THE CITY OF LAKE ELMO

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NOTICE OF MEETING

The City of Lake Elmo
Planning Commission will conduct a meeting on
Monday, September 8, 2014 at 7:00 p.m.

AGENDA

1. Pledge of Allegiance
2. Approve Agenda
3. Approve Minutes
   a. August 25, 2014
4. Public Hearing
   a. VILLAGE PARK PRESERVE – PRELIMINARY PLAT. GWSA Land Development, LLC, 10850 Old County Road 15 Suite 200 Plymouth, MN has submitted an application for a Preliminary Plat to be called Village Park Preserve. The proposed development will be a 104-unit single family residential subdivision in the southeastern portion of the Village Planning Area. (PID's 13.029.21.43.0004 and 13.029.21.44.0002).
5. Business Items
   a. SAVONA SECOND ADDITION – FINAL PLAT. The Planning Commission will consider a Final Plat for Savona 2nd Addition. This application was previously reviewed at the meeting on 8/25/14.
   b. INWOOD PUD CONCEPT PLAN. The Planning Commission will be reviewing an application for a Planned Unit Development (PUD) Concept Plan for a proposed mixed-use development on a 157 acre site in Stage 1 of the I-94 Corridor Planning Area (PIDs: 33.029.21.12.0001, 33.029.21.12.0003, 33.029.21.11.0002, 33.029.21.11.0001). This application was previously reviewed at a public hearing held on 8/25/14.
   c. HUNTER'S CROSSING FINAL PLAT – RYLAND GROUP. The Planning Commission will consider a Final Plat for Hunter's Crossing. The Final Plat includes 22 single family lots that will be located on the present site of the Country Air Golf Practice Facility. (PID 36.029.21.32.0008).

6. Updates
    a. City Council Updates – September 2, 2014 meeting:
        i. Savona Conditional Use permit passed.
    b. Staff Updates
        i. Upcoming Meetings:
            - September 22, 2014
            - October 13, 2014
    c. Commission Concerns
7. Adjourn

City of Lake Elmo
Planning Commission Meeting
Minutes of August 25, 2014

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

COMMISSIONERS PRESENT: Williams, Dodson, Kreimer, Larson, Lundgren, and Haggard (arrived 7:15)

COMMISSIONERS ABSENT: Dorschner

STAFF PRESENT: City Planner Johnson

Approve Agenda:

The agenda was accepted as presented.

Approve Minutes: July 28, 2014

M/S/P: Dodson/Kreimer, move to approve the minutes as presented; ***Vote: 5-0, motion carried.***

Public Hearing: Savona Second Addition – Final Plat and Conditional Use Permit

Johnson presented an overview of the Savona Second Addition proposed Final Plat and Conditional Use Permit.

Paul Tabone, Lennar Homes, introduced himself to the Planning Commission.

Dodson asked about the structure of the Common Interest Communities proposed for the development. Tabone noted that the two areas, single family and townhome areas, are two separate Home Owners Association. Dodson asked how the common interest agreement is established and at what point does the builder transfer management of the association to the residents/property owners. Tabone noted that an employee of Lennar serves on the board. The management is not transferred until there is enough residents to properly manage the neighborhood.

Williams asked why Lennar has not gotten a buffer easement or met some of the other conditions. Tabone stated that the easement process is complicated and that they are working on securing it. Johnson stated that these things will be addressed before the final plat is released for recording. That is what the City has to get compliance.

Williams is wondering about the landscape plan and is disappointed that it isn't completed.

Public Hearing opened at 7:48 p.m.

No one spoke.

No written comments were received.

Public Hearing closed at 7:49pm.

Williams asked if everyone agrees with the draft findings. Williams recommended amending finding #4 to say with the exception of the items covered in the conditions.

Larson noted that he is disappointed that the buffer is the minimum 100 feet and that the landscape plan is not available to show the landscaping there.

M/S/P: Dodson/Kreimer, move to recommend approval of the CUP with the finding related to design to be stricken, ***Vote: 6-0, motion carried unanimously.***

Williams noted that he is not satisfied with the answers received this evening.

M/S/P: Haggard/Lundgren, move to postpone consideration of the Final Plat until the items necessary for Final Plat as identified in the staff report are addressed, ***Vote: 4-2, motion carried*****,** with Dodson and Larson voting no.

Public Hearing: Inwood PUD Concept Plan

Johnson presented an overview of the Inwood PUD Concept Plan. This is a PUD Concept plan on 157 acres that has a mixed use of single family, single family attached, multi-family, senior townhomes and commercial use.

John Rask, Hans Hagen Homes, spoke about the Inwood PUD Concept Plan. He spoke about the ponding proposed for the development, and the impact of removing these areas from density calculations. The berming and landscapes for the Hans Hagen developments are important. Rask spoke about the demographic that the development is intended for, including seniors, smaller families and singles. He also spoke about the island green spaces in the single family residential area. He continued by describing the Lifestyle Housing product that Hans Hagen is building, including strong architectural details.

Moving forward, Rask addressed multiple questions posed by the Planning Commission. He noted that the applicants have conducted in-depth analysis on the shoreland provisions.

Lundgren asked how the Hans Hagen product would be different than the product they are building in Woodbury. Rask stated that the Woodbury product is much different as it was one they took over from Ryland and had to retro fit into the neighborhood. Rask noted that the most comparable project to the one being proposed is the Lakes in Blaine. Lundgren also noted the Concept is lacking a community gathering place. Rask noted that each street has individual gathering places, but is not focused on ballfields as there are not many young families. Rask stated the park will change based on feedback from staff and Park Commission.

Dodson asked what role the HOA has in maintaining the properties. Rask noted all of the grounds are maintained by the HOA. The homeowner is responsible to maintain their individual house. The applicants offer al-a-carte maintenance services, such as gutter cleaning. Dodson asked if there is an architectural control committee. Rask noted that the builder serves as the architectural control until the HOA is established well enough to control the architecture.

Haggard thanked the applicant for providing the Concept Design Booklet. She asked about the location of streets and trails. In addition, she asked if the applicants considered incorporating theming. Rask talked about this being a walkable community with trails and sidewalks. They will look at the Damon Farber theming.

Kreimer asked if the designer product allows basements. Rask confirmed that the designer product does allow basements and the lifestyle homes do not have basements. Kreimer asked about neighborhood amenities that are provided. Rask noted that neighborhood amenities, such as pool or clubhouse, are not as desired for the homeowner due to the fact that many of the buyers do not live there year-round. The expectation is lower HOA fees. Kreimer asked about landscaping provided. Rask noted that a base package is provided. If the owners want additional landscaping, they must pay extra and the design must be approved by the HOA. Kreimer asked about the setbacks. He noted that it is must be difficult to fit certain amenities. Rask said it is the minimum and there would typically be 8 feet combined and there are access easements.

Lundgren asked about community gardens. Rask noted that they are exploring the possibility of community gardens in a project they are working on in Dayton. Lundgren noted if the developer provides storm shelters for homes with no basement. Rask noted that sometimes there is a request for a storm shelter or for a self-contained box that goes in the master bedroom closet that is storm proof.

Public Hearing opened at 9:53 p.m.

Nancy Andert, 697 Julep Ave. N., noted that they are appalled by the proposed development. They noted when looking for a home, they looked for 2.5 acre lots. She

noted that the City must be tired of hearing from Stonegate, but if you lived in Stonegate, you would fight against the density too. Stonegate has requested low density lots, not high density. Andert read the plan statement for Low Density Residential. There should be a smooth transition of density from urban land uses to rural land uses. She stated that the residents do not want this level of density near Stonegate. The Comprehensive Plan should not be changed. She complimented the Design and Concept Booklet, but noted that the result of such a development is not as nice.

Mike Lancette, 832 Jasmine Ave. N., noted that he shares the same concerns as Ms. Andert. Lancette noted that if the density will be increased, then the buffer should be increased. He noted his concern that the area is inhabited by wildlife. Lancette added that the proposed trail should be located closer to the proposed neighborhood, not Stonegate. He added that the buffer is very important, and it should be done in a thoughtful way. He asked if there needed to be a tree inventory. Staff confirmed that the applicant will need to submit a plan at preliminary stage.

Curt Monteith, 331 Julep Ave. N., lives adjacent to Stonegate Park. He noted that he is disappointed with the growth that has occurred this far. He asked that the City and Planning Commission be considerate for Stonegate. Monteith noted that parking would be appreciated on the southwest portion of the park. He asked questions about access to the site, particularly on 10th Street. He asked if 10th Street is planned for a four-lane road. Johnson explained the reasoning about the park area. He noted that the Park Commission will be reviewing the Concept Plan on 9/15/14. Monteith asked about trails to and from the park and asked about price point for single family homes. Rask stated that they are between 300-400K.

2 letters were received, one from Molly Shodeen, area Hydrologist for the DNR and one from Tom Fitzgerald, 877 Jasmine Place Ave Place N. The letter from Mr. Fitzgerald is opposed to the development because of impacts to Stonegate. The DNR has concerns that they will work with the applicant to resolve. The letters were entered into the record.

Public Hearing closed at 10:19pm.

The Planning Commission took a brief recess and returned at 10:23pm.

Kreimer noted that he does not agree with finding #1 and #2. He does not believe that the multi-family area in the northwest corner is consistent. In addition, allowing single family areas that require exceptions is not acceptable.

Larson noted that he thinks the land uses have moved slightly, but the areas are generally the same. He noted support for the commercial area along Inwood Ave. N., as well as the location of the multi-family. He noted that parking must be improved for

Stonegate Park. Larson encourages dialogue with the Stonegate neighborhood on the Park and the buffer. He noted support for the draft findings.

Haggard noted that she thinks the plan may not be consistent with the Comprehensive Plan. She would like additional time to visit the Blaine and other development sites completed by Hans Hagen.

Williams noted that he has concerns about the residential details. He notes that he does support the draft findings, but has some conditions. His proposed condition is that the lifestyle home should not be located immediately adjacent to the Stonegate area. He noted that he supports the proposed uses in the plan except for the multi-family area in the northwest corner is too dense. He added that the trail should be concentrated on the west half of the buffer. Williams added that there should be some park/gathering area in the northwest portion of the development. Finally, he added that a 4' sideyard setback is too small, that a 5' would be a reasonable minimum. He thinks that the front and rear yard setbacks or ok.

Kreimer notes he is concerned about the size of the lots. We require 8000 square feet and the applicant is asking for flexibility of 5000-6500 square feet.

Haggard voiced her concern about the sideyard setbacks. She feels we should stay with ordinance which was already a compromise.

Lundgren is concerned that 20% of the single family homes which are low density are at 38 feet when 60 feet is required.

Larson noted that the proposed product is different than a typical single family home, as it is association maintained. Therefore, it is warranting an exception.

Dodson asked if the highest density amount for low density can even be met with our standards. Johnson stated that it would be difficult. Dodson brought up possible coving to address the resistance to reduced setbacks.

Johnson talked about the purpose of the PUD Ordinance. If a developer has a different concept or product type, sometimes deviations are warranted or necessary.

Haggard stated that she likes the concept and the elements that they have included, but the sideyard setbacks are smaller than should be.

Williams suggested condition 2a where the minimum setback would be 5' for all single family detached housing.

M/S/P: Williams/Kreimer, move to require a 5-foot sideyard setback for all of the single family detached housing, **Vote: 4-2, motion carried,** with Larson and Dodson voting no.

Haggard noted that she wished to see the development before making a decision on the sideyard setbacks.

Hans Hagen talked about the market demographic and future trends in housing. Hans Hagen talked about all the dynamics at play in new home construction. He invited the Planning Commission to go out and look at The Lakes in Blaine.

Wayne Prowse, 697 Julep Ave, spoke about why he came out to Lake Elmo. He feels that they were promised low density housing around Stonegate.

M/S/P: Williams/Dodson, move to add to condition #6 "the location, size and design of the park will be subject to review by the Park Commission. It is recommended that the Park Commission consider the inclusion of a small park area or gathering space in the northwest portion of the development, **Vote: 6-0, motion carried unanimously.**

Haggard discussed her concern about garage dominant design. The Planning Commission engaged in a discussion about garage doors.

M/S/P: Dodson/Lundgren, condition #19 move that the applicant must work with the City to submit their residential design standards to the City as part of the Preliminary Plat application, **Vote: 6-0, motion carried unanimously.**

Williams suggested that the plat should be revised to include 2 rows of designer product.

M/S/P: Williams motion to require single family lots on east side of the development, motion fails for lack of a second.

Hans Hagen noted that the applicant is happy to include increased landscaping and design standards, but if the City wants to require different product types on the east side of the development, then the proposed development will not work and the entire plan must be revised.

Larson made presented strong support for the project and noted his concern about micro-management of the process.

Lundgren noted that going beneath the standards does not feel right.

Haggard stated that the City is getting things in return for the decrease in lot width and size.

M/S/P: Williams/Kreimer, move to include the Theming elements consistent with the Damon Farber Branding and Theming Study should be included in the public amenities

throughout the proposed development, **Vote 3-3, motion fails,** with Haggard, Larson and Dodson voting no.

There was a discussion about the multi-family area in the northwest corner of the development.

Kreimer was wondering if a traffic light would be appropriate at the intersection on 10th street. Rask stated that an EAW is required and part of that is a traffic study. The traffic study does not require a traffic light at 10th Street. Johnson stated that at the recent transportation meeting with the County, this intersection came up and they were not confident that a traffic light was warranted at that intersection.

M/S/P: Kreimer/Lundgren, condition #20 move to change the proposed land use of the area in the northwest corner to Commercial, Haggard offered friendly amendment to change to 15 units per acre maximum for commercial, **Vote: 5-1, motion carried,** with Dodson voting no.

M/S/P: Larson/ Kreimer, move to recommend approval of the Concept Plan with the findings of fact listed in the Staff Report and the conditions of approval as amended.

M/S/P: Williams/Haggard, move to postpone consideration of the previous motion until the September 8th Planning Commission meeting so that the Planning Commission is able to visit the Lakes development. **Vote: 5-1, motion carried,** with Larson voting no.

Updates and Concerns

Council Updates

1. RAD Alt Comprehensive Plan Amendment to eliminate the RAD Alt zoning passed.

Staff Updates

1. Upcoming Meetings
    a. September 8, 2014
    b. September 22, 2014

Commission Concerns –

Haggard – more time to review packet.

Williams – on breaks

Meeting adjourned at 12:00pm

Respectfully submitted,

Joan Ziertman
Planning Program Assistant

PLANNING COMMISSION
DATE: 9/8/14
AGENDA ITEM: 4A – PUBLIC HEARING ITEM
CASE # 2014-43

ITEM: Village Park Preserve Residential Subdivision – Preliminary Plat

SUBMITTED BY: Nick Johnson, City Planner

REVIEWED BY: Kyle Klatt, Community Development Director
Jack Griffin, City Engineer
Brett Emmons, Emmons & Olivier Resources, Inc.
Greg Malmquist, Fire Chief
Stephen Mastey, Landscape Architecture, Inc.
Ann Pung-Terwedo, Washington County
John Hanson, Valley Branch Watershed District
Neil Ralston, Metropolitan Airports Commission

SUMMARY AND ACTION REQUESTED:

The Planning Commission is being asked to hold a public hearing to consider a Preliminary Plat request from GWSA Land Development, LLC for a 104-unit single family residential subdivision to be located on approximately 64 acres immediately west of Manning Avenue (CSAH 15) and immediately north of 30th Street within the southern portion of the Village Planning Area. Staff is recommending approval of the request subject to compliance with 13 conditions as noted in this report.

GENERAL INFORMATION

Applicant: GWSA Land Development, LLC (Craig Allen); 10850 Old County Road 15, Suite 200, Plymouth, MN 55441

Property Owners: Schiltgen Farms, Inc.; 10880 Stillwater Blvd. N., Lake Elmo, MN 55042 and Mark Holliday; PO Box 243, Lake Elmo, MN 55042

Location: Part of Sections 13, Township 29 North, Range 21 West in Lake Elmo, north of 30th Street and immediately west of Manning Avenue (CSAH 15). PID Numbers: 13.029.21.43.0004 and 13.029.21.44.0002.

Request: Application for preliminary plat approval of a 104-unit single family residential subdivision to be named Village Park Preserve.

Existing Land Use: Agriculture

Existing Zoning: RT – Rural Transitional Zoning

Surrounding Land Use: North – vacant/agricultural land, planned for Easton Village single family residential subdivision; west – Reid Park and Rural Single Family

	parcels; south – Heritage Farm open space preservation (OP) subdivision; east – Lake Elmo Airport.
Surrounding Zoning:	RT – Rural Development Transitional; OP – Open Space Preservation; PF – Public Facilities
Comprehensive Plan:	Village Urban Low Density Residential (1.5 – 2.49 units per acre) and Rural Area Development – City has submitted a Comprehensive Plan Amendment to the Metropolitan Council to change the land use guidance of the Holliday parcel from Rural Area Development to Village Urban Low Density Residential.
Proposed Zoning:	LDR – Urban Low Density Residential
History:	The subject properties are 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 faming activities, including the growing of agricultural crops. The Sketch Plan was reviewed by the Planning Commission on 6/30/14. The Comprehensive Plan Amendment for the Holliday parcel was reviewed by the Planning Commission on 6/30/14. Both Land Use Applications were reviewed by the City Council on 7/15/14, where the CPA was approved (Resolution 2014-60)
Deadline for Action:	Application Complete – 8/14/2014 60 Day Deadline – 10/12/2014 Extension Letter Mailed – No 120 Day Deadline – 12/11/14
Applicable Regulations:	Chapter 153 – Subdivision Regulations Article 10 – Urban Residential Districts (LDR) §150.270 Storm Water, Erosion, and Sediment

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REQUEST DETAILS

The City of Lake Elmo has received a request from GWSA Land Development, LLC for a preliminary plat to subdivide approximately 64 acres of land located within the Village Planning Area into 104 single family lots. The proposed plat would be located on property currently owned by Schiltgen Farms, Inc. and Mark Holliday, and would be located immediately west of Manning Avenue North (CSAH 15) and immediately north of 30th Street North. The two subject parcels have historically been used for agricultural purposes.

The preliminary plat has been developed in response to the City's Comprehensive Plan, which guides the property owned by Schiltgen Farms, Inc. for Village Urban Low Density Residential (V-LDR) development. It should be noted that the Holliday parcel is currently guided Rural Area Development (RAD). However, the City approved a Comprehensive Plan Amendment request to change the Holliday parcel from RAD to V-LDR on July 15, 2014 (Resolution 2014-60). The Comprehensive Plan Amendment request has progressed through adjacent jurisdiction review period, and the CPA application has been submitted to the Metropolitan Council. If approved, the proposed plat would be consistent with the Comprehensive Plan. The plat is designed to incorporate 104 single family lots, all of which are designed with minimum widths of 65 feet.

In terms of access, the preliminary plat shows a connection to 30th Street via the Village Parkway minor collector road in the southern portion of the plat. As shown on the proposed plat, the Village

Parkway minor collector road will serve as the primary access and circulation route for the development, extending from 30th Street in the south to the Easton Village residential subdivision in the north. In addition to the 30th Street connection, the proposed neighborhood would also benefit from temporary access to Manning Avenue (CSAH 15) through the southeast portion of Easton Village. However, this access will be closed off at some point the future. Therefore, Village Parkway, with connection to 30th Street and eventually Trunk Highway 5 (TH 5) to the north will serve as the primary access.

The proposed Village Park Preserve subdivision is the third subdivision in the Village Planning Area to submit Preliminary Plans. In terms of utilities, the subject parcels have access to City watermain within the 30th Street right-of-way north of Heritage Farms, as well as at the sanitary sewer lift station site immediately east of Reid Park. Existing sanitary sewer facilities are also located at the lift station site and will need to be extended to the subdivision to serve the residential development. As proposed, both the sewer and water services enter the subdivision in the southwestern portion of the development. Watermain is also extended to the existing watermain in 30th Street, providing a hydrological loop.

The proposed subdivision also includes a series of outlots that will provide for storm water management, open space, trails and a significant expansion of Reid Park. It should be noted that all of the outlots that are planned for parkland or storm water use will be deeded to the City.

According to the project narrative, the applicant is proposing to construct homes within the subdivision in two phases, with each phase consisting of 50+ residential lots. In addition, the narrative notes that the site will be mass graded during the first phase of construction. The mass grading would include preparation of the streets and storm water facilities. As the site is relatively flat, it is the goal of the applicant to balance the site with as much on-site material as possible.

PLANNING AND ZONING ISSUES

According to the City's Comprehensive Plan, the Village Park Preserve site is guided for Village Urban Low Density (Schiltgen Farms parcel) and Rural Area Development (Holliday parcel). While presenting a Sketch Plan for the proposed development, the applicant applied for a Comprehensive Plan Amendment for the Holliday parcel to change the land use guidance from Rural Area Development (RAD) to Village Urban Low Density (V-LDR). The Comprehensive Plan Amendment was unanimously recommended for approval by the Planning Commission on 6/30/14 and unanimously approved by the City Council on 7/15/14. The Comprehensive Plan Amendment has since been submitted to the Metropolitan Council for consideration after undergoing adjacent jurisdictional review. In order for the applicant to apply for a Final Plat, the Comprehensive Plan Amendment must be approved by the Metropolitan Council in advance of any Final approvals by the City. In addition, the site will be required to be zoned LDR – Low Density Residential prior to Final Plat approval. The overall subdivision plan has therefore been prepared in order to comply with the standards for the LDR zoning district in terms of lot size, lot widths, building setbacks, and other design criteria. The applicant notes in the project narrative that no variances are being sought for the proposed subdivision.

The arrangement of lots and blocks generally follow a grid-like pattern with the Village Parkway minor collector road running north-south through the center of the subdivision. The eastern half of the subdivision has three east-west streets, while the western half has two east-west streets. The proposed spacing of the local roads that intersect with the minor collector road generally meet the recommended spacing of 330 feet for neighborhood collector roads. It should also be noted that the

proposed subdivision includes three “eyebrow” or mini cul-de-sacs, two of which are located in the northeast and northwest corners of the subdivision, while the third is located in the southern portion of the development with direct access to the minor collector road. All local streets have been designed to comply with the City’s current street standard with a 60-foot right-of-way and 28-foot wide street.

Sidewalks are planned on one side of all residential streets within the subdivision per the City standard. In addition, the Village Parkway minor collector road includes a 6-foot walk on the west side and an 8-foot bituminous trail on east side, which is consistent with the City’s typical section for the collector. Finally, a trail connection to the proposed expansion of Reid Park is planned in the southwest corner of the subdivision, providing direct access to recreational facilities.

A typical lot building plan (detail) is included as part of the attached subdivision packet, and each lot as depicted in the plans includes a description of the lot size, dimensions, and all required setbacks. All of the lots proposed meet the City’s minimum area requirement of 8,000 for single family lots in a LDR district, with the smallest lot (Lot 4, Block 3) proposed at 8,342 square feet. The largest lot in the development (Lot 7, Block 2) is proposed at 27,055 sq. ft. in size. The Project Narrative notes that the lots will average 11,421 square feet in size, which exceeds the minimum requirements by a fairly wide margin. As an overview of the proposed lots, 60 lots are designed at 65 feet in width with the rest designed at widths of 75 or 81 feet. Generally speaking, the smaller lots of the subdivision are located on the eastern side of the development, and the larger lots are located west of the collector within closer proximity to the proposed park area adjacent to Reid Park.

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

Zoning and Site Information:

- Existing Zoning: RT – Rural Development Transitional District
- Proposed Zoning: LDR - Urban Low Density Residential
- Total Site Area: 63.6 acres
- Total Residential Units: 104
- Proposed Density (Net): 2.20 units/acre

Proposed Lot Dimensional Standards:

- Min. Lot Width: 65 ft.
- Lot Depth: 130 ft. typical
- Lot Area: 8,000 sq. ft. (8,342 min. proposed)
- Front Yard Setback: 25 ft.
- Side Yard Setback: 5 ft.to garage, 10 ft. to living space
- Rear Yard Setback: 20 ft.

Proposed Street Standards:

- ROW Width – Local 60 ft. (per Subdivision Ordinance)
- Street Widths – Local: 28 ft.(per City standard)

The standards listed above are all in compliance with the applicable requirements from the City’s zoning and subdivision regulations. Based on Staff’s review of the preliminary plat, the applicant

has demonstrated compliance with all applicable code requirements at the level of detail that is required for a preliminary plat.

As with any new subdivision, the City Code requires that a portion of the plat be set aside for public park use. In this case, the applicant has indicated that the western portion of the subdivision adjacent to Reid Park will be dedicated to the City for this purpose. Dedication of the proposed parkland is supported by the Village Land Use Plan, as the land offers a significant expansion of Reid Park and is identified as ecologically sensitive land in the Village Alternative Urban Area-wide Review (AUAR), the adopted environmental review document for the Village Planning Area. As proposed, access to the park area will be provided via a trail connection in the southwestern portion of the development. As the internal trail connections to Reid Park have not yet been determined, additional work with the Park Commission to determine trail routing will be necessary once plans for the expansion area are further developed.

The Subdivision Ordinance requires 10% of the land in urban residential districts to be set aside as parkland, which in this case amount to 6.36 acres (10% of 63.6 acres of total land). The Preliminary Plat (PP-6) indicates that Outlot 2, the proposed park area adjacent to Reid Park, is 686,961 square feet, or 15.77 acres, which is 9.41 acres above the required amount. However, it should be noted that two wetland areas exist in the proposed parkland, the area of which would not be eligible to count toward dedication. Removing the wetland areas from the calculation results in a dedication amount of 15.37 acres. Based on the level of proposed dedication, it is clear that the amount of land provided would far exceed the required amount of dedication required under the Subdivision Ordinance. When the amount of parkland provided exceeds the amount required under the ordinance, it is not uncommon for the applicant to receive a credit for the amount above what is required. It should be noted that the applicant is working on two other residential subdivision in the Village Area. The first, Village Preserve, is a 97-unit single family residential subdivision on approximately 40 acres of land in the northern portion of the Village Planning Area that has received Preliminary Plat approval. The second planned residential subdivision is on land owned by Schiltgen Farms, Inc. across Lake Elmo Ave. (CSAH 17) from the Village Preserve residential subdivision. If provided with a credit for land dedication above and beyond the required amount, it stands to reason that the credit could be utilized for the other two residential projects in which the applicant is engaged. Staff has contacted the City Attorney to confirm that this type of credit can be utilized off-site and can be granted via an approved developers agreement with the City, and the City Attorney confirmed that it is possible and legal under state statutes. In this case, the parkland credit amount would result in 9.01 acres (15.37 acres provided – 6.36 acres required = 9.01 acres of credit).

REVIEW AND ANALYSIS

City Staff has reviewed the Village Park Preserve Preliminary Plat. 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, the City's Landscape Consultant, Washington County and the Metropolitan Airports Commission, 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:

- ***Comprehensive Plan***. Based upon the City's approval of the requested Comprehensive Plan Amendment for the Holliday parcel, the proposed subdivision is consistent with the

Lake Elmo Comprehensive Plan for this area. The net density proposed for the development fall within the range allowed for the Village Urban Low Density (V-LDR) land use category (1.5-2.49 units/acre). However, before proceeding to Final Plat, the applicant must receive formal approval of the Comp Plan Amendment from the Metropolitan Council (Condition #1). Other aspects of the Comprehensive Plan relate to the Village Park Preserve subdivision as follows:

- ***Density Calculation.*** The subject property is guided Village Urban Low Density Residential (V-LDR) in the Comprehensive Plan, which allows for a density range of 1.5-2.49 units/acre (net). The applicants have completed the density calculation using the methodology consistent with the City's adopted practice. The resulting net density calculation resulted in a net density of 2.20 units/acre (104 units/47.38 net developable acres). Therefore, the proposed subdivision is consistent with the density requirements of the Village Urban Low Density Residential land use category.

- ***Parks***. The City's Park Plan identifies proposed location for neighborhood parks based on the anticipated population that should be served by each park, the location of existing City parks and areas that are currently underserved. Given the proximity of the subject parcels to Reid Park, the Park Plan does not call for a neighborhood park in this portion of the Village Planning Area. However, it should be noted that the Village Land Use Plan encourages the dedication of the land east of Reid Park as a park expansion. In March of 2014, Gonyea Development presented plans for the Village Preserve subdivision in the northern portion of the Village Planning Area to the Park Commission. As part of the broader review of the area, Gonyea presented their plan to expand Reid Park as part of the Village Park Preserve subdivision. The Park Commission was supportive of this approach, as it would allow for the creation of a destination park in the Village. As part of the Village Park Preserve subdivision, the applicants are proposing to dedicate 15.77 acres of land for the expansion of Reid Park. Therefore, the Reid Park expansion would be consistent with the Village Land Use Plan and has been supported by the City's Park Commission.

- ***Water***. Water will be provided to this area via existing watermain along 30th Street. In addition, the applicant proposes to pull watermain from the lift station, creating a hydrological loop of the system. It should be noted that the City has more than adequate capacity to serve the future subdivision on the subject property as a result of the construction of Well #4. Well #4 was recently connected to the broader water system as a result of a recent watermain extension north of the Village Planning Area.

- ***Sanitary Sewer***. The Village Preserve subdivision will be served by the sanitary sewer extension from the existing facilities located at the Village lift station site to the west of the proposed development. All wastewater for the proposed development would be directed via forcemain to the Cottage Grove Ravine Interceptor located to the east of Lake Elmo Ave near Interstate-94, which is part of the regional wastewater treatment system administered by the Metropolitan

Council. It should be noted that there is adequate capacity of the wastewater system to serve the proposed residential development.

- ***Phasing/Staging Plan.*** According to the City's Wastewater Plan, the Village Planning Area is in Stage 1 of the City's planned service areas. Therefore, the proposed subdivision is consistent with the City's Staging Plan.

- ***Zoning***. The proposed zoning for the Village Preserve site will be LDR – Low Density Residential. The submitted development plans demonstrate compliance with the City's urban residential zoning requirements. Single family detached housing is a permitted use within the LDR zoning district.

- ***Subdivision Requirements***. The City's Subdivision Ordinance includes a fairly lengthy list of standards that must be met by all new subdivisions, and include requirements for blocks, lots, easements, erosion and sediment control, drainage systems, monuments, sanitary sewer and water facilities, streets, and other aspects of the plans. Staff, as well as the City Engineer, have not identified any existing conflicts with the City's Subdivision Ordinance.

- ***Infrastructure***. The developer will be required to construct all streets, sewer, water, storm water facilities, and other infrastructure necessary to serve the development.

- ***Phasing – Grading and Construction***. The applicant noted in the submitted Project Narrative (Attachment #2) that the subdivision will be split into two phases of construction with regards to residential. However, the applicant intends to mass grade the site as part of the first phase of construction. As part of Final Plat and final construction documents, more detailed plans with regards to phasing of all improvements will be required. The City Engineer has also requested additional detail related to the phasing of improvement for the next stage of City approval.

- ***Wetlands.*** The submitted narrative indicates that there are three wetland on the site. Two of the identified wetland are located within the proposed park area and will not be impacted by development activity. The third wetland, 782 square feet in size, is located on the Holliday parcel. The applicant has noted that this wetland is eligible for a de minimis exemption. The applicant is proposing to mitigate this smaller wetland through the Valley Branch Watershed District permitting process. Typical for any preliminary plat approval, the applicant will be required to meet all the rules and regulations of the Wetland Conservation Act and Valley Branch Watershed District (Condition #5).

- ***Trails.*** The applicants are proposing two segments of trails within the development. The first trail is contained within the Village Parkway minor collector road and is consistent with the City's approved typical section. The north-south trail segment will eventually provide direct pedestrian connection through Easton Village to the downtown area to the north and west. The second trail segment proposed is in the southwest portion of the development to provide connection to the proposed park expansion area next to Reid Park. Ultimately, staff would recommend that the Park Commission engage in a broader planning effort for the future use and design of Reid Park. Once a broader plan is

established, effective trail connections can be made to the existing park area to the west of the proposed development. In addition to the sidewalks proposed for the residential subdivision, there should be ample facilities and for walking, biking, and other recreational activities, offering effective connections to Reid Park and the broader Village Area.

- ***Landscaping and Tree Preservation***. The landscape and tree preservation plans have been reviewed by the City's consulting landscape architect, Stephen Mastey. Mr. Mastey's review memorandum related to the landscape and tree preservation plans is found in Attachment #9. Mastey has requested additional calculations pertaining to street trees. In addition, he makes several recommendations related to native ground cover and other plant selections. Staff is recommending that the Final Landscape Plan be updated per the recommendations of the landscape consultant (Condition #9). In addition, it should be noted that the Tree Preservation information is located on the provided Tree Survey (TS1). As noted in the tree survey, the proposed removal amount of significant trees is 22.6%, which is under the 30% removal threshold permitted under the City's Tree Preservation Ordinance. Finally, with regards to tree preservation, the submitted landscape plans do not include tree protective fencing or other measures around the trees to be saved on the site. As part of the Final Landscape Plan, staff would recommend that tree protection measures be included.

- ***Buffering.*** Buffering for the proposed subdivision is applicable in two areas:

    - ***Village Greenbelt.*** As part of the Village Land Use Plan, the southern and eastern portions of the development are guided for a greenbelt to create separation of residential lots from 30th Street and Manning Avenue. As proposed in the Village Park Preserve Preliminary Plat, this area is currently being utilized for stormwater management purposes, which is allowed under the City's Land Use Plan. In addition, the Village Land Use Plan does not specify a set distance for the greenbelt. As shown in the plans, the separation between residential lots and 30th Street right-of-way ranges from 40 feet up to 130 feet. The separation between residential lots and Manning Avenue is greater. In addition, the Landscape Plan includes a more robust planting schedule along the greenbelt area for both Manning Avenue and 30th Street, including coniferous and evergreen trees for year-round screening. A cross section of the proposed plantings is also provided.

    - ***Mcleod Property.*** In addition to the recommended buffering along 30th Street and Manning Avenue, buffering and screening around the Mcleod property in the southwest portion of the development, particularly the east boundary, is required as a condition of approval for the Comprehensive Plan Amendment (Resolution 2014-60 – Attachment #4). Once again, a more aggressive planting schedule has been provided around the east and north boundary of the Mcleod property, providing year round screening. In addition, the lots on the east side of the Mcleod parcel are of greater size and depth than most of the lots in the development. Nevertheless, staff would recommend that the applicant install an additional row of trees in the rear of 1-3, Block 1 to provide additional screening.

Staff is recommending that this requirement be included as a condition of approval (Condition #11).

- ***Streets***. The proposed street system has been designed to comply with all applicable subdivision requirements and City engineering standards. All of the proposed cul-de-sacs meeting the minimum turning radii specified under the Subdivision Ordinance. It should be noted that the City Engineer has recommended some modest changes related to the southernmost intersection of Street 2 and the minor collector road. This recommendation is included in as a requested modification in his report, to which staff is recommending be included as a condition of approval (Condition #3).

- ***Secondary Access.*** The primary access to the site will be provided from 30th Street via the Village Parkway minor collector road. Temporary secondary access may be achieved through the temporary connection to Manning Avenue (CSAH 15) through Easton Village. However, as this access is planned to be temporary, the permanent secondary access will be the connection of the Village Parkway minor collector road to Trunk Highway 5. The City must consider the timing of the closure of the temporary access on Manning Avenue with the broader interest of secondary access in mind. Coordination with both property owners/developers will continue in this regard.

- ***Street Names***. Staff is recommending that the street names for the proposed subdivision follow the Washington County street naming system. Staff has provided the applicant with proposed street names that are consistent with the Washington County system. In conversation with the applicant, they are amenable to the provided street names. Staff will work with the applicant to incorporate the correct street names in advance of Final Plat.

- ***City Engineer Review***. The City Engineer has provided the Planning Department with a detailed comment letter (Attachment #5) as a summary of his review of the Village Park Preserve Preliminary Plat. In addition, the City Engineer obtained additional review of the proposed storm water system through Brett Emmons of Emmons & Olivier Resources, Inc. In the memorandum, the Engineer highlights several of the critical path issues or modifications that must be resolved for the proposed design to move forward. One of these issues remains the discharge of storm water to a new location within a new culvert to the south of 30th Street. As a condition of approval (Condition #6), staff is recommending that the necessary permissions related to this stormwater discharge be provided in advance of Final Plat application. In addition, the other necessary revisions and modifications identified in the City Engineer's memorandum must also be made in advance of Final Plat (Condition #3).

- ***Washington County Review***. County Staff has reviewed the Village Park Preserve plat and provided specific comments to the City in a letter dated September 3, 2014 (Attachment #7). The most significant of the County's comments relate to the need for additional right-of-way for both Manning Avenue (CSAH 15) and the Manning-30th Street intersection. As a condition of approval (Condition #8), staff is recommending that the applicants observe all requirements in the review memorandum submitted by Washington County.

- ***Watershed Districts***. The project area lies within the Valley Branch Watershed District (VBWD). The Valley Branch Watershed District has not provided any formal comments for the proposed plat at this time. It should be noted that the developer must meet all the rules of the Wetland Conservation Act and VBWD and will need to secure permits from the VBWD in order to proceed with the development as planned (Condition #5).

- ***Fire Department Review***. The Fire Chief has reviewed the plat (Attachment #6) and found the hydrant locations to be sufficient in terms of spacing and operation effectiveness. In addition, the Fire Chief is requesting that the street names follow the Washington County street naming system. Staff will work with the applicant to update the street names per the input of the Fire Chief in advance of Final Plat.

- ***Metropolitan Airports Commission Review***. Neil Ralston of the Metropolitan Airports Commission (MAC) has submitted a review memorandum documenting the concerns and requests for additional work related to the subdivision's location adjacent to the Lake Elmo Airport. The memorandum is found in Attachment #8. The most critical issues relate to the design of the stormwater management facilities on the site. In addition, MAC is recommending that an aeronautical study be filed with the FAA for any structures over 35 feet in height utilized in the construction of the subdivision. Staff is recommending that the applicant address all review comments in the memorandum submitted by MAC as part of any final plat submittal (Condition #13).

Based on the above Staff report and analysis, Staff is recommending approval of the preliminary plat with 13 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. The recommended conditions are as follows:

Recommended Conditions of Approval:

1) The Metropolitan Council must approve the Comprehensive Plan Amendment for the Holliday parcel in advance of the City's consideration of an application for Final Plat for the Village Park Preserve Subdivision.

2) In advance of Final Plat application, the applicant shall provide adequate title evidence satisfactory to the City Attorney.

3) All required modifications to the plans as requested by the City Engineer in a review memorandum dated September 4, 2014 shall be incorporated into the plans prior to consideration of a Final Plat.

4) The Preliminary Plat approval is conditioned upon the applicant meeting all minimum City standards and design requirements.

5) The developer shall follow all of the rules and regulations spelled out in the Wetland Conservation Act, and shall acquire the needed permits from Valley Branch Watershed District prior to the commencement of any grading or development activity on the site.

6) Related to the proposed storm water discharge to the south, the applicant must provide written permission from all property owners of the affected parcels located south of the proposed 30th Street culvert consenting to the discharge location, volume and rate(s) in advance of submitting Final Plat.

7) The applicant shall be responsible for the submission of final plans and the construction of all improvements within the 30th Street right-of-way as required by the City and further described in the review memorandum from the City Engineer dated September 4, 2014.

8) The applicant shall observe all right-of-way and other requirements included in a review memorandum from Washington County dated September 3, 2014.

9) The Landscape Plan shall be updated per the recommendations of the City's Landscape Consultant, describe in a memo dated September 4, 2014. Tree protection measures for trees intended to be saved according to the submitted Tree Survey must be included in the Final Landscape Plan.

10) 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.

11) The applicant shall install an additional row of trees in the rear of Lots 1-3, Block 1 to provide additional screening for the eastern boundary of the Mcleod property to satisfy the condition of approval related to the requested Comprehensive Plan Amendment.

12) The developer shall obtain all required permits from Northern Natural Gas to perform construction work over the gas line that runs from north to south across this site.

13) The developer shall address any comments from Metropolitan Airport Commission documented in a review memorandum dated September 3, 2014 as part of a final plat submission for any portion of Village Park Preserve.

DRAFT FINDINGS

Staff is recommending that the Planning Commission consider the following findings with regards to the proposed Village Park Preserve Preliminary Plat:

- That the Village Park Preserve Preliminary Plat is consistent with the Lake Elmo Comprehensive Plan and the Future Land Use Map for this area conditioned upon receiving final approval for the Metropolitan Council for the Comprehensive Plan Amendment for the Holliday parcel.
- That the Village Park Preserve Preliminary Plat complies with the City's LDR- Urban Low Density Residential zoning district.
- That the Village Park Preserve Preliminary Plat complies with the City's Subdivision Ordinance.

- That the Village Park Preserve Preliminary Plat meets other City zoning ordinances, such as landscaping, tree preservation, erosion and sediment control, and other ordinances, except where noted in the conditions of approval or the attachments to this report.
- That the Village Park Preserve Preliminary Plat is consistent with the City's engineering standards provided the plans are updated to address the City Engineer's comments documented in a letter dated September 4, 2014.
- That the Village Park Preserve Preliminary Plat provides effective and safe pedestrian facilities, providing access to Reid Park and a future connection to downtown Lake Elmo, contributing to a walkable community as guided by the Village Land Use Plan.
- That the Village Park Preserve Preliminary Plat provides a significant expansion of Reid Park, as recommended by the Village Land Use Plan.
- That the Village Park Preserve residential subdivision will allow for the completion of the Village Parkway minor collector road from 30th Street to Easton Village, providing a critical transportation improvement needed for the Village Planning Area.

RECCOMENDATION:

Staff recommends that the Planning Commission recommend approval of the Village Park Preserve Preliminary Plat with the 13 conditions of approval as listed in the Staff report. Suggested motion:

"Move to recommend approval of the Village Park Preserve preliminary plat with the 13 conditions of approval as drafted by Staff based on the findings of fact listed in the Staff Report."

ATTACHMENTS:

1. Location Map
2. Application Form and Project Narrative
3. Village Park Preserve Preliminary Plat and Plans (34 Sheets)
4. Resolution 2014-60
5. City Engineer Review Memorandum, dated 9/4/14
6. Fire Chief Review Memorandum, dated 8/27/14
7. Washington County Review Letter, dated 9/3/14
8. Metropolitan Airports Commission Review Letter, dated 9/3/14
9. City's Landscape Consultant Review Memo, dated 9/4/14.

ORDER OF BUSINESS:

- Introduction.....Community Development Director
- Report by Staff..... City Planner
- Questions from the Commission..... Chair & Commission Members

- Open the Public Hearing .....Chair
- Close the Public Hearing.....Chair
- Discussion by the Commission.....Chair & Commission Members
- Action by the Commission..... Chair & Commission Members

Date Received: _____
Received By: _____
LU File #: _____

THE CITY OF LAKE ELMO

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

PRELIMINARY PLAT APPLICATION

[redacted] Park Preserve Village

Applicant: GWSA Land Development, LLC
Address: 10850 Old County Road 15, Suite 200, Plymouth, MN 55441
Phone #: 952-270-4473
Email Address: Craig@jonyencompany.com

Fee Owner: Mark Holliday
Address: PO Box 243, Lake Elmo, MN 55042
Phone #: 651-270-1318
Email Address: Markh85@aol.com

Property Location (Address and Complete (long) Legal Description: See Attached

General information of proposed subdivision: Preliminary Plat to incorporate +/- 14 acres with The Schiltgen Property as part of a 104 lot Single family development

Conducted pre-application meeting with Staff? ☒ Yes ☐ No

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: _____ Date: 8/6/14

City Use Only
Planning: Zoning District: _____
Reviewed by: _____ Date: _____
Subject to the following conditions: _____

Engineering: Reviewed by: _____ Date: _____
Subject to the following conditions: _____

THE CITY OF
LAKE ELMO

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

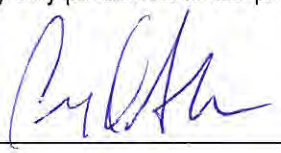
ACKNOWLEDGEMENT OF RESPONSIBILITY

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  Date 8/6/14

Name of applicant CRAIG ALLEN Phone 952-270-4493
(Please Print)

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

_____

_____

_____

THE CITY OF
LAKE ELMO

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

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 Craig Allen, GWSA Land Development, LLC
(Please Print)

Street address/legal description of subject property See Attached

Signature

8/6/14
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.

THE CITY OF
LAKE ELMO

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

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 PETER J. SCHILTGEN
(Please Print)

Street address/legal description of subject property _____

_____

_____

_____

_____

Peter J Schiltgen 8-19-14
Signature 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.

Schiltgen Farms Property Description – Manning:

The land referred to in this Commitment is situated in the County of Washington, State of Minnesota, and is described as follows:

The North 50 acres of the South Half of the Southeast Quarter of Section 13, Township 29 North, Range 21 West, Washington County, Minnesota, except that part which lies easterly of the following described line: Commencing at the southeast corner of said Southeast Quarter; thence South 88 degrees 45 minutes 30 seconds West along the South line of said Southeast Quarter, 159.73 feet (bearings are based on the Washington County Coordinate System); thence North 1 degree 14 minutes 30 seconds West, 33 feet, thence North 43 degrees 59 minutes 50 seconds East, 142.10 feet to the point of beginning of the line to be described; thence North 0 degrees 45 minutes 51 seconds West, 1188.14 feet to said North line of said South Half of the Southeast Quarter and said line there terminating.

Abstract Property.

THE CITY OF
LAKE ELMO

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

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 MARK HOLLIDAY
(Please Print)

Street address/legal description of subject property See Attached

Signature

8-12-14
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.

Mark Holliday Property Description:

The land referred to in the Commitment is situated in Washington County, State of Minnesota and is described as follows:

The South 498.6 feet of the South Half of the Southeast Quarter (S1/2 of SE1/4); Section Thirteen (13), Township Twenty Nine North (29N.), Range Twenty-one West (21W.); except the West 1273.0 feet of the South Half of the Southeast Quarter of said Section Thirteen (13). And excepting therefrom that portion of the above tract conveyed to the County of Washington by that certain Quit Claim Deed dated March 30, 1987, and filed of record in the Office of the Washington County Recorder on April 2, 1987 as Document No. 535377.

Abstract Property.

VILLAGE PARK PRESERVE
Development Narrative
September 2, 2014

Developer Introduction:

GWSA LAND DEVELOPMENT, LLC.
Craig Allen
10850 Old County Road 15
Suite 200
Lake Elmo, Minnesota 55441
Telephone: 952-270-4473
Email: craig@gonyeacompany.com

The developer is proposing a community of 104 single family homes on +/- 63.6 acres of land located on the west side of Manning Avenue North (CASH15), north of 30th Street North. The Schiltgen parcel and the Holliday parcel comprise the 63.6 acres of land. This proposed residential development will consist of higher end single family homes. It is anticipated that these homes will range in price from $400,000 to $650,000. The development is located in an area of Lake Elmo with easy access to the transportation system. This will provide the future home owners a secluded place to live that is located within minutes of all the amenities Lake Elmo has to offer with the regional facilities of the larger metropolitan area.

The project is anticipated to be constructed in two phases, of 50-60 lots per phase. The primary access is the proposed Village Parkway from 30th Street North. Over 15.7 acres of land is proposed to be dedicated as parkland to add to the existing Reid Park. A trail connection to the park area is proposed in the southwest corner. Over seventy five percent of the homes in the community will have a walkout basement. The project is located within the Stillwater School District #834.

Development Team:

Civil Engineering, Surveying & Land Planning
Sathre-Bergquist, Inc.
Robert S. Molstad, P.E.
David B. Pemberton, P.L.S.
150 South Broadway
Wayzata, Minnesota 55391
Telephone: 952-476-6000
Facsimile: 952-476-0104
Email: molstad@sathre.com
Email: pemberton@sathre.com

Wetland & Biological Sciences
Kjolhaug Environmental Services
Melissa Barrett
26105 Wild Rose Lane
Shorewood, MN 55331
Telephone: 952-401-8757
Email: Melissa@kjolhaugenv.com

Soil Sciences
Haugo GeoTechnical Services
Paul Haugo
13570 Grove Drive #278
Maple Grove, MN 55311
Telephone: (612) 554-4829
Email: p.haugo@gmail.com

Property Ownership:

Per Schedule A of Title Commitment No. HB-26627A (northerly property)

The North 50 acres of the South Half of the Southeast Quarter of Section 13, Township 29 North, Range 21 West, Washington County, Minnesota, except that part which lies easterly of the following described line:

Commencing at the southeast corner of said Southeast Quarter; thence South 88 degrees 45 minutes 30 seconds West along the South line of said Southeast Quarter, 159.73 feet (bearings are based on the Washington County Coordinate System); thence North 01 degree 14 minutes 30

seconds West, 33 feet, thence North 43 degrees 59 minutes 50 seconds East, 142.10 feet to the point of beginning of the line to be described; thence North 00 degrees 45 minutes 51 seconds West, 1188.14 feet to said North line of said South Half of the Southeast Quarter and said line there terminating.

Abstract Property.

Per Schedule A of Title Commitment No. HB-26880 (southerly property)

The South 498.6 feet of the South Half of the Southeast Quarter (S1/2 of SE1/4); Section Thirteen (13),Township Twenty Nine North (29N.), Range Twenty-one West (21W.); except the West 1273.0 feet of the South Half of the Southeast Quarter of said Section Thirteen (13). And excepting therefrom that portion of the above tract conveyed to the County of Washington by that certain Quit Claim Deed dated March 30,1987, and filed of record in the Office of the Washington County Recorder on April 2, 1987 as Document No. 535377.
Abstract Property.

Comprehensive Plan, Zoning, Density, & Variances:

The site consists of the Schiltgen parcel +/- 49 acres and the Holliday parcel +/- 14.8 acres. The Existing Land Use is classified as Rural Area Development. On the Village Land Use Plan, the planned Land Use for the Schiltgen parcel is Village Urban Low Density (V-LDR) and Rural Area Development (RAD) for the Holliday parcel.

The attached preliminary plat shows 104 single family lots that are a minimum width of 65 feet. There are 60 lots that are in the 65' lot width, 4 lots in the 75' lot width, and 40 lots that are 81' in width. The smallest lot area is L4B3 (65') – 8,342 sf and the largest lot area is L7B2 (81') at 27,055 sf, with an average lot area of 11,421 for the entire project.

Lake Elmo Zoning:

Both parcels are currently zoned RT. The Schiltgen parcel is currently planned as Village Urban Low Density (V-LDR) and the Holliday parcel is currently planned as Rural Area Development (RAD). A Comprehensive Plan Amendment to change the Holliday parcel from RAD to V-LDR was approved by City Council and is currently being reviewed by the MET Council. The V-LDR district has the following requirements:

V-LDR District

1.5 – 2.5 units per acre

Minimum Lot Area – 8,000 square feet
Minimum Width – 60 feet
Front Yard Setback – 25 feet
Side Yard Setback – 5 feet to garage and 10 feet to living space
Corner Yard Setback – 15 feet
Rear Yard Setback – 20 feet

Density:

Gross Site Area: 63.55 acres
Gross Density = 104/63.55 = 1.64 units per acre

Wetland Area: 0.40 acres
Proposed Park Area: 15.77 acres
Net Area: 63.55-0.40-15.77 = 47.38 acres
Net Density = 104/47.38 = 2.2 units per acre

Variances – No variances are proposed.

A preliminary plat lot area tabulation sheet is in Appendix A of this narrative.

Site Analysis:

The site is currently being used for agricultural purposes. Please refer to the ALTA Survey and the aerial photos. Utility service, sanitary sewer will be provided to the site as part of the proposed Trunk Sanitary Sewer project that will extend sewer service from the new lift station at Reid Park, north to the Site, the current plan is to provide sanitary sewer from the stub in the proposed Village Parkway, from the Easton Village project. A 12" trunk watermain will be installed with the proposed trunk sanitary sewer system, that will provide a watermain connection for the proposed development. Storm water will be managed and outlet from the site in accordance with the City and Watershed requirements. The proposed stormwater plan would outlet with a new storm sewer pipe down the west side of Manning Avenue North to the culvert about 850 feet south of 30th Street North. The site is within the Valley Branch Watershed District. Minor utilities (gas, electric, phone, and TV) will need to be extended to service the site.

The topography of the site is relatively flat on most of the site, 914 to 926 for the proposed development area. The proposed park area drops in elevation from 926 to +/- 892.

There are three existing wetlands on the site, two wetlands are within the proposed park area and no impacts are proposed by the residential development. The third wetland qualifies for a de minimis exemption and an application has been filed with Valley Branch Watershed District. Once approved the de minimis classification would allow us to fill without replacing.

The USDA Soil Survey of the project site indicates Antigo Silt Loams, Campia Silt Loams, and Mahtomedi Loamy Sand. The soils that are present consist of mostly moderately well drained loams and sandy loams with a moderate permeability.

Street Design:

"Village Park Preserve" proposes a north south parkway (Village Parkway), the parkway will be 32' B-B within an 80' ROW. The other public streets within the project would be 28' B-B, with a sidewalk along one side of the street, within a 60' ROW. The cul-de-sacs will have a 44' Radius to the back of curb. All streets will be constructed to the City of Lake Elmo standard street section.

Utility Services:

City sanitary sewer and watermain will need to be extended to the site, please see the notes above.

Site Grading:

The site grading is planned to begin in the fall of 2014. The project will be graded in one phase. The overall graded area is +/- 45.5 acres. We are proposing to grade all streets to the proposed hold downs and prepare corrected building pads for all home sites. We are creating five stormwater ponding areas and one infiltration area to meet the stormwater treatment requirements of the City and the Watershed. The excavation of on-site material is estimated at +/- 180,000 cy. It is our design objective to balance the site with on-site material, some import of suitable structural fill material may be necessary for building pad, street, and retaining wall construction. As the final design analysis is completed we will provide detailed construction plans for the project to the City of Lake Elmo.

Stormwater:

The stormwater facilities proposed in "Village Park Preserve" are illustrated on the enclosed preliminary plans. Runoff from the site will be directed to storm sewer inlet locations, collected and conveyed to the proposed treatment pond(s) and filtration area(s). The ponds and filtration areas will provide temporary storage of stormwater runoff, treatment of stormwater and sediment removal. The stormwater plan will provide adequate treatment and storage to meet the City of Lake Elmo and the Valley Branch Watershed District requirements.

Traffic:

"Village Park Preserve" proposes one primary access point (Village Parkway) off of 30th Street North.

Traffic Generation – (anticipate 10 trips per day per home site)
104 Lots = 1,040 trips per day

Trail System:

Six-foot concrete sidewalks are proposed along residential streets within the site. In addition, there are 8.5 foot trails proposed to promote neighborhood connectivity.

Woodland Areas & Protection:

I. Introduction

A current tree survey in accordance with City of Lake Elmo requirements has been completed for this site and is included in the submittal. The tree inventory plan is shown on the Erosion Control Plan. 25 trees were identified, per the City requirements.

II. Tree Species, Distribution and Size:

The site has 467.5 caliper inches of significant trees, with 100.0 caliper inches of exempt trees for a net total of 367.5 caliper inches. The trees located throughout the site. The species include Cherry, Box Elder, Hackberry, Ash, and a few others. A table containing data on the trees, as well as a map which shows tree location, species, size and condition, are shown in the preliminary plans, please see the Erosion Control Plan.

Tree Removal & Restitution:

The "Village Park Preserve" development will impact approximately 22.6% of the significant trees on the site. The development is under the 30% threshold.

Landscape Plan, Monuments, & Entrance:

This development will have a parkway access from 30th Street North. Many of the lots will have pond views or overlook views, due to the site topography. The stormwater ponds and treatment areas will have landscaping to create unique water treatment facilities for the proposed project. A custom entry monument may be designed and constructed at the proposed entrance. This will create a sense of luxury and livability for the new single family residents, while providing safer access to the site. Landscaping, monuments and other furnishings will be designed to conform to the Lake Elmo Branding and Theming Study.

Homeowner's Association and Restrictive Covenants:

The developer will prepare restrictive covenants and standards that will apply to this 104 lot project. The restrictive covenants will be tailored to the developer's vision of the project. Each home will be required to meet the specifics of building types, landscaping, and overall goals of the development.

A master HOA will be created for the "Village Park Preserve" project. This association will be in charge of the monumentation, entrance, landscaping, and infiltration basins. The HOA will also be responsible for maintenance issues within the subdivision. These may include special landscaping, mailboxes, signage, and other common elements.

APPENDIX A:

Village Park Preserve– Preliminary Plat Lot Area Summary

BLOCK 1	GROSS AREA				WETLAND AREA		NET AREA			
Lot 1	22,997	s.f.	0.53	acres	0	s.f.	22,997	s.f.	0.53	acres
Lot 2	15,466	s.f.	0.36	acres	0	s.f.	15,466	s.f.	0.36	acres
Lot 3	16,238	s.f.	0.37	acres	0	s.f.	16,238	s.f.	0.37	acres
Lot 4	21,309	s.f.	0.49	acres	0	s.f.	21,309	s.f.	0.49	acres

Lot 5	15,634	s.f.	0.36	acres	0	s.f.	15,634	s.f.	0.36	acres
Lot 6	14,347	s.f.	0.33	acres	0	s.f.	14,347	s.f.	0.33	acres
Lot 7	12,999	s.f.	0.30	acres	0	s.f.	12,999	s.f.	0.30	acres
Lot 8	12,034	s.f.	0.28	acres	0	s.f.	12,034	s.f.	0.28	acres
Lot 9	11,518	s.f.	0.26	acres	0	s.f.	11,518	s.f.	0.26	acres
Lot 10	10,677	s.f.	0.25	acres	0	s.f.	10,677	s.f.	0.25	acres
Lot 11	13,329	s.f.	0.31	acres	0	s.f.	13,329	s.f.	0.31	acres
Lot 12	14,784	s.f.	0.34	acres	0	s.f.	14,784	s.f.	0.34	acres
Total	362,664	s.f.	8.33	acres	0	s.f.	362,664	s.f.	8.33	acres

BLOCK 2	**GROSS AREA**				**WETLAND AREA**		**NET AREA**			
Lot 1	18,200	s.f.	0.42	acres	0	s.f.	18,200	s.f.	0.42	acres
Lot 2	21,102	s.f.	0.48	acres	0	s.f.	21,102	s.f.	0.48	acres
Lot 3	16,406	s.f.	0.38	acres	0	s.f.	16,406	s.f.	0.38	acres
Lot 4	16,691	s.f.	0.38	acres	0	s.f.	16,691	s.f.	0.38	acres
Lot 5	18,012	s.f.	0.41	acres	0	s.f.	18,012	s.f.	0.41	acres
Lot 6	26,509	s.f.	0.61	acres	0	s.f.	26,509	s.f.	0.61	acres
Lot 7	27,055	s.f.	0.62	acres	0	s.f.	27,055	s.f.	0.62	acres
Lot 8	12,112	s.f.	0.28	acres	0	s.f.	12,112	s.f.	0.28	acres
Lot 9	12,164	s.f.	0.28	acres	0	s.f.	12,164	s.f.	0.28	acres
Lot 10	11,894	s.f.	0.27	acres	0	s.f.	11,894	s.f.	0.27	acres
Lot 11	10,988	s.f.	0.25	acres	0	s.f.	10,988	s.f.	0.25	acres
Lot 12	10,988	s.f.	0.25	acres	0	s.f.	10,988	s.f.	0.25	acres
Lot 13	10,988	s.f.	0.25	acres	0	s.f.	10,988	s.f.	0.25	acres
Lot 14	10,988	s.f.	0.25	acres	0	s.f.	10,988	s.f.	0.25	acres
Lot 15	13,012	s.f.	0.30	acres	0	s.f.	13,012	s.f.	0.30	acres
Total	474,218	s.f.	10.89	acres	0	s.f.	474,218	s.f.	10.89	acres

BLOCK 3	**GROSS AREA**				**WETLAND AREA**		**NET AREA**			
Lot 1	10,852	s.f.	0.25	acres	0	s.f.	10,852	s.f.	0.25	acres
Lot 2	8,813	s.f.	0.20	acres	0	s.f.	8,813	s.f.	0.20	acres
Lot 3	8,680	s.f.	0.20	acres	0	s.f.	8,680	s.f.	0.20	acres
Lot 4	8,342	s.f.	0.19	acres	0	s.f.	8,342	s.f.	0.19	acres

Lot 5	10,457	s.f.	0.24	acres	0	s.f.	10,457	s.f.	0.24	acres
Lot 6	10,407	s.f.	0.24	acres	0	s.f.	10,407	s.f.	0.24	acres
Lot 7	11,345	s.f.	0.26	acres	0	s.f.	11,345	s.f.	0.26	acres
Lot 8	13,467	s.f.	0.31	acres	0	s.f.	13,467	s.f.	0.31	acres
Lot 9	11,462	s.f.	0.26	acres	0	s.f.	11,462	s.f.	0.26	acres
Lot 10	10,266	s.f.	0.24	acres	0	s.f.	10,266	s.f.	0.24	acres
Lot 11	10,042	s.f.	0.23	acres	0	s.f.	10,042	s.f.	0.23	acres
Lot 12	8,862	s.f.	0.20	acres	0	s.f.	8,862	s.f.	0.20	acres
Lot 13	8,630	s.f.	0.20	acres	0	s.f.	8,630	s.f.	0.20	acres
Lot 14	8,450	s.f.	0.19	acres	0	s.f.	8,450	s.f.	0.19	acres
Lot 15	8,450	s.f.	0.19	acres	0	s.f.	8,450	s.f.	0.19	acres
Lot 16	8,450	s.f.	0.19	acres	0	s.f.	8,450	s.f.	0.19	acres
Total	313,950	s.f.	7.21	acres	0	s.f.	313,950	s.f.	7.21	acres

BLOCK 4	**GROSS AREA**				**WETLAND AREA**		**NET AREA**			
Lot 1	8,450	s.f.	0.19	acres	0	s.f.	8,450	s.f.	0.19	acres
Lot 2	8,827	s.f.	0.20	acres	0	s.f.	8,827	s.f.	0.20	acres
Lot 3	9,883	s.f.	0.23	acres	0	s.f.	9,883	s.f.	0.23	acres
Lot 4	11,251	s.f.	0.26	acres	0	s.f.	11,251	s.f.	0.26	acres
Lot 5	9,903	s.f.	0.23	acres	0	s.f.	9,903	s.f.	0.23	acres
Lot 6	10,166	s.f.	0.23	acres	0	s.f.	10,166	s.f.	0.23	acres
Lot 7	10,196	s.f.	0.23	acres	0	s.f.	10,196	s.f.	0.23	acres
Lot 8	9,903	s.f.	0.23	acres	0	s.f.	9,903	s.f.	0.23	acres
Lot 9	9,577	s.f.	0.22	acres	0	s.f.	9,577	s.f.	0.22	acres
Lot 10	8,915	s.f.	0.20	acres	0	s.f.	8,915	s.f.	0.20	acres
Lot 11	8,547	s.f.	0.20	acres	0	s.f.	8,547	s.f.	0.20	acres
Lot 12	8,999	s.f.	0.21	acres	0	s.f.	8,999	s.f.	0.21	acres
Lot 13	9,135	s.f.	0.21	acres	0	s.f.	9,135	s.f.	0.21	acres
Lot 14	9,135	s.f.	0.21	acres	0	s.f.	9,135	s.f.	0.21	acres
Lot 15	9,135	s.f.	0.21	acres	0	s.f.	9,135	s.f.	0.21	acres
Lot 16	9,135	s.f.	0.21	acres	0	s.f.	9,135	s.f.	0.21	acres
Total	302,314	s.f.	6.94	acres	0	s.f.	302,314	s.f.	6.94	acres

BLOCK	**GROSS AREA**	**WETLAND**	**NET AREA**

5						AREA				
Lot 1	9,240	s.f.	0.21	acres	0	s.f.	9,240	s.f.	0.21	acres
Lot 2	9,108	s.f.	0.21	acres	0	s.f.	9,108	s.f.	0.21	acres
Lot 3	9,020	s.f.	0.21	acres	0	s.f.	9,020	s.f.	0.21	acres
Lot 4	9,020	s.f.	0.21	acres	0	s.f.	9,020	s.f.	0.21	acres
Lot 5	9,262	s.f.	0.21	acres	0	s.f.	9,262	s.f.	0.21	acres
Lot 6	9,262	s.f.	0.21	acres	0	s.f.	9,262	s.f.	0.21	acres
Lot 7	8,675	s.f.	0.20	acres	0	s.f.	8,675	s.f.	0.20	acres
Lot 8	11,717	s.f.	0.27	acres	0	s.f.	11,717	s.f.	0.27	acres
Total	150,608	s.f.	3.46	acres	0	s.f.	150,608	s.f.	3.46	acres

BLOCK 6	GROSS AREA				WETLAND AREA		NET AREA			
Lot 1	11,333	s.f.	0.26	acres	0	s.f.	11,333	s.f.	0.26	acres
Lot 2	8,509	s.f.	0.20	acres	0	s.f.	8,509	s.f.	0.20	acres
Lot 3	9,388	s.f.	0.22	acres	0	s.f.	9,388	s.f.	0.22	acres
Lot 4	10,729	s.f.	0.25	acres	0	s.f.	10,729	s.f.	0.25	acres
Lot 5	9,749	s.f.	0.22	acres	0	s.f.	9,749	s.f.	0.22	acres
Lot 6	11,229	s.f.	0.26	acres	0	s.f.	11,229	s.f.	0.26	acres
Total	121,874	s.f.	2.80	acres	0	s.f.	121,874	s.f.	2.80	acres

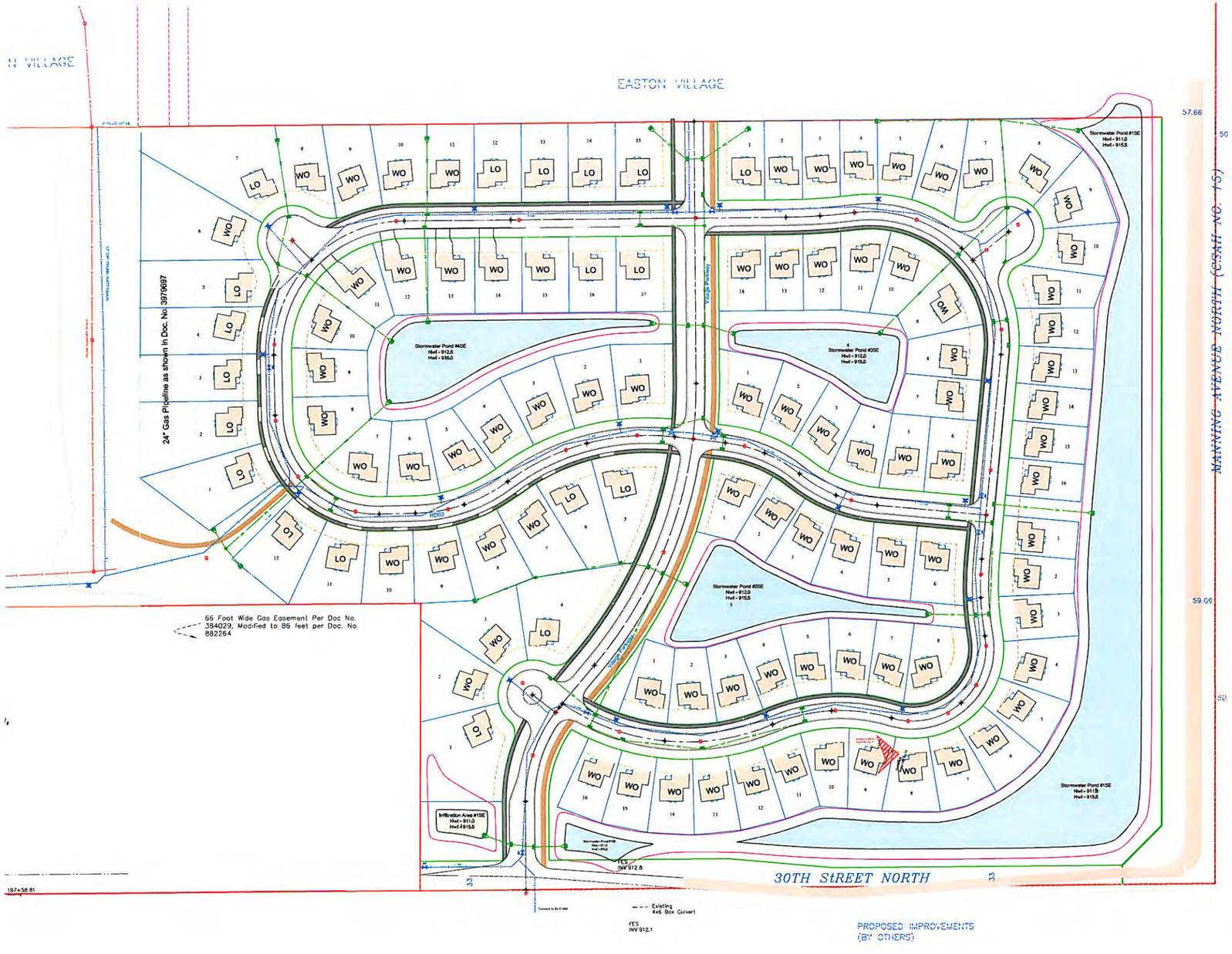
BLOCK 7	GROSS AREA				WETLAND AREA		NET AREA			
Lot 1	11,671	s.f.	0.27	acres	0	s.f.	11,671	s.f.	0.27	acres
Lot 2	9,380	s.f.	0.22	acres	0	s.f.	9,380	s.f.	0.22	acres
Lot 3	9,270	s.f.	0.21	acres	0	s.f.	9,270	s.f.	0.21	acres
Lot 4	9,925	s.f.	0.23	acres	0	s.f.	9,925	s.f.	0.23	acres
Lot 5	9,342	s.f.	0.21	acres	0	s.f.	9,342	s.f.	0.21	acres
Lot 6	10,430	s.f.	0.24	acres	0	s.f.	10,430	s.f.	0.24	acres
Lot 7	9,667	s.f.	0.22	acres	0	s.f.	9,667	s.f.	0.22	acres
Lot 8	10,140	s.f.	0.23	acres	0	s.f.	10,140	s.f.	0.23	acres
Lot 9	11,087	s.f.	0.25	acres	0	s.f.	11,087	s.f.	0.25	acres
Lot 10	11,343	s.f.	0.26	acres	0	s.f.	11,343	s.f.	0.26	acres
Lot 11	9,609	s.f.	0.22	acres	0	s.f.	9,609	s.f.	0.22	acres
Lot 12	8,579	s.f.	0.20	acres	0	s.f.	8,579	s.f.	0.20	acres
Lot 13	8,454	s.f.	0.19	acres	0	s.f.	8,454	s.f.	0.19	acres
Lot 14	10,400	s.f.	0.24	acres	0	s.f.	10,400	s.f.	0.24	acres
Total	278,594	s.f.	6.40	acres	0	s.f.	278,594	s.f.	6.40	acres

BLOCK 8	GROSS AREA				WETLAND AREA		NET AREA			
Lot 1	12,831	s.f.	0.29	acres	0	s.f.	12,831	s.f.	0.29	acres
Lot 2	11,279	s.f.	0.26	acres	0	s.f.	11,279	s.f.	0.26	acres
Lot 3	11,279	s.f.	0.26	acres	0	s.f.	11,279	s.f.	0.26	acres
Lot 4	11,189	s.f.	0.26	acres	0	s.f.	11,189	s.f.	0.26	acres
Lot 5	10,164	s.f.	0.23	acres	0	s.f.	10,164	s.f.	0.23	acres
Lot 6	9,736	s.f.	0.22	acres	0	s.f.	9,736	s.f.	0.22	acres
Lot 7	11,407	s.f.	0.26	acres	0	s.f.	11,407	s.f.	0.26	acres
Lot 8	11,408	s.f.	0.26	acres	0	s.f.	11,408	s.f.	0.26	acres
Lot 9	10,606	s.f.	0.24	acres	0	s.f.	10,606	s.f.	0.24	acres
Lot 10	10,632	s.f.	0.24	acres	0	s.f.	10,632	s.f.	0.24	acres
Lot 11	10,546	s.f.	0.24	acres	0	s.f.	10,546	s.f.	0.24	acres
Lot 12	9,965	s.f.	0.23	acres	0	s.f.	9,965	s.f.	0.23	acres
Lot 13	10,530	s.f.	0.24	acres	0	s.f.	10,530	s.f.	0.24	acres
Lot 14	10,530	s.f.	0.24	acres	0	s.f.	10,530	s.f.	0.24	acres
Lot 15	10,530	s.f.	0.24	acres	0	s.f.	10,530	s.f.	0.24	acres
Lot 16	10,530	s.f.	0.24	acres	0	s.f.	10,530	s.f.	0.24	acres
Lot 17	12,481	s.f.	0.29	acres	0	s.f.	12,481	s.f.	0.29	acres
Total	371,286	s.f.	8.52	acres	0	s.f.	371,286	s.f.	8.52	acres

OUTLOT	GROSS AREA				WETLAND AREA		NET AREA			
1	14,417	s.f.	0.33	acres	0	s.f.	14,417	s.f.	0.33	acres
2	686,961	s.f.	15.77	acres	0	s.f.	686,961	s.f.	15.77	acres
3	50,900	s.f.	1.17	acres	0	s.f.	50,900	s.f.	1.17	acres
4	32,677	s.f.	0.75	acres	0	s.f.	32,677	s.f.	0.75	acres
5	45,019	s.f.	1.03	acres	0	s.f.	45,019	s.f.	1.03	acres
6	262,419	s.f.	6.02	acres	0	s.f.	262,419	s.f.	6.02	acres
Total	2,184,786	s.f.	50.16	acres	0	s.f.	2,184,786	s.f.	50.16	acres

R/W	GROSS AREA				WETLAND AREA		NET AREA			
	473,313	s.f.	10.87	acres	0	s.f.	473,313	s.f.	10.87	acres

TOTAL	GROSS AREA				WETLAND AREA		NET AREA			
	4,730,142	s.f.	108.59	acres	0	s.f.	4,730,142	s.f.		acres



LOCATION MAP

SHEET INDEX TABLE

SHEET	Description
SP	Site Plan
ALTA	ALTA/Existing Conditions
PP	Preliminary Plat
ST	Street Plan
UP	Utility Plan
GP	Grading Plan
EC	Erosion Control Plan
TS	Tree Survey
LP	Landscape Plan

PREPARED BY	PREPARED FOR
ENGINEER SATHRE-BERGQUIST, INC. 150 SOUTH BROADWAY WAYZATA, MINNESOTA 55391 PHONE: (952) 476-6000 FAX: (952) 476-0104 CONTACT ROBERT S. MOLSTAD P.E. EMAIL: MOLSTAD@SATHRE.COM	DEVELOPER GWLAND DEVELOPMENT CONTACT CRAIG ALLEN PHONE: (952) 546-5070 EMAIL: CRAIG@GONYEACOMPANY.COM

NORTH

100 50 0 50 100 200
SCALE IN FEET

EXISTING UTILITIES SHOWN ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES ARISING OUT OF HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.

DRAWING NAME	NO.	BY	DATE	REVISIONS
BASE_PARCEL E	01	ERJ	08/11/14	UTILITY VIEWPORT REVISIONS
DRAWN BY	02	ERJ	08/14/14	STORM REVISIONS
ERJ	03	ERJ	08/26/14	SHOW WETLAND B IMPACT
CHECKED BY				
RSM				
DATE				
08/08/14				

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I HEREBY CERTIFY THAT THIS PLAN OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Robert S Molstad

ROBERT S. MOLSTAD, P.E.
Date: 08/08/14 Lic. No. 26428

ENGINEERS SURVEYORS DESIGNERS PLANNERS

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
—

LAKE ELMO,
MINNESOTA

SITE PLAN
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

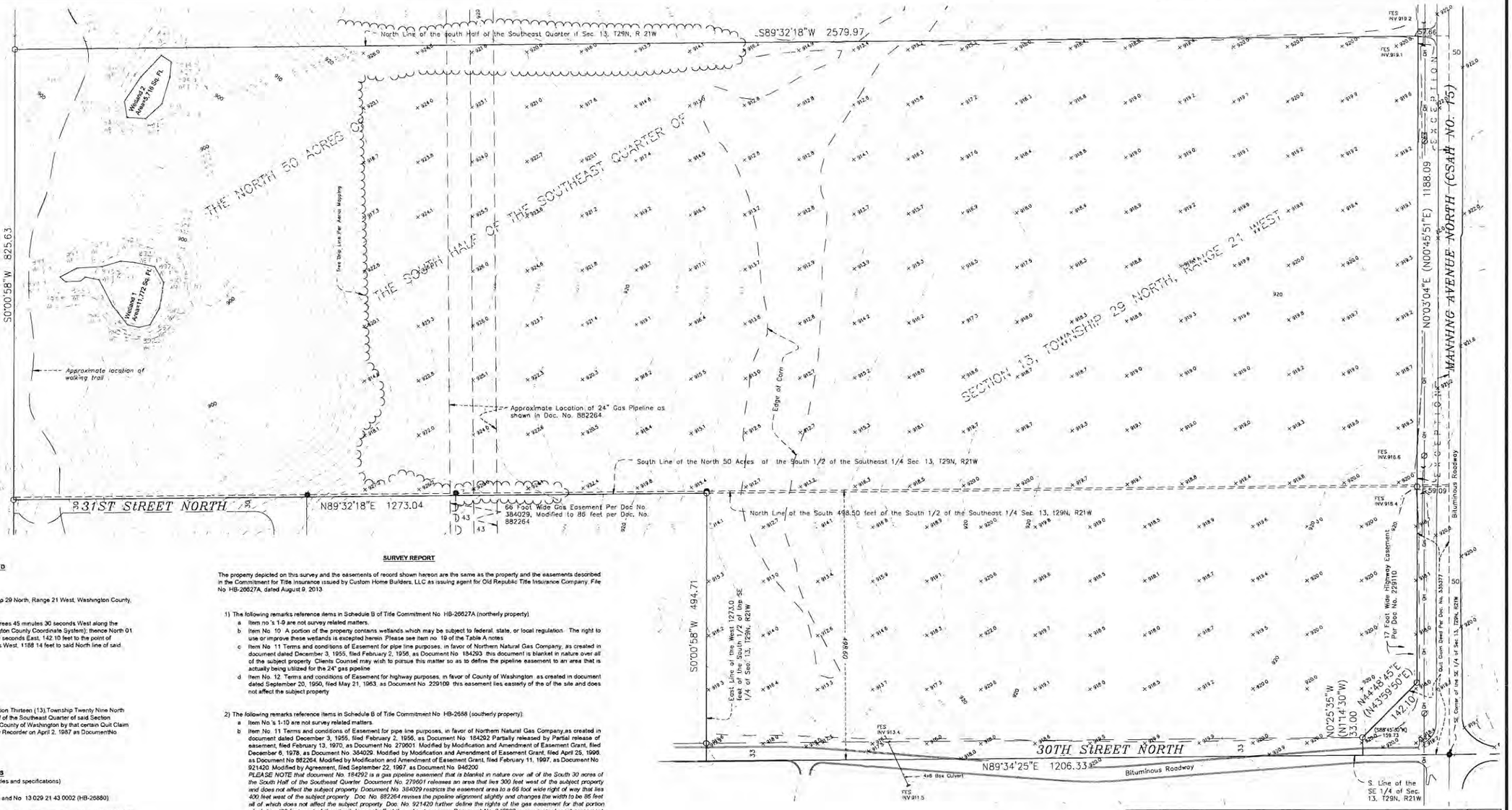
FILE NO.
3120-047
SP
SP

PARCEL E 3120-047

SURVEY LEGEND

- CATCH BASIN
- STORM MANHOLE
- SANITARY MANHOLE
- WATER MANHOLE
- HYDRANT
- GATE VALVE
- POWER POLE
- LIGHT POLE
- GUARDPOST
- GUY WIRE
- SIGN
- ELECTRIC TRANSFORMER
- TELEPHONE PEDESTAL
- ELECTRIC MANHOLE
- GAS VALVE
- TELEPHONE MANHOLE
- UTILITY MANHOLE
- ELECTRIC METER
- DENOTES 1/2 INCH X 14 INCH IRON MONUMENT SET MARKED "RLS 44565"
- DENOTES IRON MONUMENT FOUND
- (info) DENOTES RECORD MEASUREMENT
- STORM SEWER
- SANITARY SEWER
- WATERMAIN
- SANITARY SEWER SERVICE
- WATER SERVICE
- CULVERT
- ELC — UNDERGROUND ELECTRIC
- FO — UNDERGROUND FIBER OPTIC
- GAS — UNDERGROUND GAS
- TEL — UNDERGROUND TELEPHONE
- OH — OVERHEAD UTILITY
- CHAIN LINK FENCE
- CONCRETE CURB
- CONCRETE
- GAS METER

NORTH
Bearings Per Washington County Coordinate System (NAD 83-1986 Adj.)



DESCRIPTION OF PROPERTY SURVEYED

Per Schedule A of Title Commitment No. HB-26627A (northerly property)

The North 50 acres of the South Half of the Southeast Quarter of Section 13, Township 29 North, Range 21 West, Washington County, Minnesota, except that part which lies easterly of the following described line

Commencing at the southeast corner of said Southeast Quarter; thence South 88 degrees 45 minutes 30 seconds West along the South line of said Southeast Quarter, 159.73 feet (bearings are based on the Washington County Coordinate System); thence North 01 degree 14 minutes 30 seconds West, 33 feet, thence North 43 degrees 59 minutes 50 seconds East, 142.10 feet to the point of beginning of the line to be described; thence North 00 degrees 45 minutes 51 seconds West, 1188.14 feet to said North line of said South Half of the Southeast Quarter and said line there terminating.

Abstract Property

Per Schedule A of Title Commitment No. HB-26880 (southerly property)

The South 498.6 feet of the South Half of the Southeast Quarter (S1/2 of SE1/4), Section Thirteen (13),Township Twenty Nine North (29N), Range Twenty-one West (21W), except the West 1273.0 feet of theSouth Half of the Southeast Quarter of said Section Thirteen (13). And excepting therefrom that portion ofthe above tract conveyed to the County of Washington by that certain Quit Claim Deed dated March 30,1987 and filed of record in the Office of the Washington County Recorder on April 2, 1987 as DocumentNo 535377
Abstract Property

ALTA/ACSM OPTIONAL TABLE A NOTES

(The following items refer to Table A optional survey responsibilities and specifications)

2 Unassigned Address: Lake Elmo, Minnesota PID NO 13.029.21.43.0004 (HB-26627A) and No 13.029.21.43.0002 (HB-26880).

3 This property is contained in Zone X (area of minimal flooding) per Flood Insurance Rate Map, Community Panel No 27163C0355E, effective date of February 3, 2010

4 The Gross land area is 2,768,244 +/- Sq. Ft. or 63.55 +/- Acres. Wetland = 17,488+/- Sq. Ft. or 0.40 +/- Acres. ROW = 39,804+/- Sq. Ft. or 0.91+/- Acres. Net = 2,710,952+/- Sq. Ft. or 62.24+/- Acres.

5 Elevations are based on a MNDOT Geodedic Marker (C349) located on the west side of Manning Ave North approximately 2300 feet north of the subject property., 17 feet northwest of a metal shed and 4 feet east of a power pole having an elevation of 924.32 feet NAVD 1988. The contours where obtained from LIDAR mapping that was downloaded from the Minnesota Department of Natural Resources on September 20, 2013

6 The current Zoning for the subject property is RT (Rural Transitional) per the City of Lake Elmo's zoning map dated May 2013. The planning department informed us per a phone call that the property is in the process of changing to Village Low Density. Per this phone call, the setback, height, and density restrictions for this zoning designation are going to be as follows: SETBACKS - Front 25 feet, Side 10 feet living and 5 feet garage, Rear 20 feet; HEIGHT - 35 feet; DENSITY - 1.5 - 2 unit per acre

11 We have shown the location of utilities on the surveyed property by observed evidence only. Please Contact GOPHER STATE ONE CALL at 651-454-0002 for the location of underground utilities prior to any excavation

19 The Wetland delineation was preformed by Kjolhaug Environmental Service and the delineation flags were Located on October 1, 2013

SURVEY REPORT

The property depicted on this survey and the easements of record shown hereon are the same as the property and the easements described in the Commitment for Title Insurance issued by Custom Home Builders, LLC as issuing agent for Old Republic Title Insurance Company. File No. HB-26627A, dated August 9, 2013.

1) The following remarks reference items in Schedule B of Title Commitment No. HB-26627A (northerly property):
   a. Item no.'s 1-9 are not survey related matters.
   b. Item No. 10: A portion of the property contains wetlands which may be subject to federal, state, or local regulation. The right to use or improve these wetlands is excepted herein. Please see item no. 19 of the Table A notes.
   c. Item No. 11: Terms and conditions of Easement for pipe line purposes, in favor of Northern Natural Gas Company, as created in document dated December 3, 1955, filed February 2, 1956, as Document No. 184293; this document is blanket in nature over all of the subject property. Clients Counsel may wish to pursue this matter so as to define the pipeline easement to an area that is actually being utilized for the 24" gas pipeline.
   d. Item No. 12: Terms and conditions of Easement for highway purposes, in favor of County of Washington, as created in document dated September 20, 1950, filed May 21, 1963, as Document No. 229109; this easement lies easterly of the of the site and does not affect the subject property.

2) The following remarks reference items in Schedule B of Title Commitment No. HB-2658 (southerly property):
   a. Item No.'s 1-10 are not survey related matters.
   b. Item No. 11: Terms and conditions of Easement for pipe line purposes, in favor of Northern Natural Gas Company,as created in document dated December 3, 1955, filed February 2, 1956, as Document No. 184292 Partially released by Partial release of easement, filed February 13, 1970, as Document No. 279601. Modified by Modification and Amendment of Easement Grant, filed December 6, 1978, as Document No. 384029. Modified by Modification and Amendment of Easement Grant, filed April 25, 1995, as Document No 882264. Modified by Modification and Amendment of Easement Grant, filed February 11, 1997, as Document No 921420. Modified by Agreement, filed September 22, 1997, as Document No. 946200.
   PLEASE NOTE that document No. 184292 is a gas pipeline easement that is blanket in nature over all of the South 30 acres of the South Half of the Southeast Quarter. Document No. 279601 releases an area that lies 300 feet west of the subject property and does not affect the subject property. Document No. 384029 restricts the easement area to a 66 foot wide right of way that lies 400 feet west of the subject property. Doc. No. 882264 revises the pipeline alignment slightly and changes the width to be 86 feet all of which does not affect the subject property. Doc. No. 921420 further define the rights of the gas easement for that portion which lies 400 feet west of the site, it does not affect the subject property. Document No 946200 is an encroachment agreement to construct roads that lie southerly of 30th Street North, and does not affect the subject property.
   c. Item No. 12: Terms and conditions of Easement for highway purposes, in favor of County of Washington, as created in document dated September 14, 1950, filed May 21, 1963, as Document No. 229110. *This easement lies easterly of the of the westerly line of CSAH No. 15 and does not affect the subject property.*
   d. Item No. 13: Subject to 30th Street N. as laid out and traveled over the Southerly 33 feet more or less.
   Please note that we have shown the right-of-way of 30th Street North across the southerly part of the site. We have surveyed it as a right-of-way that extends 33 feet north from the center line of the historically traveled road. This is per the historic practice of providing 66 feet of right-of-way on roads that develop via prescriptive rights. Based upon contemporary case law this right-of-way could be construed to be of more or less width based upon a determination of what area is actually being utilized for highway purposes including drainage and possibly slopes.
   e. Item No. 14: Subject to CSAH No. 15/Manning Avenue N. as laid out and traveled over the Easterly 50 feet more or less.
   This item is contained within the area deeded to Washington County per quit claim deed filed as document no. 535377, and does not affect the subject property.

3) Conflicts such as (but not limited to): encroachments, protrusions, access, occupation, and easements and/or servitudes.
   a. Along the northerly boundary line there is a driving trail located between the subject properties field and the adjoiner to the north. We are not aware of who is using this trail.
   b. Along the westerly side of the site there are walking trails in the wooded area, we are not aware of who is using these trails.
   c. Please note there is a overlap of approximately 4 feet between the south line of the subject property and the north lines of the adjoining southerly properties. Clients Counsel may wish to pursue this mater so as to determine the Junior/Senor rights of this line.

CERTIFICATION

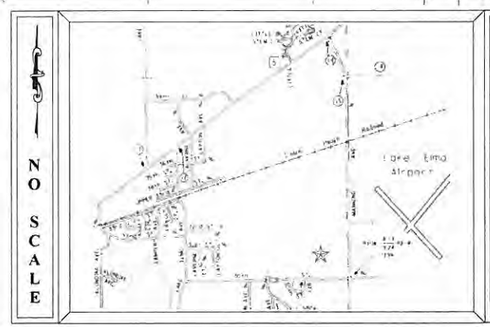
To Schiltgen Farms Inc., a corporation under the laws of Minnesota; and Custom Home Builders Title, LLC as Issueing Agent for Old Republic National Title Insurance Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS in 2011, and includes Items 1 - 4, 7a, 8, 9 and 11(a) of Table A thereof. The field work was completed on September 31, 2013.

Date of Plat or Map: October 16, 2013

Rory L. Synstelien, PLS Minnesota License No. 44565
rsynstelien@sathre.com

NO SCALE



VICINITY MAP

FIELD CREW	NO.	BY	DATE	REVISIONS
RLS		RLS	12-11-13	Added Wetland Areas to the Graphics
DRAWN BY				
RLS				
CHECKED BY				
DBP				
DATE				
10-17-13				

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100 50 0 50 100 200
SCALE IN FEET

ENGINEERS SURVEYORS DESIGNERS PLANNERS

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN 55391 (952) 476-6000

TWP 29 - RGE 21 - SEC 13
WASHINGTON COUNTY
BOUNDARY SURVEY.DWG

LAKE ELMO, MINNESOTA

ALTA/ACSM LAND TITLE SURVEY
PREPARED FOR:
GW LAND DEVELOPMENT
CUSTOM HOME BUILDERS TITLE, LLC
OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY

FILE NO. 3120-047 PARCEL E

1 / 1

VILLAGE PARK PRESERVE

LAKE ELMO, MINNESOTA

DESCRIPTION OF PROPERTY SURVEYED
(Per Schedule A of the herein referenced Title Commitment)

Per Schedule A of Title Commitment No. HB-26627A (northerly property)

The North 50 acres of the South Half of the Southeast Quarter of Section 13, Township 29 North, Range 21 West, Washington County, Minnesota, except that part which lies easterly of the following described line:

Commencing at the southeast corner of said Southeast Quarter; thence South 88 degrees 45 minutes 30 seconds West along the South line of said Southeast Quarter, 159.73 feet (bearings are based on the Washington County Coordinate System); thence North 01 degree 14 minutes 30 seconds West, 33 feet, thence North 43 degrees 59 minutes 50 seconds East, 142.10 feet to the point of beginning of the line to be described; thence North 00 degrees 45 minutes 51 seconds West, 1188.14 feet to said North line of said South Half of the Southeast Quarter and said line there terminating.

Abstract Property.

Per Schedule A of Title Commitment No. HB-26880 (southerly property)

The South 498.6 feet of the South Half of the Southeast Quarter (S1/2 of SE1/4); Section Thirteen (13),Township Twenty Nine North (29N.), Range Twenty-one West (21W.); except the West 1273.0 feet of theSouth Half of the Southeast Quarter of said Section Thirteen (13). And excepting therefrom that portion ofthe above tract conveyed to the County of Washington by that certain Quit Claim Deed dated March 30,1987, and filed of record in the Office of the Washington County Recorder on April 2, 1987 as DocumentNo. 535377.
Abstract Property.

GENERAL NOTES

1) Site Address: Unassigned, Lake Elmo, MN 55042,PID NO. 13.029.21.43.0004 (HB-26627A) and No. 13.029.21.44.0002 (HB-26880)

2) Flood Zone: Parcels are contained in Zone X (area of minimal flooding) per Flood Insurance Rate Map, Community Panel No. 27163C0355E, effective date of February 3, 2010.

3) Parcel Area: Gross- 2,768,244 Sq. Ft. - 63.55 Acres
Wetland- 17,488 Sq. Ft. - 0.40 Acres
ROW- 39,804 Sq. Ft. - 0.91 Acres
Net- 2,710,952 Sq. Ft. - 62.24 Acres

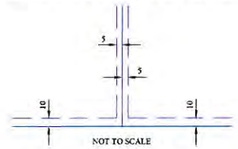
4) Benchmark: Elevations are based on MNDOT Geodedic Marker (C349) located on the west side of Manning Ave North approximately 2300 feet north of the subject property, 17 feet northwest of a metal shed and 4 feet east of a power pole having an elevation of 924.32 feet NAVD 1988. The contours where obtained from LIDAR mapping that was downloaded from the Minnesota Department of Natural Resources on September 20, 2013.

5) Zoning: The current Zoning for the subject property is RT (Rural Transitional) per the City of Lake Elmo's zoning map dated May 2013. The planning department informed us per a phone call that the property is in the process of changing to Village Low Density. Per this phone call, the setback, height, and density restrictions for this zoning designation are going to be as follows: SETBACKS - Front 25 feet, Side 10 feet living and 5 feet garage, Rear 20 feet; HEIGHT - 35 feet; DENSITY - 1.5 - 2 unit per acre.

6) Location of Utilities: We have shown the location of utilities on the surveyed property by observed evidence only.

7) Wetland: Kjolhaug Environmental Services were at the property on October 1, 2013.

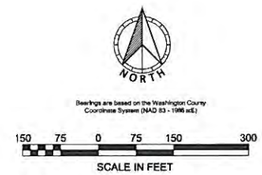
DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS.



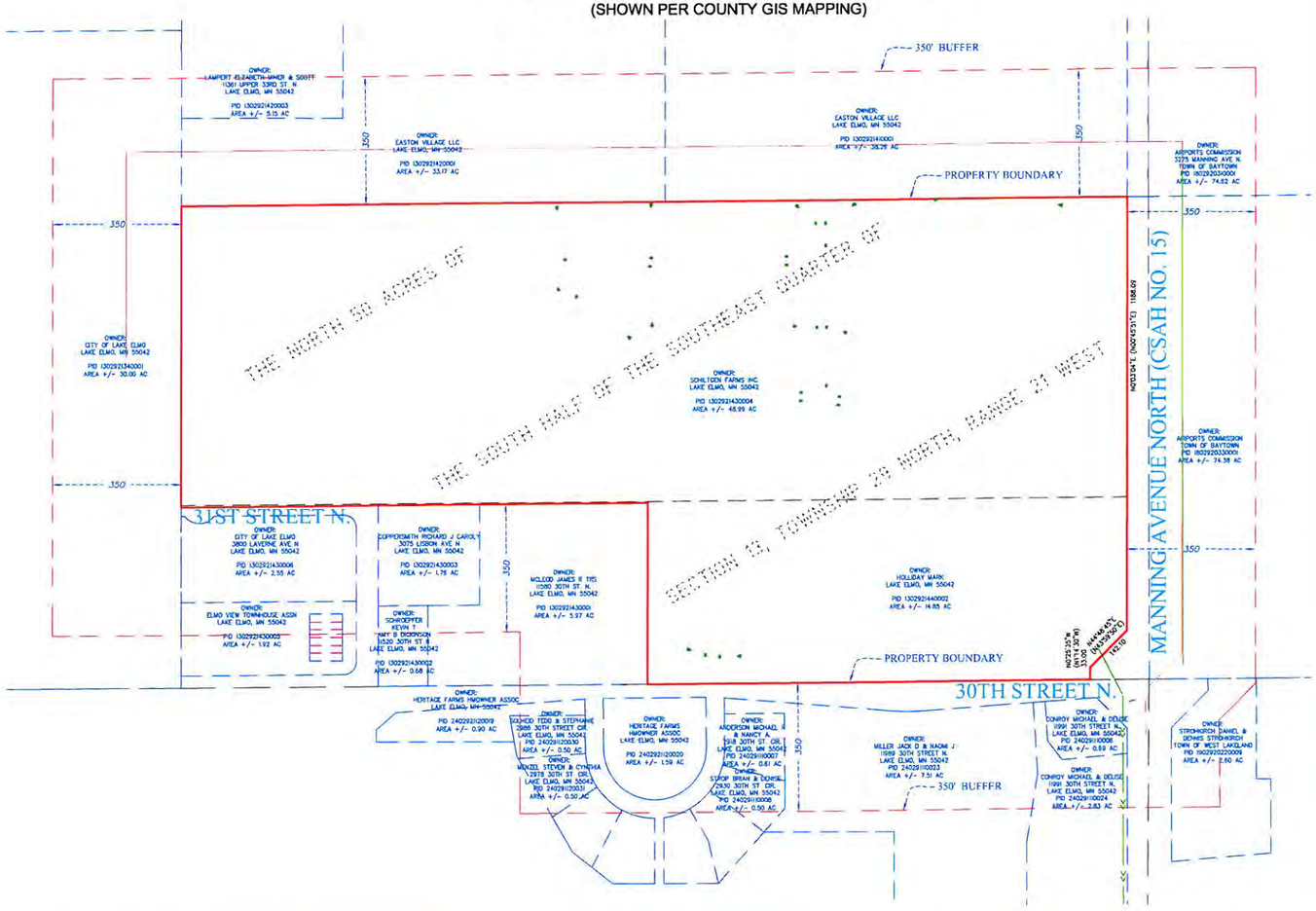
Being 5 feet in width and adjoining lot lines, unless otherwise indicated, and 10 feet in width and adjoining right of way lines, unless otherwise indicated, as shown on the plat.

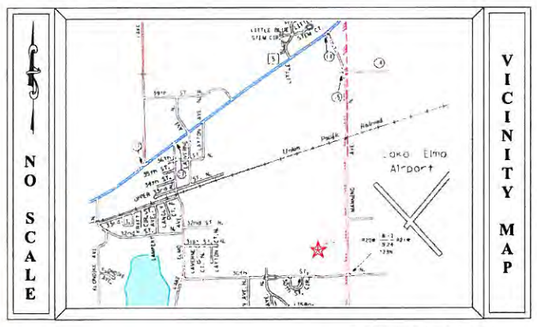
PREPARED BY	PREPARED FOR
ENGINEER SATHRE-BERGQUIST, INC. 150 SOUTH BROADWAY WAYZATA, MINNESOTA 55391 PHONE: (952) 476-6000 FAX: (952) 476-0104 CONTACT : Robert S. Molstad, P.E. EMAIL: molstad@sathre.com	DEVELOPER GW LAND DEVELOPMENT 10850 OLD COUNTY ROAD 15 SUITE 220 PLYMOUTH, MN 55441 CONTACT: Craig Allen PHONE: 952-270-4473 EMAIL: craig@gwmpasscompany.com
104 SINGLE FAMILY LOTS	

LOT AREA:	SIZE:	FRONT:	SIDE:	REAR:
7,000 SQ. FT.	50' AT FRONT SETBACK	25	5' GARAGE 10' LIVING 15' CORNER	20

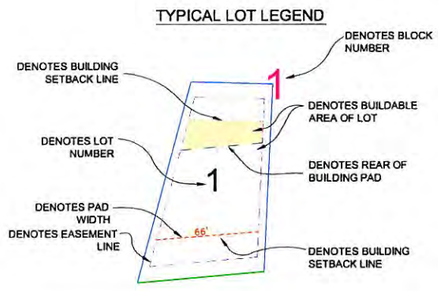


350' BUFFER IDENTIFYING LAND OWNERS AND BOUNDARY LINES FOR ADJOINING PARCELS
(SHOWN PER COUNTY GIS MAPPING)





TYPICAL LOT LEGEND



SURVEY LEGEND

- IRON PIPE SET
- IRON PIPE FOUND
- GUY WIRE–EXISTING
- POWER POLE–EXISTING
- TELEPHONE PEDESTAL–EXISTING
- OVERHEAD UTILITY–EXISTING
- WOODS–EXISTING
- EASEMENT LINE–PROPOSED
- SETBACK LINE–PROPOSED
- LOT WIDTH LINE–PROPOSED
- REAR BUILDING PAD LINE–PROPOSED
- GRAVEL–EXISTING
- BITUMINOUS–EXISTING
- EASEMENT–EXISTING
- BOUNDARY LINE–EXISTING
- ADJACENT PROPERTY LINE–EXISTING
- SECTION LINE–EXISTING
- CENTERLINE–PROPOSED
- RIGHT OF WAY–PROPOSED
- LOT LINE–PROPOSED
- CURVE RADIAL LINE–PROPOSED
- CONCRETE CURB AND GUTTER–PROPOSED
- BITUMINOUS SURFACE–EXISTING
- BITUMINOUS SURFACE–PROPOSED
- WETLAND–EXISTING
- GRAVEL–EXISTING
- CONCRETE SIDEWALK–PROPOSED
- POND–PROPOSED
- INFILTRATION–PROPOSED
- BLOCK LINE–PROPOSED

FIELD CREW	NO.	BY	DATE	REVISIONS
RLS				
DRAWN BY				
JML				
CHECKED BY				
RLS				
DATE				
08-04-14				

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

Dated this 7th day of August, 2014.

Rory L. Synstelien, PLS — Minnesota License No. 44565
rory@sathre.com

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

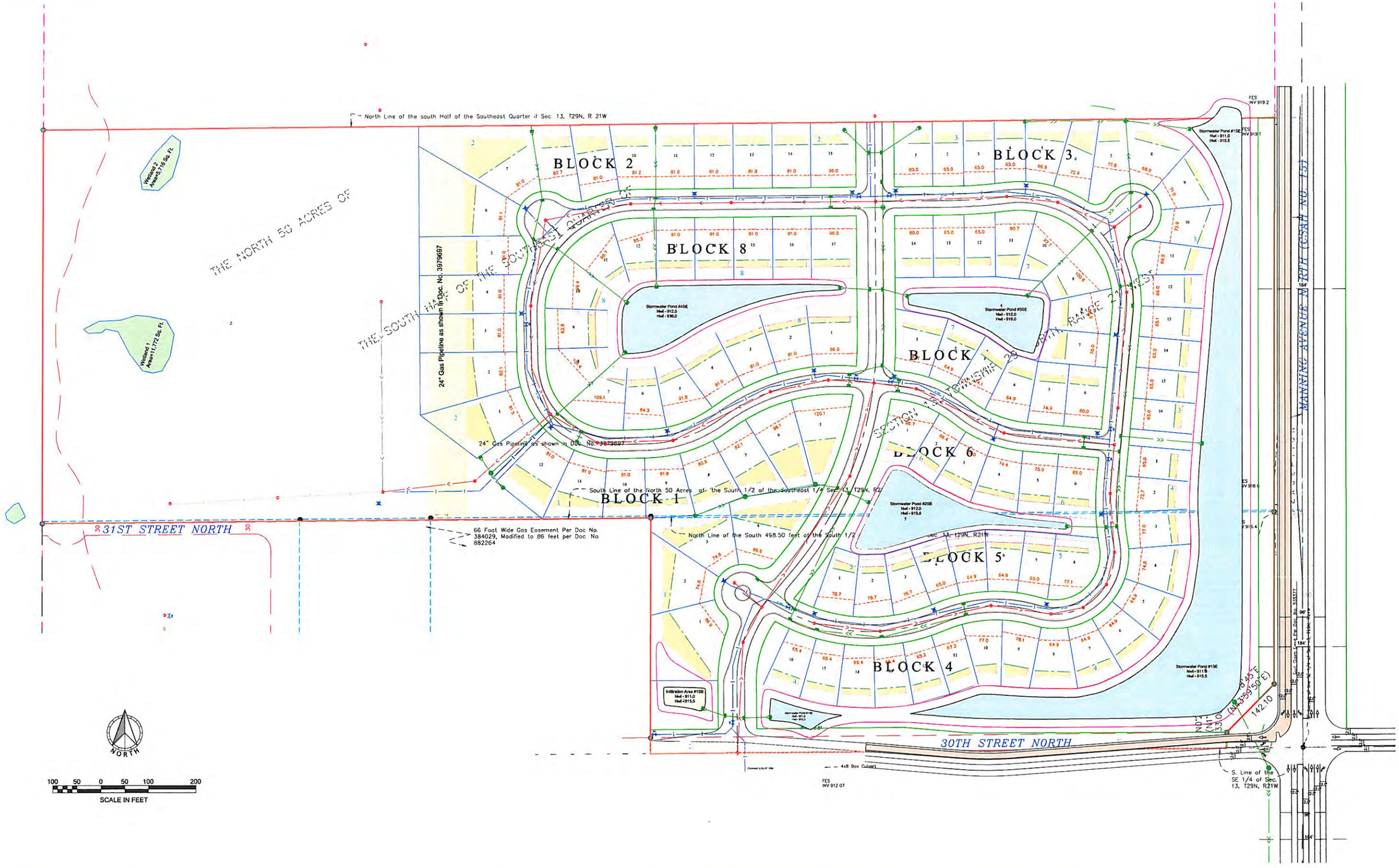
TWP.29 - RGE.21 - SEC.13
WASHINGTON COUNTY
PrePlat Parcel E.DWG

LAKE ELMO, MINNESOTA

PRELIMINARY PLAT
OF
VILLAGE PARK PRESERVE

FILE NO. 3120-047

PP-1
PP-6



FIELD CREW	NO.	BY	DATE	REVISIONS
RLS				
DRAWN BY				
JML				
CHECKED BY				
RLS				
DATE				
08-04-14				

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LAKE ELMO, MINNESOTA

PRELIMINARY PLAT OF VILLAGE PARK PRESERVE

FILE NO. 3120-047

PP-2
PP-6

SCALE IN FEET 50 25 0 25 50 100

NORTH

S89°32'18"W 2579.97

THE NORTH 50 ACRES OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER

S0100'58"W 825.63

2
686,961 SQ. FT.

24" Gas Pipeline as shown in Doc. No. 3979697

Stormwater Pond #4SE
Nwl - 912.5
Hwl - 916.0
56,896 SQ. FT.

N89°32'18"E 1273.04

31ST STREET NORTH

FIELD CREW	NO.	BY	DATE	REVISIONS
RLS				
DRAWN BY				
JML				
CHECKED BY				
RLS				
DATE				
08-04-14				

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Dated this 7th day of August, 2014.

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rory@sathre.com
Minnesota License No. 44565

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

TWP.29 - RGE.21 - SEC.13
WASHINGTON COUNTY
PrePlat Parcel E.DWG

LAKE ELMO, MINNESOTA

PRELIMINARY PLAT OF VILLAGE PARK PRESERVE

FILE NO. 3120-047

PP-3 / PP-6

S89°32'18"W 2579.97

NORTH

SCALE IN FEET 50 25 0 25 50 100

Stormwater Pond #1SE
Nwl - 911.0
Hwl - 915.5

Stormwater Pond #2SE
Nwl - 912.0
Hwl - 915.5

Stormwater Pond #3SE
Nwl - 912.0
Hwl - 916.0

Stormwater Pond #4SE
Nwl - 912.5
Hwl - 916.0
56,896 SQ. FT.

MANNING AVENUE (CSAH NO. 15)

184'

FIELD CREW	NO.	BY	DATE	REVISIONS
RLS				
DRAWN BY				
JML				
CHECKED BY				
RLS				
DATE				
08-04-14				

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Dated this 7th day of August, 2014.

