



3800 Laverne Avenue North  
Lake Elmo, MN 55042

(651) 747-3900  
[www.lakeelmo.org](http://www.lakeelmo.org)

## NOTICE OF MEETING

The City of Lake Elmo  
Planning Commission will conduct a meeting on  
**Monday, April 13, 2015 at 7:00 p.m.**

## AGENDA

1. Pledge of Allegiance
2. Approve Agenda
3. Approve Minutes
  - a. March 23, 2015
4. Public Hearing
  - a. VARIANCE – 8515 EAGLE POINT BOULEVARD. BDH + Young on Behalf of Eagle Point Medical, LLC has requested a variance to allow for a ground sign that exceeds the maximum height permitted under the Sign Ordinance.
  - b. ZONING TEXT AMENDMENT – FREEWAY SIGNS. Rihm Kenworth has requested a zoning text amendment to change the Sign Ordinance to allow freestanding signs that are 25 feet in height and 250 square feet in area for properties/businesses adjacent interstate highways.
5. Business Items
  - a. FINAL PLAT – HUNTERS CROSSING 2<sup>ND</sup> ADDITION. The Planning Commission will conduct a review of a Final Plat submitted by The Ryland Group, 7599 Anagram Drive, Eden Prairie, MN for the second phase of single family residential subdivision to be called Hunters Crossing. The final plat includes 29 residential lots and the related land and easement dedications to the City of Lake Elmo.
6. Updates
  - a. City Council Updates – April 7, 2015 Meeting
  - b. Staff Updates
    - i. Upcoming Meetings:
      - April 27, 2015
      - May 11, 2015
    - ii. Welcome to Commissioner Gary Fields
    - iii. Update on Planning Commission Terms
  - c. Commission Concerns
7. Adjourn



**City of Lake Elmo  
Planning Commission Meeting  
Minutes of March 23, 2015**

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

**COMMISSIONERS PRESENT:** Williams, Dodson, Kreimer, Griffin, Larson, Haggard and Dorschner

**COMMISSIONERS ABSENT:** Fields

**STAFF PRESENT:** Community Development Director Klatt and Planner Casey Riley

**Approve Agenda:**

Commissioner Dorschner moved to table all agenda items except those that may pose a liability. He also stated that he had read that there was a hostile work environment and he would like to postpone the agenda. The motion was seconded by Commissioner Larson. Planning Director Klatt commented that the City Administrator asked that the Commission to conduct their business as usual. Motion withdrawn by Commissioner Dorschner due to the respect he has to the city administrator.

Commissioner Larson commented that the Parks Commission did table their agenda and asked that the Planning Commission also table their agenda.

Haggard wanted to clarify that it wasn't a statement by the Planning Commission as it was not voted or agreed on, but a statement by Commissioner Dorschner.

The agenda was then accepted as presented.

**Approve Minutes: March 9, 2015**

There was a discussion by the Planning Commission regarding changes to the minutes.

M/S/P: Williams/Dodson move to approve minutes as amended, **Vote: 6-1**, with Haggard abstaining.

**Public Hearing: Zoning Map Amendment – General Amendments**

Community Development Director Klatt presented the zoning map with minor changes and asked the Commission to update the map. Klatt reviewed changes in the Village Area. The properties to be rezoned are the following:

Lake Elmo Planning Commission Minutes; 3-23-15

- Village Preserve, Village Park Preserve and Easton Village sites. Both areas were zoned Rural Transitional (RT) and are to be rezoned LDR.
- The water tower site in the Village is to be rezoned from RS to Public Facility (PF).
- 3520 Laverne Ave North, the parcel north of the fire station was left as Rural Single Family, but is a commercial building and needs to be rezoned as such (C).
- Several parcels on Stillwater Blvd were left as Rural Estates and shall be rezoned Rural Single Family.

Commissioner Haggard inquired about the northern parts of Easton Village and asked if they were originally zoned as open space. Klatt clarified that the two northern parcels will be shown as parkland once the plats are approved and the parkland dedicated to the city. Dodson inquired as to whether there were areas of the Easton Village plat that were part of the no build area due to the airport adjacent to the parcels. Klatt clarified that there are areas that will not be built upon due to the airport, but the maps have not been updated and these areas will be updated accordingly.

Commissioner Larson commented that the airport may be shifting the airport runway location and this will change the flight path of the airport. Klatt mentioned the capital improvement plan and that the airport is in the process of shifting the runway and shifting the safety zones north.

Public Hearing opened at 7:29 pm.

No one spoke and no written comment was received.

Public Hearing closed at 7:30 pm.

Haggard commented that the parcel guided for commercial be rezoned as mixed use. Klatt commented that the surrounding buildings are commercial and not mixed use. The building is currently used as office space. Williams commented that the commercial buildings in the village are zoned as General Business. Klatt apologized and clarified that the parcel be zoned General Business and not Commercial.

M/S/P: Williams/Kreimer, move to recommend approval of the updated Zoning Map, with the addition of 3520 Laverne Ave. N from RS to GB. ***Vote: 7-0, motion carried unanimously.***

Commissioner Williams noted his appreciation for Commissioner Haggard and her attention to detail.

M/S/P: Williams/Kreimer, move to recommend approval of the updated Zoning Map, ***Vote: 7-0, motion carried unanimously.***

**Business Item: Rural Area Development Update.**

Klatt began his presentation and explained the Met Council Clarification Memo and the new 2040 forecast. He explained how this forecast is not an MOU and that these numbers are a best guess as to what the population numbers may be, and is not a cap or limit.

Chair Dodson inquired if the Met Council takes into account Lake Elmo's unique geography and the large park at the center of the city. Klatt mentioned that negotiations continue with Met Council as to the number of households guided for Lake Elmo.

Klatt gave a brief overview of the 2015 Systems Statement and the Rural Area Growth Projections.

Commissioner Williams clarified that Cimarron and the Village Area are not included in the RAD Household numbers. RAD households are all areas within the city outside of the sewered areas.

Klatt presented the situation now and compared to the 2030 forecast numbers to the 2040 forecast numbers. He noted that there are options to rethinking how development is laid out in the future and different scenarios that could take place within the parameters of growth and expansion.

Commissioner Williams asked what other services need to be provided in addition to roads. Klatt commented that the services would primarily be roads. Easements are a concern as well as utilities. Klatt noted that residents sharing roads leads to the private roads being turned back to the city in the future. Wells and aquifers are also part of the equation.

Chair Dodson commented that in some situations subdividing would make sense, and in others it would not. Dorschner commented that subdividing should be evaluated on an individual level. Haggard questioned the conditions of subdivision, such as wetlands or buildable acres and asked what variables should be considered. Klatt mentioned that this the City had moved away from RE zoning and towards OP developments, as there is greater value in having common open space.

Williams said that Comprehensive Planning is a popularity contest and that the Commission needs to think of all the possibilities and consider what the community should look like. Chair Dodson mentioned that there are not many parcels left to create OP areas.

Cost of residential services in rural areas was discussed. Klatt asks if the Commission would like a more up to date report.



Transit-focused update: Should the Commission consider a transit focused update in conjunction with or parallel to transit planning updates?

Commissioner Williams directed attention to the League of MN Cities and the Effective Tax Rate chart and notes that he would like to state that he disagrees with the statement that rural areas do not pay for themselves.

Chair Dodson said that he doesn't think the tax rate has to do with land density. A brief discussion was held.

A situational study was suggested to study a certain parcel and the cost of services that will be needed. Sewer service was discussed in relation to rural developments.

Kreimer commented that he believes there will be some lots more suited to OP and some more suited to RE. He wonders how we account for that in the Comp plan. Do we allow either one and let the market dictate. Klatt stated we could combine the 2 zoning designations to allow more flexibility.

Dodson mentioned that he was somewhat opposed to private roads and the neighbor disputes that would ensue.

Klatt said that a larger discussion was needed.

**Business Item: Gateway Corridor Transit Planning Update.**

Riley presented an overview of the Gateway Corridor development project, which is a 12 mile transit way for bus rapid transit. This is in addition to express buses that will not use this corridor. The impacts to land use of this corridor will have to Lake Elmo was also discussed.

Riley noted that there has been community engagement opportunities specifically in response to the Environmental Impact Study.

Chair Dodson commented that he wanted more information about Affordable Housing. Williams noted that traditionally Cimarron was the affordable housing option in Lake Elmo.

Klatt stated that the Met Council standard is utilized to determine affordable housing, which is 60% of area median income. The Lake Elmo plan incorporates the guided numbers provided by Met Council. The Lake Elmo affordable housing requirement is 661 housing units. He noted that these are not mandated requirements, but would make the City eligible for the Livable Communities Grant.

There is a health impact study being done by the Minnesota Department of Health and one thing they are looking at is crime.

Larson noted that Savona has townhomes from \$225,000 to \$275,000. Haggard asked how many rec units the transit station would count for, and stated that the station areas would take land away from residential land. Kreimer mentioned that the school district was looking at sites to create a new school.

**Business Item: Open Meeting Law Discussion.**

Chair Dodson asked that the process for discussions to be clarified, specifically for the process of a Planning Commissioner adding an item to the agenda. Klatt explained the process and the general policy.

Disallowed communication is a situation where three of four commissioners discuss an agenda item and create a quorum. This is relevant to email as well. Williams explained the MN Open Meeting Law and said he would investigate the matter as it may be more than two individuals discussing commission matters. Commissioner Dorschner asked if the Commission would be open to training about what is acceptable and what is not.

**Updates and Concerns**

Council Updates – March 17, 2015 Meeting

1. Accessory Building Variance – 3033 Inwood Ave was approved.

Staff Updates

1. Upcoming Meetings
  - a. April 13, 2015
  - b. April 27, 2015

*Commission Concerns*

The Commission briefly commented on the Administrators parting.

Meeting adjourned at 9:51 pm

Respectfully submitted,

Joan Ziertman  
Planning Program Assistant



PLANNING COMMISSION  
DATE: 4/13/15  
AGENDA ITEM: 4A – PUBLIC HEARING  
CASE # 2015-14

ITEM: Sign Variance – 8515 Eagle Point Boulevard North

SUBMITTED BY: Nick Johnson, City Planner

REVIEWED BY: Kyle Klatt, Community Development Director  
Washington County Public Works

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### **SUMMARY AND ACTION REQUESTED:**

The Planning Commission is being asked to hold a public hearing to consider a request from BDH + Young on behalf of Eagle Point Medical, LLC, for a variance to allow a 16-foot tall ground sign. The maximum ground sign height for the subject property according to the City's Sign Ordinance is 12 feet. Staff is recommending that the Planning Commission recommend approval of the variance request based on the findings listed in the Staff Report.

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### **GENERAL INFORMATION**

*Applicant:* BDH + Young (Patrick Giordana), 7001 France Ave. N., Suite 200, Edina, MN 55435

*Property Owners:* Eagle Point Medical, LLC (Mark Davis), 222 South 9<sup>th</sup> Street #3255, Minneapolis, MN 55402

*Location:* Part of Section 33, Township 29 North, Range 21 West in Lake Elmo, at the southeast corner of Inwood Avenue (CSAH 13) and Eagle Point Boulevard.  
Address: 8515 Eagle Point Blvd. N., Lake Elmo, MN, 55042. PID Number: 33.029.21.42.0014

*Request:* Variance – Accessory Building Forward of the Primary Structure and within the Front Yard Setback.

*Existing Land Use:* Medical Facilities

*Existing Zoning:* BP – Business Park

*Surrounding Land Use:* Offices and Financial Institution

*Surrounding Zoning:* BP – Business Park

*Comprehensive Plan:* Business Park

*Proposed Zoning:* No Change

*History:* The subject property was platted as part of the Eagle Point Business Park 7<sup>th</sup> Addition in 2006. The Eagle Point Medical Center was approved as part of a Preliminary and Final PUD Plan in 2014 (Resolution 2014-54).

*Deadline for Action:*      Application Complete – 3/30/15  
    60 Day Deadline – 5/29/15  
    Extension Letter Mailed – No  
    120 Day Deadline – 7/28/15

*Applicable Regulations:*    154.212 – Sign Regulations  
    154.109 – Variances (Administration and Enforcement)

## **REQUEST DETAILS**

The City of Lake Elmo has received a request from BDH + Young on behalf of Eagle Point Medical, LLC for a variance to allow a ground or monument sign that exceeds the maximum height allowed under the City Sign Ordinance. Under the City’s ordinance, the maximum height for a ground sign in this location would be 12 feet. The applicant is requesting a variance to allow a 16-foot high ground sign, exceeding the maximum height by 4 feet.

The applicant has provided a written statement to the City indicating the reason for the variance request. The written statement includes a narrative addressing how the proposed variance meets the 4 required findings to grant a variance under the City’s Zoning Code and State Statute.

## **BACKGROUND**

The subject property is located at the southeast corner of the intersection of Inwood Avenue (CSAH 13) and Eagle Point Boulevard. The attached location map (Attachment #1) highlights the location of the parcel. The parcel has been platted as part of the Eagle Point Business Park and is 3.77 acres in size. The subject property and surrounding properties are zoned BP – Business Park. In terms of land use, the surrounding properties are mostly comprised of offices and other commercial uses. It should be noted that the Eagle Point Medical Center was approved in 2014, and is still under construction.

In terms of the physical characteristics of the property, the building is located in the northern portion of the site, while the parking area is located in the southern half. Storm water infiltration areas are located along the eastern side of the site. The site has street frontage on both the north and west sides, facing Eagle Point Blvd. and Inwood Ave. (CSAH 13) respectively. The main entrance to the building faces the south side of the site adjacent to the parking lot. The attached site plans provide detailed information about the specific elements of the property.

## **PLANNING AND ZONING ISSUES**

In reviewing the applicable codes and planning considerations that apply to the subject property, Staff would like the Planning Commission to consider the following as it reviews this request:

- **Ground Signs.** According to the City’s Sign Ordinance, the allowance for ground signs in commercial zoning districts are dictated by the total number of traffic lanes and speed limit of the adjacent roadway. In the case of the subject property, the adjacent roadway used to determine the allowable height and area for a ground sign would be Inwood Avenue. Inwood Avenue is a 4-lane roadway, with lane expansions occurring to accommodate turn lanes at intersections and driveways. In addition, the speed limit of Inwood Ave. is 55 miles per hour. This number of traffic lanes and speed limit allow for a ground sign that is 12 feet in

height and 80 square feet in area, the maximum size ground sign allowed in the City's Sign Ordinance. It should be noted that the ground sign proposed by the applicant complies with the Sign Ordinance with regards to sign area. The area of commercial message is approximately 76 square feet. In addition, the electronic variable message sign is approximately 21 square feet, thereby not exceeding the maximum size of 40% of size area.

- **Site Topography.** As noted in the applicant's narrative and shown on the various site plans provided, the elevation of the site at 8515 Eagle Point Blvd is lower than the Inwood Ave. roadway. According to the narrative, site plans and site section, the base elevation of the sign is approximately 4 feet below the elevation of passing vehicles on Inwood Avenue. To determine if this elevation was an existing condition or a result of the grading of the site, staff reviewed the topographical survey for the property. This survey (Attachment #4) was provided at the time of the preliminary and final development approvals for the Eagle Point Medical Center. The existing conditions survey reveals that the site was indeed lower than the roadway prior to the limited grading and construction of the site. This review confirms that the elevation was an existing condition not created by the landowner. In addition to reviewing the topographical survey, staff also visited the site to observe the location of the proposed sign and the elevation/visibility. The site visit confirmed that the proposed sign location is lower than Inwood Avenue in terms of elevation.
- **Drainage and Utility Easement.** The Eagle Point Medical site was originally platted as part of Eagle Point Business Park 7<sup>th</sup> Addition. When the site was platted, a 40-foot drainage and utility easement was dedicated along the western property line. The easement area contains both sanitary sewer (8-inch) and watermain (12-inch). As noted in the applicant's narrative, easement areas include restrictions as to what type of improvements can be constructed within easement areas. The applicant is correct in that a permanent ground sign would not be allowed to be constructed within the easement, especially since existing sewer and watermain are located within the easement. In terms of visibility of a sign, the utility easement does present a challenge, as the typical setback for a ground sign is the height of the sign. In other words, if a ground sign were 10 feet tall, the required setback would be 10 feet. In the case of Eagle Point Medical, the required setback is nearly 3 times greater due to the existence of the 40-foot utility easement. Similar to the topography of the site, the location of the existing utilities and easement is a situation not created by the landowner, an important test when considering a variance request.
- **Berming and Landscaping.** It should also be noted that one issue affecting visibility and is related to the elevations is the berming and landscaping that is currently in place near the property line and within the Inwood Ave right-of-way. The berming is directly related to the elevation challenges as noted by the applicant and has been discussed. On the other hand, the landscaping on the site along Inwood Ave. includes multiple trees that also reduce visibility. There is no doubt that the landscaping and trees are an amenity to the site and the overall business park. This design is in keeping with the character that Lake Elmo would like to present, supporting natural viewsheds whenever possible and installing significant trees and plantings. These plantings are a value for the property and the community. However, it is also true that these reduce visibility for ground and other types of signage that commercial businesses utilize for identification purposes. Staff does not view this as a driving factor for the variance application, but rather as information that informs the context of the site and motives of the applicant.

- **Washington County Review.** The Variance request was sent to Washington County Public Works. County Planner Ann Terwedo confirmed that the County does not have any objections to the variance request, as the sign does not conflict with traffic or sight distance on Inwood Avenue. The Washington County Review can be found in Attachment #6.

Finally, although it does not have a significant bearing on the review of the variance, Staff would note that the masonry contractor for the Eagle Point Medical project has already built the base and column for the proposed sign. The existence of the base was discovered upon the visit of the site. This work was completed prior to any sign permit being issued for the monument sign. In raising this question with the applicant, they noted that all monument signs were on the approved building plans for the Eagle Point Medical building. In viewing the sign on the approved plans, the masonry contractor incorrectly thought that approval for the signs was provided. In reviewing the approved building plans, the applicant is correct that the monument signs are on the approved plans. Staff views this as a simple misunderstanding between the applicants and contractors.

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## REVIEW AND ANALYSIS

An applicant must establish and demonstrate compliance with the variance criteria set forth in Lake Elmo City Code Section 154.017 before an exception or modification to city code requirements can be granted. These criteria are listed below, along with comments from Staff regarding applicability of these criteria to the applicant's request.

- 1) **Practical Difficulties.** A variance to the provision of this chapter may be granted by the Board of Adjustment upon the application by the owner of the affected property where the strict enforcement of this chapter would cause practical difficulties because of circumstances unique to the individual property under consideration and then only when it is demonstrated that such actions will be in keeping with the spirit and intent of this chapter. Definition of practical difficulties - "Practical difficulties" as used in connection with the granting of a variance, means that the property owner proposes to use the property in a reasonable manner not permitted by an official control.

Under this standard, the City would need to find that the placement of the proposed accessory structure in the proposed location is a reasonable use of the property.

***FINDINGS:** Increasing the height of a proposed ground sign from 12 feet to 16 feet represents a reasonable use of the property. The property is zoned Business Park and is surrounded by other commercial uses. The variance to allow a marginally taller ground sign in this location does not present an unreasonable use. Staff determines that this criterion is met.*

- 2) **Unique Circumstances.** The plight of the landowner is due to circumstances unique to the property not created by the landowner.

In order to demonstrate compliance with this standard, the Planning Commission would need to identify those aspects of the applicant's property that would not pertain to other properties within the same zoning classification.

***FINDINGS:** The existence of a 40-foot drainage and utility easement along the west property boundary and Inwood Ave. represents a unique circumstance not created by the landowner. The easement cause the ground sign to be setback much further than would ordinarily be required by the City's Zoning Code. In addition, the existing topography of the site is at a lower elevation than Inwood Ave., creating additional challenges of visibility. The topography of the site represent an*

*additional unique circumstance not created by the landowner. Staff determines that this criterion is met.*

- 3) **Character of locality.** The proposed variance will not alter the essential character of the locality in which the property in question is located.

Propose findings for this criterion are as follows:

***FINDINGS.*** *The location of the Eagle Point Medical building is in an area that is predominantly comprised of commercial uses. Ground signs and other types of signage are common along the Inwood Ave near the subject property. Increasing the height of the ground sign from 12 feet to 16 feet will not alter the essential character of the locality. Staff determines that this criterion is met.*

- 4) **Adjacent Properties and Traffic.** The proposed variance will not impair an adequate supply of light and air to property adjacent to the property in question or substantially increase the congestion of the public streets or substantially diminish or impair property values within the neighborhood.

Propose findings for this criterion are as follows:

***FINDINGS.*** *The proposed variance will not impair an adequate supply of light and air to any properties adjacent to the Eagle Point Medical site. The proposed ground sign will not present additional congestion on public streets, or substantially diminish or impair property values within the neighborhood. Staff determines that this criterion is met.*

Please note that the applicant has also provided a set of findings as part of the attached narrative and supporting documentation included with the application.

Considering the potential findings of fact as suggested in the preceding section, Staff is recommending that the Planning Commission recommend approval of the variance request based on the findings noted in items 1-4 above.

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## **RECCOMENDATION:**

Staff recommends that the Planning Commission recommend approval of the variance request submitted by BDH + Young on behalf of Eagle Point Medical, LLC given that the request meets the four criteria for a variance. In addition, Washington County has reviewed the variance request and found no conflicts resulting from the proposed sign.

The suggestion motion for taking action on the Staff recommendation is as follows:

***“Move to recommend approval of the variance request at 8515 Eagle Point Blvd. to allow for a 16-foot high ground sign at the Eagle Point Medical Center based on the findings identified in the Staff Report.”***

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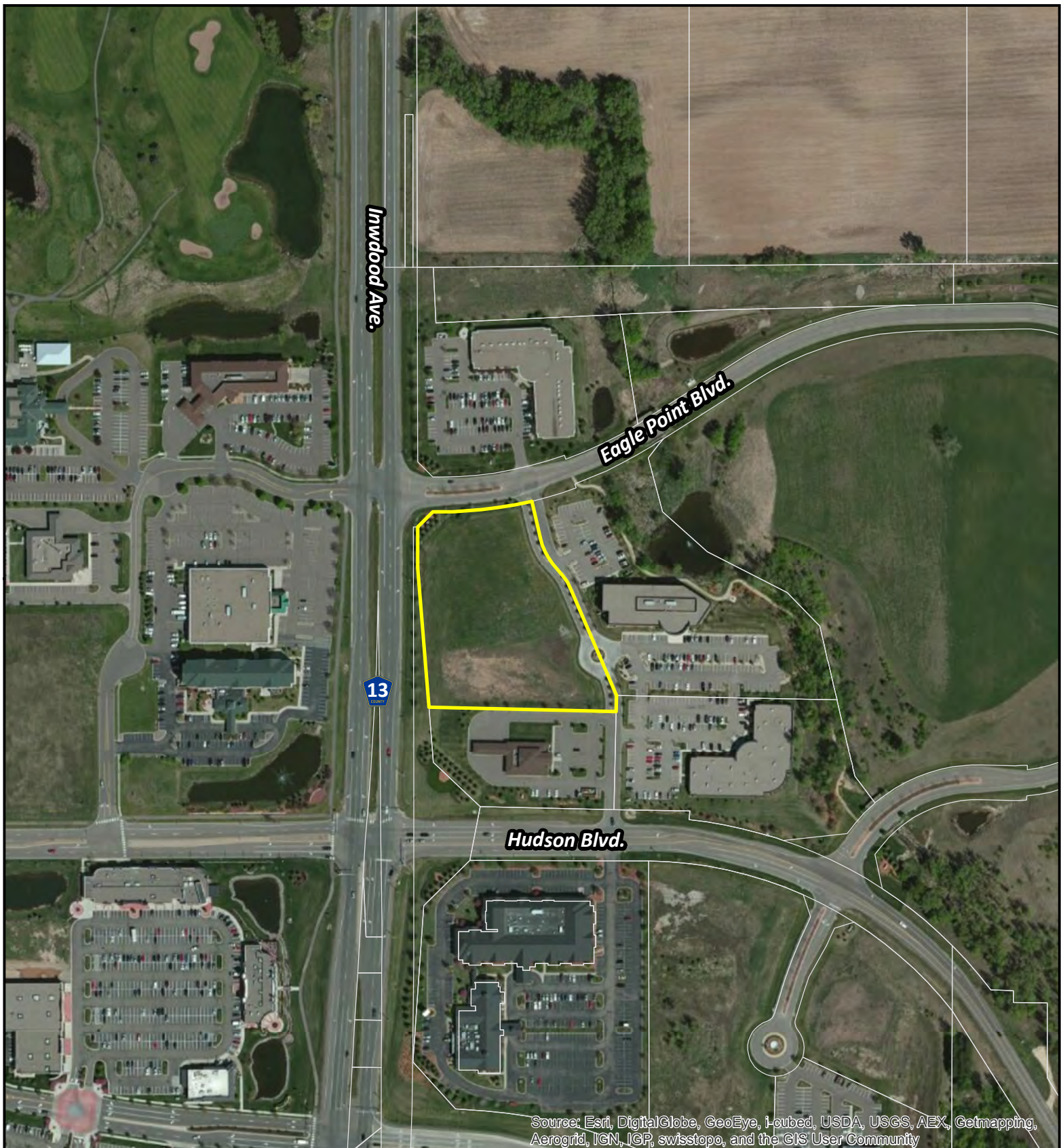
## **ATTACHMENTS:**

1. Location Map
2. Application Forms and Project Narrative
3. Proposed Ground Sign, Site Sections and Site Plans
4. Existing Conditions Survey
5. Site Photos
6. Washington County Review Email

**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





Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

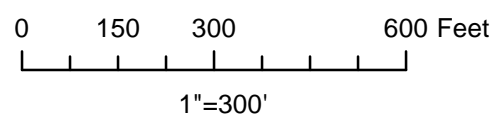
## Location Map: 8515 Eagle Point Blvd. N.



Data Source: Washington County, MN  
4-9-2015



8515 Eagle  
Point Blvd.



Date Received: \_\_\_\_\_  
Received By: \_\_\_\_\_  
Permit #: \_\_\_\_\_



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

## LAND USE APPLICATION

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

Applicant: BDH+YOUNG PATRICK GIORDANA  
Address: 7001 FRANCE AV. SOUTH SUITE 200  
Phone # 952-345-8306  
Email Address: PGIORDANA@BDHYOUNG.COM

Fee Owner: EAGLE POINT MEDICAL, LLC c/o MARK DAVIS  
Address: DAVIS REAL ESTATE SERVICES GROUP 222 SOUTH 9TH ST.  
Phone # 612-341-3242 COM. #3255  
Email Address: MDAVIS@DAVISREALESTATEMN.MN. MINNEAPOLIS, MN. 55402

Property Location (Address and Complete (long) Legal Description): 8515 EAGLE POINT BLVD.  
LAKE ELMO, MN.

### LEGAL DESCRIPTION

LOT 1 BLOCK 1, EAGLE POINT BUSINESS PARK 7TH ADDITION  
ACCORDING TO THE RECORDED PLAT THEREOF, WASHINGTON COUNTY,  
Detailed Reason for Request: \_\_\_\_\_  
MINNESOTA

VARIANCE REQUEST FOR MONUMENT SIGN HEIGHT

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

SEE ATTACHED

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: P. J. K. Date: 2/16/15  
Signature of fee owner: Mark Davis Date: 2/16/15





7001 France Avenue South  
Suite 200  
Edina, Minnesota 55435

p 952.893.9020  
f 952.893.9299

March 12, 2015

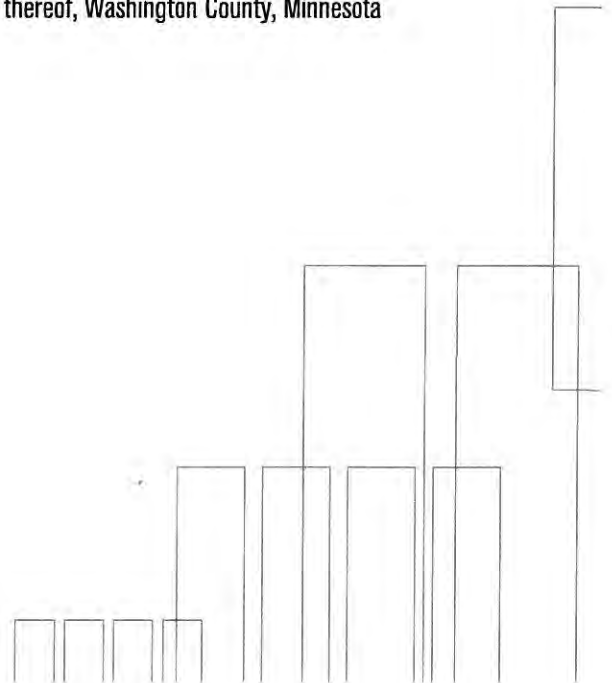
Attn: Nick Johnson  
City Planner

The City of Lake Elmo  
3800 Laverne Ave. N.  
Lake Elmo, MN 55042

Regarding: Eagle Point Medical Center - Variance application

This letter is being provided per the requirements of the City of Lake Elmo Variance procedure and application form.

- a. Property Owner:  
Eagle point Medical, LLC  
C/O Mark Davis  
Davis Real Estate Services Group  
222 South 9<sup>th</sup> Street  
Suite #3255  
Minneapolis, MN 55402
- b. Legal Description:  
Lot 1, Block 1, Eagle Point Business Park 7<sup>th</sup> Addition, according to the recorded plat thereof, Washington County, Minnesota  
  
Site size:  
164,347 S.F. ( 3.77 Acres )  
  
Zoning district:  
Eagle Point Business Park PUD  
  
Proposed use:  
30,344 S.F. Multi-tenant single story medical office building
- c. Lake Elmo City Code section from which the variance is being request:  
154.212 Table 5-3 Ground Signs





7001 France Avenue South  
Suite 200  
Edina, Minnesota 55435

p 952.893.9020  
f 952.893.9299

d. Description of variance request:

The Eagle Point Medical Center building is located at 8515 Eagle Point Boulevard in Lake Elmo Minnesota. The sites westerly property line runs adjacent to Inwood Avenue which offers the most strategic location for both building and monument signage. We have worked with the Planning staff to determine the allowable signage size on both the building and monument sign and our proposed signs meet all the required size criteria.

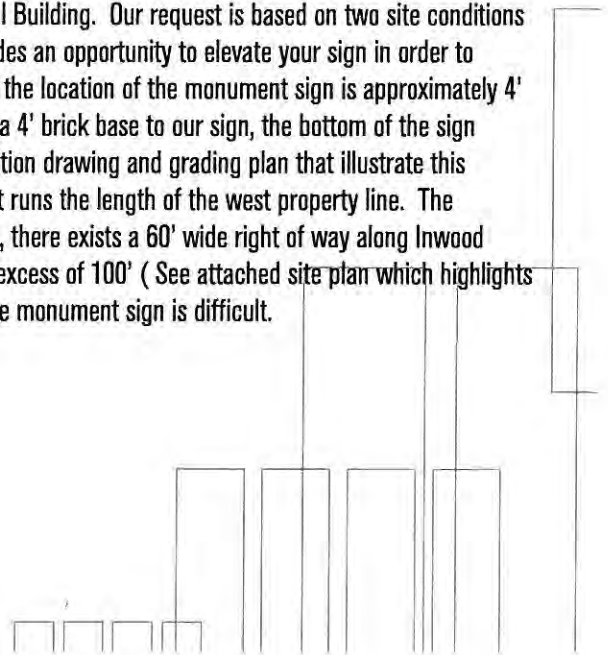
The request for a sign variance is for an additional 4' in height for the proposed monument sign. Our request is based on two site conditions that make visibility of the monument sign difficult. Ideally, a monument sign provides an opportunity to elevate your sign in order to improve the visibility for passing vehicular traffic. The site topography is such that the location of the monument sign is approximately 4' below the surface of the drive lanes on Inwood Avenue. This means that even with a 4' brick base to our sign, the bottom of the sign cabinet is

located at the same elevation as Inwood Avenue. Secondly, the project site includes a large 40' wide utility easement that runs the length of the west property line. The monument sign is not allowed to be constructed in the utility easement. In addition, there exists a 60' wide right of way along Inwood Avenue meaning the total setback of the monument sign from Inwood Avenue is 100'.

e. Pre-application discussions with staff:

Patrick Giordana (bdh + young) project architect, Steve Hirtz (Nordquist Sign Company) and Nick Johnson City Planner for the City of Lake Elmo had a meeting on Tuesday, February 17<sup>th</sup> to discuss Section 154.212 of the City of Lake Elmo City Code and the allowable signage available for the Eagle Point Medical Center project. We also discussed the criteria for requesting for a variance to the City Code and the application process.

- f. The request for a sign variance is for an additional 4' in height for the proposed monument sign. We are not requesting any increase in sign area for either the monument sign or any wall mounted building signs. Please see the attached monument sign elevation that includes a brick and stone base that compliments the materials used on the Medical Building. Our request is based on two site conditions that make visibility of the monument sign difficult. Ideally, a monument sign provides an opportunity to elevate your sign in order to improve the visibility for passing vehicular traffic. The site topography is such that the location of the monument sign is approximately 4' below the surface of the drive lanes on Inwood Avenue. This means that even with a 4' brick base to our sign, the bottom of the sign cabinet is located at the same elevation as Inwood Avenue ( See attached cross section drawing and grading plan that illustrate this condition). Secondly, the project site includes a large 40' wide utility easement that runs the length of the west property line. The monument sign is not allowed to be constructed in the utility easement. In addition, there exists a 60' wide right of way along Inwood Avenue meaning the total setback of the monument sign from Inwood Avenue is in excess of 100' ( See attached site plan which highlights these setback conditions) . These two items create a situation where visibility to the monument sign is difficult.

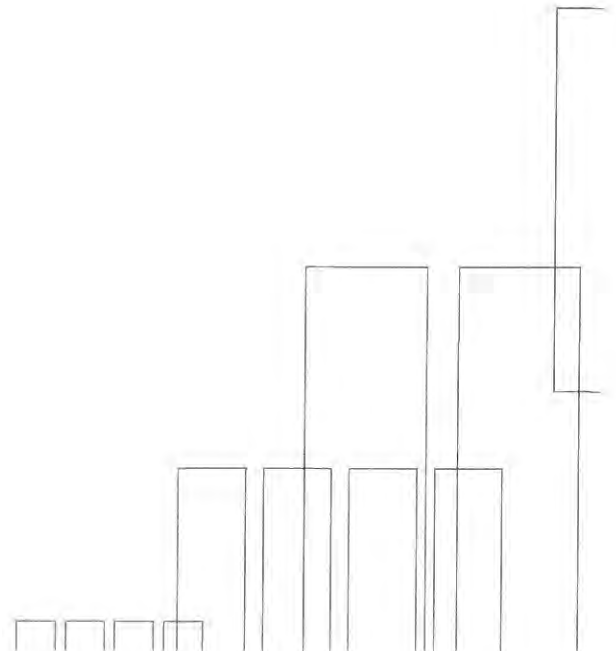




7001 France Avenue South  
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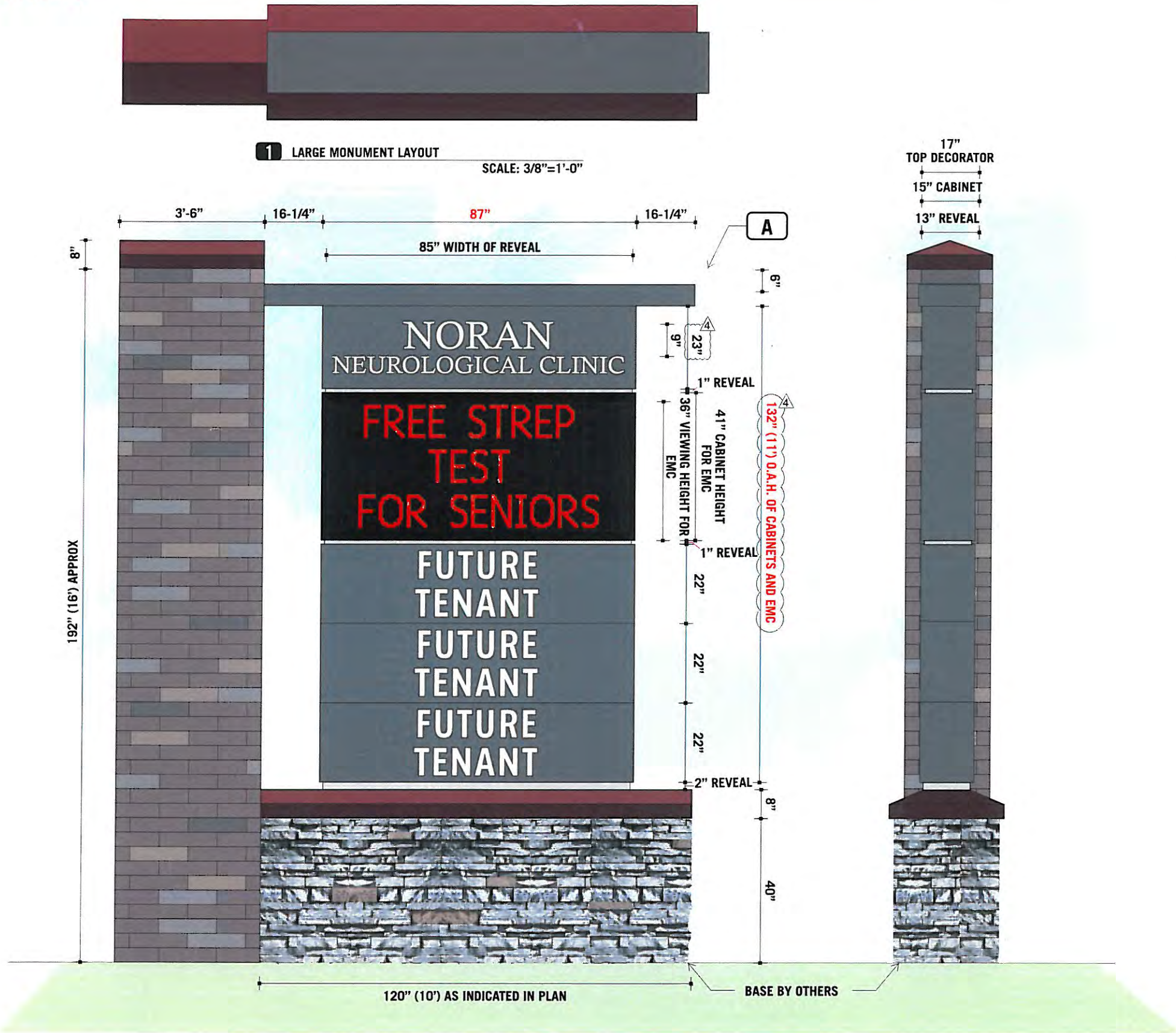
- g. Due to the 40' wide utility easement that runs the entire length of the west property line of the project site, the possible locations for the monument sign were very limited. In addition, the location of existing trees and landscaping within the Inwood Avenue Right-of-Way minimized opportunities for a view corridor to a proposed monument sign. We feel the proposed location offers the only solution that provides building tenant identification and is considerate of the existing landscaping.
- h. Granting of this variance will not alter the essential character of the neighborhood. We are not requesting additional signage area. The variance request is to allow 4' of additional height due to the site conditions outlined in the narratives above and below.
- i. Granting of this variance will not impair adequate light and air to adjacent properties and will not impair property values in the neighborhood. The variance will not impact vehicular road congestion of the adjacent public streets.





LAKE ELMO, MN

79.75 SQ FT



1 LARGE MONUMENT LAYOUT

SCALE: 3/8"=1'-0"

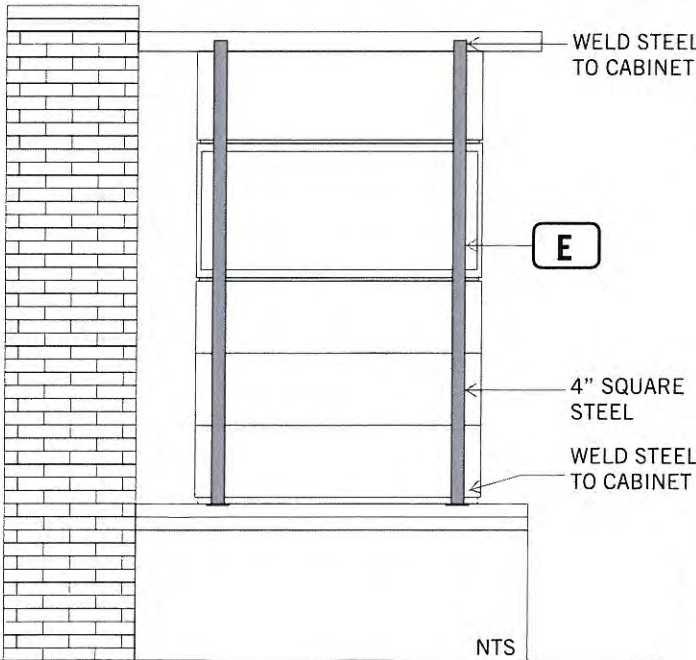
DESCRIPTION

- A** CAP (TOP DECORATOR)  
- FABRICATED ALUMINUM CAP  
- PAINTED DARK GREY METALLIC
- B** D/F CABINETS  
- FABRICATED ALUMINUM CABINETS  
- PAINTED DARK GREY METALLIC  
- 3/8" ROUTED WHITE PUSH THRU  
- WHITE LED ILLUMINATION
- C** REVEALS  
- FABRICATED ALUMINUM REVEAL  
- PAINTED SPARKLE SILVER METALLIC (MP18074)
- D** EMC  
- 19MM MONOCHROME EMC  
- QTY: 2
- E** STEEL SUPPORT  
- (1) 4" SQ STEEL TUBE BOLTED TO BASE VIA 1/2" PLATE  
- BASE USES J-BOLTS TO MOUNT CABINET

**ELECTRICAL REQUIREMENTS:**  
- WHITE LIGHTING LED UNITS  
- MODW-60 POWER SUPPLIES  
- 120V  
- 1 DOUBLE SIDED 19MM MONOCHROME EMC  
ELECTRICAL SERVICE AND CONNECTION BY OTHERS

FINISH SCHEDULE

- P1 MATTHEWS DARK GREY METALLIC
- P2 SPARKLE SILVER METALLIC (MP18074)
- 1 UPDATE EAGLE POINT FONT
- 2 REVISE SIGN TO FIT BASE
- 3 UPDATE NORAN FONT
- 4 ADJUSTED SIZE OF TOP CABINET TO REDUCE SQUARE FOOTAGE TO UNDER 80 SQ FT



**NORDQUIST**  
SIGN COMPANY

www.nordquistsign.com

945 Pierce Butler Route, St. Paul, MN 55104  
612.823.7291 877.823.7291

CLIENT:  
**EAGLE POINT  
MEDICAL**  
LAKE ELMO, MN

SIGN TYPE:  
**LARGE MONUMENT**

CUSTOMER APPROVAL

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

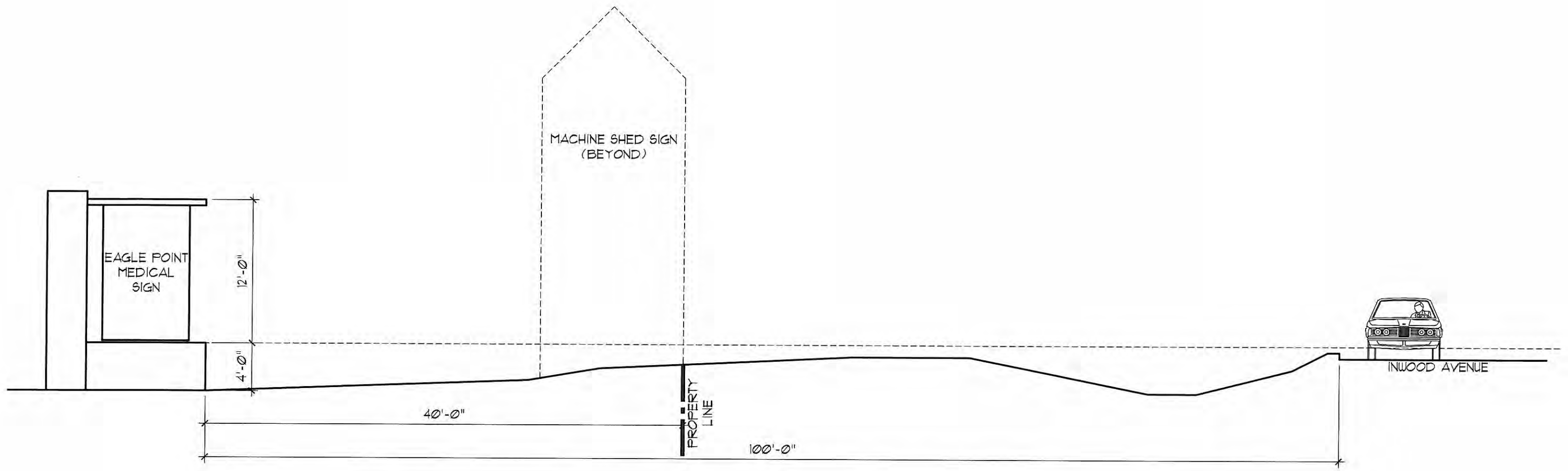
REV 1: 01.14.15 JS  
REV 2: 01.16.15 JS  
REV 3: 02.12.15 JS  
REV 4: 02.25.15 JJ

SALES: SH PR:  
DESIGN: JS  
DATE: 01.12.15  
DWG: 6092

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**ELECTRIC  
SIGN**





1 SITE SECTION  
A100 1/8" = 1'-0"



INWOOD AVENUE N. (C.S.A.H. NO. 13)

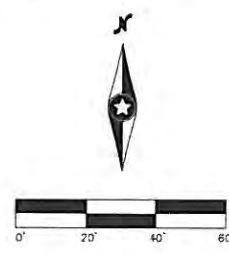
EAGLE POINT BLVD

### Grading Legend

EXISTING	PROPOSED	
---	---	PROPERTY LINE
---	---	INDEX CONTOUR
---	---	INTERVAL CONTOUR
---	---	CURB AND GUTTER
---	---	SILT FENCE
---	---	STORM SEWER
---	---	FLARED END SECTION (WITH RIPRAP)
---	---	WATER MAIN
---	---	SANITARY SEWER
---	---	DRAIN TILE
---	---	ROCK CONSTRUCTION ENTRANCE
---	---	SPOT ELEVATION
---	---	INLET PROTECTION

### Grading Key Notes (A)

- A SILT FENCE
- B ROCK CONSTRUCTION ENTRANCE
- C INLET PROTECTION
- D SILT FENCE AFTER INITIAL GRADING OF RAIN GARDEN
- E EROSION CONTROL BLANKET ON GRADES OF 3:1
- F MULCH/TEMPORARY SEED AREA DURING CONSTRUCTION SEE LANDSCAPE PLAN FOR SOD.
- G POSSIBLE CONCRETE WASHOUT LOCATION



### City of Lake Elmo - Grading/Erosion Control Notes

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 CONSTRUCTION OR CONSTRUCTION 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 SHUMPS 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 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 UNDER THE ROCK. THE ROCK SHALL BE PERIODICALLY REPLISHED TO MAINTAIN THE INTENDED PERFORMANCE. MUD AND DEBRIS SHALL BE REMOVED OR SCRAPPED 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.
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 CONSTRUCTION OF THE DITCH. PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES MUST BE COMPLETE WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER. 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 DICES, 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 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 PROTECT THE STORM SEWER SYSTEM 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 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.
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 ON-SITE: 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.

