



PLANNING COMMISSION
DATE: 2/23/14
AGENDA ITEM: 4C – PUBLIC HEARING
CASE # 2015-03

ITEM: Wildflower at Lake Elmo Preliminary Plat and Preliminary PUD Plan

SUBMITTED BY: Kyle Klatt, Community Development Director

REVIEWED BY: Nick Johnson, City Planner
Jack Griffin, City Engineer
Stephen Mastey, Landscape Architecture, Inc.

SUMMARY AND ACTION REQUESTED:

The Planning Commission is being asked to review a request for a Preliminary Plat and Preliminary Planned Unit Development (PUD) Plan for a proposed residential subdivision to be called Wildflower at Lake Elmo. This application follows the City's review and approval of a PUD Concept Plan for the site, as well as the City's approval of a Comprehensive Plan Amendment to allow the development to move forward as presented. There have been some minor modifications to the plans since the concept approval, but in general, the preliminary plan submission follows the concept plan very closely.

The proposed subdivision would be located immediately north of the Brookfield Addition along 39th Street and would extend to the northern limits of the Village area boundary. The preliminary plat includes 145 single-family lots (matching the number depicted on the concept plans) on a total site area of approximately 117 acres, roughly half of which would be preserved as open space in the form of a nature conservancy, storm water ponds, and parklands. This request does require a public hearing and Staff is recommending that the Planning Commission recommend approval of preliminary plat and preliminary PUD plans with conditions.

GENERAL INFORMATION

Applicant: Robert Engstrom Companies; 4801 West 81st Street, #101, Bloomington, MN

Property Owners: Robert Engstrom Companies; 4801 West 81st Street, #101, Bloomington, MN

Location: Part of Sections 12 and 13, Township 29 North, Range 21 West in Lake Elmo, north of 39th Street, west of Lake Elmo Avenue, and south of the northern Village Planning Area boundary line. PID Numbers 13.029.21.32.00001, 12.029.21.34.0001, 13.029.21.21.0001 and 12.029.21.43.0013.

Request: Preliminary Plat and preliminary PUD Plan

Existing Land Use: Agriculture, Woods/Natural Vegetation, Wetlands, Open Space

Existing Zoning: RT – Rural Transitional Zoning

<i>Surrounding Land Use:</i>	North – vacant/agricultural land, rural residential; west – agricultural land (future Village residential); south – offices, business park land; open space/ Field of St. Croix II subdivision
<i>Surrounding Zoning:</i>	RT – Rural Transitional; RR – Rural Residential, GB – General Business
<i>Comprehensive Plan:</i>	Village Medium Density Residential (3-4 units per acre)/Village Open Space Overlay
<i>Proposed Zoning:</i>	MDR – Urban Medium Density Residential
<i>History:</i>	Property was included in Village Planning Area boundary and municipal sewer service area as defined in the 2013 Village Land Use Plan. Site has historically been used for farming activities, including the growing of agricultural crops. A large portion of the site is located in a FEMA Flood District. The City approved a Comprehensive Plan Amendment last year that removed portions of the site from the open space land category. The City also approved a PUD Concept Plan for the property on June 17, 2014
<i>Deadline for Action:</i>	Application Deemed Complete – 2/4/15 60 Day Deadline – 4/4/15 Extension Letter Mailed – No 120 Day Deadline – 6/4/15
<i>Applicable Regulations:</i>	Article 10 – Urban Residential Districts (MDR) Article 16 – Planned Unit Development (PUD) Regulations Chapter 153 – Subdivision Regulations

REQUEST DETAILS

The City of Lake Elmo is in receipt of a request from Robert Engstrom Companies for preliminary plat and preliminary concept plan approval of the Wildflower at Lake Elmo residential development. The subdivision would be located on land formerly known as the Heritage Farm and Premier Bank property, which consists of 101 acres within the Village Planning Area. This application follows the City's review of a PUD concept plan for the property, and further approval of a Comprehensive Plan amendment to allow the platting of lots associated with the development over areas that were previously guided for open space. The developer has been working over the past several months to address the conditions attached to the concept plan approval, and has prepared plans that meet the City's requirements to proceed with a preliminary plat and preliminary PUD plans.

The entire development site is slightly over 117 acres, which includes the 101-acre parcel formerly owned by Premier Bank, 15 acres of open space associated with the Fields of St. Croix Second Addition development, and a smaller strip of land that provides access to the Smith farmstead property to the north of the applicant's site. Of the 117 acres, roughly half would be used for residential development, while the remainder would be preserved as open space or used for storm water infiltration and retention. As noted in the attached project narrative, the applicant is proposing to use the open space for natural habitat restoration and creation, with a focus on providing a landscape that is friendly towards bees, butterflies, and other pollinators. This philosophy would be carried forward into the residential areas, where the developer will work to incorporate pollinator-friendly plants within these areas.

Overall, the project will include 145 single-family residential lots, the majority of which will be located on the higher portion of the property directly north of the Brookman Addition commercial area along 39th Street. A small number of lots are proposed on the lower part of the site along Lake Elmo Avenue, and consistent with the City's requirements for concept plan approval, these lots will be served with public sanitary sewer service via a lift station located in the vicinity of Lot 3, Block 15. The primary access into the subdivision will be provided over an existing right-of-way that was previously platted within the Brookman Addition south of the applicant's site. The access through the Brookman Addition will follow the common boundary between the Engstrom property and land immediately to the west now owned by the Gonyea development company. The developer had originally planned on widening right-of-way through the Brookman Addition, but was not successful at obtaining the necessary right-of-way from the current property owner in order to create a two-land divided entrance at 39th Street. As depicted on the preliminary plans, the entrance into the Wildflower subdivision will be a standard City two-lane road until it crosses into the applicant's site.

Due in part to the location of the previously platted right-of-way providing access to 39th Street, the applicant has been cooperating with Gonyea Home (the owner of the property west of Wildflower) to plat a new right-of-way between their properties that will connect to the existing access point. In addition to the access issue, both developers have also been coordinating the siting of a smaller park area to be shared by both developments. This park area would be located essentially in the middle of the two developments and accessible via roads from either development. With the significant amount of open space being set aside within Wildflower at Lake Elmo, the applicant is not proposing any additional land dedication for parks.

The proposed internal street pattern follows a fairly rigid grid system, with larger lots located further to the north. Within the southern half of the residential area, the applicant is proposing a unique lot layout that incorporates small green courtyards surrounded by homes on smaller lots. This layout will allow the homes to face the front of the streets around the block, while moving all garages and vehicular accesses to a secondary road around the courtyard. These courtyard homes are intended to serve a different market than has typically been served in Lake Elmo, and would provide for a traditional streetscape and environment that is very attractive for pedestrians.

Other major features of the plan being presented include the creation of larger storm water facilities to the east of the residential areas along State Highway 5 and the development of an extensive trail and path system providing access to the conservation areas and to the rest of the Village Planning Area. Since the City approved the concept plan, the Valley Branch Watershed District agreed to conduct study of the Goetschel pond drainage basin to determine whether or not the developer would have the ability to direct some of the storm water runoff associated with the development to the north. This study has been completed and resulted in an overall drop in the flood levels in this area, and will allow for storm water runoff from both the Wildflower development and adjacent Gonyea project to be collected in storm water ponds in the northern part of the applicant's site.

Subsequent to the City's approval of the Wildflower PUD Concept Plan, the City Council took action on two related land use matters. First, the City agreed to amend the existing conservation easements within the Fields of St. Croix development in order to add the Field of St. Croix Homeowner's Association as a party to these agreements and to remove the portion Outlot P of the Fields of St. Croix 2nd Addition from the easement area in order to allow for the platted of homes over this lot as depicted in the concept plan. The City Council also approved an amendment to the Comprehensive Plan to allow residential development to occur on two small areas within the proposed Wildflower at Lake Elmo subdivision that were previously guided for RAD – Rural Area Development and Village Open Space Overlay. These amendments changed the following:

- The area around 13 lots that are proposed on land immediately north of the Schiltgen Farms “Parcel B” development and immediately east of Lake Elmo Avenue. This land was guided both for RAD – Rural Area Development and as part of the Village Open Space Overlay. The amendment removed these designations for the area to be subdivided and established a new land use designation of V-LDR (Village Urban Low Density Residential).
- Outlot P of Fields of St. Croix Second Addition. The amendment changed the future land use designation of the western portion of this outlot from RAD – Rural Area Development to V-MDR (Village Urban Medium Density Residential). This amendment allows for the platting of roughly 17 lots that encroach into this outlot (which are being replatted as part of the Wildflower subdivision). The amended conservation easements will reference the final description for the remnant or Outlot P that will be replatted within Wildflower at Lake Elmo.

One of the reasons the applicant has elected to pursue a Planned Development is that the development proposal includes certain elements that do not conform to City requirements. The specific requests for flexibility from current zoning requirements are included in the following section of this report.

The City’s overall PUD process has three phases: 1) General Concept Plan, 2) Preliminary Development Plan, and 3) Final Plan. It should be noted that the Planning Commission reviewed the Wildflower at Lake Elmo General Concept Plan at a meeting conducted on June 9, 2014 and with approval by the City Council at its June 17, 2014 meeting with the adoption of Resolution No. 2014-045. Approval of the General Concept Plan allows the applicant to proceed with preparation of preliminary plans, which the applicant has now submitted. Staff has reviewed the approved General Concept Plan and all the conditions associated with the approval.

The applicant has previously explained the rationale for requesting a Planned Unit Development (PUD) as part of the concept plan application, and Staff has agreed that using the PUD process for the development of this site is reasonable and beneficial for the City in a number of ways, including:

- The PUD process allows the City to review the site as a whole instead of dealing with individual development projects that may or may not be connected to each other.
- The developer has requested certain exceptions from standard zoning requirements (as allowed through the PUD process) in order to bring forward a development that provides a housing option that is unique to Lake Elmo and that is consistent with the planning principles for the Village area.
- The “courtyard home” concept integrates public open space into each block in exchange for smaller lots with narrow setbacks.
- The integrated approach allows the developer to plan for maintenance and upkeep of the common areas throughout the project, and provides the framework to preserve a large portion of the subdivision as permanent open space.
- The City has previously found that development plans are consistent with the City’s requirements for consideration of a PUD.

By recommending approval of the Preliminary PUD Development Plan, the Planning Commission would also be recommending approval of the exceptions associated with the project. In addition, the developer has prepared a separate lot profile document to be filed with the PUD that documents the proposed dimensional requirements for different types of lots being platted. Staff is suggesting that

all requested exceptions and any additional development requirements be included in a separate PUD planning document at the final platting stage of the project.

With the City's recent completion of the 39th Street road and sewer project, sanitary sewer service is available to the development provided the Eastern Trunk Sewer Line project associated with the Easton Village project moves forward this year.

PLANNING AND ZONING ISSUES

Because the Planning Commission has previously received a significant amount of information along with the concept plan for the Wildflower PUD and spent a significant amount of time reviewing this information, Staff will therefore focus on those aspects of the plans that have been changed or updated since the City's concept plan approval, along with a general summary of the PUD request as submitted by the applicant. Other general issues are noted as well.

As required by the City's Zoning and Subdivision Ordinances, the applicant has provided a much greater amount of information as part of the current submission than is required for a Concept. Because of this, Staff will not attempt to spell out every single change or update from the concept plan, but instead will provide a summary of the most significant changes that have been made to address specific comments from the Commission or to address previous conditions of approval as follows:

- The 13 lots on the lower portion of the site north of the Gonyea Homes development previously accessed directly on to Lake Elmo Avenue. This connection to Lake Elmo Avenue has been eliminated from the preliminary plans, and these lots will now connect directly to the rest of the subdivision via a longer cul-de-sac. This cul-de-sac exceeds the maximum length allowed under the Subdivision Ordinance, and will need to be approved as an exception to the City's standard zoning regulations.
- The lower 13 lots will be connected to sanitary sewer service, but will require the installation of a lift station in order to function properly.
- The developer has met several times with the adjacent property owners to the east and northwest, which resulted in the following changes to the original sketch plan: 1) a larger open area is provided in front of the Smith parcel (Outlot G) that will be owned and maintained by the association as open space; the developer has therefore eliminated any shared boundary of between new lots and this parcel; and 2) the landscape plan depicts a series of plantings between the two rural residential parcels to the east of the development and the lots to be platted within Wildflower. The types and locations of these plantings have been reviewed by the affected parties, who will also have an opportunity to further comment on the landscape plan at the public hearing.
- The City, Developer (Owner), and Fields of St. Croix Homeowner's association have agreed to amend the conservation easements over outlots within the Fields of St. Croix, and to specifically remove the portion of Outlot P that will be re-subdivided into residential homes from the easement area. The new easements now include the Fields Association as a party to the agreement, which will give the homeowners in the Fields of St. Croix control over any future changes to these easements (and especially those outlots not owned by the association).

- The developer has revised the street plans to comply with City standards throughout the project with a few exceptions. These exceptions are discussed in the following review comments.
- The proposed storm water management system directs storm water either into new facilities within the northern open space area or to a larger pond facility in the southeastern portion of the site adjacent to Highway 5. There is no ponding shown on Outlot O (or homes adjacent to the Fields of St. Croix).
- The applicant has formally stated that the conservation areas will be owned and managed by the Wildflower HOA, while any trails through this area will be owned and maintained by the City. Any storm water facilities within this area will also be owned by the City consistent with the City's storm water ponding requirements.
- The developer has made further refinements to the courtyard home area, and is asking for flexibility to allow some of the units to be attached units (duplexes) in certain locations. The interior roads will be dedicated for public use on the plat, and these roads will need to be marked as no parking zones.

Staff has reviewed the conditions of approval attached to the City's concept plan approval, and found that the developer has addressed all of these conditions with the preliminary plan submission. The City Engineer has provided a very detailed report concerning the development, and a large number of the issues identified by the Engineer are specific to the storm water management plans and other public improvements.

The Wildflower at Lake Elmo development includes a request for a Planned Unit Development and some related flexibility as permitted under this ordinance. In order to grant a PUD, an applicant is required to demonstrate compliance with the City's PUD applicant requirements and PUD Objectives. These requirements and objectives were previously reviewed as part of the concept plan, and the developer has not made any substantial changes to the overall project to warrant further review of these objectives. For the most part, the single family portion of the development is consistent with the zoning requirements for the City's LDR – Low Density Residential Zoning District, and the courtyard homes are consistent with the MDR – Medium Density Residential Zoning regulations, with the exceptions that were discussed during the concept plan review and are summarized as follows:

<u>Setback</u>	<u>MDR Zoning District (Min.)</u>	<u>Courtyard Homes (Min.)</u>
Front Yard	25 feet	20 feet
Interior Side Yard	10 Feet Principal Structure Side / 5 Feet Garage Side	Same or 7.5 both sides
Rear Yard	20 feet	20 feet
Lot Area	7,000 square feet	5,865 square feet
Lot Depth	N/A	100 feet
Lot Width	50 feet	50 feet
<u>Street Widths</u>	<u>City Standard</u>	<u>Wildflower</u>
Alley/Rear Access	Not Allowed	18 feet

One Way w/Parking	22 feet	18 feet
One Way w/o Parking	18 feet	14 feet

<u>Cul-de-sac</u>	<u>City Standard</u>	<u>Prairie View Trail</u>
Maximum Length	1,000 feet	1,300 feet

All other requirements for the City's MDR zoning district will apply, including the allowed uses and other site and development standards. Because the entire site is guided for Village Urban Medium Density Residential, Staff is recommending that the developed portion of the site be rezoned to MDR (MDR/PUD) as part of the City's final development plan review, with the exception of the lower 13 lots which would be more appropriately be zoned LDR.

Please note that the above table follows closely to the numbers proposed by the developer. The purpose of this table is to document the minimum expectation for lots and homes in the development, and is otherwise consistent with the development plans.

The developer has also requested flexibility concerning the building of homes in order to allow a mixture of some duplex units within the courtyard home area. Staff is recommending that the developer's lot profile chart include any specific request for flexibility concerning duplex units, and that the potential location of these duplex units be clearly indicated as part of the overall PUD plans. Staff is recommending language to specify that no more than 20% of the overall number of courtyard lots may be platted as duplex units (which means no more than 13 lots could be developed in this manner).

The applicant has provided a significant amount of detailed information concerning the development with the attached documentation, and Staff would like to specifically comment on the following aspects of the plan:

- The City's PUD requirements require that 20% of the project area not within street rights-of-way must be preserved as open space (and the ordinance specifically allows infiltration areas to be counted towards this amount). The applicant has provided a specific plan as part of the application materials that demonstrates that over 50% of the site, will be platted as outlots and remain as open space.
- While the proposed lot dimensional standards listed above for the courtyard homes are lower than those required in the MDR zoning district, the applicant has proposed a preliminary plan that includes a mixture of lot sizes and widths throughout the development, including the "ridge, prairie, and conservancy" lots that will function more like the City's single family districts. With the proposed mixture of homes and lot sizes, the overall net density for the project will fall within the range specified in the Comprehensive Plan for the Village Urban Medium Density land use category.
- The applicant has not provided a specific phasing plan for the development; this should be included with the final PUD submission to clarify how the project will be built out over time. The first phase, at a minimum, must include the connection to 39th Street in order to provide access into the subdivision.

The overall site plan for the property follows the adopted concept plan very closely. Staff has conducted a review of the detailed plat and plans and specific comments from Staff concerning these plans are listed in the following section of this report.

The following is a general summary of the subdivision design elements that have proposed as part of the Wildflower preliminary plat and plans:

Zoning and Site Information:

- Existing Zoning: RT – Rural Development Transitional District
- Proposed Zoning: MDR – Lot Area; RR – Conservation/Buffer Areas
- Total Site Area: 119.28 acres
- Total Residential Units: 145 (78 single family, 67 courtyard homes)
- Proposed Density (Net): 4.0 Units per acre (per developer)

Proposed Lot Dimensional Standards (Single Family Lots):

- Min. Lot Width: 80 ft.
- Lot Depth: 130 ft. (135 ft. typical)
- Lot Area: 8,000 sq. ft. (10,298 min.)
- Front Yard Setback: 25 ft.
- Side Yard Setback: 10 ft. living space; 5 ft. garage
- Rear Yard Setback: 20 ft.

Proposed Lot Dimensional Standards through Planned Unit Development Process (courtyard homes):

- As listed above

Proposed Street Standards:

- Per development plans with modifications as requested by the City Engineer

The standards listed above are all either in compliance with the applicable requirements from the City's zoning and subdivision regulations, or are consistent with requested modifications through the proposed planned unit development (PUD). Please note that the City Engineer is recommending modifications to certain streets to either expand the right-of-way (and boulevard area) associated with these streets or to expand the width of the street to conform to City standards. The specific request for changes are noted in the attached report from the City Engineer. Based on Staff's review of the Preliminary Plat and Preliminary PUD Plan, the applicant has generally demonstrated compliance with the majority of the applicable codes, and the requested modifications or flexibilities as allowed under the City's PUD Ordinance represent a reasonable request given the various design goals the applicant is trying to achieve with the exception of the street widths as noted by the Engineer,

REVIEW AND ANALYSIS

City Staff has reviewed the Wildflower preliminary plat and preliminary PUD plan. In general, the proposed plat will meet all applicable City requirements for conditional approval, and any deficiencies or additional modifications that are needed are noted as part of the review record. In addition, the City has received a detailed list of comments from the City Engineer, the Fire Chief and the City's Landscape Consultant, Stephen Mastey, all of which are attached for consideration by the Commission.

In addition to the general comments that have been provided in the preceding sections of this report, Staff would like the Planning Commission to consider the following review comments as well:

Critical Path Issues:

- Floodplain District.*** As noted above, the study undertaken by the Valley Branch Watershed District has resulted in an adjustment to the flood levels for the Goetschel Pond drainage basin. While this should allow the developer to move forward with the grading and storm water management plan as proposed and to create the proposed storm water infiltration and retention facilities in the northern portions of the site, the City's adopted FEMA (Federal Emergency Management Agency) flood maps have not been revised. The City's floodplain management ordinance will therefore apply to the lots north of the Gonyea site, and could result in some issues for the future property owners in this area. Although the Floodplain Management Ordinance will allow the creation of lots within a flood fringe area, without a map amendment, these properties will need to obtain flood insurance or submit appropriate documentation that their houses have been raised above the regulatory flood protection elevation. The creation of storm water ponds within these flood areas could also be problematic and is something that needs to be researched further prior to submission of final development plans for this area. Staff would like to discuss this issue in more detail with the watershed district prior to any lots being platted in this area, and is therefore recommending a condition of approval note that no lots within the City's designated flood district be allowed to be platted until the City and Watershed District have sufficiently addressed all flood zone related matters. This would also give the City and developer time to review options for submitted map amendments to FEMA.
- Storm Water Management – Rain Gardens.*** The developer has proposed a series of rain gardens within boulevard and median areas throughout the development. Since these areas will create a long-term maintenance issue for the City as described by the City Engineer as part of his review memorandum, Staff is asking that the developer consider eliminating those facilities that are not necessary to meet state and watershed district requirements. The developer will also need to comply with the specific review comments from the Engineer prior to constructing any of these facilities.
- Street Width and Right-of-way Dedication.*** The developer has revised the street plan for most of the development site in order to comply with City street design standards, and specifically, the width of public streets within the subdivision. A few of the streets, include the Wildflower Drive parkway segment and some of the "eyebrow" and loop roads providing access to individual lots are not consistent with the City's standards for these types of roads. Staff is recommending that he plans be revised per the City Engineer's comments so that all roads comply with City design standards for width, or are marked for no parking (these specific segments are called out in the Engineer's report). In this case, Wildflower Lane should be revised to show an 18-foot one-way travel lane on the northern one-way segment, and a 24-foot payment with parking on the southern segment (or 18 feet with parking bump-outs). The developer would like the Planning Commission to consider PUD design exceptions to allow the roads as planned.
- Conservation Easements.*** The City of Lake Elmo is holding revised conservation easements in escrow pending final plat approval for the development project. Because some of the conservation easements within the Fields of St. Croix are held by the Minnesota Land Trust, the developer has entered into a separate agreement with the Land Trust to revise these specific easements. The Fields of St. Croix HOA would like to see the agreement with the Land Trust recorded prior to the City's approval of the preliminary plat. The developer has agreed to record this agreement and should be able to complete this task prior to the City

Council's review of the subdivision. The amended easements will allow the development to move forward as proposed.

- **Plat Dedications and Modifications.** The preliminary plat as submitted anticipates that a small portion of the right-of-way for Wildflower Drive and Prairieview Trail will be dedicated over property currently owned by Gonyea Homes. In addition, one of the ponding basins (Pond 3n) that will be receiving storm water runoff from Wildflower is located on the Gonyea site as well. Although both developers are cooperating on some joint aspects of their respective projects, Engstrom Companies will need to demonstrate that the plat as proposed will be able to proceed should Gonyea not plat its property in the near future. Staff is therefore recommending that the preliminary plat be revised to dedicate the needed right-of-way across the adjacent parcels, or that the developer secure easements from the adjacent land owner prior to submission of a final plat.

Other Issues:

Members of the Community Development, Public Works, Engineering, and Fire Departments have previously reviewed the Concept Plan, while the City Engineer, Fire Department, and Landscape Architect Consultant have provided an additional review of the Preliminary Plat and Preliminary Development Plans. The general Staff comments for this project are as follows:

- **Land Use:** The proposed residential development is consistent with the future land use map as amended, which guides this area for Village Urban Medium Density and open space. The developer has indicated that the net density of site will be 4.0 units per acre, although it appears that this calculation excludes road right-of-way and storm water ponds, which will need to be added back in to comply with the City's definition for net density. In this case, the rough calculation for the site would still be around 3.5 units per acre, which falls within the Village Urban Medium Density range of 2-4 units per acre.
- **Buffer Areas/Green Belt.** A minimal open space/green belt buffer is preserved as part of the Wildflower development. One of the conditions of concept approval required the developer to provide additional screening and buffering of residential properties located to the east and northeast of Wildflower at Lake Elmo, and the landscape plan has been updated to incorporate these additional plantings. The previously approved Comprehensive Plan amendment adjusted the open space buffer across the development site, and the preliminary plat is consistent with the revised buffer area.
- **Comprehensive Plan Amendments.** The following amendments have been approved by the City and reviewed and approved by the Met Council:
 - A Comprehensive Plan amendment to change the western portion of Outlot P of Fields of St. Croix Second Addition from RAD – Rural Area Development to V-MDR (Village Urban Medium Density Residential).
 - A Comprehensive Plan Amendment to change roughly eight acres immediately east of Lake Elmo Avenue and north of the Schiltgen Farms – Parcel “B” area from RAD – Rural Area Development and Village Open Space Overlay to V-LDR (Village Urban Low Density Residential).

- **Zoning Map Amendments.** The following amendments will be necessary to rezone the Wildflower property in a manner that is consistent with the City’s Comprehensive Plan. Please note that such rezoning is typically requested as part of a preliminary plat submission; however, until a sewer project to connect the lift station on 30th Street with the recently installed trunk sewer line within 39th Street is completed by private development interests, the zoning for this area should retain the existing RT – Rural Transitional Zoning:
 - A Zoning Map Amendment to change the zoning of the residential portion of this development from RT – Rural Transitional to MDR – Medium Density Residential and LDR – Low Density Residential (for the smaller 13-lot area). Staff is recommending that the open space areas be zoned as rural residential to match the adjacent rural residential parcels.
- **Village Guiding Principles.** The Village Land Use Plan incorporated the 13 guiding principles from the Village Master Plan. Of these principles, the proposed Wildflower at Lake Elmo will implement several of them, including:
 - Principle 1 - Evoke a sense of place: Build on existing assets to preserve the small town, rural character of Lake Elmo, maintaining the Old Village as the heart of the city.
 - Principle 2 - Balance natural and built systems: Integrate development within a green framework of parks, trails and the open space greenbelt.
 - Principle 7 - Improve connectivity: Provide a balanced network for movement that links local neighborhoods and Village Area attractions with city-wide and regional systems, paying equal attention to cars, bicycles, pedestrians and transit.
 - Principle 11 - Become a great model: Encourage other communities to ‘raise the bar’ by demonstrating low impact development, best practices and sustainability.
- **Lake Elmo Theming Study.** In advance of a final plat submission, Staff is encouraging the applicant to incorporate elements from the Lake Elmo Theming Study into the design of the project. The inclusion of various theming elements would help augment the implementation of several of the guiding principles noted above.
- **Land Use and Zoning Flexibility.** The applicant’s request for flexibility concerning lot sizes, setbacks, cul-de-sac length, and street standards is described in the preceding section. Staff is recommending approval of the dimensional exceptions and increased cul-de-sac length as proposed, but does not recommend approval of the street exceptions.
- **Conservation Easements.** The developer has obtained approval from the City and the Land Trust to modify the conservation easements within the Fields of St. Croix in order to remove the easement from future development areas and to include the Fields Association as a party to these easements.
- **Natural Resource Areas.** The Village AUAR included an analysis of ecologically sensitive areas within the planning area, and a portion of the primary ecological areas are found on the

northern portions of the applicant's property. These ecologically sensitive areas are all located with the proposed conservation areas. The applicant's plan for habitat restoration is very much in line with the mitigation plan adopted as part of the AUAR.

- **Wetlands.** The ecologically sensitive areas discussed above include wetlands, but will be protected from impacts through the platting process as part of the open space preservation areas within the development. All wetlands have been designated on the site and are depicted on the attached plans. There are a few instances where the required wetland buffers encroach on to private lots, and the City Engineer has requested revisions to the plan to ensure that these buffer areas are properly maintained in the future. The developer has previously submitted documentation to the City indicating that there are no wetlands located within the Layton Avenue right-of-way in the Brookman Addition.
- **Parks and Open Space.** The proposed plans include the creation of a shared park with the neighboring development, which represents 0.2 acres of land to be dedicated for park purpose. The developer is also proposing to construct an extensive trail system throughout the development, and to create a large nature conservancy that will be managed by the Wildflower homeowner's association. With the amount of trails and open space being provided, the developer will exceed the City's minimum requirements for 10% of the land to be dedicated for park purposes, but the exact calculation should be determined prior to submission of a final plat. The proposed trail system will provide public access into the conservation land, but the developer will need to work with the City on the most appropriate manner in which to dedicate these trails for public use.
- **Sidewalks and Trails.** The preliminary plans include an extensive series of paths and trails. The City engineer has noted that additional sidewalks are needed in a few locations. Staff is recommending that the developer provide easements over all trails that are located outside of City-owned outlots (or deed separate outlots over the trails to the City), and that the construction of all trails comply the City standards.
- **Public Utilities.** The developer's plans provide connections to the existing utilities located within 39th Street as required with the City's concept plan approval. The recently completed 39th Street public improvement project extended the sewer trunk main to the railroad tracks; however, the City has not yet formally approved final development plans for Easton Village, which will include a private project to extend sewer south of the railroad tracks to the lift station along 30th Street. Approval of the Wildflower preliminary plat will need to be conditional upon the City's approval of the Easton Village Trunk Sewer Plan (or alternative depending on the Council's review of this plan).
- **Landscaping.** A detailed landscape plan has been submitted with the preliminary plat, and this plan has been reviewed by the City's consulting landscape architect. The attached review from Landscape Architecture includes several recommendations that may be addressed as part of the final plat submission. The developer has incorporated the requested improvements from adjacent property owners as part of the plan. Staff has not yet receive any feedback from these property owners in advance of the public hearing for this development.

- **39th Street Access.** The developer will need to construct the new road connecting the development with 39th Street as part of the public improvements associated with the project. This road will cross through the Brookman Addition within the previously dedicated Layton Avenue right-of-way. In order to build the proposed road and match existing grades surrounding the road, the developer will need to obtain a temporary construction easement from the owner of Lot 3, Block 2 and Lot 1 Block 3 of the Brookman Addition.
- **Environmental Review.** The proposed Wildflower Subdivision is located within the area covered by the Village AUAR. As such, the City and the developer will need to comply with the AUAR Mitigation plan that was adopted with the Final AUAR. The most critical elements of the Mitigation Plan that must be addressed include the following:
 - *Floodplain Management.* While the northern portion of the applicant's site includes a large floodplain area, development may occur within these areas as long as any proposed structures are elevated above the base flood elevation. The grading plans documents that all proposed lots will comply with this requirement; however, Staff would like to further work with the developer on this issue prior to submission of a final plat.
 - *Storm Water Management.* The storm water management plan for Wildflower at Lake Elmo will need to meet the AUAR requirements in addition to City ordinances and Valley Branch Watershed District standards.
 - *Natural Resource Areas.* Preservation of the primary ecological areas is one of the goals of this development.
 - *Potential Environmental Hazard Sites.* There are no identified hazard sites on this property.
- **Storm Water Ponds.** In accordance with the City's Engineering and Design Standards, all storm water facilities must be located on an outlet dedicated to the City. The preliminary plan notes which lots will be owned by the City.
- **City Engineer Comments.** The City Engineer has submitted a detailed list of comments that will need be addressed prior to the City's approval of final development plans for this property. None of the comments represent a critical concern (other than the ones noted above) that will not be able to be addressed by the applicant as they finalize the development plans for the site, and most of the comments are requesting technical revisions to ensure compliance with the City's engineering and development standards.
- **Street Names.** The developer is requesting to deviate from the City's recent practice of adhering to the County street addressing system for this development. The developer's proposed street names are as depicted on the preliminary plat. In order to comply with the County's street addressing standards, the east-west streets would be assigned a number (i.e. 41st Street instead of Sunflower Lane) and the north-south streets would follow existing street names projected outside the project area (Layton, Leeward, and Legion). The Fire Chief has submitted a comment letter concerning this issue, and is strongly recommending that the City adhere to the County system. The City did adopt a resolution several years ago opting out of

the County naming system, so the City Council will have the authority to approved the Street names as proposed. Based on the strong recommendation from the Fire Chief, Staff is recommending that the Street names be changes to adhere to the County system.

- **Public Art.** The developer would like to incorporate displays of public art within some of comment open areas, and possibly with center median areas, throughout the project area. Staff is recommending that the developer continue to work with the City on any necessary agreements in order to allow these displays.
- **Fire Chief Review.** The Fire Chief has submitted general review comments, most of which are or will be addressed as part of future reviews.

Based on the above Staff report and analysis, Staff is recommending approval of the preliminary plat and preliminary PUD plan with 19 conditions intended to address the outstanding issues noted above and to further clarify the City's expectations in order for the developer to move forward with a final plat and final PUD plan. The recommended conditions are divided into three categories to better communicate the purpose and intent of the conditions. The recommended conditions are as follows:

Recommended Conditions of Approval:

Pending Review and Approvals

- 1) No lots within a FEMA flood zone shall be approved as part of a final plat until such time that the City's Floodplain Management Map has been amended to remove these lots. As an alternative to amending this map, the developer must provide documentation that all structures will be built above the regulatory flood protection elevation, that any public infrastructure will also meet Floodplain Ordinance requirements, and that the proposed storm water ponds may be constructed within the floodplain area.
- 2) The developer shall record an agreement with the Minnesota Land Trust concerning amendments to the conservations easements within the Fields of St. Croix subdivision prior to the submission of a final plat for any portion of Wildflower at Lake Elmo.
- 3) The developer shall obtain temporary grading easements from the owner of the lots adjacent to Layton Avenue within the Brookman Addition in order to construct the improvements within this right-of-way as documented in the preliminary construction plans.
- 4) The developer has requested the inclusion of public art within common areas and public property throughout Wildflower development. Prior to the placement of any art on publicly owned property or public rights-of-way, the developer and City shall enter into an agreement that clarifies the individuals or entities responsible for maintenance and upkeep of any public art.
- 5) Prior to the submission of a final plat for any portion of the Wildflower PUD, the developer shall work with the City to determine the appropriate park dedication calculations for the entire development area.
- 6) The applicant must enter into a separate grading agreement with the City prior to the commencement of any grading activity in advance of final plat and 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.

- 7) The utility construction plans shall be updated to incorporate the recommendations of the City Engineer concerning the appropriate location and size of sewer services through the PUD planning area, including any requested oversizing of these facilities to service adjacent properties.

Modifications to the Preliminary Plat and Preliminary PUD Plans

- 8) The developer shall minimize the number of rain gardens within public rights-of-way consistent the review comments from the City Engineer. Any such storm water infiltration features shall be subject to review and approval by the City Engineer.
- 9) The preliminary development plans must be revised to comply with City Street standards as referenced in the City Engineer's review memorandum dated February 18, 2015.
- 10) The City approves all requests for flexibility from City Zoning and Subdivision requirements with the exception of the street standards noted in the preceding condition.
- 11) The applicant is encouraged to incorporate elements from the Lake Elmo Theming Study into the open space areas within the subdivision.
- 12) The preliminary landscape plan shall be updated to address the review comments from the City's landscape architecture consultant as noted in a review letter dated February 4, 2015.
- 13) The proposed street names within the subdivision shall be revised to comply with the County addressing system.
- 14) All center median planting areas as depicted on the preliminary plat and plans shall be owned by the City of Lake Elmo and maintained by the Homeowners Association. The applicant shall enter into a 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, trails, or open space on the final plat.
- 15) The Final Plat and Plans must address the requested modifications outlined in the City Engineer's review memorandum dated February 18, 2015.

Plat Restrictions

- 16) Prior to recording the Final Plat for any portion of the area shown in the Preliminary Plat, the Developer shall enter into a Developers Agreement acceptable to the City Attorney that delineates who is responsible for the design, construction, and payment of public improvements.
- 17) The developer shall provide an easement over or dedicate in a separate outlot all trails to be dedicated for public use. Any such trails shall be considered a park land dedication provide said trails are constructed by the developer with other public improvements within the subdivision.
- 18) The City will not approve a final plat for any portion of Wildflower until such time that the City has approved a public improvement project to connect the 39th Street Sewer to the 30th Street lift station.
- 19) The developer must follow all the rules and regulations of the Wetland Conservation Act, and adhere to the conditions of approval for the South Washington Watershed District Permit.

DRAFT FINDINGS

Staff is recommending that the Planning Commission consider the following findings with regards to the proposed Wildflower preliminary plat and preliminary PUD plan:

- That the Wildflower PUD General Concept Plan was approved by the City on June 17, 2014, and the submitted Preliminary Plat and Preliminary PUD Plans are consistent with the approved General Concept Plan.
- That the Wildflower preliminary plat and preliminary PUD plans are consistent with the Lake Elmo Comprehensive Plan and the Future Land Use Map for this area.
- That the Wildflower preliminary plat and preliminary PUD plans comply with the City's LDR - Urban Low Density Residential and MDR – Urban Medium Density Residential zoning district requirements with the exceptions as noted in the Staff report.
- That the Wildflower preliminary plat and preliminary PUD plans comply with the City's subdivision ordinance, with the PUD exceptions as requested by the applicant.
- That the Wildflower preliminary plat and preliminary PUD plans comply with the City's Planned Unit Development Regulations.
- That the Wildflower preliminary plat and preliminary PUD plans comply with City's Engineering Standards, except where noted in the review memorandum from the City Engineer dated 2/18/15.
- That the Wildflower preliminary plat and preliminary PUD plans comply with other City zoning ordinances, such as landscaping, tree preservation, and erosion and sediment control with the plan revisions as requested by City Staff and consultants.
- That the Wildflower preliminary plat and preliminary PUD plans achieve multiple identified objectives for planned developments within Lake Elmo and are consistent with the City's adopted findings for the Concept Plan.

RECCOMENDATION:

Staff recommends that the Planning Commission recommend approval of the Wildflower Preliminary Plat and Preliminary PUD Plans with the 19 conditions of approval as listed in the Staff report. Suggested motion:

“Move to recommend approval of the Wildflower Preliminary Plat and Preliminary PUD Plans with the 19 conditions of approval as drafted by Staff based on the findings of fact listed in the Staff Report.”

