

REPORT / RECOMMENDATION



To: MAYOR AND COUNCIL

Agenda Item #: IV.I

From: Ross Bintner P.E.
Environmental Engineer

Action
Discussion
Information

Date: December 18, 2012

Subject: Minnehaha Creek Watershed District Reach 14 Stream Bank Restoration Easement

Action Requested:

Authorize City Manager to sign an easement allowing the Minnehaha Creek Watershed District (MCWD) to construct, restore and maintain sections of Minnehaha Creek stream bank on property owned by the City of Edina.

Information / Background:

Reach 14 is designated as the section of Minnehaha Creek between 54th Street and France Avenue. On September 20, 2011 the Council received a feasibility report for the MCWD Reach 14 stream bank restoration project and issued Resolution 2011-90 supporting the project. Plans are now complete and the MCWD intends to bid and construct the project this winter. A portion of the project is on public property along the creek. This public property is currently unmaintained and is made up primarily of creek bed and noncontiguous sections of upland. The easement agreement gives the MCWD the right to construct and maintain this improvement on property owned by the City.

Attachments:

Easement Agreement and Appendices

EASEMENT

**City of Edina
Hennepin County, Minnesota**

Legal description of subject properties:

COLONIAL GROVE FOURTH ADDITION, PARK;

WOOD END ADDITION, PARK;

COLONIAL GROVE THIRD ADDITION, PARK;

COLONIAL GROVE SIXTH ADDITION, OUTLOT 1;

G A JOHNSONS SOUTHWOOD, PARK;

UNPLATTED 19 028 24, THAT PART OF THE NORTHEAST 1/4 OF
SOUTHEAST 1/4 AND OF THE NORTH 275 FEET OF SOUTHEAST 1/4 OF
SOUTHEAST 1/4 LYING WEST OF BORANS EDINA MANOR

RECITALS

THIS EASEMENT ("Easement") is entered into by and between the City of Edina, a statutory city and political subdivision of the State of Minnesota ("City"), and the Minnehaha Creek Watershed District ("District"), a special-purpose governmental body established under and with authorities specified at Minnesota Statutes Chapters 103B and 103D.

A. The City owns in fee simple certain real property located along and riparian to the channel of Minnehaha Creek within city boundaries, Hennepin County, Minnesota (the "Property").

B. The District wishes to construct improvements along the bed and riparian edge of Minnehaha Creek for the purpose of stabilizing the banks of the creek, limiting bank erosion and enhancing habitat and the natural appearance of the creek (the "Project"), and has determined that the Project is in the public interest, of benefit to adjoining landowners, and otherwise pursuant to its laws and authorities.

C. A portion of the Project will occur on the Property and therefore requires that the City and the District enter into this Easement to construct and maintain the Project. The Easement consists of a Construction Easement for a term of four years and a perpetual Maintenance Easement. The rights granted to the District in this Easement pertain to those portions of the Property delineated and labeled as "Access Route" and "Staging Area" on the site map labeled as Exhibit A and as "Construction Limits" on the site plans at Exhibit B, attached hereto and incorporated herein.

D. The Project will result in an area of preserved and native vegetation averaging 10 feet in depth from the creek top of bank along with bioengineering and related vegetative elements on the bed and bank of the creek.

E. For the payment of one dollar and other good and valuable consideration, and the mutual covenants and conditions set forth herein, the receipt and sufficiency of which hereby are acknowledged, the City and the District hereby enter into this Easement and concur that it is legally binding.

CONSTRUCTION EASEMENT

1. Term of Construction Easement. The Construction Easement granted to the District in Sections 2 and 3, following, expires four years from the date this Easement is filed for record in the Office of the Hennepin County Recorder or Registrar.

2. District Rights: Construction Easement. The District may enter the Construction Limits at reasonable times in order to construct, inspect and maintain a part of the Project as shown on the Project removals and landscape plans at Exhibit B, attached hereto and incorporated herein.

a. The foregoing encompasses the right to stage equipment and stockpile materials; alter land contours by means of minor grading and fill; impound, direct and redirect flows within Minnehaha Creek; remove retaining walls; replace retaining walls with vegetated rock walls; relocate and install features such as rocks; plant, maintain and remove vegetation; and otherwise take actions pursuant to the Project plans.

b. The District may temporarily or permanently remove trees and brush within the Construction Limits as indicated on Exhibit B in order to construct the Project. Each tree within the Construction Limits to be protected will be marked before construction and the District will specify construction requirements for the purpose of avoiding damage to the tree or its root system during construction.

- c. The District will protect and avoid damage to utilities, sprinkler systems and other underground features. The City will cooperate with the District before work begins to identify the existence and location of underground features.
 - d. Once construction is complete, the District will remove all equipment and materials from the Construction Limits and restore the area of disturbance materially to its preexisting condition except as modified by the Project. After construction is complete, the District will not bring self-propelled motorized equipment or vehicles onto the Property.
 - e. The District will not increase flood elevation or redirect surface flows on or across the Property.
 - f. After completing construction, the District may enter the Construction Limits to perform maintenance on the Project, which will consist of maintaining wave barriers and fencing until vegetation establishment, watering, weed pulling, herbicide application in accordance with instructions, mulching, replacement of plantings, and other actions of similar scale to facilitate the establishment of and maintain the Project.
 - g. The rights conveyed to the District under the Construction Easement are subject to use only by authorized District representatives, agents, contractors and subcontractors.
 - h. The District is wholly responsible for the cost and performance of the Project and all permits and approvals related thereto. It will perform all work on the Property in conformance with all applicable federal, state and local legal requirements.
3. District Rights: Ingress and Egress. The District may cross the Property in order to move person, vehicles, equipment and materials between the Construction Limits and public ways. The District will not use the Property outside of the Construction Limits for staging, stockpiling or construction activity. The District will repair any damage to the Property outside of the Construction Limits caused by its use materially to its preexisting condition.

MAINTENANCE EASEMENT

4. Term of Maintenance Easement. The Maintenance Easement is perpetual. The Property will be owned, used, occupied and conveyed subject to the terms set forth herein, which shall be binding on all persons owning or acquiring any right, title or interest in the Property, and their heirs, successors, personal representatives and assigns. The Maintenance Easement is established for the benefit of the District as a public body and the parcel of record contiguous to the Property and adjacent to the Project. The Maintenance Easement is appurtenant to that parcel and the public

resource of Minnehaha Creek, and is not intended as a private covenant, condition or restriction within the meaning of Minnesota Statutes §500.20.

5. District Rights: Maintenance Easement. The Maintenance Easement conveys to the District and its representatives, agents, contractors and subcontractors the right to maintain the Project and to cross the Property in order to do so. Maintenance activities include removal of weeds and invasive species; application of herbicides in accordance with label instructions; replacement of plantings and reseeded; correction of erosion; and other activities necessary or convenient to maintain a naturalized, ecologically healthy streambank that is structurally stable and resistant to erosion.

6. District Rights: Signage, Publicity. At its own cost and with City approval as to location and design, not to be unreasonably withheld, the District may place and maintain signage on the Property identifying and describing the Project and informing the public of its purposes. On reasonable notice to City, District representatives may accompany members of the public onto the Property to view the Project from time to time. Nothing in this Easement creates a right of public entry onto the Property except as coordinated with the City and accompanied by a District representative. The District may cite the Project and its location in public communications about District programs and may depict the Project in text, photographs or other media.

7. Adjusting Project Area. Notwithstanding section 9, below, the City may adjust the Project area subject to the following:

- a. The area landward from the top of bank as notated on Exhibit B maintained in protected vegetation must average at least 10 feet in depth over the creek frontage. Except for an access path as per paragraph 7.b, this protected vegetated area must be at least five feet in depth at every point.
- b. The City, if it so decides, may maintain a turf or other unpaved path to the creek so that there is access for each adjacent parcel of record. The width of each path may not exceed 20 percent of the creek frontage of the adjacent parcel of record or 20 feet, whichever is less.
- c. The District must be notified in writing at least 15 days before any adjustment.

8. Assignment. The District intends that the owner of the presently residential parcel adjacent to and upgradient of the Property will perform regular maintenance of the Project. Without further City approval, the District may assign some or all of its rights and obligations under the Maintenance Agreement to the fee owner of said parcel of record as shown on Exhibit B. The assignment may be exclusive or non-exclusive and may be recorded or registered on the title of the Property. The City will cooperate as necessary for the purpose of

accomplishing recording or registration but the District will bear the fee for doing so.

GENERAL TERMS

9. Restrictions on City. The City will not disturb elements of the Project and will not occupy the Construction Limits in any respect that impairs the District's ability to exercise its rights under this Easement. The City will not mow or disturb any vegetated, planted or seeded areas except as specified herein; apply fertilizer; place yard or other waste; or place a structure or any other alteration that impedes the function of the streambank in protecting water quality, shading the riparian edge, moderating flow into the creek, or providing wildlife habitat.

10. Ownership Obligations; Insurance. The City reserves all rights and privileges and retains all obligations associated with ownership of the Property except as specifically provided in this Easement. The City and the District each remain solely responsible to maintain liability and other insurance for their own uses of and authority over the Property.

11. Acts Beyond Party's Control. A party is not responsible for injury or alteration to the Property resulting from: (a) a cause beyond the reasonable control of that party, including without limitation fire, flood, a precipitation event with a statistical recurrence interval of 100 years or more, storm and earth movement resulting from natural forces or the act of a third party; or (b) any prudent action taken by the party under emergency conditions to prevent, abate or mitigate significant injury or alteration resulting from such a cause.

12. Binds Successors in Interest. This Easement runs with the land and binds all successors in interest to the City. The City will give the District fifteen (15) days' prior written notice of a fee transfer of the Property.

13. Notices. Any notice or other communication that either party must give to the other will be in writing and delivered to the following address or such other address as either party designates by written notice to the other:

CITY

DISTRICT

4801 W. 50th St.
Edina, MN 55424

15320 Minnetonka Blvd
Minnetonka, MN 55345

14. Recording. The District, at its cost, may file and refile this Easement for recording or registration at the county land records office.

15. Recitals. The recitals set forth above are expressly incorporated herein.

IN WITNESS WHEREOF, this instrument is executed the day and year set forth.

CITY of EDINA

Scott Neal, City Manager

Date:

STATE OF MINNESOTA
COUNTY OF HENNEPIN

This instrument was acknowledged before me this ____ day of _____, 2012, by _____ as _____ of the City of Edina.

Notary Public

MINNEHAHA CREEK WATERSHED DISTRICT

Eric Evenson, Administrator

Date:

STATE OF MINNESOTA
COUNTY OF HENNEPIN

This instrument was acknowledged before me this ____ day of _____, 2012, by _____ as Administrator of the Minnehaha Creek Watershed District.

Notary Public

Prepared by:
Smith Partners PLLP
400 Second Avenue South
Suite 1200
Minneapolis MN 55401
612-344-1400

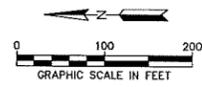
EXHIBIT A:
SITE OVERVIEW AND EQUIPMENT ACCESS ROUTES



NOTES

1. EQUIPMENT ACCESS UNDER THE BRIDGE TO FOLLOW CENTERLINE OF THE CHANNEL. MAXIMUM EXCAVATION DEPTH ALLOWED IS 2.5' TO PROVIDE 9" CLEARANCE UNDER THE BRIDGE. MAXIMUM EXCAVATION WIDTH TO BE NO MORE THAN 8' OR MINIMUM ALLOWABLE WIDTH FOR EQUIPMENT TO PASS ONE AT A TIME, WHICHEVER IS SMALLEST. EXCAVATED MATERIAL TO BE STOCKPILED BY MATERIAL AND GRADE IN THE ORDER OF EXCAVATION AND REPLACED IN KIND WHEN WINTER CONSTRUCTION IS COMPLETED.
2. SUITABLE WEIGHTED PLANK COVERINGS OR MARSH MATS SHALL BE PROVIDED BY CONTRACTOR FOR PROTECTION OF THE STREAMBANK DURING SITE ACCESS. ALTERNATE STREAMBANK PROTECTION METHODS MAY BE USED, BUT MUST BE APPROVED BY ENGINEER PRIOR TO USE. TRACKING ON THE NATIVE SOILS IS NOT ALLOWED.

LEGEND



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	KDK	LNJ	11/21/12

SEAL
 I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME ED A. MATTHIESEN
 SIGNATURE *[Signature]*
 DATE 11/21/2012 REG. NO. 16800

PRIME CONSULTANT

 Wenck Associates, Inc.
 Consulting Engineers
 Maple Plain, MN 55359
 763-479-4200
 Web Site: www.wenck.com

PROJECT TITLE
 MCWD
 REACH 14 PROJECT

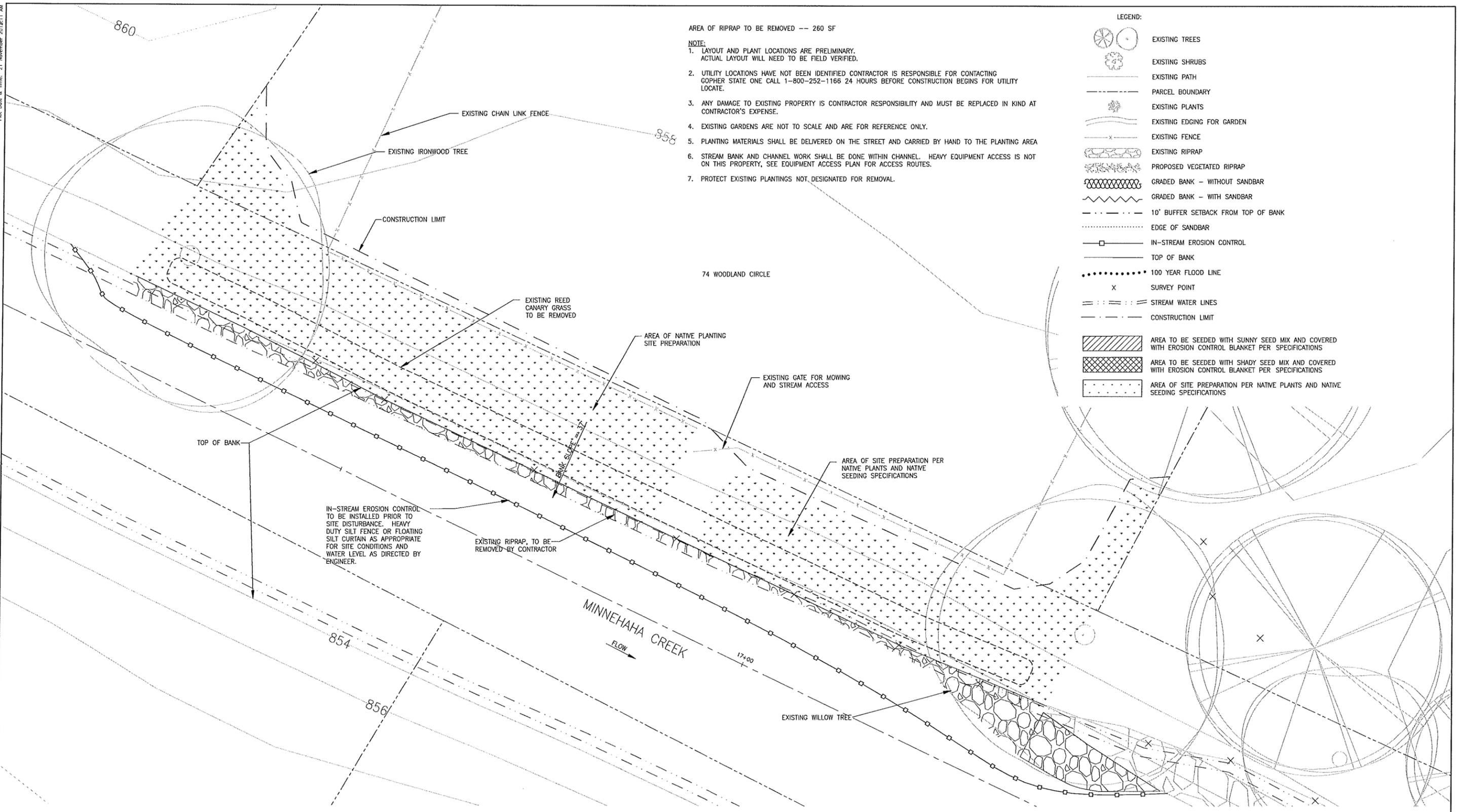
MINNEHAHA CREEK
 WATERSHED DISTRICT
 QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE			
SITE OVERVIEW/ EQUIPMENT ACCESS ROUTE			
DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054		SCALE AS SHOWN	
SHEET NO. C-101		REV NO. 1	

