THE CITY OF
LAKE ELMO

PLANNING COMMISSION
DATE: 8/24/15
AGENDA ITEM: 5B – BUSINESS ITEM
CASE # 2015-28

ITEM: Savona 3rd Addition Residential Subdivision – Final Plat

SUBMITTED BY: Kyle Klatt, Planning Director KK

REVIEWED BY: Jack Griffin, City Engineer

SUMMARY AND ACTION REQUESTED:

The Planning Commission is being asked to consider a Final Plat request from Lennar Corporation for the third phase of a planned 310 unit residential development to be located on 112.6 acres west of Keats Avenue and within Stage 1 of the City's I-94 Corridor Planning Area. The final plat will include 21 single-family lots and 99 single-family attached units, all of which will be accessed via the 5th Street Parkway off of Keats Avenue. The City has previous granted approval of a Conditional Use Permit to allow the single-family attached units that are accessed via a series of private roads. Staff is recommending approval of the request subject to compliance with a series of conditions as listed in this report.

GENERAL INFORMATION

Applicant: U.S. Home Corporation, D/B/A Lennar, 16305 36th Avenue North, Suite 600, Plymouth, MN

Property Owners: U.S. Home Corporation, D/B/A Lennar, 16305 36th Avenue North, Suite 600, Plymouth, MN

Location: Outlots C and F of Savona 2nd Addition, north of I-94, west of Keats Avenue, and south of the Hammes West development site and Goose Lake. PID Numbers 34.029.21.42.0073 and 34.029.21.41.0055.

Request: Application for final plat approval of a 120-unit residential subdivision to be named Savona 3rd Addition, which is comprised of 99 single-family attached units and 21 single family detached lots.

Existing Land Use and Zoning: Agricultural land, land that has been mass graded for residential development. Current Zoning: LDR and MDR

Surrounding Land Use and Zoning: North – active mining and gravel operation that has been reclaimed for a future residential subdivision; west and south – agricultural land; east – Savona 1st and 2nd Additions.

Comprehensive Plan: Urban Low Density Residential (2.5 – 3.99 units per acre) and Urban Medium Density Residential (4 – 7 units per acre)

History: Sketch Plan review by Planning Commission on 12/10/12. EAW approved by the City Council on 7/2/13. Preliminary Plat approved on 8/6/13. Final Plat for first addition approved on 2/18/14. Final Plat for second addition approved on 9/16/14.

Deadline for Action: Application Complete – 8/12/15
60 Day Deadline – 10/11/15
Extension Letter Mailed – No
120 Day Deadline – N/A

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 Lennar Corporation for final plat approval of the third phase of the Savona residential development (Savona 3rd Addition). The final plat includes 21 single family residential lots, 99 single family attached units (townhouses), and the infrastructure necessary to support the future homes on these lots. The City Council approved the Savona Preliminary Plat on August 6, 2013, which covered 113 acres of land within the I-94 Corridor planning area. There are 310 single family and multi-family residential units planned within the entire subdivision, and the final plat covers portion of the overall total of units that will eventually be platted. Lennar has finalized its purchase of the land included in the final plat area, and is acting as the sole applicant for this request.

With the third addition, the total number of homes that will have been platted within the Savona development is 233 residential units, which includes 112 single family lots and 121 single-family attached lots. Upon approval of the final plat, there will be 77 single family lots remaining in the subdivision to be platted.

The majority of the third addition comprises the remaining build-out of the townhouse area south of 5th Street. The initial 22 townhouses were platted with the second addition, along with the initial leg of 5th Street Lane North that will provide a public road connection to all of the private townhouse access streets. Because of revisions to the storm water plan that have previously been required by the watershed district, there have been some changes to the ponding and infiltration system within the preliminary plat area. The most significant of these changes resulted in an expansion of the storm water pond in the southeast corner of the townhouse area (Outlot J of 2nd Addition). In order to accommodate a larger pond in this area, some of the townhouse lots around the pond were reconfigured to provide the needed room for the pond. The location of the public road through this area remains unchanged, and the reconfiguration resulted in one less townhouse unit than was approved at the preliminary plat stage. Staff has deemed that the overall changes are consistent with the preliminary plat as approved.

The applicant has submitted detailed construction plans for related to sanitary sewer, water main, storm sewer, grading, drainage, erosion control, landscaping, and other details that have been reviewed by the City Engineer. The grading plans cover the remaining portions of Savona that have not yet been developed, and the applicant has entered into a grading agreement with the City to start this work prior to final plat approval. All of the other construction and development plans are specific to the third addition lots. Please note that the applicant's grading plans require grading work to occur on adjacent property, but the approved plans only authorize work on the Lennar site. The

applicant has indicated that they will be securing temporary grading easements from any affected neighboring parcels, and the City's approval of this work will need to be contingent upon the securing of these easements.

One of the issues that had been a significant part of the discussions between the developer and the City concerning Savona is the construction and platting of 5th Street through the subdivision area. The City has maintained a position that 5th Street is an integral component of development within the I-94 corridor, and that private developers will need to build this road as part of their subdivisions. The first leg of 5th Street west of Keats Avenue is being constructed as part of the first addition plans, while another further extension is under construction as part of the second addition (up to Junco Road North). The City further adopted a condition of approval in response to a request by Lennar to change the preliminary plat requirements for secondary access that required Lennar to plat and build 5th Street to the furthest extent west that any lot is platted. The proposed development plans for third addition have therefore been updated to depict plans for 5th Street that will extend to the western boundary of the third addition. The developer has secured an easement for public access and maintenance for all future portions of 5th Street through Savona, and Staff has found that this easement meets the spirit and intent of the City's previous conditions related to the construction of 5th Street. The road will need to be platted once the Dale property to the south of Savona is developed.

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 Savona 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 Savona has been updated to be consistent with the City's Comprehensive Plan. The portions of the plat that are planned for single family detached housing are zoned LDR – Low Density Residential, while the proposed townhouses are located within a MDR – Medium Density Residential Zoning District. As noted in the City's preliminary plat review, the single family and townhouse lots fall within the density ranges allowed in the Comprehensive Plan. Please note that as part of the MDR zoning district requirements, townhouses that do not have frontage on a public street may only be allowed with a Conditional Use Permit (CUP). The townhouses shown in the attached plat will have access to a private road which then connects to a proposed public road that will loop through the portion of the site south of 5th Street. The City has previously approved a Conditional Use Permit that allows the use of a private road to serve the individual townhouse lots in Savona.

In order to provide further clarity concerning the future phases of the townhouse area, the applicant has previously prepared updated plans for the overall townhouse area as part of the second addition submittal. These plans were found to not substantially alter the preliminary plat for the townhouses, and the 3rd Addition plans are consistent with this submission.

Staff has reviewed the final plat and found that it is consistent with the preliminary plat that was approved by the City. The developer has previously updated the preliminary plan submissions to comply with the conditions of approval, and the final plat application incorporates these updates as well. Please note that the final plat now includes proposed street names as recommended by the Planning Department.

The City Engineer has reviewed the final plat, and his comments are attached to this report. Although there are some additional revisions to the final construction plans that will need to be addressed by the applicant, the majority of these revisions can be made before the City releases the

final plat for recording and authorizes construction to commence on the site. The other requirements concerning grading easements will need to be addressed prior to the start of street and utility construction.

REVIEW AND ANALYSIS

The preliminary plat for Savona was approved with several conditions, which are indicated below along with Staff's comments on the status of each. There are additional comments concerning the overall development in addition to any general items and issues that have not otherwise been addressed. 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) **Secondary Access**. The preliminary plat included a condition that requires the construction of a secondary access into Savona, and that no more than half of the planned lots (155) could be platted until such time that this access was provided. The developer successfully petitioned the City to amend this condition earlier this year; however, there were two conditions attached to this approval. The first required that 5th Street be platted and constructed to the western most portion future subdivisions and the second required all necessary utility work to be completed for the second addition (this work is now part of the second addition plans). The limit was also changed from a platting restriction to a building permit restriction. In practice, this means that the City will not issue more than 155 permits within Savona (out of the 233 total lots that would be final platted upon the approval of the third addition) until a second access is provided. Lennar has indicated that the fourth and final project phase will include all remaining lots and the rest of 5th Street to the western boundary with Boulder Ponds. Because Boulder Ponds includes a connection to Hudson Boulevard, the fourth addition will satisfy building permit restriction.

2) **5th Street**. Lennar has previously granted an easement to the City for all portions of 5th Street within the Savona subdivision that is located outside of the first addition. Although the conditions noted the preceding section specify that 5th Street must be *platted* as part of future additions, Staff has found that the existing easement will provide for proper public access and the ability to maintain this road indefinitely into the future and that the spirit and intent of this requirement has therefore been met by the applicant. The third addition plans include the construction of 5th Street to the western-most extent of the plat. When development occurs on the parcel south of Savona, 5th Street will need to be incorporated into any future subdivisions on this land.

3) **Grading Easements**. The grading plans as approved by the City do not allow any grading work to occur on adjacent parcels. The developer's ultimate plans for these areas do include some grading activity on these adjacent parcels. As noted in the City Engineer's review comments, temporary off-site grading easements must be secured from MFC Properties, the Ebertz family, and DPS-Lake Elmo (Alan Dale) to allow this grading to occur. The Engineer is recommending that signed easement documents by provided to the City prior to the start of any street and utility construction work within Savona 3rd Addition.

4) **Other Issues**. 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.

Please also note that the applicant provided a response to the preliminary plat conditions with the first addition final plat; this response has not been duplicated for this report.

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; b) the applicant shall pay all fees associated with the preliminary plat; c) the applicant shall submit a revised preliminary plat and plans meeting all conditions of approval. All of the above conditions shall be met prior to the City accepting an application for final plat and prior to the commencement of any grading activity on the site. ***Comments: a) all title work has previously been reviewed by the City Attorney; b) the applicant has submitted an escrow payment related to the preliminary plat and final plat applications that are being used to cover Staff and consultant expenses related to the City's review; c) a revised preliminary plat and plans has been approved by the City and was found to address all previous comments. The applicant has commenced mass grading of the site and updated the grading plans in accordance with changes required by the two watershed districts and City Engineer..***

2) The applicant shall dedicate a minimum of 30 feet of land around the "Exception" parcel in the northwest portion of the Savona subdivision to allow for the construction of an eight-foot bituminous trail to the western edge of the subdivision and to allow for sufficient room for drainage and utilities adjacent to "Street A". ***Comments: The preliminary plat and plans have been revised to address this condition. Although the applicant is proposing to use a portion of the street right-of-way for the trail, there is a 30-foot area around all portions of the exception parcel for the trail. This proposed configuration is a reasonable compromise to still provide access to the exception parcel. The 3rd Addition does not include any of the area around the exception parcel.***

3) The applicant shall provide for a minimum green belt/buffer of 100 feet around all of the adjacent Stonegate subdivision, and must revise the preliminary plat in the vicinity of Lots 1 and 2 of Block 10 to properly account for this buffer. ***Comments: The plat has been adjusted in this area, but there are still two lots (Lots 1 and 2, Block 1 of the final plat) that are within 65 feet of the boundary with Stonegate. The second addition plat was updated to depict an outlot in the place of two buildable parcels in this area. The developer will need to secure a buffer easement or otherwise make revisions to the planned lots in order to comply with this requirement. This condition does not impact any lots within the third addition.***

4) The eight-foot bituminous trail located within Outlot A shall be moved off of the property line of the adjacent Stonegate subdivision and shall be designed to continue into the property to the north and to provide a connection to "Street A". ***Comments: The preliminary plans have been updated to address this requirement. The construction plans for 3rd Addition do not show any trails – these will need to be included in the plans for the fourth addition.***

5) The trail within the green belt/buffer area is encouraged to be located within the southern one-third or eastern one-third of the buffer and as close as possible to the lots within the Savona

subdivision. ***Comments: The preliminary plans have been updated to address this requirement. The applicant has noted that the "design and plans have been revised to shift the trail to the southern portion of the buffer outlot, except as otherwise required due to grading, drainage, and topography challenges. The trail meanders to provide for a pleasant user experience, avoids the existing wetland, and minimizes impacts on property owners on either side". No portion of this trail is located within the third addition.***

6) The sidewalk along "Street A" must continue along this street until its termination point at the northern boundary of the subdivision. ***Comments: The preliminary plans have been updated accordingly, and this condition was addressed as part of the second addition review.***

7) The applicant shall work with the City and Washington County to identify and reserve sufficient space for a future trail corridor along the western right-of-way line of Keats Avenue. ***Comments: A trail alignment is planned for construction as part of the first addition. No trail is planned south of 5th Street.***

8) The landscape plan shall be updated to include tree protection fencing in all areas where grading will be near trees intended for preservation. ***Comments: Tree preservation fencing is depicted on the plans for the trees within Outlot G of the 1st Addition. This outlot is located within the townhouse area and is being grading as part of the third addition.***

9) The landscape 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. ***Comments: Staff has previously reviewed the tree preservation and protection plan and found the plan to be in compliance with the City Code. The proposed boulevard plantings conform to the City's planting requirements for streets. The City's landscape architecture consultant has previously reviewed the overall landscape plan for Savona.***

10) Sidewalks shall be required on both sides of the public street providing access to the multi-family housing portion of the subdivision. ***Comments: The preliminary plans have been updated and the final construction plans for the townhouses within 3rd Addition include a sidewalk on both sides of the street.***

11) The applicant shall be responsible for the construction of all improvements within the Keats Avenue (CSAH 19) right-of-way as required by Washington County and further described in the review letter received from the County dated July 3, 2013. The required improvements shall include, but not be limited to: construction of a new median crossing, closure and restoration of the existing median crossing in this area, continuation of the planned ten-foot bituminous trail through the median, tum lanes, and other improvements as required by the County. ***Comments: This requirement was addressed with the first addition.***

12) The applicant shall observe all other County requirements as specified in the Washington County review letter dated July 3, 2013. ***Comments: The final construction plans have been revised in response to these comments.***

13) The developer shall follow all of the rules and regulations spelled out in the Wetland Conservation Act, and shall acquire the needed permits from the appropriate watershed districts prior to the commencement of any grading or development activity on the site. ***Comments: The applicant has received a permit from the Valley Branch Watershed District (attached) for the***

grading work proposed in the final plans. This permit includes conditions that must be met prior to the commencement of any grading work on the site. Any revisions to the preliminary plans required by the watershed district are included in the attached plans.

14) The applicant shall submit revised preliminary plans that incorporate the changes made to the western portion of the preliminary plat, and specifically, the rearrangement of lots around the "Exception" parcel. ***Comments: The revised lot configuration has been included in the updated preliminary plans, this condition is not applicable to the 3rd Addition.***

15) 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 have been created and 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. A separate agreement between the City and developer concerning these areas was created for the first and second additions, this agreement should also be used for the 3rd Addition.***

16) 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 developer paid a cash payment in lieu of land dedication in the amount of $209,429 as part of the developer's agreement for the first addition. This amount covers all of the area included in the preliminary plat.***

17) Any land under which public trails are located will be accepted as park land provided the developer constructs said trails as part of the public improvements for the subdivision. ***Comments: The dedication of land associated with was reviewed in accordance with the preceding condition.***

18) The applicant shall provide for an active recreation area (either public or private) within the multi-family portion of the subdivision. This area shall be sufficient for a small play structure or other similar improvement subject to review and approval by the Planning Director. ***Comments: The revised preliminary plans include a small play area within the multi-family area. The play is included as part of the third addition plans, and Staff is recommending that these improvements be installed at the time the townhouses on Blocks 11 and 12 are constructed.***

19) No more than half of the residential units depicted on the preliminary plat (155) may be approved as part of a final plat until a second access is provided to the subdivision, either via a connection to Hudson Boulevard to the south, Inwood Avenue (CSAH 13) to the west, or back to Keats Avenue (CSAH 19) through the property to the north of Savona. ***Comments: This condition was revised as noted in the summary of critical conditions. As amended, the developer will be able to obtain up to 155 building permits for the entire subdivision until a secondary access out of the development is provided.***

20) A future realignment of 5th Street along the western border of the plat may be considered by the City Council as part of the final plat submission for this are provided the realignment does not

result in any significant modifications to the preliminary plat. ***Comments: the City has approved a lot line adjustment that will allowed for this realignment. The road right-of-way for 5th Street within Savona now aligns with the right-of-way within the adjacent Boulder Ponds development.***

21) The applicant must enter into a separate grading agreement with the City prior to the commencement of any grading activity in advance of final plat and plan approval. The City Engineer shall review any grading plan that is submitted in advance of a final plat, and said plan shall document extent of any proposed grading on the site. ***Comments: The applicant did enter into this agreement and has been grading the site in accordance with the approved plans. The grading work for first and second addition has been completed and homes are under construction in each of the earlier subdivisions. The grading work for third addition has commenced in accordance with the approved plans.***

22) The preliminary grading, drainage and erosion control plan must be revised to address the comments from the City Engineer in his review letter dated July 9, 2013 regarding the size of specific ponds in relation to the drainage areas that are served by these ponds. ***Comments: The revised grading, erosion control, and storm water management plans address these comments. The plan has been subject to further revisions based on comments from the Valley Branch Watershed District.***

23) The preliminary plans must be revised to incorporate all proposed improvements within the 5th Street right-of-way. All improvements as requested by the City shall be included in these plans and the design shall be consistent with City specifications and with the concept plan prepared for the City by Damon Farber and Associates. ***Comments: The City Council recently approved a final set of design standards for 5th Street, and these standards must be included in the landscape plan for 5th Street for all portions of the project area, including the third addition.***

24) All required modifications to the plans as requested by the City Engineer in a review letter dated July 9, 2013 shall be incorporated into the plans prior to consideration of a final plat. Specific requirements include, but are not limited to, the following:

    a. The applicant must provide the city a letter of approval to perform the proposed work in the BP Pipeline easement. Work includes installation of storm sewer pipe, grading activities, and relocation of the High Pressure Gas line, if necessary.

    b. The applicant must provide the city a letter of approval to perform the proposed work in the Electrical Transmission easement areas. Work includes installation of storm sewer pipe, grading activities, and storm water ponding.

    Comments: Neither of these conditions are pertinent to the 2nd Addition.

25) The City will not accept an application for final plat approval until the 429 public improvement project for Section 34 has been ordered by the City Council. If the City Council does not order this project, the applicant must revise the preliminary plans to provide adequate utilities to serve the subdivision. Any such plan revisions will be subject to review and approval by the City Council. ***Comments: The Section 34 public improvement project has been ordered by the City and the project is complete.***

26) The applicant shall secure any necessary permits for the multi-family area, including but not limited to a conditional use permit to allow for single family detached residences that do not have frontage on a public street, at the time a final plat is submitted for this area. ***Comments: The City has previously approved a Conditional Use Permit for the townhouses.***

27) The applicant is encouraged to preserve or re-use as many trees as possible that are currently located on the former golf facility property and to incorporate these trees as part of the landscape plan for the Savona subdivision. ***Comments: The applicant has stated their intent to preserve these trees if possible, however, based on observed site conditions, it does not appear that many of these trees will be salvageable due to the sandy soil conditions.***

28) The applicant shall work with the Planning Director to name all streets in the subdivision prior to submission of a final plat. ***Comments: The applicant has agreed to the street names as proposed by Staff. The proposed names have been designed to comply with the County's uniform addressing system.***

Staff is recommending that the conditions noted above that pertain to the final plat and that have not yet been addressed by the applicant should be adopted with the final plat. The City Engineer's review letter does identify several issues that need to be addressed by the developer in order for the City to deem the final plans complete; however, nearly all of these concerns are related to the construction plans and should not have any bearing on the final plat. Staff is recommending that City Officials not sign the final plat mylars until the City's construction plan review is finalized and all necessary easements are documented on the final plat.

Other general comments from Staff concerning the proposed final plat include the following:

- **Townhouse Area**. The final plat includes the remainder of the planned townhouses within Savona that were not platted with the 2nd Addition. The townhouses have been designed to comply with the City's minimum requirements for lot area and common open space within such developments. The preliminary plat was approved with the private street concept, and the proposed layout will provide adequate access to each home while minimizing the amount of public infrastructure needed to serve each home.

- **Trails**. Both the 2nd and 3rd Addition subdivision included portions of the land on which the planned trail system within Savona will be located, but did not include all of the land that will be necessary to complete the trail system. Staff is recommending that all trails that have not been constructed with previous additions be completed as part of any subsequent plats.

- **Townhouse Area Retaining Wall**. The revised grading and storm water plan for Outlot J in the southeast portion of the townhouse area now depicts a 10-12 foot retaining wall that will separate the storm water pond from the back of the planned townhouses. This wall must be designed in accordance with engineering standards and will need to comply with any applicable building codes concerning setbacks and public safety measures. Although the retaining wall is not a preferred option for grading in this area, the developer is requesting the proposed wall in order to accommodate the expanded pond without substantial revisions to the layout of the townhouses.

Based on the above Staff report and analysis, Staff is recommending approval of the final plat with several conditions intended to address the outstanding issues noted above and to further clarify the City's expectations in order for the developer to proceed with the recording of the final plat.

The recommended conditions are as follows:

Recommended Conditions of Approval:

1) Final grading, drainage, and erosion control plans, utility plans, sanitary and storm water management plans, and street and utility construction plans shall be reviewed and approved by the City Engineer prior to the recording of the Final Plat. All changes and modifications to the plans requested by the City Engineer in review memo dated 8/20/15 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. These improvements shall include the play equipment located in the private park area north of Block 11.

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

4) A Common Interest Agreement concerning management of the common areas of Savona and establishing a homeowner's association shall be submitted in final form to the Community Development Director before a building permit may be issued for any structure within this subdivision. The applicant must create a separate agreement for the single-family attached lots. Said agreements shall comply with Minnesota Statues 515B-103, and specifically the provisions concerning the transfer of control to the future property owners. 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 updated to address the review comments from the City's landscape architecture consultant and shall incorporate all design elements as specified in the City's 5th Street Standard Details and Design Book.

6) The developer shall provide signed easement documents to verify that the proposed grading activity on property presently owned by MFC Properties, Walter Ebertz, and DPS-Lake Elmo, LLC will be allowed.

7) All multi-purpose trails that are depicted on the approved preliminary development plans shall be constructed as part of any subsequent final plat within Savona.

8) The proposed retaining wall east of Block 13 must be designed by a professional engineer registered in the state of Minnesota and must comply with all applicable building codes and any other authorities with jurisdiction for the wall and proposed grading adjacent to the wall.

9) The final plat must be updated to document the recorded access and roadway easement over the future extension of 5th Street adjacent to the Savona subdivision.

10) The developer is encouraged to incorporate elements from the Lake Elmo Theming Study into the final design of the community mailboxes within InWood.

DRAFT FINDINGS

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

- That the proposed Final Plat for Savona 3rd Addition consists of the creation of 21 single-family detached and 99 single-family attached residential structures.
- That the Final Plat is consistent with the Preliminary Plat and Plans as approved by the City of Lake Elmo on August 8, 2013 and revised on November 25, 2013.
- That the Final Plat is consistent with the Lake Elmo Comprehensive Plan and the Future Land Use Map for this area.
- That the Final Plat complies with the City's Urban Low Density Residential and Medium Density Residential zoning districts.
- That the Final Plat complies with all other applicable zoning requirements, including the City's landscaping, storm water, sediment and erosion control and other ordinances, except as noted in this report or attachments thereof.
- That the Final Plat complies with the City's subdivision ordinance.
- That the Final Plat is consistent with the City's engineering standards with the plan revisions as requested by the City Engineer.
- That the Permanent Public Street Easement Agreement as filed and recorded with Washington County sufficiently addresses previous conditions of approval for Savona that required the platting of 5th Street to coincide with future project phases.

RECCOMENDATION:

Staff recommends that the Planning Commission recommend approval of the Final Plat for Savona 3rd Addition with the 10 conditions of approval as listed in the Staff report. Suggested motion:

"Move to recommend approval of the Savona 3rd Addition Final Plat with the 10 conditions of approval as drafted by Staff"

ATTACHMENTS:

1. Application Forms
2. City Engineer Review Letter
3. Valley Branch Watershed District Review
4. Permanent Public Street Easement Agreement
5. Savona 3rd Addition Final Plat

6. Construction Plans: Grading, Drainage, and Erosion Control
7. Construction Plans: Sanitary Sewer, Water Main, Storm Sewer and Streets
8. Savona 3rd Addition Landscape Plans

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

SAVONA 3rd

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

THE CITY OF
LAKE ELMO

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

FINAL PLAT APPLICATION

Applicant: PAUL TABONE - LENNAR CORPORATION
Address: 16305 36th AVE N, STE 600, PLYMOUTH, MN 55446
Phone #: 952 - 249 - 3086
Email Address: PAUL.TABONE@LENNAR.COM

Fee Owner: U.S. HOME CORPORATION DBA LENNAR
Address: _____
Phone #: _____
Email Address: _____

Property Location (Address and Complete (long) Legal Description: SAVONA - TOWNHOME PORTION IN 3rd ADDITION (REFER TO PLAT)

General information of proposed subdivision: SUBSEQUENT PHASE OF SAVONA - FINAL PLAT.

WE ALSO REQUEST EASEMENT VACATION ALONG SOUTH SIDE OF TOWNHOME AREA

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: Paul J. Tabone Date: 5/12/2015

Fee Owner Signature _____ Date: 5/12/2015

THE CITY OF
LAKE ELMO

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

AFFIRMATION OF SUFFICIENT INTEREST

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

Name of applicant PAUL TABONE - LENNAR
(Please Print)

Street address/legal description of subject property SAVONA - 3rd ADDITION

Signature

5/12/2015
Date

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

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

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

THE CITY OF
LAKE ELMO

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

ACKNOWLEDGEMENT OF RESPONSIBILITY

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

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

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

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

Signature of applicant Paul J. Tarbone Date 5/15/2015

Name of applicant PAUL TARBONE - LENNAR Phone 952-249-3086
(Please Print)

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

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: August 20, 2015

To: Kyle Klatt, Planning Director
Cc: Ryan Stempski, P.E., Assistant City Engineer
From: Jack Griffin, P.E., City Engineer

Re: Savona 3rd Addition – Final Plat Review

The submittal for this review included the following items:

- Savona 3rd Addition Final Plat, Sheets 1-5, not dated.
- Construction Plans for Sanitary Sewer, Water Main, Storm Sewer and Streets prepared by Westwood Professional Services, Inc. dated 08.12.2015.
- Construction Plans for Grading and Erosion and Sedimentation Control, dated 08.06.2015.
- Landscape Plans, dated 07.20.2015. Not reviewed.

STATUS/FINDINGS: An engineering review has been completed for the Savona 3rd Addition Final Plat and Construction Plans. Please see the following comments relating to the Final Plat application.

FINAL PLAT – SAVONA 3RD ADDITION

- Off-site grading easements are required from MFC Properties, Ebertz, and DPS-Lake Elmo LLC. Signed easement documents for all off-site easements and right-of-way necessary for the project must be submitted to the City to verify that the project can be constructed as proposed. Signed easement documents must be provided before the construction plans can be approved and the start of any construction work.
- The Final Plat is not complete as submitted. Final Plat approval must be contingent upon an updated Final Plat to include the permanent street easement for 5th Street North.
- The Final Grading Plans are not complete as submitted. Final grading plans must be updated to show final grades for the project including any off-site grading on adjacent properties necessary to complete the project. Off-site grading easements must be shown on the grading, site and utility plans.
- The Street and Utility Construction Plans must be updated to show the construction of 6th Street to the 3rd Addition plat boundary along Lot 1, Block 1.
- The proposed temporary turnaround location for 6th Street Lane must be extended beyond the Savona 3rd Addition boundary to accommodate final site conditions for Lots 1 and 8, Block 2. The temporary turnaround detail must be changed from City Standard Detail No. 807A to No. 807B. A temporary access and utility easement must be provided to the City accordingly.
- Sheet No. 15 – A minimum 15 foot easement is required around all sides of CB-253 and along each side of the storm sewer run from CB-253 to CBMH-252.
- The temporary utility easement for the trunk watermain along the west side of Lot 1, Block 2 must be expanded to a minimum of 15 feet from the pipe centerline.

FINAL CONSTRUCTION PLANS & SPECIFICATIONS

- No construction, except for on-site grading operations may occur until the applicant has received City Engineer approval for the Final Construction Plans for Grading, Drainage and Erosion Control and Final Construction Plans for Street and Utilities; the applicant has obtained and submitted to the City all applicable permits needed for the project; and a preconstruction meeting has been held by the City's engineering department.
- The Final Plat shall not be recorded until final construction plan approval is granted.
- Final Construction Plans and Specifications must be prepared in accordance with the City Engineering Design Standards Manual using City details and specifications and meeting City Engineering Design Guidelines.
- Final Construction Plans for Grading, Drainage and Erosion Control and Final Construction Plans for Street and Utilities must be revised to show the permanent street easement for 5th Street North.
- The Specifications must include the following statement as the first clause of the supplementary provisions, *"The City Standard Specifications for Public Infrastructure, dated February 2015, shall apply to the work performed under this contract. Any supplemental specifications are intended to supplement the City Standard Specifications, however they do NOT supersede the City Standard Specifications, Details, Design Standards, or ordinances unless specific written approval has been provided by the City."*

The following 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.

STORM SEWER:

- Sheet 9 – CB-247 must be revised to allow the draintile invert to be above the top of effluent pipe.
- Sheet No. 9 – Remove "CB-250" text on Lot 3, Block 2.
- Sheet No. 10 – CB-405, CB-408, CBMH-94, CBMH-411A, CBMH-411 and CBMH-412 must be revised to allow the draintile invert to be above the top of effluent pipe.
- Sheet No. 10 – Add draintile at the low point on the southeast corner of the 5th Street Lane and 5th Street intersection.
- Sheet No. 15 – Storm sewer along Profile D must be a minimum of 15 feet from the backside of the proposed retaining wall and must be a minimum 15 inches in diameter.
- An updated Rational Storm Sewer Design Tabulation must be provided to include all storm sewer structures in Savona 3rd Addition.

STREETS:

- Sheet No. 10 – Revise the Typical Section for 5th Street Lane (with Landscaped Median) to have an asphalt grade B and Traffic Level 2 (consistent with the remaining 5th Street Lane bituminous mix design).
- Sheet No. 11 – Private Drive 14 and 15 cannot have a breakover (rollover) angle in excess of 5%. This means the maximum difference between the slope of 5th Street Lane and the slope of the private drive cannot exceed 5%.
- Sheet 19 – Type III Barricades should remain on 5th Street at Junco Road.
- Sheet 19 – A paved turnaround must be accommodated at STA 29+70 on 5th Street.
- Sheet 20 – Signage for the left turn land must be added to the plan.

LANDSCAPE PLAN AND OTHER AMENTIES:

- Sheet No. 2 – Revise Street Lighting Plan Note require a nominal 30-foot pole with Evans-Style lamp type.
- The Landscape Plan must updated to include landscaping for 5th Street North per the 5th Street Collector Street Standards and Guidelines, dated August 2015.
- This review does not cover the Landscape Plan. Plan review to be completed by other City representatives.

July 28, 2015

Joe Jablonski
Lennar
16305 36th Ave North, Suite 600
Plymouth, MN 55446

Re: Savona 3rd Addition—Lake Elmo, Minnesota
VBWD Permit #2015-07

Dear Mr. Jablonski:

Enclosed is the Valley Branch Watershed District (VBWD) permit for your project. Please note the following conditions imposed by the Managers, which are also listed on the back of the permit.

Permit #2015-07: On July 23, 2015, the VBWD Managers approved **Permit #2015-07** for Savona 3rd Addition, as shown on the Westwood Professional Services, Inc. June 25, 2015 Grading, Drainage and Erosion Control Plan. The VBWD Managers imposed the same conditions as included in previous permits.

Amendment to Permit #2014-25: On June 25, 2015 the VBWD Managers approved the following amendments to **Permit #2014-25**:

- Approved Elevation 1003.8 as the minimum floor elevation for Block 5—Lots 4 and 5 and Block 6—Lots 6-8.
- Require that drain tile be installed around the exterior foundations of the subject lots.

Permit #2014-25 was only for those multifamily units and the work shown on the Westwood Professional Services' Grading, Drainage & Erosion Control Plan dated August 8, 2014. All of the permit conditions from **Permit #2013-20** were imposed with approval **of Permit 2014-25**.

Permit Conditions from Permit #2013-20:

1. This permit is for Lots 14-15 of Block 8 and Blocks 9-19, the southeast portion of Outlot A, most of Outlot E, part of Outlot I, and all of Outlots B, C, G, and H, and the associated roads and storm sewer, as shown on the Sheets 3-6 of the Grading, Drainage & Erosion Control Plan dated 11/25/2013 and as owned by US Home Corporation. Another permit(s) will be required for all other work, including but not limited to the proposed multifamily units.

2. Manholes immediately upstream from treatment basins (e.g., Lots 10/11 of Block 8; Lot 5 of Block 17; Outlot C; CB in Street I upstream of Outlot I) shall have sumps greater than 3 feet and be equipped with porous baffles (e.g., SAFL baffles) to provide pretreatment and reduce washout/resuspension of sediment.

3. The bioretention basins shall be no deeper than 1.5 feet. The grading plans shall be revised and approved by the VBWD Engineer prior to construction.

4. Prior to construction, details of the proposed outlets from the treatment basins shall be provided and approved by the VBWD Engineer.

5. The low openings of Lots 4-7, Block 8 shall be no lower than El. 996.9. The low openings of Lots 1-2, Block 8 shall be no lower than El. 992.2. Drain tile shall be installed around the perimeter of the foundations of the homes on these lots.

6. This permit is not valid until a maintenance agreement in the general format of Appendix B of the VBWD Rules is submitted to and approved by the VBWD Attorney.

7. Prior to construction, the required surety shall be submitted to the VBWD.

8. The VBWD Engineer and Inspector shall be notified at least 3 days prior to commencement of work.

9. Erosion controls shall be installed prior to the commencement of grading operations and must be maintained throughout the construction period until turf is established. Additional erosion controls may be required, as directed by the VBWD Inspector or VBWD Engineer.

10. All disturbed areas shall be vegetated within 14 days of final grading.

11. This permit is not transferable.

12. The required drainage easements and access easements shall be recorded with the Washington County Recorder's Office.

13. This permit is subject to obtaining all other permits required by governmental agencies having jurisdiction (including a NPDES permit).

14. The applicant is responsible for removal of all temporary erosion-control measures, including silt fence, upon establishment of permanent vegetation at the project site as determined by the VBWD Engineer and/or Inspector.

15. The following additional erosion controls shall be implemented on the site:

    a. All proposed slopes 3 feet horizontal to 1 foot vertical (3H:1V) should be covered with erosion-control blanket.

    b. Silt fence should follow existing contours as closely as feasible to limit the potential for gully erosion along the edges.

    c. Additional silt fence may be needed during construction.

    d. Street sweeping shall be performed if sediment collects on streets.

    e. A construction sequencing plan shall be submitted, approved, and followed.

    f. If erosion occurs at the outlets of the storm sewer pipes, the applicant will be responsible for correcting the problem to the satisfaction of the VBWD.

    g. Any sediment that collects in storm sewers, ponds, or other water management features shall be removed.

16. To prevent soil compaction, the proposed infiltration areas shall be staked off and marked during construction to prevent heavy equipment and traffic from traveling over it. If infiltration facilities are

in place during construction activities, sediment and runoff shall be kept away from the facility, using practices such as diversion berms and vegetation around the facility's perimeter. Infiltration facilities shall not be excavated to final grade until the contributing drainage area has been constructed and fully stabilized. The final phase of excavation shall remove all accumulated sediment and be done by light tracked equipment to avoid compaction of the basin floor. To provide a well-aerated, highly porous surface, the soils of the basin floor shall be loosened to a depth of at least 24 inches to a maximum compaction of 85% standard proctor density prior to planting.

17. The Valley Branch Watershed District shall be granted drainage easements, which cover land adjacent to stormwater management facilities, wetlands, and lowlands up to their 100-year-flood elevations and which cover all ditches, storm sewers, and maintenance access to the stormwater management facilities.

18. The minimum floor elevations for all buildable lots in the development shall be recorded in a Declaration of Covenants and Restrictions or on the final plat.

19. Return or allowed expiration of any remaining surety and permit closeout is dependent on the permit holder providing proof that all required documents have been recorded (including but not limited to easements) and providing as-built drawings that show that the project was constructed as approved by the Managers and in conformance with the VBWD rules and regulations.

Thank you for your cooperation with the District's permit program.

Sincerely,

David J. Bucheck, President
Valley Branch Watershed District

DJB/ymh
c: Susannah Torseth, VBWD Attorney
Ray Roemmich, VBWD Inspector
Jenifer Sorensen, MDNR
Kyle Klatt, City Planning Director—City of Lake Elmo
Jack Griffin, City Engineer, FOCUS Engineering—City of Lake Elmo
Rick Chase, Building Inspector—City of Lake Elmo
John Bender, Westwood Professional Services—Authorized Agent
Thomas Hingsberger, Corps of Engineers
Brad Johnson, MDNR
Jed Chesnut, Washington Conservation District
Brooke Haworth, MDNR
Ben Meyer, Minnesota Board of Water and Soil Resources
Karen Wold, Barr Engineering Co.
Yvonne Huffman, Barr Engineering Co.

VALLEY BRANCH WATERSHED DISTRICT
PERMIT APPLICATION

TO BE COMPLETED BY VBWD:
PERMIT NUMBER 2015-07
PERMIT FEE RECEIVED WAIVED
DATE RECEIVED N/A

Return application to
John Hanson
Barr Engineering Company
Engineers for the Valley Branch Watershed District
4700 West 77th Street
Edina, MN 55435-4803

A permit fee shall accompany this permit, unless waived by the Board of Managers. (Governmental Bodies are not required to pay a fee.)

Project Information	Applicant Information
Name of Project: Savona 3rd Addition	Name: Joe Jablonski, Lennar
Purpose of Project: Grading for Residential development	Address: 16305 36th Ave Suite 600
Project Location (street address, if known; otherwise, major intersection): Keats & 5th Street	City, State, Zip: Plymouth MN 55446
City or Township: Lake Elmo	Phone: 952.249.3044
Legal Description (proof of ownership required): PID: Section: Township: Range:	Fax:
Project Timeline: Start Date: July 1 2015 Completion Date: Nov 30 2015	Email: joe.jablonski@lennar.com
Authorized Agent Information	**Owner Information (if different than Applicant)**
Name: John Bender	Name:
Business Name: Westwood	Address:
Address: 7699 Anagram Drive	City, State, Zip:
City, State, Zip: Eden Prairie MN 55344	Phone:
Phone: 952 937 5150	Fax:
Fax:	Email:
Email: John.bender@westwoodpc.com	

Once a Valley Branch Watershed District permit has been approved, the permit conditions will attached to the back of this form.

By signing this permit application, the permit applicant, his/her agent, and owner (hereinafter "Permittee") shall abide by all the conditions set by the Valley Branch Watershed District (VBWD). All work which violates the terms of the permit by reason of presenting a serious threat of soil erosion, sedimentation, or an adverse effect upon water quality or quantity, or violating any rule of the VBWD may result in the VBWD issuing a Stop Work Order which shall immediately cause the work on the project related to the permit to cease and desist. All work on the project shall cease until the permit conditions are met and approved by the VBWD representatives. In the event Permittee contests the Stop Work Order issued by the VBWD, Permittee shall attend a VBWD Board of Managers meeting and discuss the project. Any attorney fees, costs, or other expenses incurred on behalf of the VBWD in enforcing the terms of the permit shall be the sole expense of the permit applicant. Costs shall be payable from the permit applicant's permit fee. If said fees exceed the permit amount, the Permittee shall have ten (10) days from the date of receipt of the invoice from the VBWD to pay for the cost incurred in enforcing the permit, by which to pay the VBWD for said costs. If costs are not paid within the ten (10) days, the VBWD will draw on the permit applicant's surety. The Permittee agrees to be bound by the terms of the final permit and conditions required by the VBWD for approval of the permit. The permit applicant further acknowledges that he/she has the authority to bind the owner of the property and/or any entity performing the work on the property pursuant to the terms of the VBWD permit, and shall be responsible for complying with the terms of the VBWD permit.

Signatures (Required):

7/1/2015 — Applicant/Date

Same — Owner (if different than Applicant)/Date

6/11/15 — Owner's Authorized Agent/Date

VALLEY BRANCH WATERSHED DISTRICT • P.O. BOX 638 • LAKE ELMO, MINNESOTA 55042-0538
www.vbwd.org

Permit Amendment to Permit #2014-25 A VBWD permit was issued for a portion of the Savona development on January 9, 2014. While the overall plan assumed multifamily units south of 5th Street North, the VBWD-issued permit did not allow for their construction. The current proposal is consistent with the previously approved overall plan. Stormwater management facilities were designed to handle the runoff from the proposed townhomes. All of the permit conditions from Permit 2013 20 are recommended to remain. This permit is only for those multifamily units and the work shown on the Westwood Professional Services' Grading, Drainage & Erosion Control Plan dated August 8, 2014.

Permit Conditions from Permit #2013-20:

1. This permit is for Lots 14-15 of Block 8 and Blocks 9-19, the southeast portion of Outlot A, most of Outlot E, part of Outlot I, and all of Outlots B, C, G, and H, and the associated roads and storm sewer, as shown on the Sheets 3-6 of the Grading, Drainage & Erosion Control Plan dated 11/25/2013 and as owned by US Home Corporation. Another permit(s) will be required for all other work, including but not limited to the proposed multifamily units.
2. Manholes immediately upstream from treatment basins (e.g., Lots 10/11 of Block 8; Lot 5 of Block 17; Outlot C; CB in Street I upstream of Outlot I) shall have sumps greater than 3 feet and be equipped with porous baffles (e.g., SAFL baffles) to provide pretreatment and reduce washout/resuspension of sediment.
3. The bioretention basins shall be no deeper than 1.5 feet. The grading plans shall be revised and approved by the VBWD Engineer prior to construction.
4. Prior to construction, details of the proposed outlets from the treatment basins shall be provided and approved by the VBWD Engineer.
5. The low openings of Lots 4-7, Block 8 shall be no lower than El. 996.9. The low openings of Lots 1-2, Block 8 shall be no lower than El. 992.2. Drain tile shall be installed around the perimeter of the foundations of the homes on these lots.
6. This permit is not valid until a maintenance agreement in the general format of Appendix B of the VBWD Rules is submitted to and approved by the VBWD Attorney.
7. Prior to construction, the required surety shall be submitted to the VBWD.
8. The VBWD Engineer and Inspector shall be notified at least 3 days prior to commencement of work.
9. Erosion controls shall be installed prior to the commencement of grading operations and must be maintained throughout the construction period until turf is established. Additional erosion controls may be required, as directed by the VBWD Inspector or VBWD Engineer.
10. All disturbed areas shall be vegetated within 14 days of final grading.
11. This permit is not transferable.
12. The required drainage easements and access easements shall be recorded with the Washington County Recorder's Office.
13. This permit is subject to obtaining all other permits required by governmental agencies having jurisdiction (including a NPDES permit).
14. The applicant is responsible for removal of all temporary erosion-control measures, including silt fence, upon establishment of permanent vegetation at the project site as determined by the VBWD Engineer and/or Inspector.
15. The following additional erosion controls shall be implemented on the site:

a. All proposed slopes 3 feet horizontal to 1 foot vertical (3H:1V) should be covered with erosion-control blanket.
b. Silt fence should follow existing contours as closely as feasible to limit the potential for gully erosion along the edges.
c. Additional silt fence may be needed during construction.
d. Street sweeping shall be performed if sediment collects on streets.
e. A construction sequencing plan shall be submitted, approved, and followed.
f. If erosion occurs at the outlets of the storm sewer pipes, the applicant will be responsible for correcting the problem to the satisfaction of the VBWD.
g. Any sediment that collects in storm sewers, ponds, or other water management features shall be removed.

16. To prevent soil compaction, the proposed infiltration areas shall be staked off and marked during construction to prevent heavy equipment and traffic from traveling over it. If infiltration facilities are in place during construction activities, sediment and runoff shall be kept away from the facility, using practices such as diversion berms and vegetation around the facility's perimeter. Infiltration facilities shall not be excavated to final grade until the contributing drainage area has been constructed and fully stabilized. The final phase of excavation shall remove all accumulated sediment and be done by light tracked equipment to avoid compaction of the basin floor. To provide a well-aerated, highly porous surface, the soils of the basin floor shall be loosened to a depth of at least 24 inches to a maximum compaction of 85% standard proctor density prior to planting.
17. The Valley Branch Watershed District shall be granted drainage easements, which cover land adjacent to stormwater management facilities, wetlands, and lowlands up to their 100-year-flood elevations and which cover all ditches, storm sewers, and maintenance access to the stormwater management facilities.
18. The minimum floor elevations for all buildable lots in the development shall be recorded in a Declaration of Covenants and Restrictions or on the final plat.
19. Return or allowed expiration of any remaining surety and permit closeout is dependent on the permit holder providing proof that all required documents have been recorded (including but not limited to easements) and providing as-built drawings that show that the project was constructed as approved by the Managers and in conformance with the VBWD rules and regulations.

Approved: July 23, 2015 M Bachler President

Signature *Title*

Valley Branch Watershed District

Note: The grant of this permit in no way purports to permit acts, which may be prohibited by other governmental agencies.