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rory@sathre.com

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150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

TWP.29 - RGE.21 - SEC.13
WASHINGTON COUNTY
PrePlat Parcel E.DWG

LAKE ELMO, MINNESOTA

PRELIMINARY PLAT OF VILLAGE PARK PRESERVE

FILE NO. 3120-047

PP-4
PP-6

Stormwater Pond #2SE
Nwl - 912.0
Hwl - 915.5

Stormwater Pond #1SE
Nwl - 911.0
Hwl - 915.5

Infiltration Area #1SE
Nwl - 911.0
Hwl - 915.5

Stormwater Pond #1SE
Nwl - 911.0
Hwl - 915.5

30TH STREET NORTH

MANNING

Connect to Ex 6" WM

NORTH

50 25 0 25 50 100
SCALE IN FEET

FIELD CREW	NO.	BY	DATE	REVISIONS
RLS				
DRAWN BY				
JML				
CHECKED BY				
RLS				
DATE				
08-04-14				

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Dated this 7th day of August, 2014.

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TWP.29 - RGE.21 - SEC.13
WASHINGTON COUNTY
PrePlat Parcel E.DWG

LAKE ELMO, MINNESOTA

PRELIMINARY PLAT OF VILLAGE PARK PRESERVE

FILE NO. 3120-047

PP-5 / PP-6

LOT TAB SHEET

BLOCK 1	GROSS AREA				WETLAND AREA				NET AREA				WIDTH @ SETBACK		
Lot 1	22,997	s.f.	0.53	acres	0	s.f.	22,997	s.f.	0.53	acres	86.9	+/-	l.f.
Lot 2	15,466	s.f.	0.36	acres	0	s.f.	15,466	s.f.	0.36	acres	74.8	+/-	l.f.
Lot 3	16,238	s.f.	0.37	acres	0	s.f.	16,238	s.f.	0.37	acres	74.8	+/-	l.f.
Lot 4	21,400	s.f.	0.49	acres	0	s.f.	21,400	s.f.	0.49	acres	89.6	+/-	l.f.
Lot 5	15,634	s.f.	0.36	acres	0	s.f.	15,634	s.f.	0.36	acres	120.1	+/-	l.f.
Lot 6	14,347	s.f.	0.33	acres	0	s.f.	14,347	s.f.	0.33	acres	95.1	+/-	l.f.
Lot 7	12,999	s.f.	0.30	acres	0	s.f.	12,999	s.f.	0.30	acres	82.1	+/-	l.f.
Lot 8	12,034	s.f.	0.28	acres	0	s.f.	12,034	s.f.	0.28	acres	80.9	+/-	l.f.
Lot 9	11,518	s.f.	0.26	acres	0	s.f.	11,518	s.f.	0.26	acres	81.8	+/-	l.f.
Lot 10	10,677	s.f.	0.25	acres	0	s.f.	10,677	s.f.	0.25	acres	81	+/-	l.f.
Lot 11	13,329	s.f.	0.31	acres	0	s.f.	13,329	s.f.	0.31	acres	81	+/-	l.f.
Lot 12	14,784	s.f.	0.34	acres	0	s.f.	14,784	s.f.	0.34	acres	81	+/-	l.f.
Total	362,664	s.f.	8.33	acres	0	s.f.	362,664	s.f.	8.33	acres			

BLOCK 2	GROSS AREA				WETLAND AREA				NET AREA				WIDTH @ SETBACK		
Lot 1	18,200	s.f.	0.42	acres	0	s.f.	18,200	s.f.	0.42	acres	81.5	+/-	l.f.
Lot 2	21,102	s.f.	0.48	acres	0	s.f.	21,102	s.f.	0.48	acres	82.1	+/-	l.f.
Lot 3	16,406	s.f.	0.38	acres	0	s.f.	16,406	s.f.	0.38	acres	81	+/-	l.f.
Lot 4	16,691	s.f.	0.38	acres	0	s.f.	16,691	s.f.	0.38	acres	81	+/-	l.f.
Lot 5	18,012	s.f.	0.41	acres	0	s.f.	18,012	s.f.	0.41	acres	81	+/-	l.f.
Lot 6	26,509	s.f.	0.61	acres	0	s.f.	26,509	s.f.	0.61	acres	81	+/-	l.f.
Lot 7	27,055	s.f.	0.62	acres	0	s.f.	27,055	s.f.	0.62	acres	80.7	+/-	l.f.
Lot 8	12,112	s.f.	0.28	acres	0	s.f.	12,112	s.f.	0.28	acres	80.7	+/-	l.f.
Lot 9	12,164	s.f.	0.28	acres	0	s.f.	12,164	s.f.	0.28	acres	81	+/-	l.f.
Lot 10	11,894	s.f.	0.27	acres	0	s.f.	11,894	s.f.	0.27	acres	81.2	+/-	l.f.
Lot 11	10,988	s.f.	0.25	acres	0	s.f.	10,988	s.f.	0.25	acres	81	+/-	l.f.
Lot 12	10,988	s.f.	0.25	acres	0	s.f.	10,988	s.f.	0.25	acres	81	+/-	l.f.
Lot 13	10,988	s.f.	0.25	acres	0	s.f.	10,988	s.f.	0.25	acres	81	+/-	l.f.
Lot 14	10,988	s.f.	0.25	acres	0	s.f.	10,988	s.f.	0.25	acres	81	+/-	l.f.
Lot 15	13,012	s.f.	0.30	acres	0	s.f.	13,012	s.f.	0.30	acres	96	+/-	l.f.
Total	474,218	s.f.	10.89	acres	0	s.f.	474,218	s.f.	10.89	acres			

BLOCK 3	GROSS AREA				WETLAND AREA				NET AREA				WIDTH @ SETBACK		
Lot 1	10,852	s.f.	0.25	acres	0	s.f.	10,852	s.f.	0.25	acres	80	+/-	l.f.
Lot 2	8,813	s.f.	0.20	acres	0	s.f.	8,813	s.f.	0.20	acres	65	+/-	l.f.
Lot 3	8,680	s.f.	0.20	acres	0	s.f.	8,680	s.f.	0.20	acres	65	+/-	l.f.
Lot 4	8,342	s.f.	0.19	acres	0	s.f.	8,342	s.f.	0.19	acres	65	+/-	l.f.
Lot 5	10,457	s.f.	0.24	acres	0	s.f.	10,457	s.f.	0.24	acres	66.9	+/-	l.f.
Lot 6	10,407	s.f.	0.24	acres	0	s.f.	10,407	s.f.	0.24	acres	72.9	+/-	l.f.
Lot 7	11,345	s.f.	0.26	acres	0	s.f.	11,345	s.f.	0.26	acres	77.8	+/-	l.f.
Lot 8	13,467	s.f.	0.31	acres	0	s.f.	13,467	s.f.	0.31	acres	68.9	+/-	l.f.
Lot 9	11,462	s.f.	0.26	acres	0	s.f.	11,462	s.f.	0.26	acres	71	+/-	l.f.
Lot 10	10,266	s.f.	0.24	acres	0	s.f.	10,266	s.f.	0.24	acres	72.9	+/-	l.f.
Lot 11	10,042	s.f.	0.23	acres	0	s.f.	10,042	s.f.	0.23	acres	69.5	+/-	l.f.
Lot 12	8,862	s.f.	0.20	acres	0	s.f.	8,862	s.f.	0.20	acres	66	+/-	l.f.
Lot 13	8,630	s.f.	0.20	acres	0	s.f.	8,630	s.f.	0.20	acres	65.1	+/-	l.f.
Lot 14	8,450	s.f.	0.19	acres	0	s.f.	8,450	s.f.	0.19	acres	65	+/-	l.f.
Lot 15	8,450	s.f.	0.19	acres	0	s.f.	8,450	s.f.	0.19	acres	65	+/-	l.f.
Lot 16	8,450	s.f.	0.19	acres	0	s.f.	8,450	s.f.	0.19	acres	65	+/-	l.f.
Total	313,950	s.f.	7.21	acres	0	s.f.	313,950	s.f.	7.21	acres			

BLOCK 4	GROSS AREA				WETLAND AREA				NET AREA				WIDTH @ SETBACK		
Lot 1	8,450	s.f.	0.19	acres	0	s.f.	8,450	s.f.	0.19	acres	65	+/-	l.f.
Lot 2	8,827	s.f.	0.20	acres	0	s.f.	8,827	s.f.	0.20	acres	72.7	+/-	l.f.
Lot 3	9,883	s.f.	0.23	acres	0	s.f.	9,883	s.f.	0.23	acres	77	+/-	l.f.
Lot 4	11,251	s.f.	0.26	acres	0	s.f.	11,251	s.f.	0.26	acres	74.8	+/-	l.f.
Lot 5	9,903	s.f.	0.23	acres	0	s.f.	9,903	s.f.	0.23	acres	64.9	+/-	l.f.
Lot 6	10,166	s.f.	0.23	acres	0	s.f.	10,166	s.f.	0.23	acres	64.9	+/-	l.f.
Lot 7	10,196	s.f.	0.23	acres	0	s.f.	10,196	s.f.	0.23	acres	64.9	+/-	l.f.
Lot 8	9,903	s.f.	0.23	acres	0	s.f.	9,903	s.f.	0.23	acres	64.9	+/-	l.f.
Lot 9	9,577	s.f.	0.22	acres	0	s.f.	9,577	s.f.	0.22	acres	78.1	+/-	l.f.
Lot 10	8,915	s.f.	0.20	acres	0	s.f.	8,915	s.f.	0.20	acres	77	+/-	l.f.
Lot 11	8,547	s.f.	0.20	acres	0	s.f.	8,547	s.f.	0.20	acres	67.3	+/-	l.f.
Lot 12	8,999	s.f.	0.21	acres	0	s.f.	8,999	s.f.	0.21	acres	65.2	+/-	l.f.
Lot 13	9,135	s.f.	0.21	acres	0	s.f.	9,135	s.f.	0.21	acres	65.4	+/-	l.f.
Lot 14	9,135	s.f.	0.21	acres	0	s.f.	9,135	s.f.	0.21	acres	65.4	+/-	l.f.
Lot 15	9,135	s.f.	0.21	acres	0	s.f.	9,135	s.f.	0.21	acres	65.4	+/-	l.f.
Lot 16	9,135	s.f.	0.21	acres	0	s.f.	9,135	s.f.	0.21	acres	65.4	+/-	l.f.
Total	302,314	s.f.	6.94	acres	0	s.f.	302,314	s.f.	6.94	acres			

BLOCK 5	GROSS AREA				WETLAND AREA				NET AREA				WIDTH @ SETBACK		
Lot 1	9,240	s.f.	0.21	acres	0	s.f.	9,240	s.f.	0.21	acres	78.7	+/-	l.f.
Lot 2	9,108	s.f.	0.21	acres	0	s.f.	9,108	s.f.	0.21	acres	78.7	+/-	l.f.
Lot 3	9,020	s.f.	0.21	acres	0	s.f.	9,020	s.f.	0.21	acres	76.7	+/-	l.f.
Lot 4	9,020	s.f.	0.21	acres	0	s.f.	9,020	s.f.	0.21	acres	65	+/-	l.f.
Lot 5	9,262	s.f.	0.21	acres	0	s.f.	9,262	s.f.	0.21	acres	64.9	+/-	l.f.
Lot 6	9,262	s.f.	0.21	acres	0	s.f.	9,262	s.f.	0.21	acres	64.9	+/-	l.f.
Lot 7	8,675	s.f.	0.20	acres	0	s.f.	8,675	s.f.	0.20	acres	65	+/-	l.f.
Lot 8	11,717	s.f.	0.27	acres	0	s.f.	11,717	s.f.	0.27	acres	77.1	+/-	l.f.
Total	150,608	s.f.	3.46	acres	0	s.f.	150,608	s.f.	3.46	acres			

BLOCK 6	GROSS AREA				WETLAND AREA				NET AREA				WIDTH @ SETBACK		
Lot 1	11,333	s.f.	0.26	acres	0	s.f.	11,333	s.f.	0.26	acres	96.7	+/-	l.f.
Lot 2	8,509	s.f.	0.20	acres	0	s.f.	8,509	s.f.	0.20	acres	66.4	+/-	l.f.
Lot 3	9,388	s.f.	0.22	acres	0	s.f.	9,388	s.f.	0.22	acres	65	+/-	l.f.
Lot 4	10,729	s.f.	0.25	acres	0	s.f.	10,729	s.f.	0.25	acres	74.4	+/-	l.f.
Lot 5	9,749	s.f.	0.22	acres	0	s.f	9,749	s.f.	0.22	acres	75	+/-	l.f.
Lot 6	11,229	s.f.	0.26	acres	0	s.f.	11,229	s.f.	0.26	acres	85	+/-	l.f.
Total	121,874	s.f.	2.80	acres	0	s.f.	121,874	s.f.	2.80	acres			

BLOCK 7	GROSS AREA				WETLAND AREA				NET AREA				WIDTH @ SETBACK		
Lot 1	11,671	s.f.	0.27	acres	0	s.f.	11,671	s.f.	0.27	acres	80.1	+/-	l.f.
Lot 2	9,380	s.f.	0.22	acres	0	s.f.	9,380	s.f.	0.22	acres	64.9	+/-	l.f.
Lot 3	9,270	s.f.	0.21	acres	0	s.f.	9,270	s.f.	0.21	acres	74.1	+/-	l.f.
Lot 4	9,925	s.f.	0.23	acres	0	s.f.	9,925	s.f.	0.23	acres	84.9	+/-	l.f.
Lot 5	9,342	s.f.	0.21	acres	0	s.f.	9,342	s.f.	0.21	acres	74.9	+/-	l.f.
Lot 6	10,430	s.f.	0.24	acres	0	s.f.	10,430	s.f.	0.24	acres	80	+/-	l.f.
Lot 7	9,667	s.f.	0.22	acres	0	s.f.	9,667	s.f.	0.22	acres	70	+/-	l.f.
Lot 8	10,140	s.f.	0.23	acres	0	s.f.	10,140	s.f.	0.23	acres	86.9	+/-	l.f.
Lot 9	11,087	s.f.	0.25	acres	0	s.f.	11,087	s.f.	0.25	acres	100.8	+/-	l.f.
Lot 10	11,343	s.f.	0.26	acres	0	s.f.	11,343	s.f.	0.26	acres	97.7	+/-	l.f.
Lot 11	9,609	s.f.	0.22	acres	0	s.f.	9,609	s.f.	0.22	acres	80.7	+/-	l.f.
Lot 12	8,579	s.f.	0.20	acres	0	s.f.	8,579	s.f.	0.20	acres	65	+/-	l.f.
Lot 13	8,454	s.f.	0.19	acres	0	s.f.	8,454	s.f.	0.19	acres	65	+/-	l.f.
Lot 14	10,400	s.f.	0.24	acres	0	s.f.	10,400	s.f.	0.24	acres	80	+/-	l.f.
Total	278,594	s.f.	6.40	acres	0	s.f.	278,594	s.f.	6.40	acres			

BLOCK 8	GROSS AREA				WETLAND AREA				NET AREA				WIDTH @ SETBACK		
Lot 1	12,831	s.f.	0.29	acres	0	s.f.	12,831	s.f.	0.29	acres	96	+/-	l.f.
Lot 2	11,279	s.f.	0.26	acres	0	s.f.	11,279	s.f.	0.26	acres	81	+/-	l.f.
Lot 3	11,279	s.f.	0.26	acres	0	s.f.	11,279	s.f.	0.26	acres	81	+/-	l.f.
Lot 4	11,189	s.f.	0.26	acres	0	s.f.	11,189	s.f.	0.26	acres	81	+/-	l.f.
Lot 5	10,164	s.f.	0.23	acres	0	s.f.	10,164	s.f.	0.23	acres	91.8	+/-	l.f.
Lot 6	9,736	s.f.	0.22	acres	0	s.f.	9,736	s.f.	0.22	acres	84.3	+/-	l.f.
Lot 7	11,407	s.f.	0.26	acres	0	s.f.	11,407	s.f.	0.26	acres	109.1	+/-	l.f.
Lot 8	11,408	s.f.	0.26	acres	0	s.f.	11,408	s.f.	0.26	acres	101.4	+/-	l.f.
Lot 9	10,606	s.f.	0.24	acres	0	s.f.	10,606	s.f.	0.24	acres	83.8	+/-	l.f.
Lot 10	10,632	s.f.	0.24	acres	0	s.f.	10,632	s.f.	0.24	acres	99.4	+/-	l.f.
Lot 11	10,546	s.f.	0.24	acres	0	s.f.	10,546	s.f.	0.24	acres	98.7	+/-	l.f.
Lot 12	9,965	s.f.	0.23	acres	0	s.f.	9,965	s.f.	0.23	acres	85.3	+/-	l.f.
Lot 13	10,530	s.f.	0.24	acres	0	s.f.	10,530	s.f.	0.24	acres	81	+/-	l.f.
Lot 14	10,530	s.f.	0.24	acres	0	s.f.	10,530	s.f.	0.24	acres	81	+/-	l.f.
Lot 15	10,530	s.f.	0.24	acres	0	s.f.	10,530	s.f.	0.24	acres	81	+/-	l.f.
Lot 16	10,530	s.f.	0.24	acres	0	s.f.	10,530	s.f.	0.24	acres	81	+/-	l.f.
Lot 17	12,481	s.f.	0.29	acres	0	s.f.	12,481	s.f.	0.29	acres	96	+/-	l.f.
Total	371,286	s.f.	8.52	acres	0	s.f.	371,286	s.f.	8.52	acres			

OUTLOT	GROSS AREA				WETLAND AREA				NET AREA				WIDTH @ SETBACK		
1	14,417	s.f.	0.33	acres	0	s.f.	14,417	s.f.	0.33	acres	0	+/-	l.f.
2	686,961	s.f.	15.77	acres	0	s.f.	686,961	s.f.	15.77	acres	0	+/-	l.f.
3	50,900	s.f.	1.17	acres	0	s.f.	50,900	s.f.	1.17	acres	0	+/-	l.f.
4	32,677	s.f.	0.75	acres	0	s.f.	32,677	s.f.	0.75	acres	0	+/-	l.f.
5	45,019	s.f.	1.03	acres	0	s.f.	45,019	s.f.	1.03	acres	0	+/-	l.f.
6	262,419	s.f.	6.02	acres	0	s.f.	262,419	s.f.	6.02	acres	0	+/-	l.f.
Total	2,184,788	s.f.	50.16	acres	0	s.f.	2,184,786	s.f.	50.16	acres			

R/W	GROSS AREA				WETLAND AREA				NET AREA				WIDTH @ SETBACK		
	473,313	s.f.	10.87	acres	0	s.f.	473,313	s.f.	10.87	acres	0	+/-	l.f.

TOTAL	GROSS AREA				WETLAND AREA				NET AREA			
	4,730,142	s.f.	108.59	acres	0	s.f.	4,730,142	s.f.		acres		

FIELD CREW	NO.	BY	DATE	REVISIONS
RLS				
DRAWN BY				
JML				
CHECKED BY				
RLS				
DATE				
08-04-14				

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

Dated this 7th day of August, 2014.

Rory L. Synstelien, PLS — Minnesota License No. 44565
rory@sathre.com

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

TWP.29 - RGE.21 - SEC.13
WASHINGTON COUNTY
PrePlat Parcel E.DWG

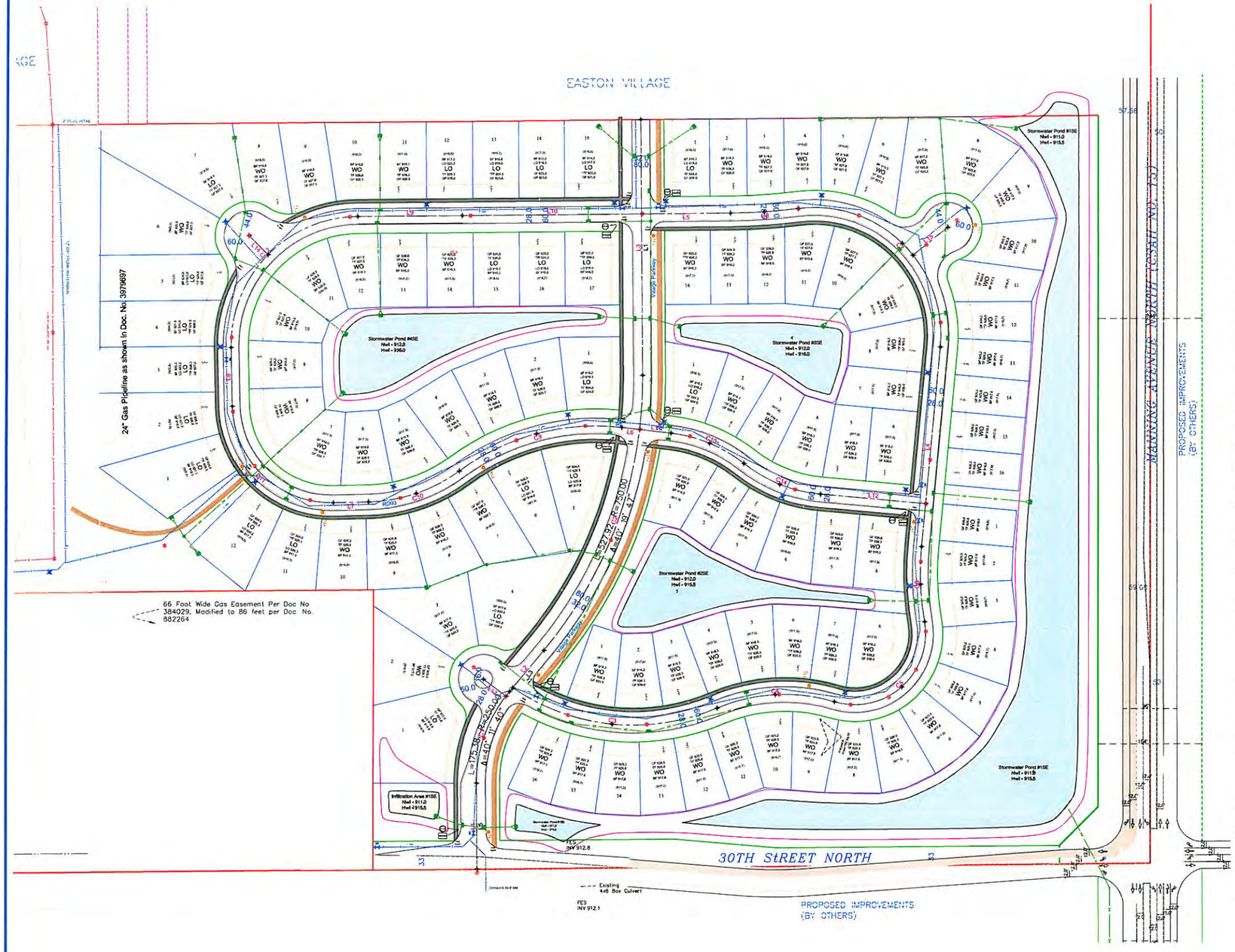
LAKE ELMO, MINNESOTA

PRELIMINARY PLAT
OF
VILLAGE PARK PRESERVE

FILE NO. 3120-047

PP-6

PP-6



RD1					
Number	Station	Radius	Length	Line/Chord Direction	Delta Angle
L1	0+00.00		151.61	N0° 25' 34.56"W	
C1	1+51.61	250.00	175.38	N19° 40' 15.37"E	40°11'40"
L2	3+26.99		94.53	N39° 46' 05.30"E	
C2	4+21.52	750.00	527.92	N19° 36' 11.65"E	40°19'47"
L3	9+49.44		449.62	N0° 33' 42.00"W	

RD 2					
Number	Station	Radius	Length	Line/Chord Direction	Delta Angle
C3	0+00.00	375.00	377.92	S84° 12' 41.54"E	57°44'33"
C4	3+77.92	300.00	209.76	N86° 56' 52.45"E	40°03'41"
C5	5+87.68	125.00	255.28	N48° 28' 21.43"E	117°00'43"
C6	8+42.96	500.00	133.66	N2° 22' 30.70"W	15°18'59"
L4	9+76.62		354.84	N5° 16' 58.57"E	
C7	13+31.46	225.00	402.59	N45° 58' 37.10"W	102°31'11"
C8	17+34.06	1000.00	118.24	S86° 09' 01.70"W	6°46'29"
L5	18+52.30		156.22	S89° 32' 16.19"W	

RD 3					
Number	Station	Radius	Length	Line/Chord Direction	Delta Angle
L6	0+00.00		31.51	N83° 13' 33.26"W	
C9	0+31.51	400.00	304.07	S74° 59' 49.24"W	43°33'15"
C10	3+35.58	275.00	170.10	S70° 56' 22.97"W	35°26'22"
L7	5+05.67		62.19	S88° 39' 34.19"W	
C11	5+67.86	175.00	274.89	N46° 20' 25.81"W	90°00'00"
L8	8+42.75		103.90	N1° 20' 25.81"W	
C12	9+46.65	225.00	356.88	N44° 05' 55.94"E	90°52'44"
L9	13+03.53		182.90	N89° 32' 17.70"E	
L10	14+86.43		316.25	N89° 32' 17.70"E	

RD 4					
Number	Station	Radius	Length	Line/Chord Direction	Delta Angle
L11	0+00.00		55.94	S83° 13' 33.26"E	
C13	0+55.94	250.00	140.29	S67° 09' 00.46"E	32°09'06"
C14	1+96.23	250.00	146.79	S67° 53' 44.54"E	33°38'34"
L12	3+43.03		187.10	S84° 43' 01.43"E	

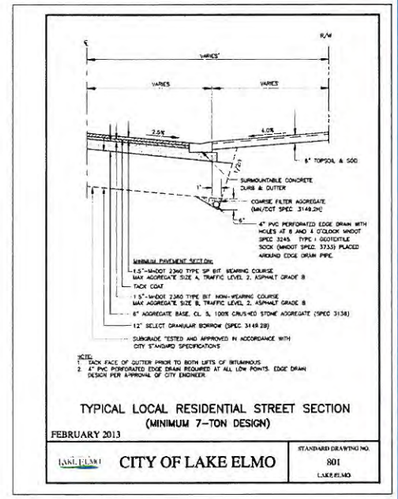
RD 5					
Number	Station	Radius	Length	Line/Chord Direction	Delta Angle
L13	0+00.00		49.45	N52° 37' 54.64"W	

RD 6					
Number	Station	Radius	Length	Line/Chord Direction	Delta Angle
L14	0+00.00		47.63	N45° 24' 11.54"W	

RD 7					
Number	Station	Radius	Length	Line/Chord Direction	Delta Angle
L15	0+00.00		78.26	N51° 14' 49.74"E	

SYMBOL LEGEND

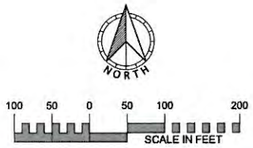
DESCRIPTION	PROPOSED	EXISTING
MINOR CONTOUR	970	
MAJOR CONTOUR	970	
LOT LINE		
WATERMAIN	WM	WM
BUILDING SETBACK BOUNDARY		
PARCEL BOUNDARY LINE		
DRAINAGE AND UTILITY EASEMENTS		
CURB AND GUTTER		
RIGHT-OF-WAY		
DRAINTILE W/CLEANOUTS		
BACKYARD CATCH BASIN		
CATCH BASIN		
STORM SEWER MANHOLE		
FLARED END SECTION W/RIP-RAP		
STORM STUCTURE LABEL	2	4
SANITARY STUCTURE LABEL	3	5
SANITARY SEWER MANHOLE		
HYDRANT	WM WM	WM WM
GATE VALVE	WM WM	WM WM
WELL		
DRAIN FLOW/RUNOFF ARROW		
EMERGENCY OVERFLOW SWALE	EOF	EOF
SOIL BORING LOCATION		
SILT FENCE		
TREE PRESERVATION FENCE		
BARRICADE	OR	OR
SPOT ELEVATION	x 960.0	x 960.0
TBC SPOT ELEVATION	x 960.0	x 960.0
UTILITY POLE		
LIGHT POLE		
HANDICAP PARKING SPACE		



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

FEBRUARY 2013

CITY OF LAKE ELMO — STANDARD DRAWING NO. 801



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ERJ	03	ERJ	08/26/14	SHOW WETLAND B IMPACT
CHECKED BY				
RSM				
DATE				
08/08/14				

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Robert S Molstad

ROBERT S. MOLSTAD, P.E.
Date: 08/08/14 Lic. No. 26428

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO. —

LAKE ELMO, MINNESOTA

PRELIMINARY STREET PLAN
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

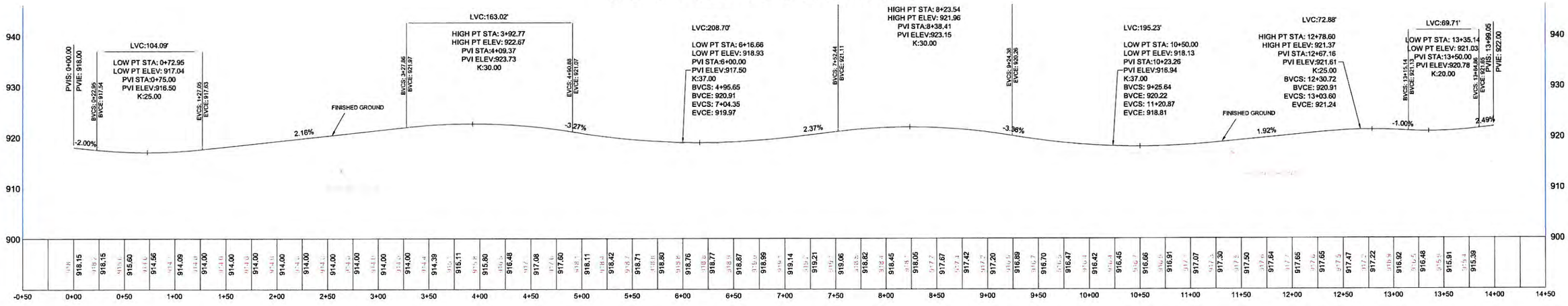
FILE NO. 3120-047

ST1 / ST5

PARCEL E 3120-047

EASTON VILLAGE

VILLAGE PARKWAY



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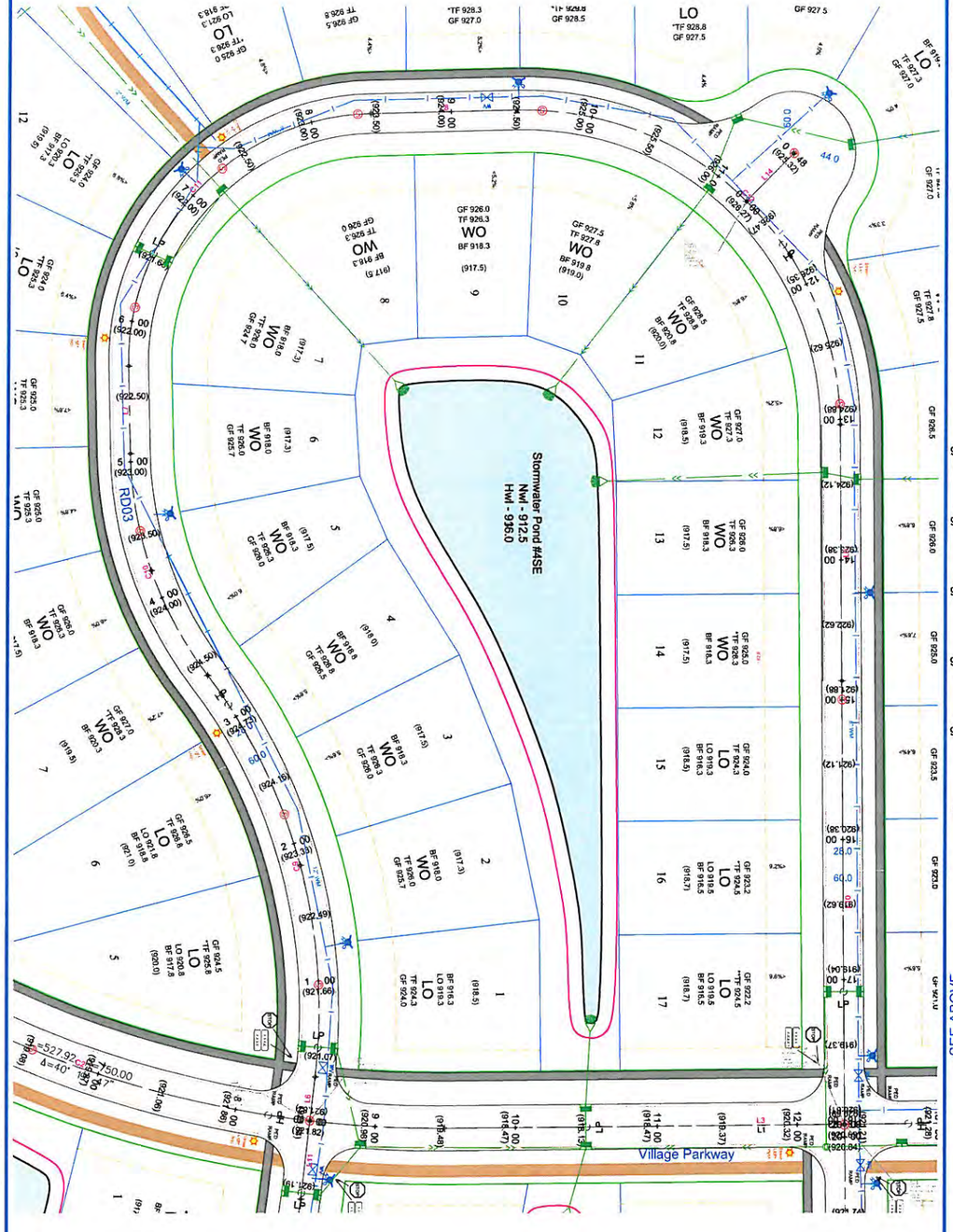
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

ST2
ST5


Stormwater Pond #4SE
NWL - 912.5
HWL - 936.0
RD03
Village Parkway
L1
L2
L3
L4
L5
L6
L7
L8
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L10
L11
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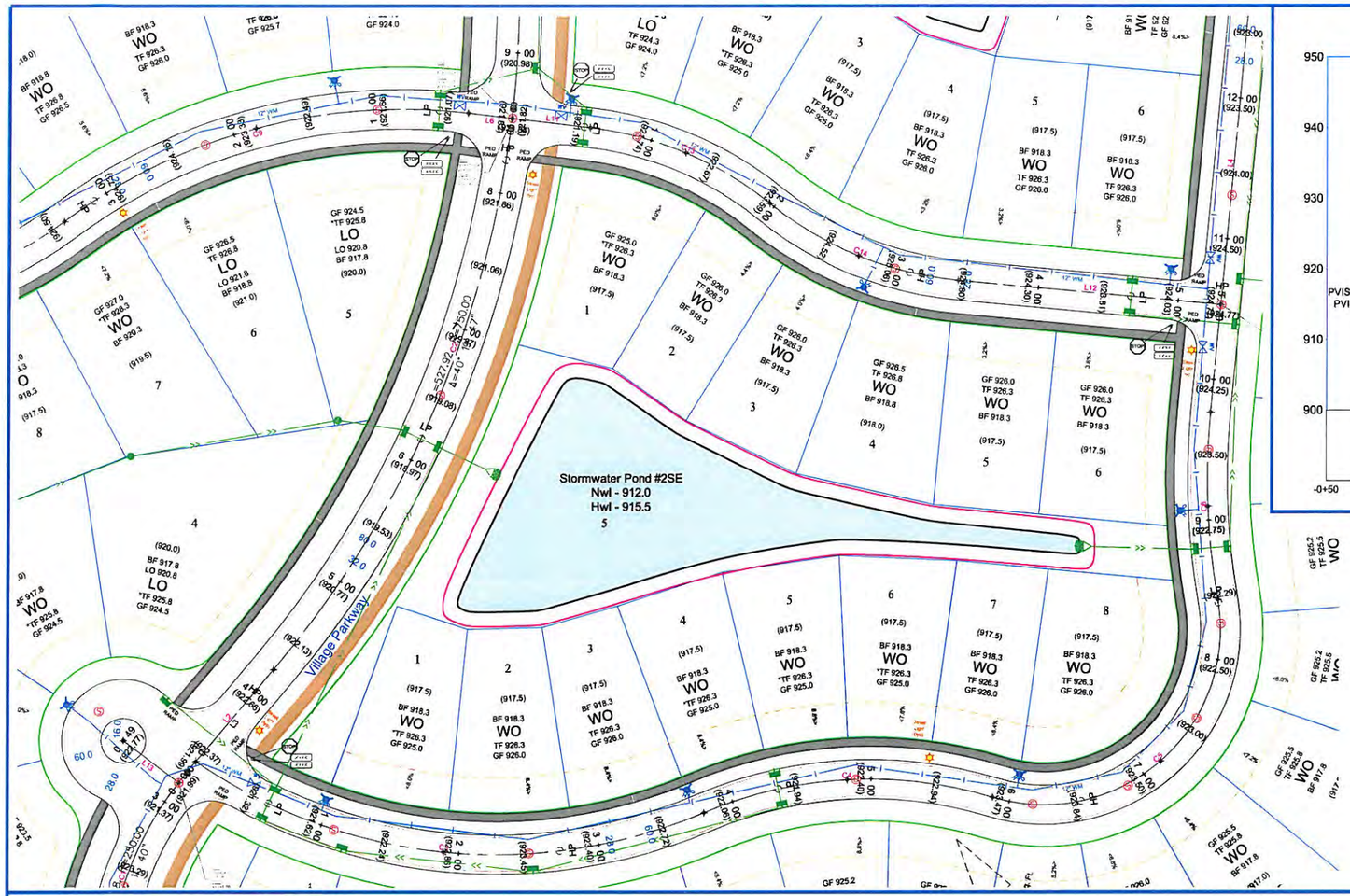
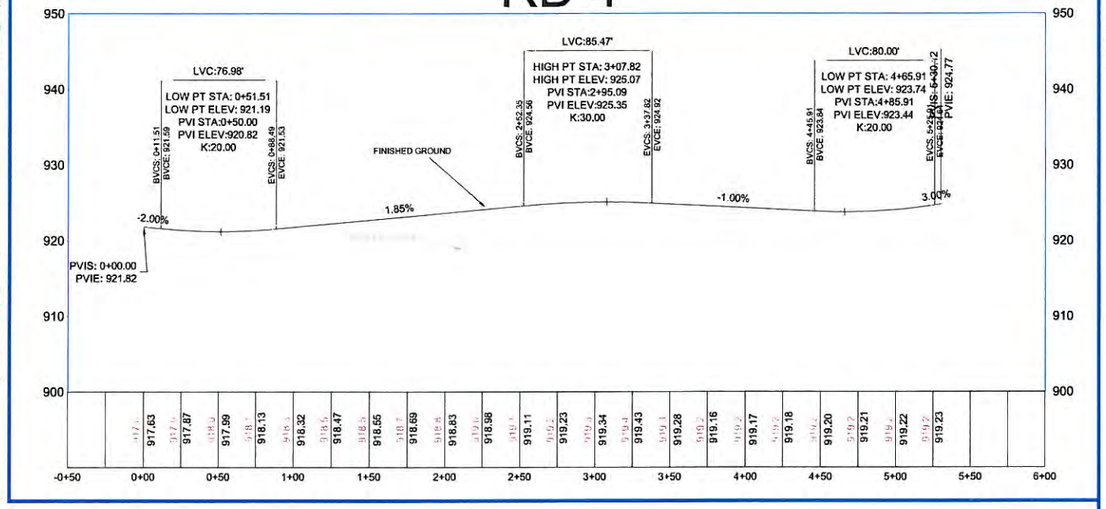
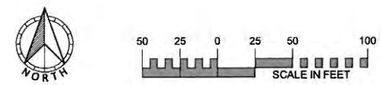
L40

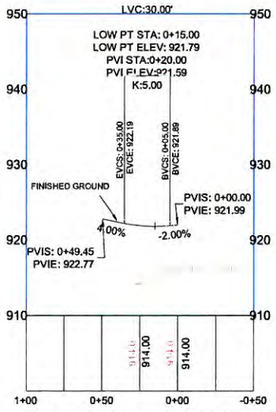


RD 4

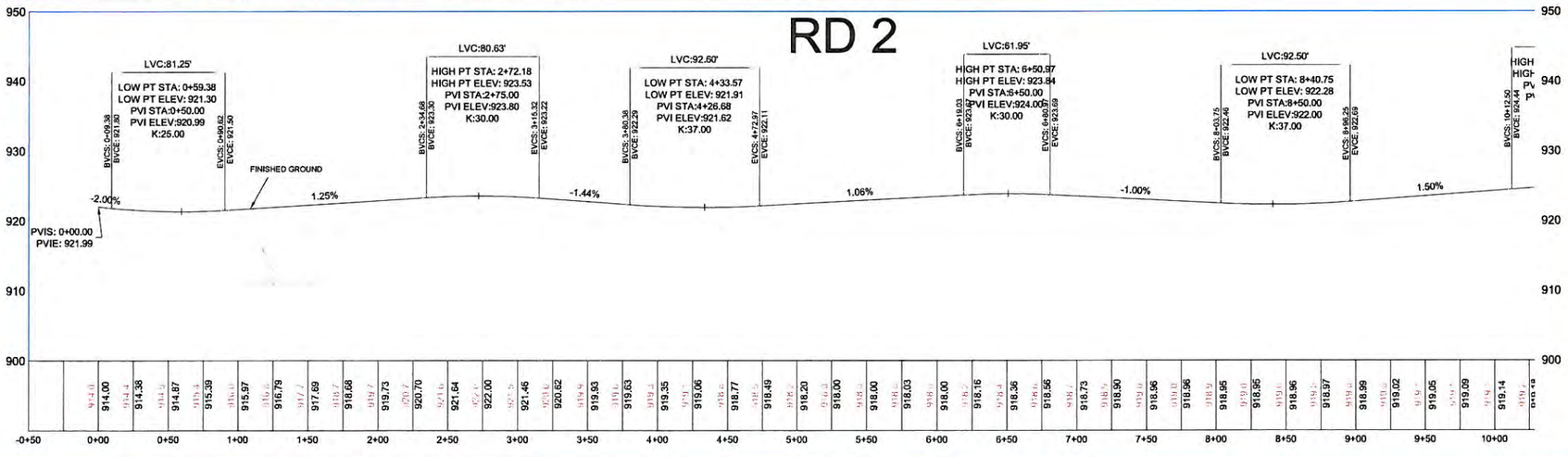




RD 5



RD 2



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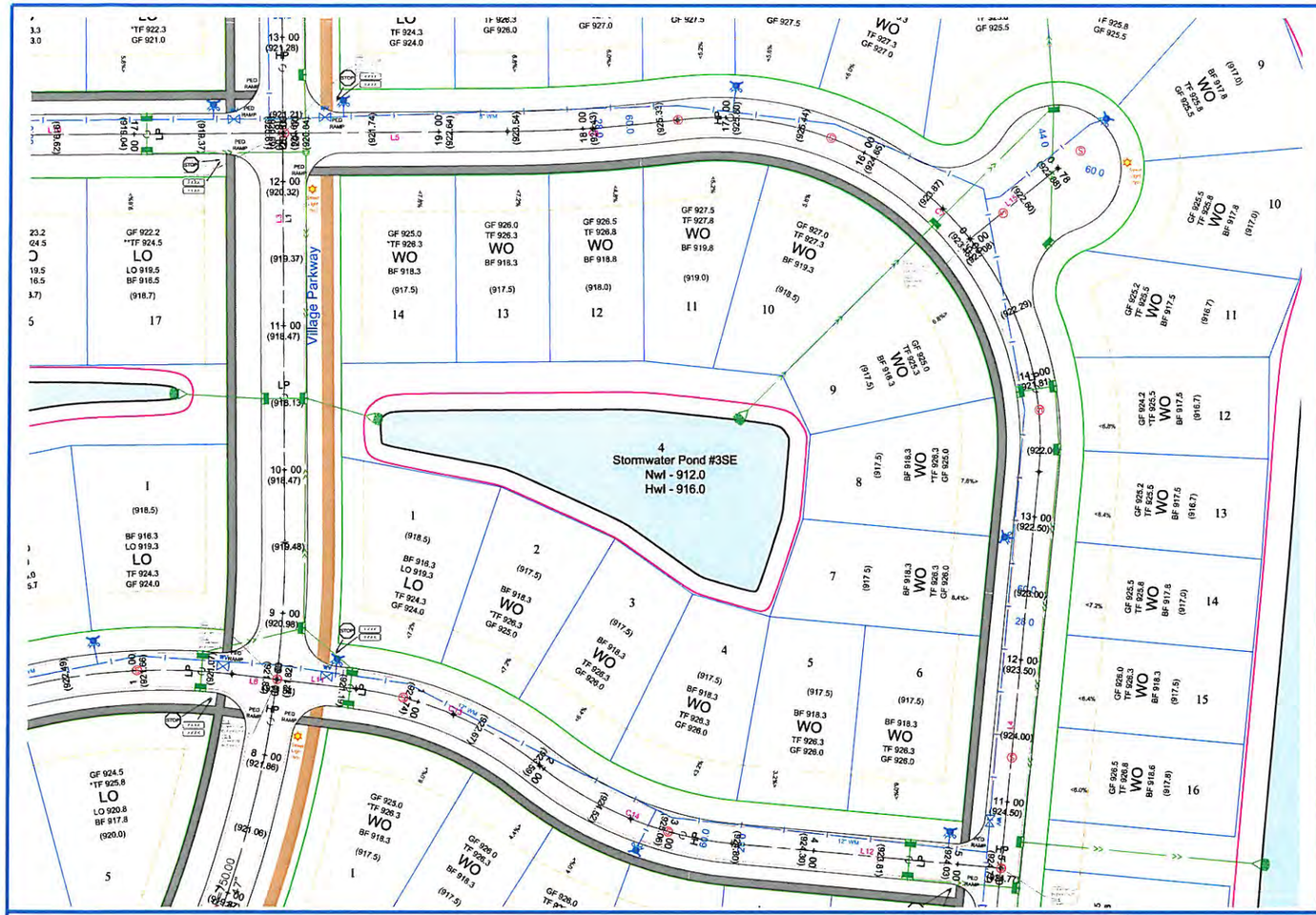
PRELIMINARY STREET PLAN
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

ST4
ST5



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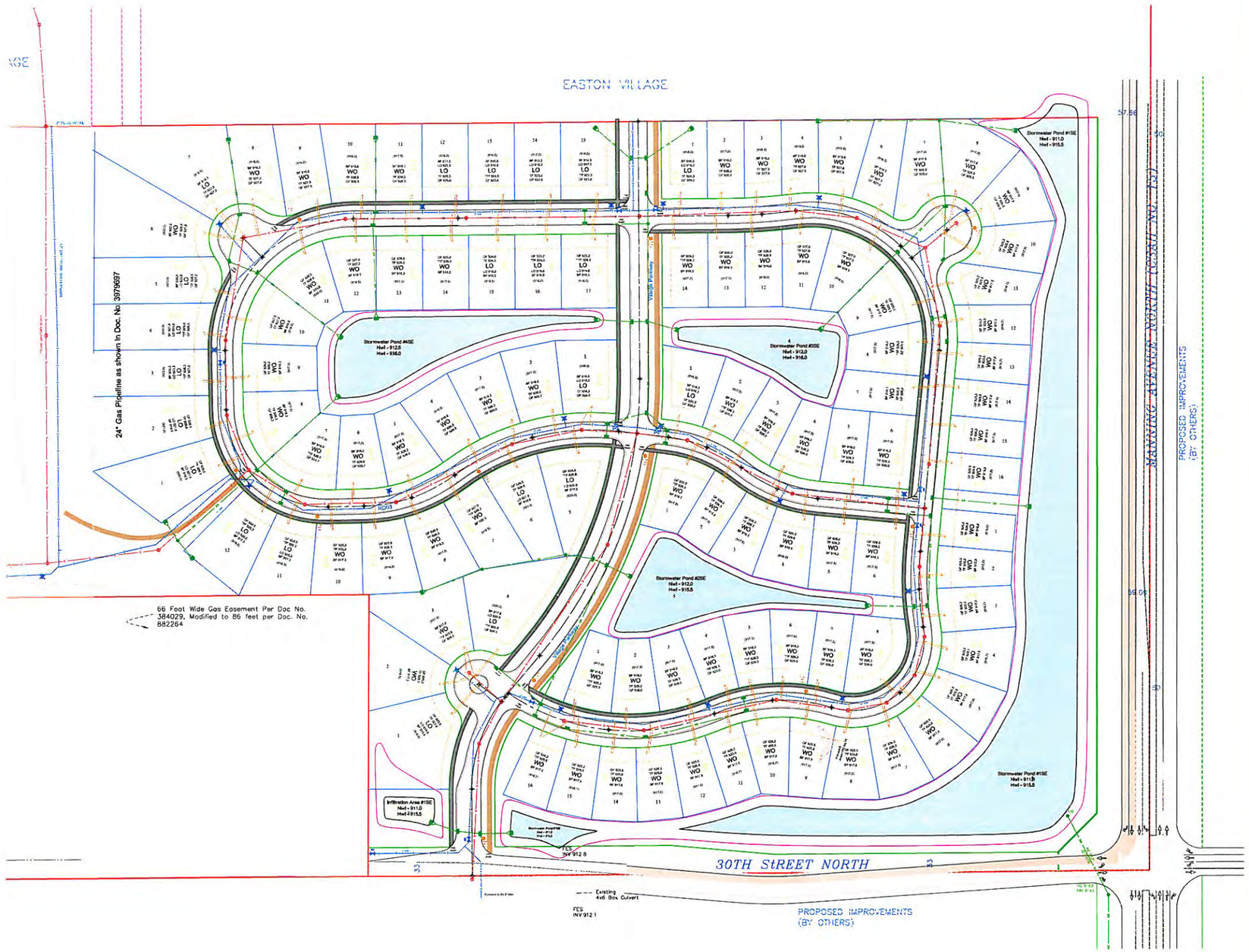
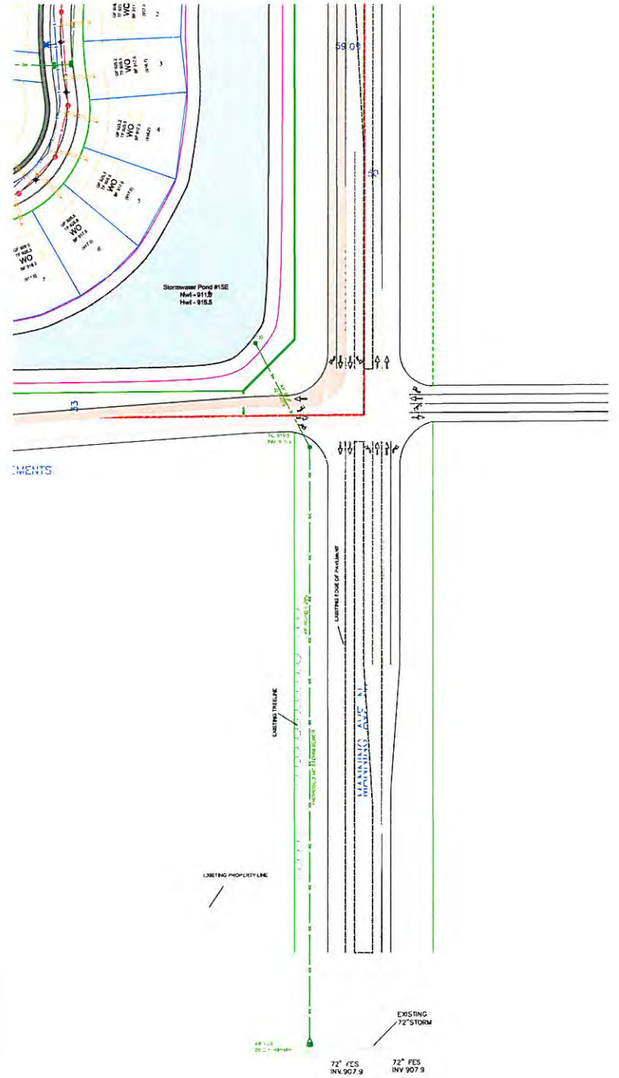
PRELIMINARY STREET PLAN
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

ST5
ST5

PARCEL E 3120-047





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NORTH

100 50 0 50 100 200
SCALE IN FEET

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ENGINEERS SURVEYORS DESIGNERS PLANNERS

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CITY PROJECT NO.
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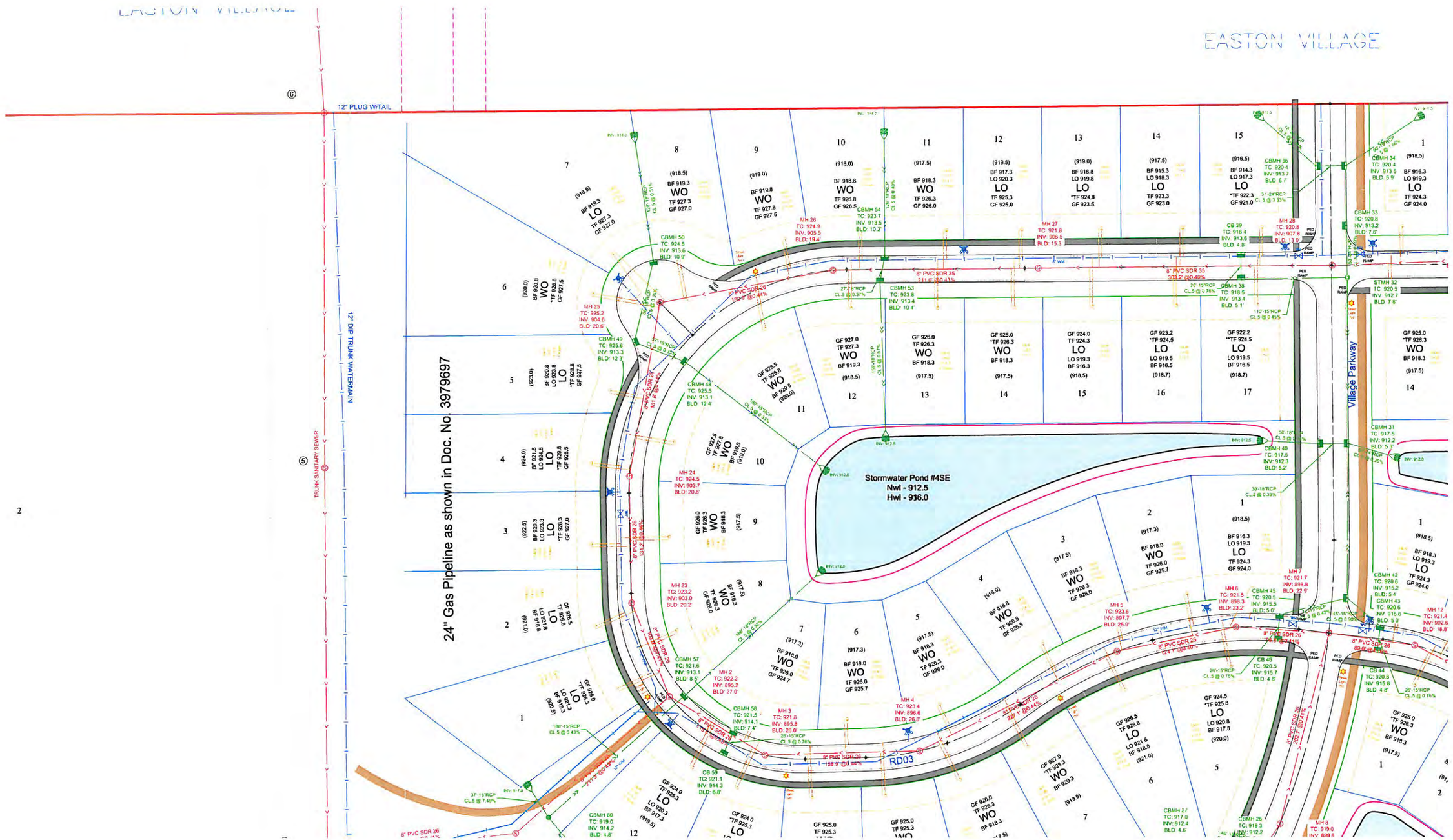
LAKE ELMO,
MINNESOTA

PRELIMINARY UTILITY PLAN
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

UP1
UP6

PROJECT NAME AND NUMBER



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UP2
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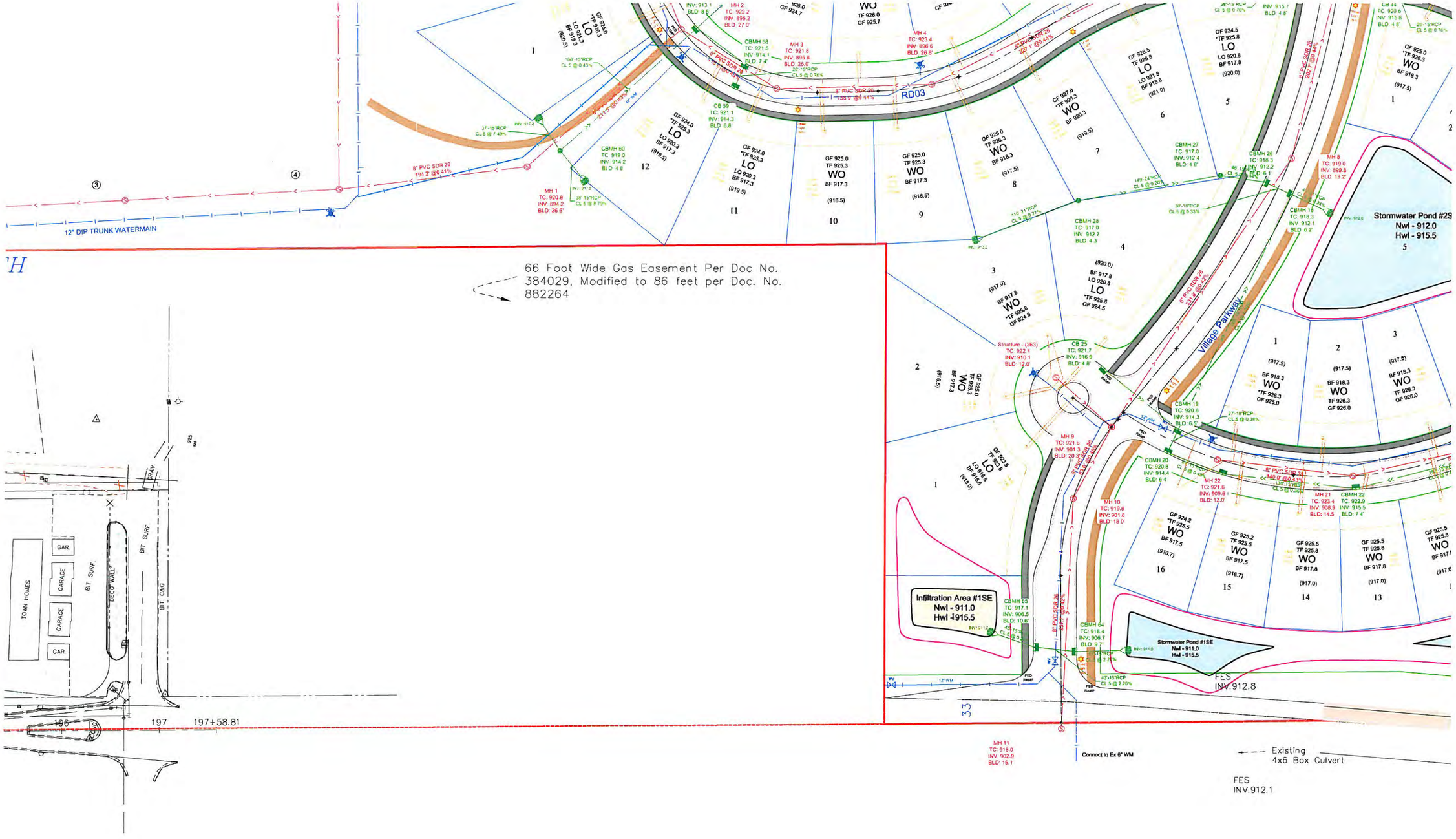
12" DIP TRUNK WATERMAIN
8" PVC SDR 26
194.2' @ 0.41%
RD03
8" PVC SDR 26
227.1' @ 0.44%
8" PVC SDR 26
158.9' @ 0.44%
8" PVC SDR 26
203.7' @ 0.44%
8" PVC SDR 26
149.24'RCP
CL 5 @ 0.20%
8" PVC SDR 26
140.0' @ 0.43%
8" PVC SDR 26
201.8' @ 0.42%
8" PVC SDR 26
201.8' @ 0.42%
8" PVC SDR 26
201.8' @ 0.42

EASTON VILLAGE

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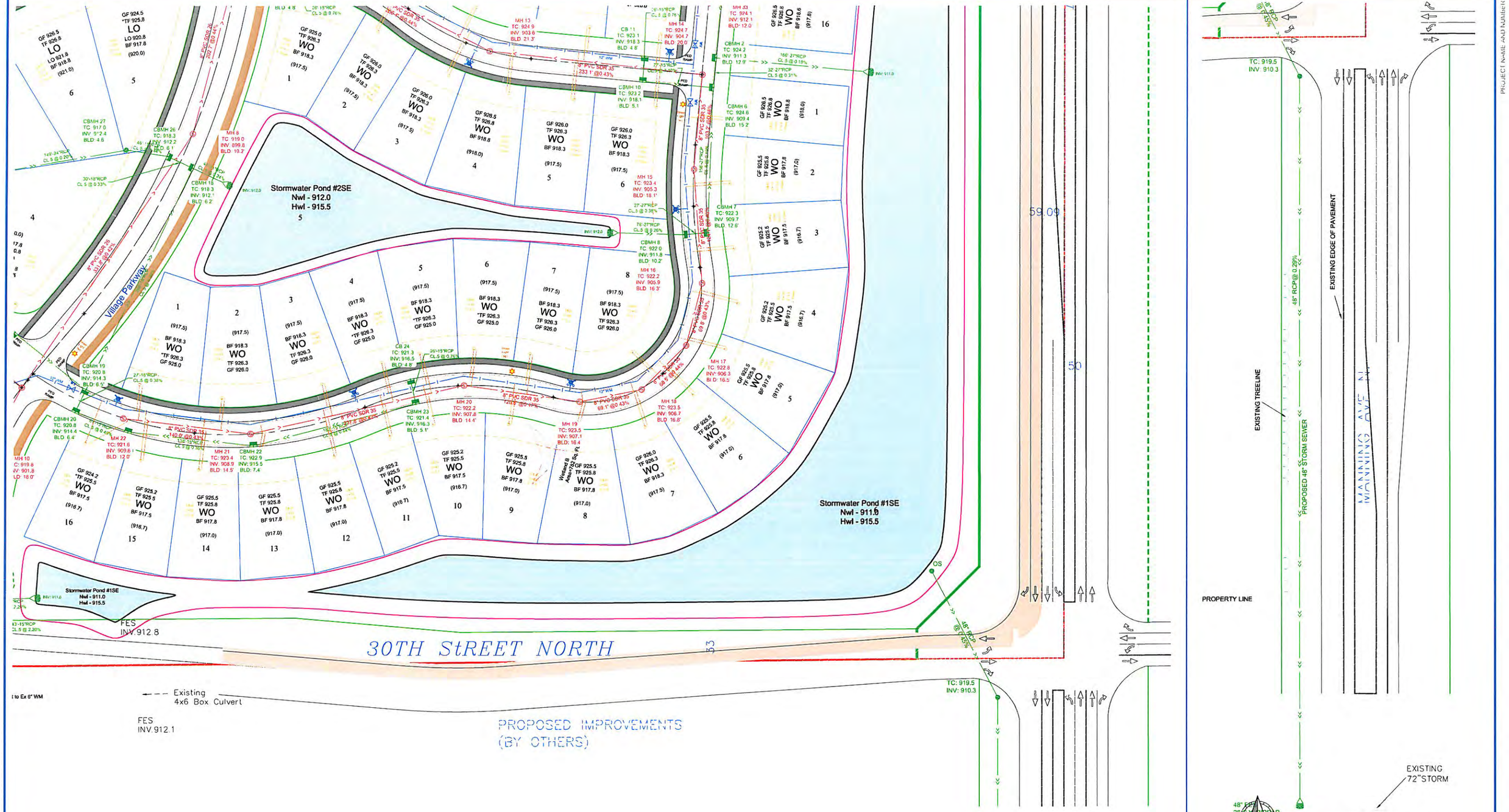
LAKE ELMO,
MINNESOTA

PRELIMINARY UTILITY PLAN
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

UP4
UP6

PROJECT NAME AND NUMBER



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PRELIMINARY UTILITY PLAN
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GWSA LAND DEVELOPMENT

FILE NO.
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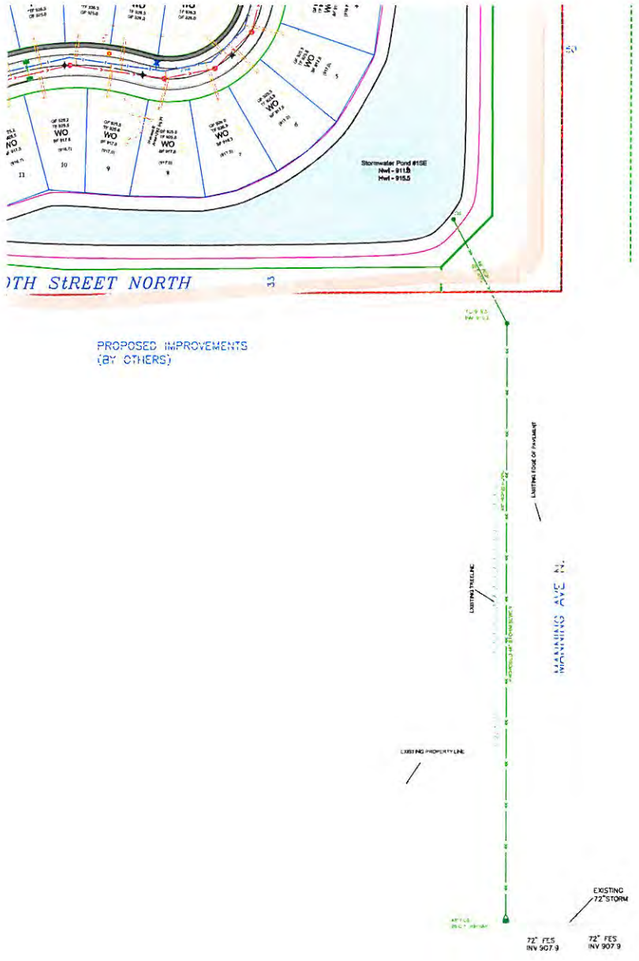
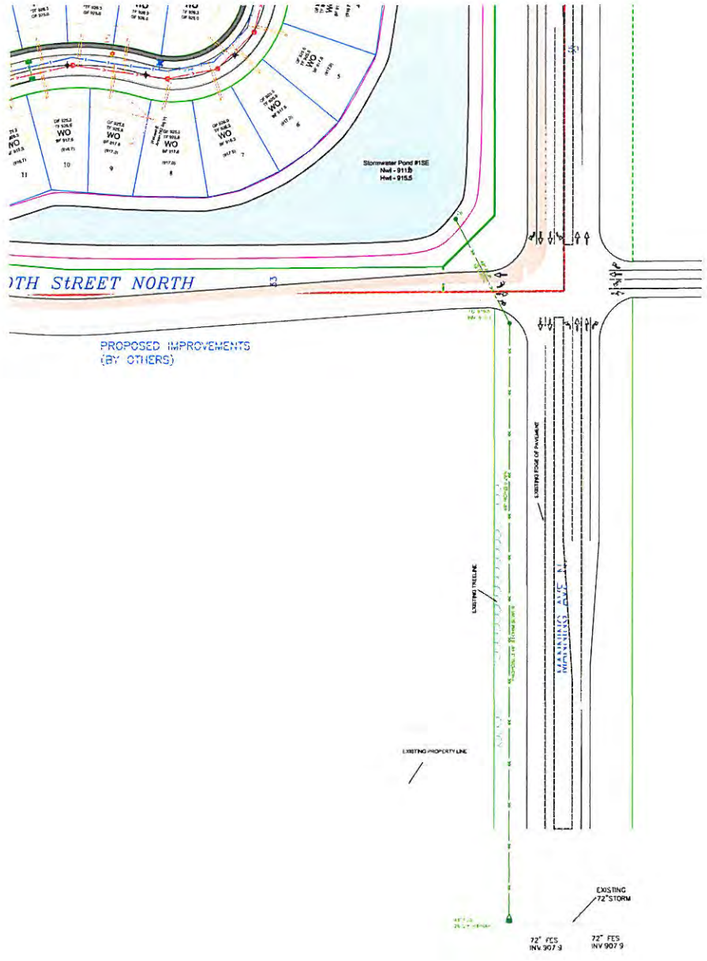
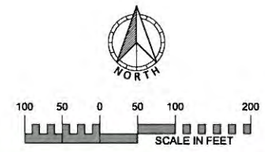
UP5
UP6

EXISTING MANNING CONDITIONS



PROPOSED MANNING IMPROVEMENTS





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CITY PROJECT NO.
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LAKE ELMO,
MINNESOTA

POND #1 SE OUTLET DETAIL

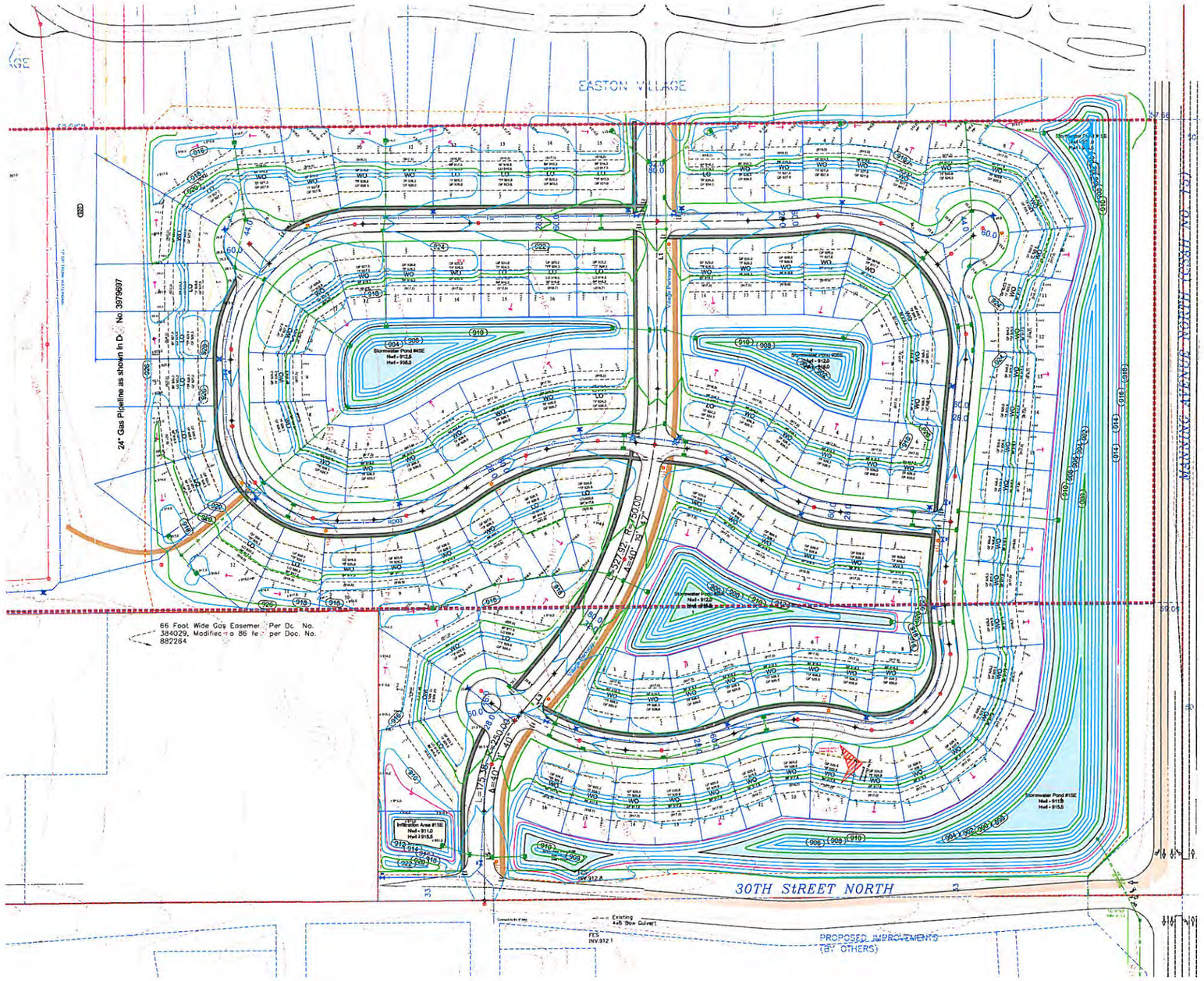
VILLAGE PARK PRESERVE

GWSA LAND DEVELOPMENT

FILE NO.
3120-047

UP6
UP6

PROJECT NAME AND NUMBER



CONSTRUCTION NOTES

1. INSTALL SILT FENCE AS SHOWN ON PLAN, AS REQUIRED BY THE CITY OF LAKE ELMO OR DIRECTED BY THE ENGINEER.

2. THE WATER QUALITY POND MUST BE EXCAVATED AT THE BEGINNING OF GRADING OPERATIONS TO PROVIDE TEMPORARY STORM WATER DETENTION DURING CONSTRUCTION. SAND AND SILT MUST BE REMOVED FROM THE POND AS NECESSARY DURING CONSTRUCTION AND AT THE COMPLETION OF THE PROJECT.

3. BEGIN GRADING, INSTALL PERFORATED RISER PIPE IN PONDS WHEN POND GRADING IS COMPLETE. TEMPORARY DRAINAGE PIPE SHALL BE USED FOR INTERMEDIATE DRAINAGE DURING THE CONSTRUCTION PERIOD AS NECESSARY AND DIRECTED BY THE ENGINEER. INSTALL SILT FENCE AROUND EXCAVATED PONDS.

4. INSPECT POND, SILT FENCE, AND ROCK ENTRANCE BERM AFTER ALL RAINFALL EVENTS AS REQUIRED BY THE NPDES PERMIT.

5. LINE ALL PONDS WITH A MINIMUM 3" ORGANIC SOILS & SEED SLOPES BETWEEN NWL AND 100 YR HWL WITH A WATER TOLERANT MIX. (OR AS NOTED)

6. REMOVE PERFORATED RISER PIPE WHEN STORM SEWER AND OUTLET STRUCTURE FOR PONDS ARE INSTALLED.

7. POND - 10:1 BENCH (1 FOOT) THEN 4:1 MAX

8. LO & WO PADS 3:1 MAX. ALL OTHER SLOPES 4:1 MAX (UNLESS NOTED)

9. RESTORATION - 40 ACRES
A. RESTORE ALL DISTURBED AREAS WITH 4" TO 6" OF TOPSOIL OR EXISTING ON-SITE ORGANIC MTRL.
B. SEED POND SLOPES AND DETENTION AREAS WITH MN/DOT 310 OR BWSR P8 SEED MIX AT A RATE OF 100 LBS./ACRE AND FERTILIZE WITH 20-0-10 AT 100 LBS./ACRE. SEED WETLAND BUFFER AREAS WITH MN/DOT 350-MESIC PRAIRIE (36.5 PLS LBS/AC) OR BWSR 35-241 SEED MIX AND FERTILIZE WITH 20-0-10 AT 100 LBS./ACRE. (REFER TO WETLAND CREATION/BANKING PLAN FOR WETLAND SEED MIX REQUIREMENTS).
C. SEED ALL OTHER DISTURBED AREAS WITH MNDOT 250 AT A RATE OF 100 LBS./ACRE AND FERTILIZE WITH 20-0-10 AT 100 LBS./ACRE. (UNLESS OTHERWISE NOTED)
D. ONLY PHOSPHOROUS FREE FERTILIZER IS TO BE USED ON SITE.
E. MULCH WITH TYPE 1 AT A RATE OF 2 TONS/ACRE AND DISC ANCHOR IMMEDIATELY AFTER PLACEMENT. USE WOODFIBER BLANKET ON ALL SLOPES 3:1 (FT) OR GREATER.
F. PLACE APPROVED STORM SEWER INLET PROTECTION IN OR AROUND ALL STORM SEWER INLETS AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED. REFER TO CITY DETAILS ST-22 & ST-23 FOR APPROVED DEVICES.
G. MAINTAIN ALL SILT FENCE UNTIL TURF HAS BEEN ESTABLISHED.
H. RESTORATION WORK WILL BE COMPLETED WITHIN 72 HOURS OF GRADING COMPLETION.

10. GRADE BACK 3' FROM FACE OF ALL RETAINING WALLS

11. MAINTAIN TEMPORARY DRAINAGE ALONG EAST SIDE OF PROPERTY LINE

12. SILT FENCE - BEFORE GRADING - 5,780 LF

GENERAL NOTES:

1. THE GRADING CONTRACTOR IS RESPONSIBLE FOR ALL STORM WATER INSPECTIONS ACCORDING TO THE MPCA STORM WATER PERMIT. THIS INCLUDES BOTH WEEKLY INSPECTIONS AND INSPECTIONS DONE AFTER A 0.5" RAIN EVENT. A COPY OF THE INSPECTION REPORT MUST BE EMAILED TO THE ENGINEER AND DEVELOPER ON A WEEKLY BASIS.

2. THE CONTRACTOR SHALL PLACE INLET PROTECTION DEVICES IN ACCORDANCE WITH THE CITY OF LAKE ELMO DETAIL ST-22& ST-23 FOR ALL STORM SEWER INLETS AND MAINTAIN THEM AS AN EFFECTIVE SILT CONTROL DEVICE. INLET PROTECTION SHALL BE REMOVED WHEN RESTORATION HAS BEEN ESTABLISHED.

3. ALL RETAINING WALLS WILL REQUIRE A STRUCTURAL DESIGN, A BUILDING PERMIT & A FINAL INSPECTION REPORT.

4. A 1'-2" CRUSHED ROCK ENTRANCE BERM SHALL BE PLACED AT THE SITE ENTRANCE, TO REPLACE SILT FENCE, AND MINIMIZE EROSION ON TO THE STREETS. THE ROCK BERMS SHALL BE THE WIDTH OF THE ENTRANCE AND 2 FEET HIGH WITH 4:1 SLOPES. (SEE DETAIL)

5. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM THE BUILDING PAD AND STREET AREAS THROUGHOUT CONSTRUCTION.

6. THE CONTRACTOR SHALL ATTEMPT TO PREVENT SOIL MATERIALS FROM LEAVING THE SITE BY EROSION AND VEHICLE WHEEL TRACKING. HE SHALL BE RESPONSIBLE FOR CLEANING OF STREET, BOULEVARD AND UTILITY FACILITIES THAT RECEIVE ANY ERODED OR TRACKED SOIL MATERIAL OR OTHER CONSTRUCTION DEBRIS OR MATERIAL.

7. EXISTING UTILITIES SHOWN ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES ARISING OUT OF HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES.

8. BUILDING PADS ARE 60' DEEP, UNLESS OTHERWISE NOTED. THE FRONT AND REAR BUILDING PAD LINES ARE SHOWN ON THE PLAN. THE ENGINEER SHOULD BE CONTACTED IF THE CONTRACTOR HAS ANY QUESTIONS REGARDING BUILDING PADS.

NORTH

100 50 0 50 100 200
SCALE IN FEET

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ERJ	03	ERJ	08/26/14	SHOW WETLAND B IMPACT
CHECKED BY				
RSM				
DATE				
08/08/14				

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Robert S Molstad

ROBERT S. MOLSTAD, P.E.
Date: 08/08/14 Lic. No. 26428

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
—

LAKE ELMO, MINNESOTA

PRELIMINARY GRADING PLAN

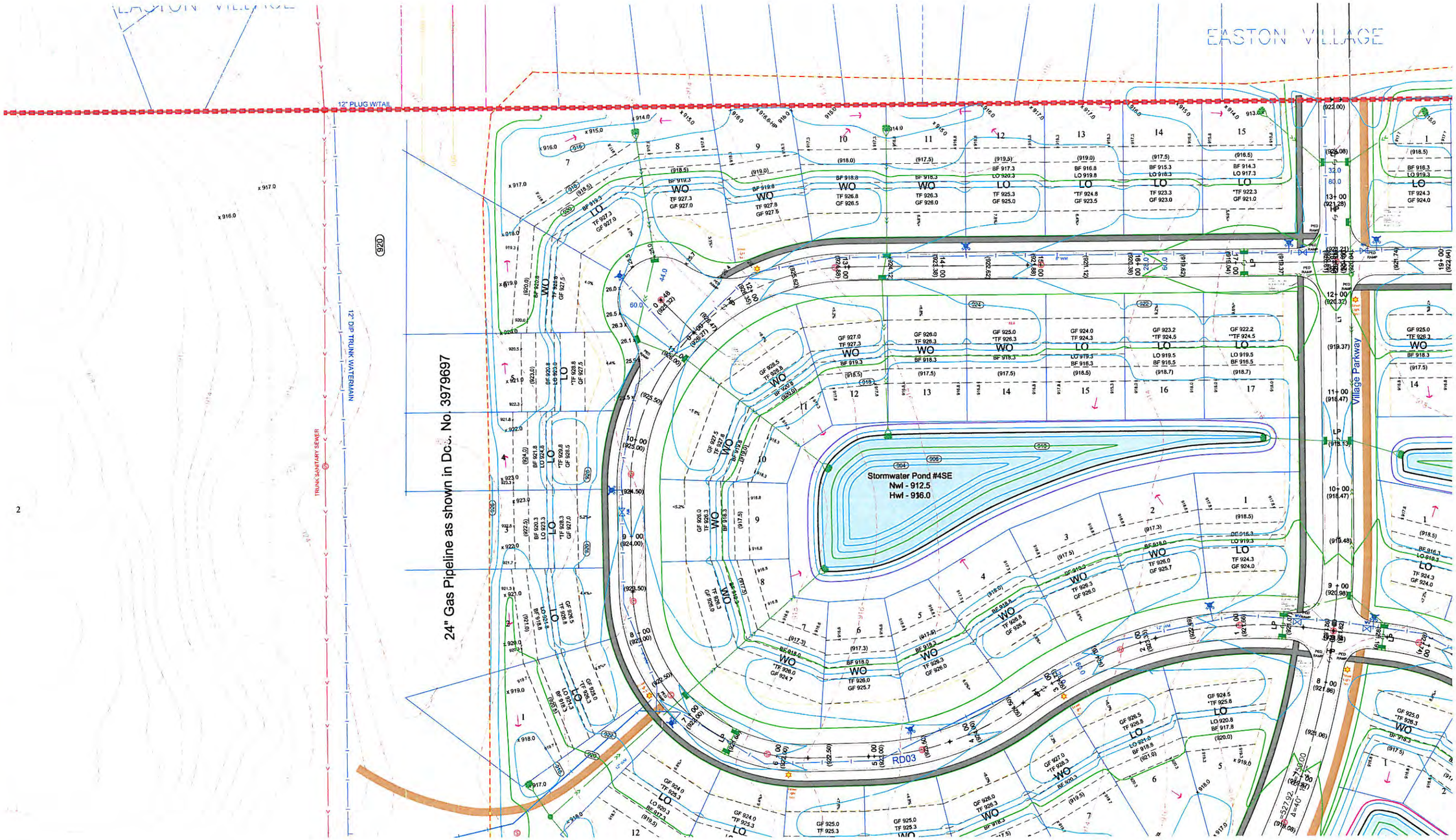
VILLAGE PARK PRESERVE

GWSA LAND DEVELOPMENT

FILE NO.
3120-047

GP1
GP5

PROJECT NAME AND NUMBER



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CITY PROJECT NO.
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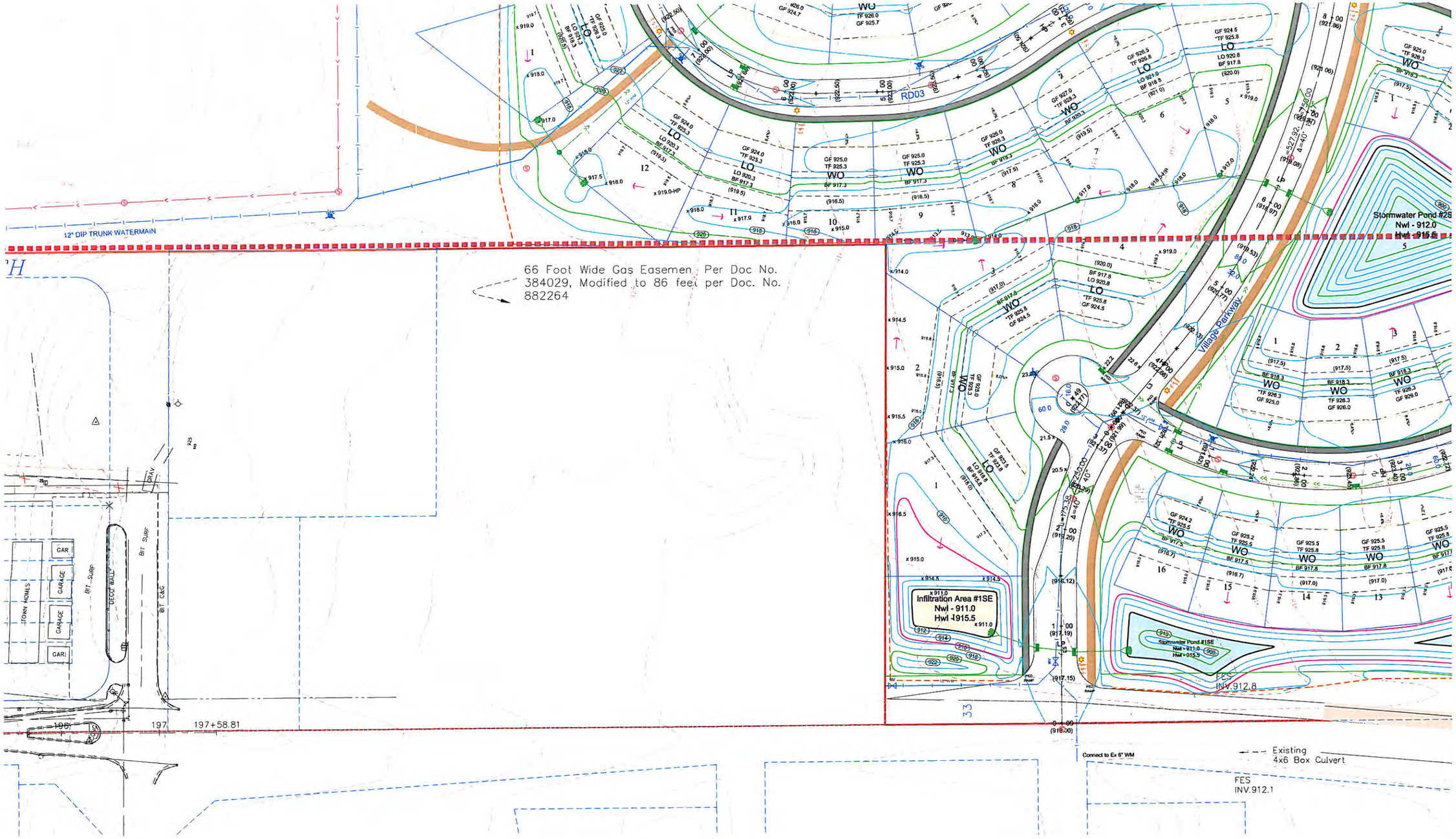
LAKE ELMO, MINNESOTA

PRELIMINARY GRADING PLAN
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

FILE NO. 3120-047

GP2 / GP5

PROJECT NAME AND NUMBER



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CITY PROJECT NO.
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LAKE ELMO, MINNESOTA

PRELIMINARY GRADING PLAN
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

GP3 / GP5

EASTON VILLAGE

Stormwater Pond #1SE
Nwl - 911.0
Hwl - 915.5

Stormwater Pond #3SE
Nwl - 912.0
Hwl - 916.0

Stormwater Pond #4SE
Nwl - 912.5
Hwl - 916.0

Village Parkway

MANNING AVENUE (CSAH NO. 15)
PROPOSED IMPROVEMENTS
(BY OTHERS)

RD03

NORTH

SCALE IN FEET
50 25 0 25 50 100

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CITY PROJECT NO.
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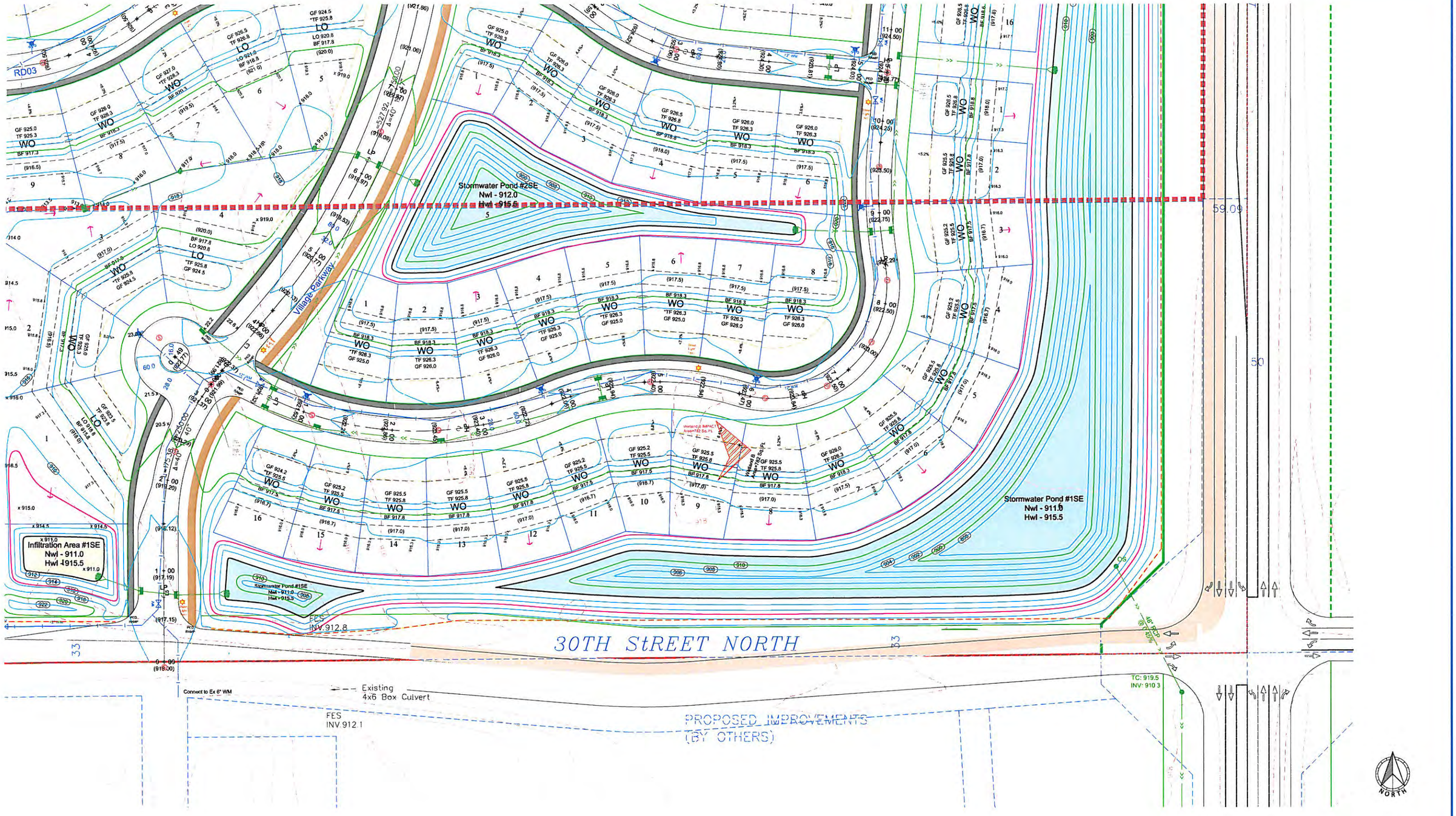
LAKE ELMO,
MINNESOTA

PRELIMINARY GRADING PLAN
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

GP4
GP5



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150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
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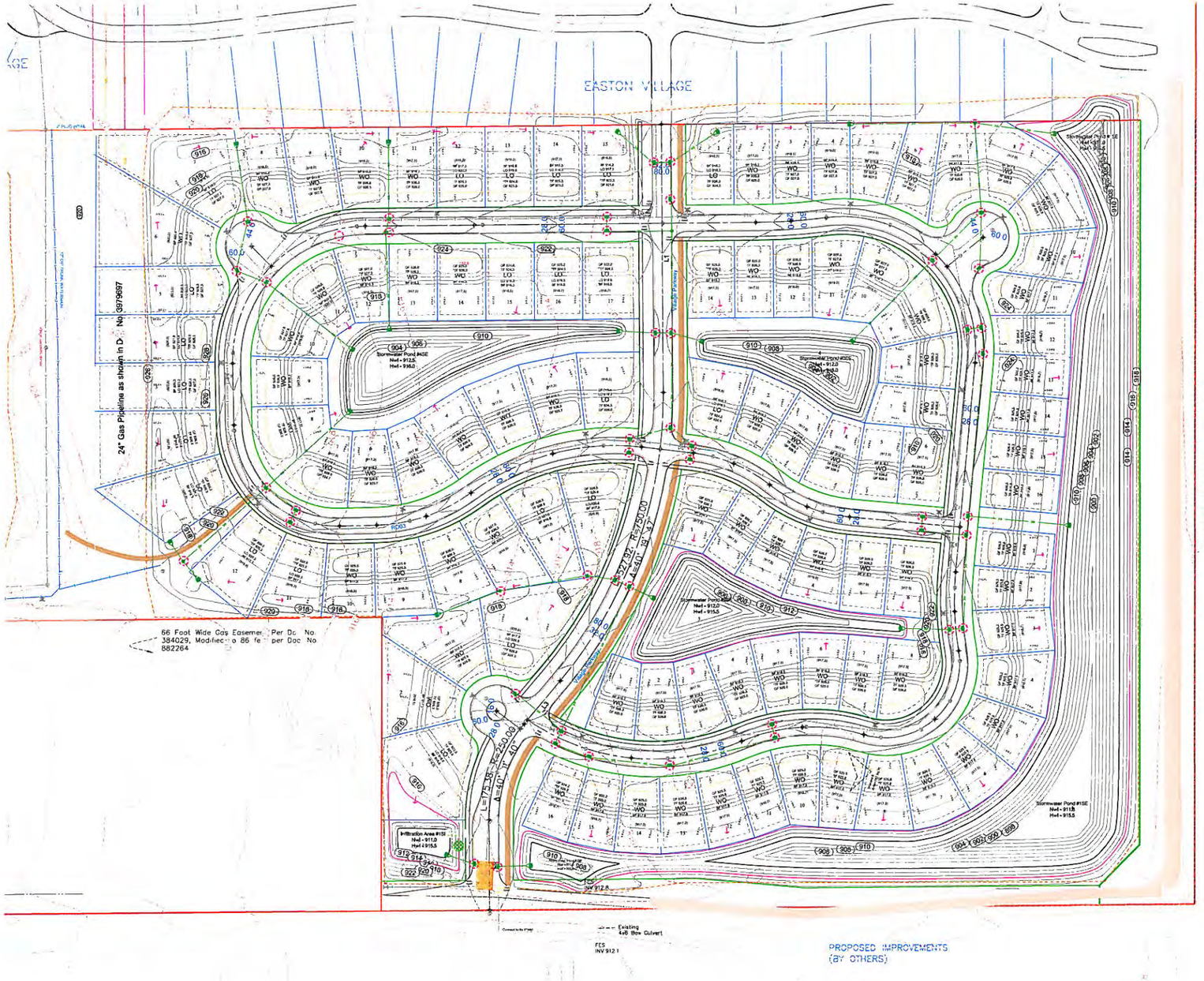
LAKE ELMO, MINNESOTA

PRELIMINARY GRADING PLAN
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

GP5
GP5

PROJECT NAME AND NUMBER



ROCK ENTRANCE BERM
SILT FENCE
POST GRADING SILT FENCE
BIO-ROLL
CONCRETE WASHOUT
INLET PROTECTION
WOODFIBER BLANKET

NORTH

100 50 0 50 100 200
SCALE IN FEET

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CITY PROJECT NO.
—

LAKE ELMO, MINNESOTA

PRELIMINARY EROSION CONTROL PLAN & TREE SURVEY
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

EC1
EC3

PROJECT NAME AND NUMBER

ROCK ENTRANCE BERM
SILT FENCE
POST GRADING SILT FENCE
BIO-ROLL
CONCRETE WASHOUT
INLET PROTECTION
WOODFIBER BLANKET

EASTON VILLAGE

Village Parkway

Stormwater Pond #4SE
Nwl - 912.5
Hwl - 916.0

Stormwater Pond #3SE
Nwl - 912.0
Hwl - 916.0

RD03

24" Gas Pipeline as shown in Doc. No. 3979697

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NORTH

50 25 0 25 50 100
SCALE IN FEET

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ENGINEERS SURVEYORS DESIGNERS PLANNERS

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

CITY PROJECT NO.
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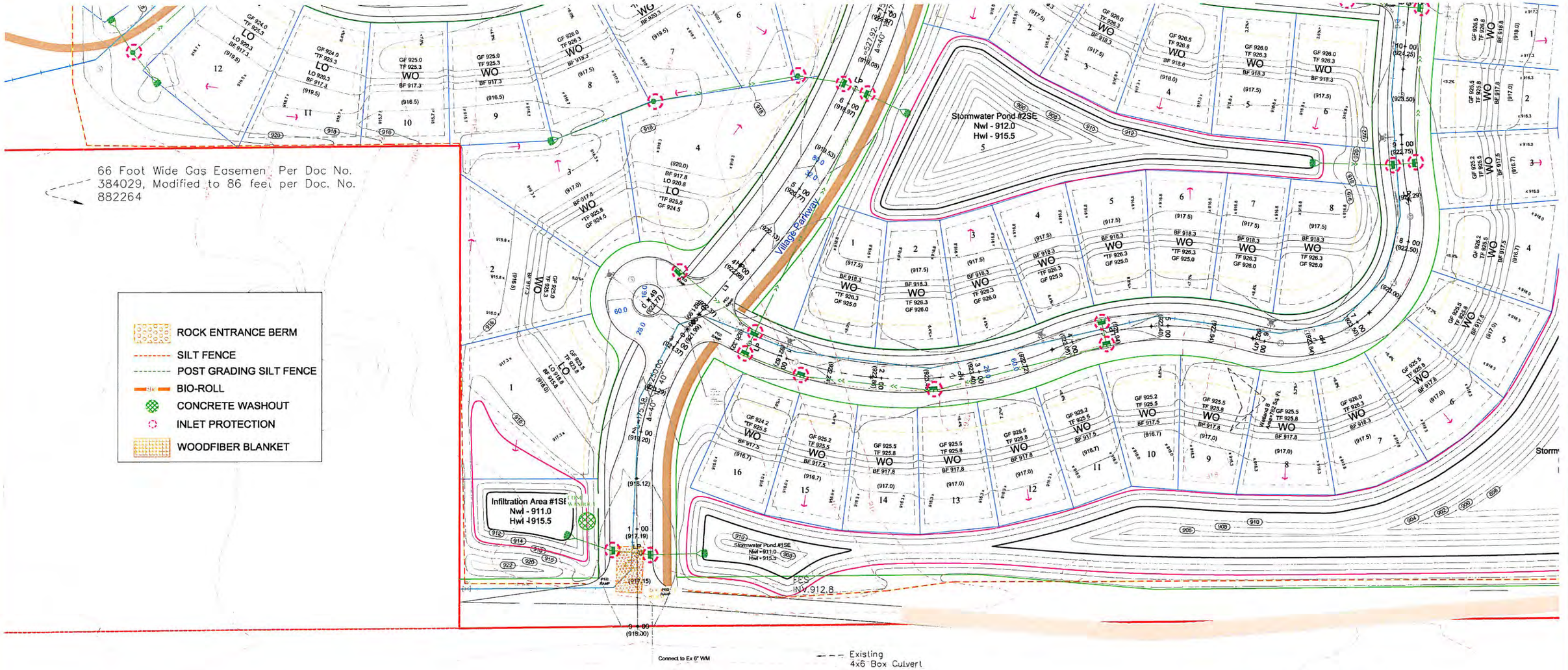
LAKE ELMO, MINNESOTA

PRELIMINARY EROSION CONTROL PLAN & TREE SURVEY
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

EC2
EC3

PROJECT NAME AND NUMBER



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CITY PROJECT NO.
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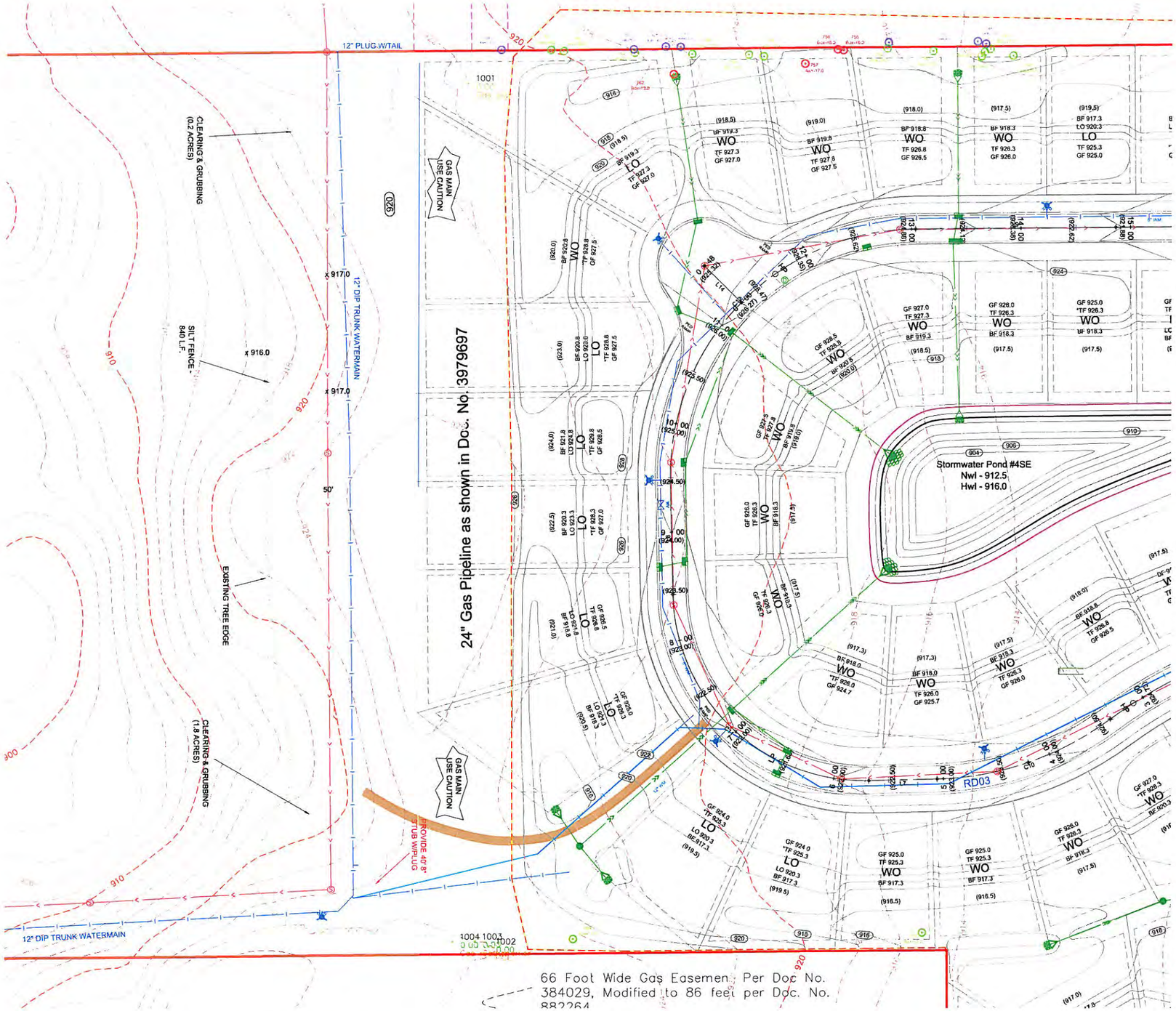
LAKE ELMO, MINNESOTA

PRELIMINARY EROSION CONTROL PLAN & TREE SURVEY
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

EC3
EC3



Tree #	Tree Species	Condition	Total Cal. In	Exempt Cal. In.	Removed Cal. In.	Saved Cal. In.
746	Boxelder	Fair	23.0			23.0
747	Boxelder	Fair	27.0			27.0
748	Hackberry	Fair	10.0	10.0		
749	Boxelder	Fair	22.0			22.0
750	Boxelder	Fair	34.0			34.0
751	Cherry, black	Fair	8.0	8.0		
752	Boxelder	Fair	12.0			12.0
753	Boxelder	Fair	13.0	13.0		
754	Oak, bur	Fair	28.0			28.0
755	Boxelder	Fair	16.0		16.0	
756	Boxelder	Fair	16.0		16.0	
757	Ash, green	Fair	17.0		17.0	
758	Ash, green	Fair	12.0			12.0
759	Boxelder	Fair	14.0			14.0
760	Boxelder	Fair	15.5			15.5
761	Ash, green	Fair	12.0	12.0		
762	Boxelder	Fair	13.0		13.0	
763	Ash, green	Fair	14.0	14.0		
764	Ash, green	Fair	21.0		21.0	
765	Oak, bur	Good	28.0	28.0		
766	Ash, green	Fair	36.0			36.0
767	Oak, bur	Fair	36.0			36.0
768	Ash, green	Fair	15.0	15.0		
769	Boxelder	Fair	13.0			13.0
770	Boxelder	Fair	12.0			12.0
				100.0	83	284.5

Total Caliper Inches	467.5
Excempt Caliper Inches	100.0
Net Caliper Inches	367.5
Removed Cal Inches	83.0
Percent Removed	22.6%
Percent Saved	77.4%

DENOTES TREE SAVED

DENOTES TREE REMOVED

DENOTES TREE EXEMPT

DRAWING NAME	NO.	BY	DATE	REVISIONS
TREE SURVEY				
DRAWN BY				
ERJ				
CHECKED BY				
RSM				
DATE				
09/02/14				

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I HEREBY CERTIFY THAT THIS PLAN OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Robert S Mohs

NATHAN HERMAN, P.E.
Date: 09/02/14 Lic. No. 26478

SATHRE-BERGQUIST, INC.
150 SOUTH BROADWAY WAYZATA, MN. 55391 (952) 476-6000

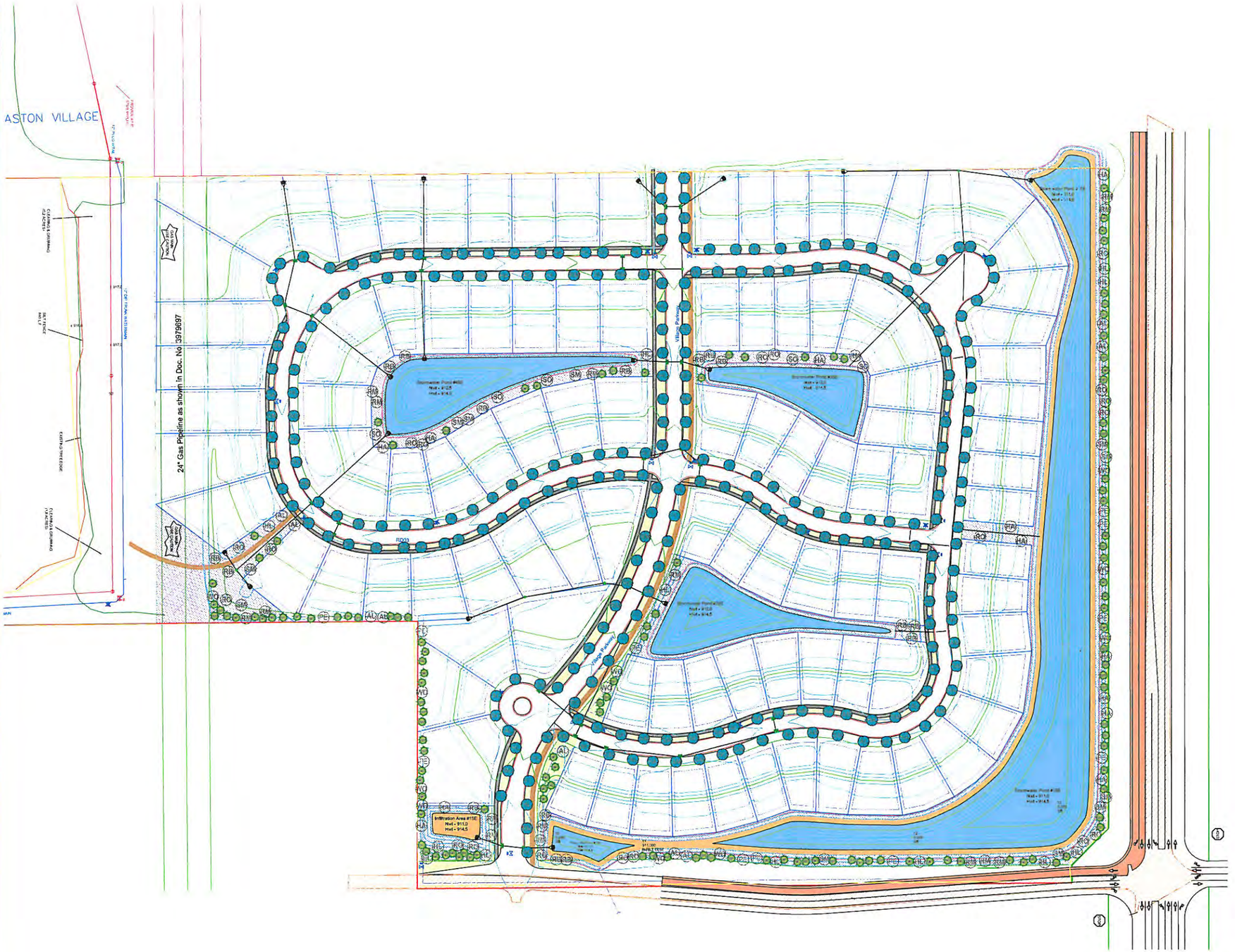
CITY PROJECT NO.