ATTACHMENTS:

1. Application Forms
2. Development Contact Information

- 3. Location Map
- 4. Legal Description
- 5. Wildflower at Lake Elmo Overview
- 6. Wildflower Lot Profile
- 7. Written Statements for PUD Application
- 8. City Engineer Review – 2/18/15
- 9. Fire Department Review – 2/13/15
- 10. Fire Department Street Naming Comments
- 11. Landscape Architect Review – 2/4/15
- 12. Valley Branch Watershed District Permit Review – 12/2/14
- 13. Preliminary Plat and Preliminary PUD Plans:
 - a. Existing Conditions
 - b. Preliminary Plat
 - c. Construction Plans
 - d. Landscape Plans
 - e. Tree Inventory (Not included with packet)

ORDER OF BUSINESS:

- IntroductionCommunity Development Director
- Report by StaffCommunity Development Director
- Questions from the Commission Chair & Commission Members
- Open the Public HearingChair
- Close the Public Hearing.....Chair
- Discussion by the Commission Chair & Commission Members
- Action by the Commission..... Chair & Commission Members

Date Received: _____
Received By: _____
Permit #: _____



651-747-3900
3800 Laverne Avenue North
Lake Elmo, MN 55042

LAND USE APPLICATION AND PRELIMINARY PLAT APPLICATION

- Comprehensive Plan Zoning District Amend Zoning Text Amend Variance*(see below) Zoning Appeal
- Conditional Use Permit (C.U.P.) Flood Plain C.U.P. Interim Use Permit (I.U.P.) Excavating/Grading
- Lot Line Adjustment Minor Subdivision Residential Subdivision Sketch/Concept Plan
- PUD Concept Plan PUD Preliminary Plan PUD Final Plan AND PRELIMINARY PLAT

Applicant: Robert Engstrom Companies
Address: 4801 West 81st St. #101 Bloomington 55437
Phone #: 952-893-1001
Email Address: bob@engstrom.com

Fee Owner: Robert Engstrom Companies
Address: (Above)
Phone #: _____
Email Address: _____

Property Location (Address and Complete (long) Legal Description):
WILDFLOWER AT LAKE ELMO AT 39th AVE NW
(SEE ATTACHED LEGAL)

Detailed Reason for Request: DESCRIPTION ATTACHED

*Variance Requests: As outlined in Section 301.060 C. of the Lake Elmo Municipal Code, the applicant must demonstrate practical difficulties before a variance can be granted. The practical difficulties related to this application are as follows:

In signing this application, I hereby acknowledge that I have read and fully understand the applicable provisions of the Zoning ordinance and current administrative procedures. I further acknowledge the fee explanation as outlined in the application procedures and hereby agree to pay all statements received from the City pertaining to additional application expense.

Signature of applicant: Robert Engstrom Date: 11/16/14

Signature of fee owner: _____ Date: _____

AFFIRMATION OF SUFFICIENT INTEREST

I hereby affirm that I **am the fee title owner** of the below described property or ~~that I have written authorization from the owner to pursue the described action.~~

Name of applicant Robert Engstrom Companies
(Please Print)

Street address/legal description of subject property _____
Attached

Robert Engstrom
Signature

12/6/14
Date

If you are not the fee owner, attach another copy of this form which has been completed by the fee owner or a copy of your authorization to pursue this action.

If a corporation is fee title holder, attach a copy of the resolution of the Board of Directors authorizing this action.

If a joint venture or partnership is the fee owner, attach a copy of agreement authorizing this action on behalf of the joint venture or partnership.

ACKNOWLEDGEMENT OF RESPONSIBILITY

This is to certify that I am making application for the described action by the City and that I am responsible for complying with all City requirements with regard to this request. This application should be processed in my name and I am the party whom the City should contact regarding any matter pertaining to this application.

I have read and understand the instructions supplied for processing this application. The documents and/or information I have submitted are true and correct to the best of my knowledge. I will keep myself informed of the deadlines for submission of material and of the progress of this application.

I understand that this application may be reviewed by City staff and consultants. I further understand that additional information, including, but not limited to, traffic analysis and expert testimony may be required for review of this application. I agree to pay to the City upon demand, expenses, determined by the City, that the City incurs in reviewing this application and shall provide an escrow deposit to the City in an amount to be determined by the City. Said expenses shall include, but are not limited to, staff time, engineering, legal expenses and other consultant expenses.

I agree to allow access by City personnel to the property for purposes of review of my application.

Signature of applicant Robert Engstrom Date 11/6/14

Name of applicant ROBERT E ENGSTROM Phone 952-893-1001
(Please Print)

Name and address of Contact (if other than applicant) _____

Wildflower at Lake Elmo

Planned Unit Development (PUD) General Concept Plan Application

Landowner: Robert Engstrom Companies
4801 W 81st Street, Suite 101
Bloomington, MN 55436
952-893-1001
(Contract Purchaser)

Applicant: Robert E. Engstrom
(Address & contact information above)
roberteengstrom@gmail.com

Consultants Gerald Mazzara
Design Forum, Architecture & Landscape Architecture
4801 W 81st Street
Bloomington, MN 55437
612-618-7406

Paul Thomas
Pioneer Engineering & Surveying
2422 Enterprise Dr
Mendota Hts, MN 55120
651-251-06605

Kelly Bopray
Bopray Environmental Services
N7831 920th St
River Falls, WI 54022
715-307-4577

Braun Intertec
Soils Engineers
Erik Johnson
11001 Hampshire Ave S
Minneapolis, MN 55438
952-995-2426

Netzell Legal Services, LLC
Tim Netzell
7900 International Dr, Suite 300
Bloomington, MN 55425
952-851-7877

Wildflower at Lake Elmo

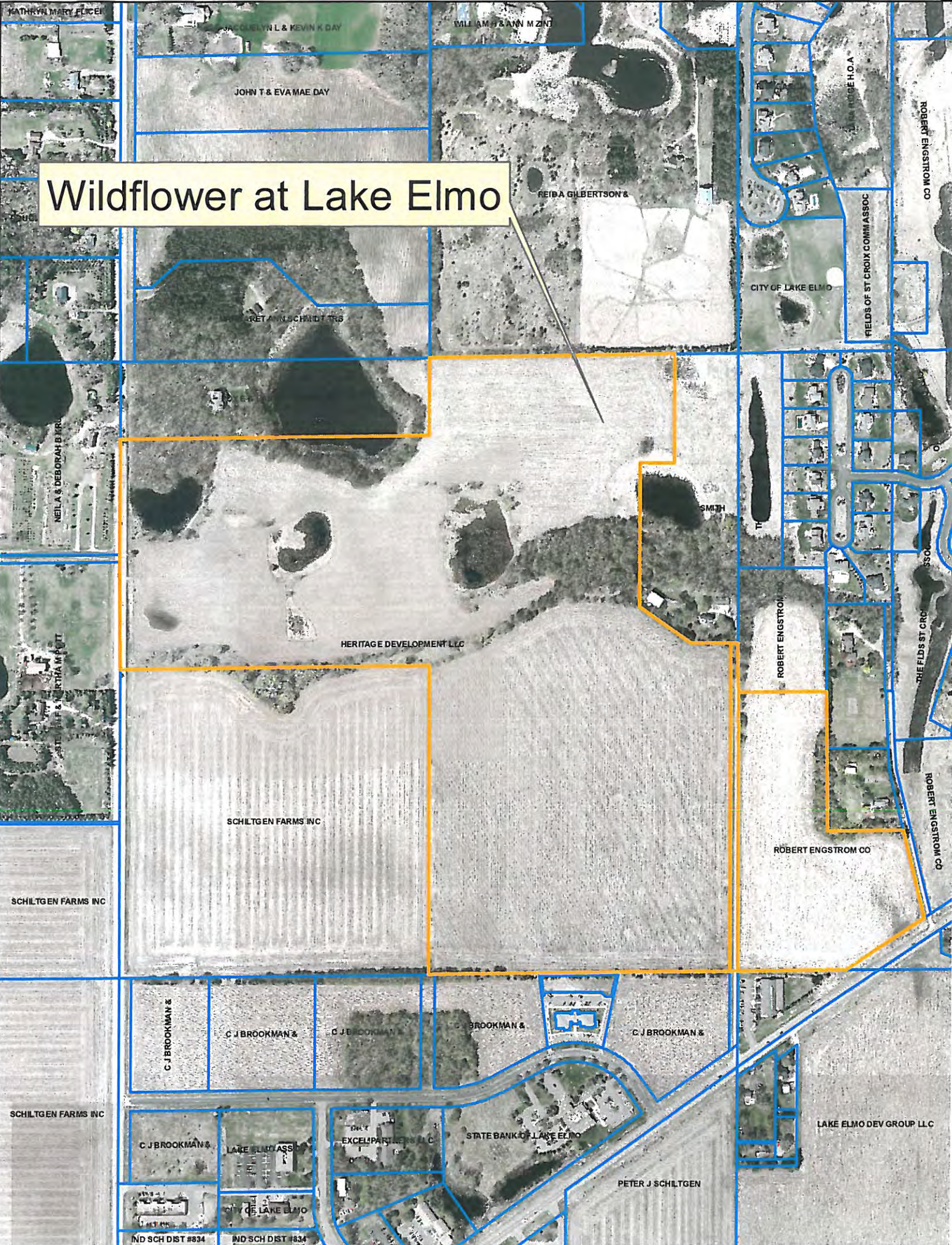


EXHIBIT A
LEGAL DESCRIPTION OF THE PROPERTY

The North 1/2 of the Southwest 1/4 and the Southeast 1/4 of the Southwest 1/4 of Section 12, Township 29, Range 21, Washington County, Minnesota, save and except the following described part thereof: All that part of the Northeast 1/4 of the Southwest 1/4 of Section 12, Township 29, Range 21, Washington County Minnesota, described as follows: Beginning at the center of said Section 12; thence due South along the East line of said Northeast 1/4 of Southwest 1/4 a distance of 1240.5 feet; thence at right angles due West a distance of 200 feet; thence North 55°00" West a distance of 270 feet; thence due North a distance of 617 feet; thence at right angles due East a distance of 147 feet; thence at right angles due North a distance of 466 feet more or less to the North line of said Northeast 1/4 of Southwest 1/4; thence Easterly along the North line of said Northeast 1/4 of Southwest 1/4 a distance of 274.17 feet to the place of beginning.

AND

That part of the Northeast 1/4 of the Northwest 1/4 of Section 13, Township 29, Range 21, Washington County, Minnesota, described as follows: Commencing at the Northeast corner of said Northeast 1/4 of Northwest 1/4 of said Section 13, thence West on the North line thereof 35 feet to a point, thence South and parallel to the East line of said quarter section to the North line of Trunk Highway No. 212; thence Northeast on the North line of said Highway to the East line of said quarter section; thence North on the East line of said quarter section to the place of beginning.

EXCEPTING THEREFROM all of the following described real property: The North 330.88 feet of the Northwest Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota.

NOTE: The precise legal description of the Property is to be confirmed by an updated Title Commitment (defined herein). It is the intent of the parties that the Property consists of the real property owned by the Seller as identified as PID Nos. 12.029.21.32.0001, 12.029.21.34.0001 and 13.029.21.21.0001, consisting of approximately 101 acres. In the event that the correct description of the Property established in the Title Commitment should differ from the description set forth herein, the description set forth in the Title Commitment shall be deemed to automatically replace the description set forth herein.

AND

OUTLOTS O AND P, THE FIELDS OF ST. CROIX 2ND ADDITION

Wildflower at Lake Elmo Overview

Robert Engstrom Companies has acquired and has fee title to a 101-acre site from Premier Bank. The site is located immediately west of the second phase of the Fields of St. Croix and in close proximity to the Old Village of Lake Elmo. The developable land conforms to the medium density designation of the city of Lake Elmo Comprehensive plan.

Approximately 60 acres, when combined with an outlot from The Fields of St. Croix, will be dedicated to Natural Habitat restoration and creation, along with surface water management.

Staging and Preliminary Plat Application

The first phase will include 22 lots off the courtyard closest to the Wildflower Drive entry, also, the 38 lots on the westerly side of the neighborhood. Construction will start in the spring of 2015.

Master Plan

A master plan of 145 home-sites has been prepared, which generally follows the comprehensive plan presentation. The plan indicates four different types of residential housing products. 67 lots are approximately 60 x 115/120 feet in a garden court setting that has interior park-like features in the center of the block, similar to our long lasting Summit Place development in the Cathedral Hill district of St. Paul. This product would have association maintained exterior grounds and be attractive to baby boomers, singles and busy two income families. Target price range is estimated at \$400,000-\$500,000. The second product is 80 and 90-foot wide lots of 135 feet depth, suitable for custom homes. As opposed to many home-sites that are being platted at a shorter lot-width, these home-sites will accommodate single-story homes.

Another grouping of nine lots overlook the wetland area and Conservancy. These home-sites will lend themselves to upper-bracket, architecturally designed homes. The last product is 13 desirable home-sites at a lower level, near Lake Elmo Avenue and adjoining the natural Conservancy. Wildflower is intended to capitalize on the national Healthy Communities Movement. The sidewalks and pathways will be convenient walking and biking opportunities and most of the pathway design will be bituminous and a lesser amount will be mowed grass paths through the prairie. An additional element of the landscape philosophy is to include some bees, butterfly and pollinator friendly plants as part of each homeowner's landscape. The streets have been designed according to use and safety. Public art might include distinctive benches, street signs, mailboxes and sculpture. Dark skies street and home lighting will be friendly to pollinators and people alike.

Our company has successfully developed two landmark developments within a ½ mile of this site—Cloverdale Farm and the Fields of St. Croix, 1st and 2nd Addition. The Fields of St. Croix, 2nd Addition is contiguous to the subject property. Both of these neighborhoods have significant prairie installations, thereby helping to create a synergistic impact with the new natural habitat, which will feature native plants, trees, and shrubs. The natural setting should lend itself to outdoor classroom activities. In addition, a two-block long pollinator pathway will be installed along the central Promenade. All of these elements will make Wildflower at Lake Elmo a distinctive ecological and educational native plant addition to the Lake Elmo Village Center.

LEGAL DESCRIPTION ATTACHED

The Fields of St. Croix Agreement

In order to help with the conversion of the farmland into natural habitat and surface water management, an agreement has been reached to facilitate the development depicted on the attached site plan. A green space buffer and driveway access is designed to be complementary to the existing ten-acre Smith residence and grounds. Similarly, the land plan is friendly to the two existing residential parcels.

The Wildflower Conservancy

The developer will install the 60 acres of natural habitat. The Wildflower Community Association will own and manage the prairie areas. Inquiry has been made to the FSA office in Farmington for enrolling the converted farmland into the CRP Program, which will help augment the Association budget. In addition, the neighboring developer has agreed to make a small contribution to the Wildflower Association. The major conservancy area will have bituminous trails and passive areas open to the public and maintained by the City of Lake Elmo. It is intended that the Conservancy will be covered by a Conservation Easement to the City of Lake Elmo. The city will abandon its conservation easement on the small area with homes in Outlot O. This area more than covers the park dedication requirement. In addition, a small outlot will be dedicated to the City, and added to the park dedication of the adjoining development.

Public Art

The developer will have distinctive landscape designs, such as benches, lighting fixtures, mailboxes, and freestanding sculptural features. The grand two lane, divided streets with a 35-foot median will lend itself to interesting landscape design, as well as some bio retention areas for surface water management. Any cooperative artscape ideas with the City of Lake Elmo would be welcomed.

PUD Flexibility

Unique designs for mailboxes, street signs and landscape details will be submitted prior to the final plat. In order to maximize design interest, setbacks from lot lines vary. Likewise, street designs vary according to use, rather than arbitrary standards.

The home-sites will be sold to local builders and be subject to architectural approval by the developer. Standards call for architectural integrity as the primary determinant. Guidelines include 4-sided architecture, style authenticity, appropriate scale, minimizing the impact of garages, encouraging one-level and 1½-story homes, and discouraging an abundance of 2 story, walk-out homes. Front yard courtyard patios are encouraged.

Stormwater Design

The overall stormwater management approach for this site is to implement Better Site Design (BSD) techniques and local Best Management Practices (BMP's) with the goal of infiltrating water near its source using a decentralized stormwater management system as much as possible. Specific techniques used include: disconnection of impervious surfaces, infiltration trenches, rain gardens, and reduction in street widths. When the capacity of these smaller practices is exceeded, the excess runoff is routed to larger stormwater facilities and infiltration basins. Valley Branch Watershed District rules require 1.1" of runoff from the new impervious surfaces created by the site to be retained on site by runoff volume reduction practices. For our site this is 2.103 acre-feet of "Volume Control". Our proposed stormwater management system achieves over 3 acre-feet of volume control, significantly exceeding the requirement. Also, to relieve flooding issues at Downs Lake, runoff from 25.6 acres of the site has been routed north toward Goetschel Pond.

The surface water design has been approved by the Valley Branch Watershed District, subject to the usual conditions.

Street Name Change

The developer is requesting that the undeveloped but platted city street of Layton Avenue North be changed to Wildflower Drive.

Landscape Designs

The landscape design will include a minimum of 100 sq. ft. of native plants for each home-site. The back lot-line should be planted in a layered design of taller deciduous trees, some evergreen trees, and, an understory of deciduous shrubs and perennial plants. The Pollinator Pathway on the north side of the Promenade will utilize ten feet of the adjoining lots to create a variety of native trees, shrubs, and plants that are friendly to bees, butterflies, other pollinators, and birds. In addition to the aesthetic and practical function, the Pollinator Pathway should provide an educational opportunity for those unfamiliar with native plants.

Developer: Robert Engstrom Companies
4801 W 81st Street, Suite 101
Bloomington, MN 55437

952-893-1001

WILDFLOWER

f

LOT PROFILE (SFD)

	RIDGE LOTS	CONSERVANCY LOTS	PRAIRIE LOTS	COURTYARD LOTS
QUANTITY	9	13	54	67
AVG DIMENSION	VARIABLE	VARIABLE	85'x145' +/-	60'x115' +/-
AVG SIZE (S.F.)	18,585	21,600	12,325 +/-	7,015 +/-

SETBACKS

	RIDGE LOTS	CONSERVANCY LOTS	PRAIRIE LOTS	COURTYARD LOTS
FRONT YD.	25'	25'	25'	20'+
SIDE YD. HOUSE: GARAGE: STREET:	15' 10' 25'	15' 10' 25'	10' 5' 15'	10' (OR 7.5') 5' (OR 7.5') 15'
REAR YD.	VARIABLE To maintain bluff vegetation and slope erosion (25' Minimum)	VARIABLE To maintain bluff vegetation and slope erosion (25' Minimum)	30'	20'+

COURTYARD LOTS:

**SPECIFIC CONDITIONS FOR SETBACK DESIGN FEATURES, FRONT, REAR & SIDE YARDS,
TO ALLOW FOR OVERLAPPING ARCHITECTURAL AND LANDSCAPE ELEMENTS IN SETBACK AREAS.**

A.	FIREPLACE BUILD OUTS (CHIMNEY & VENT BOXES)	2'-0" MAX.
B.	WINDOW BAYS OR BOX OUT FEATURES (CANTILEVERED)	2'-0" MAX.
C.	CANTILEVERED FLOOR AREAS (1 & 2 STORIES)	2'-0" MAX.
D.	FRONT PORCHES	10'-0" MAX. PAST HOUSE FRONT FACE
E.	ROOF OVERHANGS, ALL SIDES	3'-6" MAX.
F.	HIGH FENCES – NOT ATTACHED TO HOUSE (MAX. HT. 6') SIDE YARD SETBACK	3'-0" MAX. DISTANCE FROM SETBACK LINE
G.	LOW FENCES (30"- 42" HT.) – FRONT & REAR YD - ALLOWED, CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS AND GARDEN AREAS.	FRONT YD - 8'-0" INSIDE FRONT YARD P.L. REAR YD: NOT TO EXCEED 12'-0" PAST GARAGE DOOR WALL FACE
H.	DECKS & PATIOS – FRONT YD.	6'-0" INSIDE FRONT P.L.
I.	DECKS & PATIOS – SIDE YD.	3'-0" MAX. DISTANCE FROM SETBACK LINE
J.	DECKS & PATIOS – REAR YD.	NOT TO EXCEED 12'-0" PAST GARAGE DOOR WALL FACE
K.	TRELLIS, ARBORS, GATEWAYS & FEATURES	LOCATION & SIZE TO BE CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS & GARDEN AREAS. EXACT FEATURE DESIGN AND LOCATION TO BE REVIEWED AND APPROVED BY R.E.C. DESIGN REVIEW PROCEDURE.

8-21-2014

8-26-2014

● 11-5-2014 - TOTAL LOTS: 143

Wildflower Preliminary Plat & PUD Application

Section 2. Written Statements

- a. Attached exhibit A
- b. Exhibit B
- c. 143 residential lots, 65 acres public open space; Lake Elmo Ave N Right of Way=1.70 acres, Residential Right of Way=18.35 acres; Total Right of Way=20.05 acres.
- d. Exhibit B
- e. Exhibit A
- f. –The total gross area of Wildflower at Lake Elmo is 119.28 acres. The number of lots proposed is 143. Gross overall density (143 lots divided by 119.28).
- g. See engineer's plans
- h. Three long-time resident owners of adjacent properties expressed some concerns about the changes in their distant views. Landscape plans were prepared that call for landscaping that is sensitive to the owner's situation. In fact, one of the plans that calls for 24 Black Hills Spruce and 8 Sugar Maple trees have already been installed.
- i. See above for neighboring properties—the wetlands in the Conservancy area were delineated and respected in the preparation of the development plan. No mitigation of wetlands is required.
- j. See other exhibits
- k. The only docks involved might be a floating observation dock in one of the existing wetlands or possibly a fishing dock in the newly created surface water treatment area.
- l. Most of the 65 acres of open space is dedicated to bees, butterflies, birds and other pollinators. 63 acres will be owned and maintained by the Wildflower Community Association; stormwater treatment areas will be conveyed to the city for surface water treatment.

The extensive landscaping of Wildflower Drive and street islands will also be maintained by the Association.

The developer is committed to planting and installing the prairie. Maintenance estimates have been received which indicate manageable association dues. In addition, it is believed that most of the converted farmlands can be placed in the Department of Agriculture CRP program.

The outlot adjoining the future city park will also be conveyed to the City of Lake Elmo to add to the Park Dedication of the adjoining development.

Most of the developable land is farmland and consequently does not have any trees. Some significant cherry and oak trees on the ledge of the ridge were tagged and located with GPS. The wooded areas in the Conservancy will be retained with the exception of the removal of Buckthorn, Chinese Elm and other invasive species.

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: February 18, 2015

To: Kyle Klatt, Planning Director
From: Jack Griffin, P.E., City Engineer

Re: Wildflower at Lake Elmo
Preliminary Plan Review

An engineering review has been completed for the revised Preliminary Plan submittal for Wildflower at Lake Elmo PUD. The submittal consisted of the following documentation prepared by Pioneer Engineering, Inc.:

- Response memorandum dated February 5, 2015.
- Wildflower at Lake Elmo PUD Preliminary Plan Set, Sheets 1-37, dated February 4, 2015.
- Stormwater Management Plan, revised February 4, 2015.

STATUS/FINDINGS: Engineering has prepared the following review comments.

PRELIMINARY PLAT AND SITE PLAN

- The proposed plat is not contained within the plat boundaries. The plat approval must be contingent upon including the property necessary to complete the following proposed improvements.
 - Prairieview Trail R/W encroaches the Gonyea Parcel B property.
 - Wildflower Drive R/W encroaches the Gonyea Parcel B property.
 - The proposed storm water system is dependent upon the construction and operation of Pond 3N which is located entirely on the Gonyea Parcel B property.
- Minimum 15 foot easements must be added for the storm sewer pipe along Lots 13 and 14, Block 5.
- Outlots B, C, J and K must be dedicated to the City as part of the Plat.
- Outlot J references an existing Open Space easement dedicated to the Fields or St. Croix and a 10 foot drainage and utility easement for the Fields of St. Croix 2nd Addition. As Outlot J is dedicated to the City, these easements must be eliminated to ensure that the City has no restrictions going forward in regards to operation, maintenance and replacement of the storm water infrastructure.
- Outlots A, F, G, H, I include proposed trails. The applicant memo indicates trail easements will be granted to the City. City trails should be placed in Outlots dedicated to the City.
- Outlot I includes a drainage swale with landlocked basin that acts as a retention pond. Therefore Outlot I must be dedicated as City ownership.
- Outlot L includes a connecting sidewalk. The sidewalk must be paced entirely within the City R/W or Outlot L must be dedicated as City Ownership.
- Outlots M, O and P will be HOA owned and maintained. The grading plans must note that the proposed rain gardens will be HOA maintained.
- Outlot N is identified as HOA owned.
- Sheet 8: Outlot H is listed as City owned under the Public Open Space calculations. This should be moved to HOA owned.

- Wetland buffers should be shown on the Plat (Sheets 6 and 7).
- The Site Plan must be revised to eliminate wetland buffer encroachments as follows to eliminate grading and impervious surfaces:
 - The Wetland G buffer encroaches into the proposed storm water Pond 200. No grading is allowed within the wetland buffer. Pond 200 may require modifications and the storm water model revised accordingly.
 - Wetland buffers must remain a minimum of 4 feet from the proposed bituminous trail edge to allow unrestricted trail maintenance.
- The lift station site must be revised to properly site a City owned lift station facility. The proposed site is too small and does not provide sufficient separation from adjacent public uses.
- The existing FEMA floodplain must be revised as part of the Plat. The revised Floodplain cannot encroach proposed public infrastructure, including the storm water ponds and infiltration basins.

STREETS AND TRANSPORTATION

- The Site Plans, Sheets 9 and 10, must be revised using a plan scale of 1 inch = 50 feet to facilitate the review of the street geometrics including horizontal curvature information.
- Wildflower Drive proposes a typical section with two one-way lanes separated by a landscaped medium. The minimum City allowed street width for each lane is 18 feet from face of curb to face of curb (to meet adequate public safety requirements). The current plan shows a 14 foot width on the north through lane and a 20 foot width on the south through lane. Preliminary Plat should be conditioned upon meeting the City minimum standard widths and geometrics. The City specified minimum width of 18 feet assumes no parking on either side of the street.
 - The north lane of Wildflower Drive must be increased to 18 feet (back of curb to back of curb).
 - No parking signs must be placed along both sides of the street for 18 foot through lanes. To have parking along one side for a one-way travel lane requires a minimum street width of 22 feet (back of curb to back of curb)
 - Parking could also be added using a bump out design in addition to the 18 foot through lane.
 - Update Wildflower Drive typical detail per the above comments.
- Prairieview Trail is approx. 1,800 feet in length. This exceeds the maximum City standard cul-de-sac length of 1,000 feet.
- City staff has determined 28 feet to be the minimum street width. This allows parking on both sides. The 28 foot minimum requires pedestrians to be moved off the street via a sidewalk along at least one side.
 - Sidewalks should be added along Goldenrod Court and Coneflower Court and should be extended to the back of the cul-de-sac.
 - The Prairieview Trail sidewalk should be extended to the back of the cul-de-sac.
- Sunflower Lane is proposed at 24 feet in width (back of curb to back of curb). At this width, parking is allowed on one side of the street. As required, no parking signs have been indicated along one side.
- No parking signs must be added to indicate no parking around each cul-de-sac (Sunflower Lane, Goldenrod Court, Coneflower Court and Praireview Trail). The minimum fire lane is 20 feet of street width with a 45 degree cul-de-sac radii.
- The Pairiview Trail cul-de-sac island must be amended to eliminate the “tear drop” geometric.
- No parking signs must be added along the inside lane of Blazingstar Court due to the proposed 24 foot wide street pavement.
- No parking signs must be added along one side of the street for each of the Blazingstar Lane eyebrows due to the proposed 20 and 24 foot wide street pavements.

- The 10 ft boulevard along Blazingstar Court and the Blazingstar Lane eyebrows must be increased to 16 ft.
- The 10 foot wide boulevard along the Praireview Trail cul-de-sac must be increased to 16 feet.
- The 30 foot R/W and 18 foot wide alleys can be allowed under the condition that no public or private utilities are constructed within the limited R/W with the exception of limited storm sewer.
- Street Profiles: All vertical sag curves (including stop conditions) must meet the minimum K-value of 37 and all vertical crest curves meet the minimum K-value of 19. The sag curve minimum may be reduced to a K-value of 17 for the streets located within the 30 foot R/W. At all intersections the profiles must not exceed 2% longitudinal grade for the first 100 feet. Preliminary Plat should be conditioned upon the vertical street alignments meeting minimum City design standards.
 - As the main access route to the development the vertical alignment for Wildflower Drive must be revised to reduce the number of sag and crest curves creating a sinusoidal street.
 - 1) Remove the crest curve at STA 7+40.
 - 2) Remove the sag curves at STA 12+25 and STA 16+50.
 - Revise the alley street vertical crest curves to meet the minimum required K value of 17 (20 mph). Revise crest curves at STA 11+45 and STA 17+20.
 - Sheet 22: Revise the profile heading "Sunflower Lane ~~23+00~~ 27+00 to 37+00.
 - Sheets 23, 24 and 25: Remove the references to "Private Drive" for each profile.
 - Sheet 24: Revise profile heading to Blazingstar Court 0+00 to 4+06.
 - Sheets 24 and 25. Revise profiles to utilize vertical curves for all "Grade Breaks".
 - Sheet 25: The sag curves at STA 8+44.5 and STA 7+75 must be combined into one vertical curve and revised to ensure that the K value minimum is 37.
- Publicly owned trails should be clearly identified on the plans for staff review. Publicly owned and maintained trails must be located in R/W and Outlots dedicated to the City with 4-foot minimum clearance on both sides to facilitate unrestricted maintenance.

MUNICIPAL WATER SUPPLY

- The applicant is responsible to extend the municipal water to the development site at developers cost. Municipal water supply is available along 39th Street North and along State Highway 5. Connections to both locations are required.
- The preliminary utility plan provides a 12-inch diameter trunk watermain along Sunflower Lane from the TH 5 connection to the Gonyea Parcel B subdivision. Watermain oversizing costs for watermain in excess of the minimum standard 8-inch pipe is paid by the City as a reimbursement addressed within the development agreement.
- Remove the hydrant coverage circles from Sheet 26, Utility Overall Plan. An overall utility plan using a scale of 1 inch = 100 feet will need to be submitted separate from the plan set to allow staff to mark up hydrant and system valve locations. A detailed review for hydrants and system valves will be completed as part of the final construction plans.
- Correct the scale on Sheet 26.

MUNICIPAL SANITARY SEWER

- Municipal sanitary sewer is not currently available to the site. Preliminary Plat must be conditioned upon the completion of the Village East Trunk Sanitary Sewer Improvements including the trunk sewer along 39th Street North, then across TH 5 and the UP Railroad to the Easton Village development, then south through the Village Park Preserve development and connecting to the Reid Park Lift Station. The City cannot guarantee the timing nor is the City responsible for this connection to be operational.
- The applicant is responsible to extend the municipal sanitary sewer to the development site at developers cost from 39th Street North.

- A sanitary lift station is proposed to serve 13 lots including Lots 1-10, Block 16 and Lots 1-3, Block 15. The sewer comprehensive plan did not include sewer service to this area and therefore no lift station has been planned by the City. Preliminary Plat must be contingent upon the following conditions in regards to the lift station:
 - The lift station must be designed by the City and paid 100% by the developer.
 - The lift station must meet all City design and construction specifications.
 - The lift station must be fully automated via the City SCADA system with a permanent generator.
 - The proposed sanitary lift station should be constructed on property dedicated to the City of sufficient size to allow for ongoing operation, maintenance and replacement. The proposed site plan appears insufficient to properly site the proposed lift station.
 - The site plan should include an access driveway separate from the adjacent trail and include berming and landscape screening.
- Additional sanitary sewer main is required to serve Lots 8 and 9, Block 6 along Wildflower Drive. Service stubs cannot be connected to a sewer manhole and service pipe must be perpendicular to the street.
- The 10-inch trunk sanitary sewer stub on Outlot H must be extended to the south edge of the tree line in the northeast corner of Outlot H, roughly an additional 420 LF.

STORMWATER MANAGEMENT, GRADING AND STORM SEWER SYSTEM

- Preliminary Plat must be conditioned on a revised Stormwater Management Plan, grading plan and storm sewer system meeting all requirements listed in the City of Lake Elmo Engineering Design Standards in addition to the requirements of the MPCA and Valley Branch Watershed District.
- The proposed Storm water management Plan must be revised as follows:
 - Storm sewer design criteria must be revised to indicate that all rain garden 10-year HWLs must be at an elevation that remains below the street subbase drainage layer (or two feet below the roadway surface).
 - The proposed hydrology report must be revised to provide a more complete description of the proposed system and discharge points.
 - The report must be updated to address the proposed storm water connection and discharge to the existing 39th Street storm sewer system. The applicant must provide existing and proposed documentation to demonstrate that adequate capacity is available in the 39th Street storm sewer connection and downstream water bodies.
 - The soils report identifies some C and D soil groups. City standards do not allow infiltration practices to be constructed in Group C and D soils. Soil borings and classifications must be completed in the actual location of each proposed infiltration BMP to verify feasibility of the BMP. The plan must be updated if infiltration BMPs are reduced accordingly.
 - The applicant must make all revisions needed to obtain VBWD approval and all revisions must be resubmitted for City review and approval.
- The existing 100-year Floodplain is shown on the site plan and currently encroaches Lots 1, 2 and 10, Block 16; Lot 1, Block 15; the sanitary lift station site; Praireview Trail street/retaining wall; and storm water pond facilities including Pond 200, Basin 200I and 300I. The floodplain is in the process of being lowered. The preliminary plat must be contingent upon the applicant obtaining resolution for the revised FEMA floodplain as it relates to these infrastructure encroachments.
- There are nine (9) rain gardens proposed within the City R/W requiring potential issues for the ongoing maintenance of the street and drainage systems. In addition there is a bioretention ditch along the south edge of the plat and 6 more rain gardens located on HOA property but with hydraulic connections to the public R/W. For these facilities there are 25 rain garden inlet structures that will be installed integral to

the street and curb and gutter. In all, the proposed facilities will require a substantial maintenance commitment from City staff even if the HOA agrees to maintain the rain gardens themselves.

- Site specific soil testing must be completed for each proposed BMP with the BMP eliminated if the soils are not feasible in the opinion of the City (soils must be classified as Group A and B soils and demonstrate a high probability of achieving successful long-term performance).
- Consideration should be given to eliminate rain gardens located within public R/W. The infiltration credits are not needed to meet state and watershed permit requirements. As proposed the rain gardens will inundate the adjacent roadway during 10-year rain events. If not eliminated, each rain garden must be lowered such that the 10 year HWL is at least 2 feet below the lowest point of the adjacent street elevation.
- The preliminary plat should be conditioned upon a signed maintenance agreement to require all rain gardens to be HOA owned and maintained, even if they are within the public R/W. The City should maintain the right to have any of these rain gardens eliminated in the future if they are found to be a detriment to the City street pavement or subbase.
- Rain gardens must be designed to the approval of the City. Storm water details submitted with the preliminary plat (rain guardian, typical rain garden, and bioretention facility) have not been reviewed nor accepted by the City. Detailed review will be completed following preliminary plat.
- The stormwater plan as submitted is dependent upon Pond 3N on the Gonyea Parcel B property being fully constructed and operational. Preliminary Plat approval therefore must be contingent upon this pond being constructed as part of this project.
- The NWL must be added to the plans for all storm water ponds and the Outlot I drainage swale.
- All stormwater ponds, infiltration basins and bioretention facilities required to meet VBWD permit rules have been placed in Outlots dedicated to the City for ongoing operation, maintenance and replacement. The Stormwater Outlots must continue to fully incorporate the 100-year HWL as plans are revised.
- The stormwater pond and infiltration area HWL **contour** must be added to facilitate staff review.
- The HWL elevation must be shown on the plans for all low areas including rear yard drainage swales (place HWL contour on plans). The HWL contour must be fully contained within a drainage easement. Additional revisions are required for the rear yard drainage swale and storm sewer system in Block 5. The plans are not legible as submitted.
- An access maintenance approach road must be provided and shown on the plans for each storm water facility with a minimum width of 20 feet and with a maximum grade of 10%.
 - Maintenance access has been provided to Ponds 100 and 200 using a proposed trail. The trail sections must be increased to accommodate vehicle use.
 - Maintenance access to Pond 100 must be revised to be no greater than 10%.
 - Maintenance access no greater than 10% must be added for to each of the infiltration basins.

LANDSCAPE PLANS

- The landscape plans must be revised to maintain 10 foot offset from all proposed trees to any proposed utilities including sanitary sewer and water service stubs to each property.
- Add note to stake all trees to be approved by City prior to planting.
- Infiltration basin plantings and seeding to be as prescribed by the City's Landscape Architect. Please contact Stephen Mastey to obtain City standards and revise plans accordingly.
- City standard landscape plan notes and details must be incorporated into the Landscape Plans and all other notes and details removed.
- Remove note to place trees halfway between curb and sidewalk /trail. Trees must be a minimum of 5 feet behind curb.

Station #1
3510 Laverne Ave. No.
Lake Elmo, MN 55042
651-770-5006



Station #2
4259 Jamaca Ave. No.
Lake Elmo, MN. 55042
651-779-8882

LAKE ELMO FIRE DEPARTMENT

February 13, 2015

Review of the PRELIMINARY PLAT – WILDFLOWER AT LAKE ELMO

Following a review of the packet provided, I have concerns related to the following:

- Hydrant placement/spacing. Hydrants need to be placed at intersections to be most advantageous for emergency response and spaced per our requirements, with spacing of hydrants not to exceed 500’.
- Street naming to remain consistent with current program. See attachment.
- I have concerns with the turning radius of islands shown, especially the “tear drop” design as this presents problems for us getting several large apparatus into these areas, especially in the winter.
- Road widths must comply with current standards. Narrow roads create problems for us. When there is a structure fire we need to get several apparatus to the scene. There may be alternatives offered up such as “one way” or “no parking”, which experience has shown us that these are easily disregarded and when you factor in narrowing due to snowbanks, this creates difficulty in responding.

Sincerely,

Greg Malmquist, Fire Chief

“Proudly Serving Neighbors & Friends”

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LAKE ELMO FIRE DEPARTMENT

STREET NAMING and NUMBERING

It has come to my attention that there is discussion and concerns regarding our current naming and numbering system for streets in Lake Elmo. I would like to address this from the perspective of the fire department only.

While there is no perfect system to my knowledge, our current system provides an organized, sensible system for quick location and identification for emergency responders. There was a period when Lake Elmo went away from the system and areas that were designed during this period are some of our most problematic. There are also areas that were designed previously, when we initially had adopted the system we are currently using that create problems as well. This is due to the fact that those that were responsible for implementation varied from the system. In a perfect world where all roads were straight and ran directly north/south and east/west, things would be simple. Current developments with roads that “wind” or “curve” create problems for us now, but there are tools within our current system that allow us to address these as best possible.

I would now like to explain why this system is a great benefit to us. I will use a scenario of a structure fire response as an example.