EXHIBIT B:
REMOVAL AND LANDSCAPE PLANS

Plot Date & Time: 21 November 2012 11 AM

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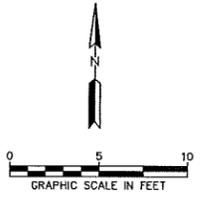
AREA OF RIPRAP TO BE REMOVED -- 260 SF

- NOTE:**
- LAYOUT AND PLANT LOCATIONS ARE PRELIMINARY. ACTUAL LAYOUT WILL NEED TO BE FIELD VERIFIED.
 - UTILITY LOCATIONS HAVE NOT BEEN IDENTIFIED. CONTRACTOR IS RESPONSIBLE FOR CONTACTING GOPHER STATE ONE CALL 1-800-252-1166 24 HOURS BEFORE CONSTRUCTION BEGINS FOR UTILITY LOCATE.
 - ANY DAMAGE TO EXISTING PROPERTY IS CONTRACTOR RESPONSIBILITY AND MUST BE REPLACED IN KIND AT CONTRACTOR'S EXPENSE.
 - EXISTING GARDENS ARE NOT TO SCALE AND ARE FOR REFERENCE ONLY.
 - PLANTING MATERIALS SHALL BE DELIVERED ON THE STREET AND CARRIED BY HAND TO THE PLANTING AREA.
 - STREAM BANK AND CHANNEL WORK SHALL BE DONE WITHIN CHANNEL. HEAVY EQUIPMENT ACCESS IS NOT ON THIS PROPERTY, SEE EQUIPMENT ACCESS PLAN FOR ACCESS ROUTES.
 - PROTECT EXISTING PLANTINGS NOT DESIGNATED FOR REMOVAL.

LEGEND:

- EXISTING TREES
- EXISTING SHRUBS
- EXISTING PATH
- PARCEL BOUNDARY
- EXISTING PLANTS
- EXISTING EDGING FOR GARDEN
- EXISTING FENCE
- EXISTING RIPRAP
- PROPOSED VEGETATED RIPRAP
- GRADED BANK - WITHOUT SANDBAR
- GRADED BANK - WITH SANDBAR
- 10' BUFFER SETBACK FROM TOP OF BANK
- EDGE OF SANDBAR
- IN-STREAM EROSION CONTROL
- TOP OF BANK
- 100 YEAR FLOOD LINE
- SURVEY POINT
- STREAM WATER LINES
- CONSTRUCTION LIMIT
- AREA TO BE SEEDED WITH SUNNY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA TO BE SEEDED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

IN-STREAM EROSION CONTROL TO BE INSTALLED PRIOR TO SITE DISTURBANCE. HEAVY DUTY SILT FENCE OR FLOATING SILT CURTAIN AS APPROPRIATE FOR SITE CONDITIONS AND WATER LEVEL AS DIRECTED BY ENGINEER.



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PRINT NAME ED A. MATTHESEN

SIGNATURE

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Consulting Engineers

Web Site: www.wenck.com

763-479-4200

MUNICIPALITY OF WOODLAND, WI 53559

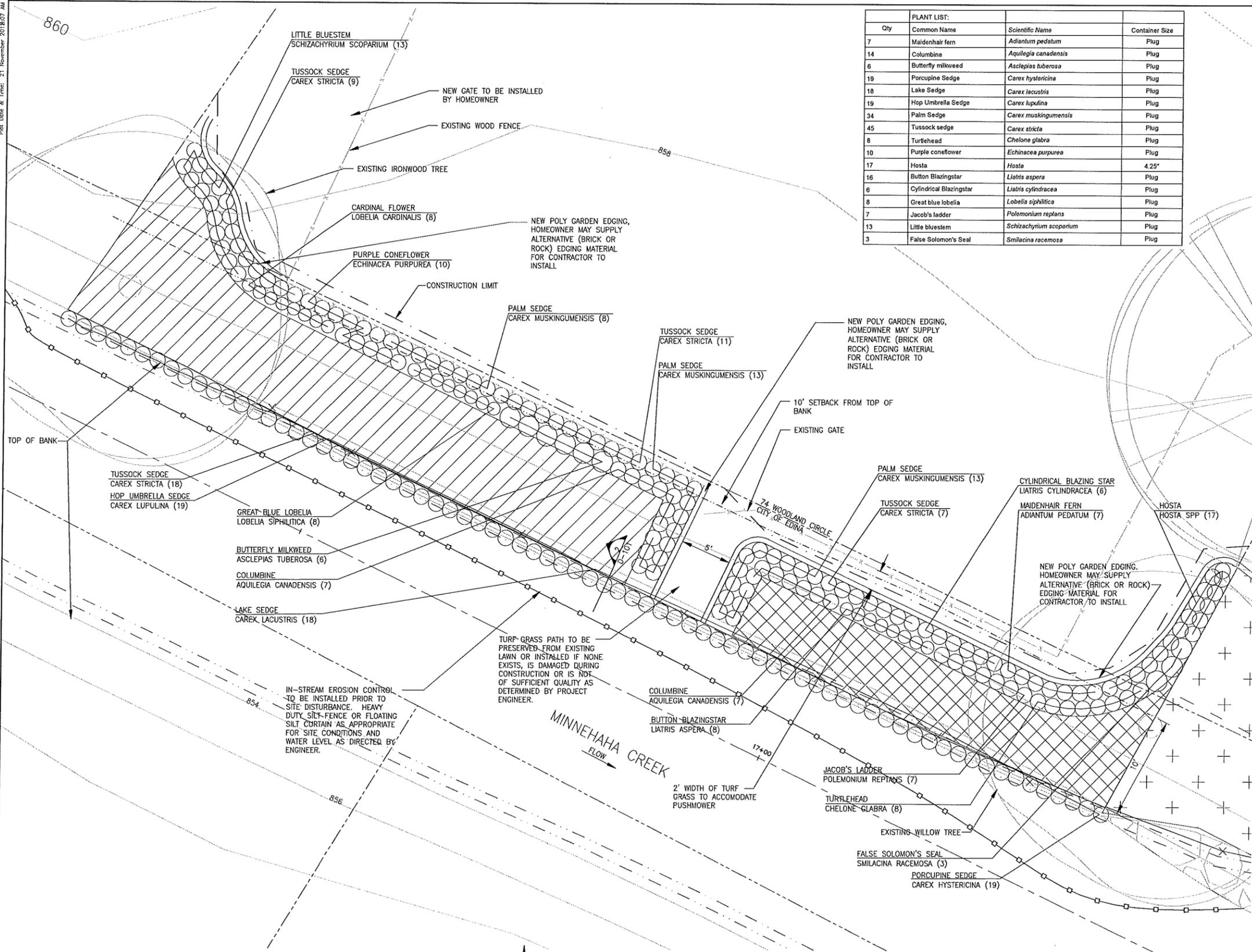
PROJECT TITLE

MCWD
REACH 14 PROJECT

MINNEHAHA CREEK
WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE			
REMOVAL PLAN 74 WOODLAND CIRCLE			
DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054		SCALE AS SHOWN	REV NO. 1

Plot Date & Time: 21 November 2012 07:44 AM
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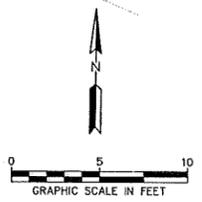


Qty	Common Name	Scientific Name	Container Size
7	Maidenhair fern	<i>Adiantum pedatum</i>	Plug
14	Columbine	<i>Aquilegia canadensis</i>	Plug
6	Butterfly milkweed	<i>Asclepias tuberosa</i>	Plug
19	Porcupine Sedge	<i>Carex hystericina</i>	Plug
18	Lake Sedge	<i>Carex lacustris</i>	Plug
19	Hop Umbrella Sedge	<i>Carex lupulina</i>	Plug
34	Palm Sedge	<i>Carex muskingumensis</i>	Plug
45	Tussock sedge	<i>Carex stricta</i>	Plug
8	Turtlehead	<i>Chelone glabra</i>	Plug
10	Purple coneflower	<i>Echinacea purpurea</i>	Plug
17	Hosta	<i>Hosta</i>	4.25"
16	Button Blazingstar	<i>Liatris aspera</i>	Plug
6	Cylindrical Blazingstar	<i>Liatris cylindracea</i>	Plug
8	Great blue lobelia	<i>Lobelia siphilitica</i>	Plug
7	Jacob's ladder	<i>Polemonium reptans</i>	Plug
13	Little bluestem	<i>Schizachyrium scoparium</i>	Plug
3	False Solomon's Seal	<i>Smilacina racemosa</i>	Plug

LEGEND:

- EXISTING TREES
- EXISTING SHRUBS
- EXISTING PATH
- PARCEL BOUNDARY
- EXISTING PLANTS
- EXISTING EDGING FOR GARDEN
- EXISTING FENCE
- EXISTING RIPRAP
- PROPOSED VEGETATED RIPRAP
- GRADED BANK - WITHOUT SANDBAR
- GRADED BANK - WITH SANDBAR
- 10' BUFFER SETBACK FROM TOP OF BANK
- EDGE OF SANDBAR
- IN-STREAM EROSION CONTROL
- TOP OF BANK
- 100 YEAR FLOOD LINE
- SURVEY POINT
- STREAM WATER LINES
- CONSTRUCTION LIMIT
- AREA TO BE SEEDDED WITH SUNNY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA TO BE SEEDDED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

DOUBLE SHREDDED HARDWOOD MULCH (MNDOT-TYPE 6) -- 440 SF (3" DEPTH)
 (TO BE PLACED IN BUFFER LANDSCAPING PLANTING AREAS AROUND POTTED PLANTS)
 AREA TO BE SEEDDED WITH SUNNY SEED MIX -- 595 SF
 AREA TO BE SEEDDED WITH SHADY SEED MIX -- 285 SF
 LENGTH OF GARDEN BORDER TO BE INSTALLED -- 150 SF
 AREA OF TURF GRASS PATH -- 130 SF
NOTE:
 1. LAYOUT AND PLANT LOCATIONS ARE PRELIMINARY. ACTUAL LAYOUT WILL NEED TO BE FIELD VERIFIED.
 2. UTILITY LOCATIONS HAVE NOT BEEN IDENTIFIED CONTRACTOR IS RESPONSIBLE FOR CONTACTING GOPHER STATE ONE CALL 1-800-252-1166 24 HOURS BEFORE CONSTRUCTION BEGINS FOR UTILITY LOCATE.
 3. ANY DAMAGE TO EXISTING PROPERTY IS CONTRACTOR RESPONSIBILITY AND MUST BE REPLACED IN KIND AT CONTRACTOR'S EXPENSE.
 4. EXISTING GARDENS ARE NOT TO SCALE AND ARE FOR REFERENCE ONLY.
 5. PLANTING MATERIALS SHALL BE DELIVERED ON THE STREET AND CARRIED BY HAND TO THE PLANTING AREA
 6. STREAM BANK AND CHANNEL WORK SHALL BE DONE WITHIN CHANNEL. HEAVY EQUIPMENT ACCESS IS NOT ON THIS PROPERTY, SEE EQUIPMENT ACCESS PLAN FOR ACCESS ROUTES.



