City of Ramsey
Agenda
Special Environmental Policy Board (EPB)
Monday March 30, 2015
6:30 pm
The COR Room, 7550 Sunwood Drive NW

1. Call to Order

2. Citizen Input

3. Approve Agenda

4. Approve Minutes

1. Approve Meeting Minutes Dated March 2, 2015

5. Policy Board Business

1. Appointment of Chairperson and Vice Chairperson

2. Review Landscape and Tree Preservation Plans Associated with the Preliminary Plat Application for Harvest Estates; Case of NIK Management Inc.

3. Consider Landscape Plan Association with a Site Plan Application for Parkview East; Case of PSD, LLC

4. Review Landscape and Storm Water Management Plan Associated with a Site Plan Application for Sunwood Village: Case of Common Bond

6. Board/Staff Input

- EAB Confirmed in Anoka County
- Joint Meeting with Planning Commission April 20
- Spring Recycling Day Event May 2

7. Adjournment

Environmental Policy Board (EPB) **4. 1.**

Meeting Date: 03/30/2015

By: Chris Anderson, Community Development

Information

Title:

Approve Meeting Minutes Dated March 2, 2015

Action:

Attachments

Meeting Minutes Dated March 2, 2015

Form Review

Inbox	Reviewed By	Date
Chris Anderson (Originator)	Chris Anderson	03/26/2015 02:55 PM
Form Started By: Chris Anderson		Started On: 03/26/2015 02:30 PM
Final Approval Date: 03/26/2015		

ENVIRONMENTAL POLICY BOARD
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

On Monday, March 2, 2015, the Environmental Policy Board (EPB) met in the COR Conference Room at the Ramsey Municipal Center, 7550 Sunwood Drive N.W., Ramsey, Minnesota.

Members Present:	Chairperson Thomas Stodola Board Member Bob Bentz Board Member Reid Bernard Board Member Larry Lewis Board Member Michael Valentine
Members Absent:	Board Member Michael Hiatt
Also Present:	City Planner Chris Anderson City Civil Engineer II Leonard Linton City Engineer Bruce Westby City Council Liaison John LeTourneau

1. CALL TO ORDER

Chairperson Stodola called the meeting to order at 6:30 p.m.

2. CITIZEN INPUT

None.

3. APPROVE AGENDA

Motion by Board Member Lewis and seconded by Board Member Valentine to approve the agenda as submitted.

Motion carried. Voting Yes: Chairperson Stodola, Board Member Lewis, Valentine, Bentz, and Bernard. Voting No: None. Absent: Board Member Hiatt.

4. APPROVE MINUTES

4.01: Approve Meeting Minutes Dated February 2, 2015

Motion by Board Member Valentine and seconded by Board Member Lewis to approve the regular meeting minutes dated February 2, 2015.

Motion carried. Voting Yes: Chairperson Stodola, Board Member Valentine, Lewis, Bentz, and Bernard. Voting No: None. Absent: Board Member Hiatt.

5. POLICY BOARD BUSINESS

5.01: Consider Surface Water Management Plan Update

City Planner Anderson introduced City Civil Engineer Linton and City Engineer Westby who were present to discuss the update of the City's Surface Water Management Plan.

City Civil Engineer Linton presented the staff report and provided additional information regarding Atlas 14.

Board Member Bentz addressed areas of sloping and concerns of potential erosion.

City Civil Engineer provided additional information noting that some areas are not completed and other areas will be routed to ponds.

City Planner Anderson stated that there are Best Management Practices (BMPs) referenced throughout the Plan. He stated that the Surface Water Management Plan, in its current state and as proposed to be updated, focuses on BMPs.

Board Member Valentine asked if staff has any concerns with the requirements of the Minnesota Pollution Control Agency (MPCA).

City Civil Engineer Linton stated that some of the recommendations from the MPCA can be adapted to fit the needs of the City, providing an example of rock construction entrances, which are not effective in Ramsey.

Board Member Valentine referenced the increase to the 100-year rain figure and asked for additional information.

City Civil Engineer Linton explained that the Atlas 14 data provided much more information and that was used to determine the figures.

Motion by Board Member Valentine and seconded by Board Member Lewis to recommend that the City Council adopt the updated Surface Water Management Plan.

Motion carried. Voting Yes: Chairperson Stodola, Board Member Valentine, Lewis, Bentz, and Bernard. Voting No: None. Absent: Board Member Hiatt.

City Engineer Westby stated that this item will move on to the Public Works Committee on March 31st to seek their recommendation to the City Council. He believed that the item would appear before the City Council in April for their preliminary approve and then will be submitted to the Lower Rum River Water Management Organization by May 17th. He advised that there is a 60-day review period and believed that the Plan would appear back before the Council perhaps in August for final approval.

City Planner Anderson stated that the full Plan and Atlas 14 information could be provided to the Board Members if desired.

Board Member Valentine stated that he would like the additional information.

5.02: Consider Request for Variance to Side Yard Setback for an Existing Pool and to Minimum Lot Size in the Critical River Overlay District on the Properties Located at 14255 and 14235 Bowers Drive NW; Case of Travis and Bridgette Richard and Lucas Hase

City Planner Anderson presented the staff report.

Board Member Lewis stated that based on the fact that the adjacent lots seem to be non-conforming this request does not seem to be out of sync with the area. He stated that there would be more of an environmental impact if the pool were to be removed.

Board Member Valentine questioned if there was an issue for either property owner.

City Planner Anderson stated that this issue arose prior to the closing of the sale on the lot and both parties are in agreement. He noted that the owners of lots one and two were not involved in the placement of the pool. He stated that the DNR has been consulted and they do not have any issues with the variance.

Board Member Bentz stated that he personally would think the issue would have been grandfathered in. He stated that since there have been multiple property owners he would think this issue would have come up during the title insurance process.

City Planner Anderson noted that this did come up in the title insurance process for this sale and all parties were in agreement that this would be the cleanest and best approach.

Motion by Board Member Lewis and seconded by Board Member Valentine to recommend that the Planning Commission adopt Resolutions #15-03-063 and #15-03-064 approving a variance to the minimum lot size on the property located at 14235 Bowers Drive NW.

Motion carried. Voting Yes: Chairperson Stodola, Board Member Lewis, Valentine, Bentz, and Bernard. Voting No: None. Absent: Board Member Hiatt.

Motion by Board Member Lewis and seconded by Board Member Valentine to recommend that the Planning Commission adopt Resolutions #15-03-065 and #15-03-066 approving a variance to pool setbacks on the property located at 14255 Bowers Drive NW.

Motion carried. Voting Yes: Chairperson Stodola, Board Member Lewis, Valentine, Bentz, and Bernard. Voting No: None. Absent: Board Member Hiatt.

5.03: Outreach Opportunities for the Environmental Policy Board

City Planner Anderson presented the staff report.

Board Member Bentz referenced the education aspect mentioned in the Surface Water Management Plan, which needs to be completed on an annual basis.

City Planner Anderson agreed that the City could do a better job with education and believed that the knowledge of the Board could be a great component.

Board Member Lewis stated that in his opinion the Board should develop a very specific focus before participating in some of the events mentioned, rather than simply providing general information. He commented that the Board would be more successful with focusing on one or two items very specific to Ramsey homeowners.

City Planner Anderson agreed and explained that these are simply opportunities, should the Board develop those specific areas of focus.

Board Member Bentz believed that surface water must also be mentioned through education because of how the Plan is composed.

City Planner Anderson explained that the public education component of the Plan could be met through several avenues, such as newsletter articles or utility inserts. He agreed with Board Member Lewis that if the Board were to participate in these events there should be a specific focus.

Board Member Valentine stated that spring is around the corner and if the Board wants to participate in some of these events the group needs to be able to plan in order to develop a relevant topic and was not sure of the best method to prepare.

City Planner Anderson stated that this is not an item that requires action as these events occur on an annual basis and the Board can plan ahead for 2016. He stated that his recommendation would be if the Board were to have a topic of importance, they could participate in one of these events to spread that message.

Board Member Valentine agreed but believed that the Board could do a better job to become organized for the future.

City Planner Anderson stated that the Board could review the time of year for the events to determine which topics would fit well, and provided the example of Oak wilt during the spring.

City Council Liaison LeTourneau noted that this list of events is just a list of opportunities where the Board could spread a message and the Board does not have to choose to participate in specific events. He agreed that the Board should focus on one educational element per year and spread that message.

Chairperson Stodola agreed that the Board could develop seasonally pertinent issues that could be included in newsletters or broadcast on QCTV segments and believed that work had begun in the past.

City Planner Anderson stated that the Board did intend to create some seasonal articles for newsletters and QCTV segments but explained that he was having trouble obtaining volunteers from the Board to write the newsletters or film a QCTV segment.

Board Member Lewis stated that perhaps an item could be placed on the next agenda.

City Planner Anderson stated that the Planning Commission requested to hold a joint meeting with the Board in April and believed that would occur on the regular Board meeting date for April.

Chairperson Stodola stated that perhaps Subcommittees would be a good method of discussing this item further.

Board Member Lewis stated that he believed that the next agenda should include time to discuss the topic which the Board should focus on for the next year and then a Subcommittee could be formed to further research that aspect.

Board Member Bentz stated that this item should be a homework aspect that the Board Members research on their own so that when the item is discussed during the meeting it does not encompass a lot of time.

Chairperson Stodola stated that because the joint meeting will occur in April, the Board should come prepared to the May meeting with their ideas.

Board Member Bentz suggested that the Board Members email their ideas to City Planner Anderson.

City Planner Anderson suggested that the Board Members email him their topics of preference, which he can then draft into a case to provide a more streamlined discussion.

City Council Liaison LeTourneau suggested holding the joint meeting in May and letting the Board move forward on this topic in April.

City Planner Anderson stated that he would look into that option but noted that he was not in attendance at the Planning Commission when the idea was brought forward. He advised that he will follow up to determine if that would be possible and will email the Board to advise them if the joint meeting would occur in April or May.

5.04: Discuss Water Conservation Alternatives

City Planner Anderson presented the staff report.

Board Member Lewis stated that in his opinion, the top soil requirement should remain intact and any additional measures would be a bonus and could be incentivized.

City Planner Anderson stated that his interpretation from the discussion one year ago was that the focus became strictly top soil and nothing else and the City should allow the ability for builders to select from a menu of options that could be implemented, one of which could include top soil, in order to achieve the same goal. He stated that based upon what they have seen in the field and the cost of top soil (which could range from $3,000 to $5,000 for a single home) he would question if that top soil requirement should remain or whether there are other opportunities that still achieve the same water conservation goal.

Board Member Lewis questioned if there is a measurable goal desired on a per lot or per acre basis which could be built into the language.

City Planner Anderson did not believe that could be quantified. He compared the average water use during the winter months and summer months.

City Council Liaison LeTourneau provided additional information on the top soil study that was completed. He stated that there needs to be a shift in thinking for homeowners to look at some of these alternatives in replacement of sprinkling in order to conserve water.

Board Member Bentz stated that he would like to see the option for commercial properties to not install irrigation, which is currently required.

City Planner Anderson stated that perhaps the recommendation of the Board would be to keep the top soil requirement and to eliminate the requirement for irrigation within the business, industrial and multi-family zoning districts. He stated that perhaps there would be an option to exempt the top soil requirement if the applicant were to achieve the goal in another manner. He stated that perhaps the Board could use educational efforts to prioritize some of the alternative options.

Board Member Valentine agreed that perhaps the beginning point could be top soil but then there could be an option to achieve the goal using alternative methods, but was unsure how that end result could be measured.

City Planner Anderson stated that he will forward these comments to staff to further discuss and bring back additional recommendations in the future.

5.05: Review Article for Potential Inclusion in Newsletter

City Planner Anderson presented the staff report.

Chairperson Stodola questioned if someone has verified that the numbers are accurate.

City Planner Andersons stated that the information does seem accurate but noted that staff would verify the figures.

Board Member Lewis questioned if this would be an opportunity to recognize the business for the Eco Star award, as this would be a great kick off for the program and would provide recognition to the business and the program. He stated that perhaps language could be included in the article that the Board is nominating the business for an Eco Star award.

The Board provided consensus to include the article under the EPB portion of the newsletter with additional language nominating the business for the Eco Star award, with direction for staff to verify the figures in the article.

Board Member Lewis stated that perhaps this would be a good opportunity to publish an article about the Eco Star program. He volunteered to draft the article.

5.06: Well Water Wise Week Promotion

City Planner Anderson presented the staff report. He welcomed input from the Board regarding information they feel would be pertinent to the website, noting that information could be provided through email.

6. BOARD / STAFF INPUT

- **Joint EPB/Planning Commission Meeting on April 20, 2015**

City Planner Anderson had nothing further to add.

Chairperson Stodola commented that he recently attended a City Council meeting to present the Work Plan and noted that the Plan was very well received by the Council.

City Council Liaison LeTourneau noted that Chairperson Stodola did a great job presenting.

7. ADJOURNMENT

Motion by Board Member Valentine and seconded by Board Member Lewis to adjourn the meeting.

The meeting adjourned at 8:58 p.m.

Respectfully submitted,

_____

Chris Anderson
City Planner

ATTEST:

_____

JoAnn Shaw
Community Development Assistant

Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

Environmental Policy Board (EPB) **5. 1.**

Meeting Date: 03/30/2015

By: Chris Anderson, Community Development

Information

Title:

Appointment of Chairperson and Vice Chairperson

Purpose/Background:

Each year the Commissions and Boards appoint officers. Currently, Mr. Tom Stodola serves as Chairperson and Mr. Bob Bentz serves as the Vice Chair.

Action:

Motion to appoint _____ as Chairperson of the Environmental Policy Board for the term of April 2015 through March 2016.

-and-

Motion to appoint _____ as Vice Chairperson of the Environmental Policy Board for the term of April 2015 through March 2016.

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Chris Anderson (Originator)	Chris Anderson	03/26/2015 02:29 PM
Form Started By: Chris Anderson		Started On: 03/24/2015 11:44 AM
Final Approval Date: 03/26/2015		

Environmental Policy Board (EPB) **5. 2.**

Meeting Date: 03/30/2015

By: Chris Anderson, Community Development

Information

Title:

Review Landscape and Tree Preservation Plans Associated with the Preliminary Plat Application for Harvest Estates; Case of NIK Management Inc.

Purpose/Background:

The City has received an application for Preliminary Plat review for Harvest Estates, a proposed single family home subdivision consisting of forty-four (44) lots located at 15153 Nowthen Blvd (the "Subject Property"), which is the site of the former municipal center. The Preliminary Plat submittal includes both a Tree Preservation Plan and Landscape Plan in accordance with City Code.

Observations/Alternatives:

City Code has standards related to both landscaping and tree preservation requirements. Single family home developments are required to provide two (2) front yard trees per lot. Not less than twenty-five percent (25%) of the plantings shall consist of coniferous species. Deciduous trees shall be at least one (1) inch in caliper and coniferous trees shall be a minimum height of five (5) feet. In addition to the tree requirements, all disturbed areas not otherwise improved with impervious surfaces (house/garage, driveway, walkways, etc) shall have four (4) inches of topsoil applied prior to establishing the yard. The boulevard area must be sodded while the remainder of the yard can be established with sod, seed, hydroseed, or other acceptable ground cover.

Residential developments shall retain at least forty percent (40%) of existing significant tree inches on site (stated another way, up to sixty percent [60%] of the existing significant tree inches can be removed). For every one (1) significant tree inch removed in excess of this threshold, 1.25 inches (diameter) of new trees shall be provided on site, or restitution equal to $125.00 per significant tree inch removed in excess of the threshold, or some combination thereof. Reforestation plantings can also satisfy the required landscaping, as outlined in the applicable zoning district.

Landscape Plan

The Landscape Plan does provide at least two (2) trees per lot. All proposed trees exceed the minimum required sizes and there is an appropriate mix of deciduous and coniferous species. Staff has requested certain revisions to the Landscape Plan, which are identified in the Staff Review Letter attached to this case.

Tree Preservation

The site has 1,435 inches of significant trees (excluding invasive species) and per the Tree Preservation Ordinance, no more than sixty percent (60%) of those inches (861 inches) can be removed without triggering reforestation of 1.25 inches of new trees for every one (1) significant tree inch removed in excess of the threshold. The project proposes removing 1,360 diameter inches of significant trees, which exceeds the removal threshold by 499 inches. Thus, a total of 624 inches (1.25 x 499) should be replanted. The required landscaping of the applicable zoning district (two [2] trees per lot for this project) can be applied toward the reforestation standard.

The project is proposing to install a total of 160 trees, each being 2.5 inches in diameter, resulting in a total of 400 diameter inches of reforestation trees. The project appears to be short 224 diameter inches of reforestation trees. However, the purpose of the Tree Preservation Ordinance, as stated in City Code, is to enhance the community and

its citizenry and not to be punitive or to cause hardship to any individual, private or public company. When considering the existing site, it does not consist of high quality natural areas (it did not even register on the Natural Resources Inventory in 2007) nor does it include natural woodlands, which provide many of the desirable ecological benefits such as wildlife habitat, reduced stormwater runoff (i.e. greater infiltration), reduced soil erosion, and greenway corridors. Not only does the project propose more trees than would be required if the reforestation standard did not exist, but it also enhances the community by providing additional transitional areas between existing homes and the proposed development, both of which meet the spirit of the requirements.

This is the second time a proposed project has resulted in very large reforestation requirement (whether it is accomplished through additional plantings or a financial payment). Exemptions were incorporated into the standard to account for certain required improvements, such as stormwater ponds and trails, as well as provisions that would exclude invasive species and/or diseased trees from the removal calculations,. Additionally, the required landscaping within the applicable zoning district isalso eligible to help satisfy the reforestation standard. Even after all these considerations, an additional eighty-nine (89) trees (at 2.5 inches) or $28,000.00 in restitution would be needed.

The additional plantings on a project site of this size, or the financial payment to account for the restitution, appears burdensome. Staff believes that a more reasonable application of the reforestation requirement would be to identify the excess inches removed allow that to be reduced by the base landscaping requirements to determine the minimum reforestation inches ([determine excess inches removed and multiply by 1.25] - base landscaping requirements per the applicable zoning district = reforestation quantity in inches). Staff believes that this method is reasonable, prudent and still meets the intent and purpose of the Tree Preservation Ordinance and will be applying this to projects in the future.

Stormwater Management

The project proposes to utilize storm sewer infrastructure and ponding to address stormwater standards. It appears that the proposed stormwater management efforts comply with the LRRWMO 3rd Generation Plan.

Alternatives:

Option #1: Recommend approval of the Landscape and Tree Preservation Plans contingent upon compliance with the Staff Review Letter dated March 27, 2015. The Landscape Plan is generally acceptable with revisions outlined in the Staff Review Letter. While a majority of the trees on site are proposed for removal, they are not part of a natural woodland area nor are they considered to be a high quality natural area per the NRI. The reforestation plan will result in larger trees installed initially, provides for transitional areas between the project and existing homes to the north and west, and a greater quantity of trees replanted on the site than just the base landscaping requirement. Staff believes the plans meet the purpose of the Tree Preservation Ordinance and supports this option.

Option #2: Recommend that the Tree Preservation Plan be revised to provide additional diameter inches of reforestation trees and/or require a financial payment of $28,000.00 (224 inches x $125). Based on the lot sizes (generally 1/4 acre or so), it may not be desirable to have eighty-nine (89) more trees installed (this number could be even greater if the standard one [1] inch tree were installed) and a payment of $28,000.00 for tree removals could be deemed punitive or burdensome. Staff believes that the proposed reforestation plan meets the intent and spirit of the Tree Preservation Ordinance and does not support this option.

Funding Source:

All costs associated with this request are the responsibility of the Applicant.

Action:

Motion to recommend approval of the Landscape and Tree Preservation Plans contingent upon compliance with the Staff Review Letter dated March 27, 2015.

Attachments

Site Location Map

Plan Set

Staff Review Letter Dated March 27, 2015

Form Review

Inbox	Reviewed By	Date
Tim Gladhill	Tim Gladhill	03/26/2015 03:17 PM
Chris Anderson (Originator)	Chris Anderson	03/26/2015 03:21 PM
Form Started By: Chris Anderson		Started On: 03/24/2015 11:47 AM
Final Approval Date: 03/26/2015		


City of RAMSEY
Harvest Estates
N
Legend
Site
Parcels
0
500
1,000 Feet

HARVEST ESTATES

City of Ramsey

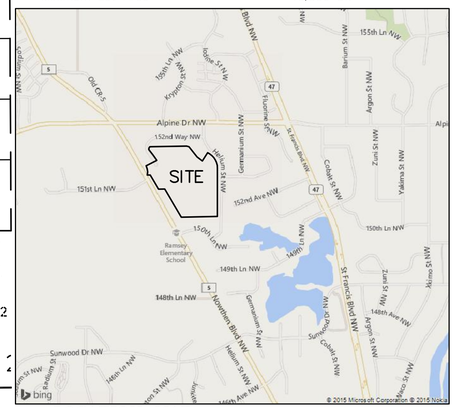
Anoka County, Minnesota

SITE DATA:

		SQ. FT.±	ACRES ±
Total Site Area	=	927,015	21.281
Right-of-Way Area	=	59,135	1.358
Net Area	=	867,880	19.924
Total Number of Lots	=	44	
Total No. Units	=	44	
Net Density	=	2.2 U/A	
Imperivious Surface	=	244,810	5.620

ZONING REGULATIONS:

Current zoning	=	Public/Quasi-Public District
Proposed zoning	=	R1 Residential (MUSA)
Front Yard	=	30 ft.
Rear Yard	=	30 ft.
Side Interior		
Living Space	=	10 ft.
Garage	=	6 ft.
Side Corner	=	30 ft.
Minimum Lot Width At Setback	=	80 ft.
Corner lot	=	90 ft.
Minimum Lot Area	=	10,800 Sf.



LOCATION MAP

No Scale

INDEX:

PRE PLAT:

C-1) COVERSHEET/SITE PLAN
C-2) PRELIMINARY PLAT
C-3) UTILITY PLAN
C-4) LANDSCAPE PLAN
C-5) TREE PRESERVATION PLAN

GRADING AND EROSION:

CG-1) GRADING PLAN
CE-1) EROSION CONTROL
CE-2) EROSION CONTROL DETAILS

Scale 1" = 30'

PRELIMINARY
NOT FOR CONSTRUCTION

100 0 100 200 300

Scale 1" = 100'

PROJECT NUMBER 141029

REVISIONS

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

Date:

Randall C. Hedlund MN. LIC. NO. 19576

PREPARED BY:

HEDLUND SURVEYING ENGINEERING PLANNING
2005 Pin Oak Drive
Eagan, MN 55122
Phone: (651) 405-6600
Fax: (651) 405-6606

SHEET TITLE: HARVEST STATES COVERSHEET/SITE PLAN

PREPARED FOR: NIK MANAGEMENT INC.
11736 177TH St. W.
Lakeville, MN 55044
Phone: (952) 236-9424

DRAWN	CHECKED	DESIGN
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SHEET NUMBER C-1

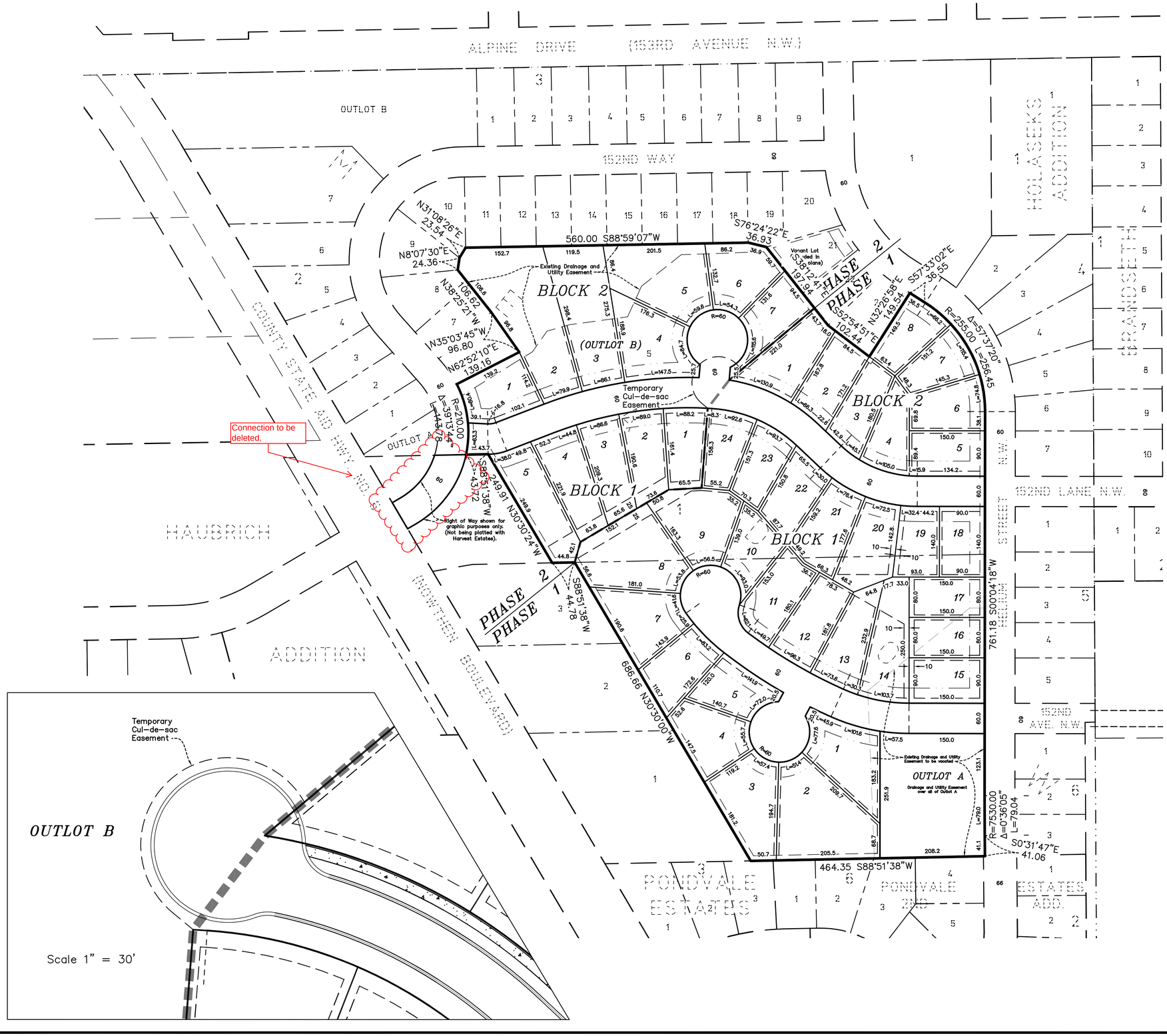
DATE 3/5/2015
REV. 00/00/00

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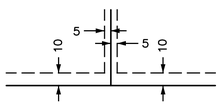
HARVEST ESTATES
City of Ramsey
Anoka County, Minnesota

LEGAL DESCRIPTION:

Lots 4 and 5, MEADOW, City of Ramsey, Anoka County, Minnesota.



Drainage and Utility Easements are shown thus:



Being 5 feet in width and adjoining lot lines, unless otherwise shown, and 10 feet in width and adjoining street lines as shown on the plat.

Bearings shown are based upon an assumed datum.

PRELIMINARY
NOT FOR CONSTRUCTION

100 0 100 200 300

Scale 1" = 100'

PROJECT NUMBER 141029

REVISIONS

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

Jeffrey D. Lindgren — MN. LIC. NO. 14376 — Date: ___

PREPARED BY:
HEDLUND SURVEYING
PLANNING ENGINEERING
2005 Pin Oak Drive
Eagan, MN 55122
Phone: (651) 405-6600
Fax: (651) 405-6606

SHEET TITLE: *HARVEST STATES PRELIMINARY PLAT*

PREPARED FOR: *NIK MANAGEMENT INC.*
11736 177TH St. W.
Lakeville, MN 55044
Phone: (952) 236-9424

DRAWN	CHECKED	DESIGN
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SHEET NUMBER
C-2

DATE 3/5/2015
REV. 00/00/00

Drawing:H:\2014 Projects\141029\Cadd\SubmittalSht's\PlatSht.dwg
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HARVEST ESTATES

City of Ramsey

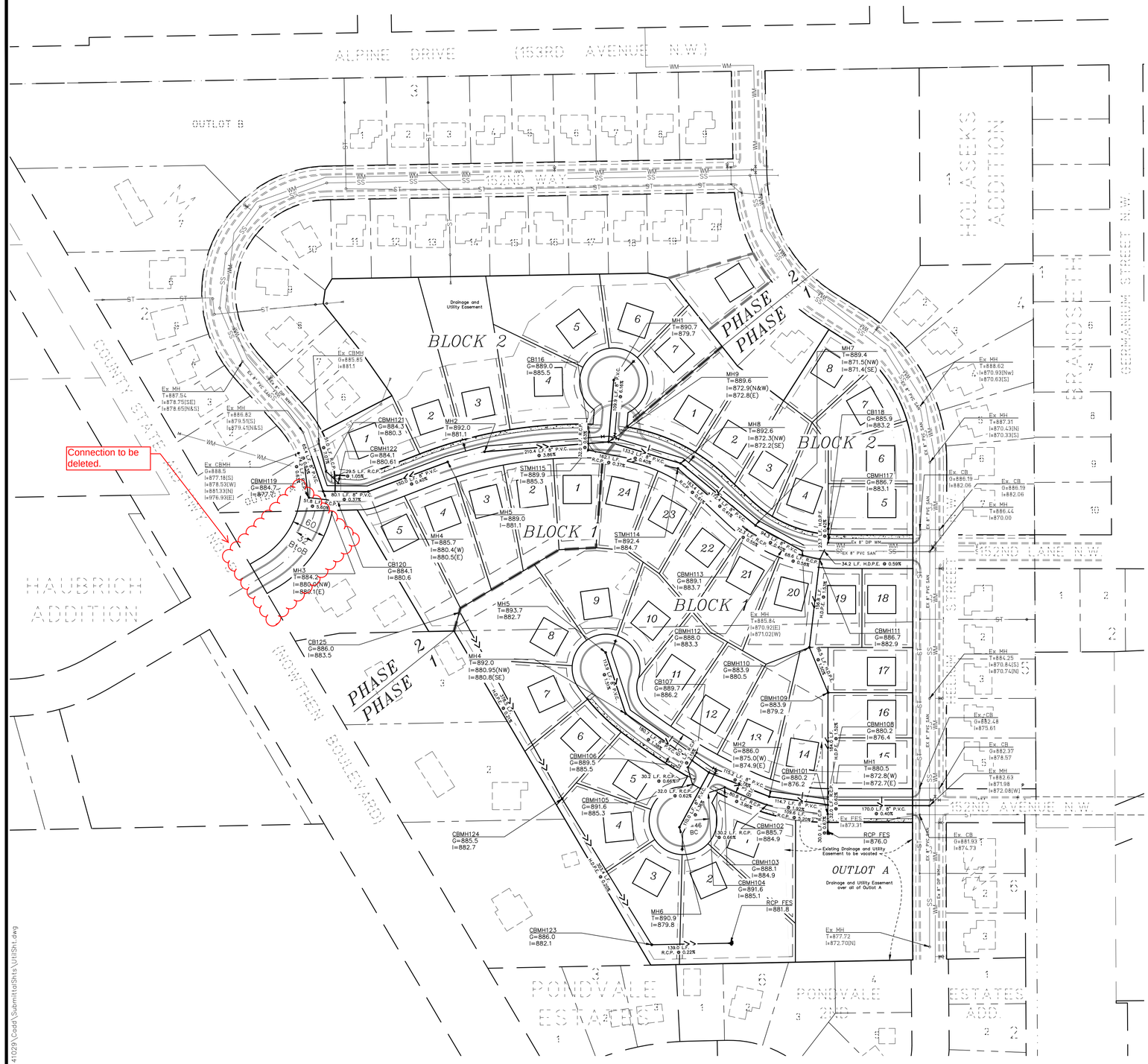
Anoka County, Minnesota

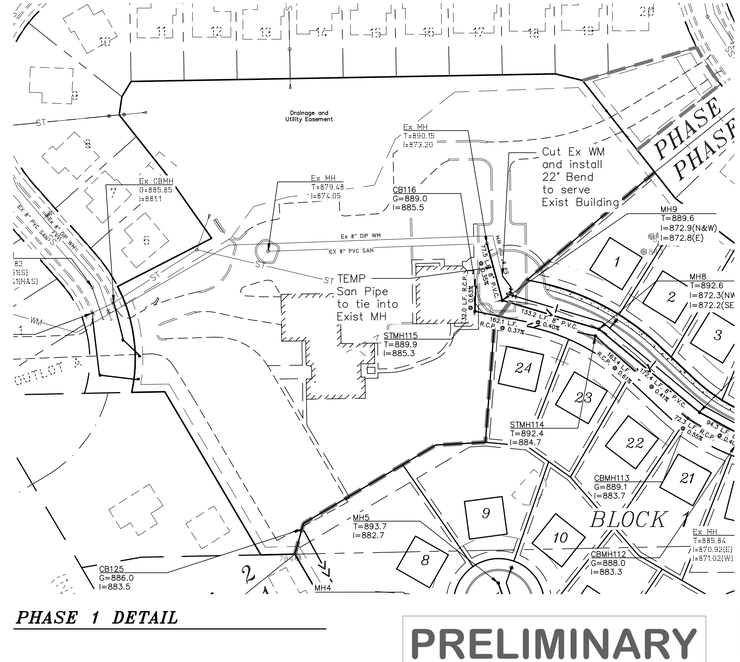
LEGEND:

SS SS	EXISTING SANITARY SEWER
WM WM	EXISTING WATERMAIN
ST ST	EXISTING STORM SEWER
x x	EXISTING FENCE
←—	PROPOSED SANITARY SEWER
—I—	PROPOSED WATERMAIN
<<—	PROPOSED STORM SEWER

GENERAL CONSTRUCTION NOTES:

1.) Existing Utility Locations As-Per As-Built Plans Provided By the _____ and Hedlund Engineering.
2.) All Existing Utilities or Improvements, Including Walks,Curbs Pavement and Parkways Damaged or Removed During Construction Shall be Promptly Restored to Their Respective Original Condition.
3.) The Contractor Shall Notify all Utility Companies Prior to Construction to Verify in the Field all Existing and Underground Utilities Adjacent to the Project, and be Responsible for Protection of the same.
4.) For on Site Location of all Under-ground Utilities Call Gopher State One Call System (651)454-0002
5.) The Contractor Shall Beware of Potential Conflicts with Existing Utilities as Indicated on the Plans The Contractor Shall Excavate Around Utilities to Determine Elev. Before Beginning Construction.
6.) The Contractor Shall Be Responsible To Lower Watermain During Install. Where Necessary To Avoid Service Conflicts.





PHASE 1 DETAIL

PRELIMINARY
NOT FOR CONSTRUCTION

100 0 100 200 300
Scale 1" = 100'

PROJECT NUMBER
141029

REVISIONS

REMARKS	DATE	BY
---	---	---

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

Date: ---
Randall C. Hedlund — MN. LIC. NO. 19576

PREPARED BY:
HEDLUND SURVEYING
ENGINEERING
PLANNING
2005 Pin Oak Drive
Eagan, MN. 55122
Phone: (651) 405-6600
Fax: (651) 405-6606

SHEET TITLE:
HARVEST ESTATES
UTILITY PLAN

PREPARED FOR:
NIK MANAGEMENT INC.
11736 177TH ST. W.
Lakeville, MN 55044
Phone: (952) 236-9424

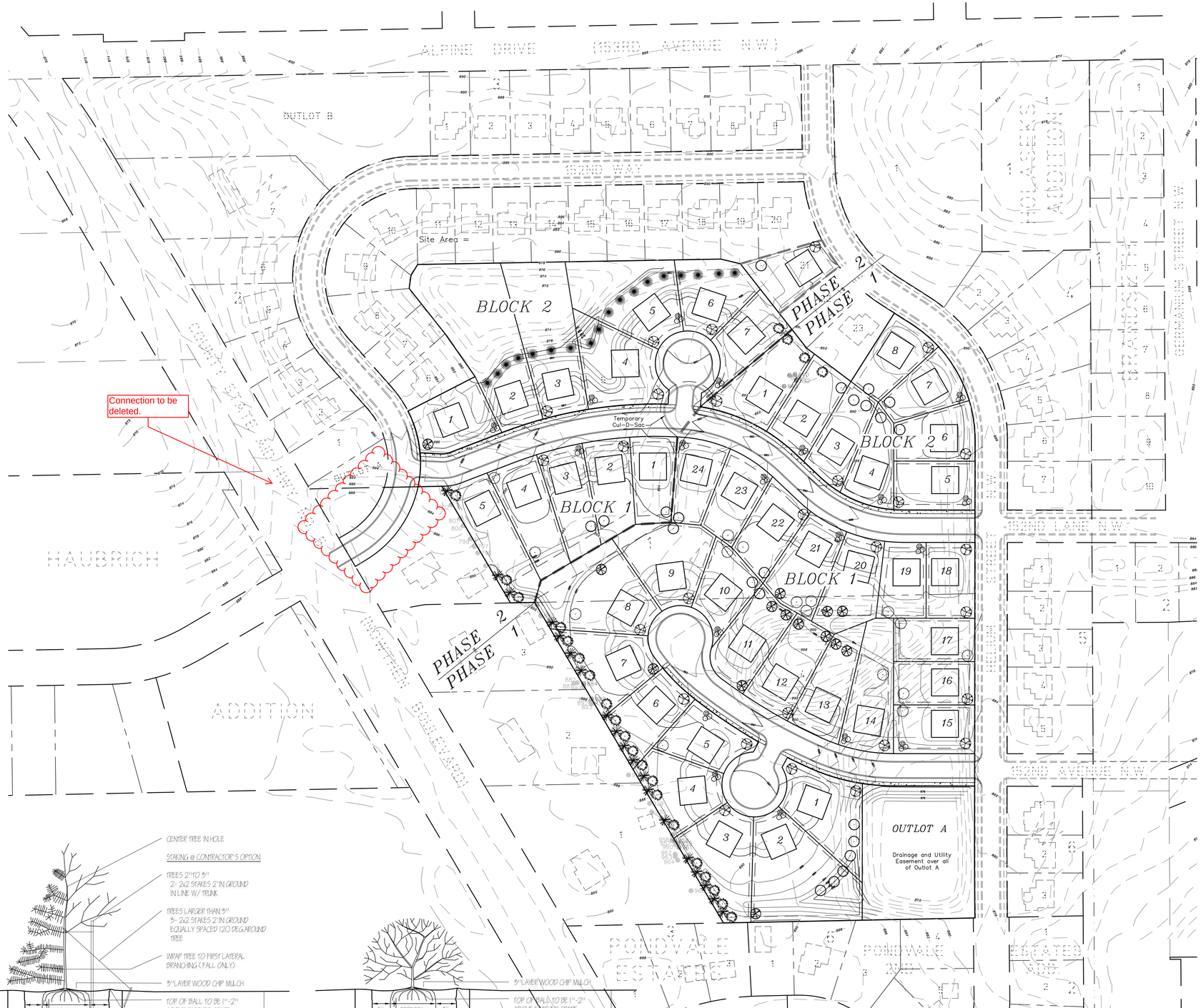
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SHEET NUMBER
C-3

DATE 3/5/2015
REV. ----

Drawing:H:\2014 Projects\141029\Cadd\Submittal\Sht1\UtilSht.dwg
Layout: Sht 1 Utility
Date:Mar 05,2015,9:52am
X-Ref Dwg:141029util.dwg
X-Ref Dwg:141029base.dwg

HARVEST ESTATES
City of Ramsey
Anoka County, Minnesota



PLANTING NOTES:

Contractor shall provide one year guarantee of all plant materials. The guarantee begins on the date of the Landscape Architect's written acceptance of the initial planting. Replacement plant materials shall also have a one year guarantee commencing upon planting.

All plants to be northern-grown and hardy.

Plants to be installed as per standard MN planting practices.

Use minimum 12" loam planting soil on trees.

Contractor shall verify locations with all utilities prior to installation of plants.

Staking of trees optional; reposition if not plumb after one year.

Wrap all smooth-barked trees-fasten top and bottom. Remove by April 1.

Open top of burlap on BB materials; remove pot on potted plants; split and break apart peat pots.

Prune plants as necessary - per standard nursery practice.

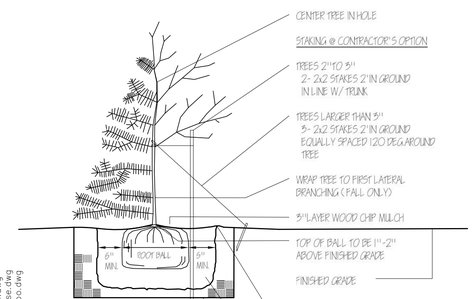
Owner shall be responsible for maintenance after acceptance of the work by the Owner.

Plants shall be immediately planted upon arrival at site. Properly heel-in materials if necessary; temporary only.

Shredded hardwood mulch (4"(1 - 6" deep)) shall be shall be placed around all new trees and shrub clusters. Diameter of mulched areas shrubs shall be a minimum of 4' from the trunk or stem of all trees and shrubs. Trench edging shall be used around all mulched areas.

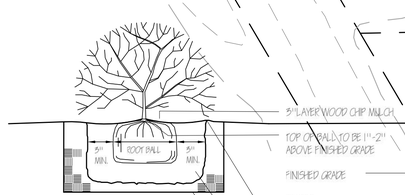
PLANT LIST:

QTY.	KEY	SYM	COMMON NAME	BOTANICAL NAME	SIZE / ROOT
19	AP		Austrian Pine	Pinus nigra	6' B&B
24	BHS		Black Hills Spruce	Picea glauca densata	6' B&B
18	BF		Balsam Fir	Abies balsamea	6' B&B
14	NM		Norway Maple	Acer platanoides	2.5" B&B
16	LL		Legend Linden	Tilia americana	2.5" B&B
19	RB		River Birch	Betula nigra	2.5" B&B
27	PA		Patmore Ash	Fraxinus pennsylvanica	2.5" B&B
25	SWO		Swamp White Oak	Quercus bicolor	2.5" B&B



TREE PLANTING DETAIL

No Scale



SHRUB PLANTING DETAIL

No Scale

PRELIMINARY
NOT FOR CONSTRUCTION

100 0 100 200 300

Scale 1" = 100'

Drawing:H:\2014 Projects\141029\Cadd\SubmittalShts\LandSht.dwg
Layout: Landscape Sheet
Date: Mar 05, 2015 - 10:27am
X-Ref Dwg:141029util.dwg
X-Ref Dwg:141029base.dwg
X-Ref Dwg:141029topo.dwg

PROJECT NUMBER 141029

REVISIONS

REMARKS	DATE	BY
---	---	---

CERTIFICATION: 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.