Receipt:# 272558

EAS $46 00
CRV Not Required
Exempt from Tax

Return to.
NORTH AMERICAN TITLE CO
6450 WEDGWOOD ROAD
#107
MAPLE GROVE MN 55311
3602

4007702

Certified Filed and/or recorded on:
11/20/2014 2 30 PM

4007702

Office of the County Recorder
Washington County, Minnesota
Jennifer Wagenius County Recorder
Kevin Corbid Auditor Treasurer

PERMANENT PUBLIC STREET EASEMENT AGREEMENT

THIS PERMANENT PUBLIC STREET EASEMENT AGREEMENT shall be effective as of the date that the last party executes this Agreement, is made by and between **DPS-Lake Elmo, LLC**, a Minnesota limited liability company, hereinafter referred to as the "Owner," and the **City of Lake Elmo**, a Minnesota municipal corporation, hereinafter referred to as the "City."

The Owner owns the real property situated within Washington County, Minnesota as described on the attached **Exhibit A** (hereinafter "Owner's Property").

The Owner in consideration of one dollar ($1.00) and other good and valuable consideration does hereby grant and convey to the City, its successors and assigns, the following:

1. A **permanent easement for public street, road, highway, sidewalk and path purposes purposes; utility and drainage purposes; including all rights of a "drainage easement" and an "utility easement" as defined by Minn. Stat. § 505.01, Subd. 3(b) and 3(j); and, all such purposes ancillary, incident or related thereto** (hereinafter "Permanent Easement") under, over, across, through and upon that real property identified and legally described on **Exhibit B**, (hereinafter the "Permanent Easement Area") attached hereto and incorporated herein by reference.

The Permanent Easement rights granted herein are forever and shall include, but not be limited to, the construction, maintenance, inspection, repair and replacement of any public street, road, highway, sanitary sewer, storm sewer, storm sewer ponds, rain gardens, landscaping, light stanchions, water mains, any utilities, underground pipes, conduits, other utilities and mains, and all facilities and improvements ancillary, incident or related thereto, under, over, across, through and upon the Permanent Easement Area.

EXEMPT FROM STATE DEED TAX

The rights of the City also include the right of the City, its contractors, agents and servants:

a.) to enter upon the Permanent Easement Area at all reasonable times for the purposes of construction, reconstruction, inspection, repair, replacement, grading, sloping, and restoration relating to the purposes of this Permanent Easement; and

NORTH AMERICAN TITLE COMPANY
5001 American Blvd W
Suite 300
Bloomington, MN 55437

#18353

b.) to maintain the Permanent Easement Area, any City improvements and any underground pipes, conduits, or mains, together with the right to excavate and refill ditches or trenches for the location of such ponds, rain gardens, pipes, conduits or mains; and

c.) to remove from the Permanent Easement Area trees, brush, herbage, aggregate, undergrowth and other obstructions interfering with the location, construction and maintenance of the pipes, conduits, or mains and to deposit earthen material in and upon the Permanent Easement Area; and

d.) to remove or otherwise dispose of all earth or other material excavated from the Permanent Easement Area as the City may deem appropriate.

e.) to prohibit obstructions or interference with its use of the Easement Area.

The City shall not be responsible for any costs, expenses, damages, demands, obligations, penalties, attorneys' fees and losses resulting from any claims, actions, suits, or proceedings based upon a release or threat of release of any hazardous substances, petroleum, pollutants, and contaminants which may have existed on, or which relate to the Permanent Easement Area or the Owner's Property prior to the date hereof.

Nothing contained herein shall be deemed a waiver by the City of any governmental immunity defenses, statutory or otherwise. Further, any and all claims brought by the Owner, its successors or assigns, shall be subject to any governmental immunity defenses of the City and the maximum liability limits provided by Minnesota Statute, Chapter 466.

The Owner, for itself and its successors and assigns, does hereby warrant to and covenant with the City, its successors and assigns, that it is well seized in fee of the Owner's Property described on Exhibit A, and the Permanent Easement Area described on Exhibit B, and has good right to grant and convey the Permanent Easement herein to the City. In addition, the Owner, for itself and its successors and assigns, does hereby warrant to and covenant with the City, its successors and assigns, the right of after acquired title to the Permanent Easement granted and conveyed in this Agreement provided that the Owner receives title to all or part of the Permanent Easement Area after the recording of this Agreement.

This Permanent Public Street Easement Agreement may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

IN TESTIMONY WHEREOF, the Owner and the City have caused this Permanent Public Street Easement Agreement to be executed as follows:

Owner:
DPS-Lake Elmo, LLC, a Minnesota limited liability company

Signature: _____
Print Name: Alan J. Dale, Chief Manager

STATE OF MINNESOTA)
) ss.
COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me this 3rd day of October, 2014, by Alan J. Dale, the Chief Manager of DPS – Lake Elmo, LLC, a Minnesota limited liability company, on behalf of the limited liability company.

_____
Notary Public

Randy Sue Simmer
Notary Public
Minnesota
My Commission Expires January 31, 2018

11594713v5

CITY OF LAKE ELMO

By: _____
Mike Pearson, Mayor

ATTEST:

_____
Adam Bell, City Clerk

STATE OF MINNESOTA)
) ss.
COUNTY OF WASHINGTON)

On this 21 day of October, 2014, before me a Notary Public within and for said County, personally appeared Mike Pearson and Adam Bell, to me personally known, who being each by me duly sworn, each did say that they are respectively the Mayor and City Clerk of the **City of Lake Elmo**, a Minnesota municipal corporation, the municipality named in the foregoing instrument, and that the seal affixed to said instrument was signed and sealed on behalf of said municipality by authority of its City Council and said Mayor and City Clerk acknowledged said instrument to be the free act and deed of said municipality.

_____
Notary Public

STACY BODSBERG
NOTARY PUBLIC - MINNESOTA
My Commission Expires Jan. 31, 2018

This instrument was drafted by:
David K. Snyder, Esq.
Johnson & Turner, P.A.
56 East Broadway Avenue, Suite 206
Forest Lake, MN 55025
651-464-7292

11594713v5

EXHIBIT A
LEGAL DESCRIPTION OF OWNER'S PROPERTY

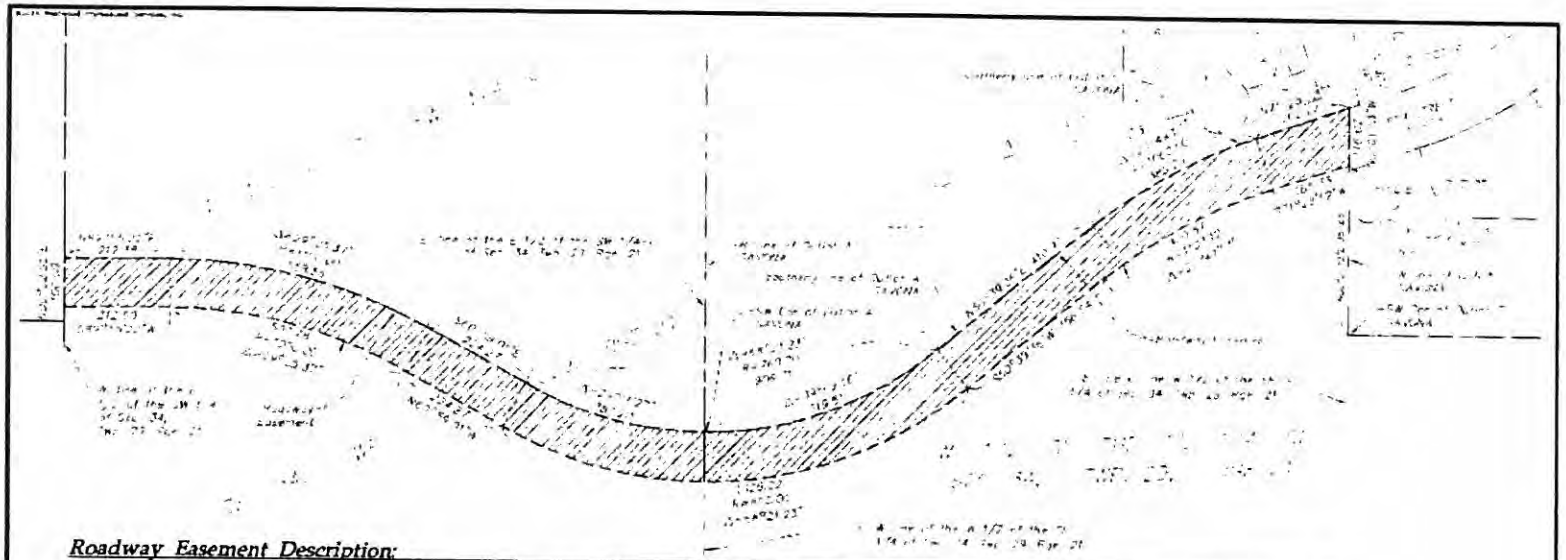
That part of the East Half of the Southwest Quarter and that part of the West Half of the Southeast Quarter, both in Section 34, Township 29, Range 21, Washington County, Minnesota, described as follows:

Commencing at the West Quarter corner of said Section 34; thence South 00 degrees 00 minutes 40 seconds East, along the west line of said Section 34, a distance of 472.55 feet; thence North 89 degrees 57 minutes 32 seconds East, a distance of 1315.91 feet to the west line of said East Half of the Southwest Quarter; thence South 00 degrees 02 minutes 55 seconds West, along said west line a distance of 714.99 feet to the point of beginning; thence North 89 degrees 55 minutes 22 seconds East, a distance of 212.38 feet; thence southeasterly along a tangential curve concave to the southwest having a central angle of 29 degrees 05 minutes 37 seconds, a radius of 1100.00 feet for an arc distance of 558.56 feet; thence thence South 60 degrees 59 minutes 01 seconds East, tangent to said curve, a distance of 224.27 feet; thence southeasterly along a tangential curve concave to the north, having a central angle of 68 degrees 21 minutes 23 seconds, a radius of 760.00 feet for an arc distance of 906.71 feet; thence North 50 degrees 39 minutes 36 seconds East, a distance of 410.97 feet; thence northeasterly along a tangential curve concave to the southeast, having a central angle of 20 degrees 49 minutes 17 seconds, a radius of 1060.00 feet for an arc distance of 385.20 feet; thence North 71 degrees 28 minutes 52 seconds East, tangent to said curve, a distance of 202.22 feet to the east line of said West Half of the Southeast Quarter; thence South 00 degrees 01 minutes 13 seconds West, along said east line a distance of 1517.53 feet to a line parallel with and distant 217.80 feet north of the north right of way line of Highway No. 12; thence South 89 degrees 54 minutes 16 seconds West, along said parallel line, a distance of 200.00 feet to a line parallel with and distant 200.00 feet west of said east line of the West Half of the Southeast Quarter; thence South 00 degrees 01 minutes 13 seconds West, along said parallel line, a distance of 173.18 feet to the north line of Minnesota Department of Transportation Right of Way Plat No. 82-43; thence South 89 degrees 18 minutes 12 seconds West, along said north line a distance of 1875.94 feet; thence continuing along said north line South 89 degrees 53 minutes 55 seconds West, a distance of 230.61 feet to the east line of the West 333.00 feet of said East Half of the Southwest Quarter; thence North 00 degrees 02 minutes 55 seconds East, along said east line a distance of 599.99 feet to the north line of the South 675.00 feet of said East Half of the Southwest Quarter; thence South 89 degrees 53 minutes 57 seconds West, along said north line a distance of 333.00 feet to said west line of the East Half of the Southwest Quarter; thence North 00 degrees 02 minutes 55 seconds East, along said west line a distance of 774.53 feet to the point of beginning.

EXHIBIT B
LEGAL DESCRIPTION AND DEPICTION OF
THE PERMANENT EASEMENT AREA

A Roadway Easement lying over, under and across that part of the West Half of the Southeast Quarter and that part of the East Half of the Southwest Quarter, all in Section 34, Township 29, Range 21, Washington County, Minnesota, described as follows:

Commencing at the southwest corner of Outlot F, SAVONA, according to the recorded plat thereof said Washington County; thence North 00 degrees 01 minutes 13 seconds East, assumed bearing along the west line of said Outlot F a distance of 351.65 feet to the point of beginning; thence South 71 degrees 28 minutes 52 seconds West, a distance of 165.33 feet; thence southwesterly, along a tangential curve, concave to the southeast, having a central angle of 20 degrees 49 minutes 17 seconds, a radius of 1103.12 feet for an arc distance of 400.87 feet; thence South 50 degrees 39 minutes 36 seconds West, tangent to said curve, a distance of 356.54 feet; thence westerly, along a tangential curve, concave to the north, having a central angle of 68 degrees 21 minutes 23 seconds, a radius of 860.00 feet for an arc distance of 1026.02 feet; thence North 60 degrees 59 minutes 01 seconds West, tangent to said curve, a distance of 224.27 feet; thence westerly, along a tangential curve, concave to the southwest, having a central angle of 29 degrees 05 minutes 37 seconds, a radius of 1000.00 feet for an arc distance of 507.78 feet; thence South 89 degrees 55 minutes 22 seconds West tangent to said curve, a distance of 212.60 feet to the west line of said East Half of the Southwest Quarter of Section 34; thence North 00 degrees 02 minutes 55 seconds East along said west line, a distance of 100.00 feet; thence North 89 degrees 55 minutes 22 seconds East, a distance of 212.38 feet; thence easterly, along a tangential curve, concave to the southwest, having a central angle of 29 degrees 05 minutes 37 seconds, a radius of 1,100.00 feet for an arc distance of 558.56 feet; thence South 60 degrees 59 minutes 01 seconds East tangent to said curve, a distance of 224.27 feet; thence easterly along a tangential curve, concave to the north, having a central angle of 29 degrees 11 minutes 27 seconds, a radius of 760.00 feet for an arc distance of 387.20 feet to the southwest corner of Outlot A, said SAVONA; thence continuing easterly along the southerly line of said Outlot A and along a compound tangential curve, concave to the north, having a central angle of 39 degrees 09 minutes 56 seconds, a radius of 760.00 feet for an arc distance of 519.51 feet; thence North 50 degrees 39 minutes 36 seconds East tangent to said curve and along said southerly line of Outlot A, a distance of 410.97 feet; thence northeasterly along said southerly line of Outlot A and along a southerly line of Outlot C, said SAVONA and along a tangential curve, concave to the southeast, having a central angle of 20 degrees 49 minutes 17 seconds, a radius of 1,060.00 feet for an arc distance of 385.20 feet; thence North 71 degrees 28 minutes 52 seconds East tangent to said curve and along said southerly line of Outlot C, a distance of 202.22 feet to the northerly extension of said west line of Outlot F; thence South 00 degrees 01 minutes 13 seconds West along said west line, a distance of 116.02 feet to the point of beginning.



Roadway Easement Description:

A Roadway Easement lying over, under and across that part of the West Half of the Southeast Quarter and that part of the East Half of the Southwest Quarter [illegible] Section 34, Township 29, Range 21, [illegible] described as follows:

Commencing at the southwest corner of Outlot A, SAVONA, according to the recorded plat thereof, Washington County; thence North 00 degrees [illegible] minutes 13 seconds East, assumed bearing, along the west line of said Outlot A, a distance of [illegible] to the point of beginning; thence South [illegible] degrees [illegible] minutes [illegible] seconds West [illegible]; thence southwesterly along a tangential curve, concave to the southeast, having a central angle of 25 degrees 40 minutes [illegible] seconds, a radius of [illegible] feet, for an arc distance of 400.9[illegible] feet; thence South 70 degrees [illegible] minutes 36 seconds West, tangent to said curve, a distance of 305.54 feet; thence westerly along a tangential curve, concave to the north, having a central angle of [illegible] degrees [illegible] minutes 21 seconds, a radius of [illegible] feet [illegible]; thence North 63 degrees [illegible] minutes [illegible] seconds West, tangent to said curve, a distance of 224.22 feet; thence westerly along a tangential curve, concave to the southeast, having a central angle of 27 degrees 25 minutes 5[illegible] seconds, a radius of [illegible] feet for an arc distance of [illegible] feet; thence South 89 degrees 55 minutes [illegible] seconds West, tangent to said curve, a distance of 212.[illegible] feet to the west line of said East Half of the Southwest Quarter of Section 34; thence North 00 degrees [illegible] minutes [illegible] seconds [illegible] along said west line, a distance of 100.00 feet; thence North 89 degrees [illegible] minutes [illegible] seconds East, a distance of 212.[illegible] feet; thence easterly along a tangential curve, concave to the southeast, having a central angle of 25 degrees 05 minutes 37 seconds, a radius of [illegible] feet for an arc distance of [illegible] feet; thence South [illegible] degrees [illegible] minutes [illegible] seconds East, tangent to said curve, a distance of [illegible] feet; thence easterly along a tangential curve, concave to the north, having a central angle of 29 degrees [illegible] minutes 2[illegible] seconds, a radius of [illegible] feet for an arc distance of [illegible] feet to the southwest corner of Outlot A, said SAVONA; thence continuing easterly along the southerly line of said Outlot A and along a non-tangential curve, concave to the north, having a central angle of 15 degrees [illegible] minutes [illegible] seconds, a radius of [illegible] feet for an arc distance of [illegible] feet; thence North [illegible] degrees 14 minutes 36 seconds East, tangent to said curve and along said southerly line of Outlot A, a distance of 41[illegible] feet; thence northeasterly along said southerly line of Outlot A and along a southerly line of Outlot [illegible], said SAVONA and along a tangential curve, concave to the [illegible], having a central angle of [illegible] degrees 49 minutes [illegible] seconds, a radius of [illegible] feet for an arc distance of [illegible] feet; thence North [illegible] degrees [illegible] minutes [illegible] seconds [illegible], not tangent to said curve and along the southerly line of Outlot [illegible], a distance of [illegible] feet to the northerly extension of the west line of Outlot [illegible]; thence South [illegible] degrees [illegible] minutes 13 seconds West along said west line, a distance of 116.32 feet to the point of beginning.

Area = [illegible]

Westwood

Westwood Professional Services, Inc.
[illegible]
www.westwoodps.com

Designed:
Checked: CYM
Drawn: [illegible]
Record Drawing by/date:

Prepared for:
Lennar
Plymouth, Minnesota

Savona
Phase II
Lake Elmo, Minnesota

Roadway Easement

Date 9/26/14 Sheet 1 of 1

11594713

EXHIBIT B
FORM OF DRAINAGE AND UTILITY EASEMENT

SAVONA 3RD ADDITION

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

Outlot C, Outlot D and Outlot F, SAVONA 2ND ADDITION, according to the recorded plat thereof, Washington County, Minnesota.

Has caused the same to be surveyed and platted as **SAVONA 3RD ADDITION** and does hereby donate and dedicate the public ways, as shown on this plat and also dedicate the easements as created by this plat for drainage and utility purposes only.

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

U.S. HOME CORPORATION

By _____
Jonathan Aune, Division Vice President

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

_____ (Signature) _____ (Name Printed)

Notary Public, _____ County, Minnesota

My Commission Expires _____

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

Dated this _____, day of _____, 20_____.

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

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

_____ (Signature) _____ (Name Printed)

Notary Public, _____ County, Minnesota

My Commission Expires _____

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

By _____ Chair By _____ Secretary

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

By _____ Mayor By _____ Clerk

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

By _____ Washington County Surveyor By _____

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

By _____ Washington County Auditor/Treasurer By _____ Deputy

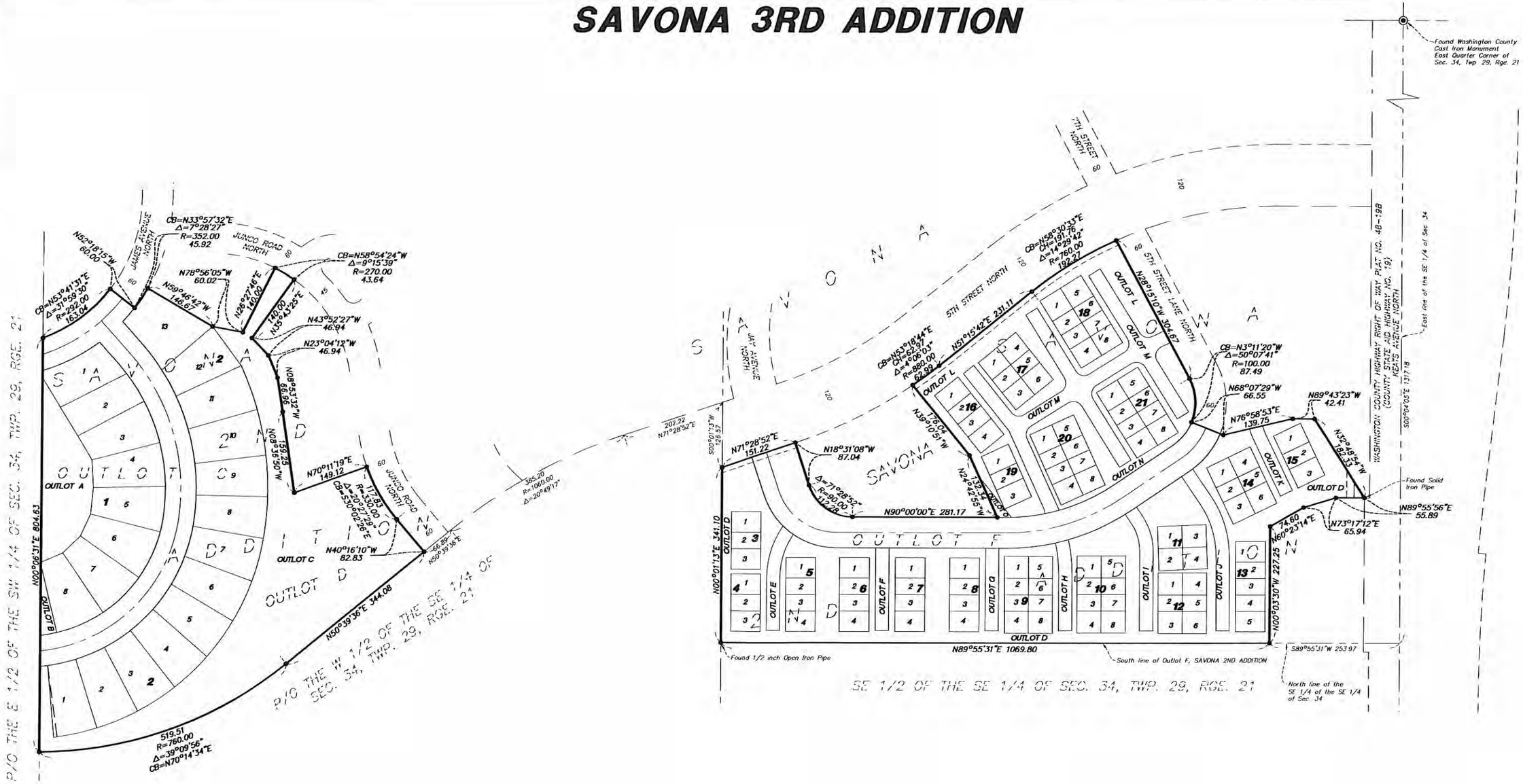
COUNTY RECORDER
Document Number _____

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

By _____ Washington County Recorder By _____ Deputy

Westwood
Professional Services, Inc.

SAVONA 3RD ADDITION

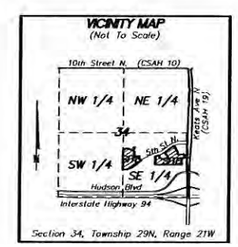


The orientation of this bearing system is based on the south line of Outlot F, SAVONA 2ND ADDITION is assumed to bear N 89°55'31" E.

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

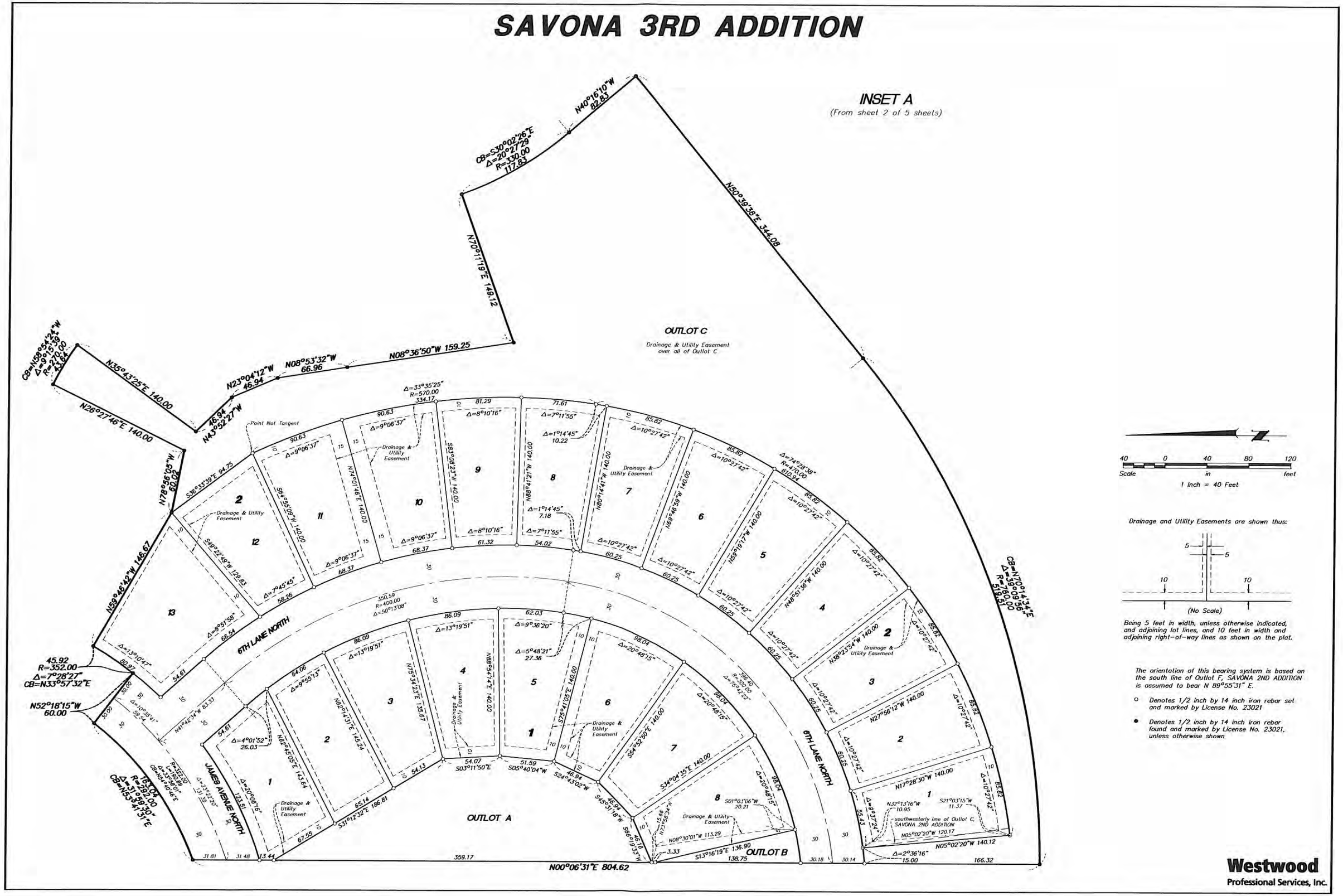
N

100 0 100 200 300
Scale in feet
1 Inch = 100 Feet



Westwood
Professional Services, Inc.

SAVONA 3RD ADDITION



Westwood
Professional Services, Inc.

SAVONA 3RD ADDITION

Scale in feet
1 Inch = 40 Feet

Drainage and Utility Easements are shown thus:

(No Scale)

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

The orientation of this bearing system is based on the south line of Outlot F, SAVONA 2ND ADDITION is assumed to bear N 89°55'31" E.

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

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

INSET B
(From sheet 2 of 5 sheets)

DETAIL
(See sheet 5 of 5 sheets)

5TH STREET LANE NORTH

N90°00'00"E 281.17

S89°55'31"W 1069.80

Found 1/2 inch Open Iron Pipe

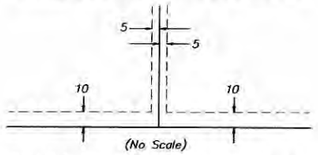
Found Iron Pipe LS No. 22440

Westwood
Professional Services, Inc.

SAVONA 3RD ADDITION

30 0 30 60 90
Scale in feet
1 Inch = 30 Feet

Drainage and Utility Easements are shown thus:



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

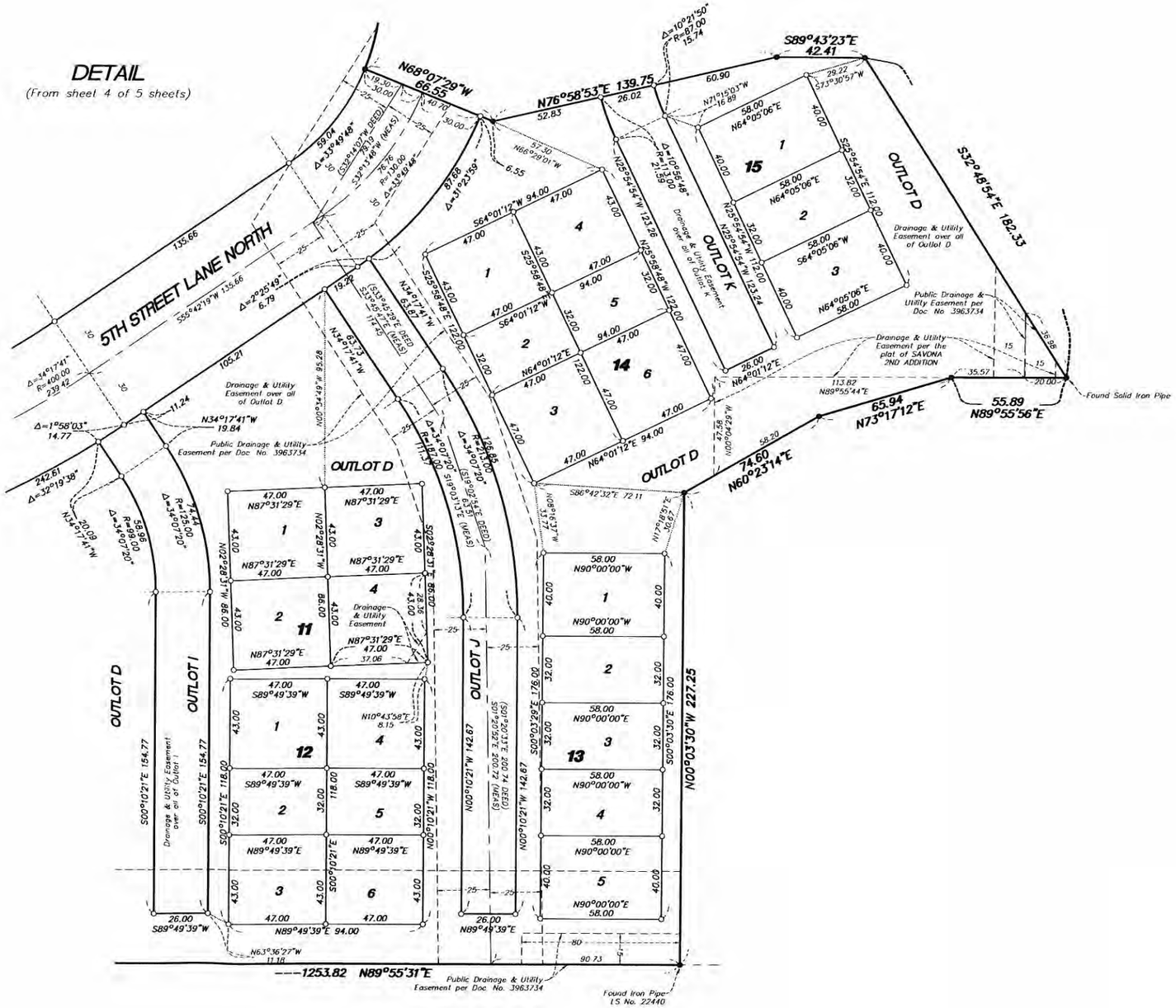
The orientation of this bearing system is based on the south line of Outlot F, SAVONA 2ND ADDITION is assumed to bear N 89°55'31" E.

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

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

DETAIL

(From sheet 4 of 5 sheets)



Westwood
Professional Services, Inc.

Construction Plans

for

Grading, Drainage & Erosion Control Plans

for

Savona 3rd Addition

Lake Elmo, Minnesota

Prepared for:

Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnesota 55446
Contact: Joe Jablonski
Phone: 952-249-3033

Prepared by:

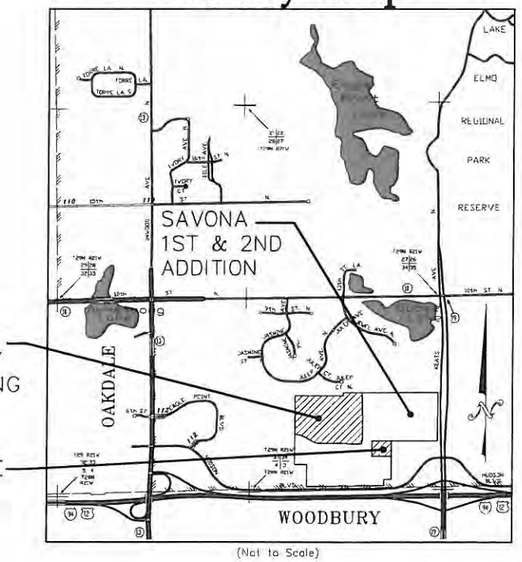
Westwood

Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com

Westwood Professional Services, Inc.

Project number: 0000565.03
Contact John Bender

Vicinity Map



(Not to Scale)

NO.	DATE	REVISION	SHEETS
1	05/20/15	REVISED PER WATERSHED	ALL
2	06/03/15	REVISED PER COMMENTS	ALL
3	06/25/15	REVISED PER COMMENTS	ALL
4	07/14/15	REVISED PER COMMENTS	ALL
5	08/06/15	REVISED SOG HOLDDOWN	6

Sheet List Table

Sheet Number	Sheet Title
1	Cover
2	Overall Grading Plan
3	Grading, Drainage & Erosion Control Plan
4	Grading, Drainage & Erosion Control Plan
5	Grading, Drainage & Erosion Control Plan
6	Grading Drainage & Erosion Control Plan
7	Details
8	Details
9	Street Profiles
10	Street Profiles
11	Pre-Development Drainage Area Plan
12	Post-Development Drainage Area Plan

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

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

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

Construction Plans
for
Grading, Drainage & Erosion Control Plans
for
Savona 3rd Addition
Lake Elmo, Minnesota

Date: 02/27/15 Sheet: 1 of 12

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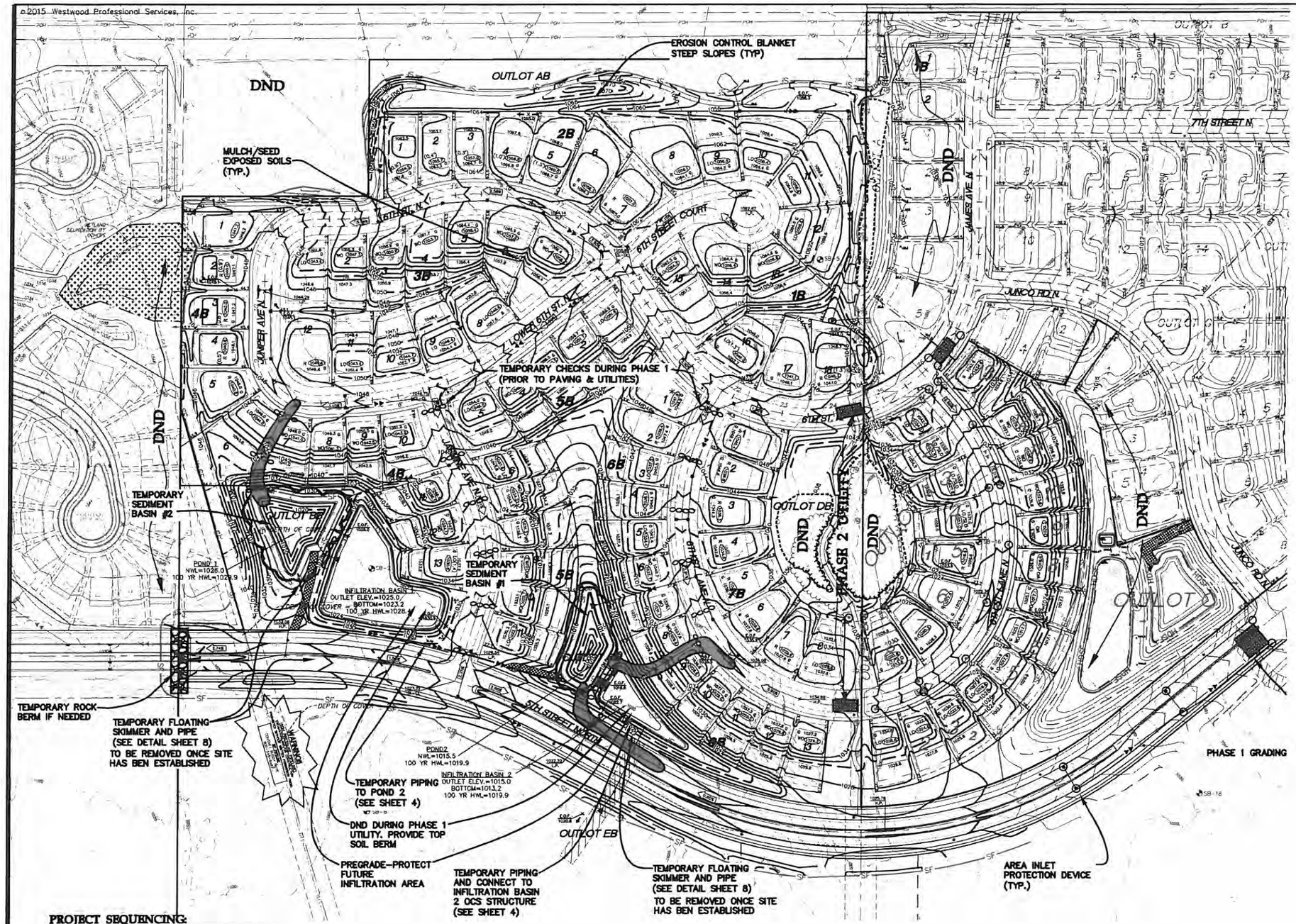

LEGEND:

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

- DENOTES SOIL BORING
- SF — DENOTES SILT FENCE
- HDSF — DENOTES HEAVY DUTY SILT FENCE
- 980 — DENOTES EXISTING CONTOURS
- 980 — DENOTES PROPOSED CONTOURS
- 980 — DENOTES PROPOSED INTERIM CONTOURS
- DENOTES FUTURE STORM SEWER
- DENOTES EXISTING STORM SEWER
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED DRAINTILE
- DENOTES EXISTING TREE LINE
- x 956.3 — DENOTES EXISTING SPOT ELEVATION
- x 66.30 — DENOTES PROPOSED SPOT ELEVATION
- DENOTES ROCK CHECKS
- E.O.F. — DENOTES EMERGENCY OVERFLOW ELEVATION
- DENOTES TREE PRESERVATION FENCING
- 3:1 SLOPE STABILIZATION EROSION CONTROL BLANKET
- POND ACCESS ROUTE
- INLET CONTROLS
- ROCK EXITS (ANTI-TRACKING)
- TEMPORARY CHANNELS TO DRAIN FUTURE PHASES TO TEMPORARY BASINS.
- DENOTES PONDING TO BE UTILIZED FOR TEMPORARY SEDIMENT BASINS

GENERAL NOTES:

- ALL CONTOURS AND SPOT ELEVATIONS ARE SHOWN TO FINISHED SURFACE/GUTTER GRADES UNLESS OTHERWISE NOTED.
- REFER TO THE SITE PLAN/RECORD PLAT FOR MOST CURRENT HORIZONTAL SITE DIMENSIONS AND LAYOUT.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING UTILITIES AND TOPOGRAPHICAL FEATURES WITH THE OWNERS AND FIELD-VERIFY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM PLAN.

* SEE SHEET 7 FOR CITY OF LAKE ELMO STANDARD PLAN NOTES FOR GRADING AND EROSION CONTROL.

DND – DO NOT DISTURB

NOTE:

TO PREVENT SOIL COMPACTION, THE PROPOSED INFILTRATION AREAS/TREATMENT BASIN SHALL BE STAKED OFF AND MARKED DURING CONSTRUCTION TO PREVENT HEAVY EQUIPMENT AND TRAFFIC FROM TRAVELING OVER IT. IF INFILTRATION FACILITIES ARE IN PLACE DURING CONSTRUCTION ACTIVITIES, SEDIMENT AND RUNOFF SHALL BE KEPT AWAY FROM THE FACILITY, USING PRACTICES SUCH AS DIVERSION BERMS AND VEGETATION AROUND THE FACILITY'S PERIMETER. INFILTRATION FACILITIES SHALL NOT BE EXCAVATED TO FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED. THE FINAL PHASE OF EXCAVATION SHALL REMOVE ALL ACCUMULATED SEDIMENT AND BE DONE BY LIGHT TRACKED EQUIPMENT TO AVOID COMPACTION OF THE BASIN FLOOR. TO PROVIDE A WELL-AERATED, HIGHLY POROUS SURFACE, THE SOILS OF THE BASIN FLOOR SHALL BE LOOSENED TO A DEPTH OF AT LEAST 24 INCHES TO A MAXIMUM COMPACTION OF 85% STANDARD PROCTOR DENSITY PRIOR TO PLANTING. WHERE FILL IS NEEDED TO COMPLETE THE FINAL GRADE OF THE INFILTRATION AREA, THE CONTRACTOR SHALL USE FREE-DRAINING SOIL WITH 100% OF THE PARTICLES SMALLER THAN 2 INCHES. SOIL SHALL HAVE LESS THAN 5% OF PARTICLES BY WEIGHT PASSING A #200 SIEVE WITH A VERIFIED SOIL CLASSIFICATION OF SAND (SP). THIS SOIL SHALL BE FREE OF EXCESSIVE MOISTURE, DEBRIS, ROOTS, ORGANIC MATERIAL OR FROZEN MATERIAL. FILL MATERIAL SHALL BE PLACED TO A MAXIMUM COMPACTION OF 85% STANDARD PROCTOR DENSITY.

PROJECT SEQUENCING:

1. INSTALL PERIMETER SILT FENCE.
2. INSTALL ROCK CONSTRUCTION ENTRANCE(S).
3. GRADE PONDS AND INSTALL TEMP. OUTLETS (FOR USE AS TEMPORARY BASINS).
4. INSTALL SILT FENCE AROUND PONDS PER PLAN.
5. MASS GRADE SITE.
6. INSTALL TEMPORARY SEDIMENTATION BASINS PER NPDES OR AS DIRECTED BY THE ENGINEER.
7. INSTALL EROSION CONTROL BLANKET IN DESIGNATED AREAS AS THEY ARE GRADED.
8. SEED AND MULCH SITE PER SPECIFICATION INITIATED IMMEDIATELY UPON GRADING COMPLETION.
9. EXCAVATE INFILTRATION AREAS AFTER FINAL GRADE & STABILZATION HAS OCCURRED.
10. REMOVE SILT FENCE AFTER PERMANENT VEGETATION HAS BEEN ESTABLISHED.

0' 100' 200' 300'

Latest Revision Date: 07/23/15

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Date: 02/27/15 Sheet: 2 OF 12

Westwood

Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com

Westwood Professional Services, Inc.

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.