### Grading Notes \*FOR PRIVATE INFRASTRUCTURE COMPONENTS ONLY\*

1. LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
2. CONTRACTORS SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, SLOPED PAVEMENT, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY ENTRANCE LOCATIONS, AND EXACT LOCATIONS AND NUMBER OF DOWNSPOUTS.
3. ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR TRENCH EXCAVATION AND BACKFILL/SURFACE RESTORATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA.
4. ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL AND SOD OR SEED. THESE AREAS SHALL BE WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. SEE LANDSCAPE PLAN FOR PLANTING AND TURF ESTABLISHMENT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO APPROPRIATE MNDOT STANDARDS.
6. ALL SLOPES SHALL BE GRADED TO 3:1 OR FLATTER, UNLESS OTHERWISE INDICATED ON THIS SHEET.
7. CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AND PROVIDE A SMOOTH FINISHED SURFACE WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN OR BETWEEN SUCH POINTS AND EXISTING GRADES.
8. SPOT ELEVATIONS SHOWN INDICATE FINISHED PAVEMENT ELEVATIONS & GUTTER FLOW LINE UNLESS OTHERWISE NOTED. PROPOSED CONTOURS ARE TO FINISHED SURFACE GRADE.
9. SEE SOILS REPORT FOR PAVEMENT THICKNESSES AND HOLD DOWNS.
10. CONTRACTOR SHALL DISPOSE OF ANY EXCESS SOIL MATERIAL THAT EXISTS AFTER THE SITE GRADING AND UTILITY CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS SOIL MATERIAL IN A MANNER ACCEPTABLE TO THE OWNER AND THE REGULATING AGENCIES.
11. ALL CONSTRUCTION SHALL CONFORM TO LOCAL, STATE AND FEDERAL RULES INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.
12. PRIOR TO PLACEMENT OF ANY STRUCTURE OR PAVEMENT, A PROOF ROLL, AT MINIMUM, WILL BE REQUIRED ON THE SUBGRADE. PROOF ROLLING SHALL BE ACCOMPLISHED BY MAKING MINIMUM OF 2 COMPLETE PASSES WITH FULLY-LOADED TAND-AXLE DUMP TRUCK, OR APPROVED EQUIVALENT, IN EACH OF 2 PERPENDICULAR DIRECTIONS WHILE UNDER SUPERVISION AND DIRECTION OF THE INDEPENDENT TESTING LABORATORY. AREAS OF FAILURE SHALL BE EXCAVATED AND RECOMPACTED AS SPECIFIED HEREIN.
13. EMBANKMENT MATERIAL PLACED BENEATH BUILDINGS AND STREET OR PARKING AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFIED DENSITY METHOD AS OUTLINED IN MNDOT 2105.3F1 AND THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER.
14. EMBANKMENT MATERIAL NOT PLACED IN THE BUILDING PAD, STREETS OR PARKING AREA, SHALL BE COMPACTED IN ACCORDANCE WITH REQUIREMENTS OF THE ORDINARY COMPACTION METHOD AS OUTLINED IN MNDOT 2105.3F2.
15. ALL SOILS AND MATERIALS TESTING SHALL BE COMPLETED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. EXCAVATION FOR THE PURPOSE OF REMOVING UNSTABLE OR UNSUITABLE SOILS SHALL BE COMPLETED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOILS TESTS AND INSPECTIONS WITH THE GEOTECHNICAL ENGINEER.
17. AFTER INITIAL GRADING OF THE RAIN GARDENS, COMPLETELY SURROUND THE RAIN GARDENS WITH SILT FENCE AND ANY OTHER EROSION CONTROL MEASURES TO PREVENT THE BASIN FROM CLOGGING.



Westwood

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FAX 320-253-8737  
TOLL FREE 1-800-270-9495

www.westwoodps.com

Designed	YTD
Checked	YTD
Drawn	MGK
Record Drawing by/drawn	

Revisions
1. 05/21/14 City Submittal
2. 06/10/14 City Review
3. 06/10/14 CONSTRUCTION DOCUMENTS

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

PF Dick

Date 06/01/14 License No. 49933

Prepared for:

**BDH & Young**

7001 France Avenue South, Suite 200  
Edina, Minnesota 55435

**Eagle Point  
Medical Center**

Lake Elmo, Minnesota

**GRADING, DRAINAGE  
& EROSION  
CONTROL PLAN**

Date 05/21/14

Sheet C2 of 5

000364720P01.dwg



## EAGLE POINT BLVD

INWOOD AVENUE N. (C.S.A.H. NO. 13)

FORM NEW CURB AND GUTTER  
AROUND EXISTING SANITARY  
MANHOLE @ RE=10021

PARKING SETBACK  
BUILDING SETBACK

PROPOSED 1-STORY  
MEDICAL BUILDING  
AREA = 30,344 SF  
FFE = 1005.8

RADIUS SHOWN IS  
TYPICAL FOR BOTH  
CORNERS ADJACENT  
TO ONE ANOTHER

TYPICAL WITHIN ALL  
PARKING ISLANDS

REMOVE EXISTING CONCRETE  
CURB AND GUTTER FOR NEW  
DRIVEWAY ENTRANCE MATCH  
PROPOSED BITUMINOUS

### Site Key Notes

- A B612 CONCRETE CURB & GUTTER
- B CONCRETE SIDEWALK
- C STANDARD DUTY BITUMINOUS PAVEMENT
- D HEAVY DUTY BITUMINOUS PAVEMENT
- E HANDICAP ACCESSIBLE SIGNAGE AND STRIPING
- F MATCH TO EXISTING CURB AND GUTTER
- G EXISTING CONCRETE CURB AND GUTTER TO REMAIN
- H PLANTED AREA
- I MONUMENT SIGN SEE ARCHITECTURAL 7/A301
- J TRASH ENCLOSURE SEE ARCHITECTURAL 1/A301
- K PARKING LOT STRIPING (SEE DETAIL)
- L CONCRETE PAVEMENT
- M FLUSH CURB CONDITION
- N 10' TRANSITION FROM B612 CURB TO FLUSH CURB
- O RAIN GARDEN
- P 2 FOOT CURB CUT
- Q DIRECTION SIGN SEE ARCHITECTURAL 4/A301

### Site Legend

EXISTING	PROPOSED	
		PROPERTY LINE
		LOT LINE
		SETBACK LINE
		EASEMENT LINE
		CURB AND GUTTER
		FENCE
		CONCRETE PAVEMENT
		CONCRETE SIDEWALK
		HEAVY DUTY BITUMINOUS PAVEMENT
		NUMBER OF PARKING STALLS
		TRANSFORMER
		SITE LIGHTING
		TRAFFIC SIGN
		POWER POLE
		BOLLARD / POST

### General Site Notes

- BACKGROUND INFORMATION FOR THIS PROJECT PROVIDED BY SUNDE LAND SURVEYING, BLOOMINGTON, MINNESOTA, OCTOBER 23, 2007.
- LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY.
- REFER TO BOUNDARY SURVEY FOR LOT BEARINGS, DIMENSIONS AND AREAS.
- ALL DIMENSIONS ARE TO FACE OF CURB OR EXTERIOR FACE OF BUILDING UNLESS OTHERWISE NOTED.
- REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS AND LOCATIONS OF EXITS, RAMPS, AND TRUCK DOCKS.
- ALL CURB RADIUS SHALL BE 3.0 FEET (TO FACE OF CURB) UNLESS OTHERWISE NOTED.
- ALL CURB AND GUTTER SHALL BE B612 UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGGERS AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE CITY AND ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO APPROPRIATE MNDOT STANDARDS.
- BITUMINOUS PAVEMENT AND CONCRETE SECTIONS TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
- CONTRACTOR SHALL MAINTAIN FULL ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES.
- SITE LIGHTING SHOWN ON PLAN IS FOR REFERENCE ONLY. REFER TO LIGHTING PLAN PREPARED BY OTHERS FOR SITE LIGHTING DETAILS AND PHOTOMETRICS.

### Site Development Summary

• ZONING	PUD EAGLE POINT BUSINESS PARK
• PROPERTY AREA	164,347 SF (3.77 AC)
• EXISTING SITE	
• PERVIOUS SURFACE	154,435 SF (94.0%)
• IMPERVIOUS SURFACE	9,912 SF (6.0%)
• PROPOSED SITE	
• PERVIOUS SURFACE	62,868 SF (38.3%)
• IMPERVIOUS SURFACE	101,378 SF (61.7%)
• BUILDING GROSS SIZE	30,344 SF
• BUILDING SETBACK PER CODE	50'-FRONT 10'-SIDE 30'-REAR
• PARKING SETBACK PER CODE	20'-FRONT 10'-REAR 20'-SIDE WITH INTERIOR ROAD
• PARKING SPACE/DRIVE AISLE	9' WIDE x 18' LONG, 22' AISLE
• PARKING RATIO REQUIREMENT MEDICAL	1 SPACES / 200 SF OF BLDG
TOTAL SPACES REQUIRED:	(30,344 SF) / (1 SPACE/200 SF) = 152
• PARKING PROVIDED	140 STALLS
• PROOF OF PARKING	12 STALLS
• TOTAL PARKING	152 STALLS



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Designed: JFD  
Checked: JFD  
Drawn: MKX  
Record Drawing by/date:

Revisions:  
1. 05/21/14 JFD, MKX  
2. 05/21/14 JFD, MKX  
3. 05/21/14 JFD, MKX

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.

JFD

Date: 05/01/14 License No. 49933

Prepared for:

BDH & Young

7001 France Avenue South, Suite 200  
Edina, Minnesota 55435

Eagle Point  
Medical Center

Lake Elmo, Minnesota

SITE PLAN

Date: 05/21/14  
Sheet: C1 OF 5

## City of Lake Elmo - Sanitary/Water Notes



## Westwood

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Designed: \_\_\_\_\_ PTD  
 Checked: \_\_\_\_\_ PTD  
 Drawn: \_\_\_\_\_ MTX  
 Record Drawing by/date: \_\_\_\_\_

**Revisions:**

- 1. 10/21/14 3TH SUBMITTAL
- 2. 04/11/14 3TH WATERFISHED
- 3. 06/10/14 FOURTH FULL SUBMITTAL

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.

PJ Diach

Date: 08/01/14 License No: 49933

Prepared for:

BDH &amp; Young

7001 France Avenue South, Suite 200  
Edina, Minnesota 55435

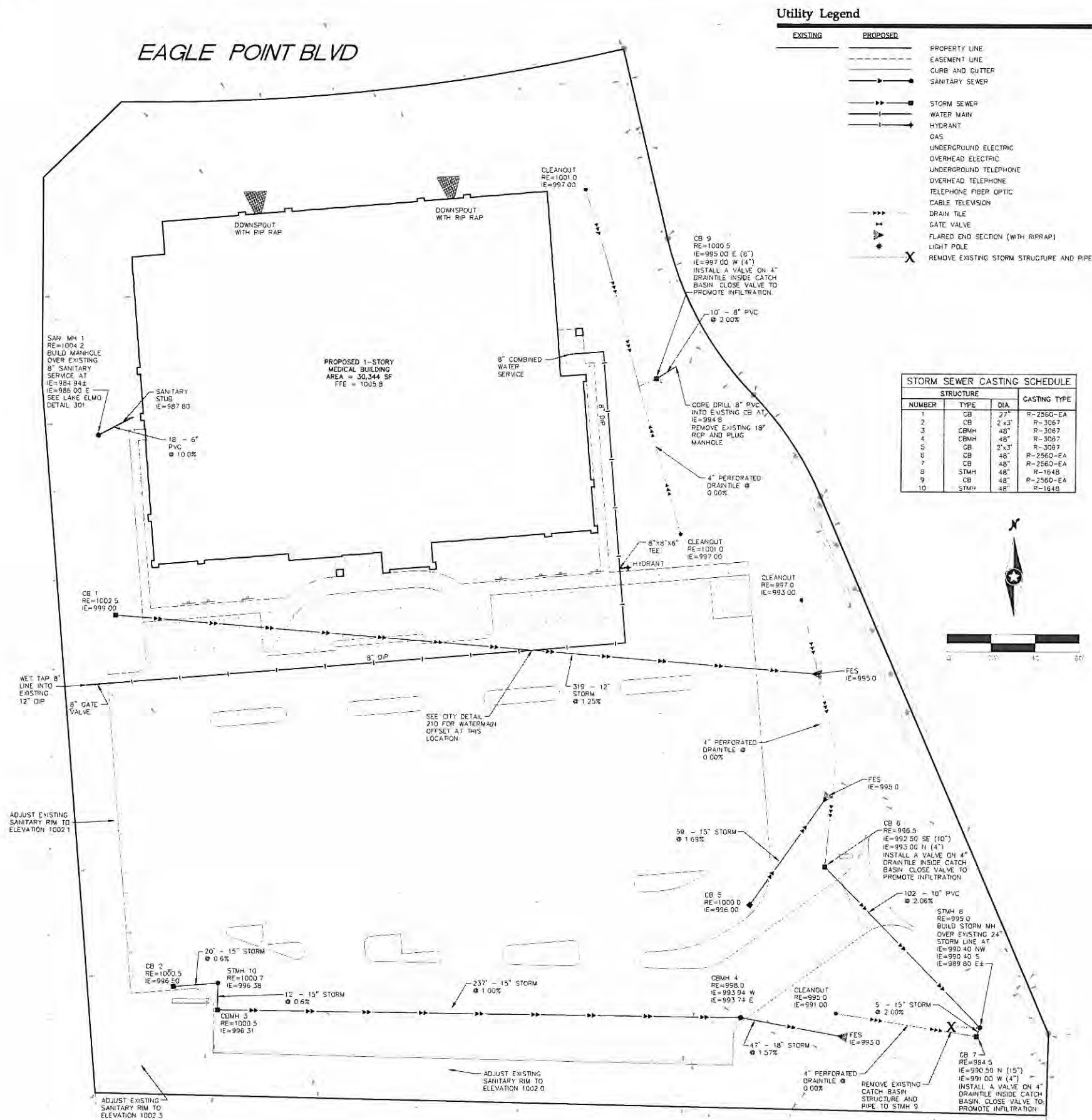
Eagle Point  
Medical Center

Lake Elmo, Minnesota

## UTILITY PLAN

Date: 05/21/14

Sheet C3 of 5



STRUCTURE			CASTING TYPE
NUMBER	TYPE	DIA.	
1	CB	27"	R-2560-EA
2	CB	2'x3'	R-3067
3	CBMH	48"	R-3067
4	CBMH	48"	R-3067
5	CB	2'x3'	R-3067
6	CB	48"	R-2560-EA
7	CB	48"	R-2560-EA
8	STMH	48"	R-1648
9	CB	48"	R-2560-EA
10	STMH	48"	R-1648

- 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 TYPE, 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 MANDOT SPEC 3235 (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 FLEABLE, WATERIGHT 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" 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 INSTALLING WATERIGHT PLUGS AS NEEDED IN THE EXISTING MANHOLE

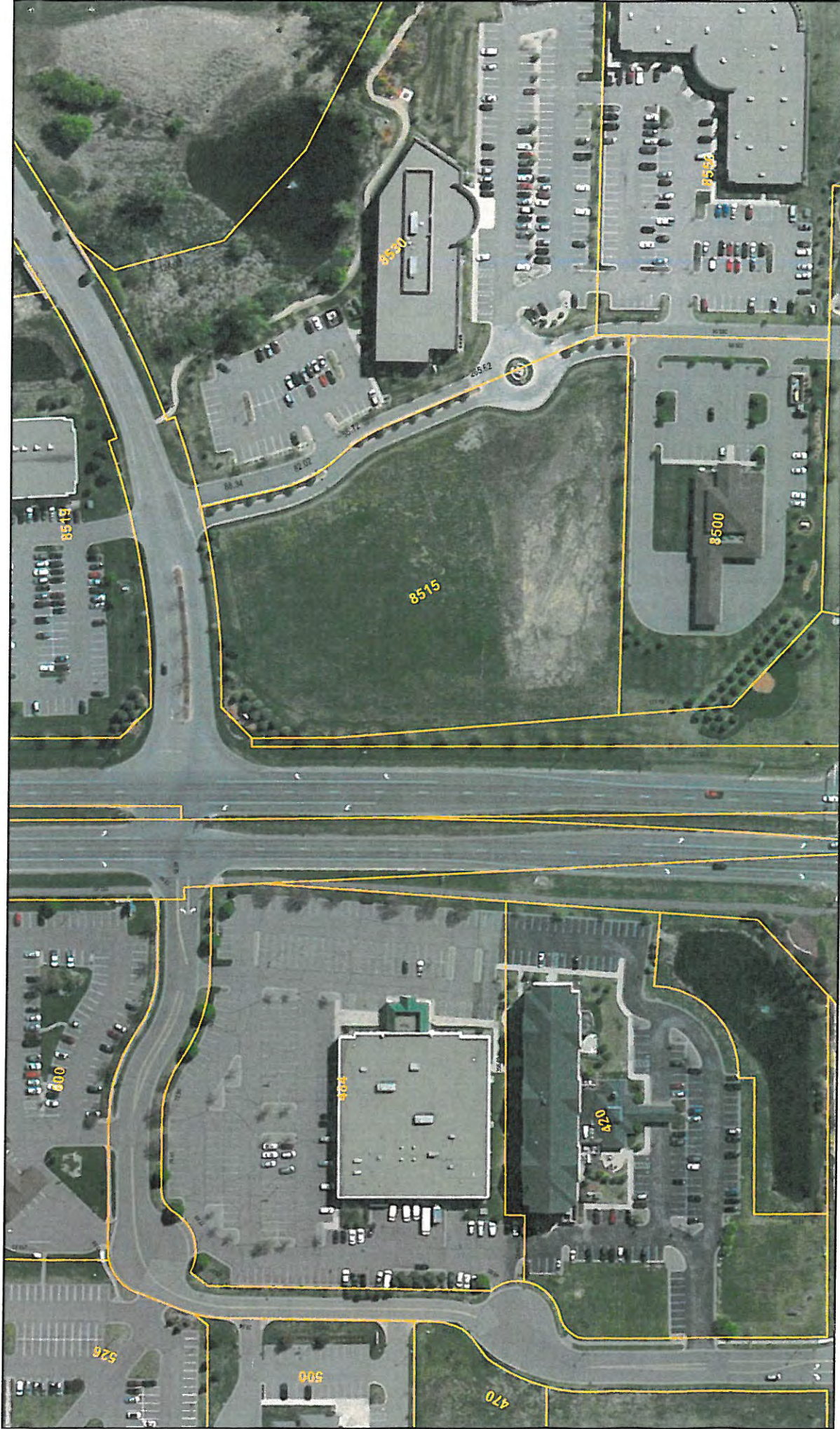
WATER MAIN NOTES:

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 & 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 LINEAR 10, 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 WATERIOUS "PACER," MODEL W9-67 OR APPROVED EQUAL, FITTED WITH FM 900 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" TYPE K COPPER UNLESS OTHERWISE NOTED

General Utility Notes \*FOR PRIVATE INFRASTRUCTURE COMPONENTS ONLY\*

- 1 THE CONTRACTOR SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND LIMITED MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION SHALL NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE OWNER OR ENGINEER OF DISCREPANCIES.
- 2 PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN THE NECESSARY FEDERAL, STATE AND LOCAL PERMITS FOR THE PROPOSED WORK OR VERIFY WITH THE OWNER OR ENGINEER THAT PERMITS HAVE BEEN OBTAINED. PERMIT FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS OTHERWISE ARRANGED WITH THE OWNER.
- 3 CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND DIMENSIONS OF DOORWAYS, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY CONNECTION LOCATIONS.
- 4 ALL PRIVATE UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR THE STATE OF TEXAS. THE CONTRACTOR SHALL COORDINATE THE SERVICE LINE CONSTRUCTION WITH THE UTILITY COMPANIES.
- 5 CONTRACTOR SHALL OBTAIN ALL NECESSARY CITY PERMITS FOR UTILITY CONNECTIONS AND UTILITIES SHALL BE INSPECTED AND APPROVED BY THE CITY. THE CITY SHALL BE NOTIFIED 48-HOURS PRIOR TO COMMENCING WITH THE UTILITY CONSTRUCTION OR ANY REQUIRED TESTING. CONTRACTOR SHALL NOT OPERATE, INTERFERE WITH, DAMAGE, OR ANY PIPE OR HOSE, TO OR TAP ANY WATER MAIN BELONGING TO THE CITY UNLESS FULLY AUTHORIZED TO DO SO BY THE CITY. ANY ADVERSE CONSEQUENCES OF SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 6 WATER MAIN LENGTHS AS SHOWN ARE APPROXIMATE HORIZONTAL LENGTHS. ALLOW FOR ADDITIONAL PIPE WHEN INSTALLING ON SLOPES OR WHEN DEFLECTIONS ARE REQUIRED. JOINT DEFLECTION SHALL NOT EXCEED THE MAXIMUM RECOMMENDED BY THE PIPE MANUFACTURER OR BY LOCAL GOVERNING SPECIFICATIONS. FITTINGS REQUIRED TO CONSTRUCT WATER MAIN SHALL BE INCLUDED IN WATER MAIN CONSTRUCTION.
- 7 PROVIDE WATER MAIN THRUST RESTRAINTS PER CITY STANDARD REQUIREMENTS.
- 8 A MINIMUM VERTICAL SEPARATION OF 18 INCHES IS REQUIRED AT ALL WATER MAIN CROSSINGS WITH SANITARY SEWER OR STORM SEWER.
- 9 UTILITY SERVICES TYPICALLY TERMINATE 5' OUTSIDE BUILDING WALL UNLESS OTHERWISE SHOWN OR NOTED.
- 10 ALL MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY.
- 11 ALL WATER LINES SHALL HAVE A 7'5" MINIMUM COVER. PROVIDE MINIMUM SEPARATION OF 18" FROM SANITARY SEWER & STORM SEWER. INSULATE WATER MAIN IF LESS THAN 7'5" OF COVER.
- 12 INSULATION SHALL BE DOW STYROFOAM #1 BRAND 35 OR EQUIVALENT, WITH 4 INCHES OF THICKNESS.
- 13 SANITARY SEWER PIPE OUTSIDE THE BUILDING ENVELOPE SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35 OR 26. SDR 26 IS REQUIRED FOR DEPTHS GREATER THAN 15 FEET. SANITARY SEWER PIPE WITHIN 5 FEET OF BUILDING AND UNDER FOOTINGS, SHALL BE PVC SCHEDULE 40.
- 14 STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE (CLASS 5 FOR PIPE DIAMETERS 18" AND SMALLER CLASS 3 FOR PIPE DIAMETERS 21" AND LARGER UNLESS OTHERWISE NOTED) WITH 4 INCHES OF, OR HDPE STORM SEWER PIPE IF ALLOWED BY THE CITY. HDPE STORM PIPE SHALL BE SDR 35. MINIMUM COVER SHALL BE 7'3"48. SHALL BE WATER TIGHT ACCORDING TO ASTM D3212 REQUIREMENTS. SEE PLAN FOR LOCATIONS WHERE RCP IS REQUIRED. PVC STORM SEWER PIPE SHALL BE SCHEDULE 40 PIPE. FLARED END SECTIONS SHALL BE RCP WITH TRASH GRADINGS & RIP-RAP.
- 15 POST INDICATOR VALVES SHALL BE CLOW F-9750 (OR EQUIVALENT) MEETING AWWA STANDARD C900 AND CITY STANDARDS. VALVE TO BE MECHANICAL JUNT RESISTANT. WEDGE CATE VALVE. POST TO BE ADJUSTABLE FOR 8 FEET WATER MAIN DEPTH. THE ELECTRICAL ALARM SWITCH SHALL BE PART NO PCV52 (OR EQUIVALENT).
- 16 AFTER CONSTRUCTION IS COMPLETED, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH AN AS-BUILT RECORD OF UTILITY CONSTRUCTION. THE AS-BUILT SHALL INCLUDE LOCATION AND LENGTH VARIATIONS OR CHANGES TO THE PLAN. CONTRACTOR TO VERIFY WITH OWNER OR ENGINEER WHETHER A PLAN WITH POST-CONSTRUCTION ELEVATIONS IS REQUIRED.

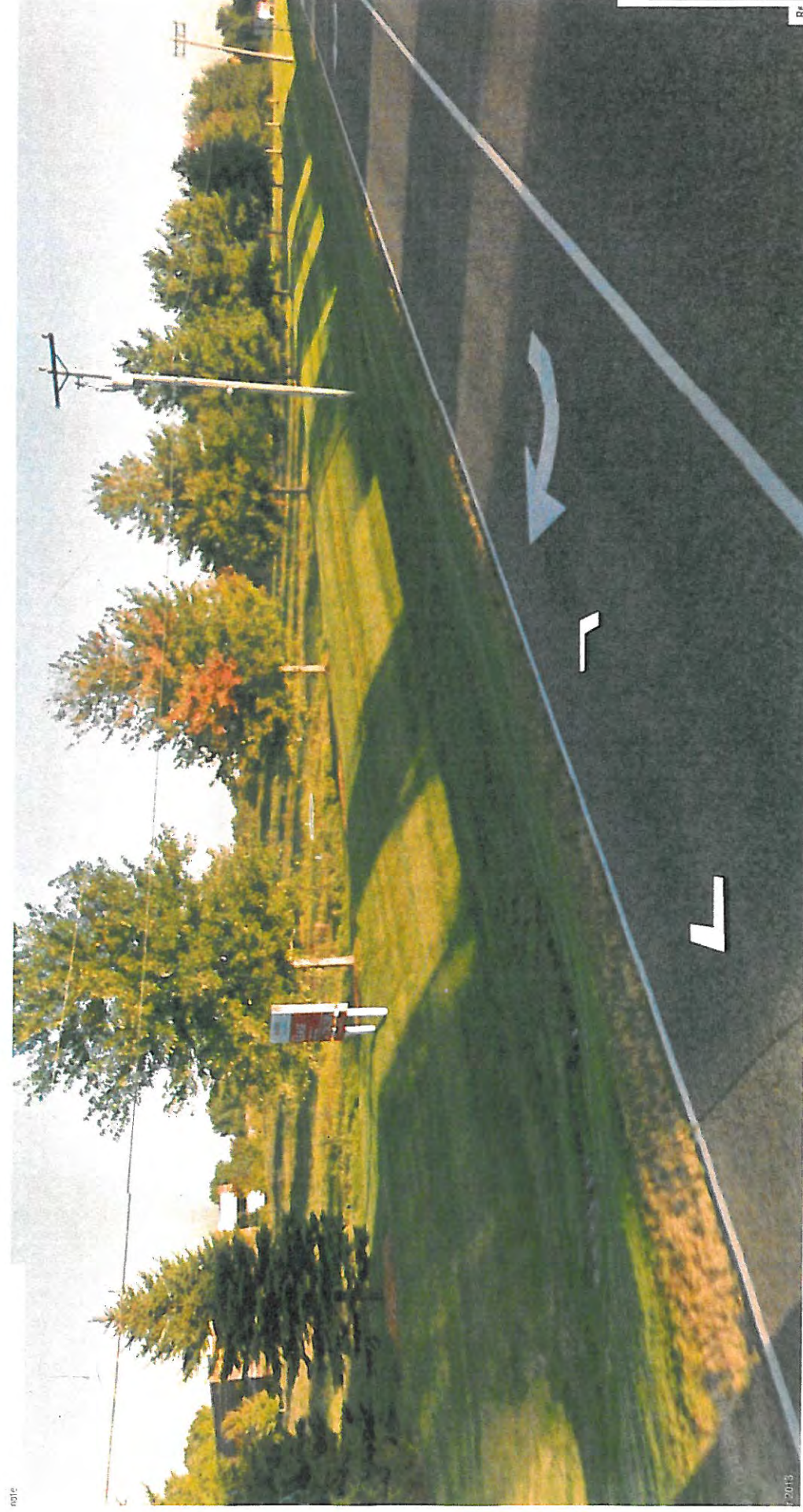




MAP FOR REFERENCE ONLY  
NOT A LEGAL DOCUMENT

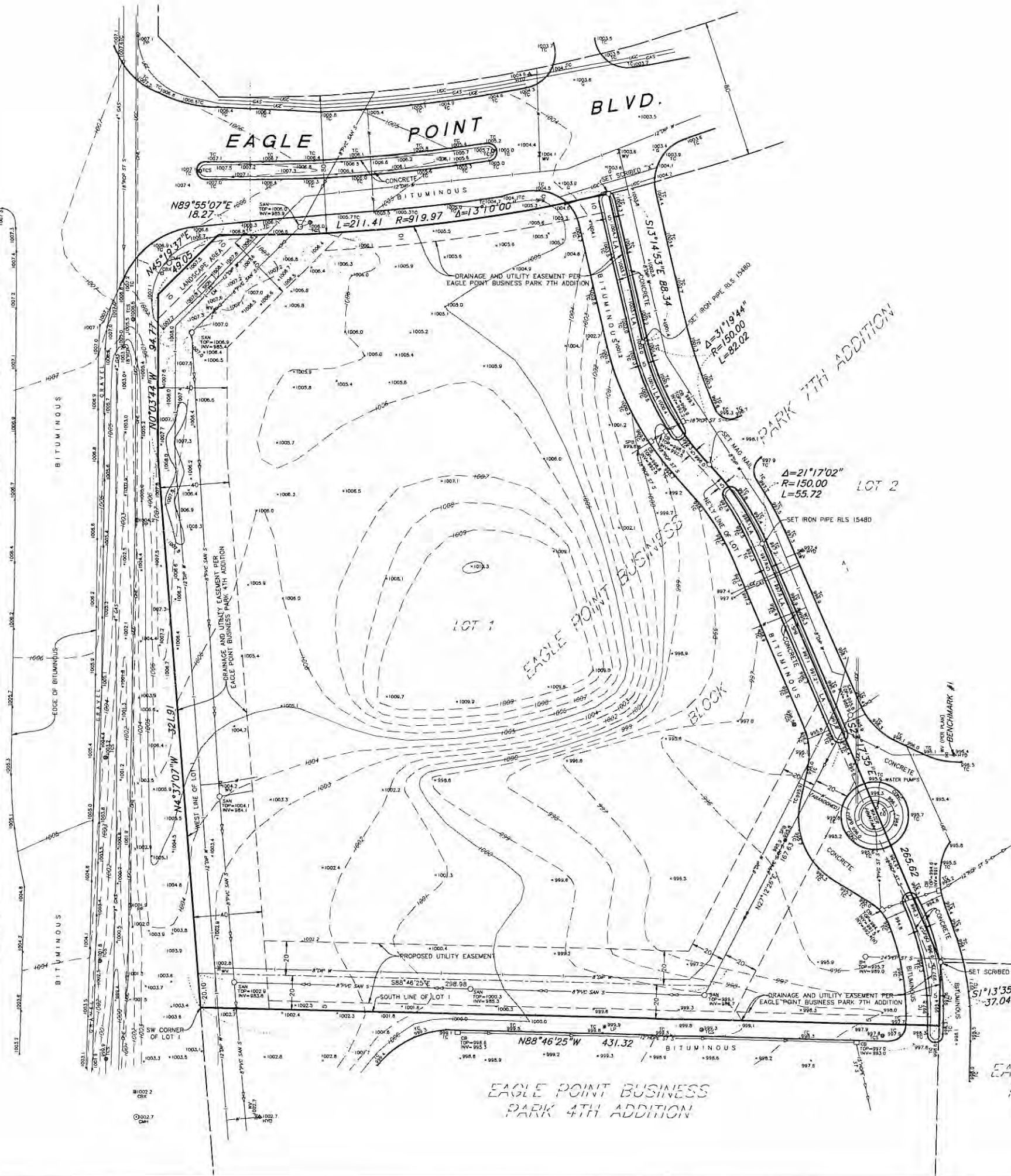
This drawing is the result of the compilation and reproduction of land records as they appear in various Washington County offices. The drawing should be used for reference purposes only. Washington County is not responsible for any inaccuracies.

Created on 2/17/2015





INWOOD AVENUE N. (C.S.A.H. NO. 13)



#### DESCRIPTION OF PROPERTY SURVEYED

Lot 1, Block 1, EAGLE POINT BUSINESS PARK 7TH ADDITION, according to the recorded plat thereof, Washington County, Minnesota.

#### PROPOSED UTILITY EASEMENT

A 40.00 foot easement over, under and across part of Lot 1, Block 1, EAGLE POINT BUSINESS PARK 7TH ADDITION, according to the recorded plat thereof, Washington County, Minnesota. The centerline of said easement is described as beginning at the intersection of the west line of said Lot 1 with the north line of the south 20.00 feet of said Lot 1; thence South 88 degrees 46 minutes 25 seconds East, assumed bearing, along said north line of the south 20.00 feet of Lot 1 a distance of 298.98 feet; thence North 27 degrees 12 minutes 26 seconds East a distance of 187.63 feet to the northeasterly line of said Lot 1 and said centerline there terminating. Except that part of said easement that lies within the drainage and utility easements as dedicated in EAGLE POINT BUSINESS PARK 4TH ADDITION and said EAGLE POINT BUSINESS PARK 7TH ADDITION, according to the recorded plats thereof, Washington County, Minnesota.

#### NOTES

- 1.) Location and sizes of underground utilities shown hereon are approximate only and are shown based on field location of visible fixtures in combination with available data provided by various sources. Utilities shown are dependent on the completeness and accuracy of data provided. Other underground utilities of which we are unaware may exist. Verify all utilities critical to construction or design.
- 2.) Contact GOPHER STATE ONE CALL at 651-454-0002 (800-252-1166) for precise onsite location of utilities prior to any excavation.
- 3.) This survey was prepared without the benefit of current title work. Easements, appurtenances, and encumbrances may exist in addition to those shown hereon. This survey is subject to revision upon receipt of a current title insurance commitment or attorney's title opinion.
- 4.) Area = 164,347 Sq. Ft. or 3.773 Acres
- 5.) Survey coordinate and bearing basis: Washington County

#### LEGEND

BH	Denotes beehive catch basin
CB	Denotes catch basin
CBX	Denotes communication box
CMH	Denotes communication line
DIP	Denotes ductile iron pipe
EM	Denotes electric meter
EO	Denotes electric outlet
G	Denotes gutter
HDPE	Denotes high density plastic pipe
HHE	Denotes electric hand hole
HYD	Denotes fire hydrant
INV	Denotes structure invert
LA	Denotes landscaped area
LP	Denotes light pole
OHE	Denotes overhead electric line
PEP	Denotes polyethylene pipe
PP	Denotes power pole
PVC	Denotes plastic pipe
RCP	Denotes reinforced concrete pipe
SAN	Denotes sanitary manhole
SAN S	Denotes sanitary sewer
SPB	Denotes sprinkler box
ST S	Denotes storm sewer
TC	Denotes top of concrete curb
TCS	Denotes traffic control sign
UGC	Denotes underground communication line
UDE	Denotes underground electric line
W	Denotes water line
WV	Denotes water valve

Denotes deciduous tree

Denotes coniferous tree

#### BENCHMARKS

- 1.) Top of top nut of fire hydrant, approximately 39 feet southeast of the southwest building corner of 8530 Eagle Point Office Center. Elevation = 998.54 feet
- 2.) Top of tile at south main entrance to 8530 Eagle Point Office Center. Elevation = 997.10 feet

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 23rd day of October, 2007.

SUNDE LAND SURVEYING, LLC

By: *Mark S. Hanson*  
Mark S. Hanson, P.L.S. Minn. Lic. No. 15480

Revision	By	Date
	BMS	
Drawing Title: <b>BOUNDARY, LOCATION, TOPOGRAPHIC and UTILITY SURVEY FOR: UNITED PROPERTIES</b>		
<b>SUNDE</b> LAND SURVEYING www.sunde.com		
Main Office: 9001 East Bloomington Freeway (35W) • Suite 118 Bloomington, Minnesota 55420-3435 952-881-2455 (fax: 952-888-9526) North Office: Brooklyn Park, Minn. 763-784-9346		
Project: 95-155-M	By: Prg 800/70	Date:
Township: 29	Range: 21	Section: 33
File: 95155M001.dwg		Sheet: 1 of 1



## Eagle Point Medical Center Site Visit, 4/1/15



Looking West



Looking Southwest



Looking Northwest



Ground Sign Base

## Nick Johnson

---

**From:** Ann Pung-Terwedo <Ann.Pung-Terwedo@co.washington.mn.us>  
**Sent:** Wednesday, April 01, 2015 10:56 AM  
**To:** Nick Johnson  
**Cc:** Carol Hanson  
**Subject:** RE: April Land Use Review

Nick,

We reviewed the application and plans for monument sign (variance to height)

to be located at 8515 Eagle Point Blvd. Since the sign is outside the right-of-way and does not cause any issues with traffic/sight distance on Inwood Avenue/ CSAH 13, there are no comments.

Thanks,

Regards,

Ann

Ann Pung-Terwedo

Senior Planner

Washington County Public Works

11660 Myeron Road North

Stillwater, MN 55082

Phone: 651-430-4362

FAX: 651-430-4350

E-Mail: Ann. Pung-terwedo@co.washington.mn.us <mailto:Pung-terwedo@co.washington.mn.us>

Washington County Public Works Department

Stewards of the county's investment in parks, buildings, transportation, land survey, and land use planning.



PLANNING COMMISSION  
DATE: 4/13/15  
AGENDA ITEM: 4B – PUBLIC HEARING  
CASE # 2015-15

ITEM: Zoning Text Amendment – Pylon and Freestanding Signs

SUBMITTED BY: Nick Johnson, City Planner

REVIEWED BY: Kyle Klatt, Community Development Director  
Casey Riley, Planning Intern  
Adam Bell, City Clerk

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### **SUMMARY AND ACTION REQUESTED:**

The Planning Commission is being asked to hold a public hearing on a request submitted by Rihm Kenworth to amend the City's Sign Ordinance to allow pylon and freestanding signs with a maximum height of 25 feet and 250 sq/ft surface area for properties within all commercial zoning districts abutting Interstate 94. The current zoning districts with frontages along I-94 include Business Park (BP), Commercial (C), and Rural Transitional (RT). Staff is recommending that the Planning Commission recommend approval of a Zoning Text Amendment to allow freestanding signs with a maximum height of 25 feet and an area of 150 square feet on properties adjacent to interstate highways.

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### **GENERAL INFORMATION**

*Applicant:* Rihm Kenworth of Lake Elmo, 11530 Hudson Boulevard, Lake Elmo, MN 55042

*Property Owners:* EN Properties LLC, 11530 Hudson Boulevard, Lake Elmo, MN 55042

*Location:* N/A – Request would allow for pylon and freestanding signs with a maximum height of 25 feet and 250 square feet of surface area for commercial properties abutting Interstate 94.

*Request:* Rihm Kenworth of Lake Elmo is requesting to amend the City's Zoning Code to allow pylon and freestanding signs with a maximum height of 25 feet and 250 square feet of surface area in the Business Park (BP), Commercial (C), and Rural Transitional (RT) zoning districts for properties along I-94.

*Existing Land Use:* N/A

*Existing Zoning:* N/A

*Surrounding Land Use:* N/A

*Surrounding Zoning:* N/A

*Comprehensive Plan:* N/A

*Proposed Zoning:* N/A

*History:* In advance of sewerage growth in Lake Elmo, a major update to the Zoning Code was completed in 2012. As part of this Zoning Code update, the previous signage regulations were replaced by the current Sign Ordinance. Prior to the adoption of the current Sign Ordinance, pylon and freestanding signs were allowed for certain parcels along I-94 with a maximum height of 30 feet and a maximum area of 150 square feet. Attachment #2 includes the previous signage regulations for the City of Lake Elmo. Page 9 of the previous signage regulations include the provisions for the I-94 District.