LAKE ELMO, MINNESOTA

TREE SURVEY
VILLAGE PARK PRESERVE
GWSA LAND DEVELOPMENT

FILE NO. 3120-047

TS1 / TS1



REQUIRED TREE PLANTING LEGEND

KEY	COMMON NAME	BOTANICAL NAME	QUANTITY	SIZE	NOTES
	TREES				
AL	Linden 'Redmond'	*Tilia americana 'Redmond'*	9	2.5" BB	straight single leader
HA	Hackberry	*Celtis occidentalis*	12	2.5" BB	straight single leader
HL	Honey Locust 'Skyline'	*Gleditsia tricanthos var inermis 'Skyline'*	12	2.5" BB	straight single leader
PE	Princeton Elm	*Ulmus americana 'Princeton'*	11	2.5" BB	straight single leader
RB	River Birch	*Betula nigra*	16	2.5" BB	mulit-stem
RM	Red Maple	*Acer ruburm*	16	2.5" BB	straight single leader
RO	Red Oak	*Quercus rubra*	19	2.5" BB	straight single leader
SM	Sugar Maple	*Acer saccharum*	11	2.5" BB	straight single leader
SO	Swamp Oak	*Quercus bicolor*	5	2.5" BB	straight single leader
WO	White Oak	*Quercus alba*	11	2.5" BB	straight single leader
	EVERGREENS				
BH	Black Hills Spruce	*Piecea glauca densata*	39	6' BB	
NP	Norway Pine	*Pinus resinosa*	28	6' BB	
SN	Norway Spruce	*Picea abies*	38	6' BB	
WP	White Pine	*Pinus strobus*	28	6' BB	
		Total	255		

TREE PLANTING REQUIREMENTS = 5 TREES /ACRE DISTURBED
51 ACRES DISTURBED = 255 TREES

STREET FRONTAGE TREE PLANTING LEGEND

KEY	COMMON NAME	BOTANICAL NAME	QTY.	SIZE	NOTES
	TREES				
AL	Greenspire Linden	*Tilia cordata 'Greenspire'*	34	2.5" BB	Straight single leader
AM	Autumn Blaze Maple	*Acer x freemanii 'Jeffersred'*	25	2.5" BB	Straight single leader
HA	Hackberry	*Celtis occidentalis*	39	2.5" BB	Straight single leader
HL	Honey Locust	*Gleditsia tricanthos var. inermis 'Imperial'*	29	2.5" BB	Straight single leader
PE	Princeton Elm	*Ulmus americana 'Princeton'*	14	2.5" BB	Straight single leader
RM	Red Maple	*Acer rubrum*	32	2.5" BB	Straight single leader
RO	Red Oak	*Quercus rubra*	32	2.5" BB	Straight single leader
SM	Sugar Maple	*Acer saccharum*	27	2.5" BB	Straight single leader
WO	White Oak	*Quercus alba*	23	2.5" BB	Straight single leader
		TOTAL	255		

MN DOT 250 MIX

Common Name	Scientific Name	% Mix	Seed/sq ft	Rate / acre
Slender Wheat Grass	*Agropyron trachycaulum*	4.0	7.1	2.8 lb
Redtop	*Agrostis alba*	3.0	233.7	2.1 lb
Smooth Bromegrass	*Bromus inermis*	14.0	32.4	9.8 lb
Perennial Rye	*Lolium perenne*	21.0	81.0	14.7 lb
Alfalfa (Creeping)	*Medicago sativa*	6.0	21.6	4.2 lb
Switchgrass	*Panicum virgatum*	3.0	10.8	2.1 lb
Timothy	*Phleum praetense*	3.0	56.3	2.1 lb
Canada Bluegrass	*Poa compressa*	14.0	539.9	9.8 lb
Kentucky Bluegrass	*Poa pratensis*	29.0	648.7	20.3 lb
White Clover	*Trifloium*	3.0	37.8	2.1 lb

Seeding Rate: 70 lb / Acre

NOTE:
ALL TREES SHALL HAVE A MINIMUM DEPTH OF 6" HARDWOOD BARK MULCH RING AROUND THE BASE OF THE TREE.

MINIMUM OF 2 ROWS OF SOD BEHIND CURB.
AREAS WITH SIDEWALKS SHALL BE SODDED FROM BACK OF CURB TO SIDEWALK.

ALL RESIDENTIAL LOTS SHALL BE TEMPORARILY SEEDED WITH MN DOT 250 SEED MIX.
ALL OUTLOTS SHALL BE PERMENANTLY SEEDED WITH MN DOT 250 SEED MIX WITH EXCEPTION TO OUTLOTS TO BE SODDED AS SHOWN IN PLAN.

KEY

REQUIRED TREE DECIDUOUS

REQUIRED TREE EVERGREEN

STREET FRONTAGE TREE DECIDUOUS

SOD

MN DOT 250 SEED MIX

100 50 0 50 100 200
SCALE IN FEET

NORTH

DRAWING NAME	NO.	BY	DATE	REVISIONS
Landscape Plan				
DRAWN BY				
NM				
CHECKED BY				
TW				
DATE				
08/07/14				

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8-8-14 Registration 20144

Norby & Associates
Landscape Architects, Inc.
100 Esst Second Street Chaska, MN 55318 (952) 361-0644

CITY PROJECT NO.
—

LAKE ELMO,
MINNESOTA

PRELIMINARY LANDSCAPE PLAN
PARCEL E
SCHILTGEN FARMS
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

LP1
LP4

GAS MAIN USE CAUTION

24" Gas Pipeline as shown in Doc. No. 3979697

12" DIP TRUNK WATERMAIN

x 916.0

x 917.0

x 917.0

50'

EXISTING TREE EDGE

CLEARING & GRUBBING

Village Parkway

Stormwater Pond #4SE
Nwl - 912.5
Hwl - 914.5

Stormwater Pond #3SE
Nwl - 912.0
Hwl - 914.5

Stormwater Pond #2SE
Nwl - 912.0
Hwl - 914.5

RD03

MATCH LINE L2
MATCH LINE L3

MATCH LINE L2
MATCH LINE L4

50 25 0 25 50 100
SCALE IN FEET

NORTH

DRAWING NAME	NO.	BY	DATE	REVISIONS
Landscape Plan				
DRAWN BY				
NM				
CHECKED BY				
TW				
DATE				
08/07/14				

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

Signed:

Date: 8-5-14 Registration No. 20144

Norby & Associates
Landscape Architects, Inc.
100 Esst Second Street Chaska, MN 55318 (952) 361-0644

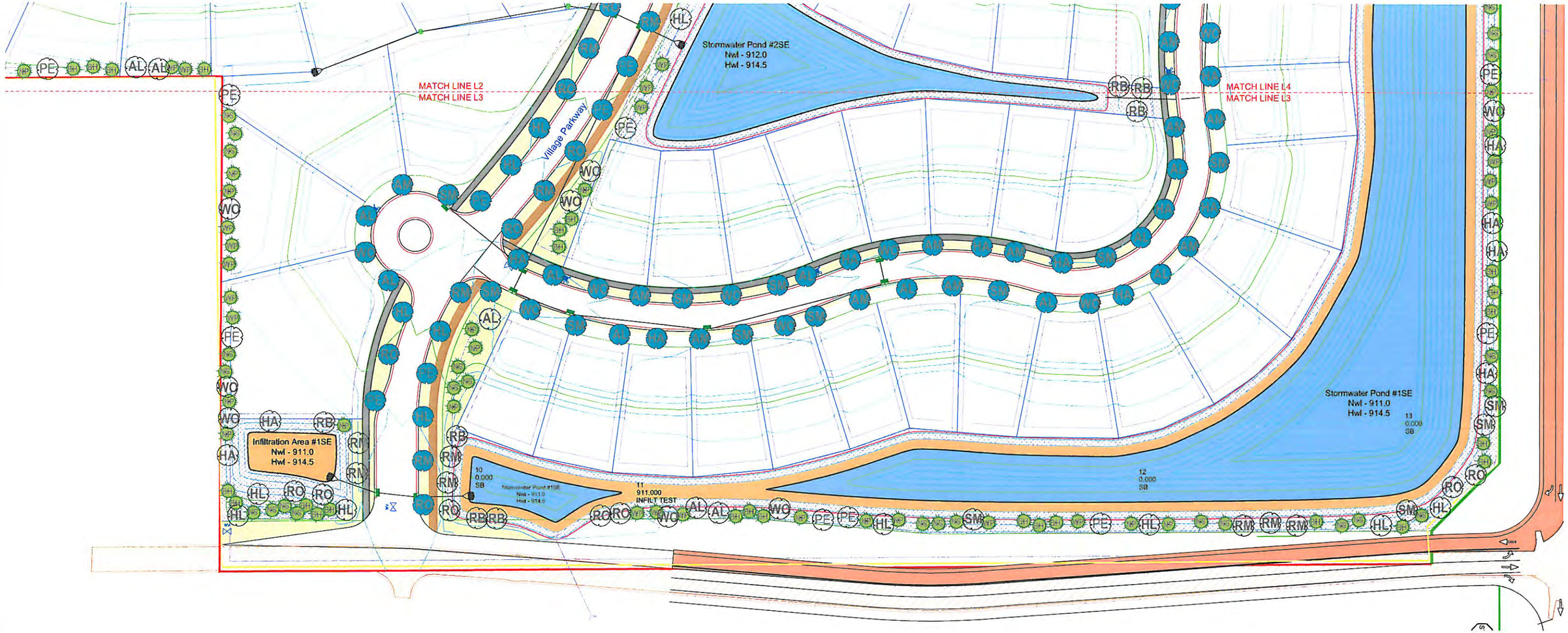
CITY PROJECT NO.
—

LAKE ELMO,
MINNESOTA

PRELIMINARY LANDSCAPE PLAN
PARCEL E
SCHILTGEN FARMS
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

LP2
LP4



50 25 0 25 50 100
SCALE IN FEET

NORTH

DRAWING NAME	NO.	BY	DATE	REVISIONS
Landscape Plan				
DRAWN BY				
NM				
CHECKED BY				
TW				
DATE				
08/07/14				

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

Date 8-8-14 Registration # 20144

Norby & Associates
Landscape Architects, Inc.
100 Esst Second Street Chaska, MN 55318 (952) 361-0644

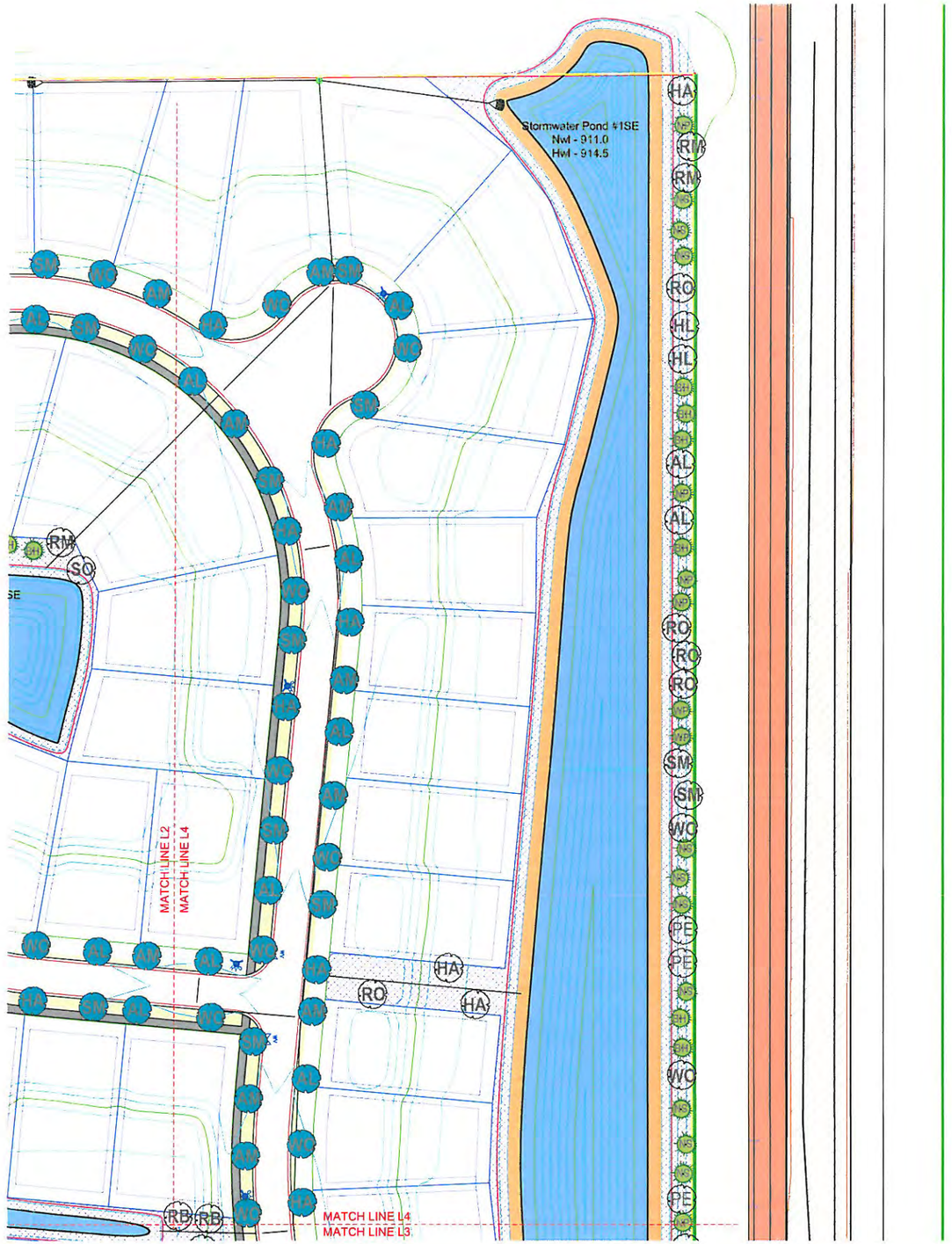
CITY PROJECT NO.
—

LAKE ELMO,
MINNESOTA

PRELIMINARY LANDSCAPE PLAN
PARCEL E
SCHILTGEN FARMS
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

LP3
LP4



50 25 0 25 50 100
SCALE IN FEET

NORTH

DRAWING NAME	NO.	BY	DATE	REVISIONS
Landscape Plan				
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CHECKED BY				
TW				
DATE				
08/07/14				

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Date 8-5-14 Registration # 20144

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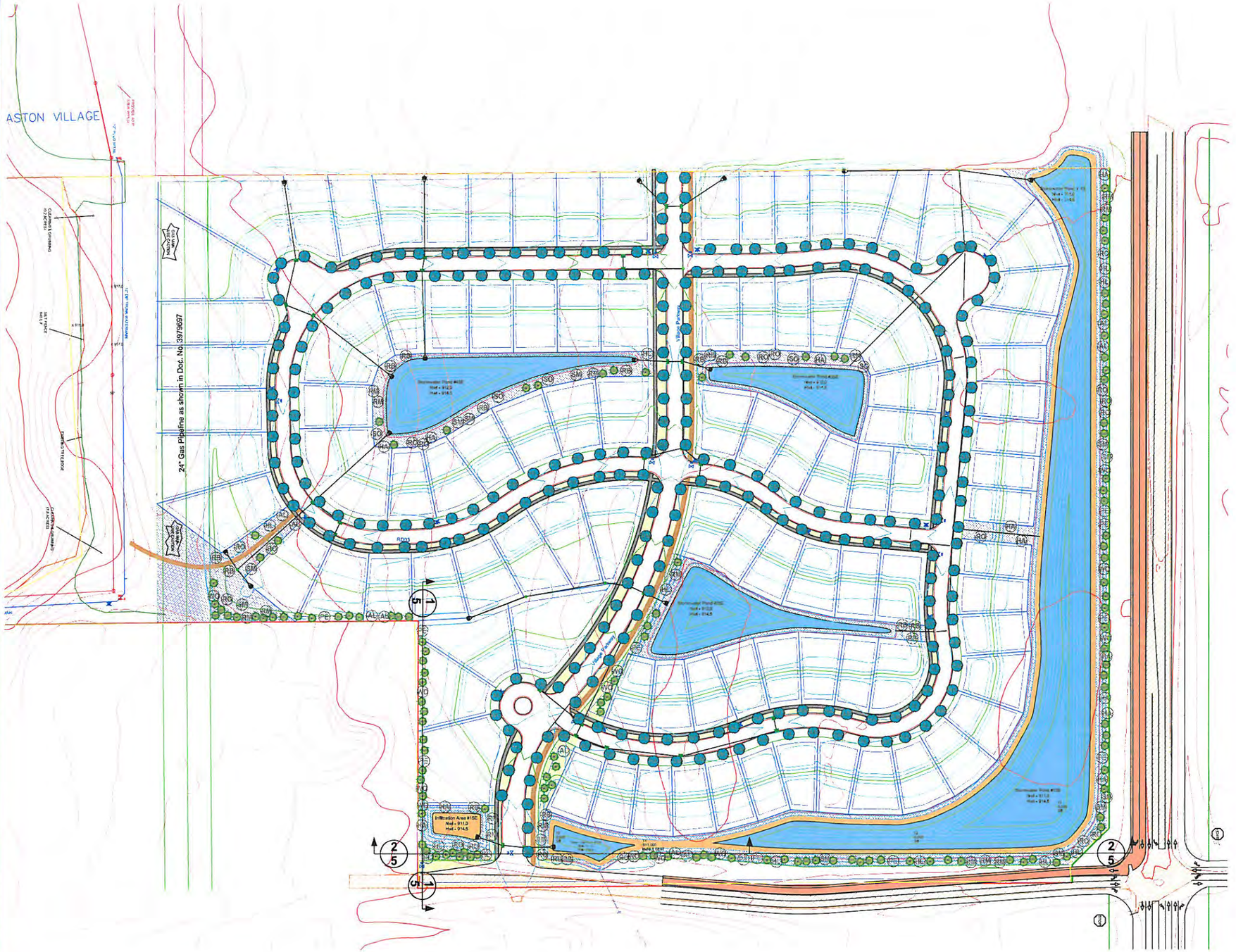
CITY PROJECT NO.
–

LAKE ELMO,
MINNESOTA

PRELIMINARY LANDSCAPE PLAN
PARCEL E
SCHILTGEN FARMS
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

LP4
LP4



REQUIRED TREE PLANTING LEGEND

KEY	COMMON NAME	BOTANICAL NAME	QUANTITY	SIZE	NOTES
	TREES				
AL	Linden 'Redmond'	*Tilia americana 'Redmond'*	9	2.5" BB	straight single leader
HA	Hackberry	Celtis occidentalis	12	2.5" BB	straight single leader
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RM	Red Maple	*Acer ruburm*	16	2.5" BB	straight single leader
RO	Red Oak	*Quercus rubra*	19	2.5" BB	straight single leader
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SO	Swamp Oak	*Quercus bicolor*	5	2.5" BB	straight single leader
WO	White Oak	*Quercus alba*	11	2.5" BB	straight single leader
	EVERGREENS				
BH	Black Hills Spruce	*Piecea glauca densata*	39	6' BB	
NP	Norway Pine	*Pinus resinosa*	28	6' BB	
SN	Norway Spruce	*Picea abies*	38	6' BB	
WP	White Pine	*Pinus strobus*	28	6' BB	
		Total	255		

TREE PLANTING REQUIREMENTS = 5 TREES /ACRE DISTURBED
51 ACRES DISTURBED = 255 TREES

STREET FRONTAGE TREE PLANTING LEGEND

KEY	COMMON NAME	BOTANICAL NAME	QTY.	SIZE	NOTES
	TREES				
AL	Greenspire Linden	*Tilia cordata 'Greenspire'*	34	2.5" BB	Straight single leader
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HL	Honey Locust	*Gleditsia tricanthos var. inermis 'Imperial'*	29	2.5" BB	Straight single leader
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RO	Red Oak	*Quercus rubra*	32	2.5" BB	Straight single leader
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WO	White Oak	*Quercus alba*	23	2.5" BB	Straight single leader
		TOTAL	255		

MN DOT 250 MIX

Common Name	*Scientific Name*	% Mix	Seed/sq ft	Rate / acre
Slender Wheat Grass	*Agropyron trachycaulum*	4.0	7.1	2.8 lb
Redtop	*Agrostis alba*	3.0	233.7	2.1 lb
Smooth Bromegrass	*Bromus inermis*	14.0	32.4	9.8 lb
Perennial Rye	*Lolium perenne*	21.0	81.0	14.7 lb
Alfalfa (Creeping)	*Medicago sativa*	6.0	21.6	4.2 lb
Switchgrass	*Panicum virgatum*	3.0	10.8	2.1 lb
Timothy	*Phleum praetense*	3.0	56.3	2.1 lb
Canada Bluegrass	*Poa compressa*	14.0	539.9	9.8 lb
Kentucky Bluegrass	*Poa pratensis*	29.0	648.7	20.3 lb
White Clover	*Trifloium*	3.0	37.8	2.1 lb

Seeding Rate: 70 lb / Acre

NOTE:
ALL TREES SHALL HAVE A MINIMUM DEPTH OF 6" HARDWOOD BARK MULCH RING AROUND THE BASE OF THE TREE.

MINIMUM OF 2 ROWS OF SOD BEHIND CURB.
AREAS WITH SIDEWALKS SHALL BE SODDED FROM BACK OF CURB TO SIDEWALK.

ALL RESIDENTIAL LOTS SHALL BE TEMPORARILY SEEDED WITH MN DOT 250 SEED MIX.
ALL OUTLOTS SHALL BE PERMENANTLY SEEDED WITH MN DOT 250 SEED MIX WITH EXCEPTION TO OUTLOTS TO BE SODDED AS SHOWN IN PLAN.

KEY

REQUIRED TREE DECIDUOUS

REQUIRED TREE EVERGREEN

STREET FRONTAGE TREE DECIDUOUS

SOD

MN DOT 250 SEED MIX

100 50 0 50 100 200
SCALE IN FEET

NORTH

DRAWING NAME	NO.	BY	DATE	REVISIONS
Landscape Plan				
DRAWN BY				
NM				
CHECKED BY				
TW				
DATE				
08/07/14				

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Landscape Architects, Inc.
100 Esst Second Street Chaska, MN 55318 (952) 361-0644

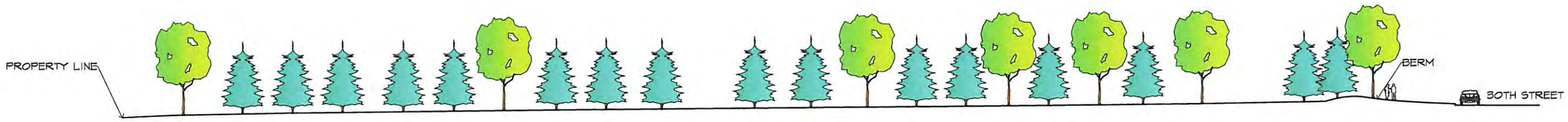
CITY PROJECT NO.
—

LAKE ELMO,
MINNESOTA

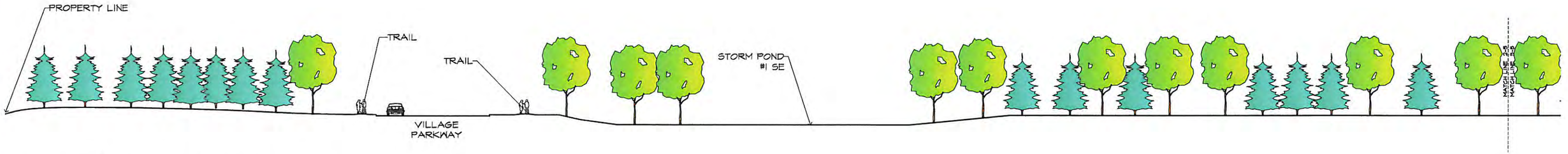
PRELIMINARY LANDSCAPE PLAN
PARCEL E
SCHILTGEN FARMS
GWSA LAND DEVELOPMENT

FILE NO.
3120-047

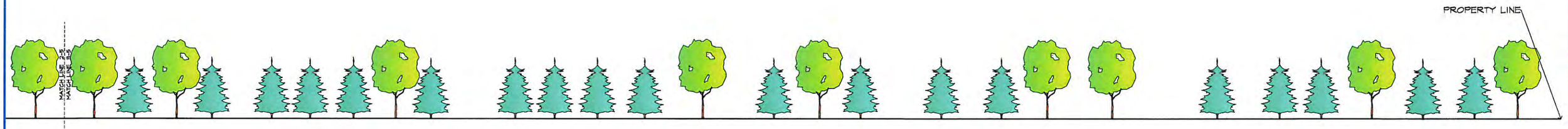
LP1
LP4



1/5 SECTION LOOKING EAST FROM McLEOD PROPERTY
SCALE: 1"=20'



2/5 30TH PERIMETER SCREENING SECTION
SCALE: 1"=20'



2/5 30TH PERIMETER SCREENING SECTION CONTINUED
SCALE: 1"=20'

DRAWING NAME	NO.	BY	DATE	REVISIONS
DRAWN BY				
CHECKED BY				
DATE				

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100 Esst Second Street Chaska, MN 55318 (952) 361-0644

CITY PROJECT NO.
—
LAKE ELMO, MINNESOTA

LANDSCAPE PERIMETER SECTIONS
PARCEL E
SCHILTGEN FARMS
GWSA LAND DEVELOPMENT

FILE NO.
3120-047
LP5
LP5

CITY OF LAKE ELMO
WASHINGTON COUNTY, MINNESOTA

RESOLUTION NO. 2014-60

RESOLUTION APPROVING AN AMENDMENT TO THE CITY OF LAKE ELMO COMPREHENSIVE PLAN CHANGING THE FUTURE LAND USE DESIGNATION OF THE HOLLIDAY PARCEL LOCATED IN THE VILLAGE PLANNING AREA

WHEREAS, the City of Lake Elmo has established a Comprehensive Plan that provides a compilation of background data, policy statements, standards, and maps, which help to guide the future physical, social, and economic development of the City; and

WHEREAS, GWSA Land Development, LLC, 10850 Old County Road 15, Suite 200, Plymouth, MN, ("Applicant") has submitted an application to the City of Lake Elmo ("City") to amend the Lake Elmo Comprehensive Plan, a copy of which is on file in the City Planning Department; and

WHEREAS, the request to amend the Comprehensive Plan was submitted along with a Sketch Plan for a proposed single-family residential subdivision in the southeast portion of the Village Planning Area; and

WHEREAS, the Lake Elmo Planning Commission held a public hearing on June 30, 2014 to consider the request to amend the Comprehensive Plan; and

WHEREAS, on June 30, 2014, the Lake Elmo Planning Commission unanimously adopted a motion to recommend that the City Council approve the request to amend the Comprehensive Plan; and

WHEREAS, the City Council reviewed the recommendation of the Planning Commission and the proposed amendment to the Comprehensive Plan at a meeting on July 15, 2014;

NOW, THEREFORE, based upon the testimony elicited and information received, the City Council makes the following:

FINDINGS

1) That the Applicant has submitted a request to amend the Comprehensive Plan in accordance with the procedures as established by the Lake Elmo Planning Department and Lake Elmo Planning Commission.

2) That the request to is to amend the Future Land Use Map (Map 3-3 in Chapter III – *Land Use Plan*) and Village Planned Land Use Map (Map 3-5 in Chapter III – *Land Use Plan*) in the Lake Elmo Comprehensive Plan, and to specifically change the future land use

designation a parcel of land located immediately west of Manning Avenue North (CSAH 15) and immediately north of 30th Street North (PID 13.029.21.44.0002) from RAD – Rural Area Development to V-LDR – Village Urban Low Density Residential.

3) That the Comprehensive Plan Amendment will apply to property legally described in the attached Exhibit "A".

4) That the subject property associated with the Comprehensive Plan Amendment request is currently located within the City's sanitary sewer service area.

5) That the proposed amendment will allow for the private market to complete the construction of the Village Parkway minor collector road, a critical transportation improvement needed to serve the upcoming growth and development and increased projected traffic volumes within the Village Planning Area.

6) That the area impacted by the proposed amendment is relatively small, and that the potential increase in residential units associated with the amendment is not inconsistent with the projected levels of planned growth and development in the Village Area under the Village Land Use Plan.

NOW, THEREFORE, BE IT RESOLVED, that based on the foregoing, the Lake Elmo City Council hereby approves the Applicant's request to amend the Lake Elmo Comprehensive Plan, subject to and contingent upon the following:

1) Submission of the Comprehensive Plan Amendment to the Metropolitan Council and the receipt of formal notification from the Metropolitan Council that its review has been completed and approved.

2) As part of the preparation of Preliminary Plans for the Village Preserve South subdivision, the applicant shall prepare a screening plan along the western boundary of the Holliday parcel adjacent to the Mcleod parcel that effectively buffers the proposed residential subdivision from the rural single family lot to the west.

Passed and duly adopted this 15th day of July 2014 by the City Council of the City of Lake Elmo, Minnesota.

Mike Pearson, Mayor

ATTEST:

Adam Bell, City Clerk

EXHIBIT A

Legal Description (PID 13.029.21.44.0002)

The South 498.6 feet of the South Half of the Southeast Quarter (S1/2 of SE1/4); Section Thirteen (13), Township Twenty Nine North (29N.), Range Twenty-one West (21W.); except the West 1273.0 feet of the South Half of the Southeast Quarter of said Section Thirteen (13). And excepting therefrom that portion of the above tract conveyed to the County of Washington by that certain Quit Claim Deed dated March 30, 1987, and filed of record in the Office of the Washington County Recorder on April 2, 1987 as Document No. 535377.

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: September 4, 2014

To: Kyle Klatt, Planning Director
Cc: Nick Johnson, City Planner
From: Jack Griffin, P.E., City Engineer

Re: Village Park Preserve
Preliminary Plat Review

An engineering review has been completed for the Village Park Preserve. A Preliminary Plan submittal was received on August 27, 2014. The submittal consisted of the following documentation prepared by Sathre-Bergquist, Inc.:

- Village Park Preserve Site Plans, Preliminary Plat, and Preliminary Plans August 14, 2014.
- Stormwater Management Plan, dated August 7, 2014.

STATUS/FINDINGS: Engineering review comments are as outlined below.

AGENCY AND THIRD PARTY APPROVALS

- The proposed drainage plan indicates the direct discharge of storm water runoff from the site to the property to the south, including the installation of a storm sewer outfall pipe. The applicant must submit written permission from the impacted property owner acknowledging and consenting to this discharge location, volume and rate(s).
- A permanent utility easement must be provided in the City standard easement form for the outfall storm sewer pipe. The easement should be a condition of final plat approval.
- The site plan is dependent upon and subject to a storm water management plan meeting State, VBWD and City rules and regulations.
- The City must receive written approvals from Washington County to verify the proposed work along Manning Avenue.
- The City must receive copies of the written approvals from Northern Natural Gas for the proposed utility and trail crossings. Any conditions of approval must be provided.
- Plan revisions are necessary to fully incorporate and comply with the Lake Elmo engineering design standards.
- Easement widths appear to provide the 30 foot minimum utility width. Additional easements and amendments may be required as the plan continues to evolve through the process.

ADDITIONAL INFORMATION REQUIRED

- No phasing plan was submitted. A phasing plan must be submitted for staff review to verify feasibility of working infrastructure at each phase.
- Existing conditions are incomplete. The Plans do not provide existing conditions in sufficient detail to allow staff to review the proposed grading and infrastructure as it relates to existing conditions at the Plat

perimeters, including the storm sewer outfall pipe south of 30th Street and the existing watermain along 30th street.

- Grading contours must be fully completed at all Plat perimeters.
- Overland Emergency Overflows (EOFs) must be provided throughout the grading plan to facilitate a complete review of the grading plan and storm water flood protection for storm water ponds and localized low points.
- Stormwater facility maintenance access roads are not shown on the plans.

GRADING PLAN

- The grading plan is substantially complete however some contours remain incomplete near the plat perimeter. All contours must be completed to demonstrate a drainage design that does not negatively impact adjacent properties.
- Additional plan review is necessary once EOFs are provided to review for adequate flood protection for each adjacent lot. It appears that 8-10 lots have low floor elevations that do not meet the 2 feet of freeboard above the pond HWLs or 1 foot above an adjacent EOF.
- The HWL for Infiltration Area 1SE encroaches into Lot 1, Block 1. The HWL area must be fully contained within an Outlot dedicated to the City.
- The HWL for Stormwater Pond 1SE encroaches into the 30th Street R/W. The HWL area must be fully contained within an Outlot dedicated to the City and may not encroach the existing City R/W.
- Maintenance access roads meeting City Standards must be provided to each Stormwater pond and infiltration basin. Plan revisions are needed to provide adequate maintenance access to all storm water facilities. Access must be accommodated without impacts to the proposed infiltration benches.
- Stormwater Pond designs do not meet the City requirements, exceeding the maximum depth allowed of 10 feet. Additional design configuration concerns include maximum side slopes, maintenance of the infiltration bench, narrow constrictions within the ponds, and long term water levels.
- Additional catch basins are needed along Road 3 to meet maximum curb runs of 350 feet.

STORMWATER MANAGEMENT

- The site plan is dependent upon and subject to a storm water management plan meeting State, VBWD and City rules and regulations. Storm water facilities proposed as part of the site plan to meet VBWD permitting requirements must be constructed in accordance with the City Engineering Design Standards Manual available on the City website.
- The Stormwater model should be revised as documented in the attached EOR review memorandum and the Stormwater facilities revised accordingly.
    - Adjust assumed CN runoff coefficients and account for on-site depressional areas.
    - Provide additional supporting documentation for assumed infiltration rates and adjust to lower rates as needed.
    - Provide additional documentation to demonstrate the feasibility of the proposed new outlet and lowering of the outlet invert along Manning Avenue.
    - Update the model to include turn lanes improvements.
    - Update water quality value in table.

MUNICIPAL WATER SUPPLY

- Municipal water supply is available at the Reid Park lift station site and along 30th Street N. Connections to both locations will be required and have been shown on the Preliminary Plans.
- Watermain alignment will need to be revised as part of the final construction plans to better align within the paved street surfaces.
- Watermain stubs to adjacent property and pipe oversizing will continue to be reviewed by City staff as the development progresses forward and oversizing routes may need to be changed as part of the final

construction plans. Watermain oversizing is paid by the City as a reimbursement addressed within the development agreement.

- Hydrant and system valve locations will be reviewed with the Fire Chief and Public Works as part of the final construction plans.

MUNICIPAL SANITARY SEWER

- Municipal sanitary sewer is available at the Reid Park lift station site. The applicant is responsible to extend the municipal sanitary sewer to the development site at developers cost.
- To serve the property to the south, the invert at the 30th Street location must be at 905. This is required to remain responsive to future private ISTS system failures.
- A review of alternative sewer alignments and pipe oversizing was previously completed by City staff and provided to the applicant for input. The preliminary plans show a pipe configuration that is not consistent with the staff plan recommendation.
- Additional manholes will need to be incorporated in the plans to improve the street centerline alignment for the sanitary sewer and allow watermain at a 10 foot offset to remain within the paved street surface.
- Sanitary sewer pipe stubs to adjacent property and pipe oversizing will continue to be reviewed by City staff as the development progresses forward. Revisions may need to be incorporated as part of the final construction plans. Sewer pipe oversizing has been accounted for through the Village East Trunk Sanitary Sewer project. Therefore, the sewer pipe oversizing must be installed at no cost to the City.

RESIDENTIAL STREETS

- All streets must be designed to meet the City's Engineering Design Standards including R/W width, street width and cul-de-sac radii. The plans appear to substantially conform to this requirement.
- The street grades and profiles must be adjusted to meet the minimum K-value of 37 for vertical sag curves.
- The eyebrow designs for Roads 5, 6 and 7 propose a unique design. The roadway geometry requires additional review to ensure adequate pavement width and turning radius for emergency and maintenance vehicles. Turning templates must be submitted.
- The geometry for Road 5 requires particular attention to avoid conflicts along the higher volume roadway of Village Parkway. Road 5 should be shifter further north to align the south curb with Road 2. This would provide additional southbound left turn lane length for Village Parkway.

VILLAGE PARKWAY (NEIGHBORHOOD COLLECTOR STREET)

- Village Parkway will serve as a neighborhood collector for the new development in the southeastern Village area, essentially becoming the primary access in and out of the future neighborhoods. Obtaining increased mobility from a typical residential street will be necessary to accommodate the new growth while providing additional access and circulation into and out of the Village Downtown. Between State Highway 5 and the UP Railroad, Village Parkway will provide parking along one or both sides of the street to accommodate the mixed use development planned for the west side of the collector road. South of the UP Railroad the street will be posted as "No Parking".
- Village Parkway must be constructed according to the Village Parkway design standards and typical section as prepared by City staff. The street design must also meet Municipal State Aid design standards for an urban collector with ADT < 10,000; 35 mph design speed. The projected 2030 ADT is 5,800. The City typical section must be placed on the Preliminary Street Plans.
- The access management guidelines for Village Parkway must be established by the City and carefully planned out along its entire corridor from 30th Street to State Highway 5. Road 5 has been placed roughly 300 feet from 30th Street. A 330 foot access spacing is recommended. The additional 30 feet would help to provide additional turn lane length along Village Parkway.
- Right and left turn lanes are required along 30th Street when the Village Parkway intersection is constructed. The Preliminary Plans should be revised to provide a turn lane Plan Sheet to detail the turn

lane dimensions, including pavement widths, lane widths, turn lane lengths and tapers for staff review. It appears that the proposed turn lanes will need to be lengthened to meet typical turn lane design standards.

- The street grades and profiles must be adjusted along Village Parkway to meet the minimum K-value of 49 for vertical sag curves and minimum K-value of 29 for vertical crest curves. In addition, street grade changes along Village Parkway should be minimized and softened (not using minimum standards with every adjustment). The proposed profile must be revised to reduce the vertical curves to avoid a roller coaster effect along this high volume roadway. Street alignment transitions must be revised to rely on minimums only when necessary.
- The minimum horizontal curve radius for Village Parkway is 375 feet. C1 is currently proposed with a 250 foot radius.

memo

651 Hale Avenue North Oakdale, Minnesota 55128 telephone: 651.770.8448 facsimile: 651.770.2552 www.eorinc.com

Date |	9/3/2014		
To |	Jack Griffin	**Contact info** |	Lake Elmo
cc |		**Contact info** |	
cc |		**Contact info** |	
From |	Brett H. Emmons, Jay Hill	**Contact info** |	EOR
		Contact info |	
Regarding |	Lake Elmo, Village Park Preserve Development – Respond to City's List of Stormwater Review Issues		

The information in these review comments are based on review of the following stormwater issues, per the city's request:

- Stormwater model input assumptions.
- Upstream runoff properly accounted for, including the pond discharge from Easton Village.
- Stormwater routing management is a workable plan for the area. The system must be able to accommodate the Downtown Village drainage.
- Flood protection (HWLs and Emergency overflows), including recommendations.
- Pond configurations and depths from the city's long term ownership and maintenance perspective (i.e. the deep storm water pond along Manning).

Documents submitted for the development review include:

- Preliminary Plan Set for Street, Utility, Grading, Landscape, and Drainage Area Plans, by Sathre-Bergquist, dated 8/8/14
- Stormwater Management Plan including 3 soil borings, by Sathre-Bergquist, dated 8/7/14

Stormwater Management and Stormwater BMPs:

1. CN and Runoff Assumptions – Proposed existing conditions (predevelopment) CNs appear too high and on-site depressional storage is not accounted for, thus providing a less conservative standard/target for their postdevelopment design.

   Discussion: Predevelopment CNs are listed at 69 for agricultural areas (compared to post-development CNs of 74). The CN of 69 for existing conditions is high for the low runoff character of the existing lands. Also, observed runoff during rain events indicates that there is not much runoff until large events are experienced and/or snowmelt. Assuming higher predevelopment CNs leads to less conservative assumptions and reduced standards for peak rate control. For example, note that compacted yard/urban lawns are listed as CN 61 in post-development (much lower than existing CN of 69). Typically we would require a CN of 58 for predevelopment conditions to ensure

conservative assumptions for hydrologic routing and flood control. Areas in the model subcatchments for the open water pond with CNs of 100 do not appear in the model and should be included. On-site depressional storage is not accounted for in existing conditions and should be included.

2. Infiltration Assumptions – The assumed infiltration rate of 0.5 in/hr may be too high and is inconsistently applied and presented in the report and models.

   Discussion: The assumed infiltration rates do not appear to be consistent between the models (HydroCAD and P8) and the narrative (Report Summary) of the Stormwater Management Plan. The narrative mentions using 0.5 in/hr in one pond, #1SE (only pond where infiltration bench is shown), and states this rate is assumed as a "conservative" rate. The P8 model uses 1.0 in/hr instead of 0.5 in/hr. The HydroCAD modeling has infiltration in all the ponds in the development instead of just pond #1SE. The rate of 0.5 in/hr is not very conservative especially for the soils in the upper 24 ft – 29 ft (boring ST-2 and ST-3, within the basin). Water table readings indicate a high water table may exist, although the readings between borings are inconsistent (possibly perched system). There is one (1) point infiltration testing result showing 4.32 in/hr. One reading alone is not sufficient for accurate infiltration estimating nor is it good practice (more samples are needed) and the infiltration method and results need additional review.

3. Stormwater Routing Using New Outlet – The new outlet is lower than the existing outlet under 30th St., but it is not clear what the downstream elevations and capacities are to ensure the new outlet is feasible, nor are details of the connection given.

   Discussion: The most downstream pond and one influencing HWLs on the other development ponds is pond 1SE. Pond 1SE has a listed NWL of 911.0, which is almost two feet below the existing culvert invert of 912.8 under 30th St. Details are needed on the new outlet for pond 1SE shown in the southeast corner (invert, size, type of pipe, permissions off-site, downstream conveyance elevations and capacity, etc.). No tailwater is used in the model for pond 1SE and this assumption should be verified. Provide information on the downstream conveyance to ensure that elevation and capacity exists for the proposed flows (186 or 331 cfs-? for 100-yr rainfall event) and associated calculated HWLs.

4. Stormwater Modeling – The information provided in the summary and modeling are inconsistent and details on where the upstream flow values originate from are lacking, making evaluation of flow routing difficult.

   Discussion: The model should be updated to better represent what is happening hydrologically in the system. Provide information on where the Existing Conditions peak flow rates come from and how they were derived. Comparing proposed peak flow rates to existing conditions is difficult without context on the existing flow rates – and the capacity of the system downstream to convey that flow. Show how and where upstream flows (2-yr 100 cfs, 10-yr 172 cfs, and 100-yr 331 cfs per Report Summary) will come into the site. Which values for incoming flows is correct, the Runoff Comparison table or the HydroCAD modeling, since they are factor of ~2X different (e.g., table 2-yr = 100 cfs, model 2-yr = 54 cfs)? The only inlet to pond 1SE is a 15" storm sewer in the northeast corner. Pipe size and inverts need to be shown for the proposed new outlet for pond 1SE (the regional flow path). Pipe sizes and inverts should also be labeled on the

grading plans. As noted above, no tailwater is shown in the model for pond 1SE and this assumption should be verified with downstream information.

5. Include Associated Improvements – Accounting for localized road improvements are not included.

   Discussion: If there are road improvements planned (development-specific) on city or county roads for access to the development (e.g., turn lanes, by-pass lanes, etc.), that additional runoff should also be accounted for in the analysis and sizing.

6. Flood protection – Surface Emergency Overflows (EOFs) are not shown or provided below critical building/home elevations.

   Discussion: All building lowest floors should be 2 feet above the 100-yr high water level or 1 foot above the overland emergency overflows (EOFs), whichever is greater. Show all EOFs on the plans and show the potential inundated areas if the pipes were blocked, since it appears many of the home elevations do not satisfy 1 foot above the emergency overflow. Emergency overflows should be provided for all low points and ponds. The lowest building opening should be set at a minimum of 1' above the EOF. The preference is to adjust some of the grading to provide an overland overflow, but as an alternative we would consider installing a secondary (separate) EOF pipe from the ponds. The pipe would be set at or slightly higher than the HWL of the pond and should be sized adequately large enough to be considered non-clogging (36" minimum). Street low points should have an EOF that limits ponding/flooding depth to a maximum of 2' in order to allow emergency access to all properties. With EOFs issue addressed, there are still proposed homes with their lowest floor not meeting the 100-yr HWL + 2' freeboard standard, including: Block 1 lot 1; Block 7 lot 1; and Block 8 lots 1, 15, 16, 17.

7. Pond Configurations – Various aspects of pond configurations (maintenance access and relation to infiltration bench, infiltration design, and narrow portion for conveyance) need to be addressed and could impact future city maintenance.

   Discussion: Pond access for maintenance (20' minimum width and maximum grade of 10%) should be shown for all facilities including access to inlet and outlet structures on the grading plans. For pond 1SE with the infiltration bench, how would access and maintenance be accomplished without impacting or destroying the infiltration BMP? Provide infiltration bench and infiltration area construction details for how the BMPs will connect to porous materials at depth. There is a narrow, shallow spot in pond1SE, which conveys regional flows, that could be susceptible to filling with cattails and obstructing flow and should be modified to avoid a restriction. Pond configuration should be reviewed by a city maintenance staff.

8. Pond Water Depths and Long-Term Levels – Pond depths exceed the city standard of 10' maximum and uncertainty about water levels in pond 1SE along Manning Ave. raise some concerns.

   Discussion: Details on the pond configuration and construction are needed before the ponds can be accepted. Ponds 1SE and 2SE are proposed to be 13' and 12' deep respectively, exceeding the maximum depth of 10' and should be reduced. A water budget should be performed for pond 1SE to determine if the proposed water levels will be acceptable for the city (safety, maintenance, aesthetics, etc.).

9. Pond Side Slopes – Review pond side slopes for maintenance.

   Discussion: State the maximum slopes on ponds, specifically 1SE, on the grading plans. Notes on sheet GP1 mention maximum of 4:1 slopes, but grading plans appear steeper than that. Slopes greater than 3:1 typically are not allowed, and depending on where water levels stabilize, this also impacts the appropriate slopes and where 10:1 safety benches are appropriate.

10. Spring Runoff – Review if spring snowmelt would impact the design.

    Discussion: Depending on the final configuration of the regional flow system, determine if a spring snowmelt critical event should be evaluated in the design.

11. Drawdown Time – Demonstrate 48 hour drawdown is accomplished with regional flows.

    Discussion: Provide draw down time analysis in the infiltration basins. The drawdown requirement is 48 hours. These facilities appear to be on-line and would be subject to the regional flows from upstream, potentially impacting the draw down time.

12. Water Quality Report – Correct water quality value in table.

    Discussion: The Stormwater Report table Provided TP Removal Efficiencies (%) lists a value of 97.9% removal of TP which does not appear to match the model output so it should be updated.

13. Landscaping Plan – The provided landscape plan is incomplete for infiltration areas.

    Discussion: Provide landscaping plan and details for the infiltration areas. Seeding only of infiltration areas should be avoided; use at least 50% coverage of plugs for the plantings to enhance establishment. An alternative to seed mix 250, with invasive species such as smooth brome, should be used, except possibly in roadside areas.

Other Considerations:

14. The VBWD should quantify and address the downstream flooding and/or water quality implications of the proposed development and increased runoff.
15. Coordination with VBWD on maximum bounce in the infiltration BMPs should be addressed since pond and infiltration area 1SE show a bounce of 4.5 feet for 100-yr event, exceeding VBWD's maximum bounce of 1.5 feet.
16. Erosion and sediment control, once planning/design approach has been finalized, should be reviewed for protection of ponding and infiltration areas and downstream areas.

Not all aspects of the submittal were reviewed. Additional items may arise as final design is reviewed. Please let us know if you have questions regarding the comments.

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

August 27, 2014

After review of the PRELIMINARY PLAT – VILLAGE PARK RESERVE, the following are items that will need to be addressed, moving forward:

- ROADWAYS
  - Street naming and numbering per city ordinance.

- FIRE HYDRANTS
  - Spacing/Location, it appears there are some that may be closer than the 500' spacing required and could be eliminated. Locate on corners of intersections to gain the most benefit from hydrants.

Reviewed by

Greg Malmquist, Fire Chief

Washington County

Public Works Department

Donald J. Theisen, P.E.
Director

Wayne H. Sandberg, P.E.
Deputy Director/County Engineer

September 3, 2014

Nick Johnson
City Planner
City of Lake Elmo
3600 Laverne Avenue North
Lake Elmo, MN 55042

RE: Washington County comments on the preliminary plat for the Village Park Preserve in the City of Lake Elmo

Dear Mr. Johnson,

Thank you for providing the County with the concept plan of the Village Preserve South subdivision in Section 19, Township 29, Range 20, City of Lake Elmo The project will consist of 104 single family residential lots on 63.6 acres. Based on review of the plans, we offer the following comments and recommendations to consider as you process this subdivision application through the City of Lake Elmo:

- The proposed access point on 30th Street is acceptable to the County. A collector roadway is identified in the center of the subdivision that will connect 30th Street to Trunk Highway (TH) 5 through the Easton Village subdivision.

- The Functional Classification of CSAH 15/ Manning Avenue is "A" Minor Arterial Roadway, expander category. The future right-of-way requirement within this section of roadway is 184 feet. As part of the subdivision plat, there should be an additional 42 feet of right-of-way dedicated to Washington County. This will need to be verified prior to final plat. There also needs to be additional right-of-way at the 30th and CSAH 15/Manning Avenue intersection since this is programmed for a traffic signal and additional turn lanes in the future. Traffic staff will review the plan and provide comments directly to the city engineer.

- A Right of Way Permit will be required for any work in the CSAH 15/Manning Avenue right-of way as it relates to the development. A plan set is required with the application and include any grading, installation of culverts, installation of water and sewer services, left and right turn lanes on CSAH 15/Manning Avenue, signage, landscaping, and any other improvements within county right-of-way.

- The proposed project will generate pedestrian/bicycle traffic on CSAH 15/ Manning Avenue so pedestrians from the future development will need to access any future off road trail. The future trail along CSAH 15/Manning Avenue will be constructed as part of the CSAH 15/Manning Avenue project.

- The developer or the city must submit the drainage report and calculations to our office for review of any downstream impacts to the county drainage system. Along with the drainage calculations, we will request written conclusions that the

volume and rate of stormwater run-off into the county right-of way will not increase as part of the project. Stormwater drainage and future drainage easements along Manning Avenue are being coordinated with the Manning Avenue Project.

As the developer plans the stormwater facilities on this property, there should be consideration for setbacks from county right-of-way and perimeter landscape elements and berming.

- Access control must be dedicated to Washington County along the CSAH 15/Manning Avenue.

- Washington County's policy is to assist local governments in promoting compatibility between land use and highways. Residential uses located adjacent to highways often result in complaints about traffic noise. Traffic noise from this highway could exceed noise standards established by the Minnesota Pollution Control Agency (MPCA), the U.S. Department of Housing and Urban Development, and the U.S. Department of Transportation. Minnesota Rule 7030.0030 states that municipalities are responsible for taking all reasonable measures to prevent land use activities listed in the MPCA's Noise Area Classification (NAC) where the establishment of the land use would result in violations of established noise standards. Minnesota Statute 116.07, Subpart 2a exempts County Roads and County State Aid Highways from noise thresholds.

  County policy regarding development adjacent to existing highways prohibits the expenditure of highway funds for noise mitigation measures in such areas. The developer should assess the noise situation and take any action outside of County right of way deemed necessary to minimize the impact of any highway noise.

If you have any questions or comments to the responses on the Village Preserve concept plan, please contact me at Ann.pung-terwedo@co.washington.mn.us.

Sincerely,

Ann P Terwedo /ck

Ann Pung-Terwedo
Senior Planner

C: Carol Hanson, Office Specialist

R/Plat Reviews/City of Lake Elmo/Village Preserve South

METROPOLITAN AIRPORTS COMMISSION
Minneapolis-Saint Paul International Airport
6040 - 28th Avenue South • Minneapolis, MN 55450-2799
Phone (612) 726-8100

September 3, 2014

Mr. Nick Johnson
City Planner
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042-9629

Re: Village Park Preserve Preliminary Plat Review
Lake Elmo Airport

SENT VIA EMAIL

Dear Mr. Johnson:

As requested in your Land Use Review package dated August 26, 2014, the Metropolitan Airports Commission (MAC) has reviewed the Village Park Preserve Preliminary Plat that will be presented to the Lake Elmo Plan Commission on September 8, 2014. We appreciate the opportunity to review the document, and offer the following comments.

Aircraft Over Flights and Noise

The proposed Village Park Preserve development is located adjacent to the Lake Elmo Airport in an area that receives aircraft overflights. Although the Baseline Year 2005 and Forecast Year 2025 65 DNL Noise Contours do not appear to encompass any of the proposed residential parcels, the eastern portion of the property is located in close proximity to the Forecast 65 DNL Noise Contour line. (Residential development should not occur within the 65 DNL Noise Contour.) It is the MAC's experience that placing residential areas in such locations around airports can result in noise complaints and resident concerns about aircraft noise. The MAC requests that prospective property buyers within the proposed Village Park Preserve development be provided information on the properties' locations relative to the Lake Elmo Airport and the related existence of aircraft operations over this area.

Water Quality – Surface Water Runoff

The Village Park Preserve Preliminary Plat provides some information about the location of proposed storm water ponds for the development area. As outlined in previous review comments provided for the adjacent Easton Village Concept Plan and Preliminary Plat, open water ponds, especially those with mowed grass nearby, have been shown to be hazardous to the flight of aircraft due to the use of the ponds by Canada geese and other waterfowl. The FAA's Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports*, can be found on the agency's web page via the following link.

http://www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf

This Advisory Circular outlines the restrictions and prohibitions surrounding drainage areas within the vicinity of airports as well as guidelines for not only ponds, but other potential wildlife attracting sources. According to the circular, the entire development area under consideration lies within the separation distance recommended by the FAA (5,000 feet for airports serving piston-powered aircraft).

The MAC fully supports the use of infiltration basins in the vicinity of the Lake Elmo Airport, and encourages all ponding areas to be designed as dry ponds that are non-attractive to waterfowl. If this is not possible, we offer the following suggestions to reduce the attraction to wildlife: design ponds with no slope benches; maintain a water depth of less than two feet so that water-emergent growth can occur; plant tall grasses around ponds; install riprap around ponds; and/or cover ponds with a grid of kevlar wire to keep birds out. Based on the Grading Plan included in the Preliminary Plat, the normal water depth in all of the proposed stormwater ponds appears to exceed the recommended two feet. We are concerned that these ponds are being proposed as open water retention facilities, and request that infiltration basins be designed instead. Please provide additional information about the design of the stormwater ponds, including the outfall elevations, proposed water release rates, and measures that will be taken to reduce the attractiveness of the ponds to waterfowl. At the time of the Final Plat, we will object to the use of open water retention ponds that do not incorporate appropriate waterfowl mitigation features. Finally, please identify who will be the responsible party for long-term maintenance of these ponds.

Airspace

Due to the proximity of this proposed development to the Lake Elmo Airport, we request that the applicant file an aeronautical study with the Federal Aviation Administration (FAA) for any structure or object, including temporary construction equipment, which will exceed a height of 35 feet above the ground within this development area and provide a copy of the study results to the MAC prior to the commencement of construction activities. Additional information about the process to file an aeronautical study with the FAA can be found on the agency's Obstruction Evaluation/Airport Airspace Analysis website via the following link.

https://oeaaa.faa.gov/oeaaa/external/portal.jsp

Street Luminaries

Due to the close proximity of the proposed development to the runways at the Lake Elmo Airport, we request the street luminaries be down-lighted to avoid confusion by pilots as they approach the airfield at night.

Landscaping

The Preliminary Landscaping Plan indicates that a mixture of deciduous and evergreen trees will be planted along the south and east sides of Stormwater Pond #1SE. We are concerned that the trees closest to the approach surface for Runway 4 could one day grow to become an obstruction to the Airport's airspace and impact flight procedures. In addition, fruits borne by these trees (if any) may attract wildlife. We request that vegetation in this area be limited to

shrubs and tall grasses. The City must also be aware that any of the trees planted in the vicinity of an approach surface may require removal at some future date if they become an obstruction to the airspace of the Airport and compromise flight procedures.

Construction Measures

Please ensure that the contractor is required to develop and implement a dust control plan that will prevent airborne particulates generated during construction from interfering with aircraft operations at the Lake Elmo Airport.

Thank you for the opportunity to comment on the Village Park Preserve Preliminary Plat. The Lake Elmo Airport is an important recreational and transportation asset to the City and the region. If you have any questions, please contact me at 612-726-8129 or via e-mail at neil.ralston@mspmac.org.

Sincerely,

Neil Ralston

Neil Ralston, A.A.E.
Airport Planner

cc: Bridget Rief, MAC
Chad Leqve, MAC
Joe Harris, MAC
Patrick Mosites, MAC

LANDSCAPE ARCHITECTURE INCORPORATED
WWW.LANDARCINC.COM

VILLAGE PARK PRESERVE (PARCEL E) DESIGN REVIEW REPORT
LAKE ELMO, MN

LANDSCAPE ARCHITECTURAL DESIGN REVIEW DATED SEPTEMBER 4TH, 2014

REVIEWED PLAN SET DATED AUGUST 8TH, 2014

Required Action Items by Village Park Preserve Project Landscape Architect

1. Provide your calculations for street frontage trees on sheet LP1.
2. Please represent planting areas within centers of Cul-de-sacs.
3. Provide temporary and permanent groundcover vegetation utilizing 100% native landscape plants for all lots, commonly held HOA & City R.O.W. areas with the exception of the areas noted to be sodded, irrigated and managed as traditional turf bed areas. Suggested native cover for proposed home lots could be Little Bluestem with the addition of some (10+ species) native wildflowers depending on aesthetic look desired (all blue flowers, mix of flowering times, etc…). Suggested permanent native cover should provide the most appropriate ecologically correct mixes. A suggested example would be to reference the seed mixes offered by MN Native Landscapes (http://www.mnnativelandscapes.com/). Please provide the appropriate mix for each specific proposed landscape situation. For example the short dry upland mix for a non-irrigated upland outlot area where shorter grasses are desired adjacent to paths or streets.
4. Provide landscape irrigation plans for all commonly held HOA & City R.O.W. areas.
5. We would encourage the use of some native understory shrubs & flowering trees (clump or single stem) to add aesthetic interest and promote pollinator & wildlife food/habitat. Also, other native trees such as quaking aspen and tamarack would also be encouraged in a variety of sizes to replicate a natural planting pattern.

SINCERELY,

LANDSCAPE ARCHITECTURE, INC.

STEPHEN MASTEY, ASLA, CLARB, LEED AP BD+C
DIRECTOR OF DESIGN

2350 BAYLESS PLACE• ST. PAUL, MN • 55114
PHONE: 651.646.1020 • EMAIL: STEPHEN@LANDARCINC.COM

PLANNING COMMISSION
DATE: 9/8/14
AGENDA ITEM: 5A – BUSINESS ITEM
CASE # 2014-41

ITEM: Savona 2nd Addition Residential Subdivision – Final Plat

SUBMITTED BY: Kyle Klatt, Planning Director

REVIEWED BY: Nick Johnson, City Planner
Jack Griffin, City Engineer

SUMMARY AND ACTION REQUESTED:

The Planning Commission is being asked to continue its discussion concerning a Final Plat request from Lennar Corporation for the second phase of a planned 310 unit residential development to be located on 112.6 acres west of Keats Avenue and within Stage 1 of the City's I-94 Corridor Planning Area. Based on feedback from the Planning Commission at its last meeting, the developer has updated certain aspects of the final plat and final construction plans to address specific comments from the Commission. The plat now includes 45 single-family lots (down from 47) and 22 single-family attached units, all of which will be accessed via an initial extension of the 5th Street Parkway off of Keats Avenue. Upon receipt of the Planning Commission's recommendation, the City Council approved the Conditional Use Permit to allow single-family attached units that are accessed via a private road at its September 2, 2014 meeting.

In the interest of conserving paper, Staff is not reproducing any materials from the last meeting that have not been updated for the September 8th meeting. The following report notes the specific changes that have been provided by the applicant, but does not restate previous Staff review comments included with the previous packet. A complete copy of the previous packet is available upon request.

Staff is recommending approval of the Final Plat subject to compliance with a series of conditions as listed in this report. The list of conditions has been updated and reduced in number to reflect the revised plans and submission of additional information by the applicant.

REVIEW AND ANALYSIS (UPDATE)

Since the last Planning Commission meeting, the applicant has prepared a revised final plat, updated landscape plan, and revised sanitary sewer, water main, storm sewer, and streets plan. In addition, the City's landscape architecture consultant has been able to review the landscape plan for Savona 2nd Addition and had drafted review comments for consideration by the Planning Commission. The changes that have been made include the following:

1) The City Attorney has reviewed the title work for the site and has found that the developer has fee interest in the project and the plat can be recorded as submitted. Condition #2 as previously recommended is no longer needed with this action.

2) The final plat has been revised to eliminate two lots in the extreme northwestern portion of the site that were previously located within the 100-foot buffer from the adjacent residential development. These lots are now platted as "Outlot Q", and could be replatted in the future into two buildable lots provided the applicant secures a trail/open space easement from the adjoining property owner. This action eliminates the need for Condition #7 in the previous Staff report.

3) The partial trail improvements within Outlot A have not been included in the final construction plans based on a mutual agreement between City Staff and the developer that this trail segment should be built as part of future additions. In addition, leaving this trail off of the plans is also appropriate due to the creation of Outlot Q, since any homes within the Outlot will not be constructed (if at all) until a later addition. This update to the plans addresses Condition #8.

4) The street and utility plans have been updated to add a sidewalk along the eastern side of James Avenue, which will connect to a planned sidewalk with the Hammes West subdivision. The addition of this sidewalk to the plans addresses Condition #9 from the previous meeting.

5) The landscape plans have been revised to reflect the additional sidewalk and to add tree protective fencing to the plan. The updated plans will allow Condition #10 from the previous Staff report to be eliminated.

6) The City's landscape architect has reviewed the landscape plans and submitted the attached review comments for consideration by the Planning Commission. With this review completed, Condition #11 can be revised.

In addition to the revisions listed above, the applicant has indicated that the new single-family lots will be annexed into the Homeowner's Association for the first addition, which has been previously reviewed by the City. The townhouses will be subject to a separate association in order to deal with issues unique to this portion of the plat (i.e. private roads). At the request of a member of the Commission, the City Attorney has been asked to address additional questions regarding the structure and provisions of the HOA documents. Staff will provide an update concerning these questions if it is available prior to the meeting. The previous condition related to this matter is a very standard condition for these types of developments, and ensures that the appropriate HOA documents are filed with the County once the plat has been recorded.

Based on the above Staff report and analysis, including all staff review comments and materials concerning the Savona 2nd Addition final plat submitted to the Commission as part of the Commission's August 25, 2014 meeting, Staff is recommending approval of the final plat with a revised list of conditions consistent with the comments noted above. The conditions are intended to address any outstanding issues and to further clarify the City's expectations in order for the developer to proceed with the recording of the final plat. The recommended conditions are as follows:

Recommended Conditions of Approval:

1) Final grading, drainage, and erosion control plans, utility plans, sanitary and storm water management plans, and street and utility construction plans shall be reviewed and approved by the City Engineer prior to the recording of the Final Plat. All changes and modifications

to the plans requested by the City Engineer in review memo dated 8/21/14 shall be incorporated into these documents before they are approved.

2) Prior to the execution of the Final Plat by City officials, the Developer shall enter into a Developer's Agreement acceptable to the City Attorney and approved by the City Council that delineates who is responsible for the design, construction, and payment of the required improvements with financial guarantees therefore.

3) All easements as requested by the City Engineer and Public Works Department shall be documented on the Final Plat prior to the execution of the final plat by City Officials.

4) A Common Interest Agreement concerning management of the common areas of Savona and establishing a homeowner's association shall be submitted in final form to the Community Development Director before a building permit may be issued for any structure within this subdivision. The applicant shall also 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 and open space on the final plat

5) Any final plat for future townhouses will take into account land previously credited as parkland, and will not reduce the size of any area that was depicted for park land on the preliminary plat.

6) The developer shall revise the final landscape plan to address comments from the City's landscape architect dated September 4, 2014.

7) The developer shall provide written authorization from the property owner to the south of Savona 2nd Addition to allow the proposed drainage improvements and discharge of storm water on to their property. In conjunction with this permission, the proposed drainage and utility easement across this site shall be recorded with the Washington County Recorder's office. As an alternative, the final plat maybe updated to include a drainage and utility easement across this property.

8) The construction plans must be updated to include all portions of 5th Street adjacent to the subdivision that will, at a minimum, extend the current limits of 5th Street west beyond Junco Road North. The developer shall update the final plat to include the portion of the 5th Street right-of-way necessary to meet the associated construction limits for Savona 2nd Addition west of Junco Road North.

DRAFT FINDINGS

Staff is recommending that the Planning Commission consider the following findings with regards to the proposed Savona 2nd Addition Final Plat:

- That the Final Plat is consistent with the Preliminary Plat and Plans as approved by the City of Lake Elmo on August 8, 2013 and revised on November 25, 2013.

- That the Final Plat is consistent with the Lake Elmo Comprehensive Plan and the Future Land Use Map for this area.

- That the Final Plat complies with the City's Urban Low Density Residential and Medium Density Residential zoning districts.

- That the Final Plat complies with all other applicable zoning requirements, including the City's landscaping, storm water, sediment and erosion control and other ordinances, with the exception of the items identified in the Staff report.

- That the Final Plat complies with the City's subdivision ordinance.

- That the Final Plat is consistent with the City's engineering standards with the plan revisions as requested by the City Engineer.

RECCOMENDATION:

Staff recommends that the Planning Commission recommend approval of the Final Plat for Savona 2nd Addition with the 8 conditions of approval as listed above. Suggested motion:

"Move to recommend approval of the Savona Final Plat with the 8 conditions of approval as drafted by Staff"

ATTACHMENTS:

1. REVISED – Savona 2nd Addition Final Plat
2. REVISED – Construction Plans: Sanitary Sewer, Water Main, Storm Sewer and Streets
3. REVISED – Savona 2nd Addition Landscape Plans
4. Review Comments – Landscape Architecture, Inc. 9-4-14

ORDER OF BUSINESS:

- Introduction.....Planning Staff
- Report by Staff.....Planning Staff
- Questions from the Commission..... Chair & Commission Members
- Discussion by the Commission..... Chair & Commission Members
- Action by the Commission..... Chair & Commission Members

LANDSCAPE ARCHITECTURE INCORPORATED
WWW.LANDARCINC.COM

SAVONA 2nd ADDITION – DESIGN REVIEW REPORT
LAKE ELMO, MN

LANDSCAPE ARCHITECTURAL DESIGN REVIEW DATED SEPTEMBER 4TH, 2014

REVIEWED PLAN SET DATED AUGUST 28TH, 2014

Required Action Items by Savona 2nd Addition Project Team

- Where Colorado Green Spruce is specified please replace with Norway Spruce.
- The colonial foundation planting plan templates and colonial row home plan templates need to designed to match this specific site with current landscape and horticultural standards and practices and resubmitted for review.
- Alternate Mailbox Monument, Sub Monument and Column Monuments with Thin **NATURAL STONE** veneer to be specified on all entry elements and included in mailbox design to match geology of specified natural boulder outcroppings adjacent to same elements. Manufactured (fake) stone veneer not allowed. Please remove the "OR" reference on these details on sheet 2 of 3. Additionally, the post mount Mailbox Unit is not approved, only the Alternate Mailbox Monument will be allowed.
  (per signage ordinance 154.212.A.4 purpose & 154.212.E.2 gen. design)

- Savona Project Landscape Architect to provide landscape irrigation plans for all commonly held HOA & City R.O.W. areas.

SINCERELY,

LANDSCAPE ARCHITECTURE, INC.

STEPHEN MASTEY, ASLA, CLARB, LEED AP BD+C
DIRECTOR OF DESIGN

2350 BAYLESS PLACE • ST. PAUL, MN • 55114
PHONE: 651.646.1020 • EMAIL: STEPHEN@LANDARCINC.COM

SAVONA 2ND ADDITION

KNOW ALL PERSONS BY THESE PRESENTS: That U.S. Home Corporation, a Delaware corporation, fee owner of the following described property situated in the County of Washington, State of Minnesota, to wit:

Outlot A and Outlot F, SAVONA, according to the recorded plat thereof, Washington County, Minnesota

Has caused the same to be surveyed and platted as **SAVONA 2ND ADDITION** and does hereby donate and dedicate to the public for public use forever the public ways, as shown on this plat and also dedicate the easements as created by this plat for drainage and utility purposes only.

In witness whereof said U.S. Home Corporation, a Delaware corporation, has caused these presents to be signed by its proper officers this _____ day of _____, 20_____.

U.S. HOME CORPORATION

By _____
Jonathan Aune, Division Vice President

STATE OF MINNESOTA
COUNTY OF _____
The foregoing instrument was acknowledged before me on this _____ day of _____, 20_____, by Jonathan Aune, Division Vice President of U.S. Home Corporation, a Delaware corporation, on behalf of the corporation.

_____ _____
(Signature) (Name Printed)

Notary Public, _____ County, Minnesota
My Commission Expires _____

I hereby certify that I have surveyed and platted or directly supervised the survey and platting of the property described on this plat as **SAVONA 2ND ADDITION**; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on the plat; that all monuments depicted on the plat have been or will be correctly set within one year as indicated on the plat; that all water boundaries and wet lands as defined in MS Section 505.01, Subd. 3 existing as of the date of this certification are shown and labeled on the plat; and that all public ways are shown and labeled on the plat.

Dated this _____, day of _____, 20_____

_____
Craig W. Morse, Licensed Land Surveyor
Minnesota License No. 23021

STATE OF MINNESOTA
COUNTY OF HENNEPIN
The foregoing Surveyor's Certificate was acknowledged before me on this _____ day of _____, 20_____, by Craig W. Morse, Licensed Land Surveyor, Minnesota License No. 23021.

_____ _____
(Signature) (Name Printed)

Notary Public, _____ County, Minnesota
My Commission Expires _____

CITY PLANNING COMMISSION
Approved by the Planning Commission of the City of Lake Elmo, Minnesota, on this _____ day of _____, 20__.

By _____ By _____
Chair Secretary

CITY OF LAKE ELMO, MINNESOTA
This plat was approved by the City Council of the City of Lake Elmo, Minnesota this _____ day of _____, 20_____, and hereby certifies compliance with all requirements as set forth in Minnesota Statutes, Section 505.03, Subdivision 2.

By _____ By _____
Mayor Clerk

COUNTY SURVEYOR
Pursuant to Chapter 820, Laws of Minnesota, 1971, and in accordance with Minnesota Statutes, Section 505.021, Subd. 11, this plat has been reviewed and approved this _____ day of _____, 20_____.

By _____ By _____
Washington County Surveyor

COUNTY AUDITOR/TREASURER
Pursuant to Minnesota Statutes, Section 505.021, Subd. 9, taxes payable in the year 20_____ on the land hereinbefore described have been paid. Also, pursuant to Minnesota Statutes, Section 272.12, there are no delinquent taxes and transfer entered this _____ day of _____, 20_____.

By _____ By _____
Washington County Auditor/Treasurer Deputy

COUNTY RECORDER
Document Number _____

I hereby certify that this instrument was recorded in the Office of the County Recorder for record on this _____ day of _____, 20_____, at _____ o'clock _____.M., and was duly recorded in Washington County Records.

By _____ By _____
Washington County Recorder Deputy

Westwood
Professional Services, Inc.

SAVONA 2ND ADDITION

NE 1/4 1/4 OF SEC. 34, TWP. 29, RANGE 21

N89°56'46"E 1162.69

Found Capped Iron Pipe License No. 5713

OUTLOT B

north line of Outlot A, SAVONA

S89°56'46"W 1480.66

Found Washington County Cast Iron Monument East Quarter Corner of Sec. 34, Twp. 29, Rge. 21

127.20 N00°08'44"E

156.24 N31°48'39"E

OUTLOT A

OUTLOT Q

726.41

INSET A

(See sheet 3 of 5 sheets)

7TH ST. N

N47°01'45"E 60.91

7TH STREET N

86.31 N48°23'05"E

JAMES AVE N

OUTLOT E

339.87 R=470.00 Δ=40°34'42"

179.87 N00°09'51"E

CB=S25°09'55"E Δ=22°19'33" R=200.00 182.95

JUNCO RD. N

OUTLOT G

OUTLOT C

OUTLOT D

638.31

N00°06'31"E 1531.03

E 1/2 OF THE SW 1/4 1/4 OF SEC. 34, TWP. 29, RANGE 21

Drainage & Utility Easement over all of Outlot D

202.22 S71°28'52"W

215.22 R=1060.00 Δ=11°37'59"

169.98 R=1060.00 Δ=9°11'17" CB=S55°15'14"W

N50°39'36"E 344.08

519.51 R=760.00 Δ=39°09'56" CB=N70°14'34"E

CB=N83°27'43"E Δ=2°34'54" R=330.00 14.87

CB=N45°20'25"E Δ=73°39'42" R=470.00 604.25

S07°49'44"E 140.00

166.32

P.O.B. THE W 1/2 OF THE SE 1/4 OF SEC. 34, TWP. 29, RANGE 21

5TH STREET NORTH

N90°00'00"E 185.31

Δ=38°44'18" R=760.00 513.84

261.20 Δ=19°41'29"

OUTLOT K

OUTLOT H

OUTLOT O

INSET C

(See sheet 5 of 5 sheet(s)

OUTLOT I

OUTLOT P

OUTLOT L

OUTLOT N

OUTLOT M

252.65 Δ=19°02'49"

231.11 N51°15'42"E

5TH ST. LANE N

S28°15'10"E 298.06

R=760.00 Δ=50°07'41" 664.98

139.75 N76°58'53"E

6.55 S68°07'29"E

42.41 S89°43'23"E

S32°48'54"E 162.33

S00°04'12"E 344.10

INSET B

(See sheet 4 of 5 sheets)

OUTLOT F

N71°28'52"E 151.22

S00°01'13"W 341.10

Found 1/2 inch Open Iron Pipe

Found Iron Pipe with 3 inch Aluminum Cap License No. 12279

Found Solid Iron Pipe

S89°55'48"W 10.00

OUTLOT J

S00°04'12"E 282.91

N89°55'31"E 1253.82

Found Iron Pipe LS No. 22440

WASHINGTON COUNTY HIGHWAY RIGHT OF WAY PLAT NO. 48-198 (COUNTY STATE AID HIGHWAY NO. 19) KEATS AVENUE NORTH

SE 1/4 OF THE SE 1/4 OF SEC. 34, TWP. 29, RANGE 21

100 0 100 200 300

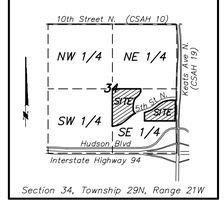
Scale in feet

The north line of Outlot A, SAVONA, is assumed to bear N 89°56'46" E

- ○ Denotes 1/2 inch by 14 inch iron rebar set and marked by License No. 23021
- ● Denotes 1/2 inch by 14 inch iron rebar found and marked by License No. 23021, unless otherwise shown
- ◉ Denotes Cast Iron Monument found marked by Washington County

VICINITY MAP

(Not To Scale)



Section 34, Township 29N, Range 21W

Westwood
Professional Services, Inc.

SAVONA 2ND ADDITION

Found Capped Iron Pipe
License No. 5713

N89°56'46"E 1162.82

OUTLOT A

OUTLOT B

OUTLOT Q

OUTLOT E

7TH STREET NORTH

JAMES AVENUE N.

JUNCO ROAD N

Easement for Power Lines to NSP per Bk. 316 of Deeds, Pg 69

Drainage & Utility Easement over all of Outlot B

Drainage & Utility Easement

Drainage & Utility Easement over all of Outlot E

N00°06'31"E 726.41

N00°08'44"E 127.20

N31°48'39"E 156.24

N47°01'45"E 60.91

N48°23'05"E 86.31

N00°09'51"E 179.87

N50°39'36"E 66.89

INSET A

(From sheet 2 of 5 sheets)

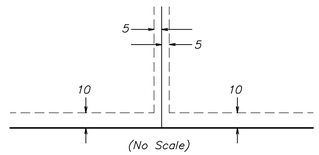
Scale 60 0 60 120 180 in feet

The north line of Outlot A, SAVONA, is assumed to bear N 89°56'46" E

○ Denotes 1/2 inch by 14 inch iron rebar set and marked by License No. 23021

● Denotes 1/2 inch by 14 inch iron rebar found and marked by License No. 23021, unless otherwise shown

Drainage and Utility Easements are shown thus:



(No Scale)

Being 5 feet in width, unless otherwise indicated, and adjoining lot lines, and 10 feet in width and adjoining right-of-way lines as shown on the plat.

Westwood
Professional Services, Inc.

SAVONA 2ND ADDITION

INSET B

(From sheet 2 of 5 sheets)

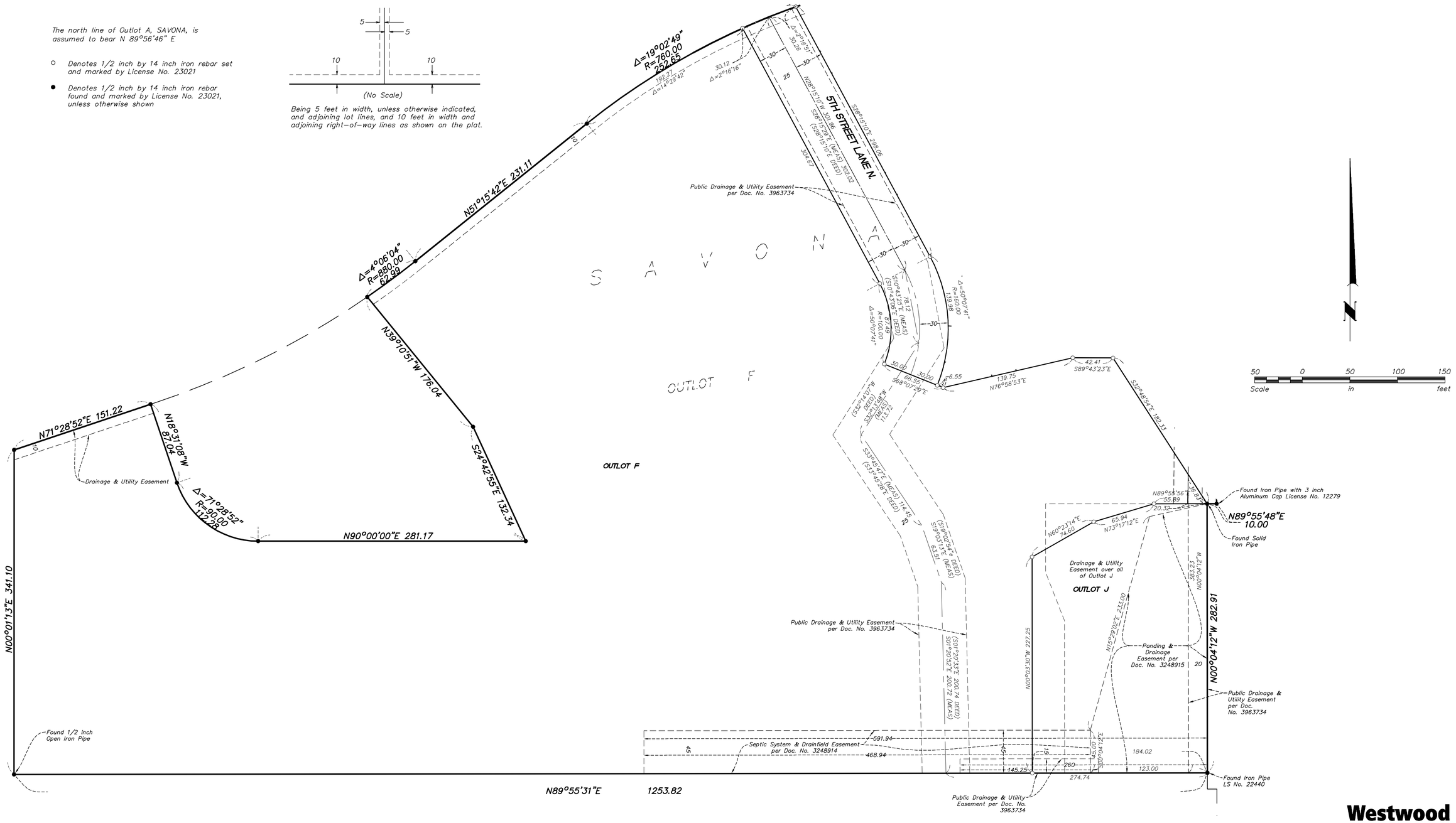
The north line of Outlot A, SAVONA, is assumed to bear N 89°56'46" E

○ Denotes 1/2 inch by 14 inch iron rebar set and marked by License No. 23021

● Denotes 1/2 inch by 14 inch iron rebar found and marked by License No. 23021, unless otherwise shown

Drainage and Utility Easements are shown thus:

Being 5 feet in width, unless otherwise indicated, and adjoining lot lines, and 10 feet in width and adjoining right-of-way lines as shown on the plat.



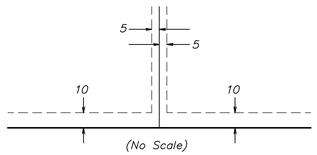
Westwood
Professional Services, Inc.

SAVONA 2ND ADDITION

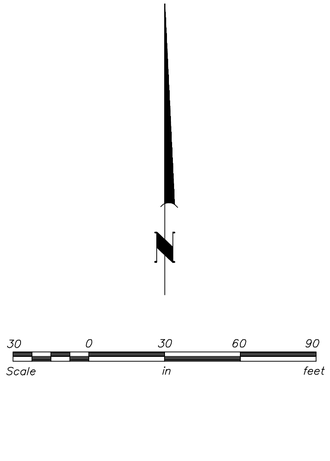
The north line of Outlot A, SAVONA, is assumed to bear N 89°56'46" E

- ○ Denotes 1/2 inch by 14 inch iron rebar set and marked by License No. 23021
- ● Denotes 1/2 inch by 14 inch iron rebar found and marked by License No. 23021, unless otherwise shown

Drainage and Utility Easements are shown thus:



Being 5 feet in width, unless otherwise indicated, and adjoining lot lines, and 10 feet in width and adjoining right-of-way lines as shown on the plat.



INSET C

(From sheet 2 of 5 sheets)

Westwood
Professional Services, Inc.

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Construction Plans

for

Sanitary Sewer, Water Main, Storm Sewer and Streets

for

Savona 2nd Addition
Lake Elmo, Minnesota

Prepared for:

Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnnesota 55446
Contact: Joe Jablonski
Phone: 952-249-3014

Prepared by:

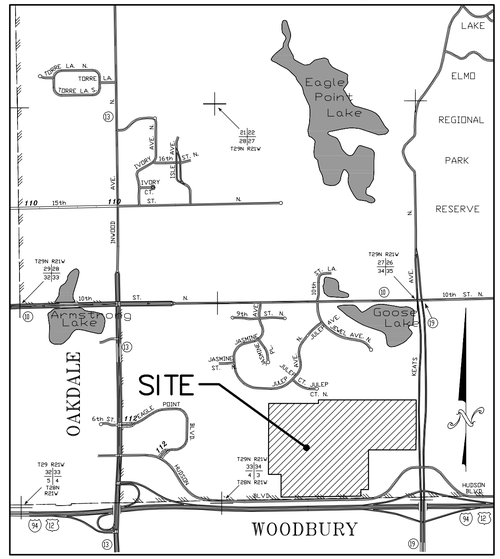
Westwood Professional Services, Inc.
7699 Anagram Drive
Eden Prairie, MN 55344

PHONE 952-937-5150
FAX 952-937-5822
TOLL FREE 1-888-937-5150

www.westwoodps.com

Westwood
Project number: 0000565.02
Contact: Ryan M. Bluhm

Vicinity Map



(Not to Scale)

Sheet List Table	
Sheet Number	**Sheet Title**
1	Cover
2	Overall Plan
3	Sanitary Sewer and Water Main Construction Plan
4	Sanitary Sewer and Water Main Construction Plan
5	Sanitary Sewer and Water Main Construction Plan
6	Sanitary Sewer and Water Main Construction Plan
7	Sanitary Sewer and Water Main Construction Plan
8	Storm Sewer and Street Construction Plan
9	Storm Sewer and Street Construction Plan
10	Storm Sewer and Street Construction Plan
11	Storm Sewer and Street Construction Plan
12	Storm Sewer and Street Construction Plan
13	Storm Sewer and Street Construction Plan
14	Storm Sewer and Street Construction Plan
15	Details
16	Details
17	Details

NO.	DATE	REVISION	SHEETS
1	06/30/14	CITY COMMENTS	ALL
2	07/30/14	CITY COMMENTS	ALL
3	08/08/14	CITY COMMENTS	ALL
4	09/03/14	CITY COMMENTS	ALL

Construction Plans
for
Sanitary Sewer, Water Main, Storm Sewer and Streets
for
Savona 2nd Addition
Lake Elmo, Minnesota

Date: 06/25/14 Sheet: 1 of 17

0000565.02CVF01.dwg

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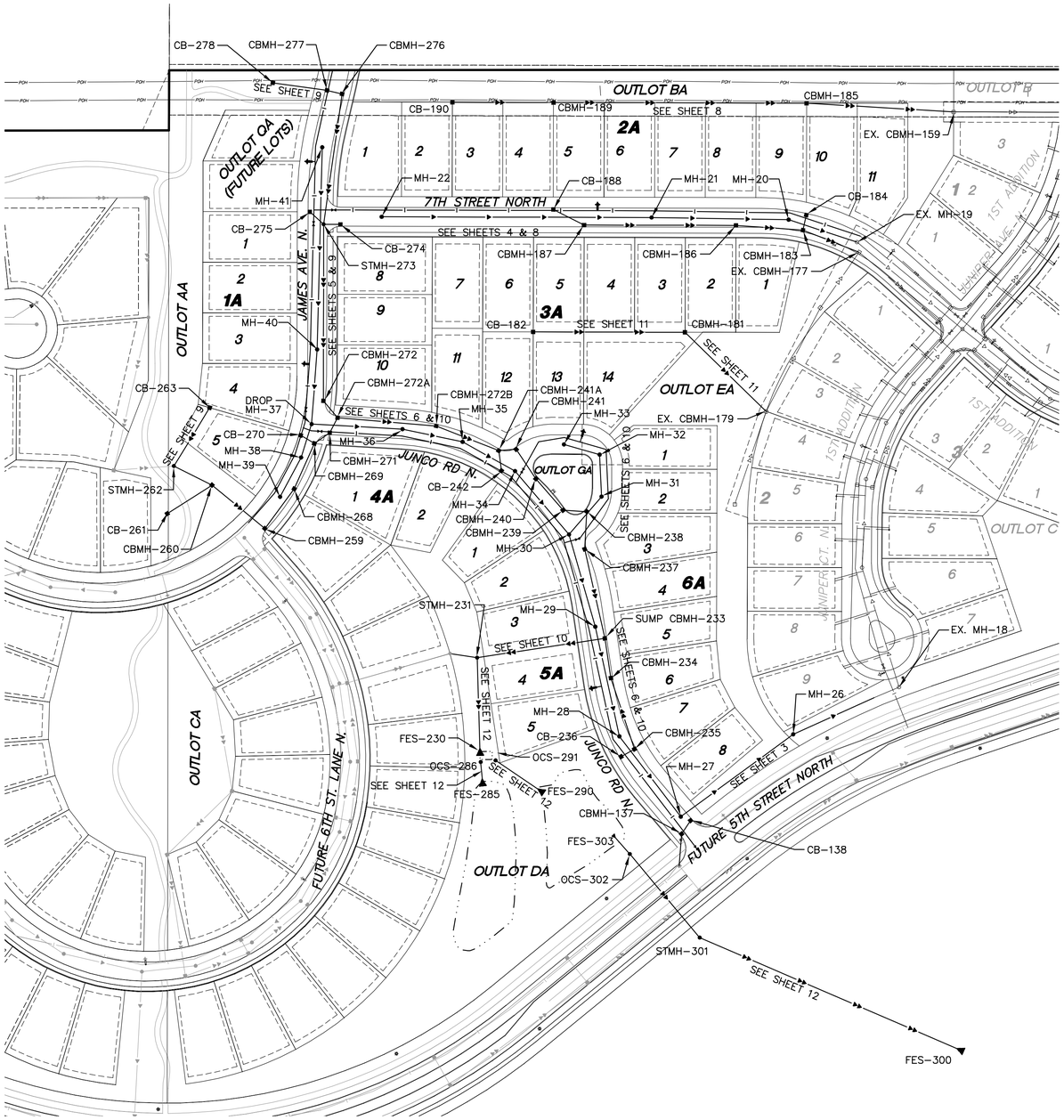
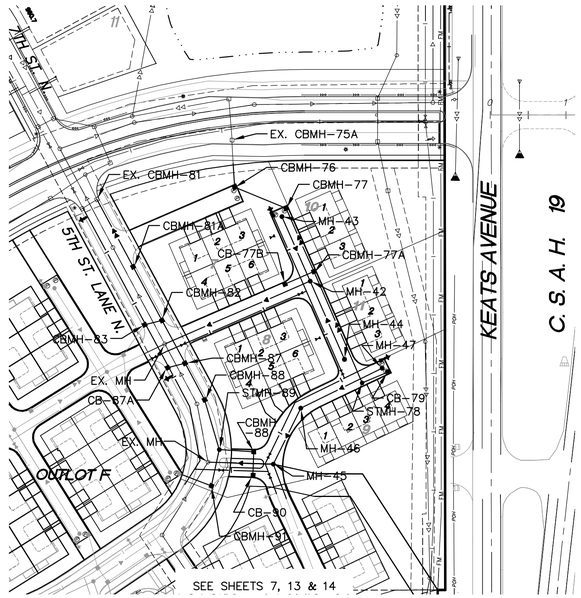
Call 48 Hours before digging:
811 or call811.com
Common Ground Alliance





SEE DETAIL, SHEET 16

STORM SEWER CASTING SCHEDULE

STRUCTURE NUMBER	STRUCTURE TYPE	STRUCTURE DIA.	CASTING TYPE
76	CBMH	48"	R-3067-V
77	CBMH	48"	R-3067-V
77A	CBMH	48"	R-3067-V
77B	CB	2'x3'	R-3067-V
78	STMH	48"	R-1642 B
79	CB	2'x3'	R-3067-V
81A	CBMH	48"	R-3067-V
82	CBMH	60"	R-3067-V
83	CBMH	48"	R-3067-V
87A	CB	2'x3'	R-3067-V
87	CBMH	60"	R-3067-V
88	CBMH	48"	R-3067-V
89	STMH	48"	R-1642 B
90A	CBMH	48"	R-3067-V
90	CB	2'x3'	R-3067-V
91	CBMH	60"	R-3067-V
137	CBMH	48"	R-3067-V
138	CB	2'x3'	R-3067-V
181	CBMH	48"	R-4342
182	CB	27"	R-4342
183	CBMH	48"	R-3067-V
184	CB	2'x3'	R-3067-V
185	CBMH	48"	R-4342
186	CBMH	48"	R-3067-V
187	CBMH	48"	R-3067-V
188	CB	2'x3'	R-3067-V
189	CBMH	48"	R-4342
190	CB	27"	R-4342
230	FES	33"	
231	STMH	72"	R-1642 B
SUMP 233	CBMH	60"	R-3508-A2
234	CBMH	48"	R-3067-V
235	CBMH	48"	R-3067-V
236	CB	2'x3'	R-3067-V
237	CBMH	48"	R-3067-V
238	CBMH	48"	R-3067-V
239	CBMH	48"	R-3067-V
240	CBMH	48"	R-3067-V
241	CBMH	48"	R-3067-V
241A	CBMH	60"	R-3067-V
242	CB	2'x3'	R-3067-V
259	CBMH	48"	R-3067-V
260	CBMH	48"	R-4342
261	CB	27"	R-4342
262	STMH	48"	R-1642 B
263	CB	27"	R-4342
268	CBMH	48"	R-3067-V
269	CBMH	48"	R-3067-V
270	CB	2'x3'	R-3067-V
271	CBMH	48"	R-3067-V
272	CBMH	48"	R-3067-V
272A	CBMH	48"	R-3067-V
272B	CBMH	48"	R-3067-V
273	STMH	48"	R-1642 B
274	CB	2'x3'	R-3067-V
275	CB	2'x3'	R-3067-V
276	CBMH	48"	R-3067-V
277	CBMH	48"	R-3067-V
278	CB	27"	R-4342
285	FES	12"	
286	OCS	48"	SEE DETAIL
290	FES	36"	
291	OCS	72"	SEE DETAIL
300	FES	21"	
301	STMH	48"	R-4342
302	OCS	48"	SEE DETAIL
303	FES	21"	R-3067-V

WARNING: XCEL TRANSMISSION LINES ARE PRESENT WITHIN THE PROJECT AREA.

EXCAVATION CLOSE TO STRUCTURE LOCATION.

A MINIMUM DISTANCE OF TEN (10) FEET OF SUPPORTED EARTH MUST BE MAINTAINED FROM ANY PART OF THE LINE STRUCTURE. SUPPORT OF THE GROUND BEYOND THE (10) FEET MAY BE PROVIDED BY A SLOPE NO GRATER THAN THREE FEET HORIZONTAL TO ONE FOOT VERTICAL. SUPPORT MAY ALSO BE PROVIDED BY THE USE OF CRIBBING, SHEET PILING, RETAINING WALL OR TUNNELING. THE SPECIFIC PLAN FOR PROVIDING THE REQUIRED SUPPORT AND THE EXCAVATION PLAN FOR THE PROPOSED PROJECT MUST BE SUBMITTED TO XCEL ENERGY FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION START.

CLEARANCE TO EQUIPMENT AND WORKERS

A WORKING CLEARANCE OF TWENTY (20) FEET BETWEEN THE ELECTRICAL CONDUCTORS AND ANY CRANES OR DIGGING EQUIPMENT USED AT CONDUCTOR ELEVATION IN OR NEAR THE EASEMENT AND A CLEARANCE OF TEN FOOT EIGHT INCHES (10'-8") TO THE PHYSICAL PROXIMITY OF WORKERS MUST BE MAINTAINED AT ALL TIMES. IN ADDITION, ANY CONSTRUCTION NEAR THE TRANSMISSION LINE(S) SHALL COMPLY WITH ALL OSHA SAFETY CLEARANCES. IF THIS CLEARANCE CANNOT BE MAINTAINED, THE CONTRACTOR OR DEVELOPER MUST ARRANGE FOR A LINE OUTAGE BY CALLING XCEL ENERGY'S SYSTEM CONTROL DEPARTMENT (STEVE ROLLIN 612/330-2875). ADEQUATE ADVANCED NOTICE MUST BE PROVIDED IN ORDER TO SCHEDULE A LINE OUTAGE, IF AN OUTAGE IS AVAILABLE.

LEGEND

FUTURE	EXISTING	PROPOSED
Sanitary Sewer	Sanitary Sewer	Sanitary Sewer
Water	Water	Water
Hyd. w\Valve	Hyd. w\Valve	Hyd. w\Valve
Storm Sewer	Storm Sewer	Storm Sewer
		Draintile

0' 100' 200' 300'

Latest Revision Date: 09/03/14

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Date: 06/25/14 **Sheet: 2 OF 17**

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Eden Prairie, MN 55344

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Ryan M. Bluhm

Date: 09/03/14 License No. 41257

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07/30/14 CITY COMMENTS
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Designed: CLJ
Checked: RMB
Drawn: HW
Record Drawing by/date:

Prepared for:

Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnesota 55446

Savona 2nd Addition

Lake Elmo, Minnesota

Overall Plan

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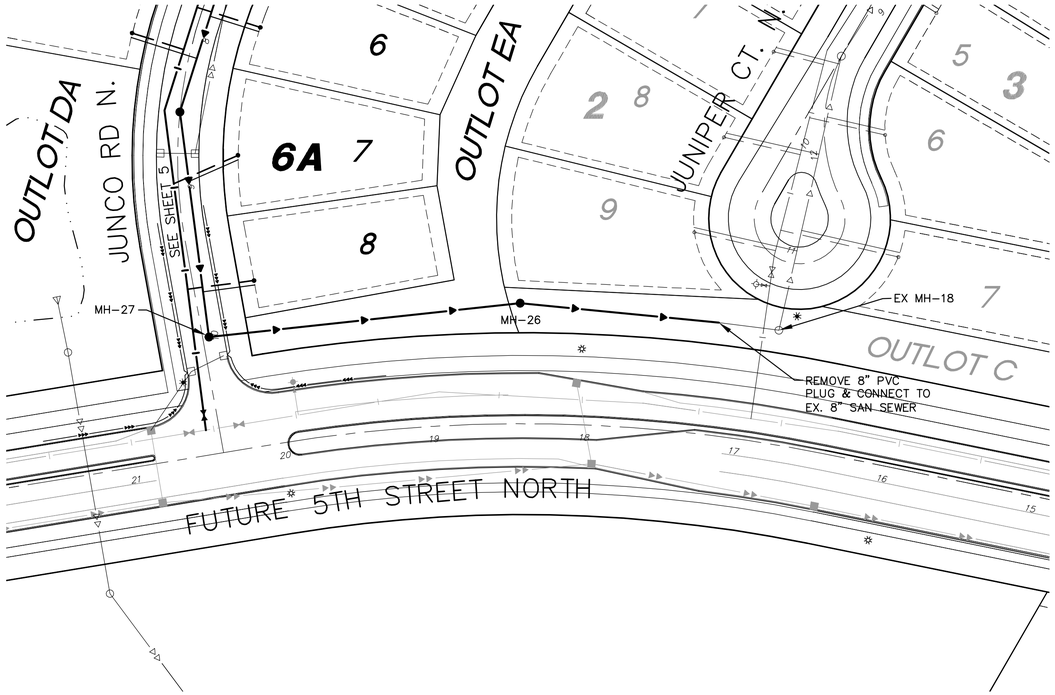
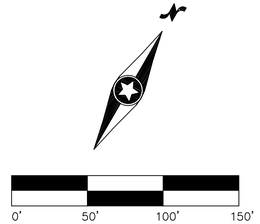
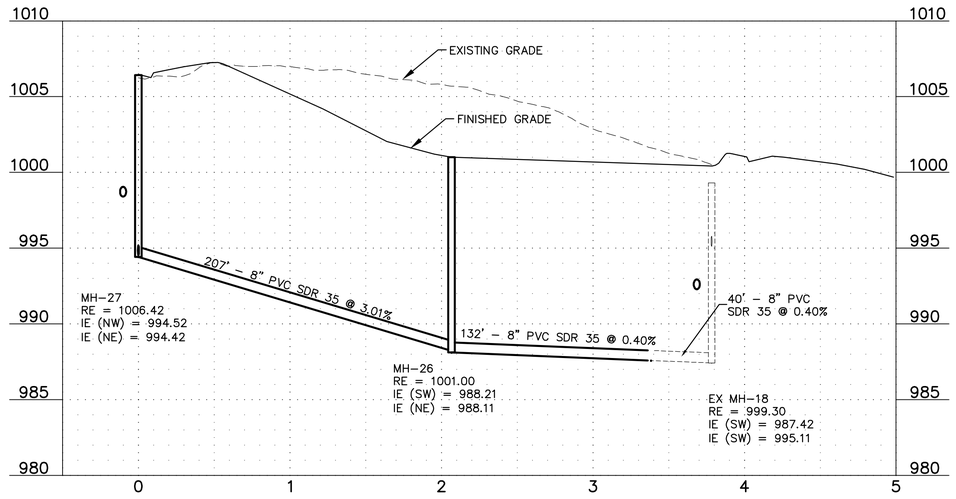




Backyard



GENERAL NOTES:

(XXX.X) DENOTES SANITARY SEWER SERVICE INVERT @ END OF STUB.

[WYE=X+XX] DENOTES SANITARY SEWER SERVICE WYE LOCATED ON MAINLINE FROM DOWN STREAM M.H.