John Bender

Date 07/23/15 License No. 43358

Revisions:

05/20/15 Revised Per Watershed
06/03/15 Revised per Comments
06/25/15 Revised per Comments
07/13/15 Revised per Comments

Designed:	CLJ
Checked:	JHB
Drawn:	DWR
Record Drawing by/date:	JAS

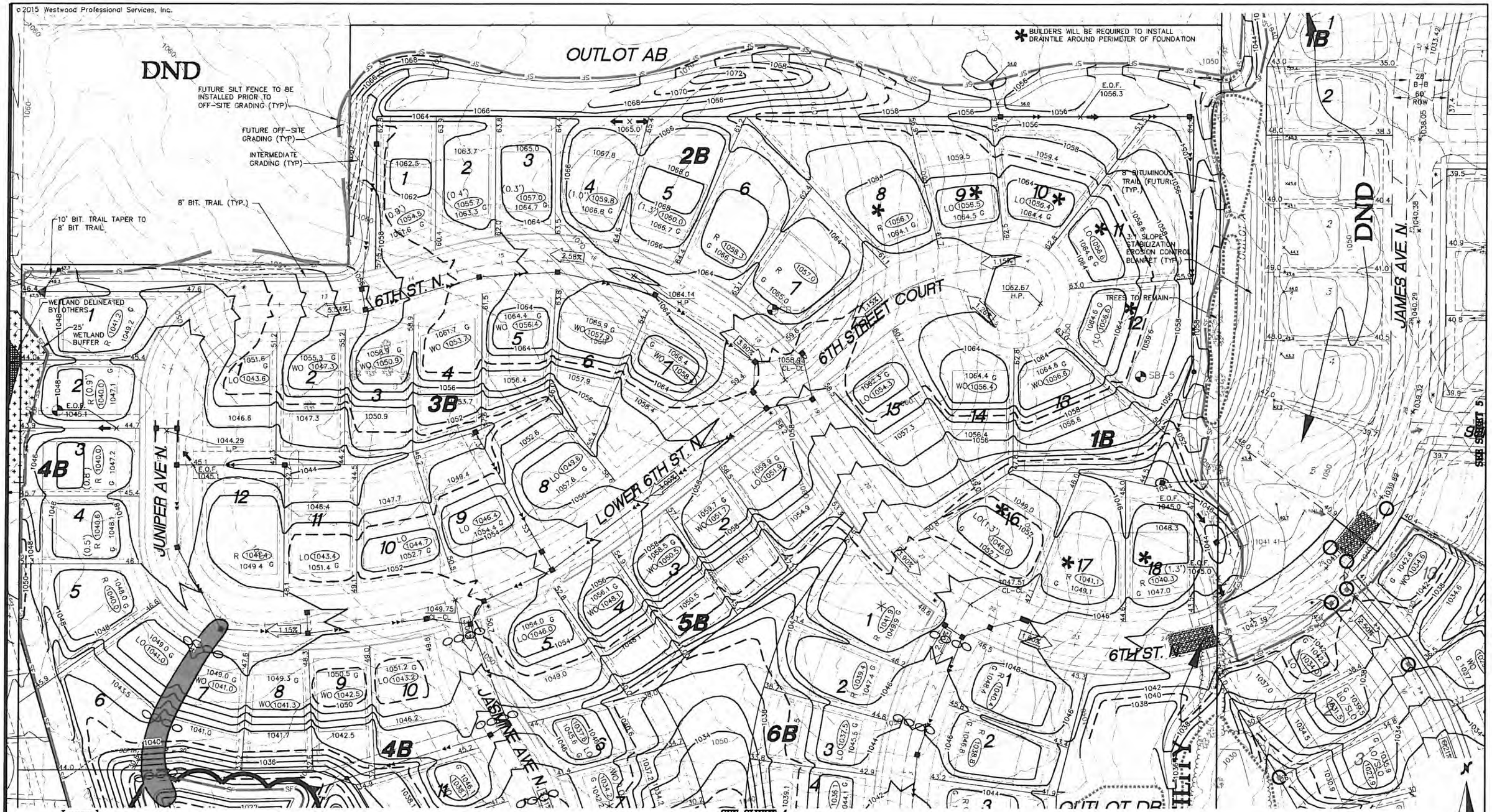
Prepared for:

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

Savona 3rd Addition

Lake Elmo, Minnesota

Single Family Overall Grading Plan



Legend:

	DENOTES SOIL BORING		DENOTES FUTURE STORM SEWER	x 68.30	DENOTES PROPOSED SPOT ELEVATION
SF	DENOTES SILT FENCE		DENOTES EXISTING STORM SEWER		DENOTES BIO-ROLL EROSION CHECKS
HDSF	DENOTES HEAVY DUTY SILT FENCE		DENOTES PROPOSED STORM SEWER	E.O.F.	DENOTES EMERGENCY OVERFLOW ELEVATION
980	DENOTES EXISTING CONTOURS		DENOTES PROPOSED DRAINTILE		DENOTES TREE PRESERVATION FENCING
980	DENOTES PROPOSED CONTOURS		DENOTES EXISTING TREE LINE		3:1 SLOPE STABILIZATION EROSION CONTROL BLANKET
980	DENOTES PROPOSED INTERIM CONTOURS	856.3	DENOTES EXISTING SPOT ELEVATION		POND ACCESS ROUTE

* DENOTES PADS WITH REAR TRANSITIONS

NOTE
SEE SHEET 7 FOR CITY OF LAKE ELMO STANDARD PLAN NOTES FOR GRADING AND EROSION CONTROL.

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

0' 50' 100' 150'

Latest Revision Date: 07/23/15

0000566 03GDF02.dwg

Date: 02/27/15 Sheet: 3 OF 12

Westwood
Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

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.

John Bender

Date 07/23/15 License No. 43358

Revisions:
06/25/15 Revised Per Watershed
06/03/15 Revised per Comments
06/25/15 Revised per Comments
07/24/15 Revised per Comments

Designed:	CLJ
Checked:	JHB
Drawn:	DWR
Record Drawing by/date:	JAS

Prepared for:

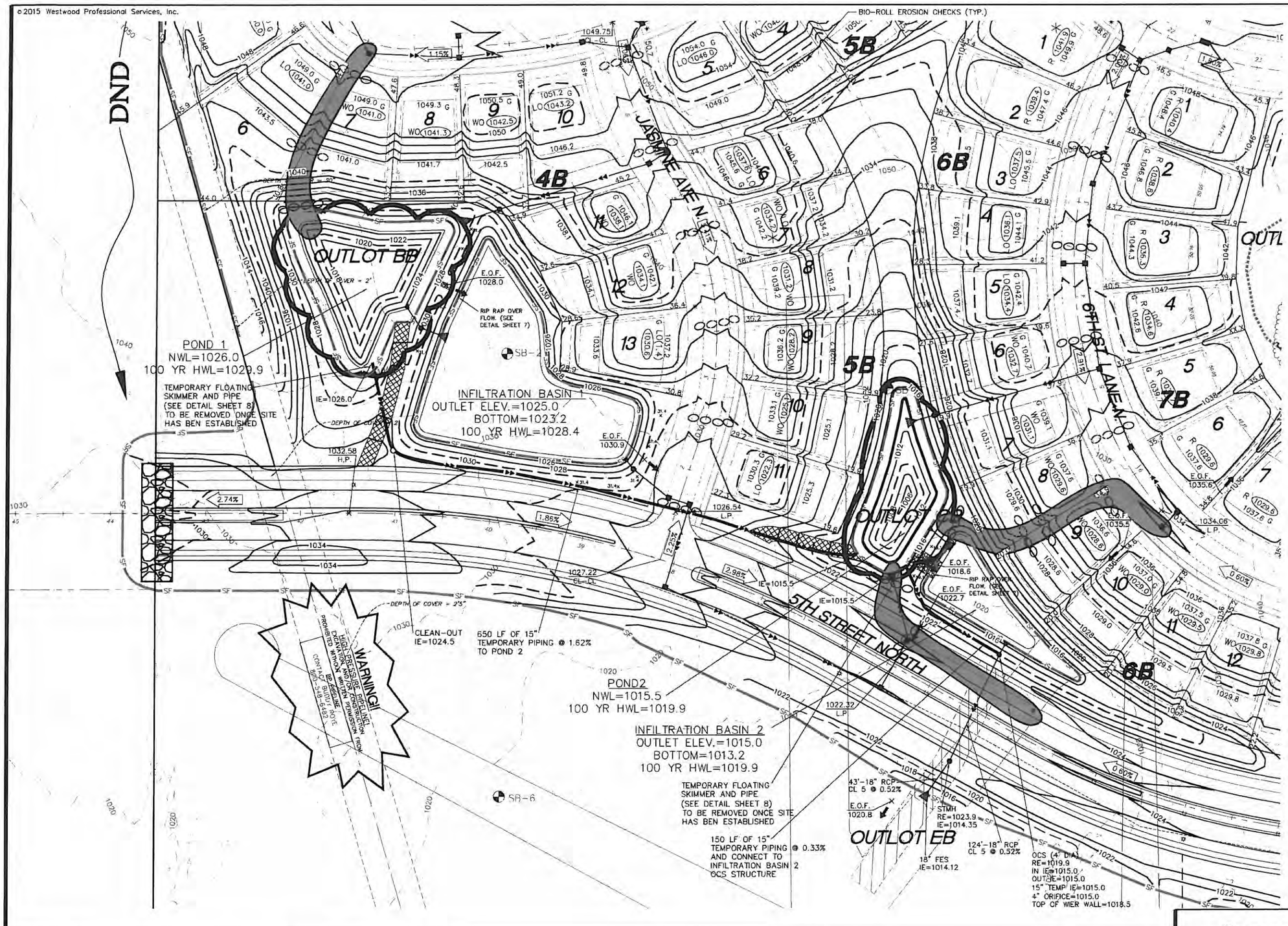
Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnnesota 55446

Savona 3rd Addition

Lake Elmo, Minnesota

Single Family Grading, Drainage & Erosion Control Plan

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



LEGEND:

- DENOTES SOIL BORING
- DENOTES SILT FENCE
- DENOTES HEAVY DUTY SILT FENCE
- DENOTES EXISTING CONTOURS
- DENOTES PROPOSED CONTOURS
- DENOTES PROPOSED INTERIM CONTOURS
- DENOTES FUTURE STORM SEWER
- DENOTES EXISTING STORM SEWER
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED DRAINTILE
- DENOTES EXISTING TREE LINE
- DENOTES EXISTING SPOT ELEVATION
- DENOTES PROPOSED SPOT ELEVATION
- DENOTES BIO-ROLL EROSION CHECKS
- DENOTES EMERGENCY OVERFLOW ELEVATION
- DENOTES TREE PRESERVATION FENCING
- 3:1 SLOPE STABILIZATION EROSION CONTROL BLANKET
- POND ACCESS ROUTE
- DENOTES PONDING TO BE UTILIZED FOR TEMPORARY SEDIMENT BASINS

* DENOTES PADS WITH REAR TRANSITIONS

NOTE

SEE SHEET 7 FOR CITY OF LAKE ELMO STANDARD PLAN NOTES FOR GRADING AND EROSION CONTROL.

0' 50' 100' 150'

Latest Revision Date: 07/23/15

0C00565.03GDFC3.dwg

Date: 02/27/15 Sheet: 4 OF 12

Savona 3rd Addition

Lake Elmo, Minnesota

Single Family Grading, Drainage & Erosion Control Plan

Westwood

Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com

Westwood Professional Services, Inc.

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.

John Bender

Date: 07/23/15 License No. 43358

Revisions:

06/23/15 Revised Per Watershed
06/03/15 Revised per Comments
06/25/15 Revised per Comments
07/14/15 Revised per Comments

Designed:	CTJ
Checked:	JHB
Drawn:	DWR
Record Drawing by/date:	JAS

Prepared for:

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

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

LEGEND:

- DENOTES SOIL BORING
- SF — DENOTES SILT FENCE
- HDSF — DENOTES HEAVY DUTY SILT FENCE
- 990 — DENOTES EXISTING CONTOURS
- 980 — DENOTES PROPOSED CONTOURS
- 980 — DENOTES PROPOSED INTERIM CONTOURS
- DENOTES FUTURE STORM SEWER
- DENOTES EXISTING STORM SEWER
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED DRAINTILE
- DENOTES EXISTING TREE LINE
- × 856.3 — DENOTES EXISTING SPOT ELEVATION
- × 66.30 — DENOTES PROPOSED SPOT ELEVATION
- DENOTES BIO-ROLL EROSION CHECKS
- E.O.F. — DENOTES EMERGENCY OVERFLOW ELEVATION
- DENOTES TREE PRESERVATION FENCING
- 3:1 SLOPE STABILIZATION EROSION CONTROL BLANKET
- POND ACCESS ROUTE
- DENOTES PONDING TO BE UTILIZED FOR TEMPORARY SEDIMENT BASINS

* DENOTES PADS WITH REAR TRANSITIONS

NOTE

SEE SHEET 7 FOR CITY OF LAKE ELMO STANDARD PLAN NOTES FOR GRADING AND EROSION CONTROL.

* BUILDERS WILL BE REQUIRED TO INSTALL DRAINTILE AROUND PERIMETER OF FOUNDATION

0' 50' 100' 150'

Latest Revision Date: 07/23/15

0000565.03GDFG4.dwg

Date: 02/27/15 Sheet: 5 OF 12

Westwood

Phone (952) 937-5150 7699 Anagram Drive
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Toll Free (888) 937-5150 westwoodps.com

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Designed:	CLJ
Checked:	JHB
Drawn:	DWR
Record Drawing by/date:	JAS

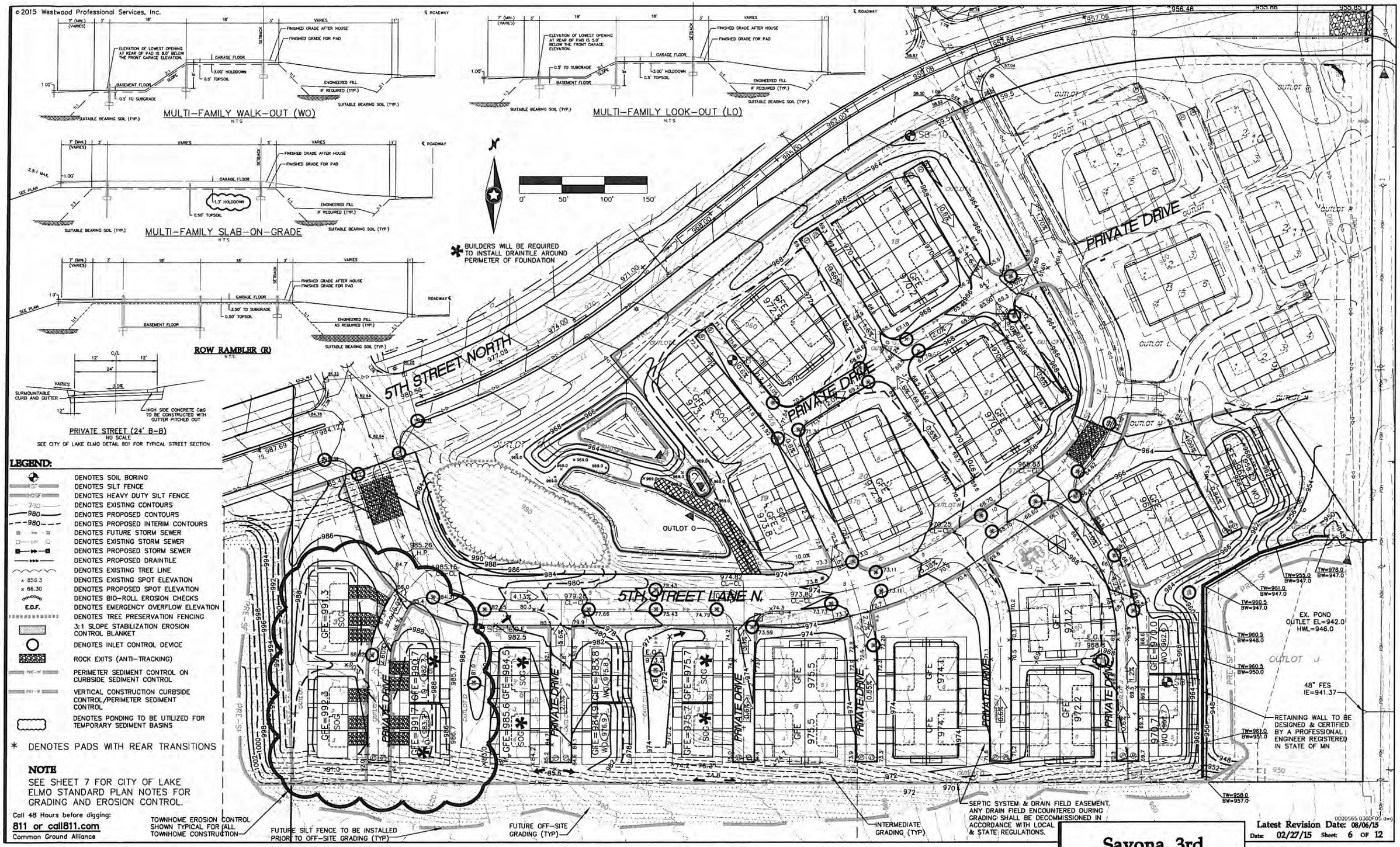
Prepared for:

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

Savona 3rd Addition

Lake Elmo, Minnesota

Single Family Grading, Drainage & Erosion Control Plan



LEGEND:

- DENOTES SOIL BORING
- DENOTES SILT FENCE
- DENOTES HEAVY DUTY SILT FENCE
- DENOTES EXISTING CONTOURS
- DENOTES PROPOSED CONTOURS
- DENOTES PROPOSED INTERIM CONTOURS
- DENOTES FUTURE STORM SEWER
- DENOTES EXISTING STORM SEWER
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED DRAINTILE
- DENOTES EXISTING TREE LINE
- DENOTES EXISTING SPOT ELEVATION
- DENOTES PROPOSED SPOT ELEVATION
- DENOTES BIO-ROLL EROSION CHECKS
- DENOTES EMERGENCY OVERFLOW ELEVATION
- DENOTES TREE PRESERVATION FENCING
- 3:1 SLOPE STABILIZATION EROSION CONTROL BLANKET
- DENOTES INLET CONTROL DEVICE
- ROCK EXITS (ANTI-TRACKING)
- PERIMETER SEDIMENT CONTROL ON CURBSIDE SEDIMENT CONTROL
- VERTICAL CONSTRUCTION CURBSIDE CONTROL/PERIMETER SEDIMENT CONTROL
- DENOTES PONDING TO BE UTILIZED FOR TEMPORARY SEDIMENT BASINS

* DENOTES PADS WITH REAR TRANSITIONS

NOTE

SEE SHEET 7 FOR CITY OF LAKE ELMO STANDARD PLAN NOTES FOR GRADING AND EROSION CONTROL.

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

0000565 030DF05.dwg

Latest Revision Date: 08/06/15
Date: 02/27/15 Sheet: 6 OF 12

Westwood
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John Bender
Date: 08/06/15 License No. 43358

Revisions:
05/20/15 Revised Per Watershed
06/02/15 Revised per Comments
06/25/15 Revised per Comments
07/14/15 Revised per Comments
08/06/15 Revised SOG Holddown

Designed:	CLJ
Checked:	JHB
Drawn:	DWR
Record Drawing by/date:	IAS

Prepared for:

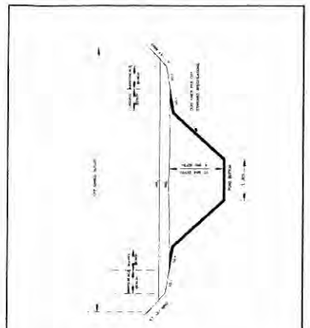
Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnnesota 55446

Savona 3rd Addition

Lake Elmo, Minnesota

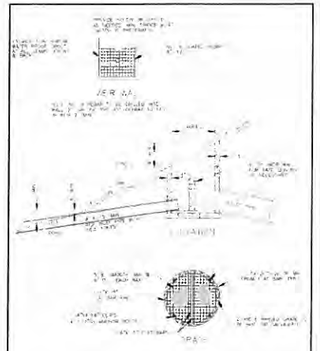
Townhome Grading Drainage & Erosion Control Plan

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

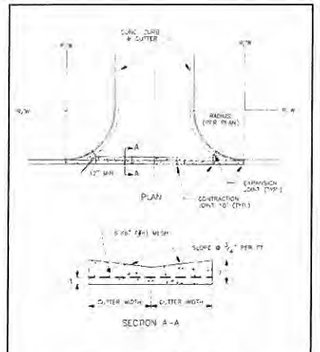


TYPICAL POND SECTION

FEBRUARY 2015 | CITY OF LAKE ELMO | STANDARD DRAWING NO. 416 LAKE ELMO

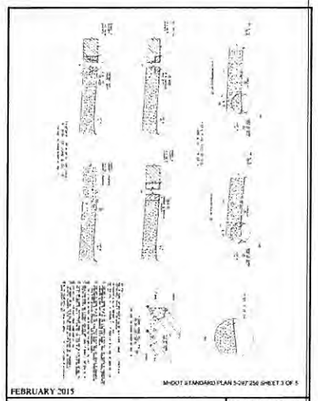


FEBRUARY 2015 | CITY OF LAKE ELMO | STANDARD DRAWING NO. 417 LAKE ELMO

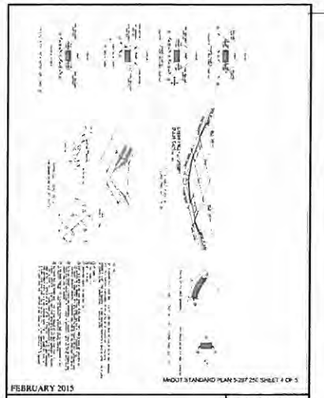


CONCRETE VALLEY GUTTER

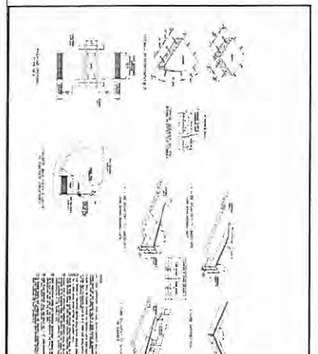
FEBRUARY 2015 | CITY OF LAKE ELMO | STANDARD DRAWING NO. 505 LAKE ELMO



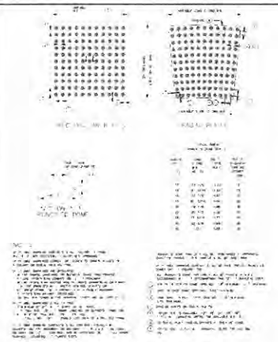
FEBRUARY 2015 | MNDOT STANDARD PLAN 5-297.250 SHEET 3 OF 5 | CITY OF LAKE ELMO | STANDARD DRAWING NO. 507C LAKE ELMO



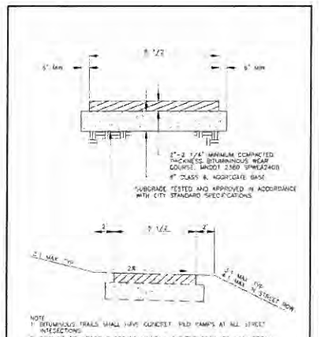
FEBRUARY 2015 | MNDOT STANDARD PLAN 5-297.250 SHEET 4 OF 5 | CITY OF LAKE ELMO | STANDARD DRAWING NO. 507D LAKE ELMO



FEBRUARY 2015 | MNDOT STANDARD PLAN 5-297.250 SHEET 5 OF 5 | CITY OF LAKE ELMO | STANDARD DRAWING NO. 507E LAKE ELMO



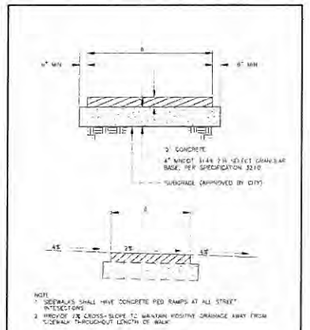
FEBRUARY 2015 | CITY OF LAKE ELMO | STANDARD DRAWING NO. 508 LAKE ELMO



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

BICYCLE-PEDESTRIAN PATH

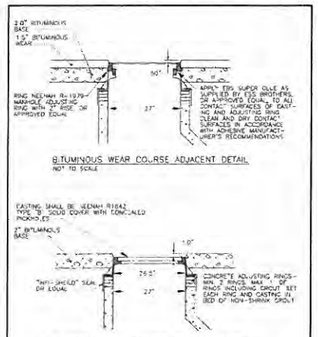
FEBRUARY 2015 | CITY OF LAKE ELMO | STANDARD DRAWING NO. 509 LAKE ELMO



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

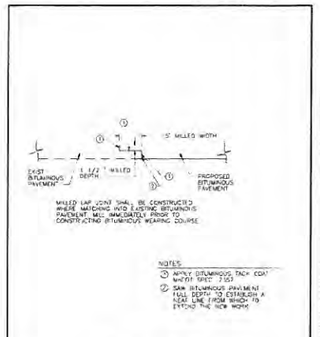
CONCRETE SIDEWALK

FEBRUARY 2015 | CITY OF LAKE ELMO | STANDARD DRAWING NO. 510 LAKE ELMO



MANHOLE CASTING ADJUSTMENT

FEBRUARY 2015 | CITY OF LAKE ELMO | STANDARD DRAWING NO. 511 LAKE ELMO



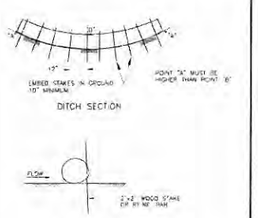
MILLED LAP JOINT

FEBRUARY 2015 | CITY OF LAKE ELMO | STANDARD DRAWING NO. 512 LAKE ELMO

1. RESTORE ALL DISTURBED AREAS WITH 6 INCHES OF TOPSOIL CONFORMING TO MNDOT 3877.
2. PROTECT ALL STORM SEWER INLETS AS SPECIFIED HEREIN AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.
3. MAINTAIN ALL SILT FENCE AND REPAIR OR REPLACE AS NEEDED OR REQUIRED UNTIL TURF HAS BEEN ESTABLISHED.
4. RESTORATION WORK SHALL BEGIN WITHIN 7 DAYS OF FINAL GRADING.
5. A MINIMUM OF 3 ROWS OF SOD SHALL BE PLACED ADJACENT TO THE BACK OF CURBS ALONG ALL BOULEVARDS. SILT FENCE SHALL BE PLACED DIRECTLY BEHIND THE SOD IN ACCORDANCE WITH THE CITY STANDARD DETAILS.
6. BOULEVARD AND DITCH RESTORATION INCLUDES FINE GRADING, WHICH INCLUDES THE REMOVAL OF ROCKS, DEBRIS AND SOIL CHUNKS, WHILE MAINTAINING POSITIVE DRAINAGE.

STANDARD PLAN NOTES
SITE RESTORATION PLANS

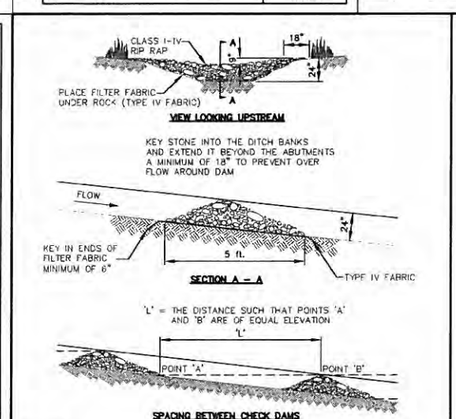
FEBRUARY 2015 | CITY OF LAKE ELMO | STANDARD DRAWING NO. 600D LAKE ELMO



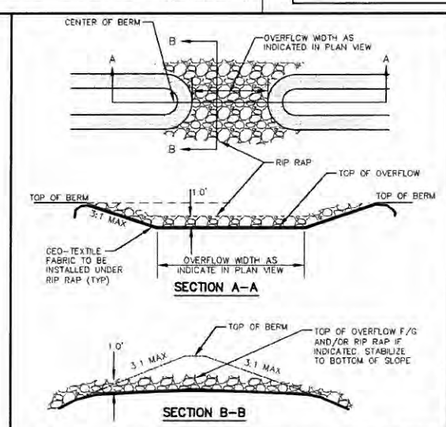
NOTE:
HOLE TO BE INSTALLED AT AN ANGLE OF APPROXIMATELY 45° ON THE DOWNSTREAM SIDE OF THE FIBER ROLL. ENSURE THAT STAKE DOES NOT PUSH DOWN THE FIBER ROLL FROM ITS FULL HEIGHT.

DITCH CHECK (FIBER ROLL)

FEBRUARY 2015 | CITY OF LAKE ELMO | STANDARD DRAWING NO. 601 LAKE ELMO



TEMPORARY ROCK CHECK DAM | LAST REVISED: 03/03/08 | GD18

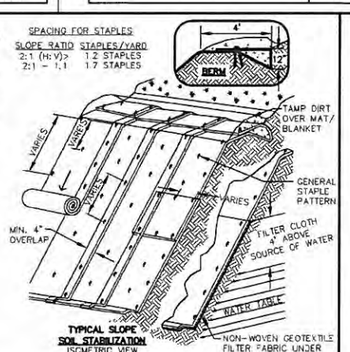


POND OVERFLOW | LAST REVISED: 03/18/13 | GD19

CATEGORY OF BLANKET	STAPLE LENGTH
00	5"
0	5"
1	4"
2	4"
3	6"
4	6"
5	5"
6	5"
7	5"

SPACING FOR STAPLES

SLOPE RATIO	STAPLES/YARD
2:1 (H:V)>	1.2 STAPLES
2:1 – 1:1	1.7 STAPLES

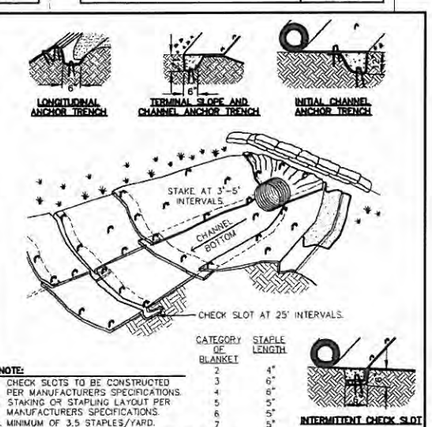


TYPICAL SLOPE SOIL STABILIZATION
ISOMETRIC VIEW

WET SLOPE LINING

NOTE:
1. MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE
2. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICK AND GRASS
3. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT
4. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL
5. DO NOT STRETCH

TEMPORARY EROSION BLANKETS
TURF REINFORCEMENT MATS FOR SLOPES | LAST REVISED: 03/03/08 | GD21



NOTE:
1. CHECK SLOTS TO BE CONSTRUCTED PER MANUFACTURERS SPECIFICATIONS.
2. STAKING OR STAPLING LAYOUT PER MANUFACTURERS SPECIFICATIONS.
3. MINIMUM OF 3.5 STAPLES/YARD.

CATEGORY OF BLANKET	STAPLE LENGTH
2	4"
3	6"
4	6"
5	5"
6	5"
7	5"

TEMPORARY EROSION BLANKETS
TURF REINFORCEMENT MATS FOR CHANNELS | LAST REVISED: 03/03/08 | GD22

Latest Revision Date: 07/23/15
0000565 03DTF01.dwg
Date: 02/27/15 Sheet: 7 OF 12

Westwood
Phone (952) 937-5150 | 7699 Anagram Drive
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Date 07/23/15 License No. 43358

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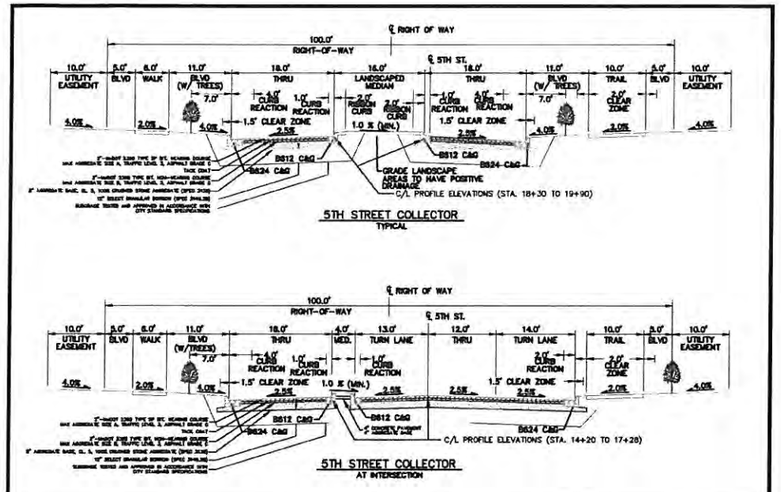
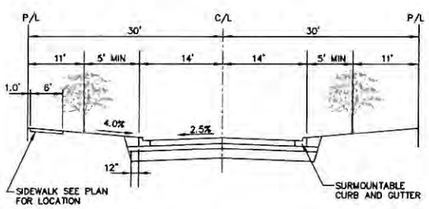
Savona 3rd Addition

Lake Elmo, Minnesota

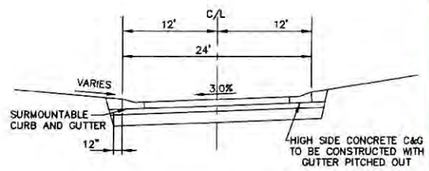
Details



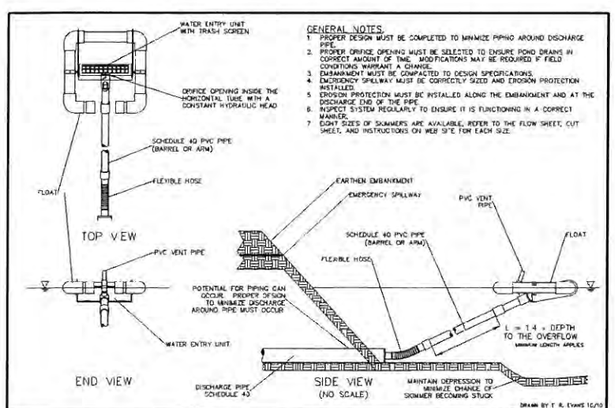
THE CITY OF LAKE ELMO	5TH STREET STANDARD DETAILS JUNE 2015	COLLECTOR TYPICAL SECTIONS



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



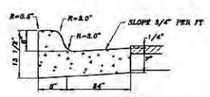
PRIVATE STREET (24' B-B)
NO SCALE
SEE CITY OF LAKE ELMO DETAIL 801 FOR TYPICAL STREET SECTION



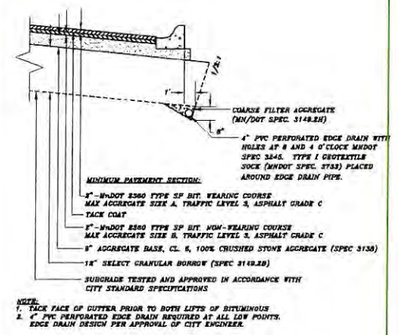
GENERAL NOTES:
1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE. REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

FAIRCLOTH SKIMMER® DISCHARGE SYSTEM WITH EMBANKMENT

J. W. FAIRCLOTH & SONS INC.
WWW.FAIRCLOTHSKIMMER.COM
TELEPHONE: (919) 720-1244
FAX: (919) 720-1288
EMAIL: WARREN@FAIRCLOTHSKIMMER.COM



MNDOT B624
CONCRETE CURB AND GUTTER
NO SCALE

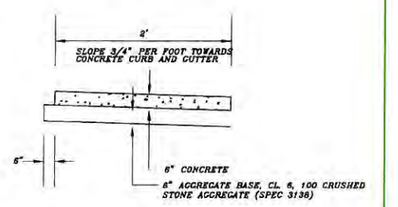


NOTE:
1. TACK FACE OF GUTTER PRIOR TO BOTH LIFTS OF BITUMINOUS
2. 4" PVC PERFORATED EDGE DRAIN REQUIRED AT ALL LOW POINTS. EDGE DRAIN DESIGN PER APPROVAL OF CITY ENGINEER.

10-TON DESIGN MINIMUM

GEOTECHNICAL REPORT REQUIRED TO VERIFY MINIMUM PAVEMENT CITY SECTION OR RECOMMEND INCREASED PAVEMENT SECTION.

THE CITY OF LAKE ELMO	5TH STREET STANDARD DETAILS MARCH 2015	MINIMUM PAVEMENT SECTION



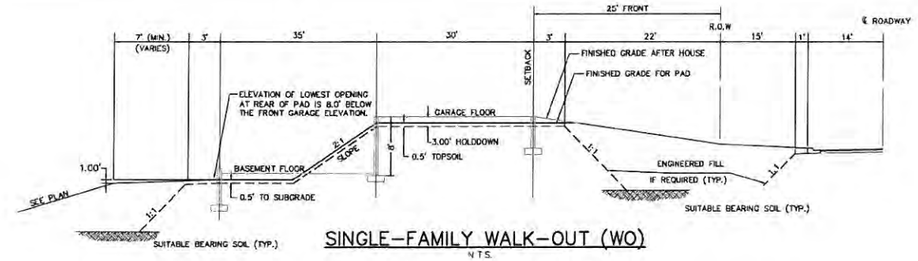
RIBBON CURB DETAIL

8' X 8' PANEL		

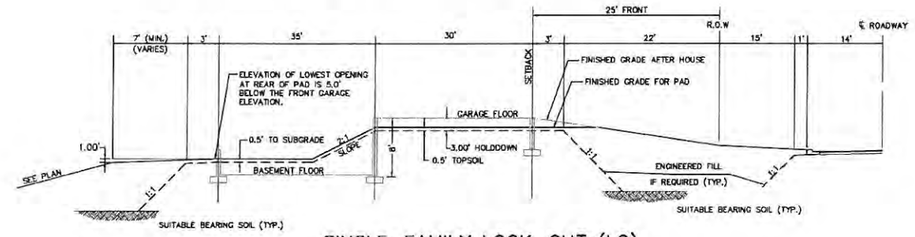
NOTE:
1. TOOL JOINTS 8' O/C

CONCRETE MEDIAN DETAIL

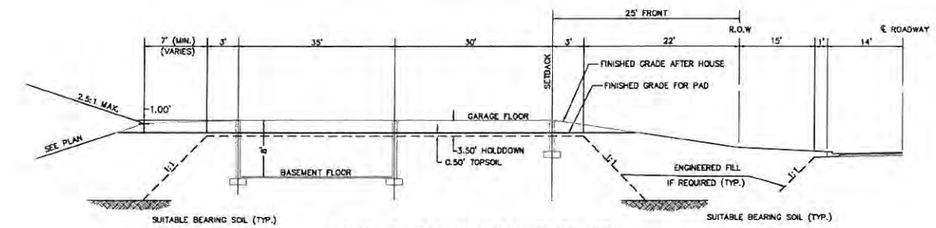
THE CITY OF LAKE ELMO	5TH STREET STANDARD DETAILS MARCH 2015	STREET MEDIAN CONCRETE SURFACING



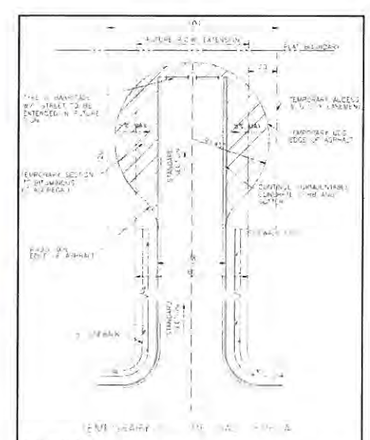
SINGLE-FAMILY WALK-OUT (WO)
N.T.S.



SINGLE-FAMILY LOOK-OUT (LO)
N.T.S.

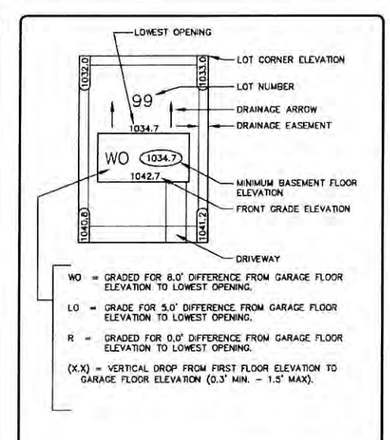


SINGLE-FAMILY RAMBLER (R)
N.T.S.



FEBRUARY 2015

THE CITY OF LAKE ELMO	CITY OF LAKE ELMO	STANDARD DRAWING NO. 807A LAKE ELMO



WO = GRADED FOR 8.0' DIFFERENCE FROM GARAGE FLOOR ELEVATION TO LOWEST OPENING.

LO = GRADE FOR 5.0' DIFFERENCE FROM GARAGE FLOOR ELEVATION TO LOWEST OPENING.

R = GRADED FOR 0.0' DIFFERENCE FROM GARAGE FLOOR ELEVATION TO LOWEST OPENING.

(X.X) = VERTICAL DROP FROM FIRST FLOOR ELEVATION TO GARAGE FLOOR ELEVATION (0.3' MIN. - 1.5' MAX).

SINGLE-FAMILY TYPICAL LOT DETAIL

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

Latest Revision Date: 07/23/15
0000565.03DTFC2.dwg

Date: 02/27/15 Sheet: 8 OF 12

Westwood
Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

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.

John Bender

Date 07/23/15 License No. 43358

Revisions:
05/20/15 Revised Per Notarized
06/03/15 Revised per Comments
06/25/15 Revised per Comments
07/14/15 Revised per Comments

Designed:	CLJ
Checked:	JHB
Drawn:	DWR
Record Drawing by/date:	JAS

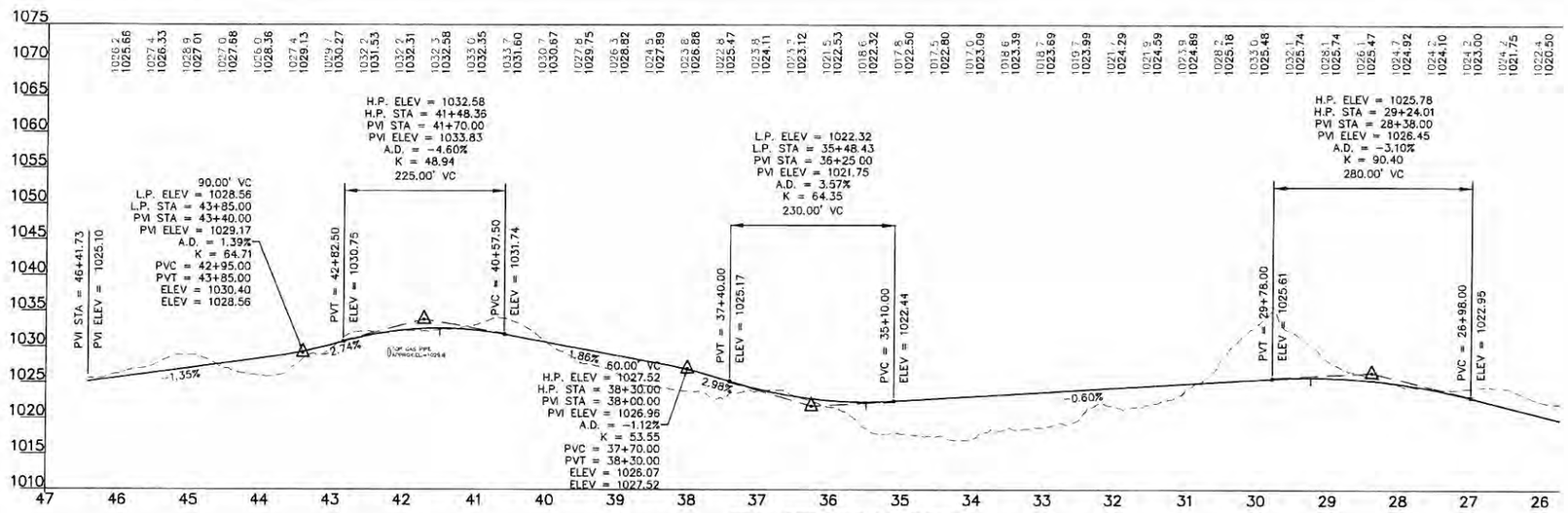
Prepared for:

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

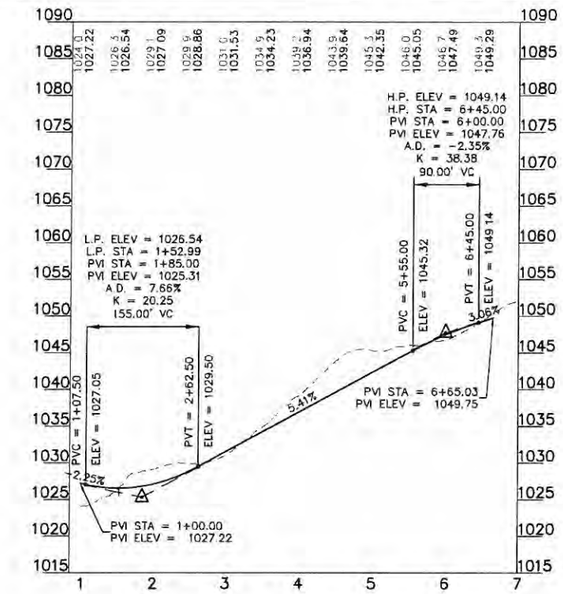
Savona 3rd Addition

Lake Elmo, Minnesota

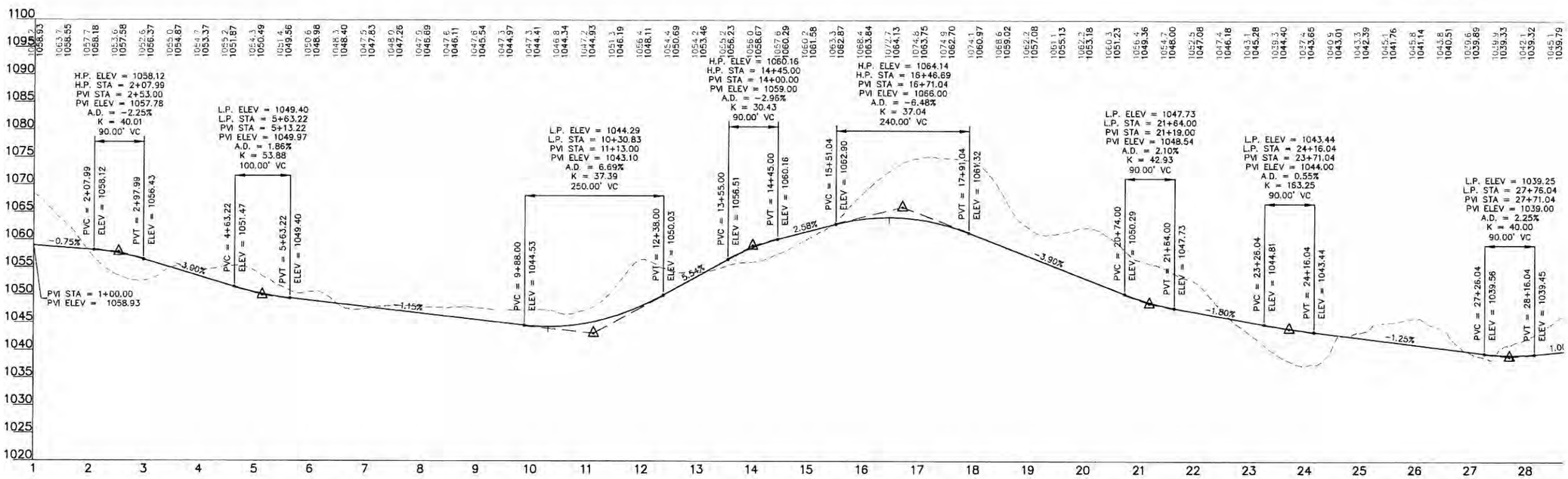
Details



5TH STREET NORTH



JASMINE AVE.