Randall C. Hedlund, Minn. No. 19576

PREPARED BY:

HEDLUND SURVEYING ENGINEERING

PLANNING
2005 Pin Oak Drive
Eagan, MN 55122
Phone: (651) 405-6600
Fax: (651) 405-6606

SHEET TITLE: *HARVEST ESTATES LANDSCAPE PLAN*

PREPARED FOR:

NIK MANAGEMENT INC.
11736 177TH St. W.
Lakeville, MN 55044
Phone: (952) 236-9424

DRAWN	CHECKED	DESIGN
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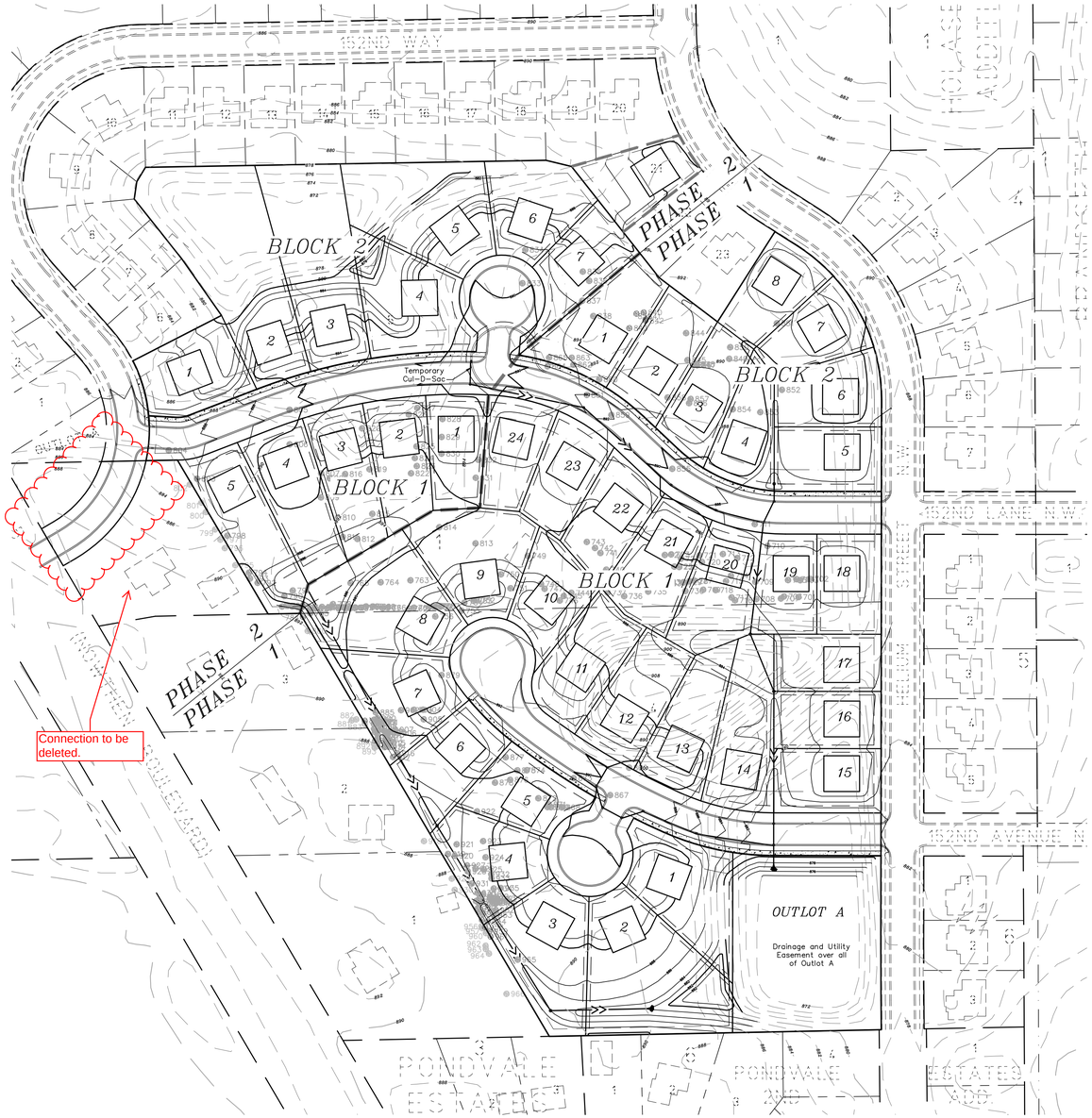
SHEET NUMBER

C-4

DATE 3/5/2015

REV. 00/00/00

HARVEST ESTATES
City of Ramsey
Anoka County, Minnesota



Trees Saved

Tree #	Species	DBH	Condition	Stems
840	Juniper	6.0	Good	1
841	Juniper	7.0	Good	1
842	Juniper	7.0	Good	1
884	Spruce, white	7.0	Fair	1
890	Pine, red	10.0	Good	1
955	Pine, red	11.5	Good	1
958	Pine, red	6.0	Good	1
959	Pine, red	7.0	Good	1
961	Pine, red	13.0	Good	1

Trees Lost

Tree #	Species	DBH	Condition	Stems
702	Pine, red	7.0	Good	1
703	Pine, red	7.5	Good	1
704	Pine, red	7.0	Good	1
705	Pine, red	10.0	Good	1
708	Juniper	5.0	Good	1
709	Pine, red	7.5	Good	1
710	Juniper	15.0	Good	1
711	Juniper	14.0	Good	1
713	Juniper	12.0	Good	1
715	Pine, red	6.5	Good	1
727	Pine, red	7.0	Good	1
728	Pine, red	4.5	Good	1
729	Pine, red	7.5	Good	1
730	Pine, white	10.5	Good	1
731	Pine, red	7.0	Fair	1
732	Pine, red	6.0	Good	1
733	Pine, red	6.5	Good	1
734	Pine, red	8.0	Good	1
736	Spruce, white	4.0	Good	1
738	Pine, red	10.0	Fair	1
739	Pine, red	8.0	Good	1
748	Pine, red	9.0	Good	1
750	Juniper	7.5	Good	1
751	Juniper	8.0	Good	1
752	Pine, Scots	7.5	Good	1
753	Pine, Scots	8.0	Good	1
754	Pine, Scots	7.0	Good	1
757	Pine, Scots	9.5	Good	1
758	Pine, Scots	7.0	Good	1
759	Pine, Scots	13.0	Fair	1
760	Pine, Scots	8.5	Good	1
761	Pine, Scots	4.0	Fair	1
762	Spruce, blue	5.5	Good	1
763	Ash, green	8.5	Good	1
764	Maple, silver	16.5	Good	1
765	Ash, green	9.5	Good	1
766	Spruce, blue	4.0	Fair	1
767	Spruce, blue	4.5	Good	1
768	Spruce, blue	5.5	Good	1
769	Spruce, blue	7.5	Good	1
770	Spruce, blue	8.0	Good	1
771	Spruce, blue	5.0	Good	1
772	Spruce, blue	6.0	Good	1
773	Spruce, blue	7.0	Fair	2
775	Spruce, blue	4.5	Fair	1
776	Spruce, blue	6.0	Good	1
777	Spruce, blue	7.0	Good	1
778	Spruce, blue	5.0	Good	1
779	Pine, Scots	9.0	Good	1
780	Spruce, blue	4.0	Fair	1
781	Spruce, white	5.0	Good	1
782	Spruce, white	4.5	Good	1
786	Spruce, white	5.0	Good	1
787	Spruce, white	5.0	Good	1
788	Spruce, white	7.0	Good	1
789	Spruce, white	5.0	Good	1
790	Oak, red	7.5	Good	1
791	Ash, green	10.0	Good	1
792	Basswood	13.1	Fair	2
793	Basswood	9.0	Good	1
794	Basswood	8.0	Good	1
798	Maple, sugar	8.0	Good	1
803	Maple, Norway	8.5	Good	1
804	Maple, silver	28.0	Fair	4
805	Honeylocust	11.5	Good	1
806	Spruce, white	13.0	Good	1
807	Basswood	10.0	Good	1
808	Ash, green	11.5	Good	1
809	Ash, green	11.5	Good	1
810	Ash, green	12.0	Good	1
811	Maple, sugar	11.5	Fair	1
812	Hackberry	8.0	Good	1
813	Ash, green	11.5	Good	1

Trees Lost

Tree #	Species	DBH	Condition	Stems
814	Maple, silver	13.0	Good	1
815	Spruce, blue	12.0	Good	1
816	Ash, green	10.5	Good	1
817	Ash, green	8.0	Good	1
818	Ash, green	10.0	Fair	1
819	Ash, green	10.0	Good	1
820	Crabapple	8.0	Good	1
821	Hackberry	9.0	Good	1
822	Pine, Scots	14.0	Good	1
823	Pine, Scots	16.0	Good	1
824	Pine, Scots	16.5	Good	1
825	Ash, green	12.0	Good	1
826	Maple, Norway	10.5	Good	1
827	Maple, Norway	9.5	Good	1
828	Ash, green	11.0	Good	1
829	Maple, silver	18.0	Fair	2
830	Birch, paper	15.0	Good	3
834	Juniper	9.0	Good	1
845	Juniper	7.0	Good	1
846	Juniper	17.0	Fair	5
847	Juniper	7.0	Good	1
848	Juniper	11.0	Fair	1
849	Juniper	7.0	Good	1
851	Juniper	5.5	Good	1
855	Juniper	6.0	Good	1
865	Juniper	13.0	Fair	1
886	Pine, red	9.5	Good	1
887	Pine, red	8.0	Good	1
888	Pine, red	8.5	Fair	1
889	Pine, red	10.0	Good	1
894	Pine, red	6.0	Good	1
895	Pine, red	7.0	Good	1
896	Pine, red	6.0	Good	1
897	Pine, red	6.0	Good	1
898	Pine, red	7.0	Good	1
899	Pine, red	7.5	Good	1
900	Pine, red	8.0	Good	1
901	Pine, red	9.5	Good	1
908	Pine, red	7.0	Fair	1
909	Pine, red	7.0	Good	1
910	Pine, red	5.0	Fair	1
911	Pine, red	6.5	Good	1
912	Pine, red	7.0	Good	1
913	Pine, red	10.5	Good	1
914	Pine, red	10.0	Good	1
915	Pine, red	8.0	Good	1
924	Pine, red	13.1	Good	1
925	Pine, red	12.5	Good	1
926	Pine, red	10.5	Good	1
927	Pine, red	14.0	Good	1
928	Pine, red	12.5	Good	1
931	Pine, red	13.0	Good	1
932	Pine, red	12.5	Good	1
933	Pine, red	11.5	Good	1
934	Pine, red	10.5	Good	1
935	Pine, red	12.0	Good	1
936	Pine, red	10.5	Good	1
937	Pine, red	9.5	Good	1
938	Pine, red	9.5	Good	1
939	Pine, red	14.0	Fair	2
940	Pine, red	6.5	Fair	1
941	Pine, red	8.0	Good	1
942	Pine, red	5.5	Good	1
943	Pine, red	8.5	Good	1
944	Pine, red	6.5	Good	1
945	Pine, red	12.0	Good	1
946	Pine, red	9.0	Good	1
947	Pine, red	8.0	Fair	1
948	Pine, red	9.0	Good	1
949	Pine, red	9.5	Good	1
950	Pine, red	10.0	Good	1
951	Pine, red	11.5	Good	1
952	Pine, red	10.0	Good	1
953	Pine, red	10.5	Good	1
954	Pine, red	17.0	Fair	2
965	Pine, red	7.0	Good	1

Total DBH= 1434.7
DBH Saved= 74.5
DBH Lost= 1360.2

Allowable Removal=2545 X 60%= **861**

Excess removed= **499**

Required replanting = 499 in. x 1.25 = 624 in. = 250 trees @ 2.5 inches - 90 trees (2 per lot required per ordinance) = 160 Trees

Siberian Elms (Not included in calculations)

Tree #	Species	DBH	Condition	Stems
784	Elm, Siberian	16.0	Fair	2
839	Elm, Siberian	21.0	Fair	1
843	Elm, Siberian	25.0	Fair	1
701	Elm, Siberian	27.0	Fair	1
706	Elm, Siberian	12.5	Fair	1
707	Elm, Siberian	8.5	Fair	1
716	Elm, Siberian	17.0	Good	1
717	Elm, Siberian	12.0	Fair	1
718	Elm, Siberian	14.0	Good	1
719	Elm, Siberian	19.0	Good	1
720	Elm, Siberian	11.5	Fair	1
721	Elm, Siberian	12.0	Fair	1
722	Elm, Siberian	12.0	Fair	1
723	Elm, Siberian	12.0	Fair	1
724	Elm, Siberian	15.0	Fair	1
725	Elm, Siberian	15.0	Fair	1
726	Elm, Siberian	10.0	Fair	1
712	Elm, Siberian	10.0	Good	1
714	Elm, Siberian	9.5	Good	1
735	Elm, Siberian	17.0	Fair	1
737	Elm, Siberian	20.0	Fair	1
740	Elm, Siberian	13.5	Fair	1
741	Elm, Siberian	10.0	Fair	1
742	Elm, Siberian	8.0	Fair	1
743	Elm, Siberian	18.0	Fair	1
744	Elm, Siberian	13.0	Fair	1
745	Elm, Siberian	16.0	Fair	1
746	Elm, Siberian	15.0	Fair	1
747	Elm, Siberian	10.0	Fair	1
749	Elm, Siberian	16.0	Fair	1
755	Elm, Siberian	8.0	Good	1
756	Elm, Siberian	9.0	Fair	1
774	Elm, Siberian	16.0	Fair	2
788	Elm, Siberian	20.0	Fair	2
785	Elm, Siberian	11.0	Fair	2
831	Elm, Siberian	19.0	Fair	1
832	Elm, Siberian	34.0	Fair	1
833	Elm, Siberian	9.5	Fair	1
835	Elm, Siberian	15.0	Fair	2
836	Elm, Siberian	8.0	Fair	1
837	Elm, Siberian	16.0	Fair	1
838	Elm, Siberian	11.0	Fair	1
844	Elm, Siberian	11.0	Fair	2

Siberian Elms (Not included in calculations)

Tree #	Species	DBH	Condition	Stems
850	Elm, Siberian	11.0	Fair	1
852	Elm, Siberian	9.0	Good	1
853	Elm, Siberian	14.0	Fair	1
854	Elm, Siberian	14.0	Good	1
856	Elm, Siberian	9.0	Good	1
857	Elm, Siberian	13.0	Good	1
858	Elm, Siberian	14.0	Fair	1
859	Elm, Siberian	8.0	Good	1
860	Elm, Siberian	12.0	Fair	2
861	Elm, Siberian	9.0	Fair	1
862	Elm, Siberian	10.0	Fair	1
863	Elm, Siberian	8.0	Fair	1
864	Elm, Siberian	9.0	Fair	1
866	Elm, Siberian	16.0	Fair	2
867	Elm, Siberian	15.0	Fair	4
868	Elm, Siberian	15.0	Fair	4
869	Elm, Siberian	10.0	Fair	2
870	Elm, Siberian	13.0	Fair	1
871	Elm, Siberian	9.0	Fair	2
872	Elm, Siberian	14.0	Fair	1
873	Elm, Siberian	14.0	Fair	1
874	Elm, Siberian	9.0	Fair	2
875	Elm, Siberian	8.0	Fair	2
876	Elm, Siberian	9.0	Fair	1
877	Elm, Siberian	20.0	Fair	1
878	Elm, Siberian	20.0	Fair	1
879	Elm, Siberian	15.0	Fair	1
885	Elm, Siberian	9.0	Fair	1
902	Elm, Siberian	8.0	Fair	1
903	Elm, Siberian	9.0	Fair	1
904	Elm, Siberian	12.0	Fair	1
905	Elm, Siberian	9.0	Fair	1
906	Elm, Siberian	11.0	Fair	1
907	Elm, Siberian	11.0	Fair	2
916	Elm, Siberian	17.0	Fair	3
917	Elm, Siberian	16.0	Fair	1
919	Elm, Siberian	16.0	Fair	1
920	Elm, Siberian	10.0	Fair	1
921	Elm, Siberian	10.0	Fair	1
922	Elm, Siberian	10.0	Fair	1
923	Elm, Siberian	12.0	Fair	1
	Elms DBH=	1110.0		

Trees Removed from inventory (Not on property)

Tree #	Species	DBH	Condition	Stems	Tree #	Species	DBH	Condition	Stems
795	Maple, silver	27.0	Fair	1	892	Pine, red	12.5	Good	1
796	Maple, silver	18.0	Fair	2	893	Pine, red	6.0	Fair	1
797	Maple, silver	9.5	Good	1	918	Elm, Siber	21.0	Fair	1
799	Maple, silver	26.0	Fair	4	929	Elm, Siber	10.0	Fair	1
800	Maple, silver	30.0	Fair	4	930	Elm, Siber	22.0	Fair	1
801	Maple, silver	31.0	Fair	3	956	Pine, red	6.5	Good	1
802	Maple, silver	15.0	Fair	1	957	Pine, red	7.5	Good	1
880	Elm, Siberian	30.0	Fair	1	960	Pine, red	5.5	Good	1
881	Spruce, white	7.0	Fair	1	962	Pine, red	8.5	Good	1
882	Spruce, white	11.0	Good	1	963	Pine, red	4.0	Good	1
883	Elm, Siberian	9.5	Fair	1	964	Pine, red	10.0	Good	1
891	Pine, red	10.0	Good	1	966	Pine, red	5.5	Good	1

PRELIMINARY
NOT FOR CONSTRUCTION

100 0 100 200 300
Scale 1" = 100'

PROJECT NUMBER 141029

REVISIONS

REMARKS	DATE	BY
---	---	---

CERTIFICATION: 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.

Randall C. Hedlund, Minn. No. 19576

PREPARED BY:
HEDLUND SURVEYING ENGINEERING PLANNING
2005 Pin Oak Drive
Eagan, MN 55122
Phone: (651) 405-6600
Fax: (651) 405-6606

SHEET TITLE: *HARVEST ESTATES TREE PRESERVATION PLAN*

PREPARED FOR: *NIK MANAGEMENT INC.*
11736 177TH St. W.
Lakeville, MN 55044
Phone: (952) 236-9424

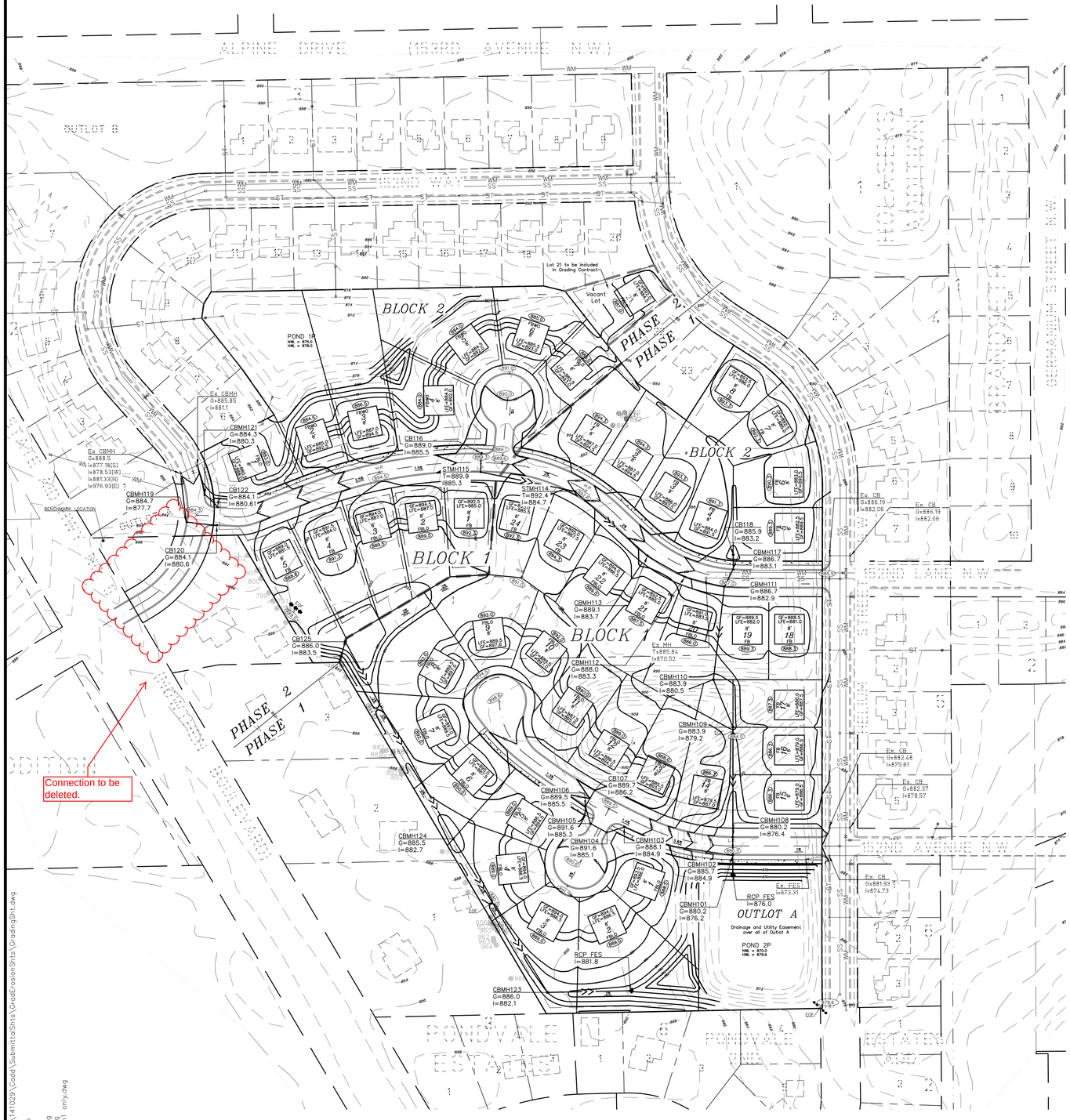
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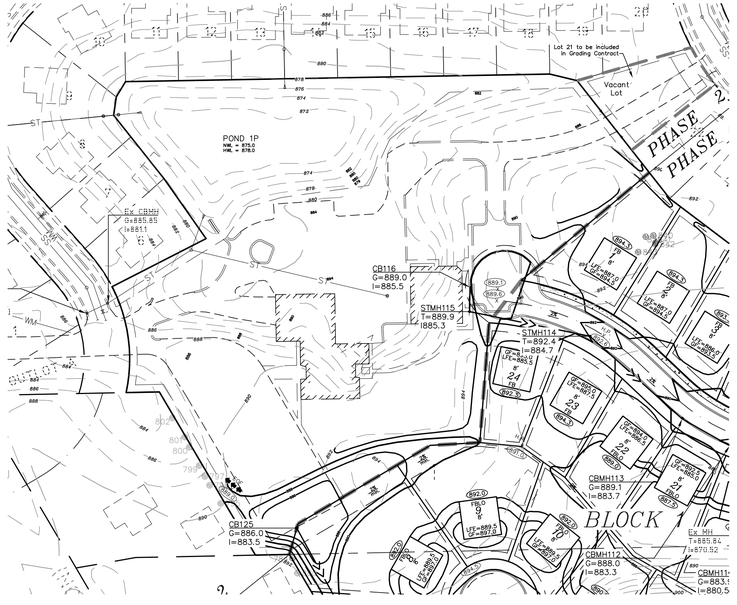
SHEET NUMBER
C-5

DATE 3/5/2015
REV. 00/00/00

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Date: Mar 05, 2015, 10:20am
X-Ref Dwg: 141029util.dwg
X-Ref Dwg: 141029base.dwg
X-Ref Dwg: 141029topo.dwg

HARVEST ESTATES
City of Ramsey
Anoka County, Minnesota





LEGEND:

X = 920.8	EXISTING CONTOUR
	EXISTING GRADE ELEVATION
ST ST	EXISTING TREE LINE
	EXISTING TREE
ST ST	EXISTING STORM SEWER
x x	EXISTING FENCE
	PROPOSED CONTOUR
	PROPOSED STORM SEWER
920.8	PROPOSED GRADE
	RETAINING WALL
920.8	DENOTES AS-BUILT GRADE
	EMERGENCY OVERFLOW

GENERAL GRADING NOTES:

1.) UNDERLYING TOPOGRAPHY FROM INFORMATION PROVIDED BY ANOKA COUNTY AND FIELD SHOTS BY HEDLUND ENGINEERING.

2.) EXISTING UTILITY LOCATIONS AS-PER PLANS PROVIDED BY THE CITY OF RAMSEY AND FIELD SHOTS BY HEDLUND ENGINEERING.

3.) SEE GRADING AND EROSION CONTROL DETAIL SHEET FOR DETAILED INFORMATION.

LOT BY LOT TABULATION

LOT	BLOCK	HOUSE TYPE	GARAGE FLOOR ELE	DRIVEWAY GRADE (%)	LOWEST FLOOR ELE	LOWEST OPENING ELE	100 YEAR FLOOD ELE	EMERGENCY OVERFLOW ELE	HIGHEST ANTICIPATED WATER TABLE OR MOTTLED SOIL
PHASE 1									
1	1	FBLO	893.5	7.1	886.0	889.2	879.6	879.6	
2	1	FBLO	894.0	5.8	886.5	889.7	879.6	879.6	
3	1	FBLO	894.0	6.0	886.5	889.7	879.6	879.6	
4	1	FBLO	894.0	5.8	886.5	889.7	N/A	880.0	
5	1	FBLO	894.0	8.7	886.5	889.7	N/A	880.0	
6	1	FBLO	895.0	6.4	887.5	890.7	N/A	880.0	
7	1	FBLO	897.0	7.3	889.5	892.7	N/A	880.0	
8	1	FBLO	897.0	6.7	889.5	892.7	N/A	889.0	
9	1	FBLO	897.0	6.2	889.5	892.7	N/A	889.0	
10	1	FBLO	897.0	6.7	889.5	892.7	N/A	884.0	
11	1	FBLO	895.0	6.7	887.5	890.7	N/A	884.0	
12	1	FBLO	894.0	5.1	886.5	889.7	N/A	884.0	
13	1	FBLO	893.0	7.8	885.5	888.7	N/A	884.0	
14	1	FB	887.0	6.7	879.5	887.0	N/A	884.0	
15	1	FB	886.5	5.8	879.0	886.5	N/A	N/A	
16	1	FB	886.5	4.0	879.0	886.5	N/A	N/A	
17	1	FB	887.5	4.2	880.0	887.5	N/A	884.0	
18	1	FB	888.5	1.3	881.0	888.5	N/A	884.0	
19	1	FB	889.5	5.1	882.5	889.5	N/A	884.0	
20	1	FBLO	891.0	6.9	883.5	886.7	N/A	884.0	
21	1	FBLO	892.5	5.8	885.0	888.2	N/A	884.0	
22	1	FBLO	894.0	8.2	886.5	889.7	N/A	884.0	
23	1	FB	895.0	6.7	887.5	895.0	N/A	884	
24	1	FB	893.0	5.1	885.5	893.0	N/A	889	
1	2	FB	894.5	5.6	887.0	894.5	N/A	887.5	
2	2	FB	894.5	5.6	887.0	894.5	N/A	887.5	
3	2	FB	893.5	7.6	886.0	893.5	N/A	887.5	
4	2	FB	891.5	7.8	884.0	891.5	N/A	887.5	
5	2	FB	889.5	3.6	882.5	889.5	N/A	887.5	
6	2	FB	890.5	3.3	883.0	890.5	N/A	887.5	
7	2	FB	892.5	5.3	885.0	892.5	N/A	887.5	
8	2	FB	893.5	4.4	886.0	893.5	N/A	887.5	
PHASE 2									
1	1	FB	892.5	5.6	885.0	892.5	878.0	N/A	
2	1	FB	894.5	5.8	887.0	890.2	878.0	N/A	
3	1	FBLO	894.4	5.6	887.0	890.2	878.0	N/A	
4	1	FB	891.5	6.0	884.0	891.5	878.0	N/A	
5	1	FB	889.0	1.6	881.5	889.0	878.0	N/A	
1	2	FBLO	888.0	4.4	880.5	883.7	878.0	N/A	
2	2	FBWO	892.5	5.6	885.0	885.0	878.0	N/A	
3	2	FBWO	894.5	5.6	887.0	887.0	878.0	N/A	
4	2	FBWO	892.0	4.4	884.5	884.5	878.0	N/A	
5	2	FBWO	892.0	2.9	884.5	884.5	878.0	N/A	
6	2	FBWO	893.0	4.4	885.5	885.5	878.0	N/A	
7	2	FBLO	893.0	6.7	885.5	888.7	878.0	N/A	

Cut/Fill Summary - Preliminary - Run Date - 2-27-15

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
Cut-Fill	1.000	1.000	827983.43 Sq. Ft.	43237.64 Cu. Yd.	65380.06 Cu. Yd.	22142.42 Cu. Yd.<Fill>
Totals			827983.43 Sq. Ft.	43237.64 Cu. Yd.	65380.06 Cu. Yd.	22142.42 Cu. Yd.<Fill>

TOTAL DISTURBED AREA = 19.1 ACRES
TOTAL IMPERVIOUS SURFACE = 5.6 ACRES

PRELIMINARY
NOT FOR CONSTRUCTION

BENCHMARK

ANOKA COUNTY BENCHMARK DISK, BENCHMARK NO. 2088,
LOCATED ON THE NORTHWESTERLY CORNER OF
15133 NOWTHEN BLVD NW, RAMSEY, MN 55303
ELEVATION = 886.831

100 0 100 200 300
Scale 1" = 100'

PROJECT NUMBER
141029

REVISIONS	REMARKS	DATE	BY
	---	---	---

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

Randall C. Hedlund — MN. LIC. NO. 19576
Date: ---

PREPARED BY:
HEDLUND SURVEYING ENGINEERING
PLANNING
2005 Pin Oak Drive
Eagan, MN 55122
Phone: (651) 405-6600
Fax: (651) 405-6606

SHEET TITLE: HARVEST ESTATES GRADING PLAN

PREPARED FOR:
NIK MANAGEMENT INC.
11736 177TH St. W.
Lakeville, MN 55044
Phone: (952) 236-9424

DRAWN	CHECKED	DESIGN
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SHEET NUMBER
CG-1

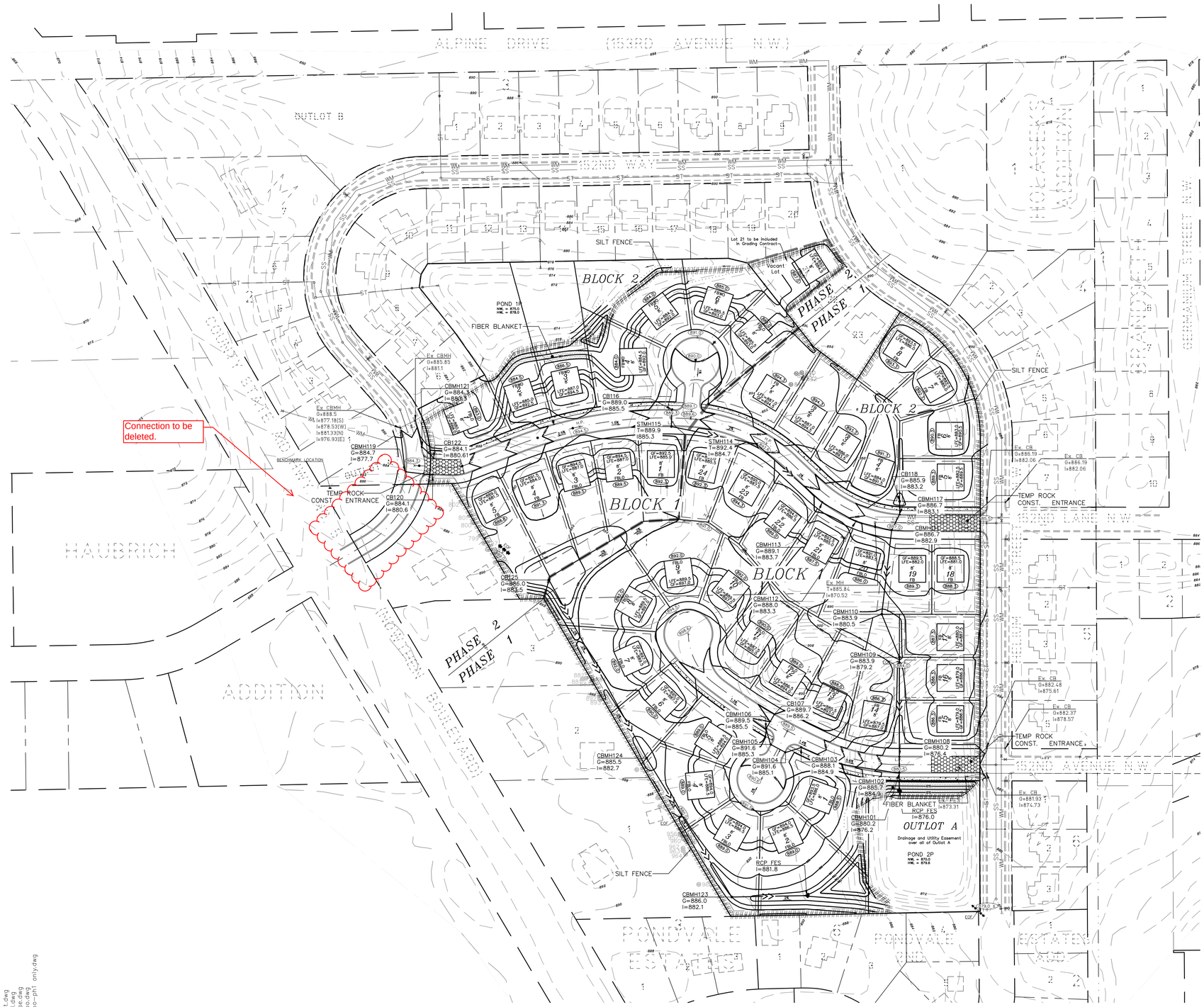
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REV. ---

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HARVEST ESTATES

City of Ramsey

Anoka County, Minnesota



GENERAL EROSION CONTROL NOTES:

EROSION CONTROL SCHEDULE:

1.) INSTALL EROSION CONTROL MEASURES PRIOR TO ANY LAND DISTURBANCE. INSTALL SEDIMENT FILTERS IMMEDIATELY FOLLOWING INSTALLATION OF STRUCTURE.
2.) SLOPES MUST BE STABILIZED BY BEING SEEDED AND COVERED WITH AN EROSION CONTROL BLANKET OR MULCHED WITH A TACKIFYING AGENT AS SOON AS POSSIBLE AFTER COMPLETION OF GRADING
3.) ALL EROSION CONTROL INSTALLATIONS SHALL REMAIN IN PLACE AND BE MAINTAINED IN GOOD CONDITION BY THE CONTRACTOR/PERMITTEE UNTIL THE SITE HAS BEEN RE-VEGETATED, AT WHICH TIME THEY SHALL BE REMOVED. FOR PROPOSED PAVED SURFACE AREA, THE CONTRACTOR MAY REMOVE NECESSARY SILT FENCING TO CONSTRUCT ROADWAY WHILE MAINTAINING ADEQUATE EROSION CONTROL IN ADJACENT AREAS.
4.) SUFFICIENT TOPSOIL SHALL BE STOCKPILED TO ALLOW FOR THE REPLACEMENT OF A MINIMUM OF 4" OF TOPSOIL FOR DISTURBED AREAS THAT ARE TO BE REVEGATATED.
5.) THE CONTRACTOR/PERMITTEE SHALL SCHEDULE SITE GRADING, UTILITY INSTALLATION AND ROADWAY CONSTRUCTION SO THAT THE GENERAL SITE CAN BE MULCHED AND RE-SEEDED SOON AFTER DISTURBANCE. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED WITHIN 14 DAYS AFTER COMPLETION OF FINAL GRADING OR AFTER 14 DAYS OF GRADING INACTIVITY. ALL MULCH MATERIAL SHALL BE DISCED INTO THE SOIL IN DIRECTION PERPENDICULAR TO THE STORMWATER FLOW OVER SUCH AREAS.
6.) REVEGETATE WITH MNDOT MIX 50B OR 60B AT 75 LBS/ACRE WITH TYPE 1 MULCH AT 2000 LBS/ACRE.

EROSION CONTROL MAINTENANCE PROGRAM:

1.) INSPECT CONSTRUCTION SITE ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF MORE THAN $\frac{1}{2}$ INCHES IN 24 HOUR PERIOD.
2.) SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
3.) SILT FENCE FABRIC SHALL BE REPLACED PROMPTLY WHEN IT DECOMPOSES OR BECOMES INEFFECTIVE BEFORE THE BARRIER IS NO LONGER NECESSARY.
4.) ALL SOILS TRACKED ONTO PAVEMENT SHALL BE REMOVED DAILY.
5.) ANY SEDIMENT REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER FABRIC IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED WITH THE APPROPRIATE SEED MIX.
6.) IN THOSE AREAS WHERE WOOD FIBER BLANKET OR OTHER SLOPE STABILIZATION METHOD HAS FAILED, THE SLOPE SHALL BE REESTABLISHED, SEED AND TOPSOIL REPLACED, AND ADDITIONAL SLOPE TREATMENT INSTALLED.
7.) SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPWARD SLOPE AREA HAS BEEN PERMANENTLY STABILIZED. REMOVAL IS REQUIRED WITH ALL TEMPORARY EROSION CONTROL FACILITIES (SEDIMENT FILTERS, HAY BALES, ETC.) ONCE SITE IS PERMANENTLY STABILIZED BY THE BUILDER.
8.) ALL PERMANENT SEDIMENTATION BASINS MUST BE RESTORED TO THEIR DESIGN CONDITION IMMEDIATELY FOLLOWING PERMANENT STABILIZATION OF THE SITE.

EROSION CONTROL LEGEND:

- WOOD FIBER BLANKET
- ROCK CONSTRUCTION ENTRANCE
- SEDIMENT TRAP OUTLET
- XXXXXXXXXXXX TREE PROTECTION
- ########### SILT FENCE

PRELIMINARY
NOT FOR CONSTRUCTION

100 0 100 200 300
Scale 1" = 100'

PROJECT NUMBER 141029

REVISIONS

REMARKS	DATE	BY
---	---	---

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

Randall C. Hedlund — Date: — MN. LIC. NO. 19576

PREPARED BY:
HEDLUND SURVEYING ENGINEERING PLANNING
2005 Pin Oak Drive
Eagan, MN 55122
Phone: (651) 405-6600
Fax: (651) 405-6606

SHEET TITLE: HARVEST ESTATES EROSION PLAN

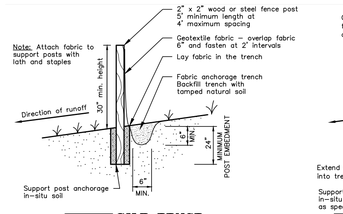
PREPARED FOR: NIK MANAGEMENT INC.
11735 177TH St. W.
Lakeville, MN 55044
Phone: (952) 236-9424

DRAWN	CHECKED	DESIGN
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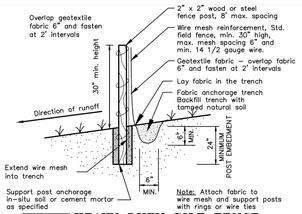
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DATE 3/5/2015
REV. ----

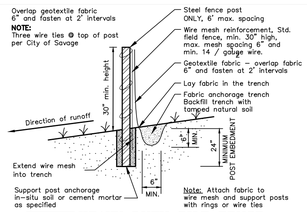
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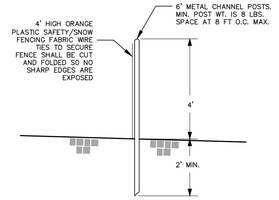
T-1 SILT FENCE
NO SCALE



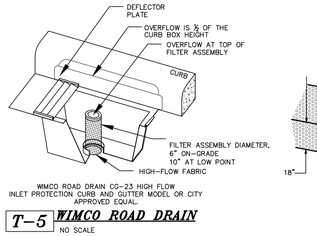
T-2 HEAVY DUTY SILT FENCE
NO SCALE



T-3 HEAVY DUTY SILT FENCE
NO SCALE (STEEL POST ONLY)

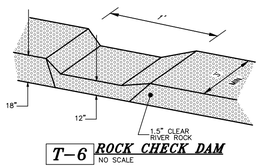


T-4 CONSTRUCTION FENCE
NO SCALE

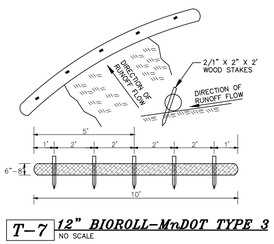


WIMCO ROAD DRAIN CG-23 HIGH FLOW INLET PROTECTION CURB AND GUTTER MODEL OR CITY APPROVED EQUAL.

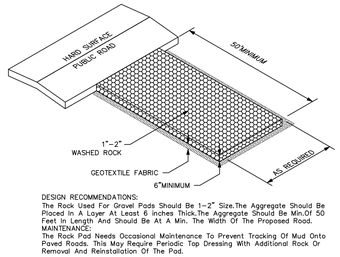
T-5 WIMCO ROAD DRAIN
NO SCALE



T-6 ROCK CHECK DAM
NO SCALE

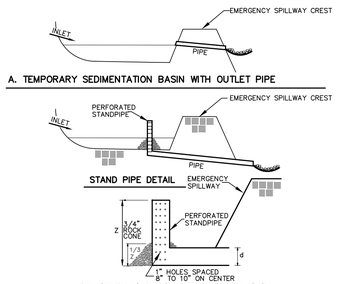


T-7 12" BIOROLL–MnDOT TYPE 3
NO SCALE

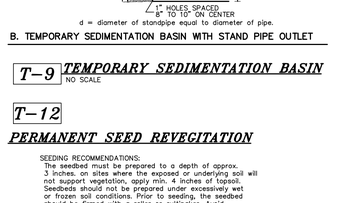


DESIGN RECOMMENDATIONS:
The Rock Used For Gravel Pads Should Be 1–2" Size.The Aggregate Should Be Placed In A Layer At Least 6 inches Thick.The Aggregate Should Be Min.Of 50 Feet In Length And Should Be At A Min. The Width Of The Proposed Road.
MAINTENANCE:
The Rock Pad Needs Occasional Maintenance To Prevent Tracking Of Mud Onto Paved Roads. This May Require Periodic Top Dressing With Additional Rock Or Removal And Reinstallation Of The Pad.

T-8 ROCK CONSTRUCTION ENTRANCE



A. TEMPORARY SEDIMENTATION BASIN WITH OUTLET PIPE



d = diameter of standpipe equal to diameter of pipe.

B. TEMPORARY SEDIMENTATION BASIN WITH STAND PIPE OUTLET

T-9 TEMPORARY SEDIMENTATION BASIN
NO SCALE

T-12 PERMANENT SEED REVEGITATION

SEEDING RECOMMENDATIONS:
The seedbed must be prepared to a depth of approx. 3 inches. on sites where the exposed or underlying soil will not support vegetation, apply min. 4 inches of topsoil. Seedbeds should not be prepared under excessively wet or frozen soil conditions. Prior to seeding, the seedbed should be firmed with a roller or cultipaker. Avoid compaction that will increase runoff and erosion, deter seed germination or prevent proper anchoring of mulch. For example, the soil should support the weight of an adult without sinking more than 1/2 inch.

1. GENERAL SEED & MULCH (MIN. 6" TOPSOIL)
   a. Seed: MnDOT Seed Mix # 25–141 @ rate of 59 PLS.
   b. Fertilizer: 22–5–10 80% W.I.N. 0% @ a Rate of 350 lbs/Acre.
   c. Mulch: MnDOT Type 1 @ a Rate of 2 Tons/Acre.

P-1 PERMANENT SOD REVEGITATION

SODDING RECOMMENDATIONS:
The soil must be prepared in the same way that it would for seeding. The upper 4 inches must be loosened and relatively free of clods, rocks etc.. the area to be sodded should be fertilized with 25 pounds per 1000 sq.ft. (1000 lb/ac) of 10–0–10 fertilizer and worked into the loosened topsoil. Prior to laying the sod, dampen the soil bed. The joints in the sod should be staggered, and the edges butted together tightly. On slopes of 3:1 or greater, or in areas of concentrated flows, the sod should be pegged down. On steep slopes w/ sheet flows, the sod should be laid with the length perpendicular to the water flow. After the sod is laid, it should be tamped or rolled to provide good contact between sod and soil. after rolling, the sod should be watered so that the soil is moistened 4 inched below the the sod.
MAINTENANCE:
In the absence of adequate rainfall, water during the 30 day period following sod placement to keep soil moist.Following this initial 30 day establishment period, water as necessary to maintain adequate moisture in the root zone. Where mowing is desired, maintain grass height of 3 inches and should not be attempted until the sod is firmly rooted, usually two to three weeks after sod is laid. Inspect areas of concentrated flow annually and following intense storms. make need repair and reveg. promptly.

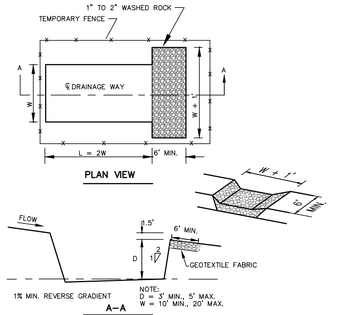
P-2 PERMANENT SEED REVEGITATION

SEEDING RECOMMENDATIONS:
The seedbed must be prepared to a depth of approx. 3 inches. on sites where the exposed or underlying soil will not support vegetation, apply min. 4 inches of topsoil. Seedbeds should not be prepared under excessively wet or frozen soil conditions. Prior to seeding, the seedbed should be firmed with a roller or cultipaker. Avoid compaction that will increase runoff and erosion, deter seed germination or prevent proper anchoring of mulch. For example, the soil should support the weight of an adult without sinking more than 1/2 inch.

1. WETLAND & POND SEED & MULCH (MIN. 6" TOPSOIL)
   a. Seed: MnDOT Seed Mix # 34–262 @ rate of 14.5 PLS.
   b. Fertilizer: 18–0–8 Natural Base @ a Rate of 120 lbs/Acre
   c. Mulch: MnDOT Type 3 @ a Rate of 2 Tons/Acre.

2. UPLAND BUFFER SEED & MULCH (MIN. 6" TOPSOIL)
   a. Seed: MnDOT Seed Mix # 33–261 @ rate of 35 PLS.
   b. Fertilizer: 18–0–8 Natural Base @ a Rate of 150 lbs/Acre
   c. Mulch: MnDOT Type 3 @ a Rate of 2 Tons/Acre.

Note: Mulch To Be Disced Anchored In Place.



T-10 TEMPORARY SEDIMENT TRAP
NO SCALE

GENERAL GRADING NOTES:

1.) UNDERLYING TOPOGRAPHY FROM INFORMATION PROVIDED BY ANOKA COUNTY AND FIELD SHOTS BY HEDLUND ENGINEERING.

2.) EXISTING UTILITY LOCATIONS AS–PER PLANS PROVIDED BY THE CITY OF RAMSEY AND FIELD SHOTS BY HEDLUND ENGINEERING.

3.) SEE GRADING AND EROSION CONTROL DETAIL SHEET FOR DETAILED INFORMATION.

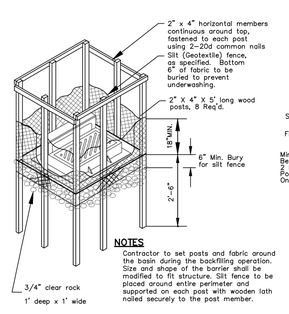
GENERAL EROSION CONTROL NOTES:

EROSION CONTROL SCHEDULE:

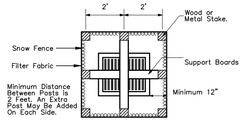
1.) INSTALL EROSION CONTROL MEASURES PRIOR TO ANY LAND DISTURBANCE. INSTALL SEDIMENT FILTERS IMMEDIATELY FOLLOWING INSTALLATION OF STRUCTURE.
2.) THE CONTRACTOR SHALL SCHEDULE SITE GRADING, UTILITY INSTALLATION AND ROADWAY CONSTRUCTION SO THAT THE GENERAL SITE CAN BE MULCHED AND RESEEDED SOON AFTER DISTURBANCE. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED WITHIN 14 DAYS AFTER COMPLETION OF FINAL GRADING OR AFTER 14 DAYS OF GRADING INACTIVITY.
3.) ALL EROSION CONTROL INSTALLATIONS SHALL REMAIN IN PLACE AND BE MAINTAINED IN GOOD CONDITION BY THE CONTRACTOR/PERMITTEE UNTIL THE SITE HAS BEEN RE–VEGETATED, AT WHICH TIME THEY SHALL BE REMOVED. FOR PROPOSED PAVED SURFACE AREA, THE CONTRACTOR MAY REMOVE NECESSARY SILT FENCING TO CONSTRUCT ROADWAY WHILE MAINTAINING ADEQUATE EROSION CONTROL IN ADJACENT AREAS.
4.) SUFFICIENT TOPSOIL SHALL BE STOCKPILED TO ALLOW FOR THE REPLACEMENT OF A MINIMUM OF 4" OF TOPSOIL FOR DISTURBED AREAS THAT ARE TO BE REVEGATATED.
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6.) REVEGETATE WITH MNDOT MIX 50B OR 60B AT 75 LBS./ACRE WITH TYPE 1 MULCH AT 2000 LBS./ACRE.

EROSION CONTROL MAINTENANCE PROGRAM:

1.) INSPECT CONSTRUCTION SITE ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF MORE THAN 3 INCHES IN 24 HOUR PERIOD.
2.) SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE–HALF THE HEIGHT OF THE BARRIER.
3.) SILT FENCE FABRIC SHALL BE REPLACED PROMPTLY WHEN IT DECOMPOSES OR BECOMES INEFFECTIVE BEFORE THE BARRIER IS NO LONGER NECESSARY.
4.) ALL SOILS TRACKED ONTO PAVEMENT SHALL BE REMOVED DAILY.
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8.) ALL PERMANENT SEDIMENTATION BASINS MUST BE RESTORED TO THEIR DESIGN CONDITION IMMEDIATELY FOLLOWING PERMANENT STABILIZATION OF THE SITE.



NOTES
Contractor to set posts and fabric around the basin during the backfilling operation. Size and shape of the barrier shall be modified to fit structure. Silt fence to be placed around entire perimeter and supported on each post with wooden lath nailed securely to the post member.



TYPE A SEDIMENT FILTER PLAN VIEW

T-11 EROSION CONTROL AROUND CATCH BASINS
NO SCALE

PROJECT NARRATIVE:

CONSTRUCTION OF A

PROJECT CONTACTS:

PROJECT ENGINEER:	RANDY HEDLUND, P.E.	HEDLUND ENGINEERING, SWPPP DESIGNER U OF M CERT. PROGRAM, FALL 2012, 651–203–6612
SWPPP CERT. IMPLEMENTOR	FRED VOLZ	HEDLUND ENGINEERING, U OF M CERT. PROGRAM, APRIL 2012, 612–363–3684
SWPPP CERTIFIED INSTALLER	MATT MARTIN	METRO EROSION, U OF M CERT. PROGRAM, FALL 2009, 320–266–4748
DEVELOPER:	NAME	COMPANY–NUMBER
CITY CONTACT:	NAME	CITY OF
NPDES OFFICER	NAME	MPCA
CONTRACTOR CONTACT	NAME	COWAN GRADING AND EXCAVATING, 651–248–3080

POND MAINTENANCE:

TO BE PERFORMED AS NECESSARY BY THE CITY OF WOODBURY.