The current Sign Regulations do not allow pylon and freestanding signs. The Code acknowledges that these signs exist and are defined in the “definition” section of the code. However, pylon and freestanding signs are not included in the current permitted signs for Commercial, Mixed-Use and Industrial. It should also be noted that in section L, *Prohibited Signs*, pylon and freestanding signs are not identified as a prohibited use.

*Applicable Regulations:* Sign Regulations (§154.212) in Current Zoning Code  
Signs: I-94 District (§151.115) in Previous Zoning Code

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## REQUEST DETAILS

Rihm Kenworth has applied for a zoning text amendment to amend the City’s Zoning Code to allow pylon and freestanding signs as a permitted use in the Business Park (BP), Commercial (C), and Rural Transitional (RT) zoning districts that abut Interstate 94. The Planning Commission is asked to hold a public hearing on the request, as all changes to the City’s Zoning Code require a public hearing. The applicants currently operate a business at 11530 Hudson Blvd. N. along Interstate 94 on a parcel that is zoned Rural Development Transitional (RT).

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## BACKGROUND

Rihm Kenworth currently operates a business at 11530 Hudson Boulevard. The property is located along Interstate 94 in the southeast corner of the City west of Manning Avenue. They recently started operations on this site and are interested in marketing their business with a sign on I-94.

The applicants met with City staff in late January of 2015 to learn more about the City’s Sign Regulations along I-94. Upon review of the sign requirements, it was found that pylon and freestanding signs are currently not permitted in any zoning districts along Interstate 94. The best option remained a Ground Sign with a maximum height of 10 feet and maximum area of 72 feet. Unfortunately, with these requirements, the sign would not be legible from a car traveling 65 mph along I-94. After reviewing the sign requirements in the City’s Zoning Code, the applicant chose to request a Zoning Text Amendment. It should be noted that a variance request was also explored by the applicant. However, after discussing the desired outcome with City staff, it was determined that such a signage change would be more appropriate as an amendment to the Sign Ordinance, as there are many properties along I-94 that will likely have similar requests or be affected by such change.

After conducting research and consulting with City staff, the applicant recommends to amend the Sign Ordinance to allow pylon and freestanding signs with a maximum height of 25 feet and a maximum 250 sq. ft. surface area for properties abutting Interstate 94. The recommendation takes into consideration the elevation of the Interstate, and the 65 mile per hour travel speed. The applicant



has provided several supplemental documents including the United States Sign Council (USSC), the Woodbury Freestanding Sign Code, and the Oakdale Sign Code for consideration by the City.

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**STAFF REVIEW COMMENTS:**

In order to review whether or not pylon and freestanding signs are an appropriate use along Interstate 94, staff reviewed sign requirements from numerous cities within the Metro. The results of staff research are found in Attachment 3, a table providing the provisions of various cities with regards to freestanding signs. The maximum height for a freestanding sign in the broader area was 50 feet in Albert Lea. The maximum surface area was found to be 250 square feet in Albert Lea, Richfield, Sauk Centre, and Bloomington. In the East Metro, Stillwater allows a maximum sign height of 25 feet and 200 square feet. Woodbury has a maximum sign height of 30 feet and 150 square feet. Oakdale allows freestanding signs to be a maximum of 25 feet in height and 80 square feet in area, whereas pylon signs are permitted to be a maximum of 30 feet in height and 150 square feet in area.

In addition, staff reviewed the sign requirements for Business Park, Commercial, and Rural Transitional zoning districts. It was found that pylon and freestanding signs are not a permitted use in Commercial, Mixed-Use and Industrial Districts. Based upon a number of previous inquiries, as well as the future context of a growing I-94 Corridor with additional commercial properties, it is staff's recommendation to provide some signage allowance for freestanding signs for commercial properties abutting the I-94 Corridor.

It should be noted that from a planning perspective, most cities have a supplemental code for businesses and commercial properties along an interstate as they are presented with different opportunities and challenges than typical businesses and commercial centers. The interstate allows the public and potential visitors to see a business from the highway, but can be a problem at the high speed of travel. The sign must be large enough to be both visible and readable at the travel speed. The applicant has included the "Sign Rules of Thumb" by the United States Sign Council to better inform the Zoning Text Amendment request. Staff has determined that a height of 25 feet is appropriate for the I-94 Corridor, but have also determined that an area of 250 square feet exceeds the size that is consistent with the desired character of Lake Elmo. Staff recommend that an a maximum area of 150 square feet would be appropriate for Lake Elmo, which would be consistent with other neighboring communities.

In addition, in determining whether or not pylon or freestanding signs are appropriate for the Commercial, Business Park and Rural Transitional zoning districts along Interstate 94, it should be noted that the proposed action does not remove or replace the sign regulation requirements. It is recommended that freestanding or pylon signs only be allowed for properties adjacent to interstate highways (I-94 in Lake Elmo's case). Different communities have different approaches to determine which parcels are eligible for freestanding signs. For example, the City of Woodbury requires that a freestanding freeway sign not be more than 100 feet from the freeway right-of-way or boundary.

In order to further clarify staff's recommended amendment to the City's Sign Ordinance, staff will provide recommended ordinance language at the Planning Commission meeting. As far as a general recommendation is concerned, staff recommends that the Planning Commission consider some allowance for freestanding signs, as the City has received a number of requests inquiring about taller freestanding signs adjacent to the I-94 Corridor. It is the opinion of staff that these requests will only increase as additional commercial development occurs within the I-94 Corridor. At this time, staff is recommending to allow signs that are 25 feet in height and 150 square feet in area for signs that are in proximity to the interstate highway.

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**RECCOMENDATION:**

Staff is recommending that the Planning Commission recommend approval of the requested zoning text amendment to allow pylon and freestanding signs with a maximum height of 25 feet and 150 square feet for commercial properties abutting Interstate 94. The recommended motion is as follows:

***“Move to recommend approval of the request amend the Sign Ordinance to allow pylon and freestanding signs for commercial properties adjacent to interstate highways. These sign should not exceed 25 feet in height and 150 square feet in area.”***

**ATTACHMENTS:**

1. Land Use Application and Supporting Materials
2. Previous Signage Regulations
3. Staff Research of Metro Sign Ordinances

**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: \_\_\_\_\_  
Permit #: \_\_\_\_\_



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

## LAND USE APPLICATION

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

Applicant: Rihm Kenworth of Lake Elmo  
Address: 11530 Hudson Boulevard Lake Elmo, MN 55042  
Phone # 612.860.1612  
Email Address: dan.dunn@rihmkenworth.com

Fee Owner: Rihm Kenworth of Lake Elmo  
Address: 11530 Hudson Boulevard Lake Elmo, MN 55042  
Phone # 612.860.1612  
Email Address: dan.dunn@rihmkenworth.com

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

Detailed Reason for Request: Identification of our building & location from the  
Interstate 94 corridor for our customers and associates is  
critical to the successful operation of our business.

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

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

Signature of applicant: [Signature] Date: 26 Feb 2015

Signature of fee owner: [Signature] Date: 26 Feb 2015

**Property Description:**

All that part of the Southeast Quarter of Section 36, Township 29 North, Range 21 West, City of Lake Elmo, Washington County, Minnesota described as follows:

Commencing at the southwest corner of said Southeast Quarter; thence North 00 degrees 54 minutes 36 seconds West, assumed bearing, along the west line of said Southeast Quarter a distance of 418.40 feet; thence North 89 degrees 04 minutes 57 seconds East, a distance of 67.00 feet to the point of beginning; thence continuing North 89 degrees 04 minutes 57 seconds East, a distance of 472.00 feet; thence South 00 degrees 54 minutes 36 seconds East, a distance of 259.00 feet; thence South 89 degrees 04 minutes 57 seconds West, a distance of 222.00 feet thence North 00 degrees 54 minutes 36 seconds West, a distance of 44.00 feet; thence South 89 degrees 05 minutes 24 seconds West, a distance of 34.00 feet; thence South 00 degrees 54 minutes 36 seconds East, a distance of 94.00 feet; thence South 89 degrees 04 minutes 57 seconds West, a distance of 36.01 feet; thence North 00 degrees 54 minutes 36 seconds West, a distance of 34.00 feet; thence south 89 degrees 04 minutes 57 seconds West, a distance of 94.99 feet; thence North 00 degrees 54 minutes 36 seconds West, a distance of 97.00 feet; thence South 89 degrees 05 minutes 24 seconds West, a distance of 85.00 feet; thence North 00 degrees 54 minutes 36 seconds West, a distance of 177.99 feet to the point of the beginning.

Containing 5 acres, more or less.





23 March 2015

Lake Elmo Planning Commission and City Council  
3800 Laverne Avenue N.  
Lake Elmo, MN 55042

Re: Zoning Text Amendment Request.

Ladies and Gentlemen of the Planning Commission and Council,

We are a new business in the Lake Elmo community located at 11530 Hudson Boulevard. Identification of our building and location for our customers and associates from the Interstate 94 corridor is critical to the successful operation of our business.

The current provisions of the Lake Elmo Zoning Text for Directory signs of 10' in height and 50 sq/ft surface area does not allow for that. Additionally, pylon signs are not currently permitted according to the City's signage provisions. Our branch locations in the cities of Albert Lea and Sauk Centre, MN., which also have Interstate frontage, have such provisions in their local zoning codes. Our signs in those communities are effective in communicating our whereabouts.

We recommend a change in the Zoning Text to allow for pylon and free standing signs with a maximum height of 25' and 250 sq/ft surface area per side, two sides total. We further suggest that pylon or freestanding signs be allowed for properties that abut Interstate 94 based on the elevation of the Interstate, and the 65 mph travel speeds on the Interstate highway along this frontage.

We respectfully submit two articles of expert testimony to support that request. One is the document Sign Legibility Rules Of Thumb published by the United States Sign Council, and the other a Letter Visibility Chart produced by the California Institute of Technology. Also tendered with this request are sign codes from the Cities of Oakdale and Woodbury, MN., which outline provisions in sign height of 25' and 20' respectively.

This proposed change to the Zoning Text would benefit not only our needs, but other commercial endeavors in this corridor of Lake Elmo, both existing and in the future.

Sincerely,



Dan Dunn

Director of Dealership Infrastructure and IT

## LETTER VISIBILITY CHART

LETTER HEIGHT	MAXIMUM READABLE DISTANCE	READABLE DISTANCE FOR MAXIMUM IMPACT
3"	100'	30'
4"	150'	40'
6"	200'	60'
8"	350'	80'
9"	400'	90'
10"	450'	100'
12"	525'	120'
15"	630'	150'
18"	750'	180'
24"	1000'	240'
30"	1250'	300'
36"	1500'	360'
42"	1750'	420'
48"	2000'	480'
54"	2250'	540'
60"	2500'	600'

NOTE: The following distances will vary approximately 10% with various color combinations. Maximum distance in color would be RED or BLACK on a white background.

Prepared by the California Institute of Technology

*Serving the Upper Midwest!*



# Sign Legibility Rules Of Thumb

UNITED  
STATES  
SIGN  
COUNCIL

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## SIGN LEGIBILITY

By Andrew Bertucci, United States Sign Council

Since 1996, the United States Sign Council (USSC) and its research arm, the United States Sign Council Foundation (USSCF) have funded an extensive array of studies into the legibility of on-premise signs and the manner in which motorists react to these signs in various roadside environments. Because of these ground breaking studies, it is now possible to determine, with a degree of certainty, the size of letters as well as the size of signs necessary to ensure motorist legibility. Most of this work has been synthesized in the current USSC publication entitled ***USSC Best Practices Standards for On-Premise Signs***, which details methods for ascertaining sign size, legibility, and height for on-premise signs that are directly in view of a motorist approaching the sign. In addition, a study completed in 2006 and entitled ***On-Premise Signs, Determination of Parallel Sign Legibility and Letter Heights*** now provides similar methods for ascertaining legibility factors for signs not directly in view, such as wall mount building signs usually parallel to a motorist's viewpoint.

The USSC Best Practices Standards and the parallel sign study offer relatively detailed analysis of the legibility factors involved with on-premise signs, and certainly should be utilized whenever such analysis is warranted. A number of equally useful generalizations, or time-saving rules-of-thumb based on the studies, however, can be applied to arrive at results which reflect legibility values which can be used as a general average applicable to most conditions. These are detailed below.



### On Premise Sign Legibility Simplified Rules Of Thumb

#### ***How Motorists React To Signs In The Roadside Environment***

Detecting and reading a roadside on-premise sign by a motorist involves a complex series of sequentially occurring events, both mental and physical. They include message detection and processing, intervals of eye and/or head movement alternating between the sign and the road environment, and finally, active maneuvering of the vehicle (such as lane changes, deceleration, and turning into a destination) as required in response to the stimulus provided by the sign.

Complicating this process is the dynamic of the viewing task, itself, involving the detection of a sign through the relatively constricted view provided by the windshield of a rapidly moving vehicle, with the distance between the motorist and the sign quickly diminishing. At 40 miles per hour, for example, the rate at which the viewing distance decreases is 58



feet per second, and at 60 miles per hour, it becomes an impressive 88 feet per second. Further complicating the process is the relative position of the sign to the eye of the motorist, whether directly in his/her field of view (perpendicular orientation), or off to the side and turned essentially parallel to the motorist's field of view (parallel orientation).

Research has now been able to quantify the viewing process and set a viewing time frame or viewing window of opportunity for both types of sign orientation. In the case of signs perpendicular to the motorist, this time frame is measured as Viewer Reaction Time (VRT), or the time frame necessary for a motorist traveling at a specific rate of speed to detect, read, and react to a sign within his/her direct field of vision with an appropriate driving maneuver. The driving maneuver itself can entail a number of mental and physical reactions, usually involving signaling, lane changes, acceleration and/or deceleration, and finally, a turn into the site of the sign.

In the case of signs parallel to the motorist's view, detecting and reading a sign is generally restricted to quick sideways glances as the sign is approached and the angle of view becomes more constricted. Because of this, the VRT involving these signs is, at best, necessarily compromised. Compensation for this reduction in the time frame involved in detecting and reading parallel signs is made through increases in letter height and size designed to facilitate rapid glance legibility. It must be understood however, that the parallel orientation will always present legibility problems, and in many cases, even if the sign is detected and read, sufficient time for a motorist to complete a driving maneuver in response to the sign may not be available.

## Perpendicular Signs

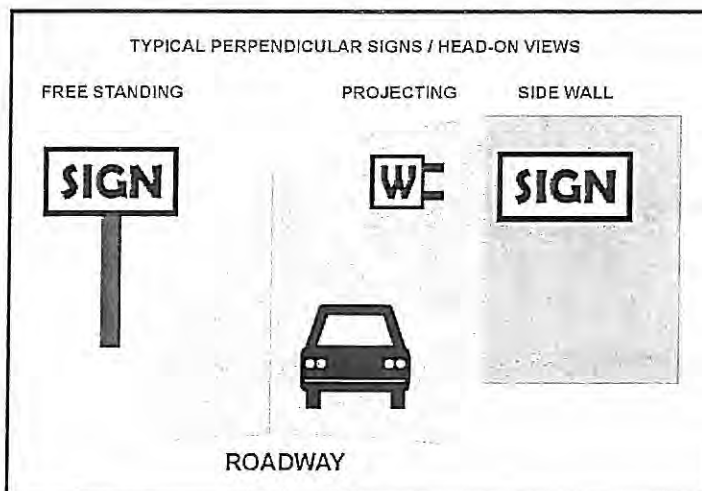


Figure 1. Perpendicular Sign Types

Perpendicular signs include most free standing signs, projecting signs, and, in some cases, flat wall signs placed on building walls that directly face on-coming traffic. (see figure 1). These signs are generally placed close to property lines and fall into the motorist's so-called "cone of vision", which is a view down the road encompassing ten degrees to the right or left of the eye, or twenty degrees total view angle. Signs falling within this cone can usually be viewed comfortably without excessive eye or head movement, and generally can be kept in the motorist's line-of-sight from the time they are first detected until they are passed. (see figure 2, cone of vision).

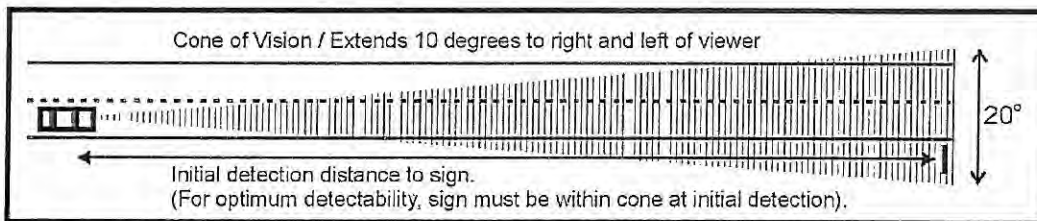


Figure 2. Cone of Vision

Because of this relatively constant view window, perpendicular signs can be designed and sized to provide for viewing time sufficient to allow for adequate detection, reading, and driving maneuvers. The key to providing adequate viewing time is an understanding of Viewer Reaction Time and Viewer Reaction Distance, and how these factors can be computed to provide for adequate letter heights and sign sizes under varied traffic conditions and vehicle speeds.

#### ***Viewer Reaction Time / Viewer Reaction Distance***

Viewer Reaction Time is simply the time necessary for a motorist to detect, read, and react to the message displayed on an approaching on-premise sign that lies within his or her cone of vision. The USSC Guideline Standards offer precise mathematical procedures for calculating VRT for specific signs with specific copy located in varied locations of increasing traffic complexity and speed.

As a rule-of-thumb for average usage with signs displaying six words of copy (or 30 letters) or less however, VRT for vehicles traveling under 35 miles per hour in simple two to three lane environments can be estimated at eight (8) seconds; for vehicles traveling over 35 miles per hour in more complex four to five lane environments, at ten (10) seconds; and for vehicles traveling over 35 mph in high speed multi-lane environments at eleven to twelve (11-12) seconds.

These values include a maneuvering time of 4 seconds in the simple environment, 5 seconds in the complex environment, and 6 seconds in the high speed multi-lane environment. Although most roadside on-premise sign installations require a motorist to make the driving maneuver before the sign is passed and thus require the full VRT value, occasionally the maneuver can safely be made after the sign location has been passed. Where this is the case, the driving maneuver time of either 4, 5, or 6 seconds should not be included in computing Viewer Reaction Time.

Once VRT is ascertained, Viewer Reaction Distance for a given sign location, or the distance in feet which a vehicle travels during the VRT interval, can be calculated. It is necessary to know this distance because it determines the size of the letters and the size of the sign necessary for legibility to take place over that distance. It represents, in lineal feet, the distance between the motorist and the sign from the moment he or she has first detected it, and it rapidly diminishes as the motorist closes the distance at speed.

It is calculated by first converting travel speed in miles per hour (MPH) to feet per second (FPS) by using the multiplier 1.47, and then multiplying the feet per second by the Viewer Reaction Time. For example, a vehicle traveling at sixty miles per hour covers eighty-eight feet per second ( $60 \times 1.47 = 88$ ). Eighty-eight feet per second times a Viewer Reaction Time of ten seconds equals eight hundred eighty feet (880) of Viewer Reaction Distance. The computation can be expressed also as this equation:

$$VRD = (MPH) (VRT) 1.47$$

### ***Determining Letter Height and Sign Size***

The overall legibility of a sign is essentially determined by the height, color, and font characteristics of the letters making up its message component. To this end, the USSC has, through extensive research, developed standard legibility indices for typical letter types and color combinations (see table 1, USSC Standard Legibility Index).

The Legibility Index (LI) is a numerical value representing the distance in feet at which a sign may be read for every inch of capital letter height. For example, a sign with a Legibility Index of 30 means that it should be legible at 30 feet with one inch capital letters, or legible at 300 feet with ten inch capital letters. The USSC Standard Legibility Index also reflects the 15 percent increase in letter height required when all upper case letters (all caps) are used instead of more legible upper and lower case letters with initial caps.

Table 1. The USSC Standard Legibility Index

ILLUMINATION	LETTER STYLE	LETTER COLOR	Background COLOR	LEGIBILITY INDEX	
				Upper & Lower Case	ALL CAPS
External	Helvetica	Black	White	<b>29</b>	<b>25</b>
External	Helvetica	Yellow	Green	<b>26</b>	<b>22</b>
External	Helvetica	White	Black	<b>26</b>	<b>22</b>
External	Clarendon	Black	White	<b>28</b>	<b>24</b>
External	Clarendon	Yellow	Green	<b>31</b>	<b>26</b>
External	Clarendon	White	Black	<b>24</b>	<b>20</b>
Internal Translucent	Helvetica	Black	White	<b>29</b>	<b>25</b>
Internal Translucent	Helvetica	Yellow	Green	<b>37</b>	<b>31</b>
Internal Translucent	Clarendon	Black	White	<b>31</b>	<b>26</b>
Internal Translucent	Clarendon	Yellow	Green	<b>37</b>	<b>31</b>
Internal Opaque	Helvetica	White	Black	<b>34</b>	<b>29</b>
Internal Opaque	Helvetica	Yellow	Green	<b>37</b>	<b>31</b>
Internal Opaque	Clarendon	White	Black	<b>36</b>	<b>30</b>
Internal Opaque	Clarendon	Yellow	Green	<b>37</b>	<b>28</b>
Neon	Helvetica	Red	Black	<b>29</b>	<b>25</b>
Neon	Helvetica	White	Black	<b>38</b>	<b>32</b>

Illumination Variations:

External light source

Internal light source with fully translucent background

Internal light source with translucent letters and opaque background

Exposed neon tube

To use the Legibility Index table to determine letter height for any given viewing distance, select the combination of font style, illumination, letter color, and background color that most closely approximates those features on the sign being evaluated. Then, divide the viewing distance (Viewer Reaction Distance) in feet by the appropriate Legibility Index value. The



result is the letter height in inches for the initial capital letter in upper and lower case configurations, or for every letter in an all caps configuration. For example, if the Viewer Reaction Distance is 600 feet, and the Legibility Index is 30, the capital letter height would be 20 inches ( $600' / 30 = 20''$ ).

***VRD (in feet) / LI = Letter Height (in inches)***

*The Legibility Index rule-of-thumb...30*

In addition to the use of the Legibility Index chart, a simpler, rule-of-thumb Legibility Index of 30 is frequently used as an average to address most legibility requirements. Although generally acceptable, it should be understood that this is an average only, and it may fall short of meeting the legibility needs of any specific sign or environment. The USSC On-Premise Sign Standards provides a much more precise means of establishing this requirement, particularly for complex environments, and should be used whenever such precision is warranted.

### ***Sign Copy Area and Negative Space – Computing Sign Size***

The computation of overall sign size is of vital concern to anyone involved in designing or building on-premise signs, since it relates directly to both sign cost as well as to adherence to local building and zoning ordinances. It is for this reason that USSC has devoted so much research resources into developing methods for computing adequate sign sizes for varied environments, and into providing the industry with the means to compute the size of signs necessary to adequately transmit communicative messages to motorists traveling at different rates of speed. The use of the Legibility Index is the vital first step in this process, but there is frequently more involved than just letter height, especially in perpendicular signs involving the use of background panels. Clearly, in these instances, an understanding of how sign copy area and negative space interact to bring about optimum viewer legibility is critical.

In instances in which only letters comprise the total sign, such as channel letters on building walls, however, the computation of total sign size in square feet is relatively simple. In the case of these types of individual letter signs, overall size is frequently considered as the product of the height of the letters times the length of the line of letters. For example, if capital letter height is two feet, and the line of letters measures thirty feet horizontally, sign size would be calculated at sixty square feet ( $2 \times 30 = 60$ ). There is an important exception to this mode of calculation in which only the space actually taken up by the letters themselves in square feet, and not the space between letters, is considered. In these cases, overall size becomes simply the sum of all the individual letter areas, and is generally a fairer method of computation when the letters and or/symbols

are spread out over a large area of building wall. In any event, for individual letter signs, it is essentially the height of the letters which is the prime determinant of overall sign size, and as we observed above, this can be calculated with some precision through use of the Legibility Index.

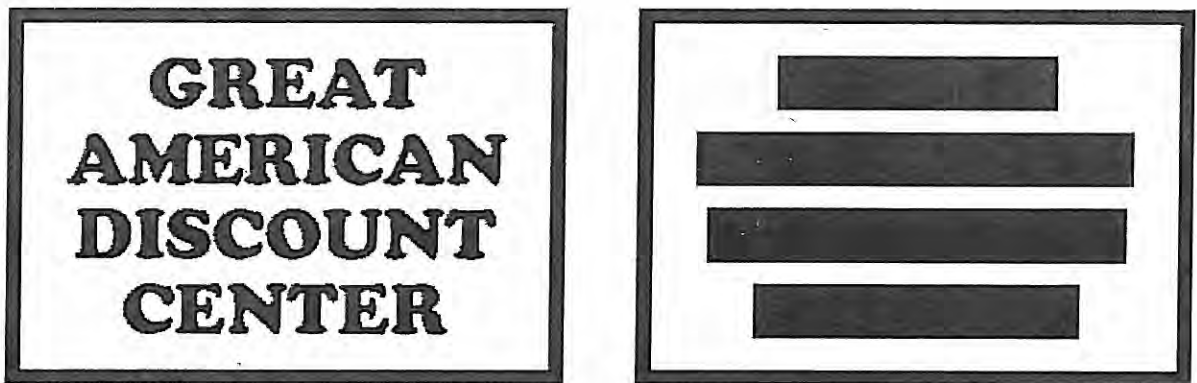
In this context, there is also another useful rule of thumb which can be used to give a working approximation of how much horizontal length a given number of letters would require once the letter height is established by simply multiplying capital letter height by the number of letters. For average fonts, this rule of thumb takes into account the space between letters in a line (usually  $1/3$  the width of an individual letter and referenced as letterspace) and can give a surprisingly close determination of the actual length of the line of letters.

In the case of signs utilizing background areas, however, computation of the amount of space occupied by the lettering, also called copy area, is only the first step in computing overall sign size. Of equal importance in signs of this type is the amount of negative space surrounding the letters or copy area. It is this negative space which provides the background for the letters, makes legibility possible, and which must be accounted for in any computation to determine overall sign size.

### Copy Area

The copy area of a sign is that portion of the sign face encompassing the lettering and the space between the letters (letterspace), as well as any symbols, illustrations, or other graphic elements. It is a critical component of effective sign design because it establishes the relationship between the message and the negative space necessary to provide the sign with reasonable legibility over distance.

Figure 3. Copy Area

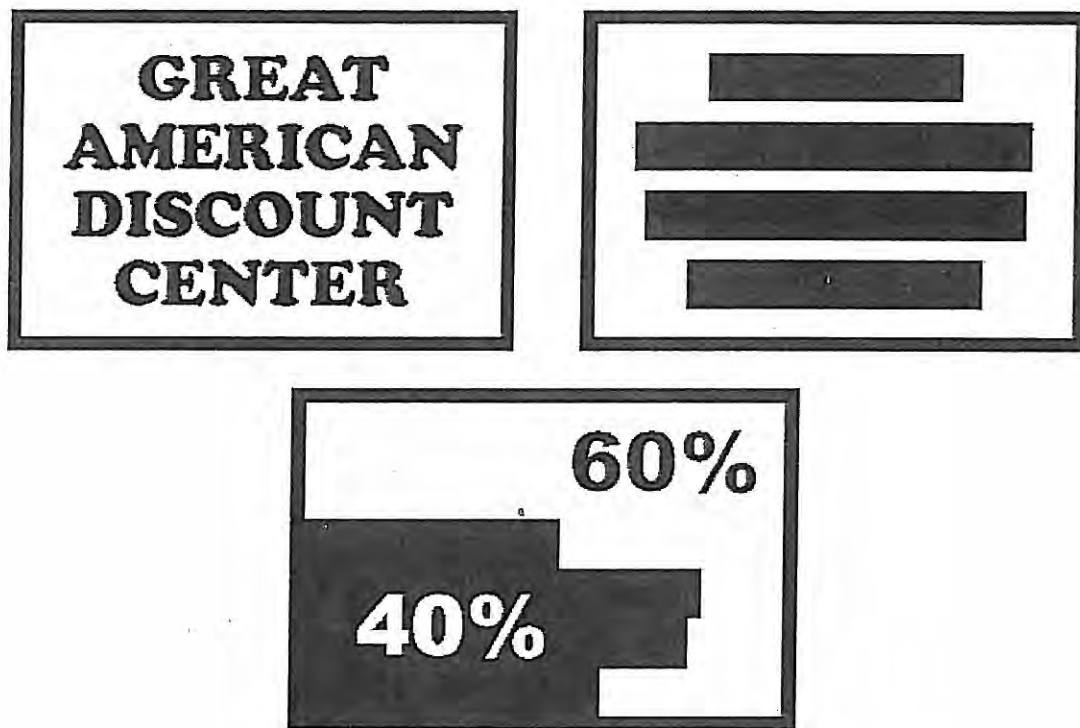


The illustration on the left depicts a typical on-premise sign face; while the one on the right, with black rectangles covering the copy area, affords a visual of the message layout

### Negative Space

Negative space is the open space surrounding the copy area of a sign. It is essential to legibility, particularly in signs in which the copy is displayed within a background panel. Negative space ideally should not be less than 60 percent of the sign or background area. This requirement for a 40/60 relationship between the copy area and negative space is the minimum USSC standard. It is intended only to establish a measurable baseline for the negative space component of a sign, such that a reasonable expectation of legibility will exist.

Figure 4. Relationship Between Copy Area And Negative Space



The bottom sign panel illustrates how the aggregate copy area comprises 40 percent of the total sign panel area, with the remaining 60 percent forming the negative space area.

## ***DETERMINING SIGN SIZE – Calculation Methodology***

The size of a sign is determined by the size and length of the message and the time required to read and understand it. It can be calculated once the numerical values of the five size determinants –Viewer Reaction Time, Viewer Reaction Distance, Letter Height, Copy Area, and Negative Space – have been established.

The step-by-step process to determine sign size, which is explained below, is useful not only as a calculation method, but also as a means of understanding the elements involved in the calculation.

### **Area of Sign / Computation Process:**

1. Determine speed of travel (MPH) in feet per second (FPS):  $(\text{MPH} \times 1.47)$ .
2. Determine Viewer Reaction Time (VRT).
3. Determine Viewer Reaction Distance  $(\text{VRT} \times \text{FPS})$ .
4. Determine Letter Height in inches by reference to the Legibility Index (LI):  $(\text{VRD}/\text{LI})$ .
5. Determine Single Letter Area in square inches (square the letter height to obtain area occupied by single letter and its adjoining letterspace).
6. Determine Single Letter Area in square feet:  $\text{Single Letter Area in square inches}/144$ .
7. Determine Copy Area (Single Letter Area in square feet  $\times$  total number of letters plus area of any symbols in square feet).
8. Determine Negative Space Area at 60% of Sign Area  $(\text{Copy Area} \times 1.5)$ .
9. Add Copy Area to Negative Space Area.
10. Result is Area of Sign in square feet.



## Computation Process / Calculation Example

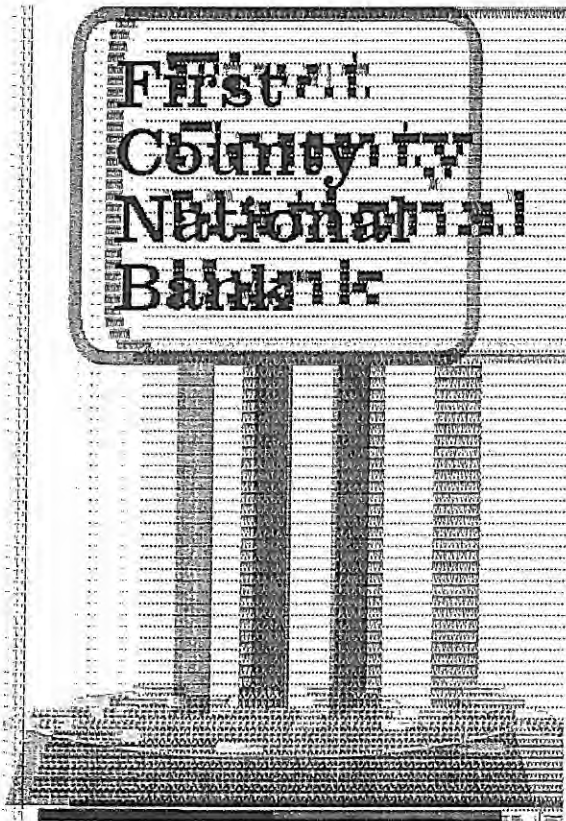


Figure 5. Calculation Example Sign

Location: Complex Driving Environment

Posted Traffic Speed of 40 MPH

Sign Background: White

Sign Copy: 23 Letters, Upper & Lower Case

Clarendon Style, Black

Internally Illuminated, Translucent Face

1. Determine speed of travel in feet per second;  $40 \text{ MPH} \times 1.47 = 59 \text{ FPS}$
2. Determine Viewer Reaction Time – Complex Environment  
Detection and Message Scan..... 5 seconds  
Maneuver..... 5 seconds  
Total Viewer Reaction Time = 10 seconds VRT
3. Determine Viewer Reaction Distance;  $59 \text{ (FPS)} \times 10 \text{ (VRT)} = 590 \text{ feet}$
4. Determine Letter Height in inches - Refer to Legibility Index, Table 1  
Black Clarendon letters on White background = Index of 31  
 $590 \text{ (VRD)} / 31 \text{ (LI)} = 19 \text{ inch letter height}$
5. Determine Single Letter Area in square inches  
 $19 \times 19 = 361 \text{ square inches, single letter area}$
6. Determine Single Letter Area in square feet  
 $361 / 144 = 2.5 \text{ square feet, single letter area}$
7. Determine Copy Area; single letter area (sq. ft.) x number of letters  
 $2.5 \times 23 = 57.5 \text{ square feet, copy area}$
8. Determine Negative Space @ 60% of sign area  
 $57.5 \times 1.5 = 86.25 \text{ square feet, negative space}$
9. Add Copy Area to Negative Space  
 $57.5 + 86.25 = 143.75 \text{ square feet}$
10. Result is Area of Sign, 144 square feet

## Area of Sign – Equation / Specific Usage

In addition to the computation method above, the USSC has developed an algebraic equation to determine the Area ( $A_{\text{sign}}$ ) for signs containing letters only, which will provide the same result but will simplify the process. The equation allows for insertion of all of the size determinants, except for Negative Space, which is fixed at the standard 40/60 ratios. (Note: If numbers are rounded off in the computation process, a very slight difference in result may occur between the computation process and the equation).

$$A_{\text{sign}} = \frac{3n}{80} \left[ \frac{(\text{VRT})(\text{MPH})}{\text{LI}} \right]^2$$

Fixed Value:

40/60 ratio, letters/negative space

Variable Values:

Number of Letters (n)

Viewer Reaction Time (VRT)

Miles Per Hour (MPH)

Legibility Index (LI)

Here's how to work the equation:

Start with the first portion of the equation which is three times the number of letters divided by 80. Three times 23 letters is 69; when divided by 80 the result is .8625. Keep this number ready for later use. Compute the second part of the equation in brackets by multiplying VRT (Viewer Reaction Time), which is 10 by the MPH (miles per hour), which is 40. The multiplication product is 400. Divide 400 by the LI (Legibility Index), which is 31, and the result is 12.90. Square the 12.90 by multiplying it by itself (12.90 x 12.90) for a product of 166. Finally, multiply the 166 by the .8625 obtained from the first part of the equation, and the resulting square footage is 143.

## Area of Sign – Equation / Broad Usage

To allow for a broader scientific evaluation of sign size and satisfy the minimal legibility requirements across a full range of reaction times and speed zones, USSC has also developed a second more simplified equation shown below. This formula fixes the average sign size determinants, leaving only Viewer Reaction Time (VRT) and the speed of travel (MPH) as the sole variables. It can be used effectively as a broad rule-of-thumb to ascertain the general size of signs necessary to adequately and safely convey roadside information to motorists traveling at a given rate of speed as well as to establish size parameters for signs across an entire community and/or road system. Table 2 below provides a handy look-up reference of the use of the equation.

$$A_{\text{sign}} = \frac{[(\text{VRT})(\text{MPH})]^2}{800}$$

Fixed Values:

30 Letters

Legibility Index (LI) of 30

40/60 ratio, letters/negative space

Variable Values:

Viewer Reaction Time (VRT)

Miles Per Hour (MPH)

Here's how to work the equation,  
assuming Viewer Reaction Time of 10 seconds and speed at 50 miles per hour:

Compute the values in the brackets by multiplying the VRT (Viewer Reaction Time) of 10 seconds by the MPH (miles per Hour), which is 50. The multiplication product is 500. Square the 500 by multiplying it by itself (500 x 500) for a product of 250,000. Divide 250,000 by 800 for the resulting square footage of 312.

Table 2. Freestanding Sign Sizes

### Freestanding Sign Size in Square Feet

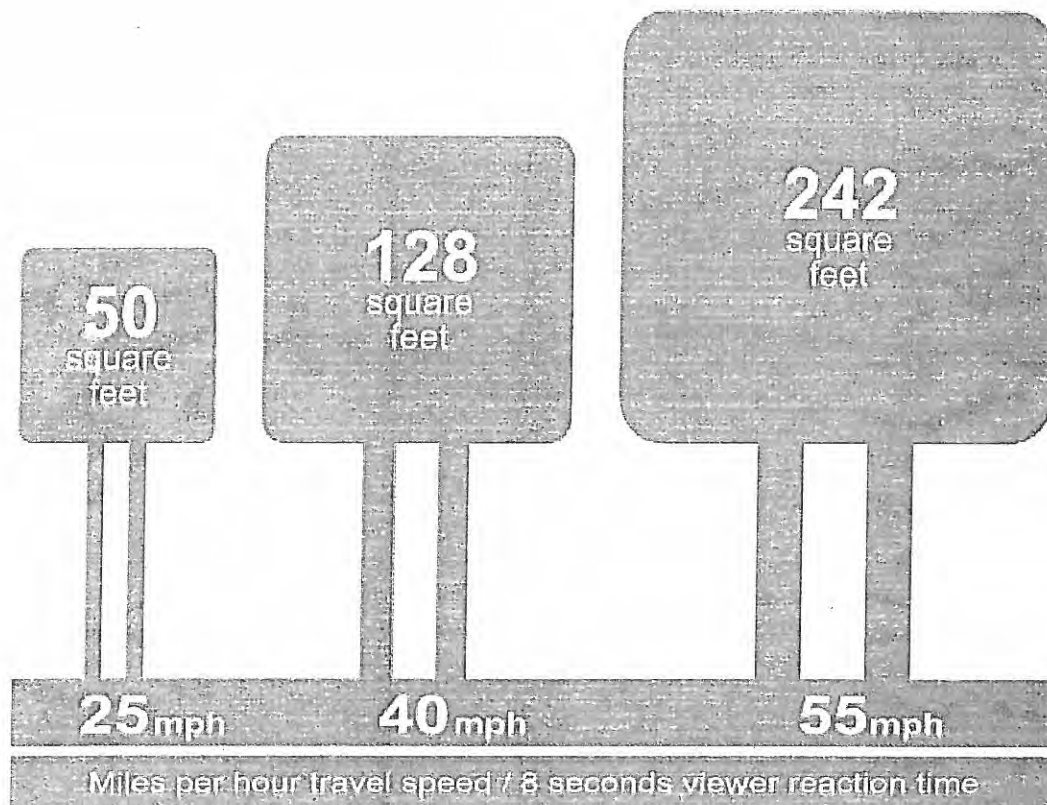
$$\text{Sign Size (Square Feet)} = [(VRT)(MPH)]^2 / 800$$

VRT = Viewer Reaction Time MPH = Miles Per Hour

VRT varies with roadside complexity:

simple or 2 lane = 8 seconds / complex or 4 lane = 10 seconds / multi lane = 11 seconds

MPH	Road Complexity	VRT	Sign Size
25	simple / 2 lane	8	50
25	complex / 4 lane	10	78
30	simple / 2 lane	8	72
30	complex / 4 lane	10	112
35	simple / 2 lane	8	98
35	complex / 4 lane	10	153
40	simple / 2 lane	8	128
40	complex / 4 lane	10	200
45	simple / 2 lane	8	162
45	complex / 4 lane	10	253
50	simple / 2 lane	8	200
50	complex / 4 lane	10	312
55	complex / 4 lane	10	378
60	complex / 4 lane	10	450
65	multi lane	11	639
70	multi lane	11	741
75	multi lane	11	850



Average sign size related to speed of travel and reaction time

Illustration from *Street Graphics and the Law*,  
American Planning Association, 2004

## Parallel Signs

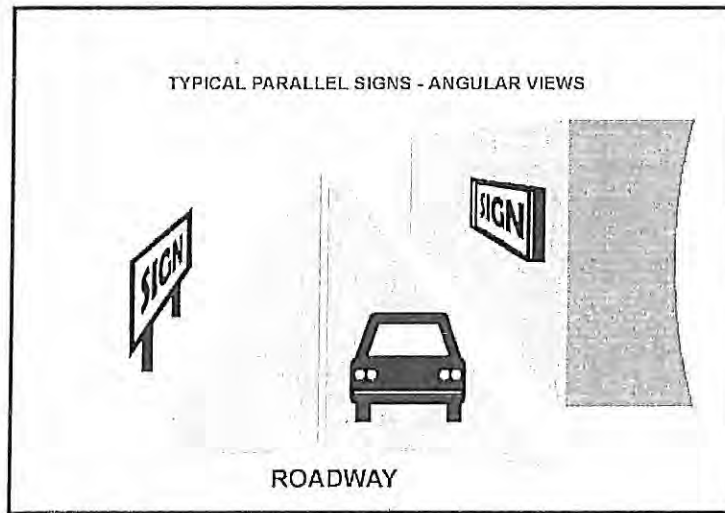


Figure 6. Parallel Sign Types

Everyday experience teaches us that parallel signs are more difficult to read than perpendicular signs simply because their orientation to the eye of any observer is at an acute angle. Now USSC research has corroborated this subjective impression with scientific evidence, and has made it possible to construct a mathematical model and attendant equations to account for the size increases necessary to allow parallel oriented signs to achieve at least some measure of the legibility quotient of perpendicular signs in a motorist oriented environment.

Parallel signs are harder to read because their orientation, or tilt, with respect to the driver makes it impossible to see the sign face at certain distances and offsets. When the driver can see the sign face, the content is often foreshortened and distorted. The driver must get close to the sign in order to increase the viewing angle to the point where the sign becomes legible. However, as drivers approach the sign, the time they have to read it gets shorter, while the sign moves further into their peripheral vision.

This condition places parallel signs at a threefold disadvantage relative to perpendicular signs. First, they are inherently more difficult to read because of the foreshortening of the message content caused by the angle of view. Second, because they become legible only after the angle of view exceeds 30 degrees, the time frame during which legibility can take place is compressed, and third, because they are usually placed back from the roadside well outside a driver's cone of vision, they are viewed by drivers only during short sideway glance durations, usually measured in fractions of seconds.



In many cases, their orientation causes not only severely compromised legibility compared to perpendicular signs, but results in the sign not being seen at all. In the USSC study, *Real World On-Premise Sign Visibility*, in which people were asked to drive through typical suburban shopping areas and locate specific signs, perpendicular signs were almost never missed while the subjects drove past 30 percent of the parallel signs, even though the parallel signs were two and three times larger than the perpendicular signs and the drivers were actively looking for them.