LOWER 6TH STREET NORTH

JUNIPER AVE N

6TH STREET NORTH

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

0' 100' 200' 300'

Latest Revision Date: 07/23/15

3000565.030TFC3.dwg

Date: 02/27/15 Sheet: 9 OF 12

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Designed:	CLJ
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Prepared for:

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

Savona 3rd Addition

Lake Elmo, Minnesota

Street Profiles

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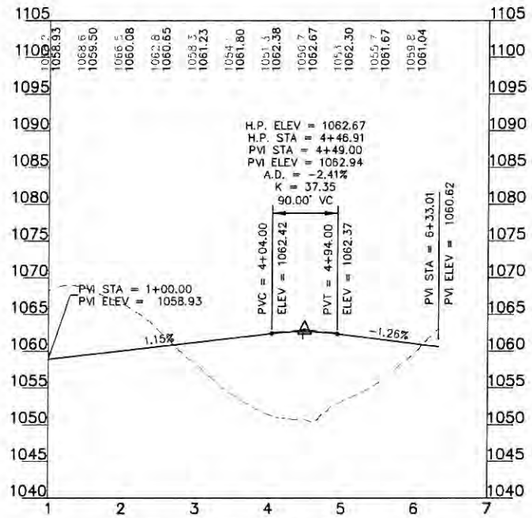
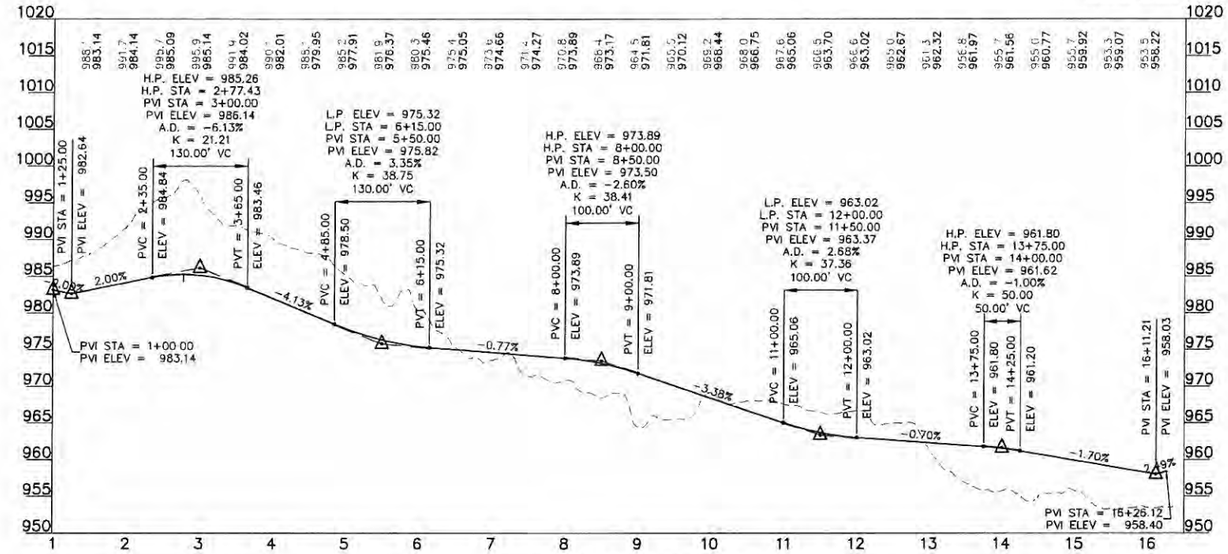
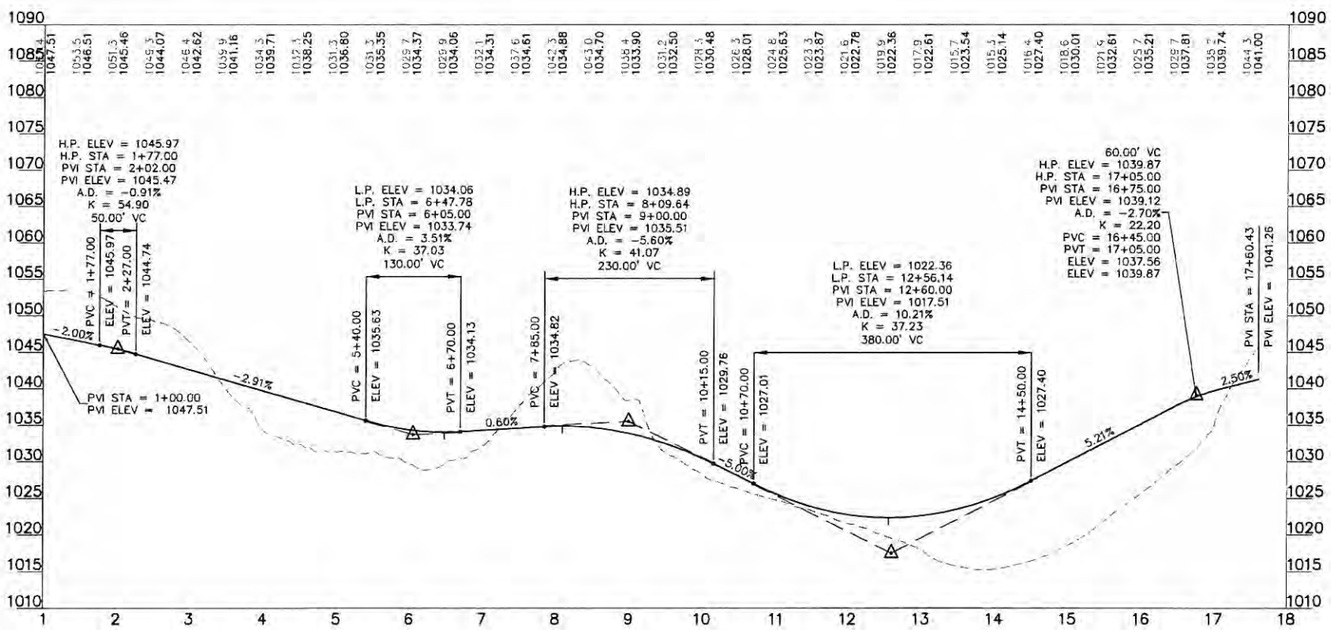


6TH STREET COURT



5TH STREET LANE N.



6TH STREET LANE N.

0' 100' 200' 300'

Latest Revision Date: 07/23/15

0000565.03 01 C4.dwg

Date: 02/27/15 Sheet: 10 OF 12

Savona 3rd Addition

Lake Elmo, Minnesota

Street Profiles

Westwood

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John Bender

Date 07/23/15 License No. 43358

Revisions:

05/29/15 Revised Per Watershed
06/03/15 Revised per Comments
06/25/15 Revised per Comments
07/21/15 Revised per Comments

Designed:	CTJ
Checked:	JHB
Drawn:	DWR
Record Drawing by/date:	JAS

Prepared for:

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

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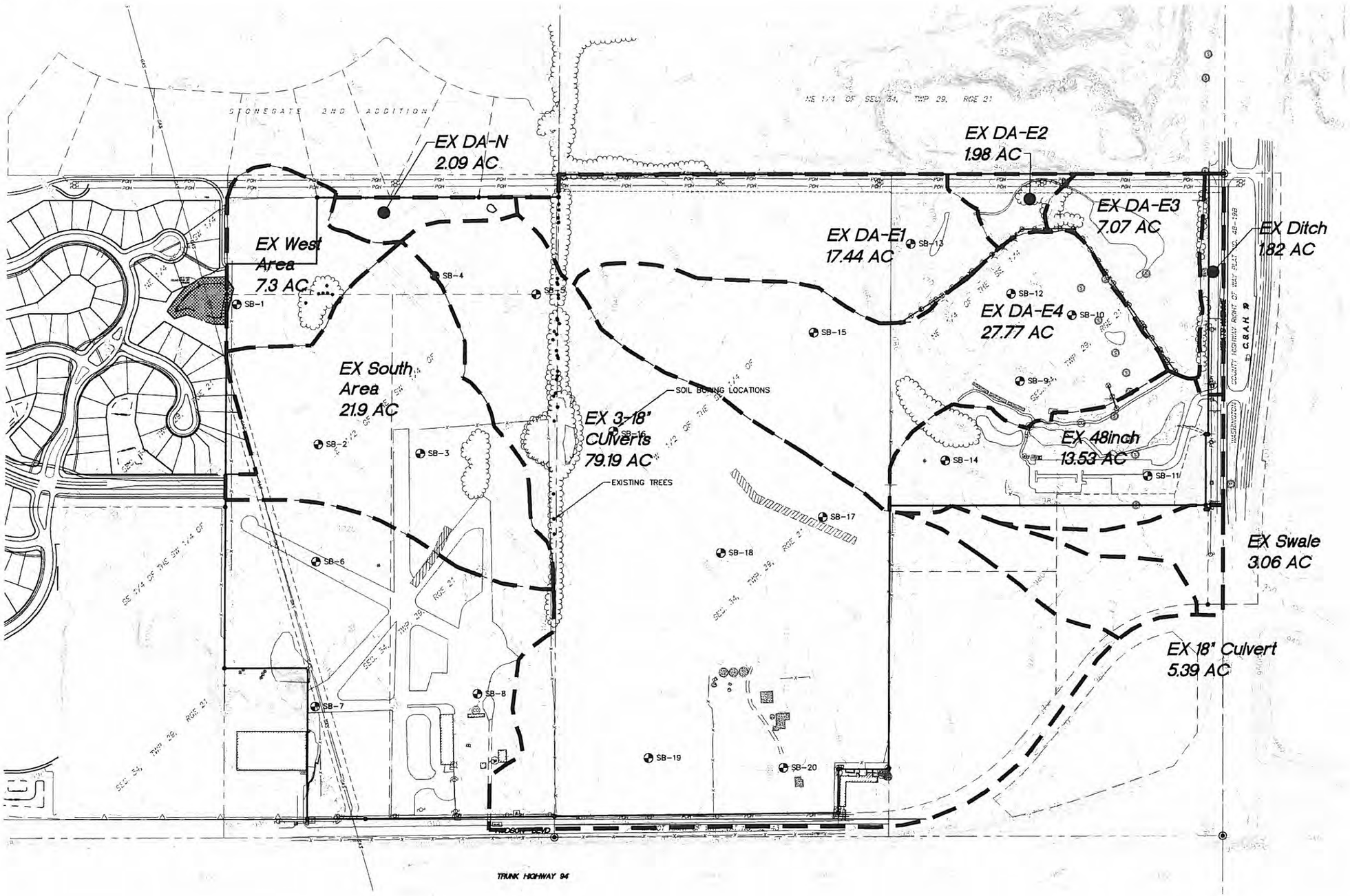

0' 200' 400' 600'

Latest Revision Date: 07/23/15
0000585.03DAF01.dwg

Date: 02/27/15 Sheet: 11 OF 12

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John Bender
Date: 07/23/15 License No. 43358

Revisions:

05/20/15 Revised Per Watershed
06/03/15 Revised per Comments
06/25/15 Revised per Comments
07/14/15 Revised per Comments

Designed:	CLJ
Checked:	JHB
Drawn:	DWR
Record Drawing by/date:	JAS

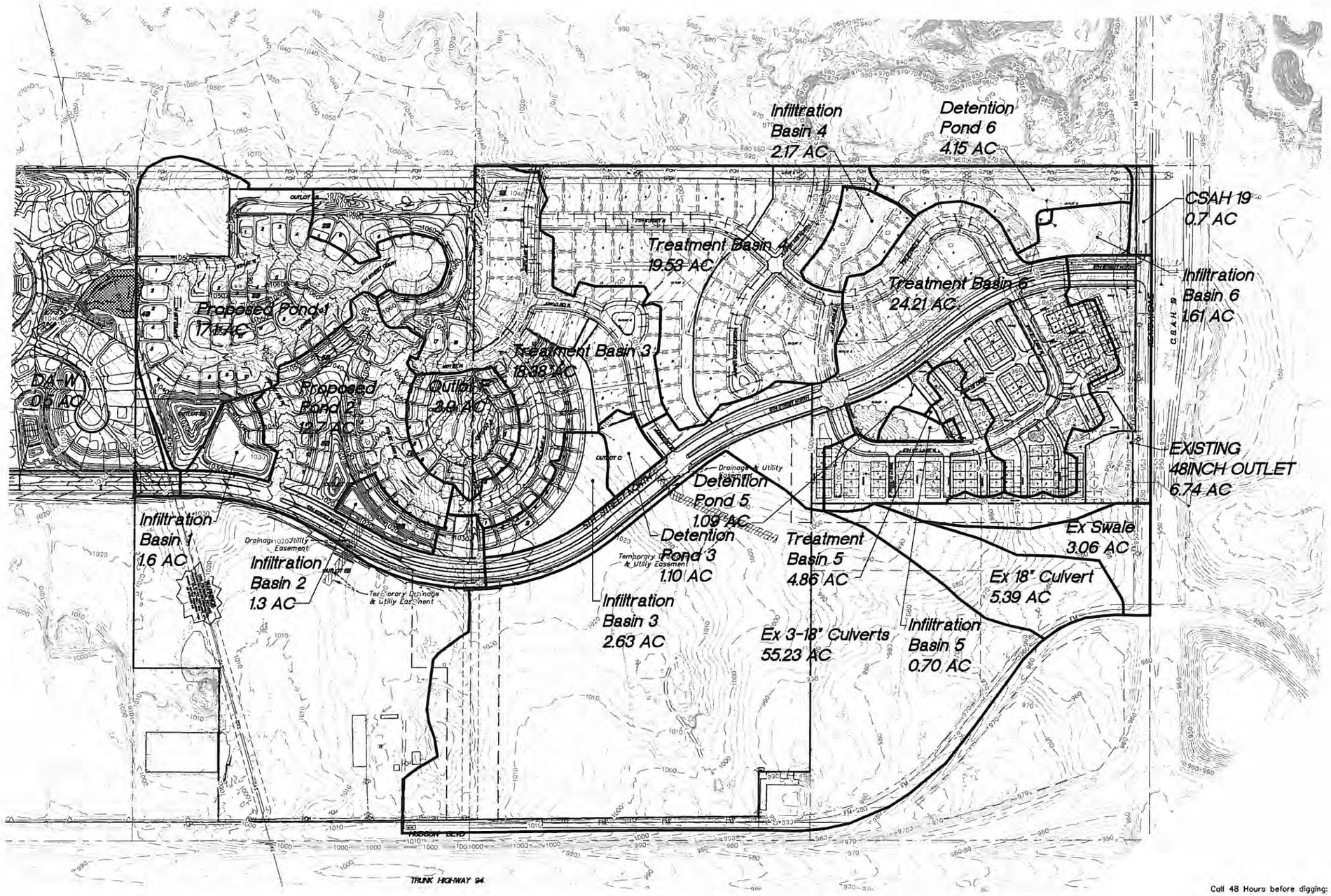
Prepared for:

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

Savona 3rd Addition

Lake Elmo, Minnesota

Pre-Development Drainage Area Plan



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0' 200' 400' 600'

Latest Revision Date: 07/23/15
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Date: 02/27/15 Sheet: 12 OF 12

Savona 3rd Addition

Lake Elmo, Minnesota

Post-Development Drainage Area Plan

Westwood

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Toll Free (888) 937-5150 westwoodps.com

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John Bender

Date 07/23/15 License No. 43358

Revisions
06/20/15 Revised Per Watershed
06/03/15 Revised per Comments
06/25/15 Revised per Comments
07/14/15 Revised per Comments

Designed:	CLJ
Checked:	JHS
Drawn:	DWR
Record Drawing by/date	JAS

Prepared for:

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

Construction Plans

for

Sanitary Sewer, Water Main, Storm Sewer and Streets

for

Savona 3rd Addition

Lake Elmo, Minnesota

Prepared for:

Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnnesota 55446
Contact: Joe Jablonski
Phone: 952-249-3033

Prepared by:

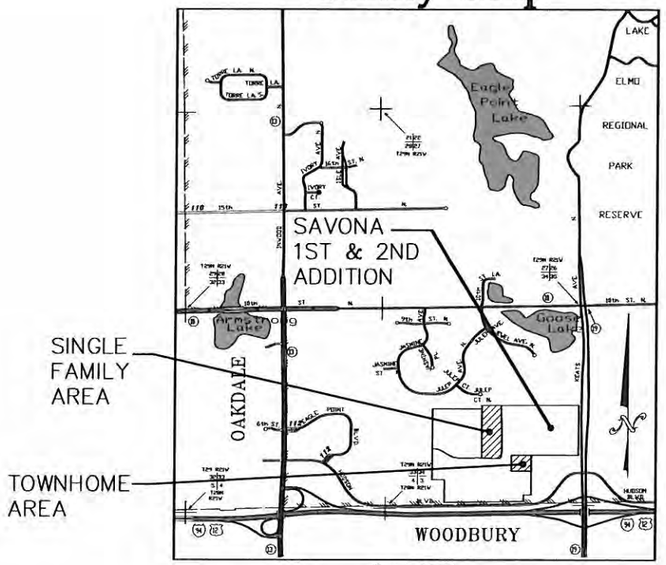
Westwood

Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com

Westwood Professional Services, Inc.

Project number: 0000565.03
Contact: John Bender

Vicinity Map



(Not to Scale)

Sheet List Table

Sheet Number	Sheet Title
1	Cover
2	Overall
3	Sanitary Sewer and Water Main Construction Plan
4	Sanitary Sewer and Water Main Construction Plan
5	Sanitary Sewer and Water Main Construction Plan
6	Sanitary Sewer and Water Main Construction Plan
7	Sanitary Sewer and Water Main Construction Plan
8	Sanitary Sewer and Water Main Construction Plan
9	Storm Sewer and Street Construction Plan
10	Storm Sewer and Street Construction Plan
11	Storm Sewer and Street Construction Plan
12	Storm Sewer and Street Construction Plan
13	Storm Sewer and Street Construction Plan
14	Storm Sewer and Street Construction Plan
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16	Details
17	Details
18	Details
19	5th Street Storm Sewer and Street Construction Plan
20	5th Street Signing, Striping & Geometric Plan
21	5th Street Typical Sections

NO.	DATE	REVISION	SHEETS
1	05/14/15	Revised Per Lennar	.
2	07/17/15	City Comments	ALL
3	08/12/15	Revised per Comments	ALL

Construction Plans
for
Sanitary Sewer, Water Main, Storm Sewer and Streets
for
Savona 3rd Addition
Lake Elmo, Minnesota

Date: 04/27/15 Sheet: 1 of 21

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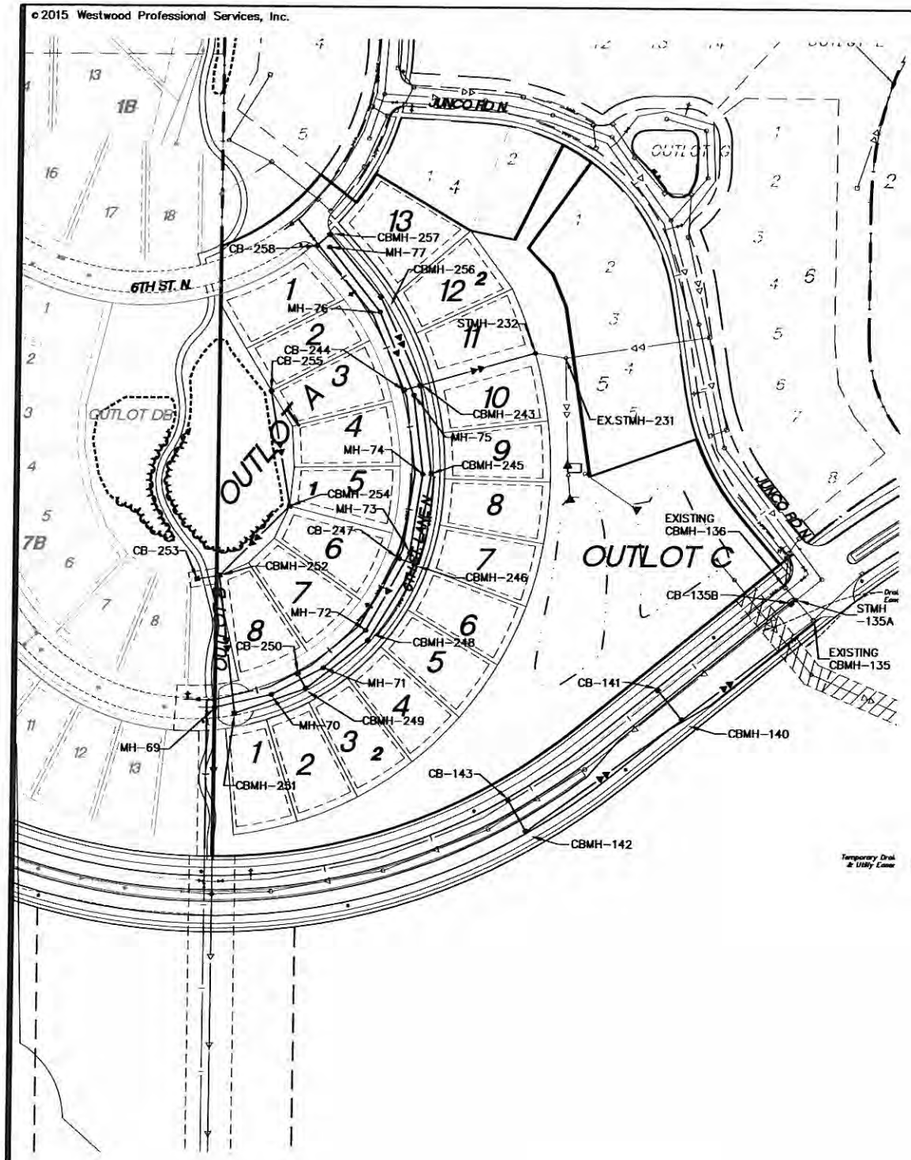

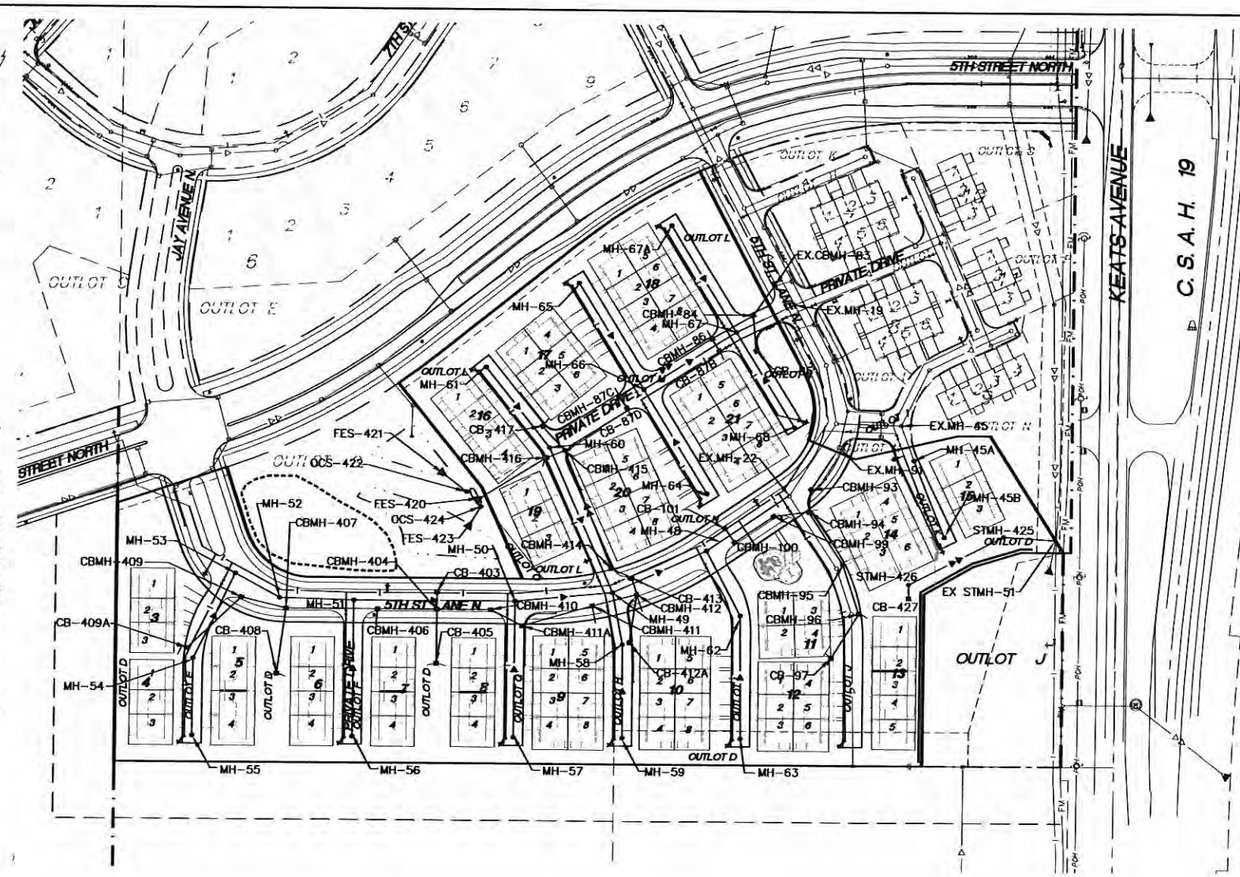

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STORM SEWER CASTING SCHEDULE

STRUCTURE			CASTING TYPE
NUMBER	TYPE	DIA.	
84	CBMH	48"	R-3067-V
85	CB	2X3	R-3067-V
86	CBMH	48"	R-3067-V
87B	CB	2X3	R-3067-V
87C	CBMH	48"	R-3067-V
87D	CB	2X3	R-3067-V
93	CBMH	48"	R-3067-V
94	CBMH	48"	R-3067-V
95	CBMH	48"	R-3067-V
96	CBMH	48"	R-3067-V
97	CB	48"	R-4342
99	CBMH	48"	R-3067-V
100	CBMH	48"	R-3067-V
101	CB	2X3	R-3067-V
135	CBMH	48"	R-3067-V
135A	STMH	48"	R-1642-B
135B	CB	2X3	R-3067-V
140	CBMH	48"	R-3067-V
141	CB	2X3	R-3067-V
142	CBMH	48"	R-3067-V
143	CB	2X3	R-3067-V
232	STMH	48"	R-3067-V
243	CBMH	48"	R-3067-V
244	CB	2X3	R-3067-V
245	CBMH	48"	R-3067-V
246	CBMH	48"	R-3067-V
247	CB	2X3	R-3067-V
248	CBMH	48"	R-3067-V
249	CBMH	48"	R-3501-TR
250	CB	2X3	R-3501-TR
251	CBMH	48"	R-3067-V
252	CB	48"	R-4342
253	CB	48"	R-4342
254	CB	48"	R-4342
255	CB	48"	R-4342
256	CBMH	48"	R-3067-V
257	CBMH	48"	R-3067-V
258	CB	2X3	R-3067-V
403	CB	2X3	R-3067-V
404	CBMH	48"	R-3067-V
405	CB	48"	R-4342
406	CBMH	48"	R-3067-V
407	CBMH	48"	R-3067-V
408	CB	48"	R-4342
409	CBMH	48"	R-3067-V
409A	CB	2X3	R-3067-V
410	CBMH	48"	R-3067-V
411	CBMH	48"	R-3067-V
411A	CBMH	48"	R-3067-V
412	CBMH	48"	R-3067-V
412A	CB	2X3	R-3067-V
413	CBMH	48"	R-3067-V
414	CBMH	48"	R-3067-V
415	CBMH	48"	R-3067-V
416	CBMH	48"	R-3067-V
417	CB	2X3	R-3067-V
420	FES	24"	TRASHGUARD
421	FES	48"	TRASHGUARD
422	OCS	48"	–
423	FES	48"	TRASHGUARD
424	OCS	48"	–
425	STMH	48"	R-1642 B
426	STMH	48"	R-1642 B
427	CB	27"	R-4342

LEGEND

EXISTING
- Sanitary Sewer
- Water
- Hyd. w\Valve
- Storm Sewer

PROPOSED
- Sanitary Sewer
- Water
- Hyd. w\Valve
- Storm Sewer
- Drainfile

FUTURE
- Sanitary Sewer
- Water
- Hyd. w\Valve
- Storm Sewer

N

0' 100' 200' 300'

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

EXCAVATION CLOSE TO STRUCTURE LOCATION.

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

CLEARANCE TO EQUIPMENT AND WORKERS

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

STREET LIGHTING

☼ 30' POLE LAMP TYPE TO BE DETERMINED BY THE CITY

Westwood
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John Bender
Date 08/12/15 License No. 43358

Revisions
05/14/15 Revised Per Lennar
07/17/15 City Comments
08/12/15 Revised Per Comments

Designed: CJ
Checked: JBB
Drawn: DWR
Record Drawing by/date

Prepared for:

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

Savona 3rd Addition

Lake Elmo, Minnesota

Date: 04/27/15 Sheet: 2 OF 21

Overall

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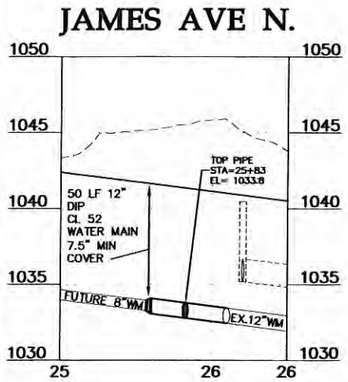
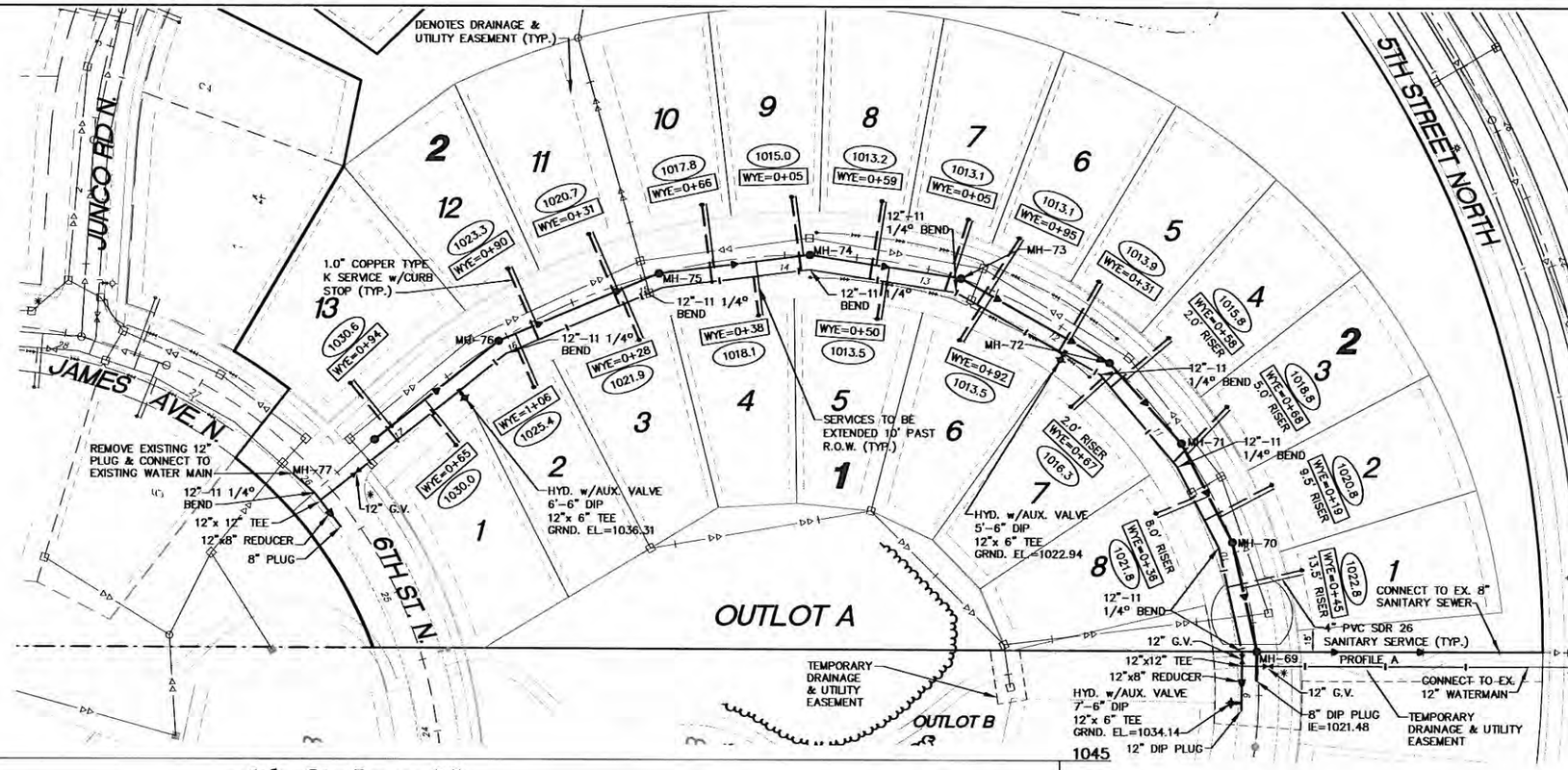




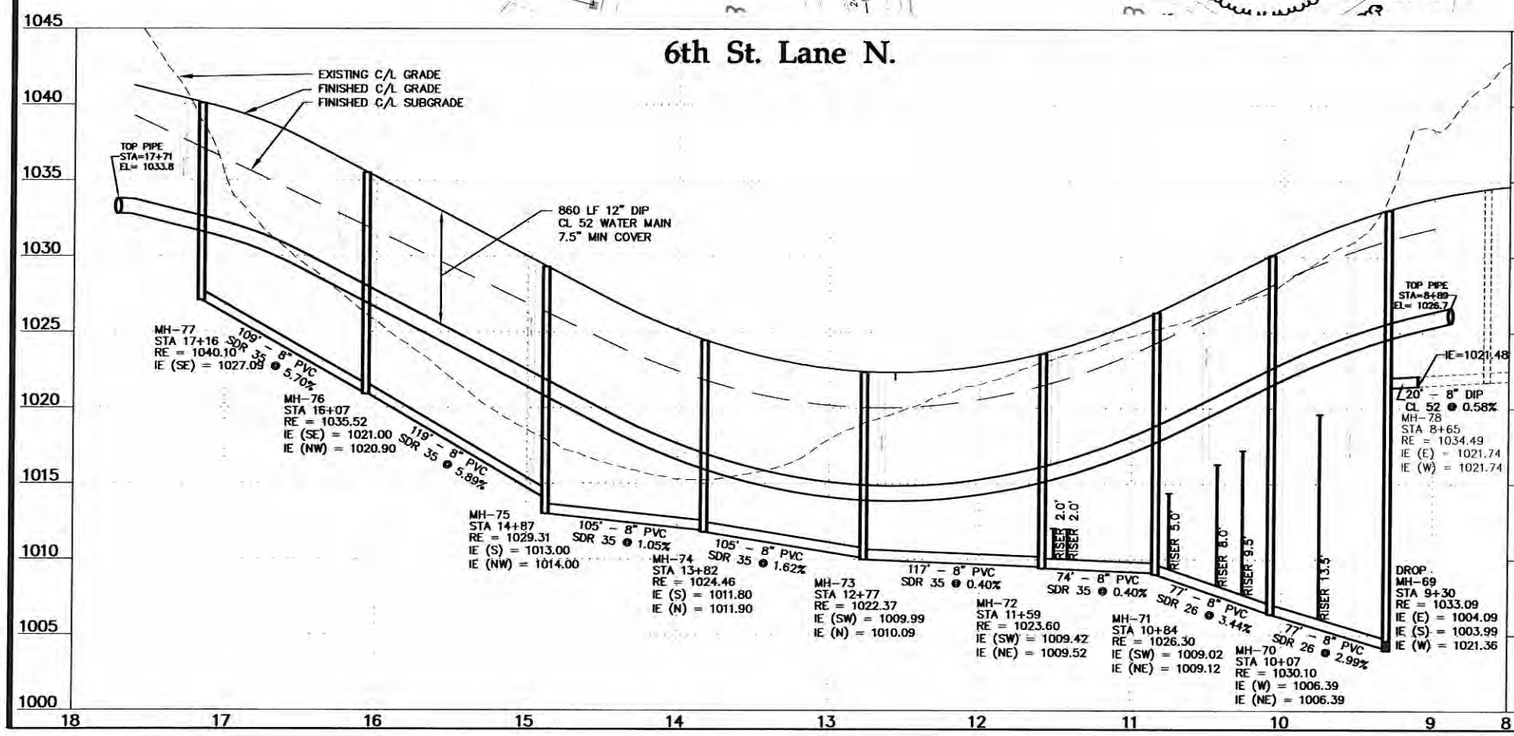
GENERAL NOTES:

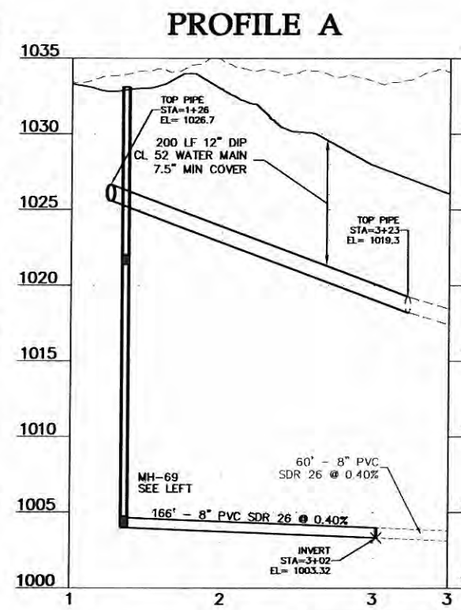
(XXX.X) DENOTES SANITARY SEWER SERVICE INVERT @ END OF STUB.

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

SANITARY SEWER NOTES:

1. ALL SANITARY SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. ALL SANITARY SEWER PVC PIPE SHALL BE INSTALLED ACCORDING TO CITY STANDARD DRAWING 103 GRANULAR MATERIAL BEDDING METHOD (FOR PVC SANITARY SEWER PIPE).
3. UNLESS NOTED OTHERWISE, ALL SMOOTH WALLED SANITARY SEWER PVC PIPE AND FITTINGS SHALL BE SDR 35 WITH ELASTOMERIC GASKETED JOINTS.
4. ALL SANITARY SEWER SERVICES SHALL BE 4-INCH PVC, SCH. 40 OR SDR 26 PIPE.
5. SMOOTH WALLED PVC PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF ASTM D-3034 FOR THE SIZE, STANDARD DIMENSION RATIO (SDR), AND STRENGTH REQUIREMENTS INDICATED ON THE PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS.
6. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MnDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
7. JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL SANITARY SEWER MANHOLES.
8. SANITARY SEWER INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A GASKETED, FLEXIBLE, WATERTIGHT CONNECTION TO ALLOW DIFFERENTIAL SETTLEMENT OF THE POPE AND MANHOLE TO TAKE PLACE.
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 WATERTIGHT 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, ENCASED IN POLYETHYLENE. CLASS-52.
4. ALL FITTINGS SHALL COMPLY WITH CEAM SPEC. 2611.2.A.1. ALL FITTINGS SHALL BE DUCTILE IRON PIPE WITH POLYETHYLENE ENCASEMENT. ALL CONNECTIONS SHALL BE INSTALLED UTILIZING COR-BLUE NUTS AND BOLTS.
5. USE GATE VALVES FOR ALL APPLICATIONS UP THROUGH 12 INCHES.
6. GATE VALVES SHALL BE RESILIENT WEDGE AMERICAN FLOW CONTROL SERIES 2500 OR APPROVED EQUAL. GATE VALVES MUST COMPLY WITH CEAM SPEC 2611.2, C.2.
7. USE BUTTERFLY VALVES FOR ALL APPLICATIONS GREATER THAN 12 INCHES.
8. BUTTERFLY VALVES SHALL BE MUELLER LINESEAL III, OR APPROVED EQUAL. BUTTERFLY VALVES SHALL COMPLY WITH CEAM SPEC. 2611.2, C.3.
9. BOLTS AND NUTS ON ALL VALVES AND HYDRANTS SHALL BE STAINLESS STEEL.
10. ALL HYDRANTS SHALL BE INSTALLED 5.0 FEET BACK OF CURB.
11. HYDRANTS SHALL BE WATEROUS "PACER," MODEL WB-67 OR APPROVED EQUAL, FITTED WITH FH 800 SERIES FLEX STAKE AND PAINTED RED.
12. HYDRANTS SHALL HAVE TWO OUTLET NOZZLES FOR 2-1/2 (I.D.) HOSE CONNECTIONS AND ONE 4" STORZ NOZZLE WITH PENTAGONAL NUT.
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 SINGLE FAMILY WATER SERVICES SHALL BE 1.0" TYPE K COPPER UNLESS OTHERWISE NOTED.

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Date: 04/27/15 Sheet: 3 OF 21

Westwood
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I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed PROFESSIONAL ENGINEER under the laws of the State of Minnesota.