ESTIMATED QUANTITIES:

SILT FENCE	=	4121 L.F.
CONST. FENCE	=	N/A L.F.
INLET PROTECTION	=	21 CB'S
ROCK CONST. ENTRANCE	=	3
EROSION CONTROL BLANKET	=	AS NEEDED
TEMP. SEED AND MULCH	=	x ACRES
PERMANENT SEED	=	x ACRES
PERMANENT SOD	=	x ACRE
BIO LOGS	=	xxx L.F.

SEQUENCE OF CONSTRUCTION:

(RECOMMENDED SEQUENCE – CONTRACTOR TO DETERMINE FINAL SEQUENCE.)

1. CONTRACTOR TO VERIFY THAT ALL PERMITS HAVE BEEN OBTAINED AND BECOME FAMILIAR WITH PERMIT REQUIREMENTS.
2. CONTRACTOR TO INSTALL PERIMETER SEDIMENT CONTROL DEVICES, CONSTRUCTION ENTRANCES, AND PROTECTIVE FENCING FOR TREES, DITCHES, EXISTING WATER BODIES AND AREAS TO REMAIN UNDISTURBED.
3. CONTRACTOR TO ROUGH GRADE SITE AND INSTALL UTILITIES.
4. CONTRACTOR TO INSTALL TEMPORARY EROSION CONTROL DEVICES AS NECESSARY.
5. CONTRACTOR TO INSTALL EROSION CONTROL BLANKETS WITH PERMANENT SEED MIX AND/OR SOD.
6. ONCE ALL DISTURBED AREAS HAVE BEEN STABILIZED, OBTAIN APPROVAL FROM THE CITY ENGINEER AND WITHIN TWO WEEKS OF FINAL STABILIZATION.
7. CONTRACTOR TO REMOVE SEDIMENT CONTROL DEVICES WITHIN TWO WEEKS OF APPROVAL.
8. SUBMIT NOTICE OF TERMINATION WITHIN 30 DAYS OF FINAL STABILIZATION.

NPDES GENERAL PERMIT REQUIREMENTS

CONSTRUCTION ACTIVITY NOTES:

EROSION PREVENTION PRACTICES:

Phased construction will be used to extent practical or as indicated in the plans to minimize exposed soil.

Areas not to be disturbed shall be delineated with flags, stakes, signs, silt fence, etc. prior to work beginning. The normal wetted perimeter of all ditches or swales, including storm water management pond slopes, that drain waters from the site must be stabilized within 200'of any property edge or discharge point, including storm sewer inlets, within 24 hours of connection.

Energy dissipation or other outlet treatment must be installed within 24 hours of connection.

All exposed soils must be stabilized as soon as possible but in no case later than 14 days after the construction activity has temporarily or permanently ceased.

Seed and/ or sod, fertilizer, and mulch shall be placed as indicated in the plans and project specifications.

Rapid stabilization shall be of type and quantity indicated in the project specifications. Additional rapid stabilization may be necessary to minimize erosion throughout the duration of the project. Type and quantity shall be determined by the engineer or inspector prior to installation.

If the contractor stockpiles material on site, he shall install the appropriate erosion control devices around the stockpile and perform the best management practices possible to avoid erosion from the stockpile.

Temporary (or permanent) sedimentation ponds are required for areas > 10 acres of disturbed soils draining soils draining to one point.

SEDIMENT CONTROL PRACTICES:

Installation of silt fence and all other down gradient sediment protection measures shall be completed prior to commencement of upstream land disturbing activities.

Silt fence shall be installed along the constant contours with continuous links not to exceed 600 feet.

No unbroken slope lengths greater than 75 feet are permitted when slope is 3:1 or greater. Slope shall be broken with silt fence or biorolls as indicated on plans.

Vehicle trafficking to be minimize to all practical extents. All eroded material that leaves the construction zone shall be collected by the contractor and returned to the site at the contractor's expense.

All stockpiles shall be surrounded by silt fence and seeded with temporary seed and mulch. See erosion and sediment control plans.

All site storm sewer inlets as well as off-site downstream inlets with potential to receive sediment, shall be protected with approved inlet protection measures at all times. Inlets shall remain protected until site is 100% stabilized and vegetation is at least 70% established. Inlet protection may be removed in winter, if the project has an approval letter from jurisdictional authority or can produce it within 72 hours.

TEMPORARY SEDIMENTATION BASINS AND DEWATERING:

Temporary sedimentation basins are required prior to runoff leaving the construction site or entering surface waters when 10 or more acres of disturbed soils drain to a common location. The basin must provide 3600 ft.^{3} of storage below the outlet per acre drained. If hydraulic calculations are available, the temporary sedimentation basin must provide a storage volume equivalent to the 2- year, 24- hour storm, but in no case less than 1800 ft.^{3} per acre drained. The temporary sedimentation basin must be constructed and made operational concurrent with the start of soil disturbance up gradient of the pond. All dewatering on site during construction must be routed to temporary sedimentation basins.

Temporary sedimentation basins must be trained within 48 hours of any rainfall event. If the rock filtered outlets plug or cause the pond not to drain within 48 hours, ponds are to be drained with pumps. Pump inlets should be protected with a geotextile membrane and rock filter set up as shown in the details, or an approved alternative. Excessive sediment-laden water that is not properly filtered will not be permitted to discharge from the site.

Dewatering practices cannot cause downstream nuisance conditions, erosion, or non-permitted wetland inundation causing adverse impacts.

INSPECTION AND MAINTENANCE:

The permittees must routinely inspect the construction site once every seven (7) days during active construction and within 24 hours of a rainfall event greater than 0.5 inches in a 24-hour period.

All inspections performed during construction must be recorded and records retained on site with the SWPPP in accordance with the stormwater permit. Records must include a site map showing areas of land disturbing activities and areas where activities have temporarily or permanently ceased.

Silt fence, biorolls and Inlet protection devices must be maintained when nonfunctional or when accumulated sediment reaches 1/3 of device height.

Off-site vehicle tracking to be removed within 24 hours of occurrence.

All non-functional BMPs must be repaired, replaced, or supplemented with functional BMPs within 24 hours of discovery, or as soon as field conditions allow access.

POLLUTION PREVENTION:

All solid waste collected from the construction site must be disposed of in accordance with MPCA disposal requirements.

Concrete washout must be contained in a device similar to those provided by Neaton Brothers Concrete Washout LLC. Equivalent units shall be approved by engineer. Unit must be maintained to manufacturer recommendation.

All hazardous materials (e.g., oil, gasoline, fuel, antifreeze, paint, cleaning solvents, curing compounds, fertilizers, etc.) must be properly stored, (including secondary containment when necessary) to prevent spills, leaks, or other discharge. Storage and disposal of hazardous waste must be in compliance with MPCA regulations.

External washing areas must be limited to a defined area of the site. All runoff containing any hazardous material must be properly collected and disposed of. Defined area must be contained with heavy-or super-duty silt fence. NO ENGINE DEGREASING ALLOWED ON-SITE.

The contractor is responsible for monitoring air pollution and ensuring it does not exceed levels set by local, state, or federal regulations. This includes dust created by work being performed on the site. Air pollution and dust control correction is considered incidental to the unit bid prices for which work is being performed. Additional dust control measures may be required by the engineer.

FINAL STABILIZATION:

The permittees must insure final stabilization of the site. Final stabilization is not complete until the following is complete:

The contractor must ensure final stabilization of the site. Final stabilization shall include a minimum of 70%, vegetation establishment (100% stabilized) on all pervious areas.

The permanent stormwater management system is constructed, meets all requirements and is operating as designed. Temporary or permanent sedimentation basins that are to be used as permanent water quality management basins have been cleaned of any accumulated sediment. All sediment has been removed from conveyance systems and ditches are stabilized with permanent cover.

All temporary erosion control measures and BMPs must be removed as part of the final site stabilization, unless directed otherwise by owner or engineer.

For residential construction only, individual lots are considered finally stabilized if the structure(s) are finished and temporary erosion protection and downgradient perimeter control has been completed and the residence has been sold to the homeowner. Additionally, the Permittee has distributed the MPCA's "Homeowner Fact Sheet" to the homeowner to inform the homeowner of the need for, and benefits of, permanent cover.

RECORD RETENTION:

The SWPPP, all changes to it, and inspections and maintenance records must be at the site during construction. All owner(s) must retain the following for 3 years after submittal of NOT:

1) SWPPP;
2) Any other permits required for the project;
3) Inspection and maintenance logs;
4) All permanent operation and maintenance agreements for surface water facilities;
5) All design calculations for temporary and permanent stormwater management.

PLAN SHEETS:

Sheet number CE 1 of this plan set is also considered a part of the SWPPP for this project.

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER 141029

REVISIONS

REMARKS	DATE	BY

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

Signature: _____ Date: _____
Randall C. Hedlund MN. LIC. NO. 19576

PREPARED BY:
HEDLUND ENGINEERING SURVEYING
PLANNING
2905 Plaza VII Drive
Suite 105
Lakeville, MN 55044
Phone: (651) 405–6600
Fax: (651) 405–6606

SHEET TITLE: HARVEST ESTATES EROSION CONTROL PLAN

PREPARED FOR: NIK MANAGEMENT INC.
11736 177TH ST. W.
Lakeville, MN 55044
Phone: (952) 236–9424

DRAWN	CHECKED	DESIGN
---	---	---

SHEET NUMBER
CE–2

DATE 3/5/2015
REV. --- --- ---

CITY OF RAMSEY LAND USE APPLICATION
TECHNICAL REVIEW FILE

DATE	3/27/15	**PROJECT ADDRESS**	UNKNOWN
PROJECT. TITLE	HARVEST ESTATES		
ESCROW #	114538		
DEPARTMENT:	Community Development: Planning Division (Landscape Plan & Environmental Resources)		
TECHNICAL REVIEWER:	Name: Chris Anderson Phone: 763-433-9817 Email: canderson@cityoframsey.com		

We offer the following comments regarding the Landscape and Tree Preservation Plans prepared by Hedlund and dated March 5, 2015:

Tree Preservation: At least forty percent (40%) of the Diameter at Breast Height (DBH) inches of significant trees shall be preserved. For every one (1) inch of significant tree DBH removed beyond this threshold, 1.25 inches of DBH shall be replanted or $125.00 shall be paid to the City in restitution (or some combination thereof). Invasive species, diseased trees, and trees removed for stormwater ponds, public trails and sidewalks, shall not be considered when calculating the removal threshold (they should be noted as such in the inventory to receive credit). Sheet C-5 indicates that there is a total of 1,435 total DBH on site (this excludes all invasive species, primarily Siberian Elm) and of that, 1,360 DBH inches will be removed (five percent [5%] of significant tree DBH inches preserved). Replacement (and/or restitution) will be necessary totaling 624 inches (1360-861=499 inches beyond removal threshold x 1.25"). The base landscaping requirements of the applicable zoning district (two [2] trees per lot) can be applied toward the reforestation standard. After a full analysis, Staff believes the proposed reforestation plan does meet the intent and spirit of the Tree Preservation Ordinance contingent upon the following revisions:

- *Sheet C-5 must be revised as follows:*
  - *Allowable Removal needs to be amended to read 1435 x 60% (2545 includes the Siberian Elm DBH).*
  - *All reforestation perimeter plantings (excluding required front yard trees) shall be installed as a Stage I improvement by the developer.*
  - *Plan sheet should include tree save fencing around trees being preserved.*
- *Sheet C-6 must be revised as follows:*
  - *Tree save fencing must be shown on the grading plan and shall be installed at or beyond the dripline of trees or groups of trees being preserved. Tree save fencing shall be installed and maintained in a plumb condition throughout all land disturbance activities.*
- *Sheet CE-1 must be revised as follows:*
  - *The legend includes a symbol for tree protection but that symbol is not shown on the plan sheet. Update this sheet (and the grading plan and tree preservation plan sheets) to show the tree protection fencing around those trees being preserved.*

Landscaping: Two (2) front yard trees are required per lot. Deciduous trees shall be a minimum of one (1) inch caliper and evergreen trees shall be at least five (5) feet in height. As a general note, builders

should be provided a copy of the approved Landscape Plan and Planting Detail if they will be assuming responsibility for installing the front yard trees on each lot. The following revisions are necessary:

- *While it appears generally that each lot will have two (2) trees planted, many of them indicate that one tree will be planted in the rear yard. Each lot shall have two (2) front yard trees. Please revise the Landscape Plan accordingly.*
- *An alternative to Patmore Ash (Fraxinus pennsylvanica) shall be utilized due to the looming emergence of Emerald Ash Borer and the potential that these trees may be planted within the public road right of way becoming the City's responsibility for long term maintenance.*
- *The planting detail must be amended to include the following*
    - *Planting depth shall be such that the 1st set of primary roots is at finished grade*
    - *Only prune out dead/broken/deformed branches at time of installation*
    - *Remove upper 1/3 of wire basket and burlap after being placed in planting hole*
    - *2-4 inches of wood chip mulch shall be included around all trees. Mulch shall not be piled against the trunk of trees.*
- *Since required landscaping is proposed to help satisfy the reforestation requirement, all trees planted shall be at least 2.5 inches in diameter, as that was the caliper used in the calculations.*
- *Boulevard area is required to be finished with sod. Remaining portions of lot can be finished with sod, seed, hydroseed, or other acceptable ground cover.*

Topsoil: Each individual lot will need to have four (4) inches of topsoil meeting the City's topsoil specification. A topsoil inspection is required prior to landscaping being installed and copies of the load tickets are required as well. This is reviewed at time of Building Permit Application and request for Certificate of Occupancy for each individual lot.

Stormwater: The project is addressing stormwater management standards through the use of storm sewer pipes and traditional ponding. While a complete review of the grading and drainage plans will be completed by the Engineering Division, it should be noted that the contour labels on the small new pond in the southeast corner of the site (adjacent to the existing pond) need to be revised. Presently, three (3) consecutive contours are labeled as 882 and it appears they should be labeled as 882, 880, and 878.

Environmental Policy Board (EPB) **5. 3.**

Meeting Date: 03/30/2015

By: Chris Anderson, Community Development

Information

Title:

Consider Landscape Plan Association with a Site Plan Application for Parkview East; Case of PSD, LLC

Purpose/Background:

The City has received an application for Preliminary Plat and Site Plan related to COR Parkview and Parkview East, located at the southwest corner of Rhinestone Street and Ramsey Parkway (the "Subject Property"). The project proposes a four (4) story apartment building consisting of 121 units. The application submittal includes a Landscape Plan in accordance with City Code. There are no significant trees on the Subject Property and thus a Tree Preservation Plan is not required.

Observations/Alternatives:

Within the COR, landscaping standards differ from the other zoning districts. The focus is more on the streetscape elements with a greater degree of creativity allowed for internal landscaping. The project will result in the new sidewalk/boulevard area being constructed along Sapphire Street, 145th Avenue, and Ramsey Parkway, while there is existing sidewalk and boulevard area along Rhinestone Street. Streetscape elements within the COR, such as trees, sidewalk width, and boulevard width, are determined based on the street designation defined in the COR Design Framework. However, the Design Framework was also created with the intent of having flexibility to allow for creative design.

The Landscape Plan focuses on the streetscape. The proposed plantings are too narrowly spaced and will need to be reduced to allow for spacing of 30-35 feet on center. Additionally, the plan will need to be revised to identify the vision clearance triangle at all intersections and access points to ensure that no plantings are installed there (site line clearance). Trees should be planted in linear groups of 5-6 trees of one species rather than alternating tree species every other tree. Species and size of proposed plantings are acceptable.

Streetscape is already established along the southern portion of Sapphire Street down to Sunwood Drive and Staff would suggest that that pattern be continued along the Subject Property for a consistent appearance. Along 145th Avenue, the plans indicate a sidewalk width of five (5) feet with a boulevard width of seven (7) feet. This stretch of sidewalk will need to be widened to six (6) feet. Sidewalk width along Ramsey Parkway is acceptable; however, the boulevard width is not identified. The boulevard will need to be a minimum width of six (6) feet.

There are no details on any internal site landscaping. While the COR Design Framework does not specifically address internal site landscaping, it is rather common that some foundation plantings and/or parking lot landscaping is provided. Staff is trying to clarify with the applicant whether there are any additional plantings that will be provided within the Subject Property.

A subsurface stormwater system is proposed to help manage runoff. The system will help achieve the LRRWMO's requirement that the first one (1) inch of rainfall be infiltrated on site. This system is designed with an overflow outlet that would allow runoff from larger events to be routed into existing storm sewer infrastructure in Sapphire Street where it will be discharged into a regional stormwater pond.

Alternatives

Option #1: Recommend approval of the Landscape Plan contingent upon compliance with the Staff Review Letter

dated March 27, 2015. The Landscape Plan addresses the streetscape adjacent to the Subject Property, which is the primary emphasis of the COR Design Framework. As long as the requested revisions are incorporated into the plan, Staff would support this option.

Option #2: Recommend approval of the Landscape Plan contingent upon compliance with the Staff Review Letter dated March 27, 2015 and upon verification there will be landscaping provided internal to the site. While this is typically provided, it is not expressly required through the COR Design Framework. Per the erosion control plan, the site will be finished with turf. Staff will continue to work with the applicant to verify whether any other landscape elements are proposed internal to the site; however, Staff would not support this option as it is not expressly required through City Code.

Funding Source:

All costs associated with this request are the responsibility of the Applicant.

Action:

Motion to recommend approval of the Landscape Plan contingent upon compliance with the Staff Review Letter dated March 27, 2015.

Attachments

Site Location Map

Plan Set

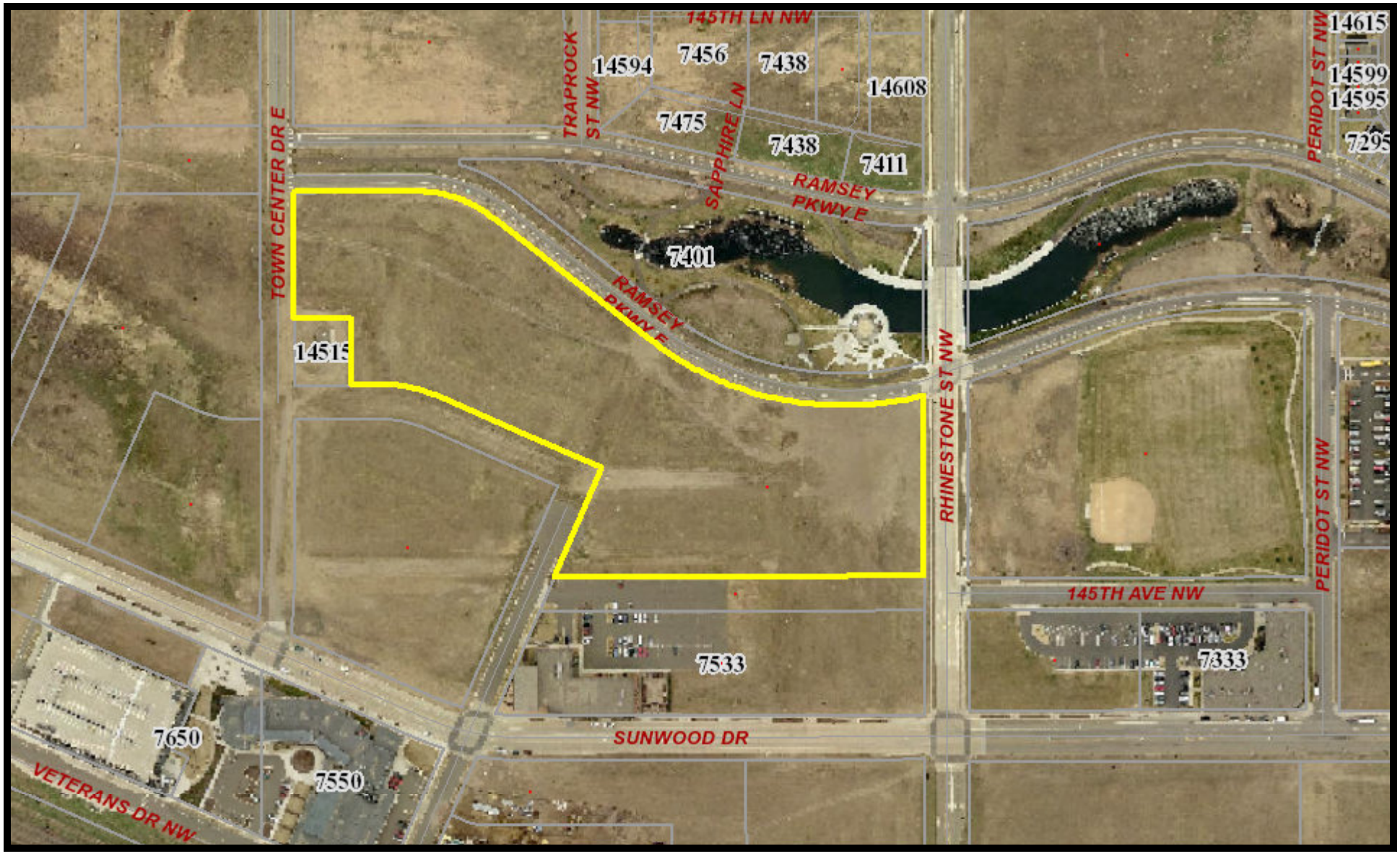
Staff Review Letter Dated March 27, 2015

Form Review

Inbox	Reviewed By	Date
Tim Gladhill	Tim Gladhill	03/26/2015 03:05 PM
Chris Anderson (Originator)	Chris Anderson	03/26/2015 03:07 PM
Form Started By: Chris Anderson		Started On: 03/26/2015 12:46 PM
Final Approval Date: 03/26/2015		

28-32-25-42-0017

Parkview East Concept Plan



Print Date: August 29, 2014

a6f0392e45854f56ad5a22c00f30cc4e

US Highways

State Highways

County Roads

City Streets

Ramps, Loops

Private Roads

A74

Municipal Boundary

0 90 180 360 540 720 Feet

LOGIS

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CITY OF RAMSEY, MN

CIVIL CONSTRUCTION PLANS FOR

PARKVIEW EAST APARTMENT COMPLEX

GRADING, AGGREGATE BASE, SANITARY SEWER, WATERMAIN, STORM SEWER,
PEDESTRIAN CURB RAMPS, CONCRETE SIDEWALK, & BITUMINOUS SURFACING.
MAY, 2015



1000 0 1000
SCALE FEET

MAP OF THE
CITY OF RAMSEY
ANOKA COUNTY, MN

SHEET INDEX

SHEET NO.	TITLE
C.0	TITLE SHEET
C1.0	LEGEND
C1.1 - C1.5	DETAILS
C1.6	TYPICAL SECTIONS
C1.7	INTERSECTION DETAILS AND CONSTRUCTION NOTES
C2.0	SWPPP
C2.1	SWPPP
C2.2	SWPPP
C2.3	EXISTING CONDITIONS AND REMOVALS
C2.4	SITE PLAN
C2.5	GRADING AND STORM UTILITY PLAN
C2.6	EROSION CONTROL PLAN
C2.7	STORM UNDERGROUND STORAGE
C2.8	LANDSCAPE/TREE PLAN
C3.0	PLAN AND PROFILE - 145TH AVENUE NW
C3.1	PLAN AND PROFILE - PARKVIEW SITE
C3.2	STORM PROFILES - PARKVIEW SITE

THIS PLAN CONTAINS 21 SHEETS

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

CODY L. HOLMES REG. NO. 49143 DATE: 3/3/2015

SCALES

PLAN 0' 20'
PROFILE 0' 20' HORIZ.
0' 5' VERT.
INDEX MAP 0' 500'

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PROJECT LOCATION
ANOKA COUNTY, MN

NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY GOPHER STATE ONE CALL, 1-800-252-1166 OR 612-454-0002.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

PROJECT DATUM:
HORIZONTAL: Anoka County Coordinates (1996 Adjustment)
VERTICAL: NGVD 29

DESIGNED CLH
DRAWN JEN
CHECKED CLH

BOLTON & MENK, INC.
Consulting Engineers & Surveyors
MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN BURNSVILLE, MN
WILLMAR, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN
BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

RECORD DRAWING INFORMATION
OBSERVER:
CONTRACTOR:
DATE:

PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
TITLE SHEET

SHEET C.0

EXISTING

- IRON PIPE MONUMENT SET
- MONUMENT FOUND
- CAST IRON MONUMENT FOUND
- STONE MONUMENT FOUND
- POST SET
- BENCH MARK
- AUTO SPRINKLER
- ANTENNA
- AIR CONDITIONER
- ANCHOR
- AIR PUMP
- APRON
- BASKETBALL HOOP
- BIRD FEEDER
- BENCH
- BRACE POLE
- CATCH BASIN
- CLOTHES LINE POLE
- CONTROL POINT
- CLEAN OUT
- COMMUNICATION PEDESTAL
- CURB STOP VALVE
- DITCH TOP
- DRINKING FOUNTAIN
- DOWN SPOUT
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC PEDESTAL
- ELECTRIC TRANSFORMER
- EXHAUST VENT
- FLAG POLE
- FILL PIPE
- GAS MANHOLE
- GAS REGULATOR
- GAS VALVE
- GAS METER
- ACCESS GRATE
- HANDICAPPED PARKING
- HAND HOLE
- HYDRANT
- IRRIGATION CONTROL VALVE
- LIGHT DECORATIVE
- LIGHT POLE
- MAILBOX
- METER
- POST
- MANHOLE
- LIFT STATION MANHOLE
- MONITORING WELL
- ORDER MICROPHONE
- PARK GRILL
- GAS PUMP
- POST INDICATOR VALVE
- PARKING METER
- SANITARY MANHOLE
- SATELLITE DISH
- SEMAPHORE TRAFFIC LIGHT
- SIGNAL BOX
- SIGNAL POLE - RR
- SOIL BORING
- SIREN
- SPRINKLER HEAD
- STORM MANHOLE
- TELEPHONE MANHOLE
- PUBLIC TELEPHONE
- TILE INLET
- TILE RISER
- TRAFFIC ARM BARRIER
- TRAFFIC SIGN
- TRANSMISSION TOWER
- UTILITY POLE
- VACUUM
- VENT PIPE
- DECIDUOUS TREE
- CONIFEROUS TREE
- STUMP
- BUSH
- WELL
- WATER MANHOLE
- WATER METER
- WATER SPIGOT
- WATER VALVE
- WETLAND / MARSH
- WETLAND - DELINEATED

PROPOSED

- ALIGNMENT/CENTERLINE (22+00)
- RIGHT-OF-WAY LINE
- TEMPORARY EASEMENT
- CONSTRUCTION LIMITS
- CURB & GUTTER
- CURB & GUTTER (OUT)
- BITUMINOUS EDGE
- CONCRETE EDGE
- GRAVEL EDGE
- SILT FENCE-PREASSEMBLED
- SILT FENCE-HEAVY DUTY
- EROSION PROTECTION AT INLET
- MANHOLE
- CATCH BASIN
- STORM INLET
- APRON
- STORM SEWER
- PERFORATED PIPE DRAIN
- STORM DRAIN TILE
- CULVERT W/APRON
- STORM MANHOLE NUMBER (1)
- SANITARY SEWER
- SANITARY FORCEMAIN
- SANITARY SEWER SERVICE
- SANITARY LIFT STATION
- SANITARY MANHOLE
- SANITARY MANHOLE NUMBER (A)
- WATERMAIN
- WATERMAIN SERVICE
- WATER SYSTEM MANHOLE
- HYDRANT
- HYDRANT W/ VALVE
- VALVE
- CURBSTOP
- BEND
- REDUCER
- CROSS
- TEE
- CAP
- SLEEVE
- SIGN
- LIGHT POLE
- GUARD RAIL
- SOIL BORING (B-?)
- WETLAND
- BUSH
- CONIFEROUS TREE
- DECIDUOUS TREE

- OVERHEAD ELECTRIC LINE
- UNDERGROUND ELECTRIC LINE
- GAS LINE
- FIBER OPTIC LINE
- UNDERGROUND COMMUNICATIONS LINE
- OVERHEAD UTILITY LINE
- WATER SYSTEM
- STORM SEWER
- TILE LINE
- SANITARY SEWER
- SANITARY FORCEMAIN
- CULVERT
- INTERMEDIATE CONTOURS
- INDEX CONTOURS
- COUNTY LINE
- CITY LIMITS
- SIXTEENTH LINE
- QUARTER LINE
- SECTION LINE
- ADJACENT LINES
- EASEMENT LINE
- BUILDING SETBACK LINE
- FENCE LINE
- GUARD RAIL
- ACCESS CONTROL LINE
- CENTERLINE
- PROPERTY / LOT LINE
- ROAD RIGHT-OF-WAY LINE
- RAILROAD RIGHT-OF-WAY LINE
- GRAVEL EDGE
- BITUMINOUS EDGE
- CONCRETE EDGE
- CURB & GUTTER
- WATER EDGE
- WATER CENTERLINE
- HIGHWATER LINE
- WETLAND EDGE
- SWALE CENTERLINE
- RAILROAD TRACKS
- TREE DRIP LINE

NOTE: DETAILS NOT TO SCALE

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

CODY L. HOLMES
LIC. NO. 49143 DATE 3/3/2015

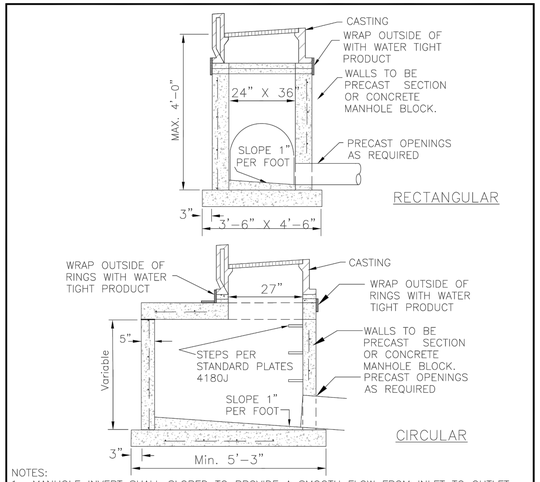
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CHECKED CLH

BOLTON & MENK, INC.
Consulting Engineers & Surveyors
MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN BURNSVILLE, MN
WILLMAR, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN
BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

REV.	BY	DATE

PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
LEGEND

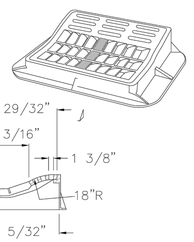
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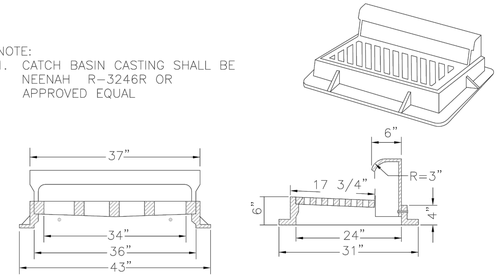
NOTES:
1. MANHOLE INVERT SHALL SLOPED TO PROVIDE A SMOOTH FLOW FROM INLET TO OUTLET
2. CONCRETE BASE SHALL BE 6" POURED IN PLACE OR 5" PRECAST SLAB.
3. CONCRETE ADJUSTING RINGS TO BE INSTALLED MAX.7–2" RINGS, MIN 2–2" RINGS
4. GROUT BETWEEN RINGS,SHIMS SHALL BE METAL, CONCRETE OR PLASTIC
5. INSPECTION OF MANHOLE REQUIRED BEFORE BACKFILLING
6. A 10 GAUGE SOLID COPPER TRACER WIRE IS REQUIRED WITH ALL STORM LINES.
7. CONDUCTIVITY IS REQUIRED ON ALL TRACER WIRE
8. STEPS ARE REQUIRED IF STRUCTURE FROM THE CASTING TO THE INVERT IS GREATER THAN 4 FEET
9. TRACER WIRES ARE TO END IN STRUCTURES, AT FINISHED GRADE ON ALL SERVICES AND STUBS

APPROVED DATE 4–2007	City of RAMSEY	STANDARD DETAILS CATCH BASIN CITY PLATE No. STO–7

NOTE:
1. CATCH BASIN CASTING SHALL BE NEENAH R–3501–TB OR APPROVED EQUAL
2. ILLUSTRATION R–3501–TB

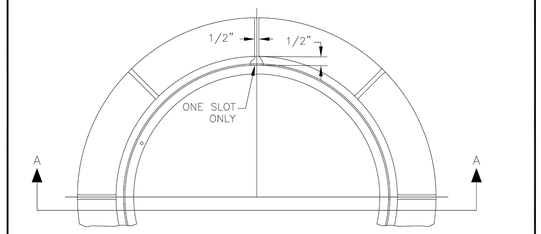


NOTE:
1. CATCH BASIN CASTING SHALL BE NEENAH R–3246R OR APPROVED EQUAL

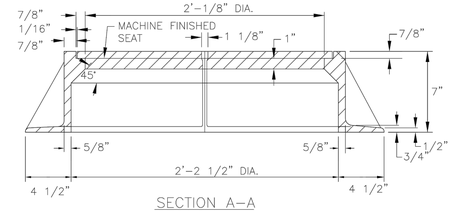


STANDARD CATCHBASIN CASTING

APPROVED DATE 2–2007	City of RAMSEY	STANDARD DETAILS STORMWATER CASTINGS CITY PLATE No. STO–2

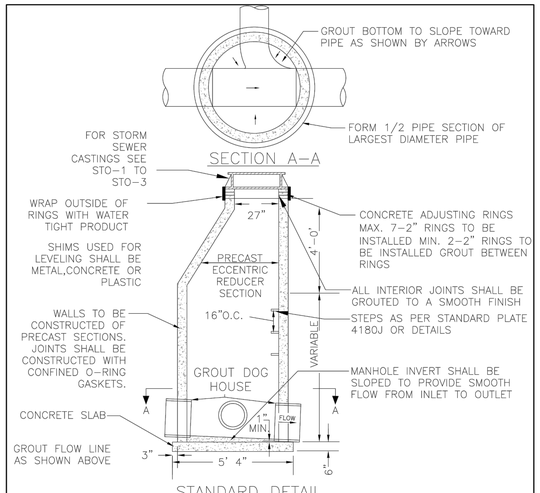


HALF TOP VIEW



SECTION A–A
7" CASTING

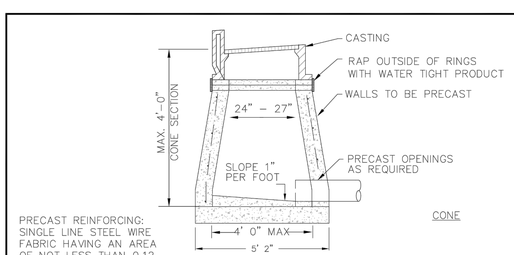
APPROVED DATE 7–93	City of RAMSEY	STANDARD DETAILS RING CASTING FOR NON–INLET STRUCTURE CITY PLATE No. STO–1



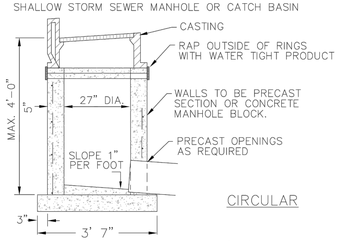
STANDARD DETAIL

NOTES:
1. MANHOLE INVERT SHALL SLOPED TO PROVIDE A SMOOTH FLOW FROM INLET TO OUTLET
2. INSPECTION OF MANHOLE REQUIRED BEFORE BACKFILLING
3. ALL INLET INVERTS TO BE 0.10 ABOVE OUTLET INVERTS UNLESS OTHERWISE NOTED
4. A 10 GAUGE SOLID COPPER TRACER WIRE IS REQUIRED WITH ALL STORM LINES.
5. CONDUCTIVITY IS REQUIRED ON ALL TRACER WIRE
6. STEPS ARE REQUIRED IF STRUCTURE FROM THE CASTING TO THE INVERT IS GREATER THAN 4 FEET
7. TRACER WIRES ARE TO END IN STRUCTURES, AT FINISHED GRADE ON ALL SERVICES AND STUBS

APPROVED DATE 1–2006	City of RAMSEY	STANDARD DETAILS STORM MANHOLE CATCH BASIN CITY PLATE No. STO–4



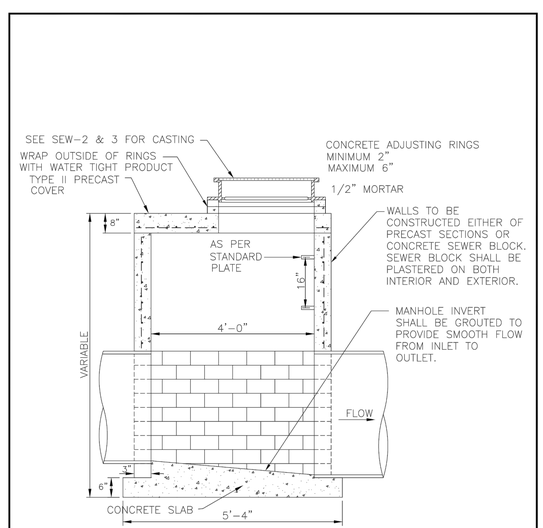
SHALLOW STORM SEWER MANHOLE OR CATCH BASIN



SHALLOW STORM SEWER MANHOLE OR CATCH BASIN

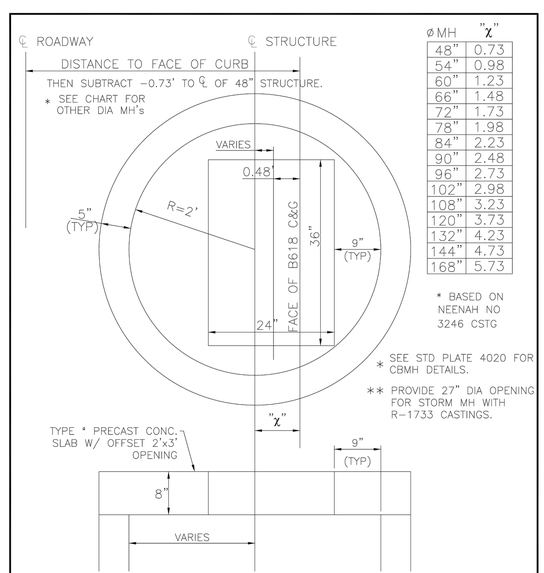
NOTES:
1. MANHOLE INVERT SHALL BE SLOPED TO PROVIDE A SMOOTH FLOW FROM INLET TO OUTLET.
2. CONCRETE BASE SHALL BE 6" POURED IN PLACE OR 5" PRECAST SLAB.
3. CONCRETE ADJUSTING RINGS TO BE INSTALLED MAX 7–2" RINGS, MIN 2–2" RINGS.
4. GROUT BETWEEN RINGS
5. SHIMS USED FOR LEVELING SHALL BE METAL OR CONCRETE.
6. A 10 GAGE SOLID COPPER TRACER WIRE IS REQUIRED WITH ALL SEWER LINES.
7. CONDUCTIVITY IS REQUIRED ON ALL TRACER WIRE
8. TRACER WIRED ARE TO END IN STRUCTURES, AT FINIHED GRADE ON ALL SERVICES AND STUBS.

APPROVED DATE 6–2008	City of RAMSEY	STANDARD DETAILS STORM AREA INLET CITY PLATE No. STO–6



SLAB–TOP MANHOLE
N.T.S.

APPROVED DATE 9–2011	City of RAMSEY	STANDARD DETAILS STANDARD DETAILS SLAB–TOP MANHOLE CITY PLATE No. SEW–6



ØMH	"X"
48"	0.73
54"	0.98
60"	1.23
66"	1.48
72"	1.73
78"	1.98
84"	2.23
90"	2.48
96"	2.73
102"	2.98
108"	3.23
120"	3.73
132"	4.23
144"	4.73
168"	5.73

* BASED ON NEENAH NO 3246 CSTG

* SEE STD PLATE 4020 FOR CBMH DETAILS.

** PROVIDE 27" DIA OPENING FOR STORM MH WITH R–1733 CASTINGS.

APPROVED DATE 4–2005	City of RAMSEY	STANDARD DETAILS SLAB TOP MANHOLE FOR CBMH CITY PLATE No. STO–5

NOTE: DETAILS NOT TO SCALE

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CODY L. HOLMES
LIC. NO. 49143 DATE 3/3/2015

DESIGNED	CLH
DRAWN	JEN
CHECKED	CLH

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REV.	BY	DATE

PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
DETAIL SHEET

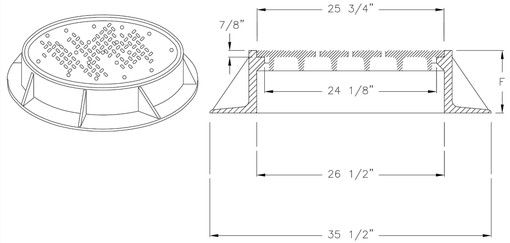
SHEET C1.1

R–1733 Series
Manhole Frames, Vented Lids

Heavy Duty

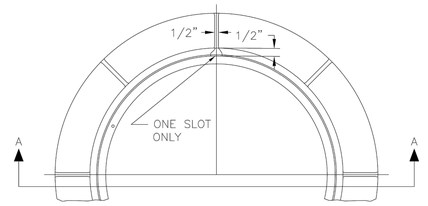
Specify:
1. catolog number.
2. Solid lid with two lift holes.

Catalog No.	Height F	Wt. Lbs.
R–1733–1	4"	405
R–1733	7"	425
R–1733–A	8"	485
R–1733–B	9"	490
R–1733–C	10"	500

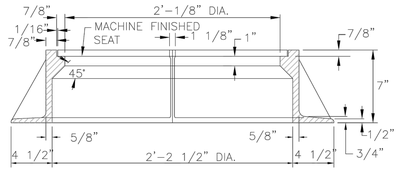


SANITARY SEWER CASTING

APPROVED		STANDARD DETAILS STANDARD DETAILS Sanitary SEWER CASTING
DATE 9–2011	City of RAMSEY	CITY PLATE No. SEW–3



HALF TOP VIEW

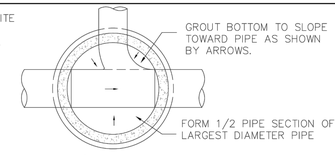


SECTION A–A
7" CASTING

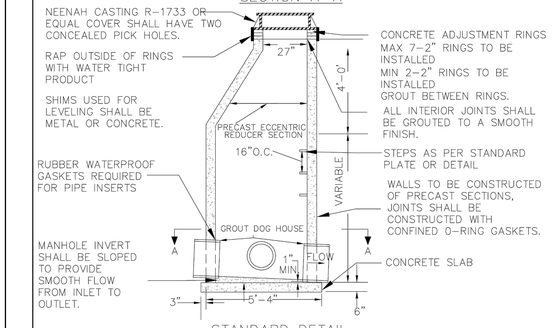
RING CASTING FOR
SANITARY SERVICE STRUCTURES

APPROVED		STANDARD DETAILS STANDARD DETAILS Sanitary SEWER SERVICE
DATE 9–2011	City of RAMSEY	CITY PLATE No. SEW–2

A 5 FT. GREEN CARSONITE MARKER SHALL BE INSTALLED NEXT TO ALL STRUCTURES NOT IN A PAVED SURFACE.



SECTION A–A



STANDARD DETAIL

NOTES:
1. A 10 GAGE SOLID COPPER TRACER WIRE IS REQUIRED WITH ALL SEWER LINES.
2. CONDUCTIVITY IS REQUIRED ON ALL TRACER WIRE.
3. TRACER WIRES ARE TO END IN STRUCTURES, AT FINISHED GRADE ON ALL SERVICES AND STUBS.
4. 6" BASE FOR ALL MANHOLES LESS THAN 14 FT. OF DEPTH, INCREASE BASE THICKNESS 2" PER 6 FT. OF DEPTH BEYOND 14 FT.
5. 5" PRECAST BASE MAY BE USED FOR MANHOLES LESS THAN 14 FT. DEEP.
6. ALL INVERTS TO BE 0.10' ABOVE OUTLET,

APPROVED		STANDARD DETAILS MANHOLE
DATE 1–2006	City of RAMSEY	CITY PLATE No. SEW–4

NOTE: DETAILS NOT TO SCALE

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CODY L. HOLMES
LIC. NO. 49143 DATE 3/3/2015

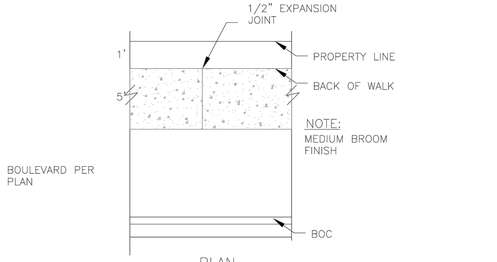
DESIGNED	DRAWN	CHECKED
CLH	JEN	CLH

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BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

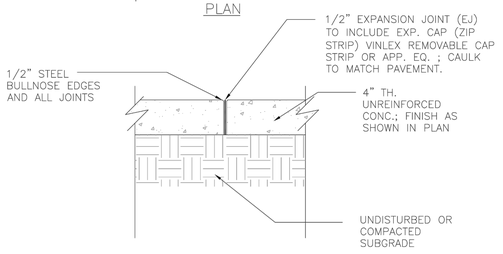
REV.	BY	DATE

PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
DETAIL SHEET

SHEET
C1.2



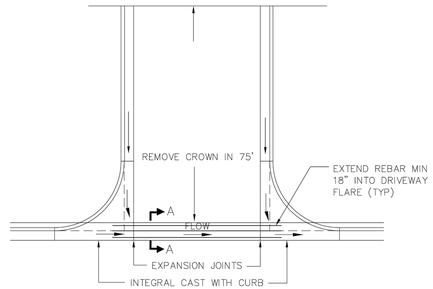
PLAN



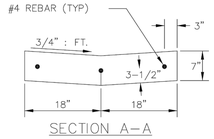
SECTION W/ GRANULAR BASE MATERIAL

NOT TO SCALE

APPROVED		STANDARD DETAILS
DATE 7-2011	City of RAMSEY	CONCRETE SIDEWALK
		CITY PLATE No. STR-03



PLAN

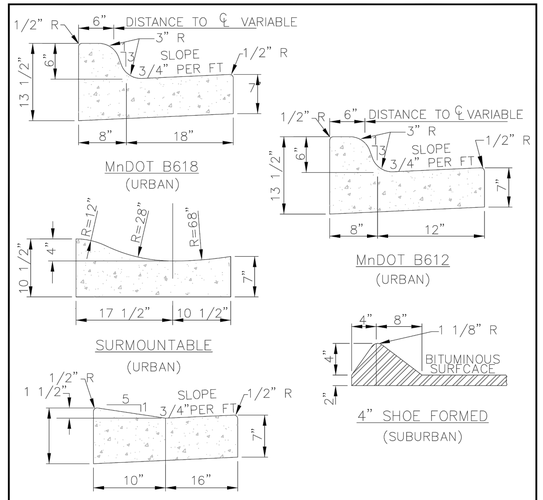


SECTION A-A

CONCRETE VALLEY GUTTER

NOTES:
1. WITH REMOVAL OF EXISTING CURB AT A STREET, MILL BITUMINOUS TO A DEPTH OF 1.5" ANS A WIDTH OF 18" IN EXISTING STREET.
2. TO BE USED WHENEVER CROSS DRAINAGE IS < 2%

APPROVED		STANDARD DETAILS
DATE 4-2007	City of RAMSEY	CROSS GUTTER
		CITY PLATE No. STR-2

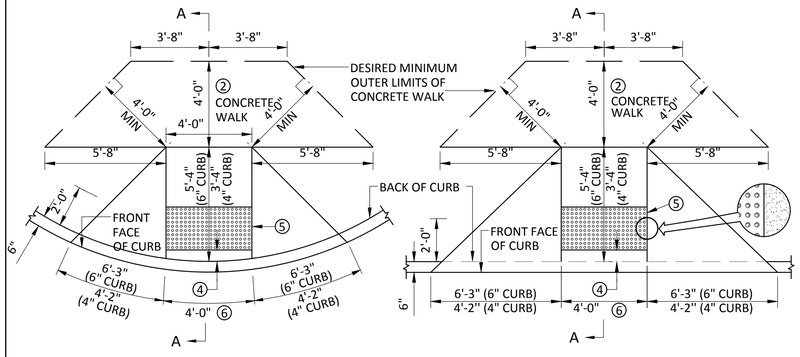


DRIVEWAY FOR B618

NOTES:

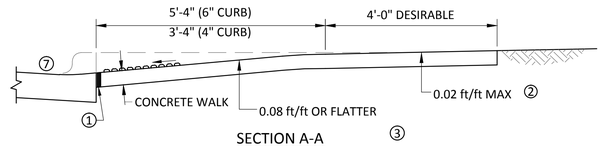
1. ON WEAR COURSE MILL THE EXISTING BITUMINOUS 1.5" BY 24" IN FRONT OF THE REPLACEMENT CURB.
2. ON BASE COURSE SAW CUT AND REMOVE EXISTING BITUMINOUS 18" IN FRONT OF THE REPLACEMENT CURB.