Parallel signs, therefore, must be read using a series of very quick glances at large visual angles during small windows of opportunity. Because of this, letter heights developed for perpendicular signs, where drivers have more time and can take longer straight ahead glances, cannot provide for adequate parallel sign legibility.

As we have noted in the case of perpendicular signs, the minimum distance at which a sign must become legible is a function of the time it takes to read the sign and the decisions and maneuvers required to comply with the sign. This is the Viewer Reaction time (VRT), which when combined with the speed of travel, becomes the Viewer Reaction Distance (VRD). Given the VRD, a perpendicular sign's letter height can be calculated using the Legibility Index.

The legibility of parallel signs, however, depends not on a driver's line of sight to a sign down the road, but rather when the sign becomes visible to the driver at a sight angle sufficient to allow at least some glance legibility to take place. A significant amount of research has now determined that this angle should be no less than 30 degrees to the driver's line of sight, and it is the visual restriction imposed by this angle, along with the number of lanes of travel, and the sign's offset from the curb, which determines the Maximum Available Legibility Distance, (or MALD) for a given parallel sign.

While traversing this distance, however, a driver cannot be expected to register much more than a few quick glances at the sign without adversely affecting his/her view of the road. Thus it is essential to optimize reading speed for parallel signs in order to minimize the duration and frequency of glances that drivers must make to read the sign. Research has shown that reading speed increases to its maximum as letters are enlarged by a factor of three, and then tends to level off; and to ensure adequate letter height for parallel signs, a multiplier of three is used in the mathematical model to determine the letter heights and the legibility index for parallel signs.

Using this multiplier of three as a benchmark or rule of thumb, the Legibility Index for parallel signs falls to 10, instead of the Legibility Index of 30 we have shown as a rule of thumb for perpendicular signs. Thus a

parallel sign with a MALD of 500 feet, for example, would require a capital letter size of 50" ( $500/10=50$ ). Conversely, a perpendicular sign at the same location, but directly viewable 500 feet down the road, would require a capital letter size of 17" ( $500/30=17$ )

### **Equations and Lookup Table**

The following equations can be used to determine appropriate letter heights for parallel mounted signs given the number of lanes of travel and the lateral offset of the sign from the curb. Equation #1 uses an average LI of 10, while Equation #2 allows users to input the LI that most closely matches their sign conditions from the USSC Legibility Index table (Table 1) and applies the three times threshold constant to that LI. A parallel sign letter height lookup table is also provided for typical roadway cross-sections and lateral sign offsets (Table 3).

***When using the equations or the lookup table  
always use the maximum number of lanes on the  
primary target road.***

### **Parallel Letter Height Model Equations**

***Equation #1:  $LH = (LN \times 10 + LO) / 5$***

***Equation #2:  $LH = (LN \times 10 + LO) / (LI / 6)$***

where:

LH is letter height in inches.

LN is the number of lanes of traffic.

LO is the lateral offset from curb in feet.

LI is the legibility index from Table 1



## Examples of how to work the equations

### 2-Lane Roadway

Lateral offset is 37 feet from the curb.

User does not know the letter style.

**Equation #1:**  $LH = (LN \times 10 + LO) / 5$

$$LH = (2 \times 10 + 37) / 5$$

$$LH = 57 / 5$$

$$LH = 11.4 \text{ inches}$$

Same scenario, but user knows the sign is: Externally Illuminated,  
Helvetica, all Caps, Light Letters on Dark Background  
(USSC LI = 22 ft/in)

**Equation #2:**  $LH = (LN \times 10 + LO) / (LI / 6)$

$$LH = (2 \times 10 + 37) / (22 / 6)$$

$$LH = 57 / 3.67$$

$$LH = 15.5 \text{ inches}$$

Table 3. Parallel sign letter height lookup table.

Offset from Curb (ft)	Letter Height in Inches				
	Number of Lanes				
	1	2	3	4	5
10	4	6	8	10	12
20	6	8	10	12	14
40	10	12	14	16	18
60	14	16	18	20	22
80	18	20	22	24	26
100	22	24	26	28	30
125	27	29	31	33	35
150	32	34	36	38	40
175	37	39	41	43	45
200	42	44	46	48	50
225	47	49	51	53	55
250	52	54	56	58	60
275	57	59	61	63	65
300	62	64	66	68	70
325	67	69	71	73	75
350	72	74	76	78	80
375	77	79	81	83	85
400	82	84	86	88	90

Sec. 18.5-56. - Freestanding signs.

(a) *Number.* Each building may have one freestanding sign per street frontage.

(b) *Area.*

- (1) A building site having one street frontage may have one freestanding sign not to exceed 80 square feet.
- (2) Building sites with two or more frontages may have one freestanding sign not to exceed 80 square feet and other freestanding signs not to exceed 40 square feet.
- (3) Building sites adjacent to the freeway may have one freestanding sign on the freeway frontage not to exceed 150 square feet and one freestanding sign on a second frontage not to exceed 80 square feet and other signs not to exceed 40 square feet.

(c) *Location.*

- (1) All portions of the sign shall be at least 15 feet from property lines.
- (2) Freeway signs must be not more than 100 feet from the freeway property lines.
- (3) No freestanding sign over three feet high shall be erected or maintained within the clear vision triangle.
- (4) Freestanding signs shall not be erected or maintained any closer than three feet to any building.

(d) *Height.* The maximum height for freestanding signs shall be 20 feet except freeway signs may be 30 feet.

(e) *Design.* Freestanding signs shall be attached to a base which is at least 75 percent of the width of the sign but shall not exceed the width of the sign by more than 20 percent. The base shall be constructed of class I materials that match those used on the building for which the sign is installed. If no class I materials are used on the building, class I or II materials shall be used.

(Ord. No. 1641, § 1641.02, 1-10-96; Ord. No. 1764, § 1764.01, 8-24-2005; Ord. No. 1816, § 1816.01, 3-11-2009)



## **ARTICLE 19. SIGNS**

### **Sec. 25-181 Purpose and Intent.**

The purpose of this Ordinance is to protect and promote the general welfare, health, safety and order within the City of Oakdale through the standards, regulations and procedures governing the erection, use and/or display of devices, signs or symbols serving as visual communicative media to persons situated within or upon public rights-of-way or properties.

The provisions of this Ordinance are intended to encourage creativity, a reasonable degree of freedom of choice, an opportunity for effective communication and a sense of concern for the visual amenities on the part of those designing, displaying or otherwise utilizing needed communicative media of the types regulated by this Ordinance, while at the same time assuring that the public is not endangered, annoyed or distracted by the unsafe, disorderly, indiscriminate or unnecessary use of such communicative facilities.

### **Sec. 25-182 Definitions.**

- (a) **Accessory Sign:** A sign relating in its subject matter to the premises on which it is located, or to products, accommodations, services or activities on the premises on which it is located.
- (b) **Accessory Use:** A use which is subordinate to the principal use being made of a parcel of land. Accessory uses are defined in the Zoning Code.
- (c) **Address Sign:** Postal identification numbers only, whether written or in numeric form.
- (d) **Area Identification Sign:** A free-standing sign which identifies the name of a neighborhood, a residential subdivision, a multiple residential complex consisting of three (3) or more structures, a shopping center or area, an industrial area, an office complex consisting of three (3) or more structures or any combination of the above that could be termed an area.
- (e) **Banners and Pennants:** Attention-getting devices which resemble flags and are of a non-permanent paper, cloth or plastic-like consistency.
- (f) **Bench Signs:** A sign which is affixed to a bench or shelter at a bus stop.
- (g) **Billboard:** A large outdoor advertising structure mounted on one or more legs and designed to display posters, composite graphics and electronic (Dynamic Displays) advertisements.
- (h) **Electronic Message Signs:** Displays, devices or portions thereof with lighted messages that change at intermittent intervals by electronic process or remote control. Also known as an automatic changeable copy sign, dynamic display message sign, electronic variable message center, electronic dynamic business sign, or video display sign. Electronic message signs are not identified as flashing or motion signs.
- (i) **Free-Standing Sign:** A sign which is placed in the ground and not affixed to any part of any structure.
- (j) **Illuminated Sign:** Any sign which is illuminated by an artificial light source.
- (k) **Institutional Sign:** Any sign or bulletin board which identifies the name and other characteristics of a public or private institution on the site where the sign is located.

- (l) **Motion Sign:** Any sign which revolves, rotates, or has any moving parts. Included in this category are searchlights used for advertisement.
- (m) **Nameplate or Identification Sign:** A sign which bears the name and/or address of the occupants of the building.
- (n) **Nits:** International System of Units, unit of luminance; to quote the brightness of computer displays.
- (o) **Non-Accessory Sign:** A sign other than an accessory sign.
- (p) **Nonconforming Sign:** A sign which does not conform to the newly enacted requirements of this Ordinance.
- (q) **Portable Sign:** A sign which is not permanently attached to the ground or any structure and so designed as to be movable from one location to another.
- (r) **Principal Building:** A freestanding structure and/or multi-tenant building sharing common walls.
- (s) **Projecting Sign:** Any sign, all or any part of which extends over public property more than twelve (12) inches.
- (t) **Permanent Sign:** Any sign which is not a temporary sign.
- (u) **Pylon Sign:** A freestanding area identification sign greater than twenty (20) feet in height, intended for freeway advertising.
- (v) **Roof Sign:** Any sign erected upon or projecting above the roofline of a structure to which it is affixed.
- (w) **Sign:** Any letter, word or symbol, device, poster, picture, statuary, reading matter or representation in the nature of an advertisement, announcement, message or visual communication whether painted, posted, printed, affixed or constructed, which is displayed outdoors for informational or communicative purposes.
- (x) **Sign Area:** That area within the marginal lines of the surface which bears the advertisement, or in the case of messages, figure or symbols attached directly to any part of the building, that area which is included in the smallest rectangle which can be made to circumscribe the message, figure or symbol displayed thereon. The stipulated maximum sign area for a freestanding sign refers to a single facing.
- (y) **Street Frontage:** The edge of a street along a parcel. An interior lot has one street frontage and a corner lot two such frontages.
- (z) **Temporary Sign:** A sign which is erected or displayed for a limited period of time.
- (aa) **Traffic Directional Sign:** A sign which is erected by a governmental unit for the purpose of directing or guiding traffic.
- (bb) **Internal Traffic Directional Sign:** A sign which is erected on private property by the owner of such property for the purpose of guiding vehicular and pedestrian traffic within his property. Such sign bears no advertising information.
- (cc) **Wall Sign:** Any sign which is affixed to a wall of any building.

**Sec. 25-183 General Provisions Applicable to All Districts.**

- (a) Non-accessory freestanding and wall signs are prohibited in all districts, except in areas specially designated in this Ordinance.
- (b) The base or support structure for the sign shall compliment the design of the building and incorporate 40% of brick, stone, decorative block, or similar substantial materials as approved by the City.



- (c) Freestanding signs along major thoroughfares (I-94, I-694, MN5/36/120/Inwood Ave/Hadley Ave/10th St) shall be subject to a Design Review Committee. The focus of the review is to assure the quality of the sign with regard to design and materials - Section 25-175(b). Furthermore, the committee will consider the signs' relationship to any architectural theme of existing or proposed structures in the area.
- (d) Freestanding signs shall be constructed with the base consisting of materials matching the building with said base at least seventy-five (75) percent of the width of the sign from the ground to the bottom of the sign.
- (e) All signs shall be constructed in such a manner and of such material that they shall be safe and substantial, provided that nothing in this Code shall be interpreted as authorizing the erection or construction of any sign not now permissible under the Zoning or Building Codes of the City.
- (f) The Building Official, in granting permits for illuminated signs, shall specify the hours during which the same may be kept lighted to prevent the creation of a nuisance. All illuminated signs shall have a shielded light source.

Any sign illuminated and located within fifty (50) feet of a lot line or a Residence District shall be diffused or indirect so as not to direct rays of light into adjacent residence. All illuminated signs in Business and Industry Districts in close proximity to Residence Districts shall be designed so as to illuminate the sign and not residential property to the extent practicable.

- (g) No sign, other than public traffic controls, directional or street name signs, shall be erected or temporarily placed within any street right-of-way or upon any public easements, except campaign yard signs as provided in subsection (i) below, may be located in a commercial, industrial or residential lot not less than five (5) feet from the curb, lot line or edge of street.
- (h) A permit for a sign to be located within fifty (50) feet of any street or highway regulatory or warning sign, or of any traffic sign or signal, or of any crossroad or crosswalk, will be issued only if:
  - (1) The sign will not interfere with the ability of drivers and pedestrians to see any street or highway sign, or any traffic sign or signal, or any crossroad or crosswalk, and
  - (2) The sign will not distract drivers nor offer any confusion to any street or highway sign, or any traffic sign or signal.
- (i) Campaign yard signs, posted by a bonafide candidate for political office or by a person or group promoting a political issue or a political candidate, may be placed in any district. Such signs may be erected beginning 46 days before the state primary in a state general election year and must be removed no later than ten (10) days following the election. The signs shall be setback a minimum of five (5) feet from the edge of the street and signs

shall not visually obstruct motor vehicle operation. Candidates shall be provided a copy of this ordinance upon filing for office.

- (j) Temporary real estate signs may be erected for the purpose of selling or promoting a residential project provided:
  - (1) Such signs shall not exceed 128 square feet in area.
  - (2) Only one sign shall be permitted per street frontage upon which the property abuts.
  - (3) Such signs shall be removed when the project is 80% completed, sold or leased.
  - (4) Such signs shall be located no closer than 100 feet to any residence not part of this project.
- (k) Temporary signs adjacent to the public right-of-way for the purpose of selling or leasing individual lots or buildings shall be permitted, provided:
  - (1) Such signs shall not exceed six (6) square feet for residential property and 32 square feet for nonresidential property and multiple-family developments of four or more dwelling units.
  - (2) Only one (1) such sign is permitted per street frontage upon which the property abuts.
  - (3) Such sign shall be removed within seven (7) days following the lease or sale.
- (l) Portable, internally lit signs are not allowed as permanent signs in any District.
- (m) Any freestanding sign within 25 feet of any intersection of street right-of-way lines and/or driveway entrances shall have vertical clearance for proper visibility by motorists on all affected roadways.
- (n) The total sign area of any multi-faced free-standing or projecting wall sign shall not exceed twice the permitted area of a two-sided sign or three times the area of a three-sided sign. All applications for signs of more than two sides shall be reviewed by the Planning Commission and Council.
- (o) No signs are allowed which contain moving parts or flashing lights, except for intermittent display of time and temperature.
- (p) (delete reference - moved to Section 5-64(d) of Oakdale Ordinance. (Revision made 02-02-01)
- (q) Bench signs are permitted in all districts at MTC bus stops.
- (r) Back-lighted signs are permitted on the ends of bus shelters.

- (s) Church directional signs shall be permitted in all districts provided the total area of such signs shall not exceed four (4) square feet per facing.
- (t) Canopies and marquees shall be considered to be an integral part of the structure to which they are accessory. Signs may be attached to a canopy or marquee but such structure shall not be considered as part of the wall area and thus shall not warrant additional sign area.
- (u) Signs advertising garage, yard, or similar household sales shall be removed within seven (7) days after the sale.
- (v) Signs with moving or changing electronic messages are allowed as part of the total area of a permitted sign.
- (w) Signs which are located on the interior of a building and are not visible from the outside of said building shall be exempt from the provisions of this Ordinance and shall not require permits or payment of fees.
- (x) Roof signs shall be prohibited in all districts.

**Sec. 25-184 District Regulations.**

- (a) In addition to those signs permitted in all districts, the following signs are permitted in each specific district and shall be regulated as to size, location and character according to the requirements herein set forth:

**(1) Residential Districts:**

- a) Nameplace Signs: One sign for each dwelling unit, not greater than two square feet in area, indicating the name and/or address of the occupant.
- b) Institutional and Recreational Signs: One sign or bulletin board per street frontage for public institutional use; for recreational use in residential districts, such sign or bulletin board shall not exceed 24 square feet in area nor shall it be placed closer than ten (10) feet to any edge of street line nor shall it be placed in a location that would interfere with the safe movement of traffic.
- c) Area Identification Signs: One sign per each major development, not to exceed 24 square feet in area.
- d) Temporary Signs: According to Sec. 25-183.
- e) Maximum Height of Free-Standing Signs: Eight (8) feet.
- f) Lighting: Lighting must be indirect or diffused.



(2) **Commercial District:**

- a) Wall Signs: One wall sign for each street frontage shall be permitted on a building for each business located within such building. The total area of all wall signs affixed to a building wall shall not exceed twenty (20) percent of the total area of that wall. No individual wall sign shall exceed 150 square feet.

A wall sign shall not project more than eighteen (18) inches from the wall to which the sign is to be affixed. Furthermore, wall mounted signs shall not exceed the roofline on any building.

Banners shall be included in the allowance for wall signs. The design and construction of all banners shall be professional looking and not be allowed to become torn or weathered.

- b) Free-Standing Sign: One freestanding sign is permitted for each building for each street frontage.

The total area of a freestanding sign for a building having one street frontage shall not exceed eighty (80) square feet. Where a building has two (2) or more street frontages, each permitted freestanding sign in excess of one shall be no greater than one-half the area of the first sign.

No part of a freestanding sign shall be closer than ten (10) feet to the front property line or exceed twenty-five (25) feet in height. The height shall be measured from the base of the sign or grade of the nearest adjacent roadway, whichever is lower.

- c) Bulletin Signs: Bulletin signs may have individual face areas of up to fifty (50) percent of the area of the display surface area of the business' identification or free-standing sign. Bulletin signs which are not wall-mounted must have a minimum elevation of ten (10) feet. Bulletin signs which are not wall-mounted must have a minimum elevation of ten (10) feet.

One portable bulletin sign up to 15 square feet may be displayed only during the merchant's business hours, with a permit. Such signs shall be located within the width of the storefront to which it is related.

- d) Pylon Signs: Retail and service establishments on property abutting an interstate freeway right-of-way may erect one pylon sign not exceeding 150 square feet of display surface area in addition to their one free-standing sign.

The minimum allowance distance of a pylon sign to an interstate right-of-way is fifty (50) feet, with a maximum height of thirty (30) feet.

P/D #  
add surrounding  
uses

m



- e) Electronic Dynamic Business Sign: Signs with moving or changing electronic messages are allowed as part of the total area of the permitted sign, with the following standards:
- (1) A Special Use Permit is required.
  - (2) Allowed Usage: Free-standing, Bulletin, and Nameplate/Building Identification.
  - (3) Business identification signage not to exceed forty (40) square feet.
  - (4) Signs may be square or rectangular and contain all messages within.
  - (5) Signs must have minimum display duration of 30 seconds.
  - (6) Goods and services displayed must be available at the business.
  - (7) No dynamic display electronic sign shall be erected that by reason of position, shape, movement, or color, interferes with the proper functioning of a traffic signs, signals, or which constitutes a traffic hazard.
  - (8) Signs shall not exceed 4,500 Nits between the hours of civil sunrise and civil sunset and shall not exceed 500 Nits between the hours of civil sunset and civil sunrise, as measured from the sign face.
  - (9) Signs adjacent to residential properties shall be shut off from 10 pm to 6 am or have a maximum of 250 Nits from civil sunset to civil sunrise.
  - (10) Signs shall have a fully functional off switch that automatically shuts the display sign off when the display deteriorates 10% or greater.
  - (11) The lamp wattage and luminance level in Nits shall be provided at the time of permit application.
  - (12) Public service messages, in addition to messages such as Amber Alerts, are to be provided at no cost to the public.
  - (13) Electronic dynamic business signs are prohibited as temporary signs.
- f) Temporary Signs: Temporary special event signs may be displayed upon issuance of a permit, for not more than ten (10) calendar days, and not more than two times each year. Such signs shall include: banners, pennants, flying signs, air inflated devices, search lights, portable bulletin signs, streamers, and other signs approved by the City. Established churches are exempt from permit requirements, number of days, and frequency guidelines. After the issuance of a Certificate of Occupancy (CO), the business that was issued the CO is exempt from the monetary and time restraints of temporary sign permit requirements for a period of ninety (90) days.
- g) Traffic Directional Signs.

**(3) Industrial Districts:**

- a) Free-Standing Identification Signs: One (1) identification sign is permitted for each building, not to exceed eighty (80) square feet in area.

No part of a freestanding sign shall be closer than ten (10) feet to the front property line or exceed fifteen (15) feet in height. The height shall be measured the same as for a freestanding sign in the Commercial Districts.

- b) Wall Signs: One (1) additional wall identification sign is permitted for each tenant having a private entry to a multi-tenant building, such sign being displayed at or near the tenants' entrance and not to exceed ten (10) percent of the area of the wall to which it is affixed.

No wall sign shall exceed 150 square feet in area. Commercial activities such as motels, restaurants, etc., may have signs according to the standards of the Commercial District.

- c) Temporary Signs
- d) Maximum Height of Freestanding Signs: Twenty (20) feet.
- e) Traffic Directional Signs

**Sec. 25-185 Billboards.**

**(a) Billboards:**

- (1) Billboards may only be erected along and are intended to be viewed from Interstate Highways 94 and 694. Billboards are allowed only in the following Zoning Districts: CC, I-O, and GI Districts.
- (2) The maximum allowable size of any billboard is 700 square feet. The maximum allowable extensions shall not exceed fifteen (15) percent of the total sign area. All skirting and perimeter material shall be counted as part of the sign area.
- (3) The maximum allowable height of any billboard is thirty-five (35) feet. If an Interstate Highway served by a billboard is elevated above the surface on which it is placed, the City Council may grant a variance to this regulation according to its discretion.
- (4) The minimum allowable distance in any direction between billboards is 5,280 feet.
- (5) The minimum allowable proximity of any billboard to any residential zoning district is 500 feet.
- (6) The minimum allowable distance of any billboard to any Interstate or Trunk Highway right-of-way is fifty (50) feet.
- (7) The minimum allowable distance of a billboard to any building shall be twenty-five (25) feet.
- (8) No portion of any billboard shall occupy air space above any driveway or parking area.

- (9) No billboard may display any moving parts nor shall it be illuminated with any flashing or intermittent lights.
  - (10) Billboards shall be a principal use in all Districts.
  - (11) All dynamic billboards shall be licensed pursuant to Chapter 9 of the City Code.
- (b) Electronic/Dynamic Display: In addition to the above requirements as applicable, signs with moving or changing electronic messages are allowed as part of the total area of permitted sign, with the following standards:
- (1) The support structure for the sign shall conform to the City's design sample and include an illuminated logo of the City with name "City of Oakdale" inscribed.
  - (2) No dynamic display electronic sign shall be erected that, by reason of position, shape, movement or color, interferes with the proper functioning of a traffic sign, signal or which constitutes a traffic hazard.
  - (3) Dynamic display electronic message signs must have minimum display duration of 30 seconds. Such displays shall contain static messages only; change from one static message to another shall be instantaneous without any special effects, through dissolve or fade transitions, or with the use of other subtle transition that do not have the appearance of moving text or images.
  - (4) Must be rectangular in shape and all messages contained within.
  - (5) Shall not be allowed on any buildings.
  - (6) All dynamic display electronic message signs shall have installed ambient light monitors and shall, at all times, allow such monitors to automatically adjust the brightness level of the electronic sign based on light conditions.
  - (7) Dynamic display electronic message signs shall not exceed 2,500 Nits (candelas per square meter) between the hours of civil sunrise and civil sunset and shall not exceed 500 Nits (candelas per square meter) between the hours of civil sunset and civil sunrise as measured from the face of the sign.
  - (8) Dynamic display electronic message signs shall have a fully functional monitoring off switch system that automatically shuts the dynamic display signs off when the display deteriorates, in any fashion, 5% or greater until the dynamic display sign has been repaired to its fully functional factory specifications.
  - (9) The lamp wattage and luminance level in Nits (candelas per square meter) shall be provided at the time of permit application from the owner or operator of the sign stating that the sign shall at all times be operated in accordance with City Codes and that the owner or operator shall provide proof of such conformance upon request of the City.
  - (10) A permanent removal of two (2) square feet of existing static billboard facing within the City of Oakdale for every one (1) square foot of Dynamic display electronic message sign
  - (11) Public service messages, in addition to messages such as Amber Alerts, are to be provided at no cost to the public.

**Sec. 25-186 Administration and Enforcement.**

- (a) **Permits.** Except as provided below, the owner or occupant of the premises on which a sign is to be displayed, or the owner or installer of such signs, shall file an application provided by the City Building Official for permission to display such sign. Permits must



be acquired for all existing, new, relocated, modified or redesigned signs except those specifically excepted below. The applicant shall submit with the application a complete description of the sign and a sketch showing its size, location, manner of construction and such other information as shall be necessary to inform the City Building Official of the kind, size, material, construction and location of the sign. The City Building Official may approve Sign Permits. The applicant shall also submit the fee at the time of application.

If a sign authorized by a permit has not been installed within three (3) months after the date of issuance of said permit, the permit shall become null and void.

- (b) All signs shall be constructed in accordance with the current Minnesota State Building Code and National Electric Code.
- (c) All signs utilizing electricity shall be subject to the State's current Electrical Code and electrical wiring shall be buried or concealed.
- (d) All sign structures shall be designed and constructed to withstand a wind pressure of not less than 80 m.p.h., or as determined by the current Minnesota State Building Code.
- (e) **Exemptions.** The exemptions permitted by this section shall apply only to the requirement of a permit and shall not be construed as excusing the installer of the sign, or the owner of the property upon which the sign is located, from complying with the other provisions of this Ordinance. No permit is required under this section for the following signs:
  - (1) A window sign placed within a building and not exceeding fifty (50) percent of the window area.
  - (2) Signs erected by a governmental unit or public school district.
  - (3) Memorial signs or tablets containing the name of the building, its use and date of erection when cut or built into the walls of the building and constructed of bronze, brass, stone or marble.
  - (4) Signs which are completely within a building and are not visible from the outside of said building.

#### **Sec. 25-187 Violations and Fines.**

If the City Building Official or his deputies finds that any sign regulated by this Ordinance is prohibited as to size, location, content, type, number, height, or method of construction, or is unsafe, insecure or a menace to the public, or if any sign has been constructed or erected without a permit first being granted to the installer of said sign or to the owner of the property upon which said sign has been erected, or fails to properly maintain said sign in a safe, orderly condition at all times, including the replacement of defective parts, or is in violation of any other provisions of this Ordinance, he shall give written notice of such violation to the owner or permittee thereof. If the owner or permittee fails to comply with the provision set forth in this Ordinance within ten (10) calendar days following receipt of said notice:

- (a) **Nuisance.** Such sign shall be deemed to be a nuisance and may be abated by the City by proceedings taken under Minnesota Statutes, Chapter 429, and the cost of abatement, including administration expenses, may be levied as a special assessment against the property upon which the sign is located.
- (b) **Penalty.** Failure to comply with the provisions of this ordinance shall be a misdemeanor.
- (c) **Confiscation.** Signs in violation of this ordinance.
  - a. **Process:**
    - i. Whenever signs are not in conformance with Oakdale Ordinance Article 19, the signs may be picked up by City Staff.
    - ii. All confiscated signs shall be stored at Public Works, in a location designated by Public Works for their storage.
    - iii. Public Works shall retain the signs for a minimum of two (2) weeks, after which they are free to dispose of the sign(s).
    - iv. Any sign(s) in violation, which requires more than one person in the removal, shall be released after the handling fee of \$100.00 has been paid at Public Works.
  - b. **Exceptions:** Political /campaign signs in violation shall first receive notification that they are in violation and have 24 hours to remove the sign. Confiscated signs will then be held at Public Works and disposed of after the election.

#### **Sec. 25-188 Appeals.**

A permit applicant or permit holder may appeal any order or determination made by the City Building Official or his deputy pursuant to this Ordinance by filing a notice of appeal with the Community Development Director requesting a hearing before the City Council. The City Council will hear:

- (a) Appeals where it is alleged that there is an error in any order, requirement, decision or determination made by the administrative officer in the enforcement of this Ordinance.
- (b) Requests for variances from the literal provisions of this Ordinance.

#### **Sec. 25-189 Nonconforming Signs.**

- (a) Any nonconforming temporary or portable sign existing at the time of adoption of this Ordinance shall be made to comply with the requirements set forth herein or shall be removed within 180 days after the adoption of this Ordinance.
- (b) Nonconforming permanent signs lawfully existing at the time of the adoption of this Ordinance shall have five (5) years from the date of the adoption of this Ordinance to comply with the provisions of this Ordinance or be removed.

#### **Sec. 25-190 to 25-200 Reserved.**

## Lake Elmo, MN Code of Ordinances

## SIGNS

## § 151.115 PURPOSE.

## (A) Purpose and findings.

## (1) Purpose.

(a) The Lake Elmo sign regulations are intended to establish a comprehensive and balanced system of sign control that accommodates the need for a well-maintained, safe, and attractive community, and the business community's need for effective communication and identification. It is not the purpose or intent of these regulations to favor commercial messages or speech over non-commercial messages or speech or to discriminate between types of non-commercial speech or the viewpoints represented therein. It is the intent of these regulations to promote the health, safety, general welfare, and desirable rural community image through the regulation of signs with the following objectives in mind:

1. Signs shall demonstrate a high standard of aesthetic character and encourage the use of monument and individual letter-style signs;
2. Permit large enough copy/graphic area to effectively convey the intended message but not so large as to unduly distract the reader and insist on lettering large enough to be easily read to encourage simple, uncluttered messages;
3. Signs shall be proportioned to the size of, and architecturally compatible with, the structures and other signs on the premises;
4. Permanent signs shall only advertise on-premise businesses, services, facilities, and the like;
5. Allow temporary business signs for grand openings and occasional sales events; allow temporary signs to advise the public of the seasonal sale of agricultural and horticultural products in keeping with the city's rural image; and to allow temporary directional signs permitting the public to more easily locate land conservation developments which enhance the city's rural image, without creating continuous visual clutter or traffic hazards along streets or at intersections; and
6. Signs shall be properly maintained.

7. Dynamic signs that distract drivers, cyclists and pedestrians shall not be permitted. Studies conducted by public and private agencies have identified that dynamic signs, including multi-vision signs, electronic signs and video displays can be highly distracting to drivers, pedestrians, and cyclists and that distraction is a significant underlying cause of traffic accidents. With respect to electronic signs, including video display signs, the City finds that they are highly visible from long distances and at very wide viewing angles both day and night and are designed to catch the eye of persons in their vicinity and hold it for extended periods of time. If left uncontrolled, electronic signs, including video display signs, constitute a serious traffic safety threat. Studies conducted by the Federal Highway Administration (FHWA), Research Review of Potential Safety Effects of Electronic Billboards on Driver Attention and Distraction, September 11, 2001, and The Role of Driver Inattention in Crashes: New Statistics from 1995; the University of North Carolina Highway Safety Research Center, Distractions in Everyday Driving, May 2003 and The Role of Driver Distraction in Traffic Crashes, May 2001; the Wisconsin Department of Transportation, Synthesis Report of Electronic Billboards and Highway Safety, June 10, 2003; the Municipal Research and Services Center of Washington, Sign Control Provisions, Jan. 2006; the Veridan Group, Video Signs in Seattle, Gerald Wachtel, May 2001, reveal that electronic signs are highly distracting to drivers and that driver distraction continues to be a significant underlying cause of traffic accidents.

(2) Findings. The City of Lake Elmo hereby finds that regulation of the construction type, location, size, and maintenance of signs is necessary to accomplish the above referenced objectives, because:

- (a) The presence of permanent and temporary signage affects the rural image of the City of Lake Elmo;
- (b) Properly regulated signage can create an atmosphere of prosperity, stimulate commercial activity, and consequently, lead to increased employment and a healthier tax base;
- (c) The safety of motorists, cyclists, and pedestrians can be threatened by signage that interferes with necessary sight-distances and/or unduly diverts the attention of such persons;
- (d) Signs that are too bright, overly illuminated, flash, blink, scroll, twirl, change messages or color, or imitate movement, including video displays, can distract drivers, cyclists and pedestrians and impact traffic safety.



(B) Severability. If any section, subsection, sentence, clause, or phrase in §§ 151.115 through 151.119 are for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of the sign ordinance. The City Council hereby declares that it would have adopted the Sign Ordinance in each section, subsection, sentence, or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared invalid.

(Ord. 08-015, passed 7-21-2009)

#### § 151.116 ADMINISTRATION AND ENFORCEMENT.

(A) Permit required. No sign shall be erected, altered, reconstructed, maintained or moved in the city without first securing a permit from the city. The content of the message or speech displayed on the sign shall not be reviewed or considered in determining whether to approve or deny a sign permit.

- (1) Permanent signs. To apply for a permanent sign permit, a complete application shall be submitted to the City containing the following:
- (a) Names and addresses of the applicant, owners of the sign, and lot;
  - (b) The address at which the sign(s) are to be erected;
  - (c) The legal description of the property on which the sign(s) are to be erected and the street on which they are to front;
  - (d) A complete set of scaled plans showing the sign dimensions, area, height, ground elevations, applicable setbacks, and other details to fully and clearly represent the safe construction and placement of the proposed signs);
  - (e) Type of sign(s) being requested (i.e. wall sign, monument sign, and the like);
  - (f) The permit fee; and
  - (g) The following if applicable:
    - 1. Written authorization from the property owner upon who's land the sign is to be erected;
    - 2. A permit from either MnDOT or Washington County if the proposed sign is along a state highway or county road;
    - 3. A sign plan showing signs for all businesses if the sign is located on a building with more than one business;
    - 4. Photographs of the building face and the building faces of both adjacent buildings if the sign is being placed on an existing structure;
- and
- 5. If replacing a historical sign, pictorial proof or other information that the sign is of historical significance or is a reproduction of a historic sign.

(2) Temporary signs. To apply for a permit to allow a temporary sign, a complete application shall be submitted to the city containing the following:

- (a) Names and addresses of the applicant, owners of the sign, and lot;
- (b) The address at which the sign(s) are to be erected;
- (c) A generalized plan set showing the sign dimensions and height, and a notation of the materials to be used;
- (d) A scaled site plan which clearly represents the placement of the proposed sign(s) on the applicable property;
- (e) The proposed time frame(s) over which the sign(s) will be posted;
- (f) The permit fee; and
- (g) The following if applicable:
  - 1. Written authorization from the property owner upon who's land the sign is to be erected; and
  - 2. A permit from either MnDOT or Washington County if the proposed sign is along a state highway or county road.

(3) Temporary sign renewal. A temporary sign permit issued by the city may be renewed provided the sign design, size, location, or other previously approved details are not proposed to change. A sign renewal application shall include the following:

- (a) Names and addresses of the applicant, owners of the sign, and lot;
- (b) The address at which the sign(s) are to be erected;
- (c) The date of issuance of the permit being renewed;
- (d) The proposed time frame(s) over which the sign(s) will be posted;
- (e) Written authorization from the property owner upon who's land the sign is to be erected (if applicable); and
- (f) The permit renewal fee.

(4) Review. The planning department shall approve or deny complete sign permit applications upon receipt of a complete application. If the permit is denied, the planning department will send a written notice of denial to the applicant. The written notice will indicate the reason(s) for denial and a description of the applicant's appeal rights.

(B) Exemptions. The following signs shall not require a permit, but shall still comply with all provisions of this subchapter or any other law or ordinance regulating signs.

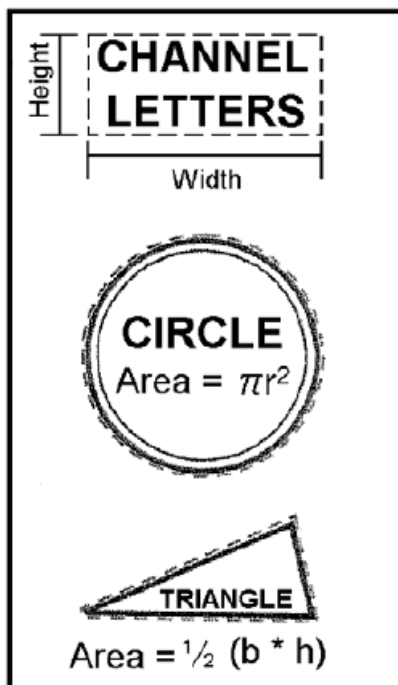
- (1) The changing of the display surface on a previously approved sign.
- (2) Signs 6 square feet or less in size, per surface if double sided.
- (3) Window signage that does not cover more than 1/3 of the total area of the window in which the sign is displayed.
- (4) Governmental signage.

(C) Fees. The fee for a sign permit is established yearly in the city's adopted fee schedule as indicated in § 11.02.

(D) Computations.

(1) Sign area measurement. The area of a sign shall be computed by means of the smallest circle, rectangle or triangle that will encompass the extreme limits of the writing, representation, emblem, or other display, together with any material or color forming an integral part of the background of the display or used to differentiate the sign from the building facade against which it is placed. When a sign has two back-to-back sign faces containing sign copy, the sign area for both faces are counted toward the total allowed sign area. Poles, bases, and other supports shall not be included in the sign area calculation.

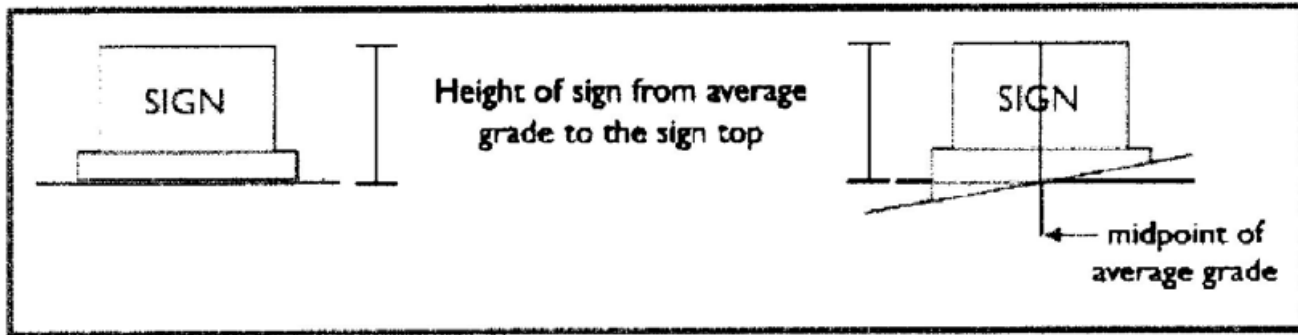
Figure 1: Sign Area Measurement



- (2) Sign height measurement. The height of the sign shall be computed as the vertical distance measured from the average grade at the base

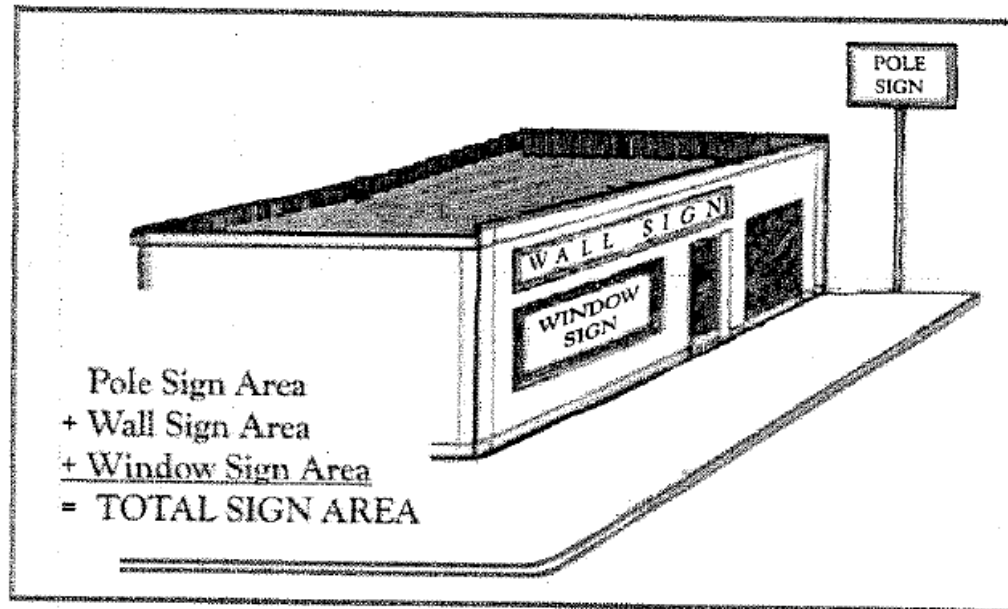
of the sign to the top of the highest attached component of the sign.

Figure 2: Sign Height Measurement



(3) Total sign area calculation. The total square footage of all sign surfaces shall be computed by adding together the sign areas of all signs on a property.

Figure 3: Total Sign Area Measurement Example



(E) Construction, maintenance and repairs.

(1) The construction of all signs, unless otherwise stated herein, shall be in conformance with the provisions of the Uniform Sign Code published by the International Conference of Building Officials, 1997 Edition, as may be amended, which is hereby adopted by reference and made a part of this subchapter.

(2) All signs and structures shall be properly maintained and shall be constructed of sufficiently permanent material so that they shall not succumb to deterioration from weathering.

(3) Any existing sign or sign structure which is rotted, unsafe, deteriorated, defaced, or otherwise altered, shall be repainted, repaired, replaced, or removed if repair is not feasible. Sign maintenance shall be the responsibility of the underlying fee owner.

(F) Abatement. If the city finds that any sign has been erected without the necessary approvals or any sign is being maintained in violation of any zoning provision, the city may give written notice of such violation to the installer of the sign; to the permit holder; and/or to the owner, lessee or manager of the property. If after receiving said notice such person fails to remove or alter the sign so as to comply with the provisions of the zoning ordinance, the sign shall be deemed to be a nuisance and may be abated by the city under M.S. Ch. 429. The cost of such abatement, including administrative expenses and reasonable attorneys' fees, may be levied as a special assessment against the property upon which the sign is located.

(Ord. 08-015, passed 7-21-2009)



## § 151.117 GENERAL STANDARDS.

(A) Abandoned signs. Abandoned signs shall be removed.

(B) Building identification. A building address, date of construction, commemorative tablet, and the like; shall not count towards the overall permitted signage on a building or parcel. All forms of building identification, except for the building address, shall be cut into a masonry surface or be constructed of bronze or other incombustible material.

(C) Building official review. No sign shall be attached to or be allowed to hang from any building until all necessary wall and roof attachments have been approved by the City Building Official.

(D) Changeable copy signs. A changeable copy sign, such as a reader board, may be integrated into an allowable sign subject to the following restrictions:

- (1) The message conveyed by the sign face shall not blink, flash, scroll or be so animated as to be deemed a distraction to passing motorists;
- (2) Copy on the sign shall not change more than once per day on average (except for time, temperature, and price information which must change when necessary for accuracy);
- (3) Characters and backgrounds depicted on a changeable copy sign shall not use florescent coloring; and
- (4) All changeable copy sign faces shall be limited to a maximum of 25 square feet in sign area, or the maximum size of the type of sign on which the face is placed, whichever is less.

(E) Flags. No more than 3 flags may be displayed on any given parcel. Individual flags shall not exceed 50 square feet in size per surface.

(F) Illumination.

- (1) Illumination of signs shall comply with Chapter 150 code requirements governing lighting, glare control, and exterior lighting standards.
- (2) Indirect illumination for signs shall be so constructed and maintained that the source of light (i.e. the bulb; not the fixture) is not visible from the public right-of-way or residential property.
- (3) Back-lit awnings are prohibited.

