaging approximately 8,700 square feet. The lots areas for the 65' lots range from 7,800 to 13,100 square feet. The average square footage is 9,800 square feet.

The various setback/ROW/Sidewalk relationships that are formed as part of the request are shown on **Exhibits A, B, C, and D.**

Density. The current plan indicates a total of 292 units on 231.25 gross residential acres. Using the City's methods of netting out rights-of-way, bluffs, wetlands and the like a net residential area of 186.92 acres is arrived at. This creates a net density of 1.56 units per acre. This is within the density range prescribed by the Golf Course Community Zoning District.

Development Area	231.2449
10th Street	2.88
Lake Elmo Avenue	2.82
Wetlands	19.71
Wetland Buffers	9.81
Open Water (area of Easement)	1.61
Open Space	
Trail Easement (Outlots B and Outlot T)	6.66
Bluff	0.85
Floodway	0.00
Net Residential Area	186.92
Total Lots	292
Net Density	1.56

Streets/Sidewalks. Streets are generally designed to be 28' feet (back of curb to back of curb) within a 60' right-of-way. All streets have sidewalks on one side except for the 55' villa product on the east side of the neighborhood and the 60-65' villa product in the SW corner. Both "pods" or enclaves contain fewer than 20 lots, and are situated in locations that won't experience through traffic. Both enclaves have a very short walk to a street with a sidewalk or trail. Some lots have access to a trail in their back yard. In only one east neighborhood (55' lots), due to the east/west dimension from the golf course to the east property line, the ROW had to be reduced to 50' to help increase the buffer and preserve trees on the property edge.

Parks, Trails and Open Spaces.

Trails. In response to the Comprehensive Park Plan for a trail along 20th Street from the clubhouse access to Lake Emo Ave., we have proposed an off-street trail from the easterly most proposed street (Street A) to Street J, where the trail moves away from the street and proceeds through the golf course, neighborhood and other planned open spaces eventually connecting to 10th Street. This is proposed to be credited against the project's park dedication fee. No other public parkland dedication is proposed.

Due to severe topography and trees, it was not possible to construct an off-street trail from the proposed trail intersection with Street E to where it leaves Street D at the NW corner of the Homestead neighborhood. Because it is not preferable to construct asphalt trails along the fronts of lots, an 8' sidewalk was discussed. RGC would prefer to see any sidewalk in a front yard no greater than 6'. While a tree should still be able to grow in a 7' green space (boulevard) between the curb and the

edge of an 8' sidewalk, an 8' wide piece of concrete looks out of scale with the other elements in the front yard. RGC is requesting that the "trail" in the area described be limited to 6'.

Private Amenities. A private park is proposed in the SW corner of the site as a small neighborhood amenity. There is also a private HOA maintained fitness center and swimming pool proposed in the golf clubhouse area on the west side of parking lot. The exact location and design have yet to be determined but will be proposed during the CUP process. Use of the fitness center and pool will be paid for through HOA dues. There are also nearly 2 miles of HOA owned nature/exercise trails that exist in the northwest corner of the site (Outlot DD). These are not designed for bicycles or other like as there are numerous bridges, stairways and steep slopes. They are intended to provide a means to experience the hilly woodland and get a more energetic experience than a normal sidewalk or trail.

Private Open Spaces. All HOA owned/maintained open spaces will be encumbered by some form of conservation easement to satisfy both DNR and City Ordinance requirements. The specifics of these easements are being worked on with Staff. There are 35 different outlots within the proposed plat; the ownership and maintenance responsibilities of the outlots are shown on Page 8 of the plan set.

Golf Cart Friendly Neighborhood. It is very important to RGC that the neighborhood be golf cart friendly. By this, we mean that golf carts would be permitted on the internal public streets and the off-street trails that connect the neighborhood to the clubhouse. Golf carts would not be allowed on sidewalks, streets surrounding the property, or trails that did not link directly to the clubhouse. Ordinances to this affect are common (slow moving vehicle) and essentially center around the driver (must be of legal driving age with insurance, etc.) and the cart itself. If the ordinance is a dawn to dusk ordinance certain accessories must be on the cart; if it includes dusk to dawn operation additional accessories are required. RGC would like to explore this concept with Lake Elmo Public Safety officials to arrive at an ordinance that satisfies all.

Restrictive Covenants. The development will be encumbered by a variety of Restrictive Covenants put in place for the benefit of the residents (Architectural Guidelines, use restrictions, exterior storage requirements, vehicle parking, RVs, etc.) as well as Restrictive Covenants placed on open spaces at the direction of the City as part of the Ordinance and Shoreland requirements. As part of the review process, we expect that the agency required covenants will be developed and that concerns of the Planning Commission will be voiced and incorporated into the HOA Documents. Finalization of these documents will be done prior to Final Plat submittal

Transportation. All the access points to surrounding streets and County Roads have been approved by the appropriate agencies subject to the final design being presented. During the EAW approval process, a traffic study was performed. All the recommendations of the study have been implemented in the plans, the most significant of which are turn lanes at all the project intersections with 20th Street.

The access to 10th Street has been obtained through negotiation the property owner to the east of the access point, Terry Emerson. The negotiation involves land swaps and other considerations we wish to remain outside the public domain. The discussions are proceeding nicely and we are in the process of reviewing final documents. The land swaps will be accomplished prior to final plat approval so that everything will be memorialized in the plat. The specifics or the land swaps will be presented at the Planning Commission meeting.

Tree Preservation

Trees were inventoried using two methods. Many trees were individually identified and located. Some trees were inventoried using a foresters sampling method. The individual tree locations as well as the forester's areas are shown on the submitted tree preservation plan. Individual trees were identified by Kjolhaug Environmental Services and Tree Biz. The foresters sample areas were done by Kjolhaug Environmental Services. Carlson McCain surveyed the individual tree locations. The detailed calculations can be found on the submitted tree preservation plan. There is a mitigation requirement of 4,298 caliper inches. This mitigation requirement is fulfilled on the submitted landscape plans.

It should be noted that our calculations are made utilizing the "mixed use" provisions in the City Ordinance. In our opinion, the public nature of the golf course, restaurant, banquet and event facilities, driving range, and teaching center all indicate a use that is commercial in nature and that any financial link between the residential uses and the golf course does not invalidate this provision.

We are confident that the combination of saving over 60% of trees on site as well as all the proposed landscaping and amenity features, The Royal Golf Club at Lake Elmo will become a beautiful new addition to the City that everyone can be proud of.

Phasing

The first phase of development will be the development of the east side of the project along with a small portion in the SW corner. This is shown on **Exhibit E** of this narrative.

All the first phase utilities will be contained in Phase 1 Development except for a sewer force main along 10th Street and its intersection with Lake Elmo Ave. and a watermain along the south side of 20th Street to its intersection with Lake Elmo Blvd **(Exhibit F).** The Grading Phasing is shown on **Exhibit G.** The primary driver of this phasing is the need to provide public sewer and water to the clubhouse within 2 years of it's opening, which is expected to be the summer of 2017. The ultimate pace of the phasing will be determined by market demand but future phases are generally expected to proceed from the SW corner north to 20th Street. Phasing of critical public infrastructure and trail improvements will be discussed and approved with Staff as we proceed with approvals.