APPROVED		STANDARD DETAILS
DATE 04-12	City of RAMSEY	CURB AND GUTTER
		CITY PLATE No. STR-1



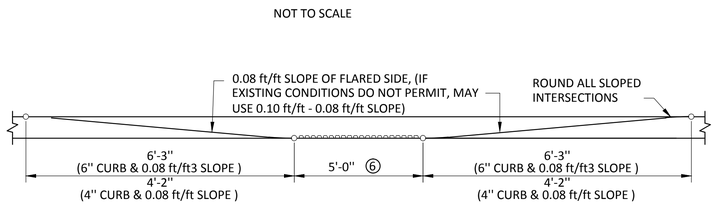
PLAN VIEW OF DIAGONAL RAMP

PLAN VIEW OF PERPENDICULAR RAMP



SECTION A-A ③

NOT TO SCALE



ELEVATION OF RAMP

NOTES:

① 1/2 INCH PREFORMED JOINT FILLER MATERIAL, AASHTO M 213.

② WHEN POSSIBLE, PROVIDE A PATH OF TRAVEL 4'-0" WIDE BEHIND THE PEDESTRIAN RAMP. A RELATIVELY FLAT 4'x4' LANDING WILL ALLOW WHEELCHAIRS TO NAVIGATE AROUND THE PEDESTRIAN RAMP.

③ WHEN A MEDIAN IS NOT WIDE ENOUGH FOR TWO PEDESTRIAN RAMPS AND A 48" LANDING BETWEEN THEM, THE PEDESTRIAN CROSSING SHALL BE CUT THROUGH THE MEDIAN AT STREET LEVEL.

④ 4" to 6" IS THE REQUIRED OFFSET OF THE DETECTABLE WARNINGS/TRUNCATED DOME AREA FROM THE BACK OF CURB.

⑤ ADA REQUIRED TRUNCATED DOME AREA SHALL BE 2'-0" MIN. IN DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH (4'-0" TYP.) OF THE CURB RAMP. THIS 2'-0" BY 4'-0" WIDTH (TYP.) TRUNCATED DOME AREA SHALL CONTRAST VISUALLY WITH THE ADJACENT WALKING SURFACE. THE ENTIRE TRUNCATED DOME AREA SHALL BE A DARK COLOR (RED, BLACK, DARK GRAY, OR BRIGHT YELLOW) WHEN THE ADJACENT SIDEWALK IS A "WHITE" OR LIGHT GRAY CEMENT COLOR.

⑥ 5'-0" FOR NEW CONSTRUCTION.

⑦ FLATTEN GUTTER OF CURB 0.02% AT TRUNCATED DOMES.

PED RAMP, WITH TRUNCATED DOMES

NOT TO SCALE

NOTE: DETAILS NOT TO SCALE

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LIC. NO. 49143 DATE 3/3/2015

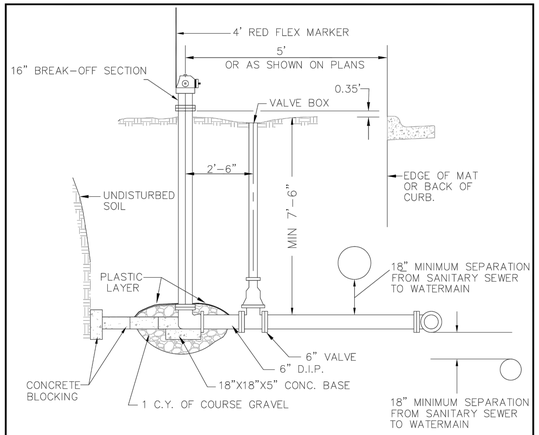
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REV.	BY	DATE

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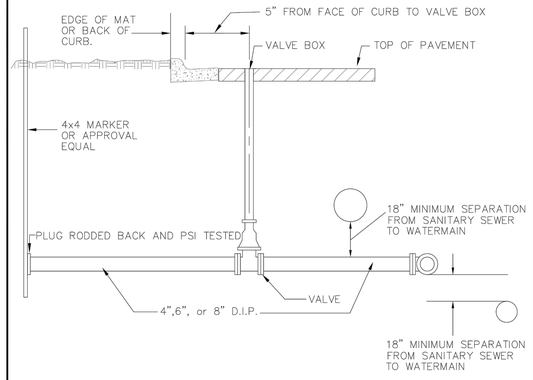
SHEET C1.3



NOTES:

1. HYDRANTS TO BE ORDERED FOR 8'-0" BURY. IN AREAS OF EXTRA DEPTH ON THE WATERMAIN, HYDRANTS EXTENSIONS MAY BE REQUIRED.
2. HYDRANTS SHALL BE BLOCKED OR TIED TO THE TEE AT MAIN WITH 2-3/4" DIAMETER TIE RODS. ALL TIE RODS TO BE COAL TAR COATED AFTER INSTALLATION. RESTRAINED JOINT PIPE AND RETAINING GLANDS MAY BE USED.
3. TOP NUT OF HYDRANT 2.5' ABOVE TOP BACK OF CURB OR BITUMINOUS SURFACE.
4. HYDRANTS BURIED BELOW WATER TABLE, DRAIN HOLES NEED TO BE PLUGGED AND HYDRANT MARKED BY PAINTING 5" CAP YELLOW.
5. BRUSH PAINT ALL HYDRANTS AFTER INSTALLATION IS COMPLETE.

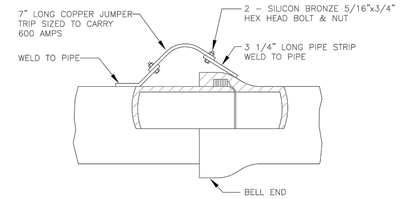
APPROVED DATE 4-2005	City of RAMSEY	STANDARD DETAILS HYDRANT
		CITY PLATE No. WAT-3



NOTES:

1.SHALL BE BLOCKED OR TIED TO THE MAIN WITH 2-3/4" DIAMETER TIE RODS. ALL TIE RODS TO BE COAL TAR COATED AFTER INSTALLATION. RESTRAINED JOINT PIPE AND RETAINING GLANDS MAY BE USED.

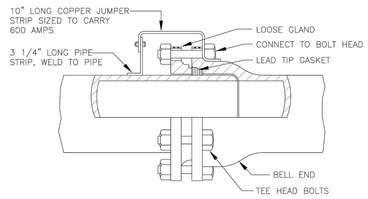
APPROVED DATE 2-2013	City of RAMSEY	STANDARD DETAILS COMMERCIAL SERVICE
		CITY PLATE No. WAT-6



PUSH ON JOINT

NOTE: DO NOT PASS CURRENT THROUGH PIPE UNLESS PIPE IS FULL OF WATER.

ALTERNATE METHOD BY AMERICAN CAST -IRON USING 4 COPPER CONTACT STRIPS IS AN APPROVED EQUAL TO ABOVE



MECHANICAL JOINT

APPROVED DATE 7-93	City of RAMSEY	STANDARD DETAILS JOINT CONNECTION FOR ELECTRICAL CONDUCTIVITY
		CITY PLATE No. WAT-1

NOTE: DETAILS NOT TO SCALE

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LIC. NO. 49143 DATE 3/3/2015

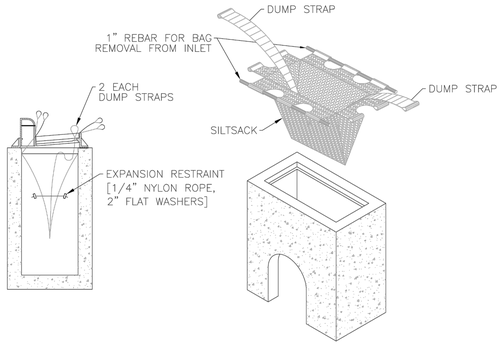
DESIGNED CLH
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CHECKED CLH

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BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

REV.	BY	DATE

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DETAIL SHEET

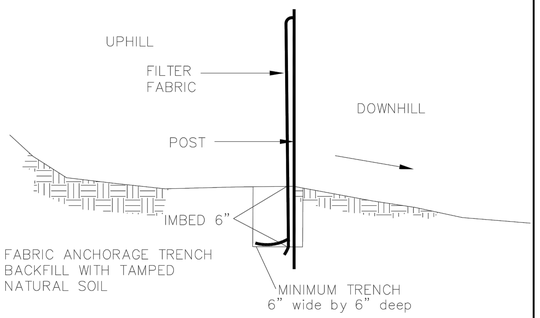
SHEET C1.4



CATCH BASIN SEDIMENT FILTER SACK

NOT TO SCALE

APPROVED DATE 7-2011	City of RAMSEY	STANDARD DETAILS CB SEDIMENT FILTER SACK
		CITY PLATE No. STO 11

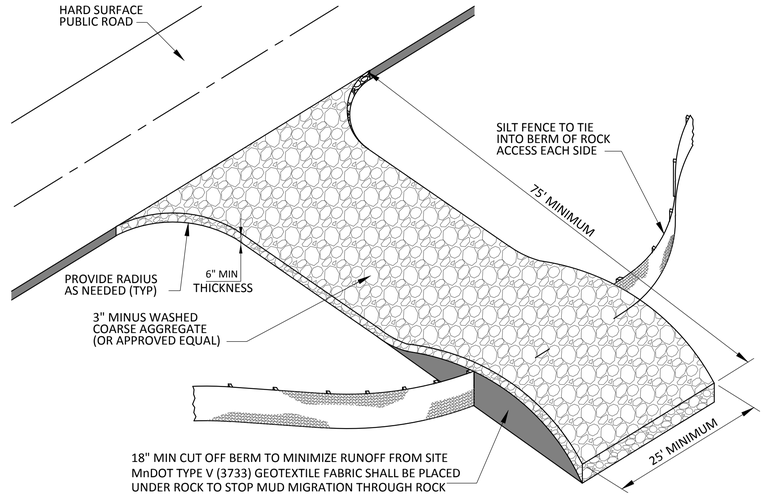


INSTALL AS PER FILTER FABRIC MANUFACTURER'S RECOMMENDATIONS

SILT FENCE DETAIL

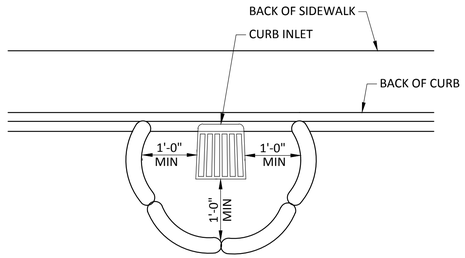
NO SCALE

APPROVED DATE 2-2005	City of RAMSEY	STANDARD DETAILS SILT FENCE
		CITY PLATE No. ERO-3

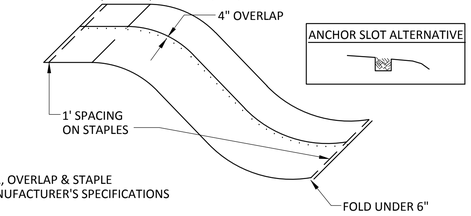


ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE



NOTE:
THIS INLET PROTECTION IS USED DURING ROUGH GRADING ONLY, USE BEFORE ROAD IS OPEN TO TRAFFIC OR IS PAVED



NOTE:
ANCHOR, OVERLAP & STAPLE PER MANUFACTURER'S SPECIFICATIONS

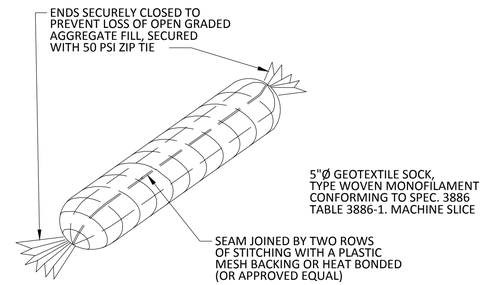
EROSION CONTROL BLANKET INSTALLATION

NOT TO SCALE

FILL ROCK LOG WITH 45 LBS. OF OPEN GRADED AGGREGATE CONSISTING OF SOUND, DURABLE PARTICLES OF CRUSHED QUARRY ROCK OR GRAVEL CONFORMING TO THE FOLLOWING GRADATION.

GRADATION	
SIEVE SIZE	PERCENT PASSING
1 1/2"	100
1"	95-100
3/4"	65-95
3/8"	30-65
NO 4	10-35
NO 10	3-20
NO 40	0-8
NO 200	0-3

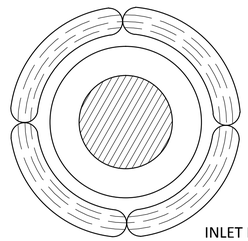
NOTE:
CRUSHED CONCRETE OR BITUMINOUS SHALL NOT BE USED FOR OPEN GRADED AGGREGATE.



INLET PROTECTION
ROCK BAG

NOT TO SCALE

PAYMENT SHALL INCLUDE ALL MATERIALS, FILLING OF LOG, PLACEMENT, MAINTENANCE & REMOVAL; 80% OF BID PRICE SHALL BE PAID UPON PROPER PLACEMENT WITH THE FINAL 20% PAID UPON REMOVAL



INLET PROTECTION WITH ROCK LOG

NOTE: DETAILS NOT TO SCALE

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CODY L. HOLMES
LIC. NO. 49143 DATE 3/3/2015

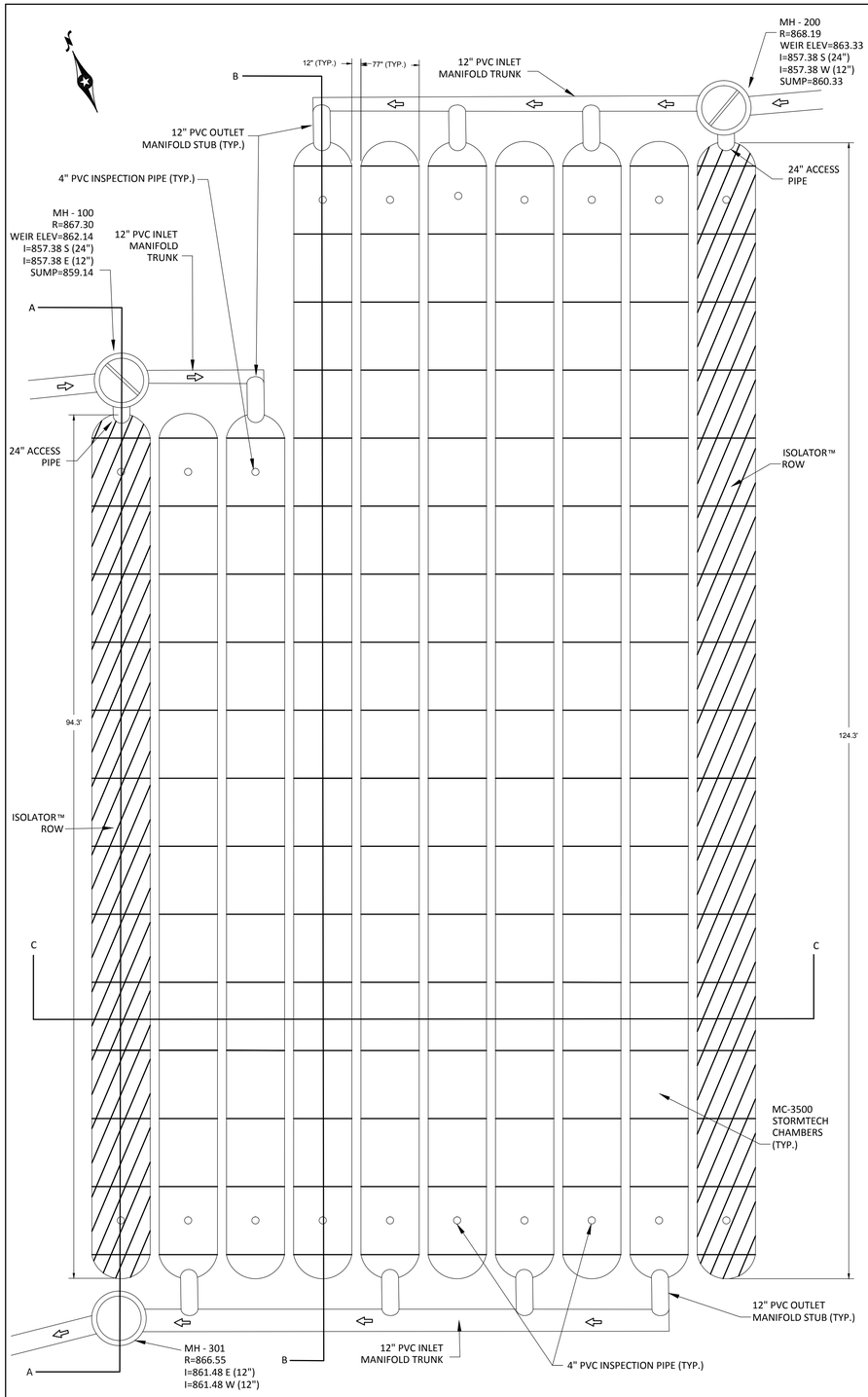
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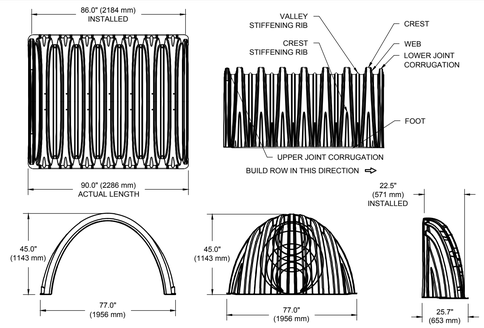
REV.	BY	DATE

PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
DETAIL SHEET

SHEET C1.5



NOTE: DETAILS NOT TO SCALE



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	178.9 CUBIC FEET	(5.06 m³)
WEIGHT	135.0 lbs.	(61.2 kg)

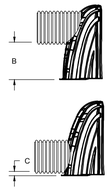
NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 22.5"	(1956 mm X 1143 mm X 571 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	46.0 CUBIC FEET	(1.30 m³)
WEIGHT	50.0 lbs.	(22.7 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

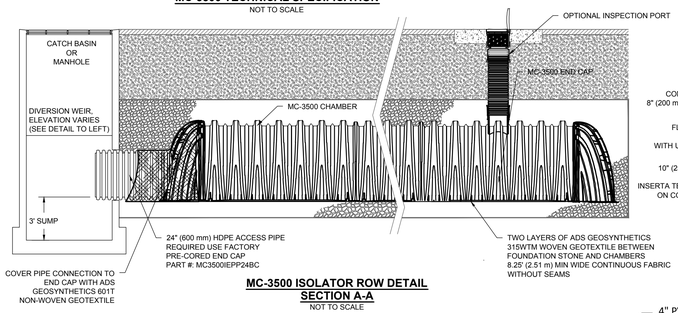
PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP30BC	30" (750 mm)	---	



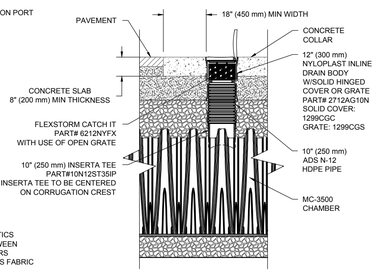
NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS.
CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm)
THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHTEST POSSIBLE FOR THE PIPE SIZE.

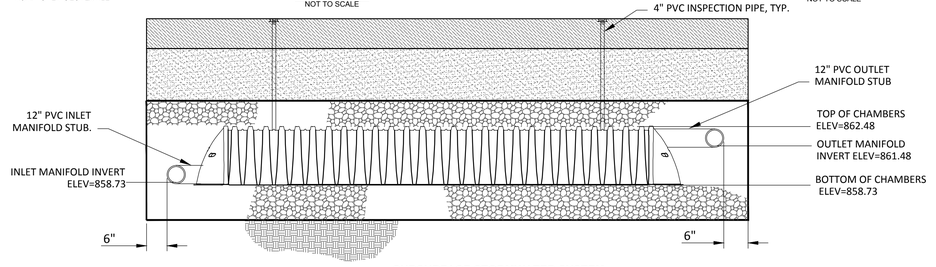
MC-3500 TECHNICAL SPECIFICATION
NOT TO SCALE



MC-3500 ISOLATOR ROW DETAIL
SECTION A-A
NOT TO SCALE



MC-3500 INSPECTION PORT DETAIL
NOT TO SCALE

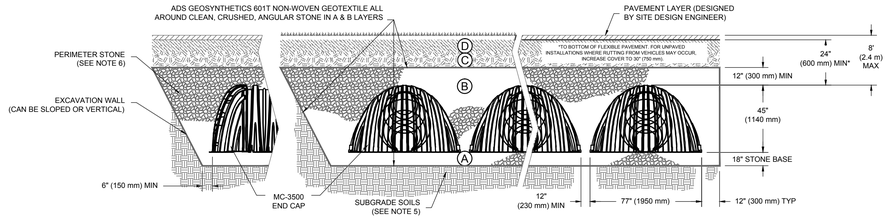


SUBSURFACE STORMWATER SYSTEM
SECTION B-B
NOT TO SCALE

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



SECTION C-C
NOT TO SCALE

Notes:
1. MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE "SITE DESIGN ENGINEER" REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT.
5. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
7. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

INSPECTION AND MAINTENANCE NOTES:

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES:
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

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CODY L. HOLMES
LIC. NO. 49143 DATE 3/3/2015

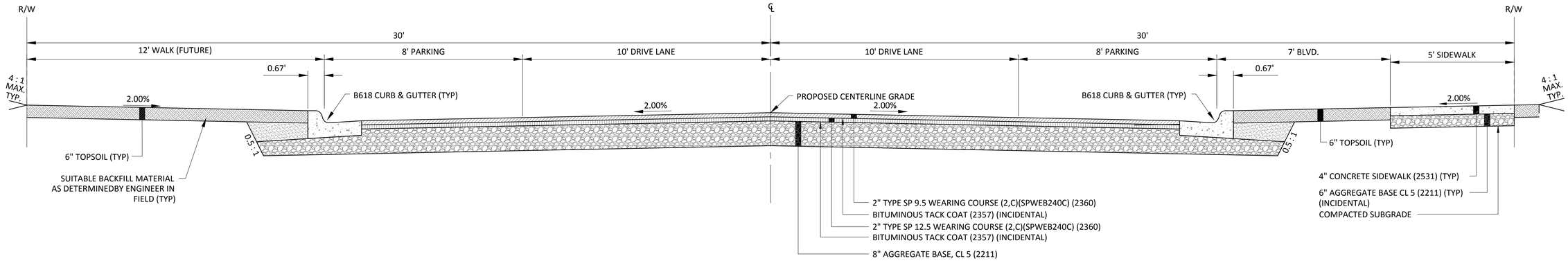
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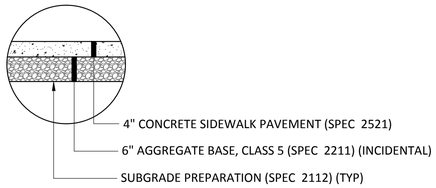
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PARKVIEW EAST APARTMENT COMPLEX
UNDERGROUND STORAGE DETAILS

SHEET C1.6

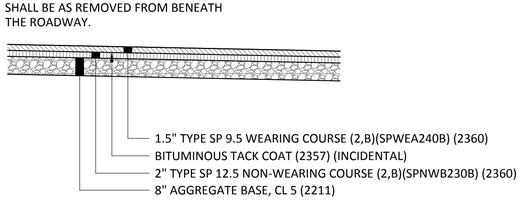


TYPICAL 36'-0" STREET SECTION
NOT TO SCALE

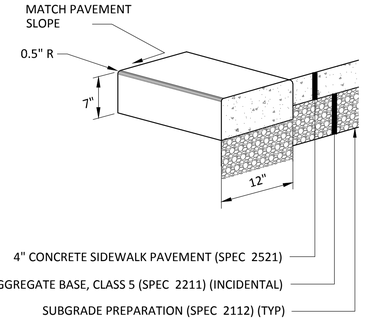


4" CONCRETE WALK
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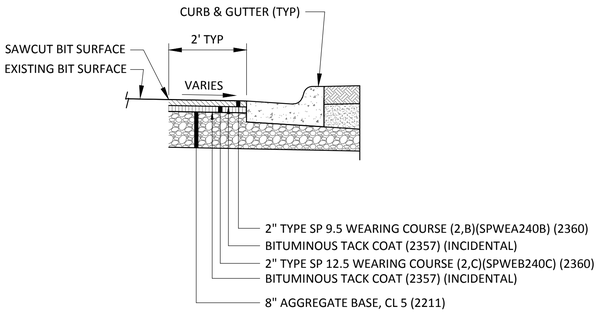
NOTE:
ALL ORGANIC OR UNSUITABLE MATERIAL SHALL BE AS REMOVED FROM BENEATH THE ROADWAY.



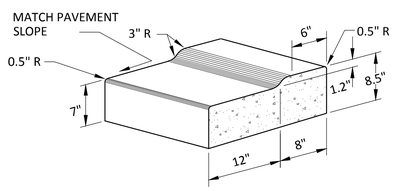
TYPICAL BITUMINOUS PARKING LOT SECTION
NOT TO SCALE



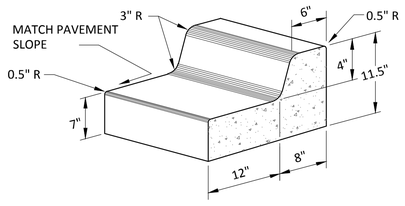
CONCRETE RIBBON AT BUILDING ENTRANCE
NOT TO SCALE



BITUMINOUS REPAIR, CURB AND GUTTER INSTALLATION
NOT TO SCALE



CONCRETE CURB & GUTTER AT TRANSISITION AREAS
NOT TO SCALE



CONCRETE CURB & GUTTER DESIGN B412
NOT TO SCALE

NOTE: DETAILS NOT TO SCALE

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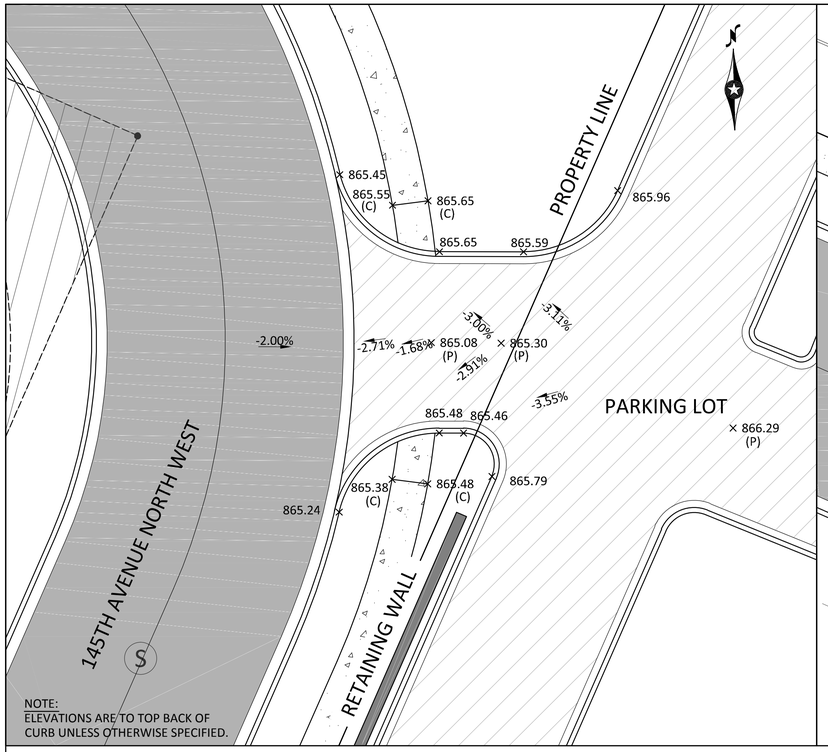
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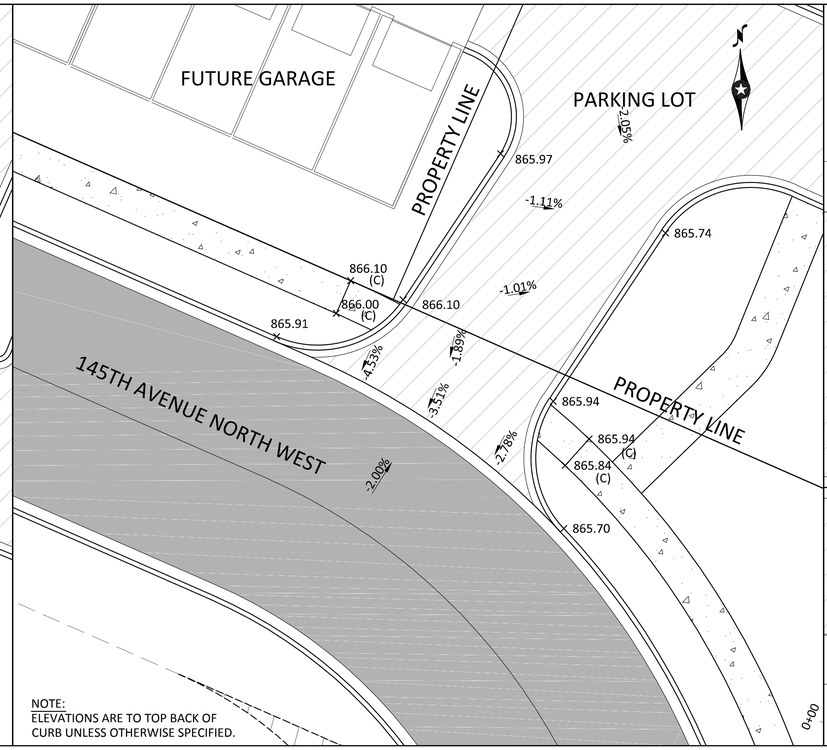
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TYPICAL SECTIONS

SHEET C1.7



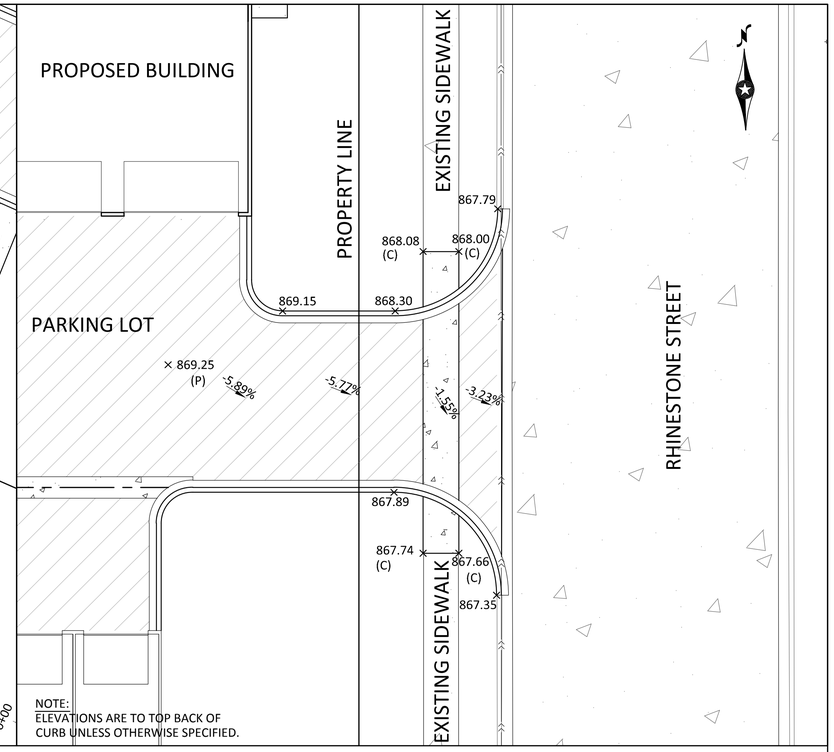
145TH AVENUE NORTH WEST & SOUTH PARKING LOT ENTRANCE

SCALE: 1' = 10'



145TH AVENUE NORTH WEST & NORTH PARKING LOT ENTRANCE

SCALE: 1' = 10'



RHINESTONE STREET & EAST PARKING LOT ENTRANCE

SCALE: 1' = 10'

STORM SEWER TABLE

STRUCT.	ALIGNMENT	OFFSET STATION	OFFSET DIST. FROM ALIGN.	LT/RT	RIM ELEV. FLOW LINE	STRUCT. FLOW OUT ELEV.	FLOWS TO STRUCT.	FLOWS TO ELEV.	DRAINAGE STRUCTURE DESIGN DESIGN H	DRAINAGE STRUCTURE DESIGN R-1 (2'x3')	DRAINAGE STRUCTURE DESIGN 48"-4022	DRAINAGE STRUCTURE DESIGN 60"-4022	DRAINAGE STRUCTURE DESIGN 84" -4022	CASTING ASSEM. EACH	RC PIPE (DESIGN 3006) 12" CL V PIPE	RC PIPE (DESIGN 3006) 18" CL V PIPE	RC PIPE (DESIGN 3006) 24" CL V PIPE	PIPE GRADE	CONNECT TO EXISTING STM. SEWER PIPE	CONNECT TO EXISTING STM. SEWER STRUCTURE	NOTES
		FT	FT		FT	FT		FT	LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	EACH	LIN FT	LIN FT	LIN FT	%	EACH	EACH	
100	STORM 100	11+58.37	0.00'	CL	867.30	859.38	STORAGE	859.38				7.92		R-1733			15	0.00			
101	STORM 100	11+04.90	0.00'	CL	867.42	859.60	100	859.38				7.82		R-1733			53	0.41			
102	STORM 100	10+31.12	0.00'	CL	865.14	861.14	101	860.60		4.00				R-3067-L	74			0.73			
103	STORM 100	11+03.81	78.88'	RT	865.00	860.00	101	859.60			5.00			R-3067-L			80	0.50			
104	STORM 100	11+04.09	105.69'	RT	864.85	860.85	103	860.72		4.00				R-3067-L	26			0.50			
200	STORM 200	26+65.41'	0.00'	CL	868.19	860.00	STORAGE	860.00			8.19			R-1733		45		0.00			
201	STORM 200	25+01.23'	0.00'	CL	867.90	861.46	200	860.03			6.44			R-3067-L		164		0.87			
202	STORM 200	23+13.94'	0.00'	CL	868.44	862.89	201	861.96		5.55				R-3067-L	187			0.49			
203	STORM 200	22+54.53'	0.00'	CL	868.02	863.19	202	862.89		4.83				R-3067-L	59			0.50			
204	STORM 200	22+08.10'	0.00'	CL	868.40	863.42	203	863.19			4.98			R-3067-L	46			0.50			
205	STORM 200	20+00.00'	0.00'	CL	868.46	864.46	204	863.42		4.00				R-3067-L	208			0.50			
300	Storm 300	31+65.58'	0.00'	CL	864.67	861.48	EXISTING	862.48'					3.19	R-3067-L					1		(2)
301	Storm 300	30+59.82'	0.00'	CL	866.55	861.48	300	861.68'			5.07			R-1733	106			0.76			
STORAGE	Storm 300	26+00.00	4.37'	RT	-	861.48	301	861.48						-	60			0.00			
400	STORM 400	40+00.00	0.00	CL	867.40	864.40	EXISTING 401	864.13	3.00					R-4342	27			1.00		1	
								TOTALS	3.00	22.38	29.68	15.74	3.19	14	793.00	209.00	148.00	6.76	1	1	

SANITARY SEWER TABLE

STRUCT.	ALIGNMENT	OFFSET STATION	OFFSET DIST. FROM ALIGN.	LT/RT	RIM ELEV. FLOW LINE	STRUCT. FLOW OUT ELEV.	FLOWS TO STRUCT.	FLOWS TO ELEV.	SANITARY STRUCTURE DESIGN H 48-4700C	SANITARY CASTING ASSEM.	8" PVC SDR 26 PIPE	PIPE GRADE	CONNECT TO EXISTING SAN SEWER PIPE	NOTES
		FT	FT		FT	FT		FT	LIN FT	EACH	LIN FT	%	EACH	
A	PRO SANITARY	0+00.00	0.00	CL	865.75	856.20	EXISTING	856.04	9.55	1	41	0.40	1	
D	PRO SANITARY	1+64.66	0.00	CL	868.71	856.96	A	856.30	11.75	1	165	0.40		
E	PRO SANITARY	4+47.16	0.00	CL	869.23	858.19	D	857.06	11.04	1	282	0.40		
SERVICE	PRO SANITARY	4+57.66	0.00	CL	-	858.33	E	858.29			10	0.40		
STUB	PRO SANITARY	1+64.66	66.15	LT		857.32	D	857.06			66	0.40		
								TOTALS	32.34	3	564.00	2.00	1	

NOTE: DETAILS NOT TO SCALE

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CODY L. HOLMES
LIC. NO. 49143 DATE 3/3/2015

DESIGNED CLH
DRAWN JEN
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BOLTON & MENK, INC.
Consulting Engineers & Surveyors
MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN BURNSVILLE, MN
WILLMAR, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN
BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

REV.	BY	DATE

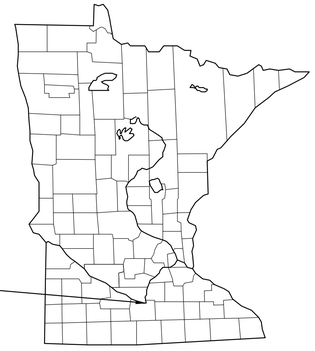
PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
INTERSECTION DETAILS & CONSTRUCTION NOTES

SHEET C1.8

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

<PROJECT NAME -YEAR>

CITY OF <ADD CITY>
<ADD COUNTY> COUNTY, MINNESOTA



RESPONSIBLE PARTIES:
The Contractor and Owner must apply for coverage under the MPCA's General Storm Water Permit for Construction Activity as required by the National Pollutant Discharge Elimination System (NPDES) Phase II program. Coverage under the permit will begin automatically 7 calendar days after the electronic submittal date or after the postmarked date of a complete application. [Longer time frames apply to sites that disturb areas greater than 50 acres.]

	COMPANY	CONTACT PERSON	PHONE
OWNER:			
SWPPP DESIGNER:	Bolton & Menk, Inc.	TIM OLSON	651-704-9970
CONTRACTOR:			
SITE MANAGER:			
PARTY RESPONSIBLE FOR LONG TERM O&M:			

Individuals listed above, including the SWPPP preparer, individual overseeing implementation of, revising, and amending the SWPPP, individuals performing or supervising the installation, maintenance and repair of BMPs must be trained. At least one individual present on the permitted project, or available on site within 72 hours, shall be trained in the applicable job duties. Documentation showing training commensurate with the job duties and responsibilities is required to be included in the SWPPP prior to any work beginning on the site. Copies of the SWPPP preparer information is included in the Project Manual. The Contractor shall provide information for the individual(s) overseeing implementation, supervising installation, maintenance, and repair of BMP's to be included in the Project Manual prior to the start of construction. This information shall be kept up to date until the project NOT is filed.

Documentation shall include:
a. Names of trained personnel associated with this project.
b. Dates of training, names of instructor(s) and entity providing training.
c. Content of training course or workshop including the number of hours trained.
d. As an alternative to a, b, and c listed above, a photocopy of a current Erosion and Stormwater Management card issued by the University of Minnesota can be attached to the SWPPP as suitable documentation of training.

SPECIAL ENVIRONMENTAL CONSIDERATIONS:

Was an environmental review required for this project or any part of a common plan of development or sale that includes all or any portion of this project?	NO
Does any portion of the site have the potential to affect threatened or endangered species or their critical habitat?	NO
Does any portion of this site discharge to a Calcareous fen and the letter of approval from the DNR is located in the Project Manual.	NO
Will any portion of the site potentially affect properties listed on the National Register of Historic Places or a known or discovered archeological site?	NO
Have any Karst features have been identified in the project vicinity?	NO
Is compliance with temporary or permanent stormwater management design requirements infeasible for this project?	NO
Has the MN DNR promulgated "work in water restrictions" for any Public Water this site disharges to during fish spawning?	NO

charge

3. Peak flow rates and stormwater volumes to minimize erosion at outlets and downstream channel and stream bank erosion.
4. The range of soil particle sizes expected to be present on the site.

LEGEND

PROJECT BOUNDARY

IMPAIRED, SPECIAL OR PROTECTED WATERS

NATIONAL WETLANDS INVENTORY

PROJECT AREAS:

Total Project Size (disturbed area) =	14.7	ACRES
Existing area of impervious surface =	0.0	ACRES
Post construction area of impervious surface =	4.9	ACRES
Total new impervious surface area created =	4.9	ACRES

Planned Construction Start Date: 07/01/2015
Estimated Construction Completion Date: 12/31/2015

PERMANENT STORMWATER MANAGEMENT SYSTEM:
Type of storm water management used if more than 1 acre of new impervious surface is created:

	Wet Sedimentation Basin
X	Infiltration/Filtration
	Regional Pond
	Permanent Storm Water Management Not Required

PROJECT LOCATION:

COUNTY	TOWNSHIP	RANGE	SECTION	LATITUDE	LONGITUDE
ANOKA	32N	25W	28	45.233710	-93.456399

BMP SUMMARY:

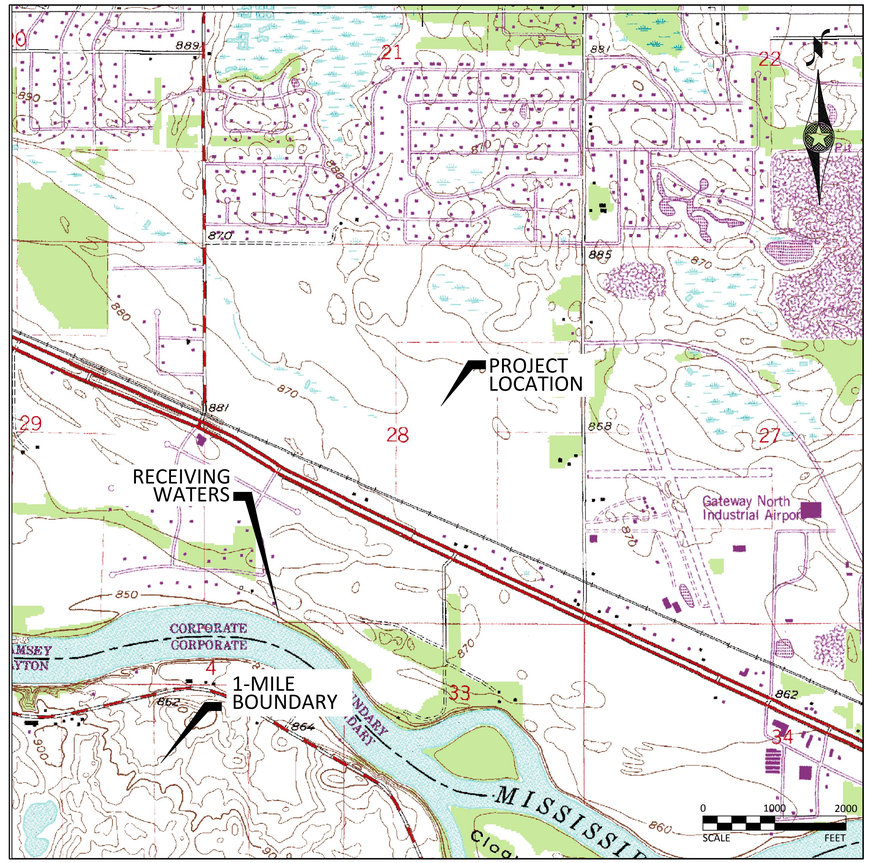
BMP	QUANTITY	UNIT
HYDROMULCH, SEED MIX 25-131 & FERTILIZER TYPE 3 (22-5-10)	0.90	AC
SILT FENCE	1956	LIN FT
INLET PROTECTION	8	EACH

DESCRIPTION OF CONSTRUCTION ACTIVITIES AND STORMWATER MANAGEMENT:
Construction activities include: Site grading, sanitary sewer and water main extensions, temporary erosion and sediment control, and permanent stabilization.

PSD, LLC is proposing to construct a 4-story apartment complex and road to the west. Drainage will flow overland into area inlets where it will be conveyed to a proposed underground storage system. This system will tie into the existing conveyance system along Sapphire Street and be discharged south of the site.

Existing drainage patterns and discharge rates are to be maintained in the proposed condition. All modifications to this SWPPP shall be approved by the engineer and remain on site during construction.

DOCUMENT RETENTION
The following documentation will be retained for a period of not less than 3-years from the date of submittal of the NOT in compliance with Part III.E of the Permit.
1. The final SWPPP
2. Copies of all stormwater related permits required for the project
3. Records of all inspection and maintenance conducted during construction
4. Copies of all permanent operation and maintenance agreements; including all right-of-way, contracts, covenants and other binding requirements regarding perpetual maintenance, and
5. All required calculations for design of the temporary and permanent BMPs.