- When we receive our initial page from the 911 dispatch center with the address, we have a general idea of where the emergency is before we even arrive at the fire station.
 - It allows us to quickly determine if this is an area with or without hydrants. This is critical as we may need to call for Mutual Aid Tenders from neighboring fire departments for adequate water supply.
 - Upon arrival at the fire station, this guides us to a general area on the map, without having to search the entire map.
- The current system is beneficial to our surrounding fire departments as well in the event we call them Mutual Aid. It allows them to respond quicker as it is less likely they will need to spend significant time searching a map.
- Addresses are important not only to find the location of the emergency, but for a structure fire there are other related operations that are impacted by this.
 - When Mutual Aid is requested, responding agencies are generally directed to a Staging Area located several blocks from the scene. Our current system makes this relatively easy. A random system would create considerable confusion.
 - In the event we are utilizing Tenders for water supply, we establish a fill site away from the scene. Again, random street names create confusion for all parties concerned.

While there is technology out there, it isn't always available to us and isn't 100% reliable. We also have situations where we have one person driving an emergency vehicle and we want them focused on driving, not a screen and entering data.

I hope this helps to clarify our concerns. If anyone would like to discuss further, I am always available.

“Proudly Serving Neighbors & Friends”



WILDFLOWER AT LAKE ELMO – DESIGN REVIEW REPORT **LAKE ELMO, MN**

LANDSCAPE ARCHITECTURAL DESIGN REVIEW DATED FEBRUARY 14TH, 2015
REVIEWED PLAN SET DATED FEBRUARY 4TH, 2015

Per our review the Landscape Plan is NOT in compliance with the City's planting requirements.

Required Action Items by Wildflower at Lake Elmo Project Team

1. Tree placement needs to be more accurately considered and represented throughout the plan. In some cases trees are represented on sidewalks and streets or too close to hardscape elements.
2. Street trees need to be at least 5 feet from back of curb. In areas where the boulevard does not allow this because of sidewalk or trail placement as noted on Sheet L1 please redesign to accommodate required trees.
3. Please provide an analysis of street tree plantings in relationship to proposed residential utility connections with appropriate setbacks from both utility service connections and driveways. It appears that once this exercise is completed some of the proposed street trees as currently represented will have to be relocated and / or an adjustment of the lot width may need to take place to facilitate the incorporation of the required trees in the streetscape corridor.
4. When determining landscape requirements and trees required per street frontage please recalculate to include street frontage on Hwy 5 and Lake Elmo Avenue North as well in addition to the new proposed streets.
5. Trees are to have a two year warranty.
6. Please add note to plan sheets: All trees to be field staked prior to installation. Contractor to coordinate field review of proposed tree locations with the city and project landscape architect prior to any tree installation.
7. Correct conversion for multi-stem trees to 2.5 inch B& B is 12 foot height.
8. Per plant schedule the specified River Birch/*Betula nigra* 'Heritage' is incorrectly spelled / noted. Should read: Heritage River Birch / *Betula nigra* 'Cully'.
9. Minimum size for ornamental trees is 2" Caliper per Table 6-1. Minimum Size Standards for Landscape Materials within the City's landscape requirements.
10. Please provide more diversity of all plantings – overstory trees, evergreen trees and ornamental trees. For example specify more than one type of evergreen on the entire project. Perhaps focusing on pollinator friendly choices would work nicely with the overall theme of the development. 211 Black Hills Spruce is not acceptable as the only evergreen specified.

52 PrairieFire Crab is too many of one type of Crab, try to limit the use of Honey Locust as it provides filtered light at best as a street tree, etc. as a few examples.

11. Please provide design sections for all berms / landscape screening suggested representing all typical planting arrangements with species specified and represented to scale at time of installation. When planting berms please consider planting side slopes verses simply planting the top as it is currently suggested. Plants are much happier when not placed on the highest, driest and windiest part of the berm.
12. Please provide design drawings for all signage and way finding elements.
13. Please provide us with an understory planting plan for the entire development. This includes all shrub & perennial beds, infiltration basins, raingardens as well as native seeding and turf sodding areas.
14. We request more information as it relates to the tree preservation plan to make a determination if tree replacement is in fact required.
15. We would like your design team to rethink the layout of the plantings within the HOA outlots M, O & P. It appears the layout is not very well developed. The absence of street tree plantings is noted and should be addressed. The observation is that the tree layout suggested simply occupies the green space rather than utilizing trees to reinforce or create space which would be our preference.
16. Correctly label Lake Elmo Avenue North on the western edge of the property. Currently it is labeled Lake Elmo Drive North.
17. We request information on soil preparation and planting specifications for all plantings/seeding.
18. Provide landscape irrigation plans for our review for all commonly held HOA & City Outlots / R.O.W. areas.
19. We recommend you provide a three year maintenance plan for all landscape materials/areas within all commonly held HOA & City Outlot / R.O.W areas.

SINCERELY,

LANDSCAPE ARCHITECTURE, INC.

STEPHEN MASTEY, ASLA, CLARB, LEED AP BD+C



Valley Branch Watershed District Permit Review Memorandum

Subject: Wildflower at Lake Elmo, Permit 2014-28
Applicant, Owner, Agent: Robert Engstrom, Robert Engstrom Companies
Engineer: Paul Thomas, Pioneer Engineering
Date: December 2, 2014
Barr Project No.: 23/82-0020.00 2200 352

Location: North of Highway 5, east of Lake Elmo Avenue, and west of Fields of St. Croix 2nd Addition, Lake Elmo

Section/Township/Range: Parts of the southwest quarter of Section 12 and northwest quarter of Section 13, Township 29 North, Range 21 West

Project Purpose: Subdivide 101 acres into 143 single-family residential lots in three general size groups: 67 lots approximately 60 feet by 120 feet (0.165 acres), 54 lots approximately 90 feet by 135 feet (0.28 acres), and 22 lots approximately 100 feet by 200 feet (0.46 acres). Construct roads, sidewalks, trails, sanitary sewer, water, and stormwater management facilities including three wet ponds, three infiltration basins, one bioretention swale/trench, and 17 rain gardens; 23.3 acres of new impervious surfaces are proposed; approximately 60 acres will be left as open space/natural habitat restoration and creation with trails.

Conformance Summary:

Issue		Conforms to VBWD & WCA Rules?	Comments
Stormwater Management	Rate	<i>Probably</i>	<i>Still under review.</i>
	Volume	<i>Probably</i>	<i>Still under review. See Suggested Site-Specific Conditions 3-9.</i>
	Quality		
	Maintenance Agreement	<i>No</i>	<i>See Suggested Site-Specific Condition 10.</i>
	Easement	<i>Yes</i>	<i>See Standard Conditions 9 and 11 and Suggested Site-Specific Condition 18.</i>
Erosion-Control Plan		<i>See comment</i>	<i>Still under review. See Standard Conditions 4-8.</i>

To: VBWD Managers
From: John Hanson
Subject: Wildflower at Lake Elmo, Permit 2014-28
Date: December 2, 2014
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Project: 23/82-0020.00 2200 352
c: Ray Marshall, Ray Roemmich, Melissa Imse

Issue		Conforms to VBWD & WCA Rules?	Comments
Wetland Management & Buffers	Delineation	See comment	We are still reviewing documentation received after the permit application deadline date. 122 square feet of wetland is proposed to be impacted. The hydrology of several wetlands is proposed to be reduced significantly because of stormwater volume BMPs. See Suggested Site-Specific Conditions 12-14. The Wetland Conservation Act TEP needs to provide advice regarding Suggested Site-Specific Condition 13.
	MNRAM Evaluation	See comment	
	Classification	See comment	
	Filling/Sequencing	See comment	
	Excavating	NA	
	Buffers	Yes	
	Hydrology	See comment	
	Replacement Plan	See comment	
Banking Plan	NA		
Floodplain Management	100-Year Flood Level	See comment	Still under review. See Suggested Site-Specific Conditions 15-16.
	Minimum Floor Elevations		
	Filling within Floodplain	See comment	See Suggested Site-Specific Condition 17.
	Easement	Yes	See Suggested Site-Specific Condition 18 and Standard Conditions 9 and 11.
Permit Fee		Yes	\$14,886.46 was submitted on November 18, 2014.
Surety		See comment	See Suggested Site-Specific Condition 19. The surety is estimated at more than \$150,000.

Comment:

1. The 100-year flood level of some stormwater management areas are not contained on the site.

Suggested Site-Specific Conditions:

These permit conditions are based on the November 5, 2014, Planned Unit Development and Preliminary Plat plan sheets by Pioneer Engineering.

1. All plan sheets shall be signed by a licensed professional.
2. No construction shall start before all permit conditions are met. If the Valley Branch Watershed District Board is not satisfied that the conditions are met, the permit will be revoked.
3. Prior to construction, more detailed calculations (and, if necessary, revised plan sheets) shall be submitted to show the project conforms to the VBWD volume-control standards.
4. This permit is not valid until the grading plans and HydroCAD model are consistent and the plans and model have been submitted.
5. The proposed rainwater gardens shall have planting medium conforming to Mix C or D, specified in the *Minnesota Stormwater Manual*.
6. Prior to construction, details of how the ponds will be lined shall be provided (e.g., cross-section details, specification of clay, specifications for construction, etc.).
7. Prior to construction, documentation that clarifies the drainage along Wildflower Drive/39th Street North shall be submitted.

To: VBWD Managers
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8. Prior to construction, proof must be submitted that Pond 3NP on the adjacent site will be constructed whether that site is developed or not.
9. A more detailed construction phasing and sequencing plan and/or specifications shall be submitted and approved prior to any construction and followed during construction. The construction phasing and sequencing plan shall ensure that the project conforms to all VBWD rules and regulations throughout construction and all phases of the development, including the existing and proposed grading offsite to the west and at the proposed Wildflower Drive connection to 39th Street North.
10. This permit is not valid until a maintenance agreement in the general format of Appendix B of the VBWD Rules is submitted to and approved by the VBWD Attorney.
11. Prior to construction, the permit holder must obtain permission for any work outside of its property.
12. This permit is valid if the appropriate documents are submitted and no adverse comments are received through the notification process.
13. Wetland monitoring shall be conducted every other year until 5 years after the project is fully complete. If the quality or size of any wetland is negatively affected, wetland banking credits shall be purchased.
14. Wetland buffer signage must be installed as required by the VBWD Rules and Regulations. Specifications for the proposed signs shall be submitted and approved by the VBWD prior to installation.
15. Drain tile shall be provided around the perimeters of proposed structures in Block 5 if their low floors are below Elevation 930.2. For lots 18-25 in Block 5, drain tile shall be provided around the perimeters of structures with low floors below El. 932.8.
16. Prior to construction, documentation shall be provided that shows all existing adjacent structures will be protected from water levels at BMPs, wetlands, low areas, etc.
17. Prior to construction, calculations that show the pre-project and post-project volumes below the overflows of each lowland/wetland shall be submitted and show no net loss in storage volume.
18. Drainage easements shall be provided in Block 5 up to the emergency overflow (EOF) elevation, which is Elevation 930.2 for most lots and Elevation 932.8 for Lots 18-25.
19. Prior to construction, the required surety shall be submitted. This permit is not valid until the permit fee and surety are submitted.
20. This permit is valid if VBWD modeling determines that proposed drainage diversion from the Downs Lake watershed to the Goetschel Pond watershed does not negatively increase the water levels within basins of the Goetschel Pond watershed.

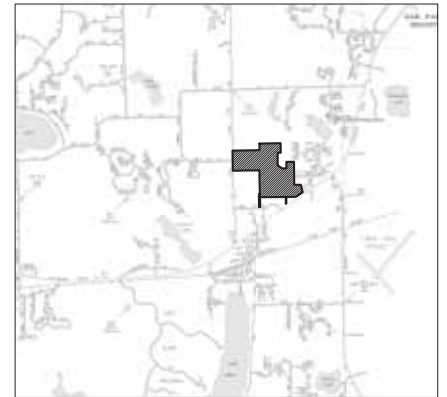
Applicable Standard Conditions:

1. This permit is not transferable.
2. This permit is subject to obtaining all other permits required by governmental agencies having jurisdiction (including a NPDES permit).
3. The VBWD Engineer and Inspector shall be notified at least 3 days prior to commencement of work.
4. Erosion controls shall be installed prior to the commencement of grading operations and must be maintained throughout the construction period until turf is established. Additional erosion controls may be required, as directed by the VBWD Inspector or VBWD Engineer.
5. The following additional erosion controls shall be implemented on the site:

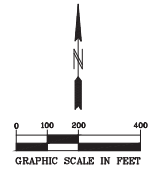
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- a. All proposed slopes 3 feet horizontal to 1 foot vertical (3H:1V) should be covered with erosion-control blanket.
 - b. Silt fence should follow existing contours as closely as feasible to limit the potential for gully erosion along the edges.
 - c. Any sediment that collects in storm sewers, ponds, or other water management features shall be removed.
 - d. Street sweeping shall be performed if sediment collects on streets.
 - e. If erosion occurs at the outlets of the storm sewer pipes, the applicant will be responsible for correcting the problem to the satisfaction of the VBWD.
6. To prevent soil compaction, the proposed infiltration area shall be staked off and marked during construction to prevent heavy equipment and traffic from traveling over it. If the infiltration facility is in place during construction activities, sediment and runoff shall be kept away from the facility using practices such as diversion berms and vegetation around the facility's perimeter. The infiltration facility shall not be excavated to final grade until the contributing drainage area has been constructed and fully stabilized. The final phase of excavation shall remove all accumulated sediment and be done by light, tracked equipment to avoid compaction of the basin floor. To provide a well-aerated, highly porous surface, the soils of the basin floor shall be loosened to a depth of at least 24 inches to a maximum compaction of 85% standard proctor density prior to planting.
 7. All disturbed areas shall be vegetated within 14 days of final grading.
 8. The applicant is responsible for removal of all temporary erosion-control measures, including silt fence, upon establishment of permanent vegetation at the project site as determined by the VBWD Engineer and/or Inspector.
 9. Valley Branch Watershed District shall be granted drainage easements which cover: (a) land adjacent to stormwater management facilities, wetlands, and lowlands up to their 100-year flood elevations and (b) all ditches, storm sewers, and maintenance access to the stormwater management facilities.
 10. The minimum floor elevations for all buildable lots in the development shall be recorded in a Declaration of Covenants and Restrictions or on the final plat.
 11. The required drainage easements and access easements shall be recorded with the Washington County Recorder's Office.
 12. Return or allowed expiration of any remaining surety and permit closeout is dependent on the permit holder providing proof that all required documents have been recorded (including but not limited to easements) and providing as-built drawings that show that the project was constructed as approved by the Managers and in conformance with the VBWD rules and regulations.

WILDFLOWER AT LAKE ELMO PLANNED UNIT DEVELOPMENT AND PRELIMINARY PLAT LAKE ELMO, MINNESOTA



LOCATION MAP



- SHEET INDEX**
- 1. COVER SHEET
 - 2. LEGENDS
 - 3-4. EXISTING CONDITIONS
 - 5. OWNERSHIP AND LAND USE
 - 6-7. PRELIMINARY PLAT
 - 8-10. PRELIMINARY SITE PLAN
 - 11-19. PRELIMINARY GRADING PLAN
 - 20-21. EROSION CONTROL PLAN
 - 22-25. STREET PROFILES
 - 26-34. PRELIMINARY UTILITY PLAN
 - 35-37. DETAILS
- L1-5. LANDSCAPE PLAN
T1. TREE PRESERVATION PLAN

PREPARED BY PIONEER ENGINEERING, P.A.

KEITH A. WILLENBRING
REGISTERED PROFESSIONAL CIVIL ENGINEER
25504
REG. NO.

PETER J. HAWKINSON
REGISTERED PROFESSIONAL LAND SURVEYOR
42299
REG. NO.

DEVELOPER
ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111
CONTACT: ROBERT ENGSTROM
ROBERTENGSTROM@GMAIL.COM
(952) 893-1001

LANDOWNER
ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111
ROBERTENGSTROM@GMAIL.COM
(952) 893-1001

PROPOSED DEVELOPMENT PHASING
MASS GRADING TO BE PERFORMED IN ONE PHASE.
UTILITY AND STREET CONSTRUCTION TO BE PERFORMED
IN THREE PHASES.

PIONEERengineering

CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS LANDSCAPE ARCHITECTS
2422 Enterprise Drive
Mendota Heights, MN 55120
www.pioneereng.com
(651) 681-1914
Fax: 681-9488

I hereby certify that this plan 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

Name: Keith A. Wilkenburg
Reg. No.: 25504 Date: 11-05-14
Revision: L1-02-04-15 City Comments

Date: 11-05-14
Designed: KAW/BIM
Drawn: KAW/BIM

COVER SHEET

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

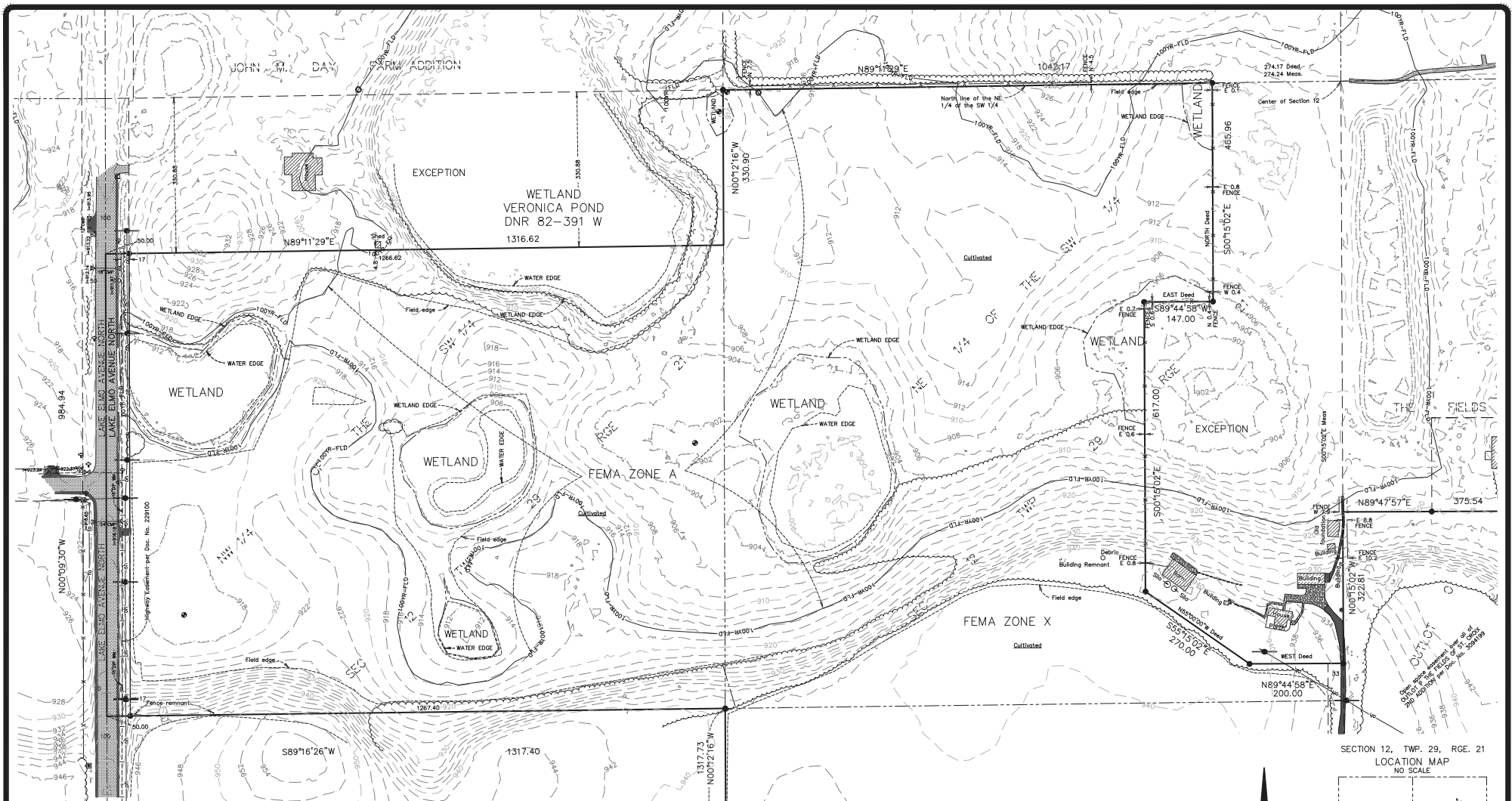
1 OF 37

LEGEND			
UTILITY LINES		FUTURE	
EXISTING	PROPOSED	EXISTING	PROPOSED
			DESCRIPTION SANITARY MANHOLE SANITARY SEWER (SANITARY & WATERMAIN PLANS) SANITARY SEWER (STORM SEWER PLANS) FORCE MAIN HYDRANT GATE VALVE REDUCER CURB STOP WATERMAIN (SANITARY & WATERMAIN PLANS) WATERMAIN (STORM SEWER PLANS) CATCH BASIN BEEHIVE STORM MANHOLE FLARED END SECTION CONTROL STRUCTURE STORM SEWER (SANITARY & WATERMAIN PLANS) STORM SEWER (STORM SEWER PLANS) CULVERT PERFORATED DRAIN TILE SOLID DRAIN TILE SERVICE CASING UNDERGROUND ELECTRIC LINE UNDERGROUND FIBER OPTIC LINE UNDERGROUND GAS LINE UNDERGROUND PETROLEUM LINES UNDERGROUND TELEPHONE LINES UNDERGROUND TELEVISION LINE OVERHEAD UTILITY LINES
SITE LINES		FUTURE	
EXISTING	PROPOSED	EXISTING	PROPOSED
			DESCRIPTION SURMOUNTABLE CURB & GUTTER B-STYLE CURB & GUTTER RIBBON CURB & GUTTER EDGE OF BITUMINOUS YELLOW PAVEMENT STRIPING (SINGLE/DOUBLE) WHITE PAVEMENT STRIPING (SINGLE/DOUBLE) PHASE LINE CENTERLINE 2' CONTOUR LINE 10' CONTOUR LINE POND OUTLET LINE POND HIGH WATER LINE PROPOSED SPOT ELEVATION EMERGENCY OVERFLOW DRAINAGE FLOW ARROW DELINEATED / PROPOSED WETLAND LINE TREE LINE FEMA FLOODPLAIN BOUNDARY RETAINING WALL FENCE (BARBED WIRE) FENCE (CHAIN LINK) FENCE (WOOD) CONSERVATION AREA SIGN WETLAND BUFFER SIGN TYPE III BARRICADE LIGHT POLE STREET SIGNS PEDESTRIAN RAMP
SURVEY LINES		FUTURE	
EXISTING	PROPOSED	EXISTING	PROPOSED
			DESCRIPTION BOUNDARY RIGHT OF WAY LOT LINE EASEMENT SET BACK LINE SECTION LINE RESTRICTED ACCESS
HATCH PATTERNS			
	GRAVEL SURFACE		WETLAND
	BITUMINOUS SURFACE		WETLAND UPLAND BUFFER
	CONCRETE SURFACE		WETLAND MITIGATION
	RIP RAP		PERMANENT TURF RESTORATION
	SELECT BACKFILL MATERIAL		PERMANENT WET BASIN SEEDING
	EROSION CONTROL BLANKET MNDOT CATEGORY PER PLAN		UPLAND/NATURAL AREA SEEDING

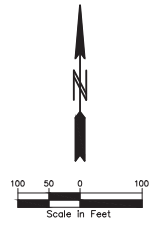
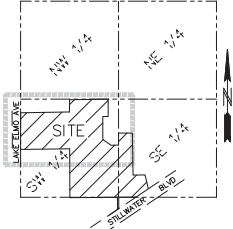
TOPOGRAPHIC SYMBOLS	
	DESCRIPTION CATCH BASIN FLARED END SECTION GATE VALVE HYDRANT WATER SERVICE WATER WELL MONITORING WELL CLEANOUT HAND HOLE MANHOLE OTHER THAN SANITARY OR STORM SANITARY OR STORM MANHOLE LAWN SPRINKLER VALVE LAWN SPRINKLER HEAD UTILITY POLE TRANSFORMER BOX FIBER OPTIC BOX ELECTRIC BOX NATURAL GAS METER LIGHT POLE SEMAPHORE TELEPHONE BOX CABLE BOX CAST IRON MONUMENT FOUND IRON PIPE JUDICIAL LAND MARK PIN NAIL CONTROL POINT SPIKE FLAG POLE TEST HOLE MAILBOX SIGN BOLLARD CONSERVATION POST DECIDUOUS TREE CONIFEROUS TREE SHRUB / BUSH
EROSION & SEDIMENT CONTROL	
	DESCRIPTION STANDARD EROSION CONTROL HEAVY-DUTY EROSION CONTROL SECONDARY EROSION CONTROL FENCE, EROSION CONTROL AT BACK OF CURB, TREE FENCE CATCH BASIN INLET PROTECTION STRAW BIO ROLLS ROCK BERM SUMPED RIP RAP PERMANENT ENERGY DISSIPATER DISCHARGE LOCATION GRAVEL CONSTRUCTION ENTRANCE TEMPORARY OUTLET FLOATING SKIMMER BASIN ACCESS 8% SLOPE MAX.
CURB LEGEND	
	DESCRIPTION 08.15 44.57 = TOP OF CURB ELEVATION FOR SURMOUNTABLE CURB 08.32 44.57 = TOP OF CURB ELEVATION FOR 6616 CURB 07.62 44.57 = BITUMINOUS ELEVATION

ABBREVIATIONS	
A	ALGEBRAIC DIFFERENCE
BV	BATTERY VALVE
BMP	BEST MANAGEMENT PRACTICE
C	CENTER LINE
CB	CATCHBASIN
CBMH	CATCHBASIN MANHOLE
CMP	CORRUGATED METAL PIPE
CO	CLEAN CUT
CS	CURB STOP
DIP	DUCTILE IRON PIPE
DT	DRAIN TILE
EL/ELEV	ELEVATION
EK	EXISTING
FES	FLARED END SECTION
F-F	FACE TO FACE
FM	FORCEMAIN
GB	GRADE BREAK
GND	GROUND
GV	GATE VALVE
HP	HIGH POINT
HYD	HYDRANT
HWL	HIGH WATER LEVEL
INV	INVERT
K	CURVE COEFFICIENT
L	LENGTH
LF	LOWEST FLOOR
LO	LOOKOUT
LO	LOWEST OPENING
LP	LIQUID PETROLEUM
LP	LOW POINT
MH	MANHOLE
PC	POINT OF CURVATURE
PCC	COMPOUND CURVE
PI	POINT OF INTERSECTION
P	PROPERTY LINE
PRC	POINT OF REVERSE CURVATURE
PVT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
R	RANBLER
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT OFF WAY
SSWR	SANITARY SEWER STATION
STRM	STORM SEWER STATION
SWPPP	STORM WATER POLLUTION PROTECTION PLAN
T	TYPICAL
TYP	TYPICAL
WM	WATER MAIN
WO	WALKOUT

LOT INFORMATION	
(TYPICAL SECTION NOT TO SCALE)	
	DESCRIPTION BLOCK NO. LOT NO. HOUSE TYPES R — RAMBLER OR SPLIT ENTRY LO — RAMBLER LOOKOUT OR SPLIT ENTRY WALKOUT WO — RAMBLER WALKOUT SLO — SIDE WALKOUT SWO — SIDE WALKOUT X' — DEPTH TO LOWEST OPENING



SECTION 12, TWP. 29, RGE. 21
LOCATION MAP
NO SCALE



LEGAL DESCRIPTION FOR PRELIMINARY PLAT PURPOSES ONLY

The real estate being located in the County of Washington, State of Minnesota, and legally described as follows:
 The North Half of Southwest Quarter and the Southwest Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota, save and except the following described part thereof: All that part of the Northeast Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota, described as follows: Beginning at the center of said Section 12; thence due South along the East line of said Northeast Quarter of Southwest Quarter a distance of 1240.5 feet; thence at right angles due West a distance of 200 feet; thence North 55 degrees 00 minutes 00 seconds West a distance of 270 feet; thence due North a distance of 617 feet; thence at right angles due East a distance of 147 feet; thence at right angles due North a distance of 466 feet more or less to the North line of said Northeast Quarter of Southwest Quarter; thence Easterly along the North line of said Northeast Quarter of Southwest Quarter a distance of 274.17 feet to the place of beginning.

And
 That part of the Northeast Quarter of the Northwest Quarter of Section 13, Township 29, Range 21, Washington County, Minnesota, described as follows: Commencing at the Northeast corner of said Northeast Quarter of Northwest Quarter of said Section 13, thence West on the North line thereof 35 feet to a point, thence South and parallel to the East line of said quarter section to the North line of Trunk Highway No. 212; thence Northeast on the North line of said Highway to the East line of said quarter section; thence North on the East line of said quarter section to the place of beginning.

Excepting therefrom all of the following described real property: The North 330.88 feet of the Northwest Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota.

Together with
 Outlots O and P THE FIELDS OF SAINT CROIX 2ND ADDITION according to the plat thereof, Washington County, Minnesota.

PIONEER engineering
 THE ENGINEERS LAND PLANNERS LAND SURVEYORS
 (651) 681-1914
 2122 Enterprise Drive
 Mendota Heights, MN 55120
 Fax: 681-9488
 www.pioneereng.com

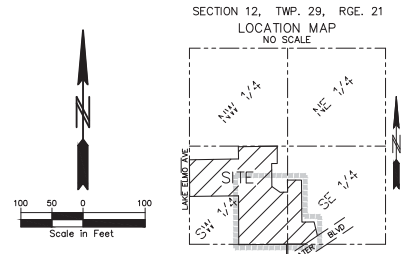
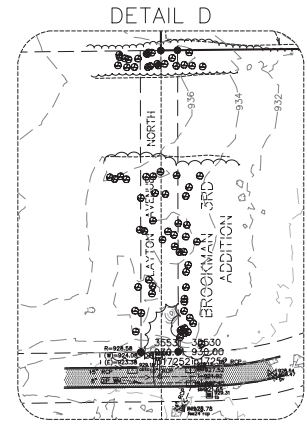
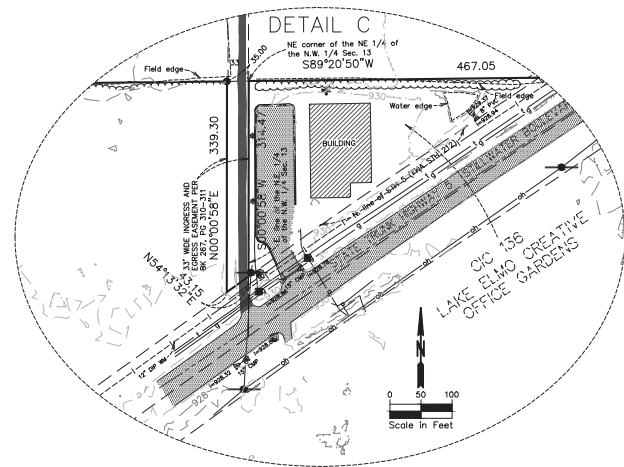
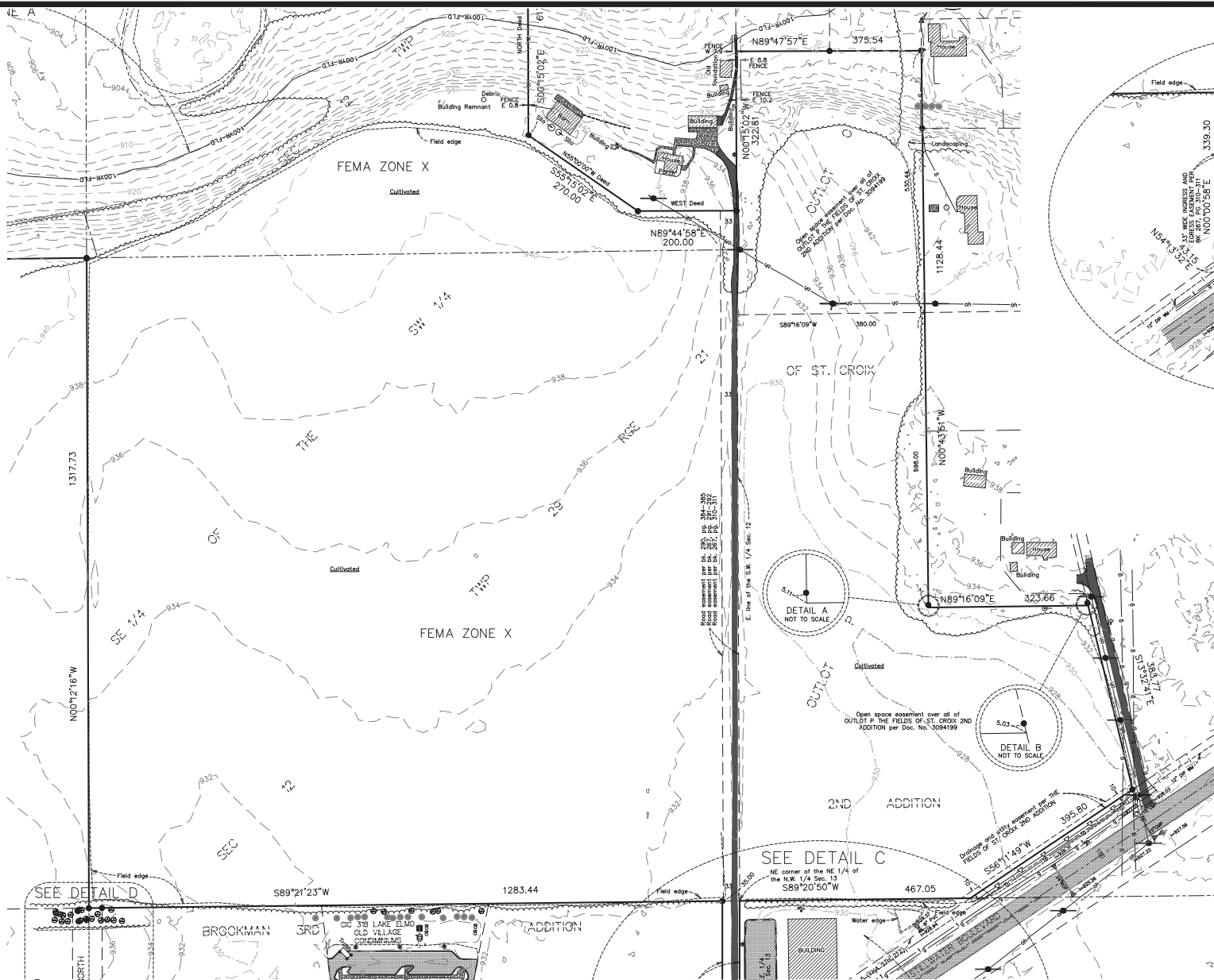
I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Surveyor under the laws of the State of Minnesota.
 Name: *H. J. [Signature]*
 Title: *Professional Surveyor*
 Reg. No. 42297 Date: 11/21/14

Revisions:
 1. 02-04-15 City Comments
 Date: 11/21/14
 Discussed:
 Drawn: [initials]

EXISTING CONDITIONS

ROBERT ENGSTROM COMPANIES
 4801 WEST 81ST STREET, SUITE 101
 MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA



PIONEER engineering

1422 Enterprise Drive
 Mendota Heights, MN 55120
 (651) 681-1914
 Fax: 681-9488
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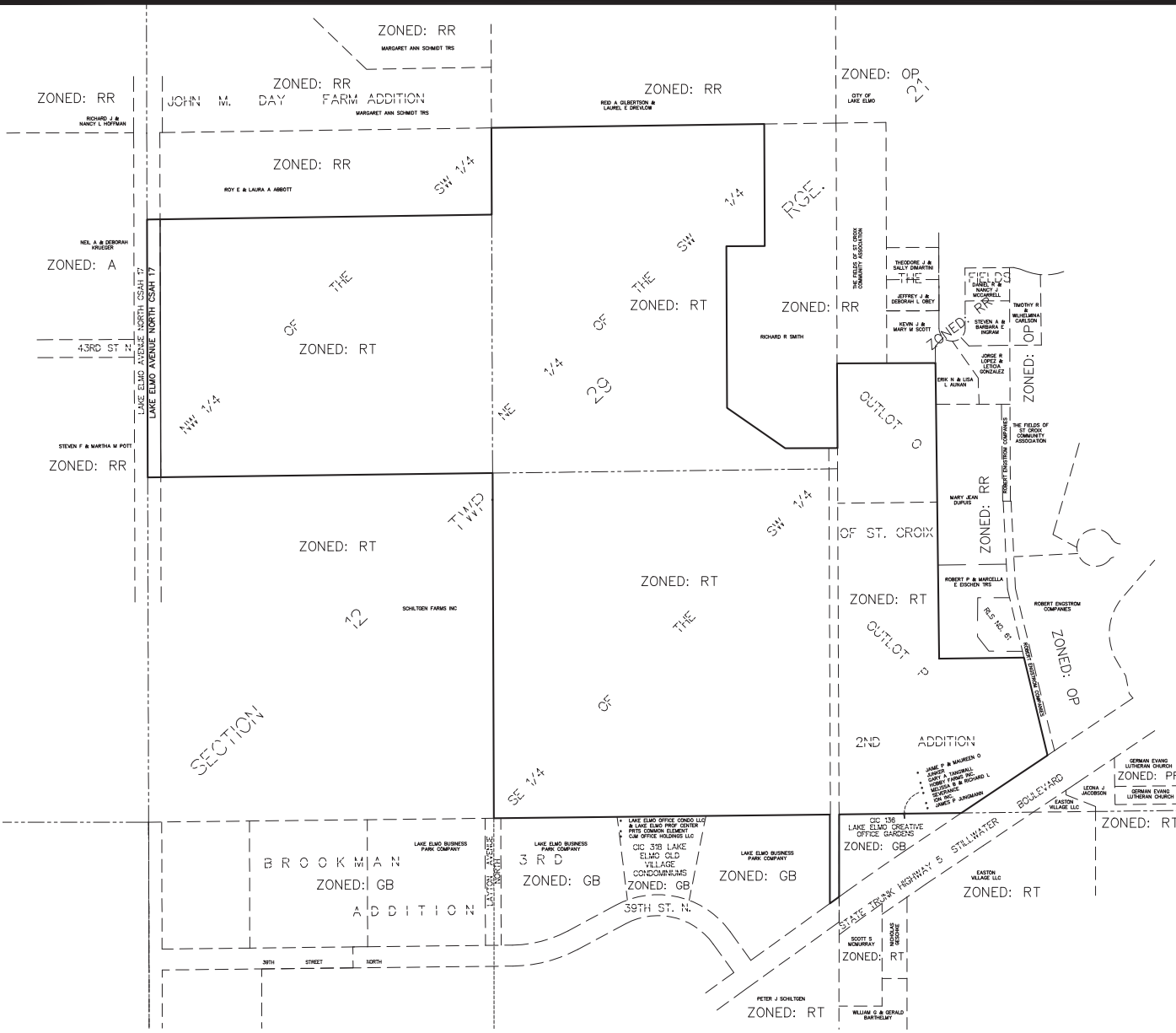
I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Surveyor under the laws of the State of Minnesota.
 Name: W. J. [Signature]
 Title: Professional Surveyor
 Reg. No. 42299 Exp. 11/2014