The approximate dates of the 4 development phases are:

Phase 1 – 2017
Phase 2 – 2019
Phase 3 – 2021
Phase 4 -- 2013

Builders. While we have spoken with many custom builders in the area, out of respect for the City approval process we have not selected any. With preliminary plat approval, we will announce these builders and, if needed, make a presentation of their work to the City. We are confident that the City will be pleased with the custom builders we will chose. Presently we are considering a pool of 7 custom builders for the traditional homes and 2-3 custom home builders for the villas.

There will be an architectural review committee (ARC) that will approve all house plans in accordance with a prescribed set of architectural guidelines that will cover minimum roof pitches and materials, 4-sided architecture, wrapped windows and doors, Hardie siding and Andersen Windows. As we continue to put together the builder pool, we will be happy to review the architectural guidelines and speak with the builders themselves.

Summary

The Royal Golf Club is a unique solution to the natural and regulatory challenges that this site presents. Its proximity to transportation and the rest of the metro area, the surrounding open space and recreational areas, quality schools and a broad buyer profile offer a unique locational advantage. Combined with the golf course, there has not been a project of this caliber in the Twin Cities in two decades; there likely will not be another one in the foreseeable future.

We believe that this plan is a solid framework with which to proceed to final plat and the other regulatory steps to bring the neighborhood to reality. We continue to discuss the project with policy makers, refine the plan as we gain more information on the potential market, evolving planning/environmental considerations, and community expectations. We look forward to

advancing the proposal and addressing more details of the design as we prepare for final PUD and plat approvals.