SANITARY SEWER NOTES:

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2. ALL SANITARY SEWER PVC PIPE SHALL BE INSTALLED ACCORDING TO CITY STANDARD DRAWING 103 GRANULAR MATERIAL BEDDING METHOD (FOR PVC SANITARY SEWER PIPE).
3. UNLESS NOTED OTHERWISE, ALL SMOOTH WALLED SANITARY SEWER PVC PIPE AND FITTINGS SHALL BE SDR 35 WITH ELASTOMERIC GASKETED JOINTS.
4. ALL SANITARY SEWER SERVICES SHALL BE 4-INCH PVC, SCH. 40 OR SDR 26 PIPE.
5. SMOOTH WALLED PVC PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF ASTM D-3034 FOR THE SIZE, STANDARD DIMENSION RATIO (SDR), AND STRENGTH REQUIREMENTS INDICATED ON THE PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS.
6. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MnDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
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13. THE CURB STOP SERVICE ASSEMBLY SHALL HAVE A MINIMUM 1-FT ADJUSTMENT RANGE AND SHALL EXTEND 6 INCHES ABOVE FINISHED GRADE FULLY EXTENDED.
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Sanitary Sewer and Water Main Construction Plan

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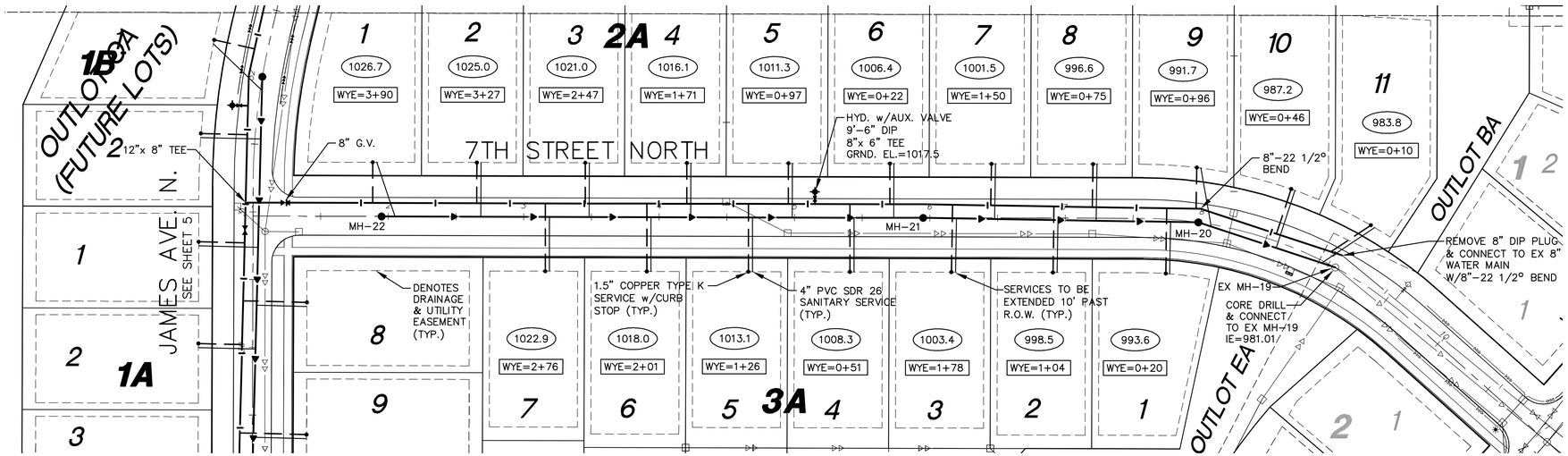

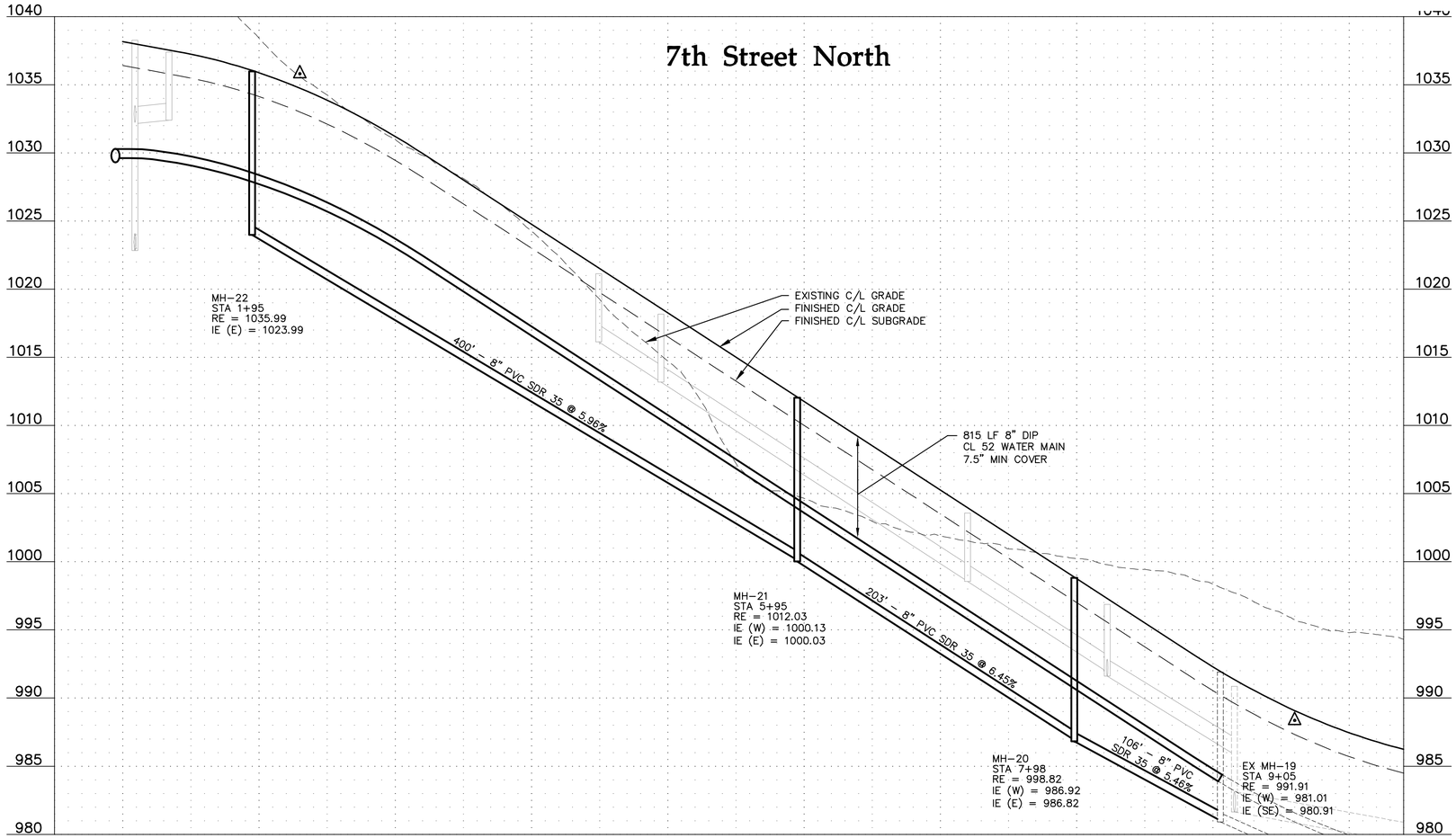

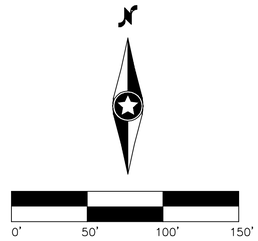

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Date: 06/25/14 Sheet: 4 OF 17

Savona 2nd Addition

Lake Elmo, Minnesota

Sanitary Sewer and Water Main Construction Plan

7th Street North

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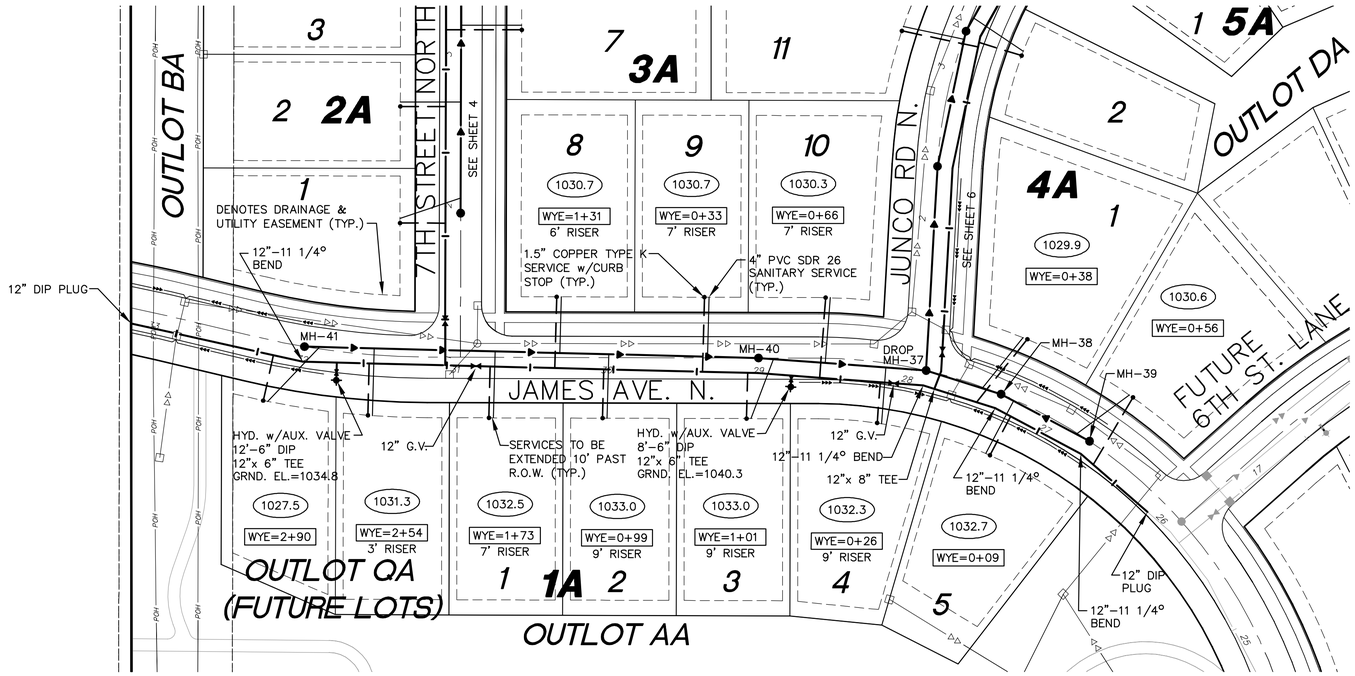

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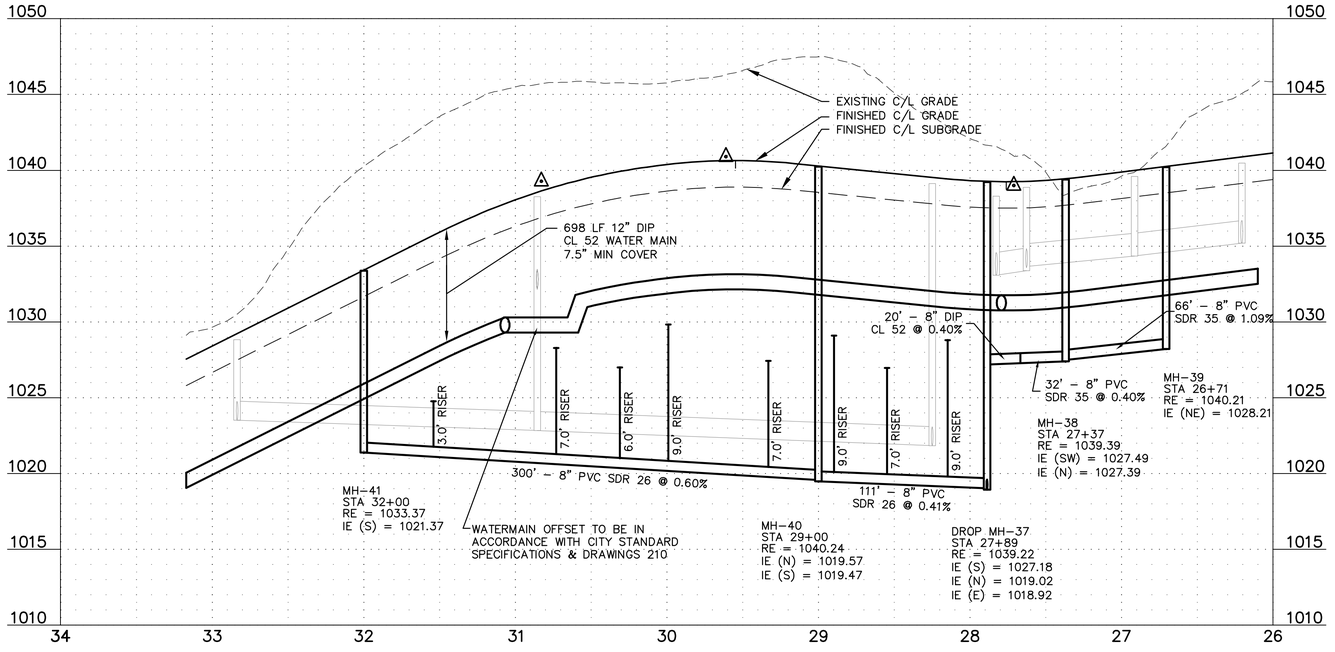

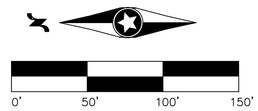

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Lake Elmo, Minnesota

Sanitary Sewer and Water Main Construction Plan
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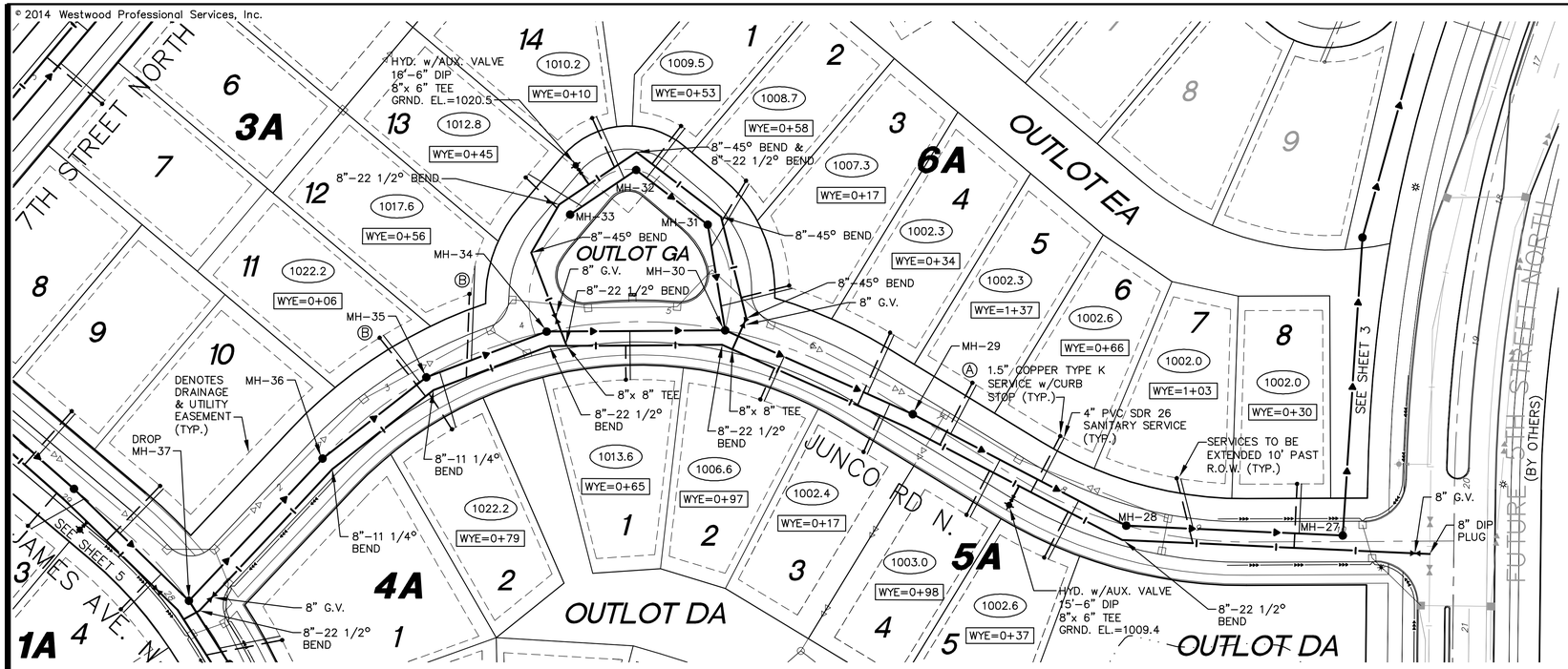

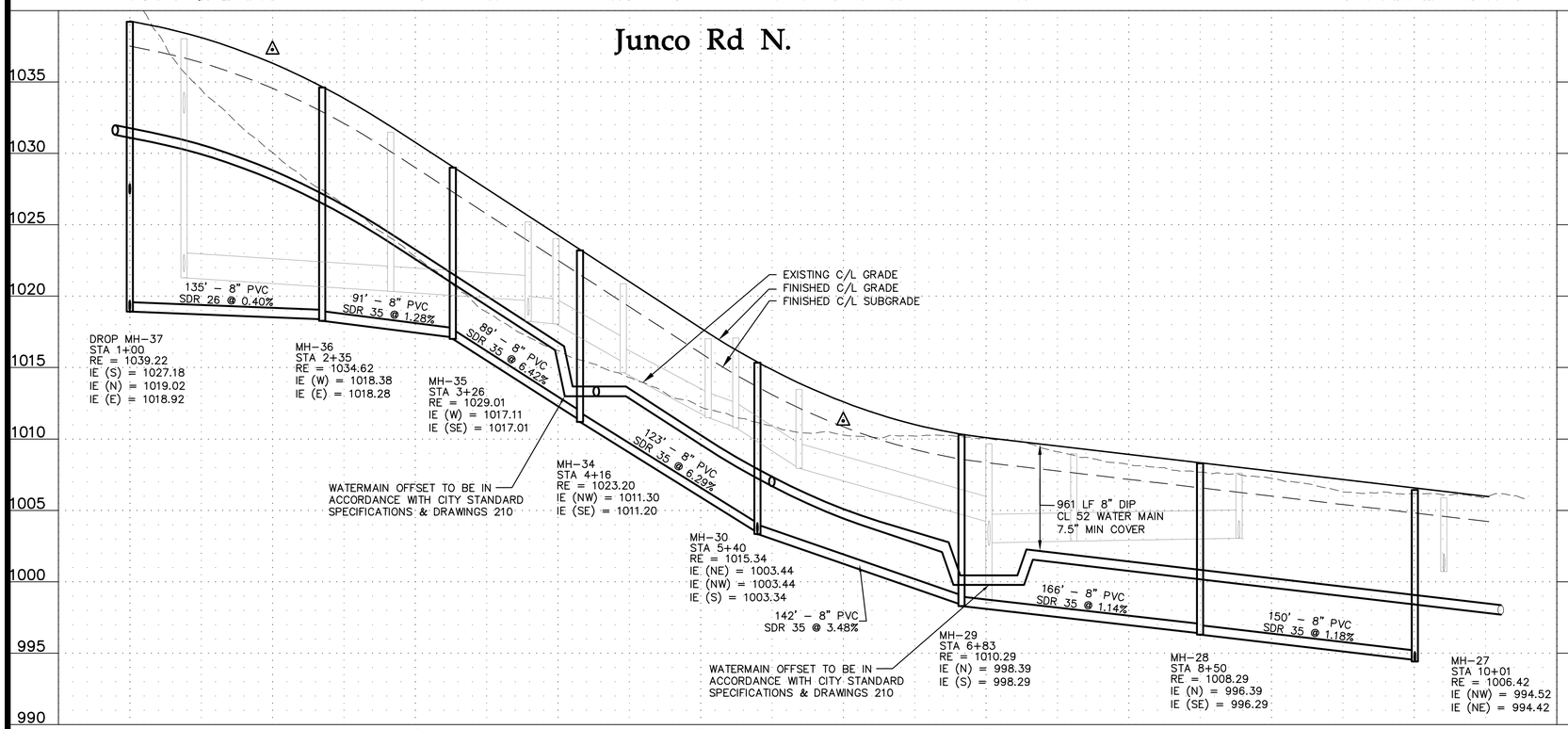

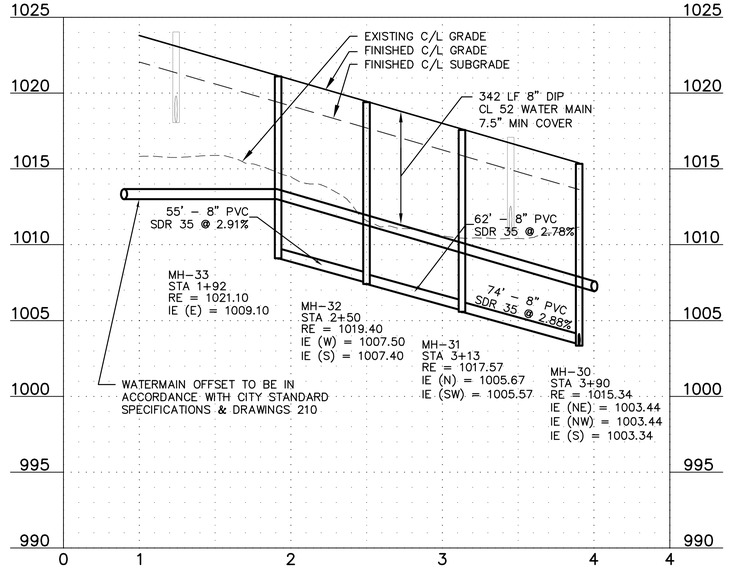

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(A) INSTALL WATER SERVICE OVER SAN SEWER. MAINTAIN 18" SEPARATION (INSULATE).

(B) INSTALL WATER SERVICE OVER STORM SEWER (INSULATE)

0' 50' 100' 150'

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GENERAL NOTES:

(XXX.X) DENOTES SANITARY SEWER SERVICE INVERT @ END OF STUB.

WYE=X+XX DENOTES SANITARY SEWER SERVICE WYE LOCATED ON MAINLINE FROM DOWN STREAM M.H.

SANITARY SEWER NOTES:

1. ALL SANITARY SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. ALL SANITARY SEWER PVC PIPE SHALL BE INSTALLED ACCORDING TO CITY STANDARD DRAWING 103 GRANULAR MATERIAL BEDDING METHOD (FOR PVC SANITARY SEWER PIPE).
3. UNLESS NOTED OTHERWISE, ALL SMOOTH WALLED SANITARY SEWER PVC PIPE AND FITTINGS SHALL BE SDR 35 WITH ELASTOMERIC GASKETED JOINTS.
4. ALL SANITARY SEWER SERVICES SHALL BE 4-INCH PVC, SCH. 40 OR SDR 26 PIPE.
5. SMOOTH WALLED PVC PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF ASTM D-3034 FOR THE SIZE, STANDARD DIMENSION RATIO (SDR), AND STRENGTH REQUIREMENTS INDICATED ON THE PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS.
6. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MnDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
7. JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL SANITARY SEWER MANHOLES.
8. SANITARY SEWER INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A GASKETED, FLEXIBLE, WATERTIGHT CONNECTION TO ALLOW DIFFERENTIAL SETTLEMENT OF THE POPE AND MANHOLE TO TAKE PLACE.
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10. ALL SERVICE LINE STUBS MUST HAVE A 2" X 2" HARDWOOD MARKER WITH METAL SPIKE RUNNING FROM THE END OF THE PIPE TO FINISHED GRADE ELEVATION.
11. UPON MAKING A CONNECTION TO AN EXISTING SANITARY SEWER STUB OR MANHOLE, DIRT AND DEBRIS SHALL BE PREVENTED FROM ENTERING THE EXISTING SEWER BY IMMEDIATELY INSALLING WATERTIGHT PLUGS AS NEEDED IN THE EXISTING MANHOLE.

Latest Revision Date: 09/03/14
0000565.02UTF04.dwg

Date: 06/25/14 **Sheet:** 6 OF 17

Westwood Professional Services, Inc.
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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.

Ryan M. Bluhm
Date: 09/03/14 License No. 41257

Revisions:
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Designed: CLJ
Checked: RMB
Drawn: HW
Record Drawing by/date:

Prepared for:
Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnesota 55446

Savona 2nd Addition

Lake Elmo, Minnesota

Sanitary Sewer and Water Main Construction Plan

Junco Rd N.

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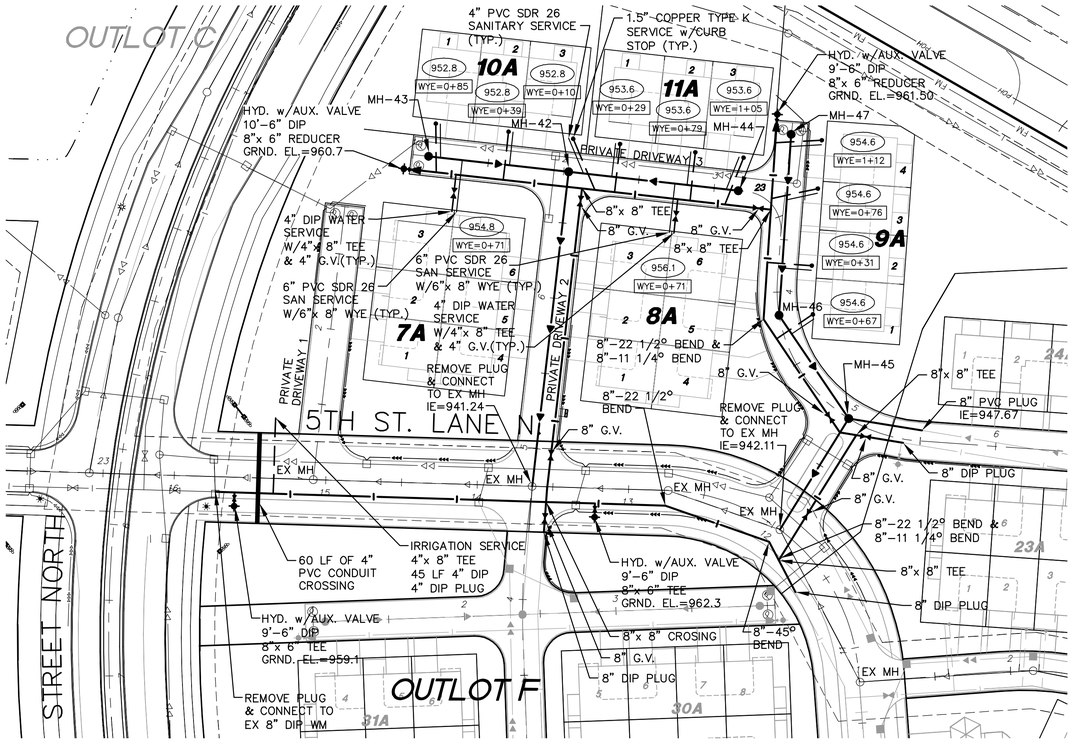

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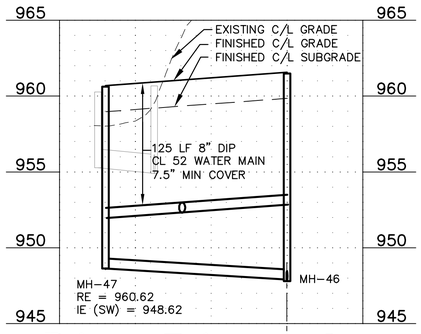

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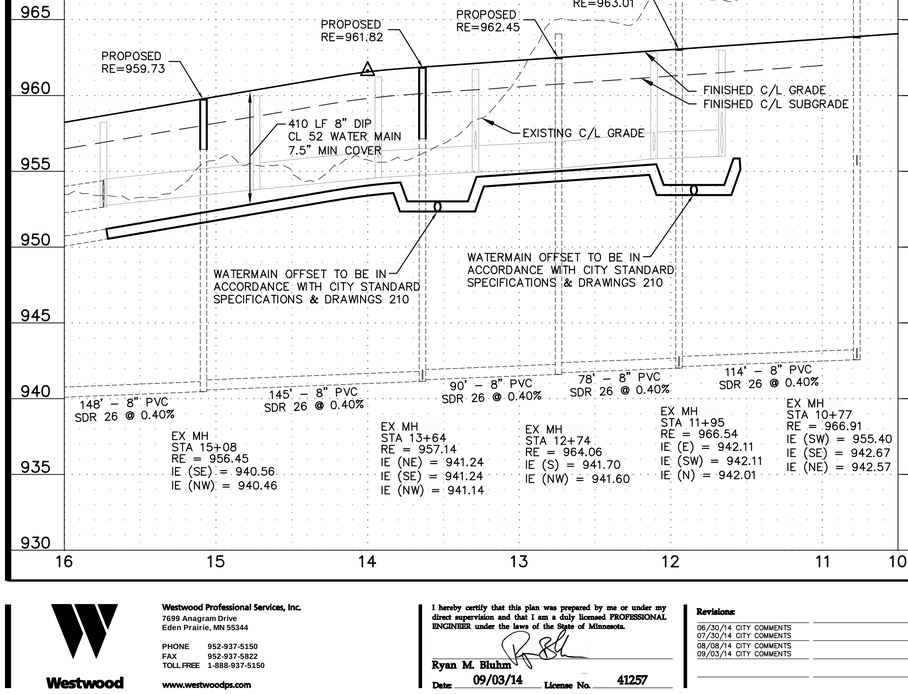
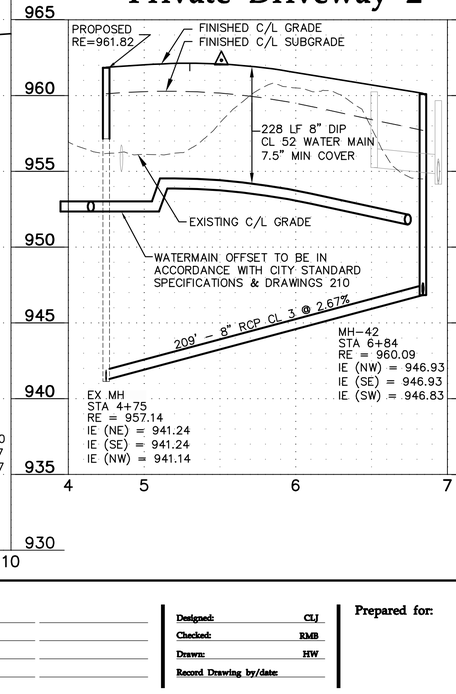
WATER MAIN NOTES:

1. ALL WATERMAIN AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. MANIPULATION OF EXISTING VALVES SHALL BE PERFORMED ONLY BY CITY PERSONNEL.
3. WATERMAIN SHALL BE DUCTILE IRON PIPE, CLASS-52.
4. ALL FITTINGS SHALL COMPLY WITH CEAM SPEC. 2611.2.A.1. ALL FITTINGS SHALL BE DUCTILE IRON PIPE WITH POLYETHYLENE ENCASEMENT. ALL CONNECTIONS SHALL BE INSTALLED UTILIZING COR-BLUE NUTS AND BOLTS.
5. USE GATE VALVES FOR ALL APPLICATIONS UP THROUGH 12 INCHES.
6. GATE VALVES SHALL BE RESILIENT WEDGE AMERICAN FLOW CONTROL SERIES 2500 OR APPROVED EQUAL. GATE VALVES MUST COMPLY WITH CEAM SPEC 2611.2, C.2.
7. USE BUTTERFLY VALVES FOR ALL APPLICATIONS GREATER THAN 12 INCHES.
8. BUTTERFLY VALVES SHALL BE MUELLER LINESEAL III, OR APPROVED EQUAL. BUTTERFLY VALVES SHALL COMPLY WITH CEAM SPEC. 2611.2, C.3.
9. BOLTS AND NUTS ON ALL VALVES AND HYDRANTS SHALL BE STAINLESS STEEL.
10. ALL HYDRANTS SHALL BE INSTALLED 5.0 FEET BACK OF CURB.
11. HYDRANTS SHALL BE WATEROUS "PACER," MODEL WB-67 OR APPROVED EQUAL, FITTED WITH FH 800 SERIES FLEX STAKE AND PAINTED RED.
12. HYDRANTS SHALL HAVE TWO OUTLET NOZZLES FOR 2-1/2 (I.D.) HOSE CONNECTIONS AND ONE 4" STORZ NOZZLE.
13. THE CURB STOP SERVICE ASSEMBLY SHALL HAVE A MINIMUM 1-FT ADJUSTMENT RANGE AND SHALL EXTEND 6 INCHES ABOVE FINISHED GRADE FULLY EXTENDED.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WATER TO HOMES AND BUSINESSES WHOSE WATER SUPPLY IS DISRUPTED DURING THE COURSE OF THE PROJECT.
15. ALL WATER SERVICES SHALL BE 1.5" TYPE K COPPER UNLESS OTHERWISE NOTED.

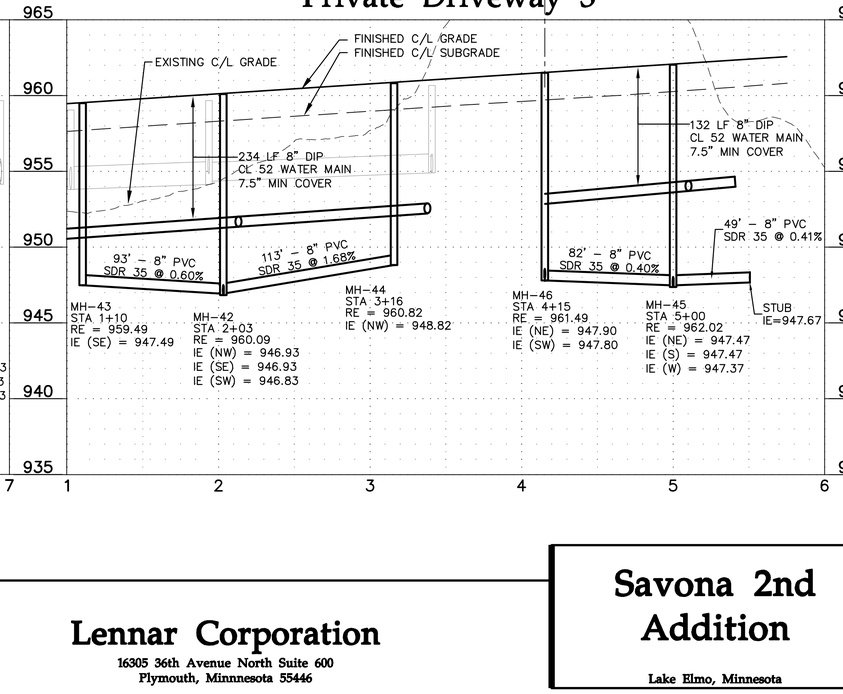
5th St. Lane N.

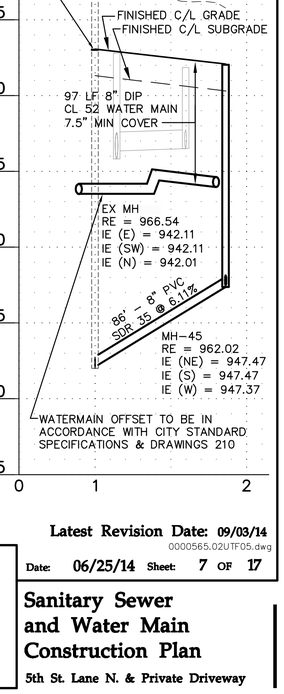


Private Driveway 2



Private Driveway 3





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Date: 06/25/14 **Sheet: 7 OF 17**

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Ryan M. Bluhm
Date: 09/03/14 License No. 41257

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Designed: CLJ
Checked: RMB
Drawn: HW
Record Drawing by/date:

Prepared for:
Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnnesota 55446

Savona 2nd Addition
Lake Elmo, Minnesota

Sanitary Sewer and Water Main Construction Plan
5th St. Lane N. & Private Driveway

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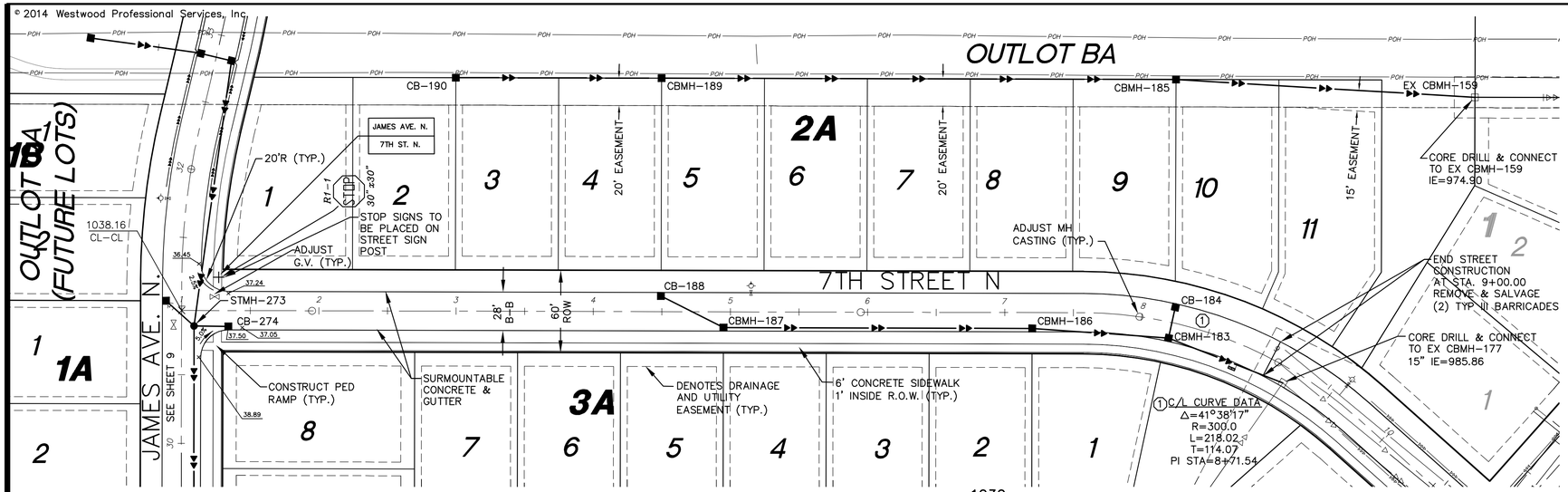

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GENERAL NOTES:

- RADIUS TO BE B618 C. & G. WITH 10' TRANSITION FROM SURMOUNTABLE CURB
- 11.90 × DENOTES GUTTERLINE ELEVATION AT INTERSECTIONS

CASTING NOTE:

ALL CATCH BASIN CASTINGS IN CURB SHALL BE SUMPED 0.10 FEET AND MANHOLE CASTINGS IN PAVED AREAS SHALL BE SUMPED 0.05 FEET. RIM ELEVATIONS ON PLAN PROFILES REFLECT THE SUMPED ELEVATIONS.

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  LONGER STREET SIGN TO BE PLACED
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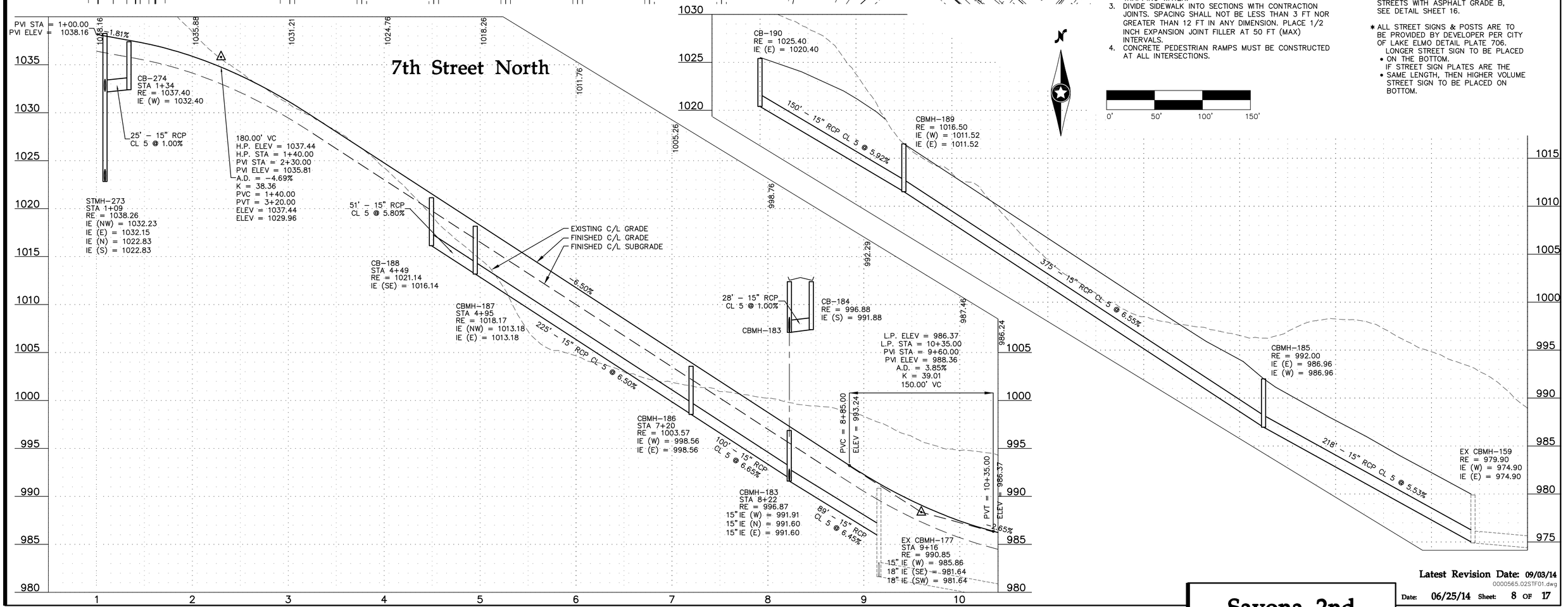

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Date: 06/25/14 Sheet: 8 OF 17

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Ryan M. Bluhm
Date: 09/03/14 License No. 41257

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Designed: CLJ
Checked: RMB
Drawn: HW
Record Drawing by/date:

Prepared for:
Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnnesota 55446

Savona 2nd Addition
Lake Elmo, Minnesota

Storm Sewer and Street Construction Plan
7th Street North

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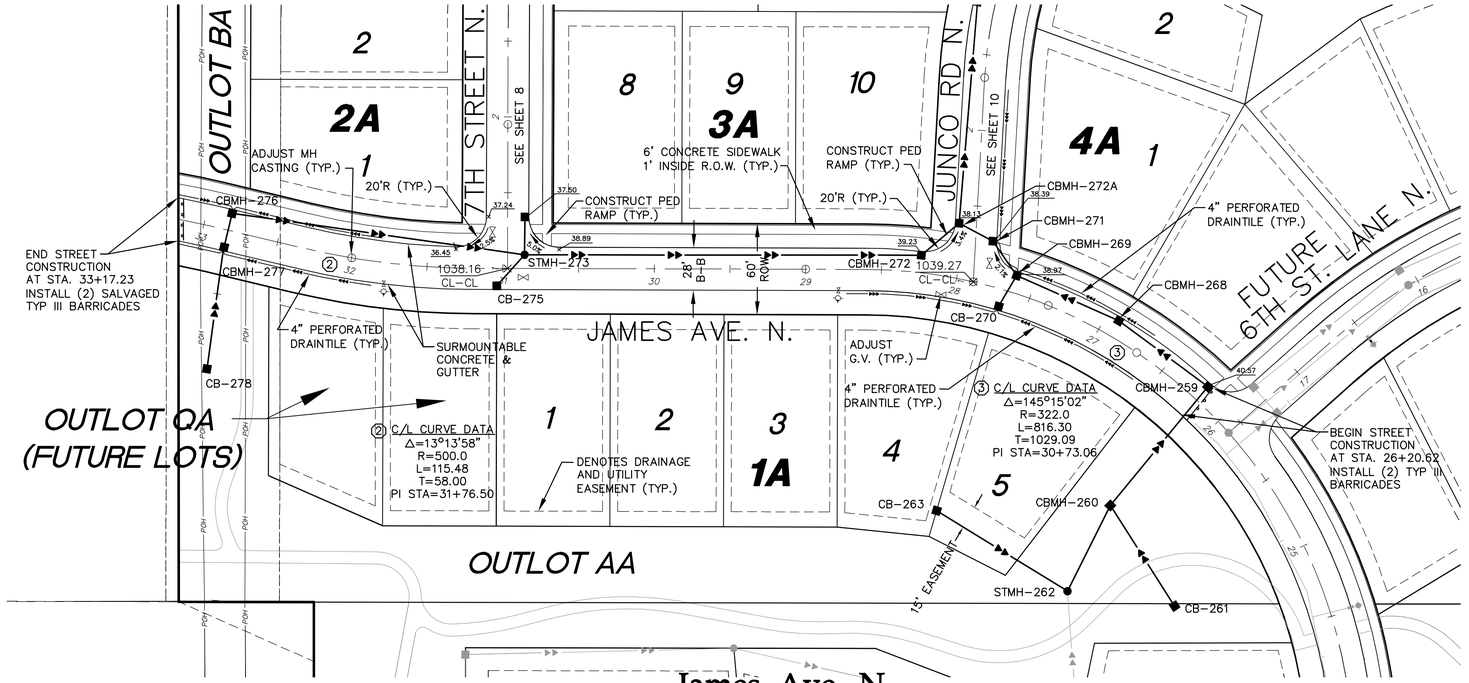

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0' 50' 100' 150'

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11.90 +

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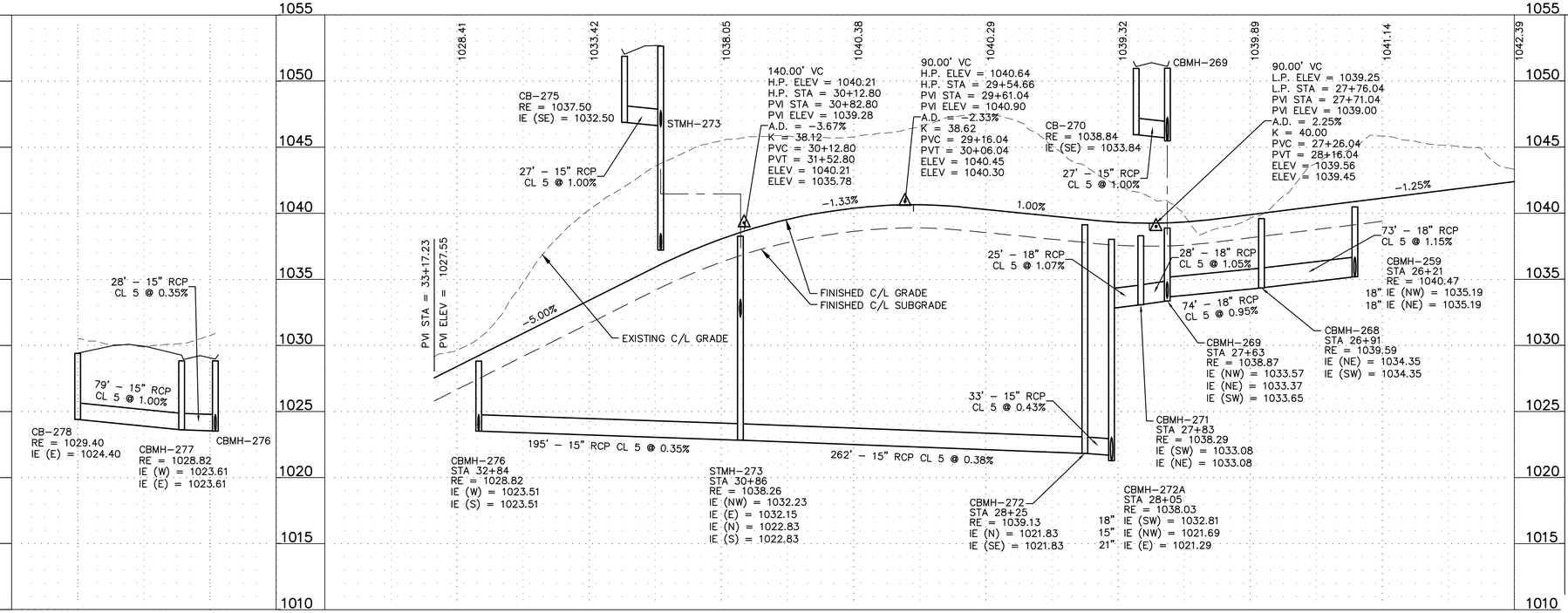

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Date: 06/25/14 **Sheet: 9 OF 17**

Savona 2nd Addition

Lake Elmo, Minnesota

Storm Sewer and Street Construction Plan

James Ave. N.

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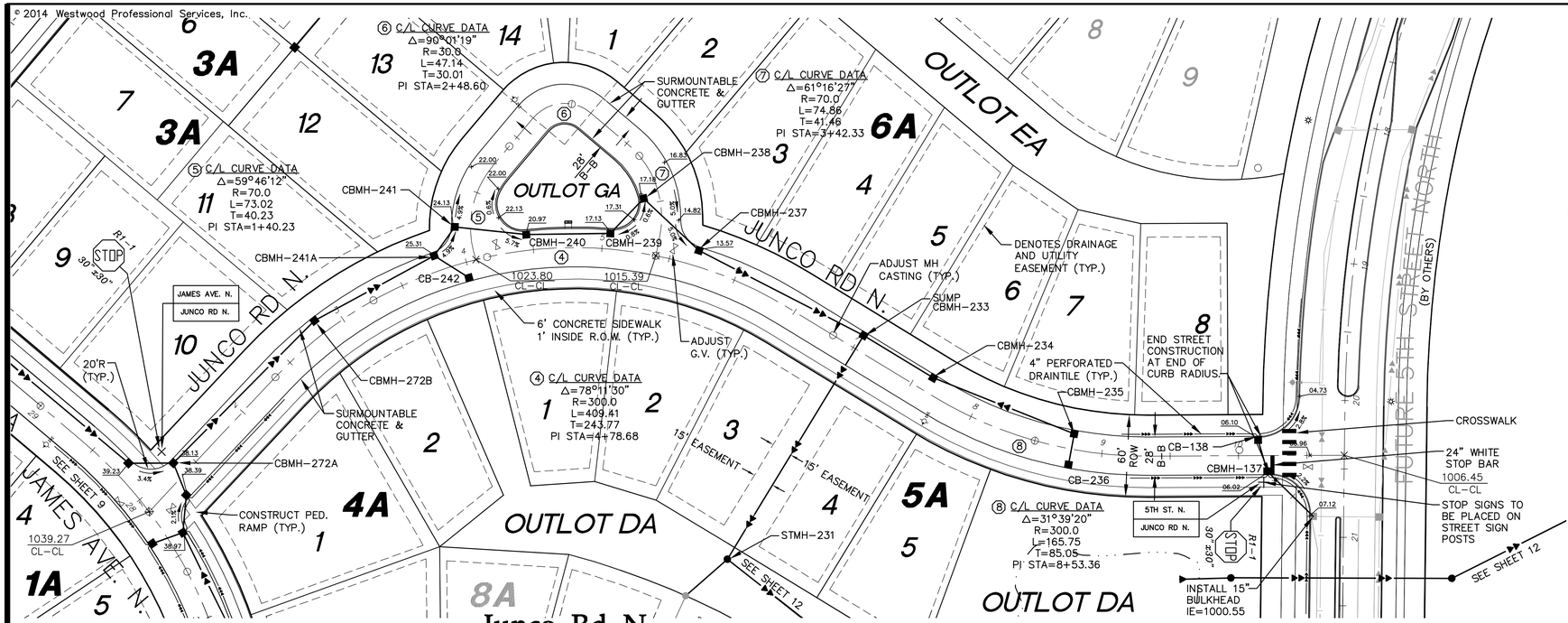

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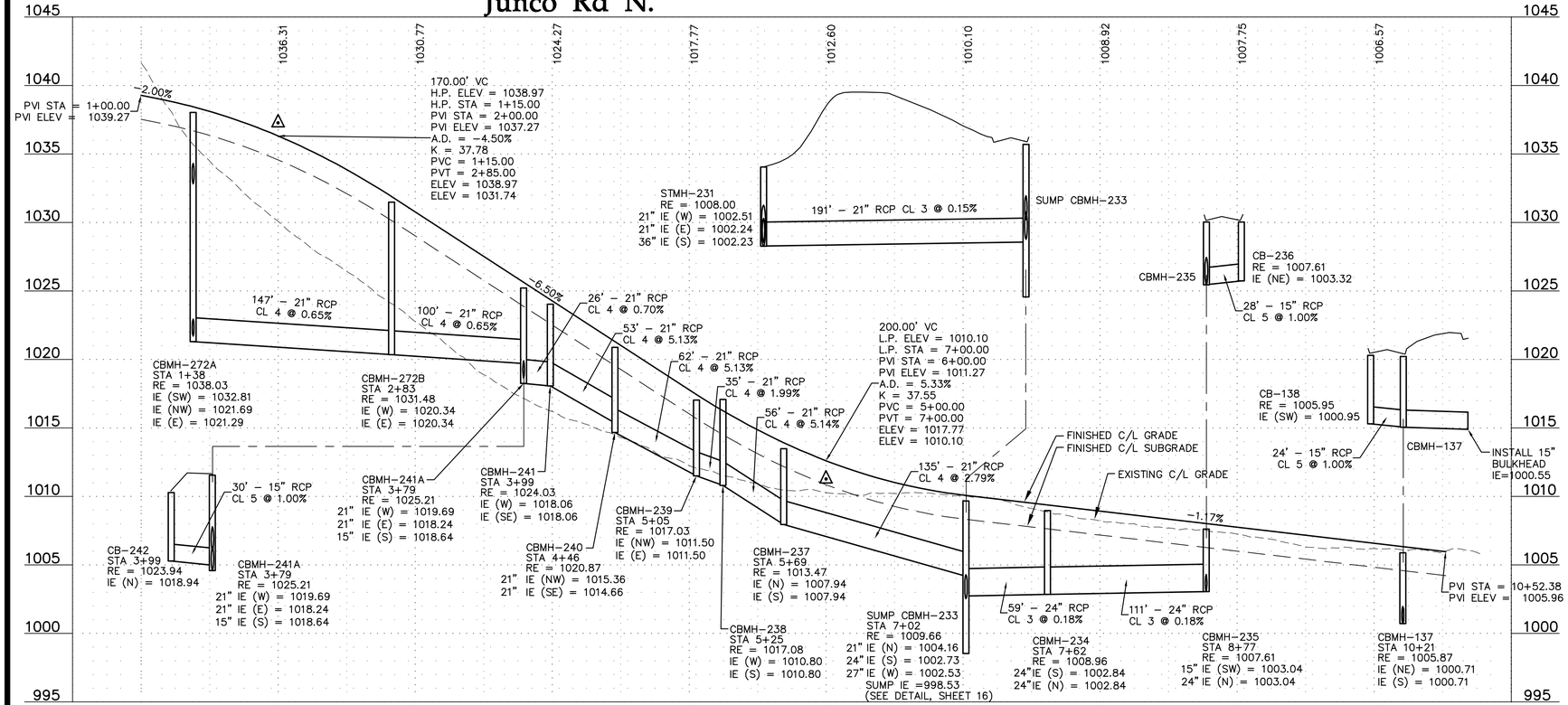

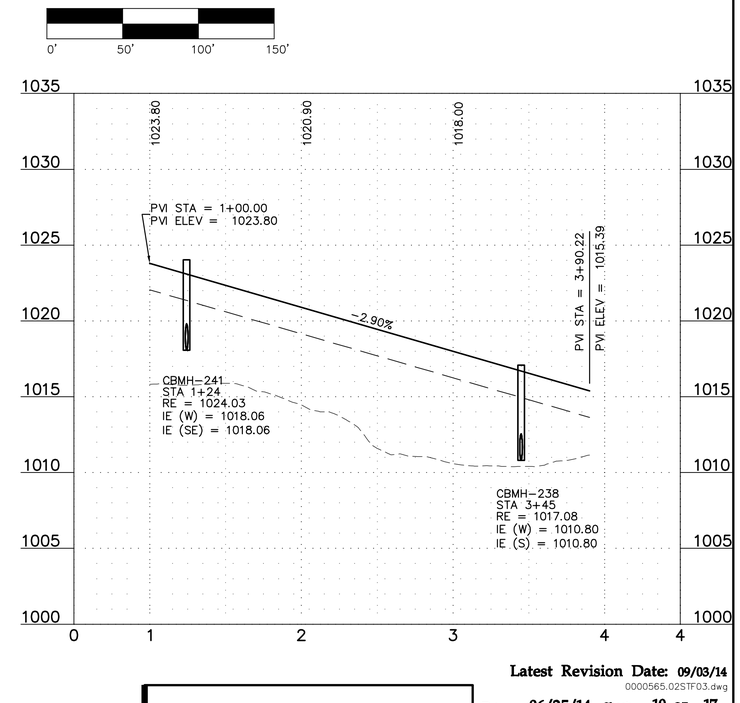

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Ryan M. Bluhm
Date: 09/03/14 License No. 41257

Revisions:
06/30/14 CITY COMMENTS
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09/03/14 CITY COMMENTS

Designed: CLJ
Checked: RMB
Drawn: HW
Record Drawing by/date:

Prepared for:
Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnesota 55446

Savona 2nd Addition
Lake Elmo, Minnesota

Storm Sewer and Street Construction Plan
Junco Rd N.

Date: 06/25/14 Sheet: 10 OF 17

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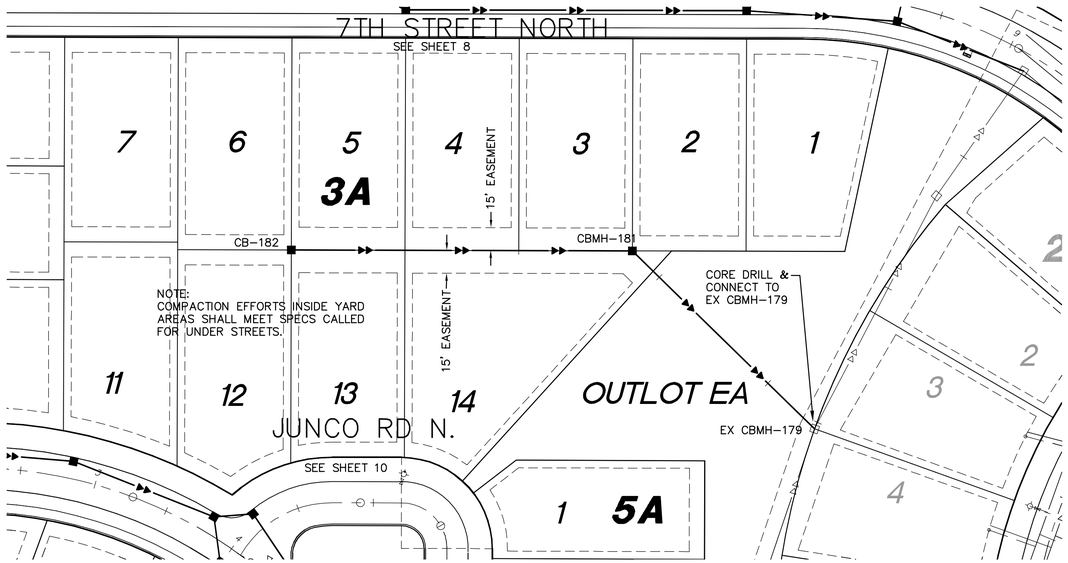

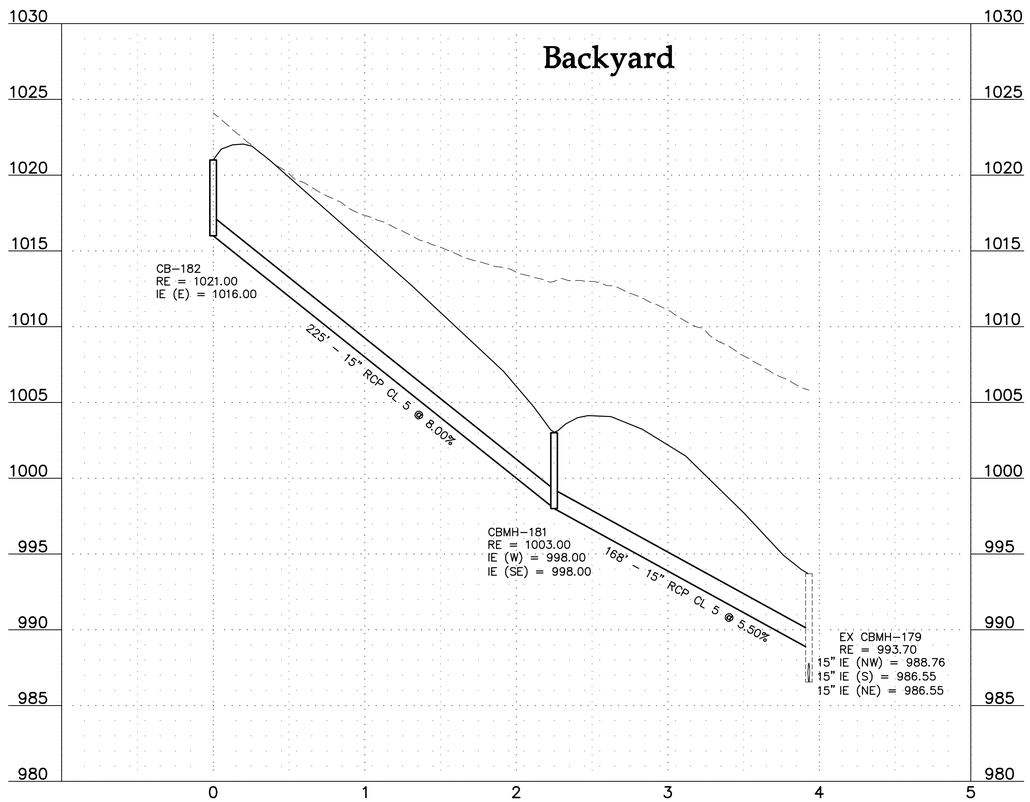

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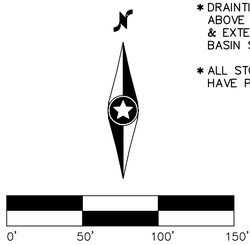

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Savona 2nd Addition

Lake Elmo, Minnesota

Date: 06/25/14 Sheet: 11 OF 17

Storm Sewer and Street Construction Plan

Backyard

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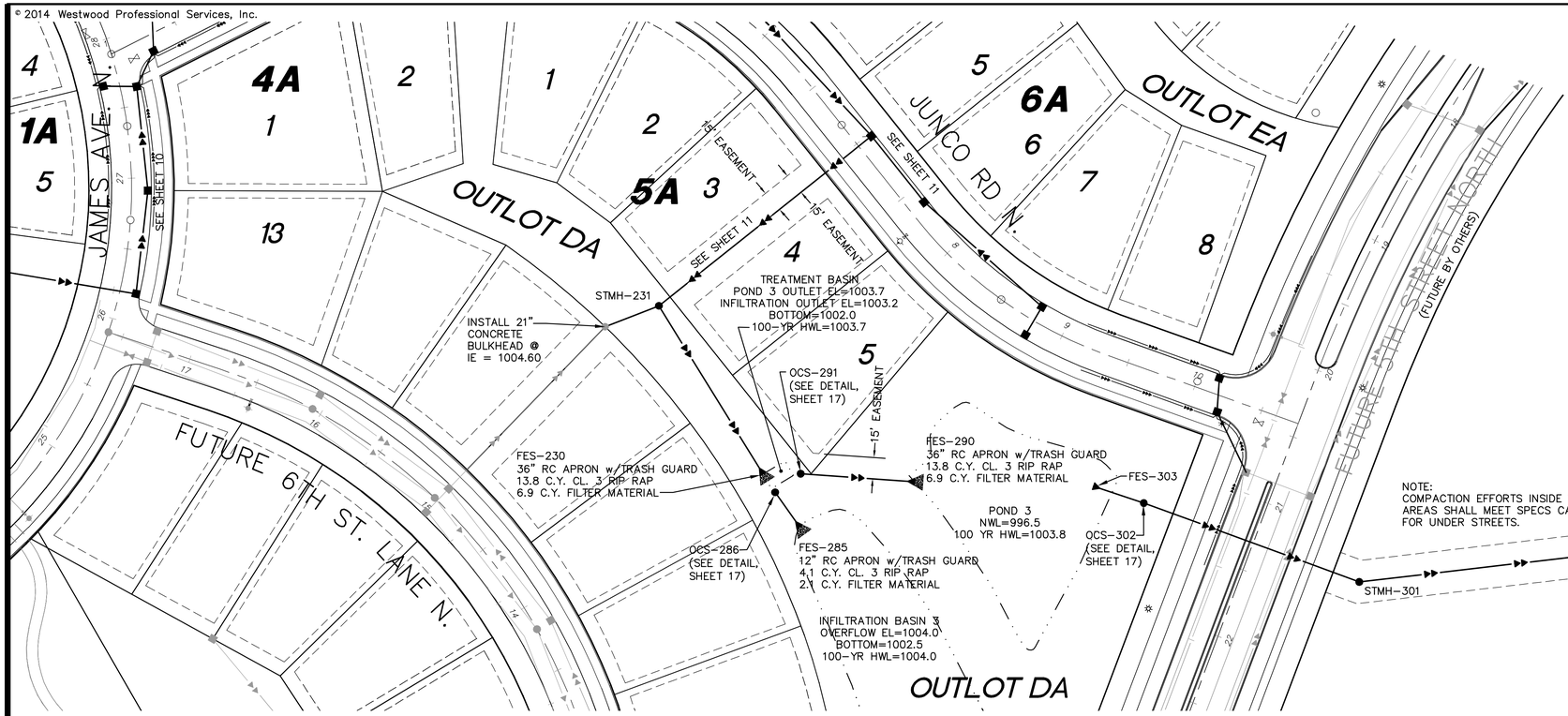

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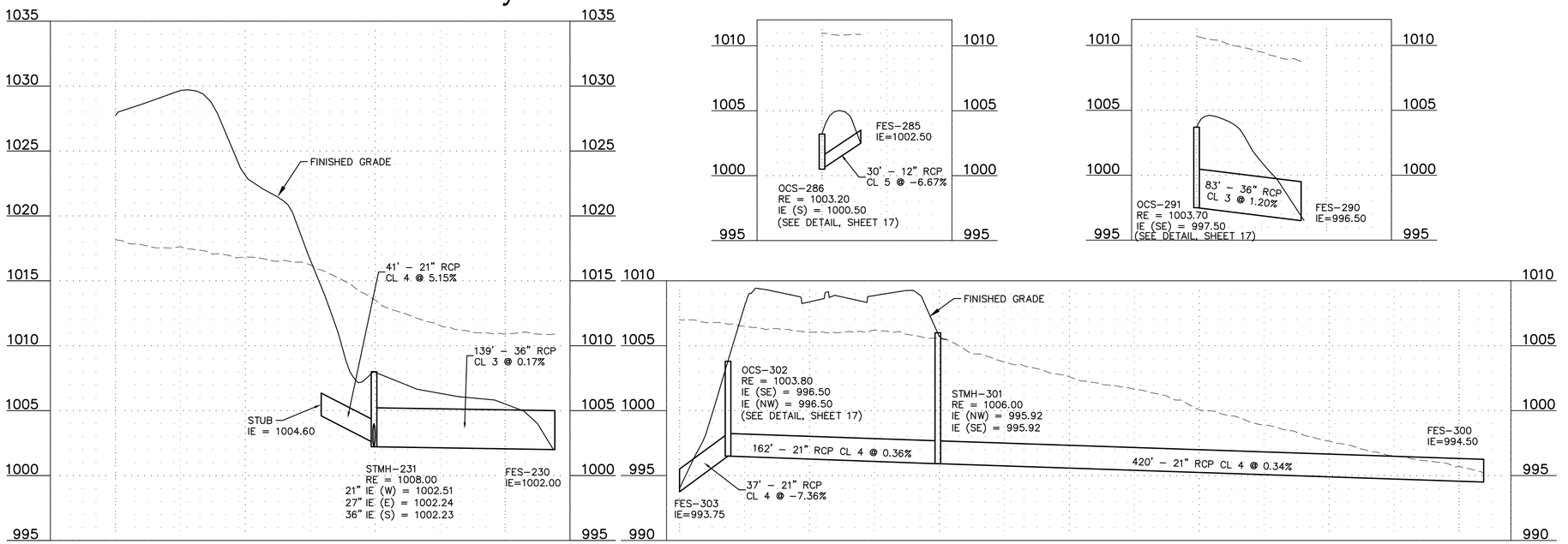

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Savona 2nd Addition

Lake Elmo, Minnesota

Latest Revision Date: 09/03/14
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Date: 06/25/14 Sheet: 12 OF 17

Storm Sewer and Street Construction Plan
Future 6th St. Lane N.
& Backyard

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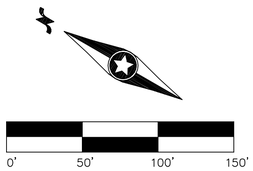
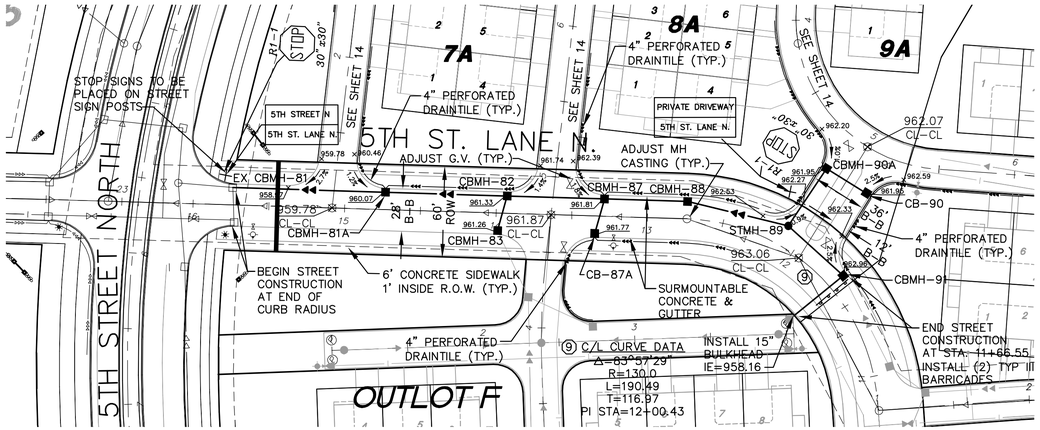
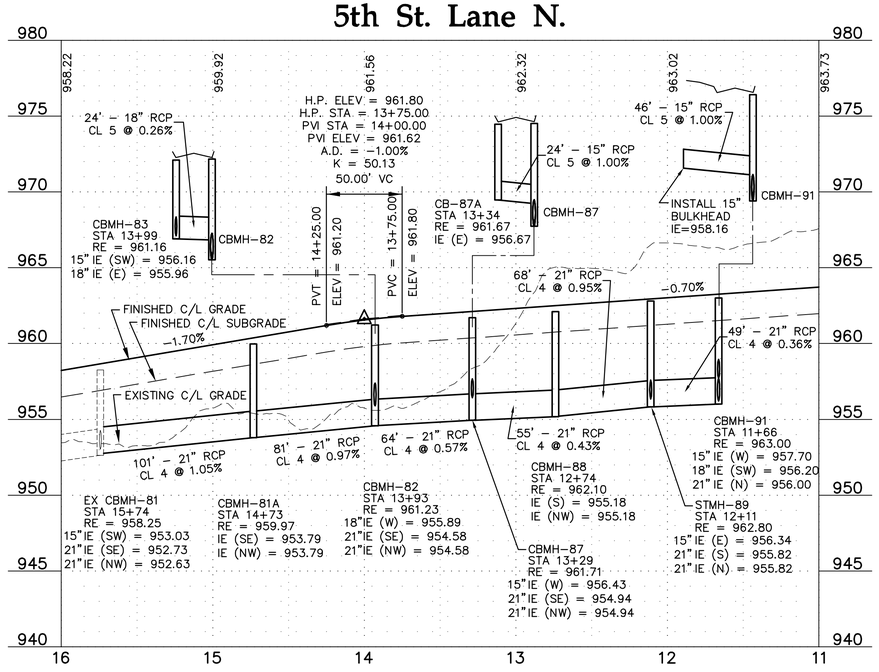
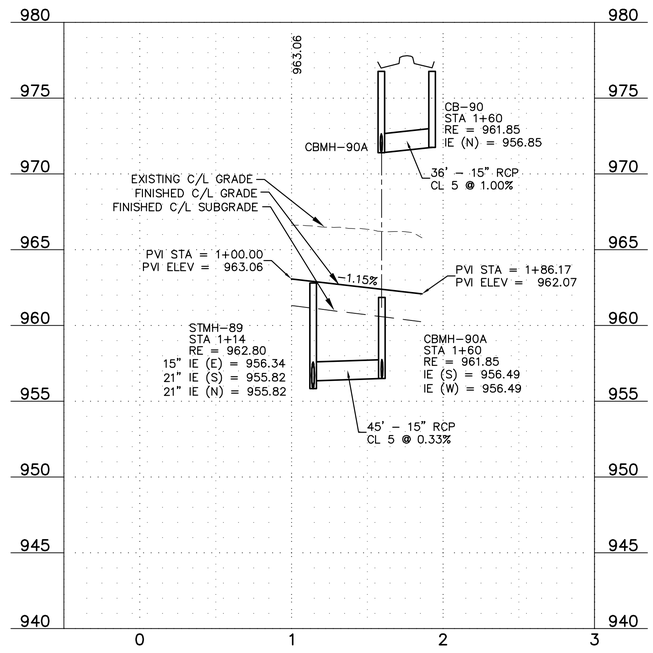




5th St. Lane N.





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Savona 2nd Addition
Lake Elmo, Minnesota

Storm Sewer and Street Construction Plan
5th St. Lane N.

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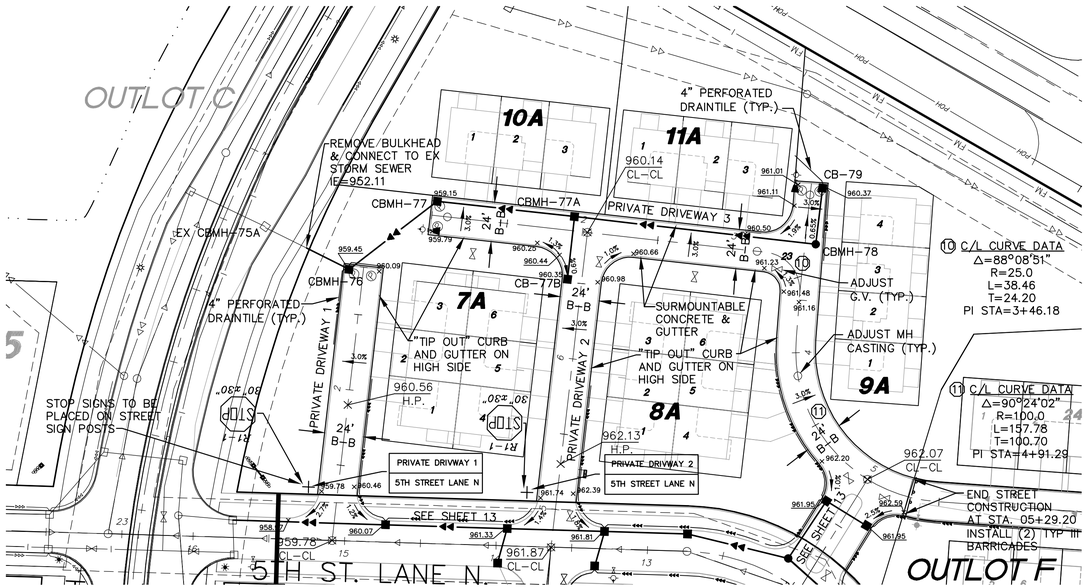

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0' 50' 100' 150'

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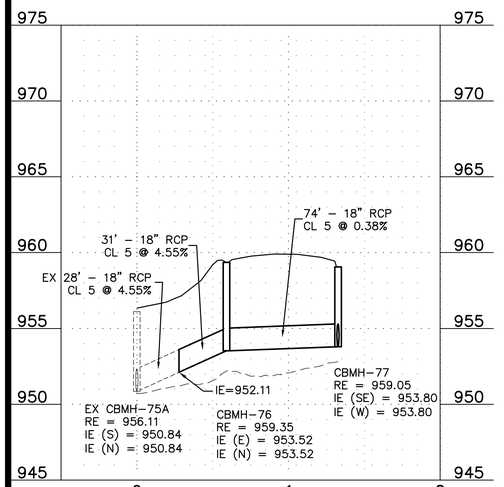

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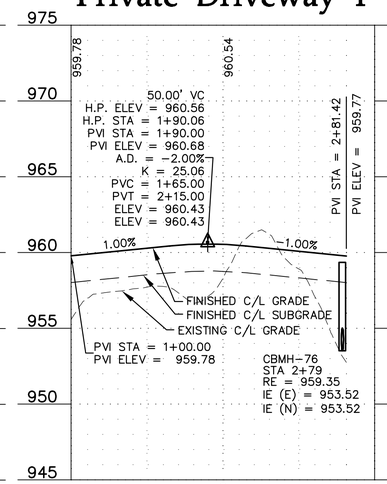

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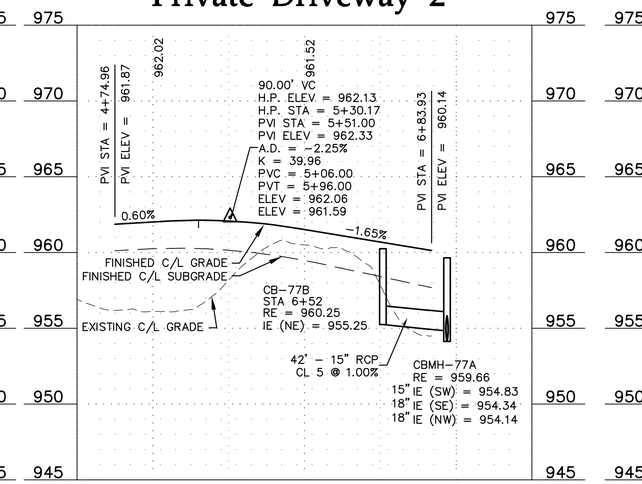

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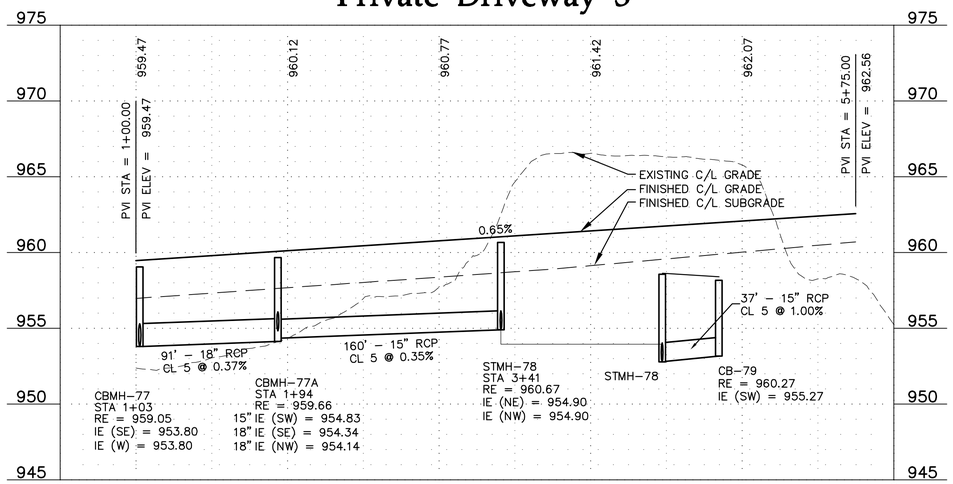

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Savona 2nd Addition

Lake Elmo, Minnesota

Storm Sewer and Street Construction Plan

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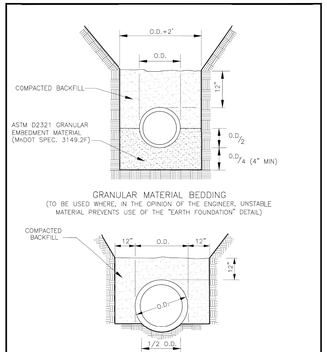
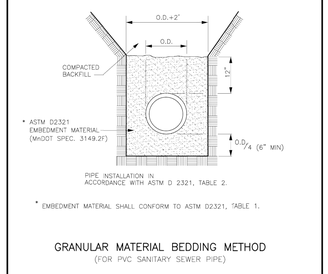


PIPE FOUNDATION DETAILS

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 101 | LAKE ELMO

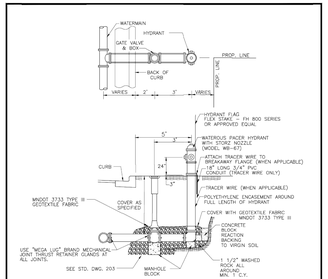


* EMBEDMENT MATERIAL SHALL CONFORM TO ASTM D2321, TABLE 1.

GRANULAR MATERIAL BEDDING METHOD
(FOR PVC SANITARY SEWER PIPE)

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 103 | LAKE ELMO

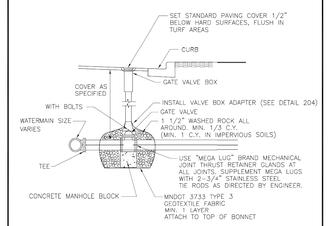


NOTES:
1. USE MEGA LUGS ON ALL JOINTS. PROVIDE CONCRETE BLOCKING BEHIND HYDRANT AND TEE. USE COR-BLUE T BOLTS ON ALL FITTINGS.
2. ALL VALVES SHALL OPEN LEFT (CCW) WHEN PRESENT.
3. 4" WEEP HOLES ARE PLUGGED. PLUMPER NOZZLE CAP MUST BE PAINTED GREEN AND A TAG SHALL BE ATTACHED TO THE HYDRANT STATING TOWN HOLDS PLUGGED.
4. SUPPLY 1 HYDRANT WRENCH FOR EACH HYDRANT INSTALLED, MINIMUM ONE PER PROJECT.
5. SUPPLY 1 HYDRANT STORZ WRENCH OR HYDRANT KEYHAK KIT PER PROJECT.
6. SUPPLY 1 6" HYDRANT EXTENSION AS DIRECTED BY THE ENGINEER.
7. ALL HYDRANTS NOT IN SERVICE SHALL BE COVERED WITH BLACK POLY PLASTIC.
**EXTRA STAKES AND REPAIR KITS ARE TO BE DELIVERED TO THE CITY GARAGE.

TYPICAL HYDRANT LAYOUT
(VALVE IN BOULEVARD)

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 201 | LAKE ELMO

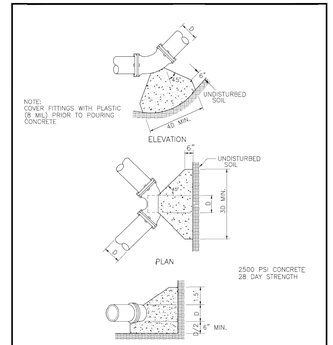


NOTES:
SUPPLY ONE 12" GATE VALVE KEY PER PROJECT, AS DIRECTED BY THE ENGINEER. EXTRA KEYS SHALL BE DELIVERED TO THE CITY GARAGE.

GATE VALVE INSTALLATION

FEBRUARY 2013

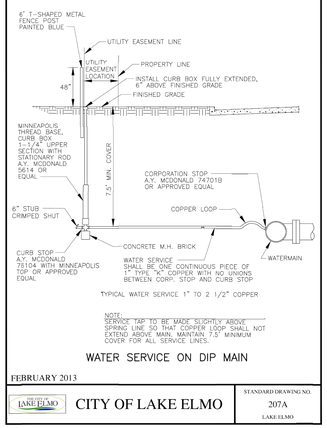
CITY OF LAKE ELMO | STANDARD DRAWING NO. 203 | LAKE ELMO



CONCRETE REACTION BACKING
(FOR BENDS)

FEBRUARY 2013

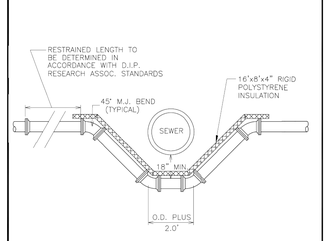
CITY OF LAKE ELMO | STANDARD DRAWING NO. 206 | LAKE ELMO



WATER SERVICE ON DIP MAIN

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 207A | LAKE ELMO

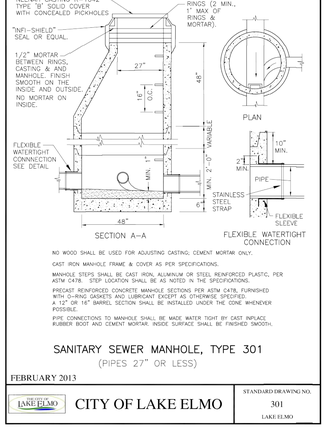


NOTE: FITTINGS SHALL BE RESTRAINED WITH THE USE OF APPROVED MECHANICAL JOINT RESTRAINING GLANDS.

WATERMAIN OFFSET

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 210 | LAKE ELMO



NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON MANHOLE FRAME & COVER AS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC, PER ASTM C478. STEP LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.

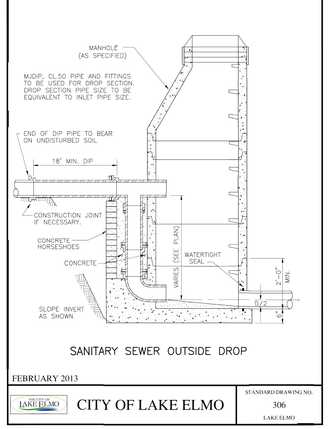
PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, FURNISHED WITH O-RING GASKETS AND LUBRICANT EXCEPT AS OTHERWISE SPECIFIED. A 12" OR 16" BARREL SECTION SHALL BE INSTALLED UNDER THE CONE WHENEVER POSSIBLE.

PIPE CONNECTIONS TO MANHOLE SHALL BE MADE WATER TIGHT BY CAST INPLACE RUBBER BOOT AND CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH.

SANITARY SEWER MANHOLE, TYPE 301
(PIPES 27" OR LESS)

FEBRUARY 2013

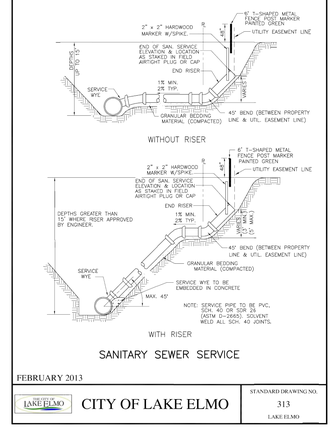
CITY OF LAKE ELMO | STANDARD DRAWING NO. 301 | LAKE ELMO



SANITARY SEWER OUTSIDE DROP

FEBRUARY 2013

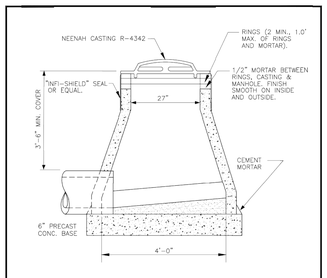
CITY OF LAKE ELMO | STANDARD DRAWING NO. 306 | LAKE ELMO



SANITARY SEWER SERVICE

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 313 | LAKE ELMO



NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON CATCH BASIN FRAME & COVER CASTINGS PER SPECIFICATIONS.

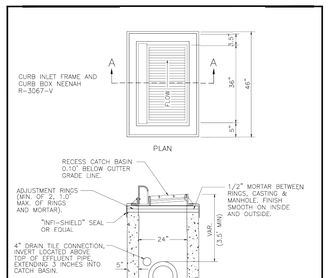
PRECAST REINFORCED CONCRETE CONE SECTION & PRECAST BASE PER ASTM C478.

FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR INSIDE SURFACE SHALL BE FINISHED SMOOTH.

CATCH BASIN, TYPE 402

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 402 | LAKE ELMO

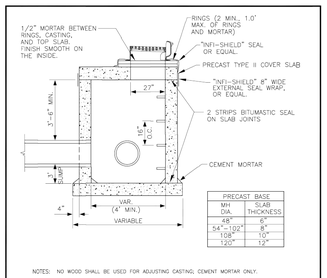


PRECAST REINFORCED CONCRETE CATCH BASIN & BASE SLAB PER ASTM C478

CATCH BASIN, TYPE 404

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 404 | LAKE ELMO



NOTES: NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON FRAME & GRATE CASTINGS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM, OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.

PRECAST REINFORCED CONCRETE BASE SLAB & COVER SLAB PER ASTM C478.

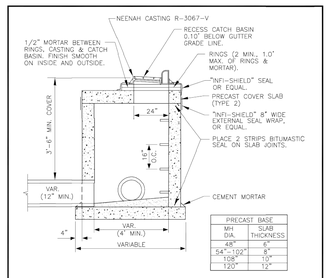
PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, FURNISHED WITH O-RING GASKETS & LUBRICANT, OR 8" CONCRETE MANHOLE BLOCK MANHOLE SECTION WITH 1/2" MORTARED EXTERIOR

FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH.

CATCH BASIN/MANHOLE WITH SUMP, TYPE 405

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 405 | LAKE ELMO



NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON FRAME & GRATE CASTINGS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.

PRECAST REINFORCED CONCRETE BASE SLAB & COVER SLAB PER ASTM C478,

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, OR 8" CONCRETE MANHOLE BLOCK WITH 1/2" MORTARED EXTERIOR.

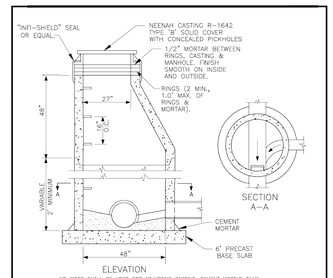
FURNISH PRECAST CONCRETE MANHOLE SECTIONS WITH O-RING GASKETS & LUBRICANT EXCEPT AS OTHERWISE SPECIFIED.

FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH.

CATCH BASIN/MANHOLE, TYPE 406

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 406 | LAKE ELMO



NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON MANHOLE FRAME & COVER AS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS & BASE SLAB PER ASTM C478.

FURNISH PRECAST MANHOLE SECTIONS WITH O-RING GASKETS & LUBRICANT EXCEPT AS OTHERWISE SPECIFIED. A 12" OR 16" BARREL SECTION SHALL BE INSTALLED UNDER THE CONE WHENEVER POSSIBLE.

FILL OPENING BETWEEN PIPE & MH WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH.

STORM SEWER MANHOLE, TYPE 407
(PIPES 27" OR LESS)

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 407 | LAKE ELMO

Call 48 Hours before digging:
811 or call811.com
Common Ground Alliance

Latest Revision Date: 09/03/14
0000565.02DTF01.dwg

Date: 06/25/14 **Sheet: 15 OF 17**

Westwood Professional Services, Inc.
7699 Anagram Drive
Eden Prairie, MN 55344
PHONE 952-937-5150
FAX 952-937-5822
TOLL FREE 1-888-937-5150
www.westwoodps.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.

Ryan M. Bluhm
Date 09/03/14 License No. 41257

Revisions:

01/16/14 CITY COMMENTS	09/03/14 CITY COMMENTS
01/31/14 BID SET	06/25/14 REVISED OUTLOTS
02/28/14 CITY COMMENTS	07/25/14 WATER SERVICE REVISION
03/13/14 CITY COMMENTS	08/04/14 MH18 & IRRIGATION SERVICE
06/30/14 CITY COMMENTS	08/28/14 WATER SERVICE REVISION
07/30/14 CITY COMMENTS	
08/08/14 CITY COMMENTS	

Designed: CLJ
Checked: RMB
Drawn: HW
Record Drawing by/date:

Prepared for:

Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnnesota 55446

Savona 2nd Addition

Lake Elmo, Minnesota

Details

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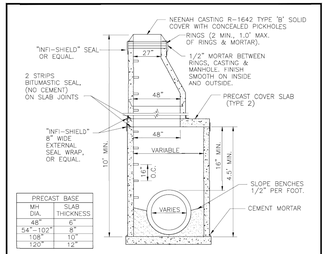


PRECAST BASE	
MH DIA.	SLAB THICKNESS
48"	6"
54"–102"	8"
108"	10"
120"	12"

NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON MANHOLE FRAME & COVER AS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS & BASE SLAB PER ASTM C478.

FURNISH PRECAST MANHOLE SECTIONS WITH O-RING GASKETS & LUBRICANT EXCEPT AS OTHERWISE SPECIFIED.

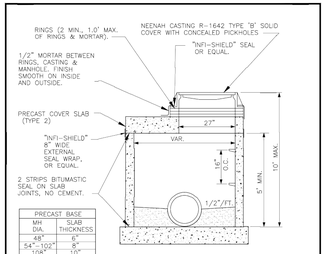
A 12" OR 16" BARREL SECTION SHALL BE INSTALLED UNDER THE CONE WHENEVER POSSIBLE.

FILL OPENING BETWEEN PIPE & MH WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH.

STORM SEWER MANHOLE, TYPE 408
(PIPES 30" & LARGER)

FEBRUARY 2013

LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 408 LAKE ELMO



PRECAST BASE	
MH DIA.	SLAB THICKNESS
48"	6"
54"–102"	8"
108"	10"
120"	12"

NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON MANHOLE FRAME & COVER AS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS & BASE SLAB PER ASTM C478.

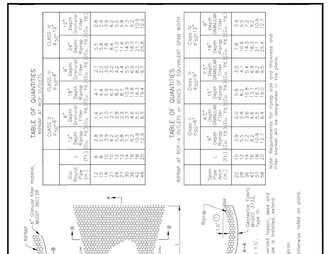
FURNISH PRECAST MANHOLE SECTIONS WITH O-RING GASKETS & LUBRICANT EXCEPT AS OTHERWISE SPECIFIED.

FILL OPENING BETWEEN PIPE & MH WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH.

STORM SEWER MANHOLE, TYPE 409

FEBRUARY 2013

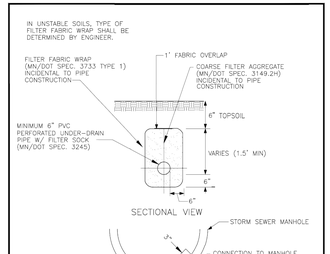
LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 409 LAKE ELMO



RIPRAP AT RCP OUTLETS

FEBRUARY 2013

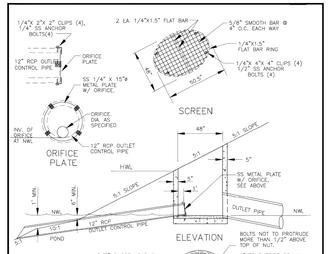
LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 411 LAKE ELMO



DRAIN TILE
USED BY DIRECTION OF CITY ENGINEER ONLY

FEBRUARY 2013

LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 412 LAKE ELMO

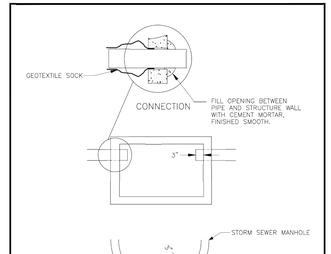


STRUCTURE TABLE			
POND	HWL	NWL	ORIFICE Ø

POND SKIMMER

FEBRUARY 2013

LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 417 LAKE ELMO

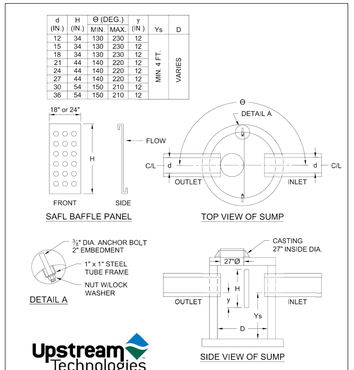


DRAIN TILE CONNECTIONS

FEBRUARY 2013

LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 420 LAKE ELMO

d (IN.)	H (IN.)	Θ (DEG.) MIN.	Θ (DEG.) MAX.	y (IN.)	Ys	D
12	34	130	230	12	MIN. 4 FT.	VARIES
15	34	130	230	12		
18	34	130	230	12		
21	44	140	220	12		
24	44	140	220	12		
27	44	140	220	12		
30	54	150	210	12		
36	54	150	210	12		



Upstream Technologies

UPSTREAM TECHNOLOGIES INC. IS THE EXCLUSIVE LICENSEE OF THE SAFL BAFFLE

This generic detail does not encompass the sizing, fit, and applicability of the SAFL Baffle for this specific project. It is the off-site responsibility of the design engineer to assure that the selected structure is sized correctly and meets all regulations. The SAFL Baffle is patent pending technology of the University of Minnesota and Upstream Technologies, Inc. is the exclusive licensee. Upstream Technologies approves plans, sizing, or system designs.

SAFL BAFFLE STRUCTURE
STANDARD SUMP MANHOLE W/BAFFLE

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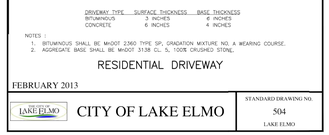
SAFL BAFFLE

CBMH–233

CONCRETE CURB & GUTTER

FEBRUARY 2013

LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 501 LAKE ELMO



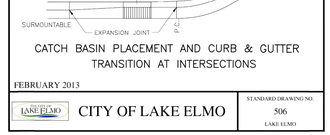
DRIVEWAY TYPE	SURFACE THICKNESS	BASE THICKNESS
BITUMINOUS	3 INCHES	6 INCHES
CONCRETE	6 INCHES	4 INCHES

NOTES:
1. BITUMINOUS SHALL BE MnDOT 2360 TYPE SP, GRADATION MIXTURE NO. A WEARING COURSE.
2. AGGREGATE BASE SHALL BE MnDOT 3138 CL. 5, 100% CRUSHED STONE.

RESIDENTIAL DRIVEWAY

FEBRUARY 2013

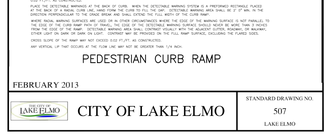
LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 504 LAKE ELMO



CATCH BASIN PLACEMENT AND CURB & GUTTER TRANSITION AT INTERSECTIONS

FEBRUARY 2013

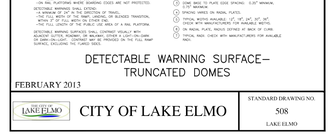
LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 506 LAKE ELMO



PEDESTRIAN CURB RAMP

FEBRUARY 2013

LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 507 LAKE ELMO

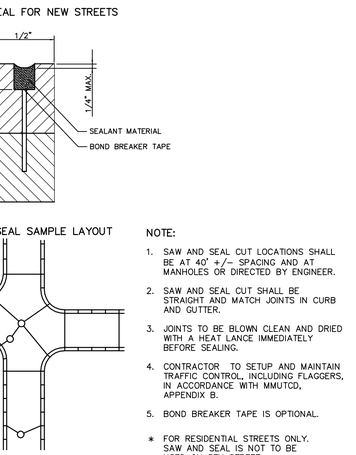


NOTES:
1. DETECTABLE WARNING SURFACES SHALL FOLLOW THE PUBLIC RIGHT-OF-WAY GRADE AND CROSS SLOPE WHERE APPLICABLE.
2. DETECTABLE WARNINGS CONSIST OF TRUNCATED DOMES ALIGNED IN A SQUARE OR RADIAL GRID PATTERN.
3. DETECTABLE WARNING SURFACE SHALL:
   - BRONZE PANELS, VARIABLE SIZE, WITH RECESSED TRANSITIONS PROVIDE A FLUSH TROWELLING CONNECTION TO THE ROADWAY.
   - BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' DRAWINGS THAT ARE INCLUDED WITH TRAFFIC CONTROL DEVICES.
   - BE INSTALLED IN ACCORDANCE WITH MnDOT STANDARD PLATES.
   - NOT PENETRATING BALANCE CONCRETE.
   - BE INSTALLED SO THAT ALL EXPANSION JOINTS ARE NOT PROTECTED.
4. DETECTABLE WARNINGS SHALL EXTEND:
   - A MINIMUM OF 24" IN THE DIRECTION OF TRAVEL.
   - THE FULL WIDTH OF THE RAMP, LANDING OR BLENDED TRANSITION, MINIMUM 24" IN FULL WIDTH OF THE CURB RAMP.
   - THE FULL LENGTH OF THE PUBLIC USE AREA OF A RAIL PLATFORM, BOARDING OR RAIL CAR.
5. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT SURFACES, EITHER LIGHTER OR DARKER, BUT NOT BOTH. CONTRAST MAY BE PROVIDED ON THE FULL RAMP SURFACE, EXCLUDING THE FLARED SIDES.

DETECTABLE WARNING SURFACE– TRUNCATED DOMES

FEBRUARY 2013

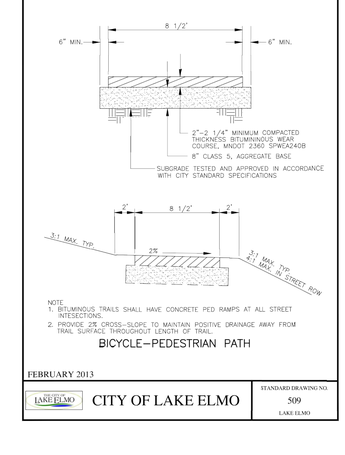
LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 508 LAKE ELMO



NOTE:
1. SAW AND SEAL CUT LOCATIONS SHALL BE AT 40' +/– SPACING AND AT MANHOLES OR DIRECTED BY ENGINEER.
2. SAW AND SEAL CUT SHALL BE STRAIGHT AND MATCH JOINTS IN CURB AND GUTTER.
3. JOINTS TO BE BLOWN CLEAN AND DRIED WITH A HEAT LANCE IMMEDIATELY BEFORE SEALING.
4. CONTRACTOR TO SETUP AND MAINTAIN TRAFFIC CONTROL, INCLUDING FLAGGERS, IN ACCORDANCE WITH MMUTCD, APPENDIX B.
5. BOND BREAKER TAPE IS OPTIONAL.

* FOR RESIDENTIAL STREETS ONLY. SAW AND SEAL IS NOT TO BE USED ON 5TH STREET.

SAW AND SEAL

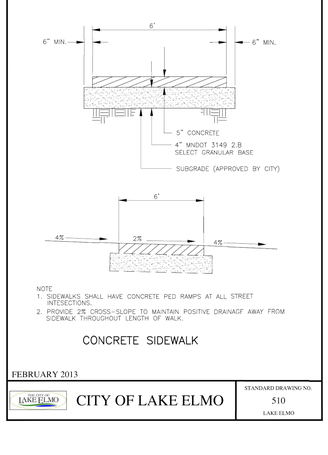


NOTE:
1. BITUMINOUS TRAILS SHALL HAVE CONCRETE PED RAMPS AT ALL STREET INTERSECTIONS.
2. PROVIDE 2% CROSS-SLOPE TO MAINTAIN POSITIVE DRAINAGE AWAY FROM TRAIL SURFACE THROUGHOUT LENGTH OF TRAIL.

BICYCLE–PEDESTRIAN PATH

FEBRUARY 2013

LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 509 LAKE ELMO

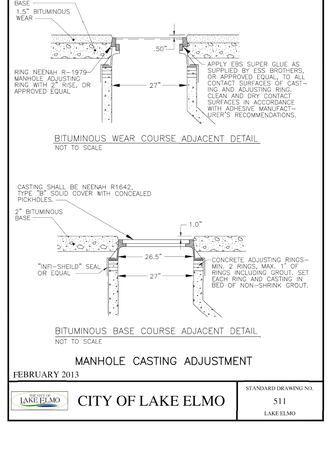


NOTE
1. SIDEWALKS SHALL HAVE CONCRETE PED RAMPS AT ALL STREET INTERSECTIONS.
2. PROVIDE 2% CROSS-SLOPE TO MAINTAIN POSITIVE DRAINAGE AWAY FROM SIDEWALK THROUGHOUT LENGTH OF WALK.

CONCRETE SIDEWALK

FEBRUARY 2013

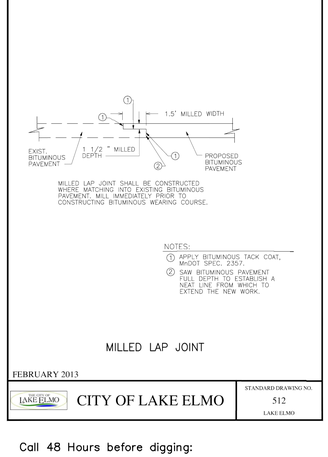
LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 510 LAKE ELMO



MANHOLE CASTING ADJUSTMENT

FEBRUARY 2013

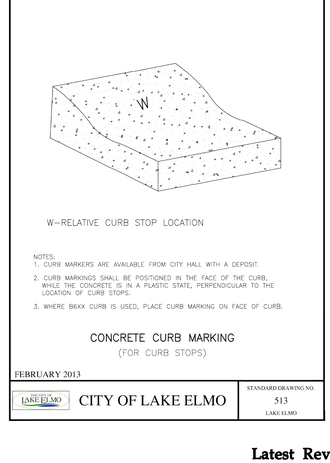
LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 511 LAKE ELMO



MILLED LAP JOINT

FEBRUARY 2013

LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 512 LAKE ELMO



CONCRETE CURB MARKING
(FOR CURB STOPS)

FEBRUARY 2013

LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 513 LAKE ELMO

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Latest Revision Date: 09/03/14

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Date: 06/25/14 Sheet: 16 OF 17

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7699 Anagram Drive
Eden Prairie, MN 55344
PHONE 952-937-5150
FAX 952-937-5822
TOLL FREE 1-888-937-5150
www.westwoodps.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.

Ryan M. Bluhm
Date 09/03/14 License No. 41257

Revisions:
06/30/14 CITY COMMENTS
07/30/14 CITY COMMENTS
08/08/14 CITY COMMENTS
09/03/14 CITY COMMENTS

Designed: CLJ
Checked: RMB
Drawn: HW
Record Drawing by/date:

Prepared for:
Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnesota 55446

Savona 2nd Addition
Lake Elmo, Minnesota

Details

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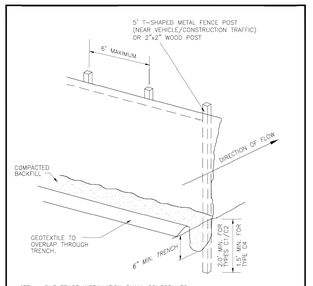
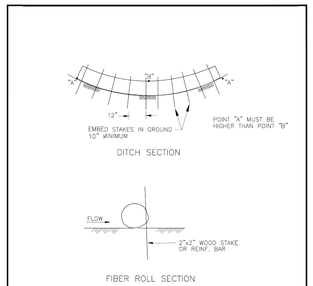


NOTE : -SILT FENCE INSTALLATION SHALL CONFORM TO MNDOT2573.3, TYPE C1/C2 NEAR VEHICLE/CONSTRUCTION TRAFFIC, TYPE C4 AT ALL OTHER LOCATIONS.
-MATERIALS SHALL CONFORM TO MNDOT 3886.

SILT FENCE

FEBRUARY 2013

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

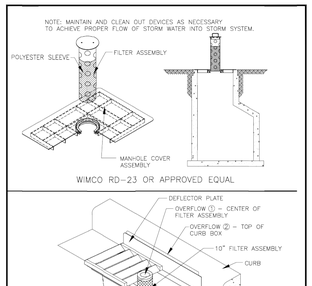


NOTE:
STAKE TO BE INSTALLED AT AN ANGLE OF APPROXIMATELY 45° ON THE DOWNSTREAM SIDE OF THE FIBER ROLL. ENSURE THAT STAKE DOES NOT PUSH DOWN THE FIBER ROLL FROM ITS FULL HEIGHT.

DITCH CHECK (FIBER ROLL)

FEBRUARY 2013

LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 603 LAKE ELMO



SEDIMENT CONTROL AROUND STORM SEWER INLET

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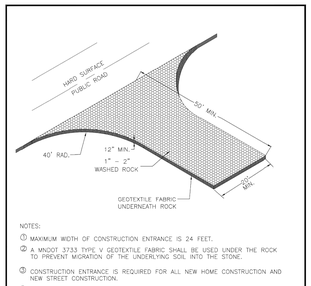
LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 604 LAKE ELMO

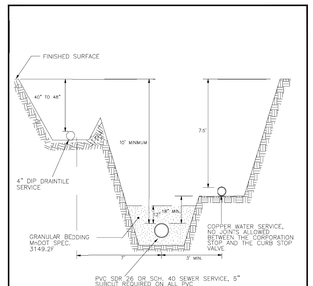


NOTES:
① MAXIMUM WIDTH OF CONSTRUCTION ENTRANCE IS 24 FEET.
② A MNDOT 3733 TYPE V GEOTEXTILE FABRIC SHALL BE USED UNDER THE ROCK TO PREVENT MIGRATION OF THE UNDERLYING SOIL INTO THE STONE.
③ CONSTRUCTION ENTRANCE IS REQUIRED FOR ALL NEW HOME CONSTRUCTION AND NEW STREET CONSTRUCTION.
④ CONSTRUCTION ENTRANCE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

ROCK CONSTRUCTION ENTRANCE

FEBRUARY 2013

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

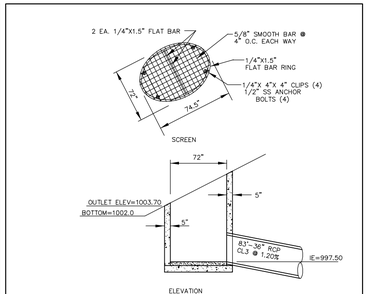


NOTE: IF 18" OF VERTICAL SEPARATION BETWEEN THE SANITARY SERVICE AND WATER SERVICE CAN NOT BE MAINTAINED TO 18" OF HORIZONTAL SEPARATION IS REQUIRED.