RECEIVING WATERS:
Receiving waters, including surface water, wetlands, Public Waters, and stormwater ponds, are identified on the USGS 7.5 min quad map within one mile of the project boundary. Receiving waters that are impaired, the impairment, and WLA are listed as follows. All specific BMPs relative to construction activities listed in this permit for special and impaired waters have been incorporated into this plan. All specific BMPs listed in approved TMDLs and those BMPs listed for construction related waste load allocations have also been incorporated.

NAME OF WATER BODY	TYPE (ditch, pond, wetland, lake, etc.)	Appendix A Special Water?	Flows to Impaired Water Within 1 Mile?	USEPA Approved TMDL?
MISSISSIPPI RIVER	RIVER	YES	YES	YES
Impairments:				

IMPLEMENTATION SCHEDULE AND PHASING:
1) Submit SWPPP Updates to Engineer. Submittal shall include any requested changes to the SWPPP, including but not limited to: Trained Personnel, Locations for Stockpiles, Concrete Washout, Sanitation Facilities, Types and Locations of Erosion & Sediment Control. Failure to submit updates shall be considered acceptance of the SWPPP as designed with no changes.
2) Install perimeter sediment control, inlet protection, and construction exit.
3) Rough grade site.
4) Construct underground infiltration chamber and storm sewer.
5) Construct parking and building areas. Protect all catch basins to ensure construction sediment does not enter infiltration chamber.
6) Add additional temporary BMPs as necessary during construction based on inspection reports.
7) Ensure final stabilization measures are complete.
8) Submit Notice of Termination (NOT) to MPCA within 30 days of final stabilization.

PROJECT INFORMATION AND LOCATION MAP

HORZ. 0 40 80 SCALE FEET

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BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

REV.	BY	DATE

PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
STORMWATER POLLUTION PREVENTION PLAN

SHEET C2.0

STORMWATER POLLUTION PREVENTION PLAN NARRATIVE

Information contained in this SWPPP summarizes requirements of the GENERAL PERMIT AUTHORIZATION TO DISCHARGE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM/STATE DISPOSAL SYSTEM PROGRAM - Permit No: MN RI0000I as they apply to this project. All provisions of the permit including those not specifically cited herein shall apply to this project. The Contractor is responsible to be familiar with and comply with all conditions of the permit. The full text of the permit is available at: http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/construction-stormwater/mpca-to-re-issue-construction-stormwater-general-permit.html.

SWPPP AMENDMENTS

Permittee must amend SWPPP as necessary to include additional requirements to correct problems identified or address the following situations.

1. There is a change in design, construction, operation, maintenance, weather or seasonal conditions.
2. Inspections or investigations by site owner or operators, USEPA or MPCA officials determine the SWPPP is not minimizing discharge of pollutants to surface waters or underground waters or discharges are causing water quality standard exceedances.
3. The SWPPP is not achieving the objectives of minimizing pollutants in stormwater discharges associated with construction activity, or the SWPPP is not consistent with the terms and conditions of the permit.
4. The MPCA determines that the project's stormwater discharges may cause, have reasonable potential to cause, or contribute to non-attainment of any applicable water quality standard, or the SWPPP does not incorporate the applicable requirements of the permit.

EROSION PREVENTION PRACTICES:

The location of areas not to be disturbed must be delineated on the project before site work begins.

Disturbance on steep slopes (>33.3%) shall be minimized. Where required, techniques such as phasing and stabilizing practices designed for steep slopes shall be used.

All exposed soils must be stabilized as soon as possible but in no case later than 7 days after the construction activity has temporarily or permanently ceased.

For public waters that have been promulgated "work in water restrictions" during fish spawning time frames, all exposed soil areas that are within 200 feet of the water's edge, and drain to these waters must complete stabilization within 24-hours during the time period.

Stormwater conveyance channels shall be routed around unstabilized areas. Erosion controls and velocity dissipation devices shall be used at outlets within and along the length of any constructed conveyance channel.

The normal wetted perimeter of all ditches or swales, including storm water management pond slopes, that drain waters from the site must be stabilized within 200' of any property edge or discharge point, including storm sewer inlets, within 24 hours of connection.

Stabilization of the remaining portions of any temporary or permanent ditches or swales with 7 calendar days after connecting to a surface water or property edge and construction in that portion of the ditch has temporary or permanently ceased.

Temporary or permanent ditches or swales used as sediment containment during construction do not need to be stabilized during temporary period of use and shall be stabilized within 24 hours after no longer used as sediment containment.

Mulch, hydromulch, tackifier, or similar practice shall not be used in any portion of a temporary or permanent drainage ditch. Refer to erosion and sediment control plan for temporary and permanent stabilization measures for ditches and swales.

Stormwater discharges shall be directed to vegetated areas where feasible. Velocity dissipation devices shall be used at discharge point.

Phased construction will be used to extent practical or as indicated in the plans to minimize exposed soils.

Rapid stabilization shall be of type and quantity indicated in the project specifications. Additional rapid stabilization may be necessary to minimize erosion throughout the duration of the project. Type and quantity shall be determined by the engineer or inspector prior to installation. In extreme cases, the contractor shall use any available rapid stabilization to immediately mitigate erosion, then further remedy the situation with approval by owner or engineer.

SEDIMENT CONTROL PRACTICES:

Practices must be established on all down gradient perimeters and be located up gradient of any buffer zones. Perimeter controls must be in place before up gradient land- disturbing activities begin and shall remain in place until final stabilization.

All sediment controls practices shall be re-installed if they have been adjusted or removed to accommodate short-term activities and replaced immediately after the short term activity has ceased. Short term activities shall be performed as quickly as possible. Sediment control practices shall be re-installed even before the next precipitation event if the activity is not complete.

All storm drains must be protected by appropriate BMPs during construction until all sources to the inlet have been stabilized. Inlet protection may be removed for specific safety concerns identified by the Permittee or jurisdictional authority. The removal shall be documented in the SWPPP and retained on site. Temporary stockpiles must have silt fence or other effective sediment controls and shall not be placed in surface waters or natural buffers.

Vehicle tracking BMPs shall be installed to minimize track out of sediment from the construction site. Method shall be approved by engineer prior to commencement of construction activities. Street sweeping shall be used if vehicle tracking BMPs are not adequate to prevent sediment from being tracked onto the street.

Soil compaction shall be minimized and topsoil shall be preserved, unless infeasible or if construction activities dictate soil compaction or topsoil stripping.

A 100 foot natural buffer, or redundant BMPs (where a buffer is infeasible) must be maintained when a surface water is located within 100 feet of disturbance activities and site runoff flows to the surface water.

If polymers, flocculants, or other sedimentation treatment chemicals are used on site, 1) conventional erosion and sediment controls shall be sowed prior to chemical placement, 2) chemicals shall be chosen based on soil types, and expected turbidity, pH, and flow rate of stormwater flowing into the treatment system, and 3) chemicals shall be used with accepted engineering practices and dosing specifications.

TEMPORARY SEDIMENTATION BASINS:

The temporary sedimentation basin shall be constructed and made operational prior to disturbance of 5 or more acres draining to a common location.

Temporary sedimentation basins are required prior to runoff leaving the construction site or entering surface waters when 5 or more acres of disturbed soils drain to a common location. The basin must provide 3,600 cubic feet of storage below the outlet per acre drained. If hydraulic calculations are available, the temporary sedimentation basin must provide a storage volume equivalent to the 2-year, 24-hour storm, but in no case less than 1800 cubic feet per acre drained. The temporary sedimentation basin must be constructed and made operational concurrent with the start of soil disturbance up gradient of the pond. The temporary sedimentation basin shall be designed to prevent short circuiting. The outfall shall be designed to remove floatable debris, allow for complete drawdown of the pond for maintenance activities, and have energy dissipation. The emergency spillway shall be stabilized.

Temporary sedimentation basins shall be situated outside of surface waters and any required buffer zone, and must be designed to avoid draining wetlands, unless the impact is in compliance with the requirements of this permit.

Excessive sediment-laden water that is not properly filtered will not be permitted to discharge from site.

DEWATERING AND BASIN DRAINING

Turbid or sediment-laden waters related to dewatering or basin draining shall be discharged to a temporary or permanent sedimentation basin on the project site unless infeasible. The temporary or permanent basin may discharge to surface waters if the basin water has been visually checked to ensure adequate treatment has been obtained in the basin and that the nuisance conditions will not result from the discharge. Discharge points shall be adequately protected from erosion and proper velocity dissipation provided.

All water from dewatering or basin-draining activities must be discharged in a manner that does not cause nuisance conditions, erosion in the receiving channels or on down slope properties, or inundation in wetlands causing significant adverse impacts to the wetland.

If filters with backwash waters are used, the backwash water shall be hauled away for disposal, returned to the beginning of the treatment process, or incorporated into site in a manner that does not cause erosion. Backwash water may be discharged to sanitary sewer if permission is granted by the sanitary sewer authority.

POLLUTION PREVENTION:

Building products that have the potential to leach pollutants must be under cover to prevent discharge or protected by an effective means designed to minimize contact with stormwater.

Pesticides, herbicides, insecticides, fertilizers, treatment chemicals, and landscape materials must be under cover.

Hazardous materials and toxic waste must be properly stored in sealed containers to prevent spills, leaks or other discharge. Restricted access storage areas must be provided to prevent vandalism.

Solid waste must be stored, collected and disposed of in compliance with Minn. R. CH 7035.

Portable toilets must be positioned so that they are secure and will not be tipped or knocked over. Sanitary waste must be disposed of properly in accordance with Minn. R. CH 7041.

Discharge of spilled or leaked chemicals, including fuel, from any area where chemicals or fuel will be loaded or unloaded shall be prevented using drip pans or absorbents. Supplies shall be available at all times to clean up discharged materials and that an appropriate disposal method must be available for recovered spilled materials.

Exterior vehicle or equipment washing on the project site shall be limited to a defined area of the site. Runoff from the washing area shall be contained in a sediment basin or other similarly effective controls and waste from the washing activity must be properly disposed of. No engine degreasing is allowed on site.

Effective containment for all liquid and solid wastes generated by concrete and other washout operations related to construction activity shall be effectively contained. Liquid and solid washout waste shall not contact the ground, and containment must be designed so that it does not result in runoff from the washout operations or areas. A sign must be installed adjacent to each washout facility that requires site personnel to utilize the proper facilities for disposal of concrete and other washout wastes.

INFESTED WATERS:

MN DNR permits are not valid for work in waters that are designated as infested waters unless accompanied by and Infested Waters Permit or written notification from MN DNR that an Infested Waters Permit is not required. There is no exception for pre-existing permits. If a MN DNR Permit has been issued for the project and the water is later designated as infested, the Contractor shall halt all work covered by the MN DNR Permit until an Infested Water Permit or written notification that in Infested Water is not required is obtained.

INSPECTION & MAINTENANCE:

A trained person shall routinely inspect the entire construction site at least once every 7 days during active construction and within 24-hours after a rainfall event greater than 0.5 inches in 24 hours. Following an inspection that occurs within 24-hours after a rainfall event, the next inspection must be conducted within 7 days.

All inspections and maintenance conducted during construction must be recorded within 24 hours in writing and records must be retained with the SWPPP. Inspection report forms are available in the Project Specifications. Inspection report forms other than those provided shall be approved by the engineer.

Where parts of the project site have permanent cover, but work remains on other parts of the site, inspections may be reduced on these areas to once per month.

Where the site has permanent cover on all exposed areas and no construction activity is occurring anywhere on site, the site must be inspected during non-frozen conditions at least once per month for 12 months. Following the 12th month of permanent cover and no construction activity, inspections shall be terminated until construction activity resumes or notification from MPCA has been issued that erosion has been detected at the site.

During frozen ground conditions, inspections may be suspended and shall resume within 24 hours after runoff occurs or 24 hours prior to resuming construction activity, whichever is first.

Inspection and maintenance shall resume until another Permittee has obtained coverage under this Permit or the project has undergone Final Stabilization, and an NOT has bee submitted.

All erosion prevention and sediment control BMPs shall be inspected to ensure integrity and effectiveness during all routine and post-rainfall inspections. All non-functioning BMPs must be repaired, replaced, or supplemented with functional BMPs by the end of the next business day after discovery, or as soon as field conditions allow access.

All perimeter control devices must be repaired, replaced, or supplemented when they become non-functional or the sediment reaches one-half (1/2) of the height of the device. These repairs must be made by the end of the next business day after discovery, or as soon as field conditions allow.

Temporary and permanent sediment basins must be drained and the sediment removed when the depth of sediment collected in the basin reaches one-half (1/2) the storage volume. Drainage and sediment removal must be completed within 72 hours of discovery, or as soon as field conditions allow.

Surface waters, including drainage ditches and conveyance systems, must be inspected for erosion and sediment deposition during each inspection. All deltas and sediment deposited in drainage ways, catch basins, and other drainage systems shall be removed. The removal and stabilization must take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints. The Permittee is responsible for obtaining all applicable permits prior to conducting any work in surface waters.

Construction site vehicle exit locations must be inspected for evidence of off-site sediment tracking onto paved surfaces. Tracked sediment must be removed from all paved surfaces both on and off site within 24-hours of discovery, or if applicable, within a shorter time to comply with the permit.

Streets and other areas adjacent to the project must be inspected for evidence of off-site accumulations of sediment. If sediment is present, it must be removed in a manner and at a sufficient frequency to minimize off-site impacts.

All infiltration areas must be inspected to ensure that no sediment from ongoing construction activity is reaching the infiltration area and that equipment is not being driven across the infiltration area.

FINAL STABILIZATION:

Final Stabilization is not complete until all of the following requirements have been met:

1. All soil disturbing activities at the site have been completed and all soils are stabilized by a uniform perennial vegetative cover with a density of 70% of its expected final growth density over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions.
2. Permanent stormwater management system is constructed, meets all requirements of the Permit, and is operating as designed. Temporary or permanent sedimentation basins that are to be used as permanent water quality management basins have been cleaned of any accumulated sediment. All sediment has been removed from conveyance systems, and ditches are stabilized with permanent cover.
3. All temporary synthetic and structural erosion prevention and sediment control BMPs have been removed. BMPs designed to decompose on site may be left in place.
4. For residential construction only, individual lots are considered finally stabilized if the structure(s) are finished, temporary erosion protection and down gradient perimeter control has been completed and the residence has been sold to the homeowner. Also, the "Homeowner Fact Sheet" has been provided to the homeowner.

NARRATIVE

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CODY L. HOLMES
LIC. NO. 49143 DATE 3/3/2015

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DRAWN JEN
CHECKED CLH

BOLTON & MENK, INC.
Consulting Engineers & Surveyors
MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN BURNSVILLE, MN
WILLMAR, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN
BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

REV.	BY	DATE

PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
STORMWATER POLLUTION PREVENTION PLAN

SHEET C2.1



LEGEND

- PROJECT BOUNDARY
- SOIL TYPE
- IMPAIRED, SPECIAL OR PROTECTED WATERS
- NATIONAL WETLANDS INVENTORY
- DWSMA, LOW VULNERABILITY
- STEEP SLOPES (>33.3%)

SOIL TYPE SUMMARY

Map Unit Symbol	Soil Name	Hyd. Soil Group
MUSYM	MUNAME	HYDGRP
Dp	DUELM	A
HuA	HUBBARD	A

NHEL - Not Highly Erodible Land
PHEL - Potentially Highly Erodible Land
HEL - Highly Erodible Land

SITE AND SOILS MAP

HORZ. 0 100 200
SCALE FEET

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PARKVIEW EAST APARTMENT COMPLEX
STORMWATER POLLUTION PREVENTION PLAN

SHEET C2.2

LEGEND

- BITUMINOUS PAVEMENT REMOVAL
- CONCRETE CURB REMOVAL
- CONCRETE PAVEMENT REMOVAL

EAST RAMSEY PARKWAY

TOWN CENTER DR

145TH AVENUE NW

SAPPHIRE STREET NW

SUNWOOD DRIVE

RHINESTONE STREET NW

OUTLOT A
AREA = 3.90 ACRES
(FUTURE SITE)

LOT 1
AREA = 5.12 ACRES
(PROPOSED SITE)

BLOCK 1

OUTLOT V
RAMSEY TOWN CENTER ADDITION

OUTLOT B

OWNER: RAMSEY HRA
PID#: 283225130007
ZONING DISTRICT: THE COR

OWNER: RAMSEY HRA
PID#: 283225420018
ZONING DISTRICT: THE COR

OWNER: HOUSING AND REDEVELOPMENT AUTHORITY
PID#: 283225420008
ZONING DISTRICT: THE COR

OWNER: RAMSEY HRA
PID#: 283225420019
ZONING DISTRICT: THE COR

OWNER: RAMSEY PROFESSIONAL CENTER LLC
PID#: 283225420020
ZONING DISTRICT: THE COR

OWNER: RAMSEY HRA
PID#: 283225140008
ZONING DISTRICT: THE COR

S 52°01'55" E 352.07

S 17°30'09" W 6.81

S 2°43'04" W 6.81

S 0°01'19" W 120.00

S 89°58'41" E 59.51

L=95.12 R=230.00
Δ=23°41'45"

S 66°16'56" E 323.42

S 22°43'04" W 213.45

L=522.66 R=573.00
CB=S 78°09'47" E CH=504.73
Δ=52°15'43"

S 00°00'00" E 323.47

N 00°00'00" W 665.93

REMOVE 14 LF
CONCRETE CURB AND GUTTER

REMOVE TREE

REMOVE TREE

REMOVE TREES

ADJUST GATE VALVES (5)

ADJUST FRAME AND
RIM CASTING

REMOVE 270 LF
BITUMINOUS CURB

REMOVE 765 SQ YD
BITUMINOUS PAVEMENT

REMOVE 53 SQ.FT.
CONCRETE WALK

REMOVE 206 SQ.FT.
CONCRETE WALK

REMOVE 54 LF
CONCRETE CURB AND GUTTER

ELECTRICAL TRANSFORMER

PROPOSED
ROADWAY
EASEMENT

FF=
868.28

FF=
868.36

FF=
867.24

FF=
867.27

CB
R=867.76
I=SE (15") 863.66

CB
R=866.62
I=NW (15") 862.47
I=SE (15") 862.39

CB
R=865.76
I=SW (18") 861.36
I=SE (18X24") 861.26
I=NW (15") 861.36

CB
R=866.86
I=NW (18X24") 860.60
I=SE (30") 860.56
I=SW (18") 860.60

CB
R=867.64
I=N (54") 860.39
I=NW (30") 860.39
I=E (42") 863.49
I=S (36") 860.49

CB
R=869.36
I=S (42") 860.61
I=W (42") 860.56
I=NE (15") 863.41

CB
R=869.24
I=NW (42") 860.79
I=S (42") 860.69

CB
R=866.40
I=SE (24") 861.46
I=W (24") 861.40

CB
R=865.56
I=NE (15") 861.46
I=NW (24") 861.43
I=S (15") 861.46

CB
R=866.57
I=N (42") 861.12
I=W (18") 861.47
I=E (24") 861.17

CB
R=864.00
I=N 857.90
I=S 857.90
I=E (27") 858.40
I=W (24") 858.55

CB
R=864.08
I=W (27") 858.40
I=SE (24") 858.42

CB
R=864.68
I=NW (24") 858.73
I=E (24") 858.78
I=S (12") 859.04

CB
R=864.21
I=W (24") 859.21
I=E (24") 859.31

CB
R=864.45
I=W (24") 859.35
I=SE (18") 859.43

CB
R=863.44
I=SW (12") 859.14

CB
R=862.72
I=NW (18") 859.66
I=E (15") 859.72

CB
R=863.44
I=N (12") 859.06
I=W (24") 858.94
I=E (24") 859.06

CB
R=864.02
I=N 857.42
I=S 857.22
I=E 858.72

CB
R=863.66
I=S (15") 860.03

CB
R=863.98
I=W (15") 860.03

SAN MH
R=865.59
I=NW (30") 853.19
I=SE (30") 853.19
I=N (10") 854.08
I=S (8") 854.51

SAN MH
R=864.77
I=N (8") 854.93
I=E (8") 854.97
I=W (8") 854.97
I=S (8") 854.79

STM MH
R=864.71
I=NE 857.21
I=SW 857.21

MH
R=865.19
I=N (8") 856.04
I=S (8") 856.01
I=E (8") 856.04
I=W (8") 856.04

SAN MH
R=870.51
I=N (18") 85
I=S (18") 85
I=NW (8") 85

SAN MH
R=866.54
I=E (8") 860.04
I=E (8")(DROP) 854.98
I=W (8") 854.33
I=N (18") 853.47
I=S (18") 853.47

STUB
INV=860.85
(PER PLAN)

DIP STUB PLUG

DIP STUB PLUG

DIP STUB PLUG

LEGEND

- CONCRETE
- ROADWAY PAVEMENT SECTION
- PARKING PAVEMENT SECTION

NOTE:
ALL DIMENSIONS ARE TO FACE OF BACK OF CURB UNLESS OTHERWISE NOTED.

EAST RAMSEY PKWY

145TH AVENUE NW

SAPPHIRE STREET NW

RHINESTONE STREET NW

CONCRETE SIDEWALK

B412 CONCRETE CURB GUTTER OUT

B618 CONCRETE CURB & GUTTER

B612 CONCRETE CURB & GUTTER (TYP)

CURB KNOCKDOWNS

CONCRETE/ RIBBON CURB FOR HANDICAP ACCESS

RETAINING WALL BEGIN

RETAINING WALL

RETAINING WALL END

TAPER CURB

375 L.F. CONCRETE VALLEY GUTTER

F.F.E= 870.00

F.F.E. =869.31

F.F.E. =869.24

L=522.66, R=573.00
CB=S 78°09'47" E, CH=504.73
Δ=52°15'43"

S 86°16'56" E 323.47

S 00°00'00" E 323.47

N 90°00'00" W 665.93

12" STM

HORZ. SCALE 0 30 60 FEET

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CODY L. HOLMES
LIC. NO. 49143 DATE 3/3/2015

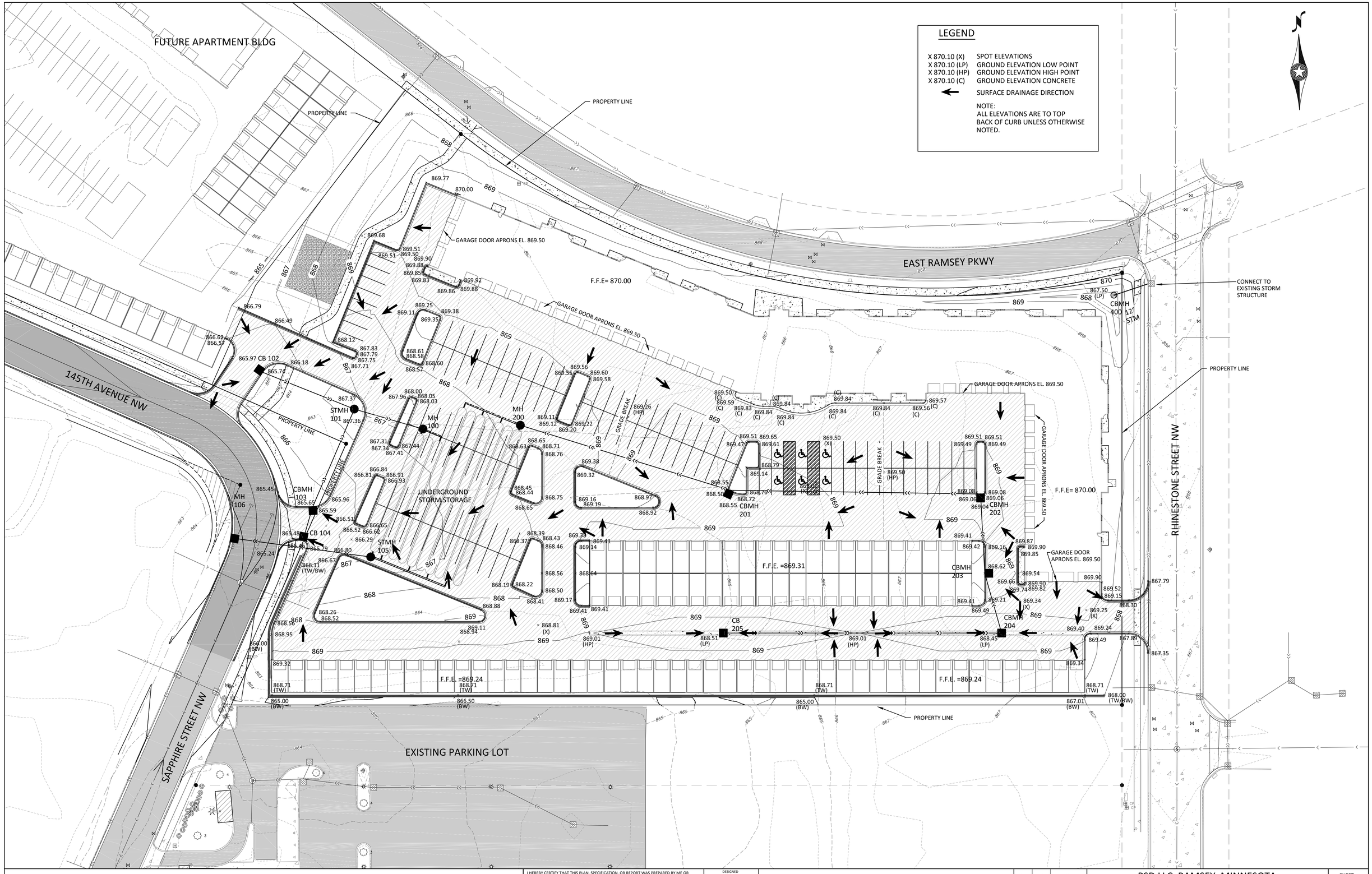
DESIGNED CLH
DRAWN JEN
CHECKED CLH

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Consulting Engineers & Surveyors
MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN BURNSVILLE, MN
WILLMAR, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN
BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

REV.	BY	DATE

PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
SITE PLAN

SHEET C2.4



0 30 60
HORZ. SCALE FEET

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REV.	BY	DATE

PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
GRADING & STORM UTILITY PLAN

SHEET C2.5

NOTES:

SILT FENCE

CONSTRUCT ROCK CONSTRUCTION ENTRANCE

F.F.E= 870.00

F.F.E= 870.00

F.F.E. =869.31

F.F.E. =869.24

F.F.E. =869.24

CB 102

STMH 101

MH 100

MH 200

CBMH 103

MH 106

CB 104

STMH 105

CBMH 201

CBMH 202

CBMH 203

CB 205

CBMH 204

CBMH 400

SILT FENCE

SILT FENCE

SILT FENCE

SILT FENCE

NOTES:

1. INSTALL EROSION CONTROL MEASURES PRIOR TO COMMENCING CONSTRUCTION.
2. KEEP ALL STREET SWEPT CLEAN OF TRACKED DIRT AND SAND.
3. ALL SILT FENCE TO BE REMOVED ONCE SEED IS ESTABLISHED.

LEGEND

- HYDROMULCH, SEED MIX 25-131 & FERTILIZER TYPE 3 (22-5-10)
- SILT FENCE
- INLET PROTECTION
- SURFACE FLOW ARROW

HORZ. SCALE 0 30 60 FEET

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BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

REV.	BY	DATE

PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
EROSION CONTROL PLAN

SHEET C2.6

LEGEND

LEGEND

SIENNA GLEN MAPLE (10' ON CENTER) (2" DIA)

BUTTERNUT HICKERY (16' ON CENTER) (2" DIA)

GYNKGO (16' ON CENTER) (2" DIA)

EAST RAMSEY PARKWAY

TOWN CENTER DR

145TH AVENUE NW

SAPPHIRE STREET NW

RHINESTONE STREET NW

SUNWOOD DRIVE

OUTLOT V
RAMSEY TOWN CENTER ADDITION

RAMSEY TOWN CENTER ADDITION

OUTLOT B

RAMSEY TOWN CENTER 11TH ADDITION

LOT 1
BLOCK 1

EXISTING BLDG.

FUTURE GARAGES

PROPOSED BUILDING

PROPOSED GARAGES

ELECTRICAL TRANSFORMER

8" WMN

12" WMN RAW

12" WMN DOM

12" DIP WMN

8" DIP WMN

HORZ. SCALE 0 40 80 FEET

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BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

REV.	BY	DATE

PSD LLC, RAMSEY, MINNESOTA

PARKVIEW EAST APARTMENT COMPLEX

LANDSCAPE TREE PLAN

SHEET C2.7

LEGEND

CONCRETE

ROADWAY PAVEMENT SECTION

PARKING PAVEMENT SECTION

EXISTING OFFICE BLDG

FF= 867.27

FF= 867.24

EXISTING BLDG.

EXISTING PARKING LOT

SAPPHIRE STREET NW

145TH AVENUE NW

CONNECT TO EXISTING SANITARY SEWER STUB

CONNECT TO EXISTING STORM SEWER BUILD NEW 84" MHCB OVER EXISTING 51" ARCH STORM

PROPOSED ROADWAY EASEMENT

F&I:
1 EA 8" X 6" TEE
1 EA 6" GV & BOX
1 EA HYDRANT
12 LF 6" WMN
STA. 4+59.97, 21.96' RT
G=866.79

F&I:
1 EA 8" GV & BOX
CONNECT TO EXISTING WMN

F&I:
1 EA 8" - 22.5 ° BEND

CONNECT TO EXISTING WMN
F&I:
1 EA 8" GV & BOX

PROPERTY LINE

PROPOSED GARAGES

PROPOSED PARKING LOT

PROPOSED UNDERGROUND STORM STORAGE

FUTURE

FUTURE GARAGES

FUTURE APARTMENT BLDG

FUTURE PARKING LOT

CB 104

STMH 105

CBMH 103

STMH 101

CB 102

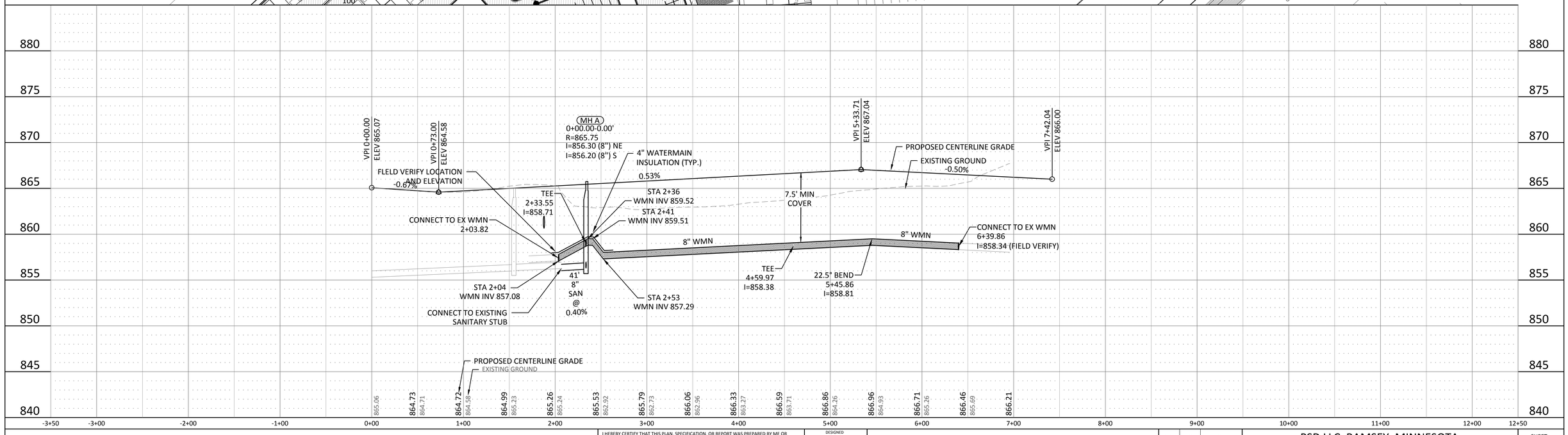
MH A

MH 100

CB 100

F&I:
1 EA 8" X 8" TEE
1 EA 8" GV & BOX
SEE SHEET C3.1 FOR WATERMAIN CONTINUATION TO APARTMENT CONNECTION

PROPERTY LINE



HORZ. 0 50 100 SCALE FEET

VERT. 0 5 10 SCALE FEET

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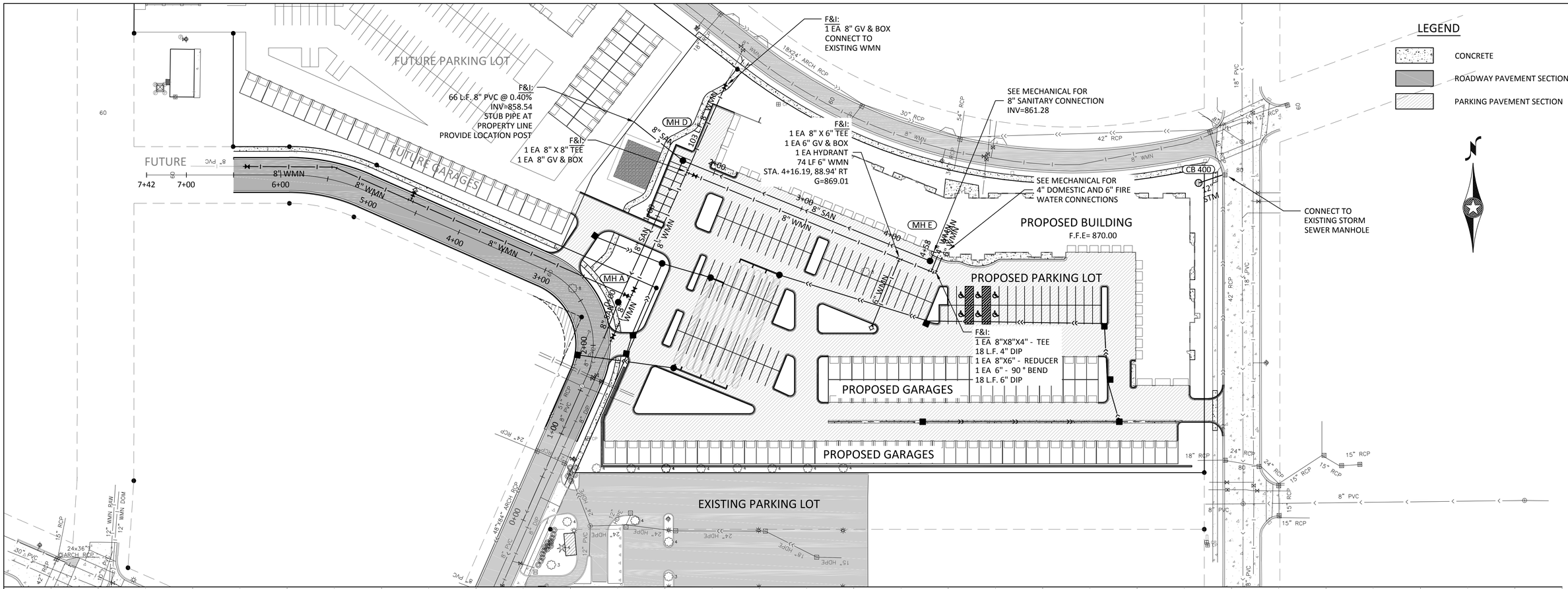
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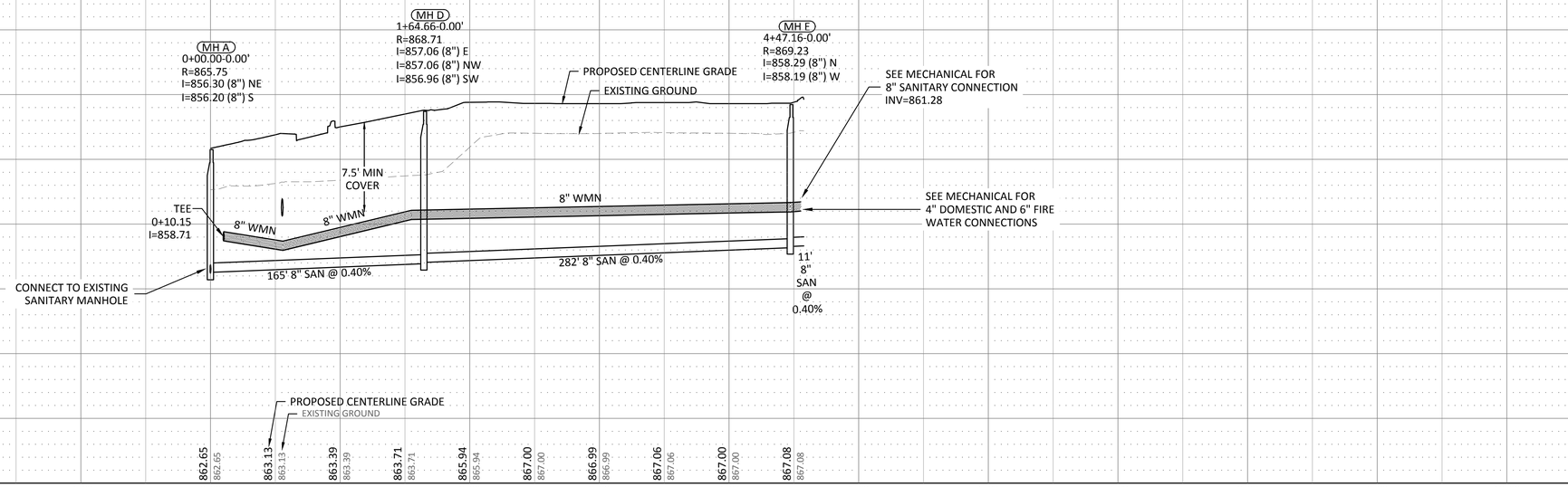
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BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

REV.	BY	DATE

PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
PLAN AND PROFILE - 145TH AVENUE NW

SHEET C3.0





HORZ. SCALE 0 50 100 FEET
VERT. SCALE 0 5 10 FEET

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LIC. NO. 49143 DATE 3/3/2015

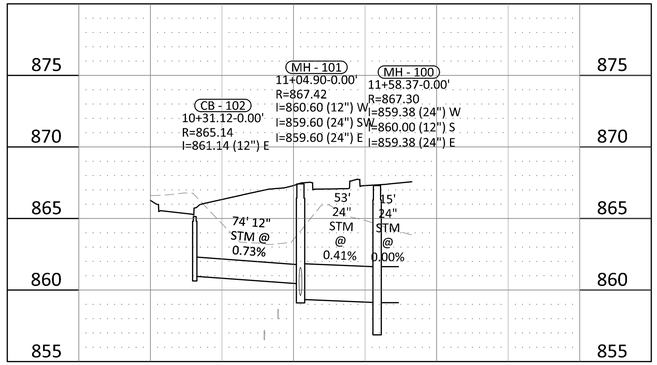
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BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

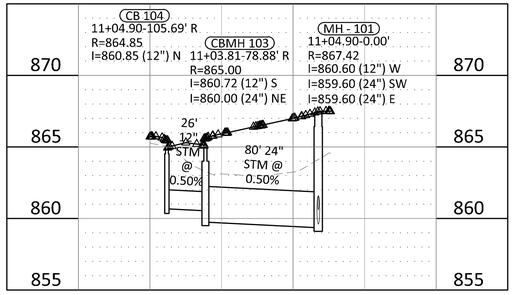
REV.	BY	DATE

PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
PLAN AND PROFILE - PARKVIEW SITE

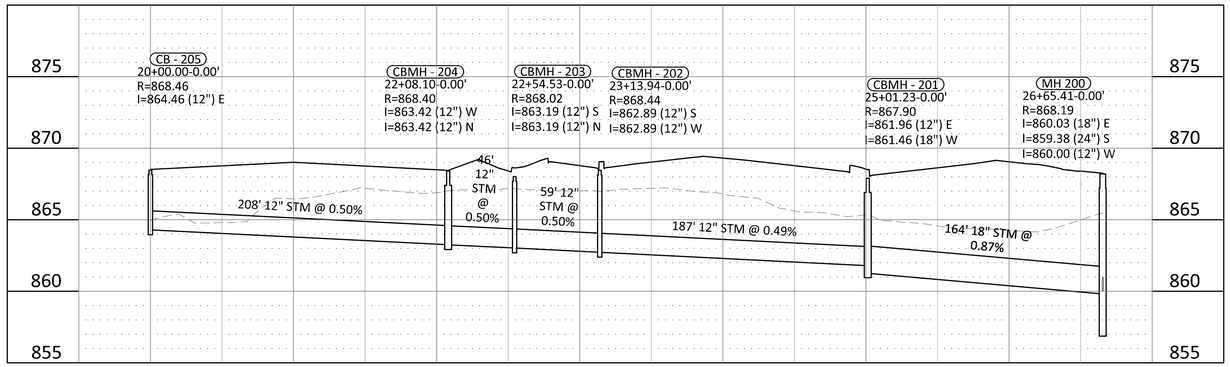
SHEET C3.1



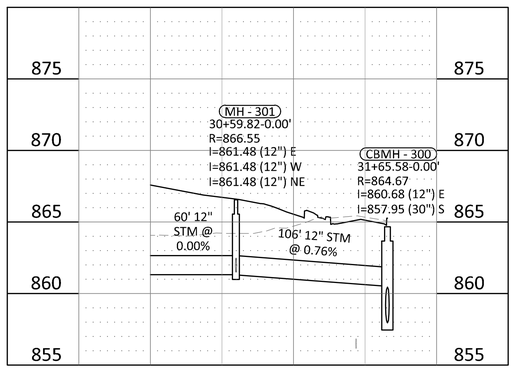
CB-102 TO CB-100



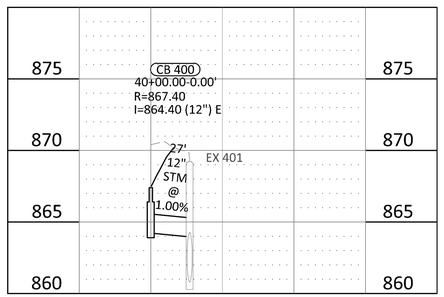
CB-104 TO CB-101



CB-205 TO CB-200



STORAGE BASIN TO CB-300



CB-400 TO EX-401

0 50 100
HORZ.
SCALE FEET

0 5 10
VERT.
SCALE FEET

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CODY L. HOLMES
LIC. NO. 49143 DATE 3/3/2015

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DRAWN JEN
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Consulting Engineers & Surveyors
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WILLMAR, MN CHASKA, MN RAMSEY, MN MAPLEWOOD, MN
BAXTER, MN ROCHESTER, MN AMES, IA SPENCER, IA

REV.	BY	DATE

PSD LLC, RAMSEY, MINNESOTA
PARKVIEW EAST APARTMENT COMPLEX
STORM SEWER PROFILES

SHEET C3.2

CITY OF RAMSEY LAND USE APPLICATION
TECHNICAL REVIEW FILE

DATE	3/27/15	**PROJECT ADDRESS**	TBD
PROJECT. TITLE	PARKVIEW EAST		
ESCROW #	114584		
DEPARTMENT:	Community Development: Planning Division (Landscape Plan & Environmental Resources)		
TECHNICAL REVIEWER:	Name: Chris Anderson, City Planner Phone: 763-433-9817 Email: canderson@cityoframsey.com		

The COR Design Framework outlines the required streetscape elements such as tree species, tree spacing, boulevard width, and sidewalk width based on the street hierarchy. There site abuts three (3) different streets, each with a different designation (Downtown, Connector, and Parkway). However, along Rhinestone Street, there is existing sidewalk and boulevard, which shall be utilized. Similarly, along Sapphire Street south of the project site, sidewalk and boulevard dimensions have already been established and the intention should be to mimic those to maintain a consistent appearance. Along Ramsey Parkway, boulevard and sidewalk width both should be six (6) feet. Finally, tree spacing for streetscape plantings should be between thirty (30) and thirty-five (35) feet.

We offer the following comments regarding the Landscape Plan prepared by Bolton & Menk, Inc. and dated March 3, 2015:

- The width of the boulevard area along Ramsey Parkway is not specified on the plans. The width should be at least six (6) feet and the additional width should be toward the building not the curb. This may require shifting the sidewalk closer to the building but that would benefit the project by improving the build to requirement (which is measure from edge of sidewalk). If this results in the public sidewalk being partially on private property, a permanent public easement over that portion of the sidewalk shall also be granted to the City for public purposes. *Please revise Sheet C2.4 to identify the boulevard width as six (6) feet*.
- The plans show a sidewalk connecting Ramsey Parkway and 145th Ave, which was requested by the City. It is presumed that park patrons (or other public) may traverse this sidewalk and thus, it would be beneficial to encumber this with a permanent public easement.
- Sidewalk width along 145th Ave should be increased to six (6) feet with the expansion being toward the future building (away from the curb). *Please revise Sheet C2.4 to accordingly.*
- The boulevard area must be finished with topsoil and sod and the developer (and eventually the management company) shall be responsible for its establishment (e.g.

watering). *Please revise Sheet C2.7 to specify that boulevards will be established with topsoil and sod.*

- *Planting details must be added to Sheet C2.7 to include the following*
  - *Planting depth shall be such that the 1st set of primary roots is at finished grade*
  - *Only prune out dead/broken/deformed branches at time of installation*
  - *Remove upper 1/3 of wire basket and burlap after being placed in planting hole*
  - *2-4 inches of wood chip mulch shall be included around all trees. Mulch shall not be piled against the trunk of trees.*
- The proposed street trees are too close together, the overall number should be reduced so that the spacing is equal to 30-35 feet on center. *Please revise Sheet C2.7 to reflect the proper spacing and update the quantities for each species accordingly.*
- All plantings shall be outside the vision clearance triangle at all intersections and access points. Definition of the vision clearance triangle can be found in City Code Section 117-348 (g). *Please revise Sheet C2.7 to identify the vision clearance triangle at all intersections and access points and ensure that no plantings are within this area.*
- Street trees should be planted with one (1) species per block or, if a standard block does not exist, such as along Ramsey Parkway and Rhinestone Street, in blocks or groups consisting of 5-6 trees of the same species. *Please revise Sheet C2.7 to reflect the street trees planted in linear groups of 5-6 trees per one species.*
- Street trees shall have a minimum branch height of not less than five (5) feet. *Please revise Sheet C2.7 to include this note.*
- There are no foundation plantings or internal landscape elements shown on the plan. Are any plantings proposed? How about within any of the parking lot islands?
- It appears that there will be a very narrow strip of vegetation between the sidewalk and the retaining wall along Sapphire Street. It would be recommended to eliminate that and just widen the sidewalk to abut the wall.
- The plan must be revised to identify turf establishment with sod. The notes refer to both sod and seed but there is no legend or labels to determine which is being used and where. Please note that any alternative to the sod requirement requires City Council approval.
- Upon acceptance of landscaping by City, a two (2) year maintenance guarantee is required to ensure survival of plantings.
- The project is subject to the City's topsoil requirement, which states that all disturbed areas not otherwise improved with walkways, driveway, home and other impervious surfacing, shall receive four (4) inches of topsoil meeting the City's topsoil specification. A topsoil inspection is required prior to landscaping being installed and copies of the load tickets are required as well. This is reviewed at time of Building Permit Application and request for Certificate of Occupancy. *Please update the Landscape Installation Notes to include this requirement.*

- The plans do not indicate whether an irrigation system will be installed or not. Establishment of the streetscape (trees and sod), including watering, is the responsibility of the Developer (and eventually the property management company). In ground irrigation within the boulevard area is subject to review and approval by the City.