Respectfully submitted,

H.C. Golf Course Development, LLC
Rick Packer
President

The Royal Golf Club at Lake Elmo

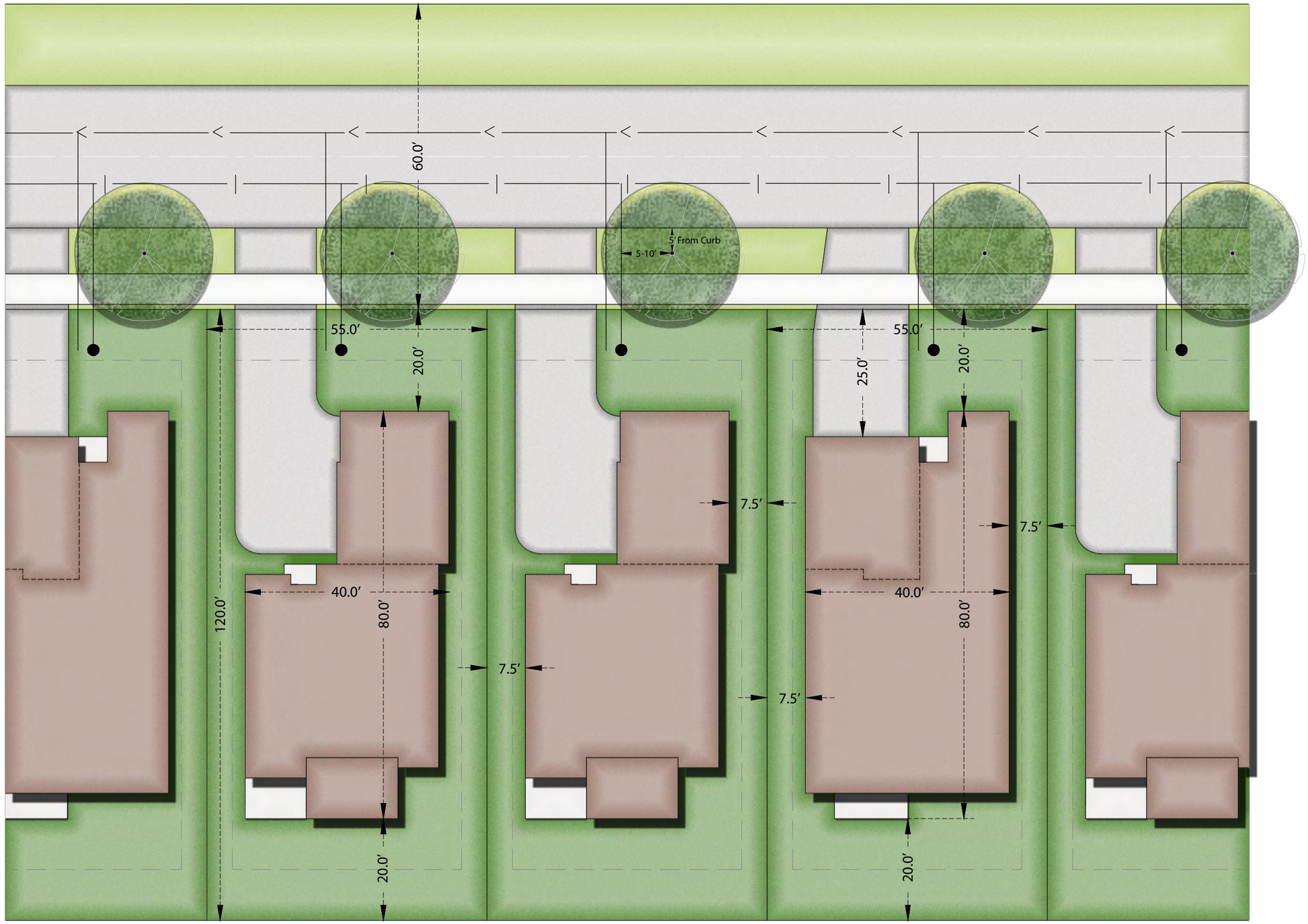


EXHIBIT A

HC Golf Course Development, LLC

The Royal Golf Club at Lake Elmo



EXHIBIT B

HC Golf Course Development, LLC

The Royal Golf Club at Lake Elmo

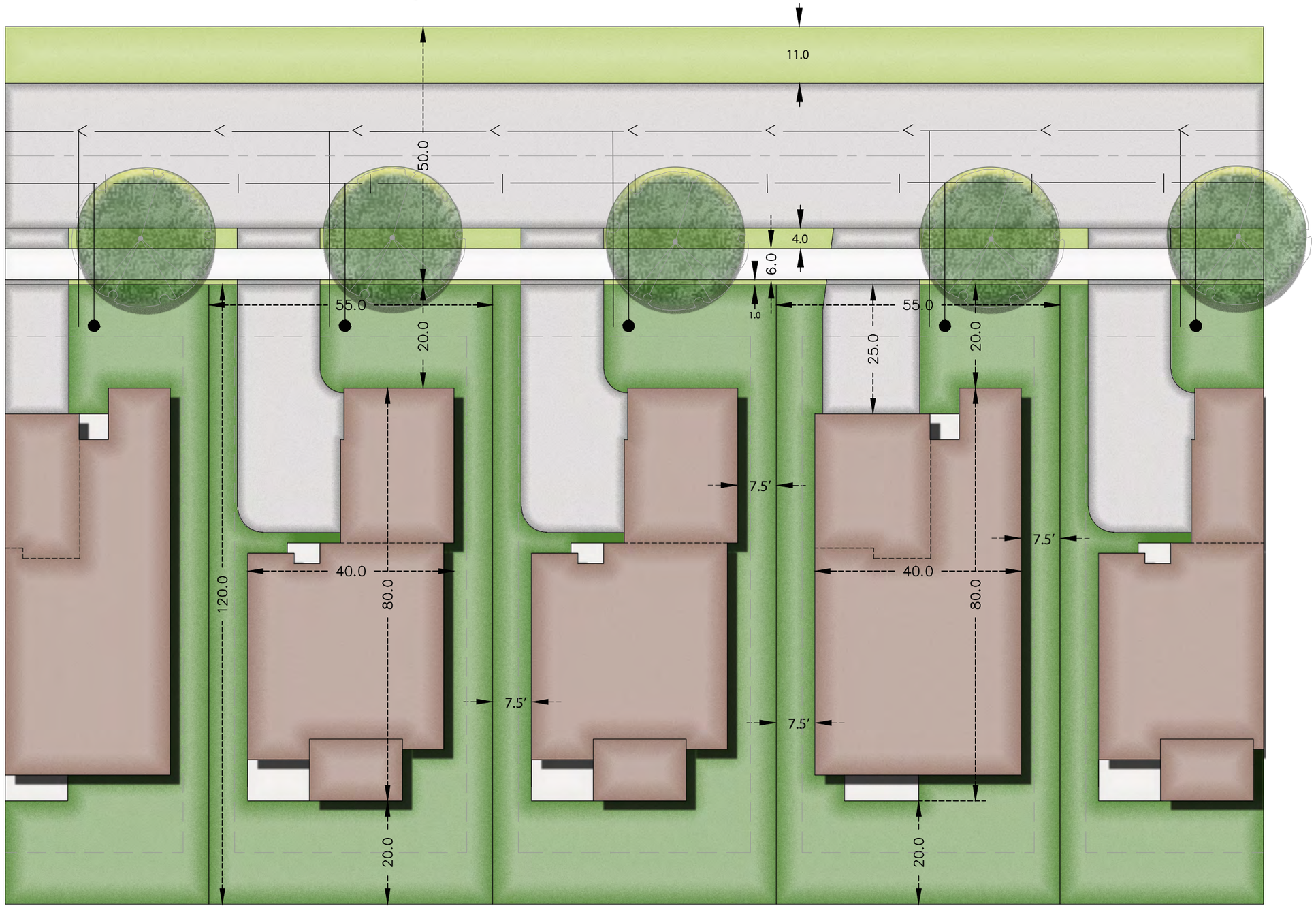


EXHIBIT C

HC Golf Course Development, LLC

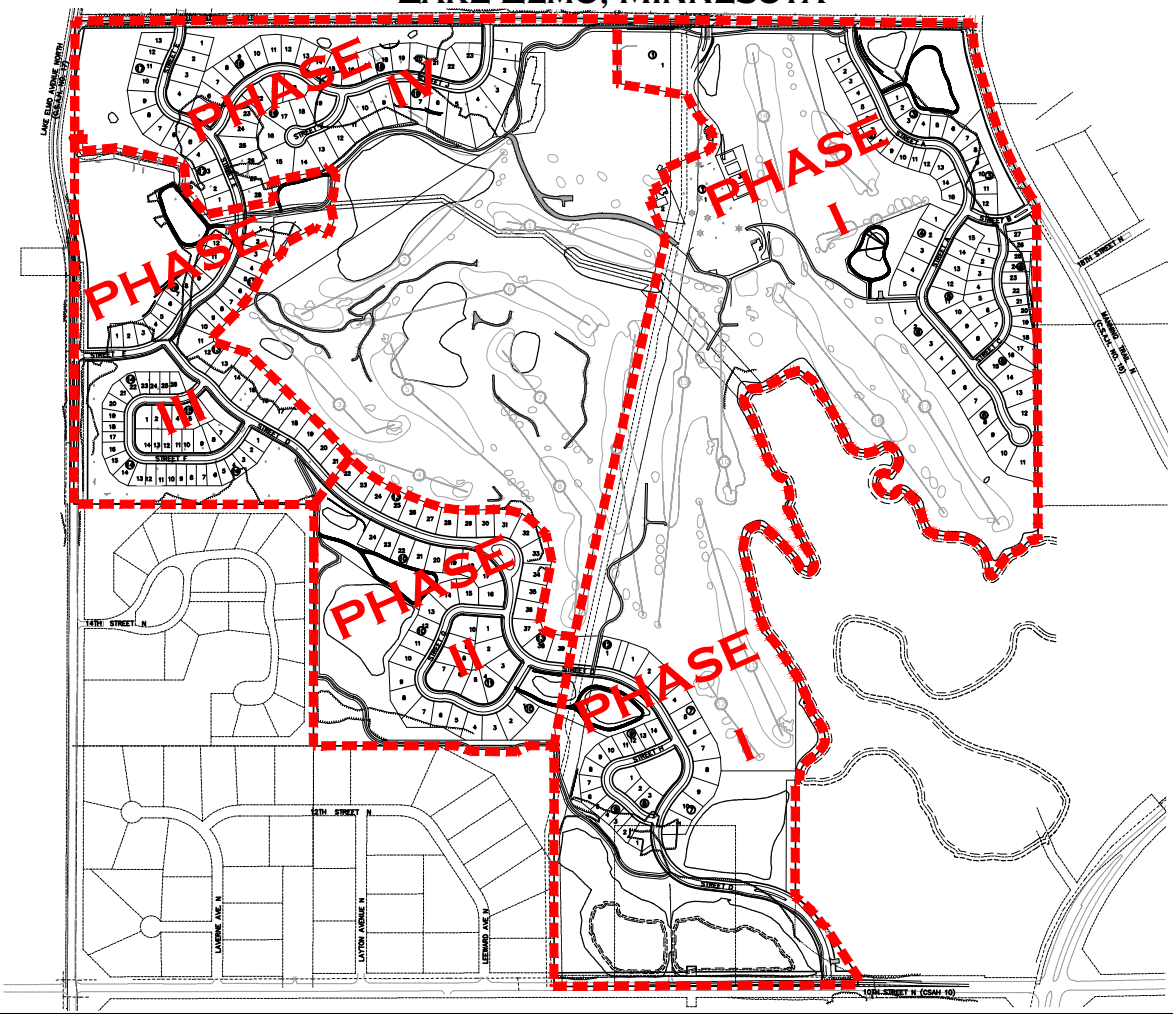
The Royal Golf Club at Lake Elmo

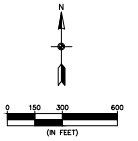


EXHIBIT D

HC Golf Course Development, LLC

Exhibit E
Phasing Plan - Development
Lake Elmo, Minnesota





BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).