Revisions:
 1. 02-04-15 City Comments
 Date: 11/2014
 Discussed:
 Drawn: [Signature]

EXISTING CONDITIONS

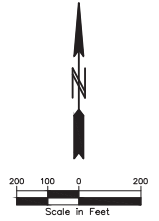
ROBERT ENGSTROM COMPANIES
 4801 WEST 81ST STREET, SUITE 101
 MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA

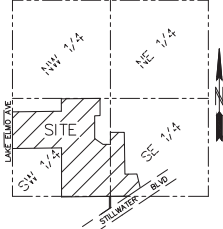


LEGEND

- A - Agriculture
- GB - General Business
- RR - Rural Residential
- RT - Rural Development Transitional
- OP - Open Space Preservation District
- PF - Public and Quasi-Public Open Space



SECTION 12, TWP. 29, RGE. 21
LOCATION MAP
NO SCALE



5015 BUSINESS LAND PLANNERS LAND SURVEYORS LICENSE #081302114
2422 Enterprise Drive
Mendota Heights, MN 55120
(651) 681-1914
Fax: 681-9488
www.pioneereng.com

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Surveyor under the laws of the State of Minnesota.
Name: W. J. [Signature]
Reg. No. 42299 Date: 11/20/14

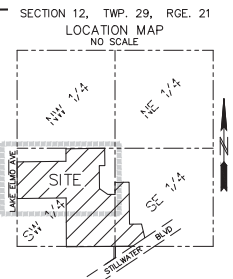
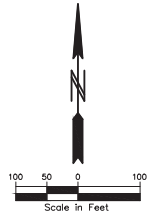
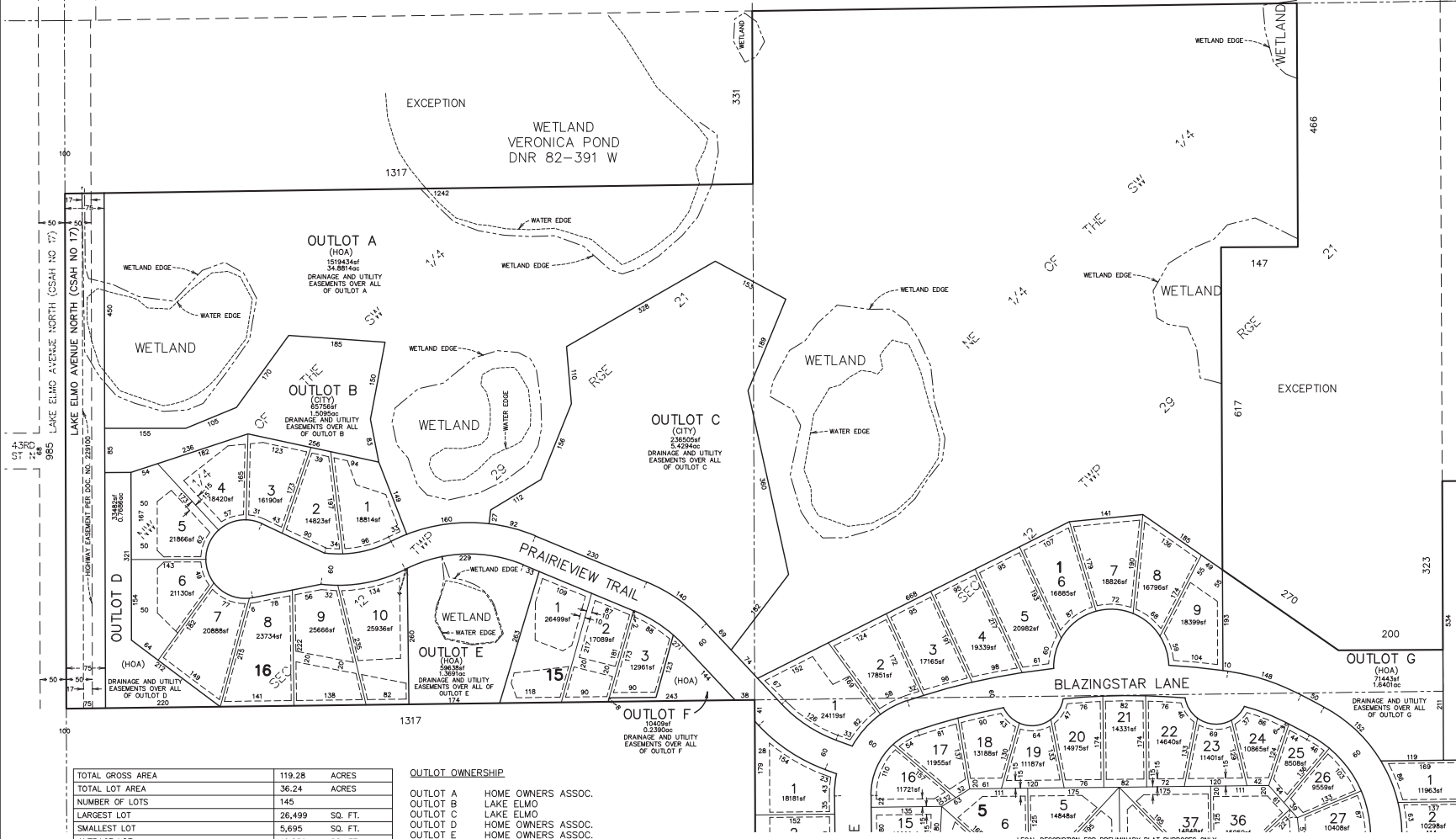
Revisions: 1, 02/04-15 City Comments
Date: 11/20/14
Discussed: [Blank]
Drawn: [Blank]

OWNERSHIP AND LAND USE

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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TOTAL GROSS AREA	119.28 ACRES
TOTAL LOT AREA	36.24 ACRES
NUMBER OF LOTS	145
LARGEST LOT	26,499 SQ. FT.
SMALLEST LOT	5,695 SQ. FT.
AVERAGE LOT	10,889 SQ. FT.
NUMBER OF OUTLOTS	16
TOTAL OUTLOT AREA	62.33 ACRES
LAKE ELMO AVE N. RIGHT OF WAY AREA	1.70 ACRES
RESIDENTIAL RIGHT OF WAY AREA	19.01 ACRES
TOTAL RIGHT OF WAY AREA	20.71 ACRES
GROSS DENSITY (EXCLUDES OUTLOTS)	2.55 LOTS/ACRE
NET DENSITY (EXCLUDES OUTLOTS & R/W)	4.00 LOTS/ACRE
ZONING	PUD

OUTLOT OWNERSHIP

OUTLOT A	HOME OWNERS ASSOC.
OUTLOT B	LAKE ELMO
OUTLOT C	LAKE ELMO
OUTLOT D	HOME OWNERS ASSOC.
OUTLOT E	HOME OWNERS ASSOC.
OUTLOT F	HOME OWNERS ASSOC.
OUTLOT G	HOME OWNERS ASSOC.
OUTLOT H	HOME OWNERS ASSOC.
OUTLOT I	HOME OWNERS ASSOC.
OUTLOT J	LAKE ELMO
OUTLOT K	LAKE ELMO
OUTLOT L	HOME OWNERS ASSOC.
OUTLOT M	HOME OWNERS ASSOC.
OUTLOT N	HOME OWNERS ASSOC.
OUTLOT O	HOME OWNERS ASSOC.
OUTLOT P	HOME OWNERS ASSOC.

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That part of the Northeast Quarter of the Northwest Quarter of Section 13, Township 29, Range 21, Washington County, Minnesota, described as follows: Commencing at the Northeast corner of said Northeast Quarter of Northwest Quarter of said Section 13, thence West on the North line thereof 35 feet to a point, thence South and parallel to the East line of said quarter section to the North line of said quarter section to the North line of said Highway No. 212; thence Northeast on the North line of said Highway to the East line of said quarter section; thence North on the East line of said quarter section to the place of beginning.

Excepting therefrom all of the following described real property: The North 330.88 feet of the Northwest Quarter of the Southwest Quarter of Section 12, Township 29, Range 21, Washington County, Minnesota.

Together with
 Outlots O and P THE FIELDS OF SAINT CROIX 2ND ADDITION according to the plat thereof, Washington County, Minnesota.

PIONEER engineering
 CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS LICENSED UNDER CHAPTER 327A
 2422 Enterprise Drive
 Mendota Heights, MN 55120
 (651) 681-1914
 Fax: 681-9488
 www.pioneereng.com

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Surveyor under the laws of the State of Minnesota.
 Name: H. J.
 Reg. No. _____ Date: 11/21/14
 Revisions: 1. 02-04-15 City Comments

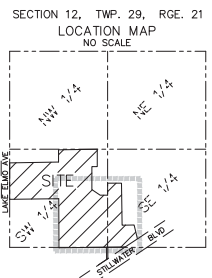
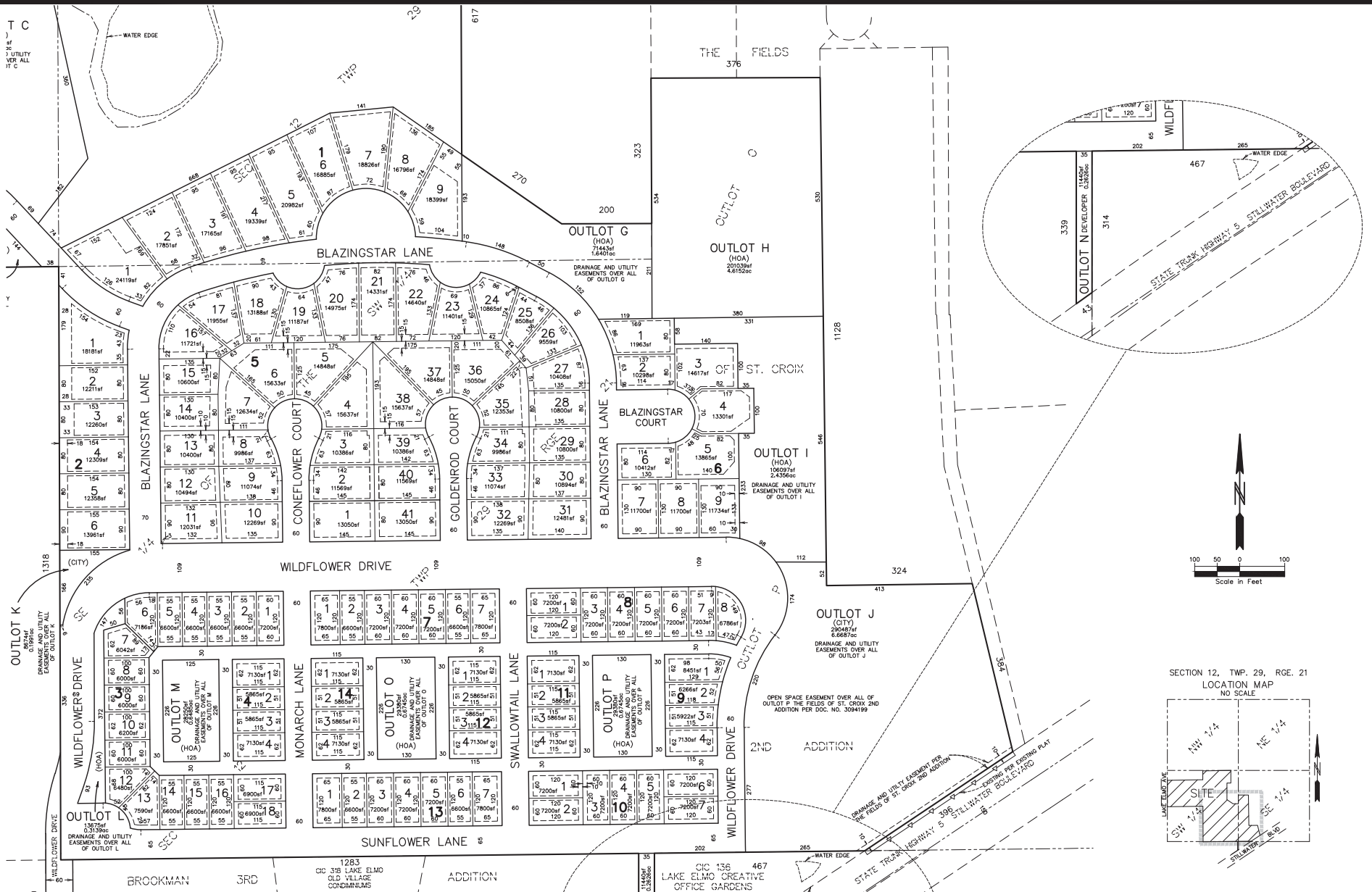
Date: 11/21/14
 Discussed:
 Drawn: only

PRELIMINARY PLAT

ROBERT ENGSTROM COMPANIES
 4801 WEST 81ST STREET, SUITE 101
 MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA

T C
of
UTILITY
OVER ALL
T C



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 2422 Enterprise Drive
 Mendota Heights, MN 55120
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I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Surveyor under the laws of the State of Minnesota.
 Name: H. J.
 Reg. No. _____ Date: 11/21/14

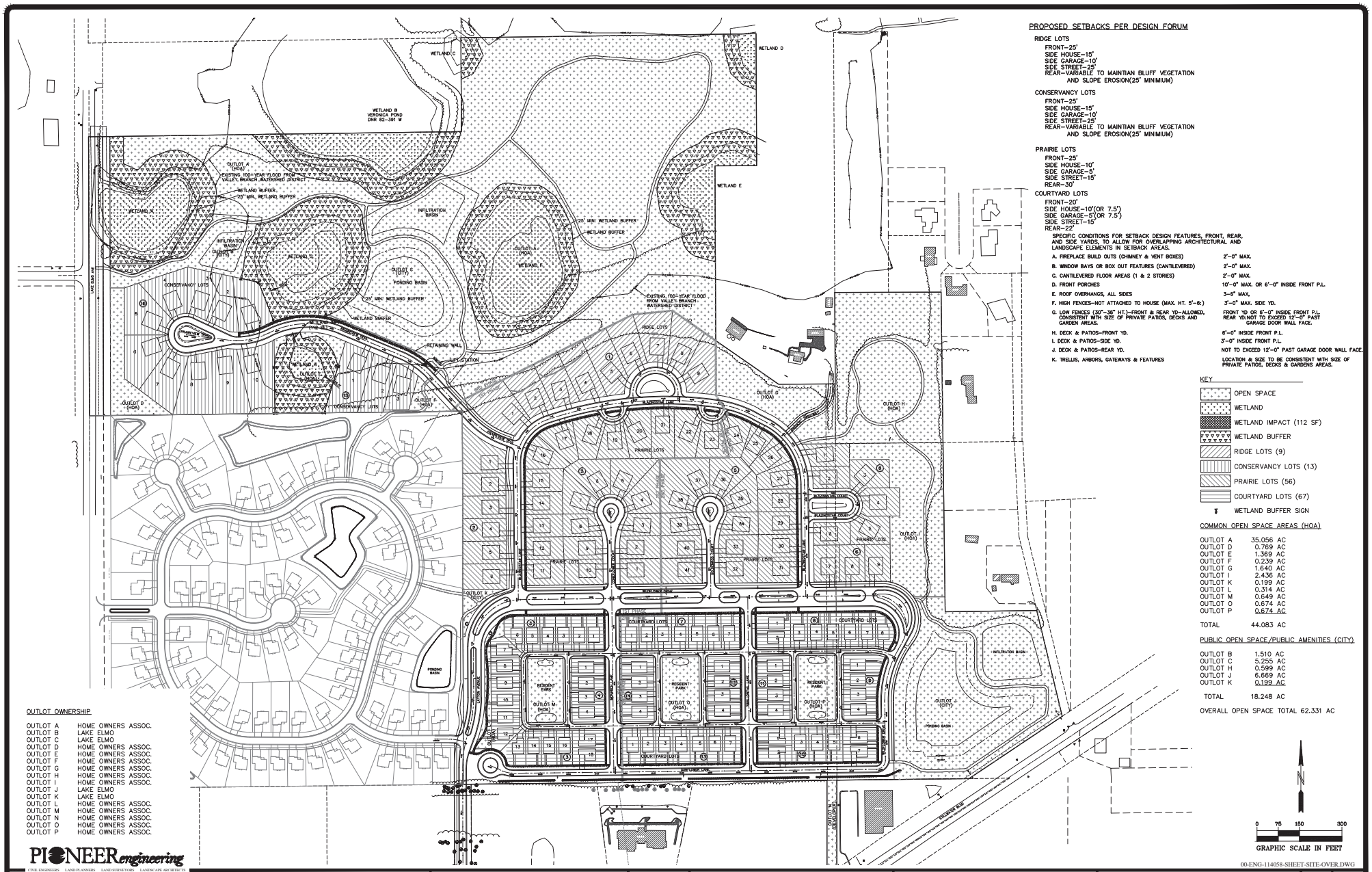
Revisions
 1. 02-04-15 City Comments

Date: 11/21/14
 Discussed:
 Drawn: only

PRELIMINARY PLAN

ROBERT ENGSTROM COMPANIES
 4801 WEST 81ST STREET, SUITE 101
 MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA



PROPOSED SETBACKS PER DESIGN FORUM

- RIDGE LOTS**
 FRONT-25'
 SIDE HOUSE-15'
 SIDE GARAGE-10'
 SIDE STREET-25'
 REAR-VARIABLE TO MAINTAIN BLUFF VEGETATION AND SLOPE EROSION(25' MINIMUM)
- CONSERVANCY LOTS**
 FRONT-25'
 SIDE HOUSE-15'
 SIDE GARAGE-10'
 SIDE STREET-25'
 REAR-VARIABLE TO MAINTAIN BLUFF VEGETATION AND SLOPE EROSION(25' MINIMUM)
- PRAIRIE LOTS**
 FRONT-25'
 SIDE HOUSE-10'
 SIDE GARAGE-5'
 SIDE STREET-15'
 REAR-30'
- COURTYARD LOTS**
 FRONT-25'
 SIDE HOUSE-10'(OR 7.5')
 SIDE GARAGE-5'(OR 7.5')
 SIDE STREET-15'
 REAR-22'
- SPECIFIC CONDITIONS FOR SETBACK DESIGN FEATURES, FRONT, REAR, AND SIDE YARDS, TO ALLOW FOR OVERLAPPING ARCHITECTURAL AND LANDSCAPE ELEMENTS IN SETBACK AREAS.**
- A. FIREPLACE BUILT OUTS (CHIMNEY & VENT BONES) 2'-0" MAX.
 - B. WINDOW BAYS OR BOX OUT FEATURES (CANTILEVERED) 2'-0" MAX.
 - C. CANTILEVERED FLOOR AREAS (1 & 2 STORES) 2'-0" MAX.
 - D. FRONT PORCHES 10'-0" MAX. OR 6'-0" INSIDE FRONT P.L.
 - E. ROOF OVERHANGS, ALL SIDES 3'-6" MAX.
 - F. HIGH FENCES-NOT ATTACHED TO HOUSE (MAX. HT. 5'-6") 3'-0" MAX. SIDE YD.
 - G. LOW FENCES (30"-36" HT.)-FRONT & REAR YD.-ALLOWED, CORRELATE WITH SIZE OF PRIVATE PATIOS, DECKS AND GARDEN AREAS. FRONT YD. NOT TO EXCEED 12'-0" PAST GARAGE DOOR WALL FACE.
 - H. DECK & PATIOS-FRONT YD. 6'-0" INSIDE FRONT P.L.
 - I. DECK & PATIOS-SIDE YD. 5'-0" INSIDE FRONT P.L.
 - J. DECK & PATIOS-REAR YD. NOT TO EXCEED 12'-0" PAST GARAGE DOOR WALL FACE.
 - K. TRELLIS, ARBORES, GATEWAYS & FEATURES. LOCATION & SIZE TO BE CONSISTENT WITH SIZE OF PRIVATE PATIOS, DECKS & GARDENS AREAS.

KEY

- OPEN SPACE
- WETLAND
- WETLAND IMPACT (112 SF)
- WETLAND BUFFER
- RIDGE LOTS (9)
- CONSERVANCY LOTS (13)
- PRAIRIE LOTS (56)
- COURTYARD LOTS (67)
- WETLAND BUFFER SIGN

COMMON OPEN SPACE AREAS (HOA)

OUTLOT A	35.056 AC
OUTLOT D	0.769 AC
OUTLOT E	1.369 AC
OUTLOT F	0.239 AC
OUTLOT G	1.640 AC
OUTLOT H	2.436 AC
OUTLOT K	0.199 AC
OUTLOT L	0.314 AC
OUTLOT M	0.849 AC
OUTLOT O	0.674 AC
OUTLOT P	0.674 AC
TOTAL	44.083 AC

PUBLIC OPEN SPACE/PUBLIC AMENITIES (CITY)

OUTLOT B	1.510 AC
OUTLOT C	5.255 AC
OUTLOT I	0.599 AC
OUTLOT J	6.689 AC
OUTLOT K	0.199 AC
TOTAL	18.248 AC

OVERALL OPEN SPACE TOTAL 62.331 AC

OUTLOT OWNERSHIP

OUTLOT A	HOME OWNERS ASSOC.
OUTLOT B	LAKE ELMO
OUTLOT C	LAKE ELMO
OUTLOT D	HOME OWNERS ASSOC.
OUTLOT E	HOME OWNERS ASSOC.
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I hereby certify that this plan 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
 Name: Keith A. Wilshabg
 Reg. No. 25526 Date: 11-05-14

Revisions
 1. 02-04-15 City Comments

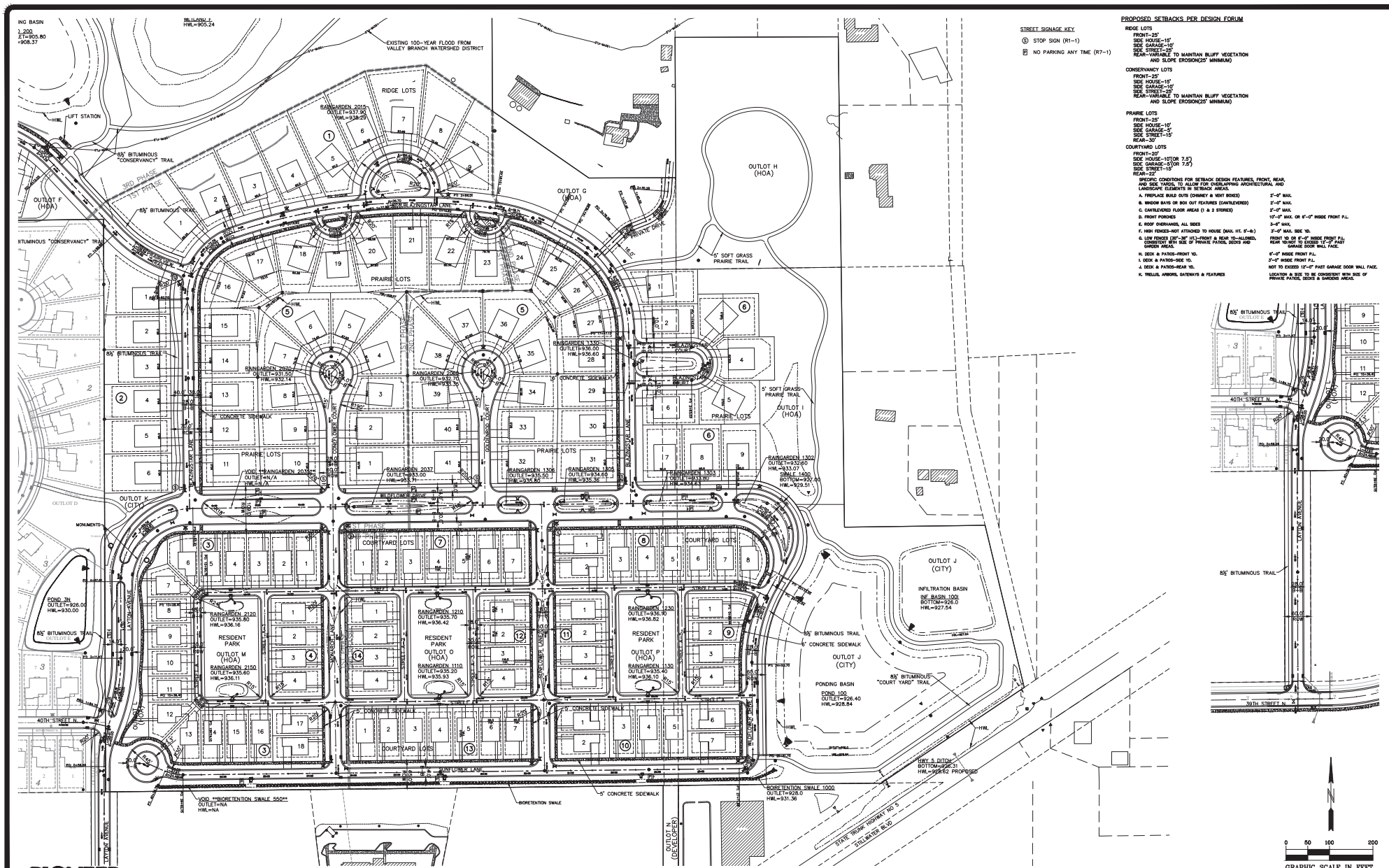
Date: 11-05-14
 Designed: KAW/BIM
 Drawn: KAW/BIM

SITE PLAN

ROBERT ENGSTROM COMPANIES
 4801 WEST 81ST STREET, SUITE 101
 MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA

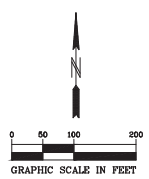
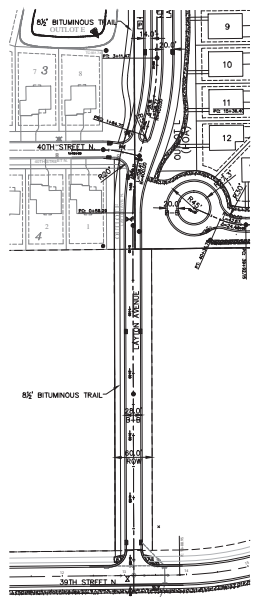
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STREET SIGNAGE KEY
 (S) STOP SIGN (R1-1)
 (N) NO PARKING ANY TIME (R7-1)

PROPOSED SETBACKS PER DESIGN FORUM

- RIDGE LOTS**
 FRONT-25'
 SIDE HOUSE-15'
 SIDE GARAGE-10'
 SIDE STREET-15'
 REAR-VARIABLE TO MAINTAIN BLUFF VEGETATION AND SLOPE EROSION CONTROL (MINIMUM)
- CONSERVANCY LOTS**
 FRONT-25'
 SIDE HOUSE-15'
 SIDE GARAGE-10'
 SIDE STREET-15'
 REAR-VARIABLE TO MAINTAIN BLUFF VEGETATION AND SLOPE EROSION CONTROL (MINIMUM)
- PRAIRIE LOTS**
 FRONT-25'
 SIDE HOUSE-15'
 SIDE GARAGE-10'
 SIDE STREET-15'
 REAR-30'
- COURTYARD LOTS**
 FRONT-20'
 SIDE HOUSE-10'(OR 7.5')
 SIDE GARAGE-10'(OR 7.5')
 SIDE STREET-15'
- REAR-22'**
- SETBACK CONDITIONS FOR SETBACK DESIGN FEATURES, FRONT, REAR, AND SIDE YARDS TO ACHIEVE THE OVERLAPPING ARCHITECTURAL AND LANDSCAPE ELEMENTS IN SETBACK AREAS.**
- A. FENCE/RAIL BARS (CORNER & VIEW BARS) 2'-0" MAX.
 - B. BRUSH BARS OR ROW CUT FENCING (ENHANCED) 2'-0" MAX.
 - C. CHAINLINK FLOOR AREA (1 & 2 STORED) 2'-0" MAX.
 - D. FENCE FENCING 10'-0" MAX. OR 4'-0" WIDE FRONT P.L.
 - E. ROOF OVERHANGS, ALL SIDES 3'-0" MAX.
 - F. HIGH FENCES-NOT ATTACHED TO HOUSE (MAX. Ht. 5'-6") 2'-0" MAX. SIDE YD.
 - G. LOW FENCES (20'-0" Ht.)-FRONT & REAR (NO-CHALLENGE) FRONT YD. TO 20'-0" WIDE FRONT P.L. REAR YD. NOT TO EXCEED 1'-0" EAST CURBLINE DOOR WALL FACE.
 - H. SIDE & PATIO-REAR YD. 4'-0" WIDE FRONT P.L.
 - I. SIDE & PATIO-REAR YD. 2'-0" WIDE FRONT P.L.
 - J. SIDE & PATIO-REAR YD. NOT TO EXCEED 12'-0" PAST GARAGE DOOR WALL FACE.
 - K. WALKWAY, GATEWAY & FEATURES 12'-0" WIDE FRONT P.L. TO 8' OVERHANG WEST SIDE OF FRONT PATIO, SIDE & GARAGE AREA.



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I hereby certify that this plan 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.
 Name: Keith A. Wilshagen
 Reg. No.: 25526 Date: 11-05-13

Revision: 1.02-04-15 City Comments
 Date: 11-05-14
 Designed: KAW/BIM
 Drawn: KAW/BIM

SITE PLAN

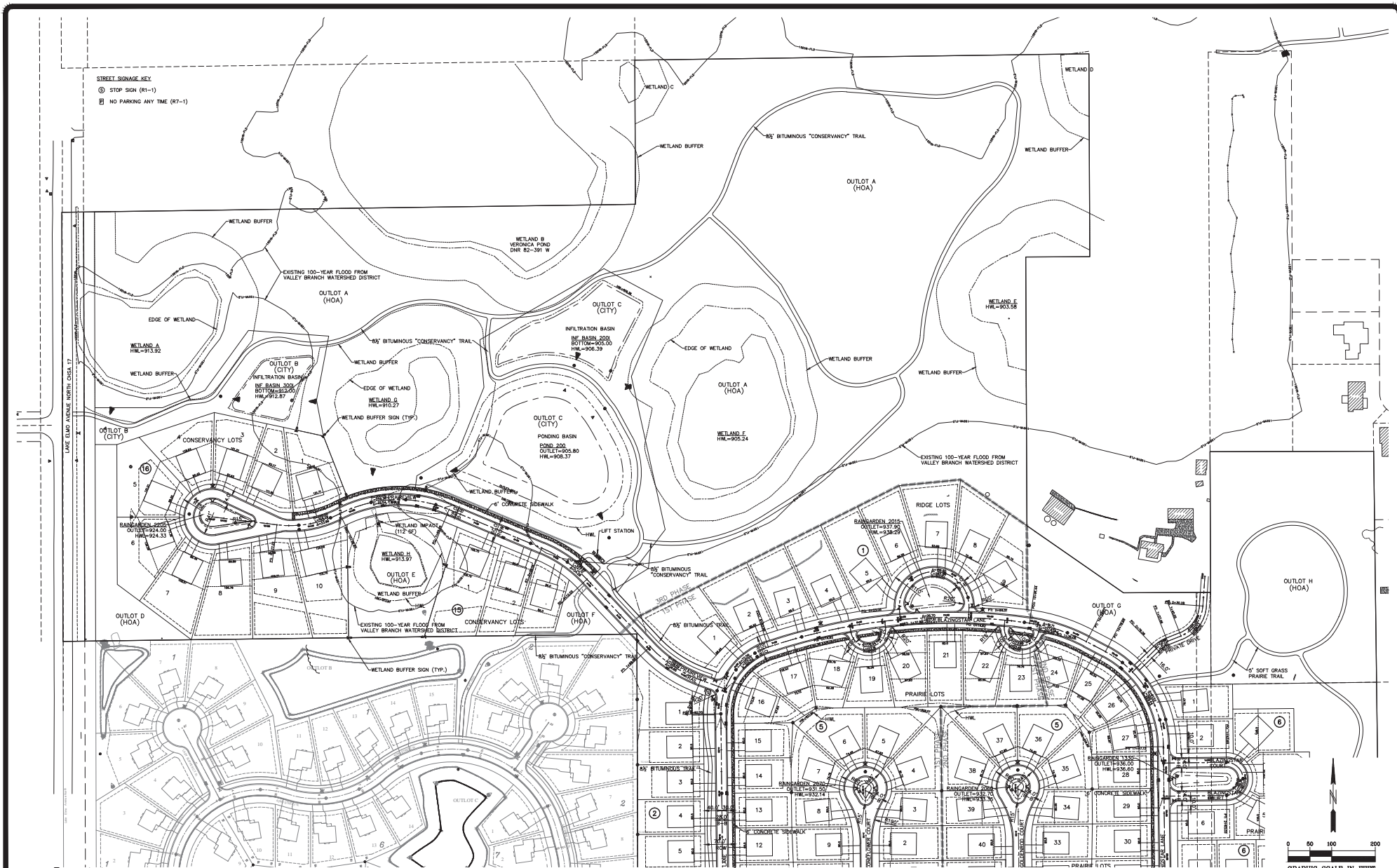
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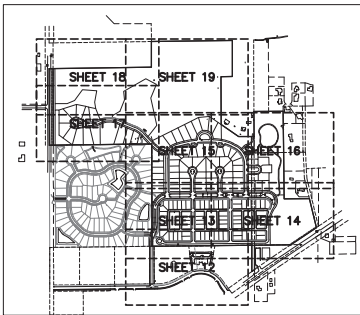
Name: Keith A. Wilshabing
 Reg. No. 25526 Date: 11-05-14
 Revision: 1.02-04-15 City Comments

Date: 11-05-14
 Designed: KAW/BIM
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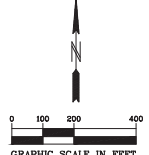
SITE PLAN

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SITE ELEVATIONS:
 -LOWEST FINISH ELEVATION
 -LOWEST GRADE ELEVATION
 -LOWEST SPRING ELEVATION
 -LOWEST 2' OF



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Name: Keith A. Wilczang
 Reg. No.: 25204 Date: 11/05/14

Revision: 1. 02-04-15 City Comments

Date: 11-05-14
 Designed: KAW/BIM
 Drawn: KAW/BIM

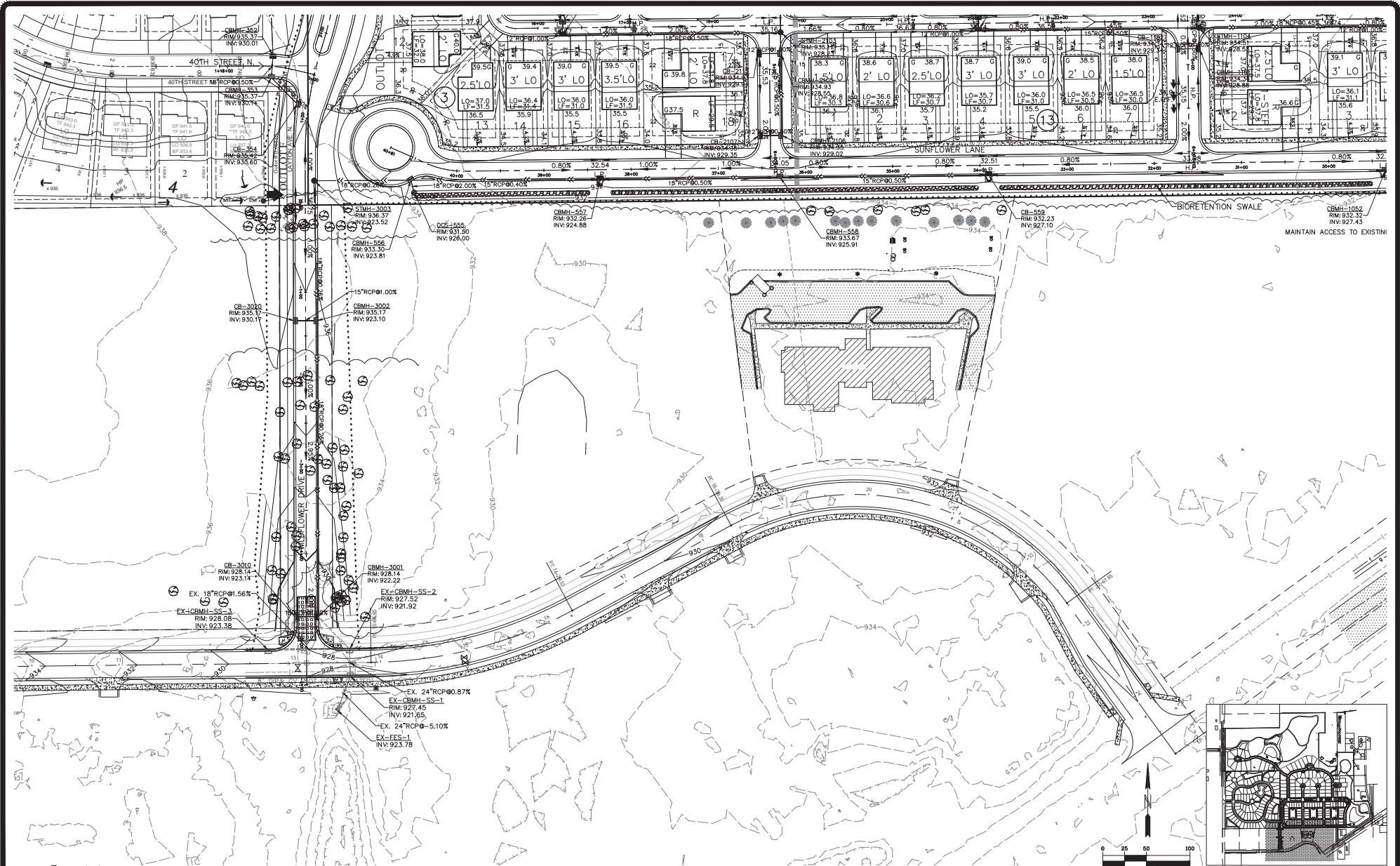
GRADING OVERALL

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Name: Keith A. Wilksham
 Reg. No. 25526 Date: 11-05-14