Please submit a revised landscaping plan that addresses these matters.

Tree Preservation: This site is devoid of any significant tree cover and therefore, no tree preservation plan is necessary.

Stormwater: It appears that the site will utilize a subsurface stormwater system to achieve the required infiltration of the first one (1) inch of rainfall in accordance with the Lower Rum River Water Management Organization's 3rd Generation Plan. The system appears to be designed with an overflow outlet that allows runoff from larger events to outlet into the existing storm sewer infrastructure in Sapphire St where it will eventually be routed to a regional pond. The Engineering Division will be completing a more comprehensive review of the grading/drainage plans.

Environmental Policy Board (EPB) **5. 4.**

Meeting Date: 03/30/2015

By: Chris Anderson, Community Development

Information

Title:

Review Landscape and Storm Water Management Plan Associated with a Site Plan Application for Sunwood Village: Case of Common Bond

Purpose/Background:

The City has received an application for Sketch Plan, Final Plat and Site Plan review for Sunwood Village, a proposed three (3) story apartment building located on the property directly west of Residence at the COR, between Sunwood Drive and Veterans Drive (the "Subject Property"). The application submittal includes a Landscape Plan in accordance with City Code. There are no significant trees on the Subject Property and thus a Tree Preservation Plan is not required.

Observations/Alternatives:

Within the COR, landscaping standards differ from the other zoning districts. The focus is more on the streetscape elements with a greater degree of creativity allowed for internal landscaping. Along Sunwood Drive, the streetscape has already been established and thus, no additional plantings are required here. Streetscape plantings along Veterans Drive is proposed but is located on the backside of the sidewalk rather than within the boulevard. This is consistent with the plantings installed on the adjacent property and also provides more rooting volume per tree.

The interior landscaping consists of a mix of deciduous and coniferous trees and shrubs and also includes a variety of perennials as well. Species are generally acceptable with the exception of Burgundy Carousel Barberry. This is a cultivar of Japanese Barberry, which is on the City's prohibited list, and should be replaced with an alternative. Tree and shrub sizes are also acceptable. The Landscape Plan is generally acceptable with necessary revisions identified in the Staff Review Letter, which is attached to this case.

Best Management Practices

There are two BMPs that are proposed as part of this project, both related to stormwater. An underground cistern is proposed to capture the first inch of rainfall per the LRRWMO standards. However, since the Subject Property is within a ten (10) year capture zone of one of the community wells, infiltration is not permitted. Thus, the cistern will capture and hold the runoff, which will be used to irrigate the site. The cistern is equipped with an overflow outlet that will connect to the storm sewer infrastructure. So, if the cistern is at capacity, all excess runoff will be piped to the regional stormwater pond serving the COR. It is further noted that this stormwater is utilized to maintain water levels in The Draw Park and Amphitheater, and subsequently utilized in the irrigation system for that park.

The second BMP is the use of a tree trench. This is essentially a lined trench that is designed to hold water and make it available for trees and other vegetation. This too will have an overflow outlet so that excess runoff will enter the traditional storm sewer infrastructure and end up in the regional stormwater pond. Both proposed BMPs aim to conserve water by capturing and utilizing rainfall to help irrigate the site.

Staff recommends approval of the Landscape Plan and supports the incorporation of the BMPs into the project.

Funding Source:

All costs associated with this request are the responsibility of the Applicant.

Action:

Motion to recommend approval of the Landscape Plan contingent upon compliance with the Staff Review Letter dated March 27, 2015.

Attachments

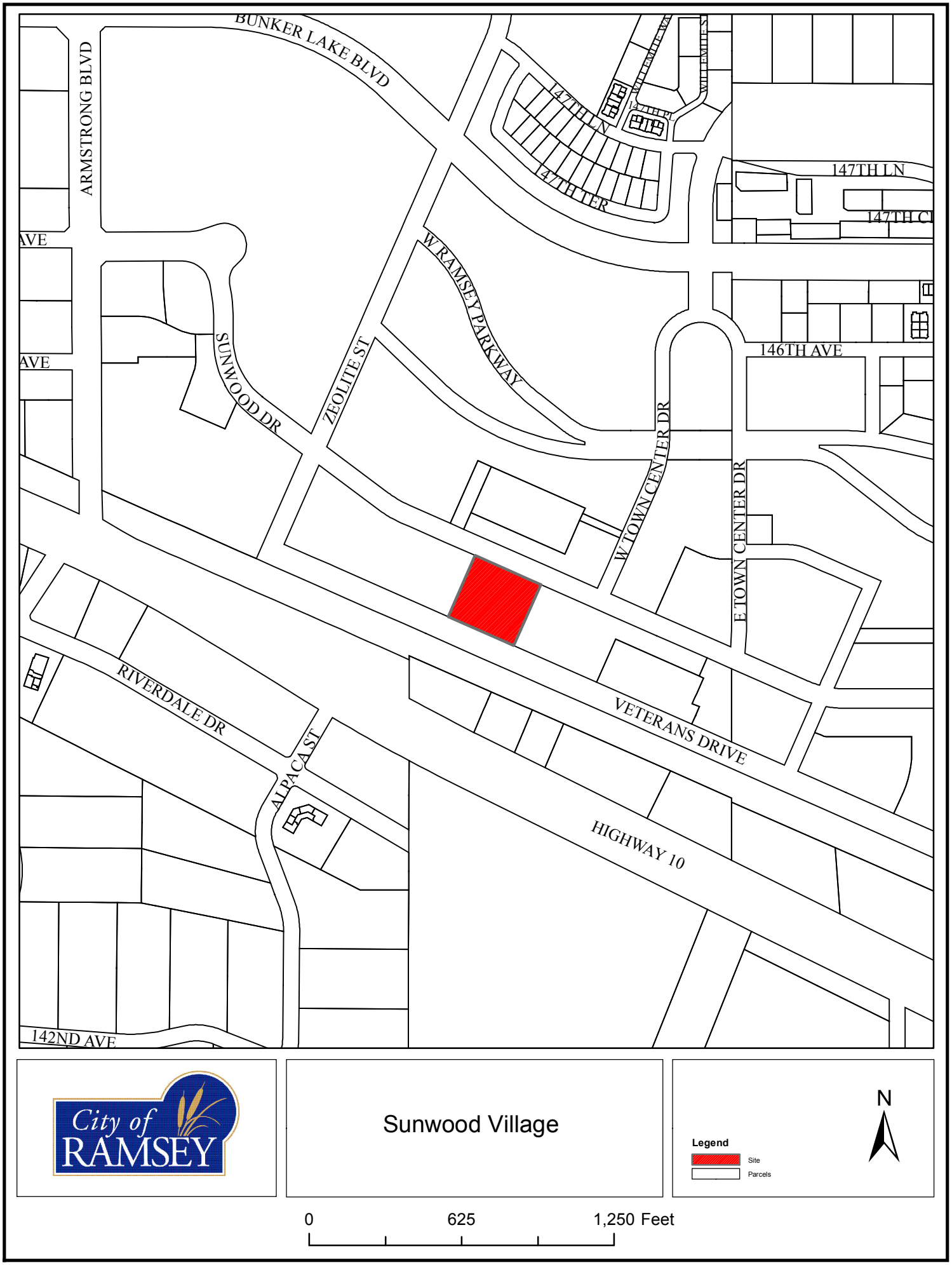
Site Location Map

Plan Set

Staff Review Letter Dated March 27, 2015

Form Review

Inbox	Reviewed By	Date
Tim Gladhill	Tim Gladhill	03/26/2015 03:02 PM
Chris Anderson (Originator)	Chris Anderson	03/26/2015 03:07 PM
Form Started By: Chris Anderson		Started On: 03/25/2015 03:43 PM
Final Approval Date: 03/26/2015		


BUNKER LAKE BLVD
ARMSTRONG BLVD
147TH LN
147TH TER
147TH LN
147TH CT
W RAMSEY PARKWAY
SUNWOOD DR
ZEOLITE ST
146TH AVE
W TOWN CENTER DR
E TOWN CENTER DR
RIVERDALE DR
ALPACA ST
VETERANS DRIVE
HIGHWAY 10
142ND AVE
City of RAMSEY
Sunwood Village
Legend
Site
Parcels
N
0
625
1,250 Feet

SUNWOOD DRIVE

(80 FOOT WIDE PUBLIC RIGHT OF WAY)

TRASH CAN

BENCH

TRASH CAN

FH

5'-0" SETBACK

48'-0" SETBACK

63'-5 3/4"

121'-4"

3-STORY
47 UNIT
APARTMENT BUILDING

PLANTER, TYP.

147'-8"

BENCH

8

14

9

60 PARKING STALLS

7

7

15

ASPHALT PAVING
SEE CIVIL

PLAY AREA

HC

63'-5 3/4"

34'-10" SETBACK

OUTLOT B

OUTLOT

LOT 3

BLOCK

SUNWOOD VILLAGE	COMM. NO.: 1408
ZONING DATA	
CURRENT ZONING:	COR-1 Sub-District
SITE ADDRESS:	OUTLOT A, COR ONE, Anoka County, Minnesota
PROPOSED USE:	MULTI-FAMILY RESIDENTIAL: 3-Story, 47 UNIT APARTMENT BUILDING
BASE SITE AREA:	80,637 S.F. (1.85 acres) PER 12/14/2014 BOUNDARY & TOPO SURVEY
NET DENSITY:	25.4 UNITS PER ACRE
GROSS BUILDING AREAS:	FIRST FLOOR: 17,696 S.F. SECOND FLOOR: 17,696 S.F. + THIRD FLOOR: 17,696 S.F. TOTAL: 53,088 S.F.
BUILDING COVERAGE:	18,055 S.F. (23% OF SITE)
IMPERVIOUS COVERAGE:	BUILDING = 18,055 S.F. + DRIVES & WALKS = 30,279 S.F. TOTAL IMPERVIOUS = 48,334 S.F. (60% OF SITE)

CIVIC CENTER DRIVE

(100 FOOT WIDE PUBLIC RIGHT OF WAY)

1 SITE PLAN
1/16" - 1'-0"

N

PRELIMINARY
NOT FOR
CONSTRUCTION

ISSUE & REVISION
PRELIMINARY- 5/6/2015

COMM #1408

CIVIL & LANDSCAPE:
Loucks Associates
7200 Hemlock Lane
Suite 300
Maple Grove, MN 55369
Tel: 763.424.5505

CONTRACTOR:
Watson-Forsberg
4645 Nathan Lane
Suite 110
Minneapolis, MN 55428
Tel: 952.564.3878

CommonBond communities
1080 Montreal Avenue
St Paul MN 55116
Phone: 651-291-1750
Fax: 651-290-0693
Web: www.commonbond.org

SUNWOOD VILLAGE
City of Ramsey, MN
City Parcel #47 (Outlot A)

1201 HAWTHORNE AVENUE
MINNEAPOLIS, MINNESOTA 55403
TEL: 612-332-5420
FAX: 612-332-5428
WWW.MILLERHANSON.COM

MILLER HANSON PARTNERS

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT, WAS PREPARED, UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA

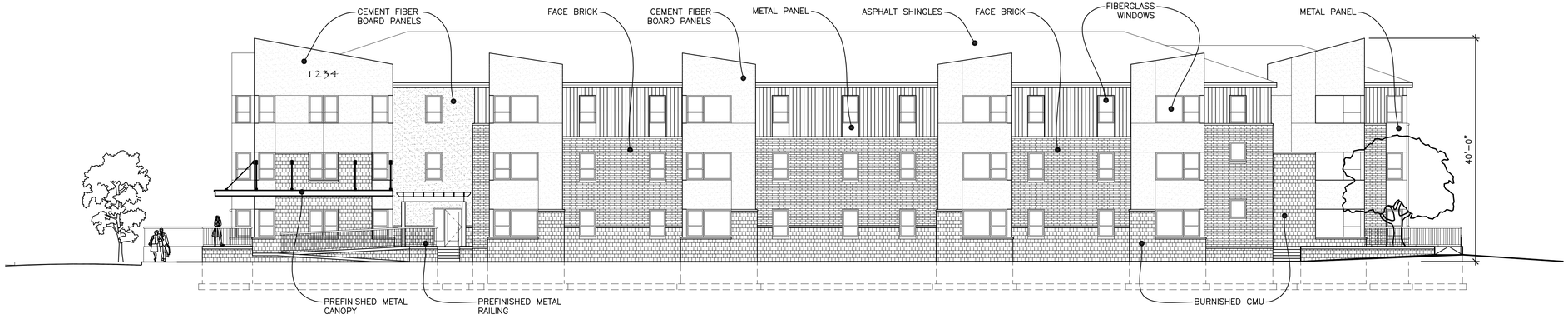
NAME
DATE:

NO. XXXX

SITE PLAN

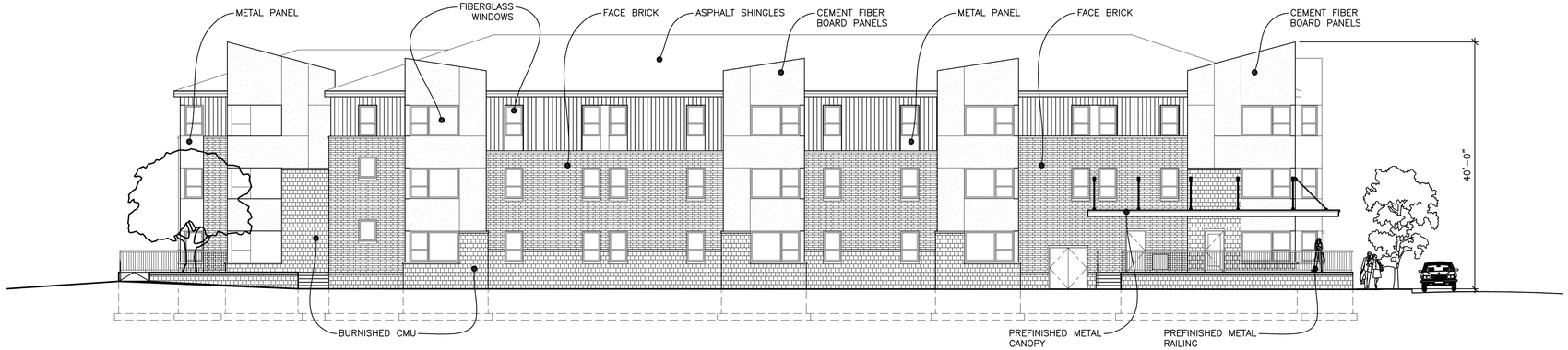
A200

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1 NORTH EXTERIOR ELEVATION

3/32" = 1'-0"



2 EAST EXTERIOR ELEVATION

3/32" = 1'-0"

PRELIMINARY
NOT FOR
CONSTRUCTION

ISSUE & REVISION
PRELIMINARY- 5/6/2015

COMM #1408

CIVIL & LANDSCAPE:
Loucks Associates
7200 Hemlock Lane
Suite 300
Maple Grove, MN 55369
Tel: 763.424.5505

CONTRACTOR:
Watson-Forsberg
6465 Wayzata Blvd.
Suite 110
Minneapolis, MN 55426
Tel: 952.564.3878

CommonBond communities
1080 Montreal Avenue
St Paul MN 55116
Phone: 651-291-1750
Fax: 651-290-0693
Web: www.commonbond.org

SUNWOOD VILLAGE
City of Ramsey, MN
City Parcel #47 (Outlot A)

1201 HAWTHORNE AVENUE
MINNEAPOLIS, MINNESOTA 55403
TEL: 612-332-5420
FAX: 612-332-5428
WWW.MILLERHANSON.COM
MILLER HANSON PARTNERS

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA

NAME
DATE
NO. XXXX

EXTERIOR ELEVATIONS

A500

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BOUNDARY & TOPOGRAPHIC SURVEY FOR:
CommonBond Communities

LEGAL DESCRIPTION:

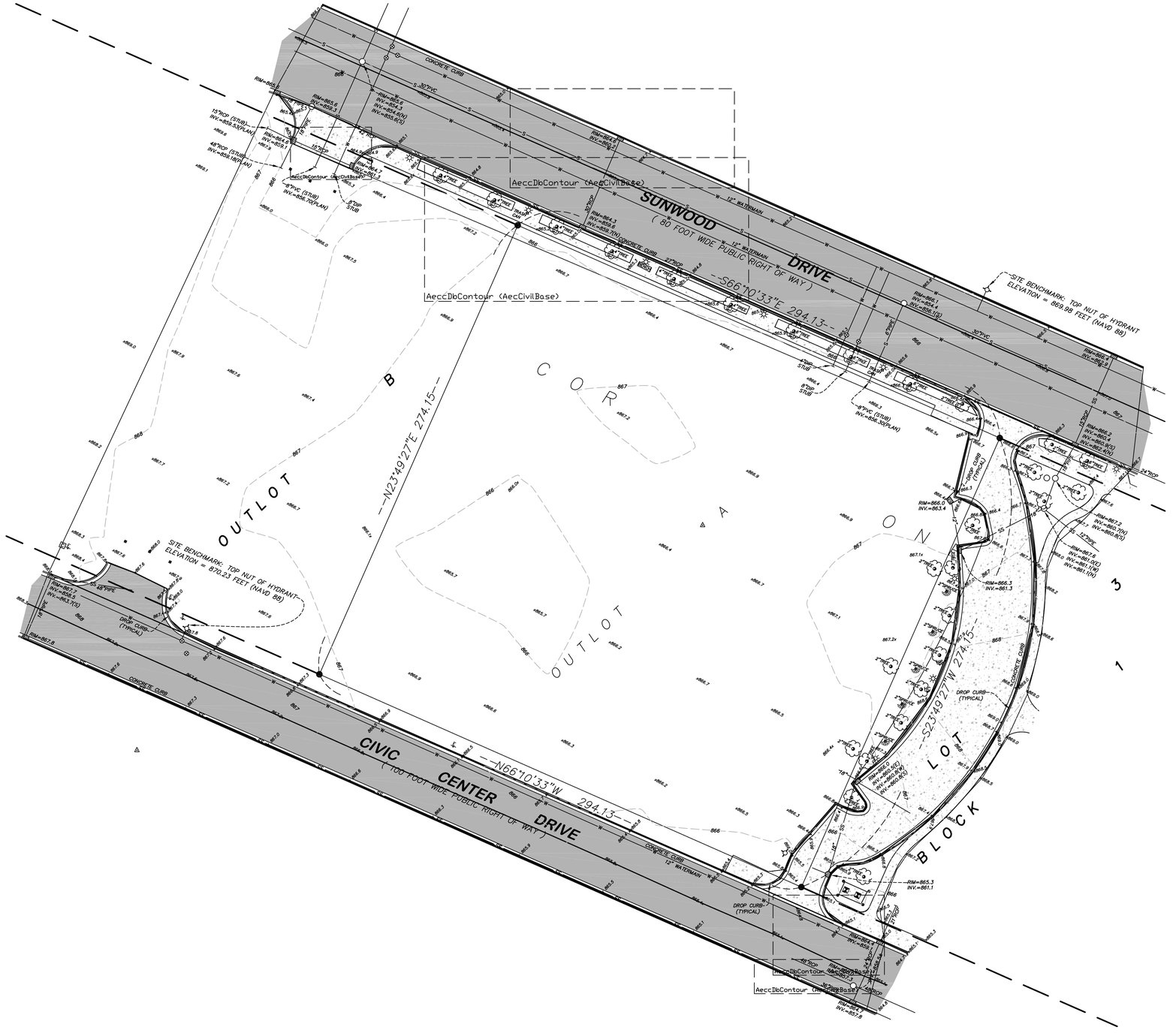
(Per Anoka County Property Information Web Site)

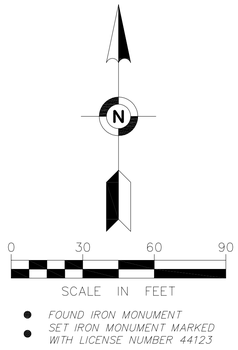
Outlot A, COR ONE, Anoka County, Minnesota.

Parcel Number: 28-32-25-31-0019

NOTES:

1. The orientation of this bearing system is based on the Anoka County Coordinate Grid (NAD 83-96 Adj.).
2. The total area of the property described hereon is 80,637 square feet or 1.85 acres.
3. No title work was provided in the preparation of this survey to verify ownership, the legal description, or the existence of any easements or encumbrances to the property.
4. Existing utilities, services and underground structures shown hereon were located based upon observed evidence. Verification and location of all utilities and services should be obtained from the owners of the respective utilities prior to any design, planning or excavation.
5. BENCHMARK: Top nut of the hydrant located on the northerly side of Civic Center Drive approximately 80 feet west of the most westerly property corner. Elevation =870.23 feet (NAVD 88)





FOUND IRON MONUMENT
SET IRON MONUMENT MARKED WITH LICENSE NUMBER 44123

LEGEND

- MANHOLE
- CATCH BASIN
- GATE VALVE
- HYDRANT
- ELECTRIC BOX
- ELECTRIC OUTLET POST
- LIGHT
- ELECTRIC SIGN
- COMMUNICATION BOX
- FIBER OPTIC SIGN
- SIGN
- BENCH
- GUARD POST
- WOOD POST
- HANDICAPPED PARKING SIGN
- STORM SEWER
- SPOT ELEVATION
- EXISTING CONTOUR LINE
- TREE
- BITUMINOUS SURFACE
- CONCRETE SURFACE

CERTIFICATION:

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

Date of survey: December 14, 2014.
Date of signature: December 30, 2014.

Brent R Peters
Minnesota License No. 44123

FIELD BOOK	PAGE
2870	46

DRAWING NAME: 1408-Survey-141231.dwg
JOB NO. 36152
FILE NO. 3291

FIELDWORK CHIEF: L.S.
DRAWN BY: kgf
CHECKED BY: BRP

REVISIONS		
NO.	DATE	DESCRIPTION

BOUNDARY AND TOPOGRAPHIC SURVEY

SURVEY FOR:
CommonBond Communities

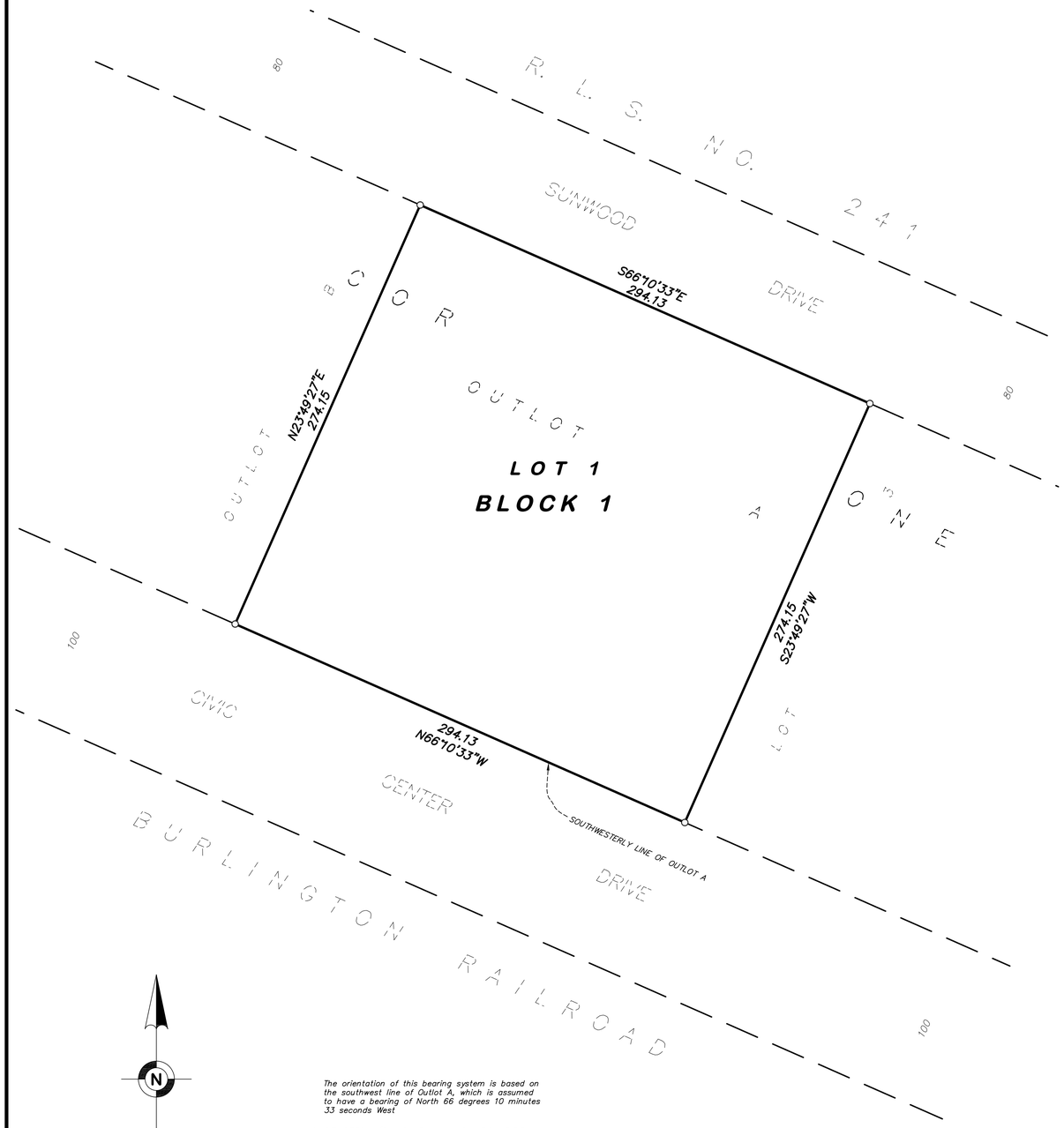
PROPERTY ADDRESS:
SUNWOOD DRIVE
RAMSEY, MINNESOTA 55303

Egan, Field & Nowak, Inc.
land surveyors since 1872
1229 Tyler Street NE, Suite 100
Minneapolis, Minnesota 55413
PHONE: (612) 466-3300
FAX: (612) 466-3383
WWW.EFNSURVEY.COM

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Printed 1/27/2015 at 3:36 PM by James Parrish

SUNWOOD VILLAGE



The orientation of this bearing system is based on the southwest line of Outlot A, which is assumed to have a bearing of North 66 degrees 10 minutes 33 seconds West

○ *DENOTES 1/2 INCH BY 14 INCH IRON PIPE MONUMENT SET & MARKED BY LICENSE 44123*

KNOW ALL MEN BY THESE PRESENTS: That CB Ramsey Housing Limited Partnership, a Minnesota limited partnership, fee owner of the following described property situated in the City of Ramsey, County of Anoka, State of Minnesota:

Outlot A, COR ONE, according to the recorded plat thereof, City of Ramsey

Has caused the same to be surveyed and platted as SUNWOOD VILLAGE.

In witness whereof said CB Ramsey Housing Limited Partnership, a Minnesota limited partnership, has caused these presents to be signed by its proper officer this _____ day of _____ , 201__.

Signed: CB Ramsey Housing Limited Partnership, a Minnesota limited partnership
By: _____, its General Partner

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____ , 201___, by _____, _____ of CB Ramsey Housing Limited Partnership, a Minnesota limited partnership, on behalf of the company.

_____

_____
Notary Public _____ County, _____
My commission expires _____

I, Brent R. Peters, Professional Land Surveyor, do hereby certify that I have surveyed or directly supervised the survey of the property described on this plat; prepared this plat or directly supervised the preparation of this plat; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on this plat have been correctly set; that all water boundaries and wet lands, as defined in Minnesota Statutes Section 505.01, Subd. 3, as of the date of the surveyor's certification are shown and labeled on this plat; and all public ways are shown and labeled on this plat.

Dated this _____ day of _____ , 201___.

_____
Brent R. Peters, Land Surveyor
Minnesota License No. 44123

STATE OF _____
COUNTY OF _____

The foregoing Surveyor's Certificate was acknowledged before me this _____ day of _____ , 201___, by Brent R. Peters, Land Surveyor, Minnesota License No. 44123.

_____

_____
Notary Public _____ County, _____
My commission expires _____

CITY COUNCIL, CITY OF RAMSEY, MINNESOTA

This Plat of SUNWOOD VILLAGE was approved and accepted by the City Council of the City of Ramsey, Minnesota at a regular meeting thereof held this _____ day of_____ , 201___, and said plat is in compliance with the provisions of Minnesota Statutes, Section 505.03, Subd. 2, have been fulfilled.

_____, Mayor _____, Clerk

COUNTY AUDITOR/TREASURER

Pursuant to Minnesota Statutes, Section 505.021, Subd. 9, taxes payable in the year _____ on the land hereinbefore described have been paid. Also, pursuant to Minnesota Statutes, Section 272.12, there are no delinquent taxes and transfer entered this _____ day of _____ , 201___.

_____
Property Tax Administrator

By: _____, Deputy

COUNTY SURVEYOR

I hereby certify that in accordance with Minnesota Statutes, Section 505.021, Subd. 11, this plat has been reviewed and approved this _____ day of _____, 201___.

_____
Larry D. Hoium
Anoka County Surveyor

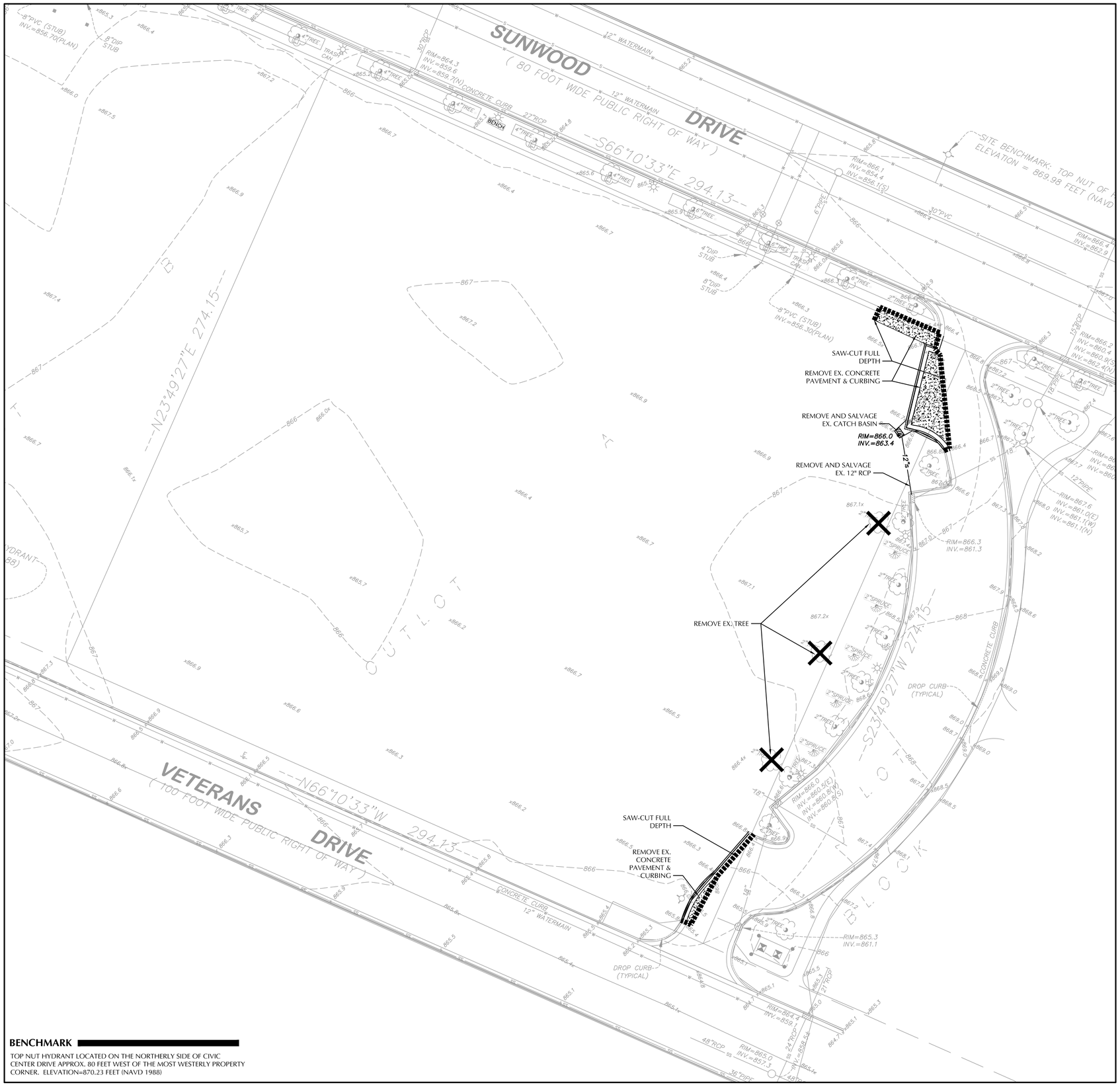
REGISTRAR OF TITLES
County of Anoka, State of Minnesota

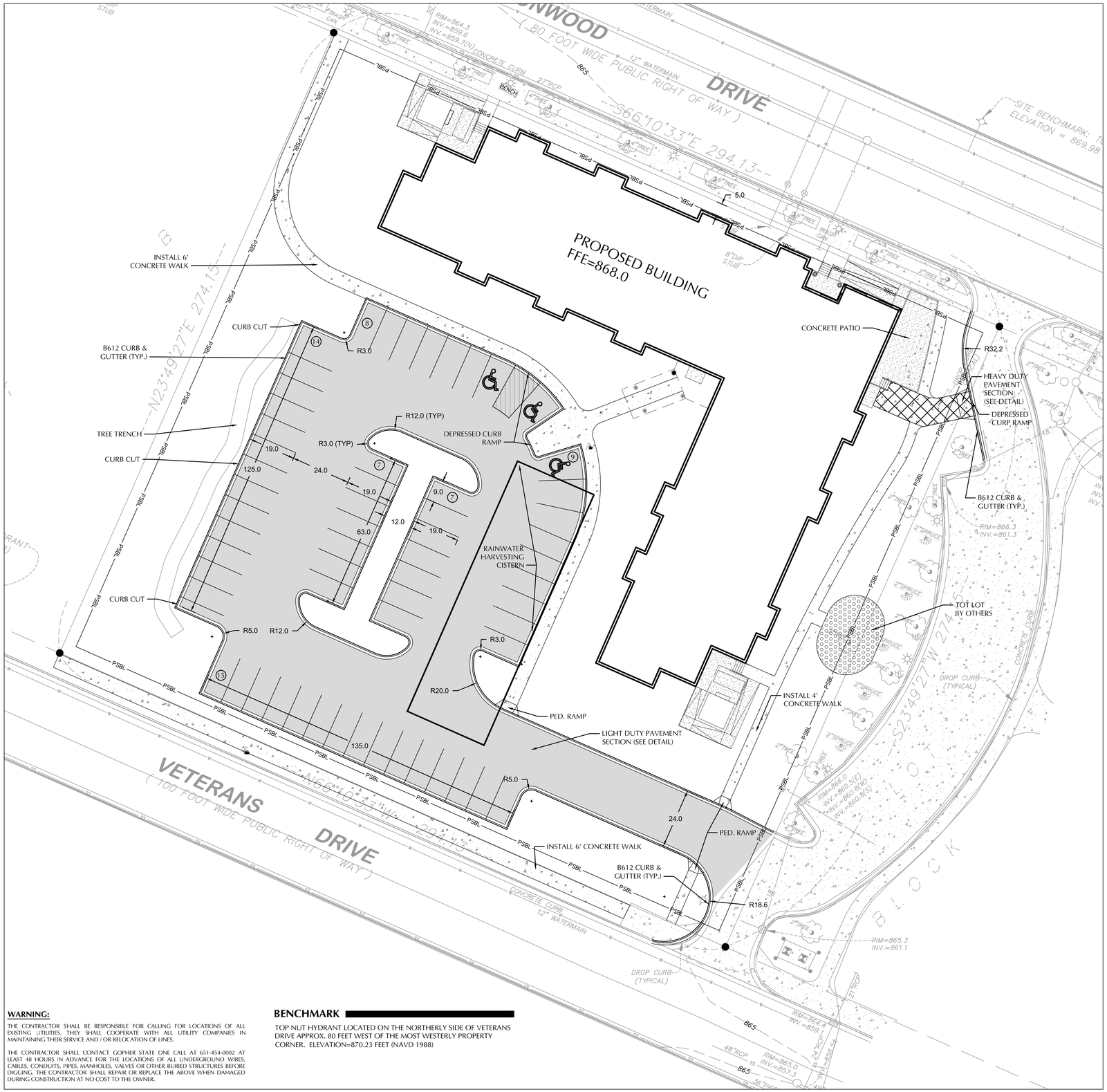
I hereby certify that this plat of SUNWOOD VILLAGE was filed in the office of the Registrar of Titles for public record this _____ day of _____ , 201___, at _____ o'clock __. M., and was duly filed in Book _____ of Plats, Pages _____ and _____ as Document Number _____ .

_____
Registrar of Titles

By _____, Deputy

Egan, Field & Nowak, Inc.
land surveyors since 1872


SUNWOOD DRIVE
(80 FOOT WIDE PUBLIC RIGHT OF WAY)
-S66°10'33"E 294.13-
VETERANS DRIVE
(100 FOOT WIDE PUBLIC RIGHT OF WAY)
-N66°10'33"W 294.13-
-N23°49'27"E 274.15-
-S23°49'27"W 274.15-
SITE BENCHMARK: TOP NUT OF
ELEVATION = 869.98 FEET (NAVD
SAW-CUT FULL DEPTH
REMOVE EX. CONCRETE PAVEMENT & CURBING
REMOVE AND SALVAGE EX. CATCH BASIN
RIM=866.0
INV.=863.4
REMOVE AND SALVAGE EX. 12" RCP
REMOVE EX. TREE
SAW-CUT FULL DEPTH
REMOVE EX. CONCRETE PAVEMENT & CURBING
12" WATERMAIN
30"RCP
27"RCP
8"DIP STUB
4"DIP STUB
8"PVC (STUB)
INV.=856.70(PLAN)
8"PVC (STUB)
INV.=856.30(PLAN)
6"PIPE
30"PVC
15"RCP
12"PIPE
18"
24"RCP
48"RCP
36"PIPE
CONCRETE CURB
DROP CURB (TYPICAL)
TRASH CAN
BENCH
RIM=864.3
INV.=858.6
INV.=858.7(N)
RIM=866.1
INV.=854.4
INV.=856.1(S)
RIM=866.4
INV.=862.9
RIM=866.2
INV.=860.4
INV.=862.4(N)
RIM=866.0 S(E)
INV.=860.8(W)
INV.=860.9(S)
RIM=865.3
INV.=861.1
RIM=866.3
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RIM=867.6
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INV.=861.1(W)
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RIM=869.4
INV.=868.7
RIM=869.5
INV.=868.8
RIM=869.6
INV.=868.9



WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

BENCHMARK

TOP NUT HYDRANT LOCATED ON THE NORTHERLY SIDE OF VETERANS DRIVE APPROX. 80 FEET WEST OF THE MOST WESTERLY PROPERTY CORNER. ELEVATION=870.23 FEET (NAVD 1988)

CALL BEFORE YOU DIG!

Gopher State One Call

TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

GENERAL NOTES

1. MINNESOTA STATE STATUTE REQUIRES NOTIFICATION PER "GOPHER STATE ONE CALL" PRIOR TO COMMENCING ANY GRADING, EXCAVATION OR UNDERGROUND WORK.

2. THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM THE PLANS.

3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASE OF THIS PROJECT. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGES TO ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASE OF THIS PROJECT.

4. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE APPROPRIATE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARDS.

5. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

6. PEDESTRIAN ACCESS ALONG SUNWOOD DR. MUST REMAIN OPEN. THE CONTRACTOR SHALL PROVIDE AN ACCESS PLAN ACCEPTABLE TO THE CITY TO MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES. THE EXISTING PARALLEL PARKING AREA ALONG SUNWOOD DR. MAY BE USED AS A DESIGNATED TEMPORARY PEDESTRIAN ACCESS. THIS AREA MUST BE BARRICADED FROM THE TRAFFIC LANE, STRIPED AND SIGNED AS NECESSARY.

7. THE DUTY OF THE ENGINEER OR THE DEVELOPER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTORS PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTORS SAFETY MEASURES IN, OR NEAR THE CONSTRUCTION SITE.

8. BEFORE BEGINNING CONSTRUCTION THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH NPDES PERMIT REQUIREMENTS, BEST MANAGEMENT PRACTICES, STATE AND LOCAL REQUIREMENTS AND THE DETAILS SHOWN ON THE DETAIL SHEET(S) OF THE PROJECT PLANS.

9. ALL CONSTRUCTION PERMITS, APPLICATIONS AND FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

10. ALL ENTRANCES AND CONNECTIONS TO CITY STREETS SHALL BE CONSTRUCTED PER THE REQUIREMENTS OF THE STATE AND LOCAL JURISDICTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND NOTIFICATIONS AS REQUIRED.

11. ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE CITY. THIS SHALL INCLUDE ALL SIGNAGE, BARRICADES, FLASHERS AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES.

12. ADJUST ALL EXISTING STRUCTURES, BOTH PUBLIC AND PRIVATE TO THE PROPOSED GRADES WHERE DISTURBED AND COMPLY WITH ALL REQUIREMENTS OF THE UTILITY OWNERS. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC LOADING.

13. EXISTING TOPOGRAPHY AND SITE SURVEY INFORMATION PROVIDED BY EGAN, FIELD AND NOWAK, INC., DATED 12-30-14.

1. ALL PAVING, CONCRETE CURB, GUTTER AND SIDEWALK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN PER THE DETAIL SHEET(S) AND STATE/LOCAL JURISDICTION REQUIREMENTS.

2. ACCESSIBLE PARKING AND ACCESSIBLE ROUTES SHALL BE PROVIDED PER CURRENT ADA STANDARDS AND LOCAL/STATE REQUIREMENTS.

3. ALL CURB DIMENSIONS SHOWN ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

4. ALL BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF WALL UNLESS OTHERWISE NOTED.

5. TYPICAL PARKING STALL IS 9' X 19' UNLESS OTHERWISE NOTED.

6. ALL CURB TERMINI TO HAVE A 3 FOOT TAPER UNLESS OTHERWISE NOTED.

7. SEE SITE ELECTRICAL PLAN FOR SITE LIGHTING.

8. SEE ARCHITECTS PLANS FOR ADDITIONAL INFORMATION.

SITE PLAN LEGEND

- LIGHT DUTY BITUMINOUS PAVEMENT
- HEAVY DUTY BITUMINOUS PAVEMENT
- CONCRETE SIDEWALK
- CONCRETE PAVEMENT

0 20 40
SCALE IN FEET

TOTAL AREA:	1.85 AC
EXISTING IMPERVIOUS AREA:	0.0 AC (0%)
PROPOSED IMPERVIOUS AREA:	1.2 AC (70%)

TOTAL PARKING:	60 STALLS
ACCESSIBLE PARKING:	3 STALLS

PRELIMINARY
NOT FOR
CONSTRUCTION

ISSUE & REVISION
PRELIMINARY: 3/3/2015

COMM #1408

CONTRACTOR:
Watson-Forsberg
6465 Wayzata Blvd.
Suite 110
Minneapolis, MN 55426
Tel: 952.564.3878

CIVIL & LANDSCAPE:
Loucks Associates
7200 Hemlock Lane
Suite 300
Maple Grove, MN 55369
Tel: 763.424.5505

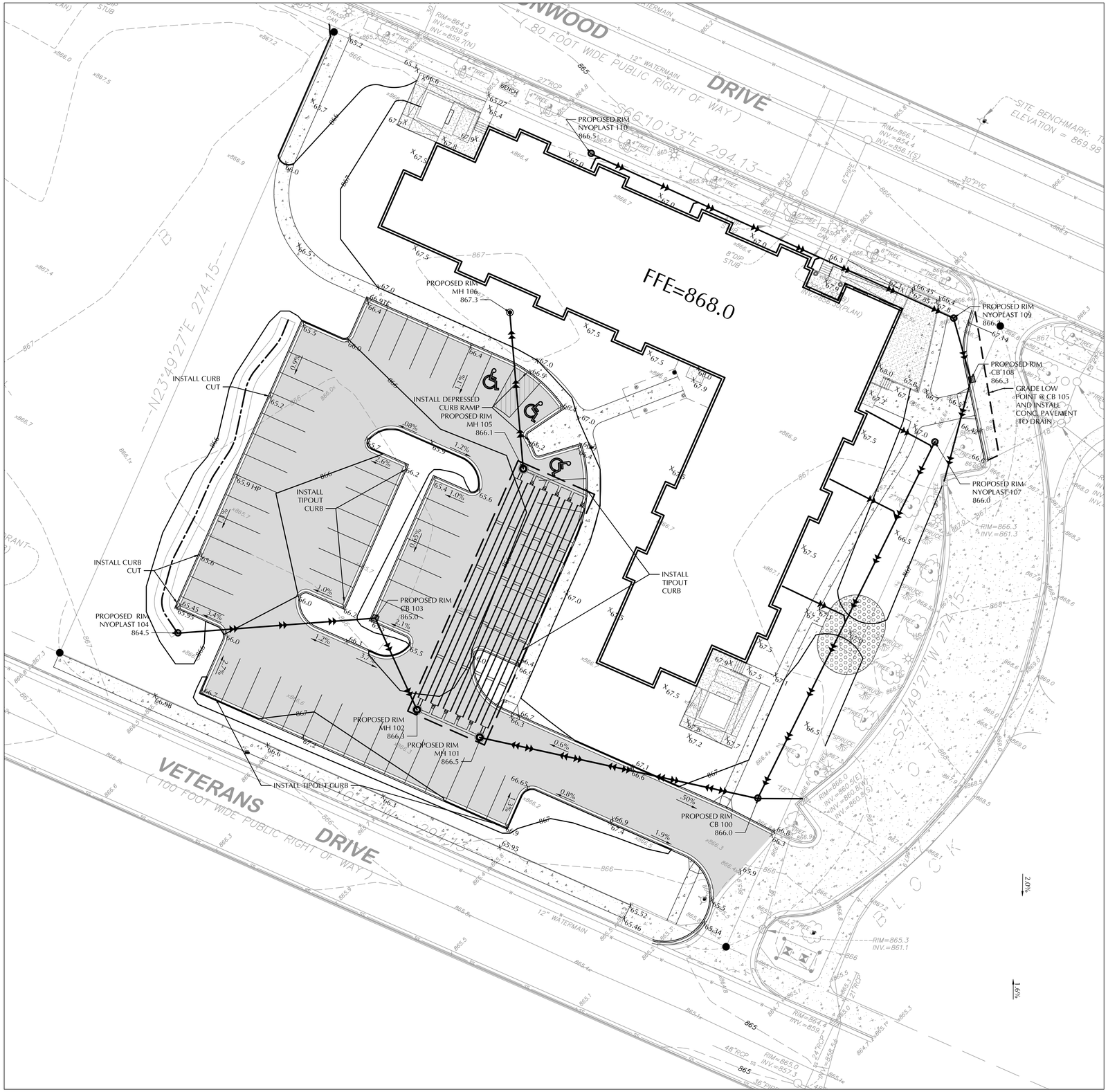
CommonBond communities
1080 Montreal Avenue
St. Paul, MN 55116
Phone: 651-291-1750
Fax: 651-291-1003
Web: www.commonbond.org

SUNWOOD VILLAGE
City of Ramsey, MN
City Parcel #47 (Outlot A)

1201 HAWTHORNE AVENUE
MINNEAPOLIS, MINNESOTA 55403
TEL: 612-332-5420
FAX: 612-332-5425
WWW.MILLERHANSON.COM
MILLER HANSON PARTNERS

SITE PLAN
C2-1

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CALL BEFORE YOU DIG!