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Carlson McCain
• environmental
• engineering
• surveying

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Phone: (763) 489-7900
Fax: (763) 489-7959
www.carlsonmccain.com

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

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 9/21/16 License #: 25063

Drawn: ADB
Designed: BJK
Date: 9/21/16

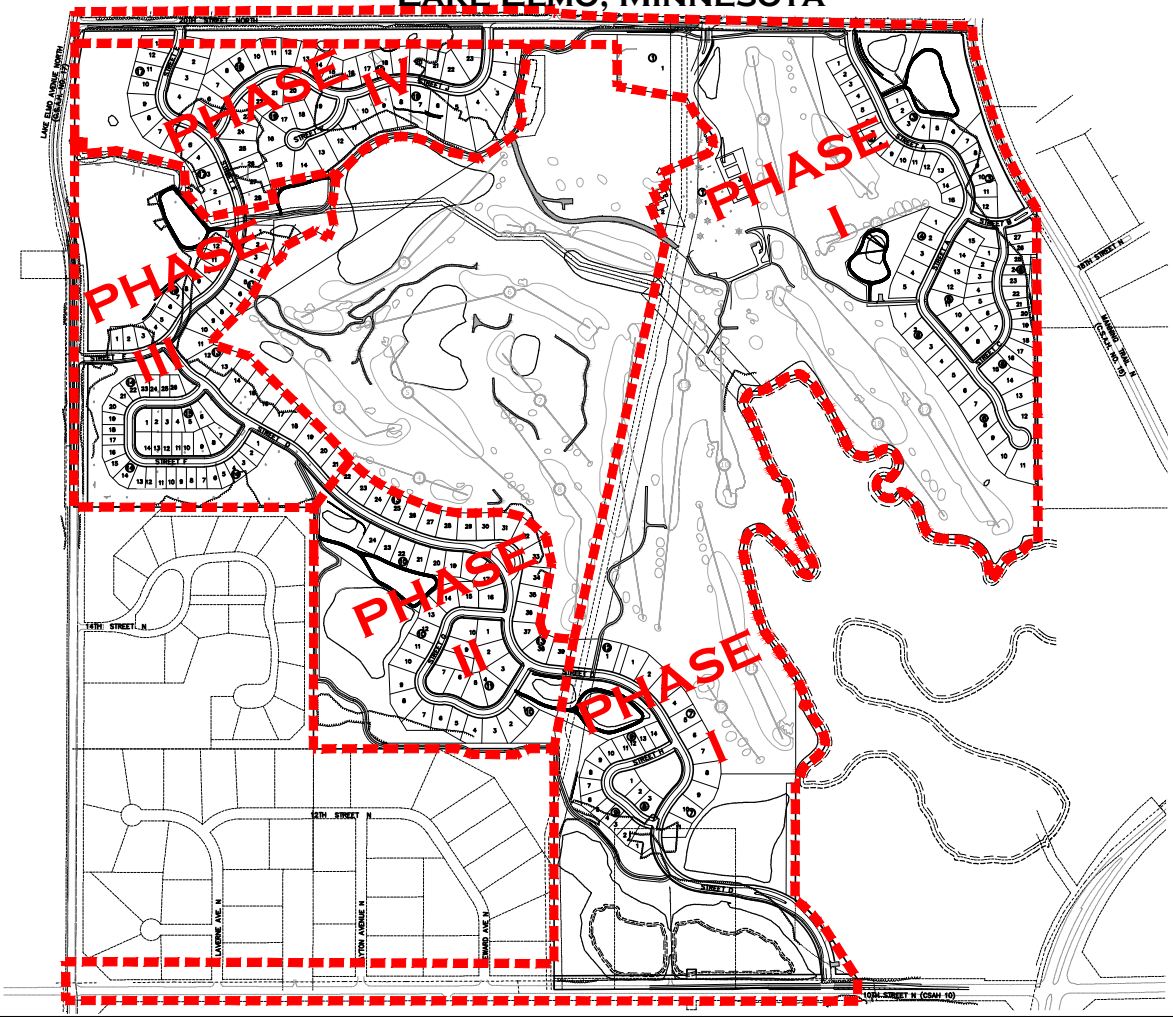
Revisions:
1. 2/10/17 Revise Per City Comments
2. 2/20/17 Revise Per Owner

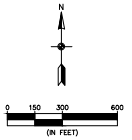
H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

EXHIBIT E

Exhibit F
Phasing Plan - Utility
Lake Elmo, Minnesota





BENCHMARKS

1) MN/DOT GSID Station #33653 (NYBECK MN163) – Top of Control Disk Elevation = 941.54 (NAVD 88).

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

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 9/21/16 License #: 25063

Drawn: ADB
Designed: BJK
Date: 9/21/16

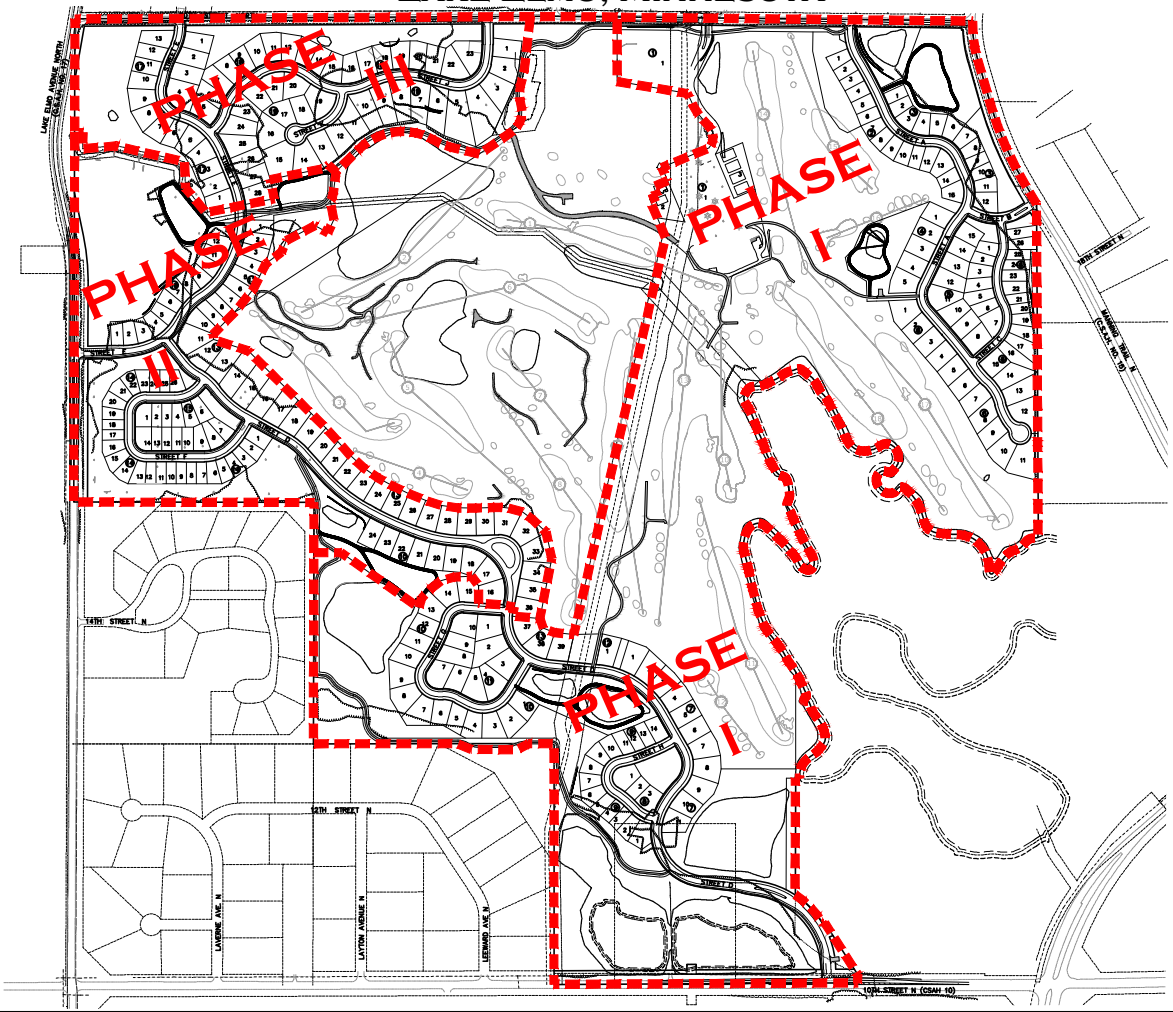
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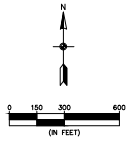
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11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