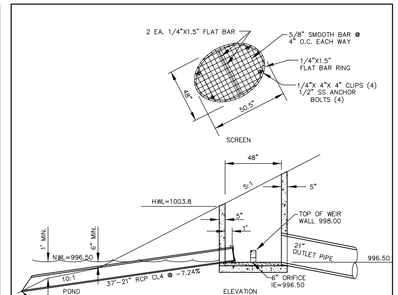
SANITARY, WATER & DRAIN TILE SERVICE INSTALLATION

FEBRUARY 2013

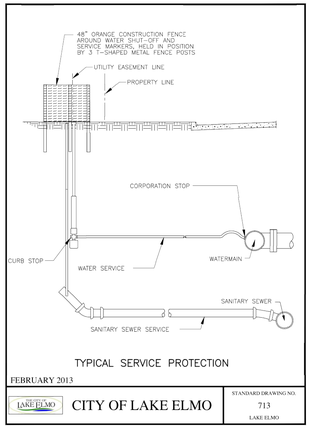
LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 712 LAKE ELMO



POND OUTLET STRUCTURE – 291



POND OUTLET STRUCTURE – 302



TYPICAL SERVICE PROTECTION

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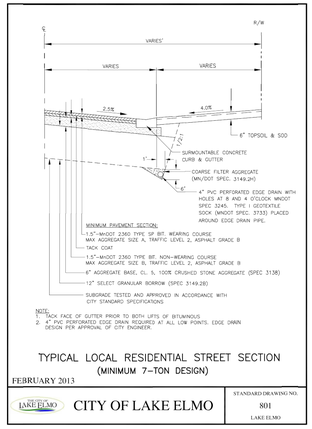
LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 713 LAKE ELMO



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

FEBRUARY 2013

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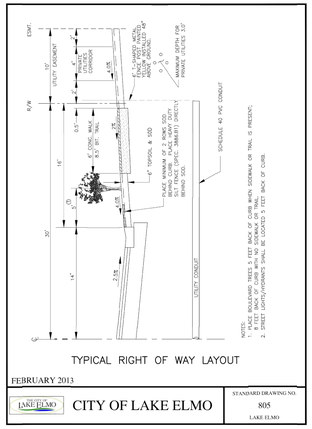

TYPICAL RIGHT OF WAY LAYOUT

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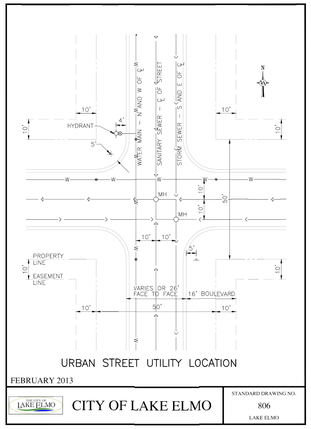

URBAN STREET UTILITY LOCATION

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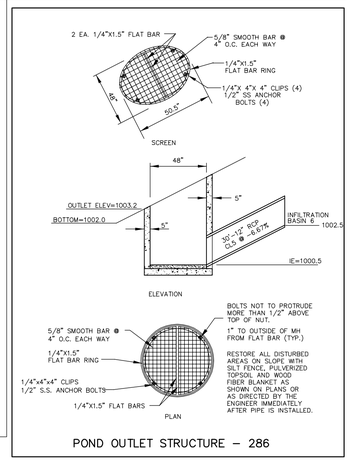
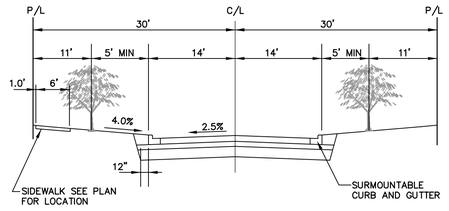
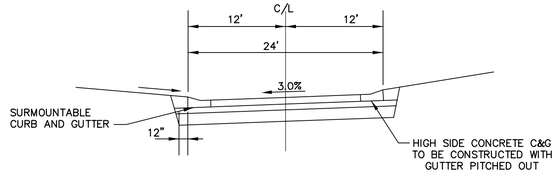


POND OUTLET STRUCTURE – 286



RESIDENTIAL STREET (28' B-B)
NO SCALE
60' ROW
SEE CITY OF LAKE ELMO DETAIL 801 FOR TYPICAL STREET SECTION



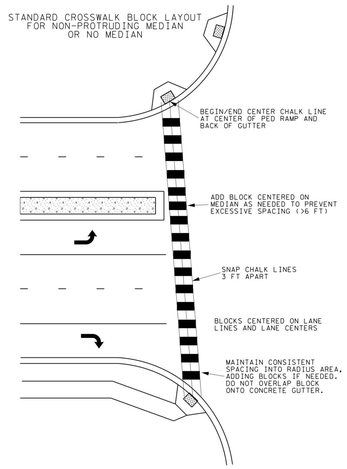
PRIVATE STREET (24' B-B)
NO SCALE
60' ROW
SEE CITY OF LAKE ELMO DETAIL 801 FOR TYPICAL STREET SECTION

MARKINGS FOR PEDESTRIAN CROSSWALKS

(L) WIDTH OF INSIDE LANE	(W) WIDTH OF PAINTED AREA	(S) WIDTH OF SPACE
9'	2.0'	2.5'
10'	2.5'	2.5'
11'	2.5'	3.0'
12'	3.0'	3.0'
13'	3.0'	3.5'

CROSSWALK NOTES;

1. PAINTED AREAS TO BE CENTERED ON CENTERLINE AND LANE LINES.
2. A MINIMUM OF 1.5 FT. CLEAR DISTANCE SHALL BE LEFT ADJACENT TO THE CURB. IF LAST PAINTED AREA FALLS INTO THIS DISTANCE IT MUST BE OMITTED.
3. ON TWO LANE TWO WAY STREETS, USE SPACING SHOWN FOR AN 11 FT. INSIDE LANE.
4. FOR DIVIDED ROADWAYS, ADJUSTMENTS IN SPACING OF THE BLOCKS SHOULD BE MADE IN THE MEDIAN SO THAT THE BLOCKS ARE MAINTAINED IN THEIR PROPER LOCATION ACROSS THE TRAVELED PORTION OF THE ROADWAY.
5. AT SKEWED CROSSWALKS, THE BLOCKS ARE TO REMAIN PARALLEL TO THE LANE LINES AS SHOWN.



PAVEMENT MARKINGS FOR PEDESTRIAN CROSSINGS

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Latest Revision Date: 09/03/14
0000565.02DTF03.dwg
Date: 06/25/14 Sheet: 17 OF 17

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Eden Prairie, MN 55344
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FAX 952-937-5822
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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.
Ryan M. Bluhm
Date: 09/03/14 License No. 41257

Revisions:
06/30/14 CITY COMMENTS
07/30/14 CITY COMMENTS
08/08/14 CITY COMMENTS
09/03/14 CITY COMMENTS

Designed: CLJ
Checked: RMB
Drawn: HW
Record Drawing by/date:

Prepared for:
Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnnesota 55446

Savona 2nd Addition
Lake Elmo, Minnesota

Details

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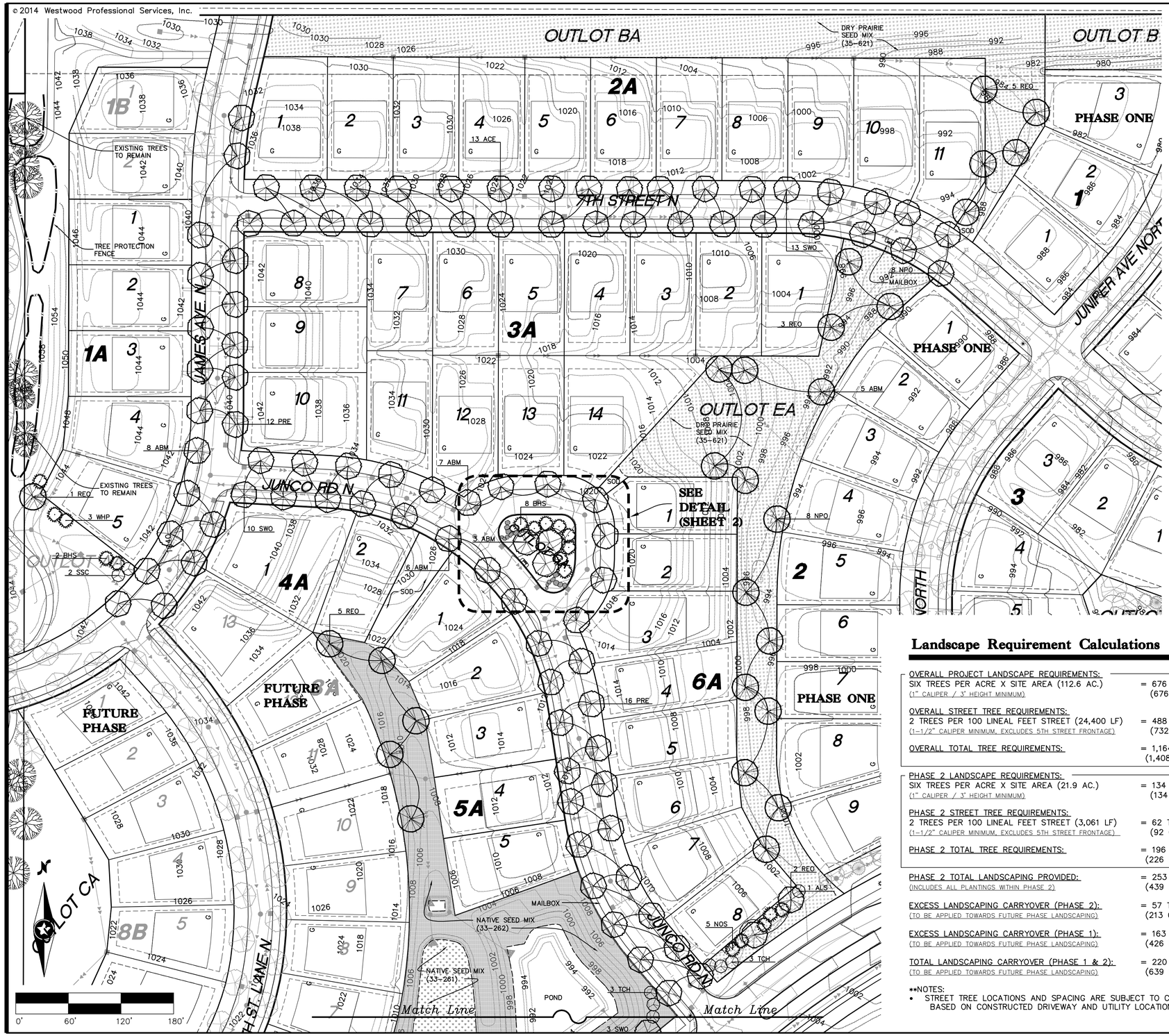

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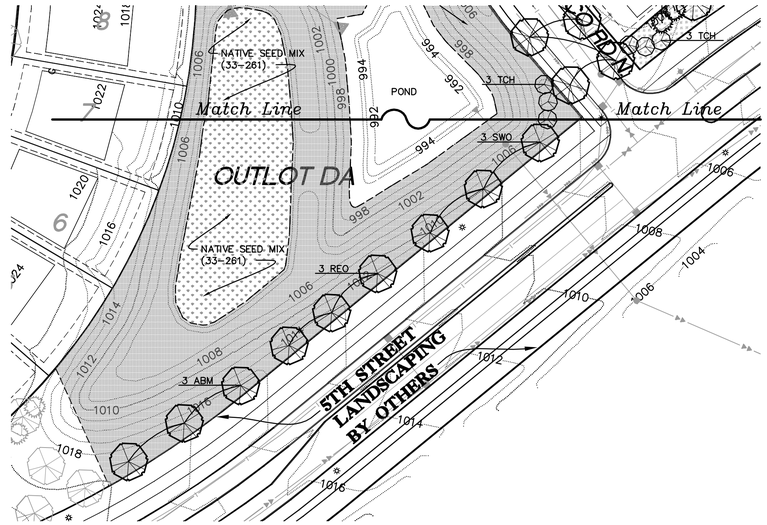
Phase 2 Final Plant Schedule

CODE	QTY.	COMMON/BOTANICAL NAME	SIZE	SPACING O.C.
ABM	32	Autumn Blaze Maple / Acer x freemanii 'Jeffersred'	1.5" BB/Cont.	AS SHOWN
NPO	16	Northern Pin Oak / Quercus ellipsoidalis	1.5" BB/Cont.	AS SHOWN
REO	19	Red Oak / Quercus rubra	1.5" BB/Cont.	AS SHOWN
SWO	26	Swamp White Oak / Quercus bicolor	1.5" BB/Cont.	AS SHOWN
PRE	28	Princeton Elm / Ulmus americana 'Princeton'	1.5" BB/Cont.	AS SHOWN
ACE	13	Accolade Elm / Ulmus japonica x wilsoniana 'Morton'	1.5" BB/Cont.	AS SHOWN
TCH	6	Thornless Cockspur Hawthorn / Crataegus crusgalli 'Inermis'	1.5" BB	AS SHOWN
ALS	1	Allegheny Serviceberry / Amelanchier laevis	6' HT., BB CLUMP	AS SHOWN
SSC	2	Spring Snow Crab / Malus 'Spring Snow'	1.5" BB	AS SHOWN
BHS	10	Black Hills Spruce / Picea glauca densata	6' HT., BB	AS SHOWN
NOS	5	Norway Spruce / Picea abies	6' HT., BB	AS SHOWN
WHP	3	White Pine / Pinus strobus	6' HT., BB	AS SHOWN

NOTE: QUANTITIES ON PLAN SUPERSEDE LIST QUANTITIES IN THE EVENT OF A DISCREPANCY.



Landscape Requirement Calculations

OVERALL PROJECT LANDSCAPE REQUIREMENTS:	
SIX TREES PER ACRE X SITE AREA (112.6 AC.) (1" CALIPER / 3' HEIGHT MINIMUM)	= 676 TREES REQUIRED (676 CALIPER INCHES)
OVERALL STREET TREE REQUIREMENTS:	
2 TREES PER 100 LINEAL FEET STREET (24,400 LF) (1-1/2" CALIPER MINIMUM, EXCLUDES 5TH STREET FRONTAGE)	= 488 TREES REQUIRED (732 CALIPER INCHES)
OVERALL TOTAL TREE REQUIREMENTS:	= 1,164 TREES REQUIRED (1,408 CALIPER INCHES)
PHASE 2 LANDSCAPE REQUIREMENTS:	
SIX TREES PER ACRE X SITE AREA (21.9 AC.) (1" CALIPER / 3' HEIGHT MINIMUM)	= 134 TREES REQUIRED (134 CALIPER INCHES)
PHASE 2 STREET TREE REQUIREMENTS:	
2 TREES PER 100 LINEAL FEET STREET (3,061 LF) (1-1/2" CALIPER MINIMUM, EXCLUDES 5TH STREET FRONTAGE)	= 62 TREES REQUIRED (92 CALIPER INCHES)
PHASE 2 TOTAL TREE REQUIREMENTS:	= 196 TREES REQUIRED (226 CALIPER INCHES)
PHASE 2 TOTAL LANDSCAPING PROVIDED: (INCLUDES ALL PLANTINGS WITHIN PHASE 2)	= 253 TREES PROVIDED (439 CALIPER INCHES)
EXCESS LANDSCAPING CARRYOVER (PHASE 2): (TO BE APPLIED TOWARDS FUTURE PHASE LANDSCAPING)	= 57 TREES (213 CALIPER INCHES)
EXCESS LANDSCAPING CARRYOVER (PHASE 1): (TO BE APPLIED TOWARDS FUTURE PHASE LANDSCAPING)	= 163 TREES (426 CALIPER INCHES)
TOTAL LANDSCAPING CARRYOVER (PHASE 1 & 2): (TO BE APPLIED TOWARDS FUTURE PHASE LANDSCAPING)	= 220 TREES (639 CALIPER INCHES)

**NOTES:
- STREET TREE LOCATIONS AND SPACING ARE SUBJECT TO CHANGE BASED ON CONSTRUCTED DRIVEWAY AND UTILITY LOCATIONS.

1. PROVIDE AND INSTALL PLANT MATERIALS THAT MEET SPECIFICATIONS AND ARE OF THE SIZE, TYPE AND SPECIES GIVEN IN THE PLANT SCHEDULE OR SHOWN ON THE PLANS.
2. PLANT LIST QUANTITIES ARE PROVIDED FOR CONVENIENCE, IN THE EVENT OF QUANTITY DISCREPANCIES, THE DRAWING SCALE SHALL TAKE PRECEDENCE.
3. NO PLANT MATERIAL SUBSTITUTIONS SHALL BE MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE CITY.
4. ALL PLANT MATERIALS TO BE SPECIMEN GRADE, MINNESOTA-GROWN AND/OR HARDY. SPECIMEN GRADE SHALL ADHERE TO, BUT IS NOT LIMITED BY, THE FOLLOWING STANDARDS:
   - ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, AND SCARS.
   - ALL PLANTS SHALL BE FREE FROM NOTICEABLE GAPS, HOLES, OR DEFORMITIES.
   - ALL PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES.
   - ALL PLANTS SHALL HAVE HEAVY, HEALTHY BRANCHING AND LEAFING.
   - CONIFEROUS TREES SHALL HAVE AN ESTABLISHED MAIN LEADER AND A HEIGHT TO WIDTH RATIO OF NO LESS THAN 5:3.
5. PLANT MATERIALS SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSIZ 60.1) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED, AND SHALL BE INSTALLED PER ANS NURSERY PLANTING PRACTICES.
6. CONTRACTOR SHALL CONTACT GOPHER STATE "ONE CALL" (651-454-0002) TO VERIFY UNDERGROUND UTILITY LOCATIONS PRIOR TO PLANTING AND PLANT MATERIAL DELIVERY.
7. PLANTS SHALL BE PLANTED IMMEDIATELY UPON ARRIVAL AT THE SITE.
8. ALL AREAS NOT SPECIFICALLY SHOWN AS PLANTED IN OTHER LANDSCAPE MATERIALS AND ALL SLOPES AND ON-SITE AREAS DISTURBED BY CONSTRUCTION, SHALL BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED AND ACCEPTED BY THE CITY.
9. CONTRACTOR SHALL PROTECT AND MAINTAIN ALL PLANTINGS, INCLUDING MULCHING, MOWING, WATERING, AND PRUNING UNTIL THE PLANT MATERIAL IS FULLY ESTABLISHED.
10. ALL BOULEVARD AREAS AND AREAS DISTURBED ADJACENT TO THE SITE SHALL BE REPAIRED, REPLACED, OR CORRECTED BY THE CONTRACTOR WITH QUALITY LAWN SOD.
11. PLANT MATERIALS SHALL BE SUBJECT TO A FULL ONE-YEAR WARRANTY BEGINNING UPON FINAL WRITTEN ACCEPTANCE BY THE CITY. DEFECTIVE MATERIALS SHALL BE REPLACED, AND REPLACEMENT MATERIALS SHALL RECEIVE A FULL ONE-YEAR WARRANTY FROM THE REPLACEMENT PLANTING DATE.
12. TREES SHALL BE FURTHER WARRANTED TO REMAIN UPRIGHT FOR A FULL TWO-YEAR PERIOD.

STANDARD PLAN NOTES
LANDSCAPE PLANS

FEBRUARY 2013

CITY OF LAKE ELMO — STANDARD DRAWING NO. 900A LAKE ELMO

1. PLANTING HOLES FOR TREES SHALL BE DUG IN THE SHAPE OF A SAUCER THAT IS TWICE AS WIDE AS THE ROOT BALL OF THE TREE.
2. TREES SHALL BE PLACED IN THE PLANTING HOLE SO THAT THE FIRST ROOT AND ROOT COLLAR (THE BULGE RIGHT ABOVE THE ROOT SYSTEM) ARE RIGHT AT GROUND LEVEL OR SLIGHTLY HIGHER.
3. TREES SHALL BE LIFTED BY THE CONTAINER OR ROOT BALL. LIFTING BY THE STEM MAY CAUSE DAMAGE TO THE ROOT BALL OR STEM.
4. AFTER EACH TREE IS PLANTED, THE HOLE SHALL BE BACKFILLED WITH THE ORIGINAL SOIL, AS THE SOIL IS ADDED TO THE HOLE, THE CONTRACTOR SHALL ELIMINATE AIR POCKETS BY LIGHTLY PUSHING THE SHOVEL END INTO THE SOIL AROUND THE ROOT BALL. THE HOLE SHALL BE FILLED UP TO THE LEVEL OF THE ROOT COLLAR.
5. THE TOP OF THE PLANTING HOLE SHALL BE COVERED WITH A MINIMUM OF 4" OF WOOD CHIP MULCH. THE MULCH SHALL BE PULLED AWAY FROM THE TRUNK TO THE EDGE OF THE ROOT BALL TO PREVENT FUNGUS FROM ATTACKING THE TRUNK.
6. NEWLY PLANTED TREES SHALL BE WATERED WITH A SLOW TRICKLE TO REMOVE ANY REMAINING AIR POCKETS IN THE SOIL.
7. PRUNING SHALL ONLY BE DONE AT THE TIME OF PLANTING OR DIRECTLY AFTER PLANTING IF THERE ARE BROKEN BRANCHES AT THE TIME OF DELIVERY OR PLANTING. ANSI A300 SHALL BE FOLLOWED FOR ANY PRUNING THAT IS REQUIRED.
8. TREES SHALL BE WATERED WITH ONE TO TWO INCHES AT A SLOW TRICKLE ON A WEEKLY BASIS DURING THE GROWING SEASON FOR THE FIRST YEAR OF ESTABLISHMENT.

STANDARD PLAN NOTES
LANDSCAPE PLANS

FEBRUARY 2013

CITY OF LAKE ELMO — STANDARD DRAWING NO. 900B LAKE ELMO

Latest Revision Date: 09/03/14

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Date: 07/11/14 Sheet: 1 OF 3

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7699 Anagram Drive
Eden Prairie, MN 55344

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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.

Cory Mayer
Date: 09/03/14 License No. 26971

Revisions:
08/28/14 – City Comments
09/03/14 – City Comments

Designed: CLM
Checked: CLM
Drawn: SVE
Record Drawing by/date:

Prepared for:

Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnesota 55446

Savona 2nd Addition

Lake Elmo, Minnesota

Final Landscape Plan

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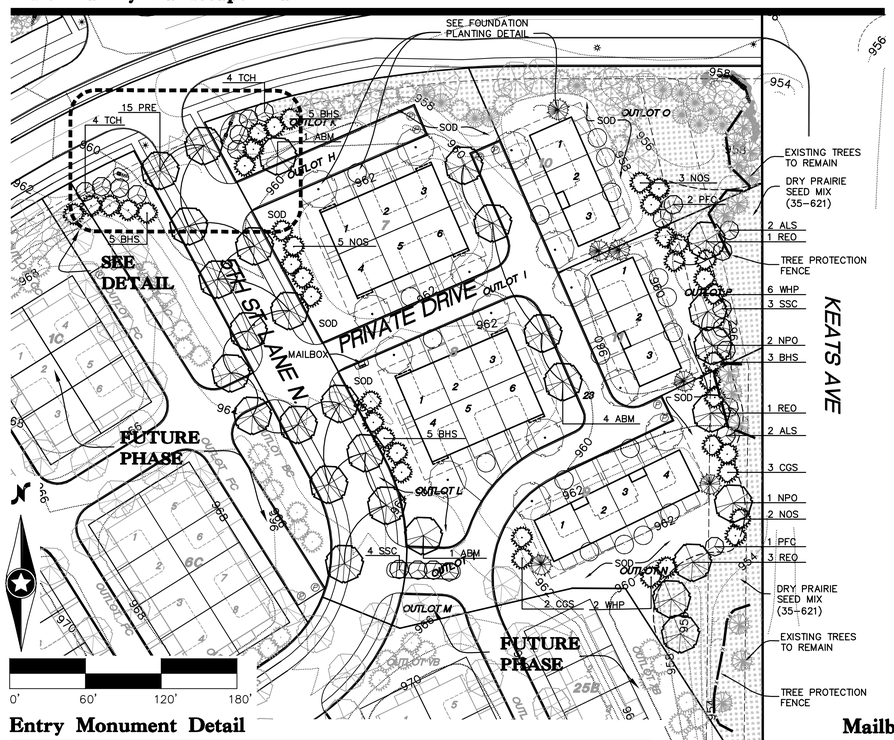
Multi Family Landscape Plan



Multi Family & Entry Monument Plant Schedule

CODE	QTY.	COMMON/BOTANICAL NAME	SIZE	SPACING O.C.
ABM	6	Autumn Blaze Maple / Acer x freemanii 'Jeffersred'	1.5" BB/Cont.	AS SHOWN
NPO	3	Northern Pin Oak / Quercus ellipsoidalis	1.5" BB/Cont.	AS SHOWN
REO	5	Red Oak / Quercus rubra	1.5" BB/Cont.	AS SHOWN
PRE	15	Princeton Elm / Ulmus americana 'Princeton'	1.5" BB/Cont.	AS SHOWN
TCH	8	Thornless Cockspur Hawthorn / Crataegus crusgalli 'Inermis'	1.5" BB	AS SHOWN
ALS	4	Allegheny Serviceberry / Amelanchier laevis	6' HT., BB CLUMP	AS SHOWN
PFC	3	Prairiefire Crab / Malus 'Prairiefire'	1.5" BB	AS SHOWN
SSC	7	Spring Snow Crab / Malus 'Spring Snow'	1.5" BB	AS SHOWN
BHS	18	Black Hills Spruce / Picea glauca densata	6' HT., BB	AS SHOWN
NOS	10	Norway Spruce / Picea abies	6' HT., BB	AS SHOWN
WHP	8	White Pine / Pinus strobus	6' HT., BB	AS SHOWN
CGS	5	Colorado Green Spruce / Picea pungens	6' HT., BB	AS SHOWN
BYD	9	Bud's Yellow Dogwood / Cornus sericea 'Bud's Yellow'	#5 Cont.	5'-0" O.C.
IBH	12	Incrediball Hydrangea / Hydrangea aborescens 'Abetwo'	#5 Cont.	4'-0" O.C.
LBS	29	Blue Heaven Bluestem Grass / Schizachyrium scoparium 'Minniblue A'	#1 Cont.	18" O.C.
ASD	13	Apricot Sparkles Daylily / Hemerocallis 'Apricot Sparkles'	#1 Cont.	18" O.C.

NOTE: QUANTITIES ON PLAN SUPERSEDE LIST QUANTITIES IN THE EVENT OF A DISCREPANCY.

Island Detail Plant Schedule

CODE	QTY.	COMMON/BOTANICAL NAME	SIZE	SPACING O.C.
BLC	15	Black Chokeberry / Aronia melanocarpa	#5 Cont.	4'-0" O.C.
IBH	10	Incrediball Hydrangea / Hydrangea aborescens 'Abetwo'	#5 Cont.	4'-0" O.C.
MIS	12	Miscanthus Flame Grass / Miscanthus sinensis 'Purpurascens'	#1 Cont.	48" O.C.
FRG	31	Feather Reed Grass / Calamagrostis x acutiflora 'Karl Foerster'	#1 Cont.	24" O.C.
LBS	68	Blue Heaven Bluestem Grass / Schizachyrium scoparium 'Minniblue A'	#1 Cont.	18" O.C.
SPD	54	Sporobolus Prairie Dropseed Grass / Sporobolus heterolepis	#1 Cont.	18" O.C.

NOTE: QUANTITIES ON PLAN SUPERSEDE LIST QUANTITIES IN THE EVENT OF A DISCREPANCY.

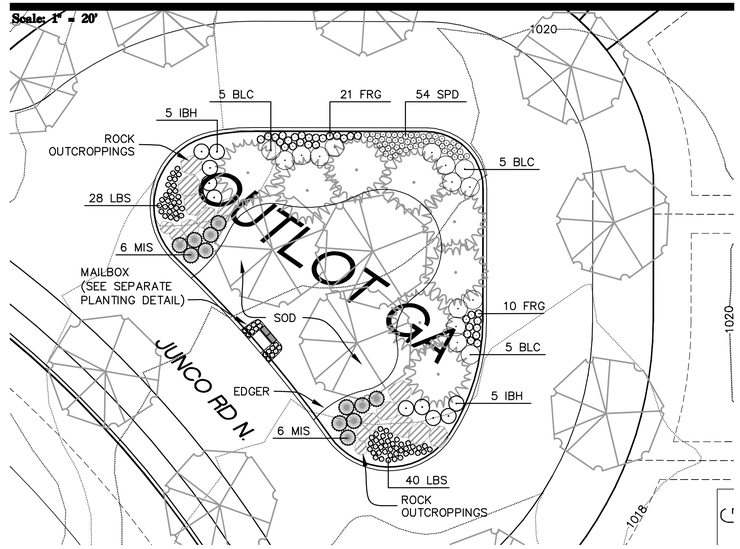
Mailbox Detail Plant Schedule (typ. each location)

CODE	QTY.	COMMON/BOTANICAL NAME	SIZE	SPACING O.C.
LBS	12	Blue Heaven Bluestem Grass / Schizachyrium scoparium 'Minniblue A'	#1 Cont.	18" O.C.
ASD	4	Apricot Sparkles Daylily / Hemerocallis 'Apricot Sparkles'	#1 Cont.	18" O.C.

NOTE: QUANTITIES ON PLAN SUPERSEDE LIST QUANTITIES IN THE EVENT OF A DISCREPANCY.

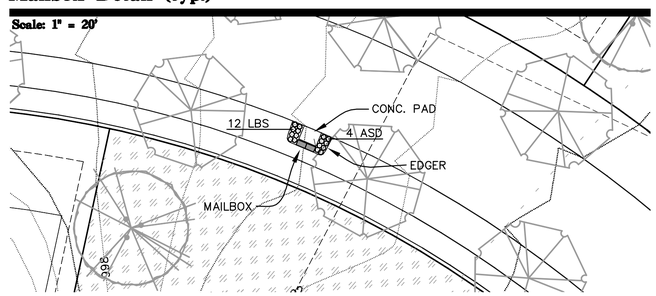
Island Detail

Scale: 1" = 20'



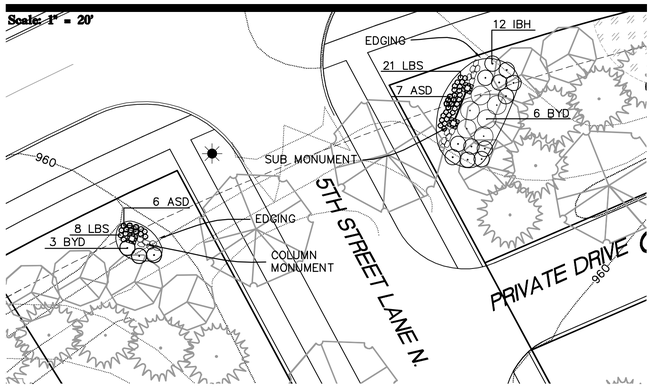
Mailbox Detail (typ.)

Scale: 1" = 20'



Entry Monument Detail

Scale: 1" = 20'



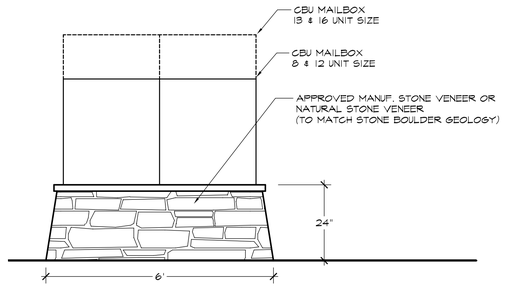
Mailbox Unit (Post Mount)

All Aluminum Construction

SALSBURY INDUSTRIES

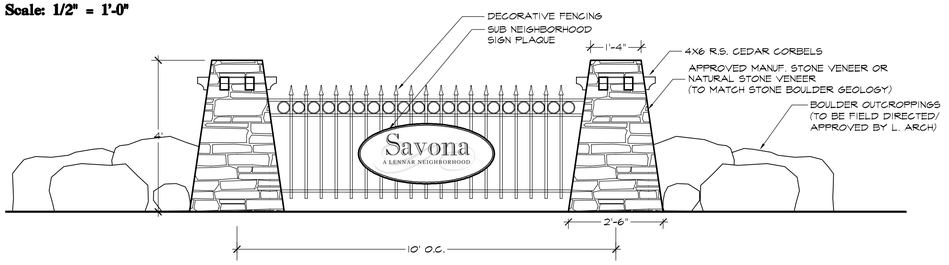
Alternate Mailbox Monument

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



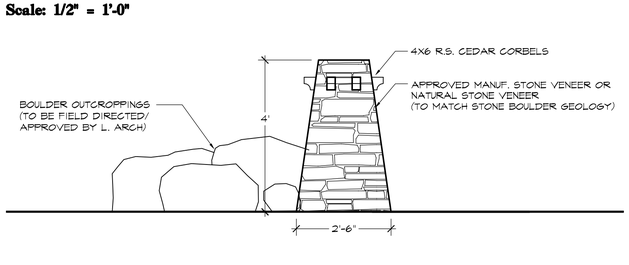
Sub Monument

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



Column Monument

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



1. PROVIDE AND INSTALL PLANT MATERIALS THAT MEET SPECIFICATIONS AND ARE OF THE SIZE, TYPE AND SPECIES GIVEN IN THE PLANT SCHEDULE OR SHOWN ON THE PLANS.
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   - ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, AND SCARS.
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   - ALL PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES.
   - ALL PLANTS SHALL HAVE HEAVY, HEALTHY BRANCHING AND LEAFING.
   - CONIFEROUS TREES SHALL HAVE AN ESTABLISHED MAIN LEADER AND A HEIGHT TO WIDTH RATIO OF NO LESS THAN 5:3.
5. PLANT MATERIALS SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSIZ 60.1) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED, AND SHALL BE INSTALLED PER ANS NURSERY PLANTING PRACTICES.
6. CONTRACTOR SHALL CONTACT GOPHER STATE "ONE CALL" (651-454-0002) TO VERIFY UNDERGROUND UTILITY LOCATIONS PRIOR TO PLANTING AND PLANT MATERIAL DELIVERY.
7. PLANTS SHALL BE PLANTED IMMEDIATELY UPON ARRIVAL AT THE SITE.
8. ALL AREAS NOT SPECIFICALLY SHOWN AS PLANTED IN OTHER LANDSCAPE MATERIALS AND ALL SLOPES AND ON-SITE AREAS DISTURBED BY CONSTRUCTION, SHALL BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED AND ACCEPTED BY THE CITY.
9. CONTRACTOR SHALL PROTECT AND MAINTAIN ALL PLANTINGS, INCLUDING MULCHING, MOWING, WATERING, AND PRUNING UNTIL THE PLANT MATERIAL IS FULLY ESTABLISHED.
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12. TREES SHALL BE FURTHER WARRANTED TO REMAIN UPRIGHT FOR A FULL TWO-YEAR PERIOD.

STANDARD PLAN NOTES
LANDSCAPE PLANS

FEBRUARY 2013

LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 900A LAKE ELMO

1. PLANTING HOLES FOR TREES SHALL BE DUG IN THE SHAPE OF A SAUCER THAT IS TWICE AS WIDE AS THE ROOT BALL OF THE TREE.
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8. TREES SHALL BE WATERED WITH ONE TO TWO INCHES AT A SLOW TRICKLE ON A WEEKLY BASIS DURING THE GROWING SEASON FOR THE FIRST YEAR OF ESTABLISHMENT.

STANDARD PLAN NOTES
LANDSCAPE PLANS

FEBRUARY 2013

LAKE ELMO CITY OF LAKE ELMO | STANDARD DRAWING NO. 900B LAKE ELMO

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Latest Revision Date: 09/03/14

Westwood

Westwood Professional Services, Inc.
7699 Anagram Drive
Eden Prairie, MN 55344

PHONE 952-937-5150
FAX 952-937-5822
TOLL FREE 1-888-937-5150

www.westwoodps.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.

Cory Meyer

Date 09/03/14 License No. 26971

Revisions:

08/28/14 – City Comments
09/03/14 – City Comments

Designed:	CLM
Checked:	CLM
Drawn:	SYB
Record Drawing by/date:	

Prepared for:

Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnesota 55446

Savona 2nd Addition

Lake Elmo, Minnesota

Date: 07/11/14 Sheet: 2 OF 3

Final Landscape Details

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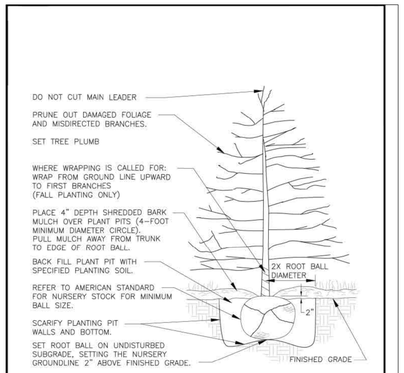
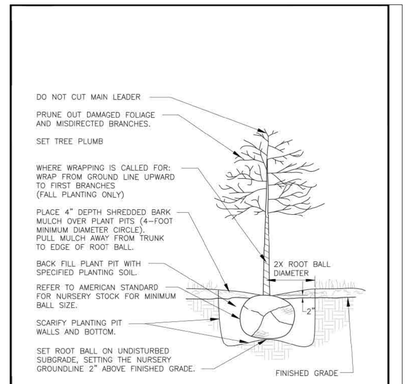
Call 48 Hours before digging:
811 or call811.com
Common Ground Alliance



CONIFEROUS TREE PLANTING

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 901 LAKE ELMO



DECIDUOUS TREE PLANTING

FEBRUARY 2013

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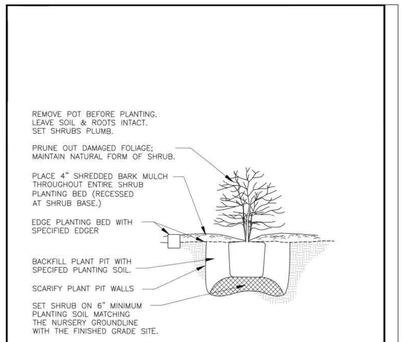

SHRUB PLANTING

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 903 LAKE ELMO

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STANDARD PLAN NOTES
LANDSCAPE PLANS

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 900A LAKE ELMO

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STANDARD PLAN NOTES
LANDSCAPE PLANS

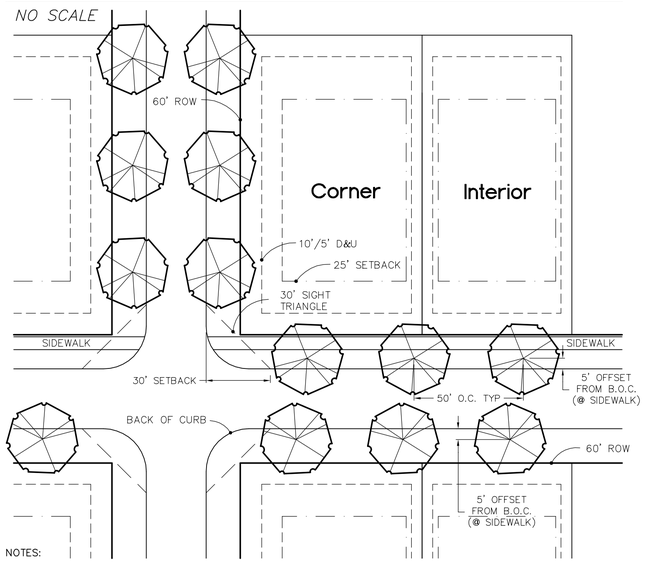
FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 900B LAKE ELMO

Supplemental Planting Notes

1. ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.
2. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
3. PRUNE PLANTS AS NECESSARY – PER STANDARD NURSERY PRACTICE AND TO CORRECT POOR BRANCHING OF EXISTING AND PROPOSED TREES.
4. THE NEED FOR SOIL AMENDMENTS SHALL BE DETERMINED UPON SITE SOIL CONDITIONS PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT FOR THE NEED OF ANY SOIL AMENDMENTS.
5. BACKFILL SOIL TO ADHERE TO MN/DOT STANDARD SPECIFICATION 3877 (SELECT TOPSOIL BORROW) AND TO BE EXISTING TOP SOIL FROM SITE FREE OF ROOTS, ROCKS LARGER THAN ONE INCH, SUBSOIL DEBRIS, AND LARGE WEEDS UNLESS SPECIFIED OTHERWISE. MINIMUM 4" DEPTH TOPSOIL FOR ALL LAWN GRASS AREAS AND 12" DEPTH TOPSOIL FOR TREES, SHRUBS, AND PERENNIALS.
6. MULCH TO BE AT ALL TREE, SHRUB, PERENNIAL, AND MAINTENANCE AREAS. SHREDDED HARDWOOD MULCH TO BE USED AROUND ALL PLANTS WITHIN TURF AREAS. PERENNIAL AND ORNAMENTAL GRASS BEDS SHALL HAVE 2" DEPTH SHREDDED HARDWOOD MULCH. MULCH TO BE FREE OF DELETERIOUS MATERIAL.
7. EDGING TO BE SPADED EDGE, UNLESS OTHERWISE INDICATED. SPADED EDGE TO PROVIDE V-SHAPED DEPTH AND WIDTH TO CREATE SEPARATION BETWEEN MULCH AND GRASS. INDIVIDUAL TREES AND SHRUBS TO BE SPADED EDGE, UNLESS NOTED OTHERWISE.
8. ALL TOPSOIL AREAS TO BE RAKED TO REMOVE DEBRIS AND ENSURE DRAINAGE. SLOPES OF 3:1 OR GREATER SHALL BE STAKED. NATIVE SEEDING PER MNDOT SPECIFICATIONS IN OUTLOT DA TO BE SEEDED WITH SEED MIX 33-262 UNLESS NOTED OTHERWISE. PORTIONS OF OUTLOTS B, BA, & EA TO BE SEEDED WITH SEED MIX 35-621 PER MNDOT SPECIFICATIONS.
9. PROVIDE IRRIGATION TO ALL STREET TREE AND BUFFER LANDSCAPING ON SITE. REAR YARD AND OPEN SPACE PLANTINGS WILL NOT BE IRRIGATED. IRRIGATION SYSTEM TO BE DESIGN/BUILD BY LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR TO PROVIDE SHOP DRAWINGS TO CITY OF LAKE ELMO FOR APPROVAL PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. CONTRACTOR TO PROVIDE OPERATION MANUALS, AS-BUILT PLANS, AND NORMAL PROGRAMMING. SYSTEM SHALL BE WINTERIZED AND HAVE SPRING STARTUP DURING FIRST YEAR OF OPERATION. SYSTEM SHALL HAVE ONE-YEAR WARRANTY ON ALL PARTS AND LABOR. ALL INFORMATION ABOUT INSTALLATION AND SCHEDULING CAN BE OBTAINED FROM THE GENERAL CONTRACTOR.
10. REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO OWNER.
11. ALL DISTURBED AREAS TO BE SEEDED, UNLESS OTHERWISE NOTED. SOD TO BE STANDARD MINNESOTA GROWN AND HARDY BLUEGRASS MIX, FREE OF LAWN WEEDS. ALL TOPSOIL AREAS TO BE RAKED TO REMOVE DEBRIS AND ENSURE DRAINAGE. SLOPES OF 3:1 OR GREATER SHALL BE STAKED. SEED AS SPECIFIED AND PER MN STATE SEED MIX SPECIFICATIONS (SEE SEED MIX TABLES).

Typical Street Tree Planting Detail



NOTES:

1. TIMING OF PLANT INSTALLATION WILL BE DEPENDENT UPON SEASON AND PLANT AVAILABILITY.
2. ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.
3. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
4. TREES INSTALLED ON FRONTS OF INDIVIDUAL LOTS SHALL BE PLANTED IN A LOCATION THAT DOES NOT INTERFERE WITH CURBSTOPS, INDIVIDUAL SEWER & WATER CONNECTIONS, OR DRIVEWAY LOCATIONS.

Wet Stormwater Native Grass Mix - Outlot DA

33-261	Stormwater South & West				
Common Name	Scientific Name	Rate (kg/ha)	Rate (lb/ac)	% of Mix (% by wt)	Seeds/ sq ft
big bluestem	*Andropogon gerardii*	2.24	2.00	5.72%	7.35
fringed brome	*Bromus ciliatus*	2.24	2.00	5.73%	8.10
bluejoint	*Calamagrostis canadensis*	0.07	0.06	0.18%	0.40
slender wheatgrass	*Elymus trachycaulus*	1.12	1.00	2.85%	2.53
Virginia wild rye	*Elymus virginicus*	1.68	1.50	4.28%	2.31
switchgrass	*Panicum virgatum*	0.43	0.38	1.07%	1.93
fowl bluegrass	*Poa palustris*	1.19	1.06	3.03%	50.70
Indian grass	*Sorghastrum nutans*	0.13	0.12	0.36%	0.55
prairie cordgrass	*Spartina pectinata*	0.43	0.38	1.07%	0.91
	Total Grasses	**9.53**	**8.50**	**24.29%**	**80.78**
awl-fruited sedge	*Carex stipata*	0.28	0.25	0.71%	3.10
dark green bulrush	*Scirpus atrovirens*	0.21	0.19	0.54%	31.70
woolgrass	*Scirpus cyperinus*	0.07	0.06	0.18%	39.00
	Total Sedges and Rushes	**0.56**	**0.50**	**1.43%**	**73.80**
Canada anemone	*Anemone canadensis*	0.08	0.07	0.19%	0.20
marsh milkweed	*Asclepias incarnata*	0.12	0.11	0.32%	0.20
leafy beggarticks	*Bidens frondosa*	0.12	0.11	0.31%	0.20
flat-topped aster	*Doellingeria umbellata*	0.07	0.06	0.17%	1.50
spotted Joe pye weed	*Eutrochium maculatum*	0.07	0.06	0.18%	2.19
autumn sneezeweed	*Helenium autumnale*	0.15	0.13	0.36%	5.97
obedient plant	*Physostegia virginiana*	0.08	0.07	0.21%	0.30
tall coneflower	*Rudbeckia laciniata*	0.08	0.07	0.21%	0.37
New England aster	*Symphyotrichum novae-angliae*	0.08	0.07	0.19%	1.56
blue vervain	*Verbena hastata*	0.06	0.05	0.15%	1.85
golden alexanders	*Zizia aurea*	0.22	0.20	0.56%	0.79
	Total Forbs	**1.12**	**1.00**	**2.85%**	**15.13**
Oats or winter wheat (see note at beginning of list for recommended dates)		28.02	25.00	71.43%	11.14
	Total Cover Crop	**28.02**	**25.00**	**71.43%**	**11.14**
	Totals:	**39.23**	**35.00**	**100.00%**	**180.85**
Purpose:	Stormwater pond edges, temporarily flooded dry ponds, and temporarily flooded ditch bottoms.				
Planting Area:	Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces. Mn/DOT Districts 2(west), 3B. 4, Metro, 6, 7 & 8.				

Dry Stormwater Native Grass Mix - Outlot DA

33-262	Dry Swale / Pond				
Common Name	Scientific Name	Rate (kg/ha)	Rate (lb/ac)	% of Mix (% by wt)	Seeds/ sq ft
big bluestem	*Andropogon gerardii*	1.68	1.50	3.40%	5.50
American slough grass	*Beckmannia syzigachne*	1.68	1.50	3.42%	27.60
fringed brome	*Bromus ciliatus*	1.68	1.50	3.40%	6.05
nodding wild rye	*Elymus canadensis*	4.48	4.00	9.09%	7.64
slender wheatgrass	*Elymus trachycaulus*	4.48	4.00	9.10%	10.15
Virginia wild rye	*Elymus virginicus*	2.80	2.50	5.67%	3.85
switchgrass	*Panicum virgatum*	0.45	0.40	0.91%	2.05
fowl bluegrass	*Poa palustris*	1.79	1.60	3.64%	76.50
Indian grass	*Sorghastrum nutans*	1.68	1.50	3.40%	6.60
	Total Grasses	**20.74**	**18.50**	**42.03%**	**145.94**
marsh milkweed	*Asclepias incarnata*	0.07	0.06	0.13%	0.10
purple prairie clover	*Dalea purpurea*	0.10	0.09	0.21%	0.50
Canada tick trefoil	*Desmodium canadense*	0.10	0.09	0.21%	0.19
ox-eye	*Heliopsis helianthoides*	0.10	0.09	0.20%	0.20
black-eyed susan	*Rudbeckia hirta*	0.08	0.07	0.17%	2.49
blue vervain	*Verbena hastata*	0.11	0.10	0.23%	3.50
	Total Forbs	**0.56**	**0.50**	**1.15%**	**6.98**
Oats or winter wheat (see note at beginning of list for recommended dates)		28.02	25.00	56.82%	11.14
	Total Cover Crop	**28.02**	**25.00**	**56.82%**	**11.14**
	Totals:	**49.32**	**44.00**	**100.00%**	**164.06**
Purpose:	Temporarily flooded swales in agricultural settings.				
Planting Area:	Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces. Mn/DOT Districts 2(west), 3B. 4, Metro, 6, 7 & 8.				

Dry Prairie Seed Mix - Outlots B, BA, EA

35-621	Dry Prairie Southeast				
Common Name	Scientific Name	Rate (kg/ha)	Rate (lb/ac)	% of Mix (% by wt)	Seeds/ sq ft
side-oats grama	*Bouteloua curtipendula*	1.27	1.13	10.23%	2.48
blue grama	*Bouteloua gracilis*	0.75	0.68	6.19%	10.00
kalm's brome	*Bromus kalmii*	0.35	0.31	2.78%	0.90
nodding wild rye	*Elymus canadensis*	1.68	1.50	13.61%	2.86
slender wheatgrass	*Elymus trachycaulus*	1.32	1.18	10.76%	3.00
junegrass	*Koeleria macrantha*	0.46	0.41	3.71%	30.00
little bluestem	*Schizachyrium scoparium*	1.69	1.51	13.70%	8.30
sand dropseed	*Sporobolus cryptandrus*	0.25	0.22	1.98%	16.00
prairie dropseed	*Sporobolus heterolepis*	0.29	0.26	2.32%	1.50
	Total Grasses	**8.07**	**7.20**	**65.28%**	**75.04**
butterfly milkweed	*Asclepias tuberosa*	0.07	0.06	0.52%	0.09
whorled milkweed	*Asclepias verticillata*	0.01	0.01	0.11%	0.05
bird's foot coreopsis	*Coreopsis palmata*	0.06	0.05	0.50%	0.20
white prairie clover	*Dalea candida*	0.10	0.09	0.78%	0.60
purple prairie clover	*Dalea purpurea*	0.17	0.15	1.32%	0.80
ox-eye	*Heliopsis helianthoides*	0.07	0.06	0.51%	0.13
round-headed bush clover	*Lespedeza capitata*	0.03	0.03	0.31%	0.10
rough blazing star	*Liatris aspera*	0.02	0.02	0.17%	0.11
dotted blazing star	*Liatris punctata*	0.02	0.02	0.23%	0.06
wild bergamot	*Monarda fistulosa*	0.03	0.03	0.30%	0.85
horsemint	*Monarda punctata*	0.02	0.02	0.22%	0.80
stiff goldenrod	*Oligonouron rigidum*	0.07	0.06	0.59%	0.98
large-flowered beard tongue	*Penstemon grandiflorus*	0.04	0.04	0.35%	0.20
black-eyed susan	*Rudbeckia hirta*	0.10	0.09	0.86%	3.20
gray goldenrod	*solidago nemoralis*	0.01	0.01	0.14%	1.65
skyblue aster	*Symphyotrichum oolentangiense*	0.01	0.01	0.06%	0.20
silky aster	*Symphyotrichum sericeum*	0.02	0.02	0.19%	0.20
bracted spiderwort	*Tradescantia bracteata*	0.01	0.01	0.12%	0.05
heart-leaved alexanders	*Zizia aptera*	0.02	0.02	0.21%	0.10
	Total Forbs	**0.90**	**0.80**	**7.49%**	**10.37**
Oats or winter wheat (see note at beginning of list for recommended dates)		3.36	3.00	27.23%	1.33
	Total Cover Crop	**3.36**	**3.00**	**27.23%**	**1.33**
	Totals:	**12.33**	**11.00**	**100.00%**	**86.75**
Purpose:	Regional dry prairie reconstruction for wetland mitigation, ecological restoration, or conservation program plantings.				
Planting Area:	Eastern Broadleaf Forest Province excluding Hardwood Hills subsection. Mn/DOT Districts Metro & 6.				

Latest Revision Date: 09/03/14
0000565.02PLF03.dwg

Date: 07/11/14 Sheet: 3 OF 3

Westwood Professional Services, Inc.
7699 Anagram Drive
Eden Prairie, MN 55344
PHONE 952-937-5150
FAX 952-937-5822
TOLL FREE 1-888-937-5150
www.westwoodps.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.
Cory Mayer
Date: 09/03/14 License No. 26971

Revisions:
08/28/14 – City Comments
09/03/14 – City Comments

Designed: CLM
Checked: CLM
Drawn: SYE
Record Drawing by/date:

Prepared for:
Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnesota 55446

Savona 2nd Addition
Lake Elmo, Minnesota

Final Landscape Details & Notes

PLANNING COMMISSION
DATE: 9/8/14
AGENDA ITEM: 5B – BUSINESS ITEM
CASE # 2014-42

ITEM: Inwood Planned Unit Development (PUD) – General Concept Plan

SUBMITTED BY: Nick Johnson, City Planner
Kyle Klatt, Community Development Director

REVIEWED BY: Jack Griffin, City Engineer
Greg Malmquist, Fire Chief
Ann Pung-Terwedo, Washington County
Matt Moore, South Washington Watershed District
Molly Shodeen, MN DNR
Emily Shively, City of Oakdale

SUMMARY AND ACTION REQUESTED:

The Planning Commission is being asked to consider a request from Hans Hagen Homes and Inwood 10, LLC for a Planned Unit Development (PUD) Concept Plan for a new mixed-use development on 157 acres of land located at the southeast corner of Inwood Avenue and 10th Street in Lake Elmo. The concept plan includes 273 single-family residential lots, 144 townhouses, 150 multi-family units, 120 senior townhouse units, and approximately 68,814 square feet of commercial/office uses. Staff is recommending approval of the PUD Concept Plan with 17 conditions of approval as listed in the Staff report. The Planning Commission held a public hearing on at their meeting on 8/25/14 and postponed consideration of the planned development.

GENERAL INFORMATION

Applicant: Hans Hagen Homes (John Rask), 941 NE Hillwind Rd. Suite 300, Fridley, MN 55432 and Inwood 10 (Tom Scheutte), LLC, 95 S Owasso Blvd. W., St. Paul, MN 55117-7830

Property Owners: Inwood 10, LLC (Tom Scheutte), 95 S Owasso Blvd. W., St. Paul, MN 55117-7830

Location: Part of Section 33 in Lake Elmo, immediately south of 10th Street (CSAH 10), immediately north of Eagle Point Business Park, immediately east of Inwood Avenue (CSAH 13) and immediately west of Stonegate residential subdivision. PIDs: 33.029.21.12.0001, 33.029.21.12.0003, 33.029.21.11.0002 and 33.029.21.11.0001.

Request: Application for Concept Plan approval of a Planned Unit Development (PUD) containing 281 single family lots, 144 townhome units, 150 multi-family units, 120 senior living townhome units and multiple sites intended for commercial uses to be named Inwood of Lake Elmo.

Existing Land Use and Zoning: Vacant land used for agricultural purposes. Current Zoning: RT – Rural Transitional Zoning District; Proposed Zoning: LDR – Low Density Residential, HDR – High Density Residential and C – Commercial (all with PUD overlay)

Surrounding Land Use and Zoning: North: Vacant agricultural land and two residential homes – RR and PF zoning; West: Oak Marsh Golf Course, urban single family subdivision, commercial – City of Oakdale jurisdiction;
South: Offices in Eagle Point Business Park (including Bremer Bank facility) – BP zoning; East: Stonegate residential estates subdivision – RE zoning.

Comprehensive Plan: Urban Low Density Residential (2.5 – 4 units per acre), Urban High Density Residential/Mixed Use (7.5 – 15 units per acre) and Commercial.

History: The site has historically been used for agricultural purposes. The applicants have submitted a mandatory Environmental Assessment Worksheet (EAW) for publication to the Environmental Quality Board (EQB) on September 15th, commencing the 30-day comment period.

Deadline for Action: Application Complete – 8/12/14
60 Day Deadline – 10/10/14
Extension Letter Mailed – No
120 Day Deadline – 12/9/14

Applicable Regulations: Chapter 153 – Subdivision Regulations
Article 10 – Urban Residential Districts (§154.450)
Article 12 – Commercial Districts (§154.550)
Article 16 – Planned Unit Development (§154.800)
Article 17 – Shoreland Management Overlay District

REQUEST DETAILS

The City of Lake Elmo has received an application from Hans Hagen Homes and Inwood 10, LLC for a Planned Unit Development (PUD) Concept Plan for a mixed-use project that will be located on 157 acres of land located south of 10th Street (CSAH 10) and east of Inwood Avenue (CSAH 13) in Lake Elmo. The proposed project will include 273 single-family residential lots, 144 townhouses, 150 multi-family units, 120 senior townhouse units, and approximately 68,814 square feet of commercial/office uses, in addition to storm water facilities, trails, and park areas as depicted on the attached site development plan. While the planned uses for the site generally match those shown on the City's future land use map for the property, the applicant is proposing a slightly different configuration of the various land uses. Most notably, the developer is asking

that the commercial area be moved further south along Inwood Avenue to the intersection of 5th Street and that a small area of multi-family development be allowed at the intersection of Inwood Avenue and 10th Street.

The Planning Commission reviewed the request and held a public hearing on 8/25/14. At the public hearing, testimony was received from Nancy Andert (697 Julep Ave. N.), Mike Lancette (832 Jasmine Ave. N.) and Curt Montieth (331 Julep Ave. N.). In addition, the City received letters from MN DNR and Tom Fitzgerald (877 Jasmine Ave. N.), both of which were entered into the public record. For further detail on the content of the testimony during the public hearing, please refer to the draft minutes for the 8/25/14 Planning Commission meeting, which is attached to the 9/8/14 Planning Commission Agenda Packet. In addition to holding the public hearing, the Planning Commission discussed many different elements of the proposed planned development. Over the course of discussion, the Planning Commission made several motions related to review of the Concept Plan. The summary of the Planning Commission review on 8/25/14 can be found in the Planning Commission Review, Analysis and Recommendations Section. After significant discussion of the proposed planned development, the Planning Commission postponed consideration of the Inwood PUD Concept Plan until the next meeting to allow the Planning Commissioners to visit a similar Hans Hagen development containing Lifestyle Homes, The Lakes in Blaine, MN. The site visit was useful in becoming familiar with the requested residential product (Lifestyle Homes) and the requested setbacks.

In response to many of the questions and discussion items at the Planning Commission meeting on 8/25/14, the applicant has submitted an updated Concept Plan and cover letter (Attachment #2) to address many of the questions/discussion. The updated Concept Plan is generally consistent with the original version submitted to the Planning Commission with a couple modifications. The modifications are noted in the Planning and Zoning Issues Section.

PLANNING AND ZONING ISSUES

Staff provided a complete analysis of the proposed planned development from a planning and zoning perspective in a Staff Report dated 8/25/14. The previous Staff Report is attached electronically to this report for reference. In the original Staff Report, staff recommended 18 conditions of approval related to the Inwood PUD Concept Plan. For the purposes of the Planning Commission's second review of the proposed development, it should be noted that staff still supports the originally recommended conditions of approval with one exception. Original Condition # 12 required the applicant to remove two residential lots that encroached on the required 100-foot greenbelt buffer. With the submittal of an updated Concept Plan, no residential lots encroach on the required buffer area. Therefore, Original Condition #12 has been removed as a recommended condition of approval, leaving 17 recommended conditions, all of which are referenced in this Staff Report.

To address some of the questions and discussion topics from the 1st review of the Inwood PUD Concept Plan, the applicants have submitted an updated Concept Plan, an Open Space Plan and a response letter detailing some of the changes and responding to some of the discussion topics. These materials can be found in Attachment #2. Many of the changes or discussion items are identified in the response or cover letter provided with the updated plans. The changes in the updated Concept Plan include the following:

- The updated Concept Plan includes increased park area in the area adjacent to Stonegate Park. The applicants acknowledge that the plan must be reviewed by the Park Commission in advance of solidifying an acceptable design and location of the park areas.
- The single family lot count has been reduced from 281 to 273 to account for additional park space and protection of existing man-made wetlands on the site.
- The updated net density calculation is 3.14 units/acre, as opposed to 3.22 units/acre in the previous plan. As noted in the cover letter, this density calculation does not include any of the larger ponding areas associated with the development. These areas would typically be included according to the City's net density definition, as has been the case in other single family subdivisions. Staff is extremely confident that the single family area proposed in the Inwood PUD Concept Plan is well within the acceptable range required under the City's Comprehensive Plan.
- The applicant provided three notes with regards to lot area, lot width and setbacks that relate to the allowed variations or flexibilities from the Zoning Code that can be achieved through the PUD Ordinance. After reviewing the comments pertaining to the lot area, lot width and setbacks, staff finds that the applicant's analysis of the City's PUD Ordinance is accurate. Therefore, applicants are permitted to request such variations from the Zoning Code as long as they are meeting one or more of the identified objectives for planned developments per the ordinance.
- The applicants have provided an Open Space Plan to demonstrate that they are meeting the 20% open space requirement for PUDs. The Open Space Plan is included in Attachment #2.
- The length of Cul-De-Sac L has been reduced to provide more park area adjacent to Stonegate Park. Staff still has some concern that it may exceed 600 feet in length, the maximum allowed length of cul-de-sac for an urban subdivision. Staff will continue to work with the applicant to ensure conformance to the rules of the City's Subdivision Ordinance.
- The original Concept Plan included two residential lots that encroached on the required 100-foot greenbelt buffer. The updated Concept Plan has corrected this issue, maintaining, and in many cases far exceeding, the 100-foot buffer requirement. As a result, staff would recommend removing the condition related to removing Lots 27 and 28, Block 7 from the greenbelt buffer area (Condition #12 on the 8/25/14 Staff Report).

It should be noted that although the applicant is providing an updated Concept Plan, the recommended conditions of approval in the original Staff Report still apply (with the exception of Original Condition #12). The applicant is providing the updated Concept Plan to be responsive to questions and discussion items posed by the Planning Commission. In addition, the updated plan includes a concept of increased park area adjacent to Stonegate Park. Staff is still recommending that the applicant present these plans to the Park Commission on September 15th. Overall, the updated plan is consistent with the previous plan with the exceptions noted. Given the limited scope of the changes in the updated plan, the previous Staff Report, dated 8/25/14, and conditions (with exception of Condition #12) still apply.

In addition to the planning and zoning issues that were outlined in the previous Staff Report, it should be noted that the City of Oakdale submitted a comment letter noting opposition to potential future restrictions of access at Oak Marsh Drive and 9th Street North. As indicate in the letter, staff is meeting with both the City of Oakdale and Washington County on September 12th to continue to work through access related concerns on Inwood Avenue (CSAH 13). As Inwood Avenue is a Washington County facility, the County will continue to take the lead on working with the applicant and both communities on proper access spacing and design. As a condition of approval (Condition #14), staff is recommending that the applicants work with Washington County to address all issues pertaining to street and intersection design for the County roads (CSAH 13 and CSAH 10). In addition, City staff will continue to work with the applicant, Washington County and the City of Oakdale related to access considerations on Inwood Avenue.

PLANNING COMMISSION REVIEW, ANALYSIS AND RECOMMENDATIONS

In addition to holding a public hearing on the proposed Inwood PUD Concept Plan, the Planning Commission discussed the planned development at great length, making multiple motions to add or amend conditions of approval for the development. As these additional or amended conditions were never included in a broader recommendation to the City Council, staff is asking the Planning Commission to reaffirm the following motions:

1. M/S/P: Williams/Kreimer, move to include Condition #19 to require a 5-foot sideyard setback for all of the single family detached housing, **Vote: 4-2, motion carried,** with Larson and Dodson voting no.

   The applicants have noted that the requested 4-foot sideyard setbacks are important to making the Lifestyle Home single family product work. Staff is confident that the reduced setback will work from a land use perspective, as long as the site is carefully engineered to properly account for storm water management.

2. M/S/P: Williams/Dodson, move to add to Condition #6 "the location, size and design of the park will be subject to review by the Park Commission. It is recommended that the Park Commission consider the inclusion of a small park area or gathering space in the northwest portion of the development", **Vote: 6-0, motion carried unanimously.**

   If affirmed, planning staff will present the Planning Commission's recommendation to the Park Commission at the 9/15/14 meeting.

3. M/S/P: Dodson/Lundgren, move to include Condition #20 that the applicant must work with the City to submit their residential design standards to the City as part of the Preliminary PUD Plan application for the City's use in reviewing building permits, **Vote: 6-0, motion carried unanimously.**

   Staff would note that Hans Hagen has identified themselves and the sole builder of the Lifestyle Homes, which is the product that raised greater concern over garage-dominated front elevations.

4. M/S/P: Kreimer/Lundgren (with friendly amendment from Haggard), move to include Condition #20 to change the proposed land use of the area in the northwest corner to Commercial or multi-family with a maximum net density of 15 units per acre, **Vote: 5-1, motion carried,** with Dodson voting no.

In addition to the above approved motions, there was discussion and/or failed motions pertaining to requiring typical single family lots on the east side of the development and incorporating theming elements into the development. There was also discussion about requiring the greenbelt buffer trail to be located within the western portion of the buffer. However, no formal motion was made related to the trail location. Finally, there was general discussion about the proposed findings listed in the 8/25/14 Staff Report. As no formal motions were made, staff has included the same draft findings that were listed in the previous report. However, staff did include recommended language proposed by Chairman Williams to note that the Concept Plan complies with the general intent of the applicable zoning districts "with the exception of the issues identified in the Staff Report."

Based on the above Staff Report and analysis, as well as the analysis completed on 8/25/14, Staff is recommending approval of the Inwood PUD Concept Plan with 17 conditions intended to address future considerations related to the submission of a PUD Preliminary Plan and Preliminary Plat application. The recommended conditions are as follows:

Recommended Conditions of Approval:

1) The applicant must obtain permission and consent from the adjoining property owner, Bremer Bank, related to the right-of-way and alignment of the 5th Street minor collector road in the southeast corner of the site. The final alignment must be determined prior to the submittal of PUD Preliminary Plan and Preliminary Plat applications.

2) Request for flexibility related to lot size, width, setbacks and all other requirements per the City's Zoning Ordinance or Design Standards must be clarified and documented as part of the PUD Preliminary Plan and Preliminary Plat submission.

3) The application for Preliminary Plat and Preliminary PUD Plan approval will include an overall PUD planning document that addresses the flexibility requests noted in the preceding condition and that also specifies the specific design considerations to be used throughout the project area.

4) The Preliminary PUD plans will include a phasing plan for all portions of the development.

5) The Preliminary Development Plans shall include a water tower within the project development area in a location that is deemed acceptable by the City Engineer. As an alternative, the developer may identify an alternate location off-site for the water tower in a location deemed acceptable by the City Engineer provided the ownership of the site is transferred to the City and all required utility connections are constructed in conjunction with the platting of the Inwood PUD.

6) The Preliminary PUD plans shall be updated to include additional park land in the southeastern portion of the site. A larger park area of 5 to 10 acres adjacent to the existing Stonegate Park and with access to 5th Street is the preferred location. The location and size of this park will be subject to review by the Lake Elmo Park Commission.

7) All street and median geometrics must accommodate emergency vehicle access and maintenance. Applicants must demonstrate acceptable turning radii for all uniquely shaped landscape medians and cul-de-sacs.

8) The developer shall follow all of the rules and regulations spelled out in the Wetland Conservation Act, and shall acquire the needed permits from the appropriate watershed district prior to the commencement of any grading or development activity on the site.

9) Any land under which public trails are located will be accepted as park land provided the developer constructs said trails as part of the public improvements for the subdivision, and the land is located outside of any restrictive easements.

10) The applicant shall observe all comments and recommendations from the City Engineer documented on the Engineer's report dated August 13, 2014.

11) The Preliminary Plat and Preliminary PUD Plans will address review comments and issues that are identified within the Environmental Assessment Worksheet for the Inwood planned development site.

12) The applicant shall enter into a maintenance agreement with the City clarifying responsibility for all median landscaping and stormwater facilities internal to the single family residential streets.

13) The applicants must work with the City to determine fair and equitable cost share for City costs related to the future signalization of the intersection at 5th Street and Inwood Avenue (CSAH 13).

14) The applicant must work with Washington County to address all review comments documented in the attached report dated 8/20/14 pertaining to access and intersection design for Inwood Avenue (CSAH 13) and 10th Street (CSAH 10).

15) The applicant must provide sidewalks on both sides of Street B to better serve the single family residential area.

16) Additional trail segments along the east side of Inwood Avenue from 5th Street to 10th Street and along 10th Street from Inwood Avenue to the Greenbelt Buffer Trail must be incorporated into the plans.

17) The applicant must work with the City to ensure compliance with the City's shoreland provisions and the standards of the SWWD and MN DNR related to shoreland areas of designated public waters.

DRAFT FINDINGS

Staff is recommending that the Planning Commission consider the following findings with regards to the proposed Inwood PUD Concept Plan:

1) That the Inwood PUD Concept Plan is consistent with the intent of the Lake Elmo Comprehensive Plan and the Future Land Use Map for this area.

2) That the Inwood PUD Concept Plan complies with the general intent of the City's Urban Low Density Residential, Urban High Density Residential and Commercial zoning districts with the exception of the issues identified in the Staff Reports.

3) That the Inwood PUD Concept Plan complies with the City's Subdivision Ordinance.

4) That the Inwood PUD complies with the City's PUD Ordinance, and specifically the identified objectives for the consideration of a Planned Development.

5) That the Inwood PUD Concept Plan is consistent with the City's engineering standards with exceptions as noted by the City Engineer in his review comments to the City dated August 13, 2014.

6) That the master-planning technique utilized in the Inwood PUD Concept Plan provides thoughtful integration of multiple land uses, a variety of housing types and an effective and connected transportation system, allowing for different modes of travel throughout the site.

RECCOMENDATION:

Staff recommends that the Planning Commission recommend approval of the Inwood PUD Concept Plan with the 17 conditions of approval as listed in the Staff Report. Suggested motion:

"Move to recommend approval of the Inwood PUD Concept Plan with the findings of fact and 17 conditions of approval as drafted in the Staff Report."

ATTACHMENTS:

1. Staff Report, dated 8/25/14 (hard copy not included)
2. Updated Inwood PUD Concept Plan, Open Space Plan and Cover Letter
3. City of Oakdale Review memorandum

ATTACHMENTS FOUND IN 8/25/14 PLANNING COMMISSION AGENDA PACKET:

1. Location Map
2. Application Form and Project Narrative
3. Inwood Concept Planning & Design Booklet
4. City Engineer's Review Memorandum, dated 8/13/14
5. Washington County Review Memorandum

ORDER OF BUSINESS:

- Introduction.....Planning Staff
- Report by Staff.....Planning Staff
- Questions from the Commission..... Chair & Commission Members
- Discussion by the Commission..... Chair & Commission Members
- Action by the Commission..... Chair & Commission Members

PLANNING COMMISSION
DATE: 8/25/14
AGENDA ITEM: 4B – PUBLIC HEARING
CASE # 2014-42

ITEM: Inwood Planned Unit Development (PUD) – General Concept Plan

SUBMITTED BY: Kyle Klatt, Community Development Director
Nick Johnson, City Planner

REVIEWED BY: Jack Griffin, City Engineer
Greg Malmquist, Fire Chief
Ann Pung-Terwedo, Washington County
Matt Moore, South Washington Watershed District
Molly Shodeen, MN DNR

SUMMARY AND ACTION REQUESTED:

The Planning Commission is being asked to hold a public hearing for a request from Hans Hagen Homes and Inwood 10, LLC for a Planned Unit Development (PUD) Concept Plan for a new mixed-use development on 157 acres of land located at the southeast corner of Inwood Avenue and 10th Street in Lake Elmo. The concept plan includes 281 single-family residential lots, 144 townhouses, 150 multi-family units, 120 senior townhouse units, and approximately 68,814 square feet of commercial/office uses. Staff is recommending approval of the PUD Concept Plan with 18 conditions of approval as listed in the Staff report.

GENERAL INFORMATION

Applicant: Hans Hagen Homes (John Rask), 941 NE Hillwind Rd. Suite 300, Fridley, MN 55432 and Inwood 10 (Tom Scheutte), LLC, 95 S Owasso Blvd. W., St. Paul, MN 55117-7830

Property Owners: Inwood 10, LLC (Tom Scheutte), 95 S Owasso Blvd. W., St. Paul, MN 55117-7830

Location: Part of Section 33 in Lake Elmo, immediately south of 10th Street (CSAH 10), immediately north of Eagle Point Business Park, immediately east of Inwood Avenue (CSAH 13) and immediately west of Stonegate residential subdivision. PIDs: 33.029.21.12.0001, 33.029.21.12.0003, 33.029.21.11.0002 and 33.029.21.11.0001.

Request: Application for Concept Plan approval of a Planned Unit Development (PUD) containing 281 single family lots, 144 townhome units, 150 multi-family units, 120 senior living townhome units and multiple sites intended for commercial uses to be named Inwood of Lake Elmo.

Existing Land Use and Zoning: Vacant land used for agricultural purposes. Current Zoning: RT – Rural Transitional Zoning District; Proposed Zoning: LDR –

	Low Density Residential, HDR – High Density Residential and C – Commercial (all with PUD overlay)
Surrounding Land Use and Zoning:	North: Vacant agricultural land and two residential homes – RR and PF zoning; West: Oak Marsh Golf Course, urban single family subdivision, commercial – City of Oakdale jurisdiction; South: Offices in Eagle Point Business Park (including Bremer Bank facility) – BP zoning; East: Stonegate residential estates subdivision – RE zoning.
Comprehensive Plan:	Urban Low Density Residential (2.5 – 4 units per acre), Urban High Density Residential/Mixed Use (7.5 – 15 units per acre) and Commercial.

History: The site has historically been used for agricultural purposes. The applicants have submitted a mandatory Environmental Assessment Worksheet (EAW) for publication to the Environmental Quality Board (EQB) on September 2nd, commencing the 30-day comment period.

Deadline for Action: Application Complete – 8/12/14
60 Day Deadline – 10/10/14
Extension Letter Mailed – No
120 Day Deadline – 12/9/14

Applicable Regulations: Chapter 153 – Subdivision Regulations
Article 10 – Urban Residential Districts (§154.450)
Article 12 – Commercial Districts (§154.550)
Article 16 – Planned Unit Development (§154.800)
Article 17 – Shoreland Management Overlay District

REQUEST DETAILS

The City of Lake Elmo has received an application from Hans Hagen Homes and Inwood 10, LLC for a Planned Unit Development (PUD) Concept Plan for a mixed-use project that will be located on 157 acres of land located on south of 10th Street and east of Inwood Avenue in Lake Elmo. The proposed project will include 281 single-family residential lots, 144 townhouses, 150 multi-family units, 120 senior townhouse units, and approximately 68,814 square feet of commercial/office uses, in addition to storm water facilities, trails, and park areas as depicted on the attached site development plan. While the planned uses for the site generally match those shown on the City's future land use map for the property, the applicant is proposing a slightly different configuration of the various land uses. Most notably, the developer is asking that the commercial area be moved further south along Inwood Avenue to the intersection of 5th Street and that a small area of multi-family development be allowed at the intersection of Inwood Avenue and 10th Street.

The overall project can be divided up into three distinct areas on the plans, which includes a multi-family area south of 5th Street, a single-family "lifestyle housing" neighborhood north of 5th Street, and commercial areas with frontage along Inwood Avenue. Within the residential areas, the developer plans a mix of different housing options, including single-family detached housing, townhouses, senior townhomes, senior multi-family, and standard multi-family housing. The planned single-family areas differ from typical residential neighborhoods in that the lots are smaller than otherwise allowed in the LDR zoning district, with reduced setbacks from the LDR standards as

well. The homes to be built in these areas are intended to appeal to a different market then a typical neighborhood by incorporating common open areas, association-maintained lawns and driveways, and other services, and with amenities that are more typical in a townhouse type of development.

As indicated in the application narrative, the developer does not have detailed plans for any of the multi-family portions of the site, and the plans as submitted depict a general development concept for these areas. These structures planned for much of these areas are intended to serve seniors, including a proposed 120-unit senior building that would be located in the southern portion of the site. All of the planned commercial areas are located along Inwood Avenue, and would be separated from the residential development by the internal road system or storm water ponds. At this time, the plans do not call for any vertical mixing of uses; however, the proposed multi-family buildings would be located adjacent to commercial activities, allowing for easy access to goods and services.

As opposed to following the City's normal subdivision procedures, the applicants have determined that a planned development approach offers the best method to achieve their development vision for their property. The purpose of the City's PUD ordinance is to provide flexibility in development and zoning standards for large parcels under unified control with the goal of achieving higher quality development. More specifically, the General Concept Plan phase of the PUD procedure allows the applicant to submit a general plan to the City demonstrating his or her basic intent of the development, including general density ranges, location of residential and nonresidential land uses, and location of streets, paths and open space. The purpose of approving the Concept Plan is to provide the applicant with conceptual approval related to the requested flexibilities or variations from the City Zoning and Subdivision Ordinances, or other City standards, before incurring substantial costs related to submitting a full Preliminary Plat application. In terms of procedure, the planned development path is similar to the normal subdivision process in that Preliminary and Final PUD Plan approvals must follow parallel track to Preliminary and Final Plat. However, one critical difference between the planned development process and standard subdivision process is that the PUD Concept Plan phase requires a public hearing and the approval of the City Council.

The applicant is proposing to develop the site as a large Planned Unit Development, and is requesting flexibility from the underlying zoning in a number of areas including the following:

- The lot sizes and setbacks for the "lifestyle housing" that is planned for most of the single-family detached houses.
- The construction of multi-family buildings on a portion of the site that is presently guided for commercial development. It should be noted that the zoning ordinance does allow multi-family buildings in commercial zoning districts as a conditional use.
- Moving certain land uses and densities across the entire site. The overall densities that are planned, and the overall size of the commercial, multi-family, and single family areas follow closely to the amount indicated in the Comprehensive Plan; however, the applicant is proposing to move the specific locations of these uses in accordance with the submitted plans. For instance, the City's future land use plan depicts approximately 13 acres of commercial land uses at the intersection of Inwood and 10th Street. The developer is proposing to keep the overall size of the commercial area the same but extending it further south along Inwood Avenue as opposed to locating single family residential directly adjacent to the County arterial roadway.
- Allocating the allowed densities across the entire site instead of reviewing densities on a project-by-project basis. This allows the developer to plan for storm water management, parks, and roadways in the appropriate locations, even though a smaller project within the

planning area may exceed underlying zoning. The density projections for the site are reviewed in greater detail in the latter sections of this report.

The flexibility that being requested by the developer is allowed under the City's PUD Ordinance, and the developer has provided a response to the PUD objectives as listed in the Zoning Ordinance as part of the project narrative. The appendix of the submitted Concept Planning & Design Booklet (Attachment #5) also addresses how the proposed planned development is meeting the objectives of the City's PUD Ordinance.

Because the project is located at the intersection of two major roadways in Lake Elmo and includes the proposed construction of another, access issues will play a major role in how the site is able to develop. Internal to the site, the developer intends to connect to the planned extension of the 5th Street minor collector road that will extend through the Boulder Ponds development in the southeastern portion of the site. This road will then turn quickly to the west and eventually intersect Inwood Avenue about 500 feet north of the Eagle Point Business Park. While most of the internal traffic will be accessed via 5th Street, there are multiple planned connections along both Inwood Avenue and 10th Street, which includes a new north/south connection road that will provide a connection between Eagle Point Boulevard and 10th Street. While all of the roads have been designed to comply with City and County requirements, they will be subject to further review and analysis as more detailed plans are prepared for the site.

One of the other major features of the project includes the preservation of the wooded area along the eastern project boundary. This area is guided for a green belt/buffer area between the Stonegate neighborhood and denser urban development on the applicant's site. The developer is also proposing a series of trails within the project, including a trail in the eastern green belt/buffer running north and south along a linear park, an east-west trail running across the entire segment of the development connecting the residential area to the commercial areas, as well as the City's planned regional trail section along 5th Street. In addition to the multiple trail systems, smaller park areas are shown in the southeastern part of the site near the existing Stonegate Park, which are proposed as a logical extension of the existing park area. The other open space areas within the development are predominately being used for storm water management purposes, with larger ponds being located south and east of the commercial area near the intersection of 5th Street and Inwood Avenue.

Regarding next steps, the applicant is proposing to bring forward a Preliminary Plan and Preliminary Plat application upon approval of the Concept Plan. Per the PUD Ordinance, the final approval of the proposed planned unit development will result in a zoning change to a specific PUD zoning district, with specific requirements and standards that are specific to the development. If the application moves forward, the change in the base zoning (LDR, HDR, C) of the property would occur at the time of Preliminary Plan approval, and the final PUD zoning with approved flexibility that is specific to the development would be established at Final Plan approval.

PLANNING AND ZONING ISSUES

The Inwood site is guided for Urban Low Density Residential, Urban High Density Residential and Commercial land uses in the City's Comprehensive Plan. As noted above, the developer is planning to keep the same general mix of uses on the property, but will be moving the specific location of certain elements to better suit the unique circumstances of this property. The most important consideration in this regard is the location of the commercial area, which is shown in the extreme northwest portion of the site in the City's Comprehensive Plan. While the location of this commercial area at the intersection of two major roadways makes sense from a planning perspective,

in reality access to this area is limited due to spacing requirements along and adjacent to a County road. The developer's plans create a new commercial intersection at Inwood and 5th Street, which allows these areas to be accessed via a back road system while avoiding any driveways with direct access to either Inwood or 10th Street. The subsequent arrangement of uses makes logical sense given the access restrictions in place. In addition, it may be problematic to locate single family residential land uses directly adjacent to Inwood Ave. (CSAH 13) as guided by the Comprehensive Plan. Inwood Ave is a County arterial roadway that is anticipated to serve a substantial volume of traffic in the future. From a land use compatibility and noise mitigation standpoint, it makes sense to narrow and extend the commercial uses along Inwood Avenue.

The other major break from the underlying Comprehensive Plan is the siting of two multi-family structures at the intersection of 10th Street and Inwood Avenue. Essentially, the developer is proposing to swap a portion of the high density/mixed use area north of Eagle Point Business Park with commercial development at this intersection. The overall balance of uses is therefore not being changed from the Comprehensive Plan, and the proposed reconfiguration appears to work well given the other site constraints, including storm water retention and infiltration requirements, that need to be addressed on the site. In addition, it should be noted that multi-family housing is allowed in the Commercial zoning district as a conditional use. The applicant is proposing to site the multi-family use in this location through the planned development process as opposed to the Conditional Use Permit process. Staff has reviewed the requested variations from the Comprehensive Plan and found that the master-planning of the 157-acre parcel as proposed in the Inwood PUD represents thoughtful planning and siting of the various uses proposed. After evaluating the master-planned development, Staff finds that the development is meeting the overall intent of the land use guidance of the Comprehensive Plan when considering the overall land use goals for the parcel.

Regarding the density calculations of the Inwood planned development, the developer has provided density calculations at the request of Staff for the entire site using the City's recently adopted net density definition. These calculations are summarized as follows:

Use	**Area (in acres)**	**Units**	**Net Density (units per acre)**
Single Family Detached	87.17	281	3.22
Multi-family (south of 5th Street)	23.2	264	11.38
Multi-family (corner of 10th and Inwood)	5.16	150	29.1

The overall net density for all of the residential areas is 6 units per acre, while on a gross basis this number is 4.9 units per acre. However, all of these numbers are misleading because most of the ponding for the development is located on the outlots adjacent to the commercial parcels, which would add additional open space to the residential calculations. The developer has noted that by utilizing the density ranges permitted under the Comprehensive Plan, the maximum number of residential units that could be built on the site would be 812 units, compared to the planned number of 695 included in the Inwood development. On an overall site development basis, the proposed Inwood PUD would be consistent with the overall range of planned growth according to the Comprehensive Plan.

In addition to the requested variation related to the Comprehensive Plan, the other flexibilities requested by the applicant include reduced setback requirements for the single family "lifestyle" housing product offered in the residential neighborhood of the development. The standards for the

LDR zoning district and the requested flexibilities for the Inwood PUD single family lots are as follows:

Setback	**LDR Zoning District**	**Inwood PUD**
Front Yard	25 Feet	18 Feet to Principal Structure / 20 Feet to Garage
Interior Side Yard	10 Feet Principal Structure Side / 5 Feet Garage Side	4 Feet
Rear Yard	20 Feet	20 Feet

In addition to setback requirements, the applicants will be requesting flexibility from minimum lot size requirements and lot width requirements, particularly for the Village/Carriage residential product. The Inwood Concept Plan noted that 20% of these homes are slightly under 40 feet in width, while 60% are 50 feet in width and the final 20% are 58 feet in width. The LDR zoning district requires a minimum lot width of 60 feet. By pursuing the PUD process, the applicants are requesting reduced lot sizes, which is allowed under the ordinance. They have noted that the unique housing type, which is completely maintenance free (HOA maintained), requires different design considerations and setbacks. The lot width of the designer product (46 lots in the southeastern potion of the development) are 65 to 85 feet in width, meeting the minimum standards of the LDR district. As an area tabulation of individual lots is not required at Concept Plan level review for a planned development, the applicant has not submitted an area calculation. However, given the size of some of the proposed lots, it is anticipated that many of the lots will be under the LDR zoning district standard of 8,000 square feet. As part of any preliminary PUD plan submittal, staff would require the applicant to submit a complete area tabulation of all the lots proposed in the planned development. Once again, the applicants have noted that in order to achieve a completely HOA maintained neighborhood with a single level product type, flexibility from standard lot width, size and setback requirements are necessary. Based on the residential product presented in the planned development, Staff would offer that the residential product proposed offers a residential product or type that is not currently represented in the Lake Elmo housing market.

With regards to the proposed uses in the Inwood PUD, it should be noted that the master-planned development proposes to integrate low density residential, high density residential and commercial uses all within one development effort. Master-planning the entire development as part of a broad, single effort allows for much greater integration of street and pedestrian networks, providing greater connectivity within the development. In addition, planning the entire site allows for improved planning and utilization of storm water facilities for the area. In reviewing the proposed commercial uses included in the Concept Plan, it should be noted that all are allowed in the Commercial zoning district. However, it is anticipated that these uses may change according to market conditions and demand. It would be Staff's expectation that the uses proposed in the Commercial areas of the development would be allowed under the Commercial zoning district.

Finally, as the Inwood development is utilizing the PUD process, it is the burden of the applicant to explain how the proposed development meets one or more of the City's identified objectives (§154.801) related to planned developments. In order to address this question, the applicant has provided a thorough explanation of which objectives are met within the back section of the Project Narrative (Attachment #3 – Also found in PUD Design Planning & Concepts Booklet). In the judgment of Staff, the proposed development meets the criteria for the following identified

objectives: A) Innovation in land techniques, B) Promotion of integrated land uses, D) Accommodation of housing of all types with convenient access to employment and/or commercial facilities and H) Creation of more efficient provision of public utilities and services, lessened demand on transportation, etc. Arguments could be made for additional objectives being achieved. Staff was most confident in the aforementioned objectives being met.

Per the City's Subdivision Ordinance, the applicant is required to provide parkland dedication in an amount equal to 10% of land developed residentially, fees equal to the market value of 10% of the land, or some combination thereof. The acceptable parkland solution is at the discretion of the City. Based on the submitted area calculations on the Inwood PUD Concept Plan, there is 78.1 acres of single family residential area and 29.5 acres of multi-family residential area, totaling 107.6 acres. Therefore, the required land dedication for the residential areas would be 10.7 acres. The applicants have noted that 12.2 acres of public parkland is provided, going above the required dedication amount. However, the outlots containing area labeled park also contain storm water facilities and one smaller wetland. In advance of preliminary plat and preliminary PUD plan, it is recommended that the applicant work with Staff to clarify the correct amount of parkland provided given the City's criteria for eligible parkland. In addition to the land dedication requirements for the residential areas of the Inwood planned development, the applicant would be required to submit a fee of $4,500 per acre of land developed for commercial purposes. Based on the area calculations, there is currently 27.7 acres of land being developed commercially, which would result in a parkland fee of $124,650. In developing more detailed plans for the Inwood development in the future, staff will work with the applicant to determine the correct parkland dedication amounts.

In terms of the parkland provided in the Inwood planned development, the majority of the park areas are found in the southeast corner of the site adjacent to existing Stonegate Park and on the east side of the development with the linear greenbelt park. It should be noted that there is park proposed on both sides of the 5th Street minor collector road. The smaller park area on the southern side of the collector is intended to serve the townhome area immediately to the west. The park area north of the collector, along with the linear greenbelt park, could easily serve the single family residential portion of the development. While at this time it appears that the total required parkland dedication amount has been met by the applicant, Staff would recommend enlarging the park area north of 5th Street adjacent to existing Stonegate Park to an overall size of 5-10 acres. Increased park area in this location would give the City the ability to design more usable recreation space where organized recreation activities, such as baseball or soccer, could be held. Given the number of residential units proposed in the development, Staff believes that a larger park area is appropriate in this case. In addition, it is likely that the park should be served by an access off of 5th Street with a small parking area to serve the overall park. If the applicants have indeed met their land dedication requirements, Staff would recommend that the applicants be given credit or compensated for any parkland provided above the dedication amount. Credit and compensation could be achieved by reducing the parkland dedication fees due related to commercial development on the site by the equal market value of the land the City receives above the dedication amount. In order to get further direction regarding the appropriate park area for the development, Staff is recommending that the applicant present their plans to the Park Commission at their next regularly scheduled meeting, which is on September 15th, 2014.

It should also be noted that two portions of the site are subject to shoreland rules. The northwest corner of the site is located within the shoreland district of Armstrong Lake, which is located in the jurisdictions of both Oakdale and Lake Elmo. In addition, an unnamed stream or tributary exists in the southwest corner of the site running towards Eagle Point Business Park. To review the proposed

development in and around these areas, Staff completed a review of the Concept Plan against the City's Shoreland Management Overlay District (Article 17 of Zoning Code). Regarding the northwest potion of the site, the proposed structures are not in close proximity to the Ordinary High Water Level (OHWL) of Armstrong Lake. In terms of impervious surface, sewered lots without riparian dedication are subject to a maximum amount of impervious surface of 30% of lot area. This standard would apply to the commercial and multi-family residential uses proposed in the northwest and western portion of the site, as the shoreland district boundary is depicted on the Concept Plan with a bold dashed black line. In addition, Staff does have some concern about the amount of impervious coverage in Lots 7-14, Block 11. These lots may need to be revised to comply with the City's shoreland standards. In addition to Armstrong Lake, the unnamed tributary flowing through the southeastern portion of the site, which travels to Wilmes Lake in Woodbury, is considered a protected water under DNR classification. The applicants have provided a significant buffer around the unnamed tributary. The City's shoreland provisions require a structure setback of 75 feet from tributaries for sewered lots with no riparian buffering requirement. However, the MN DNR and South Washington Watershed District may provide additional review on this area. There may be a concern about the proximity of the commercial use labeled "pharmacy". Regarding all the shoreland issues, Staff would recommend that the applicant work with the City to ensure compliance with the City's shoreland provisions and the standards of the SWWD and MN DNR as a condition of approval (Condition #18).

REVIEW AND ANALYSIS

City Staff has reviewed the proposed Inwood PUD Concept Plan, which has gone through multiple iterations in advance of the formal application being made to the City. In general, the proposed plan will meet all applicable City requirements for PUD Concept Plan approval, and any deficiencies or additional work that is needed is noted for the purpose of inclusion in the review record. In addition there are several things happening in and around the Inwood planned development that will have an impact on the project, including the construction of 5th Street with appropriate access spacing and alignment, as well as the potential siting of a future water tower on the site. Given that some of these efforts are still underway, Staff recognizes that some modifications will be necessary from PUD Concept Plan phase to PUD Preliminary Plan phase.

The City has received a detailed list of comments from the City Engineer and Fire Chief, in addition to comments by the Washington County Public Works, 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 issues and comments related to the following discussion areas as well:

- ***Comprehensive Plan***. In the judgment of Staff, the proposed planned development is consistent with the land use categories guided for this site as planned in the Lake Elmo Comprehensive Plan. The proposed amount of residential growth is consistent with the range of residential development as guided by the Comprehensive Plan. In addition, the land uses as proposed are generally consistent with the Urban Low Density Residential - LDR and Urban High Density Residential - HDR zoning districts. Finally, the total area intended for commercial uses on the site matches the amount planned under the Comprehensive Plan, with the locational changes noted as an acceptable variation through the PUD process. Other aspects of the Comprehensive Plan relate to the Inwood PUD Concept Plan as follows:

- ***Transportation***. The City's transportation plan calls for the construction of a minor collector road (5th Street) that will connect the eastern and western portions of the I-94 Corridor. Staff views this road as a critical piece of the transportation infrastructure that is needed to serve the densities that have been planned for this area. The applicant has incorporated the right-of-way at the width necessary to construct the minor collector as part of its PUD Concept Plan. As proposed, the provided segment of 5th Street will connect from Inwood Avenue (CSAH 13) to the Boulder Ponds development southeast of the site, eventually leading through the Savona subdivision to Keats Avenue (CSAH 19). Completion of this segment of the minor collector road will provide the infrastructure needed to properly distribute automobile traffic throughout Stage 1 of the I-94 Corridor Planning Area.
- ***Parks***. The City's Park Plan identifies the subject property as a needed location for a neighborhood park. Given the amount of residential growth proposed for the site, it makes sense to provide enough parkland to adequately serve this portion of the I-94 Corridor Planning Area. In addition to a neighborhood park as guided by the Comprehensive Plan, it should also be noted that the eastern portion of the site is guided for a 100-foot linear park known as the greenbelt buffer. The greenbelt trail provided on the eastern portion of the development is consistent with the guidance of the Comprehensive Plan.
- ***Water***. Water will eventually be provided to this area via a future extension of the municipal system along Inwood Avenue. The Inwood planned development will be able to be served under the City's current agreement with the City of Oakdale until the Inwood watermain extension is completed in 2015. It also must be noted that the subject property is identified as a future location for one of the two water towers needed to serve the I-94 Corridor Planning Area. As a condition of approval (Condition #5), Staff recommends that the applicant provide a location that meets the approval of the City Engineer within the development to site the necessary water tower. As an alternative, the applicant can provide the City with an alternative site, as long as the location works from a hydrological standpoint and meets the approval of the City Engineer.
- ***Sanitary Sewer***. The Inwood planned development will be able to connect into the existing sanitary sewer system within the Eagle Point Business Park. While this area is presently served via an interconnected system with the City of Oakdale, all of Section 34 will eventually be connected to the regional interceptor located immediately south of the business park. As noted in the City Engineer's memo, the proposed sanitary sewer connection will need to be evaluated for capacity and overall system design.
- ***Phasing***. The Inwood planned development is located within the Stage 1 phasing area of the I-94 Corridor Planning Area. Therefore, the proposed development is consistent with the City's anticipated phasing of growth.

- ***Zoning***. The proposed base zoning for the Inwood site will be split between the Urban Low Density Residential – LDR, the Urban High Density Residential – HDR, and Commercial – C zoning districts. However, approval of PUD Final Plan will result in a zoning change to a specific PUD Zoning District, recording all of the permitted variations, such as minimum lot size and setbacks, from the Zoning requirements of the base zoning district.

- ***Subdivision Requirements***. The City's Subdivision Ordinance includes a fairly lengthy list of standards that must be met by all new subdivisions, and include requirements for blocks, lots, easements, erosion and sediment control, drainage systems, monuments, sanitary sewer and water facilities, streets, and other aspects of the plans. The City will work with the applicant to ensure that all standards specified in the Subdivision Ordinance are met, or that the appropriate variation is requested through the PUD Preliminary Plan.

- ***Concept Phasing***. The developer has indicated that the first phases of the project will be the single-family areas, with the multi-family and commercial areas proceeding based on market conditions. The narrative notes that Hans Hagen Homes will be the exclusive builder of the single family area, while Inwood 10, LLC will develop the commercial and multi-family areas as the market permits. In addition, Staff is requesting that the developer will be asked to provide a more specific phasing plan with the preliminary plat and preliminary PUD submissions (Condition #4).

- ***Infrastructure***. The developer will be required to construct all streets, sewer, water, storm water ponds, and other infrastructure necessary to serve the development. Storm water facilities should be platted as outlots and deeded to the city for maintenance purposes. Adequate access to public storm water facilities must be provided.

- ***Tree Preservation and Protection***. Based upon the limited tree cover of the site, it is possible that the applicant may not be required to complete a Tree Preservation Plan. If the applicant can demonstrate that significant trees on the site will not be negatively impacted by development activity, they would be allowed to submit a Woodland Evaluation Report in lieu of a Tree Preservation Plan. In addition to the trees along the eastern boundary, there are only two relatively small stands of trees on the site, located in the southwest and southeast corners of the site respectively. The Inwood PUD Concept Plan does not show development activity over these areas. However, potential impacts to existing trees will be better understood at the preliminary plat level with the submission of a grading plan for the development. Overall, the details at the preliminary plat stage will require a greater level of detail concerning trees on the site.

- ***Green Belt/Buffer***. The Comprehensive Plan identifies the area on the east side of the Inwood planned development adjacent to the Stonegate residential subdivision as a green belt/buffer space with a minimum width of 100 feet. As proposed in the Inwood PUD Concept Plan, the applicant is utilizing this space for the continuation of trail corridor from the Boulder Ponds planned development in the south. As proposed, the design of the greenbelt trail is consistent with City planning efforts to date. In addition, it should be noted that the applicants are proposing to maintain a significant amount of existing trees along the eastern boundary of the site, adding to the value and aesthetic of the proposed linear park area. The existing trees include a significant amount of evergreen species, which should provide ample year round screening to many portions of the development. It should be noted that the distance maintained between private lots and the Stonegate neighborhood exceeds 100 feet in many areas, where separation distances of 140 to over 200 feet are common. However, it should be noted that Lots 27 and 28, Block 7 do encroach on the minimum 100-foot buffer area. As a condition of approval (Condition #12), Staff would recommend that the two lots noted be revised to maintain the 100-foot buffer requirement. With the exception of the two lots noted, Staff believes that that green belt/buffer requirements of the Comprehensive Plan have been met, and often exceeded, by the applicant.

- ***Streets and Transportation***. The Inwood PUD Concept Plan includes a substantial portion of the 5th Street minor collector road, as well as an extensive internal street network proposed to serve the mixed-use development. From a conceptual level review of the street system, it appears that the proposed internal public streets meet the City's baseline subdivision requirements and City engineering standards. The right-of-way of local streets are 60 feet in width and local roads are 28 feet in width from curb to curb. In addition to the local road provided, the Inwood planned development includes a series of private streets and driveways to serve multi-family and commercial properties. The private streets and driveways as proposed are primarily accessed off 5th Street and Street D. Significant information regarding the proposed transportation network can be found in the City Engineer's memo (Attachment #6). In addition to the Engineer's review comments, staff offers the following additional comments related to streets:
    - ***5th Street.*** The City Engineer presents a significant amount of design requirements related to the 5th Street minor collector road in his review memorandum. In addition to his comments, Staff would highlight the following:
        - ***Alignment.*** The proposed alignment should meet Washington County's specifications for the touchdown on Inwood Ave. (CSAH 13). However, the alignment at the Boulder Ponds development includes slight additional impact to the Bremer Bank property, necessitating an additional 2,967 square feet of right-of-way from the Bremer site. In order to proceed with the alignment as shown, the applicant will need written permission from Bremer Bank (Condition #1).
        - ***5th Street and Inwood Avenue Signalization.*** Washington County will require signalization for the 5th Street and Inwood Ave. intersection at some point in the future. Given the anticipated traffic volumes generated by the Inwood planned development, Staff would recommend that the City require the applicant to participate financially in the City's share of the traffic signal costs. As a condition of approval (Condition #14), Staff is recommending that the applicant work with the City to determine a fair and reasonable cost share for the City's portion of the costs to signalize the 5th Street and Inwood intersection.
    - ***Residential Streets***. For the single family neighborhood, the applicant is proposing unique street designs. The streets of the single family areas include Low Impact Development (LID) techniques of utilizing center islands and medians to incorporate infiltration and storm water management facilities allowing for enhanced and innovative storm water management within close proximity to streets and residential lots. The center medians will also allow for additional landscaping and pedestrian spaces, as demonstrated in the Concept Planning and Design Booklet (Attachment #5). It should also be noted that the islands would include a one way street design, requiring vehicle traffic to move in circular direction around the island. Due to the unique design of these streets, the City will require additional geometric details and exhibits demonstrating successful turning movements throughout the neighborhood streets. As a condition of approval (Condition #7), Staff is recommending that these details be submitted as part of the Preliminary PUD Plan. Additional details needed for review must address the review comments from the City Engineer documented in the review memorandum dated 8/13/14 (Attachment #6). Finally, it should be noted that Street C and Cul-De-Sac L exceed the maximum length of cul-de-sac for

sewered developments (600 feet) per the City's Subdivision Ordinance. The Engineer has recommended that this road section be revised to connect interior to the development. This could most likely be accomplished by connecting Street C to Neighborhood Street E.

- ***Sidewalks and Trails.*** The proposed Inwood planned development offers a substantial amount and variety of pedestrian and bicycle facilities in the form of sidewalks and trails, offering alternative modes of transport throughout the development. Staff has the following comments pertaining to sidewalks and trails:
    - ***Sidewalks.*** All of the major streets serving the single family residential area have sidewalks on at least one side of the streets, and in some case both sides. In addition, the applicant is planning unique street design with center medians. The Concept Planning and Design Booklet note that these median areas include additional pedestrian facilities to access residential homes. However, this level of detail is not currently provided for all the individual islands and medians at the Concept Plan stage. Staff would recommend that this detail be provided to better understand how these residential areas are being served. In addition, one recommendation (Condition #16) that Staff would make is to include sidewalks on both sides of Street B, as this street is serving as a neighborhood collector for the single family residential neighborhood. Finally, the mutli-family and commercial areas often have direct sidewalk access to the streets. Staff would recommend that the applicant provide pedestrian access to the best extent possible to both mutli-family and commercial uses, as one of the benefits of a master-planned development is to ensure broad connectivity in between the various land uses included in the plan.
    - ***Trails.*** The applicants are proposing an effective system of trails to serve the planned development. In addition to the greenbelt linear park trail on the east side of the development, the applicant is planning a central east-west trail contained mostly in open space areas across the entire development. This should allow the development to achieve residential neighborhoods with easy access to employment and commercial services, resulting in an integrated development with a mix of uses. In order to augment the proposed trails provided in the Concept Plat, staff recommends that additional trail segments be provided within the Inwood Avenue and 10th Street right-of-ways (Condition #17). Staff recommends that the Inwood Avenue trail segment on the east side of the road extend from 5th Street to 10th Street (CSAH 10). In addition, the 10th Street (CSAH 10) trail segment should connect from Inwood Avenue (CSAH 13) to the Greenbelt Buffer Trail at the northeast corner of the development. These trail segments would ensure proper connection of the proposed trails and offer increased connectivity and access.
- ***City Engineer Review***. The City Engineer has provided the Planning Department with a detailed comment letter (Attachment #6) dated August 13, 2014 as a summary of his review of the Inwood PUD Concept Plan. Staff has incorporated the more significant issues identified by the Engineer as part of the recommended conditions of approval, and has also included a general condition (Condition #10) that all issues identified by the City Engineer must be addressed by the applicant prior to approval of a the PUD Preliminary Plan and Preliminary Plat.
- ***Washington County Public Works Review.*** Ann Pung-Terwedo of Washington County Public Works has submitted a review memorandum that focuses on the proposed street

connections of the Inwood PUD to the surrounding arterial street network. Given that both Inwood avenue (CSAH 13) and 10th Street (CSAH 10) are County arterial roadways that will directly serve the development, there are many considerations related to access management and intersection design that the applicants must consider in planning out the internal street system. The review memorandum from Washington County is found in Attachment #8. Staff is recommending that the applicants work with Washington County to address all review comments in the memo as a condition of approval (Condition #15). Finally, it should be noted that the Inwood planned development site is within proximity to one of the planned stations for the planned Gateway Corridor transit facility. In the judgment of Staff, the development as proposed would be compatible with elements or characteristics of transit-oriented development (TOD), offering further support for the Inwood Concept Plan.

- ***Fire Chief Review.*** The Lake Elmo Fire Chief, Greg Malmquist, submitted a review letter for the proposed planned development. In the letter, he highlights the importance of an effective street naming system that follows the County system and has been utilized by the City. In addition, there are comments submitted on the proper location of fire hydrants and proper street design to allow for effective turning movements for fire apparatus and other emergency vehicles. Finally, he notes that many of the structures included in the plan may be subject to fire sprinkling requirements per State Building and Fire Codes.

- ***Watershed Districts***. The project area lies within the South Washington Watershed District. The applicants have started working with Matt Moore, the SWWD engineer, on preparing a stormwater management plan that will meet the treatment, rate and volume requirements for the proposed development. As a condition of approval (Condition #8), all specific development projects will need to comply with applicable watershed district requirements. As proposed, the project will impact man-made constructed wetlands on the site that were created related to agricultural activity. The applicant is currently working through the mitigation requirements for these impacts with the watershed district (which is the responsible government unit for wetland issues).

- ***Environmental Review***. Based upon the proposed scope of the Concept Plan, the project will meet the threshold for a mandatory Environmental Assessment Worksheet (EAW), as the proposed development will exceed the threshold of 300 residential units. The developer has prepared a draft EAW that will be distributed for public comment starting on September 2, 2014. No subdivision of land can occur until this review is complete; however, the developer may proceed with simultaneous reviews at its own risk.

- ***Design Review.*** Based on the proposed uses within the PUD Concept Plan, multiple structures within the Inwood Development will be subject to design and architectural review, including all multi-family residential (apartments, condos, senior living) and commercial buildings. Design and architectural review will be performed at Preliminary and Final PUD Plan stage for all applicable structures.

- ***Theming.*** Staff has distributed the Branding and Theming Study completed by Damon Farber and Associates to the applicants previously. In completing a preliminary landscape plan for the site, staff would recommend that the applicants consider the inclusion of various theming elements and amenities identified in the plan for various locations within the development. For example, the 5th Street and Inwood Avenue Intersection presents a gateway opportunity for the City. Utilizing some of the elements described in the theming study would help the development and City achieve unique design that is consistent with the theme that the City is attempting to augment and achieve as private development moves forward.