Revision: 1.0 02-04-15 City Comments

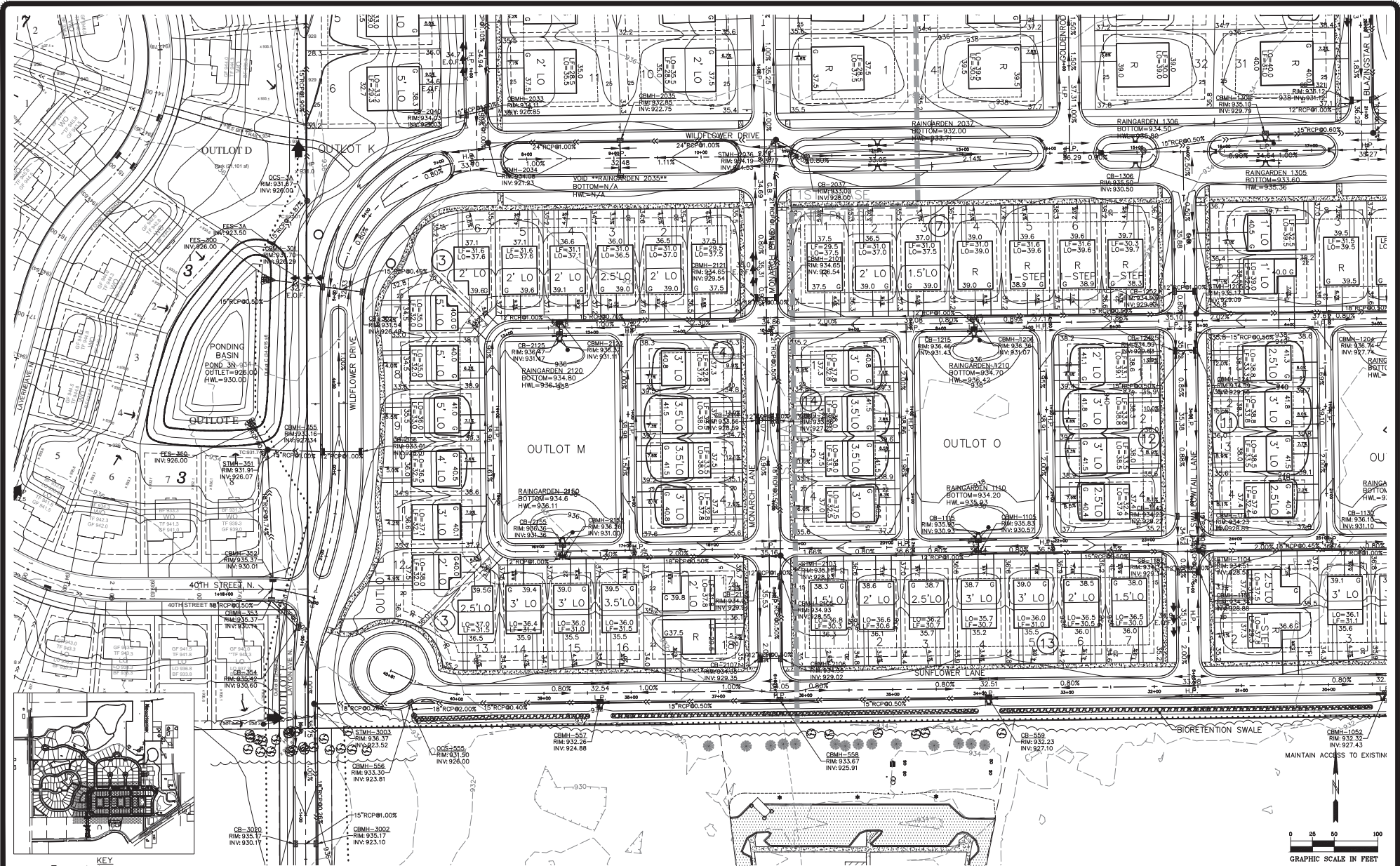
Date: 11-05-14
 Designed: KAW/BIM
 Drawn: KAW/BIM

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WILDFLOWER AT LAKE ELMO
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Name: Keith A. Wilshagen
 Title: Professional Engineer
 License No.: 25526 Date: 11-05-11

Revision: 1.0 04-15 City Comments

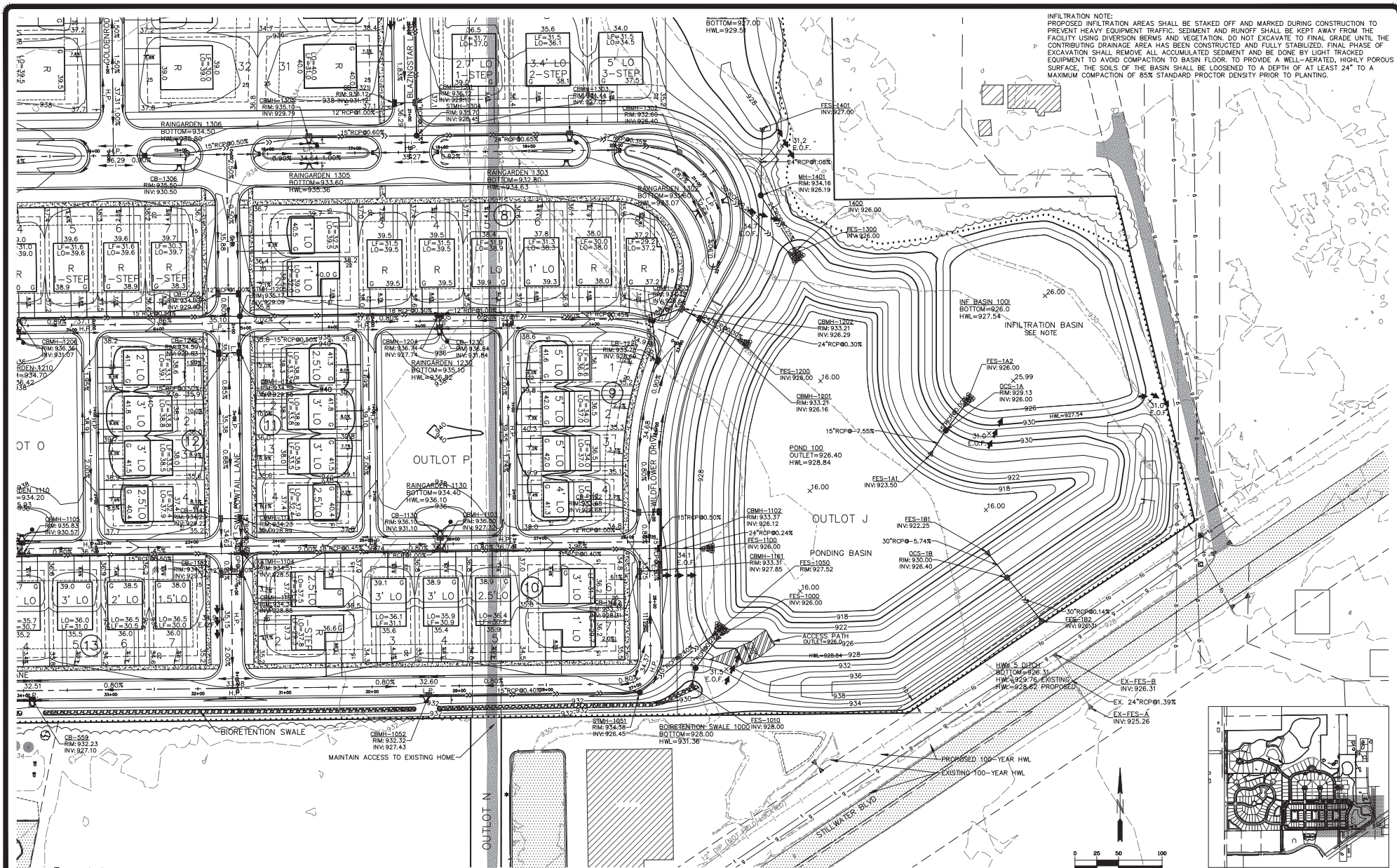
Date: 11-05-14
 Designed: KAW/BJM
 Drawn: KAW/BJM

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WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA

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INFILTRATION NOTE:
 PROPOSED INFILTRATION AREAS SHALL BE STAKED OFF AND MARKED DURING CONSTRUCTION TO PREVENT HEAVY EQUIPMENT TRAFFIC. SEDIMENT AND RUNOFF SHALL BE KEPT AWAY FROM THE FACILITY USING DIVERSION BERMS AND VEGETATION. DO NOT EXCAVATE TO FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED. FINAL PHASE OF EXCAVATION SHALL REMOVE ALL ACCUMULATED SEDIMENT AND BE DONE BY LIGHT TRACKED EQUIPMENT TO AVOID COMPACTION TO BASIN FLOOR TO PROVIDE A WELL-AERATED, HIGHLY POROUS SURFACE. THE SOILS OF THE BASIN SHALL BE LOOSENE TO A DEPTH OF AT LEAST 24" TO A MAXIMUM COMPACTION OF 85% STANDARD PROCTOR DENSITY PRIOR TO PLANTING.

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Name: Keith A. Wilshagen
 Reg. No.: 25526 Date: 11-05-12

Revision: L 02-04-15 City Comments

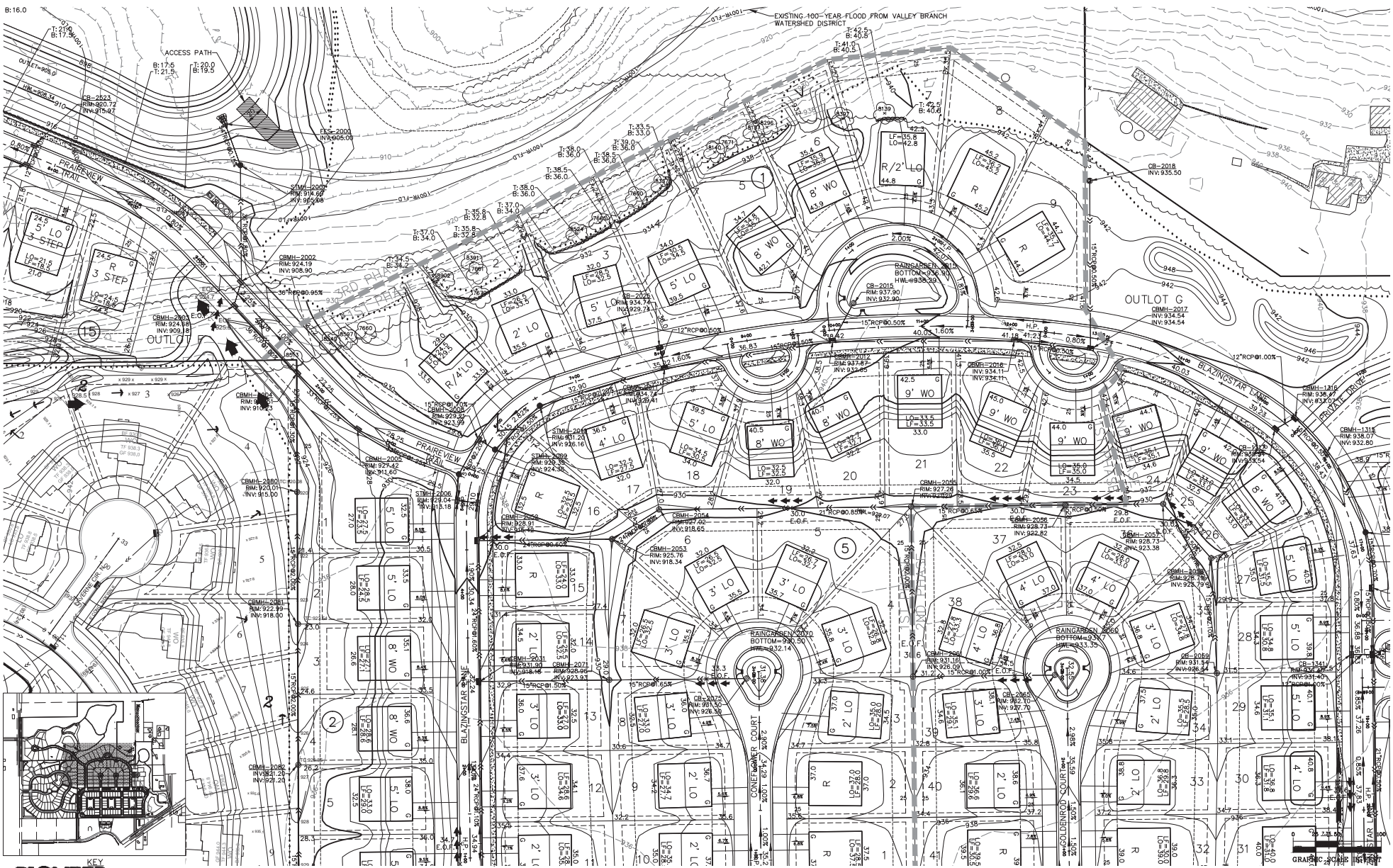
Date: 11-05-14
 Designed: KAW/BIM
 Drawn: KAW/BIM

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 Date: 11-05-14

Name: Keith A. Wilshab
 License No.: 25526
 Date: 11-05-14

Revision: 1.0 02-15 City Comments

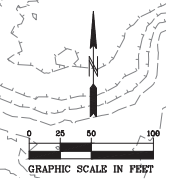
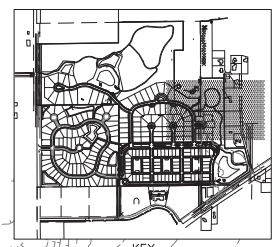
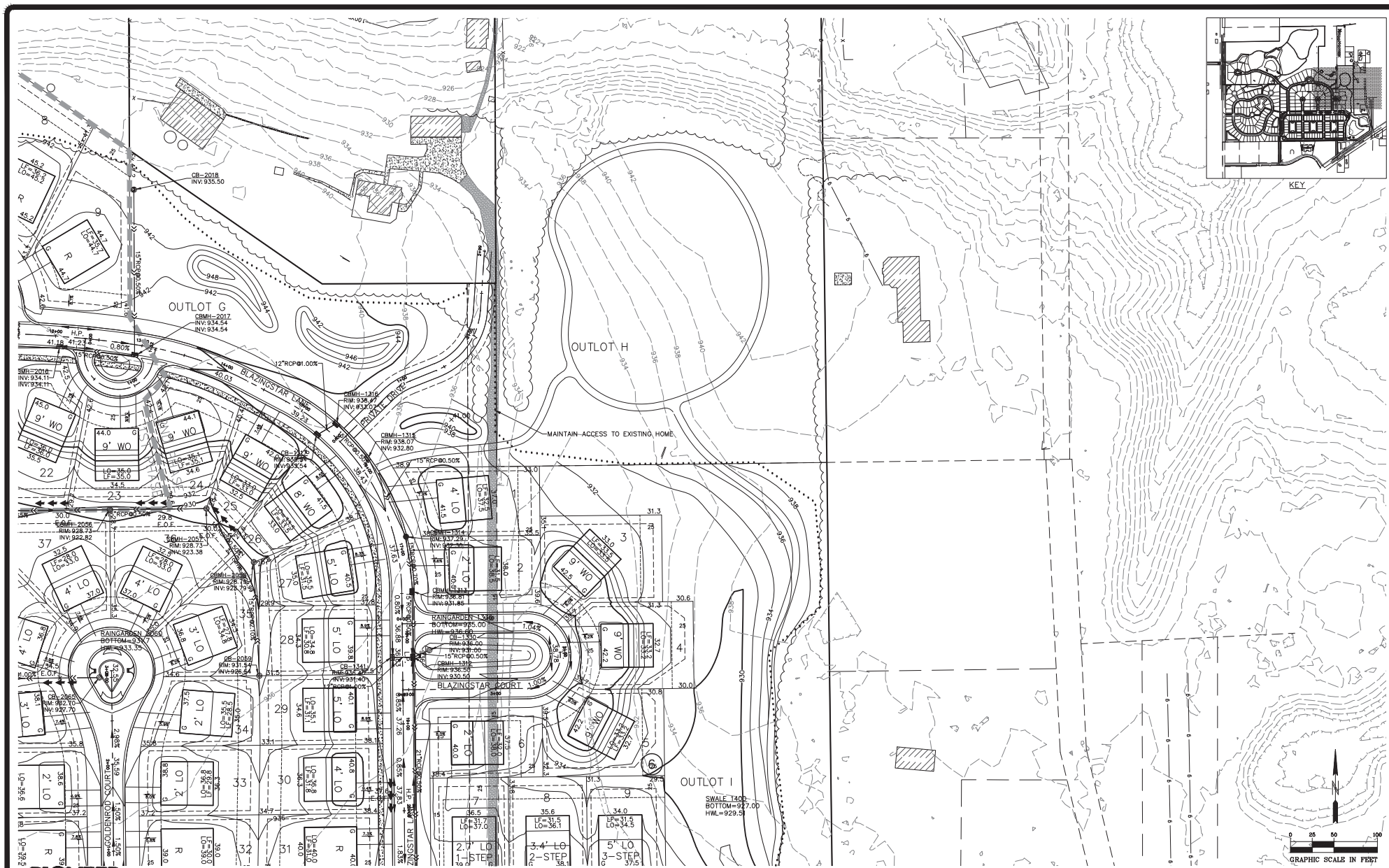
Date: 11-05-14
 Designed: KAW/BIM
 Drawn: KAW/BIM

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 Name: Keith A. Wilshagen
 Reg. No.: 25258 Date: 11-05-14

Revision: 1. 02-04-15 City Comments

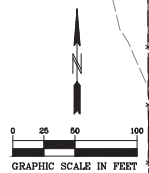
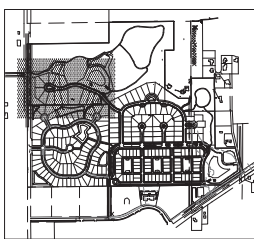
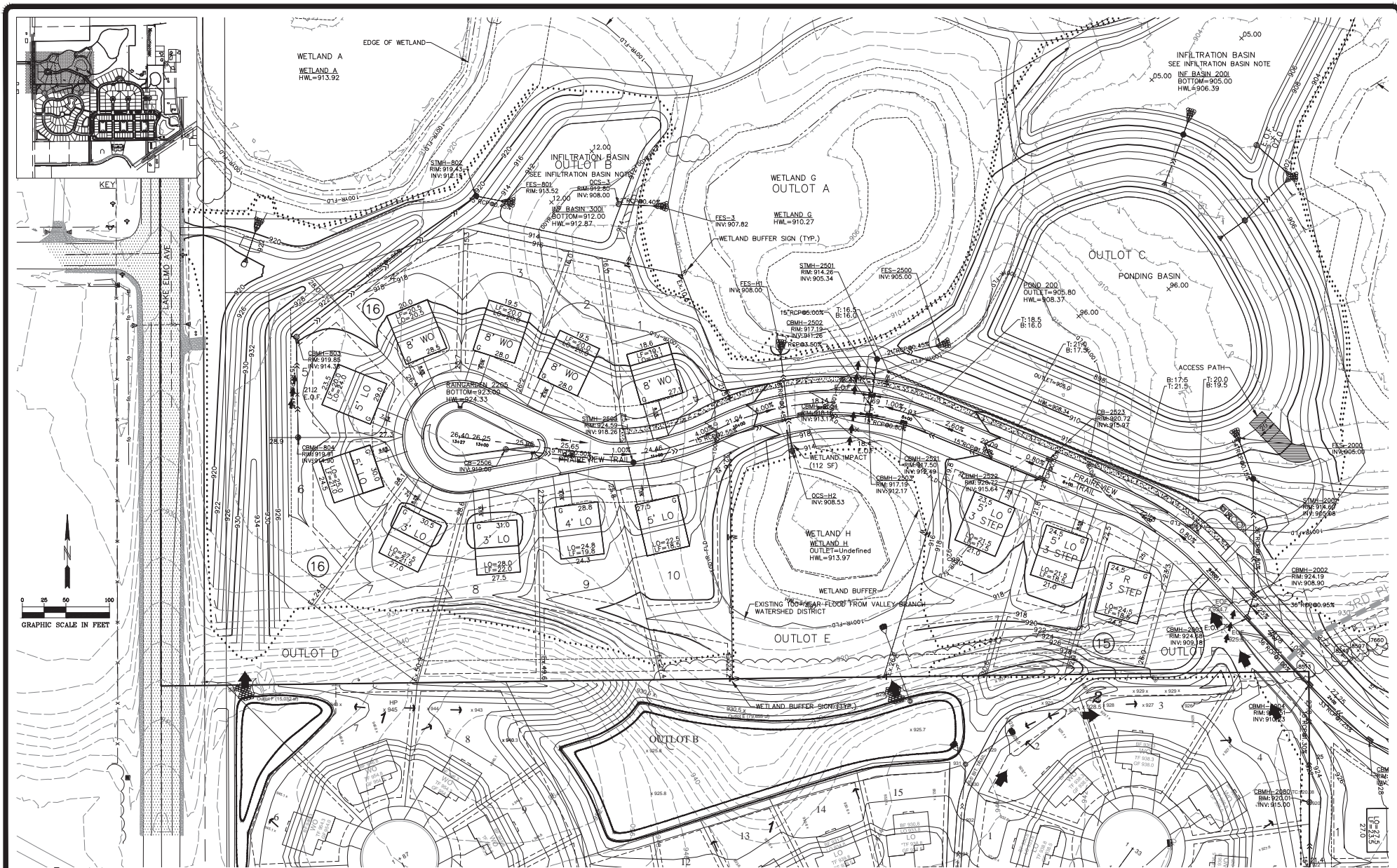
Date: 11-05-14
 Designed: KAW/BIM
 Drawn: KAW/BIM

GRADING AND EROSION CONTROL

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 Name: Keith A. Wilshagen
 Reg. No. 25526 Date: 11-05-13

Revisions
 1. 02-04-15 City Comments

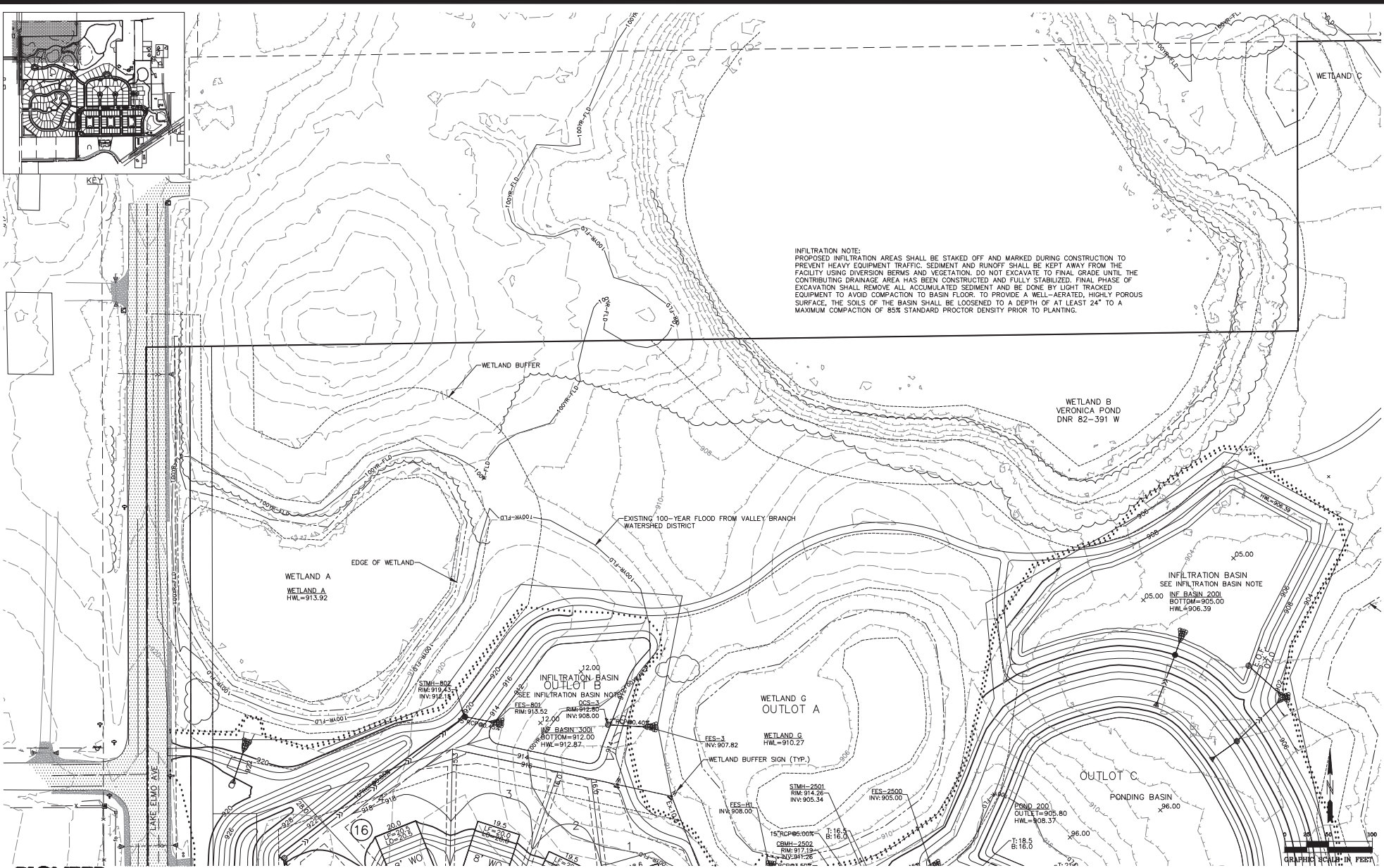
Date: 11-05-14
 Designed: KAW/BIM
 Drawn: KAW/BIM

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Name: Keith A. Wilshagen
 Exp. No. 25508 Date: 11-05-14

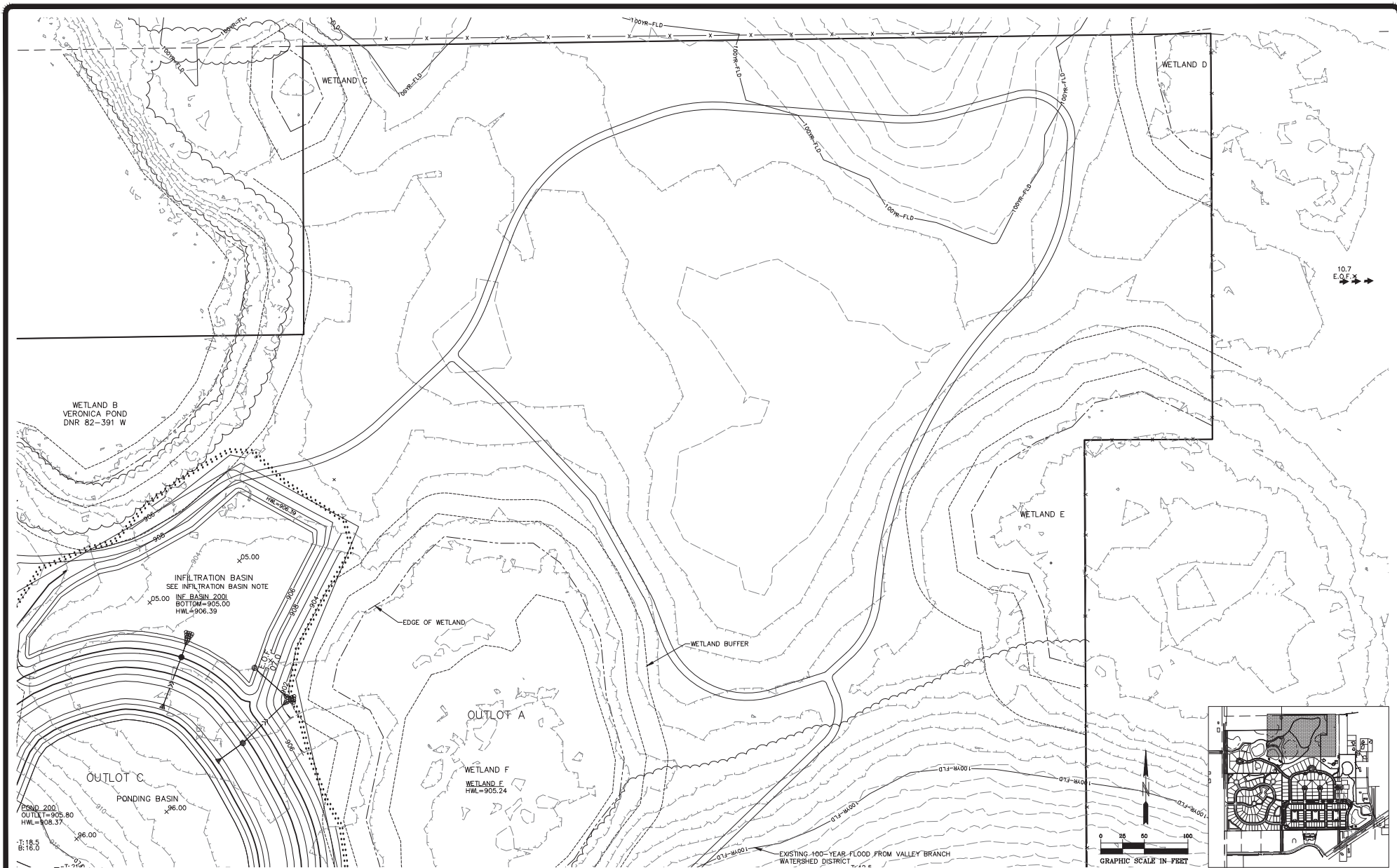
Revision: 1. 02-04-15 City Comments

Date: 11-05-14
 Designed: KAW/BIM
 Drawn: KAW/BIM

GRADING AND EROSION CONTROL

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WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA



WETLAND B
VERONICA POND
DNR 82-391 W

WETLAND C

WETLAND D

WETLAND E

OUTLOT A

WETLAND F

HWL=905.24

OUTLOT C

PONDING BASIN

HWL=906.39

INFILTRATION BASIN
SEE INFILTRATION BASIN NOTE
INF. BASIN 200'
BOTTOM=905.00
HWL=906.39

POND 200'

OUTLET=905.80

HWL=906.37

T:18.5
B:18.0

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Name: Keith A. Wilshabing
Reg. No. 25508 Date: 11-05-14

Revision: 1.02-04-15 City Comments

Date: 11-05-14
Designed: KAW/BIM
Drawn: KAW/BIM

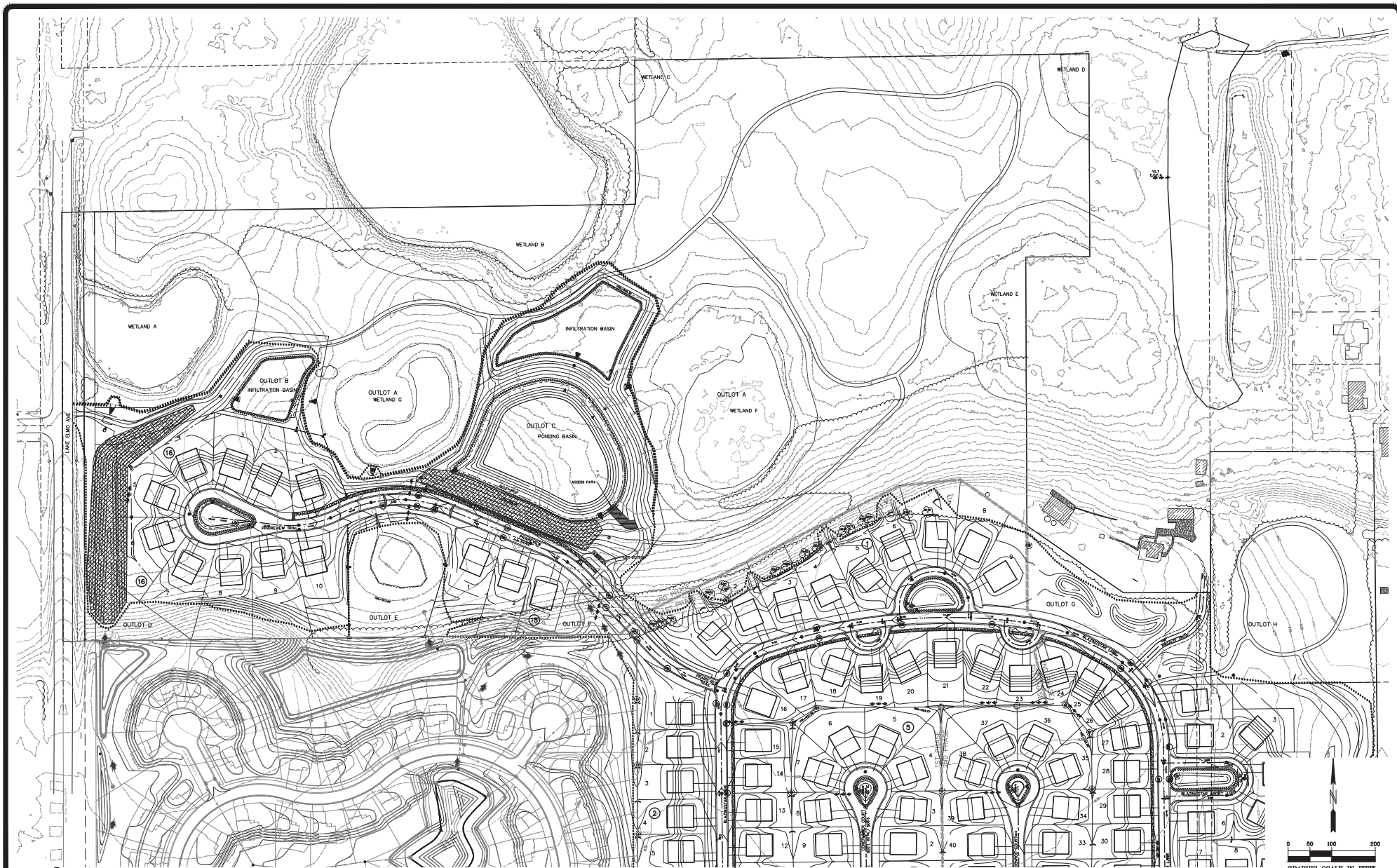
GRADING AND EROSION CONTROL

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Name: Keith A. Wilksham
 Reg. No. 25526 Date: 11-05-14

Revision: 1.02-04-15 City Comments

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 Drawn: KAW/BIM

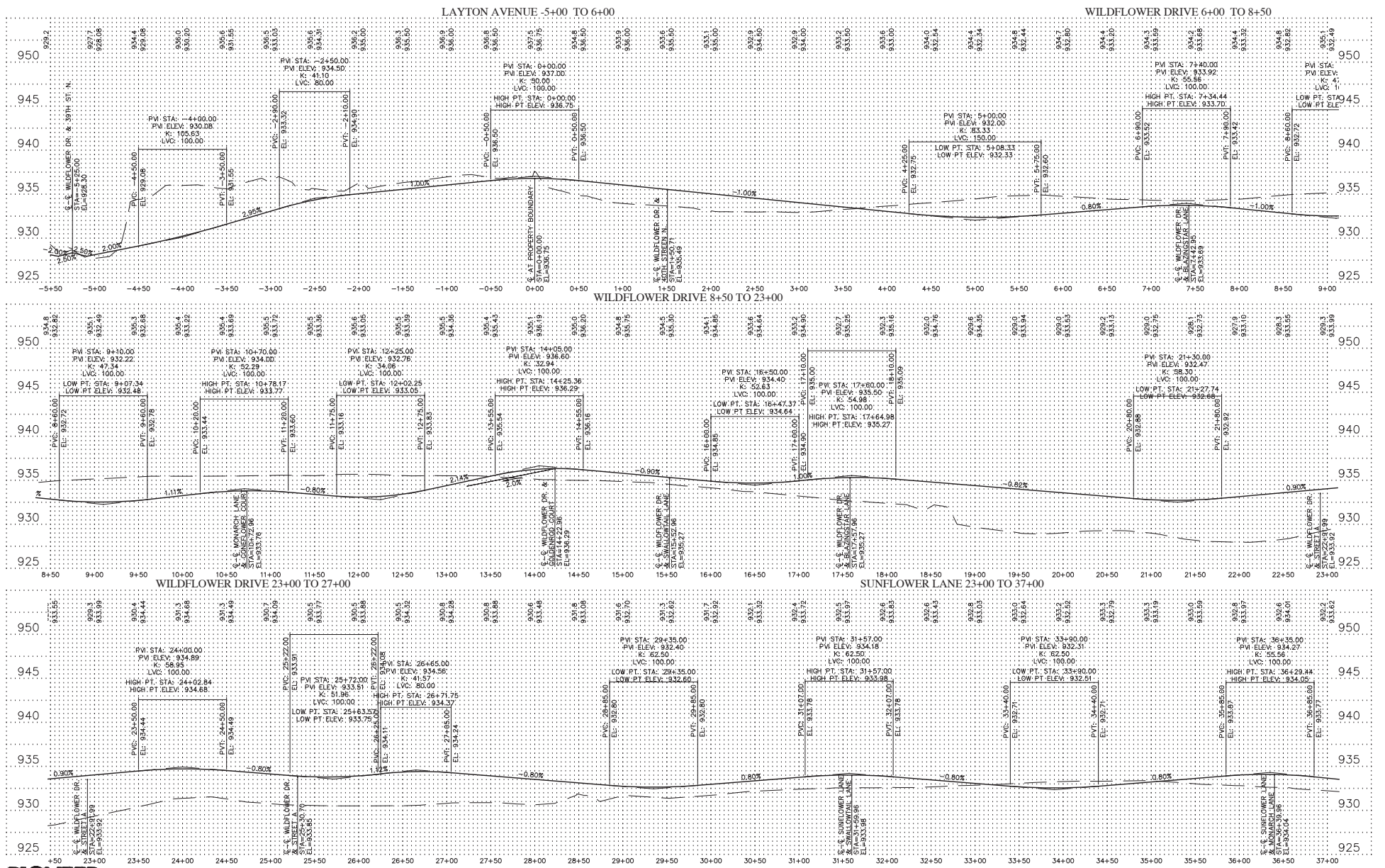
EROSION CONTROL PLAN

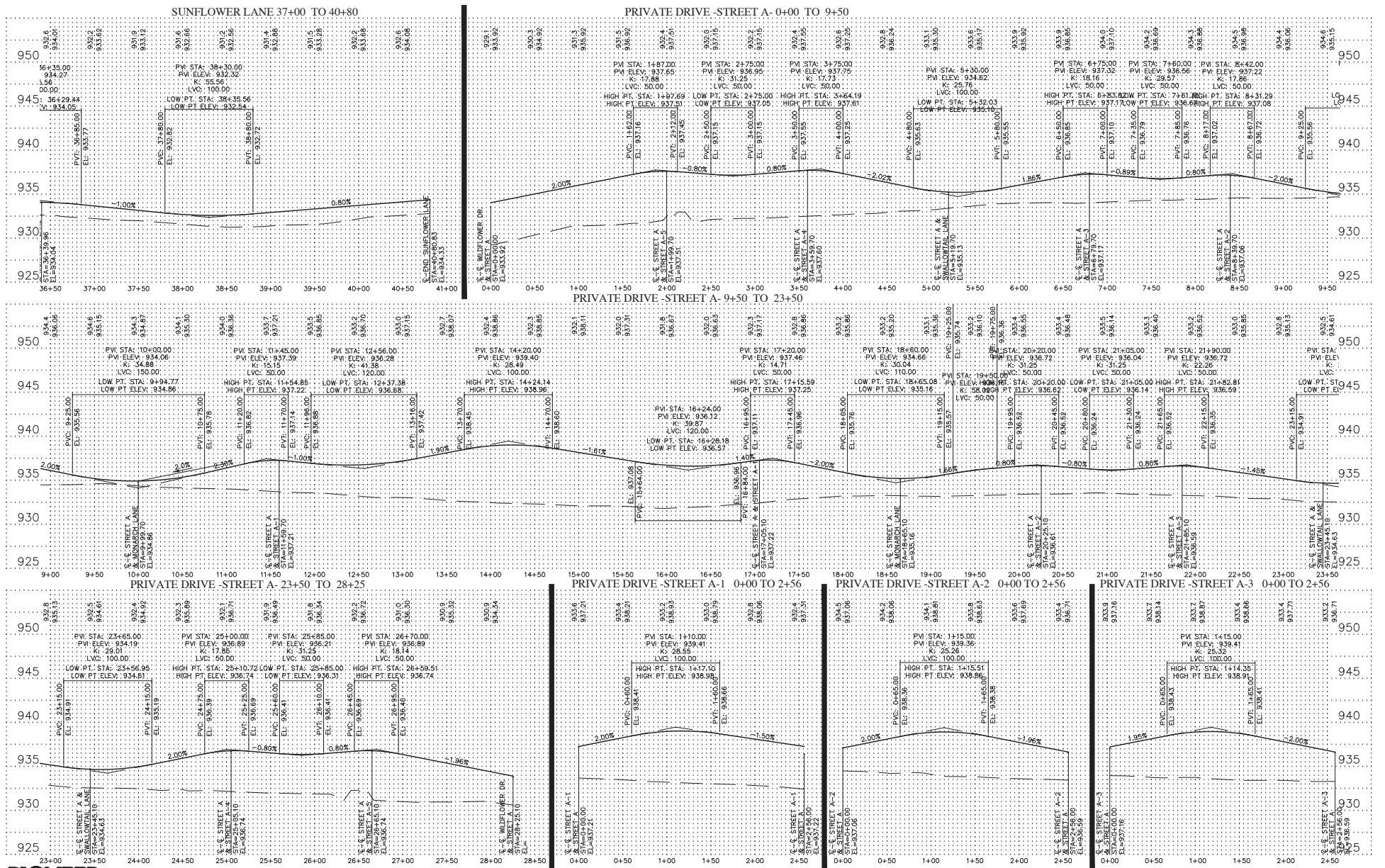
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 Name: Keith A. Wilshagen
 Reg. No. 25526 Date: 11-05-14