EXHIBIT F

Exhibit G
Phasing Plan - GRADING
Lake Elmo, Minnesota





BENCHMARKS
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2) MN/DOT GSID Station #33601 (KRAFTHEFER MN163) – Top of Control Disk Elevation = 913.04 (NAVD 88).



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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota
Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 9/21/16 License #: 25063

Drawn: JJO
Designed: BJK
Date: 9/21/16

Revisions:
1. 2/10/17 Revise Per City Comments
2. 2/20/17 Revise Per Owner

H.C. Golf Course Development, LLC
11074 Radisson Rd NE
Blaine, MN 55449

THE ROYAL GOLF CLUB AT LAKE ELMO
Lake Elmo, Minnesota

EXHIBIT G

Gmail by Google

Jack Griffin <jack.griffin@focusengineeringinc.com>

Royal Golf Club Preliminary Plat/Plans

1 message

Jack Griffin <jack.griffin@focusengineeringinc.com> Wed, Mar 8, 2017 at 2:16 PM
To: Stephen Wensman <SWensman@lakeelmo.org>
Cc: Chad Isakson <Chad.Isakson@focusengineeringinc.com>

Stephen,
Please see the attached engineering review comments for the Royal Golf Club Preliminary Plat/Plans.

Let me know if you have any questions. Thanks ~Jack

John (Jack) W. Griffin, P.E.
Principal / Sr. Municipal Engineer

FOCUS ENGINEERING, INC.
651.300.4264
jack.griffin@focusengineeringinc.com

2017-03-08 RGC-Preliminary Plan Review.pdf
1505K

MEMORANDUM

FOCUS ENGINEERING, inc.

Cara Geheren, P.E.	**651.300.4261**
Jack Griffin, P.E.	**651.300.4264**
Ryan Stempski, P.E.	**651.300.4267**
Chad Isakson, P.E.	**651.300.4283**

Date: March 8, 2017

To: Stephen Wensman, Planning Director
Cc: Emily Becker, City Planner
From: Jack Griffin, P.E., City Engineer

Re: Royal Golf Club at Lake Elmo PUD
Preliminary Plan Engineering Review

An engineering review has been completed for the Preliminary Plan submittal for the Royal Golf Club at Lake Elmo PUD. The submittal consisted of the following documentation prepared by Carlson-McCain:

- Royal Golf Club at Lake Elmo PUD Preliminary Plan Set, Sheets 1-65, dated February 28, 2017.
- Preliminary Phasing Plans, Sheets P1-P3, dated February 20, 2017.
- Lift Station Site Plans, dated February 28, 2017.
- Stormwater Management Plan dated February 28, 2017.
- Storm sewer design calculations dated February 28, 2017.
- Landscape and Tree Preservation Plans were not reviewed by Engineering.

STATUS/FINDINGS: Engineering has prepared the following review comments:

All public improvements constructed to support the development must be designed and constructed in accordance with the City Engineering Design Standards Manual available on the City website.

PRELIMINARY PLAT

- Outlots B and T include City trails and should be dedicated to the City as part of the Plat. City ownership has been correctly identified on the Preliminary Plat Index Sheet.
- Outlots E, H, M, N, V, W, AA, EE, GG, and HH include storm water ponds, infiltration basins, sanitary lift stations and utility corridors that must be dedicated to the City as part of the Plat. City ownership has been correctly identified on the Preliminary Plat Index Sheet.
- Drainage and Utility easements must be granted over all of Outlots G, O, Q, Z, and II, and portions of Outlot FF as part of the City's Municipal Separate Storm Sewer System to protect the various wetlands, wetland buffers and drainage systems. These Outlots will be HOA owned and maintained. These easements have been correctly identified on the Preliminary Plat.
- Outlots M, N and EE do not appear to be adequate for City owned/maintained lift stations. Preliminary Plat approval should be contingent upon expanding Outlots M, N, and EE, or otherwise revising the Preliminary Plat/Plans to the City's satisfaction such that the proposed sanitary lift station sites are acceptable to the City's lift station consulting engineer and Public Works staff. It is recommended that the City's lift station consultant should complete preliminary site designs for each lift station for the applicant to incorporate into the Preliminary Plat/Plans. The lift station sites require improved on-site grades, better access and

turnaround areas for daily maintenance routines, better on-site screening and greater separation from other utilities.

- All emergency overflow elevations must be fully protected by drainage easement.
- Drainage and utility easements are required over all storm sewer, sanitary sewer and watermain not located on City Outlots and right-of-way, minimum 30-feet in width, 15 feet from centerline on each side of pipe. Easements must be shown on the Preliminary Plat, Utility Plans and Grading Plans. Easements have generally been provided as required. Revisions may be necessary has the plans are finalized or additional width may be required to adjust for greater pipe depths.
- Written landowner permission must be submitted as part of the development applications for any storm water discharges to adjacent properties to avoid negative impacts to downstream properties.