Based on the above Staff Report and analysis, Staff is recommending approval of the Inwood PUD Concept Plan with multiple conditions intended to address future considerations related to the submission of a PUD Preliminary Plan and Preliminary Plat application. The recommended conditions are as follows:

Recommended Conditions of Approval:

1) The applicant must obtain permission and consent from the adjoining property owner, Bremer Bank, related to the right-of-way and alignment of the 5th Street minor collector road in the southeast corner of the site. The final alignment must be determined prior to the submittal of PUD Preliminary Plan and Preliminary Plat applications.
2) Request for flexibility related to lot size, width, setbacks and all other requirements per the City's Zoning Ordinance or Design Standards must be clarified and documented as part of the PUD Preliminary Plan and Preliminary Plat submission.
3) The application for Preliminary Plat and Preliminary PUD Plan approval will include an overall PUD planning document that addresses the flexibility requests noted in the preceding condition and that also specifies the specific design considerations to be used throughout the project area.
4) The Preliminary PUD plans will include a phasing plan for all portions of the development.
5) The Preliminary Development Plans shall include a water tower within the project development area in a location that is deemed acceptable by the City Engineer. As an alternative, the developer may identify an alternate location off-site for the water tower in a location deemed acceptable by the City Engineer provided the ownership of the site is transferred to the City and all required utility connections are constructed in conjunction with the platting of the Inwood PUD.
6) The Preliminary PUD plans shall be updated to include additional park land in the southeastern portion of the site. A larger park area of 5 to 10 acres adjacent to the existing Stonegate Park and with access to 5th Street is the preferred location. The location and size of this park will be subject to review by the Lake Elmo Park Commission.
7) All street and median geometrics must accommodate emergency vehicle access and maintenance. Applicants must demonstrate acceptable turning radii for all uniquely shaped landscape medians and cul-de-sacs.
8) The developer shall follow all of the rules and regulations spelled out in the Wetland Conservation Act, and shall acquire the needed permits from the appropriate watershed district prior to the commencement of any grading or development activity on the site.
9) Any land under which public trails are located will be accepted as park land provided the developer constructs said trails as part of the public improvements for the subdivision, and the land is located outside of any restrictive easements.
10) The applicant shall observe all comments and recommendations from the City Engineer documented on the Engineer's report dated August 13, 2014.
11) The Preliminary Plat and Preliminary PUD Plans will address review comments and issues that are identified within the Environmental Assessment Worksheet for the Inwood planned development site.
12) Lots 27 and 28, Block 7 must be revised to maintain the minimum 100-foot greenbelt buffer requirement along the eastern portion of the planned development.

13) The applicant shall enter into a maintenance agreement with the City clarifying responsibility for all median landscaping and stormwater facilities internal to the single family residential streets.

14) The applicants must work with the City to determine fair and equitable cost share for City costs related to the future signalization of the intersection at 5th Street and Inwood Avenue (CSAH 13).

15) The applicant must work with Washington County to address all review comments documented in the attached report dated 8/20/14 pertaining to access and intersection design for Inwood Avenue (CSAH 13) and 10th Street (CSAH 10).

16) The applicant must provide sidewalks on both sides of Street B to better serve the single family residential area.

17) Additional trail segments along the east side of Inwood Avenue from 5th Street to 10th Street and along 10th Street from Inwood Avenue to the Greenbelt Buffer Trail must be incorporated into the plans.

18) The applicant must work with the City to ensure compliance with the City's shoreland provisions and the standards of the SWWD and MN DNR related to shoreland areas of designated public waters.

DRAFT FINDINGS

Staff is recommending that the Planning Commission consider the following findings with regards to the proposed Inwood PUD Concept Plan:

1) That the Inwood PUD Concept Plan is consistent with the intent of the Lake Elmo Comprehensive Plan and the Future Land Use Map for this area.

2) That the Inwood PUD Concept Plan complies with the general intent of the City's Urban Low Density Residential, Urban High Density Residential and Commercial zoning districts.

3) That the Inwood PUD Concept Plan complies with the City's Subdivision Ordinance.

4) That the Inwood PUD complies with the City's PUD Ordinance, and specifically the identified objectives for the consideration of a Planned Development.

5) That the Inwood PUD Concept Plan is consistent with the City's engineering standards with exceptions as noted by the City Engineer in his review comments to the City dated August 13, 2014.

6) That the master-planning technique utilized in the Inwood PUD Concept Plan provides thoughtful integration of multiple land uses, a variety of housing types and an effective and connected transportation system, allowing for different modes of travel throughout the site.

RECCOMENDATION:

Staff recommends that the Planning Commission recommend approval of the Inwood PUD Concept Plan with the 18 conditions of approval as listed in the Staff Report. Suggested motion:

"Move to recommend approval of the Inwood PUD Concept Plan with the findings of fact and conditions of approval as drafted in the Staff Report."

ATTACHMENTS:

1. Location Map
2. Application Form
3. Project Narrative
4. Inwood PUD Concept Plan w/Details
5. Inwood PUD Concept Planning & Design Booklet
6. City Engineer's Review Memorandum, dated 8/13/14
7. Fire Chief's Review Memorandum, dated 8/19/14
8. Washington County Review Memorandum, dated 8/20/14

ORDER OF BUSINESS:

- Introduction.....Planning Staff
- Report by Staff.....Planning Staff
- Questions from the Commission..... Chair & Commission Members
- Open the Public Hearing.....Chair
- Close the Public Hearing.....Chair
- Discussion by the Commission..... Chair & Commission Members
- Action by the Commission..... Chair & Commission Members

Hans Hagen Homes

September 4, 2014

Kyle Klatt
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042

RE: InWood – Response to Planning Commission Comments

Dear Mr. Klatt,

In follow up to the Planning Commission meeting on August 25, 2014, we would like to respond to comments regarding density, lot size, and setbacks. The following table summarizes our response:

Issue	Response
Single Family Lots	The lot count has been reduced from 281 to 273 to preserve wetlands and provide more parkland.
Single Family Density	Gross Density is 2.58 units per acre. Net density is 3.14 units per acre excluding ponds and City parkland. Including parkland, the density is 2.7 units per acre.
Comprehensive Plan Density	The City's Plan allows a density of 2.5 to 3.99 units per acre. The midpoint of the density range is 3.25 u/a. InWood is on the lower end of the density range.
PUD Lot Size Standards	Section 154.802 F. of the PUD Ordinance states that the Council may reduce the lot area and width of individual lots from the base zoning district, provided an equal amount of open space or amenities is provided elsewhere.
Lot Size	Average lot size in InWood is 11,677 square feet when you include all the open space areas (excluding public parks and right-of-way). Standard zoning minimum lot size is 7,500 square feet.
Setbacks	Section 154.802 E. of the PUD Ordinance states that the PUD may provide for a **reduction or elimination** of required setbacks.
Open Space	PUD Ordinance Requires 20 percent open space. InWood provides 31% open space.

As outlined in our application and the information provided above, the InWood neighborhood meets the criteria necessary for the City to approve a PUD. The project is consistent with the City's Land Use Guide Plan and the PUD zoning ordinance.

If you have any questions on our project, please feel free to contact me at (763) 586-7202, or at jrask@hanhagenhomes.com.

Sincerely,

John Rask
Vice President of Land Development

info@hanshagenhomes.com
941 Hillwind Road NE, Suite 300 • Fridley, Minnesota 55432 • Phone 763/586-7200 Fax 763/572-9417

PUD CONCEPT PLAN

INWOOD

~for~ HANS HAGEN HOMES, INC.

INWOOD 10 LLC PROPERTY

CONCEPUAL LAYOUT FOR ALL PROPERTIES TO BE RETAINED BY "INWOOD 10 LLC" HAS BEEN DESIGNED BY COLLAGE ARCHITECTUAL GROUP. SAID LAYOUT HAS BEEN ADDED TO THIS OVERALL PLAN.

HANS HAGEN HOMES DESIGN NOTES

CARRIAGE/VILLAGE SLAB PRODUCT:
20% OF LOTS ARE 38' WIDE.
60% LOTS ARE 50' WIDE.
20% LOTS ARE 58' WIDE.
PROPOSED SETBACKS: 20' FRONT, 4' SIDES, 20' REAR.
PROPOSED UNITS = 235

DESIGNER 8'4" BSMT PRODUCT:
LOTS ARE 65' WIDE.
CORNER LOTS 85' WIDE.
PROPOSED SETBACKS: 20' FRONT, 4' SIDES, 20' REAR.
PROPOSED UNITS = 38

TOTAL SINGLE FAMILY UNIT COUNT = 273 LOTS

NORTH

GRAPHIC SCALE
(IN FEET)
1 inch = 100 ft.

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

DANIEL W. OBERMILLER

Date: 8/28/14 License No. 25341

E. G. RUD & SONS, INC.
EST. 1977
Professional Land Surveyors
6776 Lake Drive NE, Suite 110
Lino Lakes, MN 55014
Tel. (651) 361-8200 Fax (651) 361-8701
www.egrud.com

PROPERTY DESCRIPTION:

The West Half of the Southeast Quarter of Section 33, Township 29 North, Range 21 West, lying north of the north right of way line as shown on State Highway Right-of-way Plat No. 4 of 12, State Project 8282 (94=392) 902, Washington County, Minnesota.
(Abstract)
AND
The Northeast Quarter of Section 33, Township 29, Range 21, less and except:
Parcel No. 4 of Washington County Highway Right-of-way Plat No. 41; and
Parcel No. 3 of Washington County Highway Right-of-way Plat No. 42, Washington County, Minnesota.
(Torrens)

DRAWN BY: DWO	JOB NO: 13777PP	DATE: 6/4/14	
CHECK BY: DWO	SCANNED ☐		
1	6/5/14	ADD COLLAGE ARCH DESIGN	DWO
2	6/20/14	REVISE COLLAGE ARCH DESIGN	DWO
3	6/26/14	GREEN SAC RE-DESIGN	DWO
4	7/03/14	NEW LAYOUT STREET C	DWO
5	7/14/14	NEW SCHREIER LAYOUT	DWO
6	7/15/14	5th STR; PONDS	DWO
7	7/18/14	DEVEL NOTES	DWO
8	8/11/14	LAYOUT	DWO
9	8/28/14	LAYOUT	DWO
NO.	DATE	DESCRIPTION	BY

S:\rud\CAD\13proj\13777\13777-2.dwg 8/28/2014 2:36:00 PM CDT

NOTES

- Field survey was completed by E.G. Rud and Sons, Inc. on 4/10/14.
- Bearings shown are on the Washington County Coordinate System.
- Curb shots are taken at the top and back of curb.
- This survey was prepared without the benefit of title work. Additional easements, restrictions and/or encumbrances may exist other than those shown hereon. Survey subject to revision upon receipt of a current title commitment or an attorney's title opinion.
- Parcel ID Nos. 33-029-21-11-0001, 33-029-21-11-0002, 33-029-21-12-0001, 33-029-21-12-0003, 33-029-21-42-0002.
- Total parcel area = 157.18 acres.
- BENCHMARK: MNDOT Station: NYGAARD MNDT. Elevation = 1010.83 (NGVD 29)

13777 PP

OPEN SPACE PLAN:

INWOOD

~for~ HANS HAGEN HOMES, INC.

NORTH

OPEN AREA PER CALCULATIONS

OPEN AREA CALCULATIONS

TOTAL SITE AREA = 157.18 ACRES (100%)

PUBLIC PARK (SINGLE FAMILY AREA) = 13.18 ACRES (8.39%)
PUBLIC PARK (MULTI-FAMILY AREA) = 1.14 ACRES (0.89%)
ISLANDS DEDICATED TO FILTRATION = 4.70 ACRES (3.00%)
OUTLOT A = 1.39 ACRES (0.88%)
OUTLOT B = 0.54 ACRES (0.34%)
OUTLOT C = 3.79 ACRES (2.41%)
OUTLOT D (OPEN AREA) = 2.28 ACRES (1.45%)
OUTLOT E (OPEN AREA) = 1.96 ACRES (1.25%)
OUTLOT F (OPEN AREA) = 0.86 ACRES (0.55%)
OUTLOT G (OPEN AREA) = 1.09 ACRES (0.69%)
OUTLOT H (OPEN AREA) = 6.70 ACRES (4.26%)
OUTLOT I (OPEN AREA) = 5.02 ACRES (3.19%)
OUTLOT J (OPEN AREA) = 1.56 ACRES (0.99%)
BERMS ON RESIDENTIAL SITE NOT IN OUTLOTS = 4.33 ACRES (2.75%)

TOTAL OPEN AREA FOR ENTIRE SITE = 48.54 ACRES (30.9% OF SITE)

PROPERTY DESCRIPTION:

The West Half of the Southeast Quarter of Section 33, Township 29 North, Range 21 West, lying north of the north right of way line as shown on State Highway Right-of-way Plat No. 4 of 12, State Project 8282 (94=392) 902, Washington County, Minnesota.
(Abstract)
AND
The Northeast Quarter of Section 33, Township 29, Range 21, less and except:
Parcel No. 4 of Washington County Highway Right-of-way Plat No. 41; and
Parcel No. 3 of Washington County Highway Right-of-way Plat No. 42, Washington County, Minnesota.
(Torrens)

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- Total parcel area = 157.18 acres.
- BENCHMARK: MNDOT Station: NYGAARD MNDT. Elevation = 1010.83 (NGVD 29)

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

DANIEL W. OBERMILLER

Date: 9/02/14 License No. 25341

E. G. RUD & SONS, INC.
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Tel. (651) 361-8200 Fax (651) 361-8701
www.egrud.com

Oakdale

Community Development Department
1584 Hadley Avenue North
Oakdale, MN 55128

August 29, 2014

Nick M. Johnson
City Planner
City of Lake Elmo, MN
3800 Laverne Avenue North
Lake Elmo, Minnesota 55042

Ann Pung-Terwedo
Senior Planner
Washington County
11660 Myeron Road North
Stillwater, MN 55082-9573

RE: Inwood PUD General Concept Plan

Dear Mr. Johnson and Ms. Pung-Terwedo:

Thank you for providing the Inwood PUD general concept plan for the City of Oakdale's review. We have not had sufficient time to review the plan, however we would like to share our initial reaction to the concept plan.

We do not support the restricted accesses proposed along Inwood Avenue at both Oak Marsh Drive and 9th Street North. However, we look forward to discussing this proposal on September 12 at our access management meeting.

Sincerely,

Emily Shively
City Planner
City of Oakdale
(651)730-2720
emily@ci.oakdale.mn.us

PLANNING COMMISSION
DATE: 9/8/14
AGENDA ITEM: 5C – BUSINESS ITEM
CASE # 2014-46

ITEM: Hunter's Crossing Final Plat

SUBMITTED BY: Kyle Klatt, Planning Director

REVIEWED BY: Nick Johnson, City Planner
Jack Griffin, City Engineer

SUMMARY AND ACTION REQUESTED:

The Planning Commission is being asked to consider a Final Plat request from The Ryland Group for the first phase of a planned 51 unit residential development to be called Hunter's Crossing. The proposed subdivision will be located on 23.10 acres immediately east of Lake Elmo Avenue and approximately ¼ mile north of Interstate 94. The final plat includes 22 single-family lots located within the northern portion of the overall subdivision area. Staff is recommending approval of the request subject to compliance with the conditions listed in this report.

GENERAL INFORMATION

Applicant: The Ryland Group (Tracey Rust), 7599 Anagram Drive, Eden Prairie, MN

Property Owners: Nathan Landucci, 404 Lake Elmo Avenue North, Lake Elmo, MN

Location: Part of Section 36 in Lake Elmo, north of I-94, east of Lake Elmo Avenue, and south of the Cimarron Golf Course property. South of 404 Lake Elmo Avenue North. PID Number 36.029.21.32.0008

Request: Application for final plat approval of a 22 unit residential subdivision to be named Hunter's Crossing.

Existing Land Use and Zoning: Golf driving range and instruction and practice facility, including small nine-hole practice course. Current Zoning: LDR – Low Density Residential

Surrounding Land Use and Zoning: North – vacant land and Cimarron Manufactured Home Park; East – Trans-City industrial building; West – The Forest residential subdivision; South – currently vacant/agricultural but future site of proposed Air Lake Development business park; also two existing home sites located adjacent to development along Lake Elmo Avenue

Comprehensive Plan: Urban Low Density Residential (2.5 – 3.99 units per acre)

History: Sketch Plan reviewed by Planning Commission on 9/23/13. The site has historically been used for a golf driving range and practice facility. The City approved a Conditional Use Permit for the driving range in 1990, and this permit, which is still

active, has been amended at least twice since this date. At some point in the past, the home in the extreme northwestern portion of the site (and outside the area to be platted) was split off from the larger parcel. The preliminary plat was approved by the City Council on July 1, 2014.

Deadline for Action: Application Complete – 8/8/14
60 Day Deadline – 10/8/14
Extension Letter Mailed – No
120 Day Deadline – 12/8/14

Applicable Regulations: Chapter 153 – Subdivision Regulations
Article 10 – Urban Residential Districts (LDR)
§150.270 Storm Water, Erosion, and Sediment Control

REQUEST DETAILS

The City of Lake Elmo has received a request from The Ryland Group for final plat approval of the initial phase of the Hunter's Crossing residential subdivision. The area to be platted represents approximately half of the lots that were approved with the preliminary plat, and will include 22 single-family lots, outlots for storm water management facilities, and a larger outlot to be platted as part of the second addition. The City approved the Hunter's Crossing Preliminary Plat on July 1, 2014, and the final plat represents the northern portion of the overall area to be subdivided. The applicant has provided a detailed project narrative (attached) that provides summary of the request with information updated from the preliminary plat review where appropriate.

Hunter's Crossing will be located along the planned 5th Street minor collector route, and the preliminary plat indicated that the sole access into the development would be located off of 5th Street. One of the unique aspects of this project is that the planned location of 5th Street along the northern property line of the subdivision straddles the property line between the applicant's site and the adjacent property to the north. At this time, there has been no agreement reached between these two property owners to build 5th Street as a private improvement, therefore, the applicant is proposing to construct the southern half of this road as part of Hunter's Crossing, while leaving the northern portion to be constructed either when the northern property develops or when and if the City decides to complete this road as a public improvement project.

The final construction documents do include plans for 5th Street, but these plans note that it will be built as a future City project. Based on recent conversations with the City, the applicant has agreed to build the southern half of the road as noted above, but is proposing to complete this work as part of the second addition. This proposed phasing plan would result on the construction of a road of sufficient width to allow two-way traffic, but that would later be expanded to the City's full specifications for the road with one-lane of travel in each direction with turn lanes at full intersections. Because the applicant's portion of 5th Street would not be constructed until the second phase of the project, the applicant is proposing to use the existing access to the site as a temporary access for the first addition. The City's preliminary plat approval authorized the use of this temporary access to serve up to 25 lots, which falls within the number being proposed for the final plat. Washington County will also allow the temporary access provided this access is eliminated once 5th Street is in place.

There are a few issues that the City is working to address concerning the construction of 5th Street in two phases, and most importantly, is asking the applicant and northern property owner to enter into

an agreement to identify an area to handle storm water runoff from the road. The City will otherwise maintain control over the future platting in this area so that no further platting will be allowed either on the applicant's property or on the site to the north without at least half of the road being completed. As part of the planned improvements for 5th Street, the applicant will need to comply with the comments from Washington County, and will need to incorporate improvements to Lake Elmo Avenue as part of this work.

Consistent with the approved preliminary plat, the final plat does not include two exception parcels along Lake Elmo Avenue, both of which will be provided with potential future connections to the streets internal to Hunter's Crossing. As depicted in the attached plans, the northeast exception parcel will have access to 4th Street via Outlot B; access to the other exception parcel will be platted as part of the second addition. In both cases, these parcels will still be allowed to access Lake Elmo Avenue until they are redeveloped at some point in the future (both are guided for Medium Density Residential development).

The applicant has provided an updated landscape plan with all of the other required plans, and this plan has been reviewed by the City's consulting landscape architect. In his review he notes that the applicant will need to either provide more trees with the project or increase the size of the ones that have been proposed. These changes will be fairly straight forward to make as the developer prepares final revisions to the construction plans. In terms of public park land dedication, the preliminary plat was approved without a specific land dedication, and instead, the developer is expected to pay a fee in lieu of land dedication. Consistent with recent City approvals, the applicant may request a reduction in these fees in exchange for the construction of public trails within the project.

Please note that the grading and utility plans do cover the entire preliminary plat area, and that the developer will be mass grading the entire site as part of these plans. The other street and utility plans also depict the entire site, and the City Engineer has asked for further clarification concerning which aspects of these plans will be constructed as part of the phase one improvements. The applicant has submitted detailed construction plans for related to sanitary sewer, water main, storm sewer, grading, drainage, erosion control, landscaping, and other details that have been reviewed by the City Engineer.

The City's subdivision ordinance establishes the procedure for obtaining final subdivision approval, in which case a final plat may only be reviewed after the City takes action on a preliminary plat. As long as the final plat is consistent with the preliminary approval, it must be approved by the City. Please note that the City's approval of the Hunter's Crossing Preliminary Plat did include a series of conditions that must be met by the applicant, which are addressed in the "Review and Analysis" section below. There are no public hearing requirements for a final plat.

The City's zoning map for all of the area included in the preliminary plat for Hunter's Crossing has previously been updated to be consistent with the City's Comprehensive Plan. All of the site is zone LDR – Urban Low Density Residential, and the proposed lots, setbacks, streets, and other plan elements have been found to be consistent with the LDR district requirements.

Staff has reviewed the final plat and found that it is consistent with the preliminary plat that was approved by the City. Please note that the final plat now includes proposed street names as recommended by the Planning Department. The City Engineer, Landscape Architect, and County Engineer have reviewed the final plat, and these comments are attached to this report. Although there are some additional revisions to the final construction plans that will need to be addressed by the applicant, the majority of these revisions can be made before the City releases the final plat for recording.

REVIEW AND ANALYSIS

The preliminary plat for Hunter's Crossing was approved with several conditions, which are indicated below along with Staff's comments on the status of each. The applicant has also provided a response to these conditions as part of the attached application narrative. Staff is recommending approval of the final plat with conditions intended to address the outstanding issues that will require additional review and/or documentation. In order to assist the Planning Commission with its review, Staff is also including a summary the critical issues that need to be resolved for the subdivision to move forward.

Critical Issues Summary:

1) The developer is proposing to construct half of 5th Street with their project, leaving the northern half to be constructed by another private party or of the City in the future. Staff has agreed that this is be best option for moving forward with development in this area given the unique site ownership and property boundaries that exist around the applicant's site. There is minimal risk to the City in taking this approach since it will be relatively straight-forward to demonstrate benefit to the northern property owner if the City decides to build the road and asses the costs back to the abutting property owner.

2) 5th Street will be constructed with the second addition, at which time the applicant will need to prepare plans for the southern portion of this road that comply with City standards and also comply with Washington County requirements for the intersection of 5th Street and Lake Elmo Avenue. The City is working with both the applicant and property owner to the north to secure an agreement concerning the storm water facilities needed to build the road. This agreement will be completed prior to a final plat for second addition.

3) The applicant will need to secure an easement from the property owner to the east related to storm water discharge in the southwest portion of the site. This property owner has not objected to the proposed easement, and this is an issue that can be finalized prior to release of the final plat for recording.

4) All other recommended conditions of approval relate to final details that must be addressed by the applicant and can be handled prior to release of the final plat for recording.

Preliminary Plat Conditions – With Staff Update Comments (updated information in bold italics):

1) Within six months of preliminary plat approval, the applicant shall complete the following: a) the applicant shall provide adequate title evidence satisfactory to the City Attorney; and b) the applicant shall pay all fees associated with the preliminary plat. The above conditions shall be met prior to the City accepting an application for final plat and prior to the commencement of any grading activity on the site. ***Comments: a) all title work will need to be submitted and reviewed by the City Attorney before City officials sign the final plat; b) the applicant has submitted an escrow payment related to the preliminary plat application that is being used to cover Staff and consultant expenses related to the City's review.***

2) The landscape plan and tree preservation plan shall be reviewed and approved by an independent forester or landscape architect in advance of the approval of a final plat and final construction plans. ***Comment: the plans have been reviewed by the City's landscape architecture consultant***

and his review is included as an attachment to this report. The applicant will need to further revise the landscape plan to comply with the City's landscape ordinance by either adding more trees or increasing the size of the proposed trees. Staff has found that the proposed plan is generally acceptable and complies with the City's expectations and requirements for street trees, and screening and buffering of adjacent properties. This is an issue that can be resolved through further discussions between the City and developer.

3) The final landscape plan shall incorporate additional planting where feasible adjacent to the shared property lines with the parcels at 404 and 275 Lake Elmo Avenue North. ***Comments: The final landscape plan includes additional plantings along the southwestern property boundary. The number of plantings along the northwestern property boundary is similar to the preliminary plat; however, the location of the future access in this location (Outlot B) limits the developer's ability to add substantially more plantings along this boundary.***

4) The applicant shall be responsible for updating the final construction plans to include the construction of all improvements within the Lake Elmo Avenue (CSAH 17) right-of-way as required by Washington County and further described in the review letter received from the County dated June 17, 2014. The required improvements shall include, but not be limited to the construction of a northbound right turn lane and southbound center tum lane. ***Comments: Because the plans for 5th Street will be more fully developed as part of the second addition, this condition will be revised to note the most recent County review comments and to further clarify that the Lake Elmo Avenue improvements will be constructed with the 5th Street project in the future.***

5) The developer shall follow all of the rules and regulations spelled out in the Wetland Conservation Act, and shall acquire the needed permits from the Valley Branch Watershed District prior to the commencement of any grading or development activity on the site. ***Comments: The applicant has received a permit from the Valley Branch Watershed District (attached) for the grading work proposed in the final plans. This permit includes conditions that must be met prior to the commencement of any grading work on the site.***

6) 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 and open space on the final plat. ***Comments: The applicant has indicated that there will be a homeowner's association created for this development; the declarations and HOA documents should be recorded with the final plat. A maintenance agreement and evidence that the HOA has been established should be retained as a condition of approval for the final plat.***

7) The developer shall be required to pay a fee in lieu of park land dedication equivalent to the fair market value for the amount of land that is required to be dedicated for such purposes in the City's Subdivision Ordinance less the amount of land that is accepted for park purposes by the City. Any cash payment in lieu of land dedication shall be paid by the applicant prior to the release of the final plat for recording. ***Comments: The applicant will be required to pay the required fee in lieu of land dedication to recording the final plat. Because the project is being split into at least two final plats, the park fees will be pro-rated based on the percentage of lots being platted within the overall development.***

8) Any land under which paved public trails are located will be accepted as park land provided the developer constructs said paved trails as part of the public improvements for the subdivision. ***Comments: Staff is recommending that this condition be merged with the above condition for the final plat.***

9) The temporary access to Lake Elmo A venue must be eliminated when access to 5th Street is provided. The City will not issue building permits for more than 25 lots within Hunter's Crossing until such time that the temporary access is closed. ***Comments: this condition will allow the developer to plat the requested 22 homes as part of the first edition before 5th Street is constructed. Only three additional lots may be platted and built upon before 5th Street is constructed.***

10) 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. ***Comments: the applicant is seeking approval to commence grading consistent with this condition; the City will likely be issuing a permit for this work prior to the City Council action on the final plat.***

11) All required modifications to the plans as requested by the City Engineer in a review letter dated May 23, 2014 shall be incorporated into the plans prior to consideration of a final plat. ***Comments: Revised plans have been submitted for review, and the attached comments from the City Engineer provide a response to the updated plans. All final revisions and modifications as requested by the City Engineer must be addressed by the applicant before the plat will be released for recording. The majority of the Engineer's comments will require minor modifications to the plans and specifications and are not unusual at this detailed level of review.***

12) The applicant is encouraged to preserve or re-use as many trees as possible that are currently located on the property and to incorporate these trees as part of the landscape plan for the subdivision. ***Comments: Given the tight confines of the project area and the need to meet City and watershed district storm water requirements, there are relatively few opportunities to incorporate existing trees into the development. The applicant has stated that they will preserve or re-use trees if possible.***

13) The applicant shall provide written consent from the adjacent property owner to the north agreeing to the grading and storm sewer work depicted on this property. ***Comments: The applicant has stated that they will work with this property owner if any grading is necessary to construct the 5th Street improvements. The City is also working to complete a separate agreement with these property owners to address this issue.***

14) Water improvements must be available to serve the subdivision. ***Comments: The City Council has ordered these improvements as part of the Lake Elmo Avenue water project, which satisfies this condition. Ryland has agreed to pay the Water Availability Charge for the entire development prior to recording the final plat.***

15) The applicant shall pay a Water Availability Charge consistent with the Lake Elmo Fee Schedule for the entire development prior to the release of the final plat for recording, regardless of project phasing. ***Comments: Please see note above.***

Staff is recommending that the conditions noted above that pertain to the final plat and that have not yet been addressed by the applicant should be adopted with the final plat. The City Engineer's review letter does identify several issues that need to be addressed by the developer in order for the City to deem the final plans complete; however, all of these concerns are related to the construction plans and should not have any bearing on the final plat. Staff is recommending that City Officials not sign the final plat mylars until the City's construction plan review is finalized and all necessary easements are documented on the final plat.

Based on the above Staff report and analysis, Staff is recommending approval of the final plat with several conditions intended to address the outstanding issues noted above and to further clarify the City's expectations in order for the developer to proceed with the recording of the final plat.

The recommended conditions are as follows:

Recommended Conditions of Approval:

1) Final grading, drainage, and erosion control plans, utility plans, sanitary and storm water management plans, and street and utility construction plans shall be reviewed and approved by the City Engineer prior to the recording of the Final Plat. All changes and modifications to the plans requested by the City Engineer in review memo dated 9/3/14 shall be incorporated into these documents before they are approved.

2) The developer shall provide evidence in a form satisfactory to the City Attorney that warrants it has fee interest in area included in the Hunter's Crossing Final Plat.

3) Prior to the execution of the Final Plat by City officials, the Developer shall enter into a Developer's Agreement acceptable to the City Attorney and approved by the City Council that delineates who is responsible for the design, construction, and payment of the required improvements with financial guarantees therefore.

4) All easements as requested by the City Engineer and Public Works Department shall be documented on the Final Plat prior to the execution of the final plat by City Officials.

5) A Common Interest Agreement concerning management of the common areas of Hunter's Crossing and establishing a homeowner's association shall be submitted in final form to the Community Development Director before a building permit may be issued for any structure within this subdivision. The applicant shall also 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 and open space on the final plat

6) The final landscape plan shall be updated to address the comments from the City's consulting landscape architect in a review letter to the City dated 9/5/14.

7) The developer shall provide written authorization from the property owner to the east of Hunter's Crossing to allow the proposed drainage improvements and discharge of storm water on to their property. A utility easement across the affected property is one option for compliance with this condition.

8) The final construction plans for any additional final plat within Hunter's Crossing shall include, at a minimum, the southern portion of 5th Street. At this time these plans are

prepared they shall include the construction of all improvements within the Lake Elmo Avenue (CSAH 17) right-of-way as required by Washington County and further described in the review letter received from the County dated September 2, 2014.

9) The developer is encouraged to incorporate elements from the Lake Elmo Theming Study into the final design of the community mailboxes within Hunter's Crossing.

10) The developer shall pay a fee in lieu of park land dedication equivalent to the fair market value for the amount of land that is required to be dedicated for such purposes in the City's Subdivision Ordinance less the amount of land that is accepted for park purposes (or trails) by the City. Any cash payment in lieu of land dedication shall be pro-rated based on the percentage of the overall lots to be platted within the subdivision and shall be paid by the applicant prior to the release of the final plat for recording.

11) The applicant shall deed Outlots A, B, and E to the City upon recording of the final plat.

DRAFT FINDINGS

Staff is recommending that the Planning Commission consider the following findings with regards to the proposed Hunter's Crossing Final Plat:

- That the Final Plat is consistent with the Preliminary Plat and Plans as approved by the City of Lake Elmo on July 1, 2014.

- That the Final Plat is consistent with the Lake Elmo Comprehensive Plan and the Future Land Use Map for this area.

- That the Final Plat complies with the City's Urban Low Density Residential zoning district.

- That the Final Plat complies with all other applicable zoning requirements, including the City's landscaping, storm water, sediment and erosion control and other ordinances.

- That the Final Plat complies with the City's subdivision ordinance.

- That the Final Plat is consistent with the City's engineering standards with the plan revisions as requested by the City Engineer.

RECCOMENDATION:

Staff recommends that the Planning Commission recommend approval of the Final Plat for Hunter's Crossing with the 11 conditions of approval as listed in the Staff report. Suggested motion:

"Move to recommend approval of the Hunter's Crossing Final Plat with the 11 conditions of approval as drafted by Staff"

ATTACHMENTS:

1. Application Form
2. Application Narrative
3. Lot Information Summary
4. Tree Inventory
5. City Engineer Review Letter
6. Landscape Architecture Review Letter
7. Washington County Review Comments
8. Valley Branch Watershed District Permit
9. Fire Department Review Comments
10. Hunter's Crossing Final Plat
11. Construction Plans: Final Grading Plan
12. Construction Plans: Utility and Street Construction
13. Final Landscape Plans

ORDER OF BUSINESS:

- Introduction.....Planning Staff
- Report by Staff.....Planning Staff
- Questions from the Commission..... Chair & Commission Members
- Open the Public Hearing.....Chair
- Close the Public Hearing.....Chair
- Discussion by the Commission..... Chair & Commission Members
- Action by the Commission..... Chair & Commission Members

Date Received: _____
Received By: _____
LU File #: _____

THE CITY OF LAKE ELMO

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

FINAL PLAT APPLICATION

Applicant: Ryland Homes
Address: 7599 Anagram Drive Eden Prairie MN 55344
Phone #: 952 229 6063
Email Address: trust@ryland.com

Fee Owner: Nathan Landucci
Address: 13230 20th St Ct. N.
Phone #: 651 894 2582
Email Address: landucnl@hotmail.com

Property Location (Address and Complete (long) Legal Description:
404 Lake Elmo Drive N

General information of proposed subdivision:
22 lot residential subdivision

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: Tracy L Kust Date: 8/7/14

Fee Owner Signature See attached Date: _____

Date Received: _____
Received By: _____
LU File #: _____

THE CITY OF LAKE ELMO

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

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Signature of applicant: _____ Date: 8/7/14

Fee Owner Signature _____ Date: 8/7/14

THE CITY OF
LAKE ELMO

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

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 Nathan Landucci
(Please Print)

Street address/legal description of subject property

404 Lake Elmo Drive N.

Signature

8/7/14
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.

THE CITY OF
LAKE ELMO

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

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 Tracey L Rust Date 8/7/14

Name of applicant Tracey L. Rust Phone (952) 229-6063
(Please Print)

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

_____

_____

_____

RYLAND HOMES®

TWIN CITIES DIVISION

7599 Anagram Drive
Eden Prairie, MN 55344

952.229.6000 Tel
952.229.6024 Fax

www.ryland.com

August 8, 2014

Kyle Klatt
Planning Director
City of Lake Elmo
3800 Laverne Ave. N.
Lake Elmo, MN 55042

RE: Hunters Crossing – Final Plat Application

Dear Mr. Klatt:

Ryland Homes is pleased to submit to the City of Lake Elmo a Final Plat application for Hunters Crossing located on the east side of Lake Elmo Ave. N. approximately ¼ mile north of Intestate Hwy 94. The following written statements are being provided as part of the submittal requirements for the development:

A. Contact Information
   a. Property Owner/Seller: Nathan Landucci
      404 Lake Elmo Ave. N.
      Lake Elmo, MN 55042
      (651) 894-2582

   b. Developer/Buyer/Applicant: The Ryland Group – Tracey Rust
      7599 Anagram Drive
      Eden Prairie, MN 55344
      (952) 229-6063

   c. Engineer/Surveyor: Pioneer Engineering – Paul Cherne
      2422 Enterprise Drive
      Mendota Heights, MN 55120
      (651) 251-0630

B. Site Data
   a. Address: 404 Lake Elmo Ave. N., Lake Elmo, MN 55042
   b. Zoning: On October 1, 2013 the City Council approved the Comprehensive Plan Amendment request from Medium Density Residential (MDR) to Low Density Residential (LDR). Existing zoning RT-Rural Transitional with proposed zoning of LDR-Urban Low Density Residential.
   c. Parcel Size: 23.10 Acres (1,006,236 SF)
   d. PID: 36.029.21.32.0008
   e. Legal Description: See attached-Per Title Commitment

C. Final Subdivision and Lot Information:
    i. Proposed Development Name: Hunters Crossing
    ii. See attached table for lot and block number, size and width and depth of lot.
    iii. See attached table with the Public Open Space area of 0.6265 Acres.
    iv. There will be no wetlands remaining for this development.
    v. See attached table with the proposed Right-of-Way area of 4.5671 Acres.
    vi. See Final Plat for Easement locations.

D. Preliminary Plat Conditions:
    1. Title and Fees: Title will be submitted under separate cover. All fees have been paid for Preliminary Plat.
    2. Landscape plan is attached for review.
    3. Additional landscaping has been added along adjacent property lines.
    4. Final construction plans will include the necessary improvements for 5th Street and Lake Elmo Avenue. Further coordination with the City and County is necessary prior to final plans.
    5. Valley Branch Watershed District granted approval for the wetland impacts on July 10, 2014.
    6. Landscaping outside of public areas will be the responsibility of individual homeowners or the Home Owner's Association depending on the planting locations.
    7. Park fee will be paid in lieu of park land dedication prior to final plat recording.
    8. A public trail will be constructed with this development.
    9. The temporary access from Lake Elmo Avenue will be eliminated when access to 5th Street is provided.
    10. A grading permit application has been submitted to the City for approval.
    11. Please see attached plans addressing the City Engineers comments.
    12. Ryland will preserve or re-use trees if possible.
    13. Ryland will work with the property owner to the north should grading be necessary to construct 5th Street improvements.
    14. Ryland will pay the Water Availability Charge for the entire development prior to Final Plat recording.

E. Density: The net density for the overall site is 3.93 lots/acre. This calculation is based on the number of lots divided by the acreage excluding outlots and right of way (51 lots / (23.10 -3.84-6.27) Acres = 3.93 lots/acre.)

F. Infrastructure Improvements: Hunters Crossing will ultimately have access from the future 5th Street corridor. The temporary access point for the site will be via the existing driveway entrance off of Lake Elmo Avenue. The internal streets with sidewalks parallel Lake Elmo Avenue and 5th Street with 2 cul-de-sacs on the east side of the property adjacent to the proposed stormwater basin. The stormwater basin located on the east side of the property has been designed in this location due to the low area of the site as well as allowing a natural buffer between the residential and future business park use. A trail is proposed along the south and east side of the basin to provide a connection from the development to 5th Street. Sanitary sewer service will be provided within the internal roadway system with connection to the 24" sanitary sewer service that the City recently installed to service this and other sites. Watermain service will also be provided within the internal roadway and connect to the watermain trunk service that is currently being installed along Lake Elmo Avenue by the City with an expected completion date of September 2015.

Phase I of Hunters Crossing will consist of 22 lots with necessary streets and utilities.

G. Neighbor Concerns:

   a. Neighbor at Southwest corner - Ryland has discussed this project with the neighbors directly adjacent to the site. The neighbor at the southwest corner of the site mentioned concern for future grading and drainage entering their property and if Lake Elmo Avenue improvements would affect their property and/or driveway. Ryland's grading plan addresses the grading by matching existing grades at the property line. The current Lake Elmo Avenue & 5th Street intersection improvements do not extend south past the development therefore those improvements will not affect the current property owner at the southwest corner. Additional landscaping was added to increase screening along the properties lines.
   b. Neighbor to the East – Ryland has met with the adjacent neighbor to the east to discuss the development and to acquire a grading easement on their property. Discussions with them have been favorable regarding the location of 5th Street and the need for a grading easement for Ryland to do some minor grading to ensure proper flow from the stormwater basin's ultimate outlet.

H. Conflicts with nearby land uses: Ryland believes that not only is this development not creating conflicts with nearby land uses or future uses but that it is encouraging future uses with it being the first development in the area and contributing to utility trunk service extensions and roadway improvements. There is one wetland area on the site that will be disturbed during the development and has been approved by Valley Branch Watershed District. Ryland will be paying into a wetland bank in lieu of wetland mitigation.

I. No excessive burden on the City: With the City of Lake Elmo's plan to expand and create developments in Lake Elmo and given the size of this first development into the area, we do not anticipate any burdens on roadways, utilities, parks, schools, fire, police, or other services in the area.

J. Proposed lakeshore access: Not applicable.

K. Parks and/or open space: The City staff has recommended that a park is not necessary within the proposed development and that Ryland will pay a parkland dedication fee to contribute to a future regional park within the area.

L. Development Schedule: The development will be constructed in two (2) phases with the first phase utilizing the existing access off of Lake Elmo Avenue until 5th Street is constructed and complete. Phase I will consist of 22 lots along the north side of the site with necessary streets, utilities and the stormwater basins. The following is a preliminary schedule for design/approvals and construction.

   a. Begin Site Grading – August 2014
   b. Phase I Final Plat Approval – September 16, 2014
   c. Phase I Site Construction (Streets & Utilities) – September – November 2014
   d. City Watermain Extension – June – October 2014
   e. 5th Street Construction – Spring 2015
   f. Phase II Final Plat Approval – April 2015
   g. Phase II Site Construction – June – August 2015
   h. Home Construction - November 2014 – December 2016

Ryland Homes has appreciated City Staff's comments and direction so far with this project and we look forward to continuing to work with City Staff to make this a successful new neighborhood for the City of Lake Elmo. Please feel free to contact Tracey Rust at 952.229.6063 with any questions.

Sincerely,

THE RYLAND GROUP, INC.

Tracey Rust, PE
Entitlement Manager

Attachment: Legal Description
Hunters Crossing Information Table

HUNTERS CROSSING

LOT INFORMATION				
Lot #	Block #	Acreage	Width (ft)	Depth (ft)
1	1	0.3646	80.9	194.3
2	1	0.2245	72.0	133.4
3	1	0.2496	72.0	150.9
4	1	0.2499	72.0	151.2
1	2	0.3059	77.6	171.4
2	2	0.2633	72.0	158.7
3	2	0.2783	80.4	150.5
1	3	0.2702	72.0	163.5
2	3	0.2702	72.0	163.5
3	3	0.2762	103.0	126.9
4	3	0.2099	72.0	127.0
5	3	0.2099	72.0	127.0
6	3	0.2540	92.8	127.0
1	4	0.3074	83.7	148.3
2	4	0.2622	72.0	140.4
3	4	0.2379	72.0	145.6
4	4	0.3043	65.0	139.5
5	4	0.3099	78.7	125.1
6	4	0.3391	78.7	134.0
7	4	0.2421	65.0	126.4
8	4	0.2742	72.0	183.5
9	4	0.2758	91.0	133.9

Total area dedicated public open space: 0.6265 acres

Total area wetland and buffers: 0 acres

Total area proposed right-of-ways: 4.5671 acres

Hunters Crossing Tree Inventory

April 29, 2014

Final Plat Submittal August 8, 2014

RYLAND HOMES®

Tree Inventory by:

Ken Arndt
Forest Ecologist/Wetland Specialist
Midwest Natural Resources, Inc.
1032 West Seventh St. #150
St. Paul, MN 55102
(651)-788-0641

Tree Preservation Plans provided by:

PIONEER*engineering*

2422 Enterprise Drive
Mendota Heights, MN 55120
651-681-1914

Tag #	Size	Common Name	Scientific Name	Native/Non-Native	Notes	Status
1225	24/16	Siberian Elm	*Ulmus pumila*	non-native		Remove
1226	17/12/12	Siberian Elm	*Ulmus pumila*	non-native		Remove
1227	20	Siberian Elm	*Ulmus pumila*	non-native		Off-Site
1228	14/12	Siberian Elm	*Ulmus pumila*	non-native		Remove
1229	14/10/10	Silver Maple	*Acer saccharinum*	native		Remove
1230	10/10/7	Siberian Elm	*Ulmus pumila*	non-native		Remove
1231	10/9/6/6	Silver Maple	*Acer saccharinum*	native		Remove
1232	13/12	Siberian Elm	*Ulmus pumila*	non-native		Remove
1233	14	Siberian Elm	*Ulmus pumila*	non-native		Remove
1234	18	Siberian Elm	*Ulmus pumila*	non-native		Off-Site
1235	22	Boxelder	*Acer negundo*	native		Remove
1236	22	Boxelder	*Acer negundo*	native		Remove
1237	14/10	Siberian Elm	*Ulmus pumila*	non-native		Remove
1238	19	American Elm	*Ulmus americana*	native		Remove
1239	20/12	Siberian Elm	*Ulmus pumila*	non-native		Remove
1240	16	Northern Pin Oak	*Quercus ellipsoidalis*	native	Not shown on plan, **Hardwood**	Remove
1241	34	Cottonwood	*Populus deltoides*	native		Remove
1242	30	Cottonwood	*Populus deltoides*	native		Remove
1243	19	Cottonwood	*Populus deltoides*	native		Remove
1244	20	Boxelder	*Acer negundo*	native		Remove
1245	14/14/14	Green Ash	*Fraxinus pennsylvanica*	native	1 of 3 has internal decay along stem	Remove
1246	15/14	Siberian Elm	*Ulmus pumila*	non-native		Remove
1247	10/10	Siberian Elm	*Ulmus pumila*	non-native		Remove
1248	11	Siberian Elm	*Ulmus pumila*	non-native		Remove
1249	16/12	Siberian Elm	*Ulmus pumila*	non-native		Remove
1250	18/12	Siberian Elm	*Ulmus pumila*	non-native		Remove
1251	24	Siberian Elm	*Ulmus pumila*	non-native		Remove
1252	20	Siberian Elm	*Ulmus pumila*	non-native		Remove
1253	26	Black Willow	*Salix nigra*	native		Remove
1254	18	Black Willow	*Salix nigra*	native		Remove
1255	19	Black Willow	*Salix nigra*	native		Remove
1256	24	Black Willow	*Salix nigra*	native		Remove
1257	18	Black Willow	*Salix nigra*	native		Remove
1258	8	Green Ash	*Fraxinus pennsylvanica*	native		Remove
1259	17	Siberian Elm	*Ulmus pumila*	non-native		Remove
1260	8	Green Ash	*Fraxinus pennsylvanica*	native		Remove
1261	6/6	Siberian Elm	*Ulmus pumila*	non-native		Remove
1262	6/6	Siberian Elm	*Ulmus pumila*	non-native		Remove
1263	7	Green Ash	*Fraxinus pennsylvanica*	native		Remove
1264	12	Siberian Elm	*Ulmus pumila*	non-native		Remove
1265	15	Siberian Elm	*Ulmus pumila*	native		Remove
1266	12/8	Silver Maple	*Acer saccharinum*	native		Remove
1267	13/8	Silver Maple	*Acer saccharinum*	native		Remove
1268	16/12/8	Silver Maple	*Acer saccharinum*	native		Remove
1269	13	Silver Maple	*Acer saccharinum*	native		Remove
1270	22/22/20/14	Silver Maple	*Acer saccharinum*	native		Remove
1271	13	Silver Maple	*Acer saccharinum*	native		Remove
1272	14	Silver Maple	*Acer saccharinum*	native		Remove
1273	11	Silver Maple	*Acer saccharinum*	native		Remove
1274	10	Silver Maple	*Acer saccharinum*	native		Remove
1275	7	Silver Maple	*Acer saccharinum*	native		Remove
1276	10	Silver Maple	*Acer saccharinum*	native		Remove
1277	10	Silver Maple	*Acer saccharinum*	native		Remove
1278	8	Silver Maple	*Acer saccharinum*	native		Remove
1279	17	Silver Maple	*Acer saccharinum*	native		Remove
1280	17	Silver Maple	*Acer saccharinum*	native		Remove
1281	28/19	Silver Maple	*Acer saccharinum*	native		Remove
1282	25	Silver Maple	*Acer saccharinum*	native		Remove
1283	29	Silver Maple	*Acer saccharinum*	native	40% top dead, internal decay @ base	Remove
1284	12	Jack Pine	*Pinus banksiana*	native	**Coniferous**	Remove
1285	18/17/16/16/16	Silver Maple	*Acer saccharinum*	native		Remove
1286	28	Silver Maple	*Acer saccharinum*	native		Remove
1287	14	Siberian Elm	*Ulmus pumila*	non-native		Remove
1288	16	Green Ash	*Fraxinus pennsylvanica*	native		Remove
1289	16/10	Siberian Elm	*Ulmus pumila*	non-native		Remove
1290	9	Silver Maple	*Acer saccharinum*	native		Remove
1291	25	Siberian Elm	*Ulmus pumila*	non-native	Not shown on plan	Remove
1292	14	Siberian Elm	*Ulmus pumila*	non-native	Not shown on plan	Remove
1293	7	Silver Maple	*Acer saccharinum*	native		Remove
1294	20/16/12	Siberian Elm	*Ulmus pumila*	non-native		Remove
1295	8/7	Siberian Elm	*Ulmus pumila*	non-native		Save
1296	14	Siberian Elm	*Ulmus pumila*	non-native		Save
1297	11	Siberian Elm	*Ulmus pumila*	non-native		Save

Tag #	Size	Common Name	Scientific Name	Native/Non-Native	Notes	Status
1298	16	Siberian Elm	*Ulmus pumila*	non-native		Save
1299	13/10	Siberian Elm	*Ulmus pumila*	non-native		Save
1300	12/8	Siberian Elm	*Ulmus pumila*	non-native		Save
1301	13/7	Siberian Elm	*Ulmus pumila*	non-native		Save
1302	11	Siberian Elm	*Ulmus pumila*	non-native		Save
1303	10/10/8	Boxelder	*Acer negundo*	native		Save
1304	10	Siberian Elm	*Ulmus pumila*	non-native		Save
1305	10	American Elm	*Ulmus americana*	native		Save
1306	8	Siberian Elm	*Ulmus pumila*	non-native		Save
1307	10/6	Siberian Elm	*Ulmus pumila*	non-native		Save
1308	12	Siberian Elm	*Ulmus pumila*	non-native		Save
1309	12	Siberian Elm	*Ulmus pumila*	non-native		Save
1310	12/12/10/8	Siberian Elm	*Ulmus pumila*	non-native		Save
1311	10	Siberian Elm	*Ulmus pumila*	non-native		Save
1312	14	American Elm	*Ulmus americana*	native		Save
1313	18	Siberian Elm	*Ulmus pumila*	non-native		Save
1314	10	Siberian Elm	*Ulmus pumila*	non-native		Save
1315	15	Siberian Elm	*Ulmus pumila*	non-native		Save
1316	14/12	Siberian Elm	*Ulmus pumila*	non-native		Save
1317	10	Siberian Elm	*Ulmus pumila*	non-native		Save
1318	14	Siberian Elm	*Ulmus pumila*	non-native		Save
1319	13	Green Ash	*Fraxinus pennsylvanica*	native		Save
1320	14	Siberian Elm	*Ulmus pumila*	non-native		Off-Site
1321	16/15	Siberian Elm	*Ulmus pumila*	non-native		Save
1322	9	Quaking Aspen	*Populus tremuloides*	native		Remove
1323	16/10	Siberian Elm	*Ulmus pumila*	non-native		Remove
1324	20/15/10	Silver Maple	*Acer saccharinum*	native		Remove
1325	16/10	Silver Maple	*Acer saccharinum*	native		Remove
1326	15	Silver Maple	*Acer saccharinum*	native		Remove
1327	12/10	Silver Maple	*Acer saccharinum*	native		Remove
1328	16	Silver Maple	*Acer saccharinum*	native		Remove
1329	12/6/6	Silver Maple	*Acer saccharinum*	native		Remove
1330	12	Silver Maple	*Acer saccharinum*	native		Remove
1331	9	Silver Maple	*Acer saccharinum*	native		Remove

Total Inches: 2,106"
Allowed 30% Removal: 631"
Total Inches Removed: 1,677"
Total Inches to Mitigate: 1,046"
- Common Tree Removal: 1,018"
- Coniferous Tree Removal: 12"
- Hardwood Tree Removal: 16"

Common Tree Removal: 1,018"
Replace at a rate of 1/4: 1,018"/4=255"

Conifersous Tree Removal: 12"
Replace at a rate of 1/2: 12"/2=6"

Hardwood Tree Removal: 16"
Replace at a rate of 1/2: 16"/2=8"

Total Inches Required: 269"

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.	**651.300.4285**

Date: September 3, 2014

To: Kyle Klatt, Planning Director
Cc: Nick Johnson, City Planner
From: Jack Griffin, P.E., City Engineer

Re: Hunters Crossing – Ryland Homes
Final Plat and Construction Plan Review

An engineering review has been completed for the Hunters Crossing development by Ryland Homes. A Final Plat and Grading Plan submittal was received on August 15, 2014. The submittal consisted of the following documentation prepared by Pioneer Engineering:

- Final Plat Application dated August 8, 2014.
- Final Plat, unsigned and undated.
- Final Grading Plan, dated July 28, 2014.
- Utility and Street Construction Plans, dated August 6, 2014.
- Project Manual for Utility and Street Construction, dated August 6, 2014.
- Stormwater Management Report, revised July 25, 2014.

STATUS/FINDINGS: The grading plans are of sufficient quality to allow grading operations to begin. A preconstruction meeting may be scheduled to initiate grading work. At the preconstruction meeting the applicant must submit all necessary permits including the VBWD permit, Project SWPPP, County R/W approvals, and adjacent property owner permissions and easements as outlined below.

Final Grading Plans and Utility and Street Construction Plans must be revised and resubmitted for final review and approval by the City prior to street and utility construction work.

FINAL PLAT:

- The Final Plat and Construction Plans should both be updated to include the Outlot ownership information. Outlots A, B and E must be dedicated to the City.
- Note: City utilities will be constructed within Outlot C as part of the first addition. All drainage and utility easements shown on the Plat must be dedicated to the City of Lake Elmo and recorded at Washington County as part of the First Addition Final Plat, including the drainage and utility easements over Outlot C.
- The Plat proposes a temporary roadway access to CSAH 17 (Lake Elmo Avenue) through a portion of Outlot C. A 50 foot temporary road easement should be provided to the City of Lake Elmo as part of the Final Plat to include the temporary access road.
- The Plat requires future access to 5th Street North with the temporary access road to be removed. Approval of the Final Plat should be contingent upon a fully executed development agreement securing the property and cost for the future construction of 5th Street.

PROJECT EASEMENTS:

- Provide written documentation from the adjacent property owner to the north agreeing to the grading and erosion control work to be completed on the property.
- Provide written documentation from the adjacent property owner to the east agreeing to the grading and storm sewer construction work and the direct storm water discharge onto the property at FES 1A. Permanent drainage and utility easements in the City standard form must be provided for the proposed storm pond outfall from Basin 1P.
- A 20 foot permanent drainage and utility easement in the City standard form should be provided along the southern plat line to accommodate the grading and storm sewer pipe proposed on the south property line.

GRADING, STORM WATER MANGEMENT AND EROSION CONTROL

- Add Note to see Standard Plan Notes for Grading and Erosion Control, Details 600A, 600B and 600C, on Erosion Control Detail Sheet.
- Add Note to see Standard Plan Notes for Site Restoration, Detail 600D, on Erosion Control Detail Sheet.
- Spot elevations need to be placed along the west side of Basin 601P to fully contain the 932.5 HWL contour on Outlot A. Based on contours only the HWL appears to extend into County R/W.
- The maintenance access to Basin 601P Basin must be changed to 15 feet in width. The City must receive documentation indicating County approval for permanent access to this facility.
- The Temporary Sediment Basins 401P, 101P and within the 3rd Street Cul-de-sac, should be relocated outside of future street areas to avoid temporary soil saturation in these areas.
- Grading revisions should be made along the south side of Outlot B to improve drainage and grade from the localized low area within the 932 contour. Consider a second drainage outlet to CSAH 17 R/W.
- Additional swale grade appears necessary along the rear property lines of Lots 1, 2 and 3, Block 4.
- The Grading Detail plan sheet must be updated to include the City Standard Typical Sections for 5th Street and Residential Streets and the custom typical sections removed to avoid conflicting section details.
- The Temporary Access Road Section should be updated to reflect a minimum 22 foot pavement width with 2 foot gravel shoulders.
- See EOR review memorandum regarding design and construction of the iron enhanced sand filters.

STORM SEWER SYSTEM

- City Standard Plan Notes for Storm Sewer, from Detail 400A, must be included on each Storm Sewer Construction Plan Sheet.
- Storm sewer design calculations must be submitted as part of the construction plans to verify compliance with minimum and maximum pipe velocities and discharges.
- A localized low point is created on Laverne Avenue. Additional catch basin inlets should be considered to enhance drainage in this area above typical 10-year event inlet capacity.
- Increase the pipe size to 15-inch diameter from CBMH-124 to CBMH-123.
- Remove “Inspector” from Note 2.
- The plans must be revised to better clarify between the Phase 1 and Phase 2 storm sewer plans.

SANITARY SEWER AND WATERMAIN

- Watermain oversizing will be required to meet City wide distribution system demands. Watermain must be increased to 12-inch pipe diameter along 5th Street, then south along Laverne Avenue, then east along 3rd Street, then south along the stub to the south property line. A 12” x 12” cross should be installed at the intersection of 5th Street and Laverne Avenue. Watermain oversizing is paid by the City as a reimbursement addressed within the development agreement.
- Rename the “Sanitary Sewer Construction” Plan Sheets to include Watermain.
- City Standard Plan Notes for Watermain, from Detail 200A, and Sanitary Sewer, from Detail 300A, must be included on each Utility Plan Sheet.

- The plans must be revised to better clarify between the Phase 1 and Phase 2 sanitary sewer and watermain. Add a temporary hydrant at each watermain end point for system maintenance.
- Replace the air bleed valve on Sheet 2 with a temporary hydrant on the watermain stub to the southern property line.
- Insert an 12" x 8" Tee fitting with a bend fitting on Sheet 2 along the 3rd Street watermain as the watermain turns south along the trail.

STREET CONSTRUCTION

- Replace the Typical 60-foot ROW Street Section on Sheets 12-14 with the City Standard Typical Section to remove all discrepancies from City Standards.
- Provide Typical ROW Street Section for Laverne Avenue from 4th Street to 5th Street.
- The Temporary Access road must be a minimum 22-feet in width for the bituminous and signed "No Parking" along both sides of the road.
- Replace the Typical 100-foot ROW Street Section on Sheet 16 with the City Standard Typical Section to remove all discrepancies from City Standards. Adjust all other plan documents as necessary to conform with the City typical section for 5th Street.
- City Standard Plan Notes for Sidewalks and Trails, from Detail 500A, must be included on each Street and Trail Plan Sheet.
- A Signing, Pavement Marking and Lighting Plan must be completed and incorporated as part of the Street and Utility Construction Plans. City Standard Plan Notes for Signing, Pavement Marking and Lighting, from Detail 700A, must be included on each Street and Trail Plan Sheet.

PROJECT MANUAL / SPECIFICATIONS AND STANDARD DETAILS

- The City Standard Specifications must be included in the Project Manual as the governing specifications for the Improvements. The general requirements shall state the following: *"The City Standard Specifications shall apply to the work performed under this contract. Any supplemental specifications are intended to supplement the City Standard Specifications; however they do NOT supersede the City Standard Specifications, Details, Design Standards, or ordinances unless specific written approval has been provided by the City."*
- Any additional specifications for the project shall be clearly identified as "Supplemental Provisions" not "Special Provisions".
- The General Project Requirements shall be revised to be consistent with the City Standard Specifications for general project requirements, and the project requirements as specified in the Development Agreement.
- The Project Manual shall include City standard grading and erosion control specifications and be issued and used as part of the grading operations for the Project.
- Standard Plan Note Details 200A, 300A, 400A, 500A, 600A-600D, and 700A are to be placed on each applicable plan sheet and removed from the detail plan sheets.
- Add Standard Details 101, 102, 103, 105, 201, 203, 204, and 402 to the Detail Plan Sheets.

LANDSCAPE ARCHITECTURE INCORPORATED
WWW.LANDARCINC.COM

HUNTER'S CROSSING – DESIGN REVIEW REPORT
LAKE ELMO, MN

LANDSCAPE ARCHITECTURAL DESIGN REVIEW DATED SEPTEMBER 5TH, 2014

REVIEWED PLAN SET DATED AUGUST 8TH, 2014

Required Action Items by Hunter's Crossing Project Landscape Architect

1. The plan is **NOT** in compliance with the landscape requirements. Current drawing represents 575 caliper inches, required caliper inches is 784 assuming the street frontage, trees to be planted per acre as well as mitigation calculations provided are correct. City requirements are fair and reasonable therefore, one or a combination of the following recommendations must be met.
   Recommendations:
   - Revise design to preserve more existing trees. Therefore, reducing tree replacement requirements.
   - Add more landscape materials on-site to meet landscape requirements.
   - Increase caliper inches or height of trees already specified to comply with aggregate landscape requirements.
   - Plant remaining required plant materials in a nearby City Park per City staff direction to meet landscape requirements.

   (per tree preservation ordinance 154.257 8 a-d & landscape requirements 154.258)
2. 6 foot Evergreen Tree conversion to caliper inches = 2.5 inch deciduous shade tree if converted NOT 3 inch caliper inches as assumed on sheet L1.
3. Project Landscape Architect to provide landscape irrigation plans for all commonly held HOA & City R.O.W. areas.

SINCERELY,

LANDSCAPE ARCHITECTURE, INC.

STEPHEN MASTEY, ASLA, CLARB, LEED AP BD+C
DIRECTOR OF DESIGN

2350 BAYLESS PLACE• ST. PAUL, MN • 55114
PHONE: 651.646.1020 • EMAIL: STEPHEN@LANDARCINC.COM

Washington County

Public Works Department

Donald J. Theisen, P.E.
Director

Wayne H. Sandberg, P.E.
Deputy Director/County Engineer

September 2, 2014

Kyle Klatt
Community Development Director
City of Lake Elmo
3600 Laverne Avenue North
Lake Elmo, MN 55042

RE: Washington County comments on the Final Plat for Hunters Crossing residential development, City of Lake Elmo

Dear Mr. Klatt:

Thank you for providing the county with the final plat for the Hunters Crossing subdivision, in Section 34 ,Township 29N , Range 21W along County Road (CR) 17B/Lake Elmo Avenue in the City of Lake Elmo. The proposed plat consists of 22 residential lot and 5 outlots on 23.10 acres of land. Based on the plan provided, we have the following comments:

- The final plat submitted identifies 90 feet of right-of-way from the centerline of CR 17B. Although it is not the 92 feet required by the Washington County Comprehensive Plan 2040, this is an adequate amount. The County will be reevaluating the future right-of-way requirements along this section of roadway during the next Comprehensive plan update.

- The temporary access point on CR17 B is acceptable to the county on a short term/temporary basis. There is currently a right turn lane in place that can accommodate the north bound traffic. An access permit will be required for the temporary access.

- The developer or the city must submit the final drainage report and calculations to our office for review of any downstream impacts to the county drainage system. Along with the drainage calculations, we will request written conclusions that the volume and rate of stormwater run-off into the county right-of way will not increase as part of the project.

- Access control must be dedicated to Washington County along the CR 17B/Lake Elmo Avenue frontage.

- Although it may not be constructed during this phase, improvements to County Road (CR) 17B are required at the new 5th Street section. A Washington County Right-of-Way permit is required for the improvements which will include a northbound right turn lane and a southbound center left turn lane. A plan section will need to be prepared and approved by the county traffic engineer.

September 2,2014
Hunter's Crossing

- As noted previously, Washington County's policy is to assist local governments in promoting compatibility between land use and highways. Residential uses located adjacent to highways often result in complaints about traffic noise. Traffic noise from this highway could exceed noise standards established by the Minnesota Pollution Control Agency (MPCA), the U.S. Department of Housing and Urban Development, and the U.S. Department of Transportation. Minnesota Rule 7030.0030 states that municipalities are responsible for taking all reasonable measures to prevent land use activities listed in the MPCA's Noise Area Classification (NAC) where the establishment of the land use would result in violations of established noise standards. Minnesota Statute 116.07, Subpart 2a exempts County Roads and County State Aid Highways from noise thresholds. County policy regarding development adjacent to existing highways prohibits the expenditure of highway funds for noise mitigation measures in such areas. The developer should assess the noise situation and take any action outside of County right of way deemed necessary to minimize the impact of any highway noise.

- Any grading within County right of way will require a Washington County Right of Way Permit.

- All utility connections for the development require Washington County Right of Way permits. Typically, these are the responsibility of the utility companies.

Thank you for the opportunity to comment on this concept plan. If you have any questions, please contact me at 651-430-4362 or ann.pung-terwedo@co.washington.mn.us

Regards,

Ann Pung-Terwedo
Senior Planner

Cc: Carol Hanson, Office Specialist

R/Plat Reviews/City of Lake Elmo/Hunters Crossing

July 31, 2014

Tracey Rust
Ryland Homes
7599 Anagram Drive
Eden Prairie, MM 55344

Re: Hunters Crossing—Lake Elmo, Minnesota
VBWD Permit #2014-10

Dear Ms. Rust:

Enclosed is the Valley Branch Watershed District (VBWD) permit for your project. Please note the following conditions imposed by the Managers, which are also listed on the back of the permit.

1. 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. The maintenance agreement shall include the inspection and maintenance of the iron-enhanced sand filters.

2. Prior to construction, the required surety shall be submitted. This permit is not valid until the permit fee and surety are submitted.

3. The Hunters Crossing permit applicant must obtain permission to perform any and all proposed work on land not owned by the applicant.

4. This permit is not transferable.

5. This permit is subject to obtaining all other permits required by governmental agencies having jurisdiction (including a NPDES permit).

6. The VBWD Engineer and Inspector shall be notified at least 3 days prior to commencement of work.

7. 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.

DAVID BUCHECK • LINCOLN FETCHER • DALE BORASH • JILL LUCAS • EDWARD MARCHAN

VALLEY BRANCH WATERSHED DISTRICT • P.O. BOX 838 • LAKE ELMO, MINNESOTA 55042-0538
www.vbwd.org

8. The following additional erosion controls shall be implemented on the site:

    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. 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.

9. 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.

10. All disturbed areas shall be vegetated within 14 days of final grading.

11. 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.

12. Valley Branch Watershed District shall be granted drainage easements which cover: (a) land adjacent to stormwater management facilities and lowlands up to their 100-year flood elevations and (b) all ditches, storm sewers, and maintenance access to the stormwater management facilities.

13. The required drainage easements and access easements shall be recorded with the Washington County Recorder's Office.

14. 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.

15. Return or allowed expiration of any remaining surety and permit close out 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.

Thank you for your cooperation with the District's permit program.

Sincerely,

Lincoln Fetcher, Vice President
Valley Branch Watershed District

LF/ymh
Enclosure
c: Ray Marshall, VBWD Attorney
Ray Roemmich, VBWD Inspector
Molly Shodeen, MDNR
Kyle Klatt, City Planning Director—City of Lake Elmo
Jack Griffin, City Engineer, FOCUS Engineering—City of Lake Elmo
Building Inspector—City of Lake Elmo
Nathan Landucci, Owner
Nathan Campbell, Corps of Engineers
Brad Johnson, MDNR
Jed Chesnut, Washington Conservation District
Brooke Haworth MDNR
Ben Meyer, Minnesota Board of Water and Soil Resources
Karen Wold, Barr Engineering Company
Yvonne Huffman, Barr Engineering Company

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VALLEY BRANCH WATERSHED DISTRICT
PERMIT APPLICATION

TO BE COMPLETED BY VBWD:
PERMIT NUMBER 2014-10
PERMIT FEE RECEIVED $8,111.54
DATE RECEIVED May 8, 2014

Return application to
John Hanson
Barr Engineering Company
Engineers for the Valley Branch Watershed District
4700 West 77th Street
Edina, MN 55435-4803

A permit fee shall accompany this permit, unless waived by the Board of Managers. (Governmental Bodies are not required to pay a fee.)

Project Information	Applicant Information
Name of Project: Hunters Crossing	Name: Tracey Rust Ryland Homes
Purpose of Project: Residential Development	Address: 7599 Anagram Drive
Project Location (street address, if known; otherwise, major intersection): 404 Lake Elmo Ave N	City, State, Zip: Eden Prairie 55344
City or Township: Lake Elmo	Phone: 952 229 6063
Legal Description (proof of ownership required): PID: 3602921320002 Section: 36 Township: 29 Range: 21	Fax:
Project Timeline: Start Date: July 1, 2014 Completion Date: Nov 30 2016	Email: trust@ryland.com
Authorized Agent Information	**Owner Information** **(If different than Applicant)**
Name:	Name: Nathan Landucci
Business Name:	Address: 13230 20th St. Ct. N.
Address:	City, State, Zip: Stillwater MN 55082
City, State, Zip:	Phone: 651 894 2582
Phone:	Fax: 651-342-1049
Fax:	Email: LANDUCNL@hotmail.com
Email:	

Once a Valley Branch Watershed District permit has been approved, the permit conditions will attached to the back of this form.

By signing this permit application, the permit applicant, his/her agent, and owner (hereinafter "Permittee") shall abide by all the conditions set by the Valley Branch Watershed District (VBWD). All work which violates the terms of the permit by reason of presenting a serious threat of soil erosion, sedimentation, or an adverse effect upon water quality or quantity, or violating any rule of the VBWD may result in the VBWD issuing a Stop Work Order which shall immediately cause the work on the project related to the permit to cease and desist. All work on the project shall cease until the permit conditions are met and approved by the VBWD representatives. In the event Permittee contests the Stop Work Order issued by the VBWD, Permittee shall attend a VBWD Board of Managers meeting and discuss the project. Any attorney fees, costs, or other expenses incurred on behalf of the VBWD in enforcing the terms of the permit shall be the sole expense of the permit applicant. Costs shall be payable from the permit applicant's permit fee. If said fees exceed the permit amount, the Permittee shall have ten (10) days from the date of receipt of the invoice from the VBWD to pay for the cost incurred in enforcing the permit, by which to pay the VBWD for said costs. If costs are not paid within the ten (10) days, the VBWD will draw on the permit applicant's surety. The Permittee agrees to be bound by the terms of the final permit and conditions required by the VBWD for approval of the permit. The permit applicant further acknowledges that he/she has the authority to bind the owner of the property and/or any entity performing the work on the property pursuant to the terms of the VBWD permit, and shall be responsible for complying with the terms of the VBWD permit.

Signatures (Required):

Tracey L Rust 5/7/14 — 5/6/14 (Nathan Landucci)

Applicant/Date | **Owner (If different than Applicant)/Date** | **Owner's Authorized Agent/Date**

LINCOLN FETCHER • DAVID BUCHECK • DONALD SCHEEL • DALE BORASH • RAY LUCKSINGER

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

August 28, 2014

After review of the FINAL PLAT – HUNTER'S CROSSING, I have one area of concern and that is the "temporary access". I want to ensure that it will handle fire apparatus and is wide enough to allow two way traffic when we use it.

Hydrant spacing seems to be well within our guidelines and I was very pleased to see hydrants on 5th St. as they will be very beneficial.

Reviewed by

Greg Malmquist, Fire Chief

HUNTERS CROSSING

KNOW ALL PERSONS BY THESE PRESENTS: That The Ryland Group, Inc., a Maryland Corporation, owner of the following described property:

The Northwest Quarter of the Southwest Quarter of Section 36, Township 29 North, Range 21 West, Washington County, Minnesota, lying southerly of the following described "Line X":

Commencing at the West Quarter corner of said Section 36; thence South 00 degrees 02 minutes 54 seconds West, orientation of bearing system is assumed along the west line of said Northwest Quarter of the Southwest Quarter, a distance of 474.06 feet to the south line of North 474.06 feet of said Northwest Quarter of the Southwest Quarter; thence continuing along said west line, South 00 degrees 02 minutes 54 seconds West, a distance of 161.15 feet to the point of beginning of "Line X"; thence North 89 degrees 48 minutes 29 seconds East a distance of 406.17 feet; thence North 00 degrees 02 minutes 54 seconds East a distance of 161.15 feet, to the said south line of the North 474.06 feet; thence North 89 degrees 48 minutes 29 seconds East, along said south line, a distance of 912.76 feet to the east line of said Northwest Quarter of the Southwest Quarter of said "line X" there terminating.

EXCEPT that part of said Northwest Quarter of the Southwest Quarter described as follows:

Beginning at the southwest corner of said Northwest Quarter of the Southwest Quarter; thence East along the south line of said Northwest Quarter of the Southwest Quarter a distance of 16 Rods; thence North along a line parallel with the west line of said Northwest Quarter of the Southwest Quarter a distance of 10 rods; thence West on a line parallel with the south line of said Northwest Quarter of the Southwest Quarter a distance of 16 rods to said west line; thence South along said west line a distance of 10 rods to the point of beginning.

Has caused the same to be surveyed and platted as HUNTERS CROSSING and does hereby dedicate to the public for public use the public ways and the drainage and utility easements as created by this plat.

In witness whereof said The Ryland Group, Inc., a Maryland Corporation, has caused these presents to be signed by its proper officer this _____ day of _____ , 20_____ .

The Ryland Group, Inc., a Maryland Corporation

_____

_____ its _____

STATE OF MINNESOTA
COUNTY OF _____

This instrument was acknowledged before me on this _____ , by _____ its _____ of The Ryland Group, Inc., a Maryland Corporation, on behalf of the company.

_____

_____

Notary Public, _____

My Commission Expires _____

SURVEYOR'S CERTIFICATE

I Peter J. Hawkinson do hereby certify that this plat was prepared by me or under my direct supervision; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on this plat have been set, or will be correctly set within one year; that all water boundaries and wet lands, as defined in Minnesota Statutes, Section 505.01, Subd. 3, as of the date of this certificate are shown and labeled on this plat; and all public ways are shown and labeled on this plat.

Dated this _____ day of _____ 20_____ .

_____

Peter J. Hawkinson, Licensed Land Surveyor
Minnesota License No. 42299

STATE OF MINNESOTA
COUNTY OF _____

This instrument was acknowledged before me on this _____ , by Peter J. Hawkinson, Licensed Land Surveyor.

_____

_____

Notary Public, _____

My Commission Expires _____

CITY COUNCIL, Lake Elmo, Minnesota

This plat was approved by the City Council of the City of Lake Elmo, Minnesota, this _____ day of _____ , 20____ , and hereby certifies compliance with all requirements as set forth in Section 505.03, Subd. 2, Minnesota Statutes.

By: _____ Mayor

By: _____ Clerk

COUNTY SURVEYOR, Washington County, Minnesota

Pursuant to Chapter 820, Laws of Minnesota, 1971, and in accordance with Minnesota Statutes, Section 505.021, Subd. 11, this plat has been reviewed and approved this _____ day of _____ , 20_____ .

By: _____ Washington County Surveyor

By: _____

COUNTY AUDITOR/TREASURER, Washington County, Minnesota

Pursuant to Minnesota Statutes, Section 505.021, Subd. 9., taxes payable in the year 20_____ on the real estate hereinbefore described have been paid. Also, pursuant to Minnesota Statutes, Section 272.12, there are no delinquent taxes, and transfer entered on this _____ day of _____ , 20_____ .

By: _____ Washington County Auditor/Treasurer

By: _____ Deputy

COUNTY RECORDER, Washington County, Minnesota

Document Number _____

I hereby certify that this instrument was recorded in the Office of the County Recorder for record on this _____ day of _____ , 20_____ , at ____ o'clock ____ .M. and was duly recorded in Washington County Records.

By: _____ Washington County Recorder

By: _____ Deputy

PIONEERengineering, P.A.
CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS LANDSCAPE ARCHITECTS

HUNTERS CROSSING

W 1/4 CORNER OF SEC. 36, TWP. 29, RGE. 21 (WASHINGTON CO. CIM)

N LINE OF THE NW 1/4 OF THE SW 1/4

474.06 S00°02'54"W

W LINE OF THE NW 1/4 OF THE SW 1/4

5TH STREET N

S LINE OF THE N 474.06 FEET OF THE NW 1/4 OF THE SW 1/4.

S89°48'29"W 912.76

N89°48'29"E 406.17

LINE "X"

OUTLOT B

S00°02'54"W 161.15

DRAINAGE AND UTILITY EASEMENT OVER ALL OF OUTLOT B

COMMONWEALTH

DRAINAGE AND UTILITY EASEMENT

AVENUE N.

4TH STREET N.

N89°50'50"E 300.88

426.43

125.55

S89°50'50"W 121.65

OUTLOT A

DRAINAGE AND UTILITY EASEMENT OVER ALL OF OUTLOT A

OUTLOT D

DRAINAGE AND UTILITY EASEMENT OVER ALL OF OUTLOT D

LANGLY AVENUE N.

LAVERNE

A CONDOMINIUM

(CSAH 17) LAKE ELMO AVENUE NORTH

S00°02'54"W 518.71

THE WOODLANDS OF FOREST PLACE NO. 3RD

(CSAH 17) LAKE ELMO AVENUE NORTH

OUTLOT E

DRAINAGE AND UTILITY EASEMENT OVER ALL OF OUTLOT E

OUTLOT C

DRAINAGE AND UTILITY EASEMENT OVER ALL OF OUTLOT C

COUNTRY AIR GOLF

EXCEPTION

LINE PARALLEL WITH THE SOUTH LINE OF THE NW 1/4 OF THE SW 1/4

N89°50'50"E 264.00 (16 RODS)

LINE PARALLEL WITH THE EAST LINE OF THE NW 1/4 OF THE SW 1/4

S00°02'54"W 165.00 (10 RODS)

SW CORNER OF THE NW 1/4 OF THE SW 1/4

S00°02'54"W 1318.93

SW CORNER OF SEC. 36, TWP. 29, RGE. 21 (WASHINGTON CO. CIM)

S LINE OF THE NW 1/4 OF THE SW 1/4

764.89

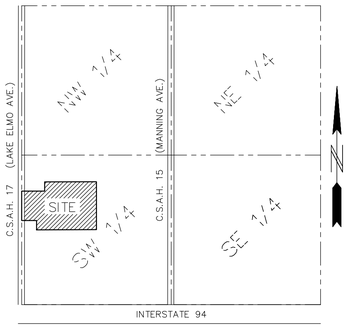
N89°50'50"E 1055.96

291.07

N00°01'17"W 532.05

E LINE OF THE NW 1/4 OF THE SW 1/4

845.77



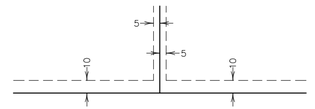
SECTION 36, TWP. 29, RGE. 21

LOCATION MAP
NO SCALE

60 30 0 60

Scale in Feet

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:



Being 5 feet in width, and adjoining lot lines unless otherwise indicated, and 10 feet in width and adjoining right of way lines and rear lot lines unless otherwise indicated and shown on the plat.

ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE WEST LINE OF THE SW 1/4 LINE OF SEC. 36, TWP. 29, RGE. 21, WHICH IS ASSUMED TO HAVE A BEARING OF SOUTH 00°02'54" WEST.

- ◉ DENOTES FOUND CAST IRON MONUMENT
- ○ DENOTES 1/2 INCH BY 14 INCH IRON PIPE MONUMENT SET AND MARKED BY LICENSE NO. 42299, OR WILL BE SET IN ACCORDANCE WITH MS 505.021, SUBD. 10.
- ● DENOTES FOUND 1/2 INCH IRON MONUMENT MARKED BY LICENSE NUMBER 42299 UNLESS OTHERWISE NOTED.

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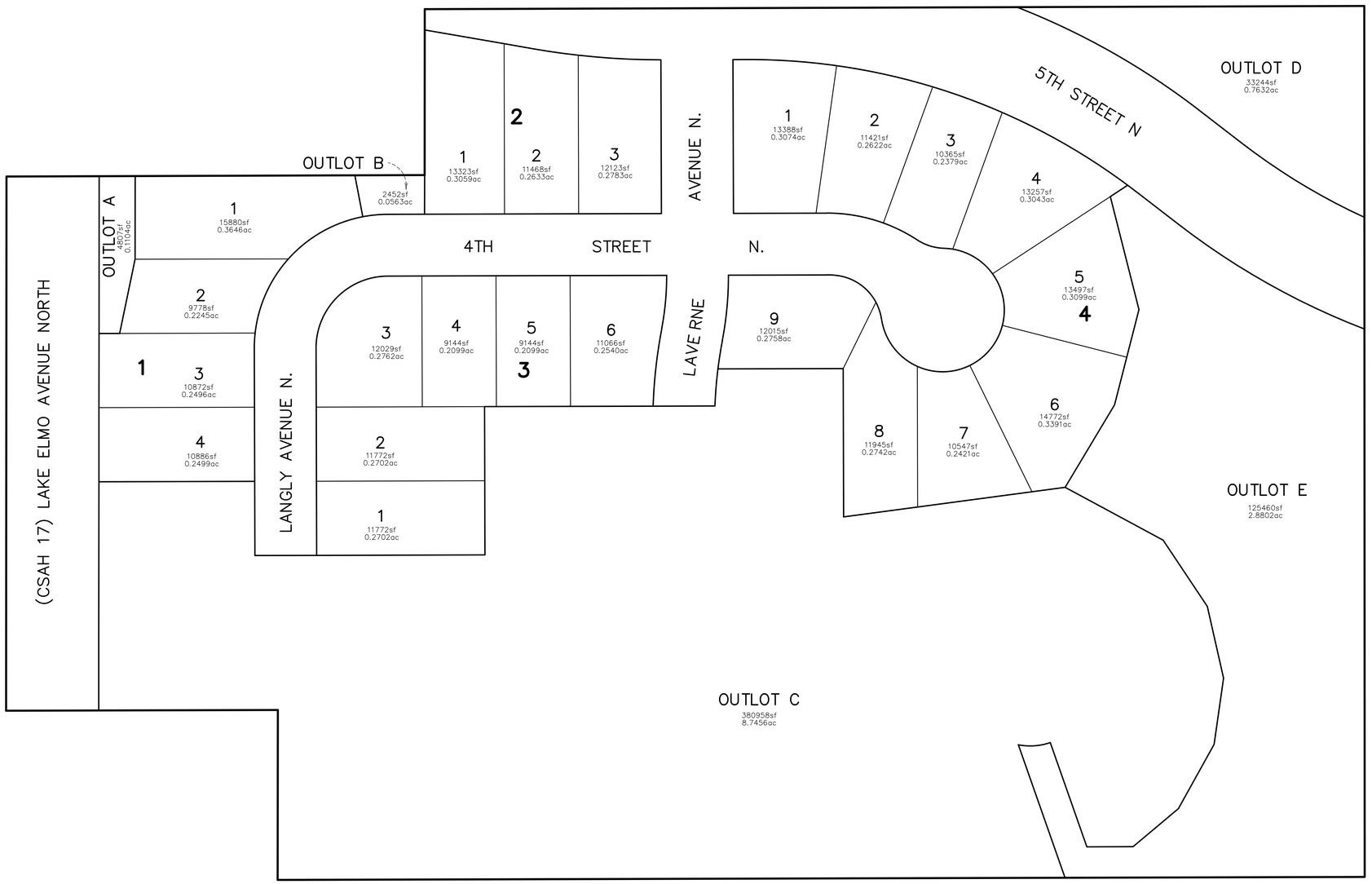
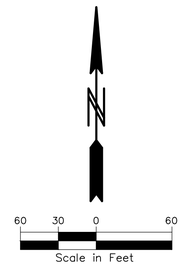
HUNTERS CROSSING

AREA SKETCH





AREA SUMMARY

BLOCK 1 =	47,416	SF.	1.0886 AC.
BLOCK 2 =	36,914	SF.	0.8475 AC.
BLOCK 3 =	64,927	SF.	1.4904 AC.
BLOCK 4 =	111,207	SF.	2.5529 AC.
TOTAL LOT AREA =	260,464	SF.	5.9794 AC.
TOTAL OUTLOT AREA =	546,921	SF.	12.5557 AC.
TOTAL R/W AREA =	198,942	SF.	4.5671 AC.
TOTAL AREA =	1,006,327	SF.	23.1022 AC.

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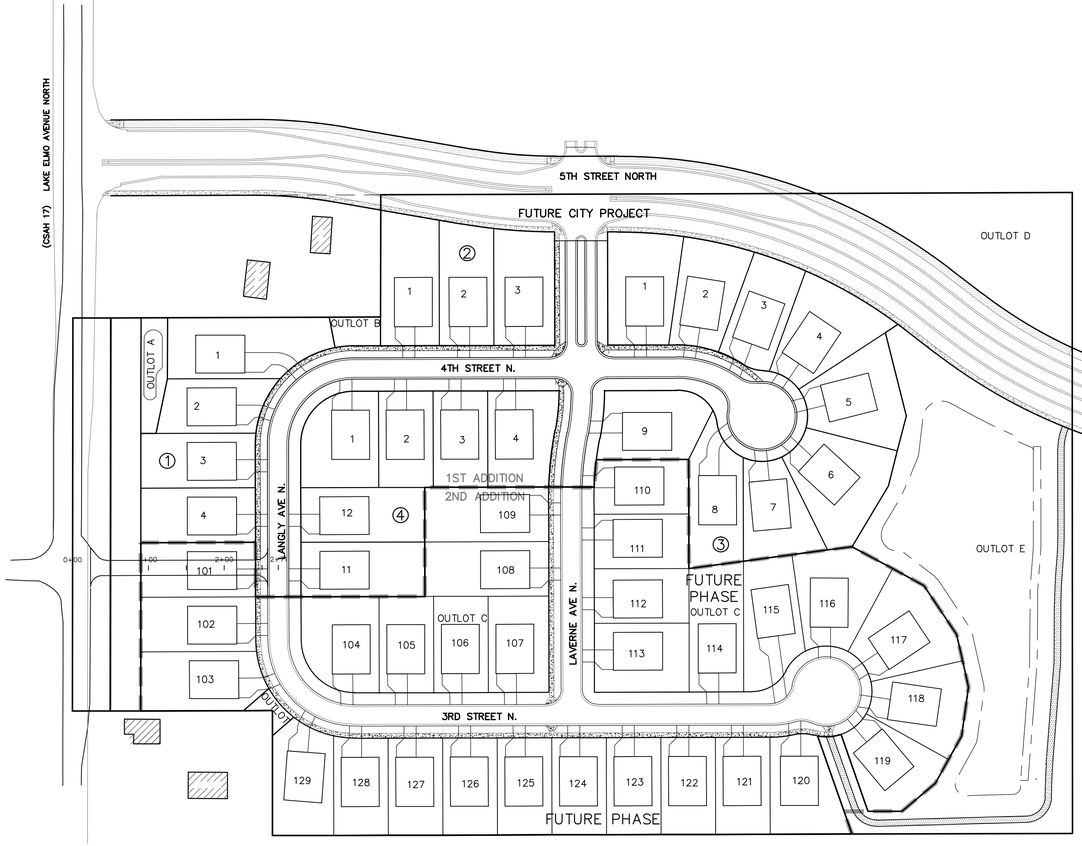
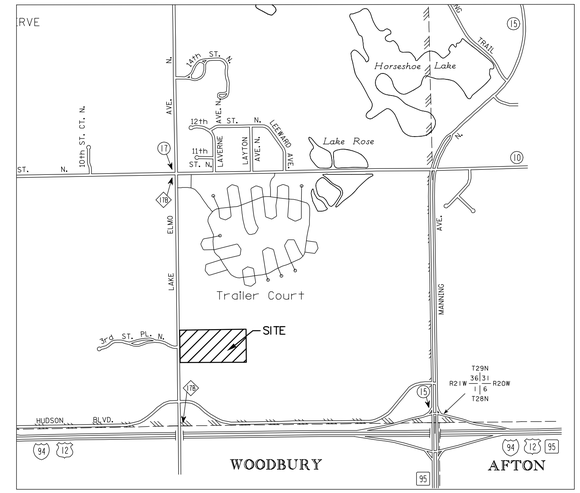
HUNTERS CROSSING
FINAL GRADING PLAN
LAKE ELMO, MINNESOTA

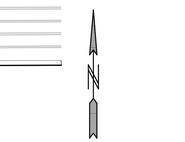
LEGEND

EXISTING	PROPOSED	FUTURE	DESCRIPTION
○	●	◎	SANITARY MANHOLE
			EXISTING SANITARY SEWER
			PROPOSED SANITARY SEWER
			FUTURE SANITARY SEWER
			HYDRANT
			GATE VALVE
			REDUCER
			EXISTING WATERMAIN
			PROPOSED WATERMAIN
			FUTURE WATERMAIN
			CATCH BASIN
			BEEHIVE
			STORM MANHOLE
			FLARED END SECTION
			CONTROL STRUCTURE
			EXISTING STORM SEWER
			PROPOSED STORM SEWER
			FUTURE STORM SEWER
			SURMOUNTABLE CURB & GUTTER
			B-STYLE CURB & GUTTER
			RIBBON CURB & GUTTER
			PHASE LINE
			EASEMENT LINE
			EXISTING 2' CONTOUR LINE
			EXISTING 10' CONTOUR LINE
			PROPOSED 2' CONTOUR LINE
			PROPOSED 10' CONTOUR LINE
			POND OUTLET LINE
			POND HIGH WATER LINE
			PROPOSED SPOT ELEVATION
			EMERGENCY OVERFLOW
			DELINEATED WETLAND LINE
			FEMA FLOODPLAIN BOUNDARY
			STANDARD EROSION CONTROL
			HEAVY-DUTY EROSION CONTROL
			TREE FENCE
			RETAINING WALL
			CONSERVATION AREA SIGN
			WETLAND BUFFER SIGN
			EX. CULVERT
			EX. OVERHEAD UTILITY LINES
			EX. UNDERGROUND TELEVISION LINE
			EX. UNDERGROUND TELEPHONE LINE
			EX. UNDERGROUND FIBER OPTIC LINE
			EX. UNDERGROUND ELECTRIC LINE
			EX. UNDERGROUND GAS LINE
			EX. FENCE (BARBED WIRE)
			EX. FENCE (CHAIN LINK)
			EX. FENCE (WOOD)
			EX. CAST IRON MONUMENT
			EX. ELECTRIC BOX
			EX. FLAG POLE
			EX. NATURAL GAS METER
			EX. HAND HOLE
			EX. FOUND IRON PIPE
			EX. JUDICIAL LAND MARK
			EX. LIGHT POLE
			EX. PK NAIL
			EX. UTILITY POLE
			EX. LAWN SPRINKLER VALVE
			EX. LAWN SPRINKLER HEAD
			EX. SEMAPHORE
			EX. SERVICE
			EX. TELEPHONE BOX
			EX. TEST HOLE
			EX. TELEVISION BOX
			EX. WATER WELL
			EX. MONITORING WELL
			EX. MAILBOX
			EX. CONTROL POINT
			EX. SPIKE
			EX. SIGN
			EX. CLEANOUT
			EX. SIGNIFICANT TREE
			EX. TREE LINE
			EX. GRAVEL SURFACE
			EX. BITUMINOUS SURFACE
			EX. CONCRETE SURFACE
			SELECT BACKFILL MATERIAL
			GRAVEL CONST. ENTRANCE





LOCATION MAP



GRAPHIC SCALE IN FEET

BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)

SHEET INDEX

1. COVER SHEET
2-5. GRADING AND DRAINAGE PLAN
6. EROSION CONTROL PLAN
7. SEEDING PLAN
8-10. DETAILS

SETBACK REQUIREMENTS

LDR STANDARDS:
FRONT SETBACK: 25'
REAR YARD SETBACK: 20'
SIDE SETBACK: 10' LIVING SPACE, 5' GARAGE
CORNER SIDE SETBACK: 15'
MINIMUM LOT WIDTH: 60'
MINIMUM LOT AREA: 8,000 SF
MAXIMUM BUILDING COVERAGE: 40%

BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)

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Name Paul J. Cheme
Reg. No. 19860 Date 07-28-2014

Revisions

Date	07-28-2014
Designed	PJC/KAW
Drawn	KAW/AJR

COVER SHEET

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

1 OF 10

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0 25 50 100

GRAPHIC SCALE IN FEET

* PERIMETER DRAINTILE REQUIRED

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

SETBACK REQUIREMENTS
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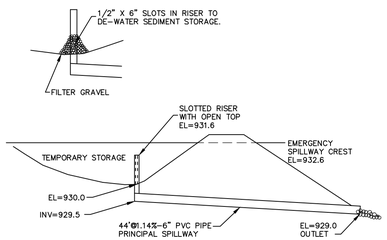
CORNER SIDE SETBACK: 15'
MINIMUM LOT WIDTH: 60'
MINIMUM LOT AREA: 8,000 SF
MAXIMUM BUILDING COVERAGE: 40%

20' REAR SETBACK



TEMPORARY SEDIMENT BASIN OUTLET WEST 5TH STREET
(TYPICAL SECTION NOT TO SCALE)

LAKE ELMO AVENUE NORTH (CSAH 17)

SLOTTED RISER W/6" OUTLET (SEE DETAIL)

TEMP BASIN 401P
OUTLET=930.0, 6" RISER
HWL=930.9
WET VOL.=NA AC*FT
STOR. VOL.=0.271 AC*FT

5TH STREET NORTH

FUTURE CITY UTILITY AND STREET PROJECT

BERM TO DIVERT OVERFLOW NORTH

BASIN 601P
OUTLET=932.1, 10' WEIR
HWL=932.50
WET VOL.=NA AC*FT
STOR. VOL.=.052 AC*FT

OUTLOT B

BASIN ACCESS

SAND FILTER ELEV: 931.5
SAND FILTER AREA: 265 SF
HOLD DOWN 18" FOR FUTURE FILTRATION MEDIA

4TH STREET NORTH

LANGLEY AVE

LAVERNE AVE

1ST ADDITION TO HUNTERS CROSSING

2ND ADDITION TO HUNTERS CROSSING

GRADE IMPROVED DRAINAGE SWALE @ 2.0%

OUTLOT D

OUTLOT E
STORMWATER BASIN 1P

TEMP OUTL

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Drawn	KAW/AJR

GRADING AND DRAINAGE PLAN

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

2 OF 10

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* PERIMETER DRAINTILE REQUIRED

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

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FRONT SETBACK: 25'
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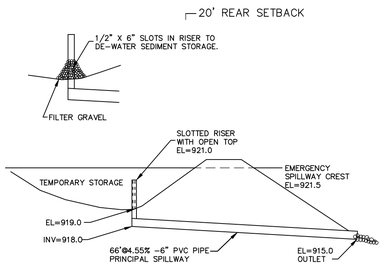
SIDE SETBACK: 10' LIVING SPACE, 5' GARAGE
CORNER SIDE SETBACK: 15'
MINIMUM LOT WIDTH: 60'
MINIMUM LOT AREA: 8,000 SF
MAXIMUM BUILDING COVERAGE: 40%



TEMPORARY SEDIMENT BASIN OUTLET EAST 5TH STREET
(TYPICAL SECTION NOT TO SCALE)

FUTURE CITY UTILITY AND STREET PROJECT

OUTLOT D

TEMP BASIN 101P
OUTLET=919.0, 4" RISER

BUILDING
1ST FLOOR EL=916.9

BLDG FLOOR ELEV = 916.9

BASIN ACCESS 8% SLOPE MAX.

BERM TO DIVERT OVERFLOW TO BASIN 1P

SLOTTED RISER W/6" OUTLET (SEE DETAIL)

5TH STREET NORTH

TH STREET N

FUTURE CITY PROJECT

LAVERNE LN

GRADE TEMPORARY DRAINAGE SWALE @ 2.0%

OUTLOT E
STORMWATER BASIN 1P

5TH STREET NORTH IMPACT
3,285 SF
BITUMINOUS TRAIL IMPACT
475 SF
POND IMPACT
8,442 SF
TOTAL IMPACT
12,202 SF

EX. WETLAND AREA
12,202 SF

BASIN 1P
OUTLET=915.50, 24" ORIFICE
HWL=918.3
WET VOL.=6.700 AC*FT
STOR. VOL.=5.548 AC*FT

GRAPHIC SCALE IN FEET
0 25 50 100

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Drawn	KAW/AJR

GRADING AND DRAINAGE PLAN

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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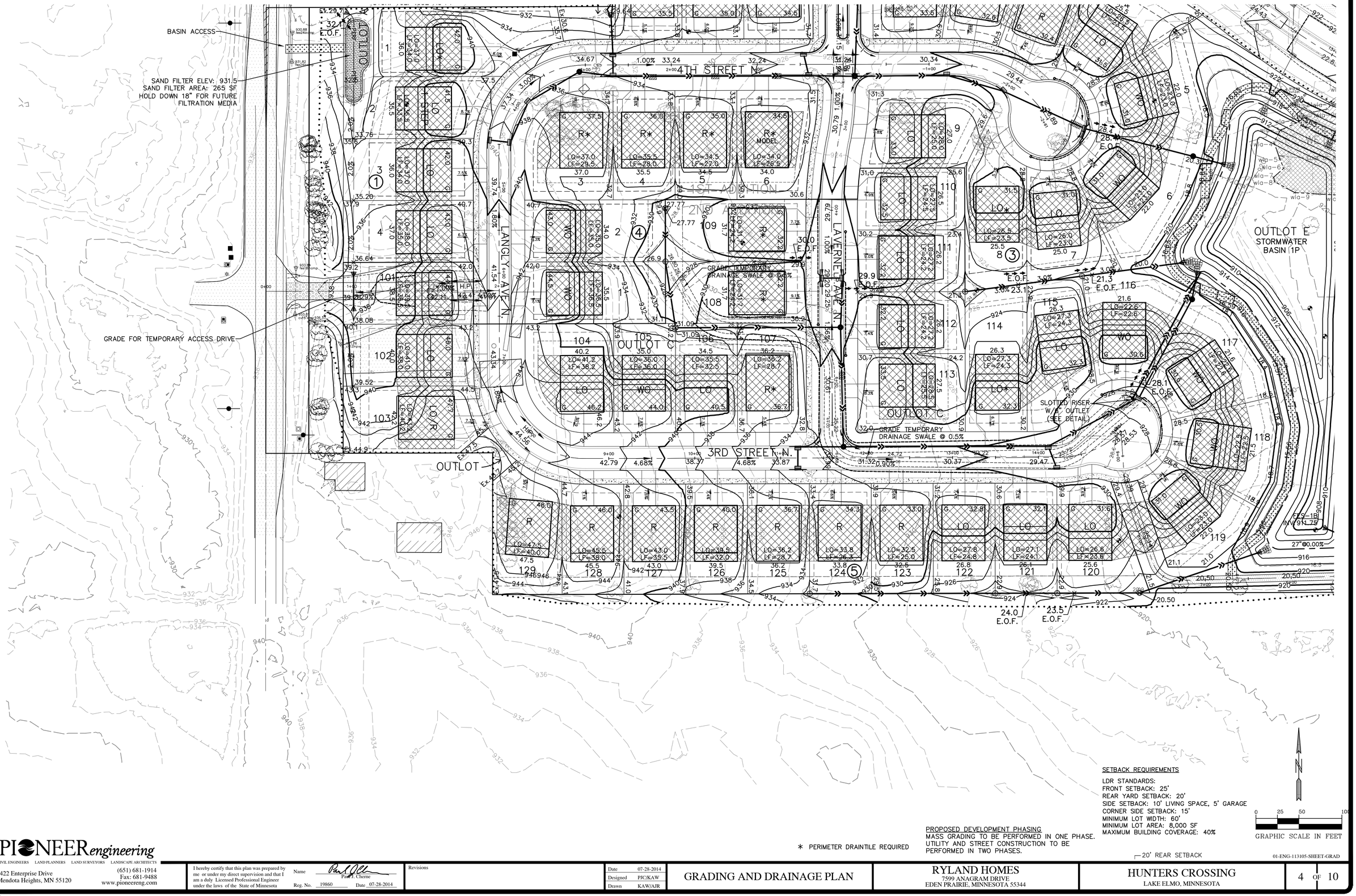

SETBACK REQUIREMENTS

LDR STANDARDS:
FRONT SETBACK: 25'
REAR YARD SETBACK: 20'
SIDE SETBACK: 10' LIVING SPACE, 5' GARAGE
CORNER SIDE SETBACK: 15'
MINIMUM LOT WIDTH: 60'
MINIMUM LOT AREA: 8,000 SF
MAXIMUM BUILDING COVERAGE: 40%

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

20' REAR SETBACK

GRAPHIC SCALE IN FEET
0 25 50 100

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GRADING AND DRAINAGE PLAN

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

4 OF 10

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* PERIMETER DRAINTILE REQUIRED

BASIN ACCESS 8% SLOPE MAX.

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

TEMP BASIN 101P
OUTLET=919.0, 4" RISER

BERM TO DIVERT OVERFLOW TO BASIN 1P

SLOTTED RISER W/6" OUTLET (SEE DETAIL)

5TH STREET NORTH

FUTURE CITY PROJECT

5TH STREET NORTH IMPACT
3,285 SF
BITUMINOUS TRAIL IMPACT
475 SF
POND IMPACT
8,442 SF
TOTAL IMPACT
12,202 SF

EX. WETLAND AREA
12,202 SF

OUTLOT E
STORMWATER
BASIN 1P

BASIN 1P
OUTLET=915.50, 24" ORIFICE
HWL=918.3
WET VOL.=6.700 AC*FT
STOR. VOL.=5.548 AC*FT

SAND FILTER ELEV: 915.0
SAND FILTER AREA: 4,405 SF
HOLD DOWN 18" FOR FUTURE FILTRATION MEDIA

CS-1 (SEE DETAIL SHEET 6)
RIM: 918.30
BLD: 6.55
INV IN: 911.75 27" RCP CL3
INV IN: 913.50 4" HDPE DT
INV OUT: 913.24 24" RCP CL3

FES-1A
INV: 913.00

4TH STREET N.

3RD STREET N.

LAVERNE LAVE N.

1ST ADDITION

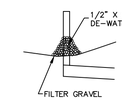
2ND ADDITION

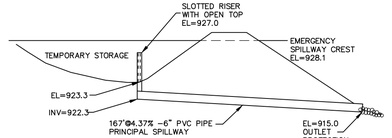
OUTLOT C

SLOTTED RISER W/6" OUTLET (SEE DETAIL)

GRADE TEMPORARY DRAINAGE SWALE @ 0.5%

GRADE TEMPORARY DRAINAGE SWALE @ 1.0%





TEMPORARY SEDIMENT BASIN OUTLET 3RD STREET SAC
(TYPICAL SECTION NOT TO SCALE)

SETBACK REQUIREMENTS

LDR STANDARDS:
FRONT SETBACK: 25'
REAR YARD SETBACK: 20'
SIDE SETBACK: 10' LIVING SPACE, 5' GARAGE
CORNER SIDE SETBACK: 15'
MINIMUM LOT WIDTH: 60'
MINIMUM LOT AREA: 8,000 SF
MAXIMUM BUILDING COVERAGE: 40%

0 25 50 100
GRAPHIC SCALE IN FEET

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GRADING AND DRAINAGE PLAN

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EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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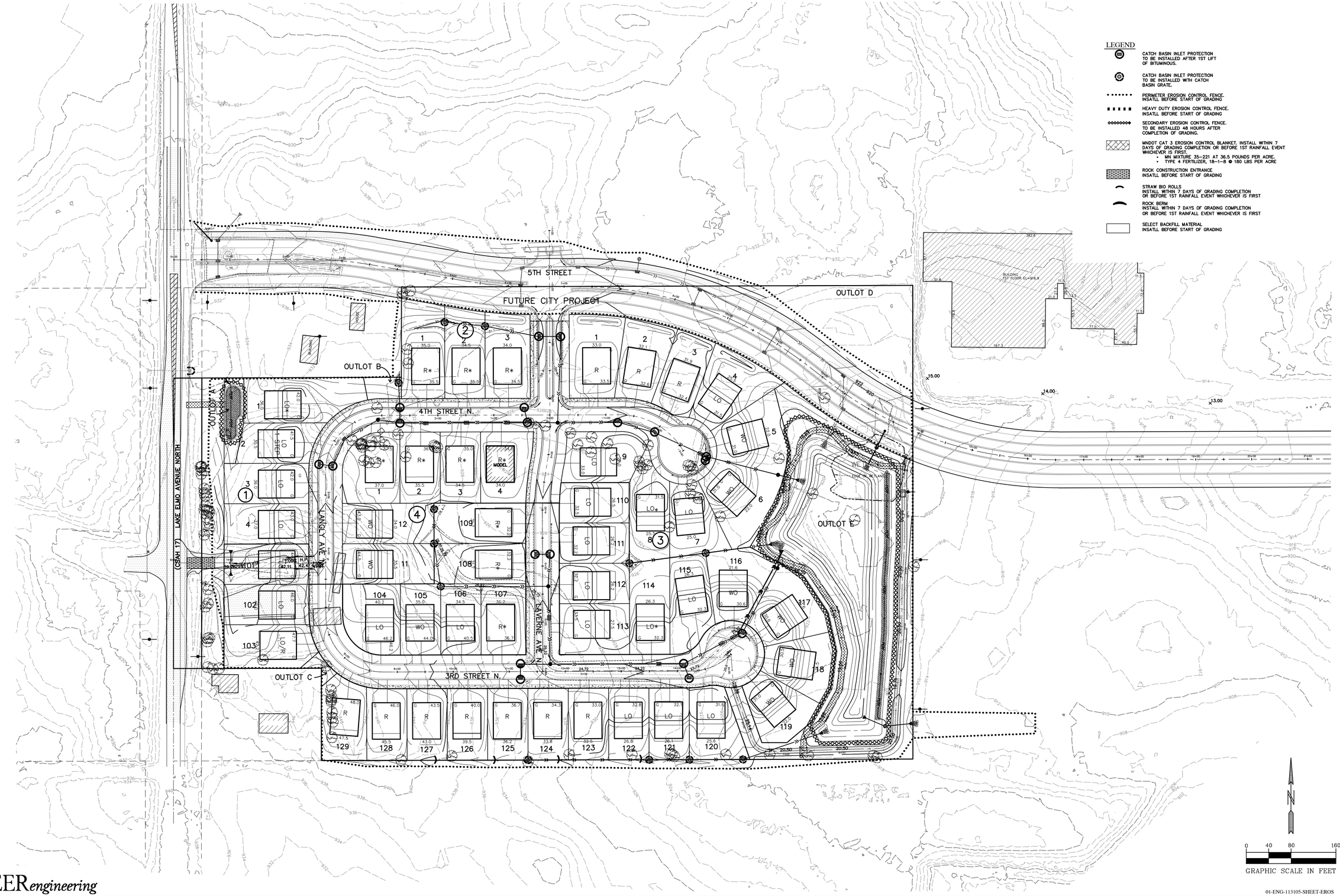

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EROSION CONTROL PLAN

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

6 OF 10

01-ENG-113105-SHEET-EROS

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SEEDING NOTES:
TEMPORARY SEED AND PERMANENT TURF RESTORATION SHALL BE DONE IN ACCORDANCE TO MNDOT 2575 & 3876.