(G) Ingress or egress. No sign or structure shall be erected or maintained if it prevents free ingress or egress from any door, window, or fire escape. No sign or sign structure shall be attached to a standpipe or fire escape.

(H) Landscaping. Sign owners shall be required to maintain the appearance of the ground around all signs detached from buildings and to landscape where possible.

(I) Master sign program. A master sign program shall be reviewed and approved for all multi-tenant commercial buildings and for all business park development to coordinate all signage for current and future tenants. The master sign program shall be reviewed as a permanent sign permit, but shall only authorize the general locations and sizes of signs to be erected within a development or on a multi-tenant building. Individual permanent sign permits shall still be needed for the placement of permanent signs in accordance with an approved master sign program. Master sign programs shall be subject to the following requirements:

- (1) A Master sign program shall include a to-scale site plan which identifies the overall sign types, sizes, and locations for all proposed signage on the site(s). The site plan shall not contain the names of any current or future tenants or occupants of the center or overall development;
- (2) The master sign program shall include a calculation of allowable sign square footage for the site(s) based on applicable zoning requirements and lot characteristics;
- (3) The master sign program shall include square footage calculations for individual signs proposed for the site(s), along with a total sign square footage area calculation;
- (4) All signs within a master sign program shall be visually consistent in location, design, and scale; and
- (5) The master sign program may be reviewed concurrently with, a separate permanent sign permit for the individual sign(s) identified in the master sign program. The separate permanent sign permit shall include all information required by § 151.116(A)(1), and may only be approved if the master sign program is approved.

(J) Multi-tenant buildings.

- (1) Multi-tenant buildings are herein considered a single commercial establishment, and shall be limited to 1 freestanding sign amongst all

planned/allowed signage subject to the following requirements:

- (a) If the multi-tenant commercial building has a floor area of 40,000 square feet or less, the sign shall not exceed 40 square feet (per side) and shall not exceed 8 feet in height;
- (b) If a multiple tenant commercial building has a floor area greater than 40,000 square feet but less than 100,000 square feet, the sign shall not exceed 75 square feet (per side) and shall not exceed 9 feet in height; and
- (c) If a multiple tenant commercial building has a floor area of greater than 100,000 square feet, the sign shall not exceed 120 square feet (per side) and shall not exceed 15 feet in height.

(2) Where a building, group of attached buildings on the same block, or center contains more than one business, the allowable sign area for any single business may be its portion of the gross square footage of the building or center applied as a percentage to the allowable sign area of the entire building or center, subject to size limitations for specific signs within an approved master sign program.

(K) Neighborhood identification signs. Independent of the total allowable sign area for individual residences within a residential zoning district, 2 ground signs for a unified residential area with 6 or more lots may be allowed consistent with the following provisions:

(1) New subdivisions:

- (a) Neighborhood identification sign(s) shall be approved as a component of a preliminary and final plat to be included as part of a new subdivision;
- (b) Each sign shall be single sided, not exceed a total of 24 square feet in sign area, and not exceed a total of 48 square feet inclusive of poles, bases, and other supports;
- (c) Signs are to be located on outlots of sufficient size and area to accommodate them or within a dedicated permanent sign easement. A homeowners or neighborhood association is required for the area identified by the signs which shall own and be responsible for the upkeep, perpetual maintenance, taxes, insurance, utilities, and other costs associated with the sign(s) and their property. The association rules or by-laws shall specify how the aforementioned sign responsibilities will be delegated and paid for. City staff shall review the proposed bylaws to ensure that they specify the aforementioned responsibilities;
- (d) Outlots or easements for signs are to be considered and planned for at the time of preliminary plat application and shall be included in the final plat. A developers agreement shall specify the designated use of the outlot or easements, its ownership, and the respective home owners association responsibilities regarding the proposed improvements;
- (e) Only indirect lighting of neighborhood identification may be approved. The electric costs and maintenance of such lighting shall be the responsibility of the homeowners association or neighborhood association of the area identified by the sign(s) and shall be clearly noted in the association's rules or bylaws;
- (f) The area around the sign is to be landscaped and maintained in such a manner to accent and enhance the sign while remaining sensitive to the natural features of the site. Detailed site and landscape plans shall be included with each sign permit application and shall be subject to review by the Planning Commission and City Council at the time of preliminary plat;
- (g) The design and construction of neighborhood area identification signs shall be done with the highest quality materials and workmanship to keep maintenance and upkeep costs to a minimum and to minimize the potential for vandalism. Neighborhood area identification signs are to be aesthetically pleasing when designed and constructed. The signs shall be compatible with nearby or potential homes and other structures in the area. Detailed construction plans and a materials list shall be included with the preliminary plat application; and
- (h) The city reserves the right to require the removal, at the owner's expense, of any sign when the requirements of this section and this subchapter are not completely followed and adhered to or if the sign is not properly maintained or falls into a state of disrepair. The city shall not have any obligation or liability to replace any sign or nearby landscaping when removed by the city.

(2) Existing unified residential areas: A neighborhood identification sign may be allowed by conditional use permit for existing unified residential areas. If no outlots or easements were originally designated for signs, the plat may be amended to provide for such a proposal and shall meet the same criteria and requirements as set forth for new subdivisions.

(L) Non-commercial speech signs. Notwithstanding any other provisions of this subchapter, all signs of any size containing non-commercial speech may be posted from August 1 in any general election year until 10 days following the general election and 13 weeks prior to any special election until 10 days following the special election.

(M) Private on-premises directional signs. Signs located on, above or beside entrances or exits to buildings or driveways which direct pedestrians or vehicles (e.g. "employees entrance," "exit only," "rest rooms," and the like) shall not count towards the overall permitted signage on a site provided such signs are no more than 4 square feet in area.

(N) Prohibited signs. The following signs are prohibited in all zoning districts.

(1) Signs obstructing vision. Any sign which obstructs the vision of drivers or pedestrians or detracts from the visibility of any official traffic-control device. This includes indoor signs that are visible from public streets.

(2) Unofficial traffic signs or signals. Any sign which contains or imitates an official traffic sign or signal, except for private, on-premises directional signs which do not interfere with traffic flows on public roads.

(3) Off-premises advertising signs. Off-premises advertising signs except as specifically allowed.

(4) Signs with moving parts, moving lighting or animation. No sign shall display any moving parts, be illuminated with any flashing or intermittent lights, use changing light intensity, utilize spotlights giving off an intermittent or rotating beam existing as a collection or concentration of rays of light (including but not limited to revolving beacons, beamed lights, or similar devices), or be animated. The only exceptions to this provision include allowable changeable copy signs; barbershop poles; and static time, temperature, and price information changing only when necessary (which shall be allowed provided the message depicted is reasonably accurate).

(5) Roof signs.

(6) Banners, pennants, ribbons, streamers. No sign which contains or consists of banners, pennants, ribbons, streamers, string of light bulbs, spinners, or similar devices; except when used for non-commercial purposes, as a governmental sign, or as part of an approved master sign program or special event temporary sign permit.

(7) Portable signs. Including but not limited to signs with wheels removed, attached temporarily or permanently to the ground, structure or other signs, mounted on a vehicle for advertising purposes, parked and visible from the public right-of-way, hot air or gas filled balloons or semitruck umbrellas used for advertising. This prohibition shall not include business vehicle identification signs when the vehicle is being used for the normal day-to-day operations of a permitted business.

(8) Signs supported by a guy wire.

(9) Billboards.

(10) Electronic variable message signs.

(11) Signs on natural surfaces. No sign shall be painted, attached or in any other manner affixed to trees, rocks, or similar naturally occurring surfaces within the City of Lake Elmo. This shall not prohibit the use of natural building materials (e.g. boulders) in the construction of a legally permitted sign.

(12) Snipe signs.

(O) Public lands and rights-of-way. No signs other than governmental signs shall be erected or temporarily placed within any street right-of-way or upon public lands or easements or rights-of-ways without Council approval.

(P) Regulations for specific sign types.

(1) Wall signs.

(a) A wall sign shall be located on the outermost wall of any principal building but shall not project more than 16 inches from the wall to which the sign is to be affixed.

(b) A wall sign shall not project higher than the parapet line of the wall to which the sign is to be affixed.

(c) Wall signs authorized by a master sign program shall not exceed 25 square feet per business, and all signs shall be visually consistent in location, design, and scale.

(d) Wall signs may be placed on not more than three walls of rectangular shaped structures or not more than 75% of the major walls on non-rectangular shaped buildings.

(2) Mural sign.

(a) Mural signs shall not be limited in size, but any commercial or noncommercial language incorporated into the mural sign shall be limited in size by the restrictions established for the applicable zoning district.

(b) In addition to the standard conditional use criteria in § 154.018, mural signs shall also be subject to the following:

1. The location for the proposed mural sign shall be viewable by the public and be accessible;



2. The scale and suitability of the mural sign shall be appropriate in the context of the surrounding properties;
3. The artist(s) commissioned to complete the mural must provide documentation of demonstrated craftsmanship on similar projects;
4. The applicant shall provide sureties to the city guaranteeing completion of the project within the proposed timeframe;
5. The applicant shall demonstrate that the necessary funds are available for the proposed project; and
6. The applicant must be able to show the final mural will last a minimum of 5 years and be reasonably resistant to vandalism and weather.

(3) Projecting, awning, and canopy signs.

- (a) Projecting signs and awning signs shall be located on street level.
- (b) If lighted, projecting, awning, and canopy signs shall use indirect illumination.
- (c) Awning or canopy signs shall not project higher than the top of the awning or canopy or below the awning or canopy.
- (d) Clearance. The bottom of a projecting sign or awning shall be a minimum of 8 feet above the ground surface when projecting over a private or public walkway.

(4) Freestanding signs. Freestanding signs shall not be erected or maintained any closer than 3 feet to any building.

(Q) Separation angle. So as not to create a double exposure or increase sign size limitations, there shall be a maximum separation angle of 45 degrees for signs which are back to back. In all residential districts, double-faced signs shall be parallel.

(R) Signs needing electricity. Signs needing electricity shall be subject to all applicable electrical codes as may be amended. Overhead wiring for such signs is prohibited.

(S) Special sign districts. All general sign regulations shall apply to signs within each of the special sign districts except as specifically noted herein.

(1) Old Village.

(a) Boundary. The boundary of the Old Village Sign District is depicted on the city's official sign district map. Modifications to the district boundary may be completed using the zoning map amendment process.

(b) Illumination. Indirect illumination or reverse lit letters shall be the permitted techniques for lighting all signs within the Old Village Sign District. Other forms of direct illumination are prohibited.

(c) Wall signs.

1. Wall signs in the Old Village Sign District shall not project higher than the parapet line of the wall to which the sign is to be affixed or 15 feet as measured from the base of the building wall to which the sign is affixed, whichever is lower.

2. Wall signs in the Old Village Sign District authorized by a master sign program shall not exceed 20 square feet per business, and all signs shall be visually consistent in location, design, and scale.

(d) Freestanding signs.

1. The area of a freestanding sign in the Old Village Sign District shall not exceed 30 square feet.

2. Freestanding signs in the Old Village Sign District shall not project higher than 6 feet, as measured from the average grade at the base of the sign or grade of the nearest roadway, whichever is lower.

(2) Agricultural Sales District.

(a) Boundary. The Agricultural Sales District shall include all properties zoned agricultural or rural residential.

(b) On-premises sign(s). Independent of the total allowable sign area for an individual property within the agricultural sales district, one or more additional on-premises signs may be erected on a property in conjunction with an operating agricultural sales business subject to the following requirements and restrictions:

1. Agricultural sales businesses utilizing less than 10 acres of land specifically for the growing of agricultural crops for the business are allowed 1 on-premises sign not to exceed 32 gross square feet of advertising surface;

2. Agricultural sales businesses utilizing more than 10 acres of land but less than 40 acres of land specifically for the growing of agricultural crops for the business are allowed 1 or 2 on-premises signs not to exceed 48 gross square feet of advertising surface (with no sign surface exceeding 32 square feet in size);

3. Agricultural sales businesses utilizing more than 40 acres of land specifically for the growing of agricultural crops for the business are allowed 1, 2 or 3 on-premises signs not to exceed 64 gross square feet of advertising surface (with no sign surface exceeding 32 square feet in size);

4. Sign(s) shall be in the form of an allowable sign type in the underlying zoning district;

5. No dimension of any sign shall exceed 15 feet exclusive of supporting structures; and

6. Any illuminated sign shall be illuminated only during those hours when business is open to the public for conducting business.

(c) Temporary off-premises sign(s). Independent of the total allowable sign area for an individual property anywhere within the city, a temporary off-premises sign may be erected on a property in conjunction with an operating agricultural sales business subject to the following requirements and restrictions.

1. Maximum number. Every agricultural sales business shall have no more than 2 off-premises signs at any given time to direct the public to the location of the business.

2. Time frame of use. Temporary off-premises signs may be erected for 45-day time periods no more than 4 times in any given calendar year. The required temporary sign permit shall stipulate the range of dates for each of the 4 allowable time periods in any given calendar year.

3. Size and height. An off-site agricultural sales advertising sign shall not exceed 50 square feet in area and shall not be taller than 10 feet in height.

4. Setbacks. Off-premises signs shall be a minimum of 25 feet from all side property lines, and a minimum of 50 feet from other off-premises advertising signs.

5. Permission required. Applicants for off-premises signs shall acquire permission from the property owner upon whose land the sign is to be erected.

(3) I-94 District.

(a) Boundary. The I-94 district shall include parcels within the BP, GB, HB, CB, and LB zoning districts which meet one of the following criteria:

1. The property is a buildable lot located to the south of Hudson Boulevard and to the north of Interstate 94; or

2. The property's southern boarder abuts Hudson Boulevard, and is not directly north, either wholly or partially, of a developable parcel lying between Hudson Boulevard and Interstate 94.

(b) Permits. Signs in the I-94 District may be erected in conformance with sign regulations governing the underlying zoning district without additional approvals. Signs proposed to conform to the special standards established for the I-94 District shall only be authorized through approval of an interim use permit.

(c) Illumination. All forms of illumination which conform to the general illumination standards for all signs shall be the permitted within the I-94 Sign District.

(d) Maximum total square footage of all sign surfaces. The maximum total square footage of all sign surfaces in the I-94 district shall be dictated by the maximum sign sizes for allowable sign types.

(e) Wall signs. The least restrictive of the following may be used to determine the allowable area for wall signs in the I-94 District:

1. The total area of all wall signs on any wall shall not exceed 10% of the area of the wall with a maximum allowable area of 80 square feet; or

2. The total area of all wall signs on any wall shall not exceed 5% of the area of the wall with a maximum allowable area of 300 square feet.

(f) Freestanding signs. In lieu of a freestanding sign meeting underlying zoning requirements, a building site within the I-94 District may have one freestanding sign within 50 feet of the property line nearest the interstate provided the sign does not exceed 150 square feet per side (300 square feet total) or 30 feet in height. The base of such a sign shall be at least 75% of the width of the sign and be constructed of materials that match those used on the building for which the sign is installed.

(g) Window signs. Window signs in the I-94 district shall not cover more than 1/3 of the window area.

(h) Awning, canopy, and projecting signs. One awning, canopy or projecting sign, in conformance with the underlying zoning requirements for height, location, and maximum size may also be erected for each business on a building site in the I-94 District.

(T) Substitution clause. The owner of any sign which is otherwise allowed by this subchapter may substitute non-commercial speech signs in lieu of any other commercial speech sign or other non-commercial speech sign. The purpose of this provision is to prevent any inadvertent favoring of commercial speech over noncommercial speech, or favoring of any particular noncommercial speech over any other noncommercial speech. This provision prevails over any more specific provision to the contrary.

(U) Temporary signs.

(1) Special events. Temporary signs may be allowed upon issuance of a permit for on-site advertising of special events such as openings and closings, change in management, sales events, or other special occasions. No more than 4 temporary sign permits may be issued in any calendar year for a given destination, and each temporary sign permit shall run for 15 days. Temporary signs for special events shall be subject to the following regulations:

- (a) Only 1 on-premises temporary sign shall be allowed per business or event;
- (b) Temporary signs shall be in the form, of an allowable sign type in the underlying zoning district; and
- (c) Temporary signs shall not exceed 32 square feet in area and shall not be taller than 10 feet in height.

(2) Residential development advertising signs. Independent of the total allowable sign area for individual properties or residences within a residential zoning district, one or more additional ground signs may be erected within a newly established unified residential area development subject to the following:

(a) Minimum development size.

1. Projects of less than 25 acres which create 10 or more dwelling units are allowed 1 on-premises ground sign not to exceed 100 square feet of advertising surface;

2. Projects of 26 through 50 acres which create 10 or more dwelling units are allowed 1 or 2 on-premises ground signs not to exceed 200 aggregate square feet of advertising surface on the project site; and

3. Projects over 50 acres which create ten or more dwelling units are allowed 1, 2, or 3 on-premises ground signs not to exceed 200 aggregate square feet of advertising surface on the project site.

(b) Restrictions.

1. No dimension shall exceed 25 feet exclusive of supporting structures.

2. The sign shall not remain once 90% of the lots in the development have been issued building permits.

3. The permit for the sign must be renewed annually by the Council.

4. Only indirect illumination is permitted and shall only occur during those hours when an on-site sales office or model home is open for conducting business.

(3) Temporary off-premises signs. Temporary off-premises signs may be erected if all of the following criteria are met:

(a) The destination to which the off-premises sign is advertising is a property for sale;

(b) An agent must be present at the destination property for sale, and the property must be open for viewing;

(c) The sign must be located on private property, and permission must have been obtained from the private property owner to erect the temporary sign;

(d) The temporary off-premises sign shall not exceed 6 square feet in size; and

(e) The temporary off-premises sign shall not cause the total square feet of signage on a property to exceed the allowed maximum in the underlying zoning district.

(V) Warning signs. Warning signs which do not exceed the minimum statutory requirements for size and number may be posted, and shall not count towards the overall permitted signage on a given property. Increases in either size or number over minimum statutory requirements shall count

against the overall permitted signage on a given property unless authorized by conditional use permit which finds sufficient evidence that larger or more frequent signage is necessary to provide the intended warning.

§ 151.118 SPECIFIC REGULATIONS BY ZONING DISTRICT.

	Base Zoning Districts													
	A	RR	R1	R2	R3	R4	RE	OP	GB	HB	CB	LB	BP [2]	PF
Front lot line	5	5	5	5	5	5	5	5	1	1	1	1	1	5
Side lot line	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Rear lot line	5	5	5	5	5	5	5	5	10	10	10	10	10	5
Vehicular access	5	5	5	5	5	5	5	5	15	15	15	15	15	5

[1]: Awning/canopy signs, mural signs, projecting signs, wall signs, or window signs proposed to be located on a building legally non-conforming to setback requirements shall be permitted without a variance provided all other zoning code provisions are met.

[2]: Signs within business parks shall also adhere to the requirements of a master sign program approved by the City Council in conjunction with the business park establishment.

[illegible]



GB, HB, CB, LB, BP, & PF									1.0 square foot per lineal foot of building parallel or substantially parallel to public road frontage (excluding alleys). [6]
	[4]	30	45	C	30	6	[5]	No max	

- [1]: Sign types with empty cells are prohibited in the applicable zoning district(s). Sign types with a maximum sign area of “C” shall require a conditional use permit.
- [2]: Ground, monument, or pole signs, where permitted, shall be limited to 1 per commercial establishment.
- [3]: All sign types in residential districts shall have no more than 2 surfaces.
- [4]: The gross surface of an awning or canopy sign shall not exceed 30% of the gross surface area of the smallest face of the awning or canopy of which the sign is to be affixed.
- [5]: On any wall parallel or substantially parallel to a public roadway, the gross surface area of a wall sign shall not exceed 0.75 square feet for each lineal foot of building facing the applicable roadway. For walls not facing a public roadway, the maximum wall sign size shall be 12 square feet.
- [6]: Open sales lots or other approved uses on lots without a building shall be limited to 30 square feet of total sign surfaces.

(C) Freestanding sign height. The maximum allowable sign height for a freestanding sign is listed in Table 3 by zoning district. These maximums shall apply except as may be specifically exempted or restricted in §§ 151.117 and 151.118.

Table 3: ALLOWABLE FREESTANDING SIGN HEIGHT IN FEET BY ZONING DISTRICT														
	Base Zoning Districts													
	Residential Districts								Business Districts					
	A	RR	R1	R2	R3	R4	RE	OP	GB	HB	CB	LB	BP	PF
Allowable height in feet	5	5	5	5	8	8	5	5	20	20	20	20	20	20

(Ord. 08-015, passed 7-21-2009)

### § 151.119 SIGN VARIANCES.

- (A) Variances from sign provisions shall be administered in accordance with § 154.017, and shall be subject to the following additional requirements:
- (1) The sign(s) shall be compatible with the character of the adjacent buildings and with the character of the adjacent neighborhood;
  - (2) The sign(s) shall have good scale and proportion in the visual relationship to buildings and adjacent areas;
  - (3) The material, size, color, lettering, location, and arrangement of the sign(s) is an integral part of the site and building design; and/or
- (B) The colors, materials, and lighting of the sign(s) are restrained and harmonious, as interpreted by the City Planner.

(Ord. 08-015, passed, 7-21-2009)

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City	Zone	Freestanding Sign Requirements	Freeway Sign Dimensions	Location	Height
Albert Lea	B-2, I-1, I-2, I-3		250 sf per side, max 2 sides.	Sign must be at least 100 ft from other freestanding signs including billboards.	50 ft.
Bloomington	Class 5 Sign District, Commercial and C/R along I-35W, I-494 and TH-77	1 identification sign allowed per frontage.	Max surface area for ground, pylon or monument is 250 sf. All other frontages 150 sf.	If the sign lights up, it must be 100 ft away from the surrounding residential buildings.	Final Pylon shall not have any part of the sign above 45 ft. the final grade. Signs on the same property have to match their final sign elevations.
Eden Prairie	Commercial		NTE 80 sq. Additional frontages may have sin NTE 36 sf.	Sign can be no closer than 300 ft to any other free-standing sign upon the building site, and 20 ft. from ROW.	Max 20 ft.
Maplewood	Business Commercial along Principal Arterial	1 freestanding sign permitted per frontage, if 2 frontages, signs must be 100 ft. from each other	Max size 180 sf.		Max 25 ft.
New Brighton	Commercial and B-3	1 ground sign is permitted per street frontage.	Max size of freeway ground sign is 170 sf.	Must be 13.5 ft. from ROW.	Max 35 ft.

Oakdale	Commercial	1 pylon sign allowed if retail is abutting freeway.	Pylon NTE 150 sf. Pylon is in addition to the freestanding sign (NTE 80 sf)	Pylon must be at least 50 ft from interstate ROW.	Max height 30 ft.
Richfield	C-2, MU-C I, MU-R	Total of all freestanding signs = 4 sf per ft of lot frontage.	200 sf per surface 250 sf per surface.		Max 27 ft. Max 27 ft.
Roseville	CB, RB, O/BP, CMU	2 on multiple frontage lot	100 sf max on a single loaded sign, 200 ft max on double loaded sign.	15 ft. min from property line	Max 25 ft.
Sauk Centre	General Commerce, Industrial/Commercial	1 freestanding sign, two sides per frontage. Plus one area identification sign per frontage NTE 64 sf.	NTE 250 sf on each side	Cannot be placed within 10 ft of ROW	Up to 45 ft.
Stillwater	BP District (HWY 36)	1 freestanding sign per development site.	NTE 100 sf. For each exposed face nor exceed an aggregate surface area of 200 sf.	15 ft. from ROW	Max 25 ft.
Woodbury	Nonresidential	1 freestanding sign per frontage, 1 <sup>st</sup> frontage 80 sf sign, 2 <sup>nd</sup> frontage 40 sf sign	Adjacent to freeway, sign on freeway not to exceed 150 sf, and 2 <sup>nd</sup> frontage NTE 80 sf. Other freestanding signs NTE 40 sf.	Freeway signs not to be more than 100 ft away from freeway.	Freeway signs can be up to 30 ft high. Other freestanding up to 20 ft high.





PLANNING COMMISSION

DATE: 4/13/15

AGENDA ITEM: 5A – BUSINESS ITEM

CASE # 2015-13

ITEM: Hunter's Crossing 2<sup>nd</sup> Addition Final Plat

SUBMITTED BY: Kyle Klatt, Planning Director

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

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### **SUMMARY AND ACTION REQUESTED:**

The Planning Commission is being asked to consider a Final Plat request from The Ryland Group for the second (and final) phase of a planned 51 unit residential development to be called Hunter's Crossing. The proposed subdivision is located within the original 23.10 acre parcel immediately east of Lake Elmo Avenue and approximately ¼ mile north of Interstate 94. The final plat includes 29 single-family lots located within the southern portion of the overall subdivision area. Staff is recommending approval of the request subject to compliance with the conditions listed in this report.

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### **GENERAL INFORMATION**

*Applicant:* The Ryland Group (Tracey Rust), 7599 Anagram Drive, Eden Prairie, MN

*Property Owners:* The Ryland Group (Tracey Rust), 7599 Anagram Drive, Eden Prairie, 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. North of 275 Lake Elmo Avenue North. PID Number 36.029.21.32.0033

*Request:* Application for final plat approval of a 29 unit residential subdivision to be named Hunter's Crossing 2<sup>nd</sup> Addition.

*Existing Land Use and Zoning:* Larger platted outlot within the Hunters Crossing preliminary plat are – undeveloped land. Current Zoning: LDR – Low Density Residential

*Surrounding Land Use and Zoning:* North – Hunters Crossing (first phase), 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 no longer valid, 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, and the final plat for the first phase of Hunters Crossing was approved on September 16, 2014.

*Deadline for Action:*           Application Complete – 3/9/15  
   60 Day Deadline – 5/9/15  
   Extension Letter Mailed – No  
   120 Day Deadline – 7/9/15

*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 second phase of the Hunter's Crossing residential subdivision. The area to be platted represents a little over half of the lots that were approved with the preliminary plat, and will include 29 single-family lots. All outlots for storm water management facilities, trails, and other common features were previously approved as part of the initial final plat. The City approved the Hunter's Crossing Preliminary Plat on July 1, 2014, and the final plat represents the southern 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.

Hunters Crossing 2<sup>nd</sup> Addition will be located south of the first subdivision phase, which is situated immediately adjacent to the planned 5<sup>th</sup> Street minor collector route. The second addition will complete the planned looped road through the development and tie back into the portion of Laverne Avenue North that eventually connects to 5<sup>th</sup> Street. There have been no changes to the arrangement or location of lots as depicted on the preliminary plat.

When the applicant submitted the final plat for the first addition of Hunters Crossing, the associated construction plans did not include any portion of 5<sup>th</sup> Street that is planned along the northern boundary of the platted area. The developer asked to use an existing private access into the development for the first phase with the understanding that his temporary access road would be eliminated when the second phase was constructed. The second addition plans include the construction of 5<sup>th</sup> Street, which as proposed, would be split into two project phases so that the applicant could build the southern portion of the road at the same time as the Hunters Crossing 2<sup>nd</sup> Addition improvements. Lennar, which is planning to build townhouses on the property north of Hunters Crossing, cannot develop its land without the 5<sup>th</sup> Street improvements in place or under construction.

The 5<sup>th</sup> Street project is unique because the right-of-way for 5<sup>th</sup> Street straddles the boundary between the Ryland property to the south and the land that Lennar will be developing for townhouses to the north. Both parties have stated that they would prefer to build 5<sup>th</sup> Street as one project and share the costs for this construction rather than building half of the road with each development. In order to keep the Hunters Crossing project moving forward, Staff has previously agreed to allow the split

construction of 5<sup>th</sup> Street, but is strongly recommending that both parties reach agreement to build the entire road in one phase. In either case, the applicant will be providing public access to Hunters Crossing via 5<sup>th</sup> Street with this plat and will need to eliminate the private access road along Lake Elmo Avenue once 5<sup>th</sup> Street is open for traffic. Please note that the City's preliminary plat approval authorized the use of this temporary access to serve up to 25 lots. Because the 2<sup>nd</sup> Addition will include the construction of 5<sup>th</sup> Street, this condition will be met with the City's acceptance of all final plat improvements. Washington County does expect the temporary access to be eliminated once 5<sup>th</sup> Street is in place.

Consistent with the approved preliminary plat, the final plat does not include either of the two exception parcels along Lake Elmo Avenue, both of which will be provided with potential future connections to the streets internal to Hunters Crossing. As depicted in the attached plans, the southwest exception parcel will have access to Langley Avenue North via Outlot A; access to the other exception parcel was platted as part of the first 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 for both the first and second additions that addresses previous review comments from the City's landscape architecture consultant. Staff is waiting for final approval of these plans from the consultant, which are expected to meet the developer's requirements for landscaping within the overall project area. In terms of public park land dedication, the preliminary plat was approved without the dedication of land and the City and developer agreed to a cash payment in lieu of any land dedication (minus a credit for the construction of a public trail within the project area). The developer's agreement for the first addition allowed the developer to divide the cash payments to the City between the two project phases.

The grading plans for the first addition included the mass grading work for the portion of the site that is being platted as the second addition; therefore, the submitted construction plans do not duplicate and work that was previously approved by the City. The applicant has submitted detailed construction plans related to sanitary sewer, water main, storm sewer, landscaping, and other details that have been reviewed by City Staff.

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 Hunters 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 Hunters Crossing 2<sup>nd</sup> Addition 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 has reviewed the construction plans plat, and these comments are attached to this report. Although there are some additional revisions to these plans that will need to be addressed by the applicant, all of these revisions can be made before the City releases the final plat for recording.

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## REVIEW AND ANALYSIS

The preliminary plat for Hunters 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 overall narrative for the project with additional details concerning the work that will be performed within the 2<sup>nd</sup> Addition. 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 has submitted construction plans for 5<sup>th</sup> Street that splits the project into two distinct phases (north and south). This would allow the project to move forward in case the two developers with parcels adjacent to 5<sup>th</sup> Street, Ryland and Lennar, cannot reach agreement to build the entire road as one project. Both parties have indicated that they intend to work together on this project, and Staff will continue to help facilitate a joint project as needed.
- 2) Washington County has previously submitted comments concerning the improvements necessary within the Lake Elmo Avenue right-of-way at 5<sup>th</sup> Street. These improvements will need to be incorporated into the final construction plans for 5<sup>th</sup> Street and the developer has consented to make any improvements as required by the County.
- 3) 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) title work has previously been submitted and reviewed by the City Attorney; 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 applicant has submitted an updated landscape plan for both the first and second phases of Hunters Crossing that addresses previous comments from the City. The updated plans are being reviewed by the City's landscape consultant and will need to be finalized before landscape work commences on the site.***
- 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 turn lane. ***Comments: The 5<sup>th</sup> Street Plans will need to be updated to address all review comments from Washington County. The developer will need to secure a permit from the County to make the proposed connection to Lake Elmo Avenue from 5<sup>th</sup> Street.***
- 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. Grading work has commenced under this permit.***
- 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 were recorded with the first addition 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 Avenue 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: With this condition in place, the developer will be able to build out all homes in the first addition and three additional homes in the second addition (or some other combination to reach 25 homes) before 5<sup>th</sup> Street is completed and accepted by the City.***

- 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: Grading work on the site has been completed under the plans approved with the first addition.***
- 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. Please note that the City Engineer's review included both the final plat and the related construction plans for 5<sup>th</sup> Street. The City Engineer did not have any final plat review comments.***
- 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 5<sup>th</sup> Street improvements. Because Lennar Homes will be submitted a preliminary plat on this parcel later this spring, the required grading work and/or easements to facility grading on this site will be provided as part of a Lennar subdivision.***
- 14) Water improvements must be available to serve the subdivision. ***Comments: Water service has been extended to the site as part of a public improvement project. Ryland has previously agreed to pay the Water Availability Charge for the entire development prior to recording the first phase 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 letters 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 will 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 Hunters Crossing 2<sup>nd</sup> Addition and 5<sup>th</sup> Street Construction plans requested by the City Engineer in review letters dated 4/2/15 and 4/3/15 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 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
- 5) The final landscape plan shall be subject to review and approval by the Community Development Director.
- 6) The final construction plans for 5<sup>th</sup> street 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.
- 7) 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.
- 8) 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.
- 9) The applicant shall deed Outlot A, to the City upon recording of the final plat.

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## 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 Hunter's Crossing preliminary plat is consistent with the Lake Elmo Comprehensive Plan and the Future Land Use Map for this area.
- That the Hunter's Crossing preliminary plat complies with the City's Urban Low Density Residential zoning districts.
- That the Hunter's Crossing preliminary plat complies with all other applicable zoning requirements, including the City's landscaping, storm water, sediment and erosion control and other ordinances.
- That the Hunter's Crossing preliminary plat complies with the City's subdivision ordinance.
- That the Hunter's Crossing 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 May 23, 2014.

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## RECCOMENDATION:

Staff recommends that the Planning Commission recommend approval of the Final Plat for Hunters Crossing 2<sup>nd</sup> Addition with the 9 conditions of approval as listed in the Staff report. Suggested motion:

*“Move to recommend approval of the Hunters Crossing 2<sup>nd</sup> Addition Final Plat with the 9 conditions of approval as drafted by Staff”*

## ATTACHMENTS:

1. Application Form
2. Application Narrative
3. City Engineer Review Letters – 4/2/15 and 4/3/15
4. Hunter's Crossing Final Plat
5. Construction Plans: Utility and Street Construction
6. Final Landscape Plans
7. 5<sup>th</sup> Street Construction Plans (Partial – Full Plans Available Online)

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## ORDER OF BUSINESS:

- Introduction .....Planning Staff
- Report by Staff .....Planning Staff



- Questions from the Commission ..... Chair & Commission Members
- Public Comments .....Chair
- Discussion by the Commission ..... Chair & Commission Members
- Action by the Commission..... Chair & Commission Members

# 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: April 2, 2015

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

Re: Hunters Crossing 2nd Addition  
Construction Plan Review

From: Ryan Stempski, P.E., Assistant City Engineer

An engineering review has been completed for the Hunters Crossing 2nd Addition. The submittal and review consisted of the following documentation prepared by Pioneer Engineering:

- Hunters Crossing 2nd Addition Final Plat, not dated.
- Construction Plans dated December 23, 2014 with a print date of March 5, 2015.
- Storm Sewer Chart dated July 25, 2014.

NOTE: A plan review for the 5<sup>th</sup> Street Construction Plans will be provided with a separate review memorandum.

**STATUS/FINDINGS:** Comments have been provided to direct plan corrections necessary for final construction plan approval. When submitting revised plans, please provide a point by point response letter that details the changes made to the plans.

### GENERAL PLAN REQUIREMENTS AND FINAL PLAT:

- No final plat changes have been identified from an infrastructure
- The City has updated City Standard Plan Notes, Details and Specifications for use in 2015 construction. These documents will be provided by the City to be incorporated in the Final Construction Plans.
- The Plans must be revised to provide consistent use of line types, bold type and shade lines for a consistent depiction of existing improvements, record drawing information and proposed improvements.
- Revise 3<sup>rd</sup> Street N street name on all sheets to match the Final Plat of Hunters Crossing 2<sup>nd</sup> Addition.

### SANITARY SEWER PLAN:

- Sheet 2 – Add a note to EX-MH-2-1 to relocate the off road structure marker to a minimum 2 feet off the bituminous trail.
- Sheet 4 – Use as-built data at EX-MH-3 to label slope and invert to proposed MH-31 and MH-32.
- Sheet 4 – Use as-built data at EX-MH-2 to label slope and invert to proposed MH-41.
- Sheet 4 – Correct stationing of proposed service crossing and add risers for all services deeper than 15 feet from EX-MH-2 to MH-41.

### WATERMAIN PLAN:

- Sheet 4 – 3<sup>rd</sup> Street N watermain must be relocated the north side of the street per City Design Standards.
- Sheet 4 – Revise 6-inch gate valve to 8-inch gate valve and remove reducer for the Outlot A watermain stub.

#### STORM SEWER PLAN:

- Update Storm Sewer Chart to be consistent with the Plan.
- Standard Detail No. 404 must be included in the Plan.
- Sheet 5 – Extend draintile out of CBMH 221 and CB 222 to a minimum distance of 100 feet for each run.
- Sheet 6 – Include draintile with clean outs from CB-205 and CB-206 to the west 100' with clean outs.
- Sheet 6 – Terminate the draintile at 50 feet that runs east out of CB-203A and CB-203B. (This is the location of the high point in the street profile.)
- Sheet 6 – Extend draintile out of CBMH 202 to a minimum 100 feet in each direction.
- Sheet 7 – Add label and invert elevation for FES-250 in profile.

#### STREET AND TRAIL PLAN:

- Street widths (back of curb to back of curb), cul-de-sac radii and radii at all intersections must be clearly labeled on the Plan.
- Update street and trail plan sheets with all draintile comments provided for the STORM SEWER PLAN.
- Sheet 10 – Add a note to EX-MH-2-1 (STA 2+30) to relocate the off road structure marker to a minimum 2 feet off the bituminous trail.

#### LANDSCAPING, LIGHTING, SIGNING & STRIPING PLAN:

- The Landscape Plan comments provided by the City's Landscape Architect must be addressed prior to final approval of the Plan Set for construction.
- Include the proposed private utility conduit crossing locations on the Plan.
- "No Parking" signs must be revised to MMUTCD Type R8-3A.

# 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: April 3, 2015

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

Re: 5<sup>th</sup> Street North Utility & Street  
Construction Plan Review  
(Hunters Crossing 2<sup>nd</sup> Addition)

From: Ryan Stempski, P.E., Assistant City Engineer

An engineering review has been completed for the 5<sup>th</sup> Street North Utility and Street Construction Plans. The submittal and review consisted of Construction Plans dated February 27, 2015 (Printed March 6, 2015) prepared by Pioneer Engineering.

**STATUS/FINDINGS:** Comments have been provided to direct plan corrections necessary for final construction plan approval. When submitting revised plans, please provide a point by point response letter that details the changes made to the plans.

### GENERAL PLAN REQUIREMENTS:

- The City has updated City Standard Plan Notes, Details and Specifications, dated March 2015, for use in 2015 construction. Please incorporate the updated standards in the Final Construction Plans.
- Plan Notes are to be located on the applicable plan sheets and removed from the detail sheets.

### SANITARY SEWER & WATERMAIN PLAN:

- Sheet 8 – Revise the sanitary sewer stub to PVC C900 material.
- Sheet 8 – Add plan note to tie all watermain stubs for a minimum two pipe segments.
- Sheet 8 – Add dimension for a minimum 7.5 feet of cover over the proposed watermain in the profile.

### STORM SEWER PLAN:

- Sheet 5 – Revise the Phase 1 Removal Plan to indicate the removal of the existing stand pipe and culverts at the 5<sup>th</sup> Street and Lake Elmo Avenue intersection.
- Sheet 10 – Draintile extensions must be a minimum of 100 feet. Revise draintile length from CB-356 to a minimum of 100 feet.
- Sheet 10 – Additional draintile extensions are needed along 5<sup>th</sup> Street to facilitate subbase drainage. Add a minimum 100 feet of draintile to the west from CBMH 301, CB-311, CBMH 341 and CB-345.
- Sheet 10 – Proposed culvert pipe from FES-401 to FES-402 must be increased to a minimum 15 inches in diameter.
- Sheet 11 – Add draintile inverts to CBMH 301, CB-311, CBMH 341 and CB-345 in the profile.
- City Standard Detail No. 404 must be included for catch basin structures.

### STREET CONSTRUCTION PLANS:

- Sheet 3 and 6 – Typical Sections and Details must be updated per the 5<sup>th</sup> Street Design Details dated March 2015. The typical sections must show the sidewalk and trail clear zones, the 10-foot drainage and utility



easements on either side of the R/W, and the depressed center median with daintile. The new 5<sup>th</sup> street pavement section detail should be used with all other information corrected to comply with the City typical sections and details.

- Sheet 5 – Add plan note to the Phase 1 Layout Plan requiring the concrete median nose to be constructed per MnDOT Standard Plate 7113A.
- Sheet 7 – Phasing Plan 2: The 5<sup>th</sup> Street phasing plan must be constructed in a manner that requires full lane paving to be installed using a full width paving machine. No pavement joints will be allowed in the wheel paths. Revise Phase 2 Removal Plan and Phase 2 Layout Plan to redefine the bituminous removal and paving limits to meet these requirements.
- Sheet 7 – Phase 2 Layout Plan: Revise layout plan to clarify and detail median construction phasing east of Laverne.
- Sheet 7 – Phase 2 Layout Plan: Add plan notes to include 6-inch perforated daintile in all planted median locations per the City standard details.
- Sheet 12 and 13 – Add street lane widths and intersection radii dimensions to the plan view.
- Sheet 12 and 13 – Revise vertical curve at STA 1+20 to meet minimum K value of 64.
- Sheet 12 and 13 – Plan must be updated to include a temporary turn-around at the east end of 5<sup>th</sup> Street and temporary drainage provisions must be detailed on the plans at the east termination point.
- Sheets 15-18 – Revise cross sections to require 4:1 slopes within R/W.

#### LIGHTING, SIGNING & STRIPING PLAN:

- Sheet 14 – Add plan note identifying the street lights as ‘Evans style lamp’ on 30 foot pole per City standards. Spacing must conform to 5<sup>th</sup> Street Design Details dated March 2015.
- Sheet 14 – Add crosswalk at the intersection of 5<sup>th</sup> Street and CSAH 17 (Lake Elmo Avenue).

#### LANDSCAPING PLANS:

- Sheet L1 and L2 – Landscape plans must be revised to meet 5<sup>th</sup> Street Design Details dated March 2015. Landscape review comments will be provided under separate memorandum from the City’s Landscape Architect.

Date Received: \_\_\_\_\_  
Received By: \_\_\_\_\_  
Permit #: \_\_\_\_\_



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

## LAND USE APPLICATION

☐ Comprehensive Plan ☐ Zoning District Amend ☐ Zoning Text Amend ☐ Variance\*(see below) ☐ Zoning Appeal

☐ Conditional Use Permit (C.U.P.) ☐ Flood Plain C.U.P. ☐ Interim Use Permit (I.U.P.) ☐ Excavating/Grading

☐ Lot Line Adjustment ☐ Minor Subdivision ☐ Residential Subdivision Sketch/Concept Plan

☐ PUD Concept Plan ☐ PUD Preliminary Plan ☐ PUD Final Plan

EASEMENT VACATION

Applicant: The Ryland Group ATTN: TRACEY RUST  
Address: 7599 Anagram Dr, Eden Prairie, MN 55344  
Phone #: (952) 229-6063  
Email Address: trust@ryland.com

Fee Owner: SAME  
Address: \_\_\_\_\_  
Phone #: \_\_\_\_\_  
Email Address: \_\_\_\_\_

Property Location (Address and Complete (long) Legal Description): Hunters Crossing  
\_\_\_\_\_  
\_\_\_\_\_

Detailed Reason for Request: - Public Roadway and utility easement vacation  
\_\_\_\_\_  
- DRAINAGE + UTILITY EASEMENT VACATION  
\_\_\_\_\_

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

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

Signature of applicant: Tracey Rust Date: 3/9/15

Signature of fee owner: Michael W. DeVol Date: 3/9/15

Michael W. DeVol  
DIVISION PRESIDENT

**TWIN CITIES DIVISION**

7599 Anagram Drive  
Eden Prairie, MN 55344

952.229.6000 Tel  
952.229.6024 Fax

[www.ryland.com](http://www.ryland.com)

March 3, 2015

Kyle Klatt  
Planning Director  
City of Lake Elmo  
3800 Laverne Ave. N.  
Lake Elmo, MN 55042

**RE: Hunters Crossing – 2<sup>nd</sup> Addition Final Plat Application**

Dear Mr. Klatt:

Ryland Homes is pleased to submit to the City of Lake Elmo the 2<sup>nd</sup> Addition Final Plat application for Hunters Crossing located on the east side of Lake Elmo Ave. N. approximately ¼ mile north of Interstate Hwy 94. The following written statements are being provided as part of the submittal requirements for the development:

**A. Contact Information**

- a. Owner/Developer/Applicant: The Ryland Group – Tracey Rust  
7599 Anagram Drive  
Eden Prairie, MN 55344  
(952) 229-6063
- b. Engineer/Surveyor: Pioneer Engineering – Paul Cherne  
2422 Enterprise Drive  
Mendota Heights, MN 55120  
(651) 251-0630

**B. Site Data**

- a. Address: Hunters Crossing 1<sup>st</sup> Addition, Lake Elmo, MN
- b. Zoning: LDR-Urban Low Density Residential.
- c. Parcel Size: 8.75 Acres (381,150 SF)
- d. PID: 36.029.21.32.0033
- e. Legal Description: Outlot C, Hunters Crossing 1<sup>st</sup> Addition, Washington County, Minnesota.