TRANSPORTATION IMPROVEMENTS

- 20th Street North dedicated right-of-way. As required, the Preliminary Plat dedicates 40 feet of right-of-way to the City of Lake Elmo along the entire length of 20th Street North to provide a minimum R/W from the existing roadway centerline.
- Manning Trail North dedicated right-of-way. As required, the Preliminary Plat dedicates 50-55 feet of right-of-way to the City of Lake Elmo along the length of Manning Trail North within the City limits of Lake Elmo to provide a minimum R/W from the existing roadway centerline.
- Washington County dedicated right-of-way. The Plat must dedicate sufficient right-of-way along CSAH 17 (Lake Elmo Avenue) and CSAH 10 (10th Street North) as may be required by Washington County. Preliminary Plat approval must be contingent upon the proposed right-of-way along CSAH 17 (Lake Elmo Avenue) and CSAH 10 (10th Street North) being reviewed and approved by Washington County.
- Access Management. Access to the development is proposed in seven locations accessing CSAH 17 (Lake Elmo Avenue), CSAH 10 (10th Street North), 20th Street North (MSA collector street) in four locations, and Manning Trail North.
    - Preliminary Plat approval must be contingent upon the City receiving written correspondence from Washington County approving the proposed access locations at CSAH 17 and CSAH 10.
    - Street E access to 20th Street North (MSA Collector Street). Access is 550 feet east of Lake Elmo Avenue vs. the required spacing of 660 feet. Proposed access location aligns with the existing intersection for 20th Street Court N. and should cause no operational concerns.
    - Street J access to 20th Street North (MSA Collector Street). Proposed access is located 365 feet offset from the existing intersection of Legion Avenue. The preferred access point would align with the existing intersection for Legion Avenue, however the applicant has indicated site conditions at the golf course prohibiting this connection. The offset has been reviewed by the City's transportation consultant and no concerns were identified with this location.
    - Golf Course Entrance. The existing entrance to the golf course from 20th Street North will be maintained as part of the development. No secondary access to the Golf Course/Club House has been proposed.
    - Street A access to 20th Street North (MSA Collector Street). Access is 650 feet west of Manning Trail North. The location has been reviewed in the field and is an acceptable access location to 20th Street North.
    - Street B access to Manning Trail North. Access is 550 feet south of 20th Street North. The location has been reviewed in the field and is an acceptable access location to Manning Trail North.
- Washington County Intersection Improvements. Preliminary Plat approval must be contingent upon the developer constructing as part of the development project and at its sole cost all intersection improvements recommended by Washington County. The preliminary plans show right and left turn lanes in each of these intersections.
- City Street Intersection Improvements. The City's transportation consultant, SRF Consulting, reviewed the transportation studies completed by the developer's consultant, including the Traffic Impact Study and Turn Lane Evaluation Report, and has identified the need for right turn lanes at each of the access locations along 20th Street North, including the Golf Course entrance and including at the intersection of Manning Trail

North. No turn lanes are required at the Manning Trail intersection with Street B. Preliminary Plat approval must therefore be contingent upon the developer constructing as part of the project and at its sole cost right turn lanes meeting City state aid design standards at Streets E, J, A, the Golf Course entrance, and Manning Trail. The preliminary plans show right turn lanes in each of these locations as required.

RESIDENTIAL STREETS

- The Preliminary Plat/Plans have addressed staff concerns regarding secondary access and street interconnections.
- All streets are proposed to be publically owned and maintained. Public streets must be designed to meet the City's Engineering Design Standards including R/W width (60-feet), street width (28-feet) and cul-de-sac radii (60 foot radius R/W / 45 foot radius pavement), except as noted herein.
- Surmountable concrete curb and gutter shall be installed in single family residential areas with future driveways and B618 curb installed along entrance roadways and roadway stretches with no lots/driveways.
- Minimum street width for one-way divided streets is 19 feet.
- Street intersections must be at 90 degrees and maintain 50 feet of tangent with maximum slopes of 2.5%.
- The City standard minimum horizontal curve radius is 90.
- Maximum longitudinal grade is 8% with no sidewalks, 6% where there are sidewalks.
- Six (6) foot sidewalks must be provided along all residential streets and as may be required by the City for connectivity. Sidewalks are not shown along the cul-de-sac of Street A, or along Streets H and K.
- Ten (10) foot utility easements are required on either side of all right-of-ways.
- Exceptions to City standards being proposed are as follows:
    - Street C: The applicant is proposing no sidewalk along Street C. With no sidewalk the right-of-way width can be narrowed to 50 feet.
    - Street D: The applicant is proposing a rural section road with ribbon curb along the southern segment with no lots/driveways. Staff is acceptable to this exception if the revisions outlined below can be accommodated.
- Typical Street Sections must be revised on the Preliminary Plans as follows:
    - All typical sections must show boulevard trees on both sides of the street. Boulevard trees shall be set back 5 feet from back of curb with trail/sidewalk and set back 8 feet from back of curb without trail/sidewalk, unless otherwise noted below.
    - When applicable the typical sections should show boulevard trees in the center median areas.
    - Street C: Boulevard trees shall be set back 8 feet from the back of curb, shown on both sides.
    - Street D (STA 44+50 to 10th Street): Typical sections shall be revised as follows and right-of-way widths adjusted as needed to comply with city standards.
        - The boulevard without trail/sidewalk shall extend 8 feet at 4% max. grade then transition to 4:1 inslope. The boulevard tree shall be placed 5 feet from back of curb.
        - A minimum 2 foot shoulder at max. grade of 2% must be placed on the outside of the trail/sidewalk prior to the 4:1 inslope.

GRADING PLAN, STORMWATER MANAGEMENT AND STORM SEWER SYSTEM

- The site plan is subject to a storm water management plan meeting State, VBWD and City rules and regulations. Storm water and storm sewer facilities proposed as part of the site plan to meet State and VBWD permitting requirements must be constructed in accordance with the City Engineering Design Standards Manual available on the City website.
    - Preliminary Plan revisions may be necessary to comply.
- Infiltration basin design must be based on actual soil borings and investigations to determine acceptable design infiltration rates and basin locations. All infiltration basins shall be given a name corresponding to the storm water model and that distinguishes the basin from a wet pond. The 100-year HWL must be shown on the preliminary plans.
    - Preliminary Plan revisions may be required to provide adequate infiltration.

- Label the Outlot M infiltration basin and provide the 100-year HWL on the plans.
- Label the Outlot EE and HH infiltration basins and provide the 100-year HWL on the plans.