John Bender
Date: 08/12/15 License No. 43358

Revisions:
05/14/15 Revised Per Lennar
07/17/15 City Comments
08/12/15 Revised Per Comments

Designed: CLJ
Checked: JBB
Drawn: DWR
Record Drawing by/date:

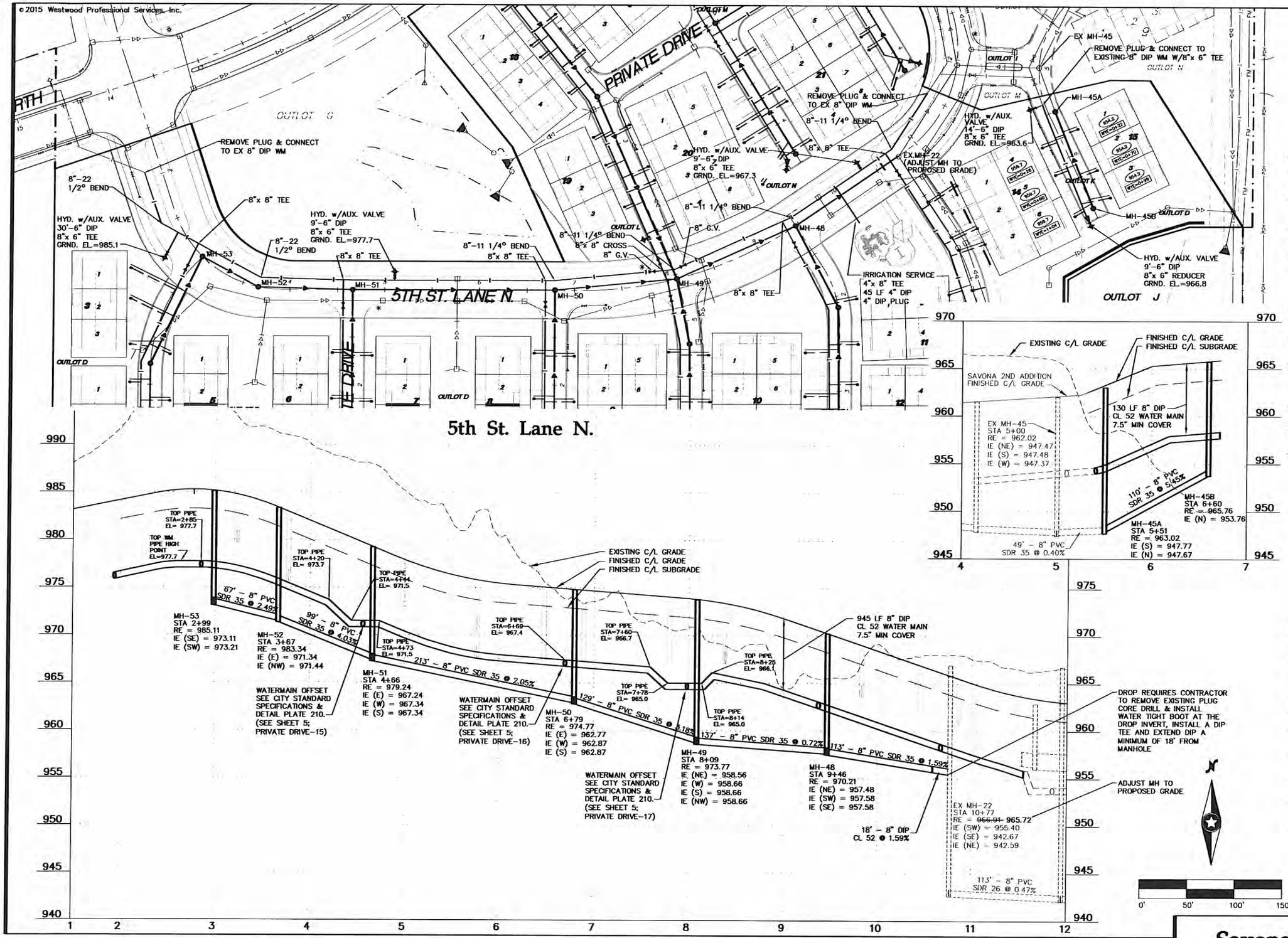
Prepared for:

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

Savona 3rd Addition

Lake Elmo, Minnesota

Sanitary Sewer and Water Main Construction Plan



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4. ALL SANITARY SEWER SERVICES SHALL BE 4-INCH PVC, SCH. 40 OR SDR 26 PIPE.
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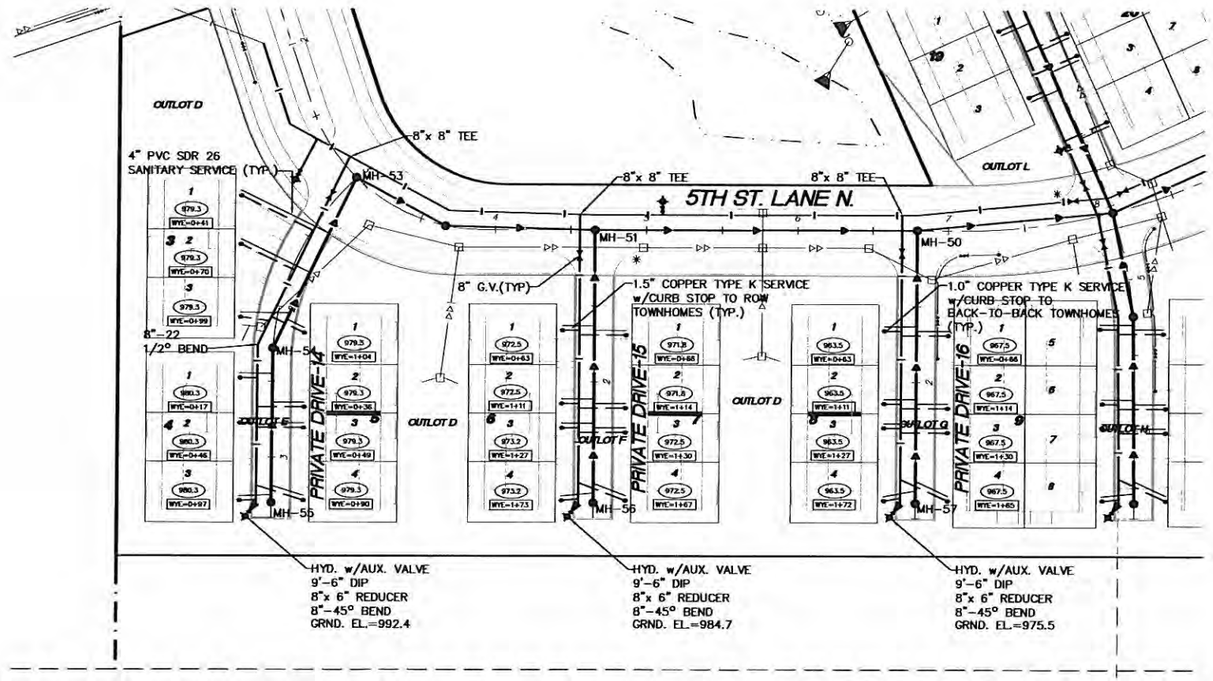

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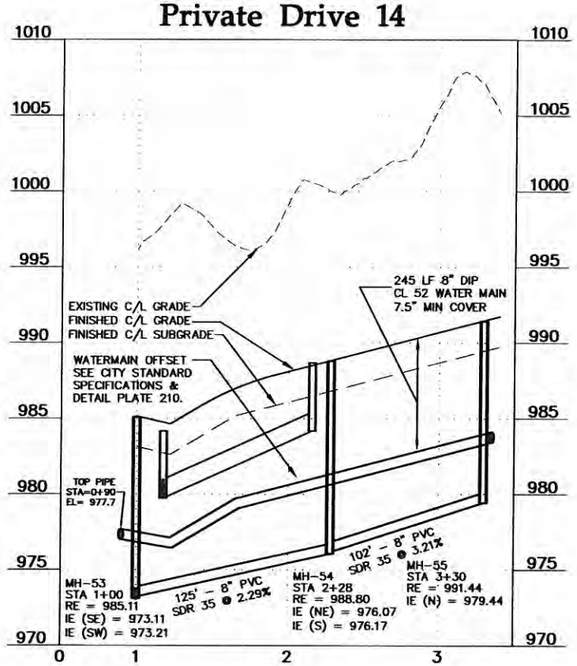
Private Drive 14



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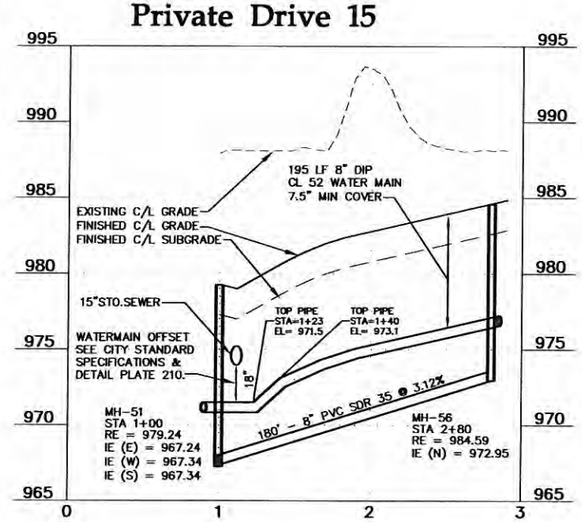

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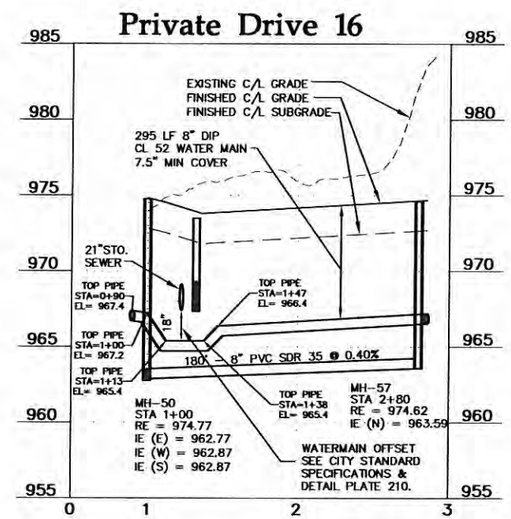

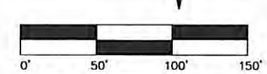

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Date: 04/27/15 Sheet: 5 OF 21

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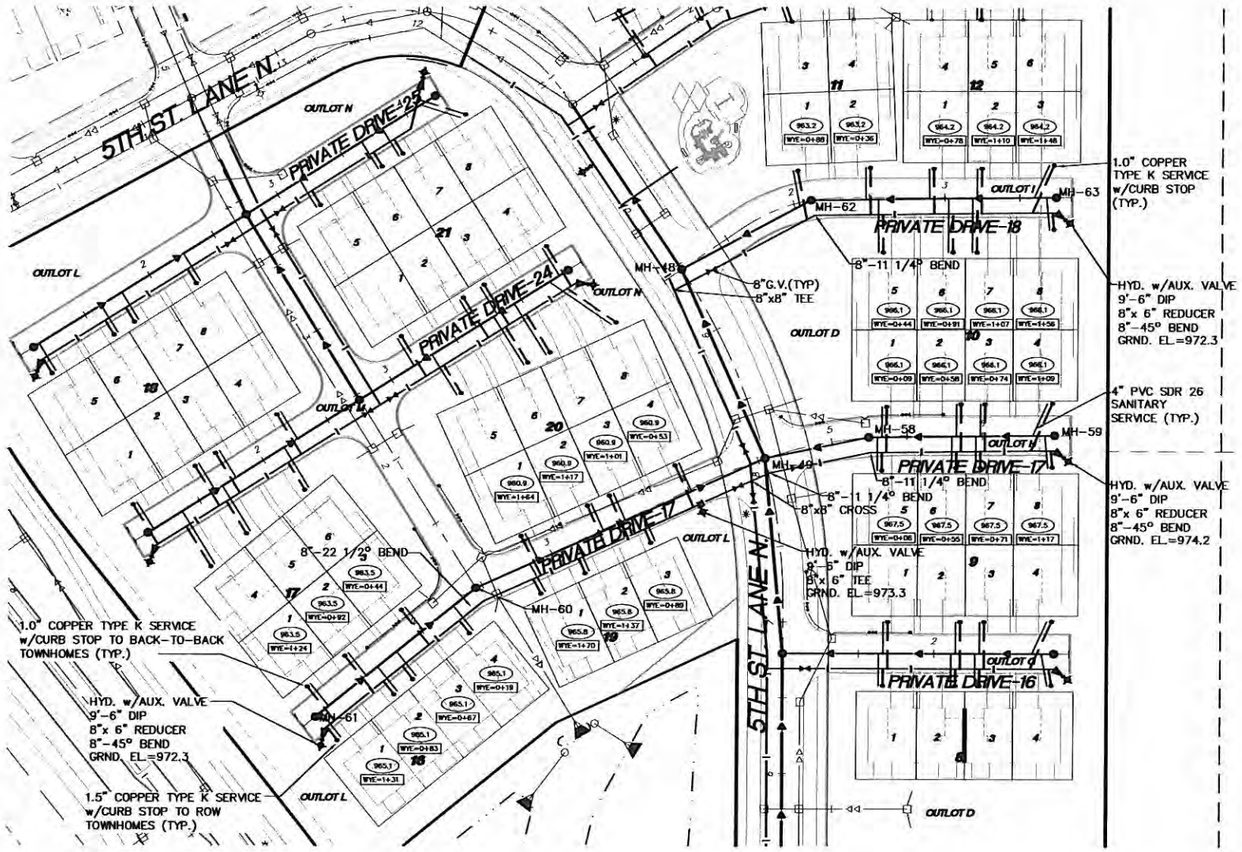

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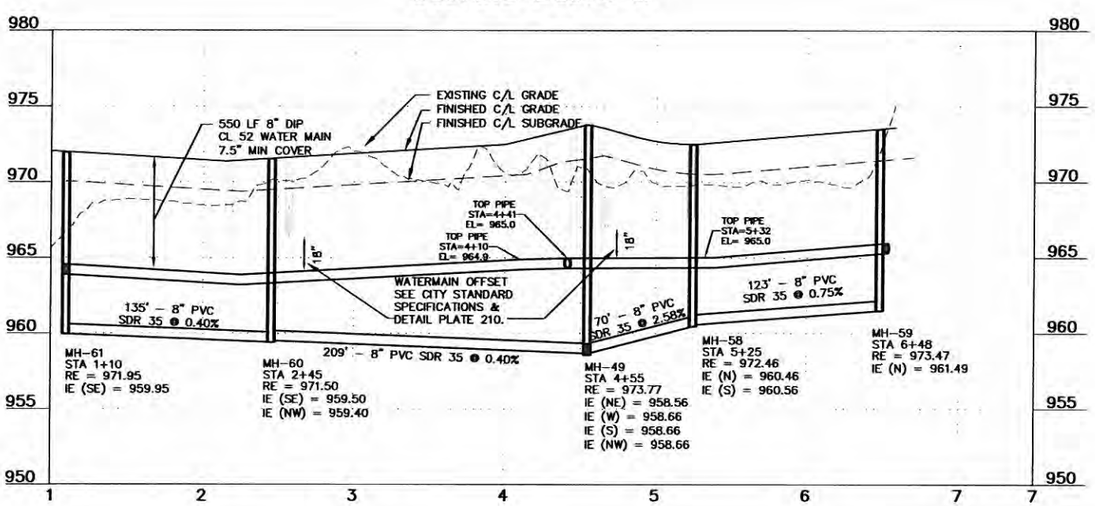

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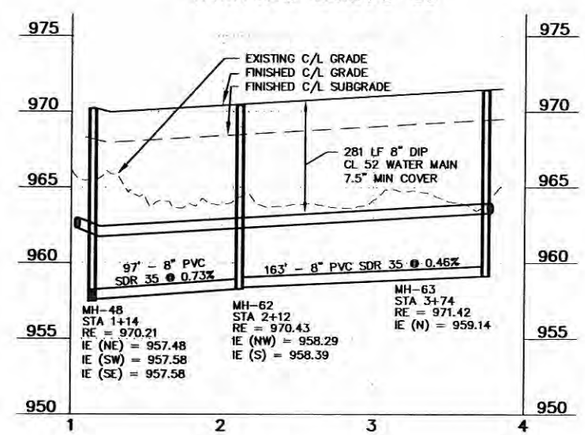

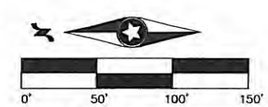

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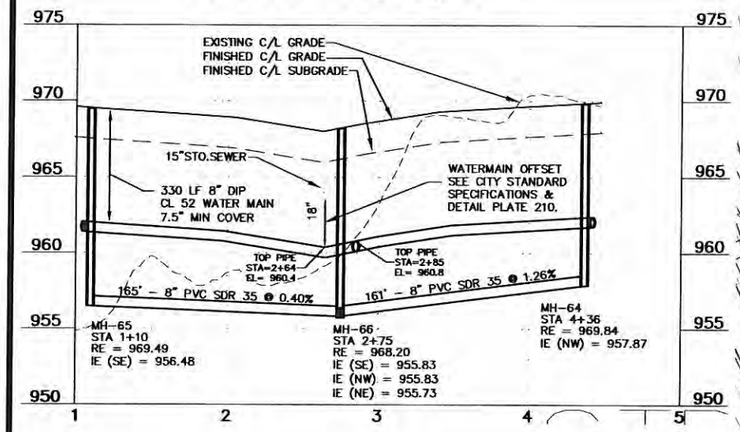

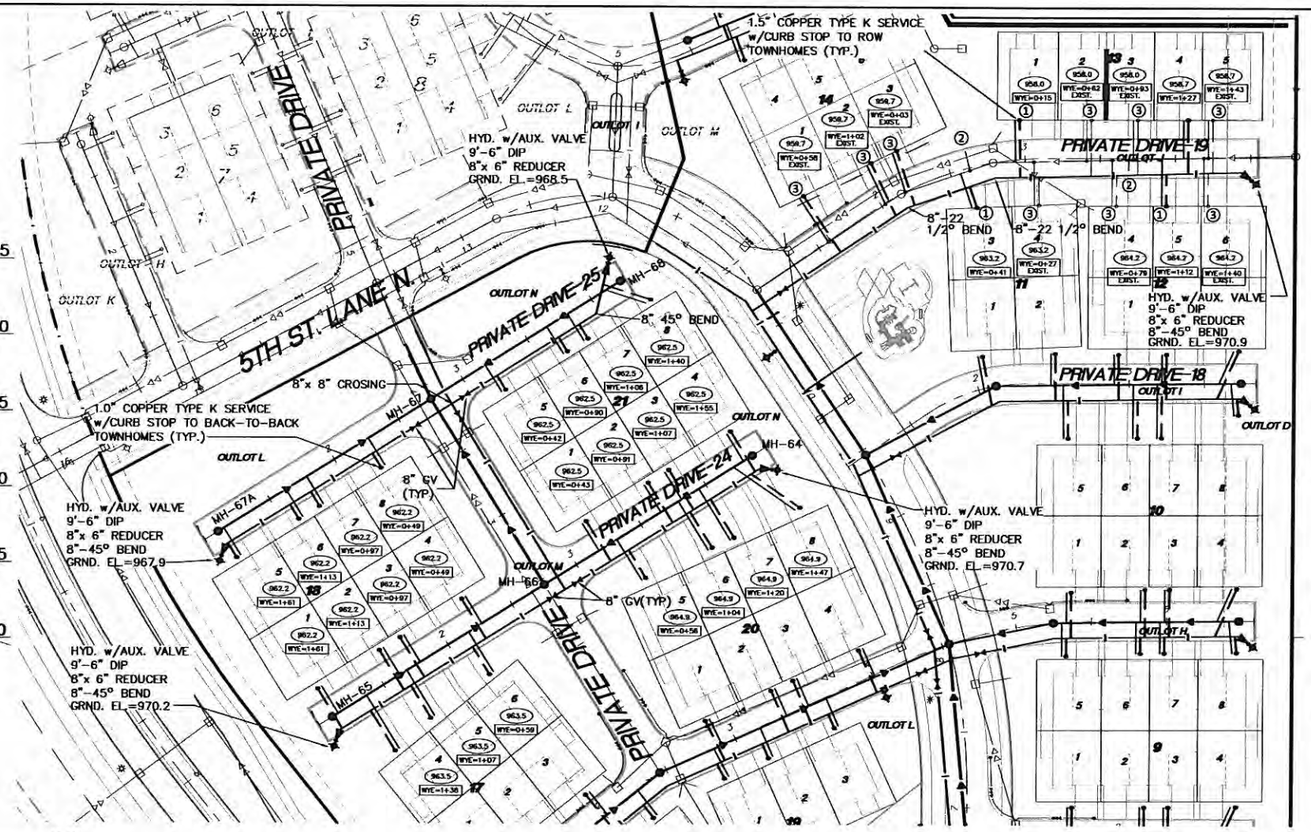

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12. HYDRANTS SHALL HAVE TWO OUTLET NOZZLES FOR 2-1/2 (I.D.) HOSE CONNECTIONS AND ONE 4" STORZ NOZZLE WITH PENTAGONAL NUT.
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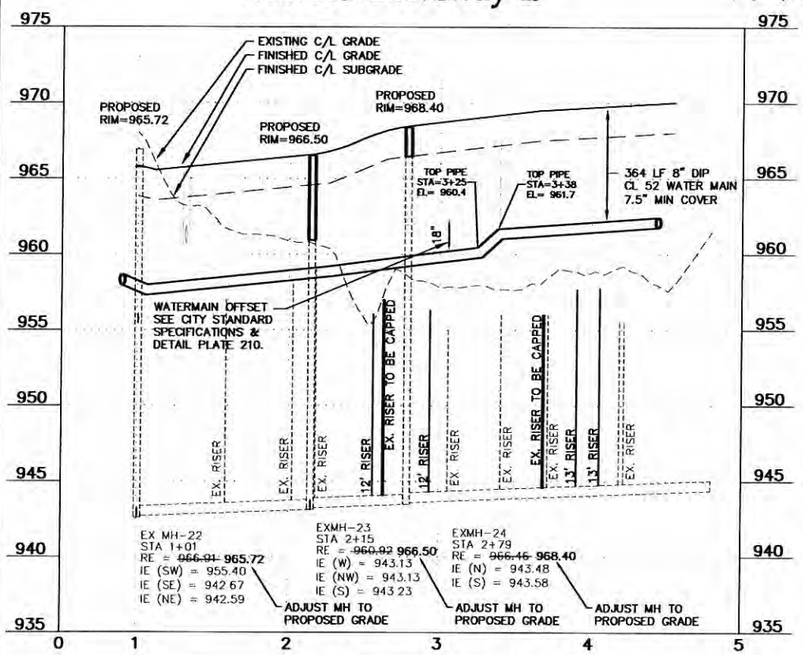
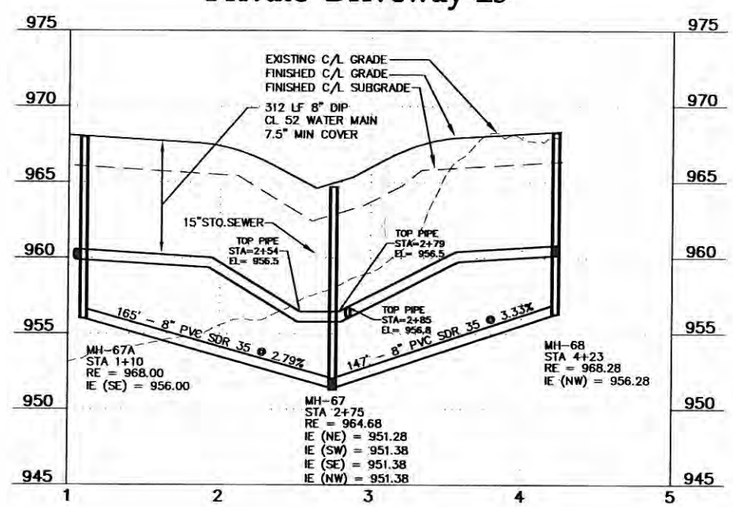
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WATER TO HOMES AND BUSINESSES WHOSE WATER SUPPLY IS DISRUPTED DURING THE COURSE OF THE PROJECT.
15. ALL BACK-TO-BACK TOWNHOME WATER SERVICES SHALL BE 1.0" TYPE K COPPER UNLESS OTHERWISE NOTED. ALL ROW TOWNHOME WATER SERVICES SHALL BE 1.5" TYPE K COOPER UNLESS OTHERWISE NOTED.

Private Driveway-19



Private Driveway-25



① SANITARY SERVICE TO BE CONNECTED TO PREVIOUSLY INSTALLED MAINLINE UTILITIES. SANITARY CONNECTION TO BE ROMAC INDUSTRIES STYLE "CB" SEWER SADDLE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

② EXISTING SERVICE RISERS TO BE REMOVED BACK TO MAINLINE AND CAPPED PER GOVERNING SPECIFICATIONS.

③ SANITARY SERVICE TO BE CONNECTED TO PREVIOUSLY INSTALLED SERVICE RISERS.

0' 50' 100' 150'

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I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed PROFESSIONAL ENGINEER under the laws of the State of Minnesota.

John Bender
Date: 08/12/15 License No. 43358

Revisions:
05/14/15 Revised Per Lennar
07/17/15 City Comments
08/12/15 Revised Per Comments

Designed: CLJ
Checked: JEB
Drawn: DWR
Record Drawing by/date:

Prepared for:

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

Savona 3rd Addition

Lake Elmo, Minnesota

Date: 04/27/15 Sheet: 7 OF 21

Sanitary Sewer and Water Main Construction Plan

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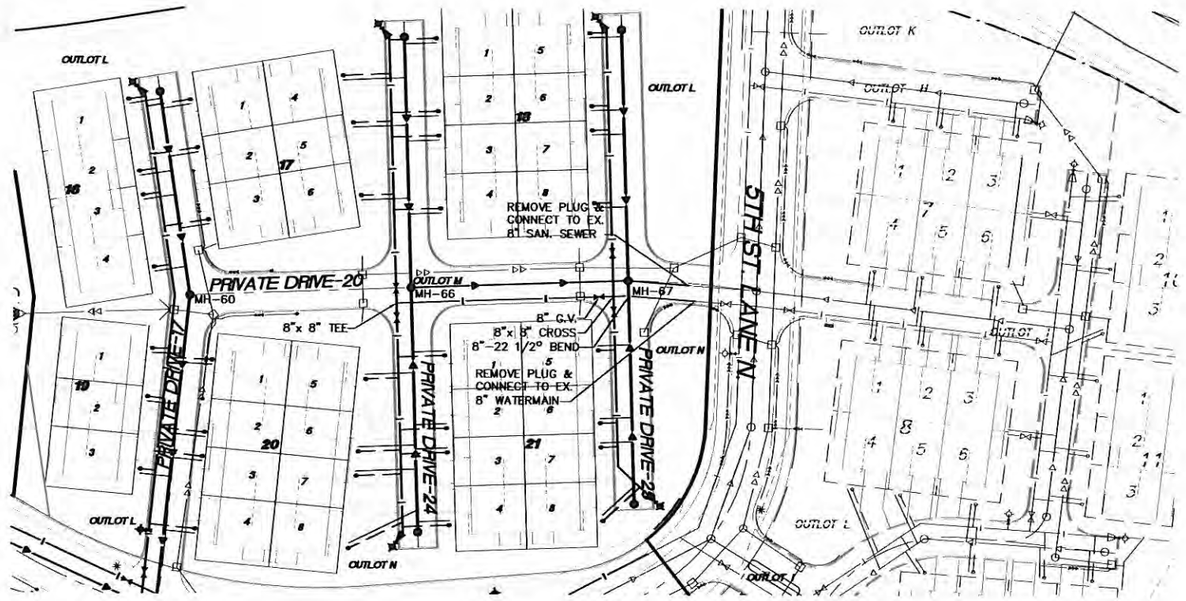
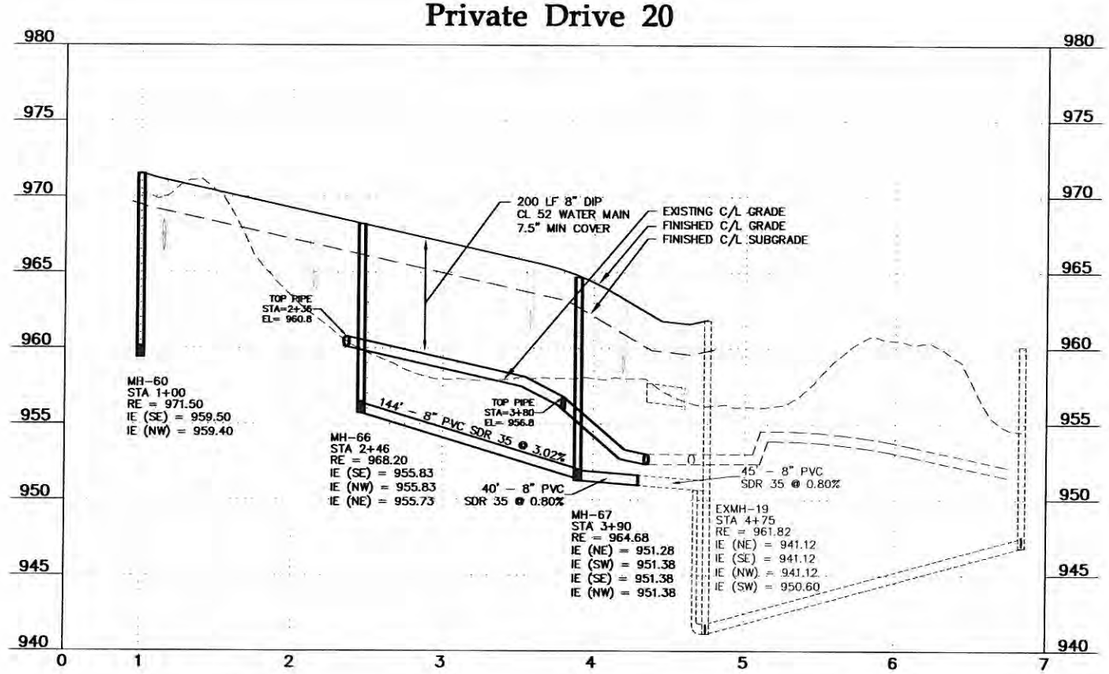


Private Drive 20



GENERAL NOTES:

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

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

SANITARY SEWER NOTES:

1. ALL SANITARY SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. ALL SANITARY SEWER PVC PIPE SHALL BE INSTALLED ACCORDING TO CITY STANDARD DRAWING 103 GRANULAR MATERIAL BEDDING METHOD (FOR PVC SANITARY SEWER PIPE).
3. UNLESS NOTED OTHERWISE, ALL SMOOTH WALLED SANITARY SEWER PVC PIPE AND FITTINGS SHALL BE SDR 35 WITH ELASTOMERIC GASKETED JOINTS.
4. ALL SANITARY SEWER SERVICES SHALL BE 4-INCH PVC, SCH. 40 OR SDR 26 PIPE.
5. SMOOTH WALLED PVC PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF ASTM D-3034 FOR THE SIZE, STANDARD DIMENSION RATIO (SDR), AND STRENGTH REQUIREMENTS INDICATED ON THE PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS.
6. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MnDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
7. JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL SANITARY SEWER MANHOLES.
8. SANITARY SEWER INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A GASKETED, FLEXIBLE, WATERTIGHT CONNECTION TO ALLOW DIFFERENTIAL SETTLEMENT OF THE POPE AND MANHOLE TO TAKE PLACE.
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 INSALLING WATERTIGHT 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, ENCASED IN POLYETHYLENE. CLASS-52.
4. ALL FITTINGS SHALL COMPLY WITH CEAM SPEC. 2611.2.A.1. ALL FITTINGS SHALL BE DUCTILE IRON PIPE WITH POLYETHYLENE ENCASEMENT. ALL CONNECTIONS SHALL BE INSTALLED UTILIZING COR-BLUE NUTS AND BOLTS.
5. USE GATE VALVES FOR ALL APPLICATIONS UP THROUGH 12 INCHES.
6. GATE VALVES SHALL BE RESILIENT WEDGE AMERICAN FLOW CONTROL SERIES 2500 OR APPROVED EQUAL. GATE VALVES MUST COMPLY WITH CEAM SPEC 2611.2, C.2.
7. USE BUTTERFLY VALVES FOR ALL APPLICATIONS GREATER THAN 12 INCHES.
8. BUTTERFLY VALVES SHALL BE MUELLER LINESEAL III, OR APPROVED EQUAL. BUTTERFLY VALVES SHALL COMPLY WITH CEAM SPEC. 2611.2, C.3.
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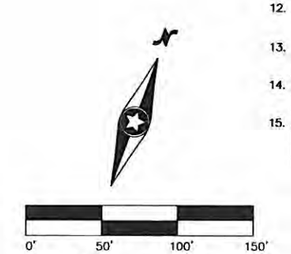

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Date: 04/27/15 Sheet: 8 OF 21

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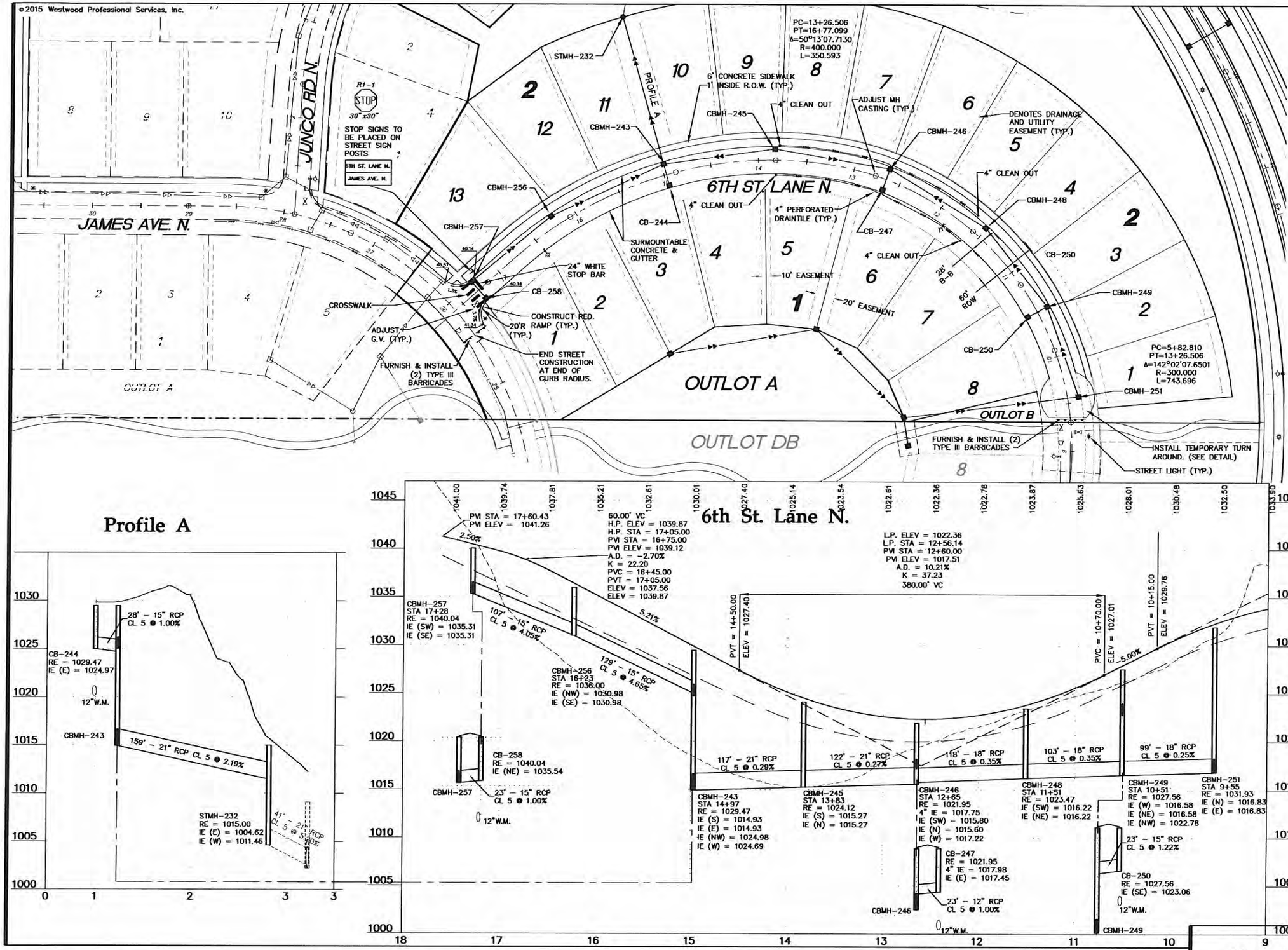

GENERAL NOTES:

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- 11.90 * DENOTES GUTTERLINE ELEVATION AT INTERSECTIONS

CASTING NOTE:

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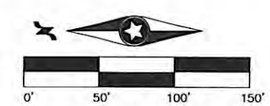
Profile A



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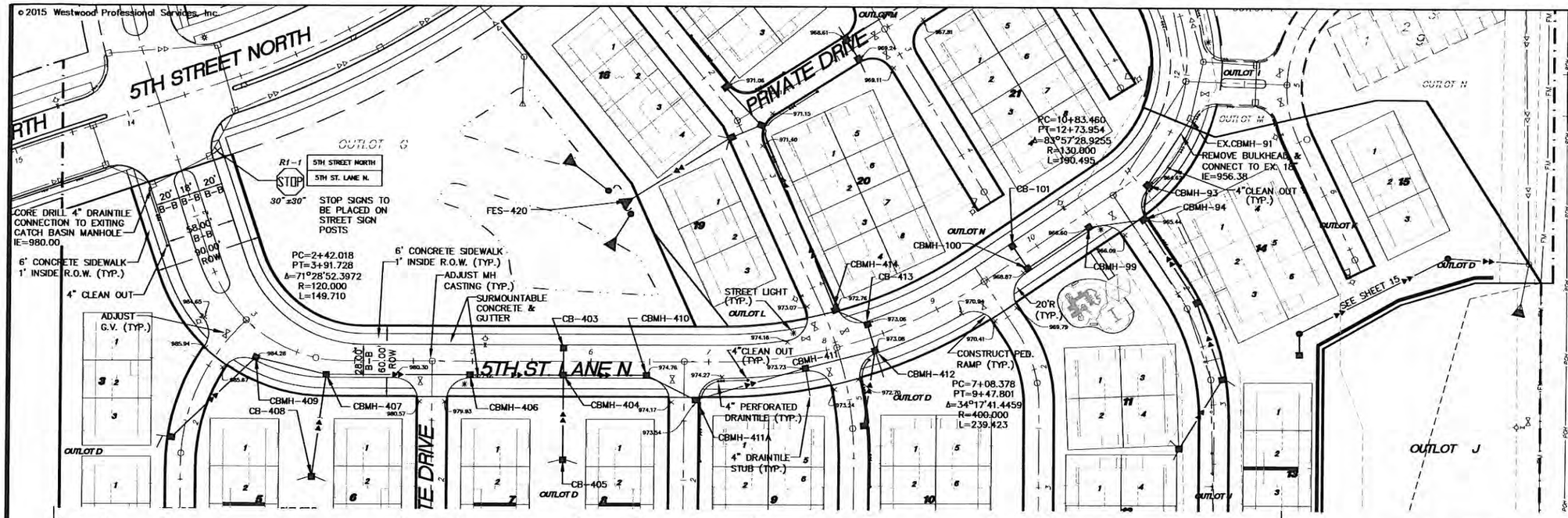
Storm Sewer and Street Construction Plan



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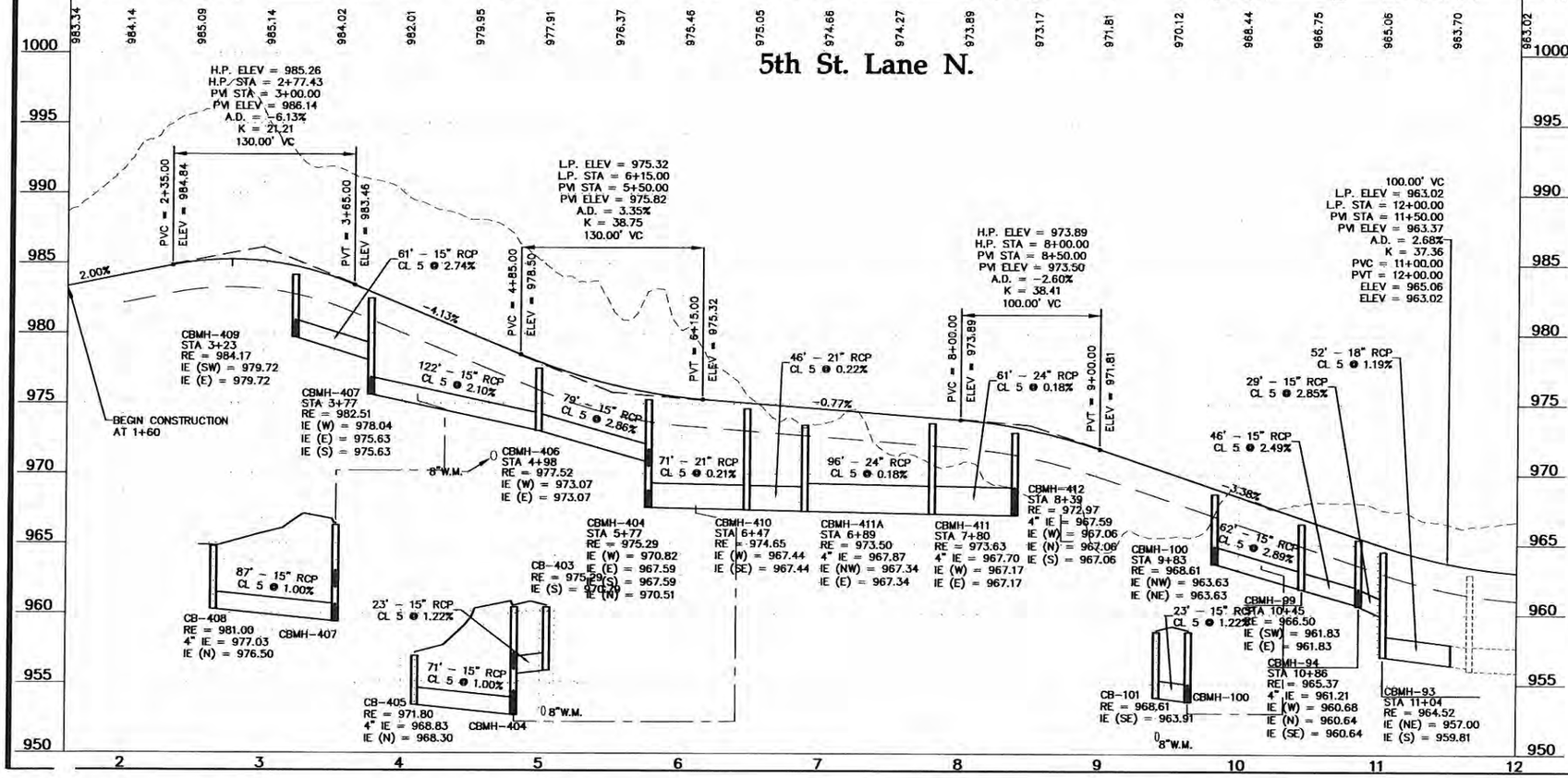
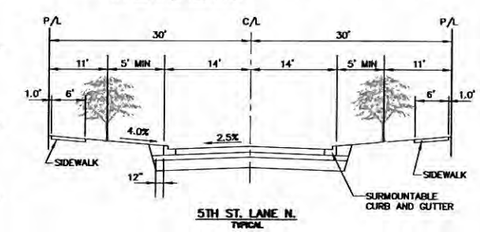
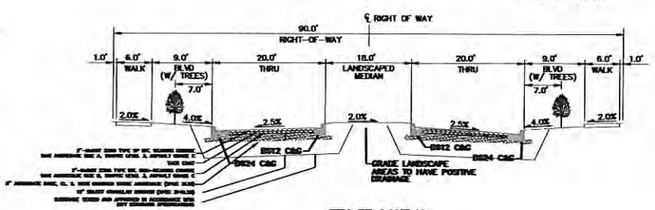




5TH ST. LANE N.
TYPICAL



5TH ST. LANE N.
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0' 50' 100' 150'

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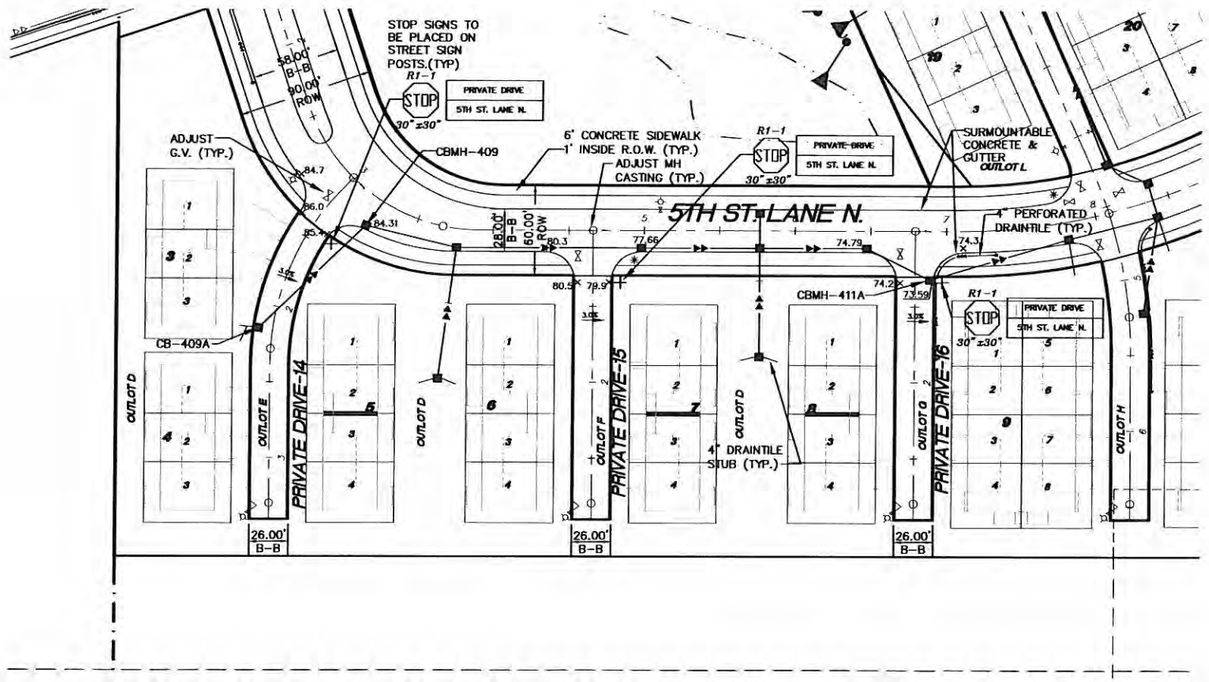

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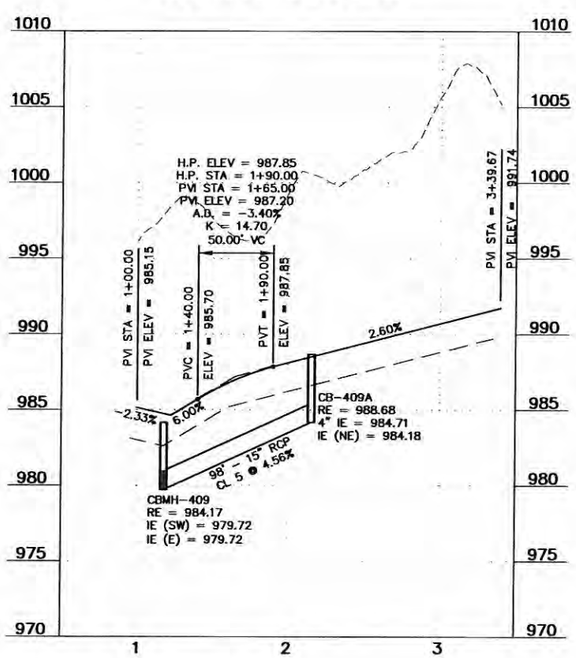