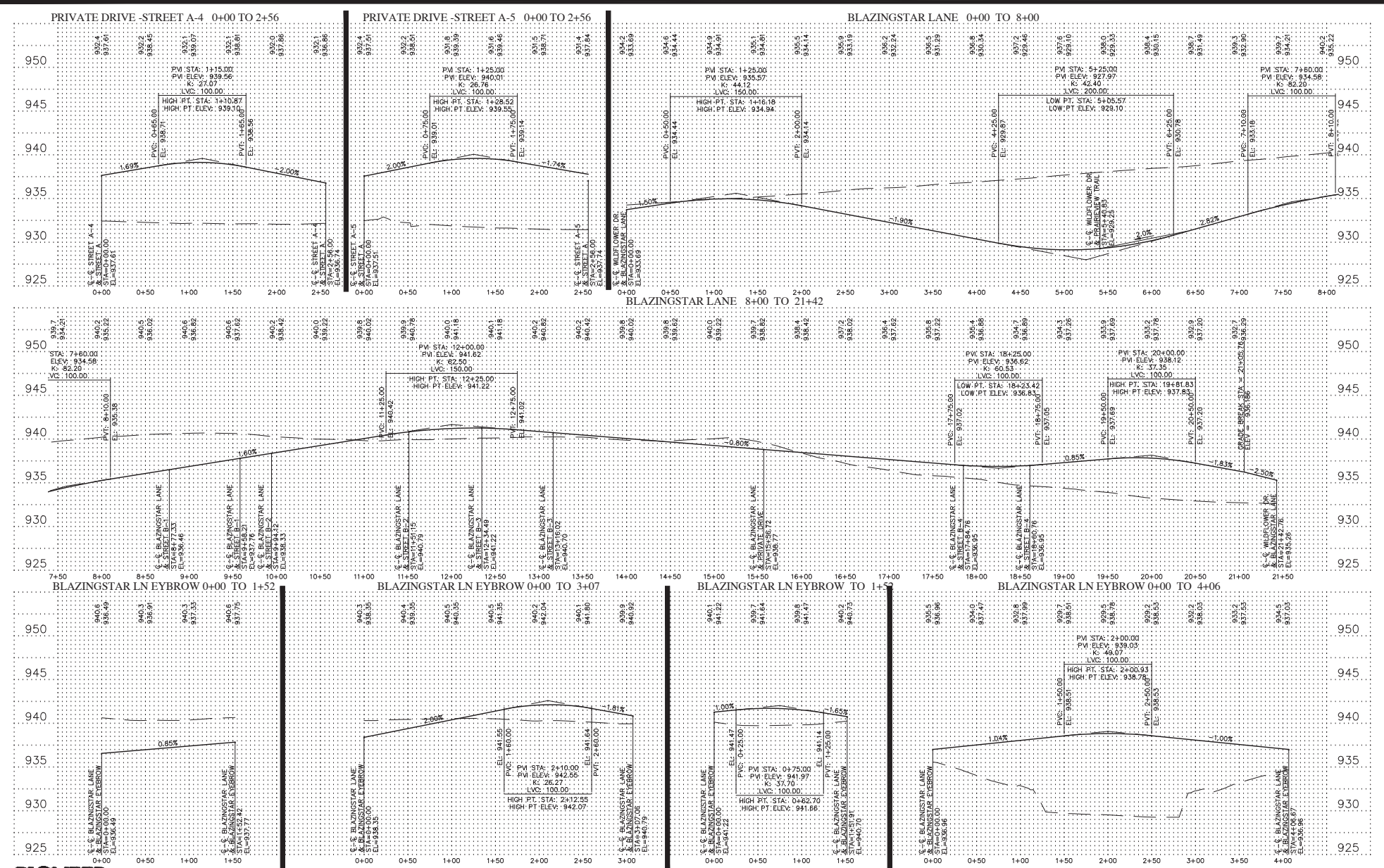
Revision: 1. 02-04-15 City Comments

Date: 11-05-14
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 Drawn: KAW/BIM

STREET PROFILES

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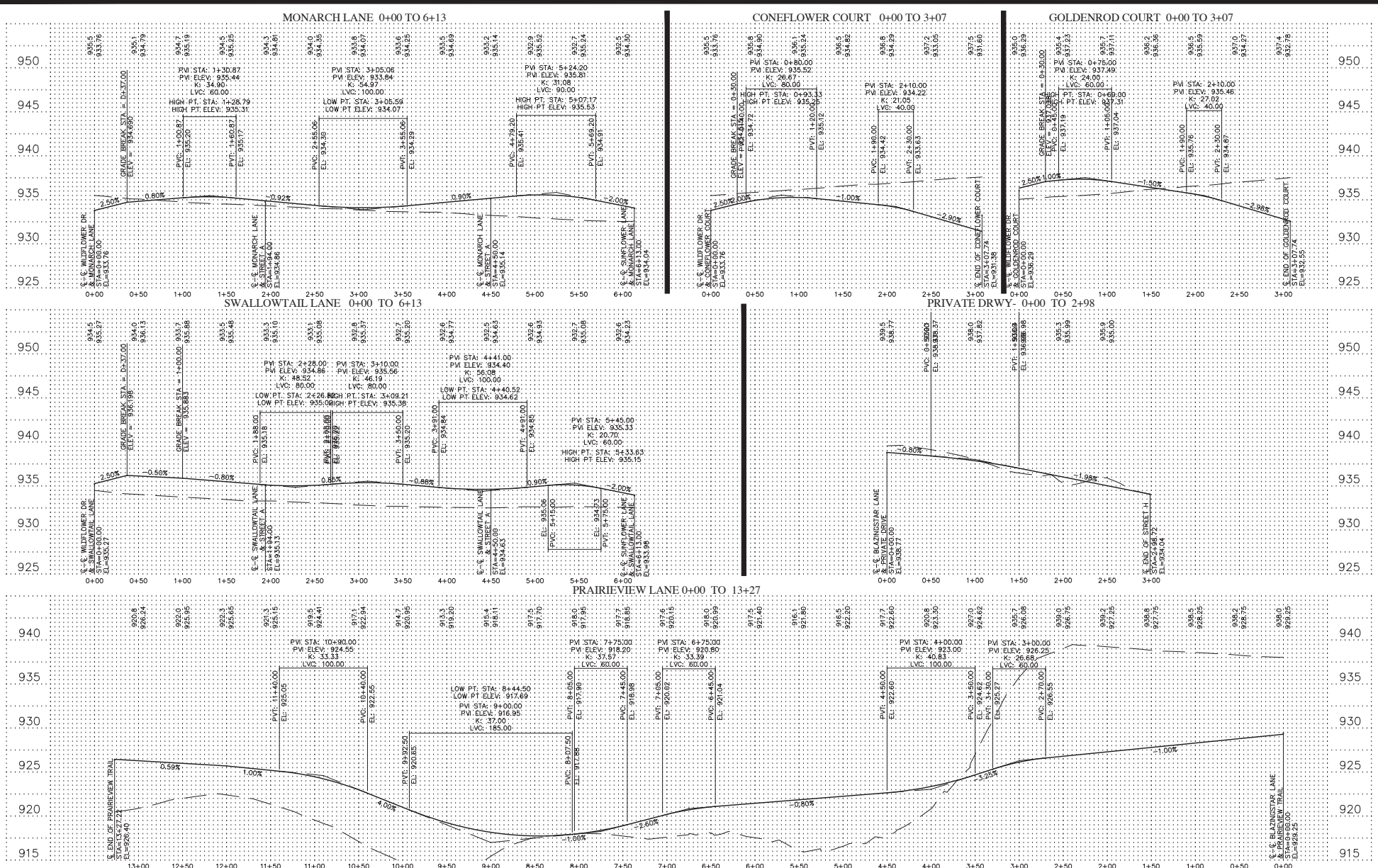
I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
 Name: Keith A. Wilksham
 License No. 25258 Date: 11-05-13

Revision: 11-05-14
 Description: L1-02-04-15 City Comments
 Date: 11-05-14
 Designed: KAW/BMB
 Drawn: KAW/BMB

STREET PROFILES

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Revision: 1. 02-04-15 City Comments

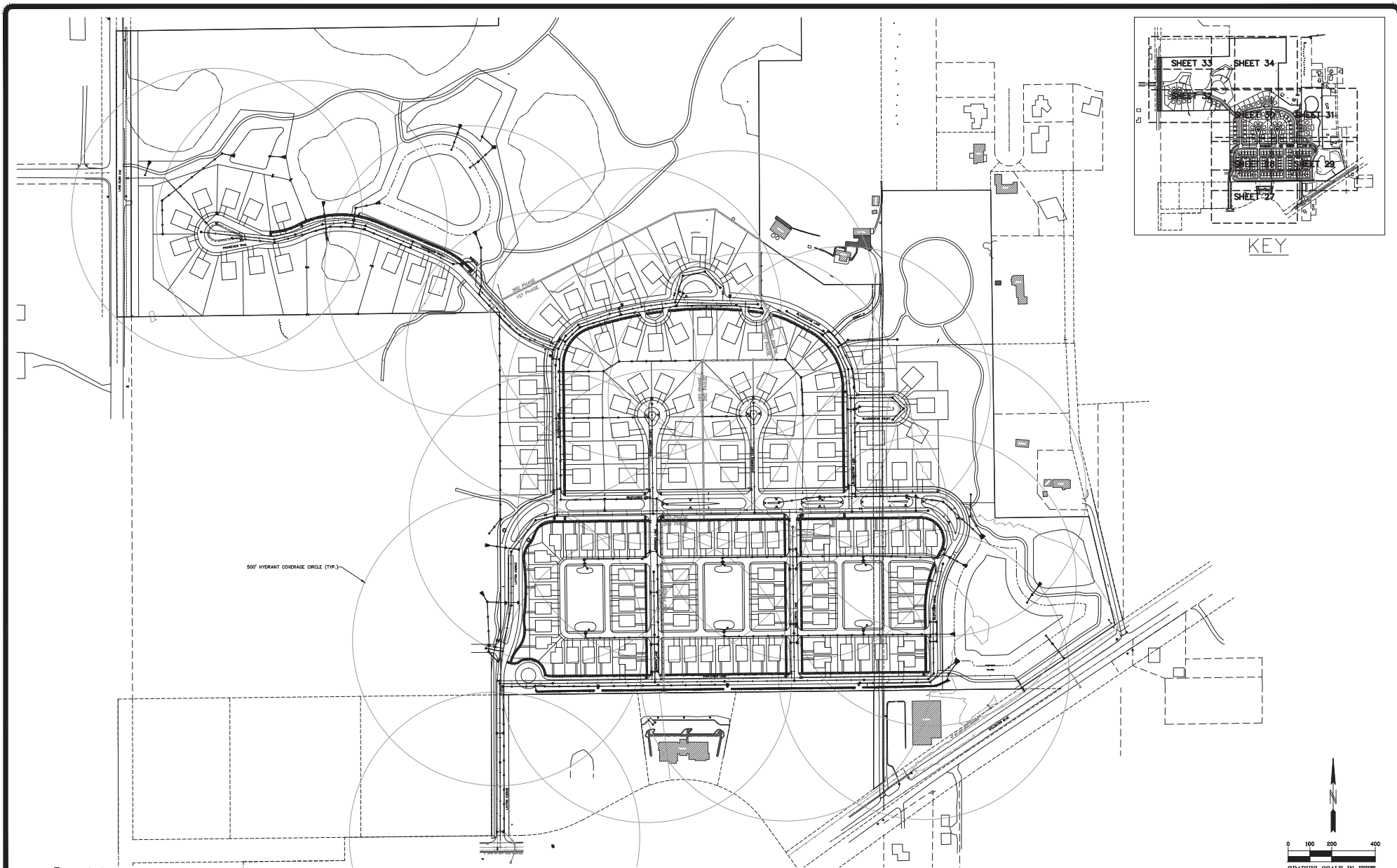
Date: 11-05-14
 Designed: KAW/BM
 Drawn: KAW/BM

STREET PROFILES

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WILDFLOWER AT LAKE ELMO
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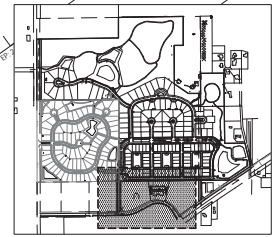
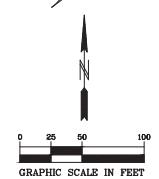
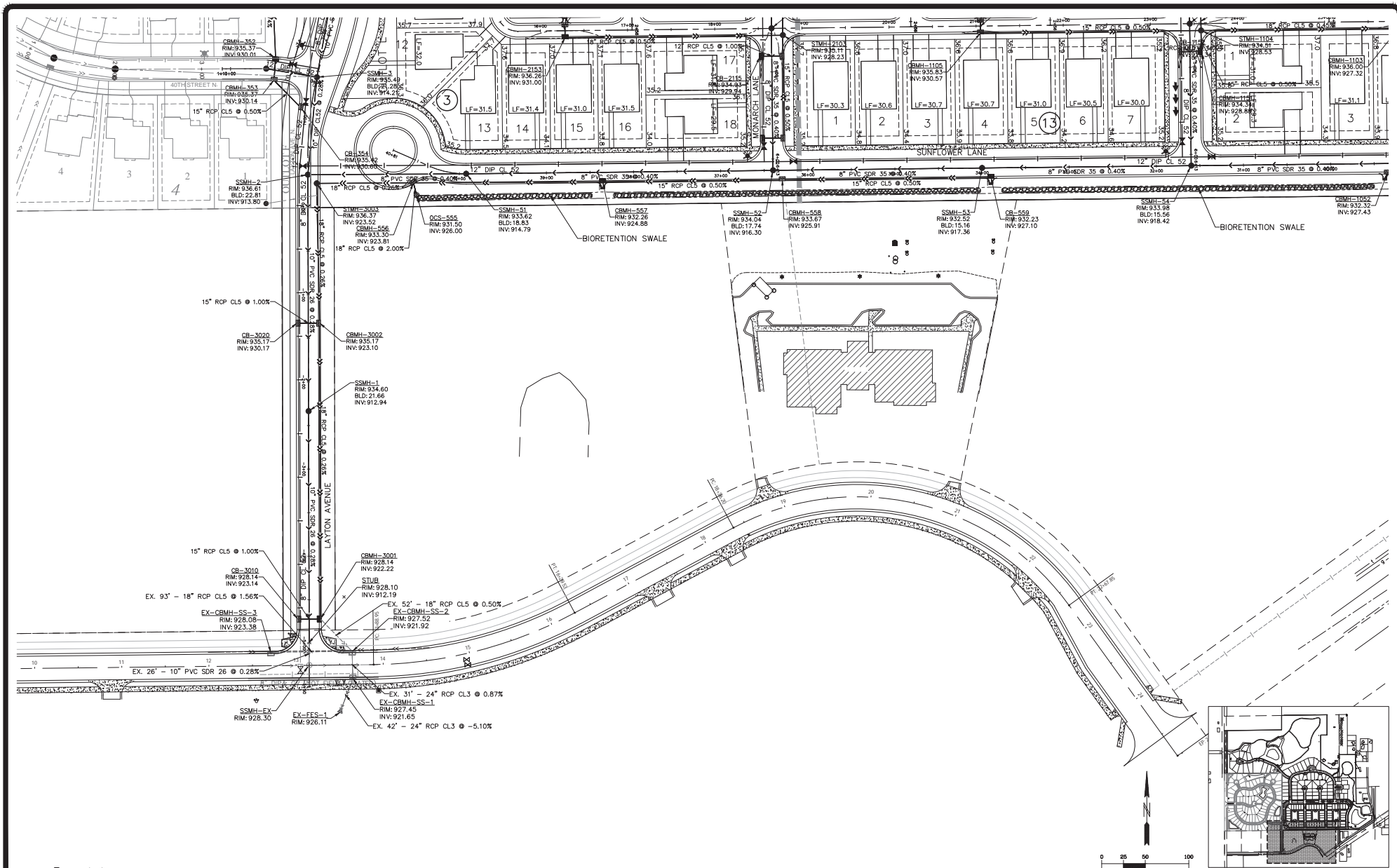
Revision: L 02-04-15 City Comments

Date: 11-05-14
 Designed: KAW/BIM
 Drawn: KAW/BIM

UTILITY OVERALL PLAN

ROBERT ENGSTROM COMPANIES
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WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA



KEY
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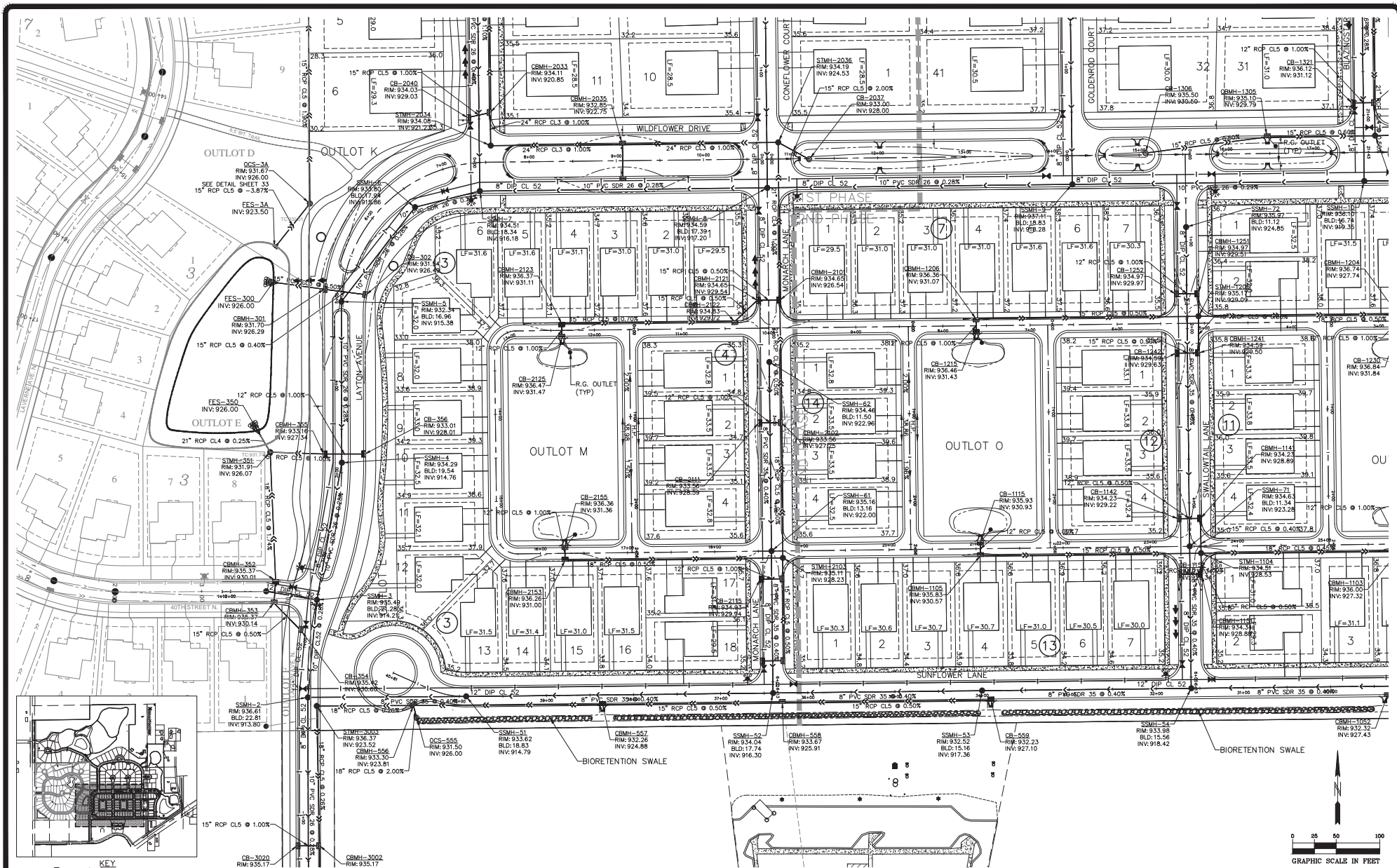
Revisions
 Date: 11-05-14
 Designed: KAW/BIM
 Drawn: KAW/BIM

UTILITY PLAN

ROBERT ENGSTROM COMPANIES
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 LAKE ELMO, MINNESOTA

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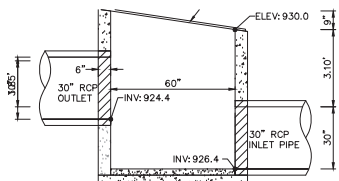
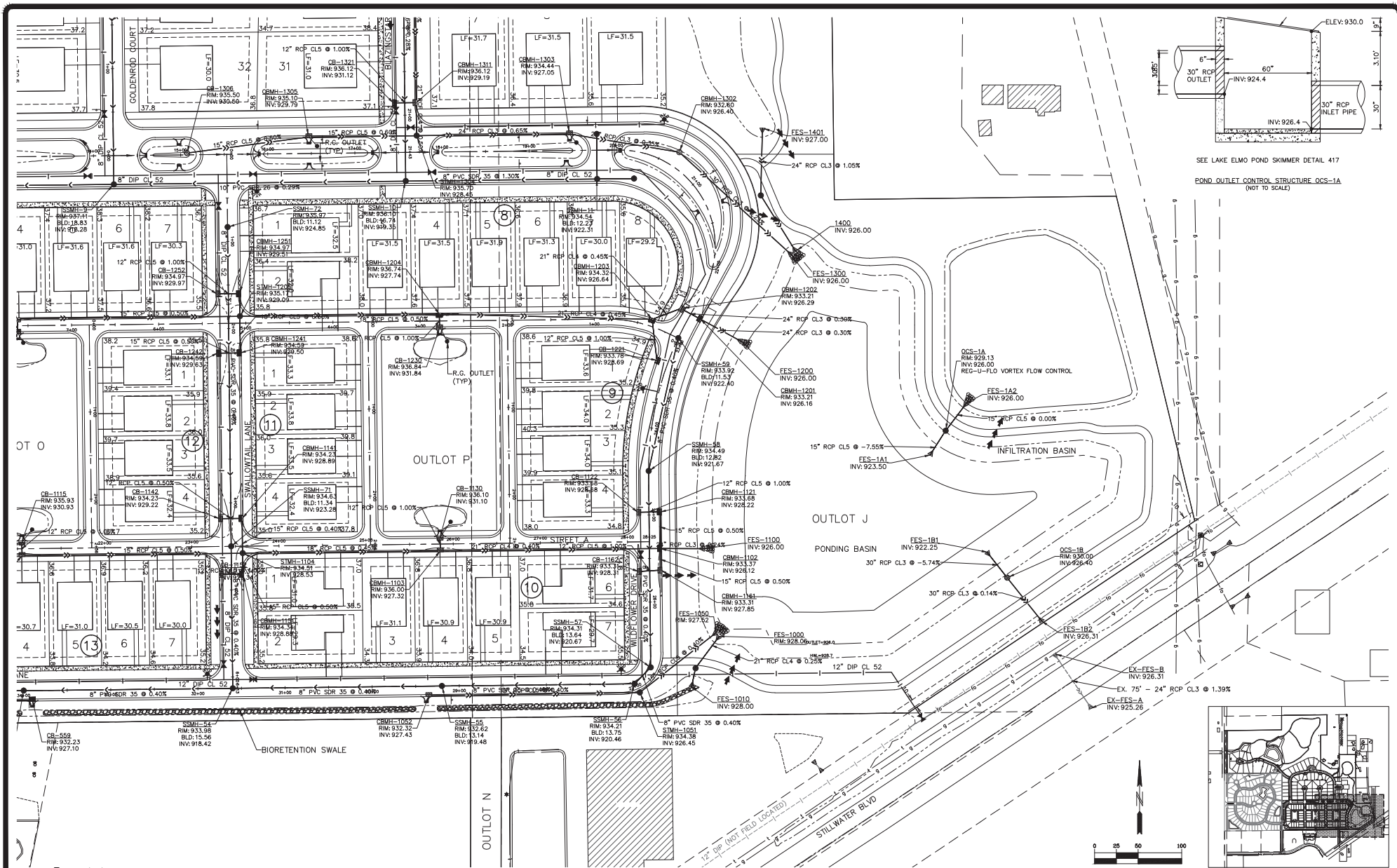
Date: 11-05-14
 Designed: KAW/BIM
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UTILITY PLAN

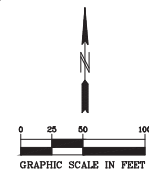
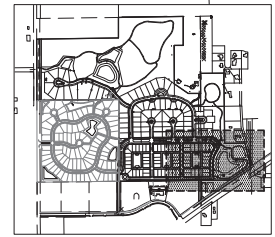
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WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA

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SEE LAKE ELMO POND SKIMMER DETAIL 417
 POND OUTLET CONTROL STRUCTURE OCS-1A
 (NOT TO SCALE)



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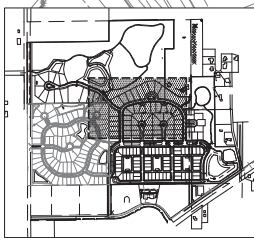
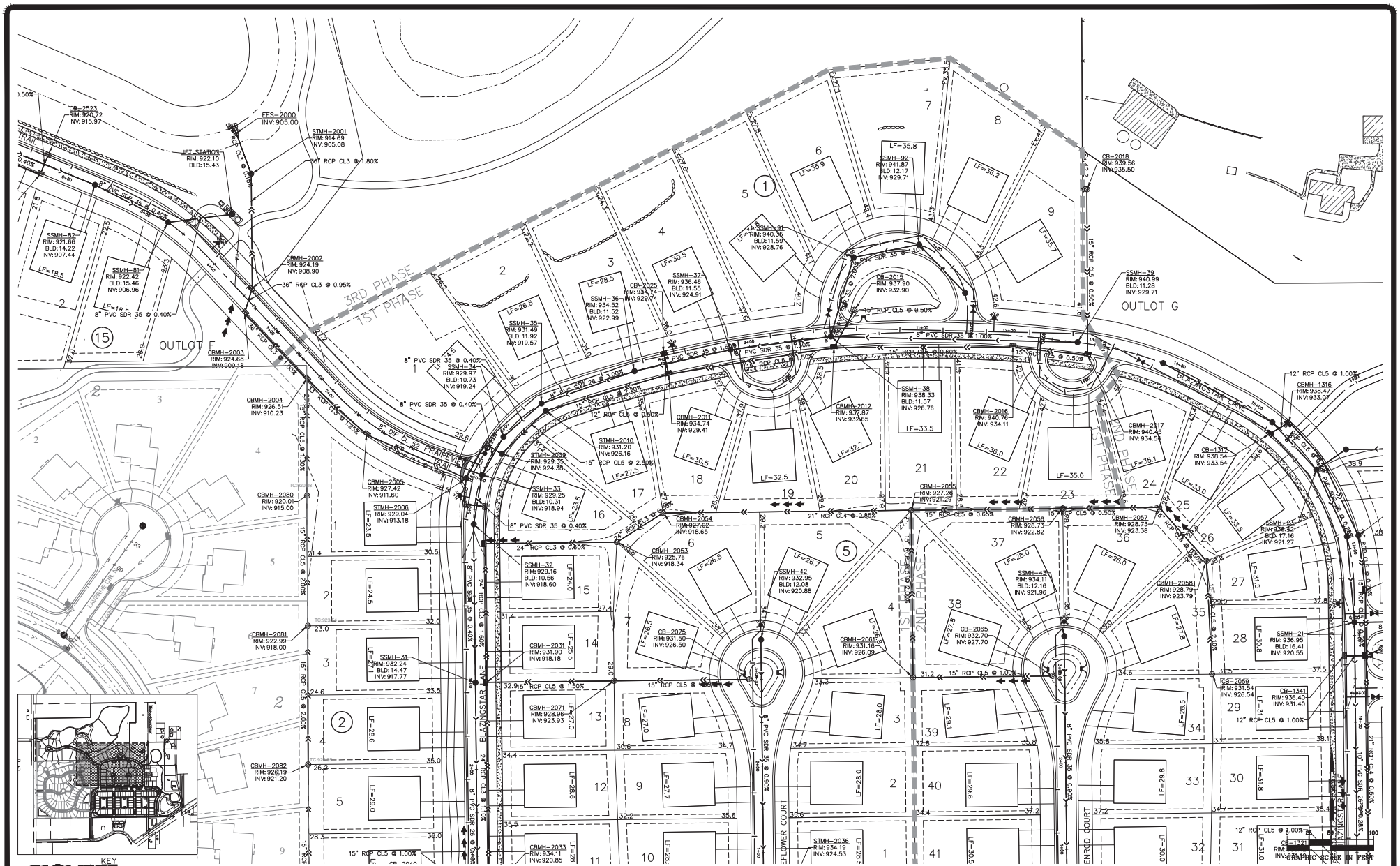
I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
 Name: Keith A. Wilshabing
 Reg. No.: 25508 Date: 11-05-14

Date: 11-05-14
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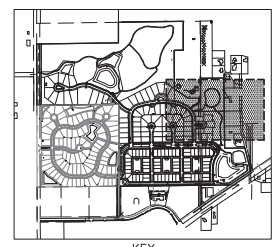
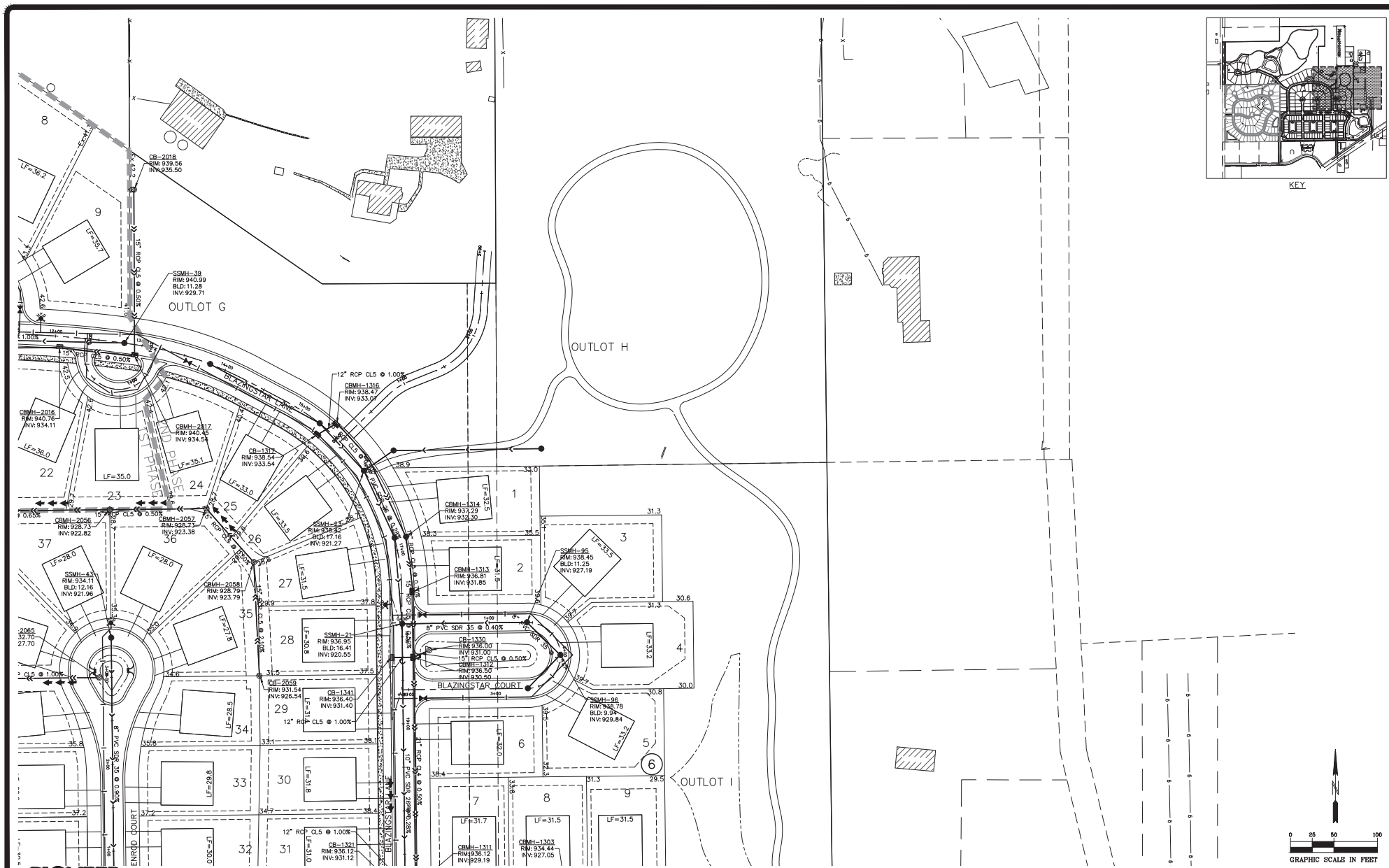
I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
 Name: Keith A. Wilksham
 Reg. No.: 25526 Date: 11-05-14

Revisions:
 Date: 11-05-14
 Designed: KAW/BIM
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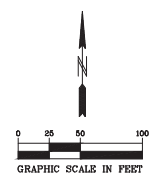
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WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA
 00-ENG-114058-SHEET-UTIL-DWG
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 Name: Keith A. Wilksham
 Exp. No.: 25526 Date: 11-05-13