- All storm water facilities, including infiltration basins, wetlands and wetland buffers, must be placed in Outlots deeded to the City for maintenance purposes. The Stormwater Facility Outlots must fully incorporate the 100-year HWL, 10 foot maintenance bench and all maintenance access roads.
- All lots must have the minimum floor elevation at least 2 feet above any adjacent 100-year HWL and the 100-year HWL shall not encroach onto any lot. When the 100-year, 10-day snow melt condition produces a higher flood elevation than the 100-year storm event, the higher flood condition shall be the flood level placed on the plans and used for preliminary plan preparation including building low floor elevations and lot encroachments.
  - The Downs Lake 100-year HWL of 893.8 encroaches Lot 1, Block 3. The low floor elevations for Lots 1-6, Block 3 must be raised to be a minimum of 2 feet higher than the 100-year HWL.
  - The Downs Lake 100-year HWL of 893.8 encroaches Lot 1-5, Block 4. The low floor elevations for Lots 2-5, Block 4 must be raised to be a minimum of 2 feet higher than the 100-year HWL.
  - The Wetland-20 100-year HWL of 909.2 continues to encroach Lots 19-20, Block 18.
- Pond 60 on Outlot V proposes storm water ponding over the existing dual gas pipeline and easement area. It is the City's understanding that this improvement will not be allowed as proposed and if allowed would pose undue maintenance and ownership burden on the City. The plans should be revised to remove this encroachment or the applicant must provide written correspondence to the City from the gas main utility owner stating that the proposed improvements are acceptable as proposed including no ongoing maintenance restrictions to the City.
- Stormwater Ponds must be constructed meeting City standards. Stormwater Wet Ponds are required to have a minimum of 3 feet in depth to the NWL, constructed with 3:1 side slopes and both a 10:1 aquatic bench and a 10:1 maintenance bench. Designated maintenance access roads, 20 feet in width, must be provided for all storm water facilities with slope no greater than 10%. Both the NWL and 100-year HWL must be shown on the plans.
  - The Typical Pond Section shown on sheet 61 must be replaced with the City's Standard Typical Pond Section detail.
  - Pond Maintenance access has not been provided to Infiltration Basin 20.
  - Pond 50 does not appear to be graded to City standards including the 10:1 aquatic bench and a 10:1 maintenance bench.
  - Pond 60 does not appear to be graded to City standards including the 10:1 aquatic bench and a 10:1 maintenance bench. Pond 60 maintenance access must be improved accordingly.
- The 100-year HWL must be calculated and placed on the plans for all rear yard catch basin areas. Drainage and utility easements must be revised on the Preliminary Plans to fully protect the localized 100-year HWL.
- Overland emergency overflows or outlets will be required as part of the site plan. All emergency overflow elevations must be fully protected by drainage easement.
- The drainage swale along the rear yards of Lots 26-28, Block 19 is not protected by easement. The swale should be regraded to run closer to the rear lot lines, rather than within 10 feet of the building pads pf Lots 27 and 28.
- The maximum curb run prior to a catch basin is 350 feet. Additional catch basins may be required.
- The storm sewer system shall be designed to maintain the City standard minimum pipe cover of 3 feet.
- Drain tile is required as part of the City standard street section at all localized low points in the street. Drain tile considerations may impact the storm sewer design and depth requirements at low points.

MUNICIPAL WATER SUPPLY

- The Royal Golf Club development area (Tartan Park) was excluded from the 2030 Comprehensive Water System Plan, being identified as an area to not be served by municipal water. However, municipal water infrastructure exists immediately adjacent to Tartan Park (16-inch trunk watermain line has been constructed along Lake Elmo Avenue).

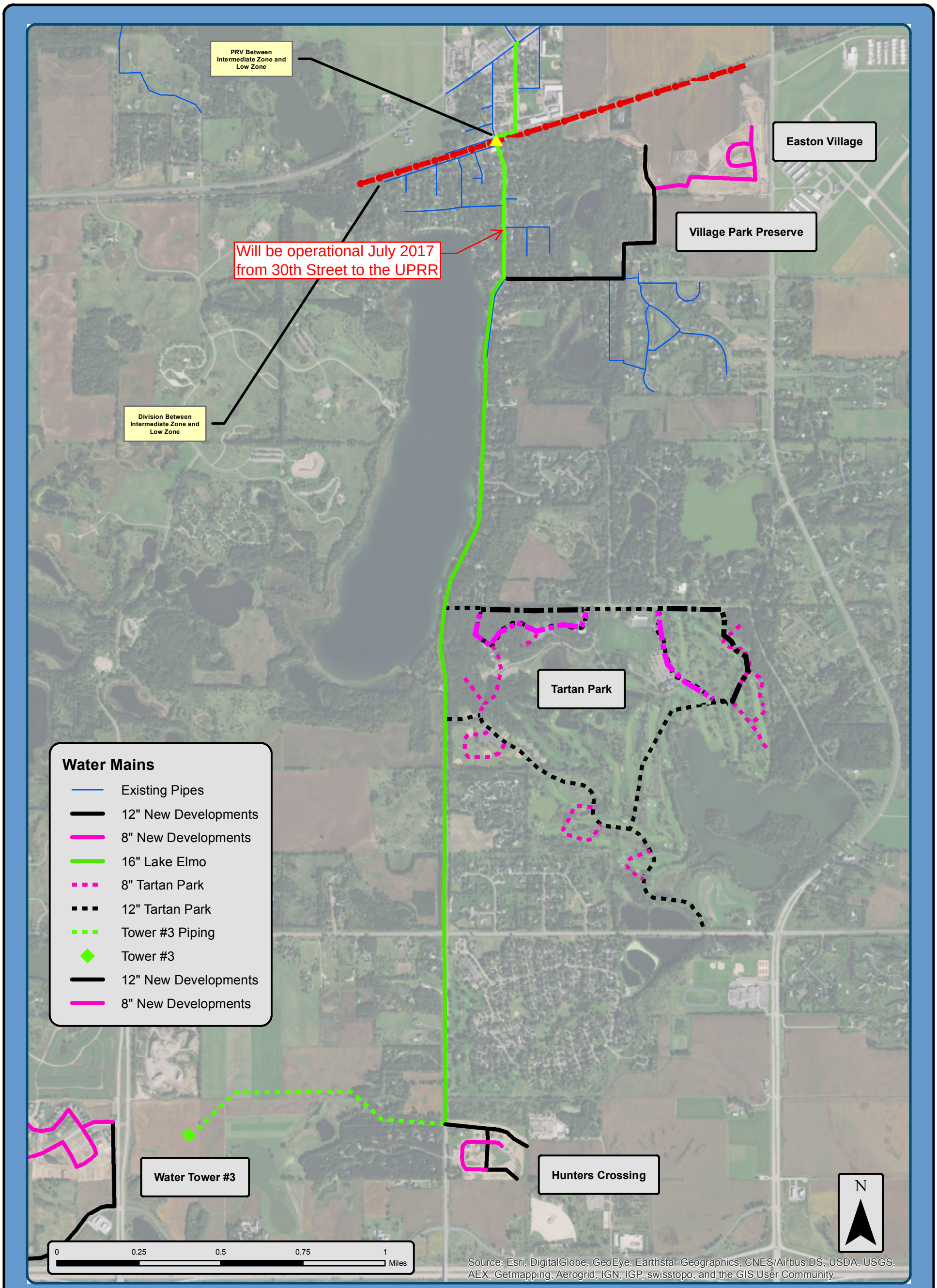
- At the developer's request, the City's water system modeling consultant (AE2S) completed the Tartan Park Water System Study to review and identify the expansion capabilities of the water system to service this subdivision including a detailed analysis of the operating pressures, watermain pipe sizing and looping requirements.
- The water system study verified that once the 16-inch trunk watermain connection is installed as part of the Downtown Phase 2 Improvements between 30th Street and Upper 33rd Street, the water system can be extended to serve the proposed development within Tartan Park without the need for additional infrastructure such as pressure reduction valves or booster stations. Depending on the final development design/layout, localized private booster pumps or pressure reduction valves may be needed for individual structures or commercial uses.
- The watermain distribution network and pipe sizing for this development should be constructed as shown in Figure 1 of the AE2S water system study. This watermain network, including pipe sizes and looping connections, has been correctly shown in the Preliminary Plans dated February 28, 2017.
- The developer is responsible to provide the water system infrastructure to support the proposed development. All water system infrastructure must be designed to meet City standards and constructed at the developer's cost.
- Prior to connection permits being issued any non-residential water users need to be better defined for the City to confirm service capabilities.