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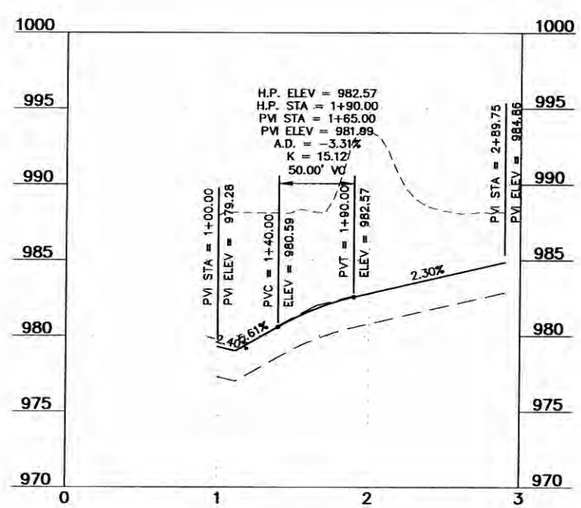

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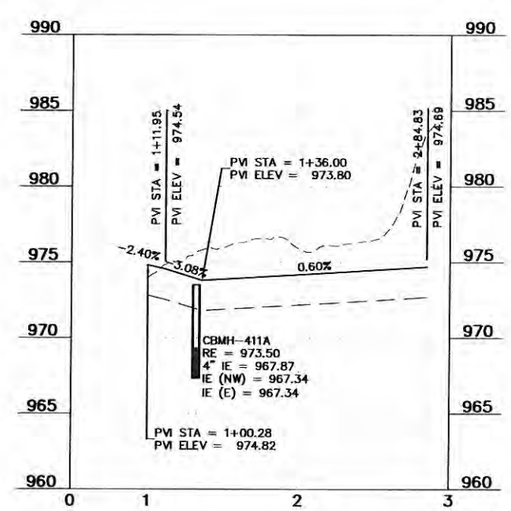

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Date: 08/12/15 License No. 43358

Revisions:
05/14/15 Revised Per Lennar
07/17/15 City Comments
08/12/15 Revised Per Comments

Designed: CLJ
Checked: JEB
Drawn: DWR
Record Drawing by/date:

Prepared for:

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

Savona 3rd Addition

Lake Elmo, Minnesota

Storm Sewer and Street Construction Plan

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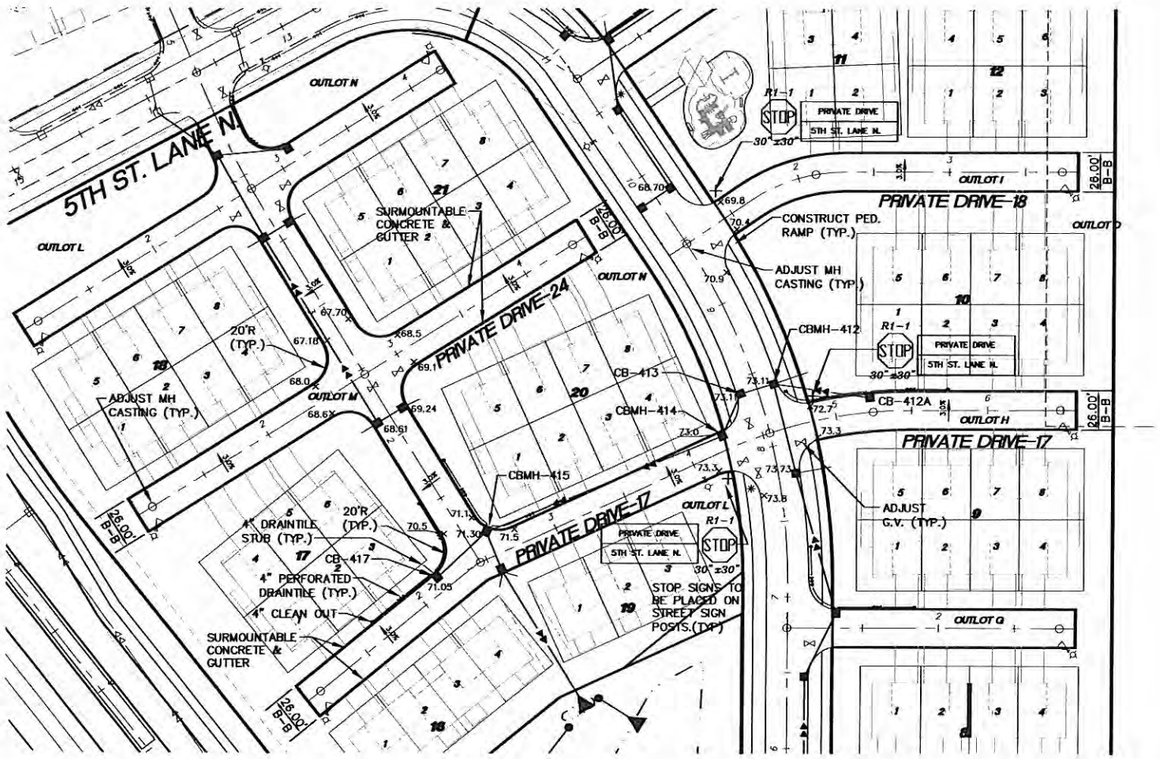

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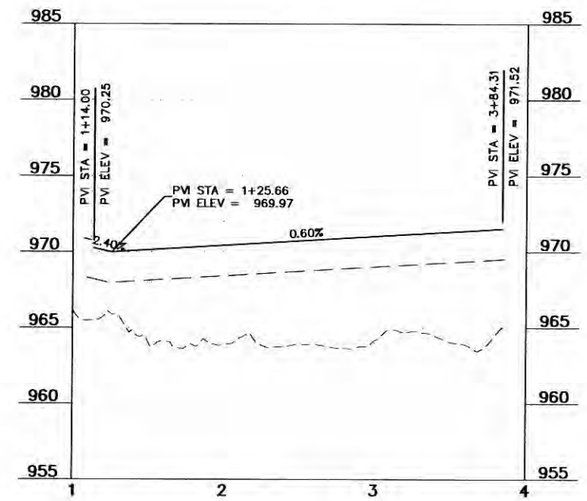

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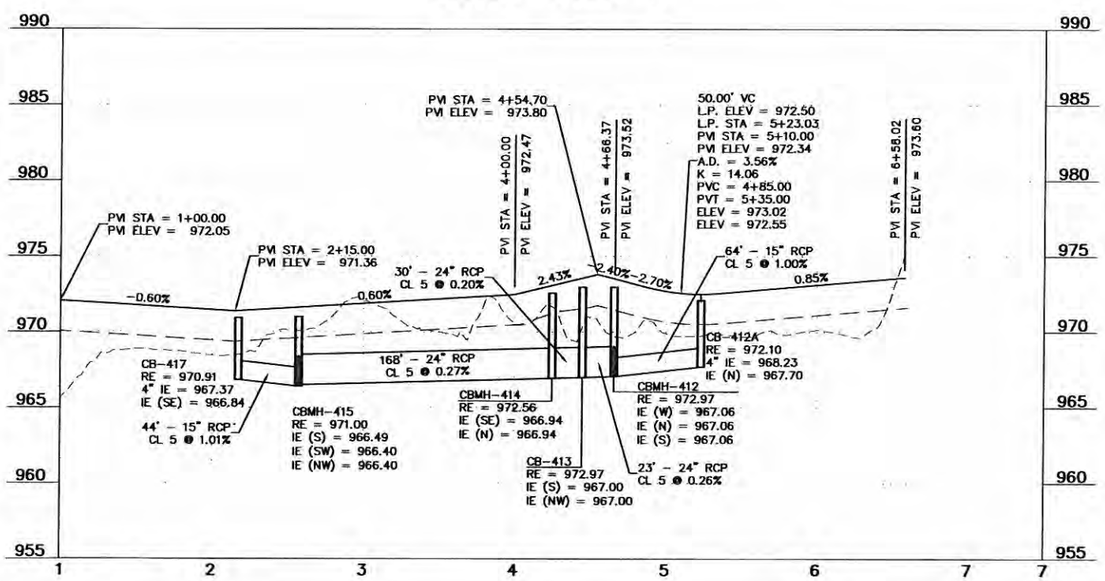

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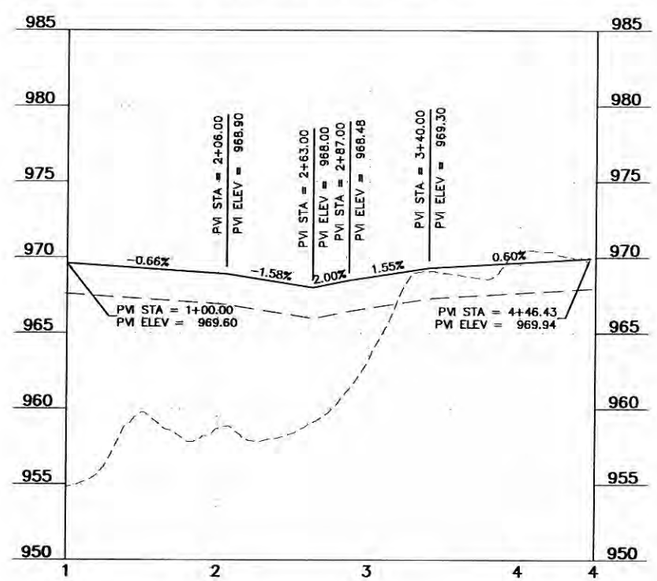

GENERAL NOTES:

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- 11.90 * DENOTES GUTTERLINE ELEVATION AT INTERSECTIONS

CASTING NOTE:

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0' 50' 100' 150'

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Date: 04/27/15 Sheet: 12 OF 21

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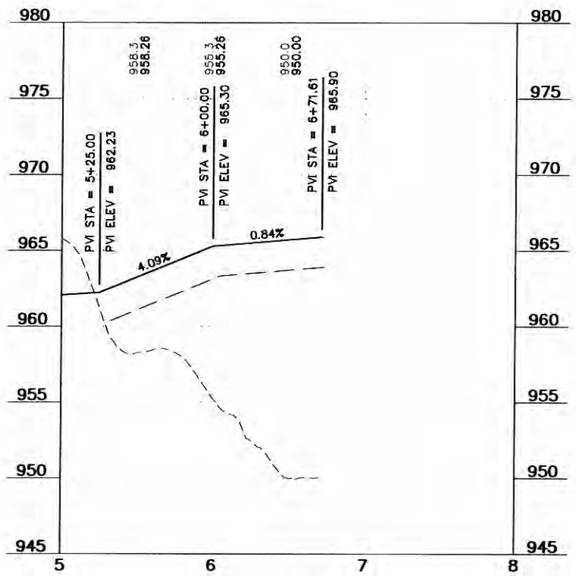

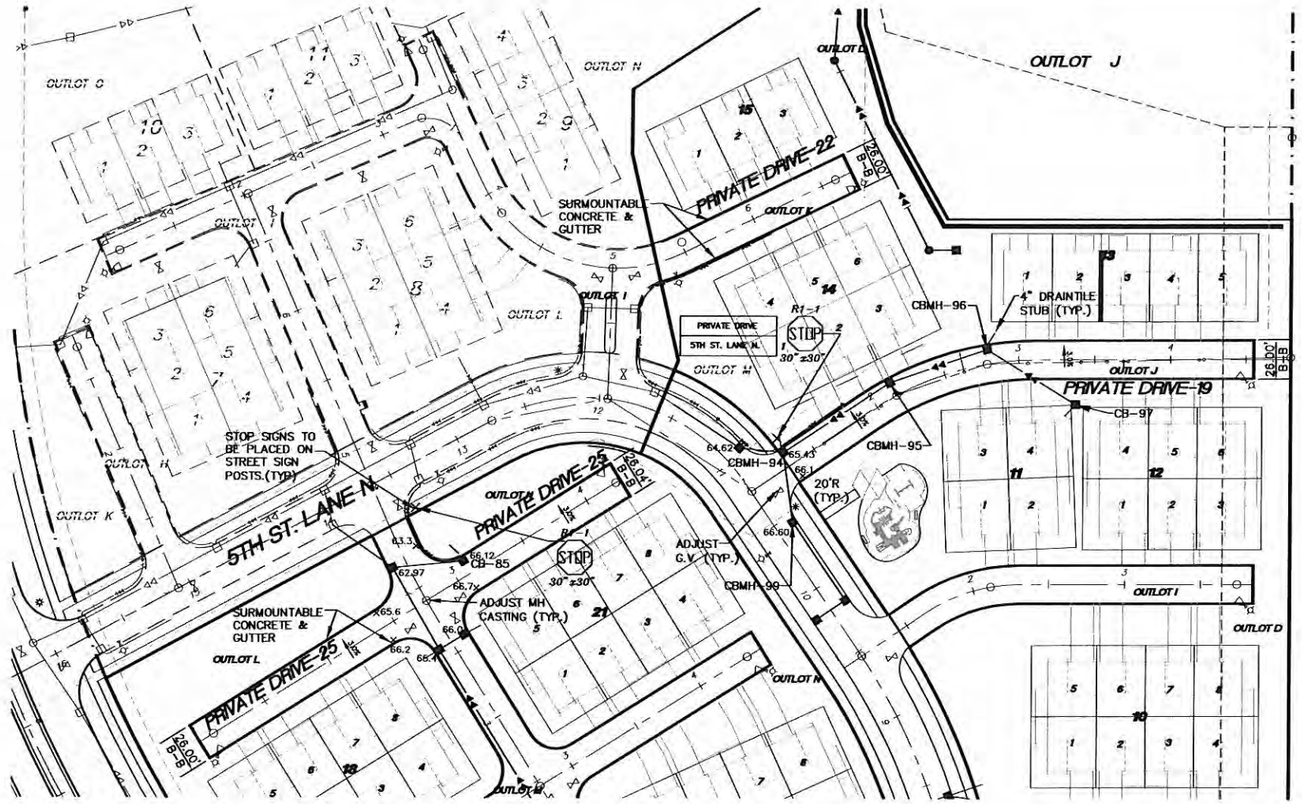

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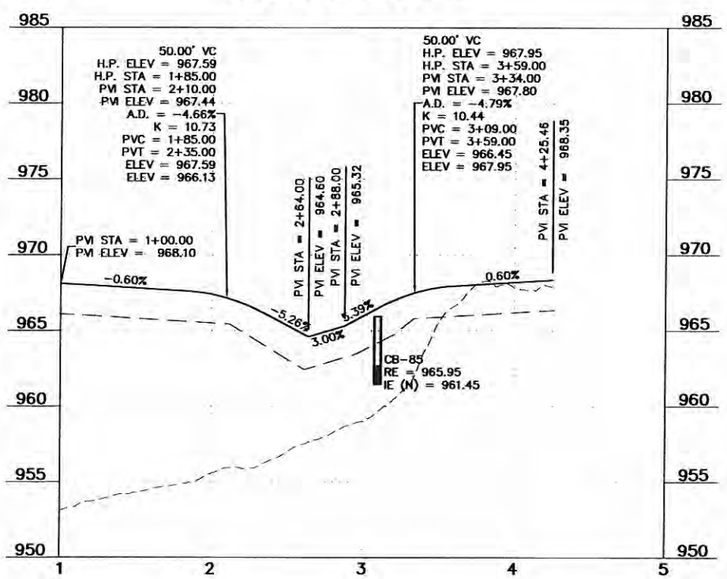

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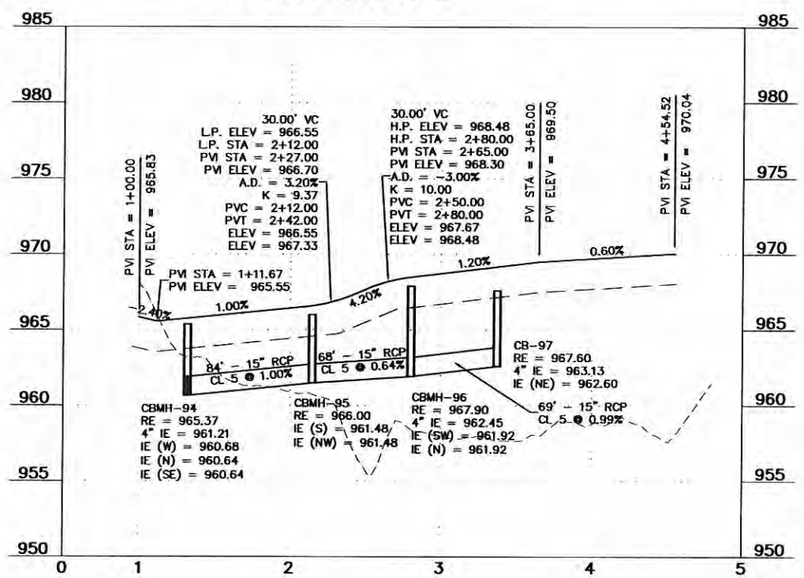

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0000565.03STF05.dwg

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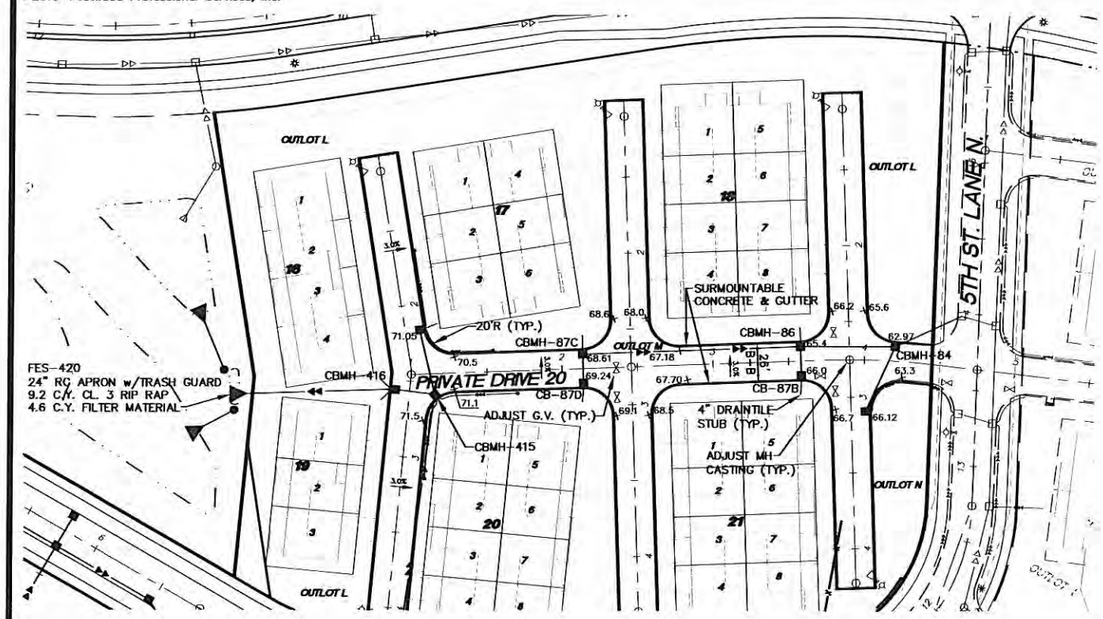

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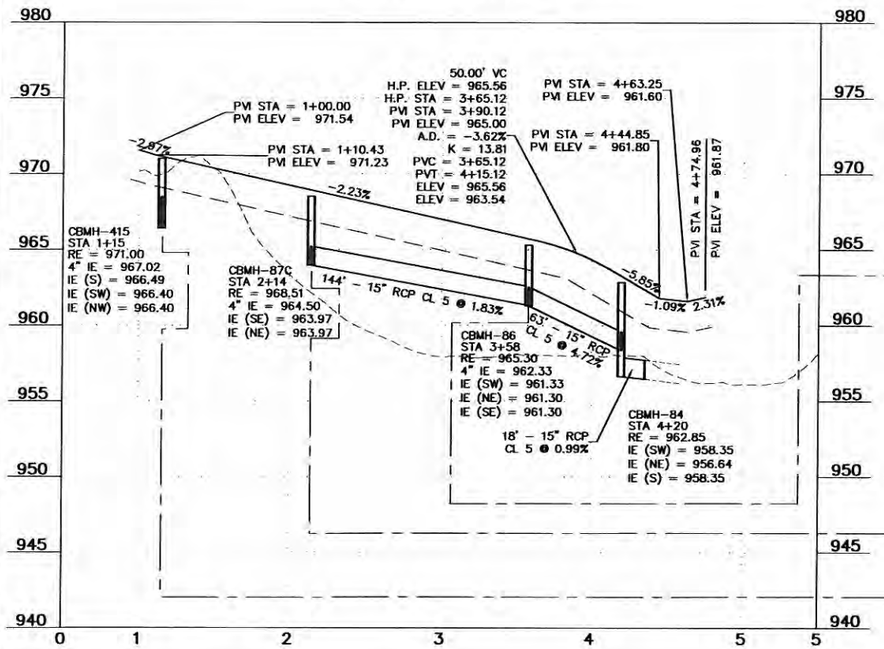
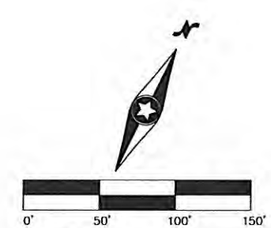
Private Drive 20





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Date: 04/27/15 Sheet: 14 OF 21

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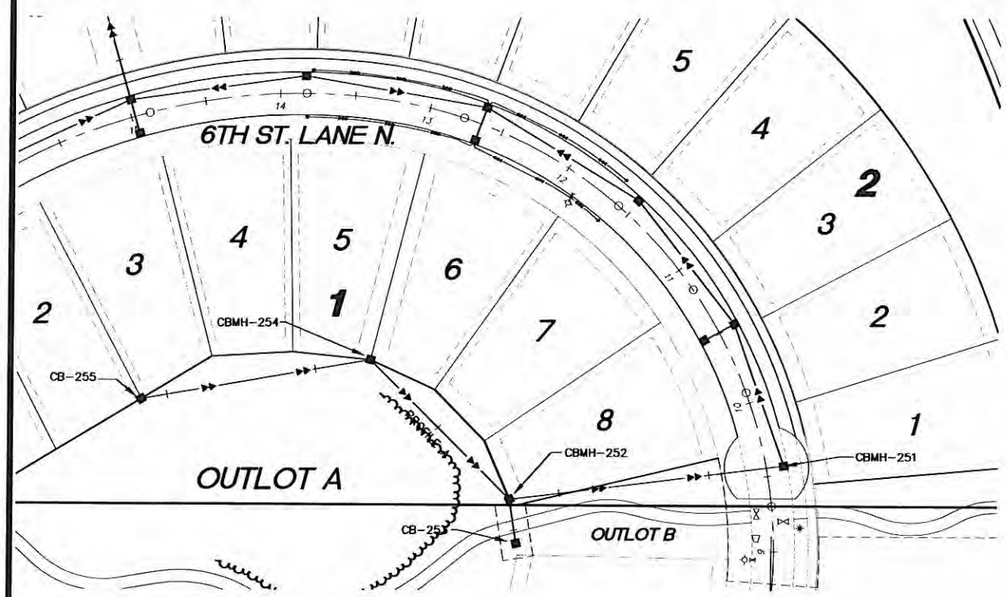

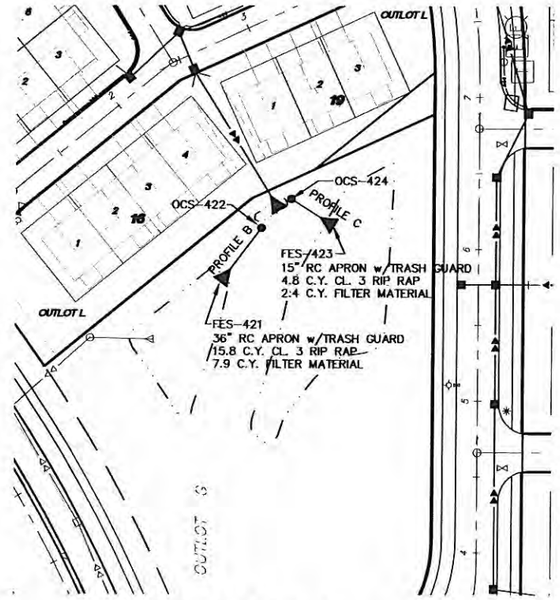

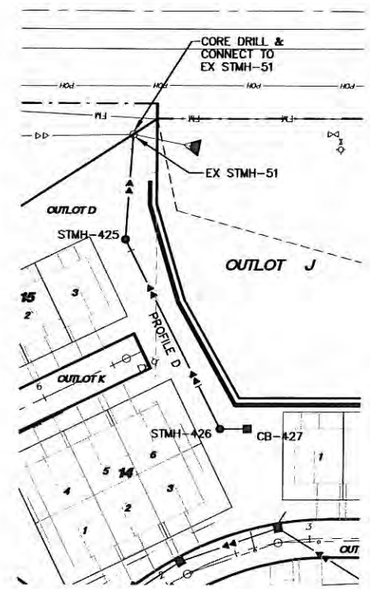

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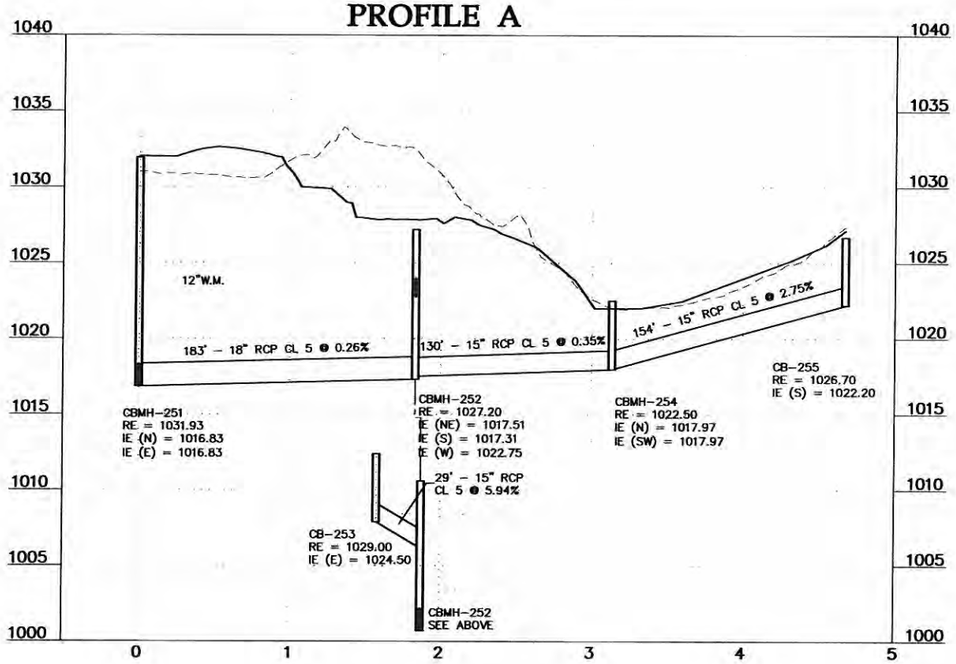

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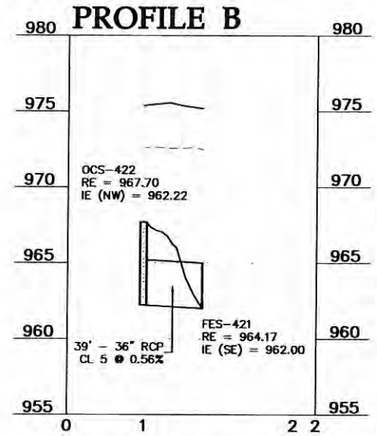

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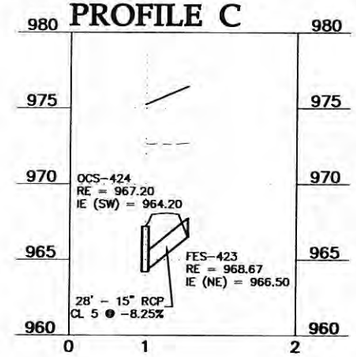

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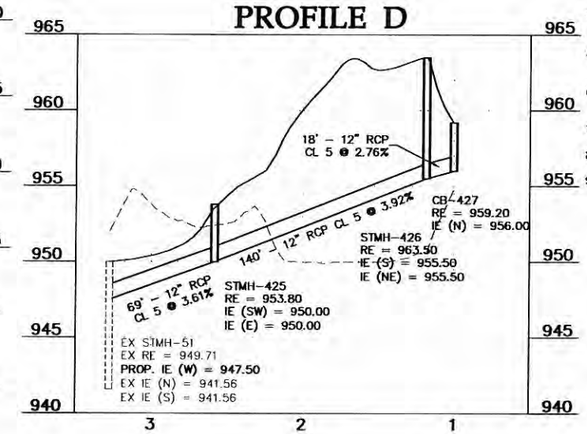

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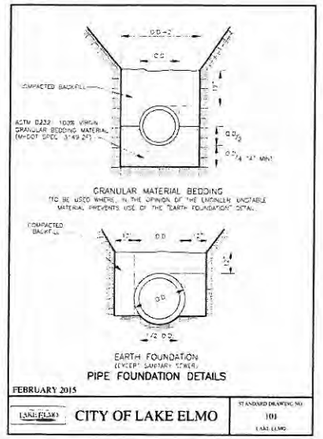
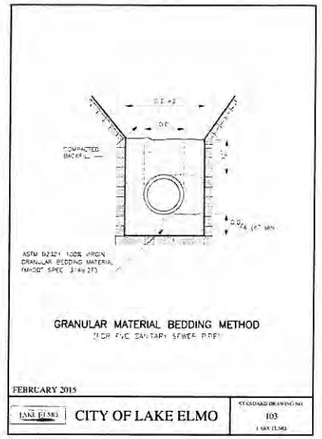
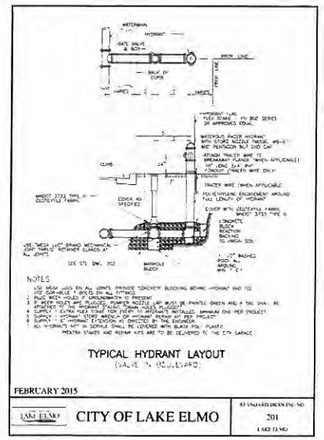
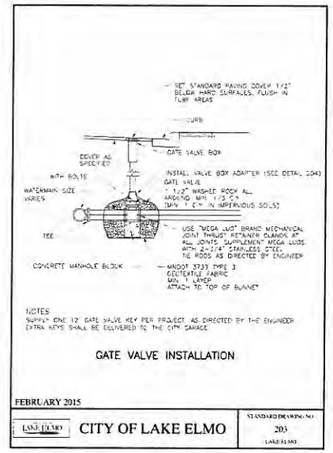
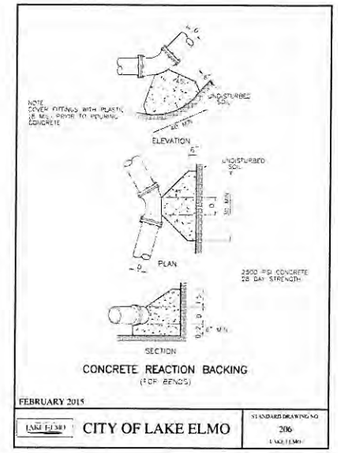
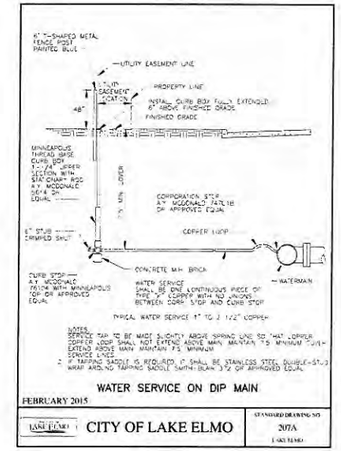


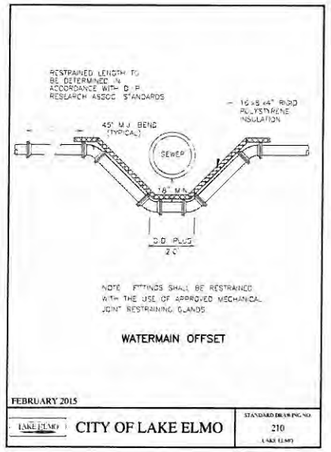


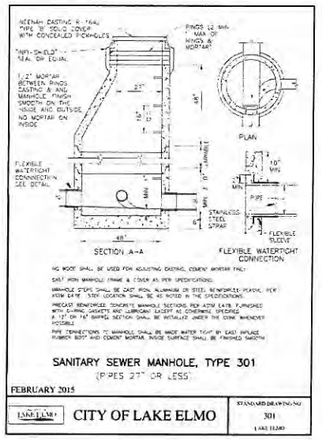


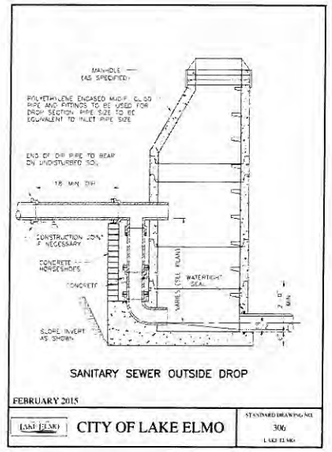


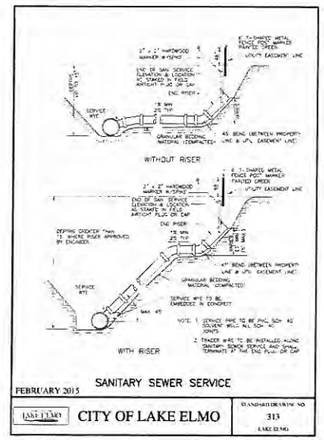


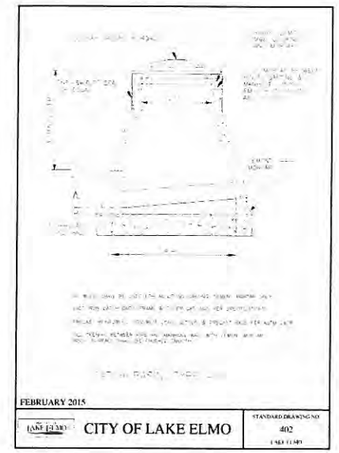


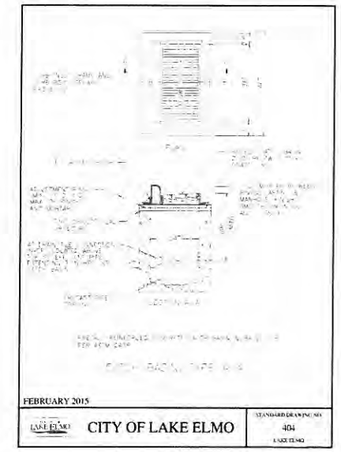


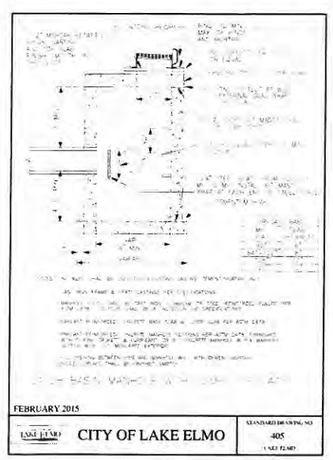


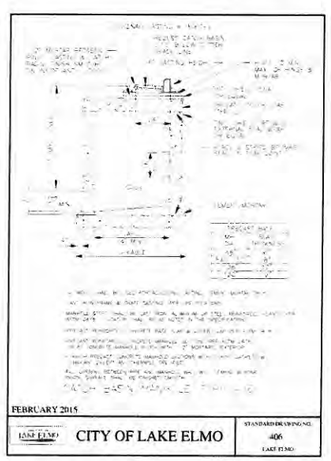


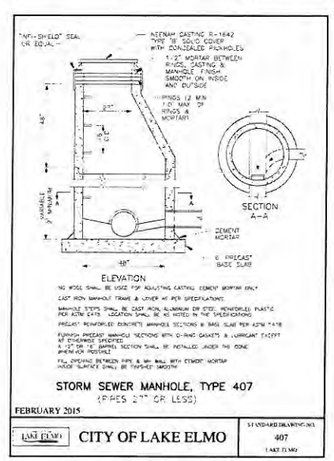


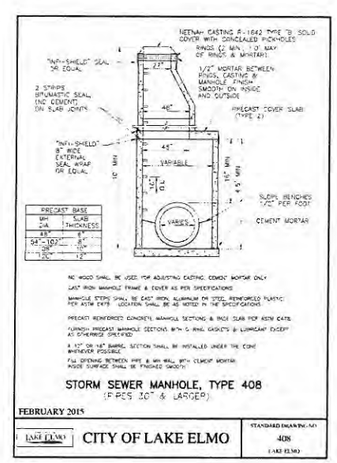


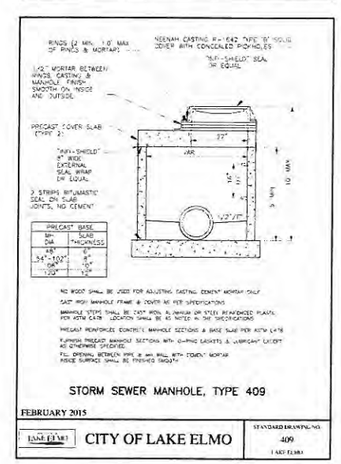


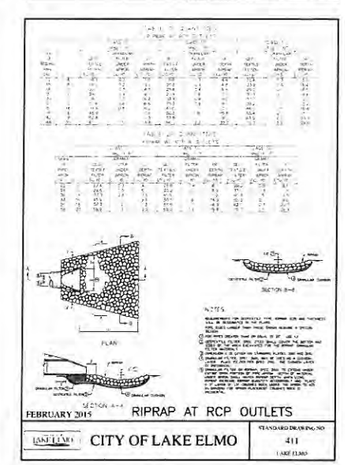












0000565.03DTF01.dwg

Date: 04/27/15 Sheet: 16 OF 21

Westwood
Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

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.

John Bender
Date: 08/12/15 License No. 43358

Revisions:
05/14/15 Revised Per Lennar
07/17/15 City Comments
08/12/15 Revised Per Comments

Designed: CLJ
Checked: JEB
Drawn: DWR
Record Drawing by/date:

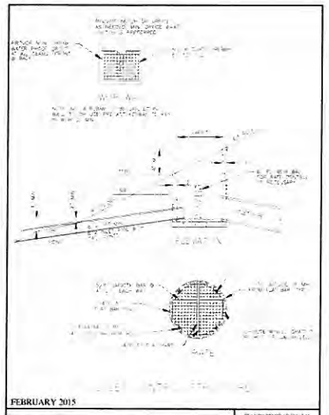
Prepared for:

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

Savona 3rd Addition

Lake Elmo, Minnesota

Details



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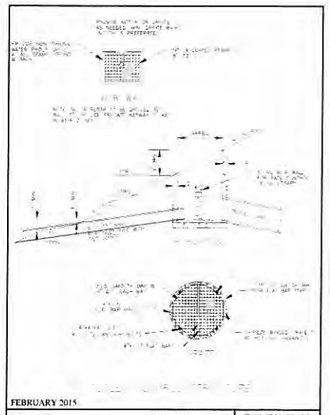
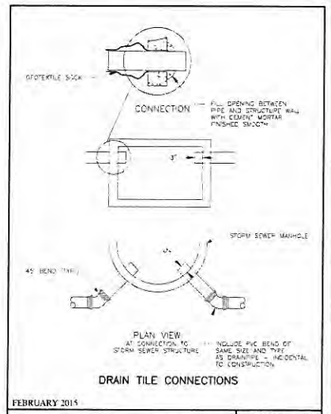
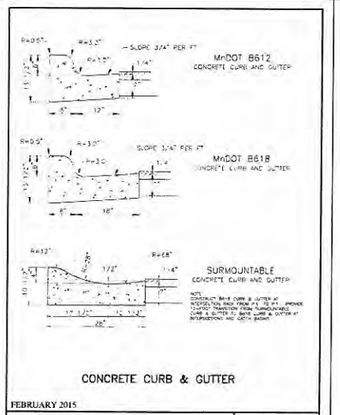


FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 417 — LAKE ELMO



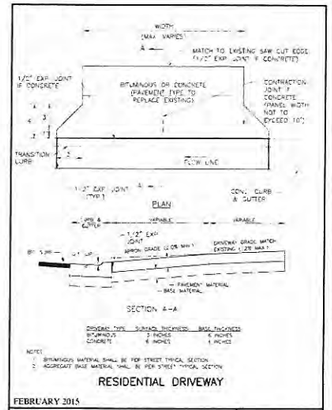
DRAIN TILE CONNECTIONS

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 420 — LAKE ELMO



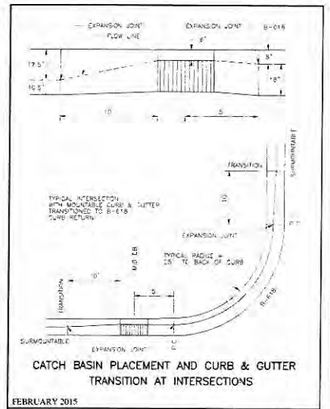
CONCRETE CURB & GUTTER

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 501 — LAKE ELMO



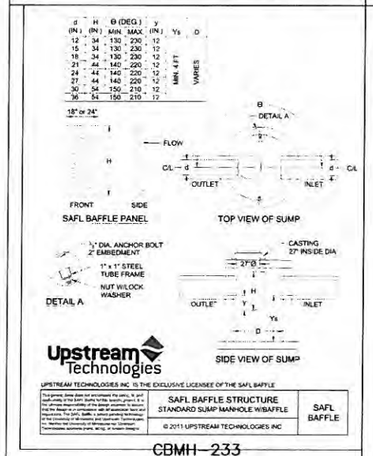
RESIDENTIAL DRIVEWAY

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 504 — LAKE ELMO

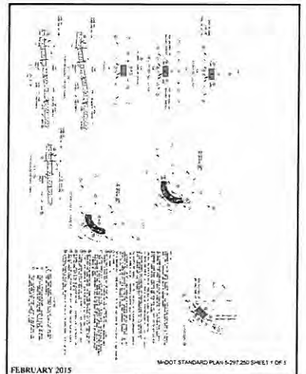


CATCH BASIN PLACEMENT AND CURB & GUTTER TRANSITION AT INTERSECTIONS

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 506 — LAKE ELMO



CBMH-233



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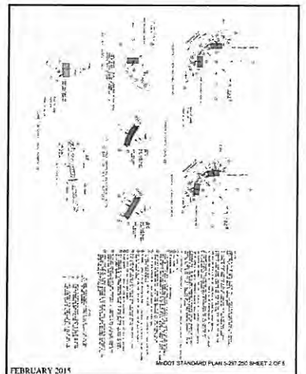

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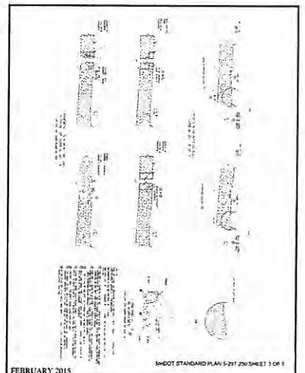

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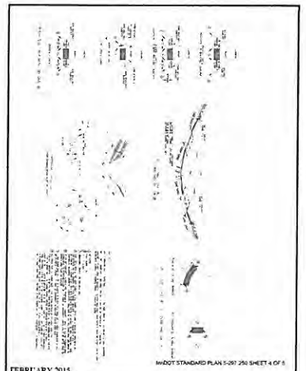

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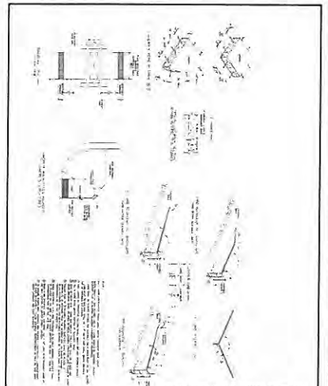
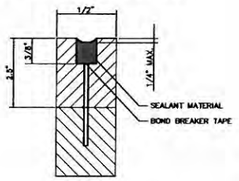
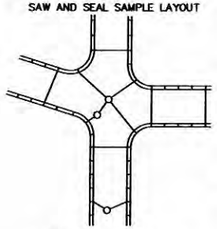


FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 507E — LAKE ELMO

SAW AND SEAL FOR NEW STREETS



SAW AND SEAL SAMPLE LAYOUT

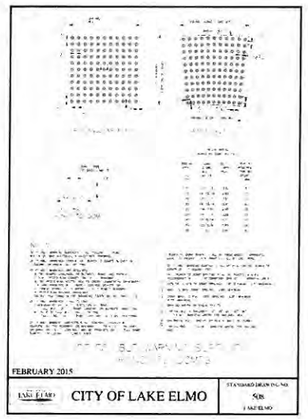


SAW AND SEAL

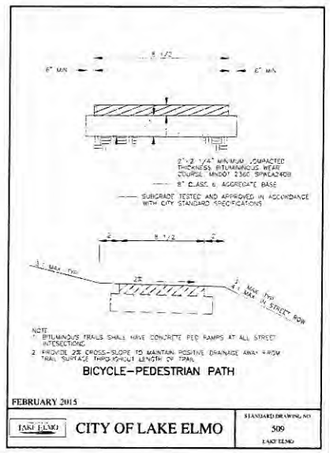
NOTE:

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

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

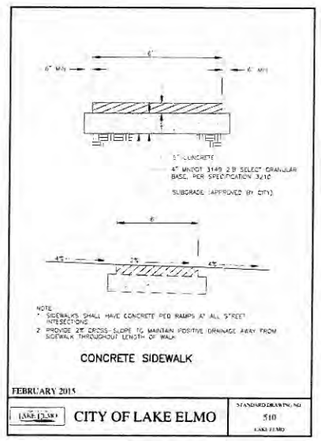


FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 508 — LAKE ELMO



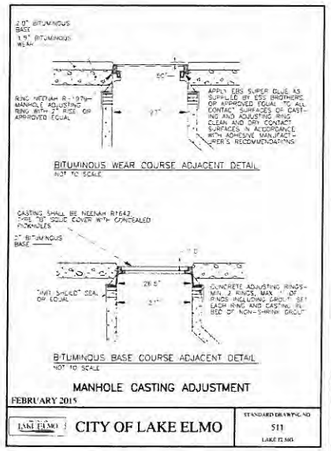
BICYCLE-PEDESTRIAN PATH

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 509 — LAKE ELMO



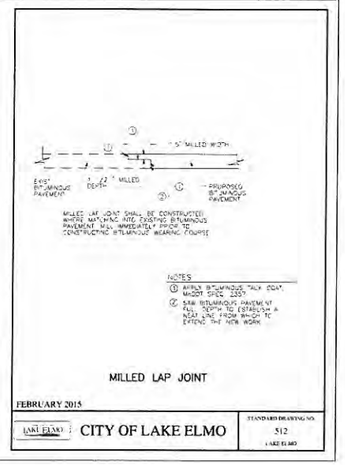
CONCRETE SIDEWALK

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 510 — LAKE ELMO



MANHOLE CASTING ADJUSTMENT

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 511 — LAKE ELMO



MILLED LAP JOINT

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 512 — LAKE ELMO

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

0000565.03D1F02.dwg

Date: 04/27/15 Sheet: 17 OF 21

Savona 3rd Addition

Lake Elmo, Minnesota

Details

Westwood
Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

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.