**C. Final Subdivision and Lot Information:**

- i. Proposed Development Name: Hunters Crossing 2<sup>nd</sup> Addition
- 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.
- iv. No wetlands.
- v. See attached table with the proposed Right-of-Way.
- 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 has been submitted under separate cover.
3. Additional landscaping has been added along adjacent property lines.
4. Final construction plans will include the necessary improvements for 5<sup>th</sup> Street.
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 5<sup>th</sup> Street is provided.
10. Grading was completed for the entire site as part of the 1<sup>st</sup> Addition.
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 5<sup>th</sup> Street improvements.
14. Ryland has already paid the Water Availability Charge for the entire development prior to 1<sup>st</sup> Addition 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 5<sup>th</sup> 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 5<sup>th</sup> 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 5<sup>th</sup> 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 was installed along Lake Elmo Avenue by the City in 2014.

2<sup>nd</sup> Addition of Hunters Crossing will consist of 29 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 & 5<sup>th</sup> 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 with final placement of proposed trees to be agreed upon by the property owner, City and Ryland.
- b. Neighbor to the East – Ryland has met with the adjacent neighbor to the east and has acquired a temporary grading easement and permanent drainage and utility easement on their property.
  - c. Neighbor to the South – Ryland has been in contact with the neighbor to the south and currently has a draft easement agreement for a permanent drainage and utility easement. However, the agreement is between the City and the owner to the south, and its Ryland's understanding that language is still being agreed upon between the two parties.
- 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.
- 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 5<sup>th</sup> Street is constructed and complete. Phase I consisted of 22 lots along the north side of the site with necessary streets, utilities and the stormwater basins. Phase II will consist of the remained of the development (29 lots) along with necessary streets and utilities. The following is a preliminary schedule for design/approvals and construction.
- a. 2<sup>nd</sup> Addition Final Plat Approval – April 2015
  - b. 2<sup>nd</sup> Addition Site Construction (Streets & Utilities) – June-August 2015
  - c. 5<sup>th</sup> Street Construction – July-August 2015

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 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: Hunters Crossing Information Table

# HUNTERS CROSSING 2ND ADDITION

KNOW ALL PERSONS BY THESE PRESENTS That The Ryland Group, Inc., a Maryland corporation, owner of the following described property:

Outlot C, HUNTERS CROSSING 1ST ADDITION, according to the recorded plat thereof, Washington County, Minnesota

Has caused the same to be surveyed and plotted as HUNTERS CROSSING 2ND ADDITION 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 BOARD, Washington County, Minnesota

I hereby certify that on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, the Board of Commissioners of Washington County, Minnesota, approved this plat

By: \_\_\_\_\_  
County Board Chair

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

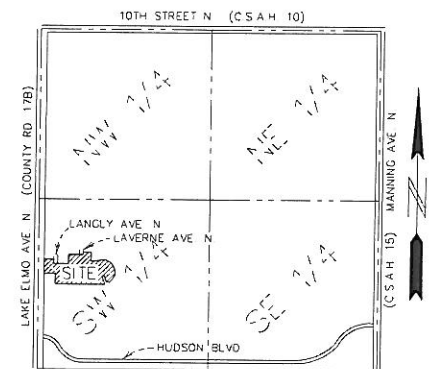
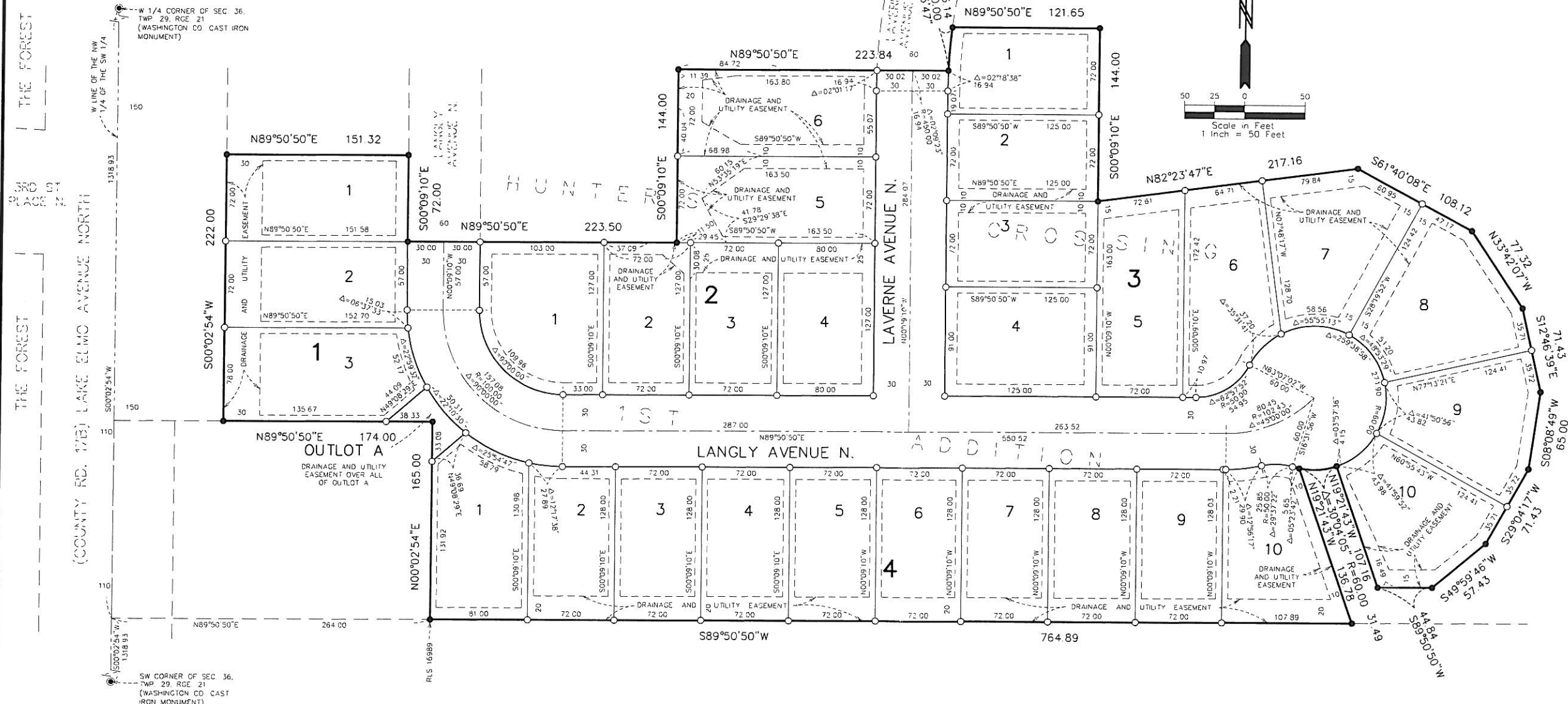
By: \_\_\_\_\_  
Deputy

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 \_\_\_\_ a'clock \_\_\_\_ M. and was duly recorded in Washington County Records

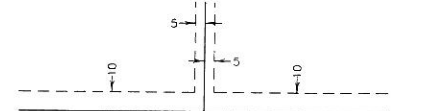
By: \_\_\_\_\_  
Washington County Recorder

By: \_\_\_\_\_  
Deputy



SECTION 36, TWP 29, RGE 21  
LOCATION MAP  
NO SCALE

DRAINAGE AND UTILITY  
EASEMENTS ARE SHOWN THUS:

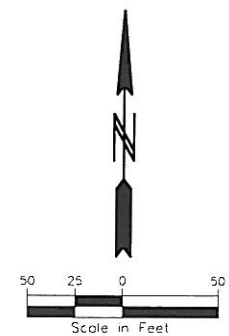


Being 5 feet in width, and adjoining lot lines unless otherwise indicated, and 10 feet in width and adjoining right of way lines and rear lot lines unless otherwise indicated and shown on the plat

- THE ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE WEST LINE OF THE NW 1/4 OF THE SW 1/4 OF SEC. 36, TWP. 29, RGE. 21, WHICH IS ASSUMED TO HAVE A BEARING OF SOUTH 00°02'54" WEST.
- DENOTES FOUND WASHINGTON COUNTY 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 SECTION 505.021, SUBD. 10
  - DENOTES FOUND 1/2 INCH IRON MONUMENT MARKED BY LICENSE NUMBER 42299 UNLESS OTHERWISE NOTED

PIONEERengineering  
CIVIL ENGINEERS LAND PLANNERS LAND SURVEYORS LANDSCAPE ARCHITECTS

## AREA SKETCH



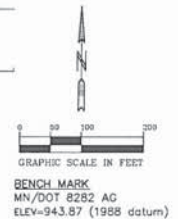
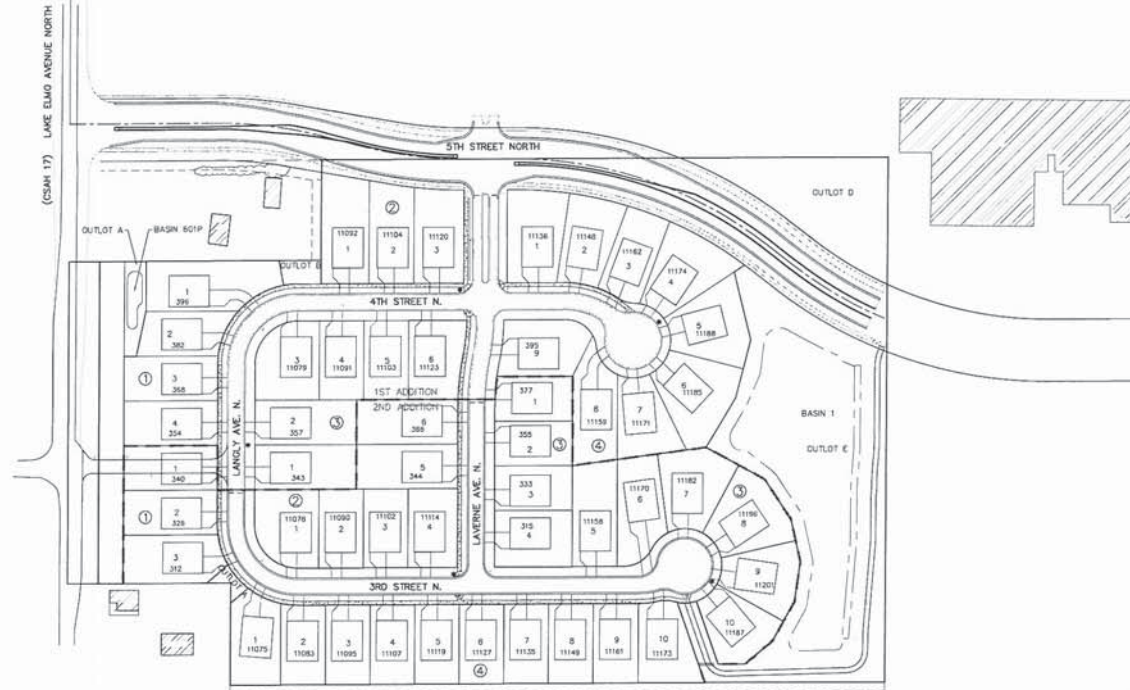
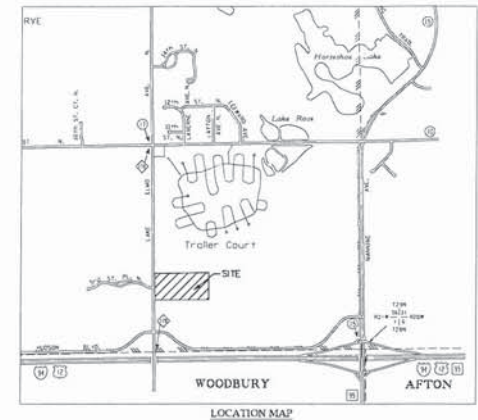
<u>AREA SUMMARY</u>		
BLOCK 1 =	34,042 SF	0.7814 AC
BLOCK 2 =	64,023 SF	1.4697 AC
BLOCK 3 =	110,228 SF	2.5304 AC
BLOCK 4 =	96,322 SF	2.2115 AC
TOTAL LOT AREA =	304,615 SF	6.9930 AC
TOTAL OUTLOT AREA =	1,304 SF	0.0299 AC
TOTAL R/W AREA =	75,040 SF	1.7227 AC
TOTAL AREA =	380,959 SF	8.7456 AC



# 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
			REBORN 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 MAIL
			EX UTILITY POLE
			EX LAM SPRINKLER VALVE
			EX LAM 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
			DRAVEL CONST ENTRANCE

## HUNTERS CROSSING 2ND ADDITION UTILITY AND STREET CONSTRUCTION LAKE ELMO, MINNESOTA



- SHEET INDEX**
- 1. COVER SHEET
  - 2-4. SANITARY SEWER & WATERMAIN
  - 5-7. STORM SEWER CONSTRUCTION
  - 8-9. STREET CONSTRUCTION
  - 10. BITUMINOUS TRAIL CONSTRUCTION
  - 11. SIGNING, STRIPING & LIGHTING PLAN
  - 12-18. CITY DETAILS

L1. LANDSCAPE PLAN

**PIONEER**engineering

2422 Enterprise Drive  
Minnetonka, MN 55120

Phone: 952-881-1914  
Fax: 952-881-1915  
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.

Sheet No. 17000 Date 12-25-2011

Project Name  
Hunters Crossing

City/County  
Lake Elmo, MN

Client  
RYLAND HOMES

Design  
P. J. KAW

Check  
KAW

Scale  
AS SHOWN

Notes  
SEE SHEET 17001

Revised  
12-25-2011

Drawn  
P. J. KAW

Checked  
KAW

Scale  
AS SHOWN

Notes  
SEE SHEET 17001

Revised  
12-25-2011

Drawn  
P. J. KAW

Checked  
KAW

Scale  
AS SHOWN

Notes  
SEE SHEET 17001

Revised  
12-25-2011

Drawn  
P. J. KAW

Checked  
KAW

Scale  
AS SHOWN

Notes  
SEE SHEET 17001

Revised  
12-25-2011

Drawn  
P. J. KAW

Checked  
KAW

Scale  
AS SHOWN

Notes  
SEE SHEET 17001

Revised  
12-25-2011

Drawn  
P. J. KAW

Checked  
KAW

Scale  
AS SHOWN

Notes  
SEE SHEET 17001

Revised  
12-25-2011

Drawn  
P. J. KAW

Checked  
KAW

Scale  
AS SHOWN

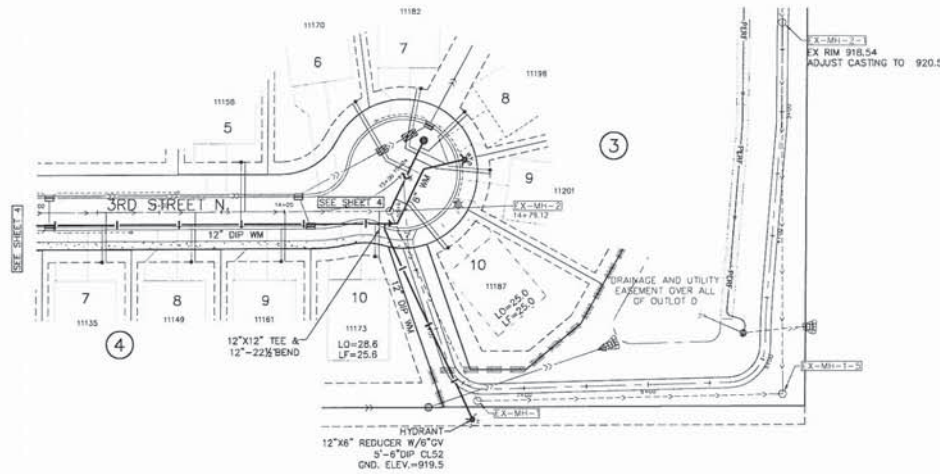
Notes  
SEE SHEET 17001

Revised  
12-25-2011



# LAKE ELMO STANDARD WATERMAIN NOTES (STANDARD DRAWING 300A)

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 COP-BLUE NUTS & BOLTS.
5. USE GATE VALVES FOR ALL APPLICATIONS UP THROUGH 12 INCHES.
6. GATE VALVES SHALL BE RESILIENT WEDGE AMERICAN FLOW CONTROL SERIES 2300 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 W9-67 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.O.) HOSE CONNECTIONS AND ONE 4" ST02 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.

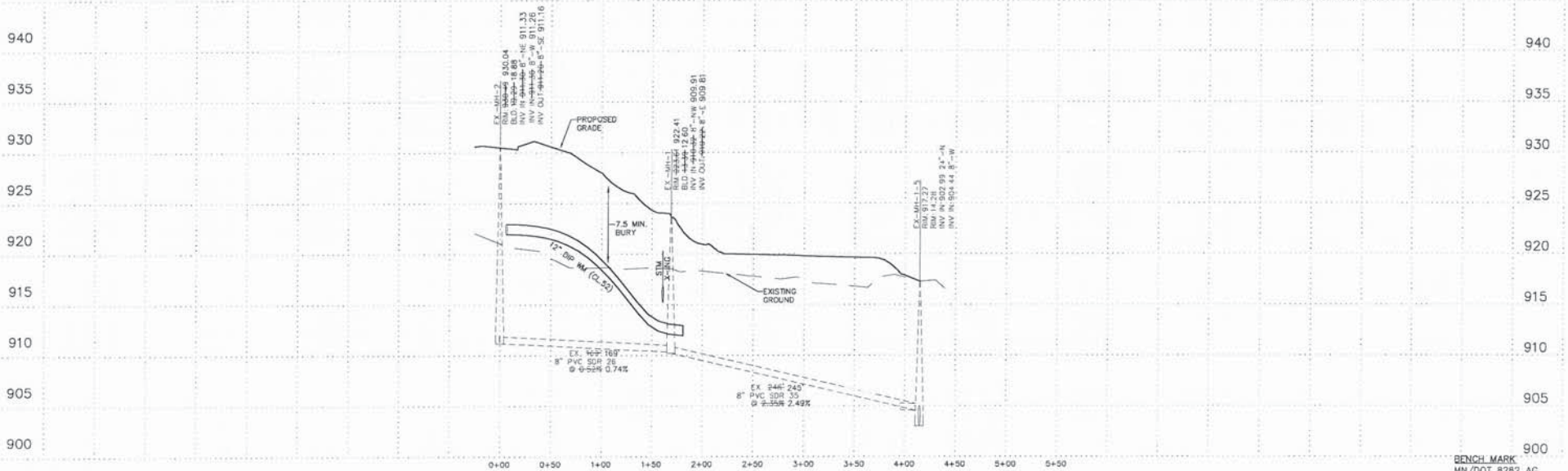
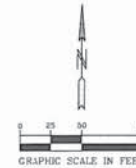


# LAKE ELMO STANDARD SANITARY SEWER NOTES (STANDARD DRAWING 300A)

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 "GRAVULAR 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 M-007 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, WATER-TIGHT 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 WATER-TIGHT PLUGS AS NEEDED IN THE EXISTING MANHOLE.

## ADDITIONAL NOTES:

1. SEE CITY OF LAKE ELMO STANDARD DETAILS FOR PUBLIC INFRASTRUCTURE.
2. SEE LAKE ELMO STANDARD PLAN NOTES FOR GRADING AND EROSION CONTROL, DETAILS 600A, 600B, AND 600C.
3. SEE LAKE ELMO STANDARD PLAN NOTES FOR SITE RESTORATION, DETAIL 600D.
4. SERVICE AND RISER STATIONING IS FROM DOWNSTREAM MANHOLE.
5. SERVICES IN PHASE 2 OF CONSTRUCTION WHICH THE SANITARY MAINLINE WAS INSTALLED IN PHASE 1 HAD WYES AND RISERS INSTALLED AND PLUGGED, WITH ENDS MARKED WITH 2"x2" HARDWOOD MARKER. LOTS INCLUDE: LOTS 1, 2 OF BLOCK 1, LOTS 5, 6 OF BLOCK 2, LOTS 1, 2, 3, 4, 5 OF BLOCK 3, AND LOTS 6, 7, 8, 9, 10 OF BLOCK 4.
6. CONTRACTOR TO CONNECT TO RISERS NOTE IN #5 AND EXTEND SERVICE TO EASEMENT PER CITY DETAIL 313.



**PIONEER**engineering

2427 Enterprise Drive  
Mendota Heights, MN 55120  
Phone: 612-448-1944  
Fax: 612-448-1948  
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: *John J. [Signature]*  
Reg. No.: 11988  
Exp. Date: 12-31-2024

Site notes

Date: 12-29-2023  
Designed: PJC/NAW  
Checked: KAW

**SANITARY SEWER AND WATERMAIN CONSTRUCTION**

**RYLAND HOMES**  
7599 ANAHEIM DRIVE  
EDEN PRAIRIE, MINNESOTA 55444

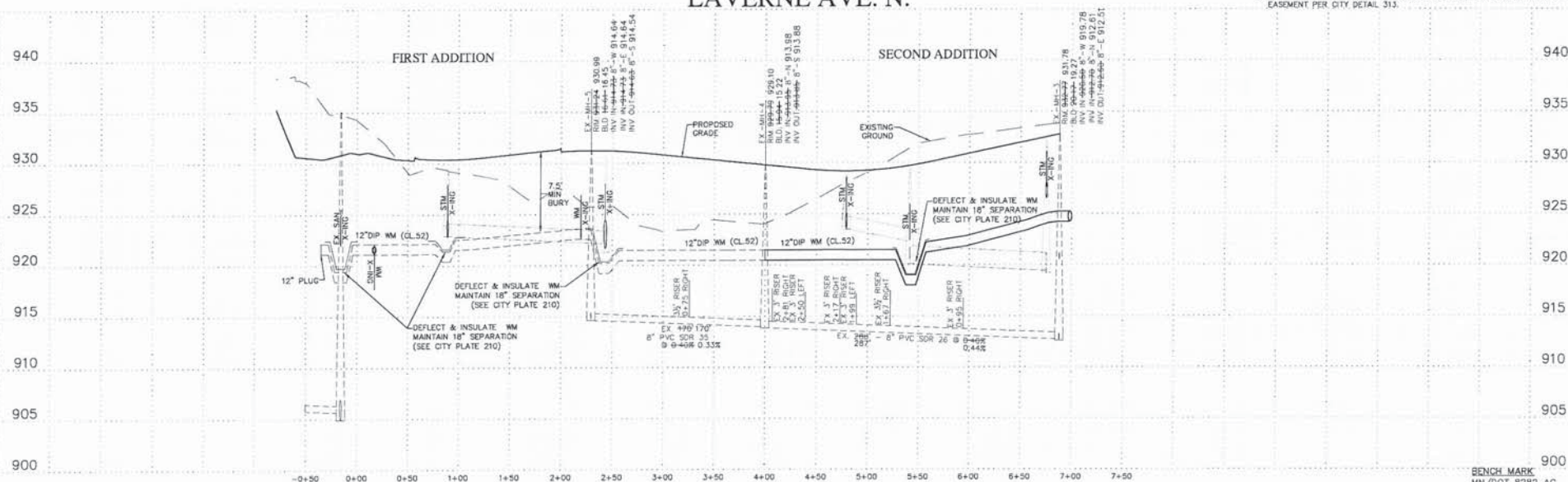
**HUNTERS CROSSING 2nd ADDITION**  
LAKE ELMO, MINNESOTA

2 OF 18

1. ALL WATERMAIN AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. MAINTENANCE 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-BUZE NUTS & WASHERS.
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.2.
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 WATERHUS "PACER," MODEL W8-67 OR APPROVED EQUAL, FITTED WITH H 800 SERIES FLEX STEEL AND PAINTED RED.
12. HYDRANTS SHALL HAVE TWO OUTLET NOZZLES FOR 2-1/2" (I.D.) HOSE CONNECTIONS AND ONE 4" STOZ NOZZLE.
13. THE CURB STOP SERVICE ASSEMBLY SHALL HAVE A MINIMUM 1-Ft. ADJUSTMENT RANGE AND SHALL EXTEND 8 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 CONSTRUCTION.

1. ALL SANITARY SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND S.D.
2. ALL SANITARY SEWER PAVING 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 SD 35 WITH ELASTOMERIC GASKETED JOINTS.
4. ALL SANITARY SEWER SERVICES SHALL BE 4-INCH PVC, SCH. 40 OR SD 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 MATERIAL SPECIFICATIONS FOR 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, WATER-TIGHT 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 WATER-TIGHT PIPES

1. SEE CITY OF LAKE ELMO STANDARD DETAILS FOR PUBLIC INFRASTRUCTURE.
2. SEE LAKE ELMO STANDARD PLAN NOTES FOR GRADING AND EROSION CONTROL. DETAILS 600A, 600B, AND 600C.
3. SEE LAKE ELMO STANDARD PLAN NOTES FOR SITE RESTORATION, DETAIL 600D.
4. SERVICE AND RISER STATIONING IS FROM DOWNSTREAM MAHNOLE.
5. SERVICES IN PHASE 2 OF CONSTRUCTION WHICH THE SANITARY MAINLINE WAS INSTALLED AND PHASE 1 OF CONSTRUCTION WHERE THE MAINLINE WAS PLUGGED WITH ENDS MARKED WITH 2"x2" HARDWOOD MARKER. LOTS INCLUDE: LOTS 1, 2 OF BLOCK 1, LOTS 5, 6 OF BLOCK 2, LOTS 1, 2, 3, 4, 5 OF BLOCK 3, AND LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 OF BLOCK 4.
6. CONTRACTOR TO CONNECT TO RISERS NOTED IN #5 AND EXTEND SERVICE TO EASEMENT PER CITY DETAIL 313.



BENCH MARK  
MN/DOT 8282 AG  
ELEV=943.87 (1988 datum)



# LAKE ELMO STANDARD SANITARY SEWER NOTES (STANDARD DRAWING 300A)

- ALL SANITARY SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
- ALL SANITARY SEWER PVC PIPE SHALL BE INSTALLED ACCORDING TO CITY STANDARD DRAWING 103 "GRANULAR MATERIAL BEDDING METHOD (FOR PVC SANITARY SEWER PIPE)".
- UNLESS NOTED OTHERWISE, ALL SMOOTH WALLED SANITARY SEWER PVC PIPE AND FITTINGS SHALL BE SDR 35 WITH ELASTOMERIC GASKETED JOINTS.
- ALL SANITARY SEWER SERVICES SHALL BE 4-INCH PVC, SCH. 40 OR SDR 26 PIPE.
- 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.
- REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MHDOT SPEC 3236 (REINFORCED CONCRETE PIPE FOR THE TYPE, SIZE AND STRENGTH CLASS SPECIFIED HEREIN).
- JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL SANITARY SEWER MANHOLES.
- SANITARY SEWER INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A GASKETED, FLEXIBLE, WATER TIGHT CONNECTION TO ALLOW DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE TO TAKE PLACE.
- A 1'-0" TO 1'-4" MANHOLE SECTION SHALL BE INSTALLED UNDER THE CONE SECTION TO ALLOW FOR HEIGHT ADJUSTMENT WHENEVER POSSIBLE.
- ALL SERVICE LINE STUBS MUST HAVE A 2"x2" HARDWOOD MARKER WITH METAL SPIKE RUNNING FROM THE END OF PIPE TO FINISHED GRADE ELEVATION.
- 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 WATER TIGHT PLUGS AS NEEDED IN THE EXISTING MANHOLE.

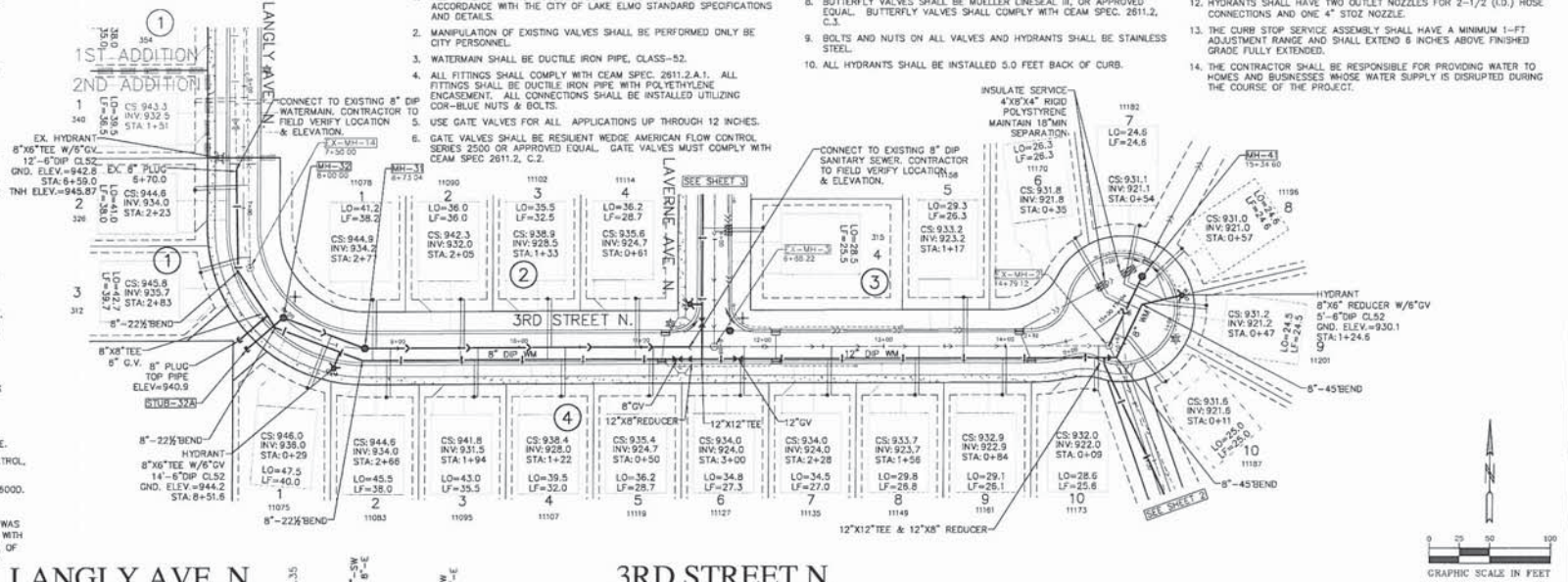
## ADDITIONAL NOTES:

- SEE CITY OF LAKE ELMO STANDARD DETAILS FOR PUBLIC INFRASTRUCTURE.
- SEE LAKE ELMO STANDARD PLAN NOTES FOR GRADING AND EROSION CONTROL, DETAILS 800A, 800B, AND 800C.
- SEE LAKE ELMO STANDARD PLAN NOTES FOR SITE RESTORATION, DETAIL 800D.
- SERVICE AND RISER STATIONING IS FROM DOWNSTREAM MANHOLE.
- SERVICES IN PHASE 2 OF CONSTRUCTION WHICH THE SANITARY MAINLINE WAS INSTALLED IN PHASE 1 HAD WYES AND RISERS INSTALLED AND PLUGGED, WITH ENDS MARKED WITH 2"x2" HARDWOOD MARKER. LOTS INCLUDE: LOTS 1, 2 OF BLOCK 1, LOTS 5, 6 OF BLOCK 2, LOTS 1, 2, 3, 4, 5 OF BLOCK 3, AND LOTS 6, 7, 8, 9, 10 OF BLOCK 4.
- CONTRACTOR TO CONNECT TO RISERS NOTE IN #5 AND EXTEND SERVICE TO EASEMENT PER CITY DETAIL 312.

# LAKE ELMO STANDARD WATERMAIN NOTES (STANDARD DRAWING 200A)

- ALL WATERMAIN AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
- MANIPULATION OF EXISTING VALVES SHALL BE PERFORMED ONLY BY CITY PERSONNEL.
- WATERMAIN SHALL BE DUCTILE IRON PIPE, CLASS-52.
- 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 & BOLTS.
- USE GATE VALVES FOR ALL APPLICATIONS UP THROUGH 12 INCHES.
- 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.
- USE BUTTERFLY VALVES FOR ALL APPLICATIONS GREATER THAN 12 INCHES.
- BUTTERFLY VALVES SHALL BE MULLER LINESEAL III, OR APPROVED EQUAL. BUTTERFLY VALVES SHALL COMPLY WITH CEAM SPEC. 2611.2, C.3.
- BOLTS AND NUTS ON ALL VALVES AND HYDRANTS SHALL BE STAINLESS STEEL.
- ALL HYDRANTS SHALL BE INSTALLED 3.0 FEET BACK OF CURB.

- HYDRANTS SHALL BE WATERLOU "PACER" MODEL WD-87 OR APPROVED EQUAL, FITTED WITH FH 850 SERIES FLEX STAKE AND PAINTED RED.
- HYDRANTS SHALL HAVE TWO OUTLET NOZZLES FOR 2-1/2 (I.D.) HOSE CONNECTIONS AND ONE 4" STOZ NOZZLE.
- THE CURB STOP SERVICE ASSEMBLY SHALL HAVE A MINIMUM 1'-0" ADJUSTMENT RANGE AND SHALL EXTEND 6 INCHES ABOVE FINISHED GRADE FULLY EXTENDED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WATER TO HOMES AND BUSINESSES WHOSE WATER SUPPLY IS DISRUPTED DURING THE COURSE OF THE PROJECT.



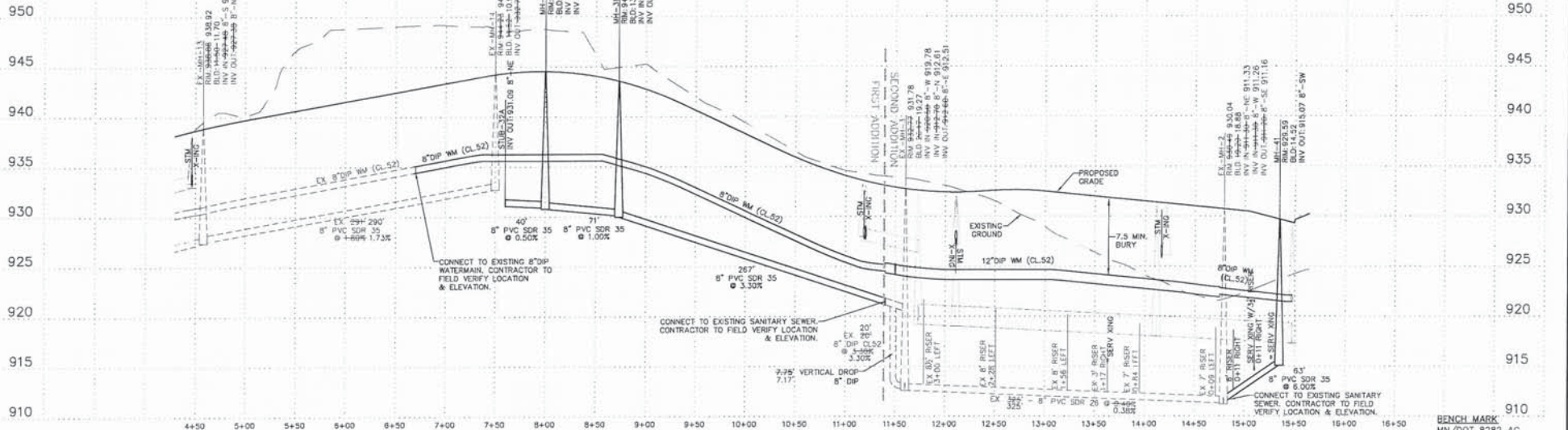
LANGLY AVE. N.

3RD STREET N.

FIRST ADDITION

SECOND ADDITION

FIRST ADDITION



**PIONEER**Engineering

2422 Enterprise Drive  
Minnetonka, MN 55305  
Tel: 952-891-9488  
Fax: 952-891-9488  
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: John J. O'Connell  
Title: Professional Engineer  
Exp. No.: 10000 Date: 12/1/2014

Date: 12/1/2014  
Designed: JJO  
Checked: KAW

**SANITARY SEWER AND WATERMAIN CONSTRUCTION**

**RYLAND HOMES**  
7999 ANAGRAM DRIVE  
EDEN PRAIRIE, MINNESOTA 55344

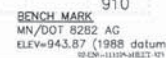
**HUNTERS CROSSING 2nd ADDITION**  
LAKE ELMO, MINNESOTA

4 OF 18



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 REQUIREMENTS FOR MODUL 5000 (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 MHDOT SPEC. 3601, CLASS III OR AS SPECIFIED HEREIN.
7. THE GEOTEXTILE FABRIC USED UNDER RIP-RAP SHALL EXTEND 3 FT. BEYOND THE RIP-RAP.
8. FURNISH & INSTALL TRASH GUARDS ON ALL FLARED END SECTIONS.
9. ALL SILT SHALL BE CLEARED OUT FROM THESE RIP-RAP AT THE END OF THE PROJECT.

1. SEE CITY OF LAKE ELMO STANDARD DETAILS FOR PUBLIC INFRASTRUCTURE.
2. SEE LAKE ELMO STANDARD PLAN NOTES FOR GRADING AND EROSION CONTROL, DETAILS 600A, 600B, AND 600C.
3. SEE LAKE ELMO STANDARD PLAN NOTES FOR SITE RESTORATION, DETAIL 600D.
4. FINAL STRUCTURE OFF SET TO BE VERIFIED BY CONTRACTOR BASED ON MATERIAL SUPPLIED TO PROJECT. FIELD STAKING SHALL BE SET ACCORDING TO BACK-OF-CURB.

\* 2ND ADDITION

2422 Enterprise Drive  
Mendota Heights, MN 55120

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer	Name <u>Paul J. Lee</u> Title <u>Owner</u>	Revision <u>1.2.25.2014</u>
---	---	-----------------------------

Date	12-29-20
Designed	PH:KA
Drawn	K.A.M.

**RYLAND HOMES**  
7599 ANAGRAM DRIVE  
EDEN PRAIRIE, MINNESOTA 55344

**HUNTERS CROSSING 2nd ADDITION**  
LAKE ELMO, MINNESOTA

5 of 18

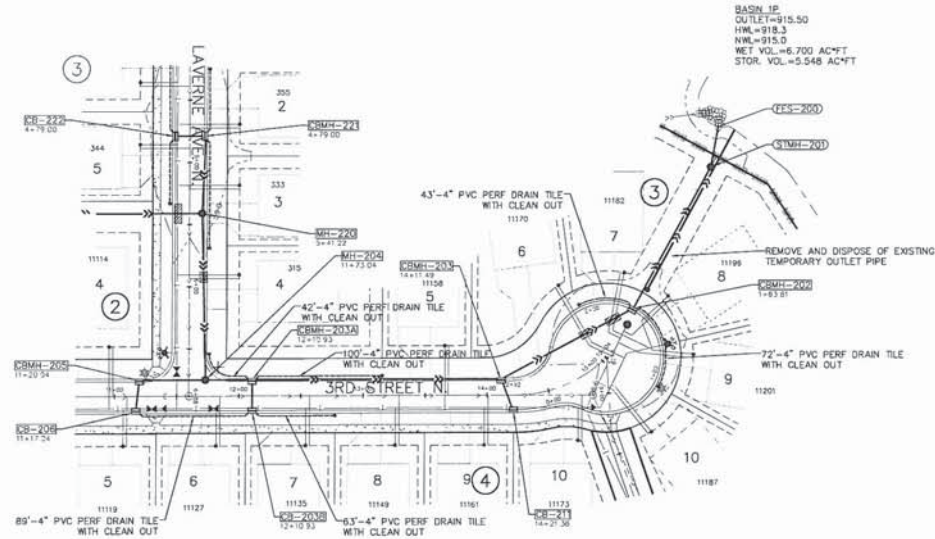


# LAKE ELMO STANDARD STORM SEWER NOTES: (STANDARD DRAWING 400A)

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 MHDOT SPEC (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 MHDOT 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.

## ADDITIONAL NOTES:

1. SEE CITY OF LAKE ELMO STANDARD DETAILS FOR PUBLIC INFRASTRUCTURE.
2. SEE LAKE ELMO STANDARD PLAN NOTES FOR GRADING AND EROSION CONTROL, DETAILS 600A, 600B, AND 600C.
3. SEE LAKE ELMO STANDARD PLAN NOTES FOR SITE RESTORATION, DETAIL 600D.
4. FINAL STRUCTURE OFF SET TO BE VERIFIED BY CONTRACTOR BASED ON MATERIAL SUPPLIED TO PROJECT. FIELD STAKING SHALL BE SET ACCORDING TO BACK-OF-CURB.



# LAKE ELMO STANDARD STORM SEWER NOTES: (STANDARD DRAWING 400A)

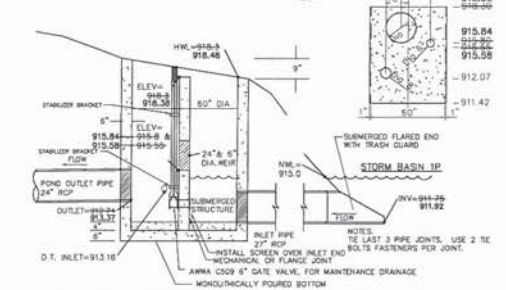
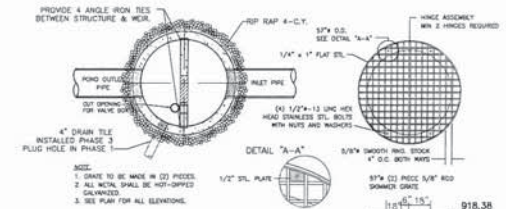
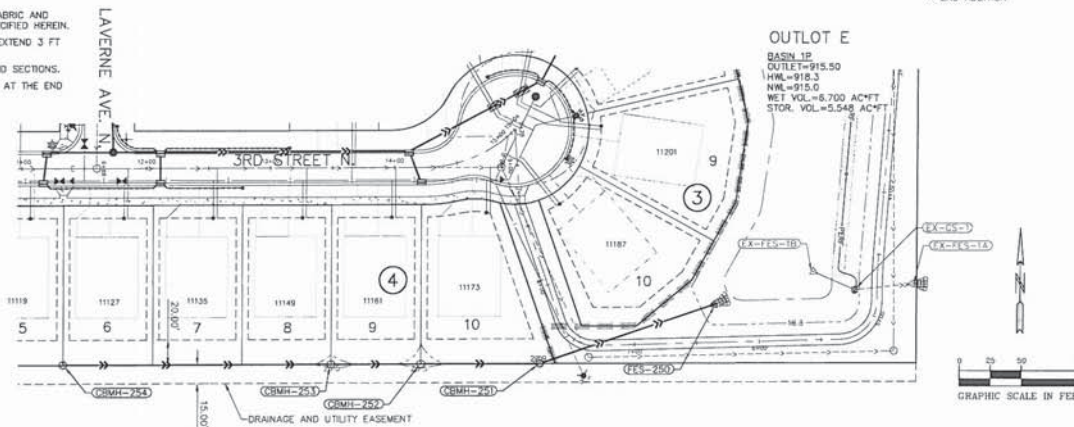
1. ALL STORM SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF M-DOY SPEC (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
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 M-DOY SPEC. 3601, CLASS II, 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.