Gopher State One Call

TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

GRADING, DRAINAGE & EROSION CONTROL NOTES

1. SPOT ELEVATIONS REPRESENT FINISHED SURFACE GRADES, GUTTER/FLOW LINE, FACE OF BUILDING, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

2. CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE SUMPED 0.10 FEET. RIM ELEVATIONS SHOWN ON PLANS DO NOT REFLECT SUMPED ELEVATIONS.

3. ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE MINIMUM OF 4 INCHES OF TOP SOIL AND SEED/MULCH OR SOD. THESE AREAS SHALL BE WATERED/MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION IS ESTABLISHED. VERIFY WITH LANDSCAPE PLAN.

4. FOR SITE RETAINING WALLS "TW" EQUALS SURFACE GRADE AT TOP FACE OF WALL (NOT TOP OF WALL), "GW" EQUALS SURFACE GRADE AT WALL GRADE TRANSITION, AND "BW" EQUALS SURFACE GRADE AT BOTTOM FACE OF WALL (NOT BOTTOM OF BURIED WALL COURSES).

5. REFER TO THE REPORT OF GEOTECHNICAL EXPLORATION AND REVIEW (REPORT NO.15/60843.100), DATED JANUARY 22, 2015 AS PREPARED BY NORTHERN TECHNOLOGIES INC. FOR AN EXISTING SUBSURFACE SITE CONDITION ANALYSIS AND CONSTRUCTION RECOMMENDATIONS.

6. STREETS MUST BE CLEANED AND SWEPT WHENEVER TRACKING OF SEDIMENTS OCCURS AND BEFORE SITES ARE LEFT IDLE FOR WEEKENDS AND HOLIDAYS. A REGULAR SWEEPING SCHEDULE MUST BE ESTABLISHED.

7. DUST MUST BE ADEQUATELY CONTROLLED.

8. SEE SWPPP FOR ADDITIONAL EROSION CONTROL NOTES AND REQUIREMENTS.

9. SEE UTILITY PLAN FOR WATER, STORM AND SANITARY SEWER INFORMATION.

10. SEE SITE PLAN FOR CURB AND BITUMINOUS TAPER LOCATIONS.

EXISTING	CIVIL LEGEND	PROPOSED
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATEVALVE	
PIV	POST INDICATOR VALVE	PIV
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOIL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
W	WATER SERVICE	
S	SANITARY SERVICE	
	HANDICAP PARKING	
	DIRECTION OF FLOW	
895.8	SPOT ELEVATION	895.8
892	CONTOURS	892
	SANITARY SEWER	
	STORM SEWER	
	WATERMAIN	
FM	FORCEMAIN	FM
DT	DRAINTILE	DT
	SILT FENCE	
	CURB & GUTTER	
	RETAINING WALL	
	TREELINE	
	EASEMENT LINE	
	SETBACK LINE	
X	FENCE LINE	X
TEL	UNDERGROUND TELE	
GAS	UNDERGROUND GAS	
OH	OVERHEAD UTILITY	

0 20 40
SCALE IN FEET

BENCHMARK

TOP NUT HYDRANT LOCATED ON THE NORTHERLY SIDE OF VETERANS DRIVE APPROX. 80 FEET WEST OF THE MOST WESTERLY PROPERTY CORNER. ELEVATION=870.23 FEET (NAVD 1988)

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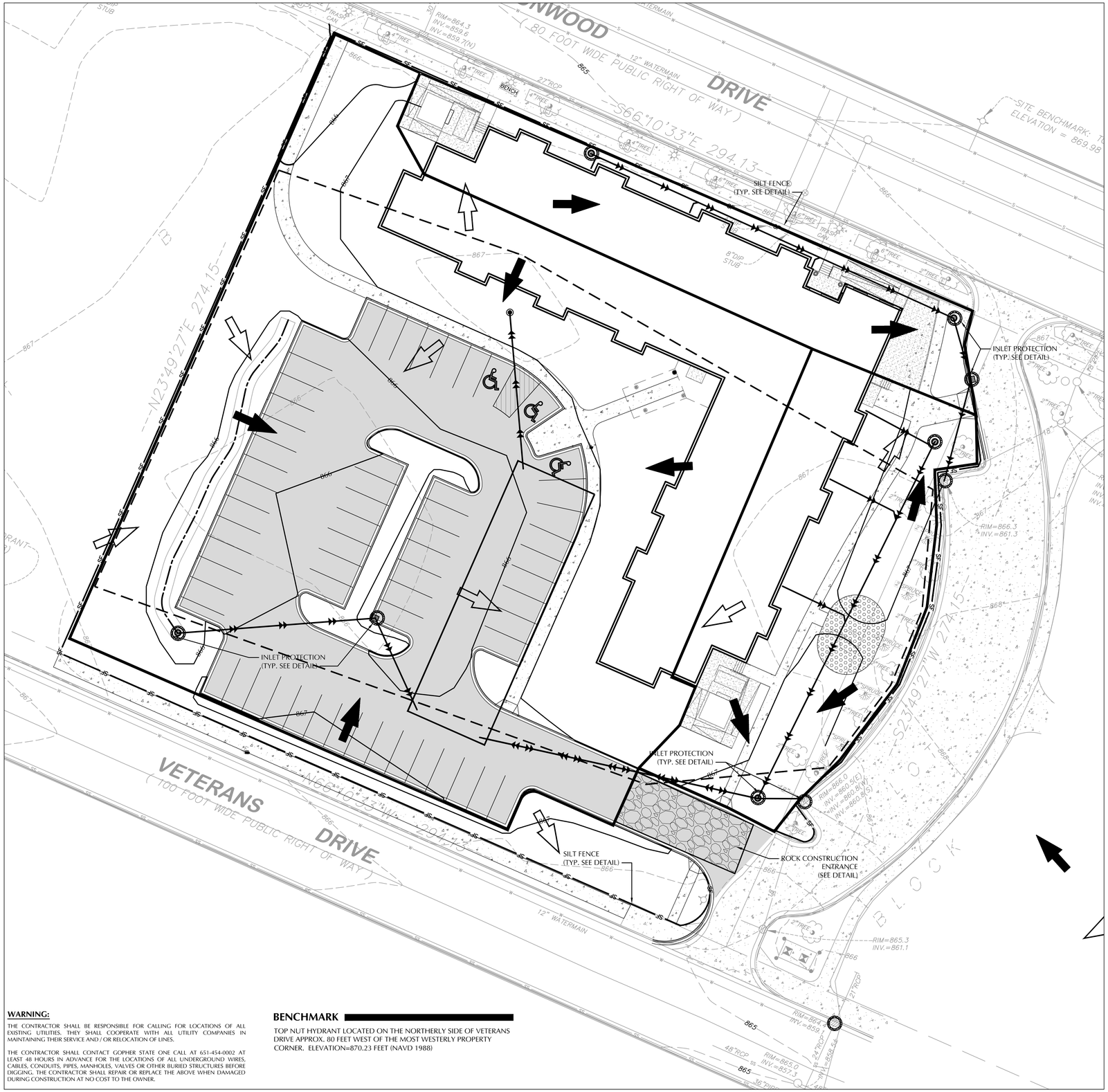
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GRADING & DRAINAGE PLAN

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THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

BENCHMARK

TOP NUT HYDRANT LOCATED ON THE NORTHERLY SIDE OF VETERANS DRIVE APPROX. 80 FEET WEST OF THE MOST WESTERLY PROPERTY CORNER. ELEVATION=870.23 FEET (NAVD 1988)

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1. THE NATURE OF THIS PROJECT WILL CONSIST OF CONSTRUCTING A MULTI-STORY RESIDENTIAL APARTMENT BUILDING WITH ASSOCIATED SURFACE PAVEMENTS, UTILITIES AND STORMWATER MANAGEMENT.

2. THE INTENDED SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES ARE AS FOLLOWS:

1. INSTALL VEHICLE TRACKING BMP
2. INSTALL SILT FENCE AROUND SITE
3. INSTALL PROTECTIVE FENCE AROUND INFILTRATION AREAS
4. CLEAR AND GRUB SITE
5. STRIP AND STOCKPILE TOPSOIL
6. REMOVE PAVEMENTS AND UTILITIES
7. CONSTRUCT STORMWATER MANAGEMENT BASINS
8. INSTALL SILT FENCE AROUND BASINS
9. ROUGH GRADE SITE
10. IMPORT CLEAN FILL FOR REPLACEMENT AND BALANCE
11. INSTALL UTILITIES
12. INSTALL BUILDING FOUNDATIONS
13. INSTALL CURB AND GUTTER
14. INSTALL PAVEMENTS AND WALKS
15. FINAL GRADE SITE
16. REMOVE ACCUMULATED SEDIMENT FROM BASINS
17. CONSTRUCT INFILTRATION BASIN
18. SEED AND MULCH
19. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.

3. SITE DATA:
AREA OF DISTURBANCE: 1.85± AC
PRE-CONSTRUCTION IMPERVIOUS AREA: 0.0 AC
POST-CONSTRUCTION IMPERVIOUS AREA: 1.2 AC

GENERAL SOIL TYPE: HSG A

4. THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE IDENTIFIED WITH FLAGS, STAKES, SIGNS, SILT FENCE, ETC. BEFORE CONSTRUCTION BEGINS.

5. ALL DISTURBED GROUND LEFT INACTIVE FOR FOURTEEN (14) OR MORE DAYS SHALL BE STABILIZED BY SEEDING OR SODDING (ONLY AVAILABLE PRIOR TO SEPTEMBER 15) OR BY MULCHING OR COVERING OR OTHER EQUIVALENT CONTROL MEASURE.

6. ON SLOPES 3:1 OR GREATER MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES. SLOPE LENGTHS CAN NOT BE GREATER THAN 75 FEET. DENOTES SLOPES GREATER THAN 3:1. ALL 3:1 SLOPES TO BE STABILIZED WITH EROSION CONTROL BLANKET

7. ALL STORM DRAINS AND INLETS MUST BE PROTECTED UNTIL ALL SOURCES OF POTENTIAL DISCHARGE ARE STABILIZED.

8. TEMPORARY SOIL STOCKPILES MUST HAVE EFFECTIVE SEDIMENT CONTROL AND CAN NOT BE PLACED IN SURFACE WATERS OR STORM WATER CONVEYANCE SYSTEMS. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT AMOUNT OF SILT, CLAY, OR ORGANIC COMPOUNDS ARE EXEPMT EX: CLEAN AGGREGATE STOCK PILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES.

9. SEDIMENT LADEN WATER MUST BE DISCHARGED TO A SEDIMENTATION BASIN WHENEVER POSSIBLE. IF NOT POSSIBLE, IT MUST BE TREATED WITH THE APPROPRIATE BMP'S.

10. SOLID WASTE MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

11. EXTERNAL WASHING OF CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE PROPERLY CONTAINED.

12. NO ENGINE DEGREASING IS ALLOWED ON SITE.

13. THE OWNER WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITTEE AND IS RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THE PERMIT. THE OPERATOR (CONTRACTOR) WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITTEE FOR PARTS II.B., PART II.C, PART II.B-F, PART V, PART IV AND APPLICABLE CONSTRUCTION ACTIVITY REQUIREMENTS FOUND IN APPENDIX A, PART C, OF THE NPDES PERMIT AND IS JOINTLY RESPONSIBLE WITH THE OWNER FOR COMPLIANCE WITH THOSE PORTIONS OF THE PERMIT.

14. TERMINATION OF COVERAGE-PERMITTEE(S) WISHING TO TERMINATE COVERAGE MUST SUBMIT A NOTICE OF TERMINATION (NOT) TO THE MPCA. ALL PERMITTEE(S) MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ONE OR MORE OF THE FOLLOWING CONDITIONS HAVE BEEN MET:

A. FINAL STABILIZATION, PER NPDES PERMIT PART IV.G. HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE.
B. TRANSFER OF OWNERSHIP AS DESCRIBED IN THE PERMIT.

15. INSPECTIONS
A. INITIAL INSPECTION FOLLOWING SILT FENCE INSTALLATION BY CITY REPRESENTATIVE IS REQUIRED.
B. EXPOSED SOIL AREAS: ONCE EVERY 7 DAYS AND WITHIN 24 HOURS FOLLOWING A 0.5" OVER 24 HOUR RAIN EVENT.
C. STABILIZED AREAS: ONCE EVERY 30 DAYS
D. FROZEN GROUND: AS SOON AS RUNOFF OCCURS OR PRIOR TO RESUMING CONSTRUCTION.
E. INSPECTION AND MAINTENANCE RECORDS MUST BE RETAINED FOR 3 YEARS AFTER FILING OF THE NOTICE OF TERMINATION AND MUST INCLUDE: DATE AND TIME OF ACTION, NAME OF PERSON(S) CONDUCTING WORK, FINDING OF INSPECTIONS AND RECOMMENDATIONS FOR CORRECTIVE ACTION, DATE AND AMOUNT OF RAINFALL EVENTS GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD.

16. MINIMUM MAINTENANCE
A. SILT FENCE TO BE REPAIRED, REPLACED, SUPPLEMENTED WHEN NONFUNCTIONAL, OR 1/3 FULL; WITHIN 24 HOURS
B. SEDIMENT BASINS DRAINED AND SEDIMENT REMOVED WHEN REACHES 1/2 STORAGE VOLUME. REMOVAL MUST BE COMPLETE WITHIN 72 HOURS OF DISCOVERY.
C. SEDIMENT REMOVED FROM SURFACE WATERS WITHIN (7)SEVEN DAYS
D. CONSTRUCTION SITE EXITS INSPECTED, TRACKED SEDIMENT REMOVED WITH 24 HOURS.
E. PROVIDE COPIES OF EROSION INSPECTION RESULTS TO CITY ENGINEER FOR ALL EVENTS GREATER THAN 2" IN 24 HOURS

17. THE SWPPP, INCLUDING ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION ACTIVITY BY THE PERMITTEE(S) WHO HAVE OPERATIONAL CONTROL OF THE SITE.

18. OWNER MUST KEEP RECORDS OF ALL PERMITS REQUIRED FOR THE PROJECT, THE SWPPP, ALL INSPECTIONS AND MAINTENANCE, PERMANENT OPERATION AND MAINTENANCE AGREMENTS, AND REQUIRED CALCULATIONS FOR TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS. THESE RECORDS MUST BE RETAINED FOR THREE YEARS AFTER FILING NPDES NOTICE OF TERMINATION.

19. SWPPP MUST BE AMENDED WHEN:
A. THERE IS A CHANGE IN DESIGN, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT HAS A SIGNIFICANT EFFECT ON DISCHARGE
B. INSPECTIONS INDICATE THAT THE SWPPP IS NOT EFFECTIVE AND DISCHARGE IS EXCEEDING WATER QUALITY STANDARDS.
C. THE BMP'S IN THE SWPPP ARE NOT CONTROLLING POLLUTANTS IN DISCHARGES OR IS NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THE PERMIT.

19. CONCRETE WASHOUT AREA
A. CONTRACTOR TO PROVIDE PREFABRICATED CONCRETE WASH-OUT CONTAINER WITH RAIN PROTECTION PER PLAN.
B. CONCRETE WASH-OUT TO BE IDENTIFIED WITH SIGNAGE STATING "CONCRETE WASHOUT AREA DO NOT OVERFILL".
C. CONCRETE WASHOUT WATER NEEDS TO BE PUMPED WITHIN 24 HOURS OF STANDING WATER IN WASHOUT AREA.

20. IN THE EVENT OF ENCOUNTERING A WELL OR SPRING DURING CONSTRUCTION CONTRACTOR TO CEASE CONSTRUCTION ACTIVITY AND NOTIFY ENGINEER.

21. PIPE OULTETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER.

22. FINAL STABILIZATION
FINAL STABILIZATION REQUIRES THAT ALL SOIL DISTURBING ACVTIVITIES HAVE BEEN COMPLETED AND THAT DISTURBED AREAS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH 70% OF THE EXPECTED FINAL DENSITY, AND THAT ALL PERMANENT PAVEMENTS HAVE BEEN INSTALLED. ALL TEMPORARY BMP'S SHALL BE REMOVED, DITCHES STABILIZED, AND SEDIMENT SHALL BE REMOVED FROM PERMANENT CONVEYANCES AND SEDIMENTATION BASINS IN ORDER TO RETURN THE POND TO DESIGN CAPACITY.

23. RESPONSIBILITIES
A. THE OWNER MUST IDENTIFY A PERSON WHO WILL OVERSEE THE SWPPP IMPLEMENTATION AND THE PERSON RESPONSIBLE FOR INSPECTION AND MAINTENANCE: CONTRACTOR IS PENDING
CONTACT: _____
COMPANY: _____
PHONE: _____

B. THE OWNER MUST IDENTIFY THE A PERSON WHO WILL BE RESPONSIBLE FOR LONG TERM OPERATIONS AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM:
CONTACT: JUSTIN EILERS
COMPANY: COMMONBOND COMMUNITIES
PHONE: 651-291-1750

24. THE WATERSHED DISTRICT OR THE CITY MAY HAVE REQUIREMENTS FOR INSPECTIONS OR AS-BUILT DRAWINGS VERIFYING PROPER CONSTRUCTION OF THE BMPS.

SITE PLAN LEGEND

- SILT FENCE
- INLET PROTECTION
- EXISTING DRAINAGE BOUNDARY
- EXISTING DRAINAGE PATTERN
- PROPOSED DRAINAGE BOUNDARY
- PROPOSED DRAINAGE PATTERN

0 20 40
SCALE IN FEET

N

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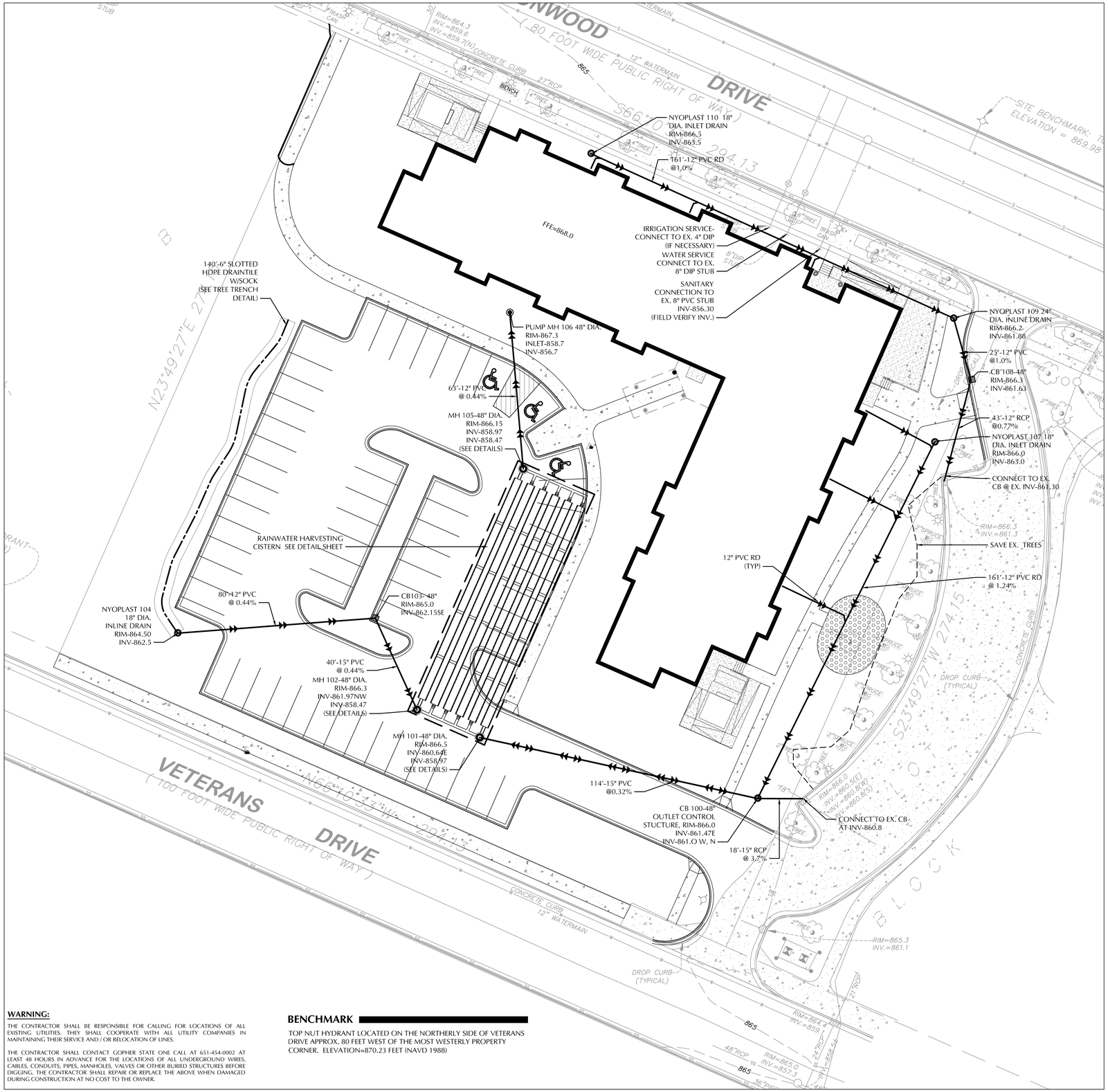
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STORMWATER POLLUTION PREVENTION PLAN

C3-2

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UTILITY PLAN NOTES

1. ALL SANITARY SEWER, STORM SEWER AND WATERMAIN UTILITIES SHALL BE FURNISHED AND INSTALLED PER THE REQUIREMENTS OF THE SPECIFICATIONS, THE CITY AND THE STANDARD UTILITIES SPECIFICATION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM), 2013 EDITION.

2. SEE DETAIL SHEET AND THE CONTRACT SPECIFICATIONS FOR SPECIFIC UTILITY DETAILS.

3. ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. THE CITY DEPARTMENT OF ENGINEERING AND BUILDING INSPECTIONS DEPARTMENT AND THE CONSTRUCTION ENGINEER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY WORK WITHIN THE PUBLIC RIGHT OF WAY, OR WORK IMPACTING PUBLIC UTILITIES.

4. THE CONTRACTOR SHALL FIELD ADJUST WATERMAIN TO AVOID CONFLICTS WITH SANITARY SEWER, STORM SEWER, AND SERVICES AS REQUIRED.

5. ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE ALL SIGNAGE, BARRICADES, FLASHERS AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT THE EXPRESSED AUTHORITY OF OF THE CITY.

6. ALL UTILITY PIPE BEDDING SHALL BE COMPACTED SAND OR FINE GRANULAR MATERIAL PER THE REQUIREMENTS OF THE CITY. ALL COMPACTION SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CEAM SPECIFICATION.

7. ADJUST ALL EXISTING STRUCTURES, BOTH PUBLIC AND PRIVATE TO THE PROPOSED GRADES WHERE DISTURBED AND COMPLY WITH ALL REQUIREMENTS OF THE UTILITY OWNERS. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC LOADING.

8. MAINTAIN 8 FEET OF COVER OVER ALL WATERMAINS AND SERVICES.

9. PROPOSED PIPE MATERIALS:

STORM SEWER	RCP CLASS 5
	PVC SDR 26

EXISTING	CIVIL LEGEND	PROPOSED
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATEVALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOIL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
	WATER SERVICE	
	SANITARY SERVICE	
	HANDICAP PARKING	
	DIRECTION OF FLOW	
	SPOT ELEVATION	
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	STORM SEWER	
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	UNDERGROUND GAS	
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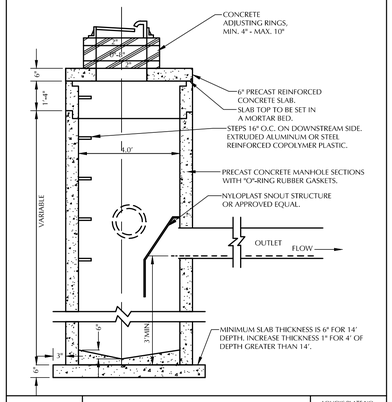
SUNWOOD VILLAGE
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City Parcel #47 (Outlot A)

UTILITY PLAN

C4-1

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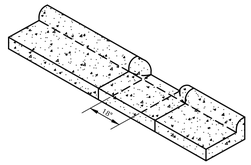
NOTE:
24"x16" SLAB OPENING FOR NEENAH R-3067 CASTING WITH D.L., D.R. OR TYPE V GRATE.
27" ø SLAB OPENING FOR NEENAH R-3250 & R-1733 CASTING.



SUMP CATCH BASIN / MANHOLE

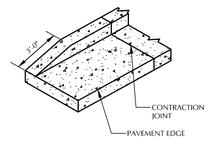
LOUCKS PLATE NO. **4304**

DRAWN 12/2013



NOTE:
CURB CUT TO BE CONSTRUCTED AT LOCATIONS AS SHOWN ON SITE &/OR GRADING PLAN. COST OF CUT TO BE INCIDENTAL TO 8in DESIGN CONCRETE CURB & GUTTER.

CONCRETE CURB CUT

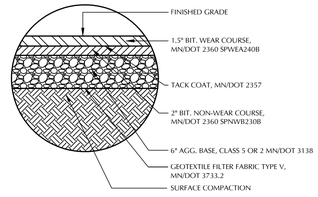


CONCRETE CURB END SECTION

CONCRETE CURB CUT & END SECTION

LOUCKS PLATE NO. **2021**

DRAWN 1/2014

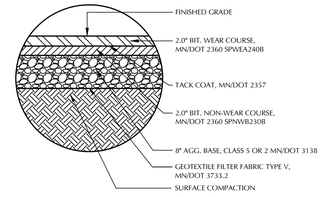


PAVEMENT SECTION BASED ON GEOTECHNICAL REPORT BY NORTHERN TECHNOLOGIES INC, DATED JANUARY,2015

STANDARD BITUMINOUS PAVEMENT SECTION

LOUCKS PLATE NO. **2030**

DRAWN 1/2014

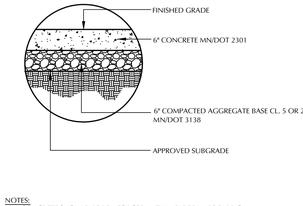


PAVEMENT SECTION BASED ON GEOTECHNICAL REPORT BY NORTHERN TECHNOLOGIES INC, DATED JANUARY,2015

HEAVY DUTY BITUMINOUS PAVEMENT SECTION

LOUCKS PLATE NO. **2031**

DRAWN 1/2014



NOTES:
1. CONCRETE SHOULD BE REINFORCED WITH WELDED WIRE FABRIC OR REINFORCING BARS TO ASSIST IN CONTROLLING CRACKING FROM DRYING SHRINKAGE AND THERMAL CHANGES.
2. SAWED OR FORMED CONTROL JOINTS SHOULD BE INCLUDED FOR EACH 225 SQUARE FEET OF AREA OR LESS (15 FEET BY 15 FEET).
3. SAW CUTS SHOULD NOT CUT THROUGH THE WELDED WIRE FABRIC OR REINFORCING STEEL AND DOWELS SHOULD BE UTILIZED AT FORMED AND/OR COLD JOINTS.

CONCRETE PAVEMENT SECTION

LOUCKS PLATE NO. **2032**

DRAWN 1/2014

CONCRETE SIDEWALK SECTION

LOUCKS PLATE NO. **2034**

DRAWN 1/2014

TYPICAL ADA PARKING

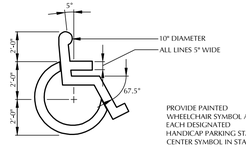
LOUCKS PLATE NO. **2035**

DRAWN 1/2014

NOTES:
1. PROVIDE (1) SIGN PER STALL
2. SIGN MUST MEET LOCAL STANDARDS

HANDICAP PARKING SIGN

NOT TO SCALE



PROVIDE PAINTED WHEELCHAIR SYMBOL AT EACH DESIGNATED HANDICAP PARKING STALL. CENTER SYMBOL IN STALL.

WHEELCHAIR SYMBOL

NOT TO SCALE

TYPICAL ADA WHEELCHAIR SYMBOL & PARKING SIGN

LOUCKS PLATE NO. **2036**

DRAWN 1/2014

SAND BEDDING

SAND SHALL CONFORM WITH MN/DOT SPEC. 3149.2B2

NOTE:
BEDDING SHALL BE CONSIDERED INCIDENTAL TO THE PIPE UNLESS MODIFIED IN THE CONTRACT DOCUMENTS. BEDDING REQUIRED FOR ALL MAINS AND SERVICES.

ROCK BEDDING

4" MIN IN GOOD MATERIAL. IF MATERIAL IS UNSTABLE USE AS MUCH ROCK AS NECESSARY TO STABILIZE.

LOUCKS ASSOCIATES

SEWER BEDDING

LOUCKS PLATE NO. **SANI-6**

DRAWN 12/2012

NOTES:
1. PLACE BOTTOM EDGE OF FENCE INTO 6 IN DEEP TRENCH AND BACKFILL IMMEDIATELY.
2. POSTS SHALL BE:
   - 6 FT MAX. SPACING,
   - 2 IN X 2IN HARDWOOD, OR STANDARD STEEL T-TYPE FENCE POSTS.
   - 5' MIN. LENGTH POSTS, DRIVEN 2 FT INTO THE GROUND.
3. ATTACH FABRIC TO WOOD POST WITH A MIN. OF 5, 1 INCH LONG STAPLES.
4. ATTACH FABRIC TO STEEL POST WITH A MIN. OF 3 ZIP TIES IN TOP 8 INCHES OF FABRIC.

SILT FENCE PRE-ASSEMBLED OR MACHINE SLICED

LOUCKS PLATE NO. **3000**

DRAWN 12/2013

NOTES:
1. ROCK SIZE SHOULD BE 1" TO 2" IN SIZE SUCH AS MN/DOT CA-1 OR CA-2 COURSE AGGREGATE, (WASHED)
2. A GEOTEXTILE FABRIC MAY BE USED UNDER THE ROCK TO PREVENT MIGRATION OF THE UNDERLYING SOIL INTO THE STONE.

ROCK ENTRANCE TO CONSTRUCTION SITE

LOUCKS PLATE NO. **3003**

DRAWN 12/2013

CONTRACTOR TO PLACE THE CONCRETE WASHOUT AREA NEAR THE CONSTRUCTION ENTRANCE

CONCRETE WASHOUT

LOUCKS PLATE NO. **3005**

DRAWN 12/2013

2'X3' SEDIMENT CONTROL BARRIER

27" SEDIMENT CONTROL BARRIER

WIMCO ROAD DRAIN, OR APPROVED EQUAL

INLET PROTECTION - EXISTING STORM STRUCTURES

LOUCKS PLATE NO. **3010**

DRAWN 12/2013

12x18" STANDARD HANDICAP PARKING SIGN WITH SEPARATE 'VAN ACCESSIBLE' PANEL. GREEN, WHITE, AND BLUE ON REFLECTIVE BACKGROUND. USE HDWR PER SIGN SUPPLIER'S RECOMMENDATIONS

12x6" STANDARD 'VAN ACCESSIBLE' PANEL, GREEN ON WHITE RELECTIVE BACKGROUND

2" DIA, 6' LONG MIN. GALVANIZED SCHEDULE 40 STEEL PIPE. EMBED IN CONCRETE FILLED BOLLARD

6" DIA. SCHEDULE 40 GALVENIZED STEEL PIPE 6' LONG MINIMUM

HEAVY DUTY HDPE DOME TOP DECORATIVE SLEEVE BLUE IN COLOR. AVAILABLE FROM BOLLARDSNSLEEVES.COM OR EQUAL.

COMPACTED OR UNDISTURBED SUBGRADE.

NOTES:
1. BOLLARDS TO BE PLACED 12" BEHIND BACK OF CURB.
2. MAINTAIN PLUMB UNTIL CONCRETE IS SUFFICIENTLY CURED.
3. HOLD CONCRETE FOOTING BELOW GRADE OF FINISHED CONCRETE TO CREATE FINAL PAVING PATTERN AS SHOWN ON PLANS.

LOUCKS ASSOCIATES

TYPICAL ADA PARKING SIGN / BOLLARD COMBO

LOUCKS PLATE NO. **SITE-36**

DRAWN 12/2012

LOUCKS ASSOCIATES

PEDESTRIAN CURB RAMP 02

LOUCKS PLATE NO. **SITE-21**

DRAWN 12/2012

ISSUE & REVISION
PRELIMINARY: 3/3/2015

COMM #1408

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Tel: 952.564.3878

CIVIL & LANDSCAPE:
Loucks Associates
7200 Hemlock Lane
Suite 300
Maple Grove, MN 55369
Tel: 763.424.5505

CommonBond communities
1080 Montreal Avenue
St. Paul, MN 55116
Phone: 651-291-1750
Fax: 651-291-1003
Web: www.commonbond.org

SUNWOOD VILLAGE
City of Ramsey, MN
City Parcel #47 (Outlot A)

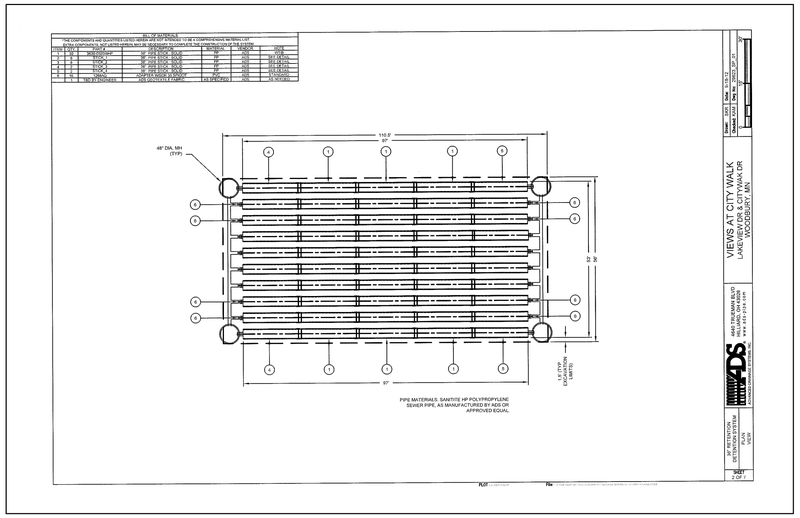
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MINNEAPOLIS, MINNESOTA 55403
TEL: 612-332-5420
FAX: 612-332-5425
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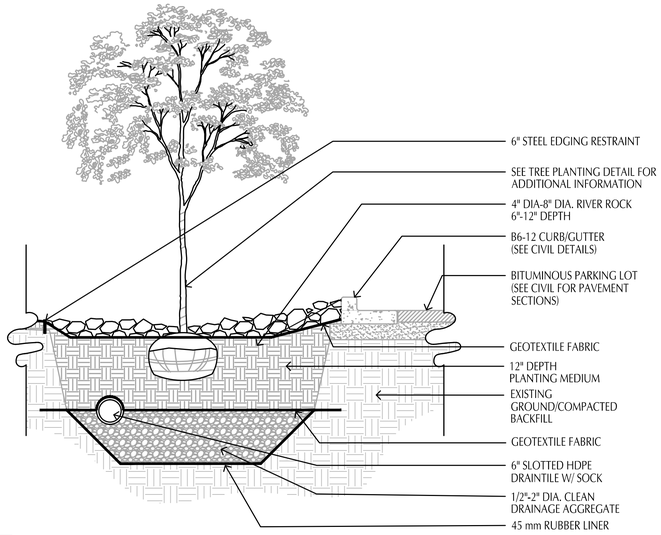
CIVIC DETAILS

C8-1

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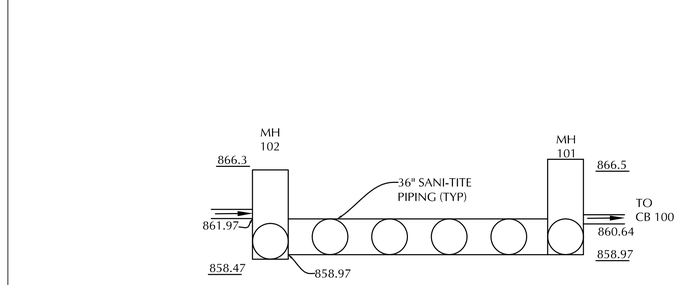
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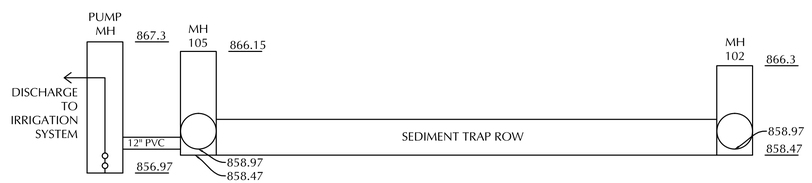


TREE TRENCH

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

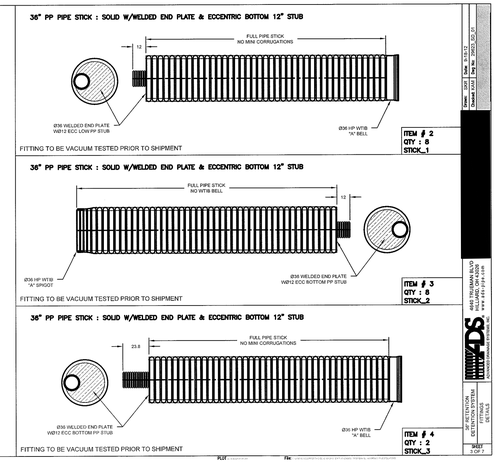


SOUTHWEST VIEW

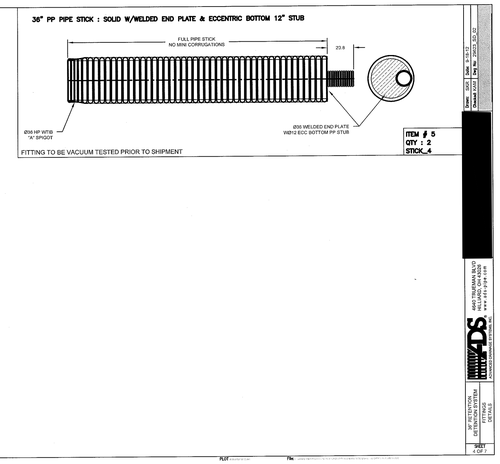


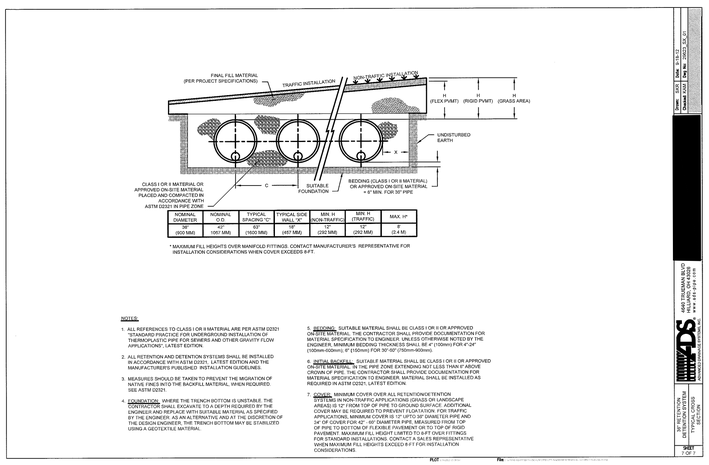
NORTHWEST VIEW

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INTENTIONALLY LEFT BLANK





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ISSUE & REVISION
PRELIMINARY: 3/3/2015

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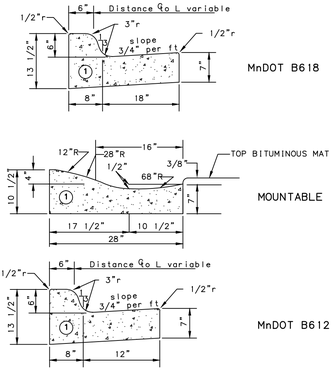
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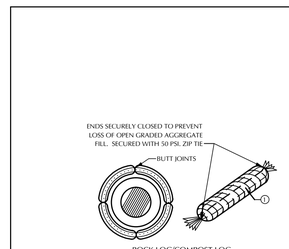
CIVIC DETAILS

C8-2

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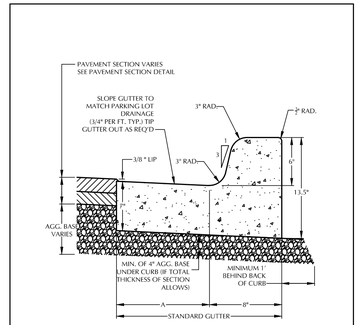


- --	CURB & GUTTER SCALE: N/A	-



NOTES:
SEE SPECS. 2573, 3137, 3886 & 3891.
MANUFACTURED ALTERNATIVES LISTED ON MnDOT'S APPROVED PRODUCTS LIST MAY BE SUBSTITUTED.
① GEOTEXTILE SOCK BETWEEN 4-10 FEET LONG AND 4-6 INCH DIAMETER, SEAM TO BE JOINED BY TWO ROWS OF STITCHING WITH A PLASTIC MESH BACKING OR PROVIDE A HEAT BONDED SEAM (OR APPROVED EQUIVALENT). FILL ROCK LOG WITH OPEN GRADED AGGREGATE CONSISTING OF SOUND DURABLE PARTICLES OF COARSE AGGREGATE CONFORMING TO SPEC. 3137 TABLE 3137-1; CA-3 GRADATION.

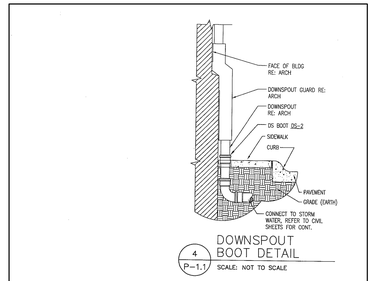
	INLET PROTECTION - ROCK/COMPOST LOG	LOUCKS PLATE NO. 3014 DRAWN 12/2013

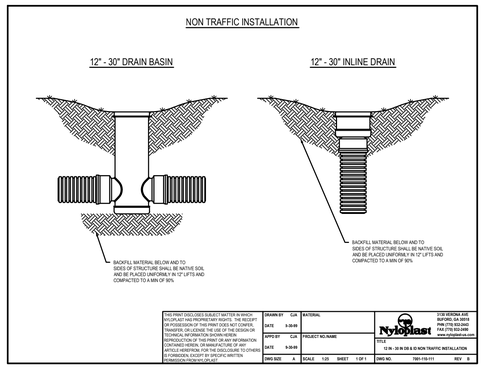


CURB TYPE	"A"
B612	12"
B618	18"
B624	24"

SPECIFICATION NOTES:
1. UPON COMPLETION, CURBING SHOULD BE SPRAYED WITH A MEMBRANE CURING COMPOUND PER MNDOT 3754.
2. EXPANSION JOINTS AT MAX. SPACING OF 200'.
3. CONSTRUCT IN ACCORDANCE WITH MNDOT 2531.

	B6 STYLE CONCRETE CURB AND GUTTER	LOUCKS PLATE NO. 2009 DRAWN 1/2014





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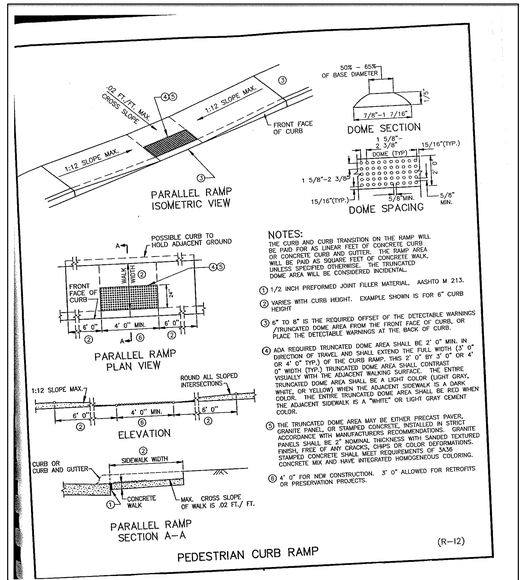
DRAWN BY	CJA	MATERIAL		
DATE	5-30-09			
APPD BY	CJA	PROJECT NO./NAME		
DATE	5-30-09			
DWG SIZE	A	SCALE 1:25	SHEET 1 OF 1	DWG NO. 7801-10-111 REV B

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TITLE: 12 IN - 30 IN DB & SD NON TRAFFIC INSTALLATION

NOTES
TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA), ALL STATE AGENCIES ARE REQUIRED TO UTILIZE THIS STANDARD PLATE. MODIFIED PLATES ARE ALLOWED PROVIDED THEY MEET PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG). LOCAL AGENCIES ARE ENCOURAGED TO ADOPT SIMILAR DESIGNS.
SHARED-USE PATHS SHALL HAVE DETECTABLE WARNINGS ACROSS THE ENTIRE WIDTH OF PATH WHEN THE PATH CROSSES A ROAD. DETECTABLE WARNINGS ARE NOT TO BE USED ON SIDEWALKS OR PATHS WHEN CROSSING ALLEYS OR RESIDENTIAL DRIVEWAYS. DETECTABLE WARNINGS SHOULD BE USED WHERE PEDESTRIAN ACCESS ROUTES CROSS COMMERCIAL DRIVEWAYS THAT ARE PROVIDED WITH TRAFFIC CONTROL DEVICES OR WITH WIDE, UNCONTROLLED OPERATIONS. LIKE IN PARKING LOTS.
ON CURB AND BEVINGS AS ABSOLUTE ELEVATION DIFFERENCE PER LENGTH OF RUN, (AS OPPOSED TO A RELATIVE SLOPE WITH RESPECT TO A CURB LINE OR CURB HEIGHT.)
NO SIGNAL POLES, SIGN POSTS, CABINETS, OR OTHER OBSTRUCTIONS ARE ALLOWED IN THE RAMP OR PATH OF TRAVEL.
① 1/2-INCH EXPANSION JOINT, 1/2-INCH PREFORMED JOINT FILLER MATERIAL, AASHTO M 213.
② VARIES WITH CURB HEIGHT. EXAMPLE SHOWN IS FOR 6" CURB AND GUTTER. SEE PLANS FOR PROPOSED RUNNING SLOPE AND CROSS SLOPE, NEITHER OF WHICH MAY EXCEED 0.02 FT./FT. AS CONSTRUCTED.
③ PLACE THE DETECTABLE WARNINGS AT THE BACK OF CURB, WHEN THE DETECTABLE WARNING SYSTEM IS A PREFORMED RECTANGLE PLACED AT THE BACK OF A RADIAL CURB LINE, HAND FORM THE CURB TO FILL THE GAP. DETECTABLE WARNING AREA SHALL BE 3'-0" MIN. IN THE DIRECTION PERPENDICULAR TO THE GRADE BREAK AND SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP.
④ WHERE RADIAL WARNING SURFACES ARE USED OR IN OTHER CIRCUMSTANCES WHERE THE EDGE OF THE WARNING SURFACE IS NOT PARALLEL TO THE EDGE OF THE CURB RAMP PATH OF TRAVEL, THE EDGE OF THE DETECTABLE WARNING SURFACE NEAREST THE GUTTER SHALL BE LOCATED NO MORE THAN 8 INCHES FROM THE BACK OF CURB. THE DETECTABLE WARNING SURFACE SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, ROADWAY, OR WALKWAY, EITHER LIGHT ON DARK OR DARK ON LIGHT. CONTRAST MAY BE PROVIDED ON THE FULL RAMP SURFACE, EXCLUDING THE FLARED SIDES.
⑤ CROSS SLOPE OF THE RAMP MAY NOT EXCEED 0.02 FT./FT. AS CONSTRUCTED.
⑥ ANY VERTICAL LIP THAT OCCURS AT THE FLOW LINE MAY NOT BE GREATER THAN 1/4 INCH.