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1	ISSUED FOR APPROVAL	KDK	LNJ	11/21/12

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PRIME CONSULTANT

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PROJECT TITLE
 MCWD
 REACH 14 PROJECT

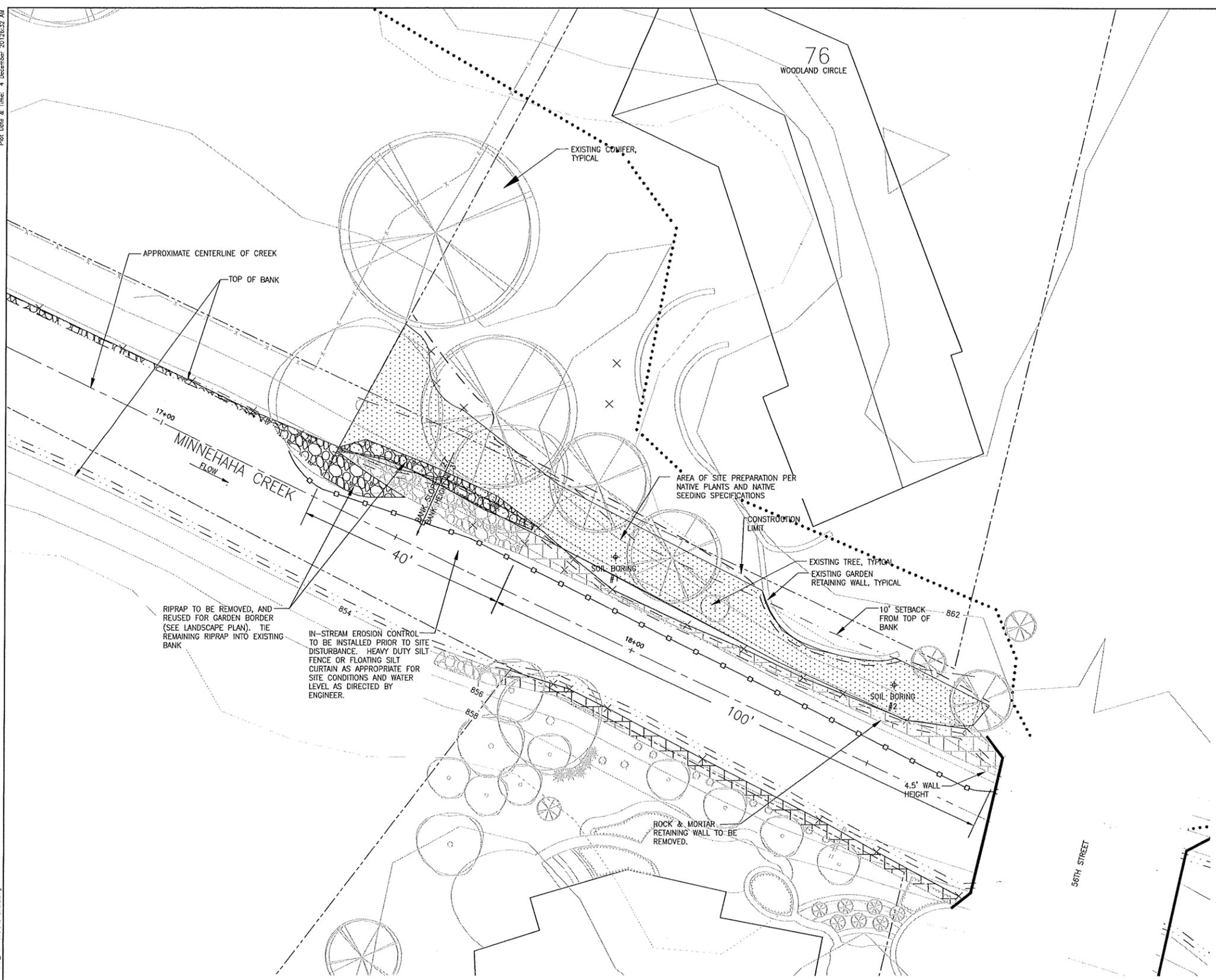
MINNEHAHA CREEK
 WATERSHED DISTRICT
 QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE
 LANDSCAPE PLAN
 74 WOODLAND CIRCLE

DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054	SHEET NO. L-106	SCALE AS SHOWN	REV NO. 1

Plot Date & Time: 4 December 2011 6:32 AM

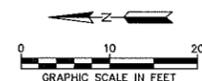
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- LEGEND:**
- EXISTING TREES
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 - TOP OF BANK
 - 100 YEAR FLOOD LINE
 - SURVEY POINT
 - STREAM WATER LINES
 - AREA TO BE PLANTED / INFILLED WITH PLANTS FROM PLANT LIST (SUNNY)
 - AREA TO BE PLANTED / INFILLED WITH PLANTS FROM PLANT LIST (SHADY)
 - AREA OF NATIVE PLANTING SITE PREPARATION

AREA OF RIPRAP TO BE REMOVED --- 330 SF
 ESTIMATED VOLUME OF RETAINING WALL TO BE REMOVED --- 960 CF

- NOTE:**
1. LAYOUT TO BE COMPLETED BY LANDSCAPE DESIGNER/HOMEOWNER ONSITE PRIOR TO PLANT INSTALLATION.
 2. UTILITY LOCATIONS HAVE NOT BEEN IDENTIFIED CONTRACTOR IS RESPONSIBLE FOR CONTACTING GOPHER STATE ONE CALL 1-800-252-1166 24 HOURS BEFORE CONSTRUCTION BEGINS FOR UTILITY LOCATE.
 3. ANY DAMAGE TO EXISTING PROPERTY IS CONTRACTOR RESPONSIBILITY AND MUST BE REPLACED IN KIND AT CONTRACTOR'S EXPENSE.
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 6. STREAM BANK AND CHANNEL WORK SHALL BE DONE WITHIN CHANNEL. HEAVY EQUIPMENT ACCESS IS NOT ON THIS PROPERTY, SEE EQUIPMENT ACCESS PLAN FOR ACCESS ROUTES.
 7. PROTECT EXISTING PLANTINGS NOT DESIGNATED FOR REMOVAL.
 8. FACE OF NEW VEGETATED BOULDER WALL HAS TO MATCH FACE OF EXISTING RETAINING WALL. CONTRACTOR TO PROVIDE REFERENCE POINTS.



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 SIGNATURE *[Signature]*
 DATE 11/21/2012 REG. NO. 16800

PRIME CONSULTANT

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 Consulting Engineers
 MAPLE PLAIN, MN 55359 763-479-4200

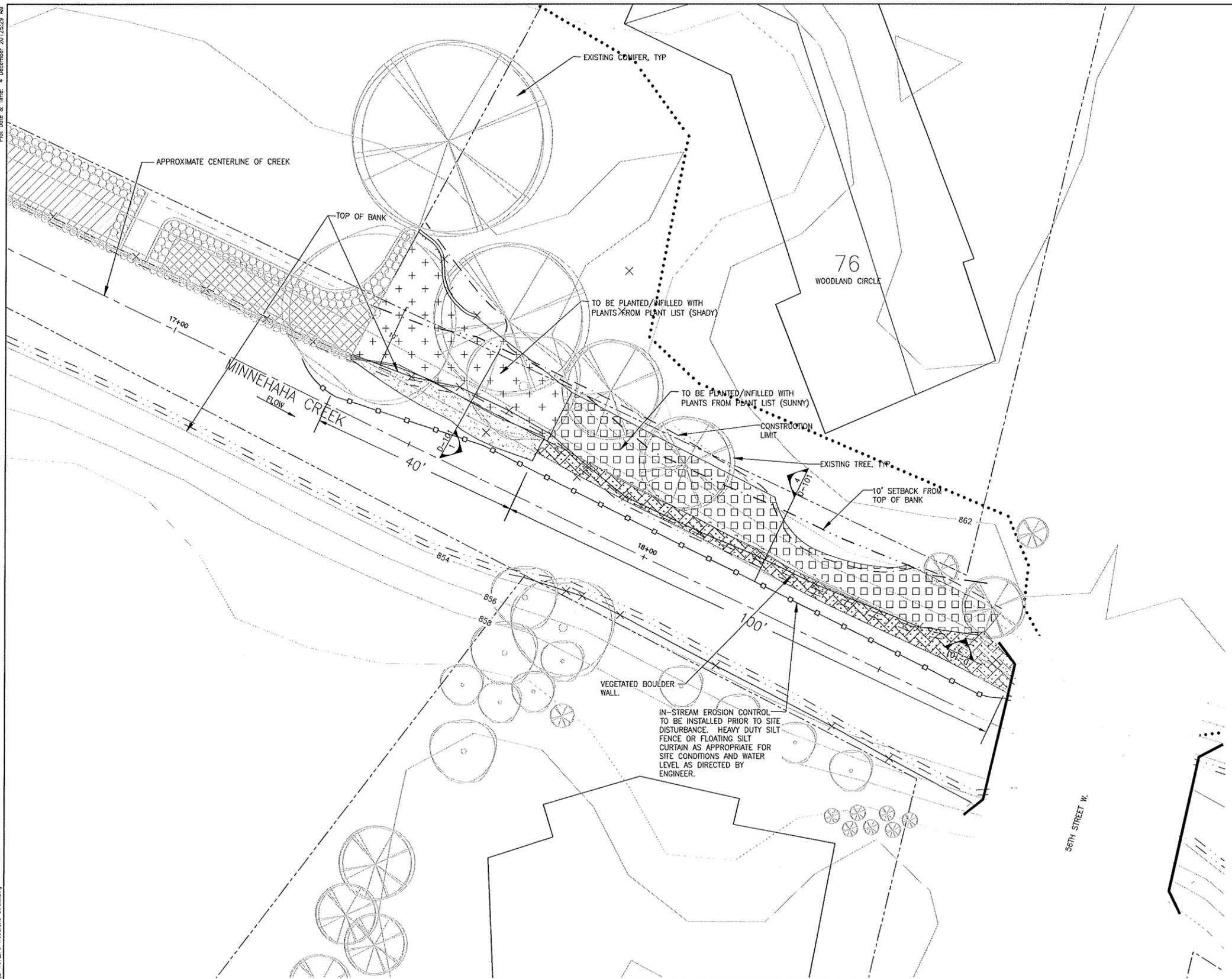
PROJECT TITLE
 MCWD
 REACH 14 PROJECT

MINNEHAHA CREEK
 WATERSHED DISTRICT
 QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE		DWN BY		CHK'D	APP'D	DWG DATE	SCALE	REV NO.
REMOVAL PLAN 76 WOODLAND CIRCLE		KDK	JVB	LNJ	LNJ	AUGUST 2012	AS SHOWN	1
PROJECT NO.	SHEET NO.							
0185-5054	L-107A							

Plot Date & Time: 4 December 2012 8:29 AM

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LEGEND:

- EXISTING TREES
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- AREA TO BE PLANTED / INFILLED WITH PLANTS FROM PLANT LIST (SUNNY)
- AREA TO BE PLANTED / INFILLED WITH PLANTS FROM PLANT LIST (SHADY)
- AREA OF NATIVE PLANTING SITE PREPARATION

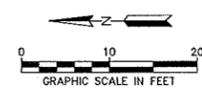
DOUBLE SHREDDED HARDWOOD MULCH (MNDOT-TYPE 6) --- 650 SF (3" DEPTH)
 (TO BE PLACED IN BUFFER LANDSCAPING PLANTING AREAS AROUND POTTED PLANTS)
 AREA OF RIP RAP TO BE COVERED WITH TOP SOIL (4" DEPTH) AND SEEDED WITH SHADY SEED MIX --- 180 SF

- NOTE:**
1. LAYOUT TO BE COMPLETED BY LANDSCAPE DESIGNER/HOMEOWNER ONSITE PRIOR TO PLANT INSTALLATION.
 2. UTILITY LOCATIONS HAVE NOT BEEN IDENTIFIED CONTRACTOR IS RESPONSIBLE FOR CONTACTING GOPHER STATE ONE CALL 1-800-252-1166 24 HOURS BEFORE CONSTRUCTION BEGINS FOR UTILITY LOCATE.
 3. ANY DAMAGE TO EXISTING PROPERTY IS CONTRACTOR RESPONSIBILITY AND MUST BE REPLACED IN KIND AT CONTRACTOR'S EXPENSE.
 4. EXISTING GARDENS ARE NOT TO SCALE AND ARE FOR REFERENCE ONLY.
 5. PLANTING MATERIALS SHALL BE DELIVERED ON THE STREET AND CARRIED BY HAND TO THE PLANTING AREA.
 6. STREAM BANK AND CHANNEL WORK SHALL BE DONE WITHIN CHANNEL. HEAVY EQUIPMENT ACCESS IS NOT ON THIS PROPERTY. SEE EQUIPMENT ACCESS PLAN FOR ACCESS ROUTES.
 7. IRRIGATION SYSTEM AND COMCAST WITHIN CONSTRUCTION LIMITS. CONTRACTOR RESPONSIBLE FOR LOCATING AND PROTECTING SYSTEM. ALL DAMAGES TO BE REPLACED IN KIND.

PLANT LIST (SUNNY)			
Qty	Common Name	Scientific Name	Min. Container Size
24	Drummond's Aster	<i>Aster drummondii</i>	Plug
12	Purple Coneflower	<i>Echinacea purpurea</i>	Plug
6	Red-Stalked Spikerush	<i>Eleocharis palustris</i>	Plug
24	Virginia Wild Rye	<i>Elymus virginicus</i>	Plug
12	Little Joe Pye Weed	<i>Eupatorium dubium 'Little Joe'</i>	Plug
6	Northern Blue Flag Iris	<i>Iris versicolor</i>	Plug
12	Great Blue Lobelia	<i>Lobelia siphilitica</i>	Plug

PLANT LIST (SHADY)			
Qty	Common Name	Scientific Name	Container Size
6	Maidenhair Fern	<i>Adiantum pedatum</i>	Plug
6	Jack in the Pulpit	<i>Arisaema triphyllum</i>	Plug
6	Large Leaved Aster	<i>Aster macrophyllus</i>	Plug
6	Turtlehead	<i>Chelone glabra</i>	Plug
6	Woodland Sunflower	<i>Helianthus strumosus</i>	Plug
6	Jacob's Ladder	<i>Potamogeton reptans</i>	Plug

PLANT LIST - (VEGETATED ROCK WALL)			
Qty	Common Name	Scientific Name	Container Size
20	Gray Dogwood	<i>Cornus racemosa</i>	Live stake/Bare Root
20	Red-Osier Dogwood	<i>Cornus sericea</i>	Live stake/Bare Root
20	Arrowwood	<i>Viburnum dentatum</i>	Live stake/Bare Root
10	Slender-leaved Willow	<i>Salix petiolaris</i>	Live stake/Bare Root



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	KDK	LNJ	11/21/12

SEAL
 I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME ED A. MATTHESEN
 SIGNATURE *[Signature]*
 DATE 11/21/2012 REG. NO. 16800