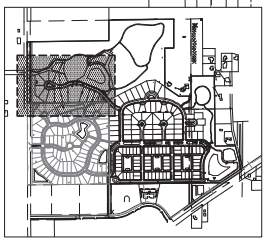
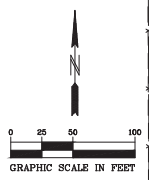
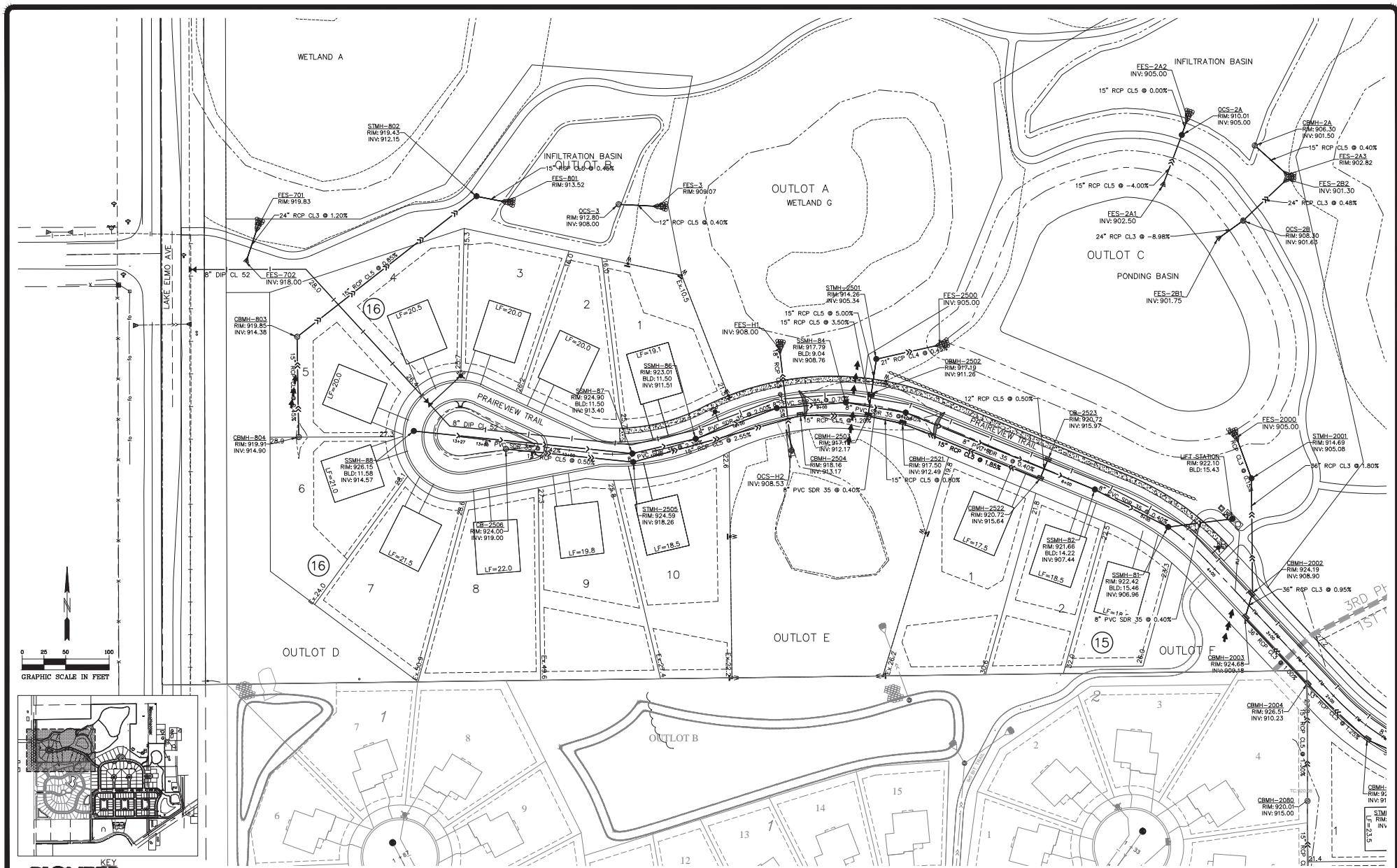
Revisions:
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WILDFLOWER AT LAKE ELMO
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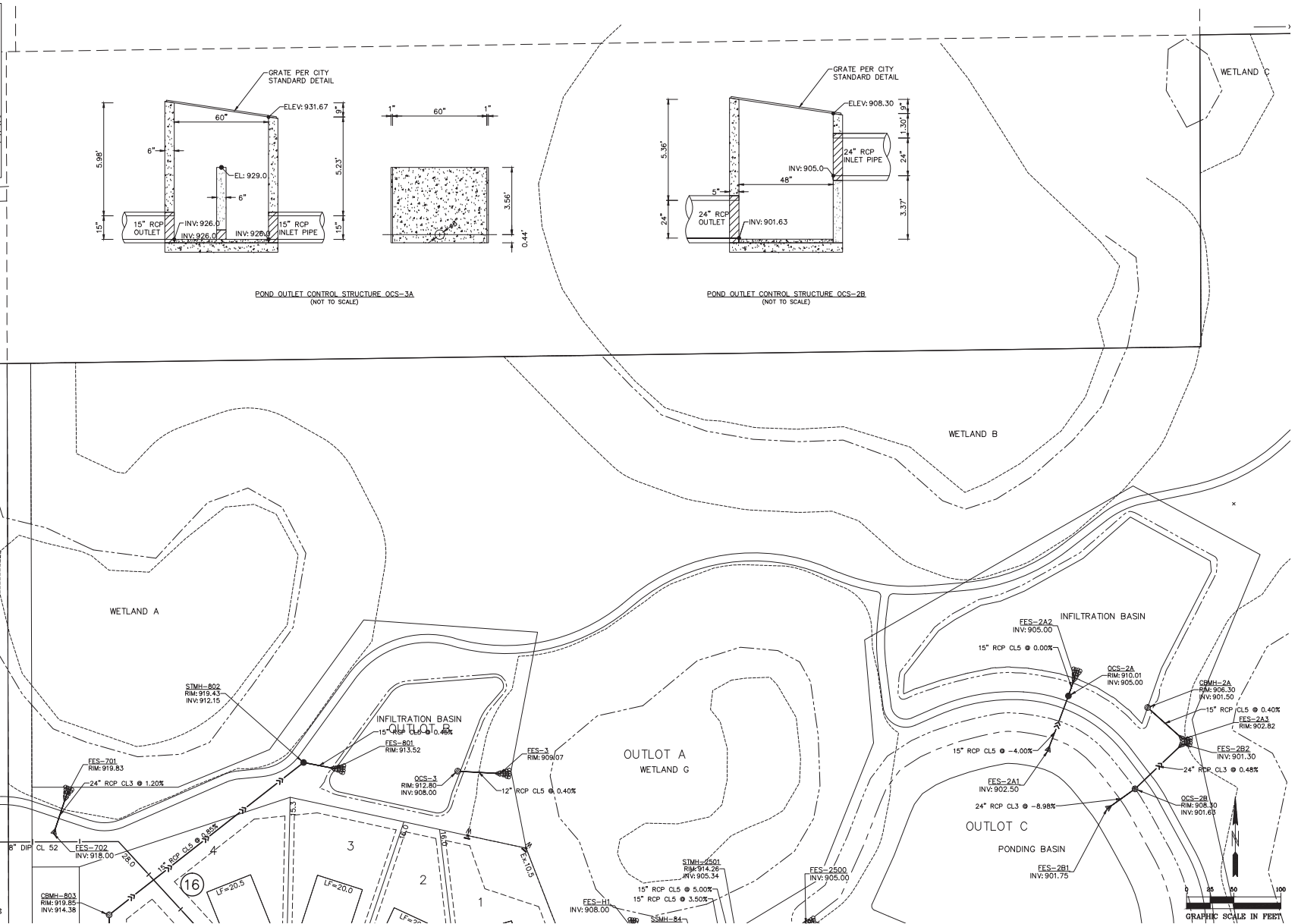
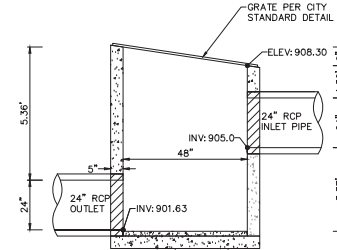
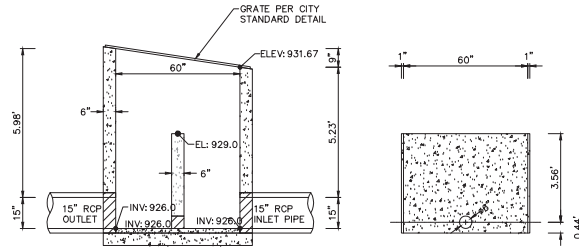
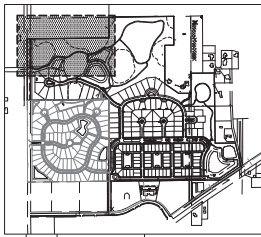
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 Reg. No. 25526 Date: 11-05-14

Revisions:
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WILDFLOWER AT LAKE ELMO
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Name: Kath A. Wilchasing
 Exp. No. 25504 Date: 11-05-14

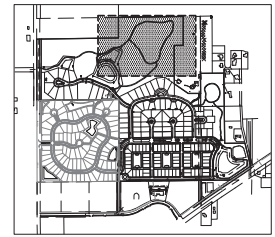
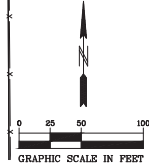
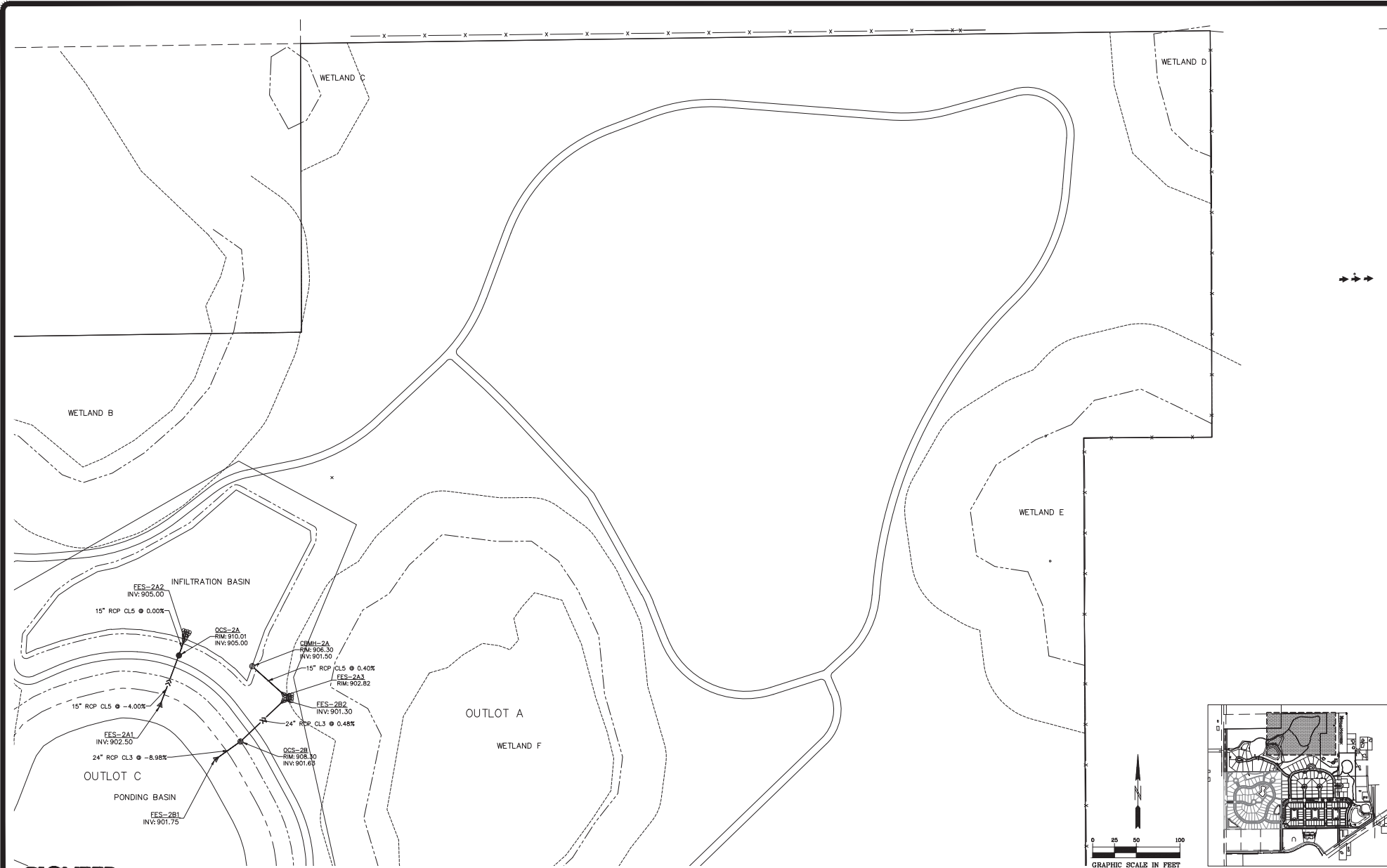
Revisions

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 Exp. No. 25504 Date: 11-05-14

Revisions:
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 Design: KAW/BIM
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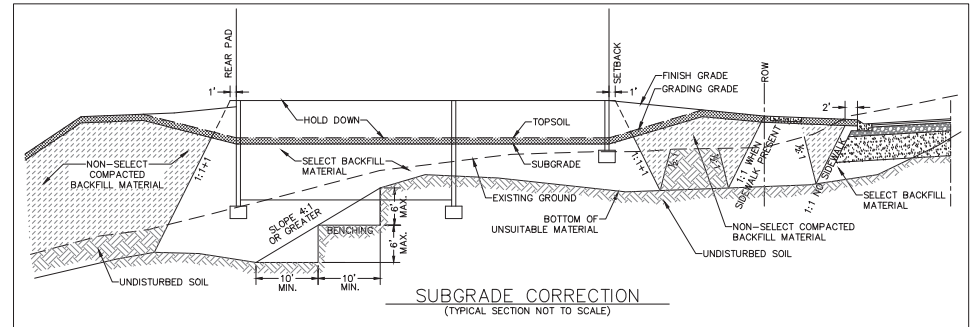
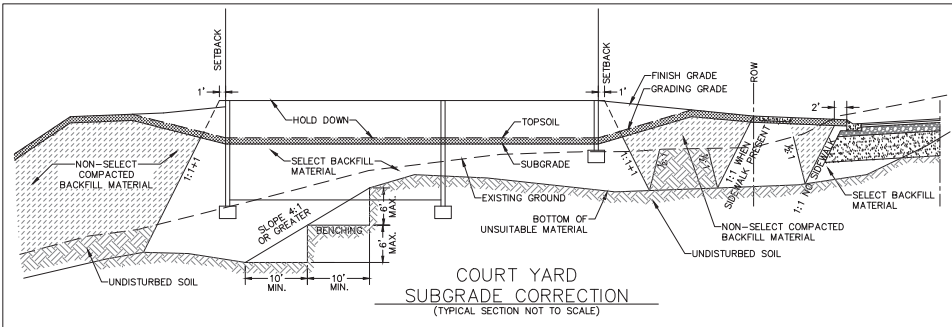
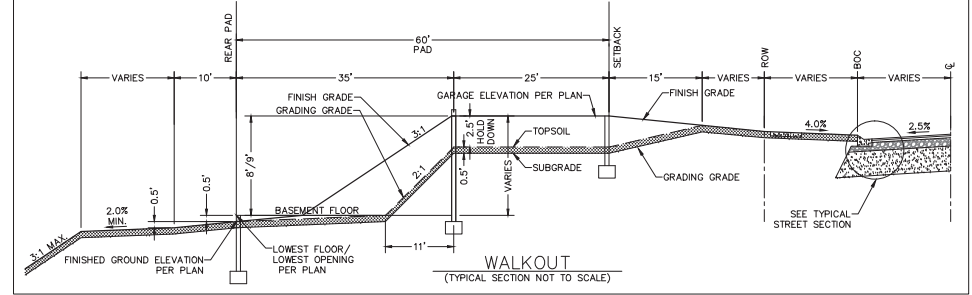
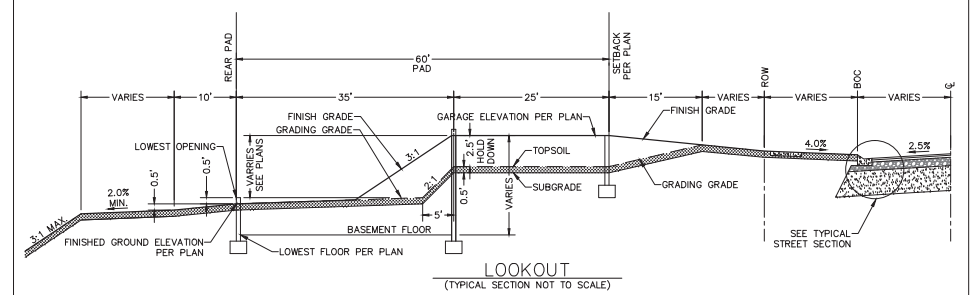
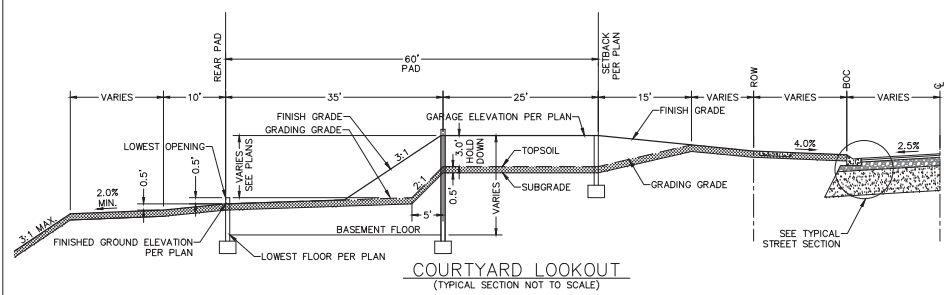
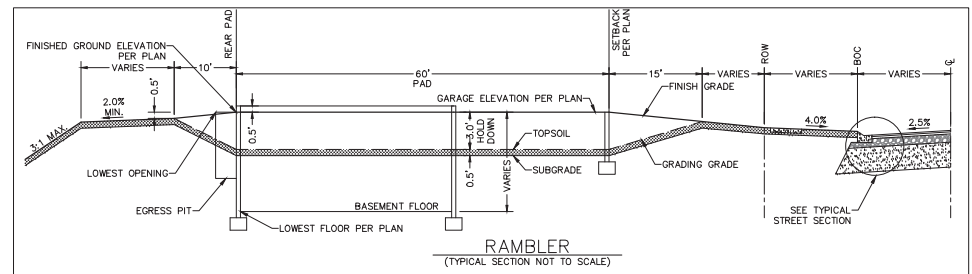
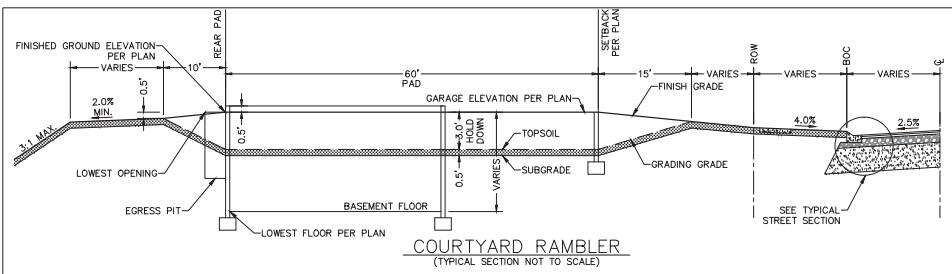
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Name: Keith A. Wilksham
Exp. No. 25526 Date: 11-05-14

Revision: 1. 02-04-15 City Comments

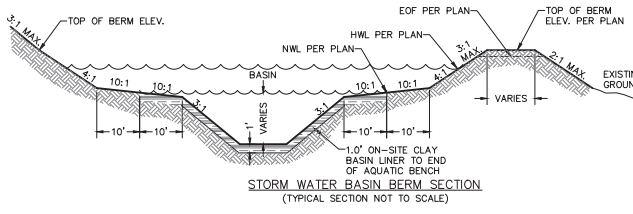
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DETAILS

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WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

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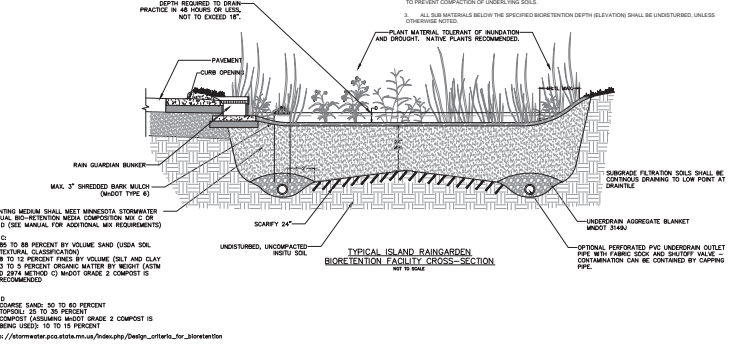
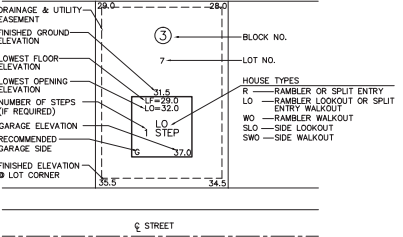
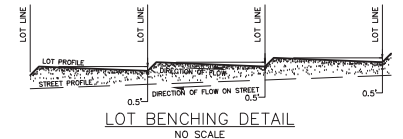
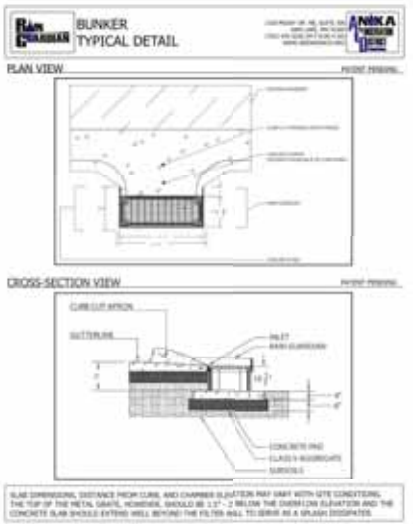


CONSTRUCTION REQUIREMENTS:

1. METAL DET RAINFALL INLET OR OTHER APPROPRIATE TEMPORARY EROSION CONTROL DEVICES TO PREVENT SEDIMENT FROM LEAVING OR ENTERING THE PRACTICE DURING CONSTRUCTION.
2. ALL DOWN-SLOPING PERIMETER SEDIMENT CONTROL BMP'S MUST BE IN PLACE BEFORE ANY UP GRADIENT LAND DISTURBING ACTIVITY BEGINS.
3. PERFORM CONTINUOUS INSPECTIONS OF EROSION CONTROL PRACTICES.
4. INSTALL UTILITIES (WATER, SANITARY SEWER, ELECTRIC, PHONE, FIBER OPTIC, ETC.) PRIOR TO SETTING FINAL GRADE OF BIODIVERTION DEVICE.
5. RIGIDLY GRADE THE SITE. IF BIODIVERTION AREAS ARE BEING USED AS TEMPORARY SEDIMENT BASINS LEAVE A MINIMUM OF 1 FOOT OF COVER OVER THE PRACTICE TO PROTECT THE UNDERLYING SOILS FROM LOGGING.
6. PERFORM ALL OTHER SITE IMPROVEMENTS.
7. SEED AND MULCH ALL AREAS AFTER DISTURBANCE.
8. CONSTRUCT BIODIVERTION DEVICE UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA.
9. MAINTAIN TEMPORARY AND PERMANENT EROSION CONTROL PRACTICES.
10. PLANT AND MULCH BIODIVERTION DEVICE.
11. REMOVE TEMPORARY EROSION CONTROL DEVICES AFTER THE CONTRIBUTING DRAINAGE AREA IS ADEQUATELY VEGETATED.

GENERAL NOTES:

1. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THIS MATERIAL SHALL BE REMOVED FROM THE PRACTICE PRIOR TO CONTAINING CONSTRUCTION.
2. GRADING OF BIODIVERTION DEVICES SHALL BE ACCOMPLISHED USING LOW-COMPACTATION EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF UNDERLYING SOILS.
3. ALL SOIL MATERIALS BELOW THE SPECIFIED BIODIVERTION DEPTH/ELEVATION SHALL BE UNDISTURBED, UNLESS OTHERWISE NOTED.

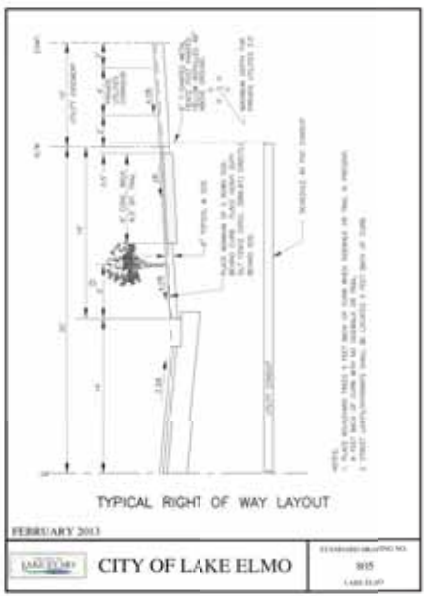
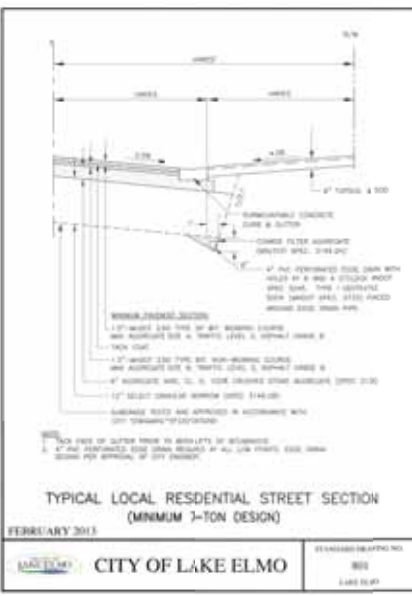
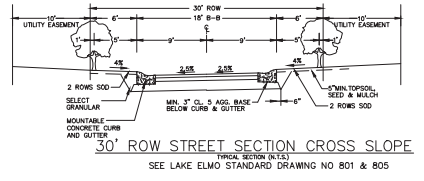
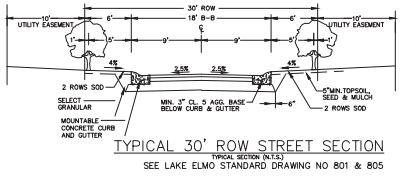
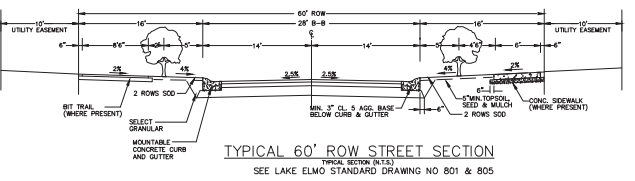
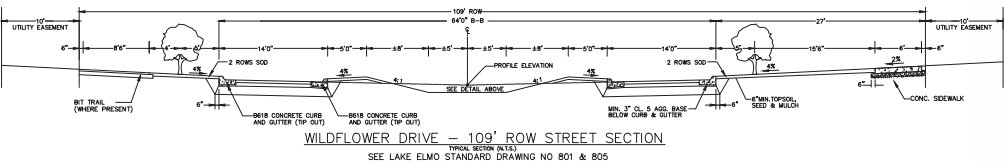


PLANTING MEDIA SHALL MEET MINNESOTA STORMWATER MANUAL, BI-O-RETENTION MEDIA COMPOSITION MIX C OR MIX D (SEE MANUAL FOR ADDITIONAL MIX REQUIREMENTS)

MIX C:
 85 TO 88 PERCENT BY VOLUME SAND (USA SOIL TEXTURAL CLASSIFICATION)
 8 TO 10 PERCENT FINES BY VOLUME (SILT AND CLAY)
 5 TO 10 PERCENT ORGANIC MATTER BY WEIGHT (DUSTIN D 2974 METHOD) @ MINIMUM GRADE 2 COMPOST IS RECOMMENDED

MIX D:
 TOPSOIL 25 TO 35 PERCENT
 COMPOST (ASSUMING MINIMUM GRADE 2 COMPOST IS BEING USED) 10 TO 15 PERCENT

http://stormwater.pca.state.mn.us/files.php/Design_center_for_biodivertion



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 Name: Keith A. Wilshing
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Revision: 1. 02-04-15 City Comments
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CITY OF LAKE ELMO
 FEBRUARY 2013

CITY OF LAKE ELMO
 FEBRUARY 2013
 00-ENG-114058-SHEET-GRAD-DTL5
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1. THE CONTRACTOR SHALL CONSULT OPERATIONS AND IMPLEMENT PROCEDURES FOR PROTECTION CONTROL, RESIST IMPACT FROM IMPROPERLY INSTALLED CURBS TO CURBS, SIDE SLOTTING AND FINISHING INTO CURBWAYS. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS AND COMPLETE DATES RELATIVE TO ALL PERMITS ISSUED FOR THE WORK TO BE COMPLETED. THE CONTRACTOR SHALL MAINTAIN A CLEAN WORK ZONE FOR ALL DEVELOPMENT WORK AND MAINTAIN CONSTRUCTION TRAFFIC SEPARATION WITH THESE MEASURES.

2. SIGNAGE AND ALL SET POINTS AND OTHER EROSION CONTROL MEASURES SHALL BE IN PLACE AND APPROVED BY ENGINEER PRIOR TO ANY EXCAVATION, EXCAVATION OR CONSTRUCTION AND SHALL BE MAINTAINED UNTIL FINAL CURB OR GRADING WORK HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER.

3. SET POINTS: THE CONTRACTOR SHALL INSTALL SET POINTS AT THE EXISTING FINISH ON THE PLANS AND IN ACCORDANCE WITH THE CITY STANDARD DETAILS. SET POINTS SHALL BE MAINTAINED UNTIL THE WORK IS COMPLETED. SET POINTS SHALL BE MAINTAINED AS DIRECTED BY THE ENGINEER.

4. STORMWATER: ALL STORMWATER SHALL BE STORED OR TREATED BEFORE BEING PLACED AGAINST THE EROSION PROTECTION.

5. BEST PRACTICES: THE CONTRACTOR SHALL MAINTAIN BEST PRACTICES ON ALL EXISTING STORMWATER SYSTEMS IN ACCORDANCE WITH THE CITY STANDARD DETAILS. ALL PROTECTION SHALL BE MAINTAINED ON ALL EXISTING STORMWATER SYSTEMS. ALL PROTECTION SHALL BE MAINTAINED ON ALL EXISTING STORMWATER SYSTEMS. ALL PROTECTION SHALL BE MAINTAINED ON ALL EXISTING STORMWATER SYSTEMS.

6. TEMPORARY SEWAGE: THE CONTRACTOR SHALL MAINTAIN TEMPORARY SEWAGE SYSTEMS THROUGHOUT THE CONSTRUCTION PERIOD TO MAINTAIN FLOW AND CLEAN THE FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

7. ROAD CONSTRUCTION ENTRANCE: A ROAD CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO MAINTAIN TRAFFIC OF 30 FT AND 20 FT OVER THE PUBLIC SIDEWALK. A SEWERLINE FABRIC SHALL BE PLACED UNDERNEATH THE ROAD TO MAINTAIN FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

8. STREET CLOSURE: ALL STREETS USED FOR ACCESS TO THE SITE AND SHALL BE KEPT OPEN FOR CONSTRUCTION EQUIPMENT AND MATERIAL SUPPLIES SHALL BE CLOSED AT THE END OF EACH WORKING DAY. THE CITY OF LAKE ELMO MAY REQUIRE ADDITIONAL CLOSURES OF THE STREETS AS DETERMINED BY DEVELOPER/CONTRACTOR OPERATIONS.

9. PROTECT EROSION AND PROTECTION: THE CONTRACTOR SHALL MAINTAIN PROTECT EROSION THROUGHOUT THE SITE AT ALL TIMES. LOW FLOW BARRIERS AND HIGH FLOW BARRIERS ARE REQUIRED THROUGHOUT THE SITE TO PREVENT EROSION. DRAINAGE DITCHES SHALL BE MAINTAINED AS SHOWN ON THE PLAN TO MAINTAIN FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

10. MATERIALS: ALL MATERIALS SHALL BE MAINTAINED AS SHOWN ON THE PLAN TO MAINTAIN FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

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12. MATERIALS: ALL MATERIALS SHALL BE MAINTAINED AS SHOWN ON THE PLAN TO MAINTAIN FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

STANDARD PLAN NOTES
GRADING AND EROSION CONTROL PLANS

FEBRUARY 2013	STANDARD DRAWING NO.	600A
CITY OF LAKE ELMO		LAKELAND

13. DRAINAGE: THE CONTRACTOR SHALL MAINTAIN DRAINAGE THROUGHOUT THE CONSTRUCTION PERIOD TO MAINTAIN FLOW AND CLEAN THE FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

14. ROAD CONSTRUCTION ENTRANCE: A ROAD CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO MAINTAIN TRAFFIC OF 30 FT AND 20 FT OVER THE PUBLIC SIDEWALK. A SEWERLINE FABRIC SHALL BE PLACED UNDERNEATH THE ROAD TO MAINTAIN FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

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17. MATERIALS: ALL MATERIALS SHALL BE MAINTAINED AS SHOWN ON THE PLAN TO MAINTAIN FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

18. PROTECT EROSION AND PROTECTION: THE CONTRACTOR SHALL MAINTAIN PROTECT EROSION THROUGHOUT THE SITE AT ALL TIMES. LOW FLOW BARRIERS AND HIGH FLOW BARRIERS ARE REQUIRED THROUGHOUT THE SITE TO PREVENT EROSION. DRAINAGE DITCHES SHALL BE MAINTAINED AS SHOWN ON THE PLAN TO MAINTAIN FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

19. MATERIALS: ALL MATERIALS SHALL BE MAINTAINED AS SHOWN ON THE PLAN TO MAINTAIN FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

STANDARD PLAN NOTES
GRADING AND EROSION CONTROL PLANS

FEBRUARY 2013	STANDARD DRAWING NO.	600B
CITY OF LAKE ELMO		LAKELAND

20. FLOWLINE: THE CONTRACTOR SHALL MAINTAIN FLOWLINE THROUGHOUT THE CONSTRUCTION PERIOD TO MAINTAIN FLOW AND CLEAN THE FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

21. ROAD CONSTRUCTION ENTRANCE: A ROAD CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO MAINTAIN TRAFFIC OF 30 FT AND 20 FT OVER THE PUBLIC SIDEWALK. A SEWERLINE FABRIC SHALL BE PLACED UNDERNEATH THE ROAD TO MAINTAIN FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

22. STREET CLOSURE: ALL STREETS USED FOR ACCESS TO THE SITE AND SHALL BE KEPT OPEN FOR CONSTRUCTION EQUIPMENT AND MATERIAL SUPPLIES SHALL BE CLOSED AT THE END OF EACH WORKING DAY. THE CITY OF LAKE ELMO MAY REQUIRE ADDITIONAL CLOSURES OF THE STREETS AS DETERMINED BY DEVELOPER/CONTRACTOR OPERATIONS.

23. PROTECT EROSION AND PROTECTION: THE CONTRACTOR SHALL MAINTAIN PROTECT EROSION THROUGHOUT THE SITE AT ALL TIMES. LOW FLOW BARRIERS AND HIGH FLOW BARRIERS ARE REQUIRED THROUGHOUT THE SITE TO PREVENT EROSION. DRAINAGE DITCHES SHALL BE MAINTAINED AS SHOWN ON THE PLAN TO MAINTAIN FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

24. MATERIALS: ALL MATERIALS SHALL BE MAINTAINED AS SHOWN ON THE PLAN TO MAINTAIN FLOW OF WATER AND ALLOW SEWAGE TO SETTLE OUT. TEMPORARY SEWAGE SYSTEMS SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

STANDARD PLAN NOTES
GRADING AND EROSION CONTROL PLANS

FEBRUARY 2013	STANDARD DRAWING NO.	600C
CITY OF LAKE ELMO		LAKELAND

25. RESTORE ALL DISTURBED AREAS WITH 6 INCHES OF TOPSOIL, CONFORMING TO SHEET 8077.

26. PROTECT ALL STORM SEWER LINES AS SHOWN HEREIN AND MAINTAIN LISTS. RESTORATION IS COMPLETED.

27. MAINTAIN ALL SET POINTS AND OTHER AS NEEDED OR REQUIRED UNTIL WORK HAS BEEN ESTABLISHED.

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

29. A MINIMUM OF 6 INCHES OF TOPSOIL SHALL BE PLACED ADJACENT TO THE BACK OF CURBS ALONG ALL SIDEWALKS. SET POINTS SHALL BE PLACED EXACTLY BEHIND THE CURB IN ACCORDANCE WITH THE CITY STANDARD DETAILS.

30. SIGNAGE AND SET POINTS PRESENTATION INCLUDES THE CHANGING, WHICH INCLUDES THE REMOVAL OF SIGNS, SIGNS AND SIGN CHANGING WHILE MAINTAINING POSITIVE DRAINAGE.

STANDARD PLAN NOTES
SITE RESTORATION PLANS

FEBRUARY 2013	STANDARD DRAWING NO.	600D
CITY OF LAKE ELMO		LAKELAND

2" X 6" METAL FENCE POST (NEAR VEHICLE CONSTRUCTION TRAFFIC) OR 2" X 4" WOOD POST

1' MAXIMUM

COMPACTED MATERIAL

DEVELOPE TO DISPLAY THROUGH FREEDOM

NOTE: SILT FENCE INSTALLATION SHALL CONFORM TO MINNESOTA STATE RULES FOR VEHICLE CONSTRUCTION TRAFFIC. ALL MATERIALS SHALL CONFORM TO AASHTO 242.

SILT FENCE

FEBRUARY 2013	STANDARD DRAWING NO.	601
CITY OF LAKE ELMO		LAKELAND

12" X 12" WOOD SIGN OR FIBER ROLL

12" X 12" WOOD SIGN OR FIBER ROLL

12" X 12" WOOD SIGN OR FIBER ROLL

NOTE: THE SIGN SHALL BE PLACED AT THE END OF THE FIBER ROLL. THE FIBER ROLL SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

DITCH CHECK (FIBER ROLL)

FEBRUARY 2013	STANDARD DRAWING NO.	603
CITY OF LAKE ELMO		LAKELAND

NOTE: MAINTAIN AND CLEAN OUT DEVICES AS NECESSARY TO MAINTAIN PROPER FLOW OF STORM WATER INTO STORM SYSTEM.

POLYESTER SLUICE

FILTER ASSEMBLY

WHOLE COVER ASSEMBLY

WIMCO RD-23 OR APPROVED EQUAL

SEDIMENT CONTROL AROUND STORM SEWER INLET

COLLECTOR PIPE

OVERFLOW (2) - COVER OF FILTER ASSEMBLY

OVERFLOW (2) - TOP OF CURB BOX

10" FILTER ASSEMBLY

CURB

CO-23 HIGH-FLOW

HIGH-FLOW FABRIC

WIMCO CO-23 HIGH-FLOW OR APPROVED EQUAL

SEDIMENT CONTROL AROUND STORM SEWER INLET

FEBRUARY 2013	STANDARD DRAWING NO.	604
CITY OF LAKE ELMO		LAKELAND

12" X 12" WOOD SIGN OR FIBER ROLL

12" X 12" WOOD SIGN OR FIBER ROLL

12" X 12" WOOD SIGN OR FIBER ROLL

NOTE: THE SIGN SHALL BE PLACED AT THE END OF THE FIBER ROLL. THE FIBER ROLL SHALL BE MAINTAINED AS DIRECTED BY THE CITY ENGINEER.