APPROVED MARCH 23, 2011 (STATE DESIGN ENGINEER)	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION PEDESTRIAN CURB RAMP PERPENDICULAR DESIGN	SPECIFICATION REFERENCE 2521 2531	STANDARD PLATE NO. 7036G



NOTES:
THE CURB AND CURB TRANSITION ON THE RAMP WILL BE PAID FOR AS LINEAR FEET OF CONCRETE CURB OR CONCRETE CURB AND GUTTER. THE RAMP AREA WILL BE PAID AS SQUARE FEET OF CONCRETE WALK, UNLESS SPECIFIED OTHERWISE. THE TRUNCATED DOME AREA WILL BE CONSIDERED INCIDENTAL.

① 1/2 INCH PREFORMED JOINT FILLER MATERIAL, AASHTO M 213.

② VARIES WITH CURB HEIGHT. EXAMPLE SHOWN IS FOR 6" CURB

③ 6" TO 8" IS THE REQUIRED OFFSET OF THE DETECTABLE WARNINGS FROM THE FRONT FACE OF CURB, OR (TRUNCATED DOME AREA FROM THE FRONT FACE OF CURB, OR PLACE THE DETECTABLE WARNINGS AT THE BACK OF CURB.

④ ADA REQUIRED TRUNCATED DOME AREA SHALL BE 2' 0" MIN. IN DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH (2' 0" OR 4' 0" TYP.) OF THE CURB RAMP. THIS 2' 0" BY 3' 0" OR 4' 0" WIDTH (TYP.) TRUNCATED DOME AREA SHALL CONTRAST VISUALLY WITH THE ADJACENT WALKING SURFACE. THE ENTIRE TRUNCATED DOME AREA SHALL BE A LIGHT COLOR (LIGHT GRAY, WHITE, OR YELLOW) WHEN THE ADJACENT SIDEWALK IS A DARK COLOR. THE ENTIRE TRUNCATED DOME AREA SHALL BE RED WHEN THE ADJACENT SIDEWALK IS A "WHITE" OR LIGHT GRAY CEMENT COLOR.

⑤ THE TRUNCATED DOME AREA MAY BE EITHER PRECAST PAVER, GRANITE PANEL, OR STAMPED CONCRETE, INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. GRANITE PAVERS SHALL BE 2" NOMINAL THICKNESS WITH SURFACE TEXTURED FINISH, SHALL BE FREE OF ANY CRACKS, CHIPS OR COLOR DEFORMATIONS. PRECAST CONCRETE SHALL MEET REQUIREMENTS OF 3439 STAMPED CONCRETE SHALL MEET REQUIREMENTS OF 3435 CONCRETE MIX AND HAVE INTEGRATED HOMOGENEOUS COLORING.

⑥ 4' 0" FOR NEW CONSTRUCTION. 3' 0" ALLOWED FOR RETROFITS OR PRESERVATION PROJECTS.

(R-12)

PEDESTRIAN CURB RAMP

PRELIMINARY
NOT FOR
CONSTRUCTION

ISSUE & REVISION
PRELIMINARY: 3/3/2015

COMM #1408

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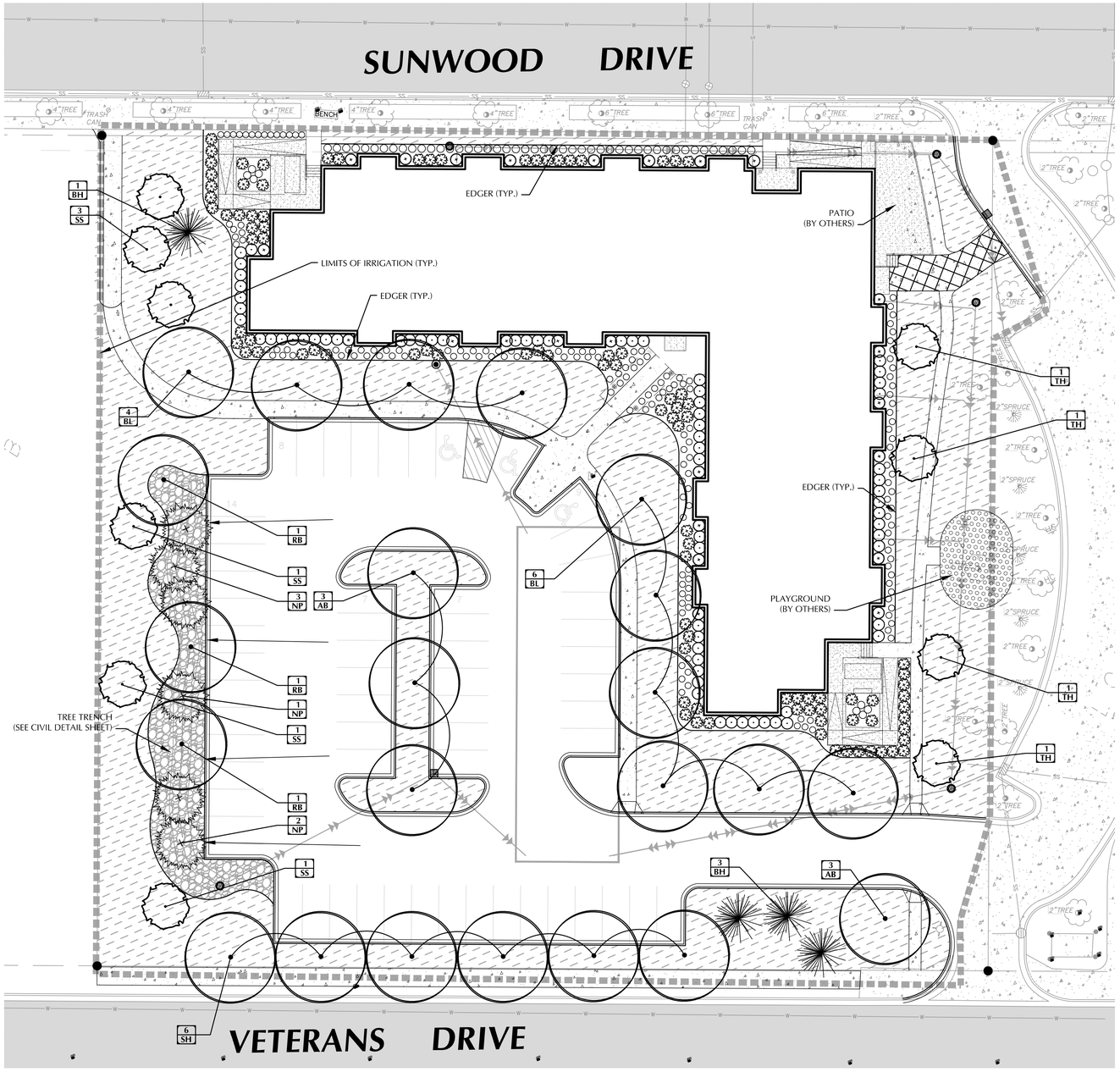
SUNWOOD VILLAGE
City of Ramsey, MN
City Parcel #47 (Outlot A)

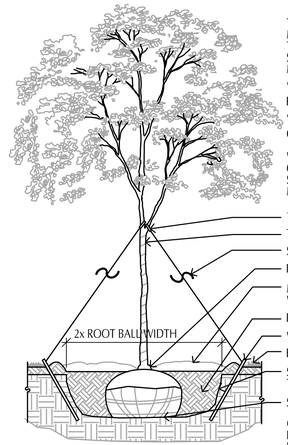
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CIVIC DETAILS

C8-3

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THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TREES IN A PLUMB POSITION THROUGH THE WARRANTY PERIOD. STAKING IS SUGGESTED, BUT NOT REQUIRED. ANY STAKING MUST CONFORM WITH PRACTICES AS DEFINED IN A.N.A. GUIDELINES FOR STANDARD PRACTICES

PRUNE DAMAGED AND CROSSING BRANCHES AFTER PLANTING IS COMPLETE.

CUT BACK WIRE BASKET

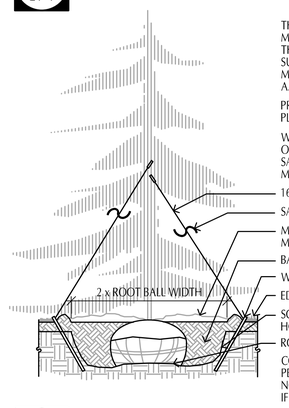
WATER TREE THOROUGHLY DURING PLANTING OPERATIONS. PLACE BACKFILL IN 8-12" LIFTS AND SATURATE SOIL WITH WATER. DO NOT COMPACT MORE THAN NECESSARY TO MAINTAIN PLUMB.

CONTRACTOR IS RESPONSIBLE FOR TESTING PERCOLATION RATES PRIOR TO PLANTING. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY IF POOR DRAINAGE EXISTS.

1 / L1-1 DECIDUOUS TREE PLANTING DETAIL

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

Deciduous Tree.DWG



THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TREES IN A PLUMB POSITION THROUGH THE WARRANTY PERIOD. STAKING IS SUGGESTED, BUT NOT REQUIRED. ANY STAKING MUST CONFORM WITH PRACTICES AS DEFINED IN A.N.A. GUIDELINES FOR STANDARD PRACTICES.

PRUNE ANY DAMAGED BRANCHES AFTER PLANTING IS COMPLETE.

WATER TREE THOROUGHLY DURING PLANTING OPERATIONS. PLACE BACKFILL IN 8-12" LIFTS AND SATURATE SOIL WITH WATER. DO NOT COMPACT MORE THAN NECESSARY TO MAINTAIN PLUMB.

CONTRACTOR IS RESPONSIBLE FOR TESTING PERCOLATION RATES PRIOR TO PLANTING. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY IF POOR DRAINAGE EXISTS.

3 / L1-1 CONIFEROUS TREE PLANTING DETAIL

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

Coniferous Tree.DWG

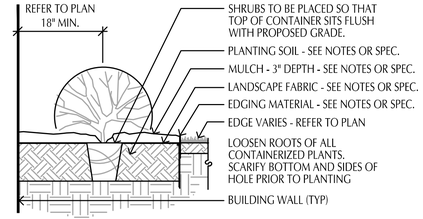
CALL BEFORE YOU DIG!

Gopher State One Call

TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

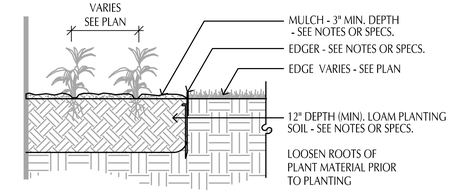
0 20 40

SCALE IN FEET



2 / L1-1 SHRUB PLANTING DETAIL

SCALE: 3/4" = 1'-0"



4 / L1-1 PERENNIAL PLANTING

SCALE: 3/4" = 1'-0"

Perennial.Dwg

PLANT PALATTE:

SYM	QTY	COMMON NAME	SCIENTIFIC NAME	SIZE	CONT	COMMENTS
DECIDUOUS TREES						
RB	3	RENAISSANCE BIRCH	Betula papyrifera 'Renci'	10' HGT	B&B	CLUMP
SH	6	SKYLINE HONEYLOCUST	Gleditsia triacanthos var. inermis 'Skycole'	2.5" CAL	B&B	SINGLE STEM
BL	10	BOULEVARD LINDEN	Tilia americana 'Boulevard'	1.5" CAL	B&B	SINGLE STEM
AB	6	AUTUMN BLAZE MAPLE	Acer x freemanii 'Jeffersred'	2.5" CAL	B&B	SINGLE STEM
ORNAMENTAL TREES						
SS	6	SPRING SNOW CRABAPPLE	Malus x 'Spring Snow'	1.5" CAL	B&B	SINGLE STEM
TH	4	THORNLESS HAWTHORN	Crataegus crus-galli var. inermis	1.5" CAL	B&B	SINGLE STEM
EVERGREEN TREES						
NP	6	NORWAY PINE	Pinus resinosa	6' HGT	B&B	FULL FORM
BH	4	BLACK HILLS SPRUCE	Picea glauca densata	6' HGT	B&B	FULL FORM

QTY.						
DECIDUOUS SHRUBS						
(66)	BC	BURGUNDY CAROUSEL BARBERRY	Berberis thunbergii 'Bailtwo'	24" HGT	POT	PLANT 4' O.C.
	EH	ENDLESS SUMMER HYDRANGEA	Hydrangea macrophylla 'Endless Summer'	24" HGT	POT	PLANT 4' O.C.
	GM	GREEN MOUND ALPINE CURRANT	Ribes alpinum 'Green Mound'	24" HGT	POT	PLANT 4' O.C.
	GS	GOLDFLAME SPIREA	Spiraa x bumalda 'Goldflame'	24" HGT	POT	PLANT 4' O.C.
CONIFEROUS SHRUBS						
(123)	BJ	BLUE CHIP JUNIPER	Juniperus horizontalis 'Blue Chip'	18" SPRD	POT	PLANT 5' O.C.
	MJ	MANEY JUNIPER	Juniperus chinensis 'Maney'	18" SPRD	POT	PLANT 5' O.C.
	TY	TAUNTON YEW	Taxus x media 'Taunton'	18" SPRD	POT	PLANT 4' O.C.
	MD	MEDORA JUNIPER	Juniperus scopulorum 'Medora'	48" HGT	POT	AS SHOWN
PERENNIALS						
(216)	KG	KARL FOERSTER GRASS	Calamagrostis acutiflora 'Karl Foerster'	1 GAL	POT	PLANT 2' O.C.
	RD	RUBY STELLA DAYLILY	Hemerocallis x 'Ruby Stella'	1 QT	POT	PLANT 1.5' O.C.
	SD	STELLA D' ORO DAYLILY	Hemerocallis x 'Stella D' Oro'	1 QT	POT	PLANT 1.5' O.C.
	PH	PATRIOT HOSTA	Hosta 'Patriot'	1 GAL	POT	PLANT 2' O.C.
	AS	AUTUMN FIRE SEDUM	Sedum x 'Autumn Fire'	1 GAL	POT	PLANT 2' O.C.

IRRIGATION NOTES:

VERIFY AND CONFIRM COMPLETE LIMITS OF IRRIGATION PRIOR TO SUPPLYING SHOP DRAWINGS.

LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN IRRIGATION LAYOUT PLAN AND SPECIFICATION AS A PART OF THE SCOPE OF WORK WHEN BIDDING. THESE SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ORDER AND/OR INSTALLATION. IT SHALL BE THE LANDSCAPE CONTRACTORS RESPONSIBILITY TO INSURE THAT ALL SODDED/SEEDED AND PLANTED AREAS ARE IRRIGATED PROPERLY, INCLUDING THOSE AREAS DIRECTLY AROUND AND ABUTTING BUILDING FOUNDATION.

THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER WITH AN IRRIGATION SCHEDULE APPROPRIATE TO THE PROJECT SITE CONDITIONS AND TO PLANT MATERIAL GROWTH REQUIREMENTS.

IRRIGATION SYSTEM IS NOT TO SPRINKLE ACROSS PAVEMENT. THE SYSTEM SHALL INCORPORATE A RAIN SENSOR INTO IRRIGATION SYSTEM. IRRIGATRION BACKFLOW DEVICE IS TO BE INSTALLED IN AN IRRIGATION ENCLOSURE.

PLANTINGS OUTSIDE THE LIMITS OF IRRIGATION ARE TO BE WATERED REGULARLY UNTIL PLANTING/SOD/SEED HAS BEEN ESTABLISHED.

GENERAL NOTES

CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID. HE SHALL INSPECT SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS RELATING TO THE NATURE AND SCOPE OF WORK.

VERIFY LAYOUT AND ANY DIMENSIONS SHOWN AND BRING TO THE ATTENTION OF THE LANDSCAPE ARCHITECT ANY DISCREPANCIES WHICH MAY COMPROMISE THE DESIGN AND/OR INTENT OF THE PROJECT'S LAYOUT.

ASSURE COMPLIANCE WITH ALL APPLICABLE CODES AND REGULATIONS GOVERNING THE WORK OR MATERIALS SUPPLIED.

CONTRACTOR SHALL PROTECT ALL EXISTING ROADS, CURBS/GUTTERS, TRAILS, TREES, LAWNS AND SITE ELEMENTS DURING PLANTING OPERATIONS. ANY DAMAGE TO SAME SHALL BE REPAIRED AT NO COST TO THE OWNER.

CONTRACTOR SHALL VERIFY ALIGNMENT AND LOCATION OF ALL UNDERGROUND AND ABOVE GRADE UTILITIES AND PROVIDE THE NECESSARY PROTECTION FOR SAME BEFORE CONSTRUCTION / MATERIAL INSTALLATION BEGINS (MINIMUM 10' - 0" CLEARANCE).

ALL UNDERGROUND UTILITIES SHALL BE LAID SO THAT TRENCHES DO NOT CUT THROUGH ROOT SYSTEMS OF ANY EXISTING TREES TO REMAIN.

EXISTING CONTOURS, TRAILS, VEGETATION, CURB/GUTTER AND OTHER EXISTING ELEMENTS BASED UPON INFORMATION SUPPLIED TO LANDSCAPE ARCHITECT BY OTHERS. CONTRACTOR SHALL VERIFY ANY AND ALL DISCREPANCIES PRIOR TO CONSTRUCTION AND NOTIFY LANDSCAPE ARCHITECT OF SAME.

LANDSCAPE INSTALLATION:

COORDINATE THE PHASES OF CONSTRUCTION AND PLANTING INSTALLATION WITH OTHER CONTRACTORS WORKING ON SITE.

NO PLANTING WILL BE INSTALLED UNTIL COMPLETE GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.

WHERE SOD/SEED ABUTS PAVED SURFACES, FINISHED GRADE OF SOD/SEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC.

SEED ALL AREAS DISTURBED DUE TO GRADING OTHER THAN THOSE AREAS NOTED TO RECEIVE SOD. SEED SHALL BE INSTALLED AND MULCHED AS PER MNDOT SPECS.

SOD ALL DESIGNATED AREAS DISTURBED DUE TO GRADING. SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, THE SOD SHALL BE STAKED TO THE GROUND.

ALL PLANT MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSERYMEN. UNLESS NOTED OTHERWISE, ALL SHRUBS SHALL HAVE AT LEAST 5 CANES AT THE SPECIFIED MINIMUM SHRUB HEIGHT OR WIDTH. ORNAMENTAL TREES SHALL HAVE NO V CROTCHES AND SHALL BEGIN BRANCHING NO LOWER THAN 3' ABOVE ROOT BALL. STREET AND BOULEVARD TREES SHALL BEGIN BRANCHING NO LOWER THAN 5' ABOVE FINISHED GRADE.

PLAN TAKES PRECEDENCE OVER PLANT SCHEDULE IF DISCREPANCIES IN QUANTITIES EXIST. SPECIFICATIONS TAKE PRECEDENCE OVER NOTES.

NO PLANT MATERIAL SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL IS REQUESTED OF THE LANDSCAPE ARCHITECT BY THE LANDSCAPE CONTRACTOR PRIOR TO THE SUBMISSION OF A BID AND/OR QUOTATION.

ALL PROPOSED PLANTS SHALL BE LOCATED AND STAKED AS SHOWN ON PLAN. ADJUSTMENTS IN LOCATION OF PROPOSED PLANT MATERIALS MAY BE NEEDED IN FIELD. SHOULD AN ADJUSTMENT BE ADVISED, THE LANDSCAPE ARCHITECT MUST BE NOTIFIED.

ALL PLANT MATERIALS SHALL BE FERTILIZED UPON INSTALLATION WITH A 27-3-3 SLOW RELEASE FERTILIZER MIXED IN WITH THE PLANTING SOIL PER THE MANUFACTURER'S INSTRUCTIONS. PLANTS MAY BE TREATED FOR SUMMER AND FALL INSTALLATION WITH AN APPLICATION OF GRANULAR 27-3-3 AT 6 OZ PER 2.5" CALIPER PER TREE AND 3 OZ PER SHRUB WITH AN ADDITIONAL APPLICATION OF 27-3-3 THE FOLLOWING SPRING IN THE TREE SAUCER.

ALL PLANTING AREAS RECEIVING GROUND COVER, PERENNIALS, ANNUALS, AND/OR VINES SHALL RECEIVE A MINIMUM OF 12" DEPTH OF PLANTING SOIL CONSISTING OF AT LEAST 45 PARTS TOPSOIL, 45 PARTS PEAT OR MANURE AND 10 PARTS SAND.

ALL PLANTS TO BE INSTALLED AS PER PLANTING DETAILS. REMOVE ALL FLAGGING AND LABELS FROM PLANTS.

WRAPPING MATERIAL SHALL BE CORRUGATED PVC PIPING 1" GREATER IN

CALIPER THAN THE TREE BEING PROTECTED OR QUALITY, HEAVY, WATERPROOF CREPE PAPER MANUFACTURED FOR THIS PURPOSE. WRAP ALL DECIDUOUS TREES PLANTED IN THE FALL PRIOR TO 12-1 AND REMOVE ALL WRAPPING AFTER 5-1.

BLACK POLY EDGER TO BE USED TO CONTAIN SHRUBS, PERENNIALS, AND ANNUALS WHERE BED MEETS SOD/SEED UNLESS NOTED OTHERWISE.

ALL ANNUAL AND PERENNIAL PLANTING BEDS TO RECEIVE 3" DEEP SHREDDED HARDWOOD MULCH WITH NO WEED BARRIER.

ALL SHRUB BED MASSINGS TO RECEIVE 3" DEEP SHREDDED HARDWOOD MULCH AND FIBER MAT WEED BARRIER.

ALL TREES TO RECEIVE 4" DEEP SHREDDED HARDWOOD MULCH WITH NO MULCH IN DIRECT CONTACT WITH TREE TRUNK.

SPREAD GRANULAR PRE EMERGENT HERBICIDE (PREEN OR EQUAL) PER MANUFACTURER'S RECOMMENDATIONS UNDER ALL MULCHED AREAS.

IF THE LANDSCAPE CONTRACTOR IS CONCERNED OR PERCEIVES ANY DEFICIENCIES IN THE PLANT SELECTIONS, SOIL CONDITIONS OR ANY OTHER SITE CONDITION WHICH MIGHT NEGATIVELY AFFECT PLANT ESTABLISHMENT, SURVIVAL OR GUARANTEE, HE MUST BRING THESE DEFICIENCIES TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO PROCUREMENT AND/OR INSTALLATION.

CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR THE OWNER ACCEPTANCE INSPECTION OF ALL LANDSCAPE AND SITE IMPROVEMENTS.

CONTRACTOR IS RESPONSIBLE FOR ON-GOING MAINTENANCE OF ALL NEWLY INSTALLED MATERIALS UNTIL TIME OF OWNER ACCEPTANCE. ANY ACTS OF VANDALISM OR DAMAGE WHICH MAY OCCUR PRIOR TO OWNER ACCEPTANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL PROVIDE THE OWNER WITH A MAINTENANCE PROGRAM INCLUDING, BUT NOT NECESSARILY LIMITED TO, PRUNING, FERTILIZATION AND DISEASE/PEST CONTROL.

CONTRACTOR SHALL GUARANTEE NEW PLANT MATERIAL THROUGH ONE CALENDAR YEAR FROM THE DATE OF OWNER ACCEPTANCE.

WARRANTY (ONE FULL GROWING SEASON) FOR LANDSCAPE MATERIALS SHALL BEGIN ON THE DATE OF ACCEPTANCE BY THE LANDSCAPE ARCHITECT AFTER THE COMPLETION OF PLANTING OF ALL LANDSCAPE MATERIALS. NO PARTIAL ACCEPTANCE WILL BE CONSIDERED.

LANDSCAPE CONTRACTOR SHALL ESTABLISH TO HIS SATISFACTION THAT SOIL AND COMPACTION CONDITIONS ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AT AND AROUND THE BUILDING SITE.

PRELIMINARY
NOT FOR
CONSTRUCTION

ISSUE & REVISION
PRELIMINARY: 3/3/2015

COMM #1408

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7200 Hemlock Lane
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CONTRACTOR:
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Tel: 952.564.3878

CommonBond communities
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St. Paul, MN 55116
Phone: 651-291-1750
Fax: 651-291-1003
Web: www.commonbond.org

SUNWOOD VILLAGE
City of Ramsey, MN
City Parcel #47 (Outlot A)

1201 HAWTHORNE AVENUE
MINNEAPOLIS, MINNESOTA 55403
TEL: 612-332-5420
FAX: 612-332-5425
WWW.MILLERHANSON.COM
MILLER HANSON PARTNERS

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

Douglas D. Lukens, LA
45591
License No.
Date:

LANDSCAPE PLAN
L1-1

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TYPE AA & BB

CL1 LED

Cimarron LED Series

CAST LUMINAIRES



FEATURES
- Stylish vertically finned die-cast solid top housing and lower heat sink optimize or maximum heat dissipation;
- Isolated electrical compartment with integral heat sinking for cooler operation and longer driver life
- Drivers have greater than 90% power factor and less than 10% THD
- Optional continuous dimming to 10% or dual circuitry available
- Automatic thermal self protection
- Surge protection standard
- 60,000 hours life (L90 @ 40°C)*
- Shipped with upswept or straight arm for uniform look and ease of installation
- -30 deg C to 40 deg C ambient operation
- Elektrocote TGIC polyester powder coat finish
- Choice of 32 high brightness LED configurations with individual acrylic lenses aimed to produce IES type II, III, IV and V distribution
  - Increased lumen ouput with use of 1050 mA driver (90L only)
  - Backlight control option reduces spill light behind pole by 85%, doesn't change fixture appearance or EPA
- CRI – 70
- 5000K, 3,000K, 4000K CCT, new turtle friendly Amber
- features exclusive wiHUBB technology
  - Wireless system for On/Off and 0-10VDC full range dimming control
  - Programmable autonomous operation
- IP65
- DLC approved
- Listed to UL1598 and CSA C22.28250.0-24 for wet locations

ORDERING INFORMATION

CL1 – [ ] – [ ] [ ] – [ ] – [ ] – [ ] – [ ] – [ ] – [ ]

SERIES
- CL1 Cimarron LED

NO. OF LEDS
- 90L 90 High brightness LEDs
- 60L 60 High brightness LEDs
- 30L 30 High brightness LEDs

VOLTAGE
- U[3] Universal 120V-277V, 50/60 Hz
- 5 480V, 60 Hz
- F 347V, 60 Hz
- E[3] 220V, 50 Hz

CCT
- 3K 3000K
- 4K 4000K
- 5K 5000K
- AM Amber available for "turtle Friendly" applications (consult factory)

DRIVE CURRENT
- Leave blank for 700mA (standard)
- 105 1050 mA (use with 90L only for higher lumen output)

COLOR
- DB Dark Bronze
- BL Black
- WH White
- GR Gray
- PS Platinum Silver
- RD Red (premium color)
- FG Forest Green (premium color)
- CC Custom Color

DISTRIBUTION
- 2 Type II
- 3 Type III
- 4 Type IV
- 5M Type V Medium
- 5S Type V Short
- 5W Type V Wide

OPTIONS
- BC[6] Backlight control
- BL[1,2,5] Bi-level control
- CD[2] Continuous dimming
- WB Wall bracket
- RPA3 3" Round pole adapter
- RPA4 4" Round pole adapter
- RPA5 5" Round pole adapter
- RPA6 6" Round pole adapter
- F(X)[1,4] Fusing (replace X with voltage: 1-120V, 2-208V, 3-240V, 4-277V, 5-480V, 6-347V)
- PR(X)[5] NEMA Photo cell receptacle (replace X with voltage: U = 120-277, 5 = 480, 6 = 347)
- WIH In-fixture wireless control module, pg. 381
- VG Vandal guard

MOUNTING
- A Arm mount construction (6" straight rigid arm included & acceptable for 90° configurations)
- AD Decoative arm mount const. (6" decorative upsweyt arm incl. & acceptable for 90° configurations)
- MAF Mast arm fitter for mounting to standard 2 3/8" mast arm bracket, includes 6" straight rigid arm

ENERGY DATA

Power Factor	>.9
Total Harmonic Distortion	<10%

Notes: 1 For BL option 90L and 60L, N/A 347V & 480V
2 BL & CD cannot be combined
3 Fuse option not available with universal voltage
4 Select F3 fusing option for 220V
5 Photocell receptacle not available with BL optcion
6 Recommended for Type II, III or Type IV distributions only
7 Replace XX with color designation (see below)
8 Direct pole mount only, not compatible with tenon adapters

ARM-CL-K-S-XX Adjusts in 4° increments

ARM-CL-TK-TA-XX Adjusts in 4° increments

ADJUSTABLE MOUNTING ARMS

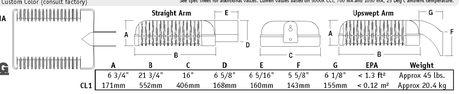
Catalog Number	Description	EPA ft² (m²)	Weight lbs. (kg)
ARM-CL-K-TA-XX[7]	2 3/8" OD tenon slipfitter for single fixture	—	5 (2.3)
ARM-CL-TK-TA-XX[7]	2 3/8" OD tenon slipfitter for twin fixture (180°)	—	7 (3.2)
ARM-CL-K-S-XX[7,8]	10" Adjustable arm	0.5 (0.05)	5.75 (2.6)

Replace **XX** with color designation: **DB** - Dark Bronze, **BL** - Black, **WH** - White, **GR** - Gray, **PS** - Platinum Silver, **RD** - Red (Premium Color), **FG** - Forest Green (Premium Color), **CC** - Custom Color (consult factory)

LIGHT ENGINE	INPUT WATTS 120V-277V	INPUT WATTS 347V-480V	LUMENS DELIVERED TYPE 2	TYPE 3	TYPE 4	TYPE 5M
30L-5K	70	87	6384	6164	6641	7108
60L-5K	140	157	13300	12842	13325	13185
90L-5K	210	227	19684	19006	19202	20592
90L-5K-105	336	363	26974	25351	25548	25793
30L-4K	70	87	6089	6109	6104	6417
60L-4K	140	157	11583	11468	12036	12038
90L-4K	210	227	17143	16973	17648	18521
90L-4K-105	336	363	23896	23912	24199	24583

See spec sheet for additional values. Lumen values based on 5000K CCT, 700 mA and 1050 mA, 25 Deg C ambient temperature.

*Projected per IESNA TM-21-11
NOTE1: All poles to be drilled with #2 pattern



	A	B	C	D	E	F	G	EPA	Weight
CL1	6 3/4" 171mm	21 3/4" 552mm	16" 406mm	6 5/8" 168mm	6 5/16" 160mm	5 5/8" 143mm	6 1/8" 155mm	< 1.3 ft² < 0.12 m²	Approx 45 lbs. Approx 20.4 kg

SPAULDING LIGHTING

TYPE CC

CIMARRON LED CL1S

Cat.#

Job

Type

SPAULDING LIGHTING

Approvals

SPECIFICATIONS

Construction:
- Stylish vertically finned die-cast solid top housing for maximum heat dissipation; Stops collection of unsightly debris
- Rugged lower die-cast aluminum heat sink optimizes thermal management and optical performance
- One piece die-cut silicone gasket with mechanically compressed stainless steel bezel ensures weather proof seal around each individual LED for IP65 rating
- Backlight Control (BC) option available for 85% spill light reduction, doesn't change fixture appearance or EPA, recommended for Type III and Type IV distributions
- Complements the Cimarron LED CL1 i
- Weight - 19 pounds, EPA - .45 ft²

Optics:
- Choice of 126 high brightness LED configurations with individual acrylic lenses specially designed for IES Type II, III, IV and V distributions
- 3000K, 80 CRI; 4000K, 70 CRI; 5100K, 67 CRI, Turtle friendly Amber

Electrical:
- Universal input voltage 120-277 VAC, 50/60 Hz
- Ambient operating temperature -40° C to 40° C
- Drivers have greater than 90% power factor and less than 10% THD
- 700mA drive current standard, 350mA and 525mA options available with 32L and 48L LED models
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20KA and 10KV protection meeting ANSI/IEEE C62.41.2 Category C High and Surge Location Category C3. The SPD is designed with a clamping voltage of 1600V at 20KA using industry standard 8/20µs waveform
- Optional 0-10VDC continuous dimming to 10%
- Automatic thermal self-protection
- LED electrical assembly, including PR devices, consumes no power in the "off" state

Controls:
- Drivers are 0-10V dimming standard. Photocell and occupancy sensors available for complete on/off and dimming control

Installation:
- Quick-mount plate included for easy installation
- The decorative integral arm houses two stage hinge mechanism
- Safety latch holds luminaire door to prevent "free swing"
- Quick-connect wiring for simplified, hassle-free installation
- Suitable for applications requiring 3G testing prescribed by ANSI ©136.31

Finish:
- TGIC thermoset polyester powder paint finish applied at nominal 2.5 mil thickness

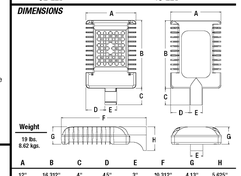
Warranty:
Five year limited warranty, for more information visit: http://www.hubbelloutdoor.com/resources/warranty/

Listings:
- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations
- 700mA models meet DesignLights Consortium (DLC) qualifications, consult DLC website for more details: http://www.designlights.org/QPL
- EIA approved
- IP66
- IES Progress Award Winner - 2013

PRODUCT IMAGE(S)



DIMENSIONS



Weight
19 lbs.
8.62 kgs.

A	B	C	D	E	F	G	H
12" 305mm	16.312" 414mm	4" 102mm	4.5" 119mm	3" 76mm	10.312" 115mm	4.13" 105mm	5.625" 143mm

CERTIFICATIONS/LISTINGS

ORDERING INFORMATION ORDERING EXAMPLE: CL1S-A-48LU-5K-3-DB-RPA3

CL1S – A – [ ] [ ] – [ ] – [ ] – [ ] – [ ] – [ ]

SERIES
- CL1S Cimarron LED Pedestrian Scale

MOUNTING
- A 4" straight arm attached to housing complete with quick-mount plate

NO. OF LEDS
- 16L 16 High brightness LEDs
- 32L 32 High brightness LEDs
- 48L 48 High brightness LEDs

VOLTAGE
- UF Universal 120V-277V, 50/60 Hz
- 1[1] 120V
- 2[1] 208V
- 3[1] 240V
- 4[1] 277V
- 5 480V, 60 Hz
- F 347V, 60 Hz
- E[2] 220V, 50 Hz

CCT
- 3K 3000K, 80 CRI
- 4K 4000K, 70 CRI
- 5K 5100K, 67 CRI

DRIVE CURRENT
- Leave blank for 700mA (standard)
- 035[3,9] 350mA (32L, 48L)
- 053[3] 525mA (32L) 520mA (48L)

DISTRIBUTION
- 2 Type II
- 3 Type III
- 4 Type IV
- 5M Type V Medium
- 5S Type V Short
- 5W Type V Wide
- 2L Type II rotated left
- 3L Type III rotated left
- 4L Type IV rotated left
- 2R Type II rotated right
- 3R Type III rotated right
- 4R Type IV rotated right

COLOR
- DB Dark Bronze
- BL Black
- WH White
- GR Gray
- PS Platinum Silver
- RD Red (premium color)
- FG Forest Green (premium color)
- CC Custom Color

OPTIONS
- BC[4] Backlight control
- CD[4] Continuous dimming
- F(X)[2,3] Fusing (replace X with voltage: 1-120V, 2-208V, 3-240V, 4-277V, 5-480V, 6-347V)
- RPA3 3" Round pole adapter
- RPA4 4" Round pole adapter
- TB Terminal block
- WB Wall bracket
- PR(X) NEMA Photo cell receptacle (replace X with voltage: U=120-277, 5=480, 6 =347)

MOTION CONTROL OPTIONS
- SCP[3,10] Motion sensor On/Off control, No light output when no motion detected
- SCP[3,10] Programmable motion control, factory default is 10%

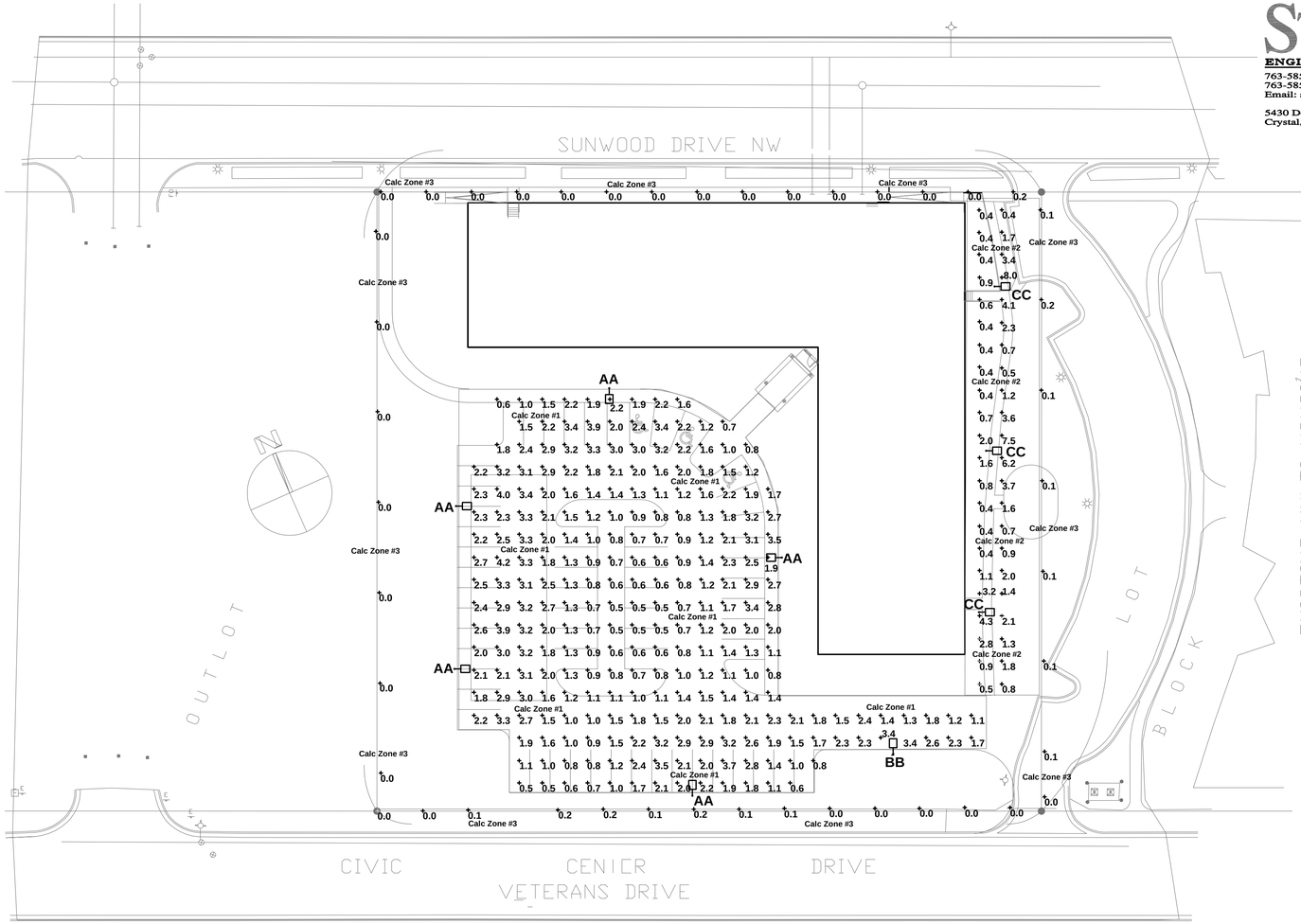
Controls Guide

Notes: 1 - Select only when using voltage specific options F, WH
2 - Fuse option not available with U voltage
3 - Select F3 fusing option for 220V
4 - Not recommended for Type 5S, 5M or 5W
5 - Order to match larger Cimarron CL1 with white bezels
6 - Dimming leads accessible for connection to third party dimming systems
7 - Only available with 120V or 277V input
8 - 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, must order minimum of one remote control to program dimming settings (see accessories)
9 - 32L and 48L available with 035 and 053 drive current
10 - 120V/277V/347V/480V only

SPAULDING LIGHTING

Spaulding Lighting • 701 Millennium Boulevard • Greenville, SC 29607 • Phone: 864-678-1000
Due to our continued efforts to improve our products, product specifications are subject to change without notice.
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HUBBELL Lighting



1 SITE PHOTOMETRIC PLAN
1" = 30'-0"

Luminaire Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage	MTG HGT
	AA	5	SPAULDING LIGHTING	CL1-x-60L-1-4K-4-BC	TYPE IV CIMARRON LED WITH BACK-LIGHT CONTROL	60 - NICHIA 4000K LEDs	1	CL1-x-60L-1-4K-4-BC.ies	9641.508	1	140.3	20'-0"
	BB	1	SPAULDING LIGHTING	CL1-x-60L-1-3K-2-BC	TYPE 2 FROM FRAEN AND BC GASKET	60- NICHIA 3K LEDS	1	CL1-x-60L-1-3K-2-BC.ies	6265.158	1	137.2	20'-0"
	CC	3	SPAULDING LIGHTING	CL1S-A-16LU-4K-2	TYPE 2 LENS- MINI CIMARRON	16- NICHIA 4200K LEDS	1	CL1S-A-16LU-4K-2.ies	3321.907	1	38.1	8'-0"

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
Calc Zone #1	+	1.8 fc	4.2 fc	0.5 fc	8.4:1	3.6:1	0.4:1
Calc Zone #2	+	1.7 fc	8.0 fc	0.4 fc	20.0:1	4.3:1	0.2:1
Calc Zone #3	+	0.0 fc	0.2 fc	0.0 fc	N/A	N/A	0.0:1

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5430 Douglas Drive North
Crystal, MN 55429

ISSUE & REVISION
PHOTOMETRIC: 03-04-2015

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MILLER HANSON PARTNERS

SITE PHOTOMETRIC PLAN

E101

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CITY OF RAMSEY LAND USE APPLICATION
TECHNICAL REVIEW FILE

DATE	3/27/15	**PROJECT ADDRESS**	TBD
PROJECT. TITLE	SUNWOOD VILLAGE		
ESCROW #	114596		
DEPARTMENT:	Community Development: Planning Division (Landscape Plan & Environmental Resources)		
TECHNICAL REVIEWER:	Name: Chris Anderson, City Planner Phone: 763-433-9817 Email: canderson@cityoframsey.com		

We offer the following comments regarding the Landscape Plan prepared by Loucks Associates and dated March 3, 2015:

- Proposed species are generally acceptable with the exception of Burgundy Carousel Barberry. This is a cultivar of Japanese Barberry, which is on the City's list of prohibited species. *Please replace this species with an alternative.*
- The width of the boulevard area along Veterans Drive should be widened to match the boulevard area east of the parking ramp (four [4] feet). While the COR Design Framework identifies a six (6) foot wide boulevard along Connector Streets, the proposed boulevard trees are located on the back side of the sidewalk and thus, the additional width is not necessary.
- The boulevard area must be finished with sod and the developer (and eventually the management company) shall be responsible for its establishment (e.g. watering).
- Plan should identify a unique symbol for each shrub species proposed and add the species labels to the plan as well.
- Planting details/specifications shall be updated to include:
    - Removal of upper portion of wire basket and burlap after being placed in planting hole
- The plan must be revised to identify turf establishment with sod. The notes refer to both sod and seed but there is no legend or labels to determine which is being used and where. Please note that any alternative to the sod requirement requires City Council approval.
- Upon acceptance of landscaping by City, a two (2) year maintenance guarantee is required to ensure survival of plantings.
- Any damage to existing streetscape elements (plants, trees, irrigation, etc.) along Sunwood Drive will need to be repaired and/or replaced. All plan sheets should include this note so that contractors are aware of this.
- The project is subject to the City's topsoil requirement, which states that all disturbed areas not otherwise improved with walkways, driveway, home and other impervious surfacing, shall receive four (4) inches of topsoil meeting the City's topsoil

specification. A topsoil inspection is required prior to landscaping being installed and copies of the load tickets are required as well. This is reviewed at time of Building Permit Application and request for Certificate of Occupancy. *Please update the Landscape Installation Notes to include this requirement.*

Please submit a revised landscaping plan that addresses these matters.

Tree Preservation: This site is devoid of any significant tree cover and therefore, no tree preservation plan is necessary.

Best Management Practices (BMPs): There are a couple BMPs proposed with this project. First, satisfy the Lower Rum River Water Management Organization's (LRRWMO) infiltration requirement, the project proposes to capture the first one (1) inch of rainfall from the site with an underground cistern. However, since the project site is within a 10-year capture zone of one of the community wells where infiltration is not permitted, the captured runoff will be used for irrigation purposes onsite. The second BMP proposed is the use of a tree trench. This essentially is a lined trench that will also be used to store stormwater runoff for uptake by trees and other vegetation. Both BMPs have overflow measures built in that allow runoff from larger events to be routed through to the existing stormwater sewer system.

Environmental Policy Board (EPB) **6.**

Meeting Date: 03/30/2015

By: Chris Anderson, Community Development

Information

Title:

Board/Staff Input

- EAB Confirmed in Anoka County
- Joint Meeting with Planning Commission April 20
- Spring Recycling Day Event May 2

Purpose/Background:

Action:

Attachments

No file(s) attached.

Form Review

Form Started By: Chris Anderson Started On: 03/26/2015 02:30 PM

Final Approval Date: 03/26/2015