PRIME CONSULTANT

 Wenck Associates, Inc. Consulting Engineers
 Maple Plain, MN 55359 763-479-4200

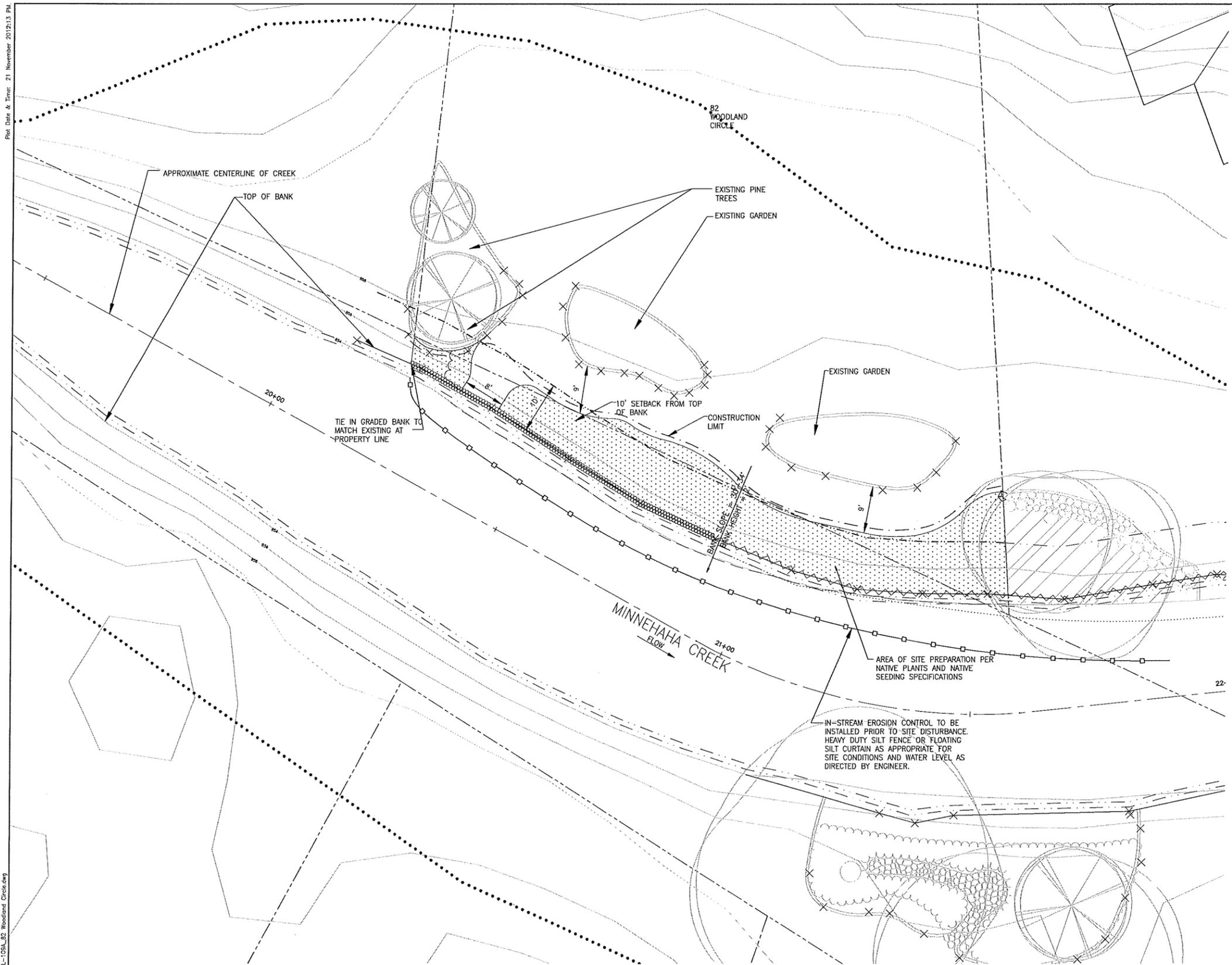
PROJECT TITLE
 MCWD
 REACH 14 PROJECT

 MINNEHAHA CREEK
 WATERSHED DISTRICT
 QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE
 LANDSCAPE PLAN
 76 WOODLAND CIRCLE
 DWN BY KDK CHK'D JVB APP'D LNJ DWG DATE AUGUST 2012 SCALE AS SHOWN
 PROJECT NO. SHEET NO. REV NO.
 0185-5054 L-107 1

Plot Date & Time: 21 November 2012 1:13 PM

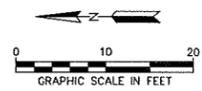
M:\0185\5054_Reach_14\CAD\LN\NSCP\L-109A_82_Woodland_Circle.dwg



LEGEND:

- EXISTING TREES
- EXISTING SHRUBS
- EXISTING PATH
- PARCEL BOUNDARY
- EXISTING PLANTS
- EXISTING EDGING FOR GARDEN
- EXISTING FENCE
- EXISTING RIPRAP
- PROPOSED VEGETATED RIPRAP
- GRADED BANK - WITHOUT SANDBAR
- GRADED BANK - WITH SANDBAR
- 10' SETBACK FROM TOP OF BANK
- EDGE OF SANDBAR
- IN-STREAM EROSION CONTROL
- TOP OF BANK
- 100 YEAR FLOOD LINE
- SURVEY POINT
- STREAM WATER LINES
- CONSTRUCTION LIMIT
- AREA TO BE SEEDED WITH SUNNY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA TO BE SEEDED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

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 7. PROTECT EXISTING PLANTINGS NOT DESIGNATED FOR REMOVAL.



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	KDK	LNJ	11/21/12

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PRINT NAME ED A. MATTHESEN

SIGNATURE

DATE 11/21/2012 REG. NO. 16800

PRIME CONSULTANT

Wenck Associates, Inc.
Consulting Engineers

Web Site: www.wenck.com

WAPLE PLAIN, MN 55359 763-479-4200

PROJECT TITLE

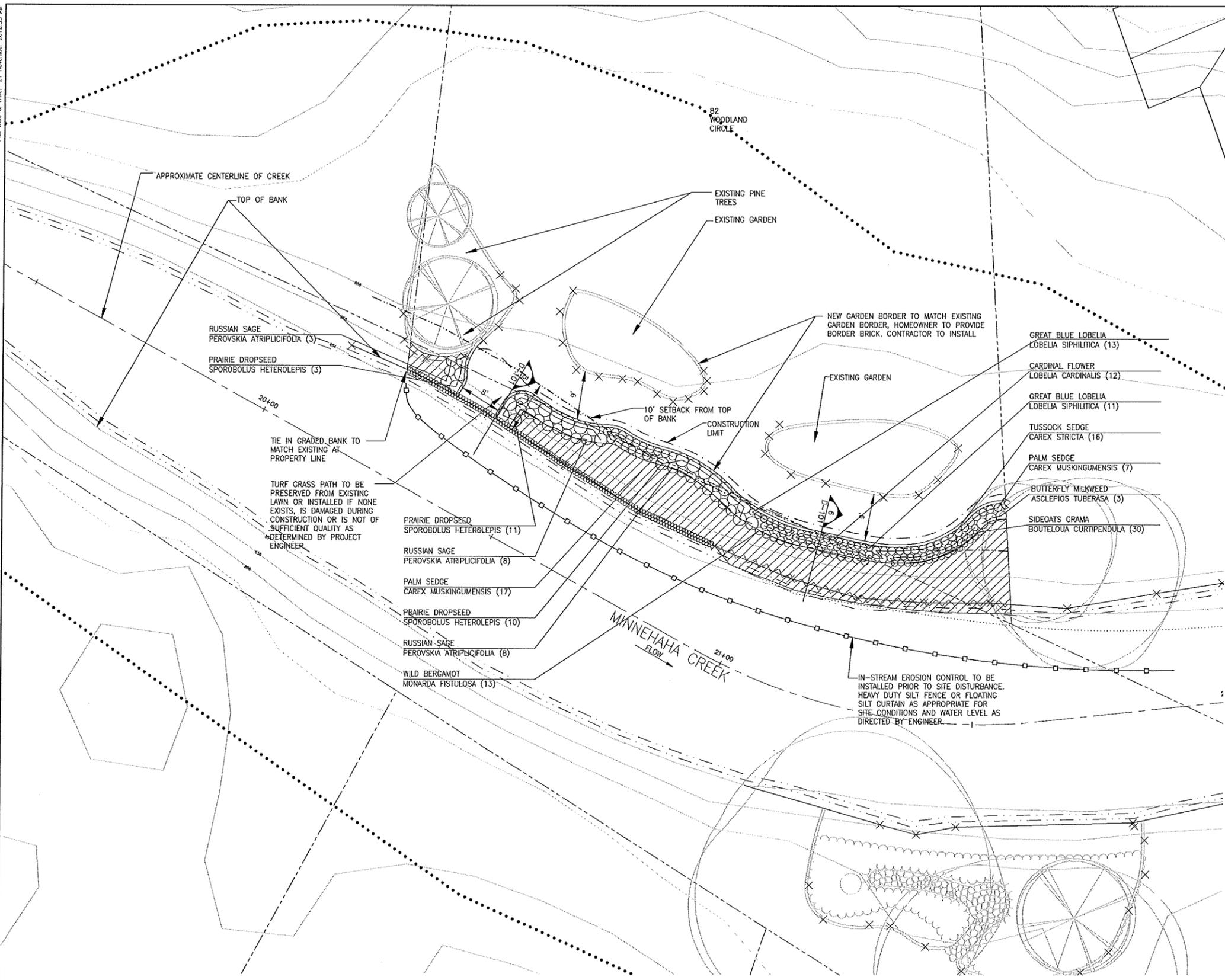
MCWD
REACH 14 PROJECT

MINNEHAHA CREEK
WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE			
REMOVAL PLAN 82 WOODLAND CIRCLE			
DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054	SHEET NO. L-109A	SCALE AS SHOWN	REV NO. 1

Plot Date & Time: 21 November 2012 8:35 AM

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LEGEND:

- EXISTING TREES
- EXISTING SHRUBS
- EXISTING PATH
- PARCEL BOUNDARY
- EXISTING PLANTS
- EXISTING EDGING FOR GARDEN
- EXISTING FENCE
- EXISTING RIPRAP
- PROPOSED VEGETATED RIPRAP
- GRADED BANK - WITHOUT SANDBAR
- GRADED BANK - WITH SANDBAR
- 10' SETBACK FROM TOP OF BANK
- EDGE OF SANDBAR
- IN-STREAM EROSION CONTROL
- TOP OF BANK
- 100 YEAR FLOOD LINE
- SURVEY POINT
- STREAM WATER LINES
- CONSTRUCTION LIMIT
- AREA TO BE SEEDDED WITH SUNNY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA TO BE SEEDDED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

DOUBLE SHREDDED HARDWOOD MULCH (MNDOT-TYPE 6) --- 335 SF (3" DEPTH)
(TO BE PLACED IN BUFFER LANDSCAPING PLANTING AREAS AROUND POTTED PLANTS)

AREA TO BE PLANTED WITH SUNNY SEED MIX --- 930 SF

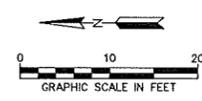
LENGTH OF GARDEN BORDER TO BE INSTALLED --- 125 LF

AREA OF TURF GRASS PATH --- 130 SF

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Qty	Common Name	Scientific Name	Min. Container Size
3	Butterfly Milkweed	<i>Aclepias tuberosa</i>	Plug
30	Sideoats Gramma	<i>Bouteloua curtipendula</i>	Plug
24	Palm Sedge	<i>Carex muskingumensis</i>	Plug
16	Tussock's Sedge	<i>Carex stricta</i>	Plug
24	Great Blue Lobelia	<i>Lobelia siphilitica</i>	Plug
12	Cardinal Flower	<i>Lobelia cardinalis</i>	Plug
13	Wild Bergamot	<i>Monarda fistulosa</i>	Plug
14	Prairie Dropseed	<i>Sporobolus heterolepis</i>	Plug
11	Russian Sage	<i>Perovskia atriplicifolia</i>	Plug



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	KDK	LNJ	11/21/12

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PRINT NAME ED A. MATTHESEN

SIGNATURE

DATE 11/21/2012 REG. NO. 16800

PRIME CONSULTANT

Wenck Associates, Inc.
Consulting Engineers

Web Site: www.wenck.com

WAPLE PLAIN, WI 53599 763-479-4200

PROJECT TITLE

MCWD
REACH 14 PROJECT

MINNEHAHA CREEK
WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE

LANDSCAPE PLAN
82 WOODLAND CIRCLE

DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054	SHEET NO. L-109	SCALE AS SHOWN	REV NO. 1

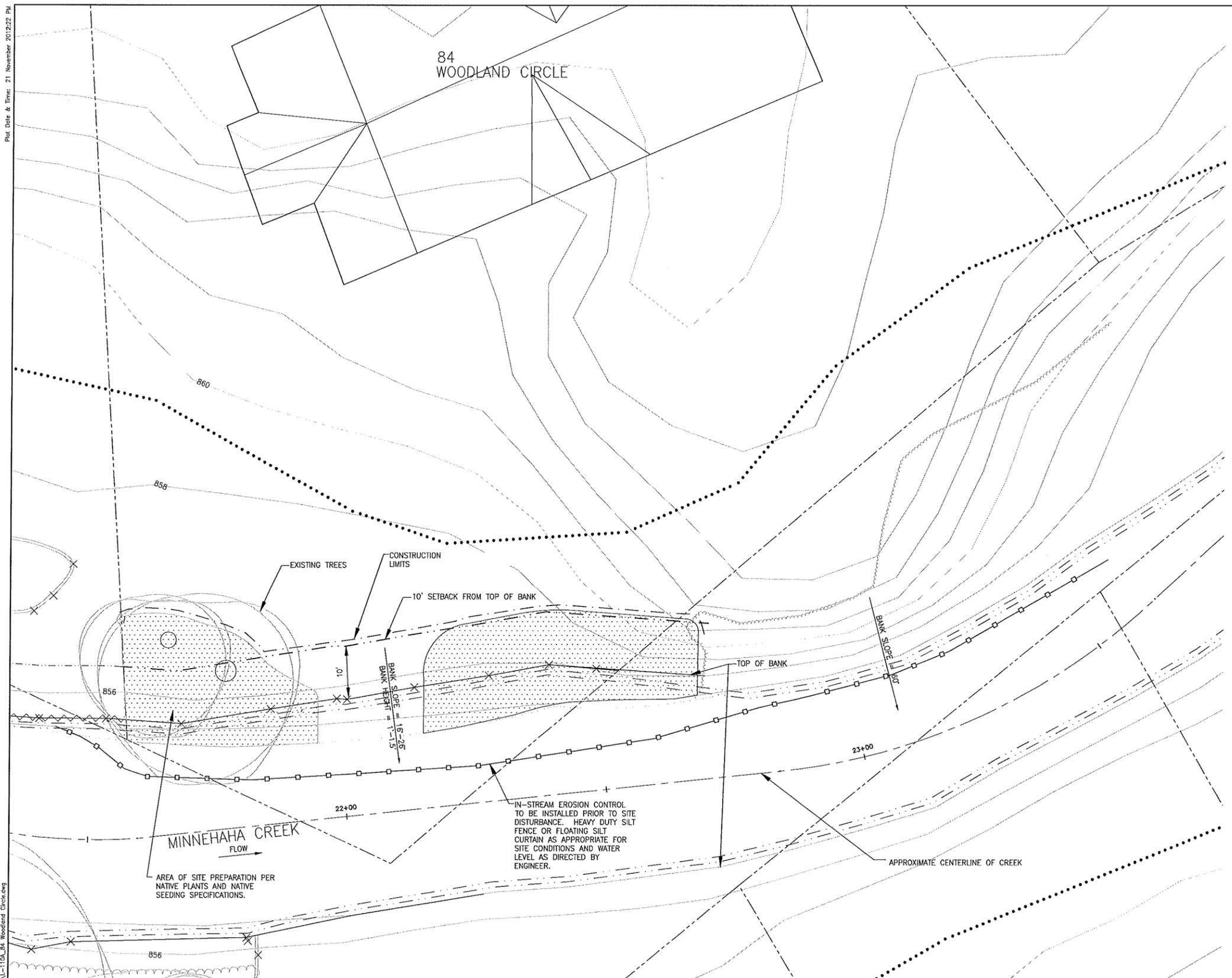
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84 WOODLAND CIRCLE