## ADDITIONAL NOTES:

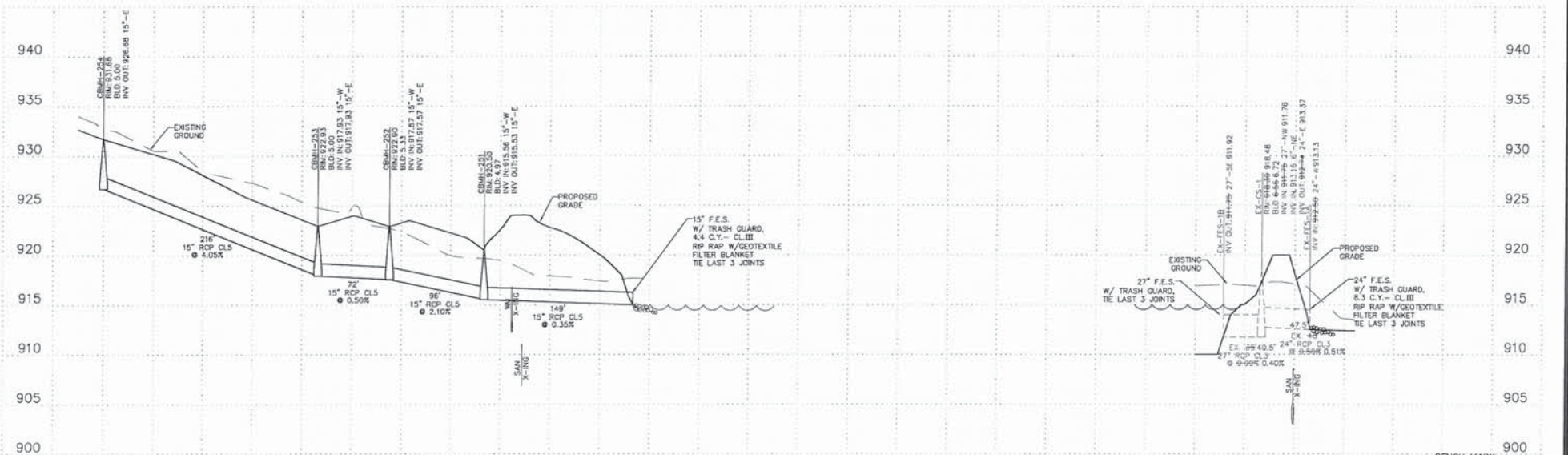
1. SEE CITY OF LAKE ELMO STANDARD DETAILS FOR PUBLIC INFRASTRUCTURE.
2. SEE LAKE ELMO STANDARD PLAN NOTES FOR GRADING AND EROSION CONTROL, DETAILS 600A, 600B, AND 600C.
3. SEE LAKE ELMO STANDARD PLAN NOTES FOR SITE RESTORATION, DETAIL 600D.
4. FINAL STRUCTURE OFF SET TO BE VERIFIED BY CONTRACTOR BASED 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-231	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

\* 2ND ADDITION



EXISTING POND OUTLET CONTROL STRUCTURE CS-1  
(NOT TO SCALE)



**PIONEER**Engineering

7422 Enterprise Drive  
Minnetonka, MN 55120  
Phone: 612-948-1914  
Fax: 612-948-1915  
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: *[Signature]*  
Date: 12/27/2014

Date: 12/27/2014  
Designed: PJS/KAW  
Drawn: KAW

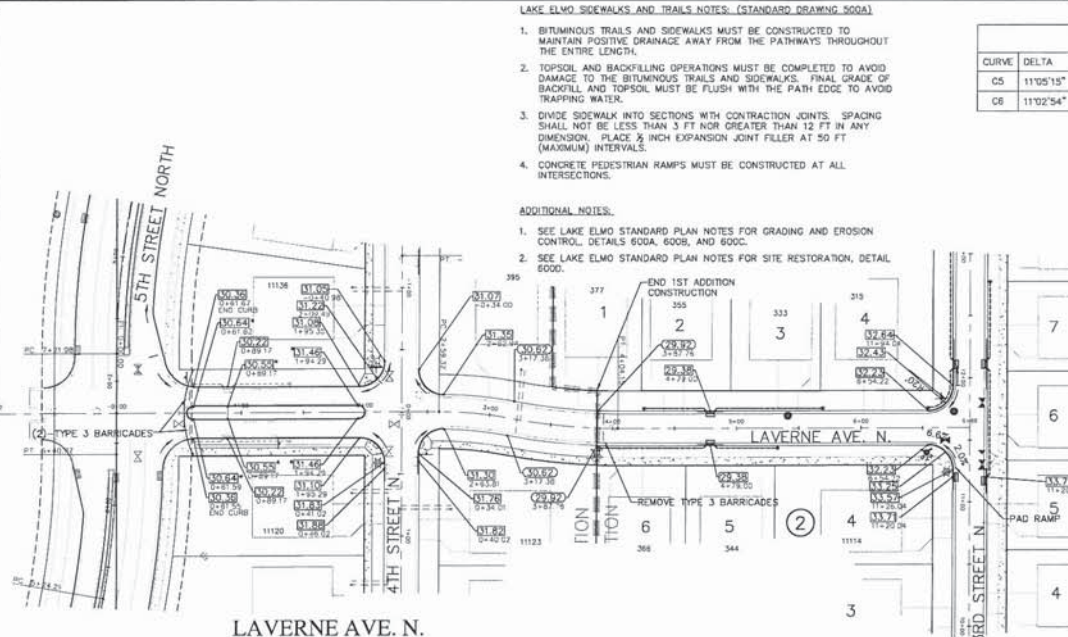
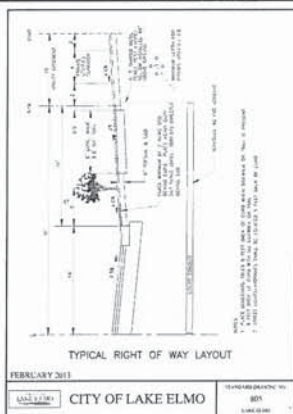
STORM SEWER CONSTRUCTION

RYLAND HOMES  
7999 ANAGRAM DRIVE  
EDEN PRAIRIE, MINNESOTA 55448

HUNTERS CROSSING 2nd ADDITION  
LAKE ELMO, MINNESOTA

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# LAKE ELMO SIDEWALKS AND TRAILS NOTES: (STANDARD DRAWING 500A)

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 3/4 INCH EXPANSION JOINT FILLER AT 50 FT (MAXIMUM) INTERVALS.
4. CONCRETE PEDESTRIAN RAMPS MUST BE CONSTRUCTED AT ALL INTERSECTIONS.

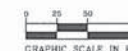
## ADDITIONAL NOTES:

1. SEE LAKE ELMO STANDARD PLAN NOTES FOR GRADING AND EROSION CONTROL, DETAILS 600A, 600B, AND 600C.
2. SEE LAKE ELMO STANDARD PLAN NOTES FOR SITE RESTORATION, DETAIL 600D.

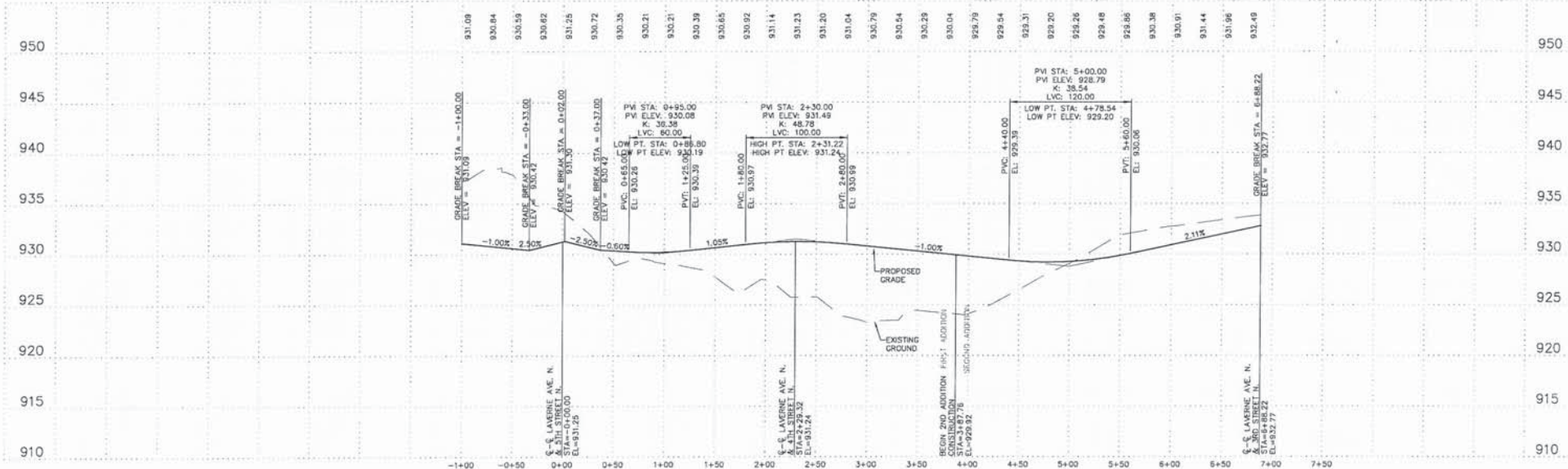
CURVE TABLE					
CURVE	DELTA	LENGTH	RADIUS	TANGENT	PC
C5	11°05'15"	58.05	300.00	29.12	2+59.32
C6	11°02'54"	86.77	450.00	43.52	3+17.38

## CURB LEGEND

- 08.15 = TOP OF CURB ELEVATION FOR SURMOUNTABLE
- 08.39 = TOP OF CURB ELEVATION FOR 8618 CURB (+/- TIP OUT GUTTER)
- 07.82 = BITUMINOUS ELEVATION
- 8618 CURB & GUTTER
- BITUMINOUS EDGE
- PED. RAMP



BENCH MARK  
MN/DOT B292 AG  
ELEV=943.87 (1988 datum)



**PIONEER**Engineering  
2422 Enterprise Drive  
Minnetonka, MN 55320  
Phone: 952-881-1914  
Fax: 952-881-1948  
www.pioneereng.com

I certify that the 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: *[Signature]*  
Reg. No.: 17950 Date: 12-27-2014

Project: STREET CONSTRUCTION

Drawn: JH/BAW  
Checked: BAW

STREET CONSTRUCTION

RYLAND HOMES  
7591 ANAGRAM DRIVE  
EDEN PRAIRIE, MINNESOTA 55344

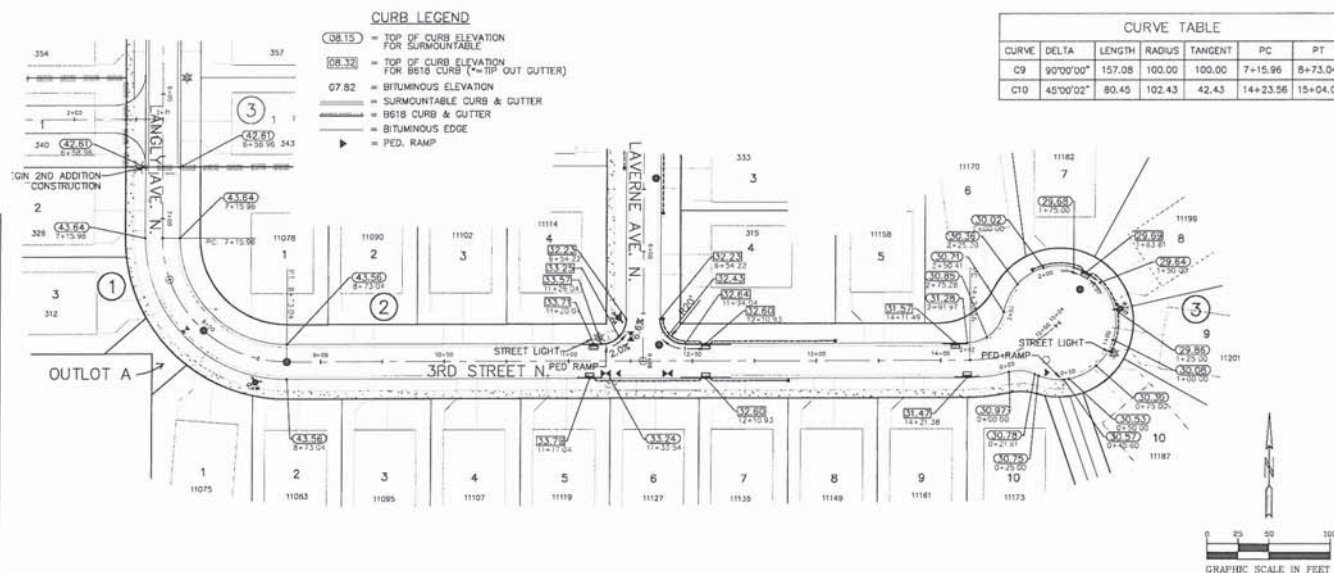
HUNTERS CROSSING 2nd ADDITION  
LAKE ELMO, MINNESOTA

8 OF 18

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. DRIVE SIDEWALK INTO SECTIONS WITH CONTRACTION JOINTS. SPACING MUST NOT BE LESS THAN 3 FEET GREATER THAN 12 FT IN ANY DIMENSION. PLACE 3/4" INCH EXPANSION JOINT FILLER AT 50 FT (MAXIMUM) INTERVALS.
4. CONCRETE PEDESTRIAN RAMPS MUST BE CONSTRUCTED AT ALL INTERSECTIONS.



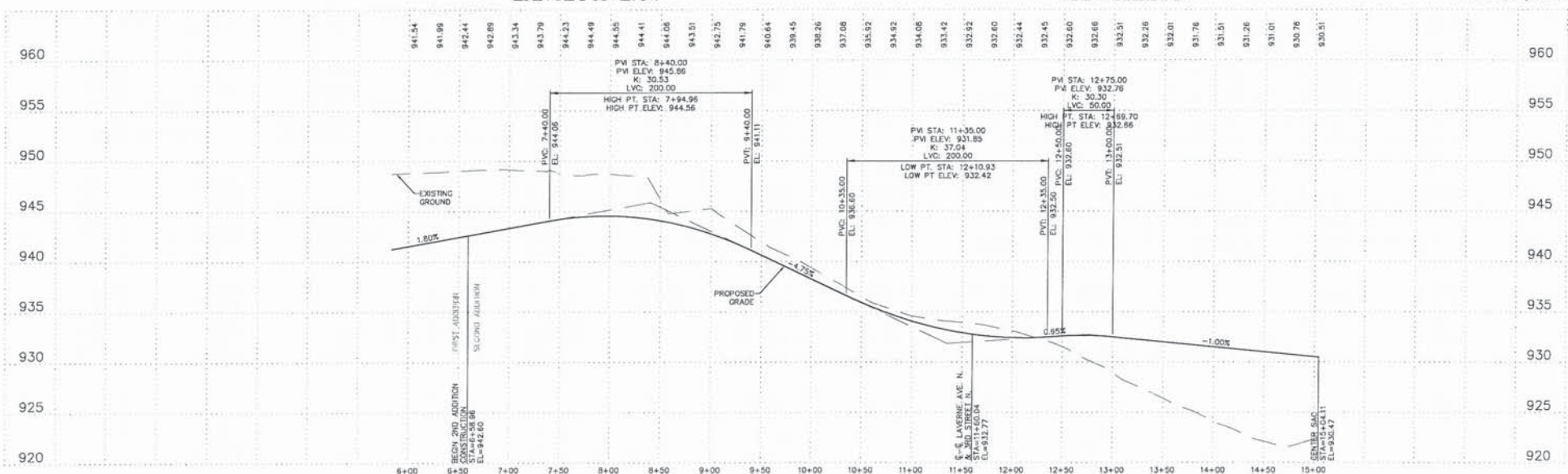
CURVE TABLE						
CURVE	DELTA	LENGTH	RADIUS	TANGENT	PC	PT
C9	90°00'00"	157.08	100.00	100.00	7+15.96	8+73.04
C10	45°00'02"	80.45	102.43	42.43	14+23.56	15+04.01



BENCH MARK  
MN/DOT 8282 AG  
ELEV=943.87 (1988 datum)

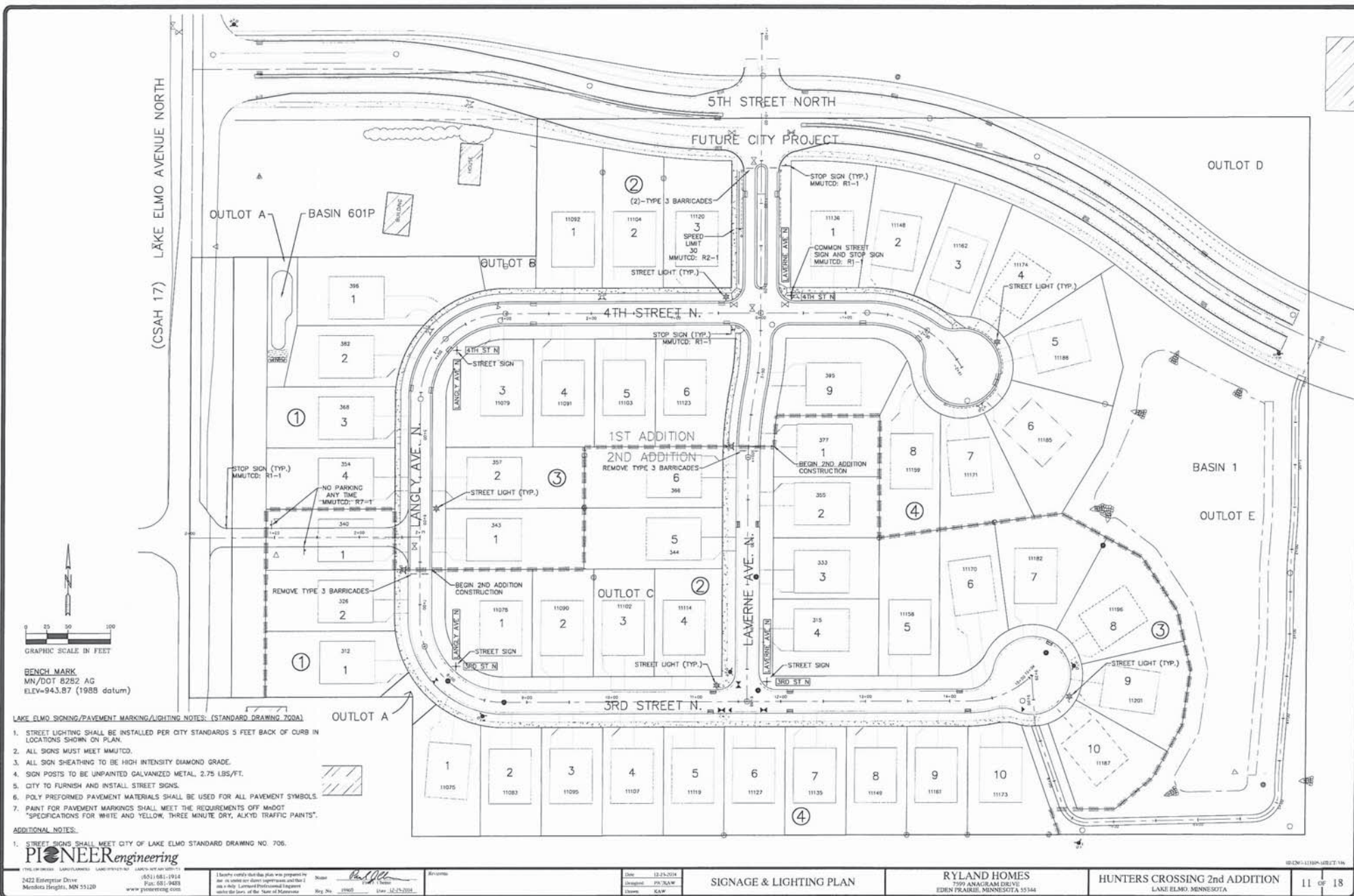


3RD STREET N.



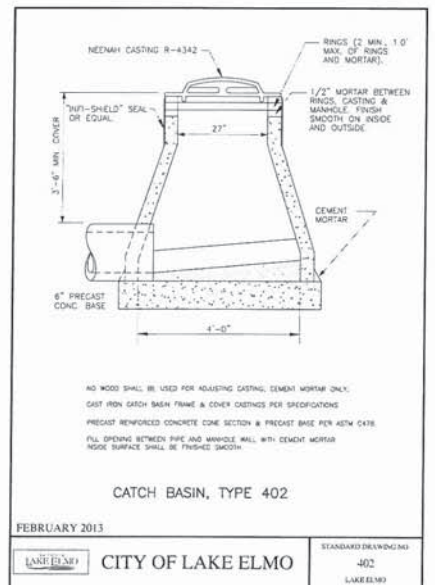
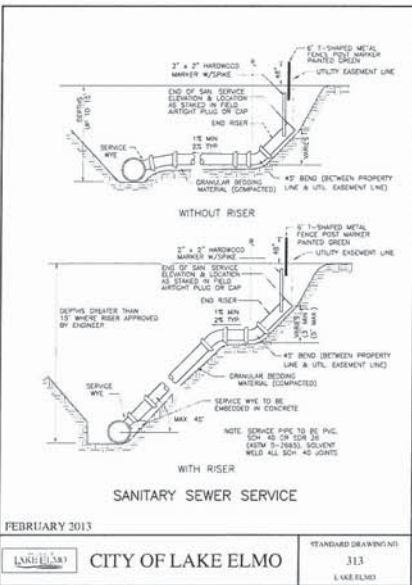
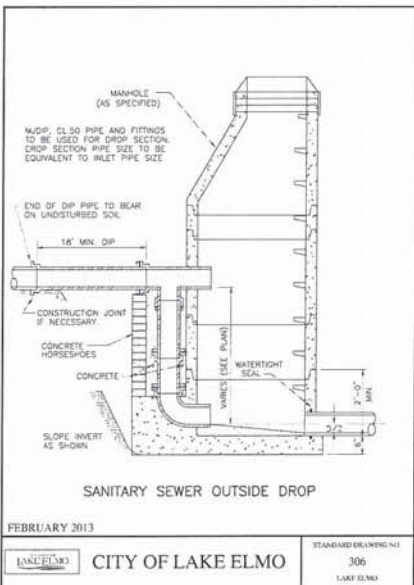
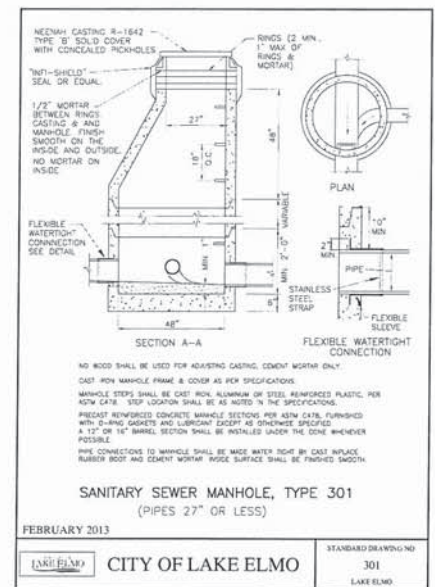
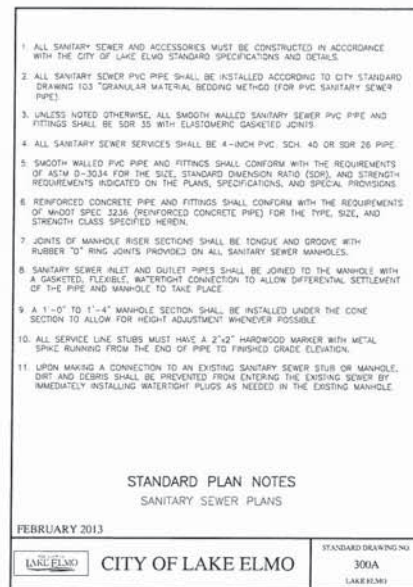
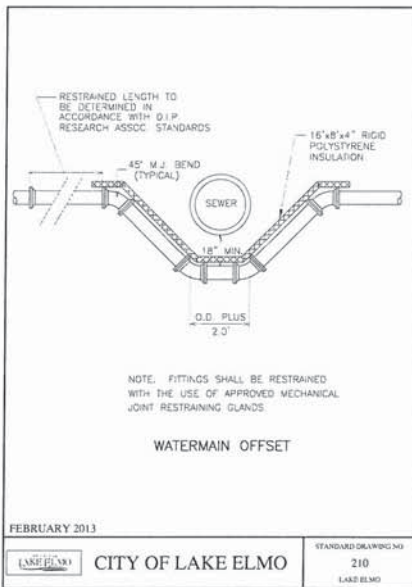
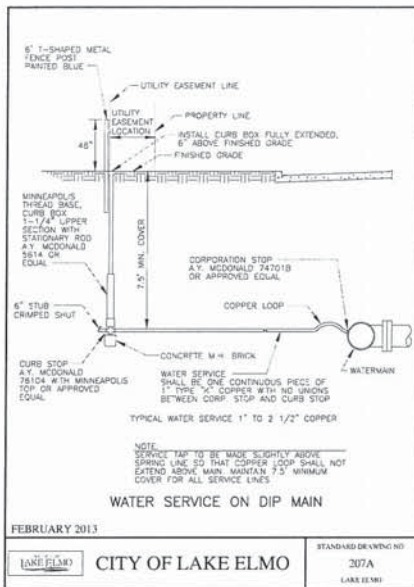




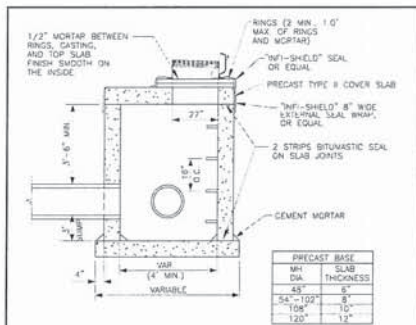










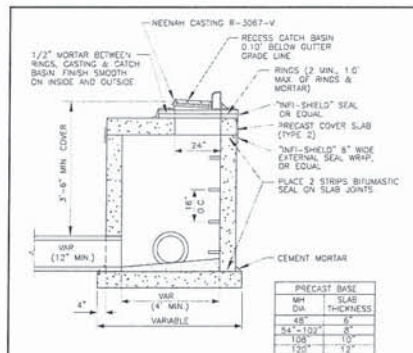


NOTES: NO WOOD SHALL BE USED FOR ADJUSTING CASTING, CEMENT MORTAR ONLY.  
 CAST IRON FRAME & DRIVE CASTINGS PER SPECIFICATIONS.  
 MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.  
 PRECAST REINFORCED CONCRETE BASE SLAB & COVER SLAB PER ASTM C478.  
 PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, FINISHED WITH 3-RING GASKETS & LUBRICANT OR 4\"/>

CATCH BASIN/MANHOLE WITH SUMP, TYPE 405

FEBRUARY 2013

	CITY OF LAKE ELMO
STANDARD DRAWING NO.	405
LAKE ELMO	

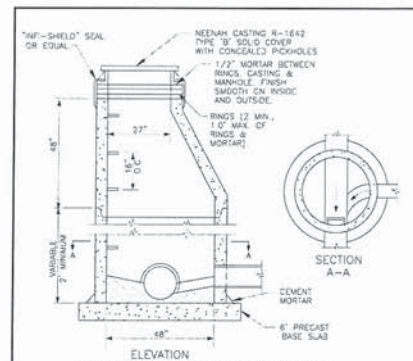


NO WOOD SHALL BE USED FOR ADJUSTING CASTING, CEMENT MORTAR ONLY.  
 CAST IRON FRAME & DRIVE CASTINGS PER SPECIFICATIONS.  
 MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.  
 PRECAST REINFORCED CONCRETE BASE SLAB & COVER SLAB PER ASTM C478.  
 PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, FINISHED WITH 3-RING GASKETS & LUBRICANT OR 4\"/>

CATCH BASIN/MANHOLE, TYPE 406

FEBRUARY 2013

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STANDARD DRAWING NO.	406
LAKE ELMO	

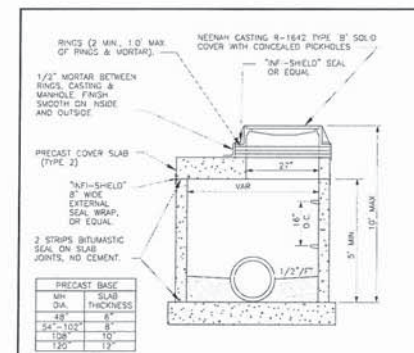


NO WOOD SHALL BE USED FOR ADJUSTING CASTING, CEMENT MORTAR ONLY.  
 CAST IRON FRAME & COVER AS PER SPECIFICATIONS.  
 MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.  
 PRECAST REINFORCED CONCRETE MANHOLE SECTIONS & BASE SLAB PER ASTM C478.  
 FINISH PRECAST MANHOLE SECTIONS WITH 3-RING GASKETS & LUBRICANT EXCEPT AS OTHERWISE SPECIFIED.  
 4\"/>

STORM SEWER MANHOLE, TYPE 407  
 (PIPES 27\"/>

FEBRUARY 2013

	CITY OF LAKE ELMO
STANDARD DRAWING NO.	407
LAKE ELMO	

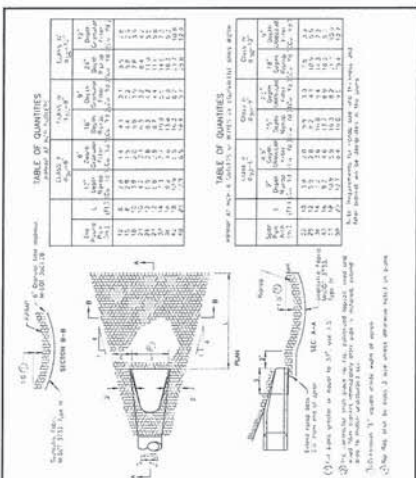


NO WOOD SHALL BE USED FOR ADJUSTING CASTING, CEMENT MORTAR ONLY.  
 CAST IRON FRAME & COVER AS PER SPECIFICATIONS.  
 MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.  
 PRECAST REINFORCED CONCRETE MANHOLE SECTIONS & BASE SLAB PER ASTM C478.  
 FINISH PRECAST MANHOLE SECTIONS WITH 3-RING GASKETS & LUBRICANT EXCEPT AS OTHERWISE SPECIFIED.  
 FULL OPENING BETWEEN PIPE & MH WALL WITH CEMENT MORTAR.  
 ROUGH SURFACE SHALL BE FINISHED SMOOTH.

STORM SEWER MANHOLE, TYPE 409

FEBRUARY 2013

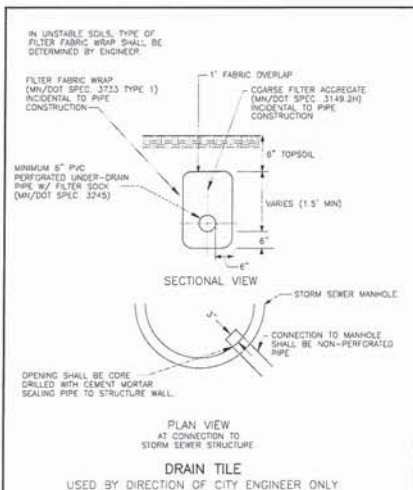
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STANDARD DRAWING NO.	409
LAKE ELMO	



RIPRAP AT RCP OUTLETS

FEBRUARY 2013

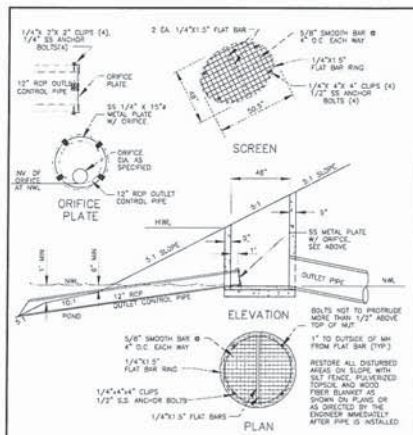
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STANDARD DRAWING NO.	411
LAKE ELMO	



PLAN VIEW AT CONNECTION TO STORM SEWER STRUCTURE  
 DRAIN TILE  
 USED BY DIRECTION OF CITY ENGINEER ONLY

FEBRUARY 2013

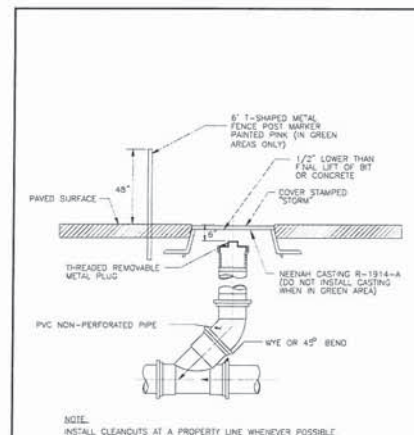
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STANDARD DRAWING NO.	412
LAKE ELMO	



STRUCTURE TABLE  
 POND SKIMMER

FEBRUARY 2013

	CITY OF LAKE ELMO
STANDARD DRAWING NO.	417
LAKE ELMO	



DRAINTILE CLEANOUT  
 (CASTING USED FOR CURB STOPS IN HARD SURFACES)

FEBRUARY 2013

	CITY OF LAKE ELMO
STANDARD DRAWING NO.	419
LAKE ELMO	

PIEEREngineering

2422 Enterprise Drive  
 Mendota Heights, MN 55120

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.

Signature: [Signature]  
 Date: 12/21/2014

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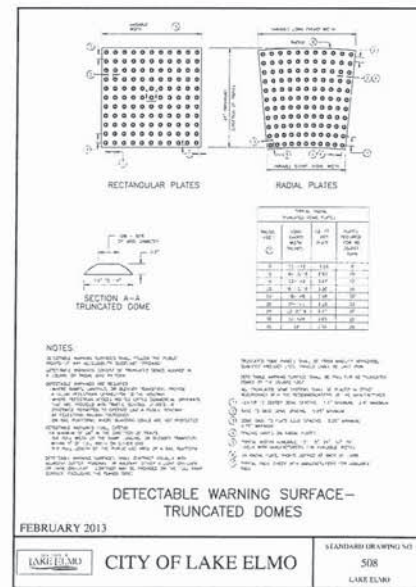
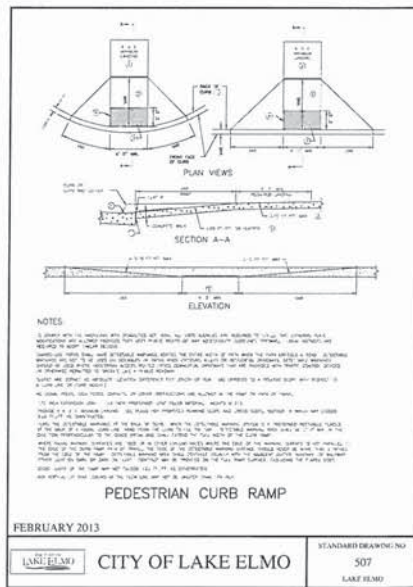
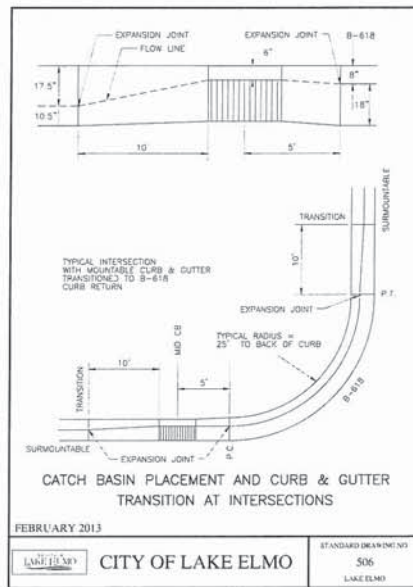
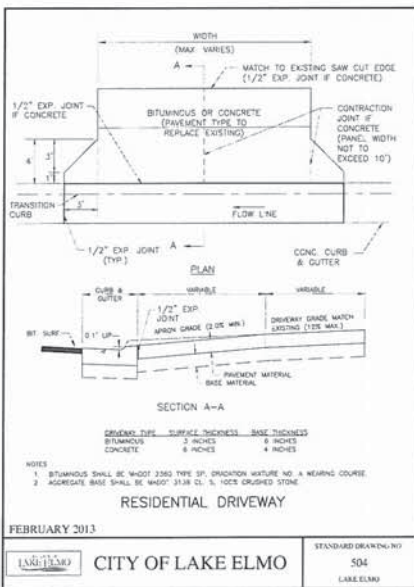
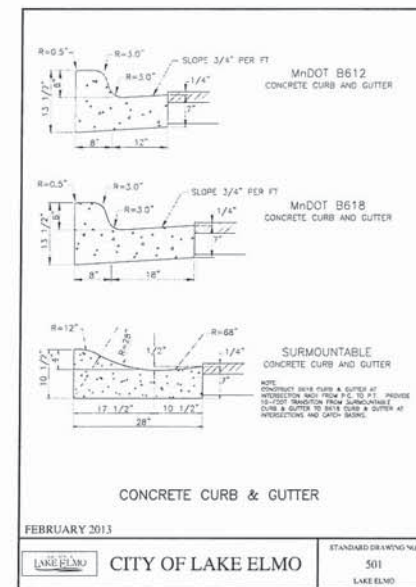
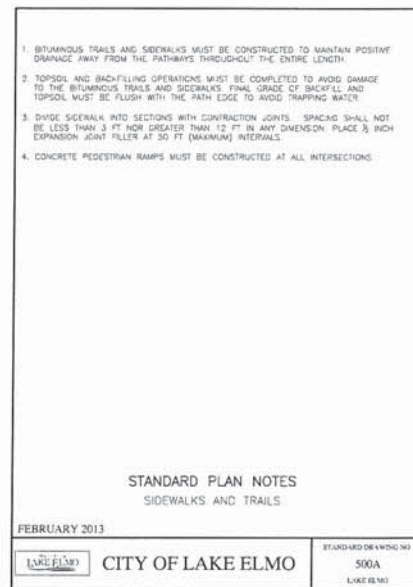
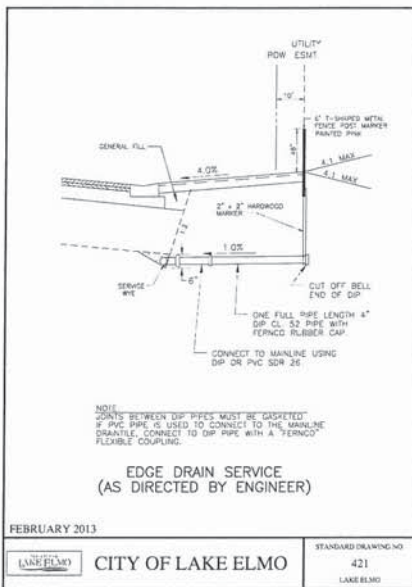
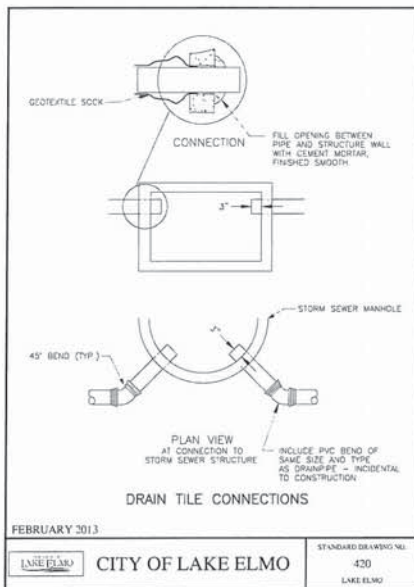
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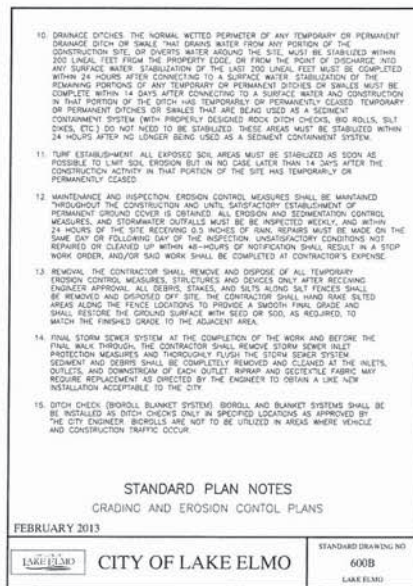
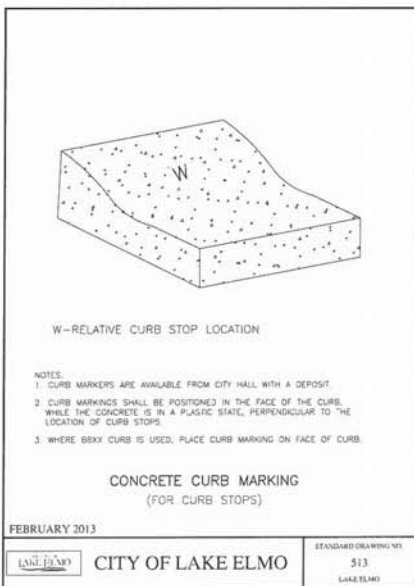
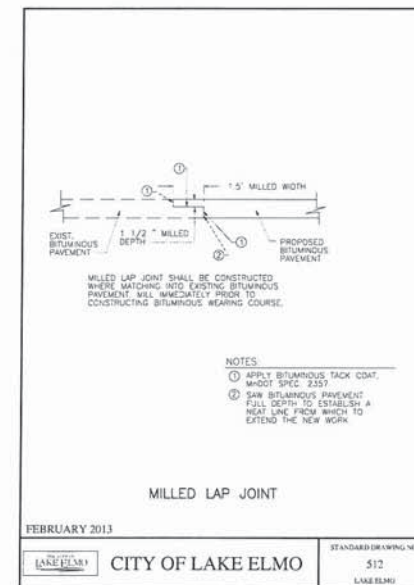
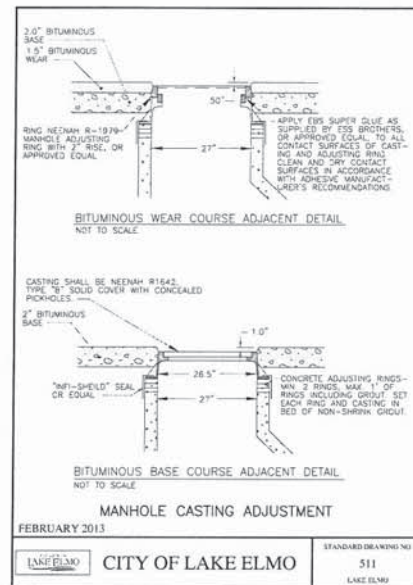
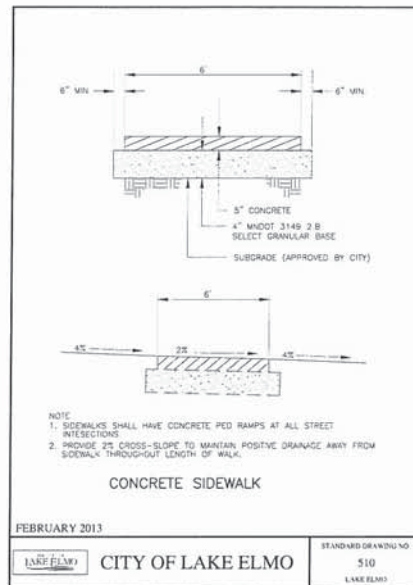
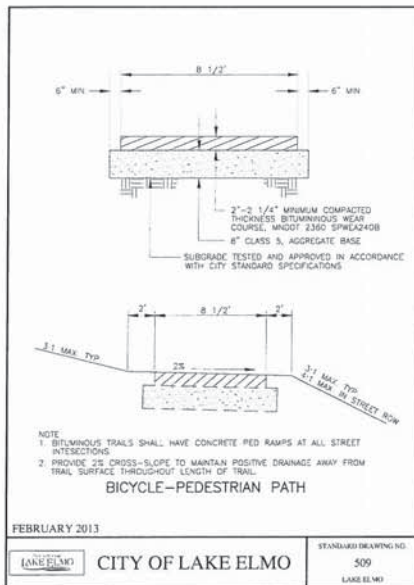
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**PIONEERengineering**

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.