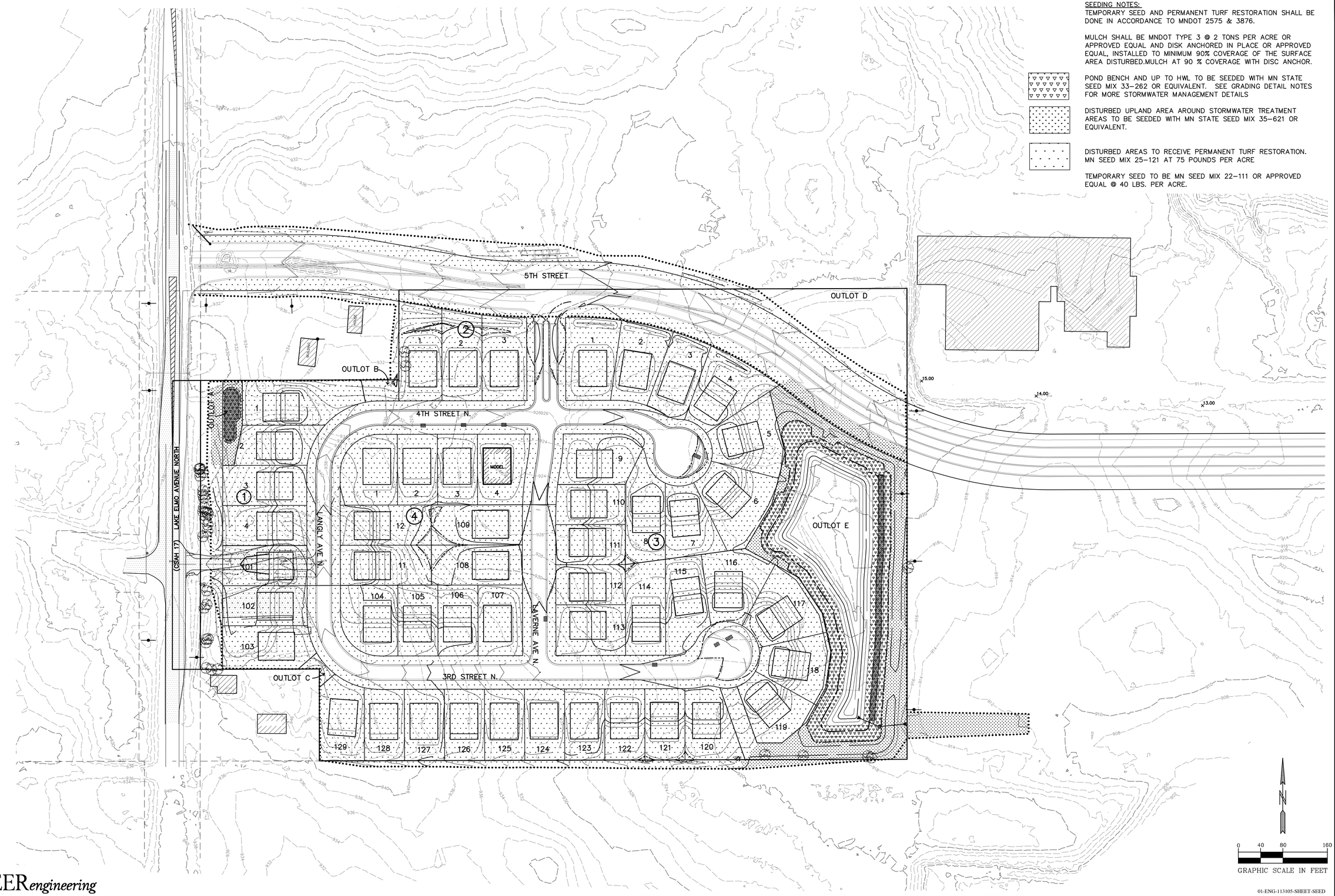
MULCH SHALL BE MNDOT TYPE 3 @ 2 TONS PER ACRE OR APPROVED EQUAL AND DISK ANCHORED IN PLACE OR APPROVED EQUAL, INSTALLED TO MINIMUM 90% COVERAGE OF THE SURFACE AREA DISTURBED.MULCH AT 90 % COVERAGE WITH DISC ANCHOR.

POND BENCH AND UP TO HWL TO BE SEEDED WITH MN STATE SEED MIX 33-262 OR EQUIVALENT. SEE GRADING DETAIL NOTES FOR MORE STORMWATER MANAGEMENT DETAILS

DISTURBED UPLAND AREA AROUND STORMWATER TREATMENT AREAS TO BE SEEDED WITH MN STATE SEED MIX 35-621 OR EQUIVALENT.

DISTURBED AREAS TO RECEIVE PERMANENT TURF RESTORATION. MN SEED MIX 25-121 AT 75 POUNDS PER ACRE

TEMPORARY SEED TO BE MN SEED MIX 22-111 OR APPROVED EQUAL @ 40 LBS. PER ACRE.



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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 Paul J. Cherne
Reg. No. 19860 Date 07-28-2014

Revisions

Date	07-28-2014
Designed	PJC/KAW
Drawn	KAW/AJR

SEEDING PLAN

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

7 OF 10

01-ENG-113105-SHEET-SEED

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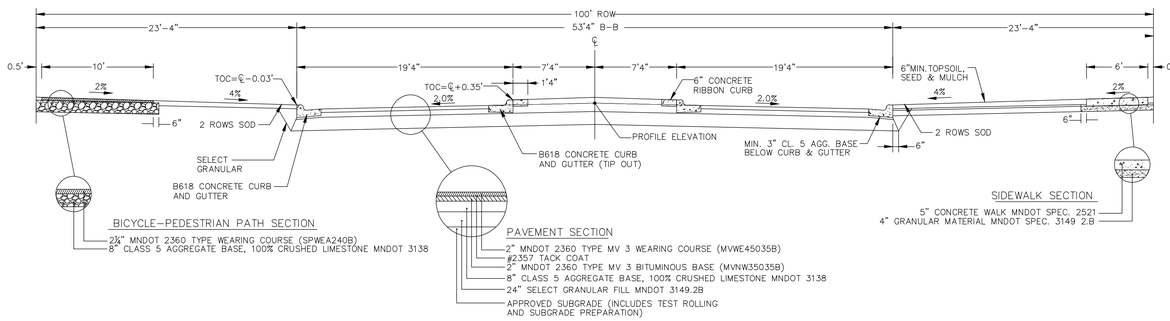
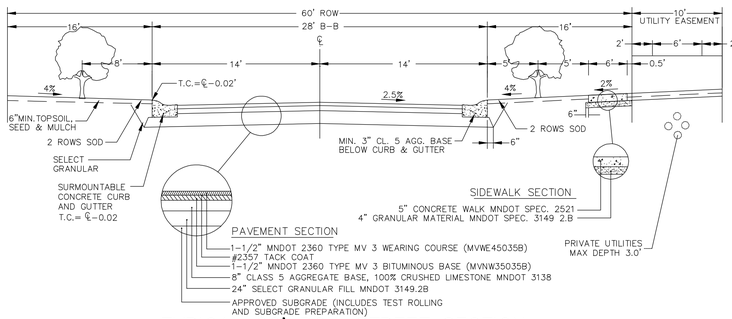


TYPICAL 100' ROW STREET SECTION

TYPICAL SECTION (N.T.S.)

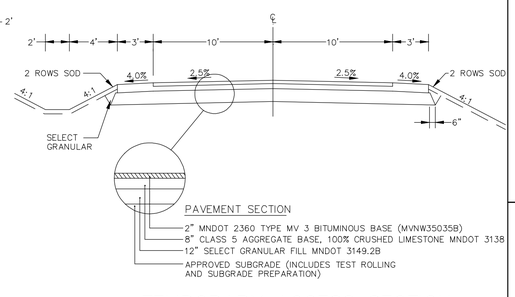
SEE LAKE ELMO STANDARD DRAWING NO 801 & 805



TYPICAL 60' ROW STREET SECTION

TYPICAL SECTION (N.T.S.)

SEE LAKE ELMO STANDARD DRAWINGS NO 801 & 805

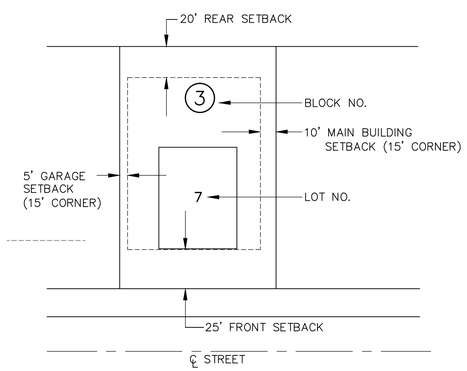


TEMPORARY ACCESS SECTION

TYPICAL SECTION (N.T.S.)

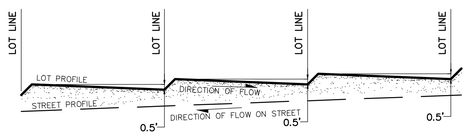
SETBACK REQUIREMENTS

LDR STANDARDS:
FRONT SETBACK: 25'
REAR YARD SETBACK: 20'
SIDE SETBACK: 10' LIVING SPACE, 5' GARAGE
CORNER SIDE SETBACK: 15'
MINIMUM LOT WIDTH: 60'
MINIMUM LOT AREA: 8,000 SF
MAXIMUM BUILDING COVERAGE: 40%



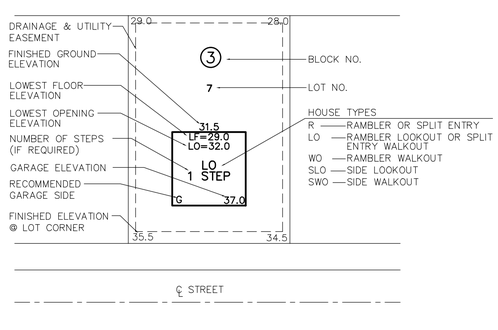
LOT SETBACK DETAIL

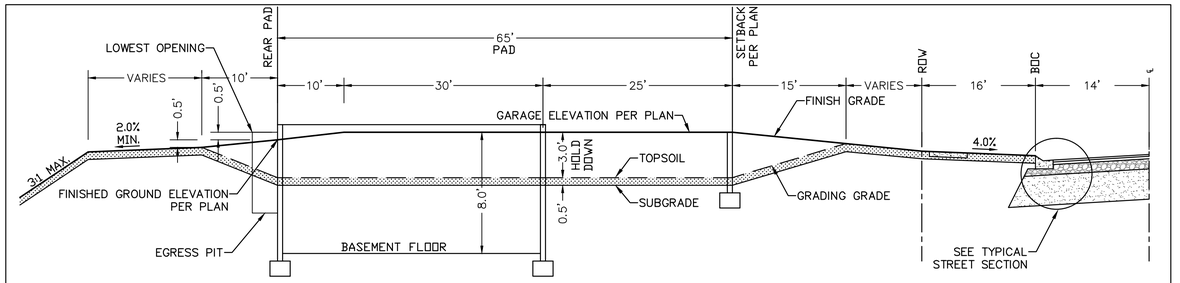
(TYPICAL SECTION NOT TO SCALE)



LOT BENCHING DETAIL

NO SCALE





RAMBLER

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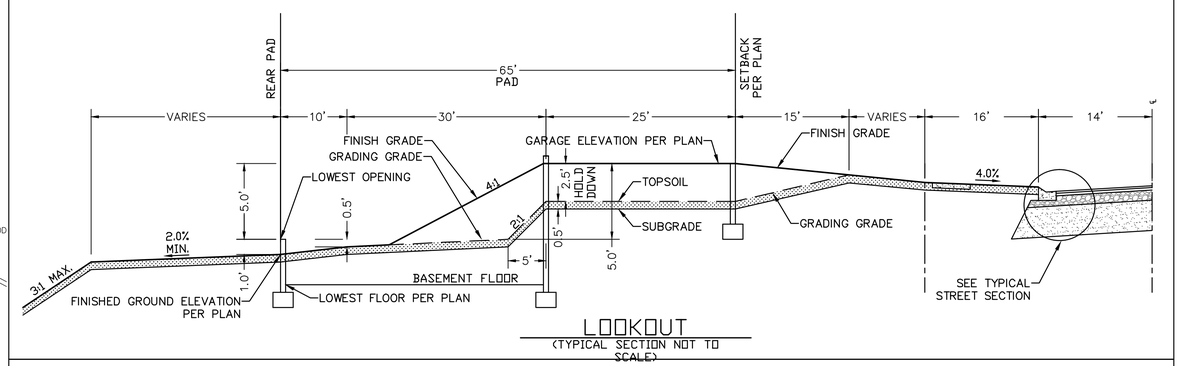
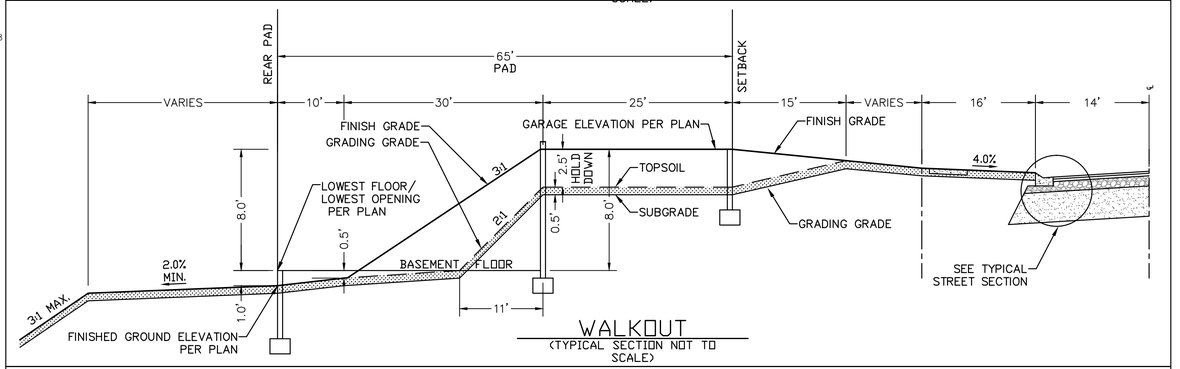


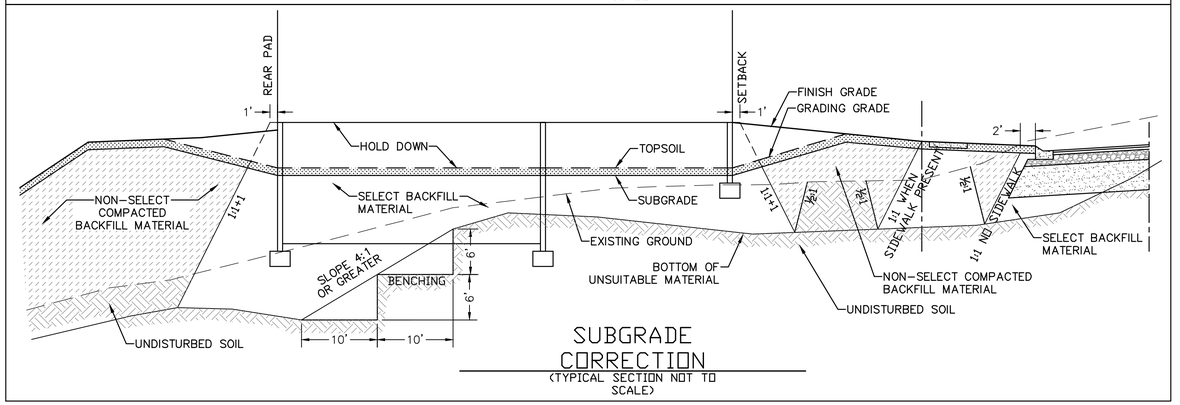
LOOKOUT

(TYPICAL SECTION NOT TO SCALE)



WALKOUT

(TYPICAL SECTION NOT TO SCALE)



SUBGRADE CORRECTION

(TYPICAL SECTION NOT TO SCALE)

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Reg. No. 19860 Date 07-28-2014

Revisions

Date	07-28-2014
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GRADING DETAILS

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HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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

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

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

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

5. INLET PROTECTION. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL EXISTING STORM SEWER INLETS IN ACCORDANCE WITH THE CITY STANDARD DETAILS. INLET PROTECTION SHALL ALSO BE PROVIDED ON ALL PROPOSED STORM SEWER INLETS IMMEDIATELY FOLLOWING CONSTRUCTION OF THE INLET. INLET PROTECTION MUST BE INSTALLED IN A MANNER THAT WILL NOT IMPOUND WATER FOR EXTENDED PERIODS OF TIME OR IN A MANNER THAT PRESENTS A HAZARD TO VEHICULAR OR PEDESTRIAN TRAFFIC.

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

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

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

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

STANDARD PLAN NOTES

GRADING AND EROSION CONTROL PLANS

FEBRUARY 2013

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

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

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

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

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

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

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

STANDARD PLAN NOTES

GRADING AND EROSION CONTOL PLANS

FEBRUARY 2013

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

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

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

STANDARD PLAN NOTES

GRADING AND EROSION CONTOL PLANS

FEBRUARY 2013

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

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

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

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

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

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

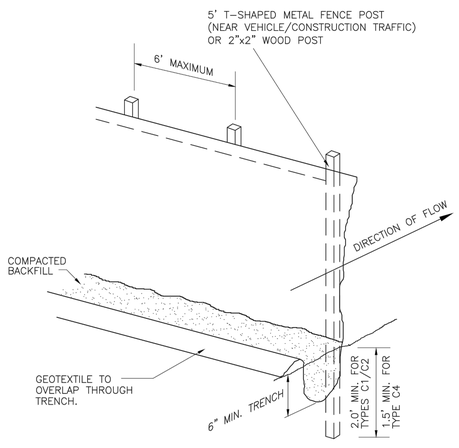
6. BOULEVARD AND DITCH RESTORATION INCLUDES FINE GRADING, WHICH INCLUDES THE REMOVAL OF ROCKS, DEBRIS AND SOIL CHUNKS, WHILE MAINTAINING POSITIVE DRAINAGE.

STANDARD PLAN NOTES

SITE RESTORATION PLANS

FEBRUARY 2013

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

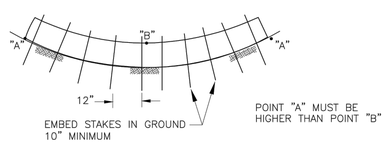


NOTE : -SILT FENCE INSTALLATION SHALL CONFORM TO MNDOT2573.3, TYPE C1/C2 NEAR VEHICLE/CONSTRUCTION TRAFFIC, TYPE C4 AT ALL OTHER LOCATIONS.
-MATERIALS SHALL CONFORM TO MNDOT 3886.

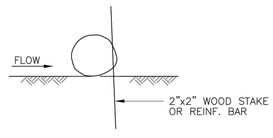
SILT FENCE

FEBRUARY 2013

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



DITCH SECTION



FIBER ROLL SECTION

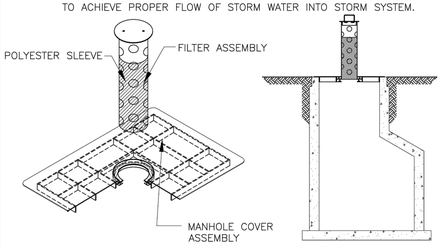
NOTE:
STAKE TO BE INSTALLED AT AN ANGLE OF APPROXIMATELY 45° ON THE DOWNSTREAM SIDE OF THE FIBER ROLL. ENSURE THAT STAKE DOES NOT PUSH DOWN THE FIBER ROLL FROM ITS FULL HEIGHT.

DITCH CHECK (FIBER ROLL)

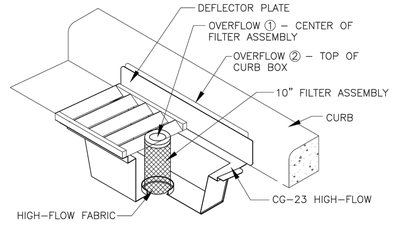
FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 603 LAKE ELMO

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



WIMCO RD-23 OR APPROVED EQUAL

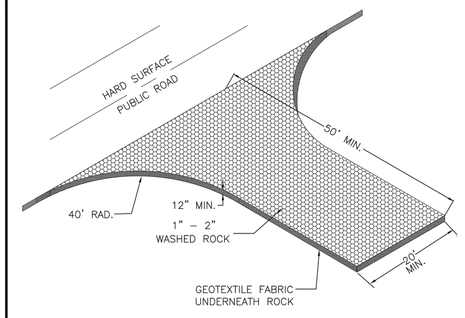


WIMCO CG-23 HIGH-FLOW OR APPROVED EQUAL

SEDIMENT CONTROL AROUND STORM SEWER INLET

FEBRUARY 2013

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



NOTES:

① MAXIMUM WIDTH OF CONSTRUCTION ENTRANCE IS 24 FEET.

② A MNDOT 3733 TYPE V GEOTEXTILE FABRIC SHALL BE USED UNDER THE ROCK TO PREVENT MIGRATION OF THE UNDERLYING SOIL INTO THE STONE.

③ CONSTRUCTION ENTRANCE IS REQUIRED FOR ALL NEW HOME CONSTRUCTION AND NEW STREET CONSTRUCTION.

④ CONSTRUCTION ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OF MUD ONTO ROADWAYS THAT ADJOIN THE PROJECT. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL ROCK OR REMOVAL AND REINSTALLATION OF THE ROCK ENTRANCE.

⑤ REMOVE MUD AND DEBRIS FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.

ROCK CONSTRUCTION ENTRANCE

FEBRUARY 2013

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Name Paul J. Cherne
Reg. No. 19860 Date 07-28-2014

Revisions

Date	07-28-2014
Designed	PJC/KAW
Drawn	KAW/AJR

EROSION CONTROL DETAILS

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HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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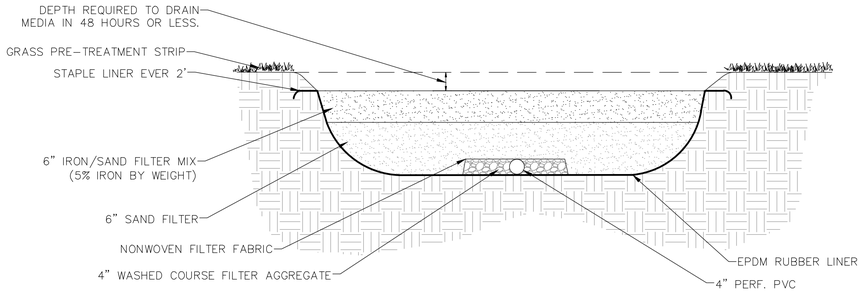
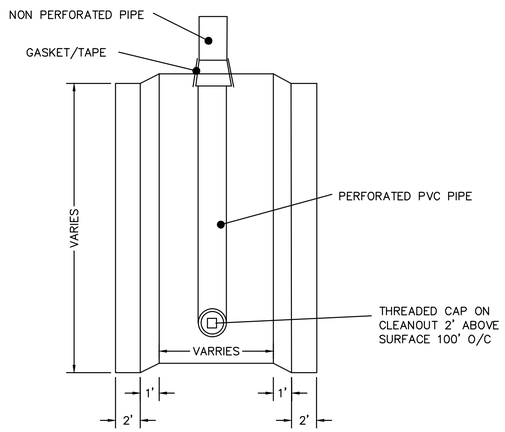
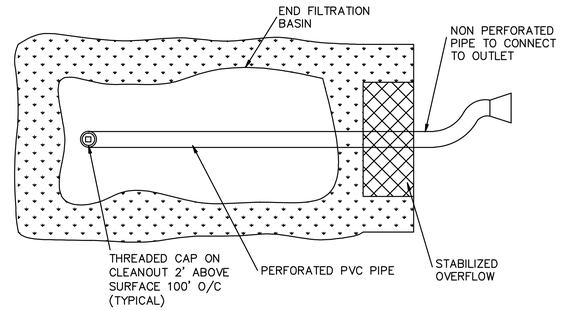




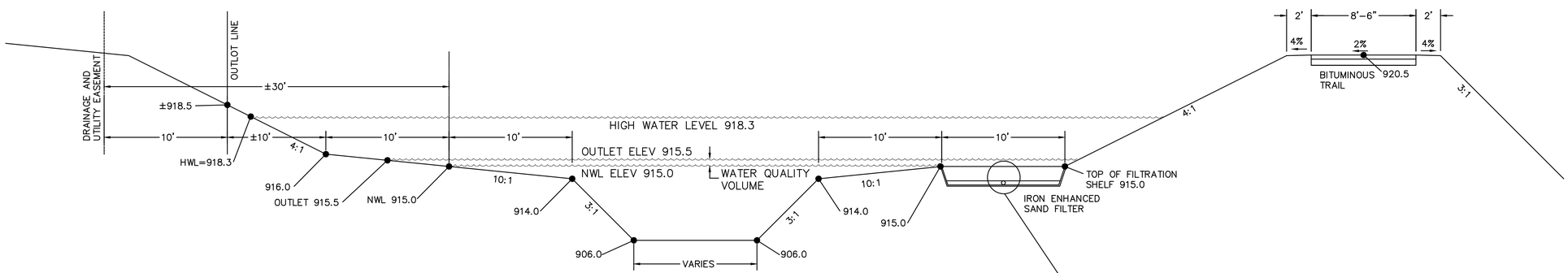
TOP VIEW

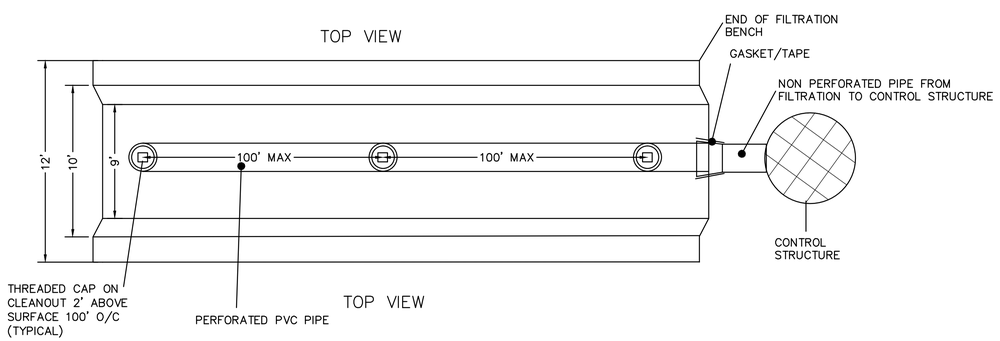


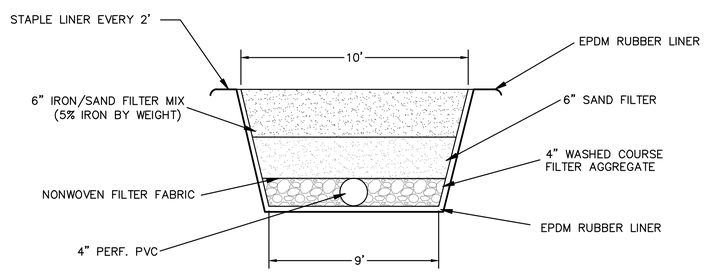
INSTALLATION OF IRON ENHANCED SAND FILTER NOT IN CONTRACT

BASIN WITH IRON ENHANCED SAND FILTER SECTION (OUTLOT A)

N.T.S.







INSTALLATION OF IRON ENHANCED SAND FILTER NOT IN CONTRACT

POND SECTION WITH IRON ENHANCED SAND FILTER (OUTLOT E)

N.T.S.

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HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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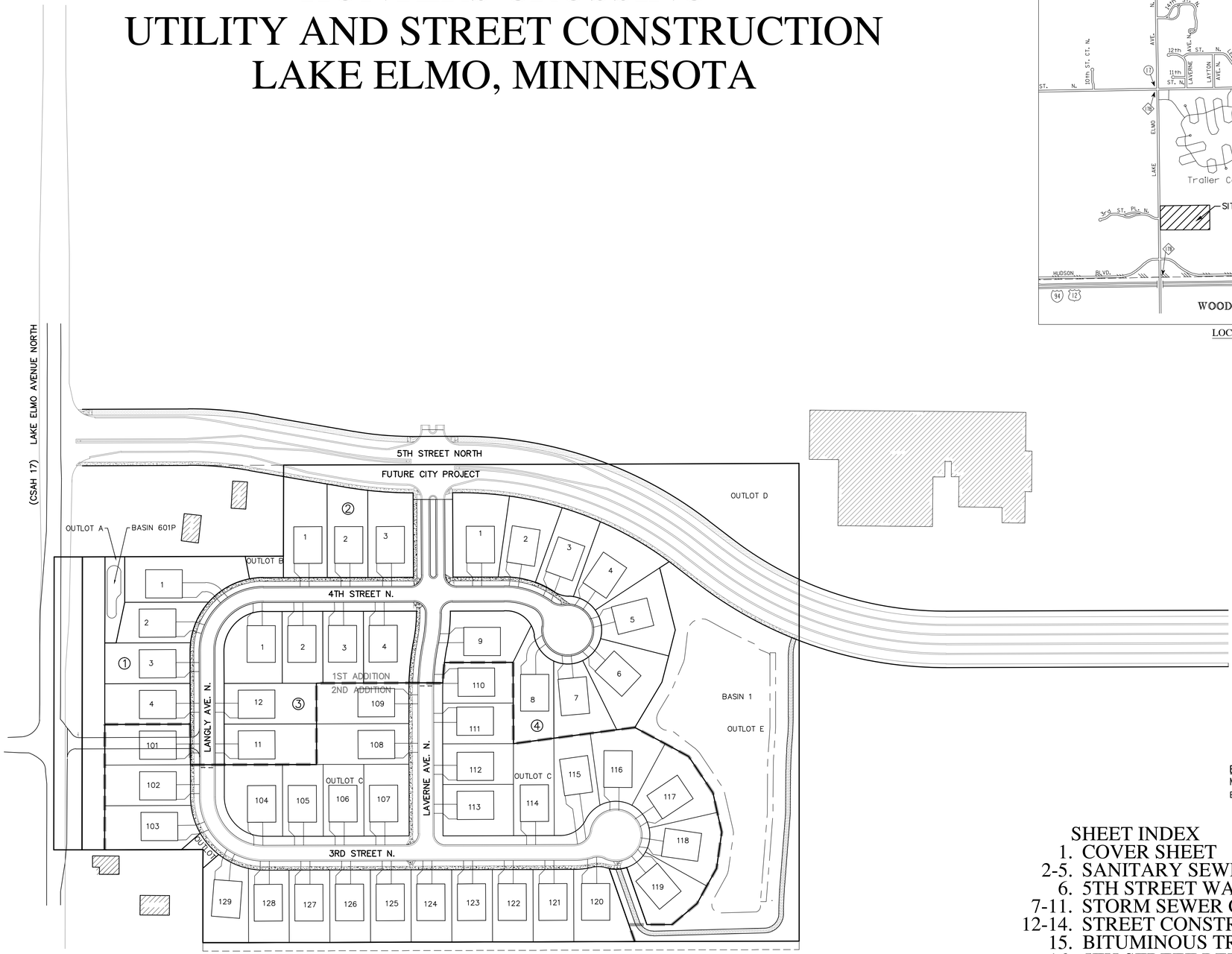
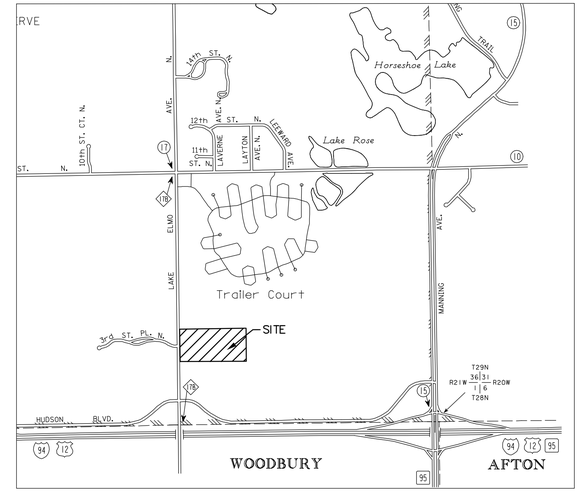
HUNTERS CROSSING
UTILITY AND STREET CONSTRUCTION
LAKE ELMO, MINNESOTA

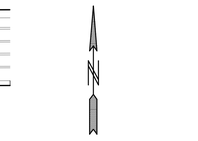
LEGEND

EXISTING	PROPOSED	FUTURE	DESCRIPTION
○	●	◎	SANITARY MANHOLE
			EXISTING SANITARY SEWER
			PROPOSED SANITARY SEWER
			FUTURE SANITARY SEWER
			HYDRANT
			GATE VALVE
			REDUCER
			EXISTING WATERMAIN
			PROPOSED WATERMAIN
			FUTURE WATERMAIN
			CATCH BASIN
			BEEHIVE
			STORM MANHOLE
			FLARED END SECTION
			CONTROL STRUCTURE
			EXISTING STORM SEWER
			PROPOSED STORM SEWER
			FUTURE STORM SEWER
			SURMOUNTABLE CURB & GUTTER
			B-STYLE CURB & GUTTER
			RIBBON CURB & GUTTER
			PHASE LINE
			EASEMENT LINE
			EXISTING 2' CONTOUR LINE
			EXISTING 10' CONTOUR LINE
			PROPOSED 2' CONTOUR LINE
			PROPOSED 10' CONTOUR LINE
			POND OUTLET LINE
			POND HIGH WATER LINE
			PROPOSED SPOT ELEVATION
			EMERGENCY OVERFLOW
			DELINEATED WETLAND LINE
			FEMA FLOODPLAIN BOUNDARY
			STANDARD EROSION CONTROL
			HEAVY-DUTY EROSION CONTROL
			TREE FENCE
			RETAINING WALL
			CONSERVATION AREA SIGN
			WETLAND BUFFER SIGN
			EX. CULVERT
			EX. OVERHEAD UTILITY LINES
			EX. UNDERGROUND TELEVISION LINE
			EX. UNDERGROUND TELEPHONE LINE
			EX. UNDERGROUND FIBER OPTIC LINE
			EX. UNDERGROUND ELECTRIC LINE
			EX. UNDERGROUND GAS LINE
			EX. FENCE (BARBED WIRE)
			EX. FENCE (CHAIN LINK)
			EX. FENCE (WOOD)
			EX. CAST IRON MONUMENT
			EX. ELECTRIC BOX
			EX. FLAG POLE
			EX. NATURAL GAS METER
			EX. HAND HOLE
			EX. FOUND IRON PIPE
			EX. JUDICIAL LAND MARK
			EX. LIGHT POLE
			EX. PK NAIL
			EX. UTILITY POLE
			EX. LAWN SPRINKLER VALVE
			EX. LAWN SPRINKLER HEAD
			EX. SEMAPHORE
			EX. SERVICE
			EX. TELEPHONE BOX
			EX. TEST HOLE
			EX. TELEVISION BOX
			EX. WATER WELL
			EX. MONITORING WELL
			EX. MAILBOX
			EX. CONTROL POINT
			EX. SPIKE
			EX. SIGN
			EX. CLEANOUT
			EX. SIGNIFICANT TREE
			EX. TREE LINE
			EX. GRAVEL SURFACE
			EX. BITUMINOUS SURFACE
			EX. CONCRETE SURFACE
			SELECT BACKFILL MATERIAL
			GRAVEL CONST. ENTRANCE





LOCATION MAP



GRAPHIC SCALE IN FEET

BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)

SHEET INDEX

1. COVER SHEET
2-5. SANITARY SEWER & WATERMAIN
6. 5TH STREET WATERMAIN
7-11. STORM SEWER CONSTRUCTION
12-14. STREET CONSTRUCTION
15. BITUMINOUS TRAIL CONSTRUCTION
16. 5TH STREET REFERENCE SHEET
17-22. CITY DETAILS
23. IRON ENHANCED SAND FILTER PLAN

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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 Paul J. Cherne
Reg. No. 19860 Date 08-06-2014

Revisions

Date	08-06-2014
Designed	PJC/KAW
Drawn	KAW/AJR

COVER SHEET

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

01-ENG-113105-SHEET-COVR-UTIL

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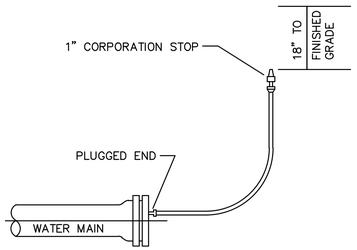
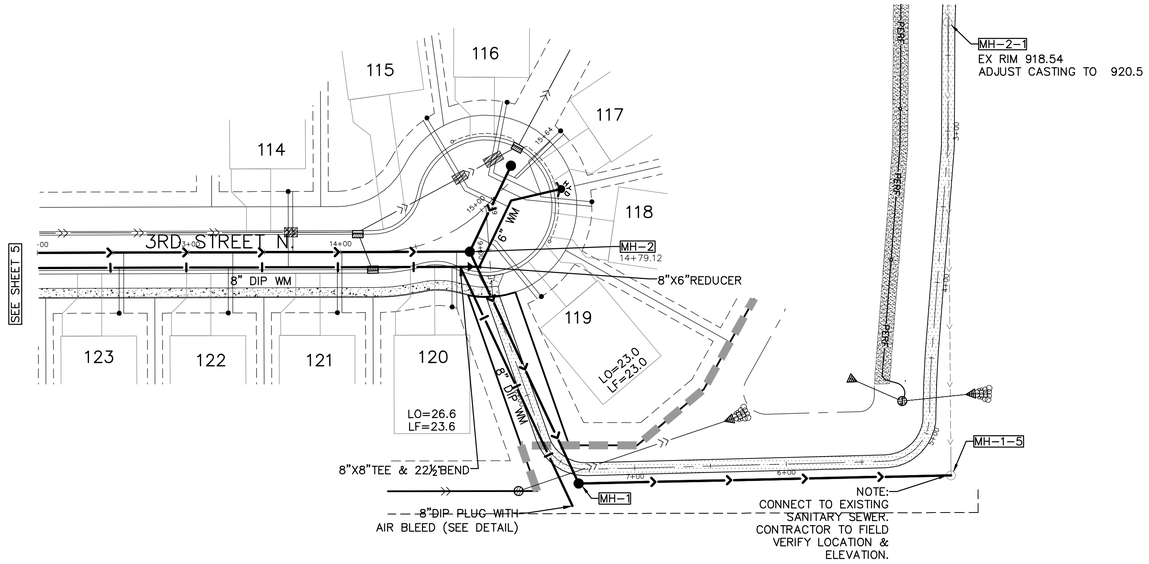


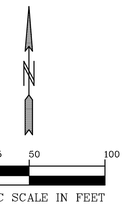
AFTER MEETING TEST REQUIREMENTS THE AIR BLEED LINE SHALL BE DISCONNECTED AT THE PLUG WITH NO ADDITIONAL COMPENSATION.

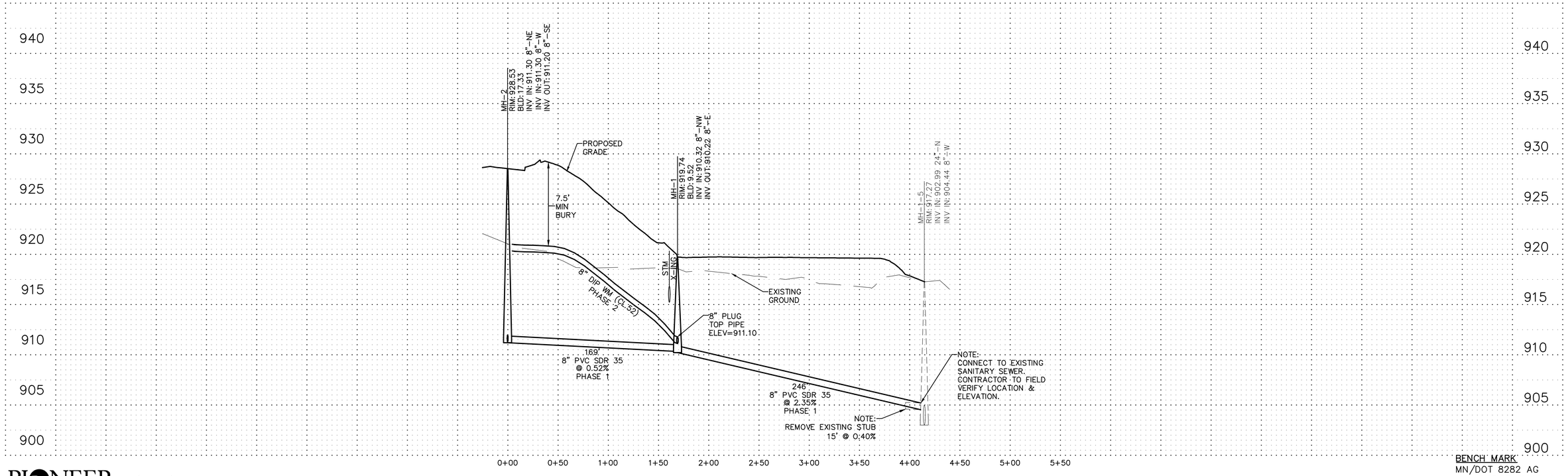
AIR BLEED DETAIL



CONSTRUCTION NOTES:

1. SEE CITY OF LAKE ELMO STANDARD DETAILS FOR PUBLIC INFRASTRUCTURE.
2. WATER SERVICES SHALL BE 1" COPPER TYPE "K" PER CITY DETAIL 207A.
3. SERVICE AND RISER STATIONING IS FROM DOWNSTREAM MANHOLE.
4. SANITARY SERVICES SHALL BE 4" PVC (SDR 26) PER CITY DETAIL 313.
5. SERVICES IN PHASE 2 OF CONSTRUCTION WHICH THE SANITARY MAINLINE IS INSTALLED IN PHASE 1 WILL HAVE WYE AND RISERS INSTALLED AND PLUGGED. ENDS TO HAVE 2"X2" HARDWOOD MARKER. LOTS INCLUDE: 102, 103, 108, 109, 110, 111, 112, 113, 114, 120, 121, 122, 123 ,AND 124.





BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)
01-ENG-113105-SHEET-311

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Revisions

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Designed	PJC/KAW
Drawn	KAW/AJR

SANITARY SEWER CONSTRUCTION

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

2 OF 23

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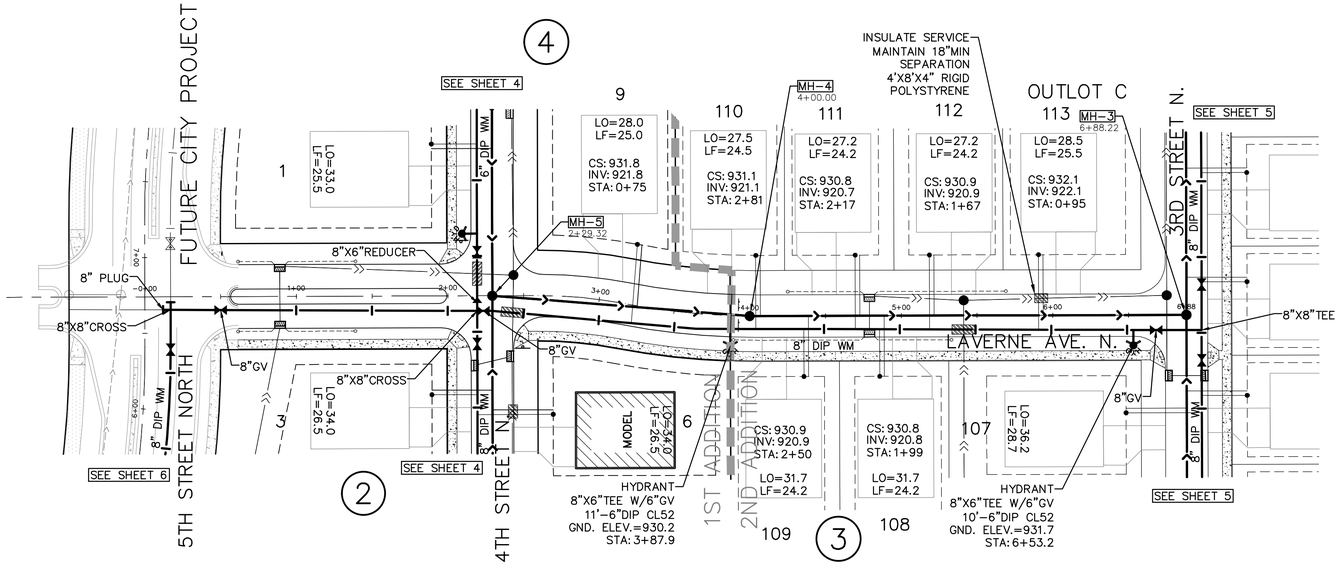

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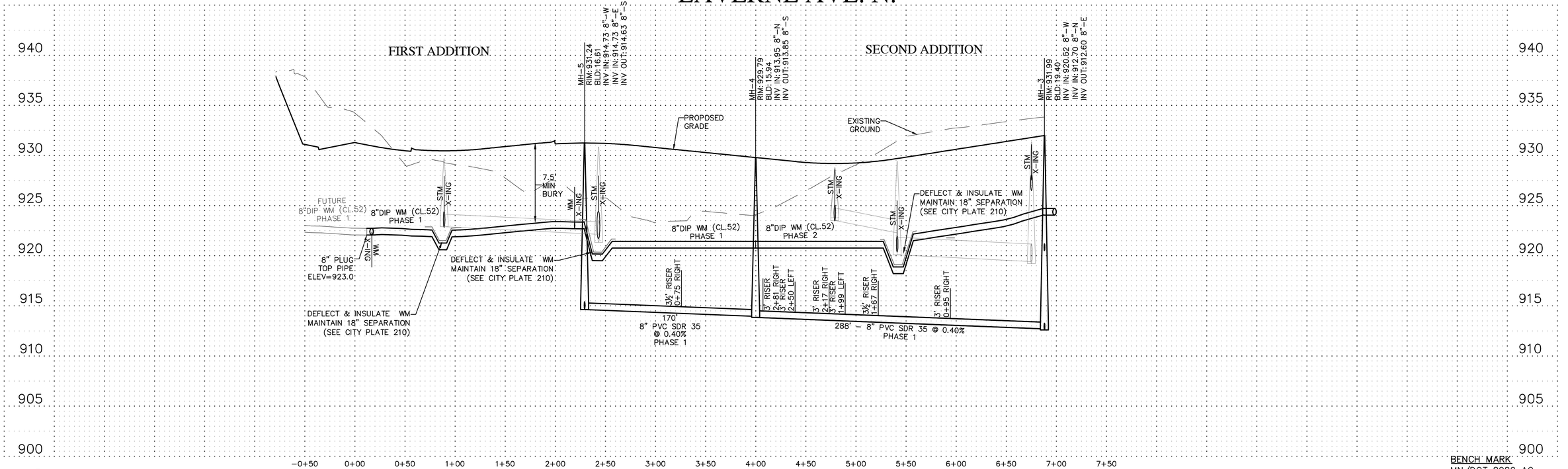
0 25 50 100
GRAPHIC SCALE IN FEET

LAVERNE AVE. N.



BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)
01-ENG-113105-SHEET-312

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Reg. No. 19860 Date 08-06-2014

Revisions

Date	08-06-2014
Designed	PJC/KAW
Drawn	KAW/AJR

SANITARY SEWER CONSTRUCTION

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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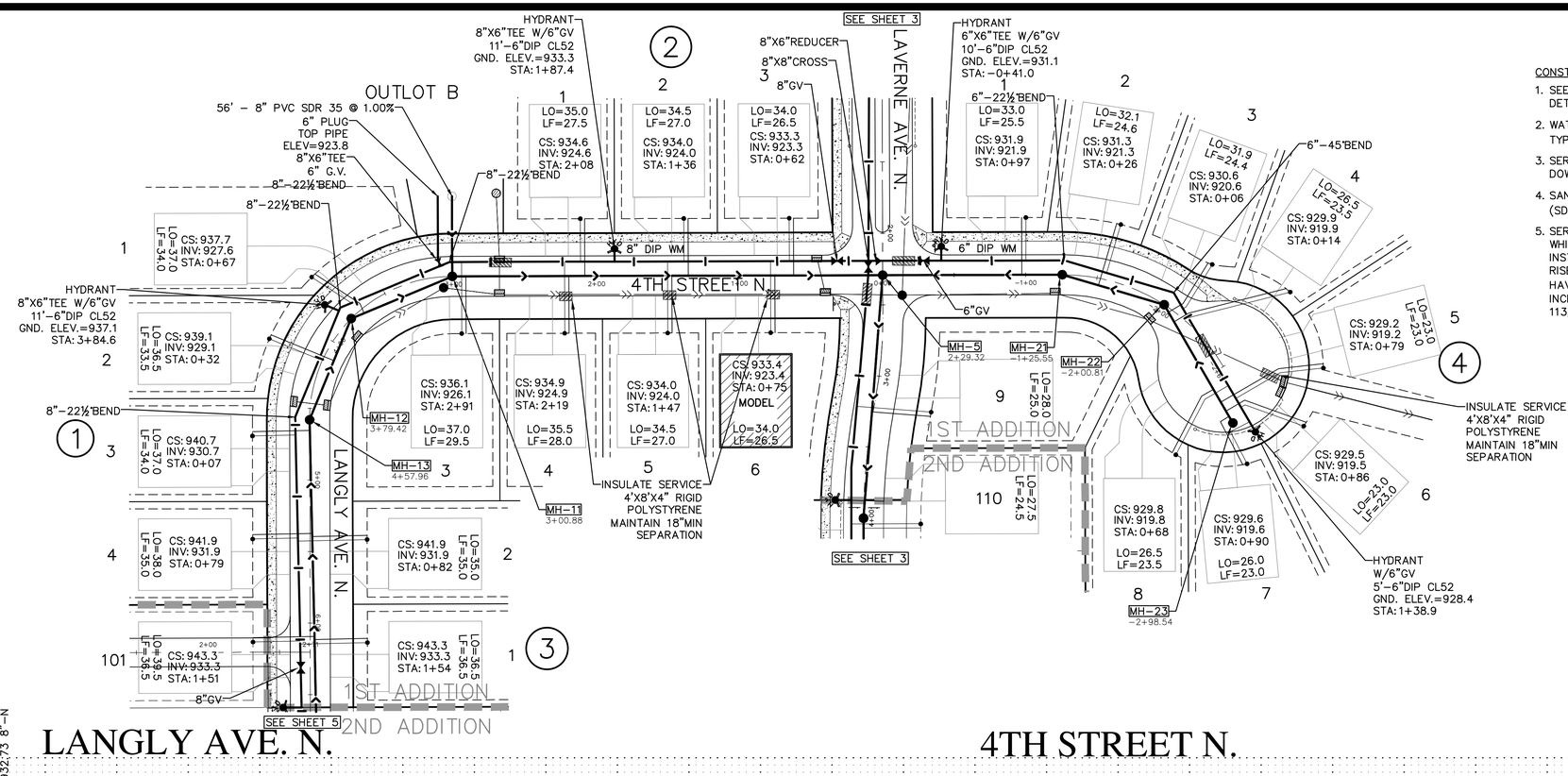

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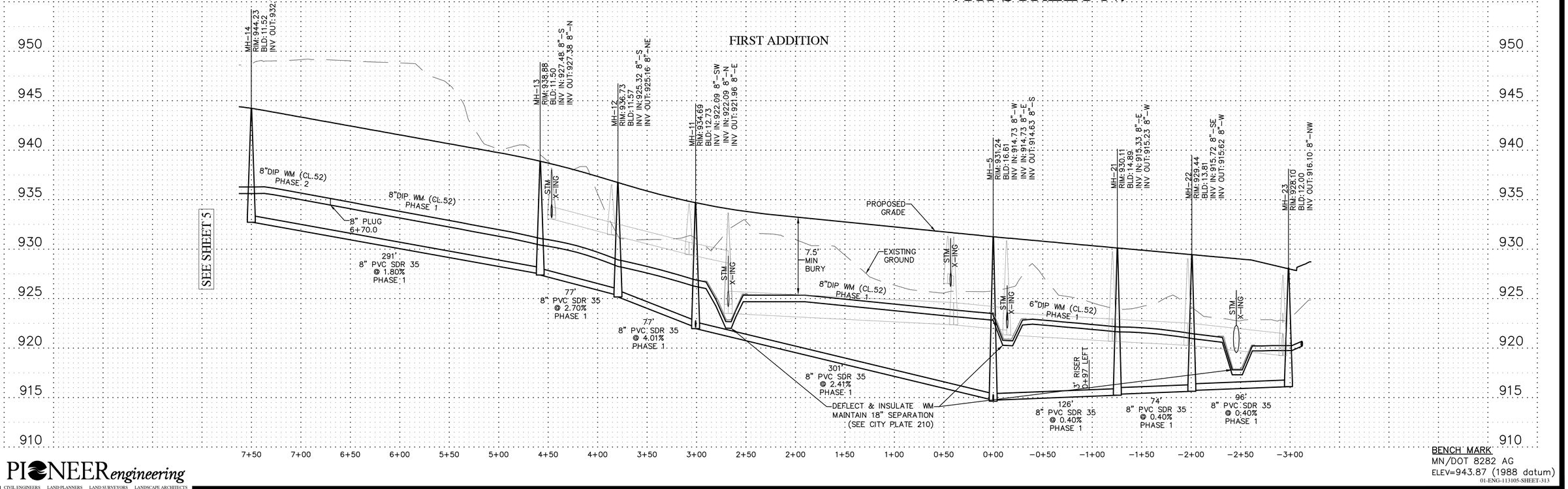
GRAPHIC SCALE IN FEET
0 25 50 100

LANGLY AVE. N.

4TH STREET N.



BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)
01-ENG-113105-SHEET-313

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Drawn KAW/AJR

SANITARY SEWER CONSTRUCTION

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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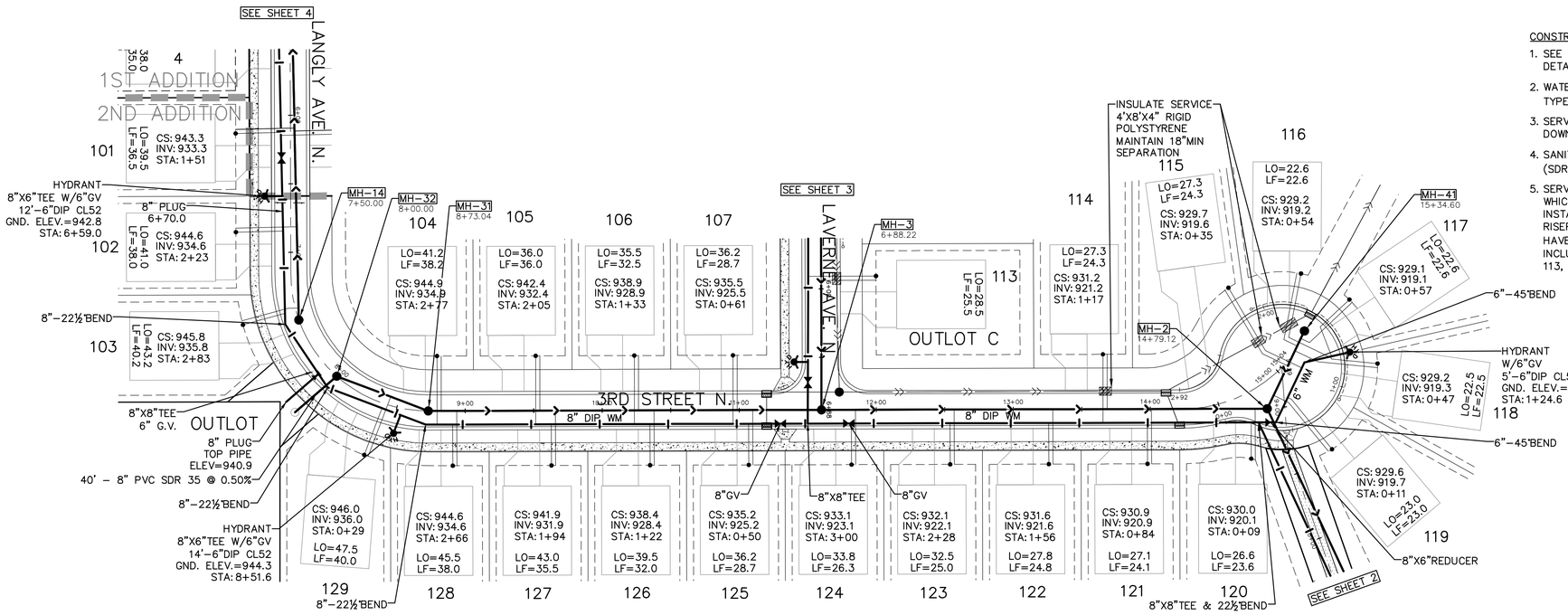

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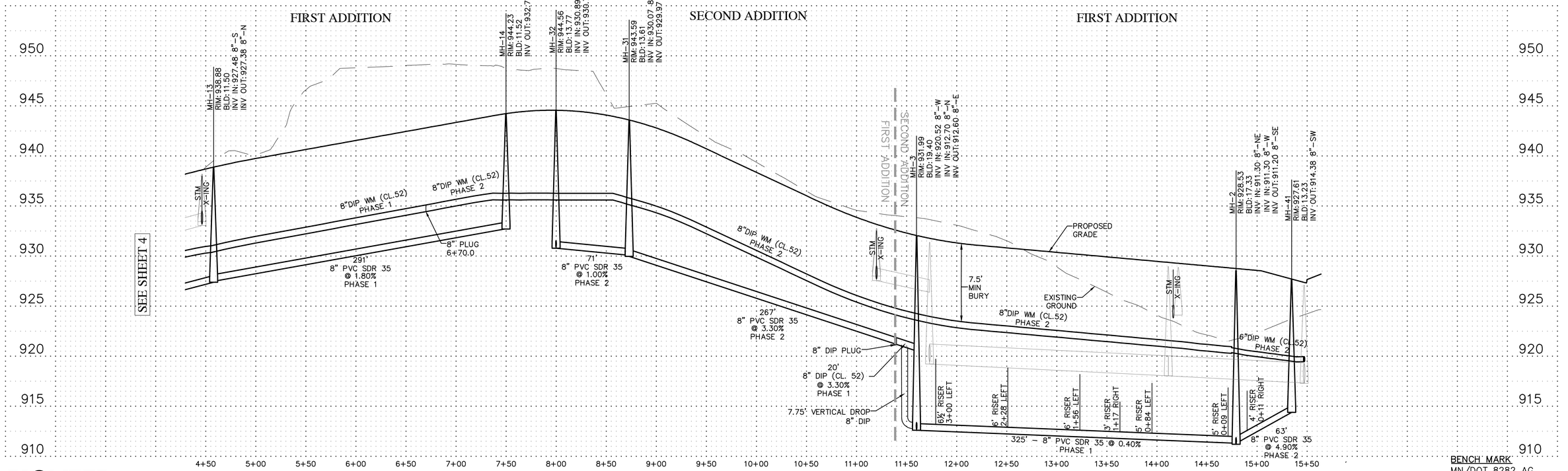
GRAPHIC SCALE IN FEET
0 25 50 100

LANGLY AVE. N.

3RD STREET N.



BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)
01-ENG-113105-SHEET-314

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Name Paul J. Cherne
Reg. No. 19860 Date 08-06-2014

Revisions

Date	08-06-2014
Designed	PJC/KAW
Drawn	KAW/AJR

SANITARY SEWER CONSTRUCTION

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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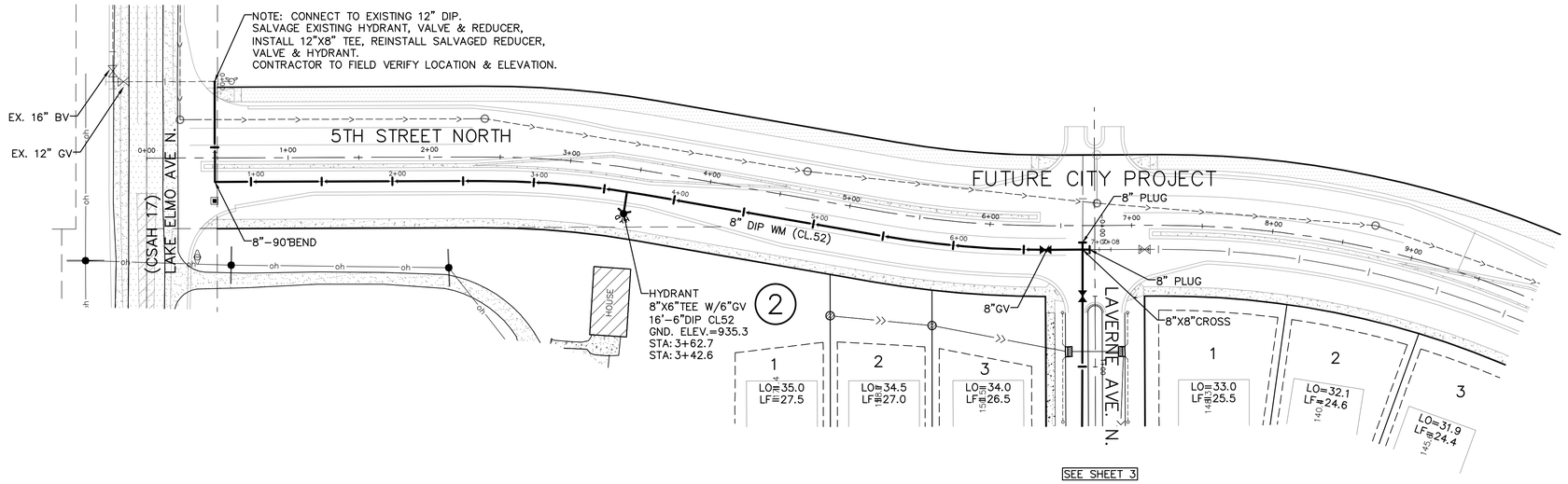

CONSTRUCTION NOTES:

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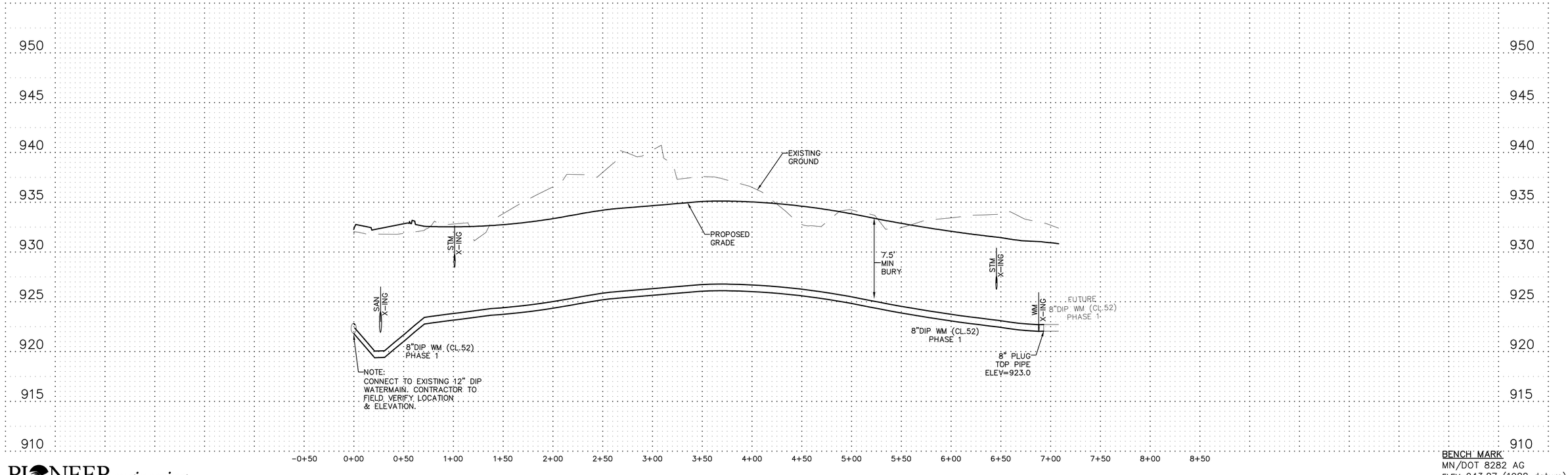
0 25 50 100

GRAPHIC SCALE IN FEET

5TH STREET NORTH WATERMAIN



BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)

01-ENG-113105-SHEET-315

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Name Paul J. Cherne
Reg. No. 19860 Date 08-06-2014

Revisions

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Designed	PJC/KAW
Drawn	KAW/AJR

5TH STREET WATERMAIN

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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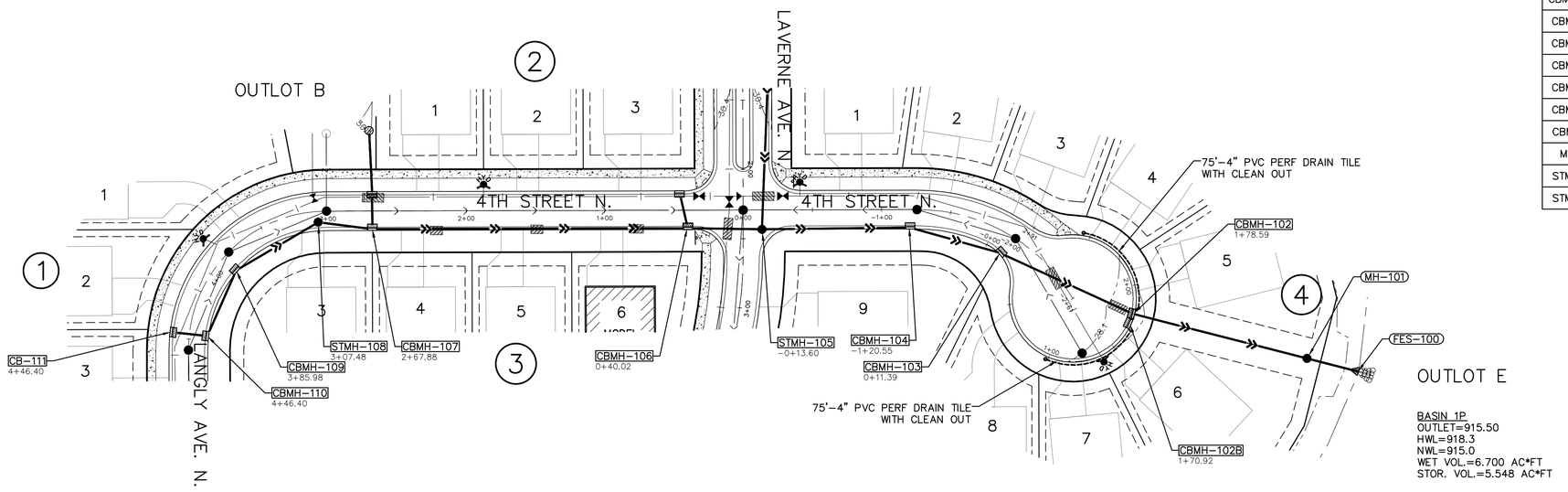
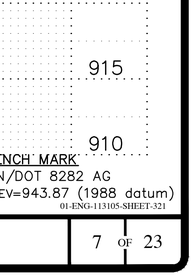
STRUCTURE TABLE		
STRUCTURE NAME	STRUCTURE SIZE	NEENAH CASTING OR EQUAL
CB–111	48" DIA.	R–3067 V
CBMH–102	60" DIA.	R–3067 V
CBMH–102B	48" DIA.	R–3067 V
CBMH–103	60" DIA.	R–3067 V
CBMH–104	60" DIA.	R–3067 V
CBMH–106	60" DIA.	R–3067 V
CBMH–107	60" DIA.	R–3067 V
CBMH–109	48" DIA.	R–3067 V
CBMH–110	48" DIA.	R–3067 V
MH–101	60" DIA.	R–1642
STMH–105	60" DIA.	R–1642
STMH–108	48" DIA.	R–1642

STORM SEWER CONSTRUCTION NOTES:

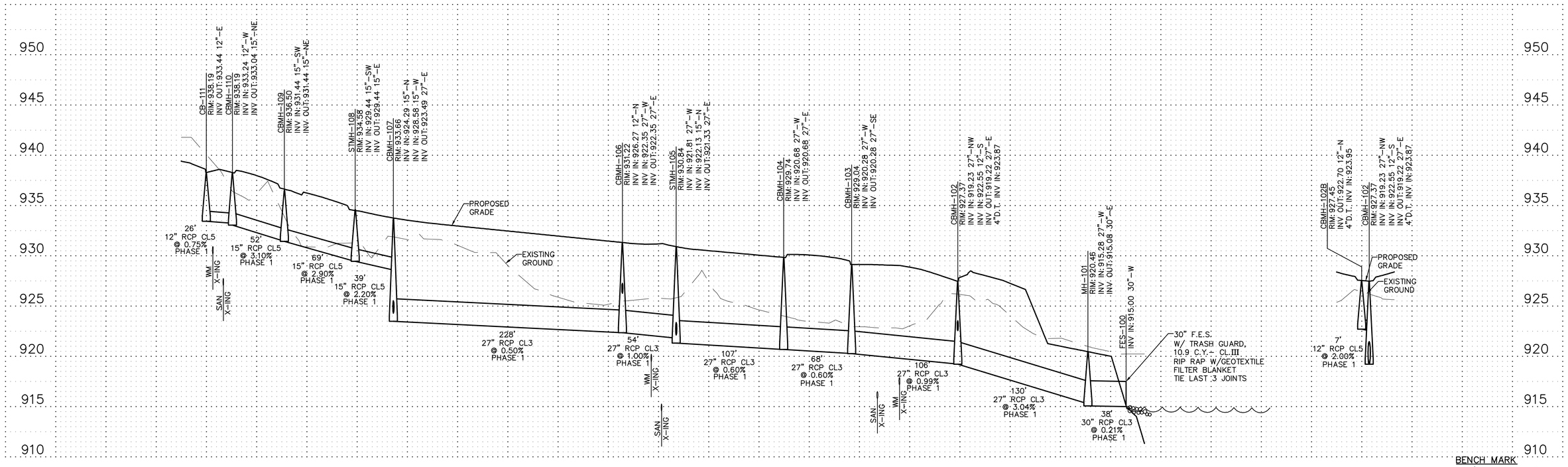
1. SEE CITY OF LAKE ELMO STANDARD DETAILS FOR PUBLIC INFRASTRUCTURE.
2. FINAL STRUCTURE OFF SET TO BE VERIFIED BY CONTRACTOR AND INSPECTOR BASED ON MATERIAL SUPPLIED TO PROJECT. FIELD STAKING SHALL BE SET ACCORDING TO BACK–OF–CURB.



BASIN 1P
OUTLET=915.50
HWL=918.3
NWL=915.0
WET VOL.=6.700 AC*FT
STOR. VOL.=5.548 AC*FT



GRAPHIC SCALE IN FEET



BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)

01-ENG-113105-SHEET-321

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Name Paul J. Cherne
Reg. No. 19860 Date 08-06-2014

Revisions

Date	08-06-2014
Designed	PJC/KAW
Drawn	KAW/AJR

STORM SEWER CONSTRUCTION

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

7 OF 23

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STORM SEWER CONSTRUCTION NOTES:

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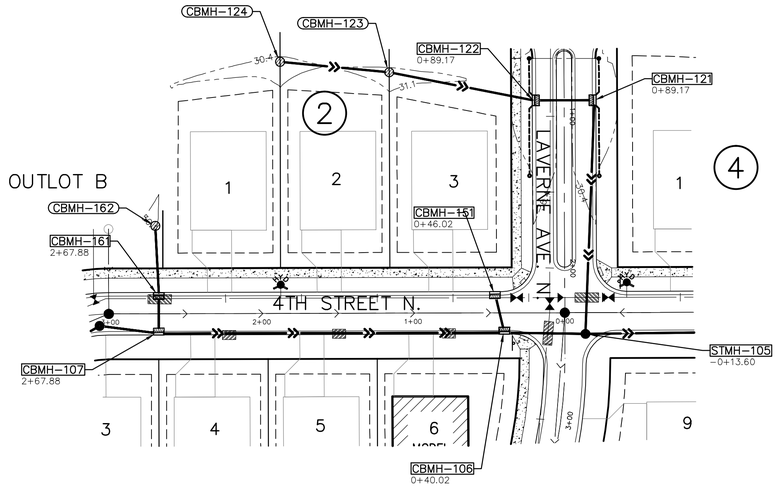
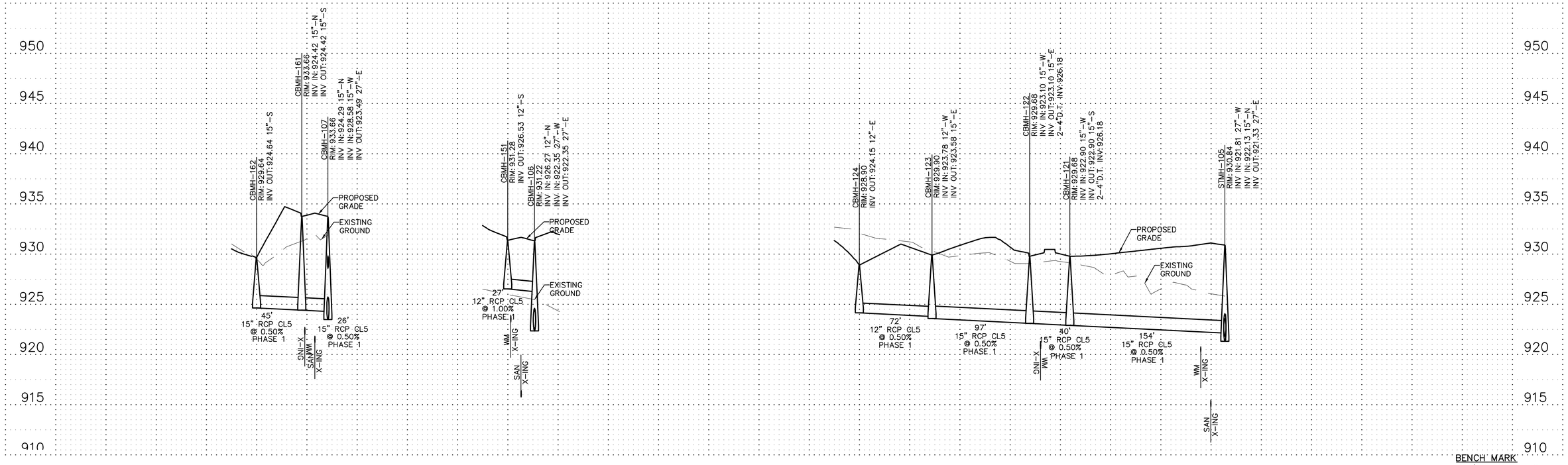
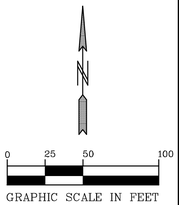
STRUCTURE TABLE		
STRUCTURE NAME	STRUCTURE SIZE	NEENAH CASTING OR EQUAL
CBMH-121	48" DIA.	R-3067 V
CBMH-122	48" DIA.	R-3067 V
CBMH-123	48" DIA.	R-4342
CBMH-124	48" DIA.	R-4342
CBMH-151	48" DIA.	R-3067 V
CBMH-161	48" DIA.	R-3067 V
CBMH-162	48" DIA.	R-4342







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Reg. No. 19860 Date 08-06-2014

Revisions

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Drawn	KAW/AJR

STORM SEWER CONSTRUCTION

RYLAND HOMES
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EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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STORM SEWER CONSTRUCTION NOTES:

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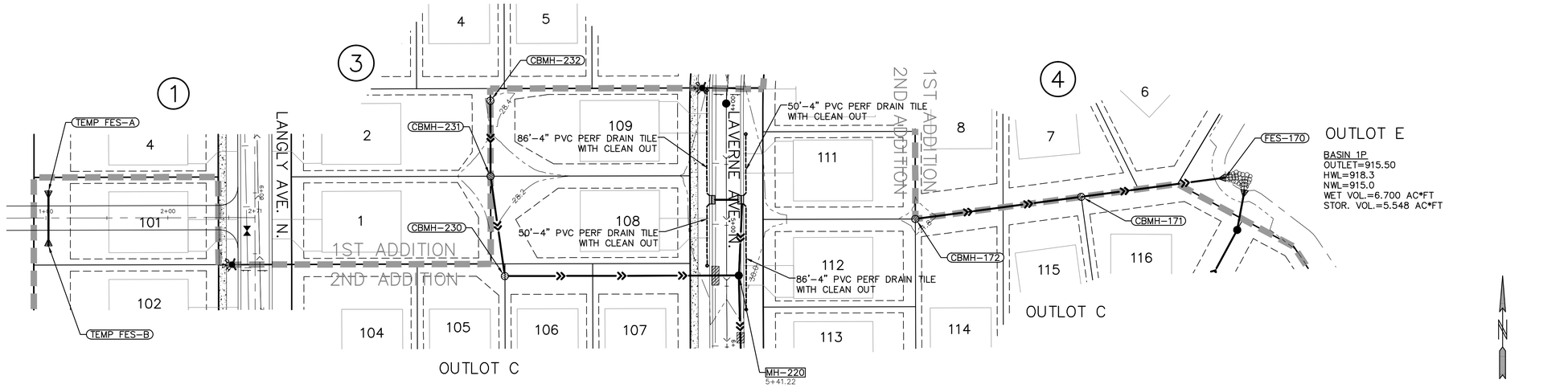
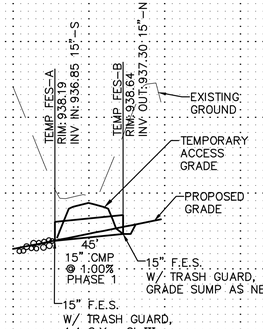
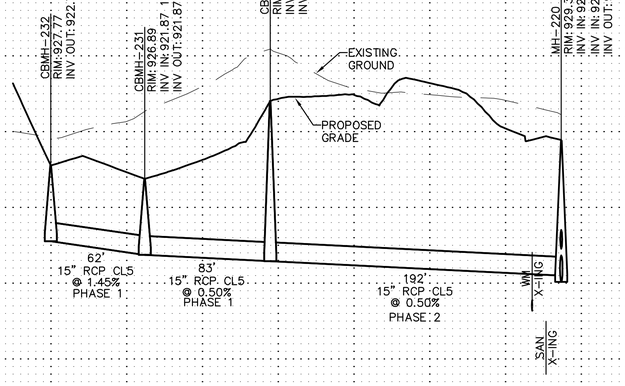
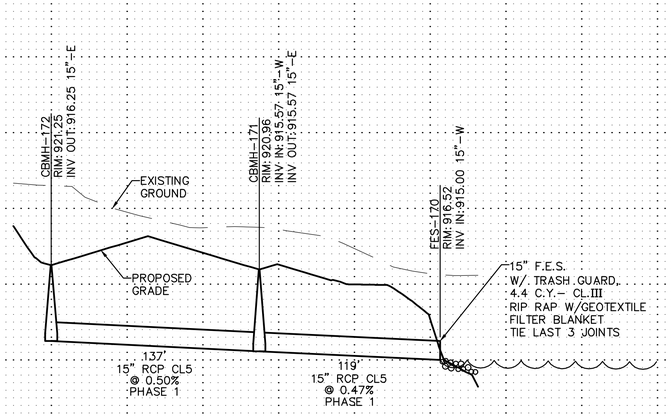
2. FINAL STRUCTURE OFF SET TO BE VERIFIED BY CONTRACTOR AND INSPECTOR BASED ON MATERIAL SUPPLIED TO PROJECT. FIELD STAKING SHALL BE SET ACCORDING TO BACK-OF-CURB.

STRUCTURE TABLE		
STRUCTURE NAME	STRUCTURE SIZE	NEENAH CASTING OR EQUAL
CBMH-171	48" DIA.	R-4342
CBMH-172	48" DIA.	R-4342
CBMH-230	48" DIA.	R-4342
CBMH-231	48" DIA.	R-4342
CBMH-232	48" DIA.	R-4342









950 945 940 935 930 925 920 915 910

BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)

01-ENG-113105-SHEET-323

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Name Paul J. Cherne
Reg. No. 19860 Date 08-06-2014

Revisions

Date	08-06-2014
Designed	PJC/KAW
Drawn	KAW/AJR

STORM SEWER CONSTRUCTION

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

9 OF 23

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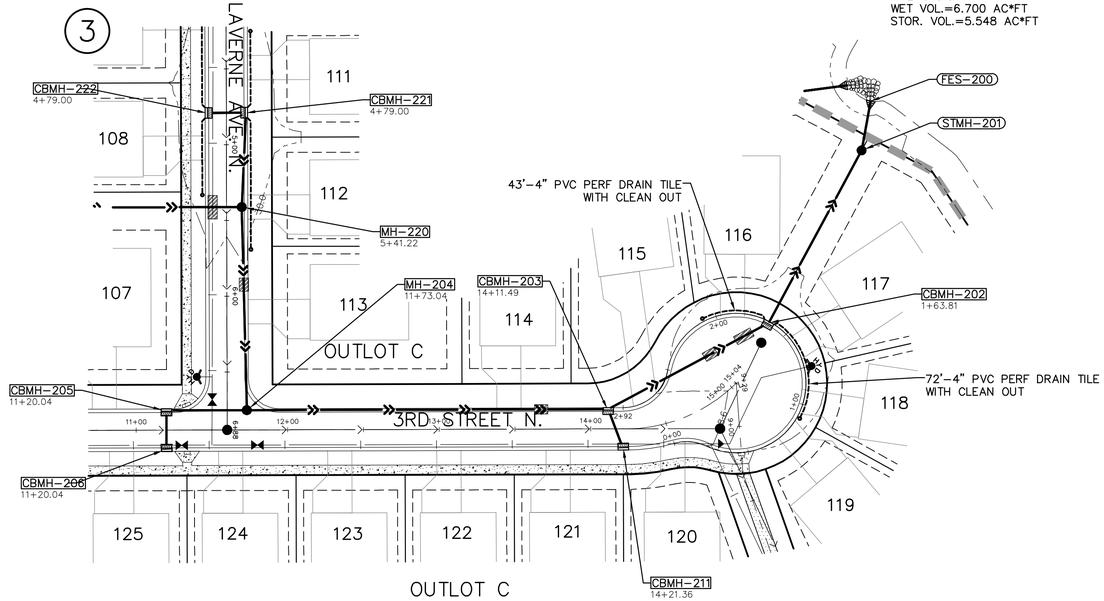

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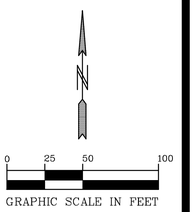
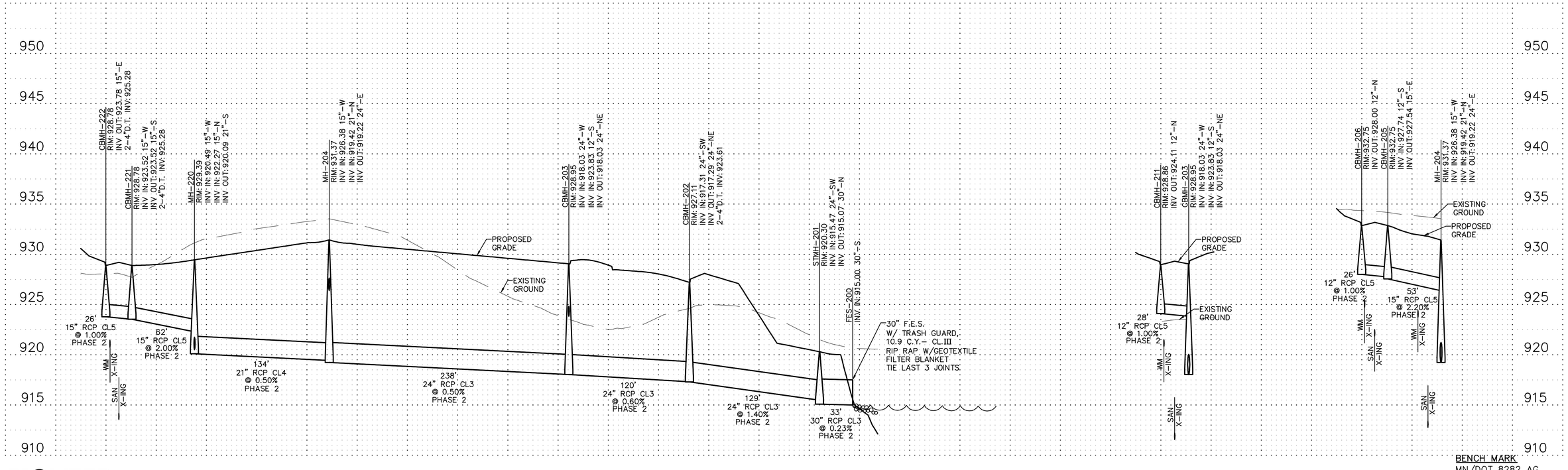
STRUCTURE TABLE		
STRUCTURE NAME	STRUCTURE SIZE	NEENAH CASTING OR EQUAL
CBMH-202	48" DIA.	R-3067 V
CBMH-203	48" DIA.	R-3067 V
CBMH-205	48" DIA.	R-3067 V
CBMH-206	48" DIA.	R-3067 V
CBMH-211	48" DIA.	R-3067 V
CBMH-221	48" DIA.	R-3067 V
CBMH-222	48" DIA.	R-3067 V
MH-204	60" DIA.	R-1642
MH-220	48" DIA.	R-1642
STMH-201	60" DIA.	R-1642





BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)

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Revisions

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Drawn	KAW/AJR

STORM SEWER CONSTRUCTION

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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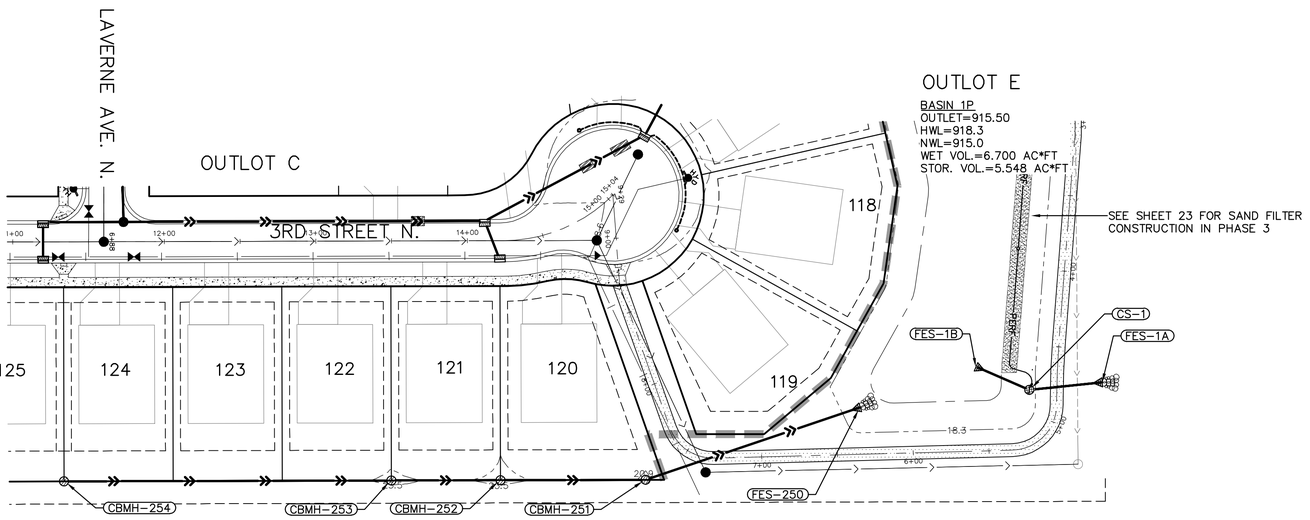
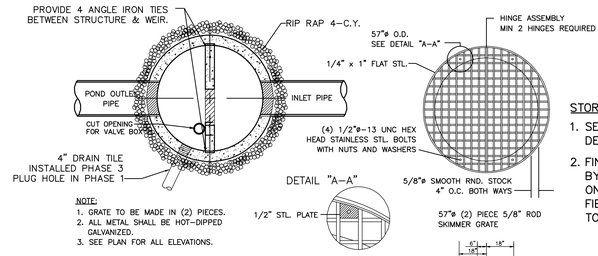
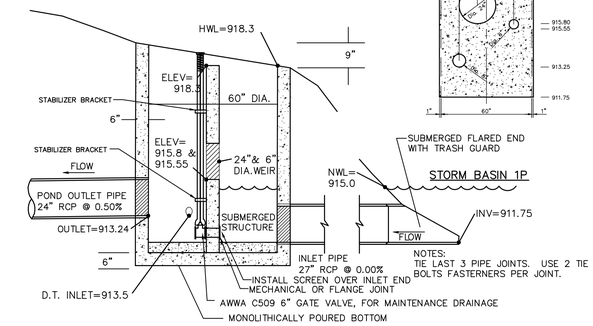
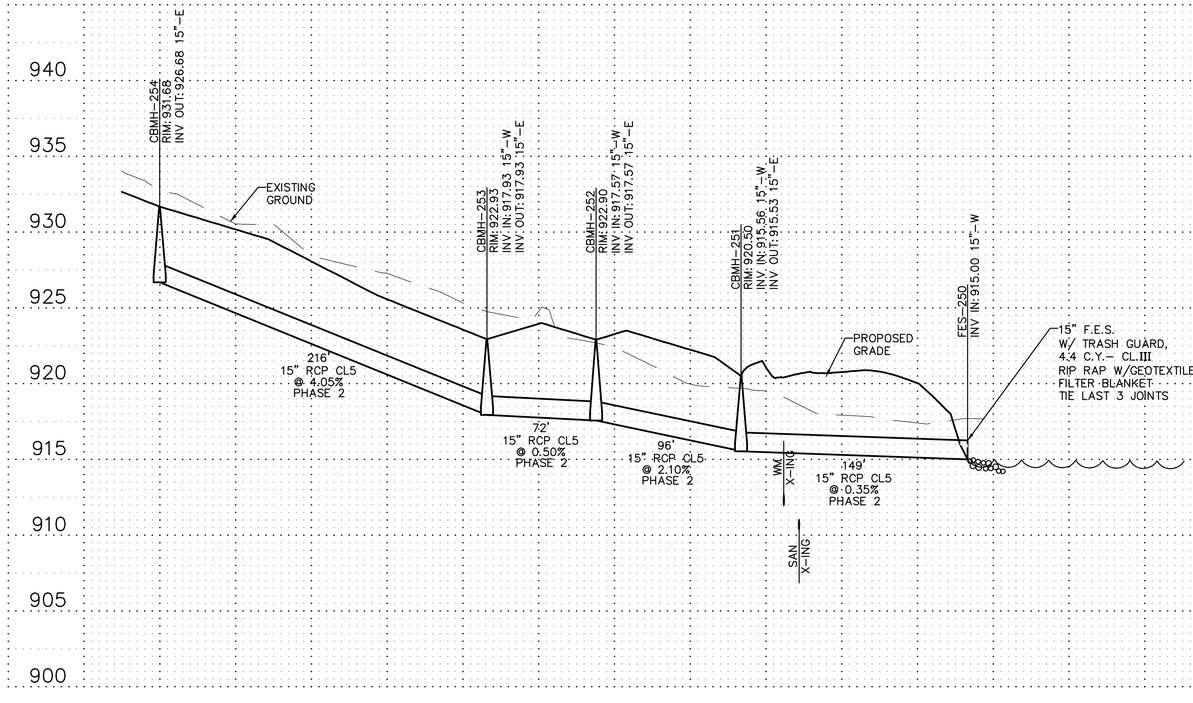
STRUCTURE TABLE		
STRUCTURE NAME	STRUCTURE SIZE	NEENAH CASTING OR EQUAL
CBMH-251	48" DIA.	R-4342
CBMH-252	48" DIA.	R-4342
CBMH-253	48" DIA.	R-4342
CBMH-254	48" DIA.	R-4342
CS-1	60" DIA.	SPECIAL

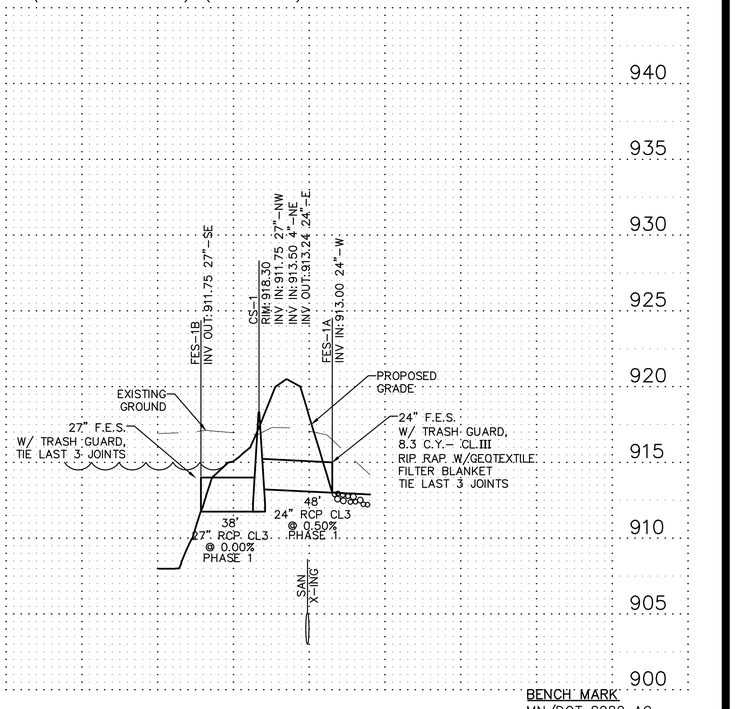






POND OUTLET CONTROL STRUCTURE CS-1
(NOT TO SCALE) (PHASE 1)





STORM SEWER CONSTRUCTION NOTES:

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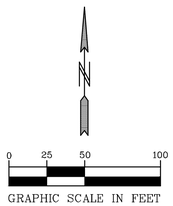

BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)

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Revisions

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Drawn	KAW/AJR

STORM SEWER CONSTRUCTION

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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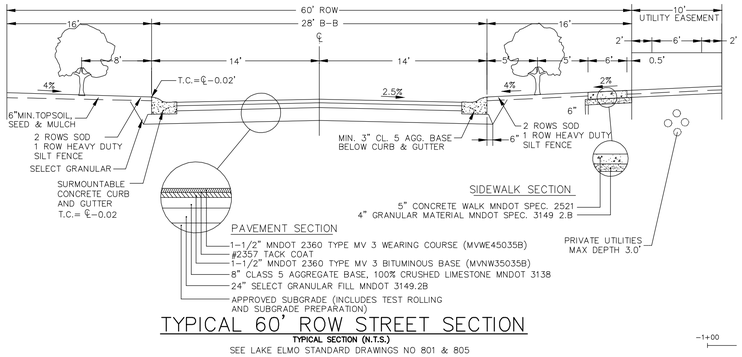
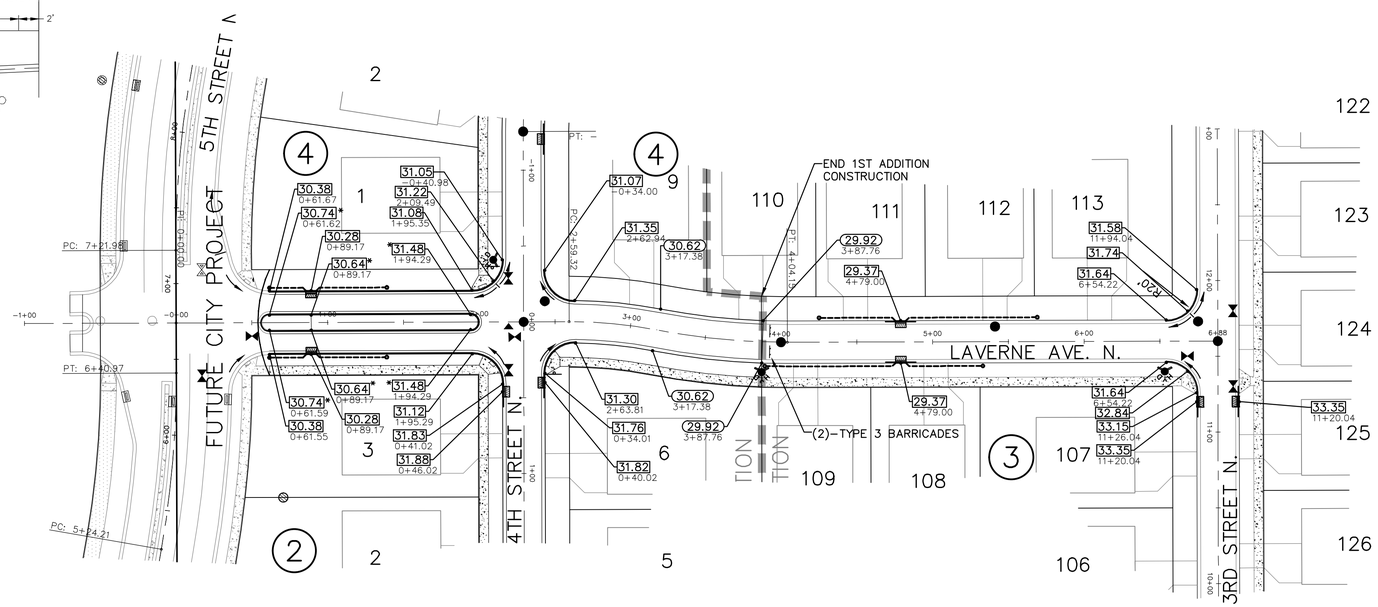


TYPICAL 60' ROW STREET SECTION

TYPICAL SECTION (N.T.S.)

SEE LAKE ELMO STANDARD DRAWINGS NO 801 & 805

CURVE TABLE						
CURVE	DELTA	LENGTH	RADIUS	TANGENT	PC	PT
C5	11°05'15"	58.05	300.00	29.12	2+59.32	3+17.38
C6	11°02'54"	86.77	450.00	43.52	3+17.38	4+04.15



CURB LEGEND

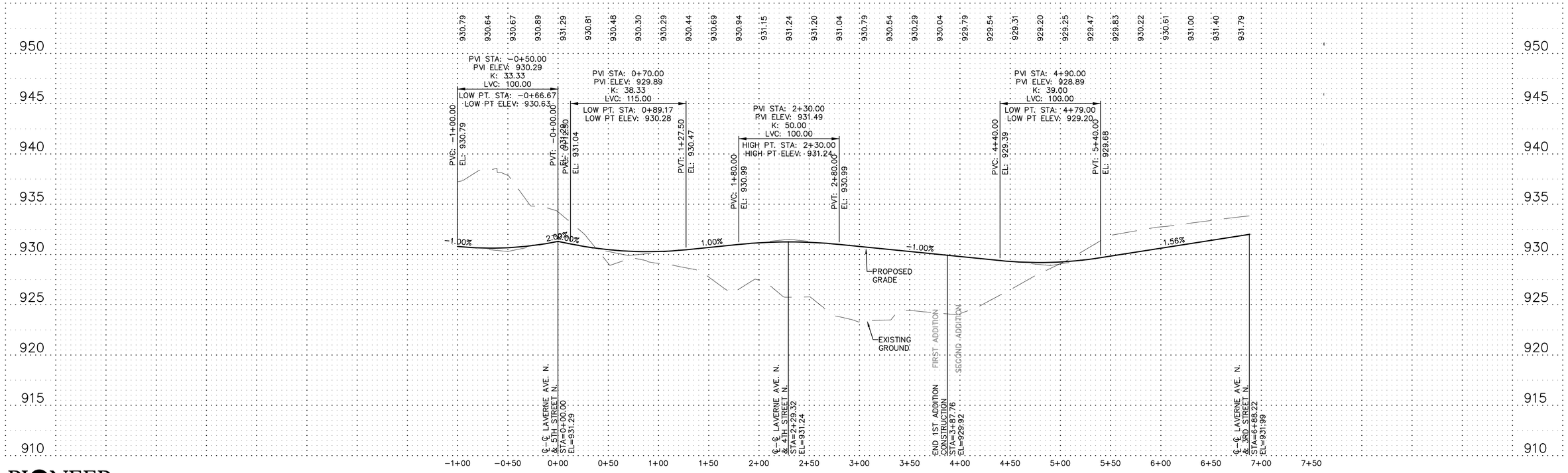
- (08.15) = TOP OF CURB ELEVATION FOR SURMOUNTABLE
- [08.32] = TOP OF CURB ELEVATION FOR B618 CURB (*=TIP OUT GUTTER)
- 07.82 = BITUMINOUS ELEVATION
- = SURMOUNTABLE CURB & GUTTER
- = B618 CURB & GUTTER
- = BITUMINOUS EDGE
- ▶ = PED. RAMP

0 25 50 100

GRAPHIC SCALE IN FEET

BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)

LAVERNE AVE. N.



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STREET CONSTRUCTION

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

01-ENG-113105-SHEET-331

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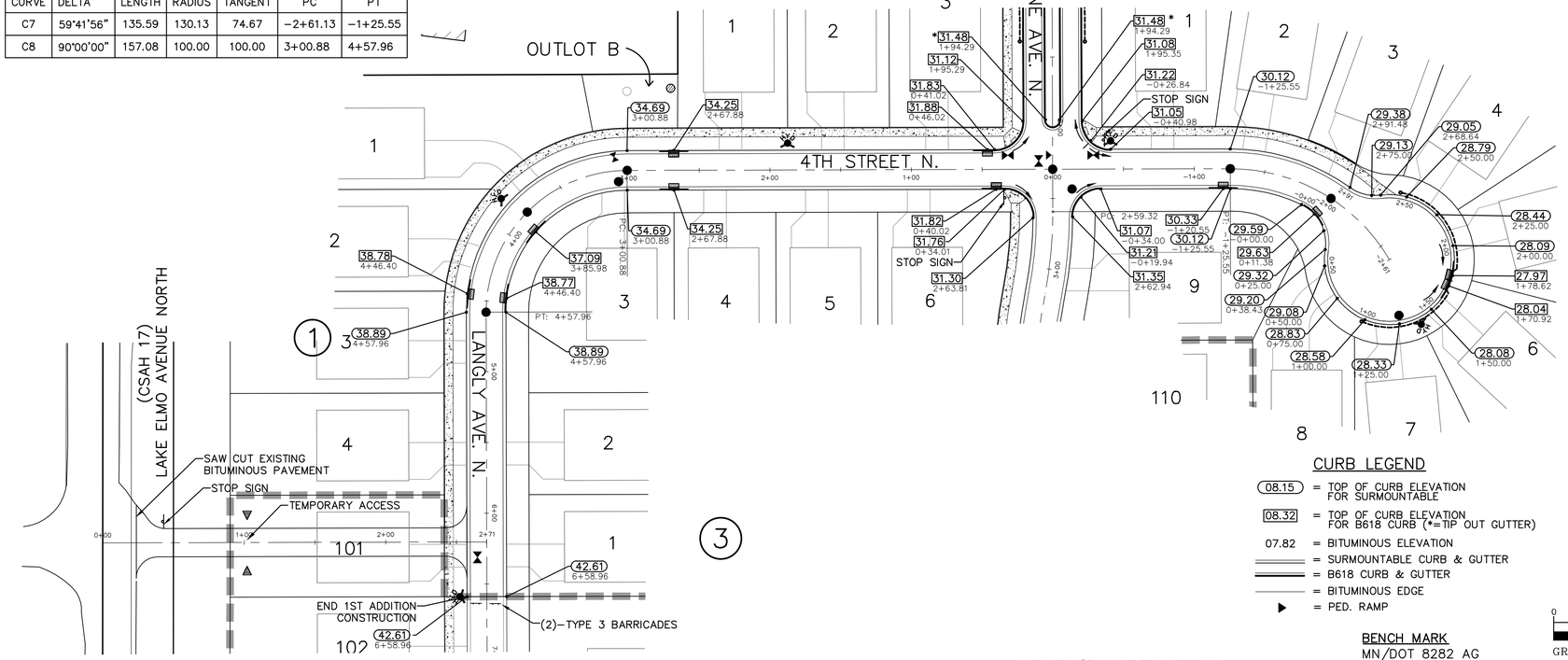
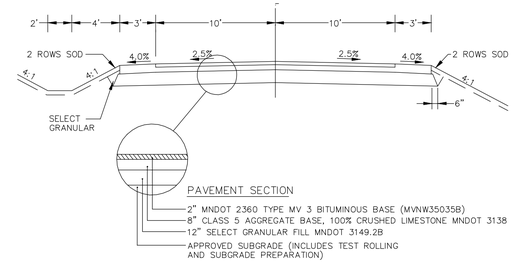
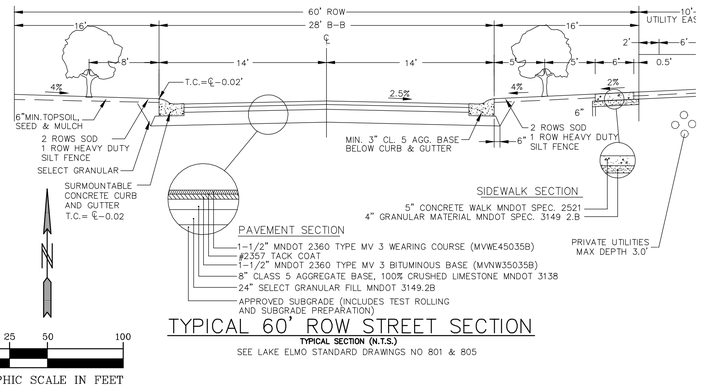
CURVE TABLE						
CURVE	DELTA	LENGTH	RADIUS	TANGENT	PC	PT
C7	59°41'56"	135.59	130.13	74.67	−2+61.13	−1+25.55
C8	90°00'00"	157.08	100.00	100.00	3+00.88	4+57.96



TEMPORARY ACCESS



TEMPORARY ACCESS SECTION
TYPICAL SECTION (N.T.S.)



TYPICAL 60' ROW STREET SECTION
TYPICAL SECTION (N.T.S.)
SEE LAKE ELMO STANDARD DRAWINGS NO 801 & 805

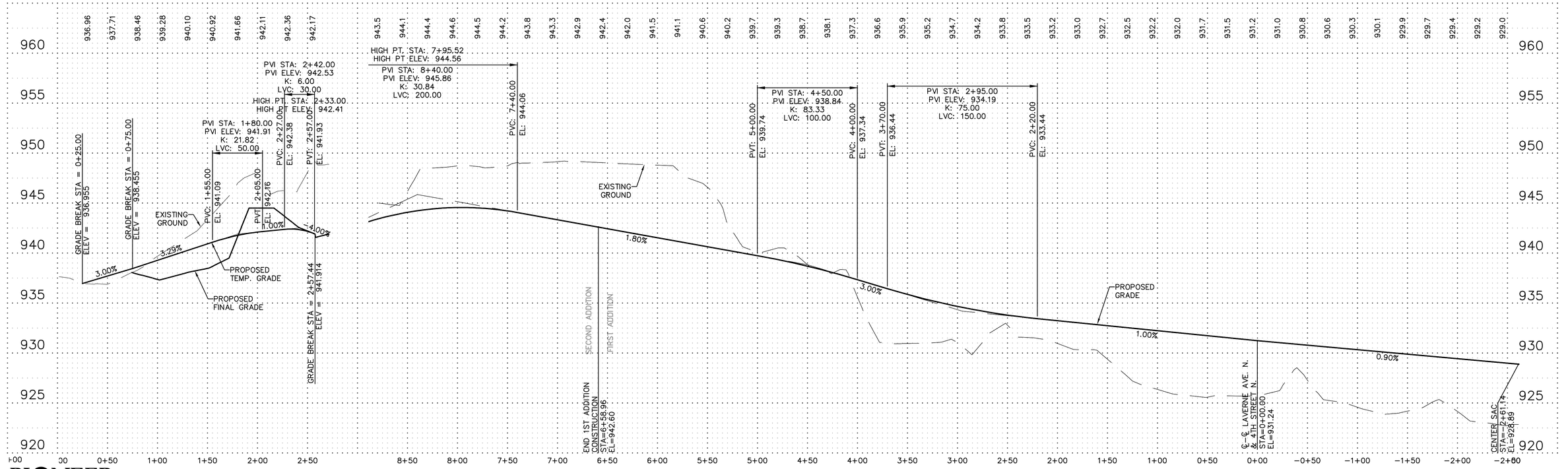
CURB LEGEND

- 08.15 = TOP OF CURB ELEVATION FOR SURMOUNTABLE
- 08.32 = TOP OF CURB ELEVATION FOR B618 CURB (*=TIP OUT GUTTER)
- 07.82 = BITUMINOUS ELEVATION
- = SURMOUNTABLE CURB & GUTTER
- = B618 CURB & GUTTER
- = BITUMINOUS EDGE
- ▶ = PED. RAMP

BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)

0 25 50 100
GRAPHIC SCALE IN FEET

LANGLY AVE. N.