- LEGEND:**
- EXISTING TREES
 - EXISTING SHRUBS
 - EXISTING PATH
 - PARCEL BOUNDARY
 - EXISTING PLANTS
 - EXISTING EDGING FOR GARDEN
 - EXISTING FENCE
 - EXISTING RIPRAP
 - PROPOSED VEGETATED RIPRAP
 - GRADED BANK - WITHOUT SANDBAR
 - GRADED BANK - WITH SANDBAR
 - 10' SETBACK FROM TOP OF BANK
 - EDGE OF SANDBAR
 - IN-STREAM EROSION CONTROL
 - TOP OF BANK
 - 100 YEAR FLOOD LINE
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 - STREAM WATER LINES
 - CONSTRUCTION LIMIT
 - AREA TO BE SEEDED WITH SUNNY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
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REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	JVB	LNJ	11/21/12

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PRIME CONSULTANT

Wenck
 Wenck Associates, Inc.
 Consulting Engineers
 Maple Plain, MN 55359 763-479-4200

PROJECT TITLE
 MCWD
 REACH 14 PROJECT

MINNEHAHA CREEK
 WATERSHED DISTRICT
 QUALITY OF WATER, QUALITY OF LIFE

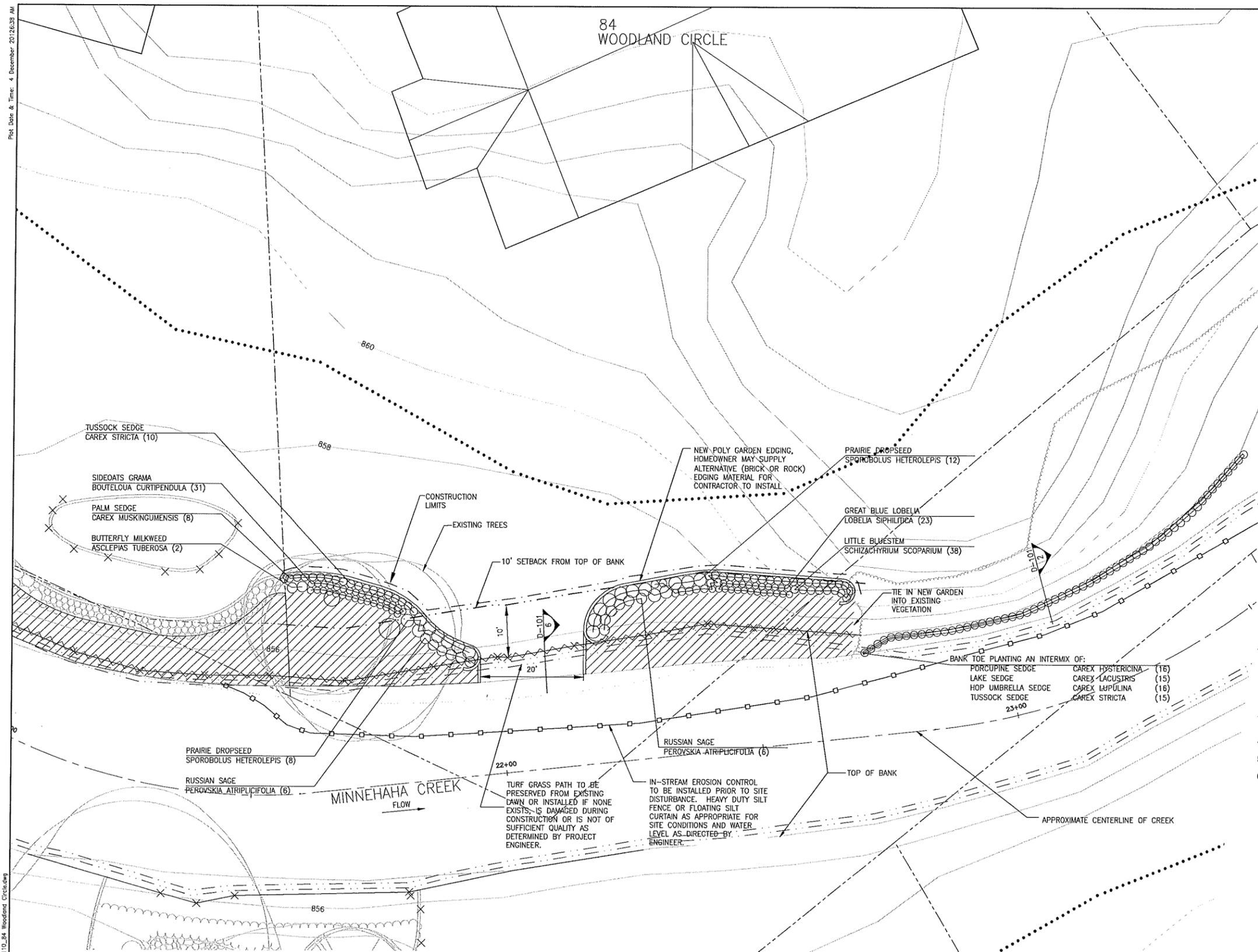
SHEET TITLE
 REMOVAL PLAN
 84 WOODLAND CIRCLE

DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054	SHEET NO. L-110A	SCALE AS SHOWN	REV NO. 1

84 WOODLAND CIRCLE

LEGEND:

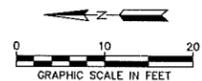
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- AREA TO BE SEEDED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS



- DOUBLE SHREDDED HARDWOOD MULCH (MNDOT-TYPE 6) --- 400 SF (3" DEPTH)
(TO BE PLACED IN BUFFER LANDSCAPING PLANTING AREAS AROUND POTTED PLANTS)
 - AREA TO BE SEEDED WITH SUNNY SEED MIX --- 1150 SF
 - LENGTH OF GARDEN BORDER TO BE INSTALLED --- 135 LF
 - AREA OF TURF GRASS PATH --- 365 SF
- NOTE:**
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- BANK TOE PLANTING AN INTERMIX OF:
- PORCUPINE SEDGE CAREX HYSTERICINA (16)
 - LAKE SEDGE CAREX LACUSTRIS (15)
 - HOP UMBRELLA SEDGE CAREX LUPULINA (16)
 - TUSSOCK SEDGE CAREX STRICTA (15)

Qty	Common Name	Scientific Name	Min. Container Size
3	Butterfly Milkweed	<i>Asclepias tuberosa</i>	Plug
31	Sideoats Gramma	<i>Bouteloua curtipendula</i>	Plug
16	Porcupine Sedge	<i>Carex hystericina</i>	Plug
15	Lake Sedge	<i>Carex lacustris</i>	Plug
16	Hop Umbrella Sedge	<i>Carex lupulina</i>	Plug
9	Palm Sedge	<i>Carex muskingumensis</i>	Plug
25	Tussock's Sedge	<i>Carex stricta</i>	Plug
23	Great Blue Lobelia	<i>Lobelia siphilitica</i>	Plug
38	Little Bluestem	<i>Schizachyrium scoparium</i>	Plug
20	Prairie Dropseed	<i>Sporobolus heterolepis</i>	Plug
12	Russian Sage	<i>Perovskia atriplicifolia</i>	Plug



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	JVB	LNJ	11/21/12

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PRINT NAME ED A. MATTHIASEN

SIGNATURE

DATE 11/21/2012 REG. NO. 16800

PRIME CONSULTANT

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Consulting Engineers
Web Site: www.wenck.com
MAPLE PLAIN, MN 55359 763-479-4200

PROJECT TITLE

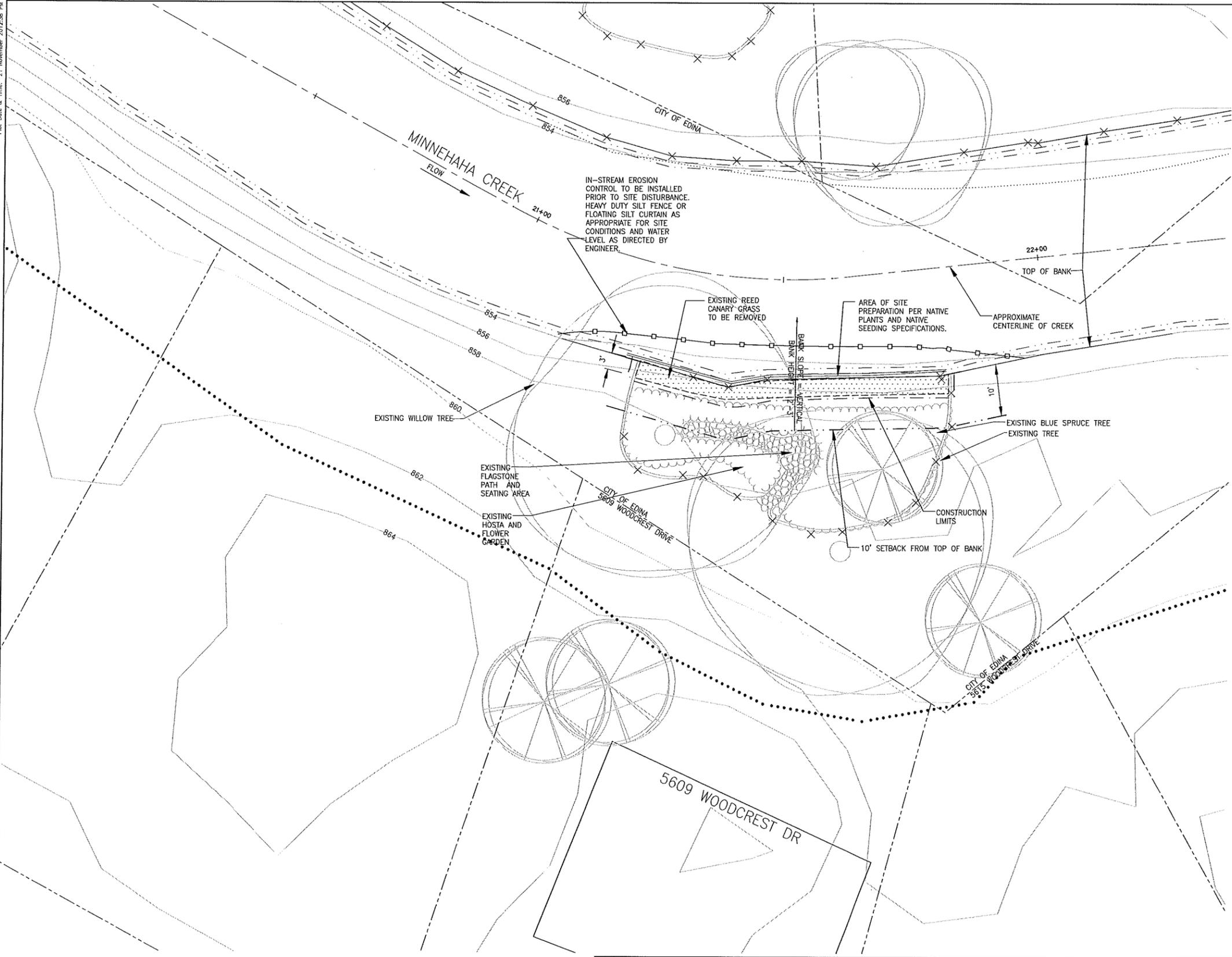
MCWD REACH 14 PROJECT

MINNEHAHA CREEK WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE		LANDSCAPE PLAN		84 WOODLAND CIRCLE	
DWN BY	CHK'D	APP'D	DWG DATE	AUGUST 2012	
KDK	JVB	LNJ	SCALE	AS SHOWN	
PROJECT NO.	SHEET NO.	PROJECT NO.		REV. NO.	
0185-5054	L-110	0185-5054		1	

Plot Date & Time: 21 November 2012 3:38 PM

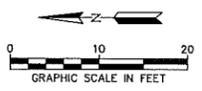
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LEGEND:

- EXISTING TREES
- EXISTING SHRUBS
- EXISTING PATH
- PARCEL BOUNDARY
- EXISTING PLANTS
- EXISTING EDGING FOR GARDEN
- EXISTING FENCE
- EXISTING RIPRAP
- PROPOSED VEGETATED RIPRAP
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REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	JVB	LNJ	11/21/12

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SIGNATURE: *[Signature]*

DATE: 11/21/2012 REG. NO. 16800

PRIME CONSULTANT

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Maple Plain, MN 55359 763-479-4200

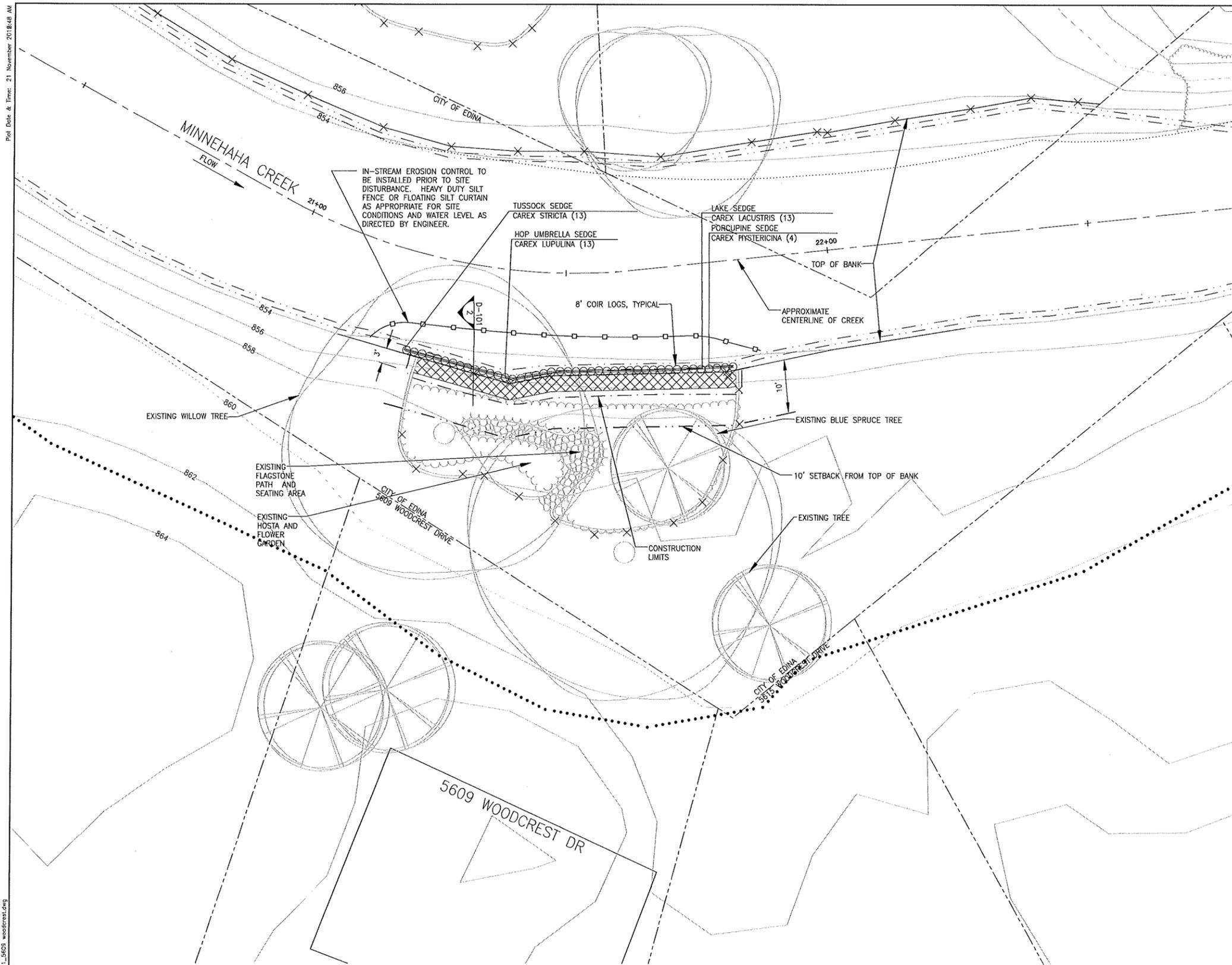
PROJECT TITLE: MCWD REACH 14 PROJECT

MINNEHAHA CREEK WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE			
REMOVAL PLAN 5609 WOODCREST DRIVE			
DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054		SCALE AS SHOWN	
SHEET NO. L-111A		REV NO. 1	