Yes No

10/10/2014

10/10/2014

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CITY DETAILS

RYLAND HOMES  
7799 ANACRAM DRIVE  
SEEN FRANKS, MINNESOTA 55344

HUNTERS CROSSING 2nd ADDITION  
LAKE ELMO, MINNESOTA

16 OF 18

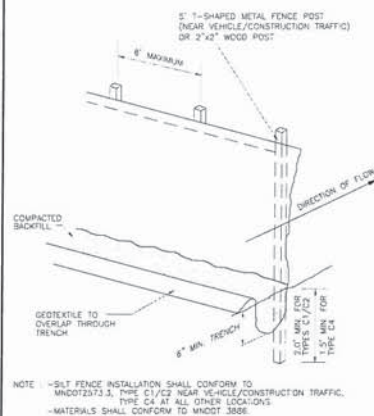
1. RESTORE ALL DISTURBED AREAS WITH 8 INCHES OF TOPSOIL CONFORMING TO MNDOT 1077.
2. PROTECT ALL STORM SEWER INLETS AS SPECIFIED HEREIN AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.
3. MAINTAIN ALL SILT FENCE AND REPAIR OR REPLACE AS NEEDED OR REQUIRED UNTIL TURF HAS BEEN ESTABLISHED.
4. RESTORATION 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

STANDARD DRAWING NO.  
600D  
LAKE ELMO

CITY OF LAKE ELMO

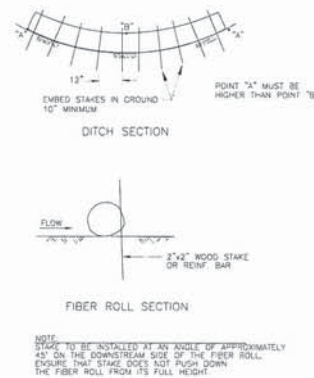


#### SILT FENCE

FEBRUARY 2013

STANDARD DRAWING NO.  
601  
LAKE ELMO

CITY OF LAKE ELMO

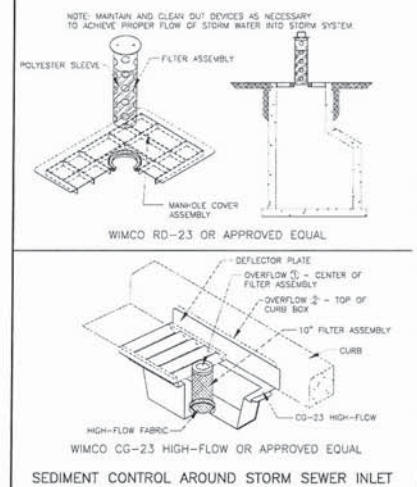


#### DITCH CHECK (FIBER ROLL)

FEBRUARY 2013

STANDARD DRAWING NO.  
603  
LAKE ELMO

CITY OF LAKE ELMO

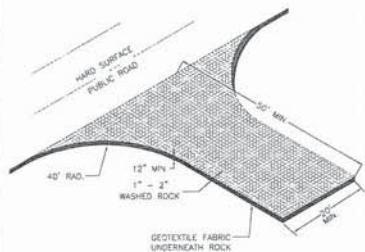


#### SEDIMENT CONTROL AROUND STORM SEWER INLET

FEBRUARY 2013

STANDARD DRAWING NO.  
604  
LAKE ELMO

CITY OF LAKE ELMO



#### ROCK CONSTRUCTION ENTRANCE

FEBRUARY 2013

STANDARD DRAWING NO.  
605  
LAKE ELMO

CITY OF LAKE ELMO

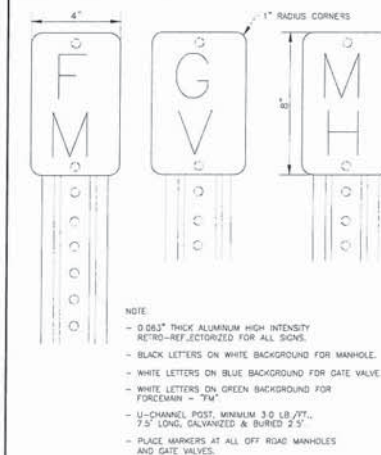
1. STREET LIGHTING SHALL BE INSTALLED PER CITY STANDARDS 5 FEET BACK OF CURB IN LOCATIONS SHOWN ON PLAN.
2. ALL SIGNS MUST MEET MAUTCD.
3. ALL SIGN SHEATHING TO BE HIGH INTENSITY DIAMOND GRADE.
4. SIGN POSTS TO BE UNPAINTED GALVANIZED METAL 2.75 LBS/FT.
5. CITY TO FURNISH AND INSTALL STREET SIGNS.
6. 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, ALKID TRAFFIC PAINTS.

#### STANDARD PLAN NOTES SIGNING/PAVEMENT MARKINGS/LIGHTING PLANS

FEBRUARY 2013

STANDARD DRAWING NO.  
700A  
LAKE ELMO

CITY OF LAKE ELMO



#### OFF ROAD STRUCTURE MARKERS

FEBRUARY 2013

STANDARD DRAWING NO.  
705  
LAKE ELMO

CITY OF LAKE ELMO

DIMENSION	30\"/>
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- NOTE
- 9\"/>

#### STREET SIGNS

FEBRUARY 2013

STANDARD DRAWING NO.  
706  
LAKE ELMO

CITY OF LAKE ELMO

**PIONEER**Engineering

7501 ORCHARD LANE  
MINNETONKA, MN 55345  
TEL: 952-895-1918 FAX: 952-895-1918  
WWW.PIONEERENGINEERING.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: *[Signature]*  
Reg. No.: 21982 Date: 12/29/2014

Other: 12/29/2014  
Designed: JPC/BAW  
Checked: BAW

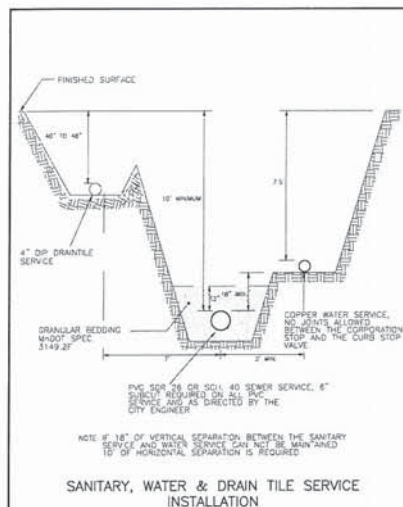
CITY DETAILS

**RYLAND HOMES**  
7599 ANAGRAM DRIVE  
EDEN PRAIRIE, MINNESOTA 55344

**HUNTERS CROSSING 2nd ADDITION**  
LAKE ELMO, MINNESOTA

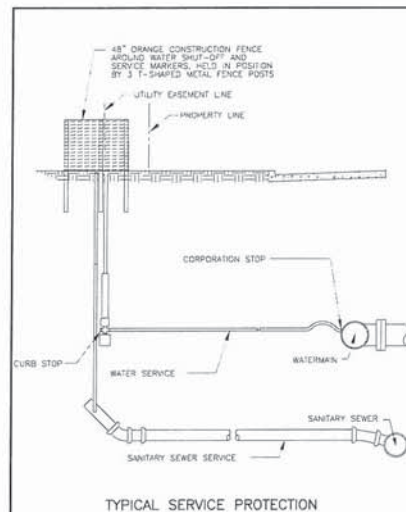
17 OF 18





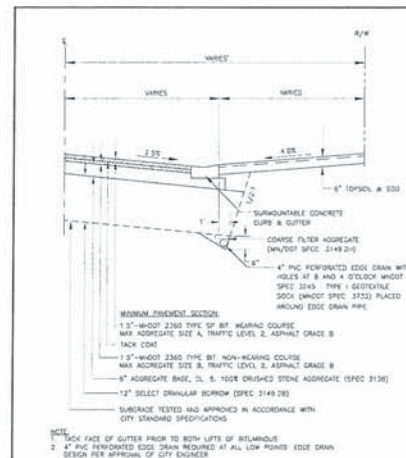
FEBRUARY 2013

STANDARD DRAWING NO.  
712  
LAKE ELMO



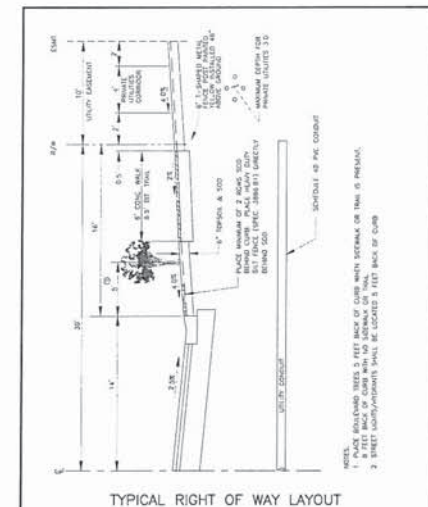
FEBRUARY 2013

	CITY OF LAKE ELMO	STANDARD DRAWING NO. 713 LAKE ELMO
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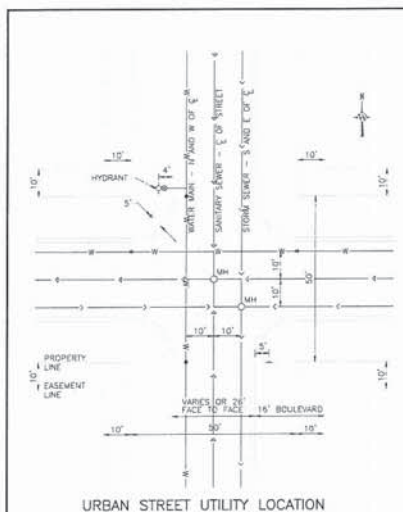
FEBRUARY 2013

LAKE ELMO	CITY OF LAKE ELMO	STANDARD DRAWING NO. 801 LAKE ELMO
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FEBRUARY 2013

	<b>CITY OF LAKE ELMO</b>	STANDARD DRAWING NO. <b>805</b> LAKE ELMO
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FEBRUARY 2013

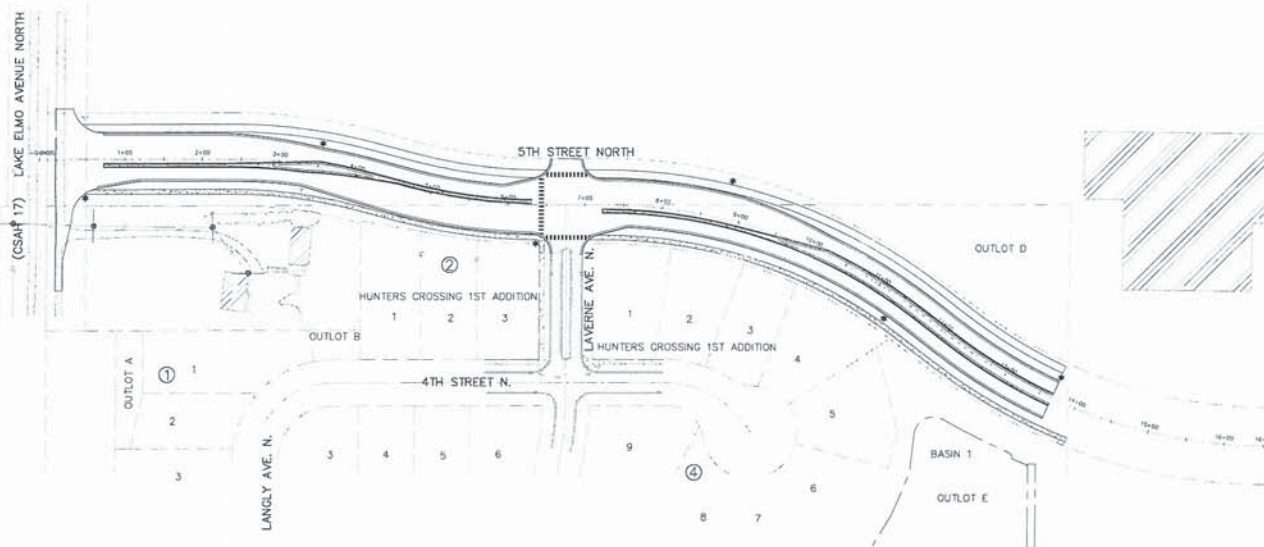
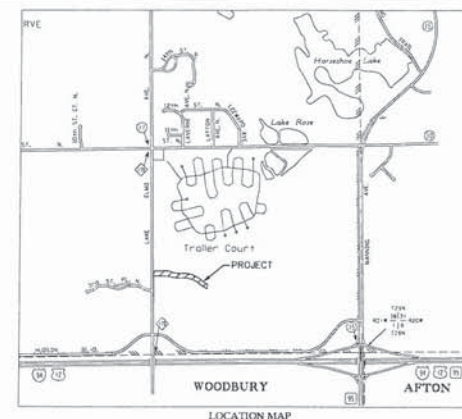
 <b>CITY OF LAKE ELMO</b>	STANDARD DRAWING NO. <b>806</b> LAKE ELMO
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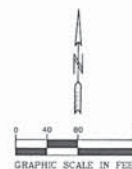
FEBRUARY 2013

 <b>CITY OF LAKE ELMO</b>	STANDARD DRAWING NO. <b>900A</b> LAKE ELMO
--	--

# 5TH STREET NORTH UTILITY AND STREET CONSTRUCTION LAKE ELMO, MINNESOTA



BENCH MARK  
MN/DOT 8282 AG  
ELEV=943.87 (1988 datum)



## SHEET INDEX

1. COVER SHEET
2. LEGEND SHEET
3. TYPICAL SECTIONS
4. STREET ALIGNMENT SHEET
5. PHASE 1 PLAN
6. PHASE 1 TYPICAL SECTIONS
7. PHASE 2 PLAN
- 8-9. SANITARY SEWER & WATERMAIN
- 10-11. STORM SEWER CONSTRUCTION
- 12-13. STREET CONSTRUCTION
14. SIGNING, STRIPING & LIGHTING PLAN
- 15-18. SECTIONS
- 19-25. CITY DETAILS
- L1-2. LANDSCAPE PLAN

**PIONEER**engineering

2422 Enterprise Drive  
Minnetonka, MN 55120

TEL: 952.891.1914  
FAX: 952.891.1915  
WWW.PIONEERENGINEERING.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.

Project: 5TH STREET NORTH  
Sheet: 1 of 25  
Date: 03/30/05

Date: 03/27/05  
Designed: P. J. JENSEN  
Drawn: M. J. JENSEN

COVER SHEET

RYLAND HOMES  
7399 ANAGRAM DRIVE  
EDEN PRAIRIE, MINNESOTA 55344

5TH STREET NORTH  
LAKE ELMO, MINNESOTA

1 OF 25

UTILITY LINES		LEGEND	
EXISTING	PROPOSED	FUTURE	DESCRIPTION
			SANITARY MANHOLE
			SANITARY SEWER (SANITARY & WATERMAIN PLANS)
			SANITARY SEWER (STORM SEWER PLANS)
			FORCE MAIN
			HYDRANT
			GATE VALVE
			REDUCER
			CURB STOP
			WATERMAIN (SANITARY & WATERMAIN PLANS)
			WATERMAIN (STORM SEWER PLANS)
			CATCH BASIN
			BEDCHAMBER
			STORM MANHOLE
			FLARED END SECTION
			CONTROL STRUCTURE
			STORM SEWER (SANITARY & WATERMAIN PLANS)
			STORM SEWER (STORM SEWER PLANS)
			CULVERT
			PERFORATED DRAIN TILE
			SOLID DRAIN TILE SERVICE CASING
			UNDERGROUND ELECTRIC LINE
			UNDERGROUND FIBER OPTIC LINE
			UNDERGROUND GAS PIPELINE
			UNDERGROUND PETROLEUM PIPELINE
			UNDERGROUND TELEPHONE LINES
			OVERHEAD UTILITY LINES
SITE LINES		LEGEND	
EXISTING	PROPOSED	FUTURE	DESCRIPTION
			B612-STYLE CURB & GUTTER
			B624-STYLE CURB & GUTTER
			REBORN CURB & GUTTER
			EDGE OF BITUMINOUS
			YELLOW PAVEMENT STRIPING (SINGLE/DOUBLE)
			WHITE PAVEMENT STRIPING (SINGLE/DOUBLE)
			PHASE LINE
			CENTERLINE
			2' CONTOUR LINE
			10' CONTOUR LINE
			POND OUTLET LINE
			POND HIGH WATER LINE
			PROPOSED SPOT ELEVATION
			EMERGENCY OVERFLOW
			DRAINAGE FLOW ARROW
			DELINEATED / PROPOSED WETLAND LINE
			WETLAND BUFFER
			TREE LINE
			FEMA FLOODPLAIN BOUNDARY
			RETAINING WALL
			FENCE (BARBED WIRE)
			FENCE (CHAIN LINK)
			FENCE (WOOD)
			CONSERVATION AREA SIGN
			WETLAND BUFFER SIGN
			TYPE III BARRICADE
			LIGHT POLE
			STREET SIGNS
			PEDESTRIAN RAMP
SURVEY LINES		LEGEND	
EXISTING	PROPOSED	FUTURE	DESCRIPTION
			BOUNDARY
			RIGHT OF WAY
			LOT LINE
			EASEMENT
			SET BACK LINE
			SECTION LINE
			RESTRICTED ACCESS

HATCH PATTERNS			
	GRAVEL SURFACE		WETLAND
	BITUMINOUS SURFACE		WETLAND UPLAND BUFFER
	CONCRETE SURFACE		WETLAND MITIGATION
	RP RAP		PERMANENT TURF RESTORATION
	SELECT BACKFILL MATERIAL		PERMANENT WET BASIN SEEDING
	EROSION CONTROL BLANKET MDOT CATEGORY PER PLAN		UPLAND/NATURAL AREA SEEDING

### TOPOGRAPHIC SYMBOLS

	CATCH BASIN
	CATCH BASIN BEDRIVE
	FLARED END SECTION
	GATE VALVE
	HYDRANT
	WATER SERVICE
	WATER WELL
	MONITORING WELL
	CLEANOUT
	HAND HOLE
	MANHOLE OTHER THAN SANITARY OR STORM
	SANITARY OR STORM MANHOLE
	LAWN SPRINKLER VALVE
	LAWN SPRINKLER HEAD
	UTILITY POLE
	TRANSFORMER BOX
	FIBER OPTIC BOX
	ELECTRIC BOX
	NATURAL GAS METER
	LIGHT POLE
	SEAMPHONE
	TELEPHONE BOX
	CABLE BOX
	CAST IRON MONUMENT
	FOUND IRON PIPE
	AERIAL LAND MARK
	PIK NAIL
	CONTROL POINT
	SPIRE
	FLAG POLE
	TEST HOLE
	MARKED
	SIGN
	BOLLARD
	CONSERVATION POST
	DECIDUOUS TREE
	CONIFEROUS TREE
	SHRUB / BUSH

### EROSION & SEDIMENT CONTROL

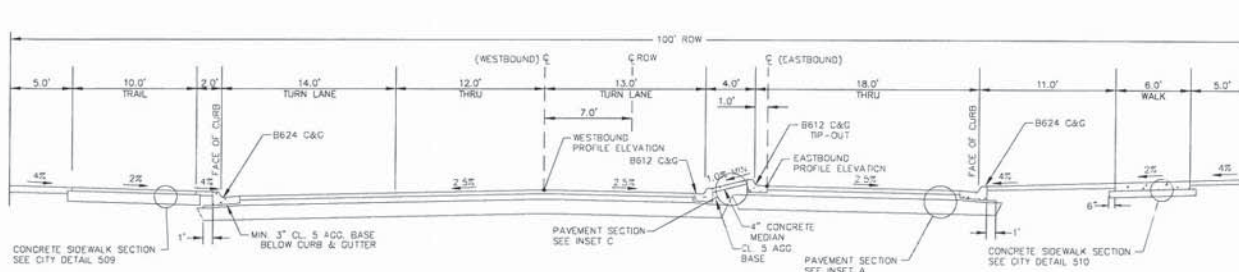
.....	STANDARD EROSION CONTROL
=====	HEAVY-DUTY EROSION CONTROL
◇◇◇◇◇◇◇◇◇◇◇◇◇◇◇◇◇◇	SECONDARY EROSION CONTROL FENCE
◇◇◇◇◇◇◇◇◇◇◇◇◇◇◇◇◇◇	EROSION CONTROL AT BACK OF CURB
-----+-----	TREE FENCE
	CATCH BASIN INLET PROTECTION
	STRAW BIO ROLLS
	ROCK BERM
	SUMPED RIP RAP PERMANENT ENERGY DISSIPATER
	DISCHARGE LOCATION
	GRAVEL CONSTRUCTION ENTRANCE
	TEMPORARY OUTLET FLOATING SKIMMER
	BASIN ACCESS B/C SLOPE MAX.

### CURB LEGEND

	= TOP OF CURB ELEVATION FOR BB CURB
	= TOP OF CURB ELEVATION FOR TYPOT BE CURB
	= BITUMINOUS ELEVATION
	= TYPOT 8812 CURB & GUTTER
	= 8812 CURB & GUTTER
	= 8824 CURB & GUTTER
	= BITUMINOUS EDGE

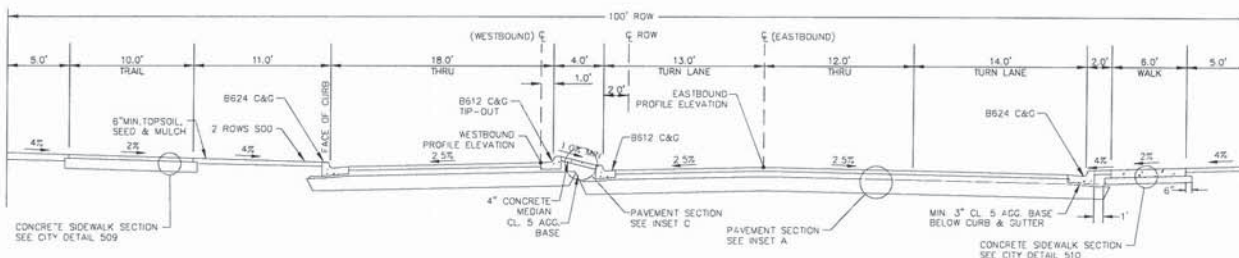
ABBREVIATIONS	
A	ALGEBRAIC DIFFERENCE
BV	BUTTERFLY VALVE
BWP	BEST MANAGEMENT PRACTICE
C	CENTER LINE
CB	CATCHBASIN
CBMH	CATCHBASIN MANHOLE
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
CS	CURB STOP
DIP	DUCTILE IRON PIPE
DT	DRAIN TILE
EL/ELEV	ELEVATION
EX	EXISTING
FCS	FLARED END SECTION
F-F	FACE TO FACE
FM	FORCE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





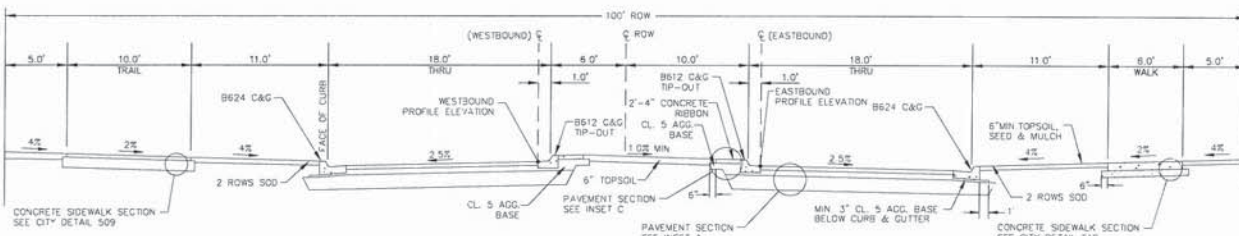
**TYPICAL 5TH STREET NORTH SECTION WESTBOUND TURN LANES**

TYPICAL SECTION (N.T.S.)  
ROW STATION 0+72 TO 2+31 & 7+22 TO 8+98



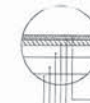
**TYPICAL 5TH STREET NORTH SECTION EASTBOUND TURN LANES**

TYPICAL SECTION (N.T.S.)  
ROW STATION 4+56 TO 6+31



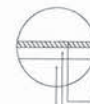
**TYPICAL 5TH STREET NORTH SECTION**

TYPICAL SECTION (N.T.S.)  
ROW STATION 10+19 TO 13+67



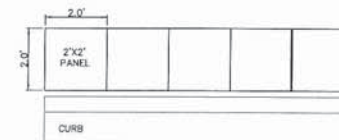
**INSET A PAVEMENT SECTION**  
TYPICAL SECTION (N.T.S.)  
2" MNDOT 2360 TYPE SP 9.5, MIXTURE 2B WEARING COURSE  
#2.57 TACK COAT  
2" MNDOT 2360 TYPE SP 12.5, MIXTURE 2B BITUMINOUS BASE  
8" CLASS 5 AGGREGATE BASE, 100% CRUSHED STONE MNDOT 3138  
24" SELECT GRANULAR FILL MNDOT 3149 2B  
APPROVED SUBGRADE (INCLUDES TEST ROLLING AND SUBGRADE PREPARATION)

**INSET A PAVEMENT SECTION**



**INSET C CONCRETE RIBBON SECTION**  
TYPICAL SECTION (N.T.S.)  
4" CONCRETE  
4" CLASS 5 AGGREGATE BASE, 100% CRUSHED STONE MNDOT 3138  
APPROVED SUBGRADE (INCLUDES TEST ROLLING AND SUBGRADE PREP AND SUBGRADE PREPARATION)

**INSET C CONCRETE RIBBON SECTION**

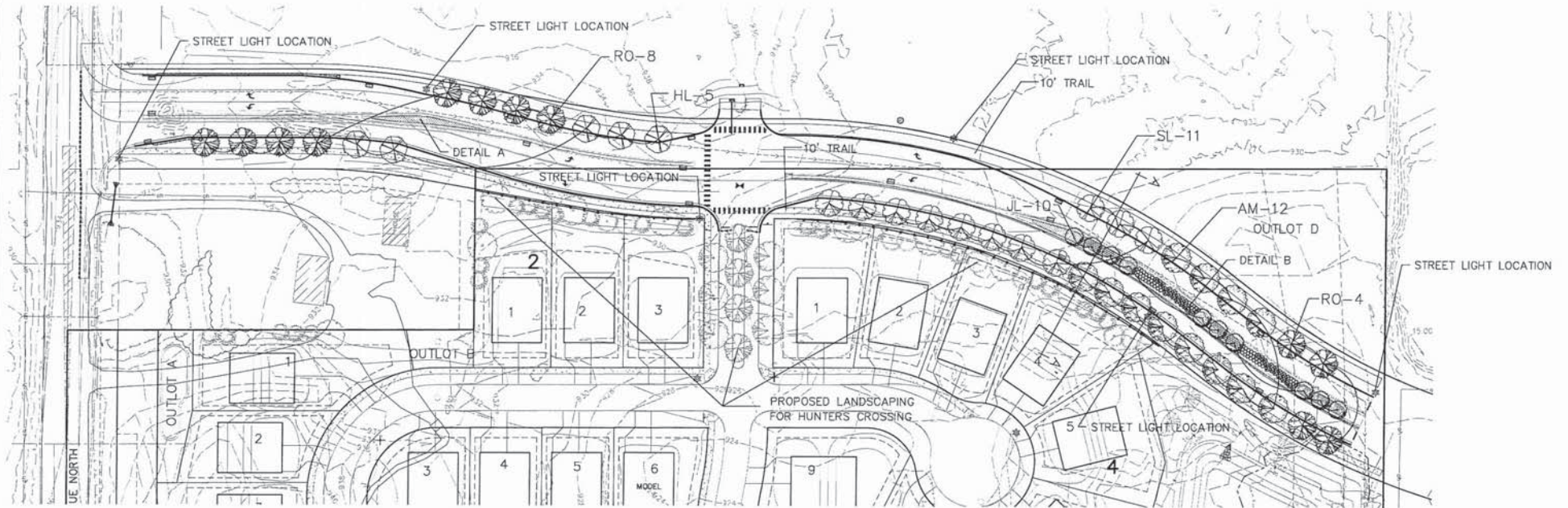


**NOTE:**  
1. ISOLATION JOINT AT 250' INTERVAL OR AT FIXED OBJECTS.  
2. COLOR PER LANDSCAPE PLAN.

**CONCRETE MEDIAN DETAIL**  
TYPICAL SECTION (N.T.S.)



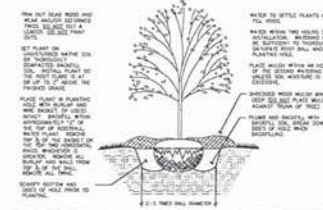




KEY	COMMON NAME/SCIENTIFIC NAME	ROOT	QUANTITY
OVERSTORY TREES			
AM	AUTUMN BLAZE MAPLE/ACER X FREEMANI 'AUTUMN BLAZE'	2.5" B&B	12
SL	SENTRY LINDEN/TILIA AMERICANA 'SENTRY'	2.5" B&B	11
HL	THORNLESS HONEYLOCUST/GLEDITSIA TRACANTHOS VAR INERMIS	2.5" B&B	5
RO	RED OAK/QUERCUS RUBRA	2.5" B&B	12
ORNAMENTAL TREES			
JL	JAPANESE TREE LILAC/SYRINGA RETICULATA (CLUMP)	6' B&B	10

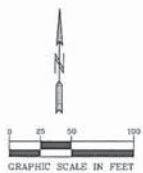
SEE SHEET L2 FOR DETAILS A AND B AND CROSS SECTION A-A'

#### DECIDUOUS TREE PLANTING DETAIL



#### LANDSCAPE NOTES

- THE LANDSCAPE CONTRACTOR SHALL NOTIFY 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 10 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 1-800-255-1111 PRIOR TO COMMENCING WORK. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE OWNER. NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONFLICTS TO FACILITATE PLANT RELOCATION.
- ALL CONTAINER MATERIAL TO BE GROWN IN THE CONTAINER A MINIMUM OF SIX (6) MONTHS PRIOR TO PLANTING ON SITE.
- NO PLANT MATERIAL SHALL BE INSTALLED UNTIL GRADING HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- ALL PLANT MATERIAL SHALL MEET THE STANDARDS FOUND IN THE AMERICAN ASSOCIATION OF HORTICULTURISTS-AMERICAN STANDARDS FOR NURSERY STOCK.
- DECIDUOUS AND CONIFEROUS TREES SHALL NOT BE STAKED, BUT THE LANDSCAPE CONTRACTOR MUST GUARANTEE STABILITY TO A WIND SPEED OF 40 MPH.
- THE LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM GUARANTEE OF ONE YEAR ONE (1) REPLACEMENT ON NEW PLANT MATERIALS. GUARANTEES SHALL BE ADDED UPON BY DEVELOPER/OWNER AND LANDSCAPE CONTRACTOR BEFORE SIGNING OFF AFTER INSTALLATION.
- IF THERE IS A DISCREPANCY BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND THE NUMBER SHOWN ON THE PLANT LIST, THE NUMBER SHOWN ON THE PLAN WILL TAKE PRECEDENCE.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WILDCUTS AND PLANTING SOIL QUANTITIES BY COMPLETING WORK SHOWN ON THE PLAN. THE LANDSCAPE CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN ON THE PLAN CORRECTLY.
- CONSTRUCTION SPACE FOR LAWN GRASS SHALL BE INDICATED 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 PERMANENT CLEAR UNOBSTRUCTED. ALL PESTERMIN AND WEEDS ACCESS TO BE MAINTAINED THROUGHOUT CONSTRUCTION PERIOD. ALL WEEDS 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.
- ESTIMATE OF MATERIALS OR SUPPLIES ON-SITE WILL NOT BE ALLOWED.



**PIONEER**engineering

2422 Enterprise Drive  
Minnetonka, MN 55120  
Tel: 952.831.1914  
Fax: 952.831.1948  
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: Amelia L. Thompson  
Reg. No.: 38755 Date: 5-4-2015

No. sheets: \_\_\_\_\_

Date: 5-4-2015  
Designed by: \_\_\_\_\_  
Drawn by: \_\_\_\_\_

LANDSCAPE PLAN

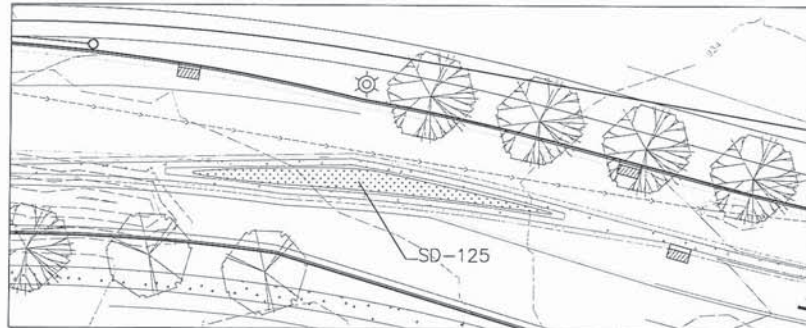
**RYLAND HOMES**  
1799 ANAHEIM DRIVE  
EDEN PRAIRIE, MINNESOTA 55444

**5TH STREET NORTH**  
LAKE ELMO, MINNESOTA

L1 of 2



DETAIL A



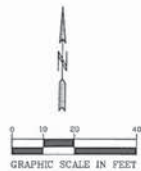
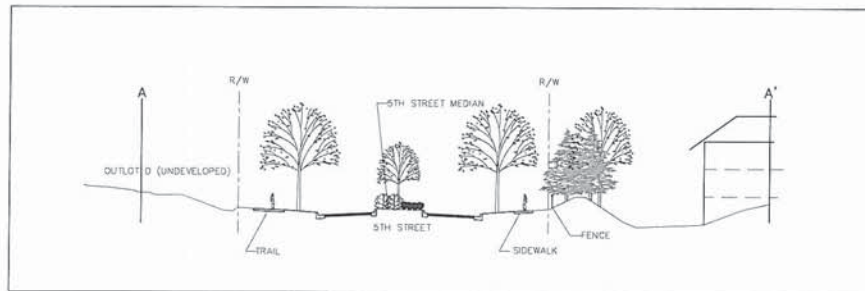
KEY	COMMON NAME/SCIENTIFIC NAME	ROOT	QUANTITY
SHRUBS			
GBC	GLOSSY BLACK CHOKEBERRY/ARONIA MELANOCARPIA	#3 POT	34
GFS	GOLDFLAME SPIREA/SPIRAEA X BUMALDA 'GOLDFLAME'	#3 POT	29
RR	RUGOSA ROSE/ROSA RUGOSA	#3 POT	35
PERENNIALS			
AJ	AUTUMN JOY SEDUM/SEDUM SPECTABILE 'AUTUMN JOY'	#1 POT	160
KF	KARL FOERSTER/CALAMAGROSTIS ACUTIFOLIA	#1 POT	160
SD	STELLA D'ORO DAYLILY/HERMOCAULIS 'STELLA D'ORO'	#1 POT	275

## NOTES:

PERENNIAL AREAS TO BE AMENDED WITH COMPOST/PLANTING SOIL TO A DEPTH OF AT LEAST 6" MEDIAN PLANTING BEDS TO BE MULCHED WITH SHREDDED WOOD MULCH TO A DEPTH OF 3" NO WEED BARRIER USED BENEATH WOOD MULCH PREEN (OR EQUIVALENT) TO BE USED AT TIME OF PLANTING AND ACCORDING TO PACKAGE INSTRUCTIONS AS PART OF A REGULAR ONGOING MAINTENANCE PROGRAM. BOULEVARD AREAS BETWEEN ROAD AND TRAIL/SIDEWALK AND TRAIL/SIDEWALK AND PROPERTY LINE TO BE SODDED MEDIAN PLANTINGS TO BE TEMPORARILY IRRIGATED FOR AT LEAST ONE GROWING SEASON OR UNTIL PLANTINGS ARE ESTABLISHED. SODDED BOULEVARDS TO BE IRRIGATED AS PART OF ADJACENT DEVELOPMENTS. IRRIGATION DESIGNED BY OTHERS. MAINTENANCE (INCLUDING IRRIGATION) OF 5TH STREET LANDSCAPING TO BE RESPONSIBILITY OF CITY OF LAKE ELMO

MEDIAN PLANTS CHOSEN FOR LOW MAINTENANCE TENDANCIES ALONG WITH MODERATE TO HIGH SALT TOLERANCE.

CROSS-SECTION A-A'



**PIONEER**engineering

2422 Enterprise Drive  
Mendota Heights, MN 55120  
(651) 681-1914  
Fax: 651-948-1488  
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: Joseph L. Thompson  
Lic. No.: 36753  
Date: 04-2015

Drawings

Sheet: LA-2015  
Designed: JR  
Drawn: JB

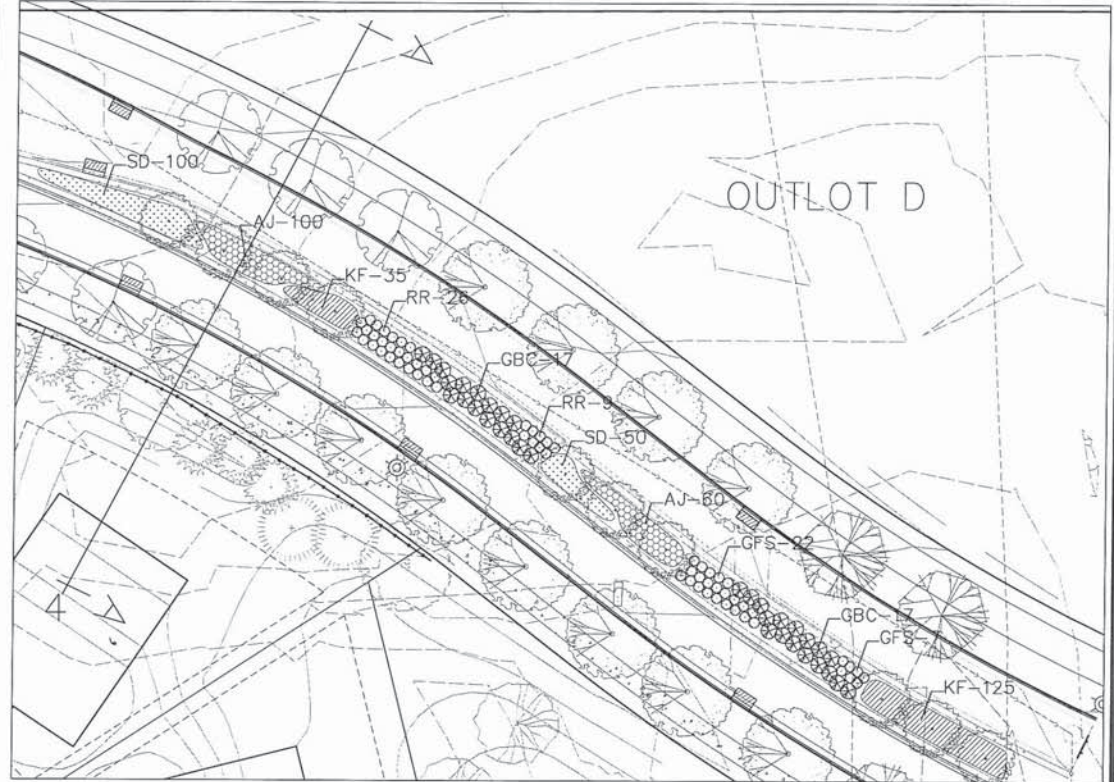
LANDSCAPE PLAN

RYLAND HOMES  
7799 ANAGRAM DRIVE  
EDEN PRAIRIE, MINNESOTA 55344

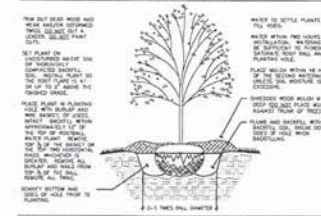
5TH STREET NORTH  
LAKE ELMO, MINNESOTA

L2 of 2

DETAIL B



DECIDUOUS TREE PLANTING DETAIL



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 VERIFY THE LANDSCAPE ARCHITECT'S PROPOSED PHYSICAL EXISTING 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 EXCEPT THAT ONE CALL, 1-800-4-A-UTILITY 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. VERIFY THE LANDSCAPE ARCHITECT'S OF ANY CONFLICTS TO PROPOSED PLANTING.
- 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 NORTHERN-AMERICAN STANDARDS FOR NURSERY STOCK.
- ALL CONTAINER MATERIAL TO BE GROWN IN THE CONTAINER A MINIMUM OF SIX (6) MONTHS PRIOR TO PLANTING ON SITE.
- DECIDUOUS AND CONIFEROUS TREES SHALL NOT BE STAKED, BUT THE LANDSCAPE CONTRACTOR MUST GUARANTEE STABILITY TO A WIND SPEED OF 50 MPH.
- THE LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM GUARANTEE OF ONE YEAR (1) YEAR REPLACEMENT ON NEW PLANT MATERIALS. GUARANTEE SHALL BE ISSUED UPON OR OVERSIGHT/REPAIRS AND LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY PLANTS WHICH ARE DEEMED UNSATISFACTORY WITHIN THREE (3) MONTHS AFTER INSTALLATION.
- IF THERE IS A DISCREPANCY BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND THE NUMBER SHOWN ON THE PLANT LIST, THE NUMBER SHOWN ON THE PLAN WILL TAKE PRECEDENCE.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MULCHES AND PLANTING SOIL QUANTITIES TO COMPLETE WORK SHOWN ON THE PLAN. THE LANDSCAPE CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN ON THE PLANT SCHEDULE.
- CONCRETE SPACES FOR LAWN GRASS SHALL BE INSTALLED PRIOR TO PLANTING.
- 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 PLANTINGS CLEAN UNLESSSED, ALL PESTICIDES AND HERBICIDES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION PERIOD. ALL WEEDS SHALL BE REMOVED PRIOR TO THE SITE BEING OPENED TO EXISTING FACILITIES SHALL BE REPAIRS AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES, REGULATIONS AND PERMITS REGARDING THIS WORK.
- STORAGE OF MATERIALS OR SUPPLIES ON-SITE WILL NOT BE ALLOWED ON LOT 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.