4TH STREET N.

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CURVE TABLE						
CURVE	DELTA	LENGTH	RADIUS	TANGENT	PC	PT
C9	90°00'00"	157.08	100.00	100.00	7+15.96	8+73.04
C10	45°00'02"	80.45	102.43	42.43	14+23.56	15+04.01

CURB LEGEND

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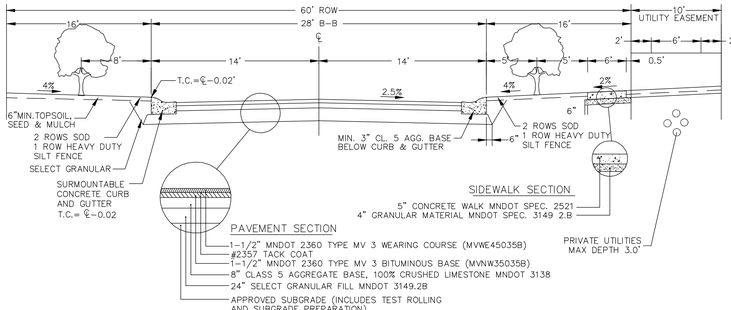
07.82 = BITUMINOUS ELEVATION

= SURMOUNTABLE CURB & GUTTER

= B618 CURB & GUTTER

= BITUMINOUS EDGE

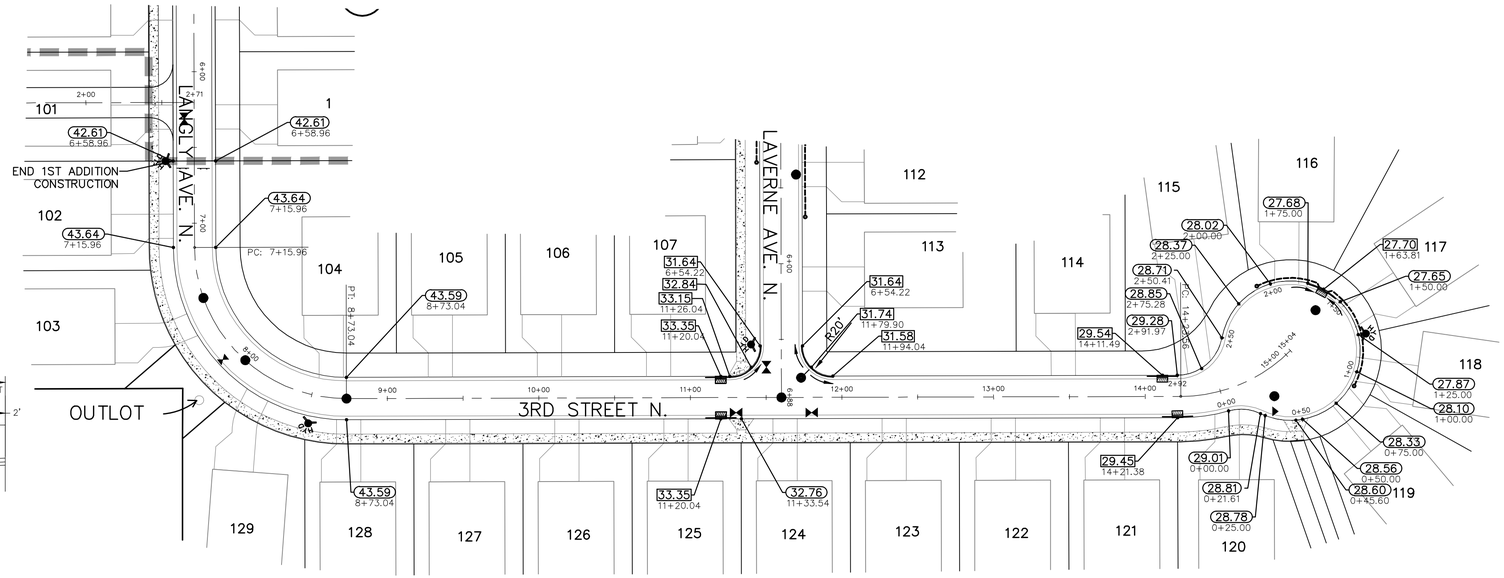
▶ = PED. RAMP

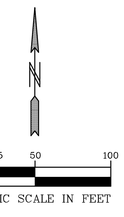


TYPICAL 60' ROW STREET SECTION

TYPICAL SECTION (N.T.S.)

SEE LAKE ELMO STANDARD DRAWINGS NO 801 & 805

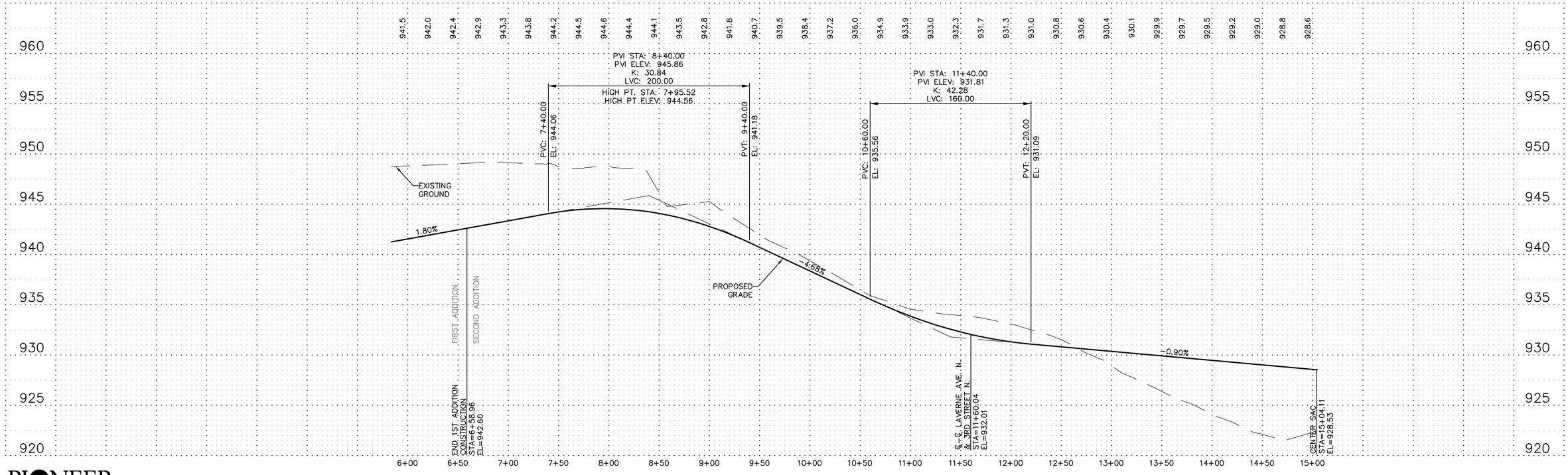




BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)

LANGLY AVE. N.

3RD STREET N.



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Reg. No. 19860 Date 08-06-2014

Revisions

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Drawn	KAW/AJR

STREET CONSTRUCTION

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EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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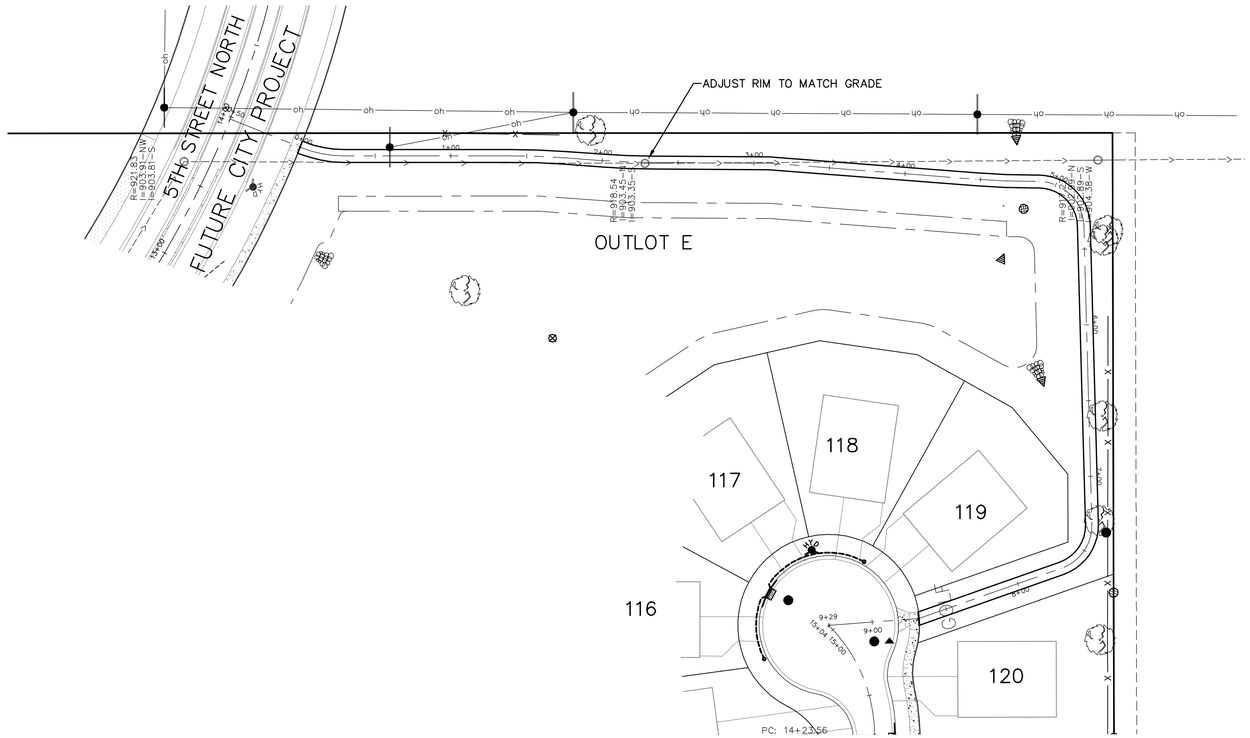
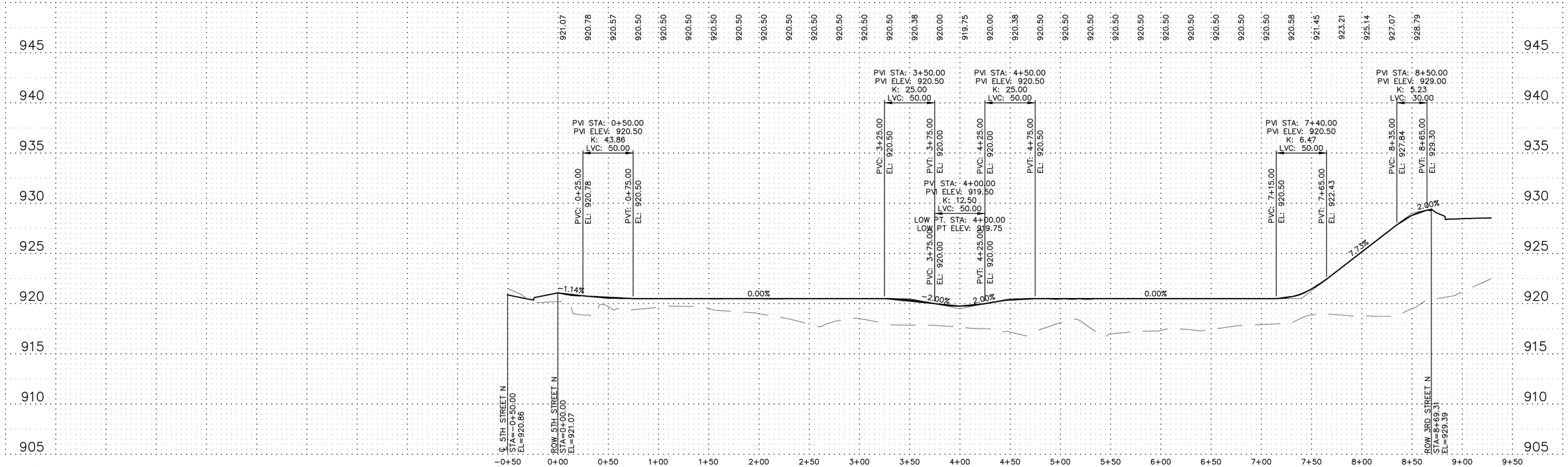


0 25 50 100

GRAPHIC SCALE IN FEET

BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)

BITUMINOUS TRAIL



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BITUMINOUS TRAIL CONSTRUCTION (PHASE 2)

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HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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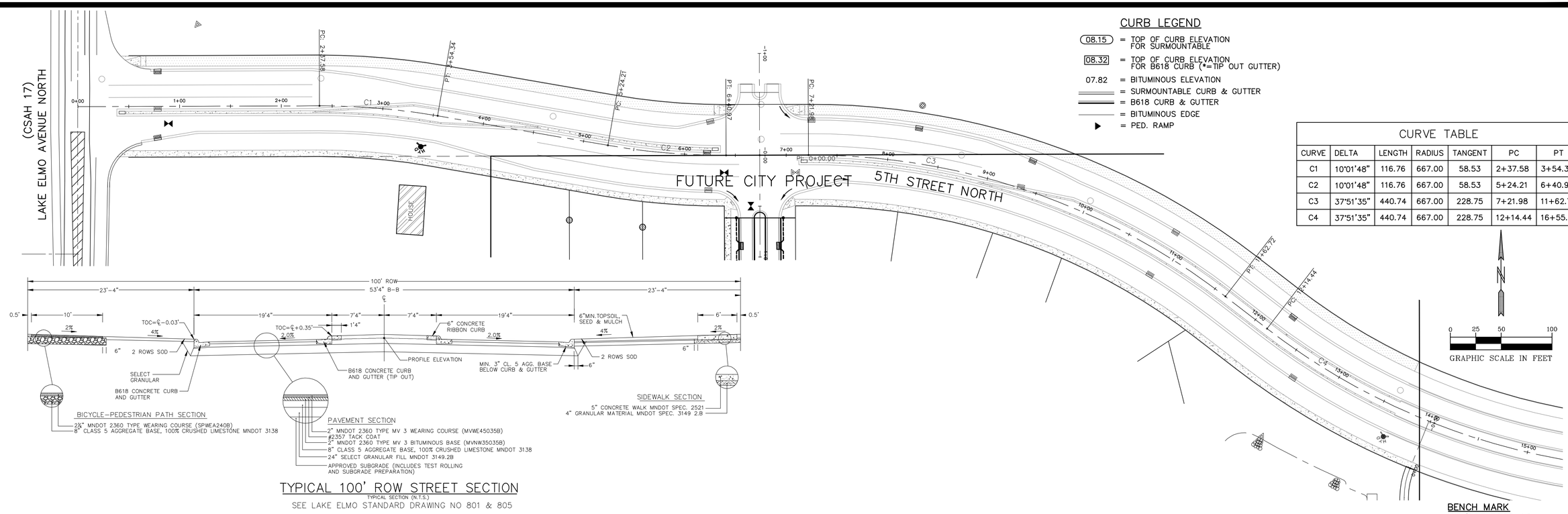

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07.82 = BITUMINOUS ELEVATION

= SURMOUNTABLE CURB & GUTTER

= B618 CURB & GUTTER

= BITUMINOUS EDGE

▶ = PED. RAMP

CURVE TABLE						
CURVE	DELTA	LENGTH	RADIUS	TANGENT	PC	PT
C1	10°01'48"	116.76	667.00	58.53	2+37.58	3+54.34
C2	10°01'48"	116.76	667.00	58.53	5+24.21	6+40.97
C3	37°51'35"	440.74	667.00	228.75	7+21.98	11+62.72
C4	37°51'35"	440.74	667.00	228.75	12+14.44	16+55.18

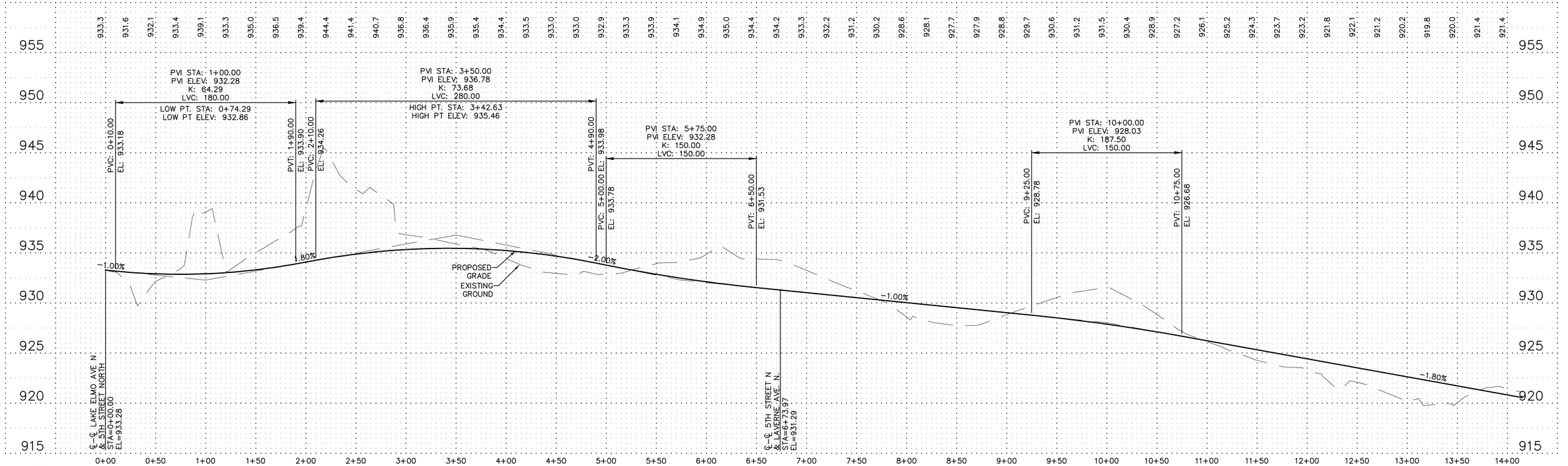
TYPICAL 100' ROW STREET SECTION

TYPICAL SECTION (N.T.S.)

SEE LAKE ELMO STANDARD DRAWING NO 801 & 805

5TH STREET NORTH (FUTURE CITY PROJECT)

BENCH MARK
MN/DOT 8282 AG
ELEV=943.87 (1988 datum)



NOT IN CONTRACT – FOR REFERENCE ONLY 01-ENG-113105-SHEET-335

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STREET PLAN AND PROFILE

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EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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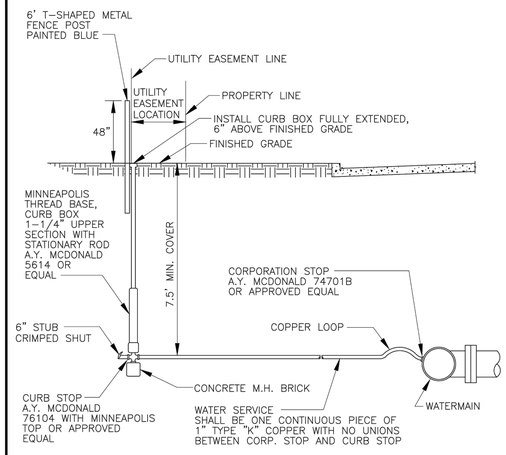


TYPICAL WATER SERVICE 1" TO 2 1/2" COPPER

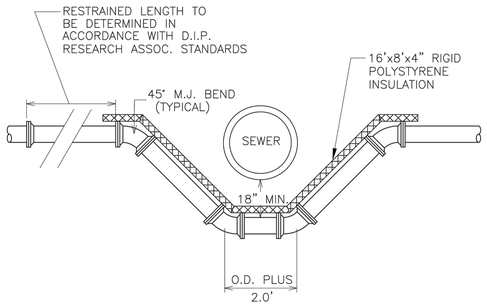
NOTE:
SERVICE TAP TO BE MADE SLIGHTLY ABOVE SPRING LINE SO THAT COPPER LOOP SHALL NOT EXTEND ABOVE MAIN. MAINTAIN 7.5' MINIMUM COVER FOR ALL SERVICE LINES.

WATER SERVICE ON DIP MAIN

FEBRUARY 2013

THE CITY OF LAKE ELMO — CITY OF LAKE ELMO

STANDARD DRAWING NO. 207A
LAKE ELMO



NOTE: FITTINGS SHALL BE RESTRAINED WITH THE USE OF APPROVED MECHANICAL JOINT RESTRAINING GLANDS.

WATERMAIN OFFSET

FEBRUARY 2013

THE CITY OF LAKE ELMO — CITY OF LAKE ELMO

STANDARD DRAWING NO. 210
LAKE ELMO

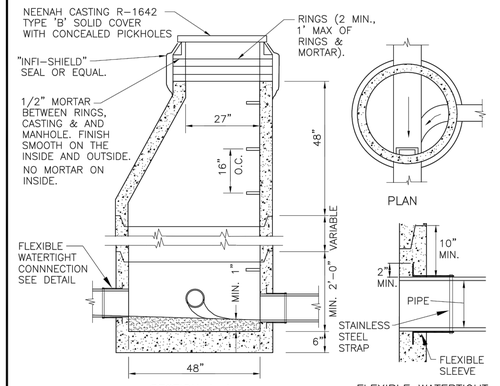
1. ALL SANITARY SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. ALL SANITARY SEWER PVC PIPE SHALL BE INSTALLED ACCORDING TO CITY STANDARD DRAWING 103 "GRANULAR MATERIAL BEDDING METHOD (FOR PVC SANITARY SEWER PIPE).
3. UNLESS NOTED OTHERWISE, ALL SMOOTH WALLED SANITARY SEWER PVC PIPE AND FITTINGS SHALL BE SDR 35 WITH ELASTOMERIC GASKETED JOINTS.
4. ALL SANITARY SEWER SERVICES SHALL BE 4-INCH PVC, SCH. 40 OR SDR 26 PIPE.
5. SMOOTH WALLED PVC PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF ASTM D-3034 FOR THE SIZE, STANDARD DIMENSION RATIO (SDR), AND STRENGTH REQUIREMENTS INDICATED ON THE PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS.
6. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MnDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
7. JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL SANITARY SEWER MANHOLES.
8. SANITARY SEWER INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A GASKETED, FLEXIBLE, WATERTIGHT CONNECTION TO ALLOW DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE TO TAKE PLACE.
9. A 1'-0" TO 1'-4" MANHOLE SECTION SHALL BE INSTALLED UNDER THE CONE SECTION TO ALLOW FOR HEIGHT ADJUSTMENT WHENEVER POSSIBLE.
10. ALL SERVICE LINE STUBS MUST HAVE A 2"x2" HARDWOOD MARKER WITH METAL SPIKE RUNNING FROM THE END OF PIPE TO FINISHED GRADE ELEVATION.
11. UPON MAKING A CONNECTION TO AN EXISTING SANITARY SEWER STUB OR MANHOLE, DIRT AND DEBRIS SHALL BE PREVENTED FROM ENTERING THE EXISTING SEWER BY IMMEDIATELY INSTALLING WATERTIGHT PLUGS AS NEEDED IN THE EXISTING MANHOLE.

STANDARD PLAN NOTES
SANITARY SEWER PLANS

FEBRUARY 2013

THE CITY OF LAKE ELMO — CITY OF LAKE ELMO

STANDARD DRAWING NO. 300A
LAKE ELMO



NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON MANHOLE FRAME & COVER AS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC, PER ASTM C478. STEP LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, FURNISHED WITH O-RING GASKETS AND LUBRICANT EXCEPT AS OTHERWISE SPECIFIED. A 12" OR 16" BARREL SECTION SHALL BE INSTALLED UNDER THE CONE WHENEVER POSSIBLE.

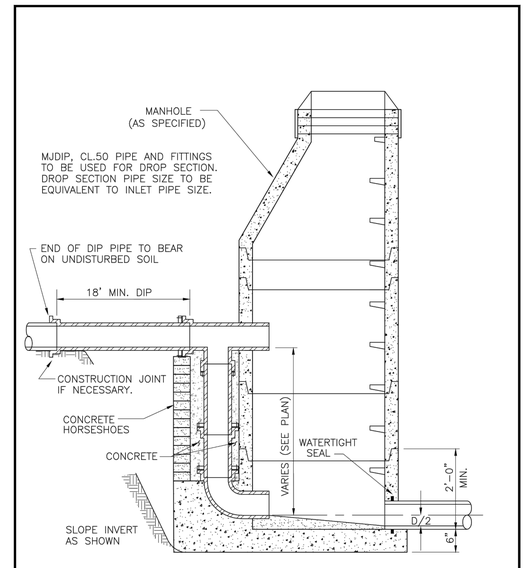
PIPE CONNECTIONS TO MANHOLE SHALL BE MADE WATER TIGHT BY CAST INPLACE RUBBER BOOT AND CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH.

SANITARY SEWER MANHOLE, TYPE 301
(PIPES 27" OR LESS)

FEBRUARY 2013

THE CITY OF LAKE ELMO — CITY OF LAKE ELMO

STANDARD DRAWING NO. 301
LAKE ELMO

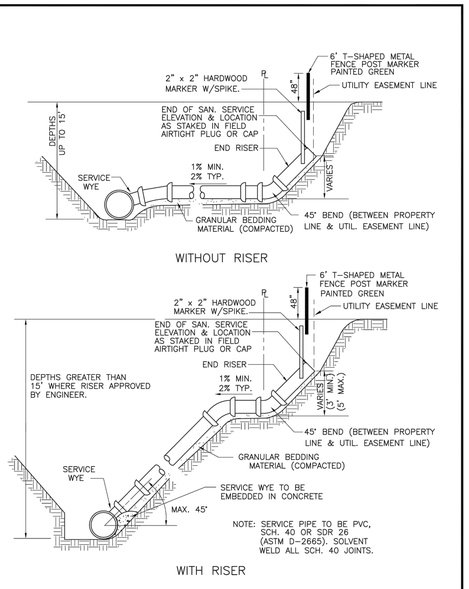


SANITARY SEWER OUTSIDE DROP

FEBRUARY 2013

THE CITY OF LAKE ELMO — CITY OF LAKE ELMO

STANDARD DRAWING NO. 306
LAKE ELMO



WITHOUT RISER

WITH RISER

SANITARY SEWER SERVICE

FEBRUARY 2013

THE CITY OF LAKE ELMO — CITY OF LAKE ELMO

STANDARD DRAWING NO. 313
LAKE ELMO

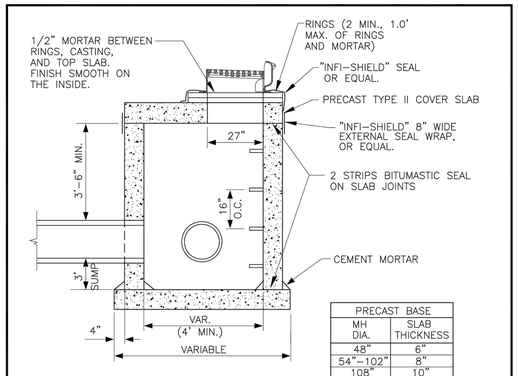
1. ALL STORM SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MnDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
3. PRECAST CONCRETE MANHOLE AND CATCH BASIN SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-477.
4. A 1'-0" TO 1'-4" MANHOLE SECTION SHALL BE INSTALLED UNDER THE CONE SECTION TO ALLOW FOR HEIGHT ADJUSTMENT WHENEVER POSSIBLE.
5. JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL STORM SEWER MANHOLES.
6. RIP-RAP SHALL BE HAND-PLACED OVER GEOTEXTILE FABRIC AND CONFORM TO MnDOT SPEC. 3601, CLASS III, OR AS SPECIFIED HEREIN.
7. THE GEOTEXTILE FABRIC USED UNDER RIP-RAP SHALL EXTEND 3 FT UNDER THE APRON.
8. FURNISH & INSTALL TRASH GUARDS ON ALL FLARED END SECTIONS.
9. ALL SILT SHALL BE CLEANED OUT FROM THE RIP-RAP AT THE END OF THE PROJECT.

STANDARD PLAN NOTES
STORM SEWER PLANS

FEBRUARY 2013

THE CITY OF LAKE ELMO — CITY OF LAKE ELMO

STANDARD DRAWING NO. 400A
LAKE ELMO



PRECAST BASE	
MH DIA.	SLAB THICKNESS
48"	6"
54"-102"	8"
108"	10"
120"	12"

NOTES: NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON FRAME & GRATE CASTINGS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM, OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.

PRECAST REINFORCED CONCRETE BASE SLAB & COVER SLAB PER ASTM C478.

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, FURNISHED WITH O-RING GASKETS & LUBRICANT, OR 8" CONCRETE MANHOLE BLOCK MANHOLE SECTION WITH 1/2" MORTARED EXTERIOR

FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH.

CATCH BASIN/MANHOLE WITH SUMP, TYPE 405

FEBRUARY 2013

THE CITY OF LAKE ELMO — CITY OF LAKE ELMO

STANDARD DRAWING NO. 405
LAKE ELMO

PIONEER engineering
CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS LANDSCAPE ARCHITECTS
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 Engineer under the laws of the State of Minnesota

Name Paul J. Cherne
Reg. No. 19860 Date 08-06-2014

Revisions

Date	08-06-2014
Designed	PJC/KAW
Drawn	KAW/AJR

CITY DETAILS

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

01-ENG-113105-SHEET-DTLS

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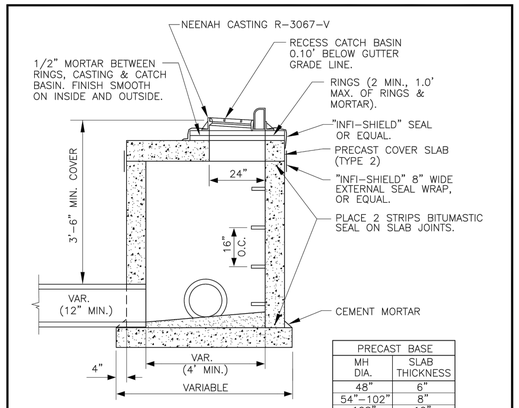


PRECAST BASE	
MH DIA.	SLAB THICKNESS
48"	6"
54"-102"	8"
108"	10"
120"	12"

NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON FRAME & GRATE CASTINGS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.

PRECAST REINFORCED CONCRETE BASE SLAB & COVER SLAB PER ASTM C478,

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, OR 8" CONCRETE MANHOLE BLOCK WITH 1/2" MORTARED EXTERIOR.

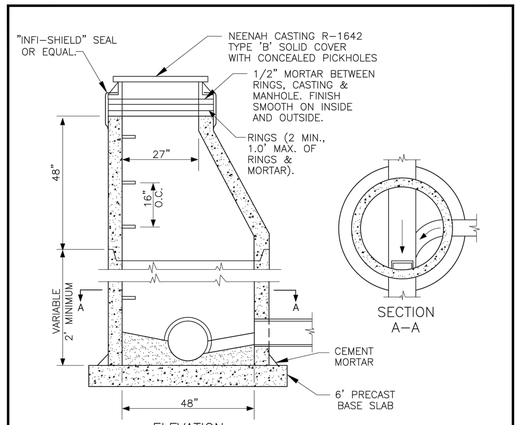
FURNISH PRECAST CONCRETE MANHOLE SECTIONS WITH O-RING GASKETS & LUBRICANT EXCEPT AS OTHERWISE SPECIFIED.

FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH.

CATCH BASIN/MANHOLE, TYPE 406

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 406 LAKE ELMO



ELEVATION

NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON MANHOLE FRAME & COVER AS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS & BASE SLAB PER ASTM C478.

FURNISH PRECAST MANHOLE SECTIONS WITH O-RING GASKETS & LUBRICANT EXCEPT AS OTHERWISE SPECIFIED.
A 12" OR 16" BARREL SECTION SHALL BE INSTALLED UNDER THE CONE WHENEVER POSSIBLE.

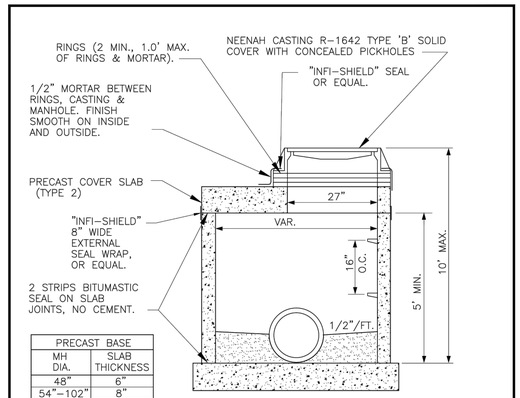
FILL OPENING BETWEEN PIPE & MH WALL WITH CEMENT MORTAR.
INSIDE SURFACE SHALL BE FINISHED SMOOTH.

STORM SEWER MANHOLE, TYPE 407

(PIPES 27" OR LESS)

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 407 LAKE ELMO



PRECAST BASE	
MH DIA.	SLAB THICKNESS
48"	6"
54"-102"	8"
108"	10"
120"	12"

NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON MANHOLE FRAME & COVER AS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS & BASE SLAB PER ASTM C478.

FURNISH PRECAST MANHOLE SECTIONS WITH O-RING GASKETS & LUBRICANT EXCEPT AS OTHERWISE SPECIFIED.

FILL OPENING BETWEEN PIPE & MH WALL WITH CEMENT MORTAR.
INSIDE SURFACE SHALL BE FINISHED SMOOTH.

STORM SEWER MANHOLE, TYPE 409

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 409 LAKE ELMO

TABLE OF QUANTITIES
RIPRAP AT RCP OUTLETS

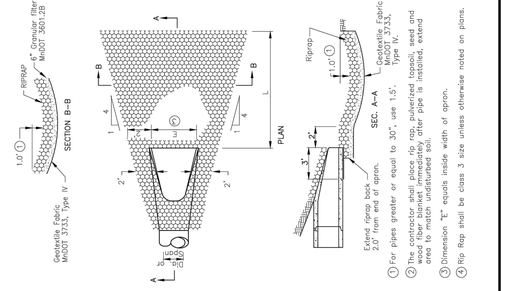
		CLASS II d50=6"	CLASS III d50=9"	CLASS IV d50=12"
Dia. Round Pipe (Ft.)	L	12" Depth Riprap (Cu.Yds.)	18" Depth Riprap (Cu.Yds.)	24" Depth Riprap (Cu.Yds.)
12	8	2.8	4.4	11.0
15	9	2.9	4.4	11.0
18	10	3.0	4.5	11.2
24	12	3.5	5.5	13.8
30	14	4.3	6.8	17.1
36	16	5.0	7.8	19.4
42	18	10.3	15.3	25.8
48	20	12.9	19.2	29.7

		CLASS II d50=6"	CLASS III d50=9"	CLASS IV d50=12"
Span Pipe Arch (Ft.)	L	6" Depth Granular Filter (Cu.Yds.)	9" Depth Granular Filter (Cu.Yds.)	12" Depth Granular Filter (Cu.Yds.)
18	12	3.9	5.9	14.8
22	14	4.2	6.4	16.0
29	18	5.0	7.6	19.0
36	20	5.4	8.2	20.4

TABLE OF QUANTITIES
RIPRAP AT RCP-A OUTLETS or BOXES OF EQUIVALENT SPAN WIDTH

		Class II d50=6"	Class III d50=9"	Class IV d50=12"
Span Pipe Arch (Ft.)	L	6" Depth GRANULAR Filter (Cu.Yds.)	9" Depth GRANULAR Filter (Cu.Yds.)	12" Depth GRANULAR Filter (Cu.Yds.)
28	12	2.8	4.1	10.8
36	14	3.6	5.4	14.3
43	16	4.2	6.4	16.9
51	18	5.5	8.2	21.7
58	20	6.4	9.5	23.4

Note: Requirements for riprap and thickness and filter blanket will be designated in the plans.



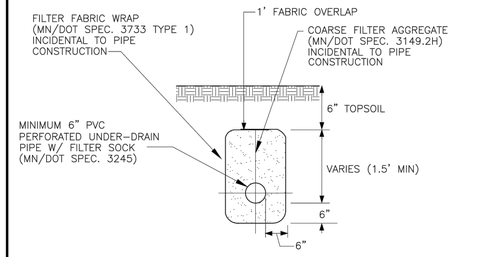
① For pipes greater or equal to 30", use 1.5'.
② The contractor shall place rip rap, pulverized topsoil, seed and wood fiber blanket immediately after pipe is installed, extend entire length outside apron.
③ Dimension "L" equals inside width of apron.
④ Rip Rap shall be class 3 size unless otherwise noted on plans.

RIPRAP AT RCP OUTLETS

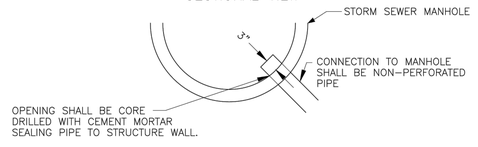
FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 411 LAKE ELMO

IN UNSTABLE SOILS, TYPE OF FILTER FABRIC WRAP SHALL BE DETERMINED BY ENGINEER.



SECTIONAL VIEW



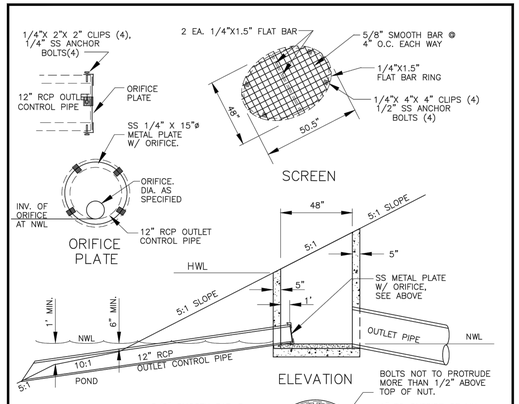
PLAN VIEW
AT CONNECTION TO
STORM SEWER STRUCTURE

DRAIN TILE

USED BY DIRECTION OF CITY ENGINEER ONLY

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 412 LAKE ELMO

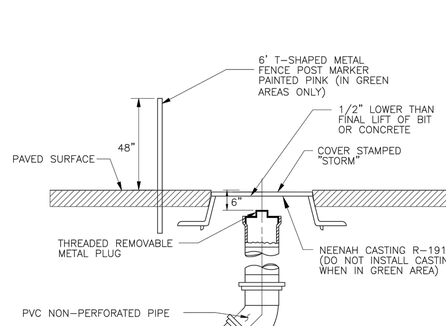


STRUCTURE TABLE			
POND	HWL	NWL	ORIFICE ø

POND SKIMMER

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 417 LAKE ELMO



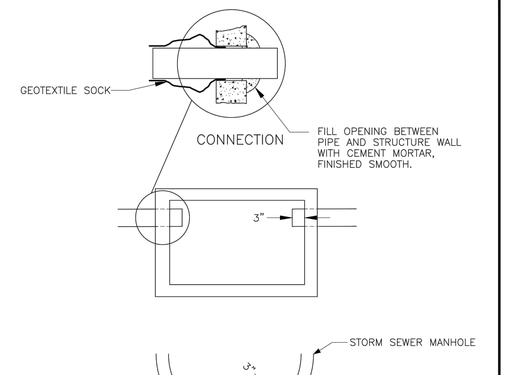
NOTE:
INSTALL CLEANOUTS AT A PROPERTY LINE WHENEVER POSSIBLE.

DRAINTILE CLEANOUT

(CASTING USED FOR CURB STOPS IN HARD SURFACES)

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 419 LAKE ELMO



DRAIN TILE CONNECTIONS

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 420 LAKE ELMO

PIONEER engineering
CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS LANDSCAPE ARCHITECTS
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 Engineer under the laws of the State of Minnesota

Name Paul J. Cherne
Reg. No. 19860 Date 08-06-2014

Revisions

Date	08-06-2014
Designed	PJC/KAW
Drawn	KAW/AJR

CITY DETAILS

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

01-ENG-113105-SHEET-DTLS

18 OF 23

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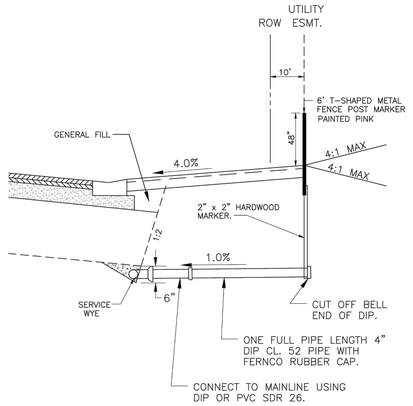


NOTE:
JOINTS BETWEEN DIP PIPES MUST BE GASKETED.
IF PVC PIPE IS USED TO CONNECT TO THE MAINLINE DRAINTILE, CONNECT TO DIP PIPE WITH A "FERNCO" FLEXIBLE COUPLING.

EDGE DRAIN SERVICE (AS DIRECTED BY ENGINEER)

FEBRUARY 2013

CITY OF LAKE ELMO

STANDARD DRAWING NO. 421 LAKE ELMO

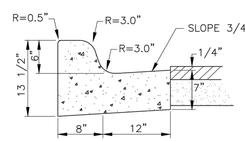
1. BITUMINOUS TRAILS AND SIDEWALKS MUST BE CONSTRUCTED TO MAINTAIN POSITIVE DRAINAGE AWAY FROM THE PATHWAYS THROUGHOUT THE ENTIRE LENGTH.
2. TOPSOIL AND BACKFILLING OPERATIONS MUST BE COMPLETED TO AVOID DAMAGE TO THE BITUMINOUS TRAILS AND SIDEWALKS. FINAL GRADE OF BACKFILL AND TOPSOIL MUST BE FLUSH WITH THE PATH EDGE TO AVOID TRAPPING WATER.
3. DIVIDE SIDEWALK INTO SECTIONS WITH CONTRACTION JOINTS. SPACING SHALL NOT BE LESS THAN 3 FT NOR GREATER THAN 12 FT IN ANY DIMENSION. PLACE ½ INCH EXPANSION JOINT FILLER AT 50 FT (MAXIMUM) INTERVALS.
4. CONCRETE PEDESTRIAN RAMPS MUST BE CONSTRUCTED AT ALL INTERSECTIONS.

STANDARD PLAN NOTES
SIDEWALKS AND TRAILS

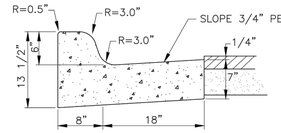
FEBRUARY 2013

CITY OF LAKE ELMO

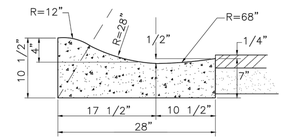
STANDARD DRAWING NO. 500A LAKE ELMO



MnDOT B612
CONCRETE CURB AND GUTTER



MnDOT B618
CONCRETE CURB AND GUTTER



SURMOUNTABLE
CONCRETE CURB AND GUTTER

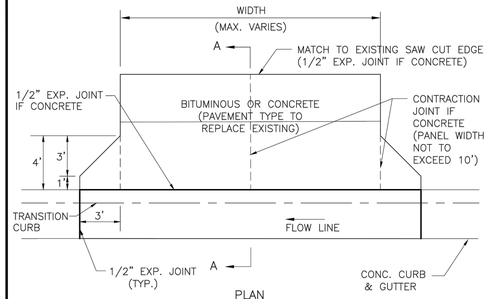
NOTE:
CONSTRUCT B618 CURB & GUTTER AT INTERSECTION RADII FROM P.C. TO P.T. PROVIDE 10-FOOT TRANSITION FROM SURMOUNTABLE CURB & GUTTER TO B618 CURB & GUTTER AT INTERSECTIONS AND CATCH BASINS.

CONCRETE CURB & GUTTER

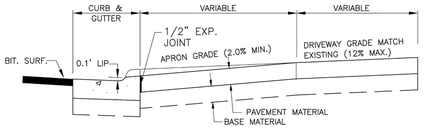
FEBRUARY 2013

CITY OF LAKE ELMO

STANDARD DRAWING NO. 501 LAKE ELMO



PLAN



SECTION A–A

DRIVEWAY TYPE	SURFACE THICKNESS	BASE THICKNESS
BITUMINOUS	3 INCHES	6 INCHES
CONCRETE	6 INCHES	4 INCHES

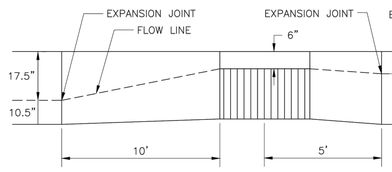
NOTES :
1. BITUMINOUS SHALL BE MnDOT 2360 TYPE SP, GRADATION MIXTURE NO. A WEARING COURSE.
2. AGGREGATE BASE SHALL BE MnDOT 3138 CL. 5, 100% CRUSHED STONE.

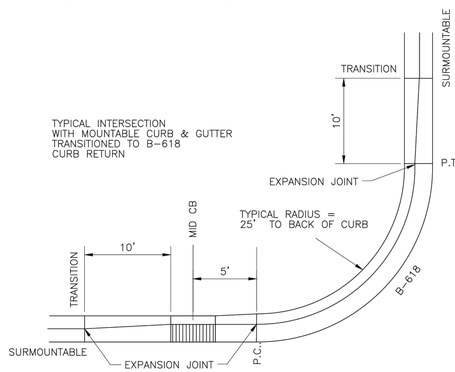
RESIDENTIAL DRIVEWAY

FEBRUARY 2013

CITY OF LAKE ELMO

STANDARD DRAWING NO. 504 LAKE ELMO



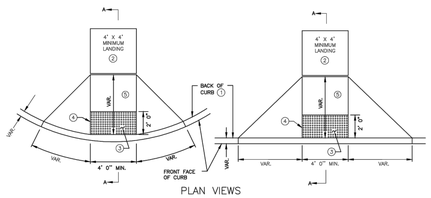


CATCH BASIN PLACEMENT AND CURB & GUTTER TRANSITION AT INTERSECTIONS

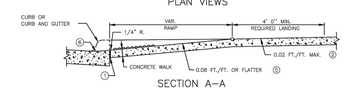
FEBRUARY 2013

CITY OF LAKE ELMO

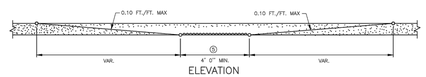
STANDARD DRAWING NO. 506 LAKE ELMO



PLAN VIEWS



SECTION A–A



ELEVATION

NOTES:

TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA), ALL STATE AGENCIES ARE REQUIRED TO UTILIZE THIS STANDARD PLATE. MODIFICATIONS ARE ALLOWED PROVIDED THEY MEET PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG). LOCAL AGENCIES ARE REQUIRED TO ADOPT SIMILAR DESIGNS.

SHARED-USE PATHS SHALL HAVE DETECTABLE WARNINGS ACROSS THE ENTIRE WIDTH OF PATH WHEN THE PATH CROSSES A ROAD. DETECTABLE WARNINGS ARE NOT TO BE USED ON SIDEWALKS OR PATHS WHEN CROSSING ALLEYS OR RESIDENTIAL DRIVEWAYS. DETECTABLE WARNINGS SHOULD BE USED WHERE PEDESTRIAN ACCESS ROUTES CROSS COMMERCIAL DRIVEWAYS THAT ARE PROVIDED WITH TRAFFIC CONTROL DEVICES OR OTHERWISE PERMITTED TO OPERATE LIKE A PUBLIC ROADWAY.

SLOPES ARE DEFINED AS ABSOLUTE ELEVATION DIFFERENCE PER LENGTH OF RUN. (AS OPPOSED TO A RELATIVE SLOPE WITH RESPECT TO A CURB LINE OR CURB HEIGHT.)

NO SIGNAL POLES, SIGN POSTS, CABINETS, OR OTHER OBSTRUCTIONS ARE ALLOWED IN THE RAMP OR PATH OF TRAVEL.

1/2-INCH EXPANSION JOINT. 1/2-INCH PREFORMED JOINT FILLER MATERIAL, AASHTO M 213.

PROVIDE A 4' X 4' MINIMUM LANDING. SEE PLANS FOR PROPOSED RUNNING SLOPE AND CROSS SLOPE, NEITHER OF WHICH MAY EXCEED 0.02 FT./FT. AS CONSTRUCTED.

PLACE THE DETECTABLE WARNINGS AT THE BACK OF CURB. WHEN THE DETECTABLE WARNING SYSTEM IS A PREFORMED RECTANGLE PLACED AT THE BACK OF A RADIAL CURB LINE, HAND FORM THE CURB TO FILL THE GAP. DETECTABLE WARNING AREA SHALL BE 2' 0" MIN. IN THE DIRECTION PERPENDICULAR TO THE GRADE BREAK AND SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP.

WHERE RADIAL WARNING SURFACES ARE USED OR IN OTHER CIRCUMSTANCES WHERE THE EDGE OF THE WARNING SURFACE IS NOT PARALLEL TO THE EDGE OF THE CURB RAMP PATH OF TRAVEL, THE EDGE OF THE DETECTABLE WARNING SURFACE SHOULD NEVER BE MORE THAN 3 INCHES FROM THE EDGE OF THE RAMP. DETECTABLE WARNING AREA SHALL CONTRAST VISUALLY WITH THE ADJACENT GUTTER, ROADWAY, OR WALKWAY, EITHER LIGHT ON DARK OR DARK ON LIGHT. CONTRAST MAY BE PROVIDED ON THE FULL RAMP SURFACE, EXCLUDING THE FLARED SIDES.

CROSS SLOPE OF THE RAMP MAY NOT EXCEED 0.02 FT./FT. AS CONSTRUCTED.

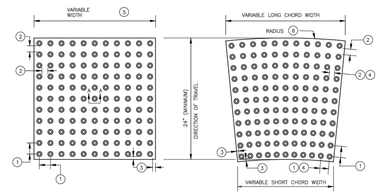
ANY VERTICAL LIP THAT OCCURS AT THE FLOW LINE MAY NOT BE GREATER THAN 1/4 INCH.

PEDESTRIAN CURB RAMP

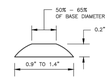
FEBRUARY 2013

CITY OF LAKE ELMO

STANDARD DRAWING NO. 507 LAKE ELMO



RECTANGULAR PLATES RADIAL PLATES



SECTION A–A
TRUNCATED DOME

TYPICAL RADIAL
TRUNCATED DOME PLATES

RADIUS (YEET) (7)	LONG CHORD WIDTH (INCHES)	SQ. FT. PER PLATE	PLATES REQUIRED FOR 90 DEGREE TURN
10	23–1/2	3.53	8
15	18–13/16	2.93	15
15	23–1/2	3.67	12
20	18–13/16	3.00	20
20	18–7/8	2.98	20
25	20–1/2	3.28	23
25	23–9/16	3.77	20
30	22–5/8	3.65	25
35	22	3.56	30

NOTES:

DETECTABLE WARNING SURFACES SHALL FOLLOW THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG).

DETECTABLE WARNINGS CONSIST OF TRUNCATED DOMES ALIGNED IN A SQUARE OR RADIAL GRID PATTERN.

DETECTABLE WARNINGS ARE REQUIRED:
- –WHERE RAMPS, LANDINGS, OR BLENDED TRANSITIONS PROVIDE A FLUSH PEDESTRIAN CONNECTION TO THE ROADWAY.
- –WHERE PEDESTRIAN ACCESS ROUTES CROSS COMMERCIAL DRIVEWAYS THAT ARE PROVIDED WITH TRAFFIC CONTROL DEVICES OR OTHERWISE PERMITTED TO OPERATE LIKE A PUBLIC ROADWAY.
- –AT PEDESTRIAN RAILWAY CROSSINGS.
- –ON RAIL PLATFORMS WHERE BOARDING EDGES ARE NOT PROTECTED.

DETECTABLE WARNINGS SHALL EXTEND:
- –IN THE FULL WIDTH OF THE DIRECTION OF TRAVEL.
- –THE FULL LENGTH OF THE RAMP, LANDING, OR BLENDED TRANSITION, WITHIN 3" OF FULL WIDTH ON EITHER END.
- –THE FULL LENGTH OF THE PUBLIC USE AREA OF A RAIL PLATFORM.

DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, ROADWAY, OR WALKWAY, EITHER A LIGHT-ON-DARK OR DARK-ON-LIGHT. CONTRAST MAY BE PROVIDED ON THE FULL RAMP SURFACE, EXCLUDING THE FLARED SIDES.

TRUNCATED DOME PANELS SHALL BE FROM MNDOT'S APPROVED/QUALIFIED PRODUCT LISTS. PANELS SHALL BE CAST IRON.

DETECTABLE WARNING SURFACE SHALL BE PAID FOR AS TRUNCATED DOMES BY THE SQUARE FOOT.

ALL TRUNCATED DOME SYSTEMS SHALL BE PLACED IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER.

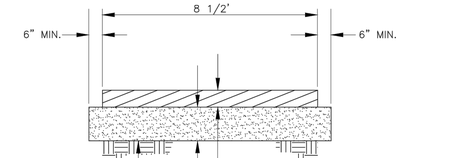
1. CENTER TO CENTER DOME SPACING: 1.6" MINIMUM, 2.4" MAXIMUM.
2. BASE TO BASE DOME SPACING: 0.65" MINIMUM.
3. DOME BASE TO PLATE EDGE SPACING: 0.35" MINIMUM, 0.75" MAXIMUM.
4. SPACING VARIES ON RADIAL PLATES.
5. TYPICAL WIDTHS AVAILABLE: 12", 18", 24", 30", 36". CHECK WITH MANUFACTURERS FOR AVAILABLE WIDTHS.
6. ON RADIAL PLATE, RADIUS DEFINED AT BACK OF CURB.
7. TYPICAL RADII. CHECK WITH MANUFACTURERS FOR AVAILABLE RADII.

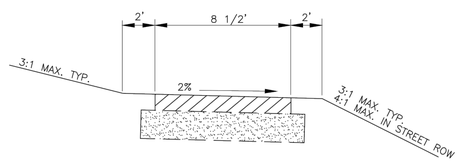
DETECTABLE WARNING SURFACE– TRUNCATED DOMES

FEBRUARY 2013

CITY OF LAKE ELMO

STANDARD DRAWING NO. 508 LAKE ELMO





NOTE
1. BITUMINOUS TRAILS SHALL HAVE CONCRETE PED RAMPS AT ALL STREET INTESECTIONS.
2. PROVIDE 2% CROSS-SLOPE TO MAINTAIN POSITIVE DRAINAGE AWAY FROM TRAIL SURFACE THROUGHOUT LENGTH OF TRAIL.

BICYCLE–PEDESTRIAN PATH

FEBRUARY 2013

CITY OF LAKE ELMO

STANDARD DRAWING NO. 509 LAKE ELMO

PIONEER engineering
CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS LANDSCAPE ARCHITECTS
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 Engineer under the laws of the State of Minnesota

Name Paul J. Cherne
Reg. No. 19860 Date 08-06-2014

Revisions

Date	08-06-2014
Designed	PJC/KAW
Drawn	KAW/AJR

CITY DETAILS

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

01-ENG-113105-SHEET-DTLS

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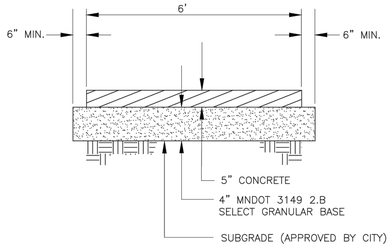
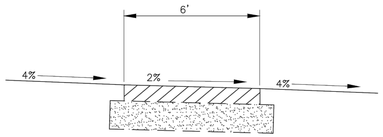


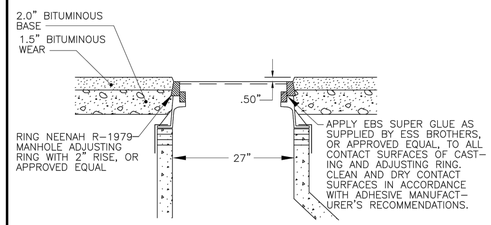


NOTE
1. SIDEWALKS SHALL HAVE CONCRETE PED RAMPS AT ALL STREET INTESECTIONS.
2. PROVIDE 2% CROSS-SLOPE TO MAINTAIN POSITIVE DRAINAGE AWAY FROM SIDEWALK THROUGHOUT LENGTH OF WALK.

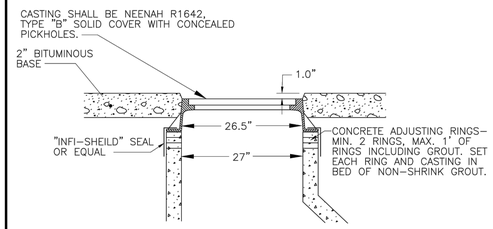
CONCRETE SIDEWALK

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 510 LAKE ELMO



BITUMINOUS WEAR COURSE ADJACENT DETAIL
NOT TO SCALE

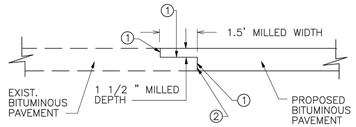


BITUMINOUS BASE COURSE ADJACENT DETAIL
NOT TO SCALE

MANHOLE CASTING ADJUSTMENT

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 511 LAKE ELMO



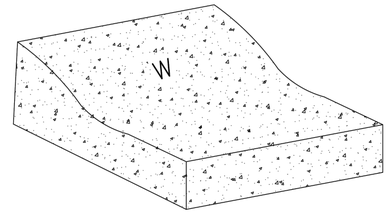
MILLED LAP JOINT SHALL BE CONSTRUCTED WHERE MATCHING INTO EXISTING BITUMINOUS PAVEMENT. MILL IMMEDIATELY PRIOR TO CONSTRUCTING BITUMINOUS WEARING COURSE.

NOTES:
1. APPLY BITUMINOUS TACK COAT, MnDOT SPEC. 2357.
2. SAW BITUMINOUS PAVEMENT FULL DEPTH TO ESTABLISH A NEAT LINE FROM WHICH TO EXTEND THE NEW WORK.

MILLED LAP JOINT

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 512 LAKE ELMO



W-RELATIVE CURB STOP LOCATION

NOTES:
1. CURB MARKERS ARE AVAILABLE FROM CITY HALL WITH A DEPOSIT.
2. CURB MARKINGS SHALL BE POSITIONED IN THE FACE OF THE CURB, WHILE THE CONCRETE IS IN A PLASTIC STATE, PERPENDICULAR TO THE LOCATION OF CURB STOPS.
3. WHERE B6XX CURB IS USED, PLACE CURB MARKING ON FACE OF CURB.

CONCRETE CURB MARKING
(FOR CURB STOPS)

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 513 LAKE ELMO

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND IMPLEMENT MINNESOTA POLLUTION CONTROL AGENCY (MPCA) BEST MANAGEMENT PRACTICES (BMP) TO CONTROL SITE SILTATION AND EROSION INTO DRAINAGE WAYS. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS AND COMPLETION DATES RELATIVE TO ALL PERMITS ISSUED FOR THE WORK TO BE COMPLETED. THE ENGINEER MAY ISSUE A STOP WORK ORDER FOR ALL DEVELOPMENT WORK AND BUILDING CONSTRUCTION FOR NONCOMPLIANCE WITH THESE MEASURES.
2. SEQUENCING. ALL SILT FENCE AND OTHER EROSION CONTROL MEASURES SHALL BE IN PLACE AND APPROVED BY ENGINEER PRIOR TO ANY REMOVALS, EXCAVATION OR CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER.
3. SILT FENCE. THE CONTRACTOR SHALL INSTALL SILT FENCE AT THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE CITY STANDARD DETAILS. SILT FENCE DAMS AND INTERIM SUMPS SHALL BE PLACED TO INTERCEPT SILT FROM CONCENTRATED RUNOFF FROM OPEN GRADED AREAS. ADDITIONAL SILT FENCE SHALL BE REQUIRED AS DIRECTED BY THE ENGINEER.
4. STOCKPILES. ALL STOCKPILE AREAS SHALL HAVE SILT FENCE OR SEDIMENT TRAPPING SYSTEMS PLACED AROUND THE ENTIRE PERIMETER.
5. INLET PROTECTION. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL EXISTING STORM SEWER INLETS IN ACCORDANCE WITH THE CITY STANDARD DETAILS. INLET PROTECTION SHALL ALSO BE PROVIDED ON ALL PROPOSED STORM SEWER INLETS IMMEDIATELY FOLLOWING CONSTRUCTION OF THE INLET. INLET PROTECTION MUST BE INSTALLED IN A MANNER THAT WILL NOT IMPOUND WATER FOR EXTENDED PERIODS OF TIME OR IN A MANNER THAT PRESENTS A HAZARD TO VEHICULAR OR PEDESTRIAN TRAFFIC.
6. TEMPORARY SEDIMENT BASINS. THE CONTRACTOR SHALL INCORPORATE TEMPORARY SEDIMENT BASINS THROUGHOUT THE CONSTRUCTION SITE TO CAPTURE RUNOFF AND SLOW THE FLOW OF WATER AND ALLOW SEDIMENT TO SETTLE OUT. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED AS DIRECTED BY THE CITY ENGINEER.
7. ROCK CONSTRUCTION ENTRANCE. A ROCK ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO REDUCE TRACKING OF SILT AND DIRT ONTO THE PUBLIC STREETS. A GEOTEXTILE FABRIC SHALL BE PLACED UNDERNEATH THE ROCK. THE ROCK SHALL BE PERIODICALLY REPLENISHED TO MAINTAIN THE INTENDED PERFORMANCE. MUD AND DEBRIS SHALL BE REMOVED OR SCRAPED FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.
8. STREET SWEEPING. ALL STREETS USED FOR ACCESS TO THE SITE AND HAUL ROUTES USED FOR CONSTRUCTION EQUIPMENT AND MATERIAL SUPPLIES SHALL BE CLEANED AT THE END OF EACH WORKING DAY. THE CITY OR ENGINEER MAY ORDER ADDITIONAL SWEEPING OF THE STREETS AS DEEMED REQUIRED AT DEVELOPER/CONTRACTOR EXPENSE.
9. POSITIVE DRAINAGE AND PROTECTION. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE SITE AT ALL TIMES. LOW POINTS WITHIN AND ALONG ROADWAYS ARE EXPRESSLY PROHIBITED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS TO FACILITATE PROPER DRAINAGE DURING CONSTRUCTION. TO PROTECT PREVIOUSLY GRADED AREAS FROM EROSION, WOOD FIBER BLANKET SHALL BE PLACED IMMEDIATELY ON STEEP SLOPES (1:3 OR GREATER) AND EMBANKMENTS, PERMANENT AND TEMPORARY PONDS, AND OUTLETS AND OVERFLOWS TO PROTECT THE COMPLETED GRADE AND MINIMIZE SILT IN THE RUNOFF.

STANDARD PLAN NOTES
GRADING AND EROSION CONTROL PLANS

FEBRUARY 2013

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

10. DRAINAGE DITCHES. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER. STABILIZATION OF THE LAST 200 LINEAL FEET MUST BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER. STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES MUST BE COMPLETE WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER AND CONSTRUCTION IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.
11. TURF ESTABLISHMENT. ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
12. MAINTENANCE AND INSPECTION. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND UNTIL SATISFACTORY ESTABLISHMENT OF PERMANENT GROUND COVER IS OBTAINED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES, AND STORMWATER OUTFALLS MUST BE BE INSPECTED WEEKLY, AND WITHIN 24 HOURS OF THE SITE RECEIVING 0.5 INCHES OF RAIN. REPAIRS MUST BE MADE ON THE SAME DAY OR FOLLOWING DAY OF THE INSPECTION. UNSATISFACTORY CONDITIONS NOT REPAIRED OR CLEANED UP WITHIN 48-HOURS OF NOTIFICATION SHALL RESULT IN A STOP WORK ORDER, AND/OR SAID WORK SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE.
13. REMOVAL. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY EROSION CONTROL MEASURES, STRUCTURES AND DEVICES ONLY AFTER RECEIVING ENGINEER APPROVAL. ALL DEBRIS, STAKES, AND SILTS ALONG SILT FENCES SHALL BE REMOVED AND DISPOSED OFF SITE. THE CONTRACTOR SHALL HAND RAKE SILTED AREAS ALONG THE FENCE LOCATIONS TO PROVIDE A SMOOTH FINAL GRADE AND SHALL RESTORE THE GROUND SURFACE WITH SEED OR SOD, AS REQUIRED, TO MATCH THE FINISHED GRADE TO THE ADJACENT AREA.
14. FINAL STORM SEWER SYSTEM. AT THE COMPLETION OF THE WORK AND BEFORE THE FINAL WALK THROUGH, THE CONTRACTOR SHALL REMOVE STORM SEWER INLET PROTECTION MEASURES AND THOROUGHLY FLUSH THE STORM SEWER SYSTEM. SEDIMENT AND DEBRIS SHALL BE COMPLETELY REMOVED AND CLEANED AT THE INLETS, OUTLETS, AND DOWNSTREAM OF EACH OUTLET. RIPRAP AND GEOTEXTILE FABRIC MAY REQUIRE REPLACEMENT AS DIRECTED BY THE ENGINEER TO OBTAIN A LIKE NEW INSTALLATION ACCEPTABLE TO THE CITY.
15. DITCH CHECK (BIOROLL BLANKET SYSTEM). BIOROLL AND BLANKET SYSTEMS SHALL BE BE INSTALLED AS DITCH CHECKS ONLY IN SPECIFIED LOCATIONS AS APPROVED BY THE CITY ENGINEER. BIOROLLS ARE NOT TO BE UTILIZED IN AREAS WHERE VEHICLE AND CONSTRUCTION TRAFFIC OCCUR.

STANDARD PLAN NOTES
GRADING AND EROSION CONTOL PLANS

FEBRUARY 2013

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

16. FLOTATION SILT CURTAIN. FLOTATION SILT CURTAIN SHALL BE UTILIZED WHEN CONSTRUCTION ACTIVITIES OCCUR DIRECTLY ADJACENT TO LAKES, STREAMS OR WETLANDS IN ORDER TO CONTAIN SEDIMENTS NEAR THE BANKS OF WORKING AREAS. THE INSTALLATION OF FLOTATION SILT CURTAINS WILL BE REQUIRED AS DIRECTED BY THE CITY ENGINEER.
17. CONCRETE WASHOUT ONSITE. ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. A COMPACTED CLAY LINER THAT DOES NOT ALLOW WASHOUT LIQUIDS TO ENTER GROUND WATER IS CONSIDERED AN IMPERMEABLE LINER. THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

STANDARD PLAN NOTES
GRADING AND EROSION CONTOL PLANS

FEBRUARY 2013

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

1. RESTORE ALL DISTURBED AREAS WITH 6 INCHES OF TOPSOIL CONFORMING TO MNDOT 3877.
2. PROTECT ALL STORM SEWER INLETS AS SPECIFIED HEREIN AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.
3. MAINTAIN ALL SILT FENCE AND REPAIR OR REPLACE AS NEEDED OR REQUIRED UNTIL TURF HAS BEEN ESTABLISHED.
4. RESTORATION WORK SHALL BEGIN WITHIN 7 DAYS OF FINAL GRADING.
5. A MINIMUM OF 2 ROWS OF SOD SHALL BE PLACED ADJACENT TO THE BACK OF CURBS ALONG ALL BOULEVARDS. SILT FENCE SHALL BE PLACED DIRECTLY BEHIND THE SOD IN ACCORDANCE WITH THE CITY STANDARD DETAILS.
6. BOULEVARD AND DITCH RESTORATION INCLUDES FINE GRADING, WHICH INCLUDES THE REMOVAL OF ROCKS, DEBRIS AND SOIL CHUNKS, WHILE MAINTAINING POSITIVE DRAINAGE.

STANDARD PLAN NOTES
SITE RESTORATION PLANS

FEBRUARY 2013

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

PIONEERengineering
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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 Engineer under the laws of the State of Minnesota
Name Paul J. Cherne
Reg. No. 19860 Date 08-06-2014

Revisions

Date	08-06-2014
Designed	PJC/KAW
Drawn	KAW/AJR

CITY DETAILS

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

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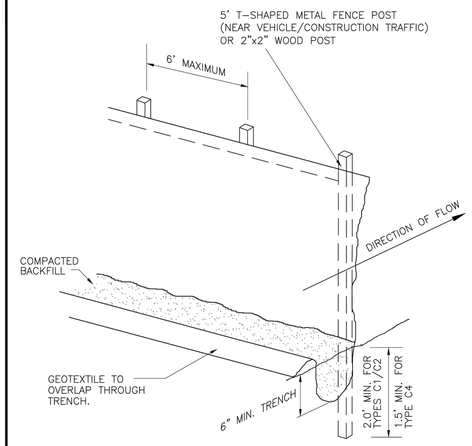
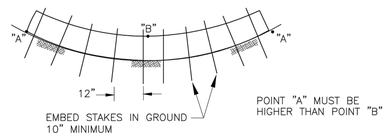


NOTE : –SILT FENCE INSTALLATION SHALL CONFORM TO MNDOT2573.3, TYPE C1/C2 NEAR VEHICLE/CONSTRUCTION TRAFFIC, TYPE C4 AT ALL OTHER LOCATIONS.
–MATERIALS SHALL CONFORM TO MNDOT 3886.

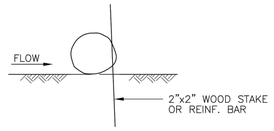
SILT FENCE

FEBRUARY 2013

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



DITCH SECTION



FIBER ROLL SECTION

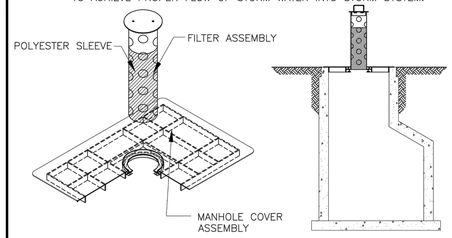
NOTE:
STAKE TO BE INSTALLED AT AN ANGLE OF APPROXIMATELY 45° ON THE DOWNSTREAM SIDE OF THE FIBER ROLL. ENSURE THAT STAKE DOES NOT PUSH DOWN THE FIBER ROLL FROM ITS FULL HEIGHT.

DITCH CHECK (FIBER ROLL)

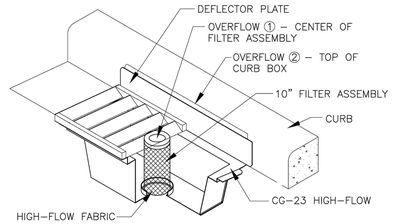
FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 603 LAKE ELMO

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



WIMCO RD-23 OR APPROVED EQUAL

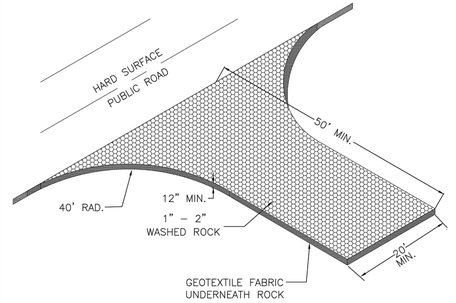


WIMCO CG-23 HIGH-FLOW OR APPROVED EQUAL

SEDIMENT CONTROL AROUND STORM SEWER INLET

FEBRUARY 2013

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



NOTES:

① MAXIMUM WIDTH OF CONSTRUCTION ENTRANCE IS 24 FEET.

② A MNDOT 3733 TYPE V GEOTEXTILE FABRIC SHALL BE USED UNDER THE ROCK TO PREVENT MIGRATION OF THE UNDERLYING SOIL INTO THE STONE.

③ CONSTRUCTION ENTRANCE IS REQUIRED FOR ALL NEW HOME CONSTRUCTION AND NEW STREET CONSTRUCTION.

④ CONSTRUCTION ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OF MUD ONTO ROADWAYS THAT ADJOIN THE PROJECT. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL ROCK OR REMOVAL AND REINSTALLATION OF THE ROCK ENTRANCE.

⑤ REMOVE MUD AND DEBRIS FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.

ROCK CONSTRUCTION ENTRANCE

FEBRUARY 2013

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

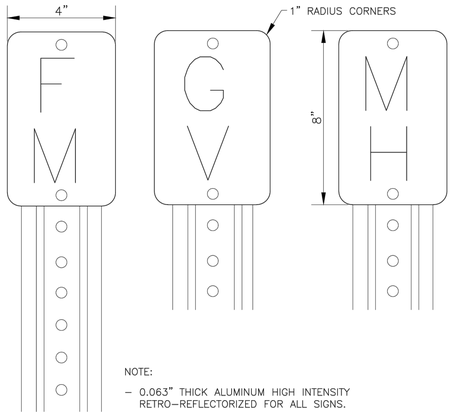
1. STREET LIGHTING SHALL BE INSTALLED PER CITY STANDARDS 5 FEET BACK OF CURB IN LOCATIONS SHOWN ON PLAN.
2. ALL SIGNS MUST MEET MMUTCD.
3. ALL SIGN SHEATHING TO BE HIGH INTENSITY DIAMOND GRADE.
4. SIGN POSTS TO BE UNPAINTED GALVANIZED METAL, 2.75 LBS/FT.
5. CITY TO FURNISH AND INSTALL STREET SIGNS.
6. POLY PREFORMED PAVEMENT MATERIAL SHALL BE USED FOR ALL PAVEMENT SYMBOLS.
7. PAINT FOR PAVEMENT MARKINGS SHALL MEET THE REQUIREMENTS OF MnDOT "SPECIFICATIONS FOR WHITE AND YELLOW, THREE MINUTE DRY, ALKYD TRAFFIC PAINTS".

STANDARD PLAN NOTES

SIGNING/PAVEMENT MARKINGS/LIGHTING PLANS

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 700A LAKE ELMO

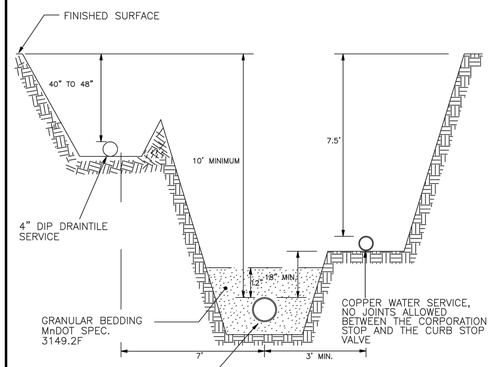


NOTE:
- 0.063" THICK ALUMINUM HIGH INTENSITY RETRO-REFLECTORIZED FOR ALL SIGNS.
- BLACK LETTERS ON WHITE BACKGROUND FOR MANHOLE.
- WHITE LETTERS ON BLUE BACKGROUND FOR GATE VALVE.
- WHITE LETTERS ON GREEN BACKGROUND FOR FORCEMAIN – "FM".
- U-CHANNEL POST, MINIMUM 3.0 LB./FT., 7.5' LONG, GALVANIZED & BURIED 2.5'.
- PLACE MARKERS AT ALL OFF ROAD MANHOLES AND GATE VALVES.

OFF ROAD STRUCTURE MARKERS

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 705 LAKE ELMO

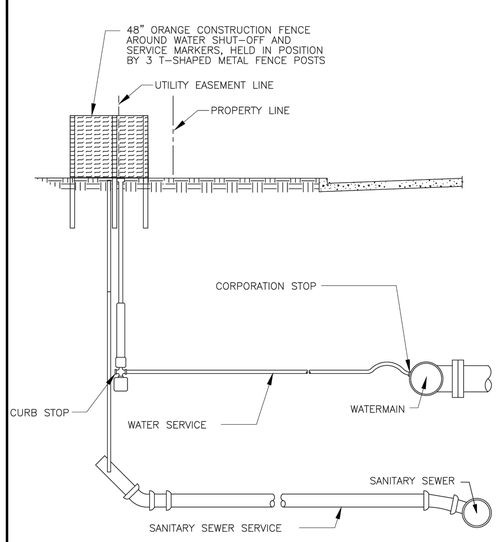


NOTE: IF 18" OF VERTICAL SEPARATION BETWEEN THE SANITARY SERVICE AND WATER SERVICE CAN NOT BE MAINTAINED 10' OF HORIZONTAL SEPARATION IS REQUIRED.

SANITARY, WATER & DRAIN TILE SERVICE INSTALLATION

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 712 LAKE ELMO



TYPICAL SERVICE PROTECTION

FEBRUARY 2013

CITY OF LAKE ELMO | STANDARD DRAWING NO. 713 LAKE ELMO

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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 Paul J. Cherne
Reg. No. 19860 Date 08-06-2014

Revisions

Date	08-06-2014
Designed	PJC/KAW
Drawn	KAW/AJR

CITY DETAILS

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

01-ENG-113105-SHEET-DTLS

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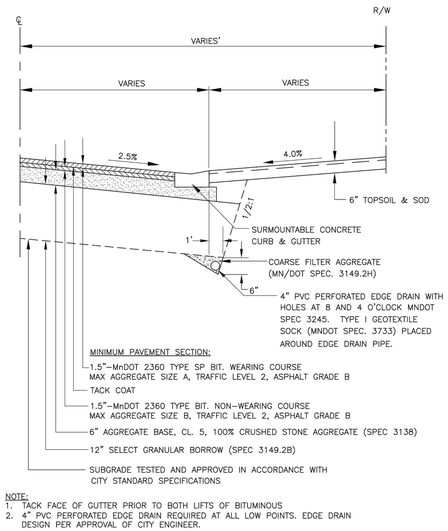


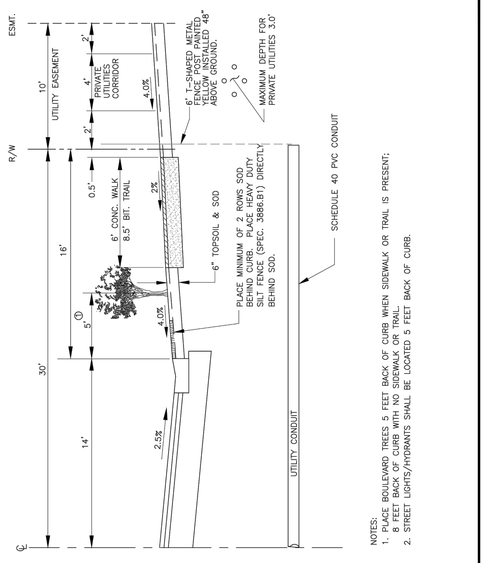
NOTE:
1. TACK FACE OF GUTTER PRIOR TO BOTH LIFTS OF BITUMINOUS
2. 4" PVC PERFORATED EDGE DRAIN REQUIRED AT ALL LOW POINTS. EDGE DRAIN DESIGN PER APPROVAL OF CITY ENGINEER.

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

FEBRUARY 2013

THE CITY OF LAKE ELMO — CITY OF LAKE ELMO

STANDARD DRAWING NO. 801 LAKE ELMO



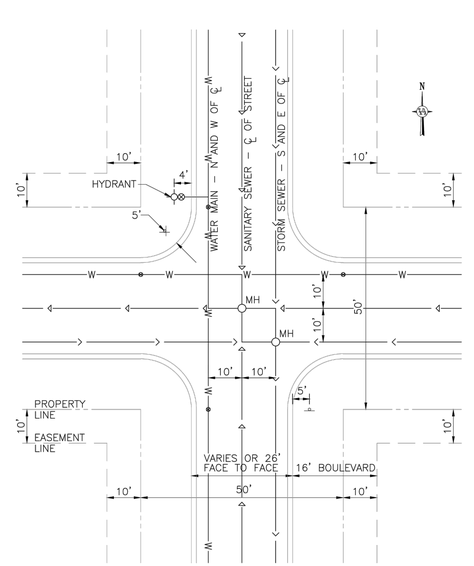
NOTES:
1. PLACE BOULEVARD TREES 5 FEET BACK OF CURB WHEN SIDEWALK OR TRAIL IS PRESENT; 8 FEET BACK OF CURB WITH NO SIDEWALK OR TRAIL.
2. STREET LIGHTS/HYDRANTS SHALL BE LOCATED 5 FEET BACK OF CURB.

TYPICAL RIGHT OF WAY LAYOUT

FEBRUARY 2013

THE CITY OF LAKE ELMO — CITY OF LAKE ELMO

STANDARD DRAWING NO. 805 LAKE ELMO



URBAN STREET UTILITY LOCATION

FEBRUARY 2013

THE CITY OF LAKE ELMO — CITY OF LAKE ELMO

STANDARD DRAWING NO. 806 LAKE ELMO

1. PROVIDE AND INSTALL PLANT MATERIALS THAT MEET SPECIFICATIONS AND ARE OF THE SIZE, TYPE AND SPECIES GIVEN IN THE PLANT SCHEDULE OR SHOWN ON THE PLANS.
2. PLANT LIST QUANTITIES ARE PROVIDED FOR CONVENIENCE, IN THE EVENT OF QUANTITY DISCREPANCIES, THE DRAWING SCALE SHALL TAKE PRECEDENCE.
3. NO PLANT MATERIAL SUBSTITUTIONS SHALL BE MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE CITY.
4. ALL PLANT MATERIALS TO BE SPECIMEN GRADE, MINNESOTA–GROWN AND/OR HARDY. SPECIMEN GRADE SHALL ADHERE TO, BUT IS NOT LIMITED BY, THE FOLLOWING STANDARDS:
   - ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, AND SCARS.
   - ALL PLANTS SHALL BE FREE FROM NOTICEABLE GAPS, HOLES, OR DEFORMITIES.
   - ALL PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES.
   - ALL PLANTS SHALL HAVE HEAVY, HEALTHY BRANCHING AND LEAFING.
   - CONIFEROUS TREES SHALL HAVE AN ESTABLISHED MAIN LEADER AND A HEIGHT TO WIDTH RATIO OF NO LESS THAN 5:3.
5. PLANT MATERIALS SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSIZ 60.1) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED, AND SHALL BE INSTALLED PER ANS NURSERY PLANTING PRACTICES.
6. CONTRACTOR SHALL CONTACT GOPHER STATE "ONE CALL" (651–454–0002) TO VERIFY UNDERGROUND UTILITY LOCATIONS PRIOR TO PLANTING AND PLANT MATERIAL DELIVERY.
7. PLANTS SHALL BE PLANTED IMMEDIATELY UPON ARRIVAL AT THE SITE.
8. ALL AREAS NOT SPECIFICALLY SHOWN AS PLANTED IN OTHER LANDSCAPE MATERIALS AND ALL SLOPES AND ON–SITE AREAS DISTURBED BY CONSTRUCTION, SHALL BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED AND ACCEPTED BY THE CITY.
9. CONTRACTOR SHALL PROTECT AND MAINTAIN ALL PLANTINGS, INCLUDING MULCHING, MOWING, WATERING, AND PRUNING UNTIL THE PLANT MATERIAL IS FULLY ESTABLISHED.
10. ALL BOULEVARD AREAS AND AREAS DISTURBED ADJACENT TO THE SITE SHALL BE REPAIRED, REPLACED, OR CORRECTED BY THE CONTRACTOR WITH QUALITY LAWN SOD.
11. PLANT MATERIALS SHALL BE SUBJECT TO A FULL ONE–YEAR WARRANTY BEGINNING UPON FINAL WRITTEN ACCEPTANCE BY THE CITY. DEFECTIVE MATERIALS SHALL BE REPLACED, AND REPLACEMENT MATERIALS SHALL RECEIVE A FULL ONE–YEAR WARRANTY FROM THE REPLACEMENT PLANTING DATE.
12. TREES SHALL BE FURTHER WARRANTED TO REMAIN UPRIGHT FOR A FULL TWO–YEAR PERIOD.

STANDARD PLAN NOTES
LANDSCAPE PLANS

FEBRUARY 2013

THE CITY OF LAKE ELMO — CITY OF LAKE ELMO

STANDARD DRAWING NO. 900A LAKE ELMO

PIONEER*engineering*
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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 me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota
Name Paul J. Cherne
Reg. No. 19860 Date 08-06-2014

Revisions

Date	08-06-2014
Designed	PJC/KAW
Drawn	KAW/AJR

CITY DETAILS

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

01-ENG-113105-SHEET-DTLS

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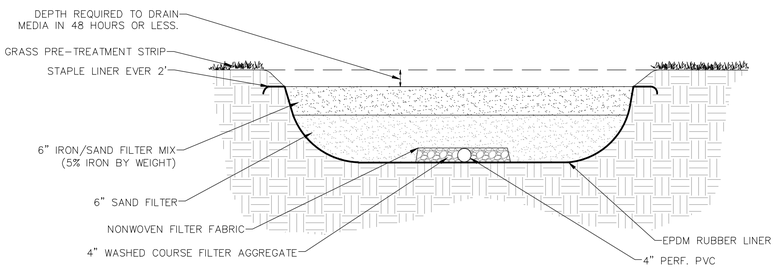
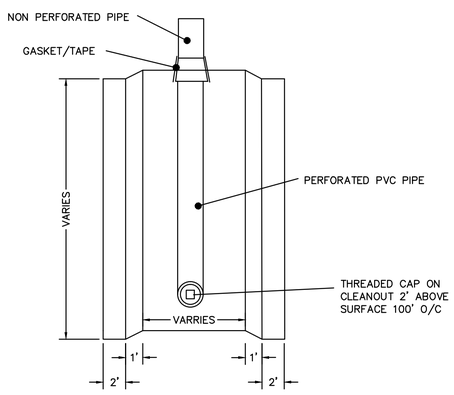
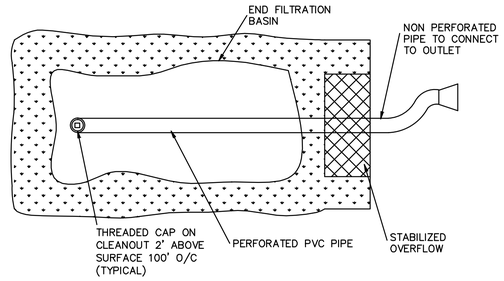
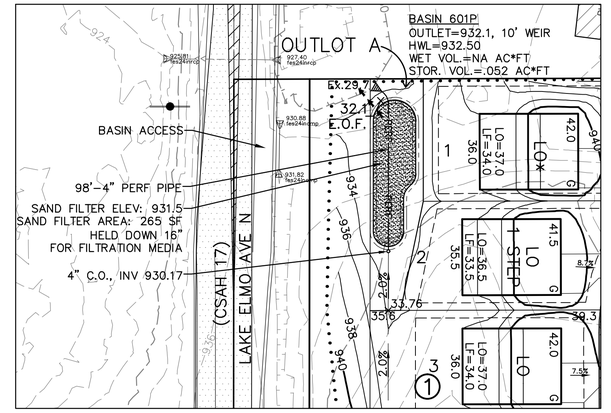




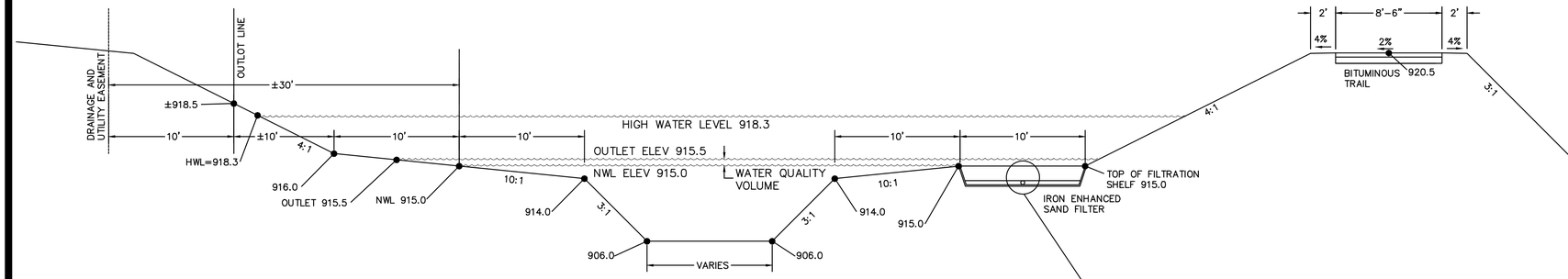
TOP VIEW

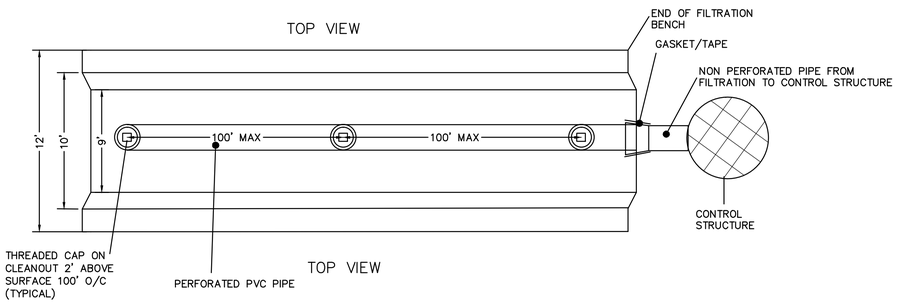


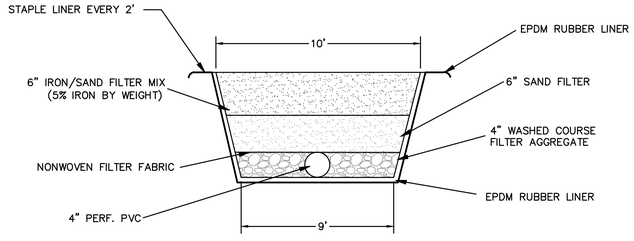


BASIN WITH IRON ENHANCED SAND FILTER SECTION (OUTLOT A)

N.T.S.

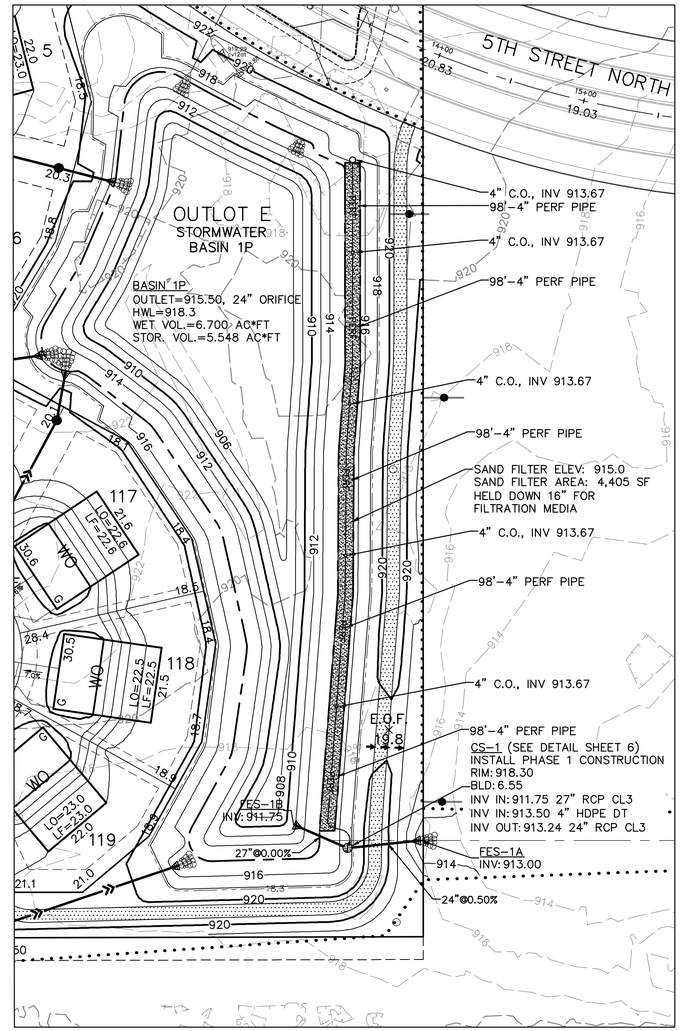


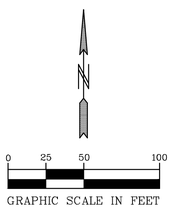




POND SECTION WITH IRON ENHANCED SAND FILTER (OUTLOT E)

N.T.S.





01-ENG-113105-SHEET-DTLS-FILT

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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 Paul J. Cherne
Reg. No. 19860 Date 08-06-2014

Revisions

Date	08-06-2014
Designed	PJC/KAW
Drawn	KAW/AJR

IRON ENHANCED SAND FILTER PLAN
PHASE 3 - SITE CLOSEOUT

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

23 OF 23

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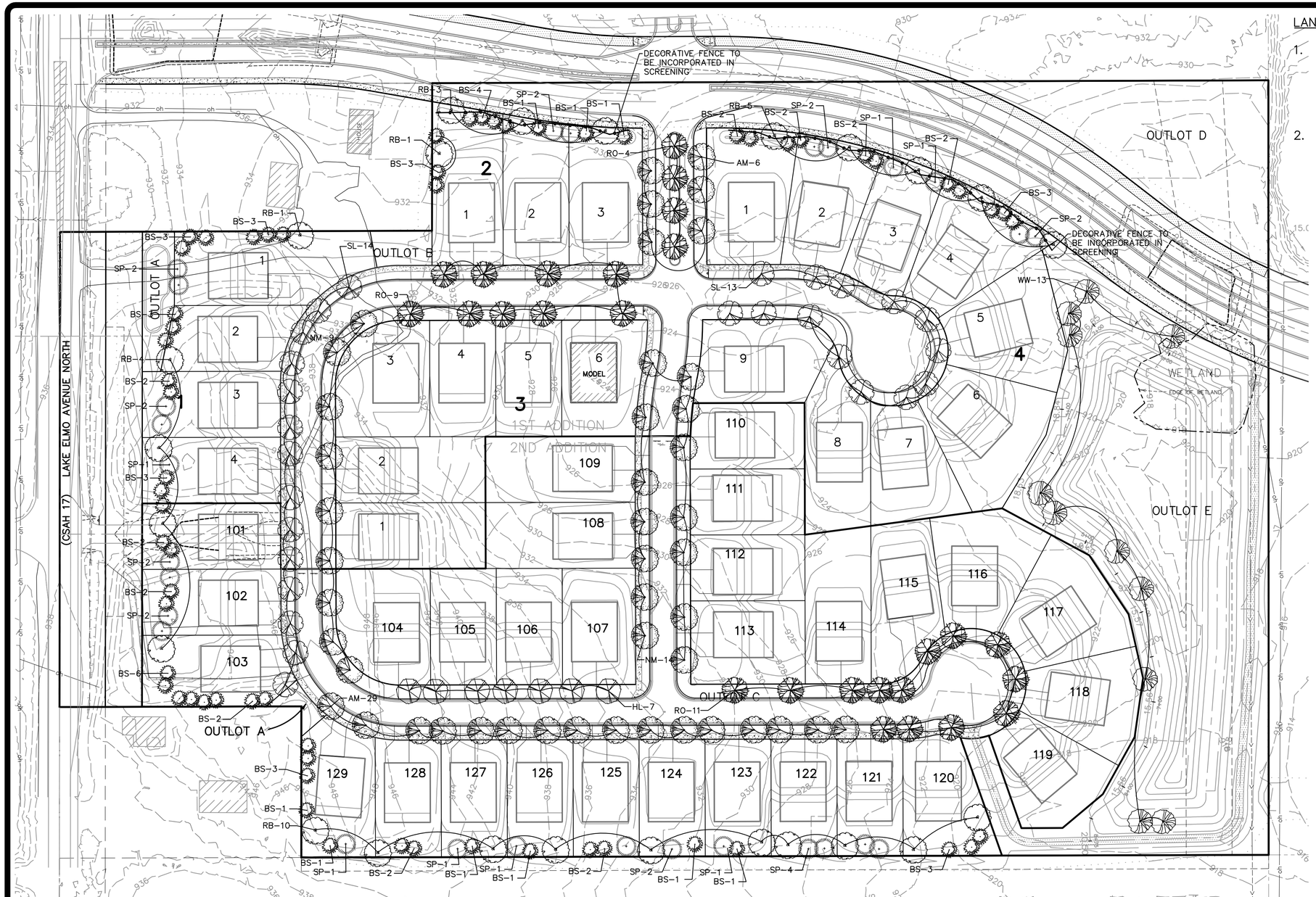
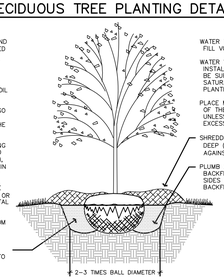


0 30 60 120

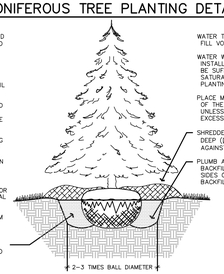
GRAPHIC SCALE IN FEET

KEY	COMMON NAME/SCIENTIFIC NAME	ROOT	QUANTITY
	OVERSTORY TREES		
AM	AUTUMN BLAZE MAPLE/ACER X FREEMANI 'AUTUMN BLAZE'	2.5" B&B	22
SL	SENTRY LINDEN/TILIA AMERICANA 'SENTRY'	2.5" B&B	27
HL	THORNLESS HONEYLOCUST/GLEDITSIA TRACANTHOS VAR INERMIS	2.5" B&B	7
RB	RIVER BIRCH/BETULA NIGRA	10' B&B	24
NM	NORTHWOODS RED MAPLE/ACER RUBRUM	2.5" B&B	23
RO	RED OAK/QUERCUS RUBRA	2.5" B&B	26
WW	WHITE WILLOW/ SALIX ALBA 'NIOBE'	2.5" B&B	11
	EVERGREEN TREES		
BS	BLACK HILLS SPRUCE/PICEA GLAUCA DENSATA	6' B&B	63
SP	SCOTCH PINE/PINUS SYLVESTRUS	6' B&B	27

DECIDUOUS TREE PLANTING DETAIL



CONIFEROUS TREE PLANTING DETAIL



LANDSCAPE REQUIREMENTS:

1. ONE TREE TO BE PLANTED FOR EVERY FIFTY FEET OF STREET FRONTAGE.
   TOTAL PROPOSED STREET FRONTAGE: 2,440 LINEAR FT /50 = 48.8X2=97.6
   REQUIRED TREES: 98 TREES (EQUAL TO 245")

2. FIVE TREES TO BE PLANTED FOR EVERY ONE ACRE OF LAND THAT IS BEING DEVELOPED.
   TOTAL AREA: 21.5 ACRES (EXCLUDING 5TH STREET ROW)
   REQUIRED TREES: 108 TREES (EQUAL TO 270")

MITIGATION REQUIREMENTS:
(SEE TREE PRESERVATION PLAN FOR MORE DETAIL)

TOTAL INCHES: 2,106"
ALLOWED 30% REMOVAL: 631"
TOTAL INCHES REMOVED: 1,677
TOTAL INCHES TO MITIGATE: 1,046"
- COMMON TREE REMOVAL: 1,018"
- CONIFEROUS TREE REMOVAL: 12"
- HARDWOOD TREE REMOVAL: 16"

REPLACE COMMON TREES AT A RATE OF 1/4 TOTAL INCHES REMOVED: 1,018"/4=255"
REPLACE CONIFEROUS TREES AT A RATE OF 1/2 TOTAL INCHES REMOVED: 12"/2=6"
REPLACE HARDWOOD TREES AT A RATE OF 1/2 TOTAL INCHES REMOVED: 16"/2=8"

TOTAL INCHES REQUIRED FOR MITIGATION: 269"

LANDSCAPE SUMMARY:

TOTAL TREES REQUIRED:		
STREET FRONTAGE REQUIREMENT:	98	(245")
DEVELOPED ACREAGE REQUIREMENT:	108	(270")
MITIGATION:		(269")
TOTAL INCHES REQUIRED:		(515")
*DEVELOPED ACREAGE REQUIREMENT USED TOWARD MITIGATION REQUIREMENT.		
TOTAL TREES PROPOSED:		
DECIDUOUS (2.5" EACH):	140	(350")
EVERGREEN (6' EQUIV. TO 3" EACH):	90	(270")
TOTAL:	230	(620")

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 GOPHER STATE ONE CALL 1-800-252-1166 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 CONFLICTS 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 STANDABILITY TO A WIND SPEED OF 60 M.P.H.
- 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 DESCREPANCY 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 PLANT SCHEDULE.
- COMMERCIAL GRADE POLY LAWN EDGING 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 PROMPTLY 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.

01-PLAN-113105-SHEET-LAND

PIONEERengineering
CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS LANDSCAPE ARCHITECTS
2422 Enterprise Drive
Mendota Heights, MN 55120
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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 Jennifer L. Thompson
Reg. No. 44763 Date

Revisions

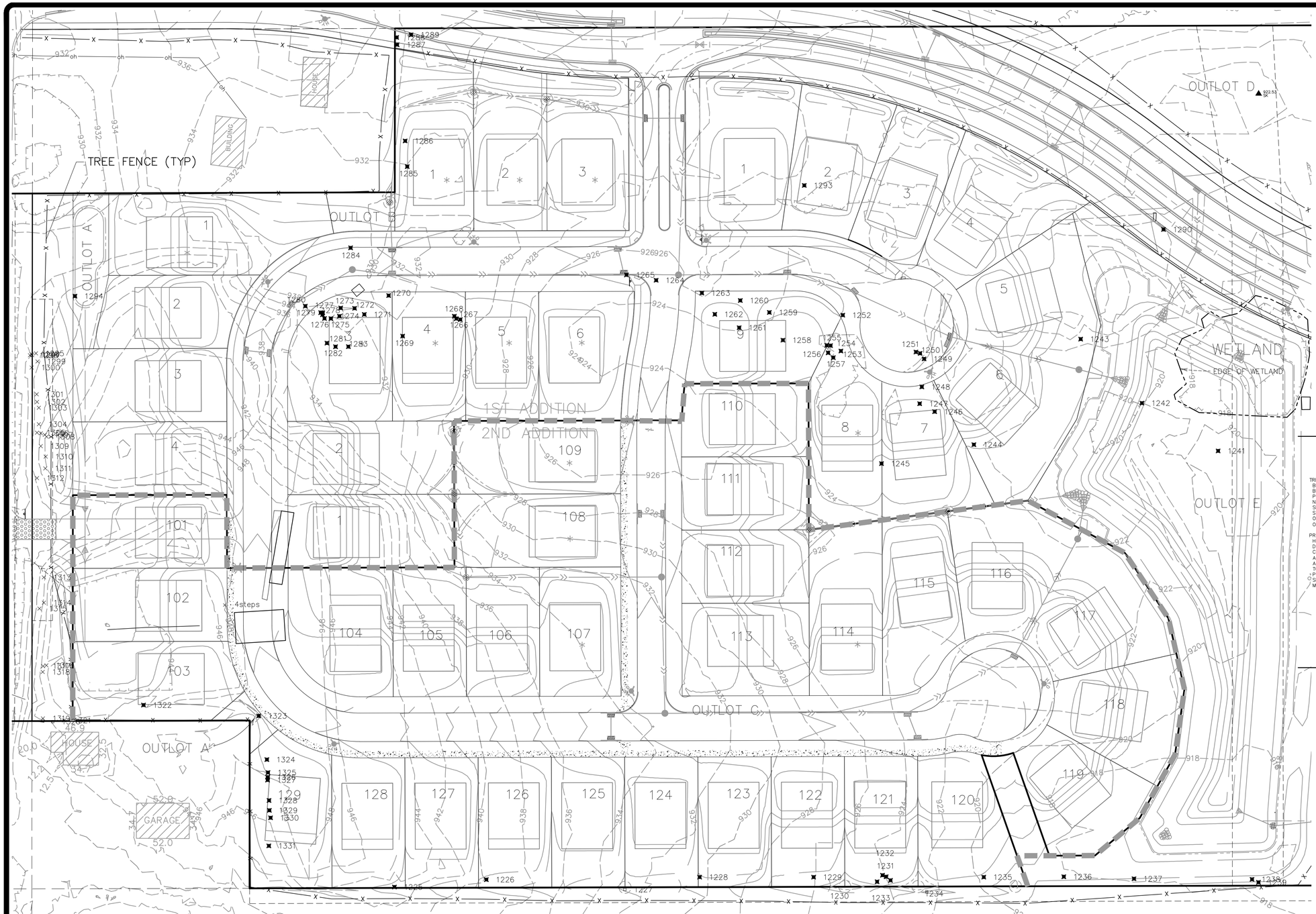
Date	08-08-2014
Designed	TML/jlt
Drawn	TML/jlt

LANDSCAPE PLAN

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

L1 OF 1



Total Inches: 2,106"
Allowed 30% Removal: 631"
Total Inches Removed: 1,677"
Total Inches to Mitigate: 1,046"
Common Tree Removal: 1,018"
Coniferous Tree Removal: 12"
Hardwood Tree Removal: 16"
Common Tree Removal: 1,018"
Replace at a rate of 1/4: 1,018"/4=255"
Conifersous Tree Removal: 12"
Replace at a rate of 1/2: 12"/2=6"
Hardwood Tree Removal: 16"
Replace at a rate of 1/2: 16"/2=8"
Total Inches Required: 269"

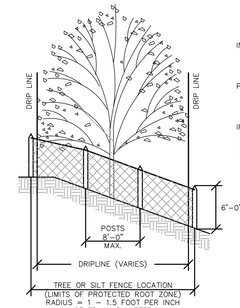
SEE DOCUMENT TITLED "HUNTERS CROSSING TREE INVENTORY" FOR A DETAILED TREE INVENTORY
SEE SHEET L1 FOR LANDSCAPE PLAN

TREE PROTECTION DETAIL

NOT TO SCALE

TREES TO BE SAVED SHALL BE FENCED OFF WITH BRIGHT ORANGE POLYETHYLENE SAFETY NETTING OR HEAVY DUTY SILT FENCE AND STEEL STAKES AT THE DRIP LINE, OR AS DIRECTED BY THE OWNER'S CONSULTANT.

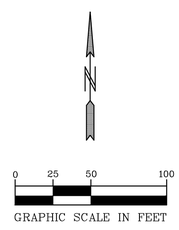
PROTECTION FENCE WILL HELP INSURE AGAINST DAMAGE BY VEHICLES, COMPACTION OF SOILS AND/OR THE CHEMICAL ALTERATION OF SOILS DUE TO CONCRETE WASHOUT, PAINTS AND LEAKAGE OR SPILLAGE OF ANY TOXIC MATERIALS.



INSTALL TREE OR SILT FENCE PRIOR TO OR AT SAME TIME AS LAND CLEARING.

PROTECTION FENCE SHOULD REMAIN IN PLACE UNTIL ALL CONSTRUCTION IS COMPLETE.

IF PROTECTION FENCE IS DAMAGED OR REMOVED, NEW FENCING MUST BE PLACED BACK IN ORIGINAL POSITION UNTIL CONSTRUCTION IS COMPLETE.



× 1245 = TREE TO BE SAVED
⊠ 1245 = TREE TO BE REMOVED
□ 1245 = TREE LOCATED OFFSITE

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TREE PRESERVATION PLAN

RYLAND HOMES
7599 ANAGRAM DRIVE
EDEN PRAIRIE, MINNESOTA 55344

HUNTERS CROSSING
LAKE ELMO, MINNESOTA

T1 OF 1

01-PLAN-113105-SHEET-TREE