Plot Date & Time: 21 November 2012 8:48 AM

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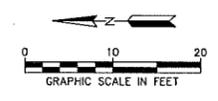
- EXISTING TREES
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- AREA TO BE SEEDED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

AREA TO BE SEEDED WITH SHADY SEED MIX -- 185 SF

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PLANT LIST

Qty	Common Name	Scientific Name	Min. Container Size
4	Porcupine sedge	<i>Carex hystericina</i>	Plug
13	Lake sedge	<i>Carex lacustris</i>	Plug
13	Hop umbrella sedge	<i>Carex lupulina</i>	Plug
13	Tussock sedge	<i>Carex stricta</i>	Plug



1	ISSUED FOR APPROVAL	JVB	LNJ	11/21/12
REV	REVISION DESCRIPTION	DWN	APP	REV DATE

SEAL

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

PRINT NAME: ED A. MATTHESEN

SIGNATURE: *[Signature]*

DATE: 11/21/2012 REG. NO.: 16800

PRIME CONSULTANT

Wenck Associates, Inc.
Consulting Engineers
Web Site: www.wenck.com
763-479-4209

WAPLE PLAIN, MN 55359

PROJECT TITLE

MCWD
REACH 14 PROJECT

MINNEHAHA CREEK
WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

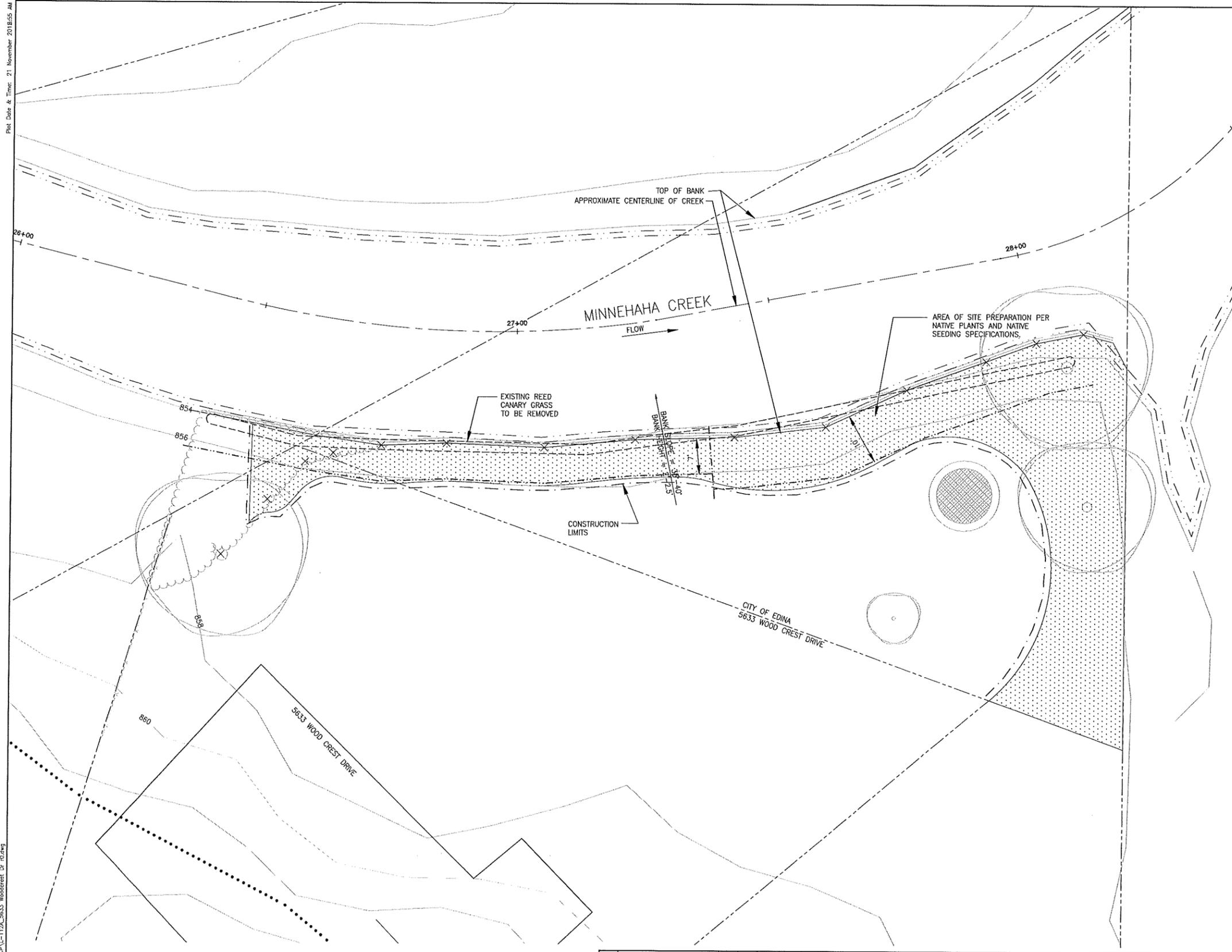
SHEET TITLE

LANDSCAPE PLAN
5609 WOODCREST DRIVE

DWN BY	CHK'D	APP'D	DWG DATE
KDK	JVB	LNJ	AUGUST 2012
PROJECT NO.	SHEET NO.	SCALE	REV NO.
0185-5054	L-111	AS SHOWN	1

Plot Date & Time: 21 November 2012 8:55 AM

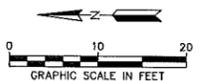
M:\0185\5054_Reach 14\CAD\INDSCP\L-112A_5633_Woodcrest_Dr_rfl.dwg



LEGEND:

- EXISTING TREES
- EXISTING SHRUBS
- EXISTING PATH
- PARCEL BOUNDARY
- EXISTING PLANTS
- EXISTING EDGING FOR GARDEN
- EXISTING FENCE
- EXISTING RIPRAP
- PROPOSED VEGETATED RIPRAP
- GRADED BANK - WITHOUT SANDBAR
- GRADED BANK - WITH SANDBAR
- 10' SETBACK FROM TOP OF BANK
- EDGE OF SANDBAR
- IN-STREAM EROSION CONTROL
- TOP OF BANK
- 100 YEAR FLOOD LINE
- SURVEY POINT
- STREAM WATER LINES
- CONSTRUCTION LIMIT
- AREA TO BE SEED WITH SUNNY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA TO BE SEED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

- NOTE:**
1. LAYOUT AND PLANT LOCATIONS ARE PRELIMINARY. ACTUAL LAYOUT WILL NEED TO BE FIELD VERIFIED.
 2. UTILITY LOCATIONS HAVE NOT BEEN IDENTIFIED CONTRACTOR IS RESPONSIBLE FOR CONTACTING GOPHER STATE ONE CALL 1-800-252-1166 24 HOURS BEFORE CONSTRUCTION BEGINS FOR UTILITY LOCATE.
 3. ANY DAMAGE TO EXISTING PROPERTY IS CONTRACTOR RESPONSIBILITY AND MUST BE REPLACED IN KIND AT CONTRACTOR'S EXPENSE.
 4. EXISTING GARDENS ARE NOT TO SCALE AND ARE FOR REFERENCE ONLY.
 5. PLANTING MATERIALS SHALL BE DELIVERED ON THE STREET AND CARRIED BY HAND TO THE PLANTING AREA.
 6. STREAM BANK AND CHANNEL WORK SHALL BE DONE WITHIN CHANNEL. HEAVY EQUIPMENT ACCESS IS NOT ON THIS PROPERTY, SEE EQUIPMENT ACCESS PLAN FOR ACCESS ROUTES.
 7. PROTECT EXISTING PLANTINGS NOT DESIGNATED FOR REMOVAL.



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	JVB	LNJ	11/21/12

SEAL

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PRINT NAME ED A. MATHIESEN

SIGNATURE

DATE 11/21/2012 REG. NO. 16800

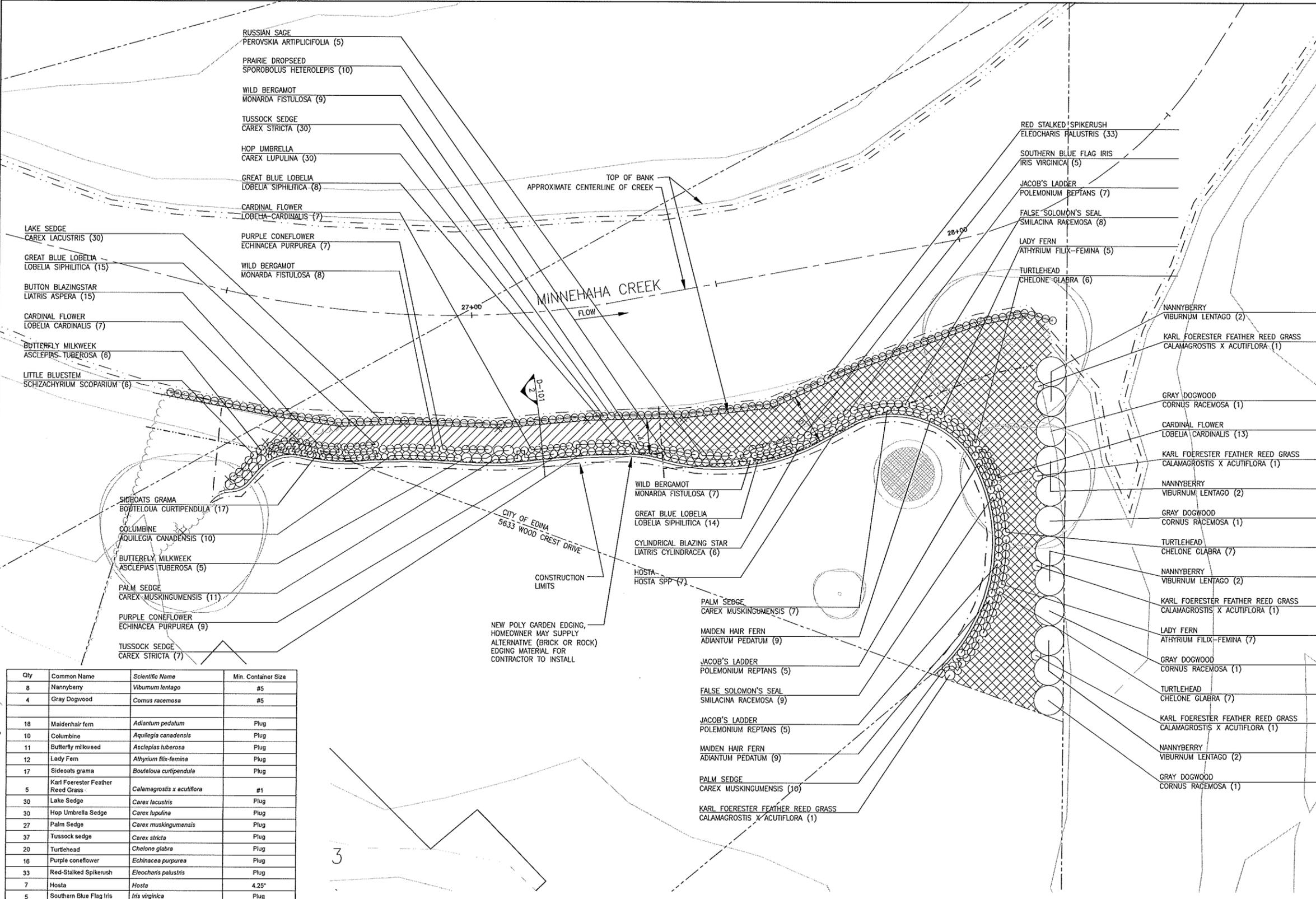
PRIME CONSULTANT

Wenck Associates, Inc.
Consulting Engineers
Web Site: www.wenck.com
WISCONSIN, WI 53559 763-479-4200

PROJECT TITLE
MCWD
REACH 14 PROJECT

MINNEHAHA CREEK
WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

REMOVAL PLAN 5633 WOODCREST DRIVE			
DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054	SHEET NO. L-112A	SCALE AS SHOWN	REV NO. 1



LEGEND:

- EXISTING TREES
- EXISTING SHRUBS
- EXISTING PATH
- PARCEL BOUNDARY
- EXISTING PLANTS
- EXISTING EDGING FOR GARDEN
- EXISTING FENCE
- EXISTING RIPRAP
- PROPOSED VEGETATED RIPRAP
- GRADED BANK - WITHOUT SANDBAR
- GRADED BANK - WITH SANDBAR
- 10' BUFFER SETBACK FROM TOP OF BANK
- EDGE OF SANDBAR
- IN-STREAM EROSION CONTROL
- TOP OF BANK
- 100 YEAR FLOOD LINE
- SURVEY POINT
- STREAM WATER LINES
- AREA TO BE SEEDDED WITH SUNNY SEED MIX AND COVER EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA TO BE SEEDDED WITH SHADY SEED MIX AND COVER EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA OF NATIVE PLANTING SITE PREPARATION

DOUBLE SHREADED HARDWOOD MULCH (MNDOT-TYPE 6) --- 630 SF (3' DEPTH) TO BE PLACED IN BUFFER LANDSCAPING PLANTING AREAS AROUND POTTED PLANTS)

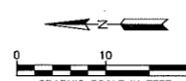
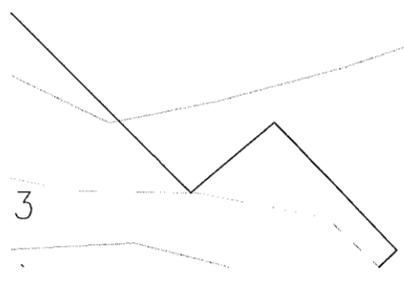
AREA TO BE SEEDDED WITH SUNNY SEED MIX --- 340 SF

AREA TO BE SEEDDED WITH SHADY SEED MIX --- 1375 SF

LENGTH OF GARDEN BORDER TO BE INSTALLED --- 210 LF

- NOTE:**
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 5. PLANTING MATERIALS SHALL BE DELIVERED ON THE STREET AND CARRIED BY HAND TO THE PLANTING AREA.
 6. STREAM BANK AND CHANNEL WORK SHALL BE DONE WITHIN CHANNEL. HEAVY EQUIPMENT ACCESS IS NOT ON THIS PROPERTY, SEE EQUIPMENT ACCESS PLAN FOR ACCESS ROUTES.