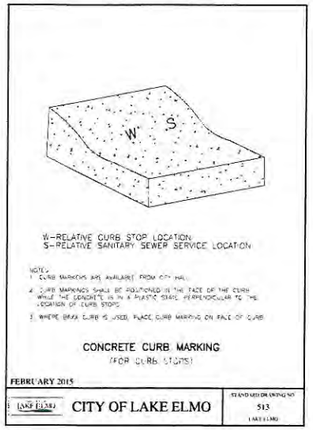
John Bender
Date 08/12/15 License No. 43358

Revisions:
05/14/15 Revised Per Lennar
07/17/15 City Comments
08/12/15 Revised Per Comments

Designed: CLJ
Checked: JEB
Drawn: DWR
Record Drawing by/date:

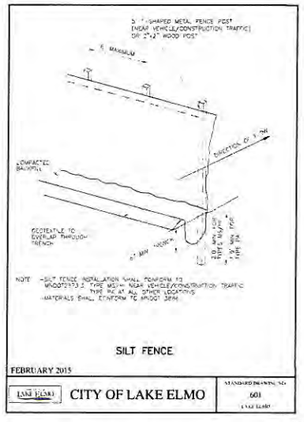
Prepared for:

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



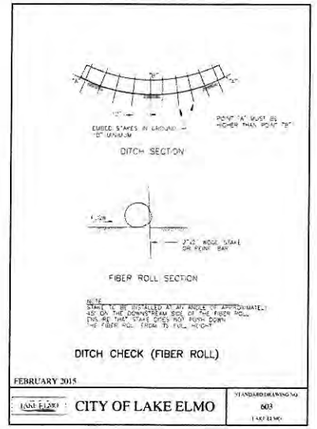
CONCRETE CURB MARKING
(FOR CURB STOPS)

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 513



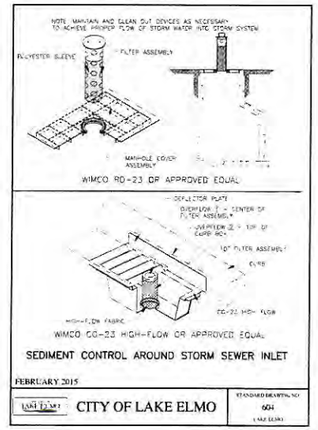
SILT FENCE

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 601



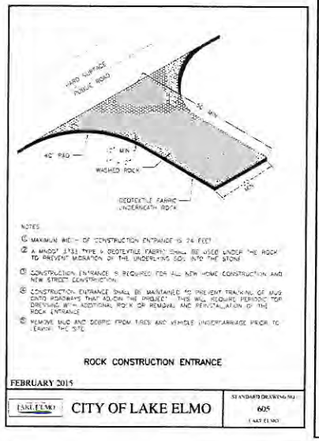
DITCH CHECK (FIBER ROLL)

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 603



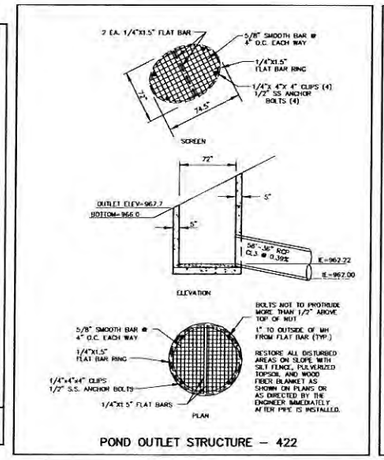
SEDIMENT CONTROL AROUND STORM SEWER INLET

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 604

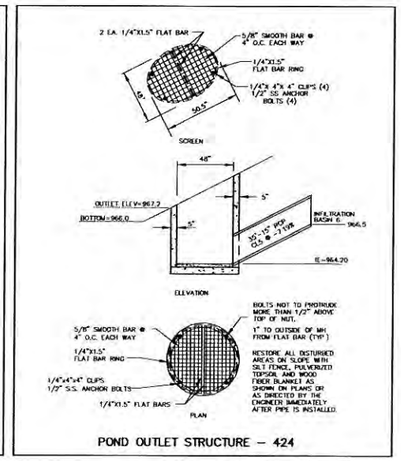


ROCK CONSTRUCTION ENTRANCE

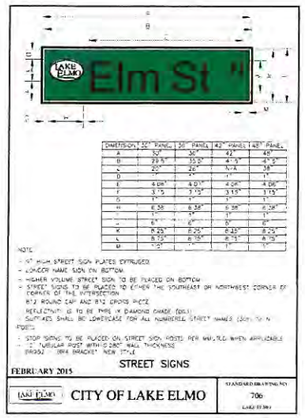
FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 605



POND OUTLET STRUCTURE – 422

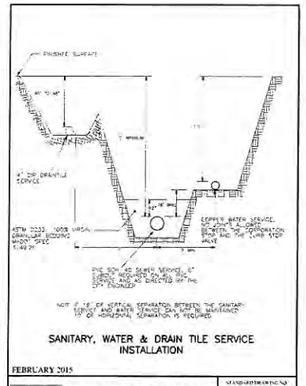


POND OUTLET STRUCTURE – 424



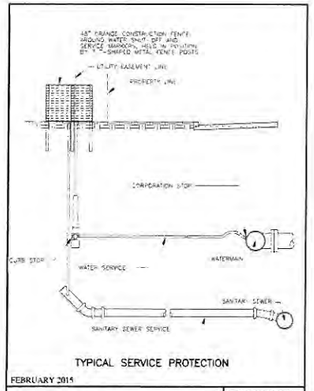
STREET SIGNS

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 706



SANITARY, WATER & DRAIN TILE SERVICE INSTALLATION

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 712



TYPICAL SERVICE PROTECTION

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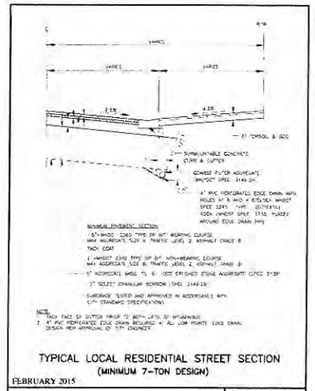
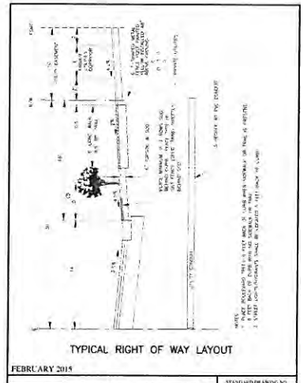


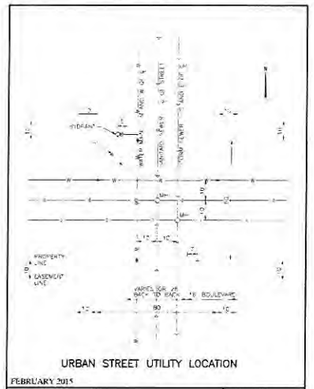
TYPICAL LOCAL RESIDENTIAL STREET SECTION
(MINIMUM 7-TON DESIGN)

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 801



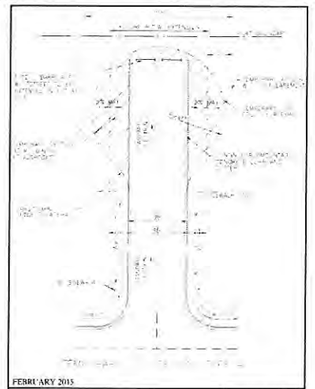
TYPICAL RIGHT OF WAY LAYOUT

FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 805

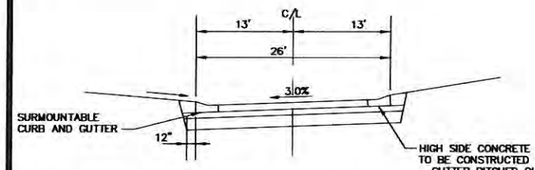


URBAN STREET UTILITY LOCATION

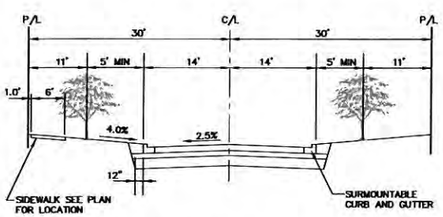
FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 806



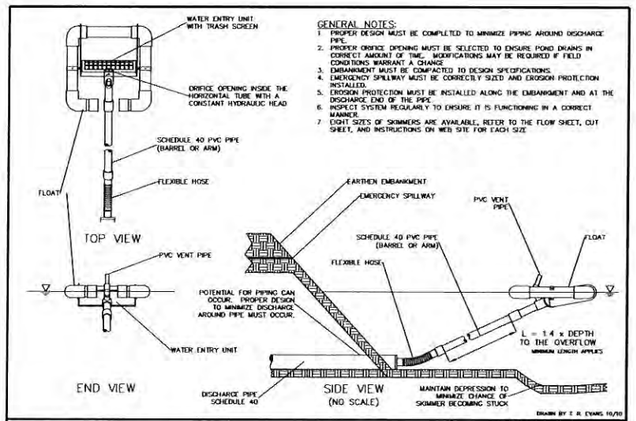
FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 807A



PRIVATE STREET (26' B-B)
NO SCALE
60' ROW
SEE CITY OF LAKE ELMO DETAIL 801 FOR TYPICAL STREET SECTION



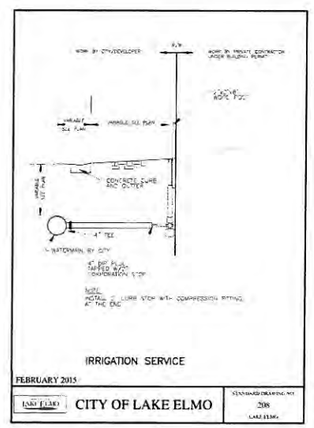
RESIDENTIAL STREET (28' B-B)
NO SCALE
60' ROW
SEE CITY OF LAKE ELMO DETAIL 801 FOR TYPICAL STREET SECTION



GENERAL NOTES:
1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE. REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

FAIRCLOTH SKIMMER® DISCHARGE SYSTEM WITH EMBANKMENT

A. W. FAIRCLOTH & SON INC.
WWW.FAIRCLOTHSKIMMER.COM
TELEPHONE: (919) 732-1244
FAX: (919) 732-1266
EMAIL: INFO@FAIRCLOTHSKIMMER.COM



IRRIGATION SERVICE

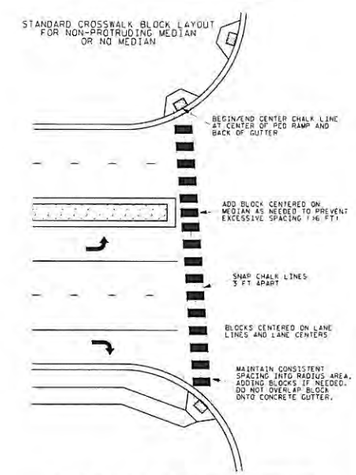
FEBRUARY 2015 — LAKE ELMO — CITY OF LAKE ELMO — STANDARD DRAWING NO. 208

MARKINGS FOR PEDESTRIAN CROSSWALKS

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

CROSSWALK NOTES;

1. PAINTED AREAS TO BE CENTERED ON CENTERLINE AND LANE LINES. REQUIRES POLYMER PERFORMED MATERIAL PER CITY SPEC. 3217.
2. A MINIMUM OF 1.5 FT. CLEAR DISTANCE SHALL BE LEFT ADJACENT TO THE CURB. IF LAST PAINTED AREA FALLS INTO THIS DISTANCE IT MUST BE OMITTED.
3. ON TWO LANE TWO WAY STREETS, USE SPACING SHOWN FOR AN 11 FT. INSIDE LANE.
4. FOR DIVIDED ROADWAYS, ADJUSTMENTS IN SPACING OF THE BLOCKS SHOULD BE MADE IN THE MEDIAN SO THAT THE BLOCKS ARE MAINTAINED IN THEIR PROPER LOCATION ACROSS THE TRAVELED PORTION OF THE ROADWAY.
5. AT SKEWED CROSSWALKS, THE BLOCKS ARE TO REMAIN PARALLEL TO THE LANE LINES AS SHOWN.



PAVEMENT MARKINGS FOR PEDESTRIAN CROSSINGS

Call 48 Hours before digging:
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Date: 04/27/15 Sheet: 18 OF 21

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Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

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.

John Bender
Date: 08/12/15 License No. 43358

Revisions:
05/14/15 Revised Per Lennar
07/17/15 City Comments
08/12/15 Revised Per Comments

Designed: CLJ
Checked: JBB
Drawn: DWR
Record Drawing by/date:

Prepared for:

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

Savona 3rd Addition

Lake Elmo, Minnesota

Details

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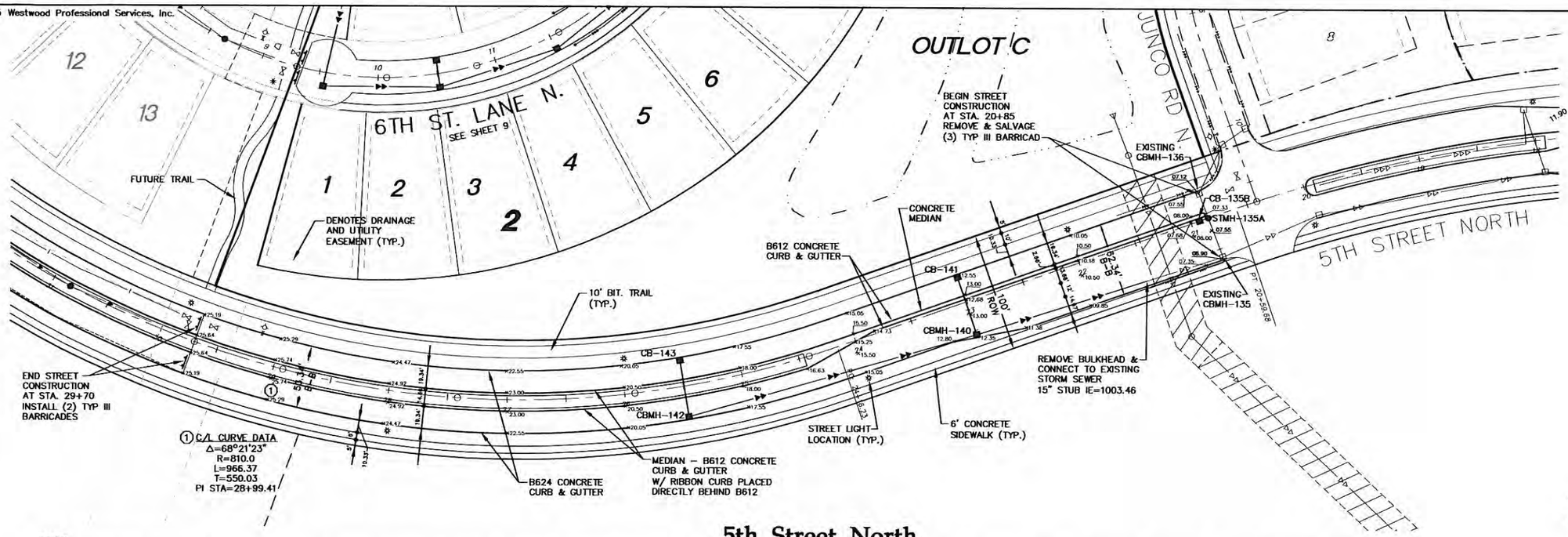
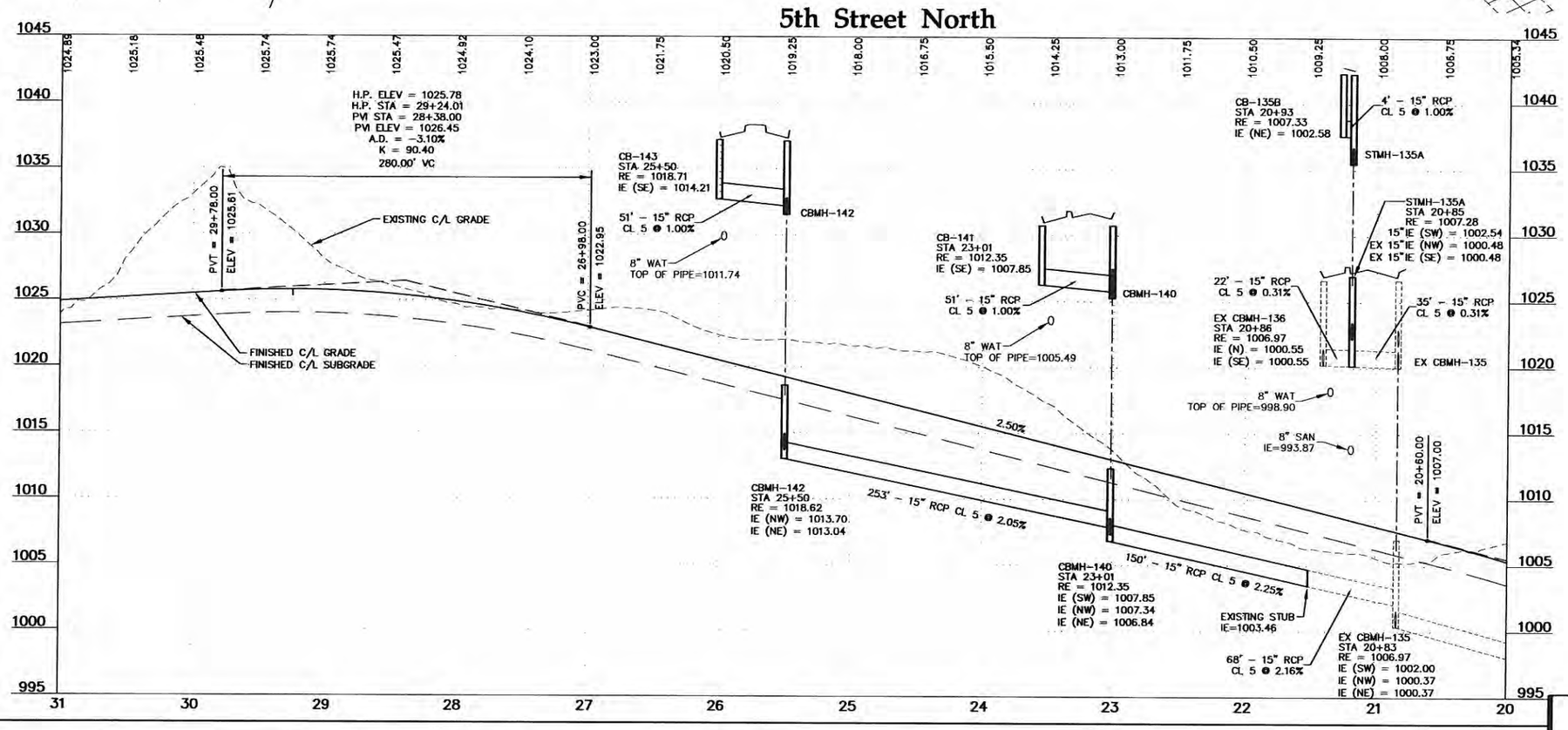
811 or call811.com
Common Ground Alliance



5th Street North



GENERAL NOTES:

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

CASTING NOTE:

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

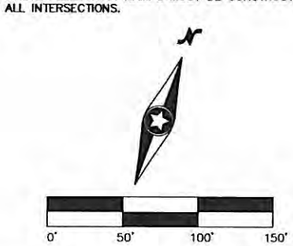
* CONDUIT CROSSINGS TO BE PERPENDICULAR TO STREET & PLACED BELOW THE STREET SUBGRADE.
* DRAINTILE INVERT TO BE LOCATED ABOVE TOP OF EFFLUENT STORM PIPE & EXTENDING 3 INCHES INTO CATCH BASIN STRUCTURE.
* ALL STORM SEWER INSTALLED SHALL HAVE POSITIVE GRADE.
* SAW AND SEAL OF BITUMINOUS PAVEMENT (40 FOOT INTERVALS) REQUIRED ON ALL RESIDENTIAL STREETS WITH ASPHALT GRADE B, SEE DETAIL SHEET 16.
* ALL STREET SIGNS & POSTS ARE TO BE PROVIDED BY DEVELOPER PER CITY OF LAKE ELMO DETAIL PLATE 706. LONGER STREET SIGN TO BE PLACED
  - ON THE BOTTOM.
  - IF STREET SIGN PLATES ARE THE SAME LENGTH, THEN HIGHER VOLUME STREET SIGN TO BE PLACED ON BOTTOM.

STORM SEWER NOTES:

1. ALL STORM SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MNDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
3. PRECAST CONCRETE MANHOLE AND CATCH BASIN SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-477.
4. A 1'-0" TO 1'-4" MANHOLE SECTION SHALL BE INSTALLED UNDER THE CONE SECTION TO ALLOW FOR HEIGHT ADJUSTMENT WHENEVER POSSIBLE.
5. JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL STORM SEWER MANHOLES.
6. RIP-RAP SHALL BE HAND-PLACED OVER GEOTEXTILE FABRIC AND CONFORM TO MnDOT SPEC. 3601, CLASS III, OR AS SPECIFIED HEREIN.
7. THE GEOTEXTILE FABRIC USED UNDER RIP-RAP SHALL EXTEND 3 FT UNDER THE APRON.
8. FURNISH AND 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.

SIDEWALK AND TRAIL NOTES:

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 1/2 INCH EXPANSION JOINT FILLER AT 50 FT (MAX) INTERVALS.
4. CONCRETE PEDESTRIAN RAMPS MUST BE CONSTRUCTED AT ALL INTERSECTIONS.



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Date: 04/27/15 Sheet: 19 OF 21

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John Bender
Date: 08/12/15 License No. 43358

Revisions:
05/14/15 Revised Per Lennar
07/17/15 City Comments
08/12/15 Revised Per Comments

Designed: CLJ
Checked: JTB
Drawn: DWR
Record Drawing by/date:

Prepared for:

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

Savona 3rd Addition

Lake Elmo, Minnesota

5th Street Storm Sewer and Street Construction Plan

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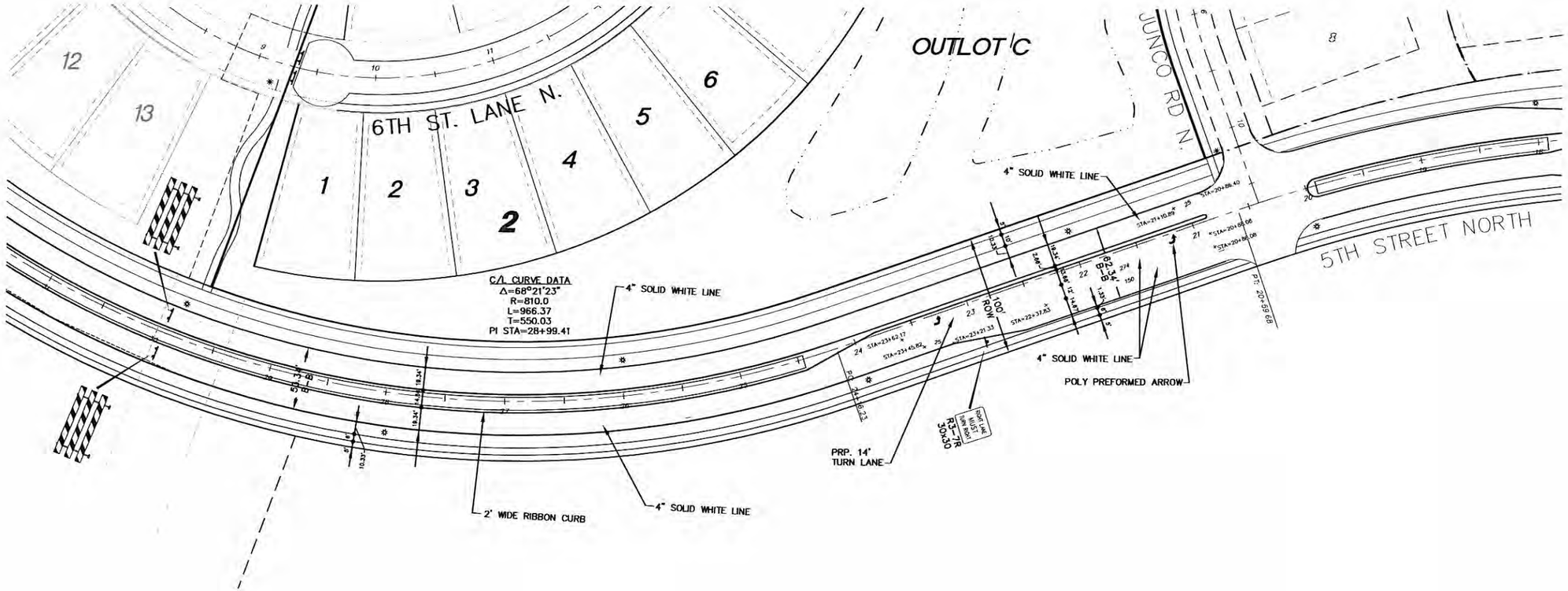

SIGNING/PAVEMENT & MARKING/LIGHTING NOTES:

1. STREET LIGHTING SHALL BE INSTALLED PER CITY STANDARDS 5 FEET BACK OF CURB IN LOCATIONS SHOWN ON PLAN.
2. ALL SIGNS MUST MEET MMUTCD.
3. ALL SIGN SHEATHING TO BE HIGH INTENSITY DIAMOND GRADE DG3.
4. SIGN POSTS TO BE GREEN POWDERED PAINTED FINISH, 3.0 lbs/FT.
5. CONTRACTOR IS RESPONSIBLE FOR FURNISHING & INSTALLING STREET SIGNS.
6. SIGN PANELS: SIGN PANELS SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE MnDOT STANDARD SIGNS MANUAL, THE MINNESOTA TRAFFIC ENGINEERING MANUAL, THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD), AND MnDOT SPECIFICATIONS 2564 AND 3352. ALL SIGN PANELS SHALL BE NEW. SIGN FACE MATERIAL SHALL BE REFLECTIVE SIGN SHEETING MEETING 3M DIAMOND GRADE DG3, OR APPROVED EQUAL. SIGN PANELS SHALL BE OF THE TYPE AND QUANTITIES AS SHOWN IN THE PLANS.
7. STREET NAME SIGNS: ALL STREET SIGN PANELS TO BE MANUFACTURED SHALL BE APPROVED BY THE LAKE ELMO DEPARTMENT OF PUBLIC WORKS PRIOR TO FABRICATION.
8. POLY PREFORMED PAVEMENT MATERIAL SHALL BE USED FOR ALL PAVEMENT SYMBOLS.
9. PAVEMENT MARKINGS MUST BE EPOXY RESIN WITH DROP-ON GLASS BEADS PER CITY OF LAKE ELMO STANDARD SPECIFICATIONS.
10. EPOXY RESIN, EPOXY RESIN FOR PAVEMENT MARKINGS SHALL MEET THE REQUIREMENTS OF MnDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2005 EDITION.
11. DROP-ON GLASS BEADS: DROP-ON GLASS BEADS FOR PAVEMENT MARKINGS SHALL MEET THE REQUIREMENTS OF MnDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2005 EDITION.
12. POLYMER PREFORMED MATERIAL:
    A. CROSSWALK AND STOP BAR PAVEMENT MARKINGS SHALL BE 3M STAMARK INTERSECTION GRADE TAPE, SERIES A420, OR APPROVED EQUAL.
    B. ALL OTHER PAVEMENT MARKING SYMBOLS SHALL BE 3M STAMARK HIGH PERFORMANCE PAVEMENT MARKING TAPE, SERIES 380, OR APPROVED EQUAL.
13. ALL STREET SIGNS & POSTS ARE TO BE PROVIDED BY DEVELOPER PER CITY OF LAKE ELMO DETAIL PLATE 706.
    - LONGER STREET SIGN TO BE PLACED ON THE BOTTOM.
    - IF STREET SIGN PLATES ARE THE SAME LENGTH, THEN HIGHER VOLUME STREET SIGN TO BE PLACED ON BOTTOM.

Site Legend

EXISTING	PROPOSED	
		PROPERTY LINE
		LOT LINE
		SETBACK LINE
		EASEMENT LINE
		CURB AND GUTTER
		POND NORMAL WATER LEVEL
		RETAINING WALL
		FENCE
		CONCRETE PAVEMENT
		CONCRETE SIDEWALK
		HEAVY DUTY BITUMINOUS PAVEMENT
		NORMAL DUTY BITUMINOUS PAVEMENT
	11	NUMBER OF PARKING STALLS
	T	TRANSFORMER
		SITE LIGHTING
		TRAFFIC SIGN
		POWER POLE
		BOLLARD / POST

0' 50' 100' 150'

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Date: 04/27/15 Sheet: 20 OF 21

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John Bender
Date: 08/12/15 License No. 43358

Revisions:
05/14/15 Revised Per Lennar
07/17/15 City Comments
08/12/15 Revised Per Comments

Designed: CLJ
Checked: JTB
Drawn: DWR
Record Drawing by/date:

Prepared for:

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

Savona 3rd Addition

Lake Elmo, Minnesota

5th Street Signing, Striping & Geometric Plan

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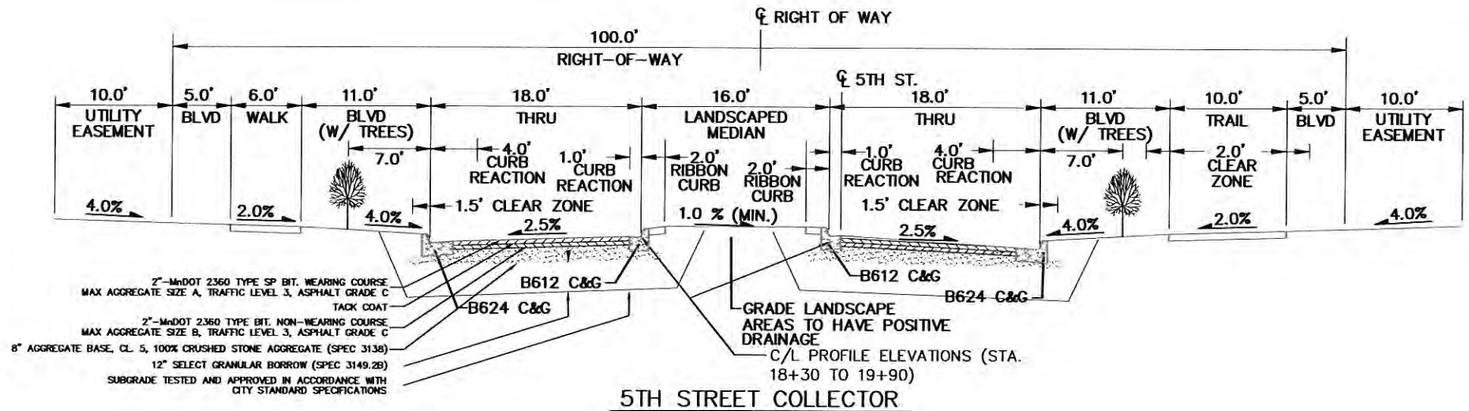
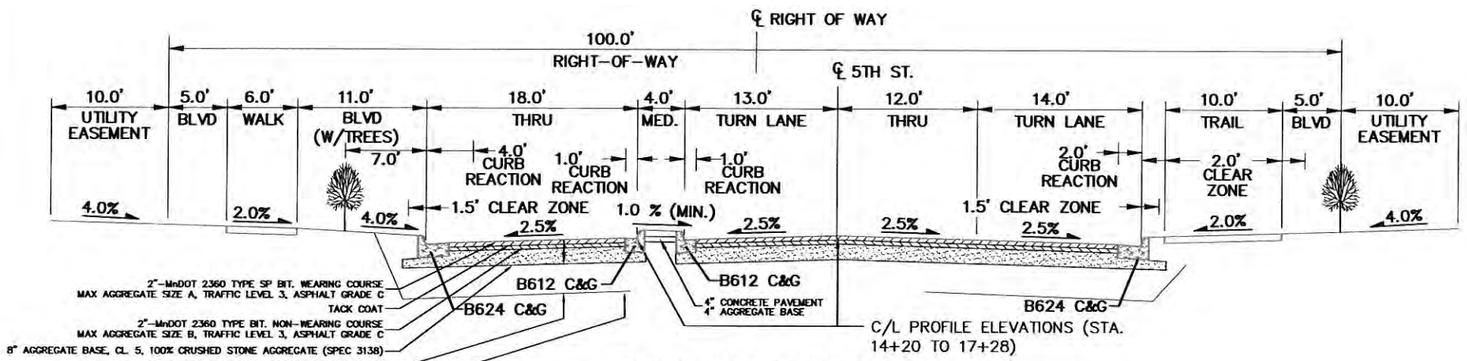


5TH STREET COLLECTOR
TYPICAL



5TH STREET COLLECTOR
AT INTERSECTION

THE CITY OF LAKE ELMO

5TH STREET STANDARD DETAILS

JUNE 2015

COLLECTOR TYPICAL SECTIONS

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Date: 04/27/15 Sheet: 21 OF 21

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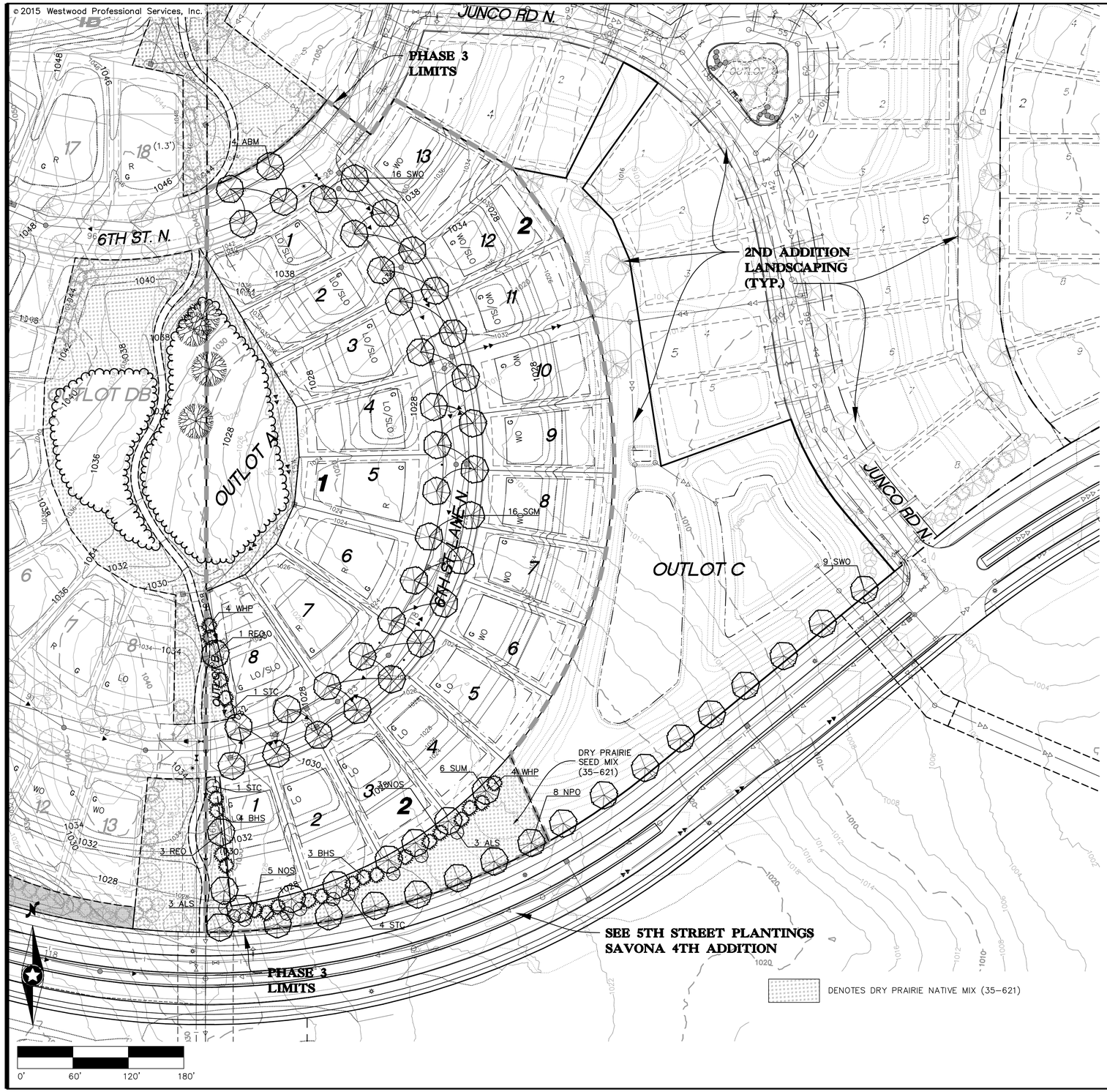
Plymouth, Minnesota 55446

Savona 3rd Addition
Lake Elmo, Minnesota

5th Street Typical Sections



Phase 3 Final Plant Schedule

CODE	QTY.	COMMON/BOTANICAL NAME	SIZE	SPACING O.C.
ABM	4	Autumn Blaze Maple / Acer x freemanii 'Jeffersred'	1.5" BB/Cont.	AS SHOWN
SGM	16	Sienna Glen Maple / Acer x freemanii 'Sienna'	1.5" BB/Cont.	AS SHOWN
SUM	6	Sugar Maple / Acer saccharum	1.5" BB/Cont.	AS SHOWN
NPO	8	Northern Pin Oak / Quercus ellipsoidalis	1.5" BB/Cont.	AS SHOWN
REO	4	Red Oak / Quercus rubra	1.5" BB/Cont.	AS SHOWN
SWO	25	Swamp White Oak / Quercus bicolor	1.5" BB/Cont.	AS SHOWN
ALS	6	Allegheny Serviceberry / Amelanchier laevis	6' HT., BB CLUMP	AS SHOWN
STC	6	Sugar Tyme Crab / Malus 'Sutyzam'	1.5" BB	AS SHOWN
BHS	7	Black Hills Spruce / Picea glauca densata	6' HT., BB	AS SHOWN
NOS	8	Norway Spruce / Picea abies	6' HT., BB	AS SHOWN
WHP	8	White Pine / Pinus strobus	6' HT., BB	AS SHOWN

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

Landscape Requirement Calculations

OVERALL PROJECT LANDSCAPE REQUIREMENTS:
SIX TREES PER ACRE X SITE AREA (116.7 AC) = 700 CAL IN. REQUIRED
(700 trees @ 1" CALIPER / 3' HEIGHT MINIMUM)

OVERALL STREET TREE REQUIREMENTS:
1 TREE PER 50' LOCAL STREET FRONTAGE (22,248 LF) = 667 CAL IN. REQUIRED
(608 trees @ 1-1/2" CALIPER MINIMUM)

1 TREE PER 40' 5TH STREET FRONTAGE (8,171 LF) = 306 CAL IN. REQUIRED
(204 trees @ 1-1/2" CALIPER MINIMUM)

OVERALL TOTAL TREE REQUIREMENTS: = 1,673 CAL IN. REQUIRED

PHASE 3 LANDSCAPE REQUIREMENTS:
SIX TREES PER ACRE X SITE AREA (26.4 AC) = 158 CAL IN. REQUIRED
(158 trees @ 1" CALIPER / 3' HEIGHT MINIMUM)

PHASE 3 STREET TREE REQUIREMENTS:
1 TREE PER 50' LOCAL STREET FRONTAGE (4,078 LF) = 123 CAL IN. REQUIRED
(82 trees @ 1-1/2" CALIPER MINIMUM)

PHASE 3 TOTAL TREE REQUIREMENTS: = 281 CAL IN. REQUIRED

PHASE 3 TOTAL LANDSCAPING PROVIDED: = 589 CAL IN. PROVIDED
(INCLUDES ALL PLANTINGS WITHIN PHASE 3)

**NOTES:
- STREET TREE LOCATIONS AND SPACING ARE SUBJECT TO CHANGE BASED ON CONSTRUCTED DRIVEWAY AND UTILITY LOCATIONS.
- ALL DISTURBED AREAS TO BE SODDED, UNLESS OTHERWISE NOTED.

1. PRIOR TO TREE STAKING AND PLANTING OPERATIONS CONTRACTOR MUST CONTACT GOPHER STATE ONE CALL (www.gopherstateonecall.org or 811) TO VERIFY UNDERGROUND UTILITIES. WHERE PRIVATE UTILITIES EXIST ON-SITE THE CONTRACTOR IS REQUIRED TO HAVE THOSE LOCATED AS WELL.
2. PLANT MATERIALS SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK: ANSI Z60.1 LATEST EDITION. http://americanhort.org/documents/ANSI Nursery Stock Standards AmericanHort 2014.pdf
3. NO PLANT SUBSTITUTIONS SHALL BE MADE WITHOUT THE PRIOR WRITTEN AUTHORIZATION FROM THE CITY.
4. ALL TREE PROTECTION MEASURES TO BE FIELD STAKED PRIOR TO INSTALLATION. CONTRACTOR TO COORDINATE FIELD REVIEW OF PROPOSED TREE PROTECTION LOCATIONS WITH THE CITY AND PROJECT LANDSCAPE ARCHITECT PRIOR TO ANY TREE PROTECTION INSTALLATION.
5. ALL TREE LOCATIONS TO BE FIELD STAKED PRIOR TO INSTALLATION. CONTRACTOR TO COORDINATE FIELD REVIEW OF PROPOSED TREE LOCATIONS WITH THE CITY AND PROJECT LANDSCAPE ARCHITECT PRIOR TO ANY TREE INSTALLATION.
6. ALL PLANTS SHALL BE PLANTED IMMEDIATELY UPON ARRIVAL TO PROJECT SITE. NO PLANT MATERIAL IS TO BE LEFT OVERNIGHT ON THE PROJECT SITE WITHOUT BEING INSTALLED UNLESS WRITTEN APPROVAL BY CITY.
7. ALL TREES, SHRUBS, PERENNIALS AND TURF LAWN TO HAVE A TWO YEAR WARRANTY BEGINNING UPON WRITTEN ACCEPTANCE BY THE CITY. DEFECTIVE PLANTS AS DETERMINED BY THE CITY SHALL BE REPLACED WITHIN 30 DAYS OF NOTICE DURING THE GROWING SEASON, AND REPLACEMENT MATERIALS SHALL RECEIVE THE SAME TWO YEAR WARRANTY UNTIL PLANTS ARE SUCCESSFULLY ESTABLISHED.
8. CONTRACTOR TO PROTECT AND MAINTAIN ALL PLANTINGS AND PLANT BEDS, INCLUDING PROTECTION FROM WILDLIFE, WEEDING, RE-MULCHING, FERTILIZATION, IRRIGATION AND ALL OTHER TYPICAL FORMS OF HORTICULTURAL CARE UNTIL THE END OF THE WARRANTY PERIOD AS DETERMINED AND APPROVED BY CITY.
9. ALL AREAS DISTURBED ADJACENT TO THE PROJECT SITE INCLUDING BOULEVARDS SHALL BE REPAIRED AND MAINTAINED PER CITY DIRECTION.
10. PROVIDE A THREE YEAR MAINTENANCE PLAN FOR ALL SEEDING OF PLANT MATERIALS/AREAS WITHIN ALL COMMERCIAL PROPERTIES, COMMONLY HELD HOA AREAS, CITY OUTLOTS AND R.O.W. AREAS.
11. ALL TREE, SHRUB AND PERENNIAL BEDS, WITHIN THE R.O.W. OR LOCATED ON COMMERCIAL PROPERTIES OR ON COMMONLY HELD HOA PROPERTY AND CITY OUTLOTS WITHIN DEVELOPMENTS ARE REQUIRED TO HAVE AN AUTOMATIC IRRIGATION SYSTEM DESIGNED BY AN EPA WATER SENSE CERTIFIED PROFESSIONAL. THIS PLAN IS REQUIRED FOR CITY REVIEW AT THE SAME TIME AS LANDSCAPE PLAN REVIEW.
12. ALL TRADITIONAL TURF LAWN AREAS WITHIN R.O.W. OR LOCATED ON COMMERCIAL PROPERTIES OR ON COMMONLY HELD HOA PROPERTY AND CITY OUTLOTS WITHIN DEVELOPMENTS ARE REQUIRED TO HAVE AN AUTOMATIC IRRIGATION SYSTEM DESIGNED BY AN EPA WATER SENSE CERTIFIED PROFESSIONAL. THIS PLAN IS REQUIRED FOR CITY REVIEW AT TIME OF LANDSCAPE PLAN REVIEW.