MUNICIPAL SANITARY SEWER

- At the developer's request, the City recently amended the Comprehensive Plan to include the Royal Golf Club development within the City's designated Municipal Urban Service Area (MUSA).
- The developer is responsible to provide wastewater infrastructure to support the proposed development. All sewer infrastructure must be designed to meet City standards and constructed at the developer's cost.
- The Preliminary Plat/Plans extend sewer service to the subdivision by constructing three new sanitary lift stations to address the varied topography with the last lift station located on the south end of the Plat at the new street access to 10th Street North. A 6-inch HPDE forcemain is then extended from the lift station along 10th Street to connect to the existing 16-inch HPDE Lake Elmo Avenue sanitary forcemain.
- The sanitary sewer system layout as proposed is generally acceptable. No pipe oversizing is required. The sewer system has been designed with a gravity sewer stub extended to the south end of the Plat.
- The lift station site plans submitted by the applicant indicate that the proposed lift station sites are too small as proposed and will likely need to be enlarged to properly accommodate the proposed facilities without added ownership and maintenance burden.
- The lift station sites require improved on-site grades, better access and turnaround areas for daily maintenance routines, better on-site screening and greater separation from other utilities. It is recommended that the City's lift station consultant complete preliminary site designs for each lift station for the applicant to incorporate into the Preliminary Plat/Plans. The Preliminary Plat should be contingent upon revised Outlot areas to accommodate each of the proposed sanitary lift station facilities.
- Prior to connection permits being issued any non-residential sewer users need to be better defined for the City to confirm service capabilities.

GENERAL PLAN COMMENTS

- The proposed trails should be centered within the 30 foot wide dedicated Outlots. A minimum 6 foot mow strip must be reserved on both sides of the trail.
- The grading plan indicates significant use of retaining walls. Retaining walls should be placed within private lots and Outlots to the extent possible to be owned and maintained by the HOA.
- Landscape Plans should be reviewed and revised to avoid planting conflicts. Tree plantings must remain outside of utility easements, including the small utility corridor, and clear from all storm water maintenance benches and access roads. Tree plantings must be offset a minimum of 10 feet from watermains, sanitary sewer mains, and storm sewers, and offset a minimum of 5 feet from water/sewer services.



THE CITY OF LAKE ELMO

Figure 1
City of Lake Elmo
New Development Low Pressure Zone

AE2S
Advanced Engineering and Environmental Services, Inc.

Washington County

Public Works Department

Donald J. Theisen, P.E.
Director

Wayne H. Sandberg, P.E.
Deputy Director/County Engineer

March 6, 2017

Stephen Wensman
Community Development Director
City of Lake Elmo
3600 Laverne Avenue North
Lake Elmo, Mn 55042

Re: Washington County comments on the Preliminary Plat Royal Golf Club at Lake Elmo, in the City of Lake Elmo

Dear Mr. Wensman,
We have reviewed the Preliminary Plat of the Royal Golf Club Residential Development at Lake Elmo dated 9/21/2016. The Project is located north of County State Aid Highway (CSAH) 10 /10th Street, south of 20th Street North, west of Manning Trail North and east of CSAH 17/Lake Elmo Avenue. The project will convert approximately 147.9 acres of golf course, woodland, ball fields, grassland, and wetland to approximately 292 single-family residential lots. The project will involve grading, installation of public and private infrastructure, open space preservation, tree clearing, and stormwater ponding. The project will include approximately 90.8 acres of private open space consisting of woodland, stormwater ponds, wetlands, grassland, and turf areas. Based on the plans submitted, we offer the following comments:

- The plat needs to reflect future right-of way along 10th Street/CSAH 10 and Lake Elmo Avenue/CSAH 17 as identified in the Washington County Comprehensive Plan 2030, Transportation Plan, Minimum Right-of-Way Widths for County Roads:
    - The future right-of-way width along CSAH 10 is 184 feet (92 feet from the centerline of the roadway. The current preliminary plat, dated 9/21/2016, identifies 75 feet from the centerline of CSAH 10. The preliminary and final plat plan should be updated to reflect an additional 17 feet of right-of-way.

    - The future right-of-way width along CSAH 17/Lake Elmo Avenue is 150 feet. Some of the pages on the preliminary play identify the right-of-way as 75 feet from the centerline of CSAH 17. The applicant should verify the 75 foot right-of way on all the pages of preliminary plat, and provide this information to the county and the city before the preliminary plat is approved.

The access points at CSAH 17/Lake Elmo Avenue and CSAH 10/10th Street are acceptable to the county. The developer has submitted turn-lane improvement plans for the intersections at CSAH 10/10th Street at Street D and CSAH 17/Lake Elmo at Street E that meet county requirements. These plans do reflect comments from the county on these turn lane improvements as part of the development. Currently, the timing of these improvements should be coordinated with the CSAH 17 improvements planned in 2018-2019. The County will coordinate the plans and cost participation with the City of Lake Elmo on these improvements.

Any work in the county right-of-way as it relates to the development will require a right-of-way permit, including: grading for the installation of culverts, installation of water and sewer services, turn lane modifications, road improvements, trails, Americans with Disability Act (ADA) ramp improvements.

A County Trail is shown on the Future Trail System map in the Washington County 2030 Comprehensive Plan. This is a long range plan to be implemented as development occurs, or if a larger roadway project is planned. Based on the current roadway alignment with Lake Rose adjacent to the CSAH 10 roadway, a trail could not be constructed without impacting the Lake. Any trail should be planned as part of a larger project and will be evaluated at that time; however, a small section could be constructed along CSAH 10 east of Street D.

Although the county has not reviewed a stormwater plan to date, the developer, city or watershed district, must submit the drainage report and calculations for review of any downstream impacts to the county drainage system. Along with the drainage calculations, there must be written conclusions that the volume and rate of stormwater run-off into any county right-of-way will not increase as part of the project.

Washington County's policy is to assist local governments in promoting compatibility between land use and highways. Residential uses located adjacent to highways often result in complaints about traffic noise. Traffic noise from adjacent highways could exceed noise standards established by the Minnesota Pollution Control Agency (MPCA), the U.S. Department of Housing and Urban Development, and the U.S. Department of Transportation. Minnesota Rule 7030.0030 states that municipalities are responsible for taking all reasonable measures to prevent land use activities listed in the MPCA's Noise Area Classification (NAC) where the establishment of the land use would result in violations of established noise standards. Minnesota Statute 116.07, Subpart 2a exempts County Roads and County State Aid Highways from noise thresholds.

County policy regarding development adjacent to existing highways prohibits the expenditure of highway funds for noise mitigation measures in such areas. The developer should assess the noise situation and take any action outside of County right-of-way deemed necessary to minimize the impact of any highway noise.

If you have any questions or comments to the responses on the Royal Golf Club Residential Development Preliminary Plat please contact me at Ann.pung-terwedo@co.washington.mn.us.

Sincerely,

Ann Pung-Terwedo, Senior Planner

Cc: Joe Gustafson, Traffic Engineer