Qty	Common Name	Scientific Name	Min. Container Size
8	Nannyberry	<i>Viburnum lentago</i>	#5
4	Gray Dogwood	<i>Cornus racemosa</i>	#5
18	Maidenhair fern	<i>Adiantum pedatum</i>	Plug
10	Columbine	<i>Aquilegia canadensis</i>	Plug
11	Butterfly milkweed	<i>Asclepias tuberosa</i>	Plug
12	Lady Fern	<i>Athyrium filix-femina</i>	Plug
17	Sideoats grama	<i>Bouteloua curtipendula</i>	Plug
5	Karl Foerster Feather Reed Grass	<i>Calamagrostis x acutiflora</i>	#1
30	Lake Sedge	<i>Carex lacustris</i>	Plug
30	Hop Umbrella Sedge	<i>Carex lupulina</i>	Plug
27	Palm Sedge	<i>Carex muskingumensis</i>	Plug
37	Tussock sedge	<i>Carex stricta</i>	Plug
20	Turtlehead	<i>Chelone glabra</i>	Plug
16	Purple coneflower	<i>Echinacea purpurea</i>	Plug
33	Red-Stalked Spikerush	<i>Eleocharis palustris</i>	Plug
7	Hosta	<i>Hosta</i>	4.25"
5	Southern Blue Flag Iris	<i>Iris virginica</i>	Plug
15	Button Blazingstar	<i>Liatris aspera</i>	Plug
6	Cylindrical Blazingstar	<i>Liatris cylindracea</i>	Plug
27	Cardinal flower	<i>Lobelia cardinalis</i>	Plug
37	Great blue lobelia	<i>Lobelia siphilitica</i>	Plug
24	Wild bergamot	<i>Monarda fistulosa</i>	Plug
5	Russian sage	<i>Perovskia atriplicifolia</i>	Plug
17	Jacob's ladder	<i>Polemonium reptans</i>	Plug
5	Little bluestem	<i>Schizachyrium scoparium</i>	Plug
17	False Solomon's seal	<i>Smilacina racemosa</i>	Plug
10	Prairie dropseed	<i>Sporobolus heterolepis</i>	Plug



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	JVB	LNJ	11/21/12

SEAL

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PRINT NAME ED A. MATTHIASEN

SIGNATURE

DATE 11/21/2012 REG. NO. 16800

PRIME CONSULTANT

Wenck Associates, Inc. Consulting Engineers
WAPLE PLAIN, MN 55359
763-479-4200

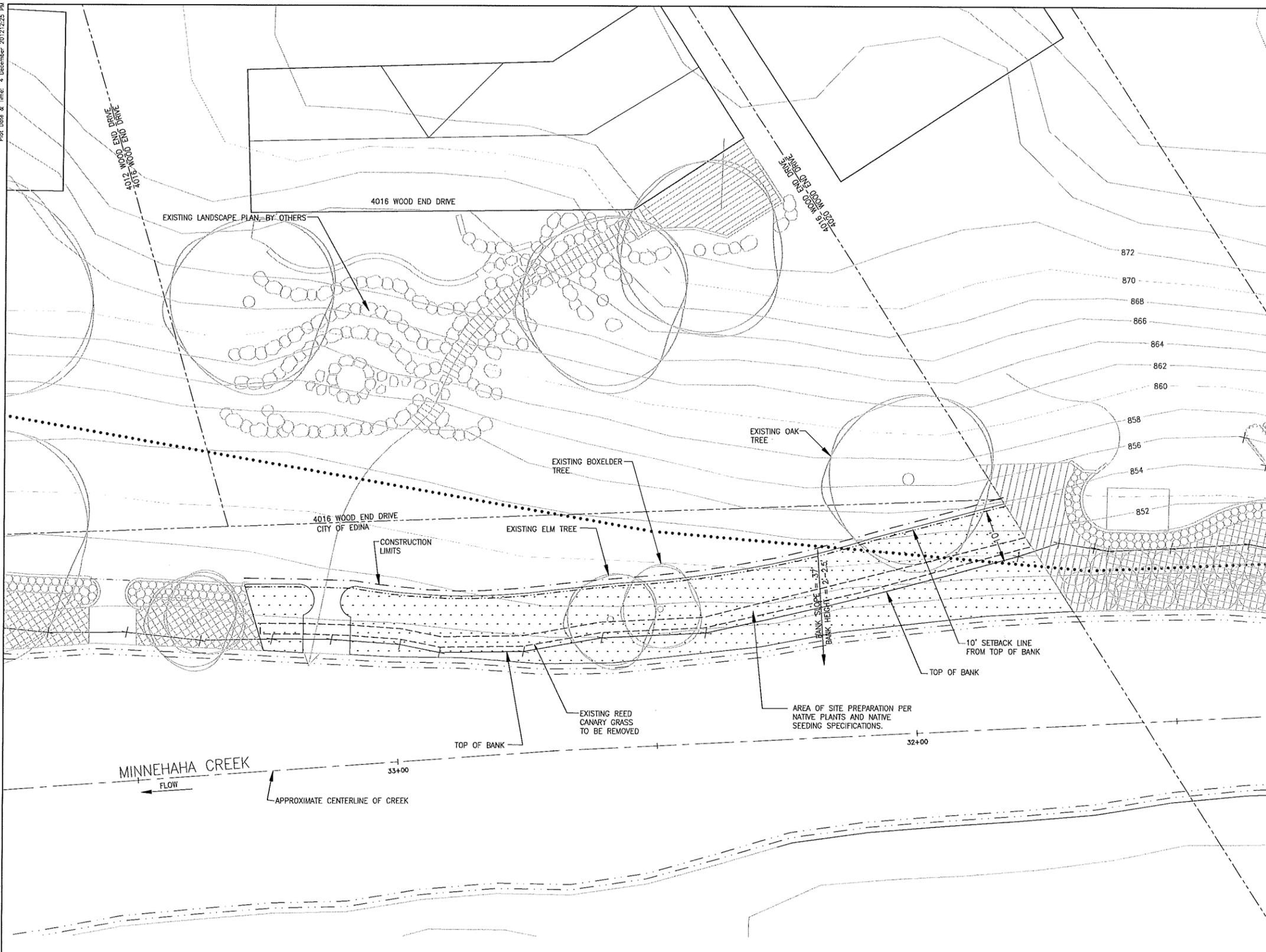
PROJECT TITLE
MCWD
REACH 14 PROJECT

MINNEHAHA CREEK
WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE			
LANDSCAPE PLAN 5633 WOODCREST DRIVE			
DWN BY	CHK'D	APP'D	DWG DATE
KDK	JVB	LNJ	AUGUST 2012
PROJECT NO.		SCALE	
0185-5054		AS SHOWN	
SHEET NO.		REV NO.	
L-112		1	

Plot Date & Time: 4 December 2012 12:25 PM

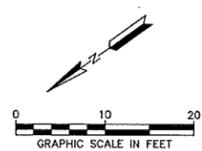
MC:\0185\5054 - Reach 14\LANDSCAPE\L-114A_4016 Woodend Drawn



LEGEND:

- EXISTING TREES
- EXISTING SHRUBS
- EXISTING PATH
- PARCEL BOUNDARY
- EXISTING PLANTS
- EXISTING EDGING FOR GARDEN
- EXISTING FENCE
- EXISTING RIPRAP
- PROPOSED VEGETATED RIPRAP
- GRADED BANK - WITHOUT SANDBAR
- GRADED BANK - WITH SANDBAR
- 10' SETBACK FROM TOP OF BANK
- EDGE OF SANDBAR
- IN-STREAM EROSION CONTROL
- TOP OF BANK
- 100 YEAR FLOOD LINE
- SURVEY POINT
- STREAM WATER LINES
- CONSTRUCTION LIMIT
- AREA TO BE SEEDED WITH SUNNY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA TO BE SEEDED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

- NOTE:**
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 6. STREAM BANK AND CHANNEL WORK SHALL BE DONE WITHIN CHANNEL. HEAVY EQUIPMENT ACCESS IS NOT ON THIS PROPERTY, SEE EQUIPMENT ACCESS PLAN FOR ACCESS ROUTES.
 7. PROTECT EXISTING PLANTINGS NOT DESIGNATED FOR REMOVAL.



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	JVB	LNJ	1/21/12

SEAL

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PRINT NAME ED A. MATTHIASEN

SIGNATURE *[Signature]*

DATE 11/21/2012 REG. NO. 16800

PRIME CONSULTANT

Wenck
Wenck Associates, Inc.
Consulting Engineers
WAPLE PLAN, MN 55359
763-478-4200

PROJECT TITLE

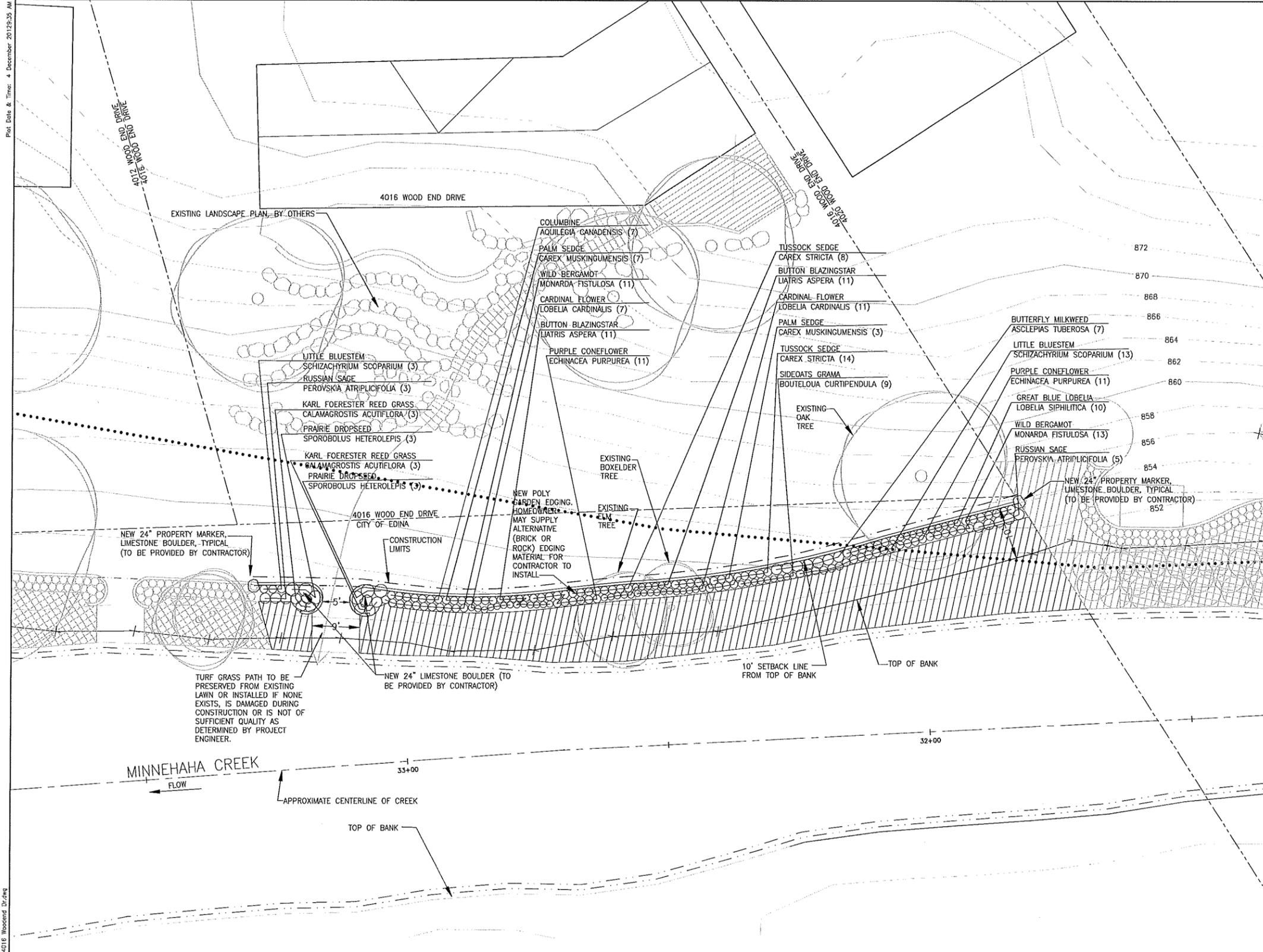
MCWD
REACH 14 PROJECT

MINNEHAHA CREEK
WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE			
REMOVAL PLAN 4016 WOOD END DRIVE			
DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054		SCALE AS SHOWN	SHEET NO. L-114A
REV NO. 1			

Plot Date & Time: 4 December 2012 9:35 AM

M:\0185\0504 - Reach 14\DWG\LANDSCAPE\114-4016 Woodend Dr.dwg



LEGEND:

- EXISTING TREES
- EXISTING SHRUBS
- EXISTING PATH
- PARCEL BOUNDARY
- EXISTING PLANTS
- EXISTING EDGING FOR GARDEN
- EXISTING FENCE
- EXISTING RIPRAP
- PROPOSED VEGETATED RIPRAP
- GRADED BANK - WITHOUT SANDBAR
- GRADED BANK - WITH SANDBAR
- 10' SETBACK FROM TOP OF BANK
- EDGE OF SANDBAR
- IN-STREAM EROSION CONTROL
- TOP OF BANK
- 100 YEAR FLOOD LINE
- SURVEY POINT
- STREAM WATER LINES
- CONSTRUCTION LIMIT
- AREA TO BE SEEDDED WITH SUNNY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA TO BE SEEDDED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

DOUBLE SHREDDED HARDWOOD MULCH (MNDOT-TYPE 6) --- 490 SF (3" DEPTH)
 (TO BE PLACED IN BUFFER LANDSCAPING PLANTING AREAS AROUND POTTED PLANTS)

AREA TO BE SEEDDED WITH SUNNY SEED MIX --- 1665 SF

LENGTH OF GARDEN BORDER TO BE INSTALLED --- 165 LF

AREA OF TURF GRASS PATH --- 75 SF

- NOTE:**
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 - PLANTING MATERIALS SHALL BE DELIVERED ON THE STREET AND CARRIED BY HAND TO THE PLANTING AREA.