STANDARD PLAN NOTES
LANDSCAPE PLANS

FEBRUARY 2015

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

Latest Revision Date: 08/25/15

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Date: 05/26/15 Sheet: 1 OF 5

Savona 3rd Addition

Lake Elmo, Minnesota

Final Landscape Plan

Westwood
Phone (952) 937-5150 7699 Anagram Drive
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Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

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Cory Meyer

Date: 08/25/15 License No. 26971

Revisions:
07/20/15 – City Comments
08/25/15 – City Comments

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

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Plymouth, Minnesota 55446

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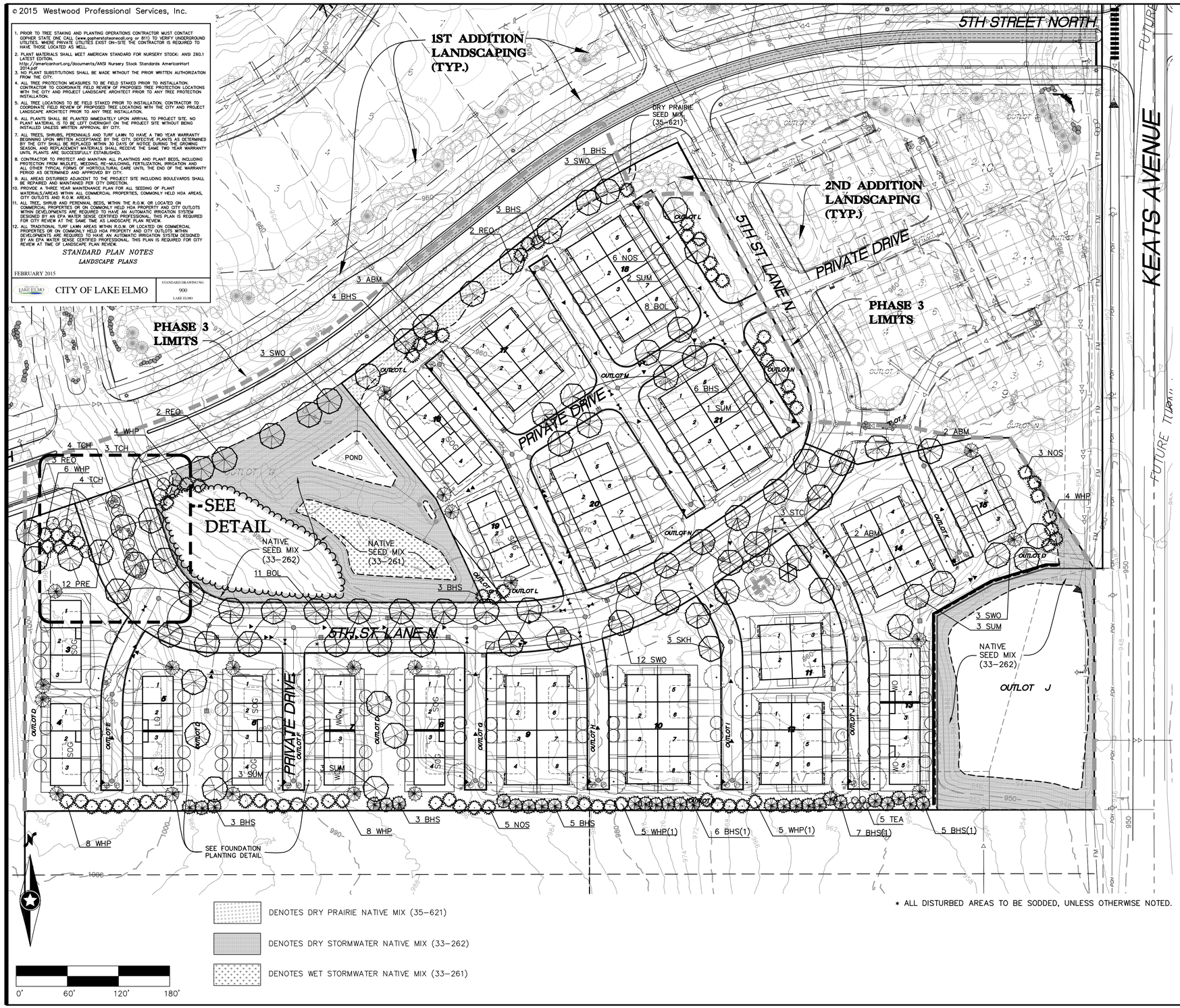
STANDARD PLAN NOTES

LANDSCAPE PLANS

FEBRUARY 2015

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



DENOTES DRY PRAIRIE NATIVE MIX (35-621)

DENOTES DRY STORMWATER NATIVE MIX (33-262)

DENOTES WET STORMWATER NATIVE MIX (33-261)

* ALL DISTURBED AREAS TO BE SODDED, UNLESS OTHERWISE NOTED.

Phase 3 Final Plant Schedule - Multi Family

CODE	QTY.	COMMON/BOTANICAL NAME	SIZE	SPACING O.C.
ABM	7	Autumn Blaze Maple / Acer x freemanii 'Jeffersred'	1.5" BB/Cont.	AS SHOWN
SUM	12	Sugar Maple / Acer saccharum	1.5" BB/Cont.	AS SHOWN
SKH	3	Skyline Honeylocust / Gleditsia triacanthos var. inermis 'Skycole'	1.5" BB/Cont.	AS SHOWN
REO	7	Red Oak / Quercus rubra	1.5" BB/Cont.	AS SHOWN
SWO	21	Swamp White Oak / Quercus bicolor	1.5" BB/Cont.	AS SHOWN
BOL	19	Boulevard Linden / Tilia americana 'Boulevard'	1.5" BB/Cont.	AS SHOWN
PRE	12	Princeton Elm / Ulmus americana 'Princeton'	1.5" BB/Cont.	AS SHOWN
TCH	11	Thornless Cockspur Hawthorn / Crataegus crusgalli 'Inermis'	1.5" BB	AS SHOWN
STC	3	Sugar Tyme Crab / Malus 'Sutyzam'	1.5" BB	AS SHOWN
BHS	28	Black Hills Spruce / Picea glauca densata	6' HT., BB	AS SHOWN
BHS(1)	18	Black Hills Spruce / Picea glauca densata	8' HT., BB	AS SHOWN
WHP	30	White Pine / Pinus strobus	6' HT., BB	AS SHOWN
WHP(1)	10	White Pine / Pinus strobus	8' HT., BB	AS SHOWN
NOS	14	Norway Spruce / Picea abies	6' HT., BB	AS SHOWN
TEA	5	Techny Arborvitae / Thuja occidentalis 'Techny'	6' HT., BB	AS SHOWN

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

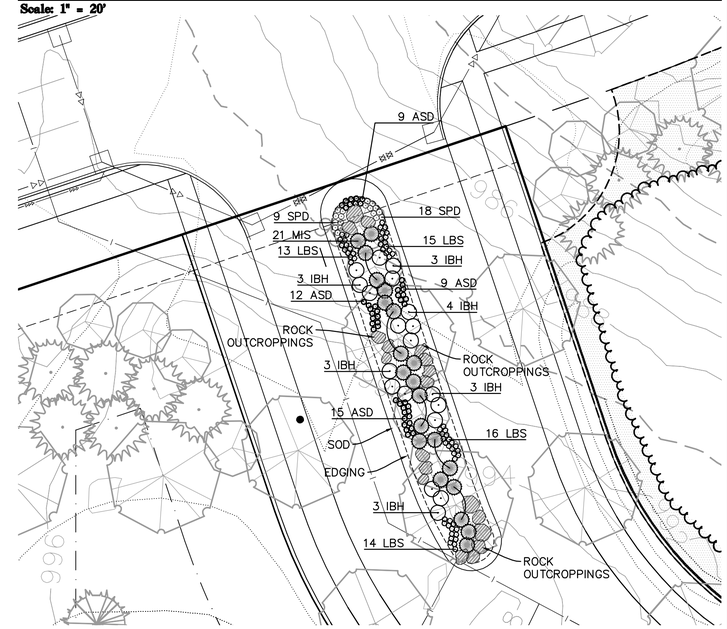
5th St. Lane Median Plant Schedule

CODE	QTY.	COMMON/BOTANICAL NAME	SIZE	SPACING O.C.
IBH	19	Incrediball Hydrangea / Hydrangea aborescens 'Abetwo'	#5 CONT.	4'-0" O.C.
MIS	21	Miscanthus Flame Grass / Miscanthus sinensis 'Purpurascens'	#1 CONT.	48" O.C.
LBS	58	Blue Heaven Bluestem Grass / Schizachyrium scoparium 'Minniblue A'	#1 CONT.	18" O.C.
SPD	27	Sporobolus Prairie Dropseed Grass / Sporobolus heterolepis	#1 CONT.	18" O.C.
ASD	45	Apricot Sparkles Daylily / Hemerocallis 'Apricot Sparkles'	#1 CONT.	36" O.C.

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

5th St. Lane Entrance Detail

Scale: 1" = 20'



Latest Revision Date: 08/25/15

0000565.03PLF02.dwg

Date: 05/26/15 Sheet: 2 OF 5

Westwood

Phone (952) 937-5150 7699 Anagram Drive
Fax (952) 937-5822 Eden Prairie, MN 55344
Toll Free (888) 937-5150 westwoodps.com

Westwood Professional Services, Inc.

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.

Cory Meyer

Date: 08/25/15 License No. 26971

Revisions:
07/20/15 – City Comments
08/25/15 – City Comments

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

Prepared for:

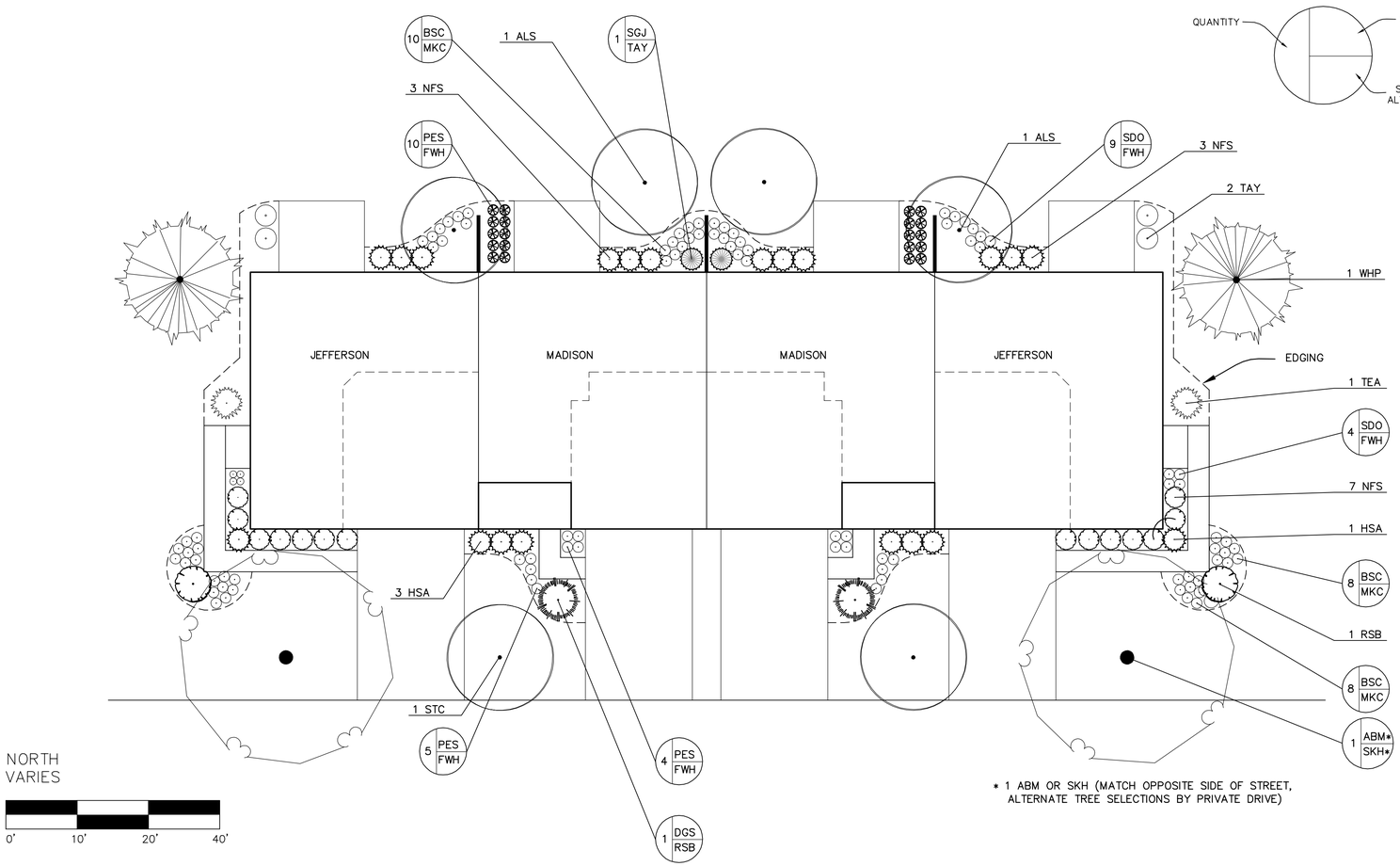
Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnesota 55446

Savona 3rd Addition

Lake Elmo, Minnesota

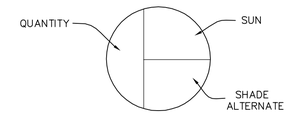
Final Landscape Plan - Multi Family

Colonial Row Home Planting Plan



* 1 ABM OR SKH (MATCH OPPOSITE SIDE OF STREET, ALTERNATE TREE SELECTIONS BY PRIVATE DRIVE)

Legend



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

Final Plant Schedule - Jefferson End Unit

TYPE	CODE	QTY.	COMMON/BOTANICAL NAME	SIZE	SPACING O.C.
OVERSTORY	ABM	1	Autumn Blaze Maple / Acer x freemanii 'Jeffers Red'	2.5" BB	AS SHOWN
	SKH	–	Skyline Honelocust / Gleditsia triacanthos var. inermis 'Skycole'	2.5" BB	AS SHOWN
ORNAMENTAL	ALS	1	Allegheny Serviceberry / Amelanchier laevis	6' HT., BB CLUMP	AS SHOWN
EVERGREEN	WHP	1	White Pine / Pinus strobus	6' HT., BB	AS SHOWN
SHRUBS & PERENNIALS	RSB	1	Regent Serviceberry / Amelanchier alnifolia 'Regent'	#10 CONT.	4'–0" O.C.
	shade alt:		*no change*		
	TEA	1	Techny Arborvitae / Thuja occidentalis 'Techny Globe'	#10 CONT.	4–0" O.C.
	shade alt:		*no change*		
	HSA	1	Holmstrup Arborvitae / Thuja occidentalis 'Holmstrup'	4' HT., BB	4'–0" O.C.
	shade alt:		*no change*		
	TAY	2	Taunton Yew / Taxus medii 'Taunton'	#5 CONT.	4'–0" O.C.
	shade alt:		*no change*		
	NFS	10	Neon Flash Spirea / Spiraea japonica 'Neon Flash'	#5 CONT.	3'–0" O.C.
	shade alt:		*no change*		
	BSC	16	Big Sky Coneflower / Echinacea x big sky 'Twilight'	#1 CONT.	18" O.C.
	shade alt:		*MKC McKana Hybrids Columbine / Aquilegia 'McKana'*	*#1 CONT.*	*18" O.C.*
	SDO	13	Stella de Oro Daylily / Hemerocallis 'Stella de Oro'	#1 CONT.	12" O.C.
	shade alt:		*FWH Frances Williams Hosta / Hosta 'Frances Williams'*	*#1 CONT.*	*18" O.C.*

NOTES:
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Final Plant Schedule - Madison Interior Unit

TYPE	CODE	QTY.	COMMON/BOTANICAL NAME	SIZE	SPACING O.C.
ORNAMENTAL	ALS	1	Allegheny Serviceberry / Amelanchier laevis	6' HT., BB CLUMP	AS SHOWN
	STC	1	Sugar Tyme Crab / Malus 'Sutyzam'	1.5" BB	AS SHOWN
SHRUBS & PERENNIALS	DGS	1	Dwarf Globe Blue Spruce / Picea pungens 'Glauca Globosa'	#5 CONT.	5'–0" O.C.
	shade alt:		*RSB Regent Serviceberry / Amelanchier alnifolia 'Regent'*	*#5 CONT.*	*4'–0" O.C.*
	SGJ	1	Sea Green Juniper / Juniperus chinensis 'Sea Green'	#5 CONT.	4'–0" O.C.
	shade alt:		*TAY Taunton Yew / Taxus medii 'Taunton'*	*#5 CONT.*	*4'–0" O.C.*
	HSA	3	Holmstrup Arborvitae / Thuja occidentalis 'Holmstrup'	4' HT., BB	4'–0" O.C.
	shade alt:		*no change*		
	NFS	3	Neon Flash Spirea / Spiraea japonica 'Neon Flash'	#5 CONT.	3'–0" O.C.
	shade alt:		*no change*		
	PES	19	Purple Emperor Sedum / Sedum 'Purple Emperor'	#1 CONT.	18" O.C.
	shade alt:		*FWH Frances Williams Hosta / Hosta 'Frances Williams'*	*#1 CONT.*	*18" O.C.*
	BSC	10	Big Sky Coneflower / Echinacea x big sky 'Twilight'	#1 CONT.	18" O.C.
	shade alt:		*MKC McKana Hybrids Columbine / Aquilegia 'McKana'*	*#1 CONT.*	*18" O.C.*

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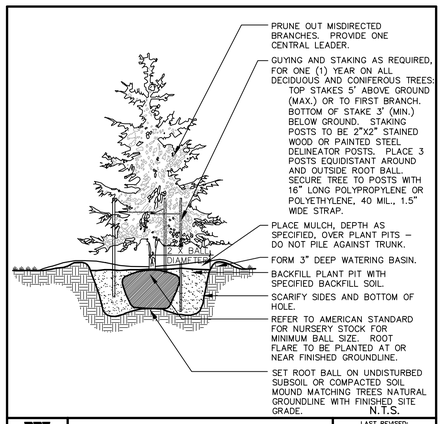
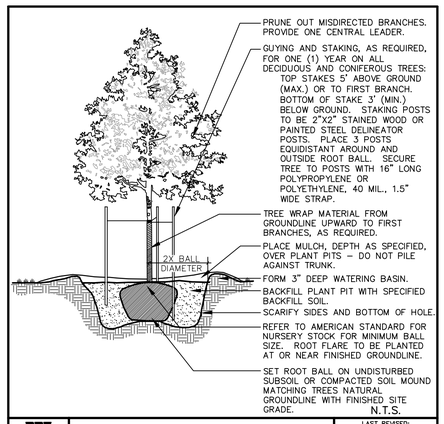


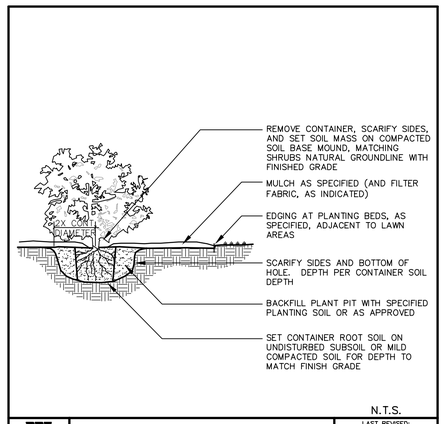
N.T.S.

Westwood	EVERGREEN TREE PLANTING	LAST REVISED: 06/05/13 LA29



N.T.S.

Westwood	DECIDUOUS TREE PLANTING	LAST REVISED: 06/05/13 LA28



N.T.S.

Westwood	SHRUB & PERENNIAL CONTAINER PLANTING	LAST REVISED: 06/05/13 LA27–C

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STANDARD PLAN NOTES

LANDSCAPE PLANS

FEBRUARY 2015

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

Latest Revision Date: 08/25/15

0000565.03PLF03.dwg

Date: 05/26/15 **Sheet:** 3 OF 5

Savona 3rd Addition

Lake Elmo, Minnesota

Foundation Plan Details

Westwood

Phone (952) 937-5150
Fax (952) 937-5822
Toll Free (888) 937-5150
7699 Anagram Drive
Eden Prairie, MN 55344
westwoodps.com

Westwood Professional Services, Inc.

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed LANDSCAPE ARCHITECT under the laws of the State of Minnesota.

Cory Meyer

Date: 08/25/15 License No. 26971

Revisions:

07/20/15 – City Comments
08/25/15 – City Comments

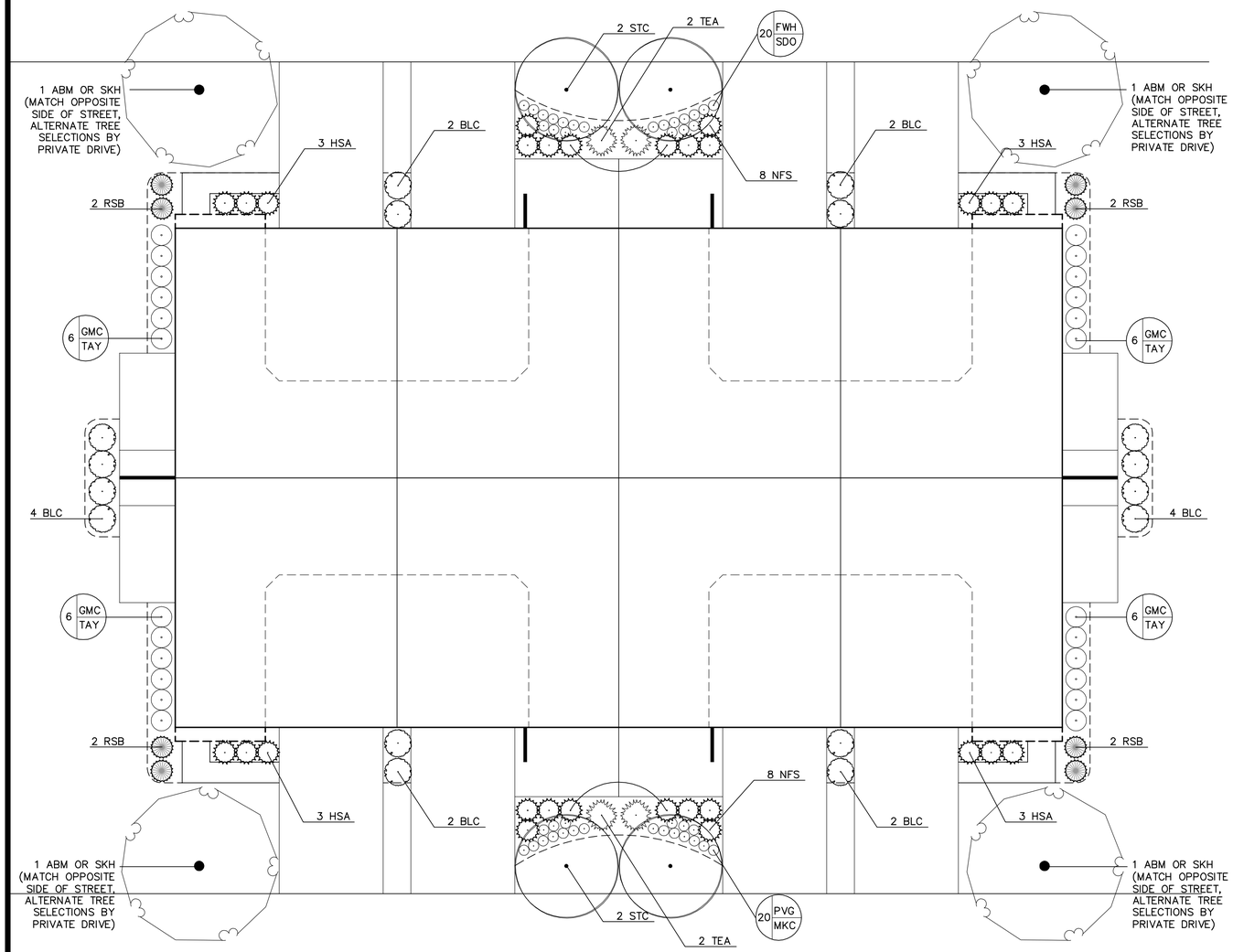
Designed: CLM
Checked: CLM
Drawn: SYE
Record Drawing by/date:

Prepared for:

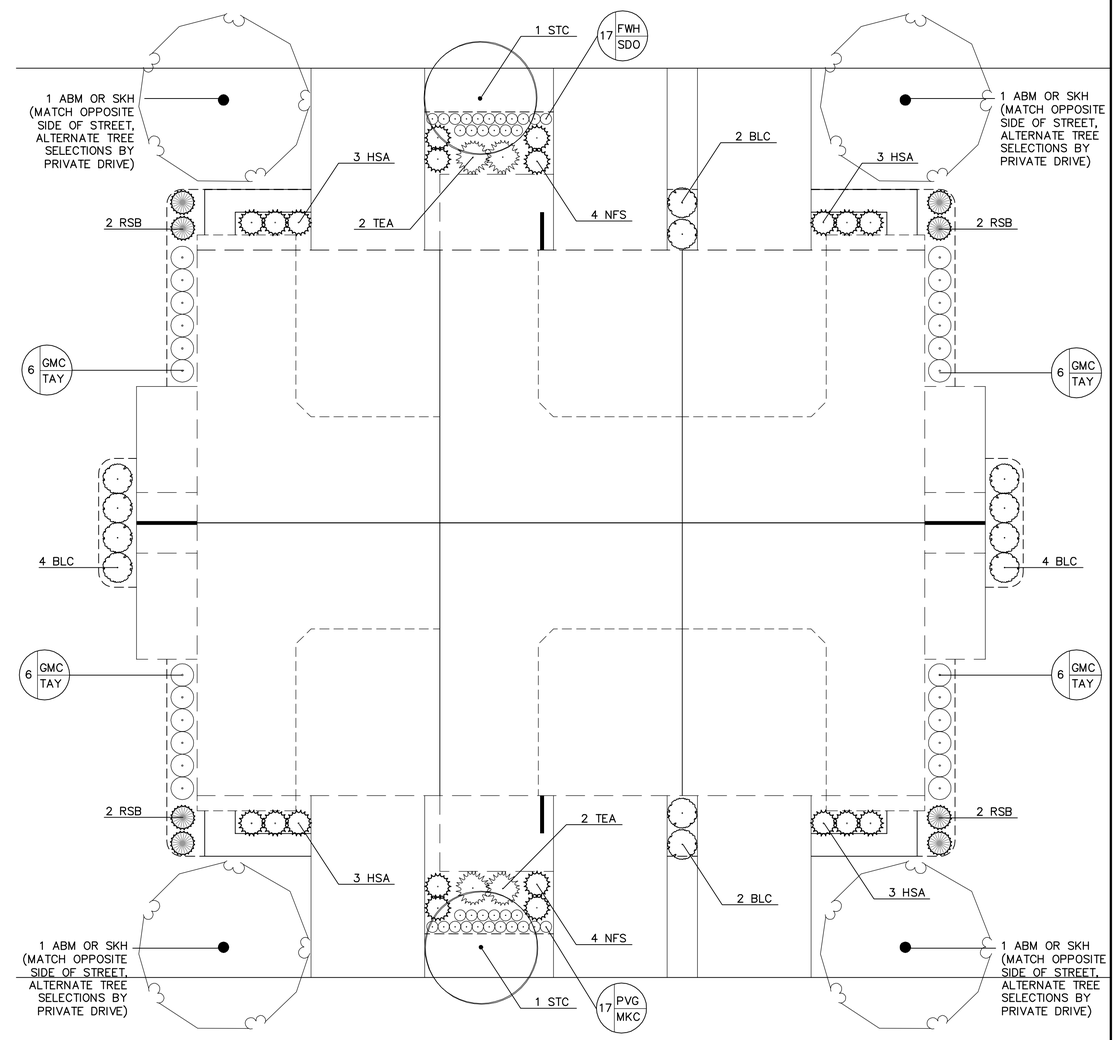
Lennar Corporation
16305 36th Avenue North Suite 600
Plymouth, Minnesota 55446

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

Colonial Home Planting Plan (8 unit)



Colonial Home Planting Plan (6 unit)



Final Plant Schedule

TYPE	CODE	8 UNIT QTY.	6 UNIT QTY.	COMMON/BOTANICAL NAME	SIZE	SPACING O.C.
OVERSTORY	ABM	4	4	Autumn Blaze Maple / Acer x freemanii 'Jeffers Red'	2.5" BB	AS SHOWN
	SKH	–	–	Skyline Honeylocust / Gleditsia triacanthos var. inermis 'Skycole'	2.5" BB	AS SHOWN
ORNAMENTAL	STC	4	2	Sugar Tyme Crab / Malus 'Sutyzam'	1.5" BB	AS SHOWN
SHRUBS & PERENNIALS	BLC	16	12	Black Chokeberry / Aronia melanocarpa	#10 CONT.	4'–0" O.C.
	shade alt:			*no change*		
	TEA	4	4	Techny Arborvitae / Thuja occidentalis 'Techny Globe'	#10 CONT.	4–0" O.C.
	shade alt:			*no change*		
	RSB	8	8	Regent Serviceberry / Amelanchier alnifolia 'Regent'	#10 CONT.	4'–0" O.C.
	shade alt:			*no change*		

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TYPE	CODE	8 UNIT QTY.	6 UNIT QTY.	COMMON/BOTANICAL NAME	SIZE	SPACING O.C.
SHRUBS & PERENNIALS	NFS	16	8	Neon Flash Spirea / Spiraea japonica 'Neon Flash'	#5 CONT.	3'–0" O.C.
	shade alt:			*no change*		
	HSA	12	12	Holmstrup Arborvitae / Thuja occidentalis 'Holmstrup'	4' HT., BB	4'–0" O.C.
	shade alt:			*no change*		
	GMC	24	24	Greenmound Currant / Ribes alpinum 'Green Mound'	#5 CONT.	3'–0" O.C.
	shade alt:			*TAY Taunton Yew / Taxus medii 'Taunton'*	*#5 CONT.*	*4'–0" O.C.*
	PVG	20	17	Philippe Vapelle Geranium / Geranium 'Philippe Vapelle'	#1 CONT.	12" O.C.
	shade alt:			*MKC McKana Hybrids Columbine / Aquilegia 'McKana'*	*#1 CONT.*	*18" O.C.*
	FWH	20	17	Frances Williams Hosta / Hosta 'Frances Williams'	#1 CONT.	18" O.C.
	shade alt:			*no change*		

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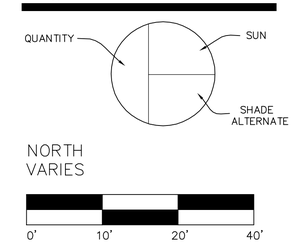
Legend



Latest Revision Date: 08/25/15

0000565.03PLF04.dwg

Date: 05/26/15 **Sheet:** 4 OF 5

Savona 3rd Addition

Lake Elmo, Minnesota

Foundation Plan Details

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Corey Meyer

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07/20/15 – City Comments
08/25/15 – City Comments

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

Prepared for:

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

Stormwater South & West Seed Mix

33-261	Stormwater South & West				
Common Name	**Scientific Name**	**Rate (kg/ha)**	**Rate (lb/ac)**	**% of Mix (% by wt)**	**Seeds/ sq ft**
big bluestem	*Andropogon gerardii*	2.24	2.00	5.72%	7.35
fringed brome	*Bromus ciliatus*	2.24	2.00	5.73%	8.10
bluejoint	*Calamagrostis canadensis*	0.07	0.06	0.18%	6.40
slender wheatgrass	*Elymus trachycaulus*	1.12	1.00	2.85%	2.53
Virginia wild rye	*Elymus virginicus*	1.68	1.50	4.28%	2.31
switchgrass	*Panicum virgatum*	0.43	0.38	1.07%	1.93
fowl bluegrass	*Poa palustris*	1.19	1.06	3.03%	50.70
Indian grass	*Sorghastrum nutans*	0.13	0.12	0.36%	0.55
prairie cordgrass	*Spartina pectinata*	0.43	0.38	1.07%	0.91
	Total Grasses	**9.53**	**8.50**	**24.29%**	**80.78**
awl-fruited sedge	*Carex stipata*	0.28	0.25	0.71%	3.10
dark green bulrush	*Scirpus atrovirens*	0.21	0.19	0.54%	31.70
woolgrass	*Scirpus cyperinus*	0.07	0.06	0.18%	39.00
	Total Sedges and Rushes	**0.56**	**0.50**	**1.43%**	**73.80**
Canada anemone	*Anemone canadensis*	0.08	0.07	0.19%	0.20
marsh milkweed	*Asclepias incarnata*	0.12	0.11	0.32%	0.20
leafy beggarticks	*Bidens frondosa*	0.12	0.11	0.31%	0.20
flat-topped aster	*Doellingeria umbellata*	0.07	0.06	0.17%	1.50
spotted Joe pye weed	*Eutrochium maculatum*	0.07	0.06	0.18%	2.19
autumn sneezeweed	*Helenium autumnale*	0.15	0.13	0.36%	5.97
obedient plant	*Physostegia virginiana*	0.08	0.07	0.21%	0.30
tall coneflower	*Rudbeckia laciniata*	0.08	0.07	0.21%	0.37
New England aster	*Symphyotrichum novae-angliae*	0.08	0.07	0.19%	1.56
blue vervain	*Verbena hastata*	0.06	0.05	0.15%	1.85
golden alexanders	*Zizia aurea*	0.22	0.20	0.56%	0.79
	Total Forbs	**1.12**	**1.00**	**2.85%**	**15.13**
Oats or winter wheat (see note at beginning of list for recommended dates)		28.02	25.00	71.43%	11.14
	Total Cover Crop	**28.02**	**25.00**	**71.43%**	**11.14**
	Totals:	**39.23**	**35.00**	**100.00%**	**180.85**
Purpose:	Stormwater pond edges, temporarily flooded dry ponds, and temporarily flooded ditch bottoms.				
Planting Area:	Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces. Mn/DOT Districts 2(west), 3B, 4, Metro, 6, 7 & 8.				

Dry Swale/Pond Seed Mix

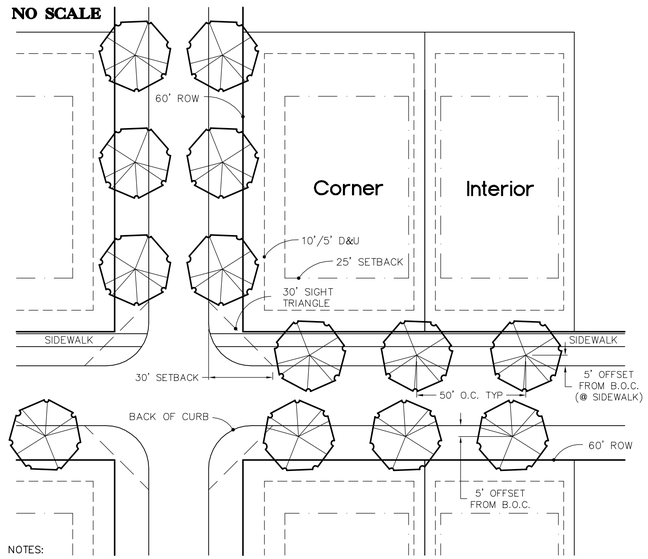
33-262	Dry Swale / Pond				
Common Name	**Scientific Name**	**Rate (kg/ha)**	**Rate (lb/ac)**	**% of Mix (% by wt)**	**Seeds/ sq ft**
big bluestem	*Andropogon gerardii*	1.68	1.50	3.40%	5.50
American slough grass	*Beckmannia syzigachne*	1.68	1.50	3.42%	27.60
fringed brome	*Bromus ciliatus*	1.68	1.50	3.40%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

Dry Prairie Southeast Seed Mix

35-621	Dry Prairie Southeast				
Common Name	**Scientific Name**	**Rate (kg/ha)**	**Rate (lb/ac)**	**% of Mix (% by wt)**	**Seeds/ sq ft**
side-oats grama	*Bouteloua curtipendula*	1.27	1.13	10.23%	2.48
blue grama	*Bouteloua gracilis*	0.76	0.68	6.19%	10.00
kalm's brome	*Bromus kalmii*	0.35	0.31	2.78%	0.90
nodding wild rye	*Elymus canadensis*	1.68	1.50	13.61%	2.86
slender wheatgrass	*Elymus trachycaulus*	1.32	1.18	10.76%	3.00
junegrass	*Koeleria macrantha*	0.46	0.41	3.71%	30.00
little bluestem	*Schizachyrium scoparium*	1.69	1.51	13.70%	8.30
sand dropseed	*Sporobolus cryptandrus*	0.25	0.22	1.98%	16.00
prairie dropseed	*Sporobolus heterolepis*	0.29	0.26	2.32%	1.50
	Total Grasses	**8.07**	**7.20**	**65.28%**	**75.04**
butterfly milkweed	*Asclepias tuberosa*	0.07	0.06	0.52%	0.09
whorled milkweed	*Asclepias verticillata*	0.01	0.01	0.11%	0.05
bird's foot coreopsis	*Coreopsis palmata*	0.06	0.05	0.50%	0.20
white prairie clover	*Dalea candida*	0.10	0.09	0.78%	0.60
purple prairie clover	*Dalea purpurea*	0.17	0.15	1.32%	0.80
ox-eye	*Heliopsis helianthoides*	0.07	0.06	0.51%	0.13
round-headed bush clover	*Lespedeza capitata*	0.03	0.03	0.31%	0.10
rough blazing star	*Liatris aspera*	0.02	0.02	0.17%	0.11
dotted blazing star	*Liatris punctata*	0.02	0.02	0.23%	0.06
wild bergamot	*Monarda fistulosa*	0.03	0.03	0.30%	0.85
horsemint	*Monarda punctata*	0.02	0.02	0.22%	0.80
stiff goldenrod	*Oligoneuron rigidum*	0.07	0.06	0.59%	0.98
large flowered beard tongue	*Penstemon grandiflorus*	0.04	0.04	0.36%	0.20
black-eyed susan	*Rudbeckia hirta*	0.10	0.09	0.86%	3.20
gray goldenrod	*solidago nemoralis*	0.01	0.01	0.14%	1.65
skyblue aster	*Symphyotrichum oolentangiense*	0.01	0.01	0.06%	0.20
silky aster	*Symphyotrichum sericeum*	0.02	0.02	0.19%	0.20
bracted spiderwort	*Tradescantia bracteata*	0.01	0.01	0.12%	0.05
heart-leaved alexanders	*Zizia aptera*	0.02	0.02	0.21%	0.10
	Total Forbs	**0.90**	**0.80**	**7.49%**	**10.37**
Oats or winter wheat (see note at beginning of list for recommended dates)		3.36	3.00	27.23%	1.33
	Total Cover Crop	**3.36**	**3.00**	**27.23%**	**1.33**
	Totals:	**12.33**	**11.00**	**100.00%**	**86.75**
Purpose:	Regional dry prairie reconstruction for wetland mitigation, ecological restoration, or conservation program plantings.				
Planting Area:	Eastern Broadleaf Forest Province excluding Hardwood Hills subsection. Mn/DOT Districts Metro & 6.				

Typical Street Tree Planting Detail

NO SCALE



NOTES:

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

1. PRIOR TO TREE STAKING AND PLANTING OPERATIONS CONTRACTOR MUST CONTACT GOPHER STATE ONE CALL (www.gopherstateonecall.org or 811) TO VERIFY UNDERGROUND UTILITIES. WHERE PRIVATE UTILITIES EXIST ON-SITE THE CONTRACTOR IS REQUIRED TO HAVE THOSE LOCATED AS WELL.
2. PLANT MATERIALS SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK: ANSI Z60.1 LATEST EDITION.
   http://americanhort.org/documents/ANSI Nursery Stock Standards AmericanHort 2014.pdf
3. NO PLANT SUBSTITUTIONS SHALL BE MADE WITHOUT THE PRIOR WRITTEN AUTHORIZATION FROM THE CITY.
4. ALL TREE PROTECTION MEASURES TO BE FIELD STAKED PRIOR TO INSTALLATION. CONTRACTOR TO COORDINATE FIELD REVIEW OF PROPOSED TREE PROTECTION LOCATIONS WITH THE CITY AND PROJECT LANDSCAPE ARCHITECT PRIOR TO ANY TREE PROTECTION INSTALLATION.
5. ALL TREE LOCATIONS TO BE FIELD STAKED PRIOR TO INSTALLATION. CONTRACTOR TO COORDINATE FIELD REVIEW OF PROPOSED TREE LOCATIONS WITH THE CITY AND PROJECT LANDSCAPE ARCHITECT PRIOR TO ANY TREE INSTALLATION.
6. ALL PLANTS SHALL BE PLANTED IMMEDIATELY UPON ARRIVAL TO PROJECT SITE. NO PLANT MATERIAL IS TO BE LEFT OVERNIGHT ON THE PROJECT SITE WITHOUT BEING INSTALLED UNLESS WRITTEN APPROVAL BY CITY.
7. ALL TREES, SHRUBS, PERENNIALS AND TURF LAWN TO HAVE A TWO YEAR WARRANTY BEGINNING UPON WRITTEN ACCEPTANCE BY THE CITY. DEFECTIVE PLANTS AS DETERMINED BY THE CITY SHALL BE REPLACED WITHIN 30 DAYS OF NOTICE DURING THE GROWING SEASON, AND REPLACEMENT MATERIALS SHALL RECEIVE THE SAME TWO YEAR WARRANTY UNTIL PLANTS ARE SUCCESSFULLY ESTABLISHED.
8. CONTRACTOR TO PROTECT AND MAINTAIN ALL PLANTINGS AND PLANT BEDS, INCLUDING PROTECTION FROM WILDLIFE, WEEDING, RE-MULCHING, FERTILIZATION, IRRIGATION AND ALL OTHER TYPICAL FORMS OF HORTICULTURAL CARE UNTIL THE END OF THE WARRANTY PERIOD AS DETERMINED AND APPROVED BY CITY.
9. ALL AREAS DISTURBED ADJACENT TO THE PROJECT SITE INCLUDING BOULEVARDS SHALL BE REPAIRED AND MAINTAINED PER CITY DIRECTION.
10. PROVIDE A THREE YEAR MAINTENANCE PLAN FOR ALL SEEDING OF PLANT MATERIALS/AREAS WITHIN ALL COMMERCIAL PROPERTIES, COMMONLY HELD HOA AREAS, CITY OUTLOTS AND R.O.W. AREAS.
11. ALL TREE, SHRUB AND PERENNIAL BEDS, WITHIN THE R.O.W. OR LOCATED ON COMMERCIAL PROPERTIES OR ON COMMONLY HELD HOA PROPERTY AND CITY OUTLOTS WITHIN DEVELOPMENTS ARE REQUIRED TO HAVE AN AUTOMATIC IRRIGATION SYSTEM DESIGNED BY AN EPA WATER SENSE CERTIFIED PROFESSIONAL. THIS PLAN IS REQUIRED FOR CITY REVIEW AT THE SAME TIME AS LANDSCAPE PLAN REVIEW.
12. ALL TRADITIONAL TURF LAWN AREAS WITHIN R.O.W. OR LOCATED ON COMMERCIAL PROPERTIES OR ON COMMONLY HELD HOA PROPERTY AND CITY OUTLOTS WITHIN DEVELOPMENTS ARE REQUIRED TO HAVE AN AUTOMATIC IRRIGATION SYSTEM DESIGNED BY AN EPA WATER SENSE CERTIFIED PROFESSIONAL. THIS PLAN IS REQUIRED FOR CITY REVIEW AT TIME OF LANDSCAPE PLAN REVIEW.

STANDARD PLAN NOTES

LANDSCAPE PLANS

FEBRUARY 2015

CITY OF LAKE ELMO

STANDARD DRAWING NO. 900 LAKE ELMO

Supplemental Planting Notes

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

Latest Revision Date: 08/25/15

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Date: 05/26/15 Sheet: 5 OF 5

Savona 3rd Addition

Lake Elmo, Minnesota

Final Landscape Details

Westwood

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Westwood Professional Services, Inc.

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed LANDSCAPE ARCHITECT under the laws of the State of Minnesota.

Cory Meyer

Date: 08/25/15 License No. 26971

Revisions:
07/20/15 – City Comments
08/25/15 – City Comments

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

Prepared for:

Lennar Corporation
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