ROCK CONSTRUCTION ENTRANCE

FEBRUARY 2013	STANDARD DRAWING NO.	605
CITY OF LAKE ELMO		LAKELAND

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CIVIL ENGINEERS LANDSCAPE ARCHITECTS LANDSCAPE ARCHITECTS LANDSCAPE ARCHITECTS
2422 Enterprise Drive
Menomonie Heights, MN 55120
Fax: 681-9488
www.pioneereng.com

I hereby certify that this plan 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.
Name: KGB A. Wilshing
No. 2559
Date: 11-05-14

Reason: L.0304-15 City Comments
Date: 11-05-14
Designed: KAW/BIM
Drawn: KAW/BIM

CITY DETAILS

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

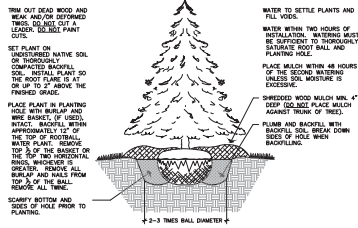
WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

37 OF 37

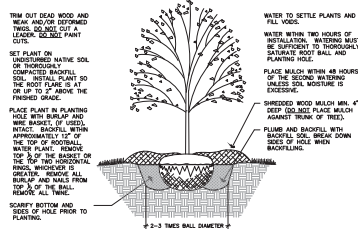
LANDSCAPE NOTES

- THE LANDSCAPE CONTRACTOR SHALL VISIT THE PROJECT SITE TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS PRIOR TO SUBMITTING A BID.
- THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF PROPOSED PHYSICAL START DATE AT LEAST 7 DAYS IN ADVANCE.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD VERIFICATION OF ALL EXISTING UTILITY LOCATIONS ON THE PROJECT SITE WITH OTHER STAFF OR CALL 1-800-250-1188 PRIOR TO COMMENCING WORK. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF EXISTING UTILITIES DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER. NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONDITIONS TO FACILITATE PLANT RELOCATION.
- GRADING TO BE PERFORMED BY OTHERS.
- NO PLANT MATERIAL SHALL BE INSTALLED UNTIL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- ALL PLANT MATERIAL SHALL MEET THE STANDARDS FOUND IN THE AMERICAN ASSOCIATION OF NURSERYMEN-AMERICAN STANDARD FOR NURSERY STOCK.
- ALL CONTAINER MATERIAL TO BE GROWN IN THE CONTAINER A MINIMUM OF SIX (6) MONTHS PRIOR TO PLANTING ON SITE.
- DECIDUOUS AND CONIFEROUS TREES SHALL NOT BE STAKED, BUT THE LANDSCAPE CONTRACTOR MUST GUARANTEE STABILITY TO A WIND SPEED OF 50 MPH.
- THE LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM GUARANTEE OF ONE YEAR ONE TIME REPLACEMENT ON NEW PLANT MATERIALS. GUARANTEE SHALL BE AGREED UPON BY DEVELOPER/BUILDER AND LANDSCAPE CONTRACTOR.
- THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANTS WHICH ARE DEEMED UNSATISFACTORY BEFORE, DURING OR AFTER INSTALLATION.
- IF THERE IS A DISCREPANCY BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND THE NUMBER SHOWN ON THE PLANT LIST, THE NUMBER SHOWN ON THE PLAN WILL TAKE PRECEDENCE.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MULCHES AND PLANTING SOIL QUANTITIES TO COMPLETE WORK SHOWN ON THE PLAN. THE LANDSCAPE CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN ON THE PLAN FOR ACCURACY.
- COMMERCIAL GRADE POLY LAMIN EXOSOL SHALL BE INSTALLED WHERE NOTED.
- THE LANDSCAPE CONTRACTOR SHALL REPAIR ALL DAMAGE TO THE SITE CAUSED BY THE PLANTING OPERATION AT NO COST TO THE OWNER.
- THE LANDSCAPE CONTRACTOR SHALL KEEP PAVEMENTS CLEAN UNSTAINED. ALL PEDESTRIAN AND VEHICLE ACCESS TO BE MAINTAINED THROUGHOUT CONSTRUCTION PERIOD. ALL WASTES SHALL BE PROPERLY REMOVED FROM THE SITE ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES, REGULATIONS AND PERMITS GOVERNING THE WORK.
- STORAGE OF MATERIALS OR SUPPLIES ON-SITE WILL NOT BE ALLOWED.

CONIFEROUS TREE PLANTING DETAIL



DECIDUOUS TREE PLANTING DETAIL



LANDSCAPE REQUIREMENTS:

- ONE TREE TO BE PLANTED FOR EVERY FIFTY FEET OF STREET FRONTAGE.
TOTAL PROPOSED STREET FRONTAGE: 23,400 LINEAR FT
REQUIRED TREES: 23400/50=468 TREES
- FIVE TREES TO BE PLANTED FOR EVERY ONE ACRE OF LAND DEVELOPED OR DISTURBED BY DEVELOPMENT ACTIVITY.
TOTAL AREA: 77 ACRES (AREA WITHIN GRADING LIMITS ONLY)
REQUIRED TREES: 77X5=385 TREES

TOTAL TREES REQUIRED: 853

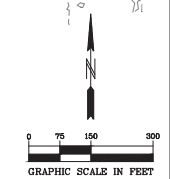
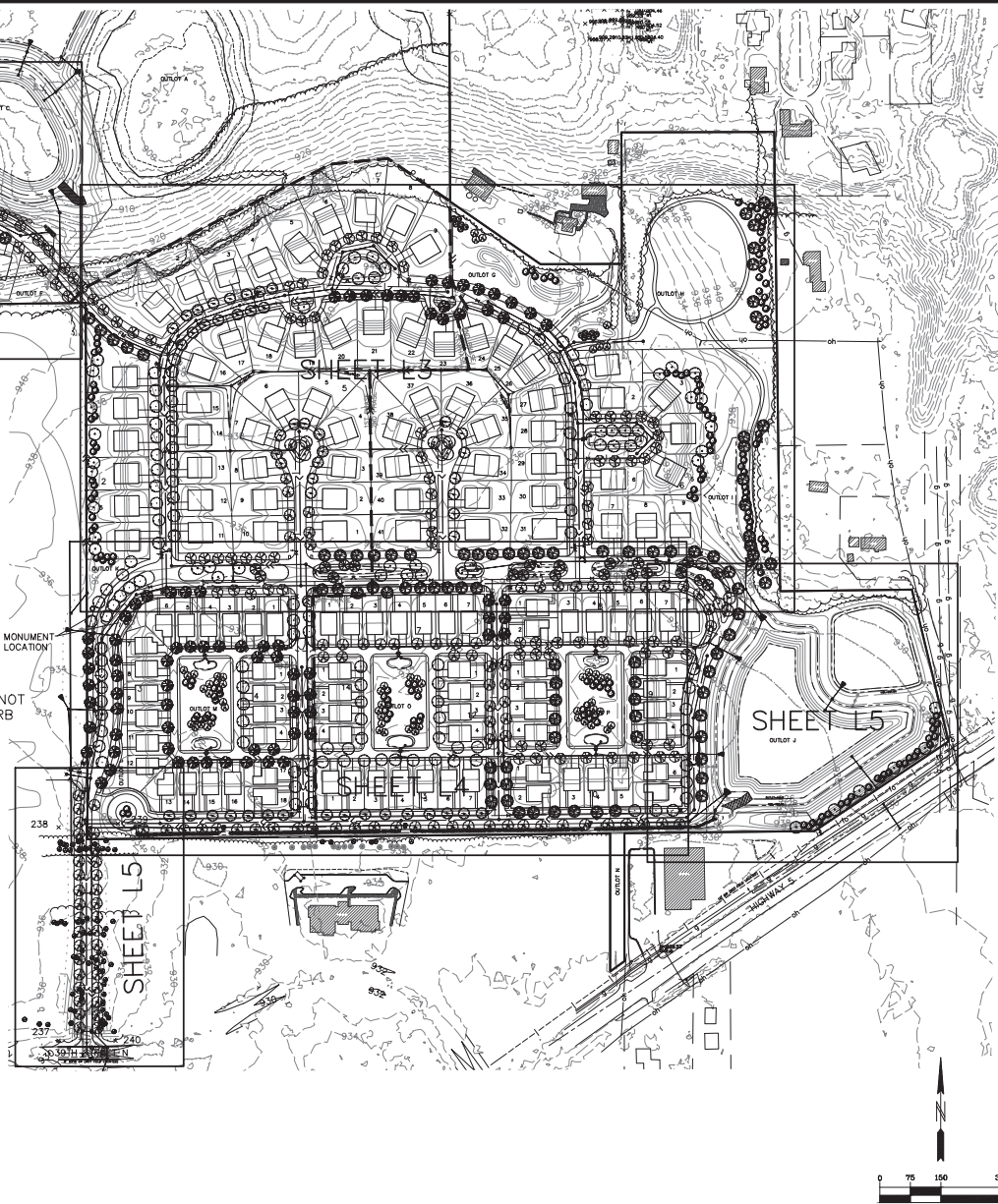
TOTAL TREES PROPOSED: 930

TREES TO BE PLANTED A MINIMUM OF 5' FROM BACK OF CURB. BOULEVARD AREAS THAT CONTAIN SIDEWALKS AND TRAILS THIS MAY NOT BE POSSIBLE. IN THESE AREAS PLANT TREES HALFWAY BETWEEN CURB AND SIDEWALK/TRAIL.

TREE TOTALS FOR ENTIRE SITE

PLANT SCHEDULE

KEY	COMMON NAME/Scientific name	ROOT	QUANTITY	INSTRUCTIONS
OVERSTORY TREES				
	RED MAPLE/Acer rubrum	2.5" B&B	107	
	QUAKING ASPEN/Populus tremuloides	2.5" B&B	28	
	SUGAR MAPLE/Acer saccharum	2.5" B&B	92	
	RIVER BIRCH/Betula nigra 'Heritage'	6" B&B	66	Multi-Stem
	COMMON HACKBERRY/Celtis occidentalis	2.5" B&B	57	
	HONEYLOCUST/Gleditsia triacanthos var. enermis	2.5" B&B	91	
	NORTHERN RED OAK/Quercus rubra	2.5" B&B	87	
	SENTRY LINDEN/Tilia americana 'Sentry'	2.5" B&B	125	
EVERGREEN TREES				
	BLACK HILLS SPRUCE/Picea glauca densata	6" B&B	211	
ORNAMENTAL TREES				
	PRAIRIE FIRE CRAB/Malus 'prairiefire'	1.5" B&B	53	
	ALLEGHENY SERVICEBERRY/Amelanchier laevis	1.5" B&B	13	



242 Enterprise Drive
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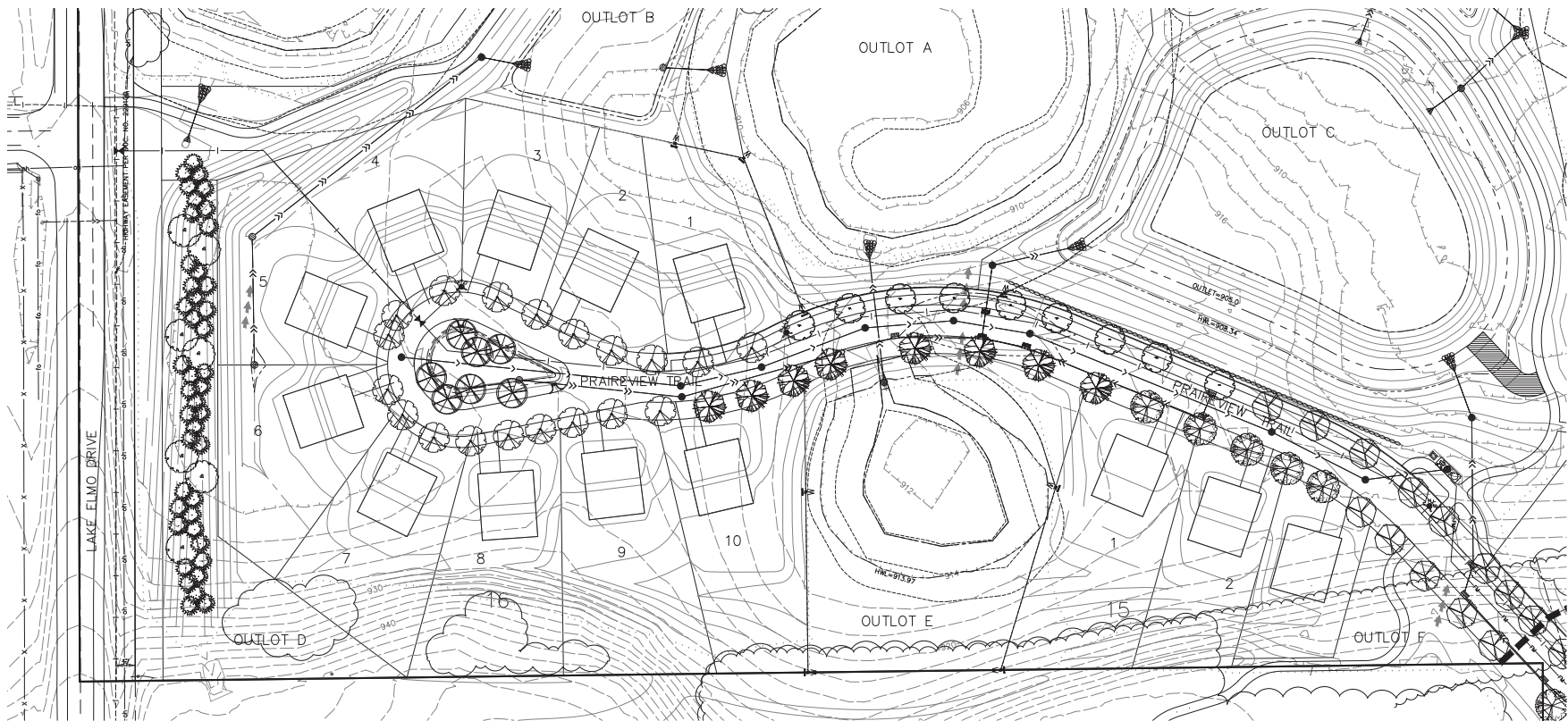
I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota. Name: Janice L. Thompson Reg. No. 44753 Date: 11-05-14

Revisions: 1, 02-04-15 City Comments
Date: 11-05-14
Designed by: JL
Drawn by: JL

LANDSCAPE PLAN

ROBERT ENGSTROM COMPANIES
4801 WEST RIST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55457-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA
L1 OF 5



SEE SHEET L1 FOR TREE SCHEDULE

PIONEERengineering
THE DESIGN. LANDSCAPE. CONSTRUCTION. CONNECTION.

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 Fax: 681-9488
 www.pioneereng.com

I hereby certify that this plan was prepared by
 me or under my direct supervision and that I
 am a duly Licensed Landscape Architect
 under the laws of the State of Minnesota
 Name: Kimberly L. Thompson
 Reg. No. 44753 Date: _____

Revised:
 1. 02-04-15 City Comments

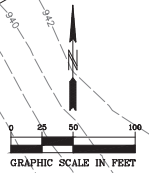
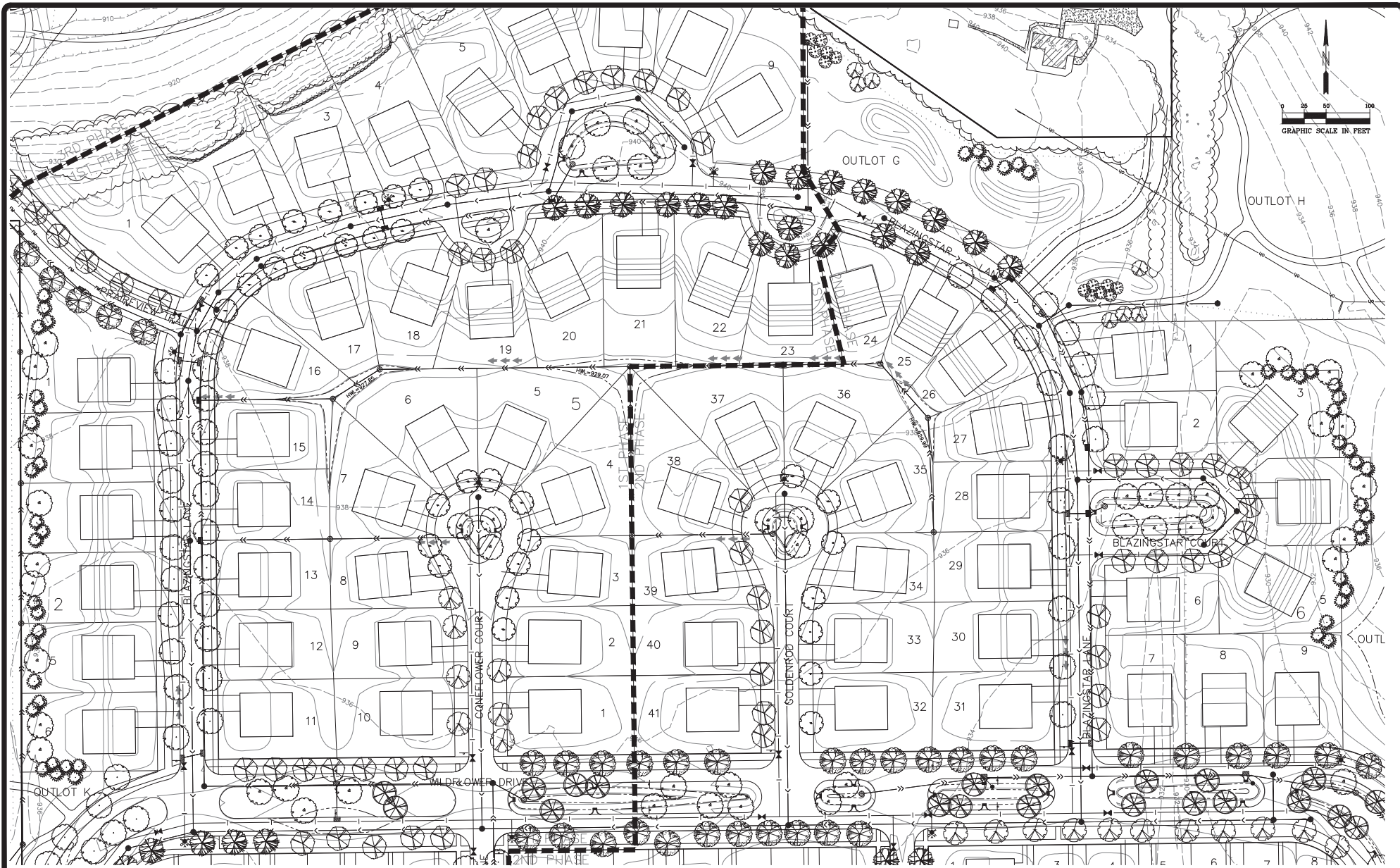
Date: 11.05.14
 Designed by:
 Drawn by: [initials]

LANDSCAPE PLAN

ROBERT ENGSTROM COMPANIES
 4801 WEST 81ST STREET, SUITE 101
 MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA

L2 OF 5



PIONEER Engineering
 CONSULTING ENGINEERS ARCHITECTS LANDSCAPE ARCHITECTS

SEE SHEET L1 FOR TREE SCHEDULE

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Reviewed: 11/05/14 City Comments:

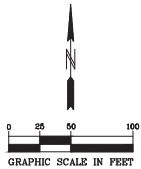
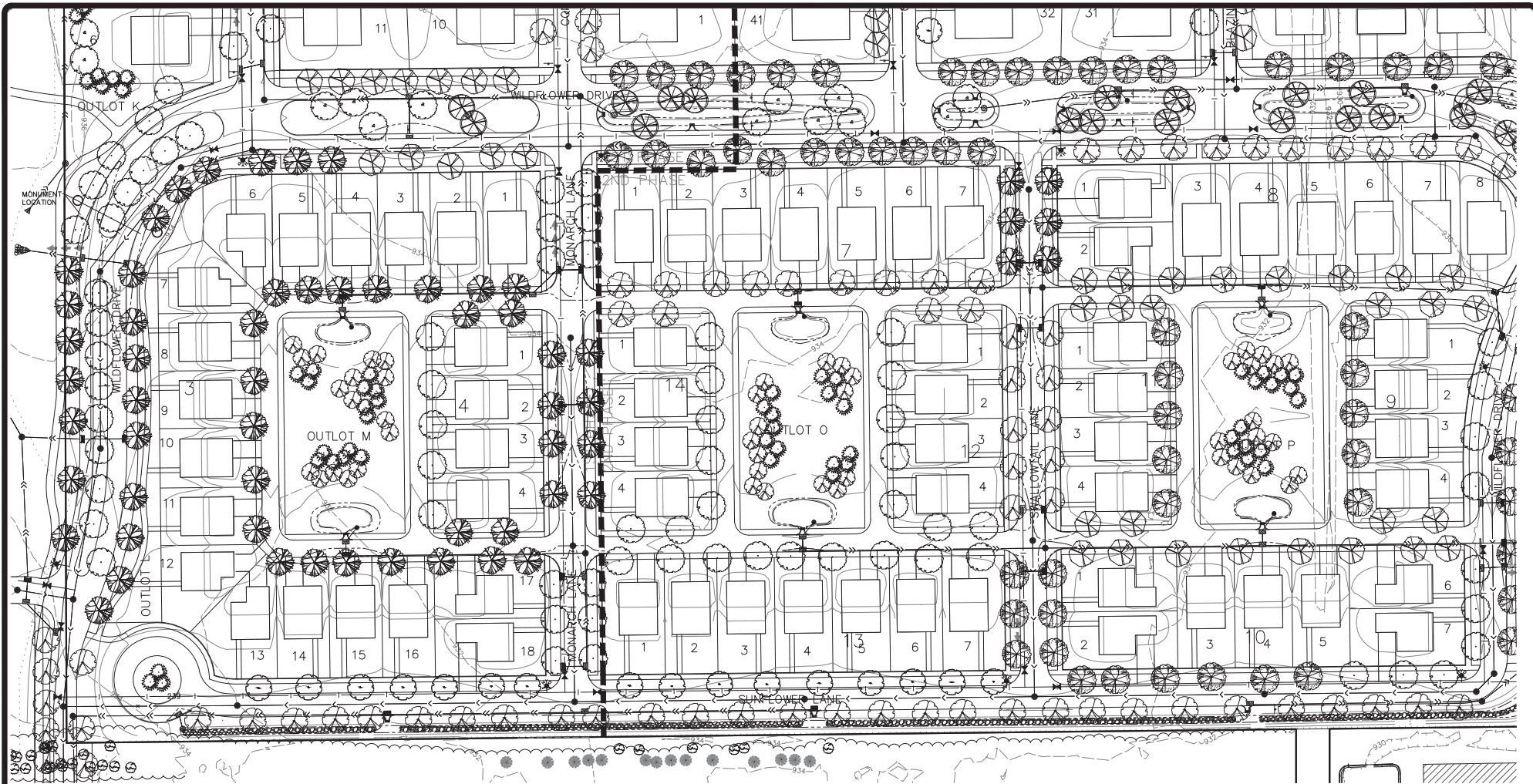
Date: 11/05/14
 Designed by: [Signature]
 Drawn by: [Signature]

LANDSCAPE PLAN

ROBERT ENGSTROM COMPANIES
 1801 WEST BIST STREET, SUITE 101
 MINNEAPOLIS, MINNESOTA 55417-1111

WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA

L3 OF 5



SEE SHEET L1 FOR TREE SCHEDULE

PIONEERengineering
ENGINEERING LANDSCAPE ARCHITECTURE CONSULTING

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 Mendota Heights, MN 55120
 (651) 681-1914
 Fax: 681-9488
 www.pioneereng.com

I hereby certify that this plan was prepared by
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 under the laws of the State of Minnesota. Reg. No. 44753 Date _____

Reviewed
 1. 02-04-15 City Comments

Date: 11-05-14
 Designed by:
 Drawn by:

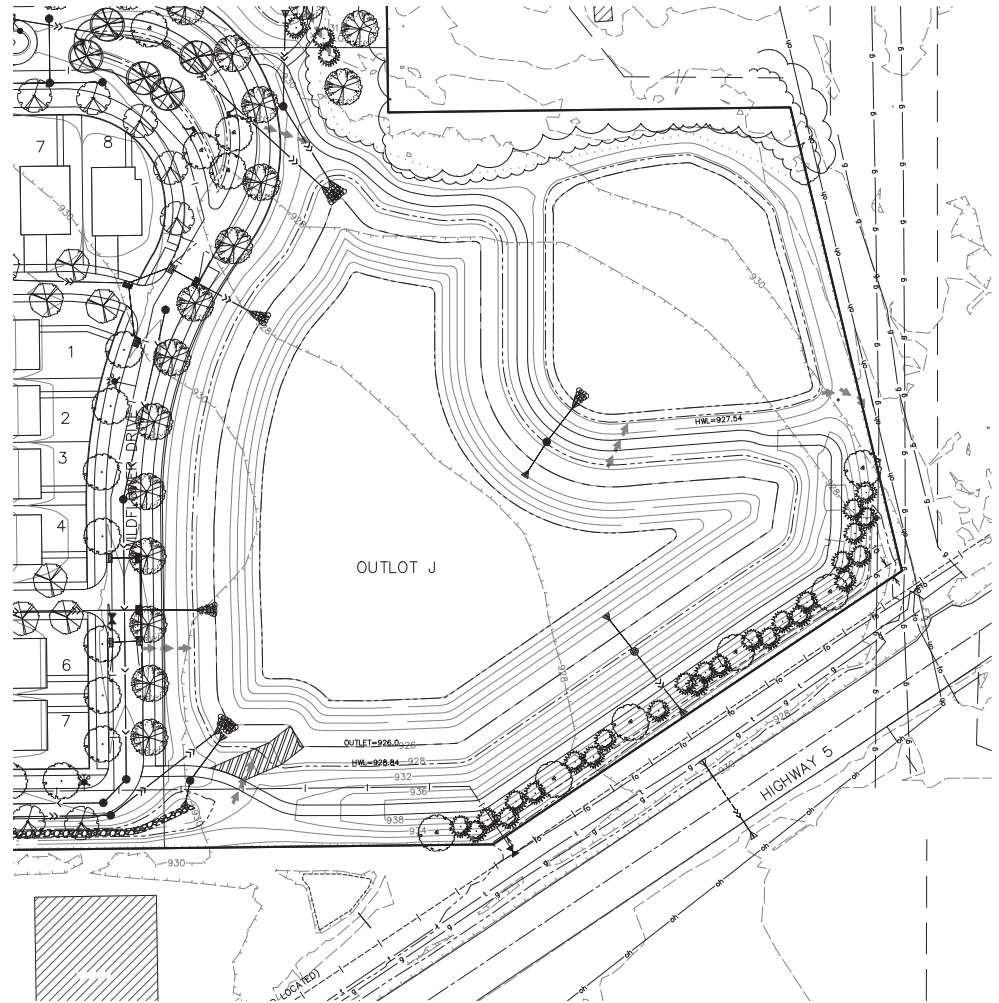
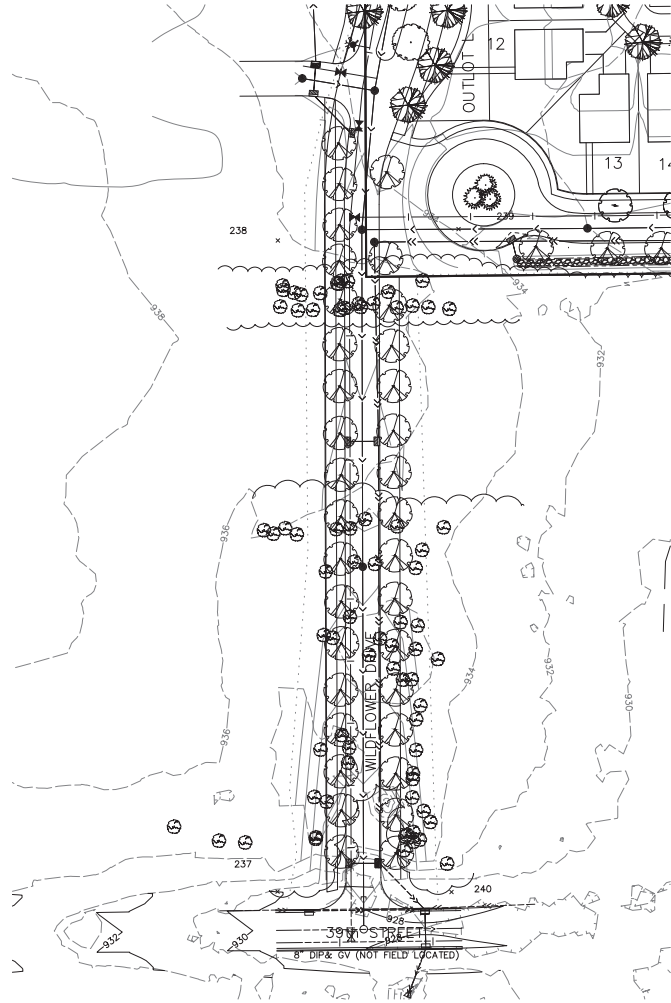
LANDSCAPE PLAN

ROBERT ENGSTROM COMPANIES
 480 WEST BIST STREET, SUITE 101
 MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA

L4 OF 5

ENTRANCE DETAIL



SEE SHEET L1 FOR TREE SCHEDULE



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Resident: 1, 02-04-15 City Commission

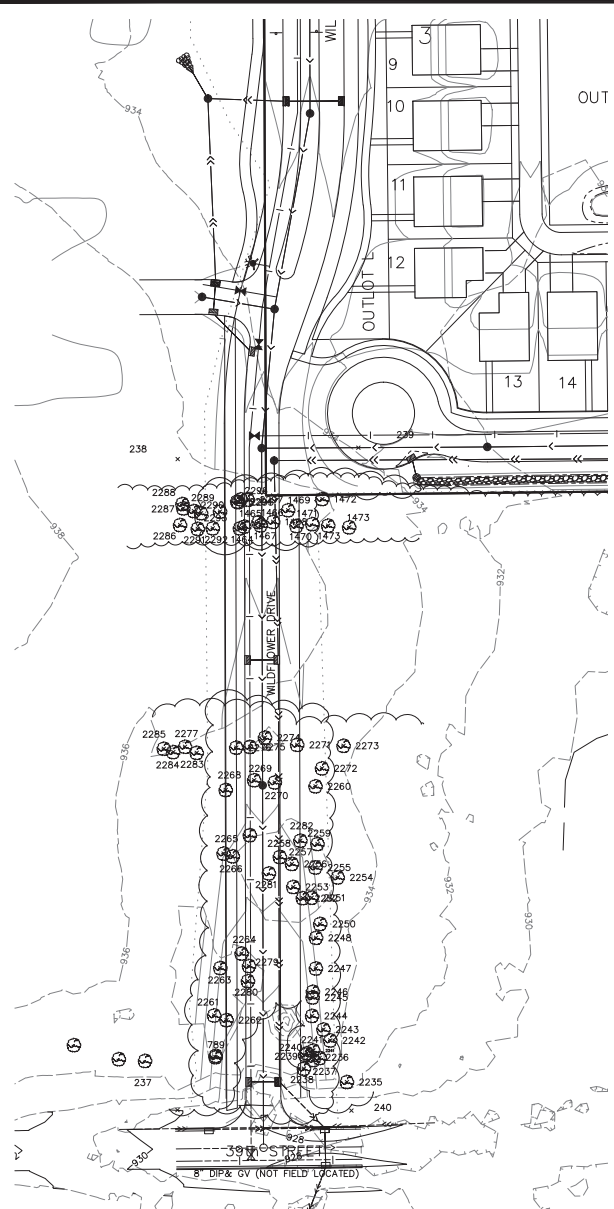
Date: 11/05/14
Designed by:
Drawn by:

LANDSCAPE PLAN

ROBERT ENGSTROM COMPANIES
4801 WEST 81ST STREET, SUITE 101
MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
LAKE ELMO, MINNESOTA

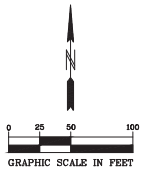
L5 OF 5



SOUTH ENTRANCE TREE INVENTORY

#	Tree Tag #	Size (DBH ")	Common Name	Scientific Name	Significant Tree	Notes	Status
1	789	24	Honeylocust	<i>Gleditsia triacanthos</i>	Y		Remove
2	1464	6	Box Elder	<i>Acer negundo</i>	N		Remove
3	1465	5	Colorado spruce	<i>Picea pungens</i>	N		Remove
4	1466	9	Box Elder	<i>Acer negundo</i>	N		Remove
5	1467	6	Colorado spruce	<i>Picea pungens</i>	N		Remove
6	1468	7	Box Elder	<i>Acer negundo</i>	N		Remove
7	1469	13	Box Elder	<i>Acer negundo</i>	Y		Remove
8	1470	6	Colorado spruce	<i>Picea pungens</i>	N	60% shade suppressed	Remove
9	1471	8	Colorado spruce	<i>Picea pungens</i>	N	70% shade suppressed	Remove
10	1472	14/12	Box Elder	<i>Acer negundo</i>	Y		Offsite save
11	1473	7	Box Elder	<i>Acer negundo</i>	N		Offsite save
12	1474	7	Colorado spruce	<i>Picea pungens</i>	N		Offsite save
13	2235	7/7/6	Box Elder	<i>Acer negundo</i>	N		Offsite save
14	2236	11	Box Elder	<i>Acer negundo</i>	N		Remove
15	2237	11	Box Elder	<i>Acer negundo</i>	N		Remove
16	2238	8	Box Elder	<i>Acer negundo</i>	N	60% top missing	Remove
17	2239	14/11/7	Box Elder	<i>Acer negundo</i>	Y		Remove
18	2240	15	Hackberry	<i>Celtis occidentalis</i>	Y		Remove
19	2241	15	Box Elder	<i>Acer negundo</i>	Y		Remove
20	2242	11	Box Elder	<i>Acer negundo</i>	N		Remove
21	2243	11	Box Elder	<i>Acer negundo</i>	N		Remove
22	2244	20	Box Elder	<i>Acer negundo</i>	Y		Remove
23	2245	8	Box Elder	<i>Acer negundo</i>	N		Remove
24	2246	16	Box Elder	<i>Acer negundo</i>	Y		Remove
25	2247	9	Box Elder	<i>Acer negundo</i>	N		Remove
26	2248	18	Box Elder	<i>Acer negundo</i>	N	30% top missing, decay at base of tree	Remove
27	2250	10	Box Elder	<i>Acer negundo</i>	N		Remove
28	2251	9	Box Elder	<i>Acer negundo</i>	N		Remove
29	2252	10	Box Elder	<i>Acer negundo</i>	N		Remove
30	2253	12/12	Box Elder	<i>Acer negundo</i>	Y		Remove
31	2254	13	Box Elder	<i>Acer negundo</i>	N	30% top missing	offsite save
32	2255	13	Box Elder	<i>Acer negundo</i>	Y		Remove
33	2256	13	Box Elder	<i>Acer negundo</i>	Y		Remove
34	2257	10	Box Elder	<i>Acer negundo</i>	N		Remove
35	2258	9	Box Elder	<i>Acer negundo</i>	N		Remove
36	2259	13	Box Elder	<i>Acer negundo</i>	Y		Remove
37	2260	17	Box Elder	<i>Acer negundo</i>	Y		Remove
38	2261	6	Box Elder	<i>Acer negundo</i>	N		Remove
39	2262	6	Box Elder	<i>Acer negundo</i>	N		Remove
40	2263	6	Honeylocust	<i>Gleditsia triacanthos</i>	N		Remove
41	2264	6	Box Elder	<i>Acer negundo</i>	N		Remove
42	2265	16	Box Elder	<i>Acer negundo</i>	Y		Remove
43	2266	7	Box Elder	<i>Acer negundo</i>	N		Remove
44	2267	19	Box Elder	<i>Acer negundo</i>	N	40% top missing, split at base	Remove
45	2268	16	Box Elder	<i>Acer negundo</i>	Y		Remove
46	2269	15	Box Elder	<i>Acer negundo</i>	Y		Remove
47	2270	15/14/12/6	Box Elder	<i>Acer negundo</i>	Y		Remove
48	2271	13	Box Elder	<i>Acer negundo</i>	Y		Remove
49	2272	22/21	Box Elder	<i>Acer negundo</i>	N	22" 100% top missing, 21" decay along main trunk	Remove
50	2273	21	Box Elder	<i>Acer negundo</i>	Y		Offsite save
51	2274	19	Box Elder	<i>Acer negundo</i>	Y		Remove
52	2275	16	Box Elder	<i>Acer negundo</i>	N	50% top missing	Remove
53	2276	16	Box Elder	<i>Acer negundo</i>	Y		Remove
54	2277	18	Box Elder	<i>Acer negundo</i>	N	40% top missing	Offsite save
55	2279	7	Siberian elm	<i>Ulmus pumila</i>	N		Remove
56	2280	6	Honeylocust	<i>Gleditsia triacanthos</i>	N		Remove
57	2281	10	Box Elder	<i>Acer negundo</i>	N	heavy lean to tree	Remove
58	2282	12	Box Elder	<i>Acer negundo</i>	Y		Remove
59	2283	17	Box Elder	<i>Acer negundo</i>	N	major damage from tree #2285 which has toppled onto #2283	Offsite save
60	2284	17	Box Elder	<i>Acer negundo</i>	Y		Offsite save
61	2285	18	Box Elder	<i>Acer negundo</i>	N	toppled	Offsite save
62	2286	6	Box Elder	<i>Acer negundo</i>	N		Offsite save
63	2287	7	Box Elder	<i>Acer negundo</i>	N		Offsite save
64	2288	10	Box Elder	<i>Acer negundo</i>	N		Offsite save
65	2289	11	Box Elder	<i>Acer negundo</i>	N		Offsite save
66	2290	10	Box Elder	<i>Acer negundo</i>	N		Remove
67	2291	8	Box Elder	<i>Acer negundo</i>	N		Offsite save
68	2292	9/8	Box Elder	<i>Acer negundo</i>	N		Remove
69	2293	6	Box Elder	<i>Acer negundo</i>	N		Remove
70	2294	11	Box Elder	<i>Acer negundo</i>	N	top split at 8' up from base of tree	Remove
71	2295	6	Box Elder	<i>Acer negundo</i>	N		Remove
72	2296	10	Box Elder	<i>Acer negundo</i>	N		Remove
73	2297	11	Box Elder	<i>Acer negundo</i>	N		Remove

NOTES:
 1. NON-SIGNIFICANT TREES ARE DUE TO SIZE NOT MEETING ORDINANCE REQUIREMENTS OR;
 2. TREES THAT ARE DAMAGED, SPLIT, LEANING, OR HAVE SIGNIFICANT MISSING CANOPIES.



2422 Enterprise Drive
 Mendota Heights, MN 55120
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I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota. Reg. No. 44753 Date: _____

Revisions: 1. 02-04-15 City Comments

Date: 2-2-15
 Drawn: JP
 Check: JHML

SOUTH ENTRANCE TREE INVENTORY

ROBERT ENGSTROM COMPANIES
 480 WEST 81ST STREET, SUITE 101
 MINNEAPOLIS, MINNESOTA 55437-1111

WILDFLOWER AT LAKE ELMO
 LAKE ELMO, MINNESOTA

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