6. STREAM BANK AND CHANNEL WORK SHALL BE DONE WITHIN CHANNEL. HEAVY EQUIPMENT ACCESS IS NOT ON THE STREAM BANKS. SEE EQUIPMENT ACCESS PLAN FOR ACCESS ROUTES.

QTY	PLANT SPECIES	MIN. CONTAINER SIZE
7	Columbine <i>Aquilegia canadensis</i>	Plug
7	Butterfly milkweed <i>Asclepias tuberosa</i>	Plug
9	Sideoats grama <i>Bouteloua curtipendula</i>	Plug
6	Karl Foerster Feather Reed Grass <i>Celamagrostis acutiflora 'Karl Foerster'</i>	#1
10	Palm Sedge <i>Carex muskingumensis</i>	Plug
22	Tussock sedge <i>Carex stricta</i>	Plug
22	Purple coneflower <i>Echinacea purpurea</i>	Plug
22	Button blazingstar <i>Liatris aspera</i>	Plug
18	Cardinal flower <i>Lobelia cardinalis</i>	Plug
10	Great blue lobelia <i>Lobelia siphilitica</i>	Plug
24	Wild bergamot <i>Monarda fistulosa</i>	Plug
9	Russian sage <i>Perovskia atriplicifolia</i>	Plug
16	Little bluestem <i>Schizachyrium scoparium</i>	Plug
6	Prairie dropseed <i>Sporobolus heterolepis</i>	Plug

REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	JVB	LNJ	11/21/12

SEAL

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PRINT NAME: ED A. MATTHIASEN

SIGNATURE:

DATE: 11/21/2012 REG. NO. 16600

PRIME CONSULTANT

Wenck

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 WAPLE PLAIN, WI 53559 763-479-4200

PROJECT TITLE: MCWD REACH 14 PROJECT

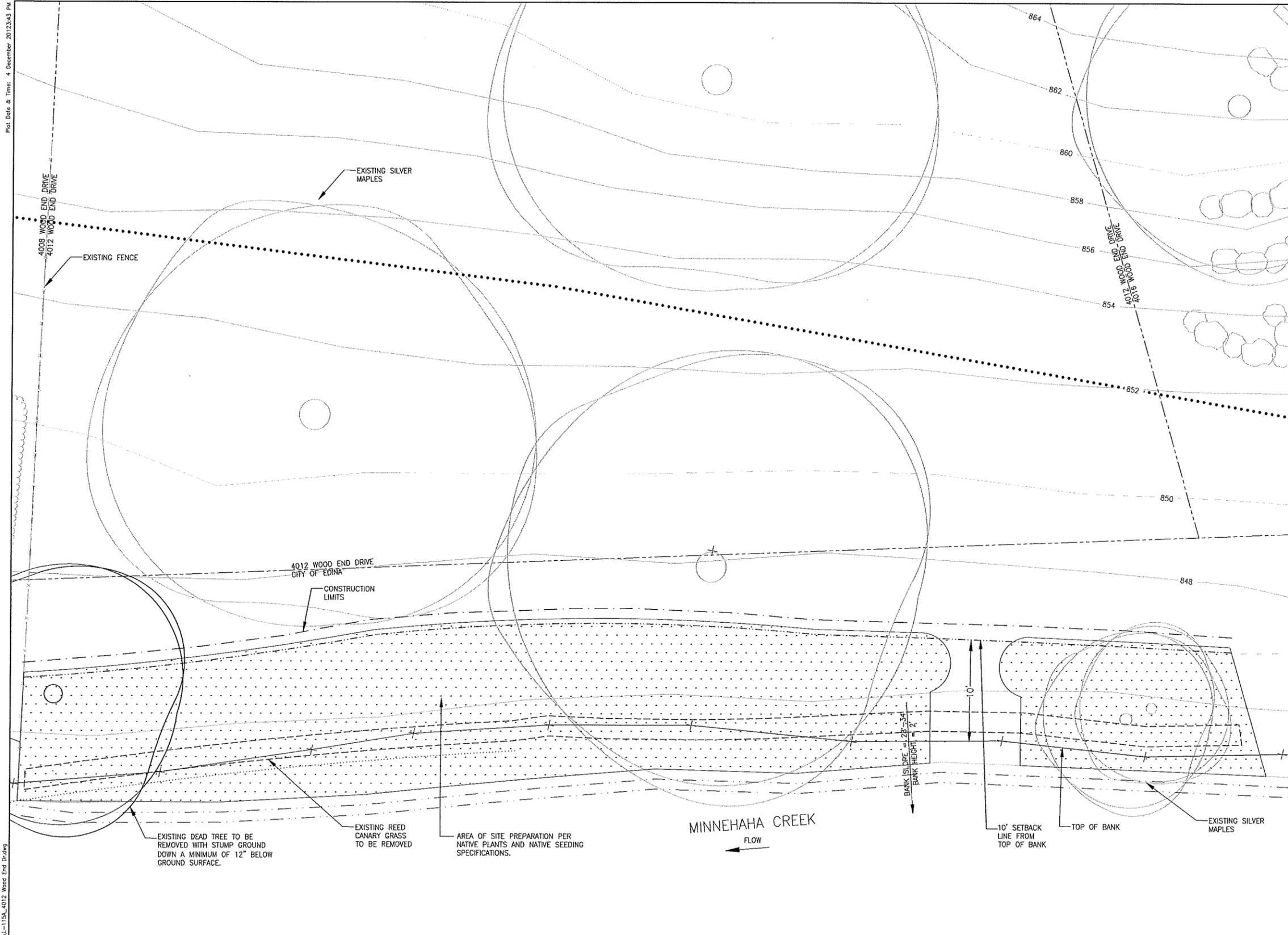
MINNEHAHA CREEK WATERSHED DISTRICT
 QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE: LANDSCAPE PLAN 4016 WOOD END DRIVE

DWN BY: KDK
 CHK'D: JVB
 APP'D: LNJ

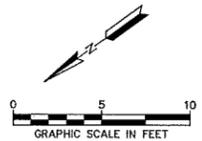
DWG DATE: AUGUST 2012
 SCALE: AS SHOWN

PROJECT NO.: 0185-5054
 SHEET NO.: L-114
 REV NO.: 1



- LEGEND:**
- EXISTING TREES
 - EXISTING SHRUBS
 - EXISTING PATH
 - PARCEL BOUNDARY
 - EXISTING PLANTS
 - EXISTING EDGING FOR GARDEN
 - EXISTING FENCE
 - EXISTING RIPRAP
 - PROPOSED VEGETATED RIPRAP
 - GRADED BANK - WITHOUT SANDBAR
 - GRADED BANK - WITH SANDBAR
 - 10' BUFFER SETBACK FROM TOP OF BANK
 - EDGE OF SANDBAR
 - IN-STREAM EROSION CONTROL
 - TOP OF BANK
 - 100 YEAR FLOOD LINE
 - SURVEY POINT
 - STREAM WATER LINES
 - CONSTRUCTION LIMIT
 - AREA TO BE SEEDED WITH SUNNY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
 - AREA TO BE SEEDED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
 - AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

- NOTE:**
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 7. PROTECT EXISTING PLANTINGS NOT DESIGNATED FOR REMOVAL.



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	JVB	LNJ	11/21/12

SEAL
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 PRINT NAME: ED A. MATTHESEN
 SIGNATURE: *[Signature]*
 DATE: 11/21/2012 REG. NO.: 16800

PRIME CONSULTANT

 Wenck
 Wenck Associates, Inc.
 Consulting Engineers
 MAPLE PLAIN, MN 55359
 763-479-4200

PROJECT TITLE
 MCWD
 REACH 14 PROJECT

MINNEHAHA CREEK
 WATERSHED DISTRICT
 QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE			
REMOVAL PLAN 4012 WOOD END DRIVE			
DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054		SHEET NO. L-115A	SCALE AS SHOWN
		REV NO. 1	

Plot Date & Time: 4 December 2012 10:22 AM

MA:0185-5054-Rev04-Plan-1A (D:\D\LANDSCAP\1-115_4012_Wood_End_Driving

PLANT LIST

Qty	Common Name	Scientific Name	Min. Container Size
21	Maidenhair fern	<i>Adiantum pedatum</i>	Plug
10	Columbine	<i>Aquilegia canadensis</i>	Plug
10	Lady Fern	<i>Athyrium filix-femina</i>	Plug
23	Palm Sedge	<i>Carex muskingumensis</i>	Plug
5	Turtlehead	<i>Chelone glabra</i>	Plug
14	Hosta	<i>Hosta</i>	4.25"
11	Little Joe' pye weed	<i>Eupatorium dubium 'Little Joe'</i>	Plug
14	Cylindrical Blazing Star	<i>Liatris cylindracea</i>	Plug
26	Cardinal flower	<i>Lobelia cardinalis</i>	Plug
15	False Solomon's seal	<i>Maianthemum racemosum</i>	Plug
10	Jacob's ladder	<i>Polemonium reptans</i>	Plug
7	Solomon's Seal	<i>Polygonatum biflorum</i>	Plug

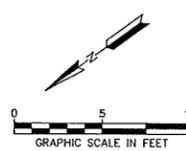
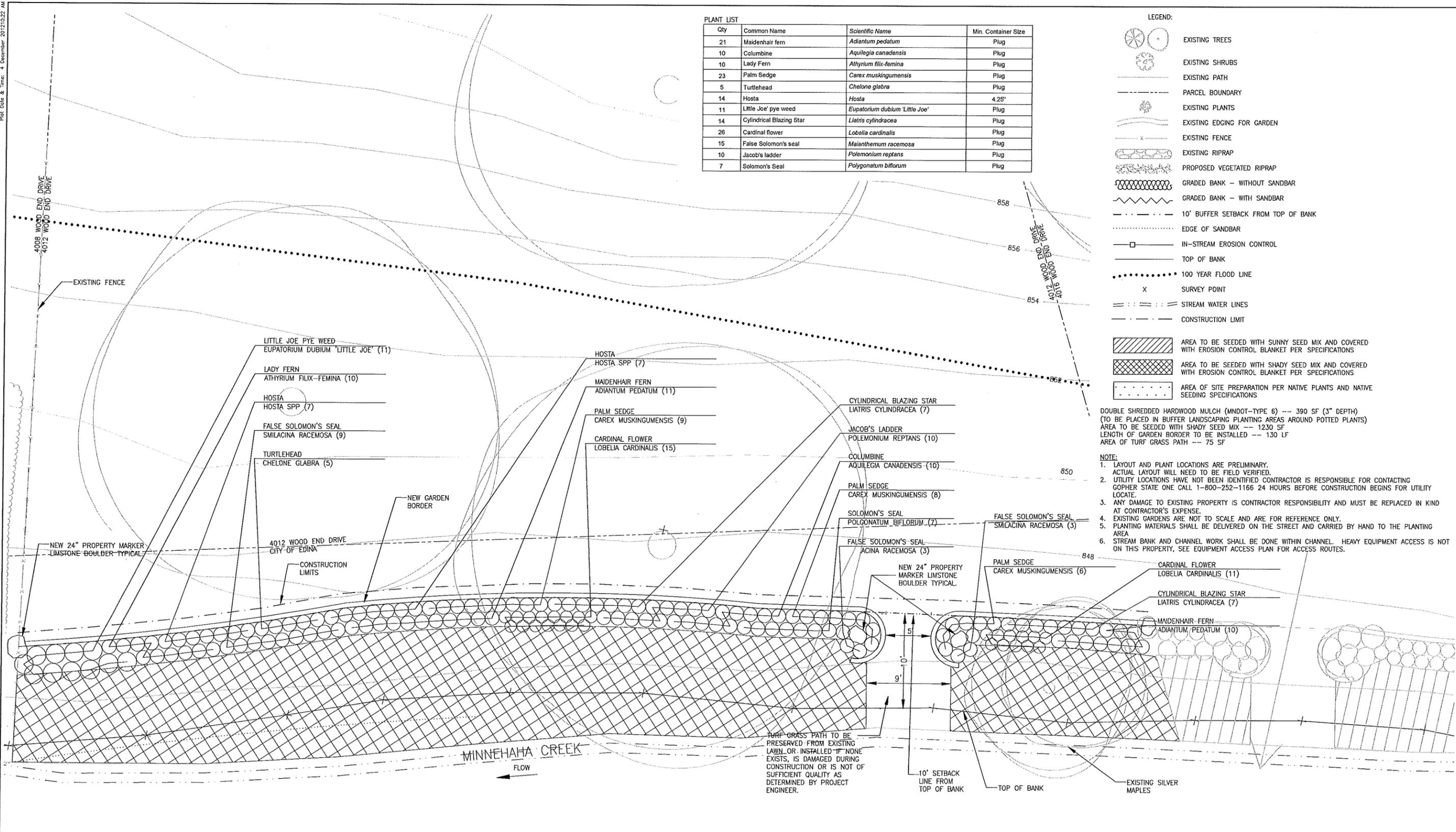
LEGEND:

- EXISTING TREES
- EXISTING SHRUBS
- EXISTING PATH
- PARCEL BOUNDARY
- EXISTING PLANTS
- EXISTING EDGING FOR GARDEN
- EXISTING FENCE
- EXISTING RIPRAP
- PROPOSED VEGETATED RIPRAP
- GRADED BANK - WITHOUT SANDBAR
- GRADED BANK - WITH SANDBAR
- 10' BUFFER SETBACK FROM TOP OF BANK
- EDGE OF SANDBAR
- IN-STREAM EROSION CONTROL
- TOP OF BANK
- 100 YEAR FLOOD LINE
- SURVEY POINT
- STREAM WATER LINES
- CONSTRUCTION LIMIT
- AREA TO BE SEEDDED WITH SUNNY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA TO BE SEEDDED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

DOUBLE SHREDDED HARDWOOD MULCH (MNDOT-TYPE 6) --- 390 SF (3" DEPTH)
 (TO BE PLACED IN BUFFER LANDSCAPING PLANTING AREAS AROUND POTTED PLANTS)
 AREA TO BE SEEDDED WITH SHADY SEED MIX --- 1230 SF
 LENGTH OF GARDEN BORDER TO BE INSTALLED --- 130 LF
 AREA OF TURF GRASS PATH --- 75 SF

NOTE:

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REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	JVB	LNJ	11/21/12

SEAL
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 PRINT NAME ED A. MATTHESEN
 SIGNATURE
 DATE 11/21/2012 REG. NO. 16800

PRIME CONSULTANT

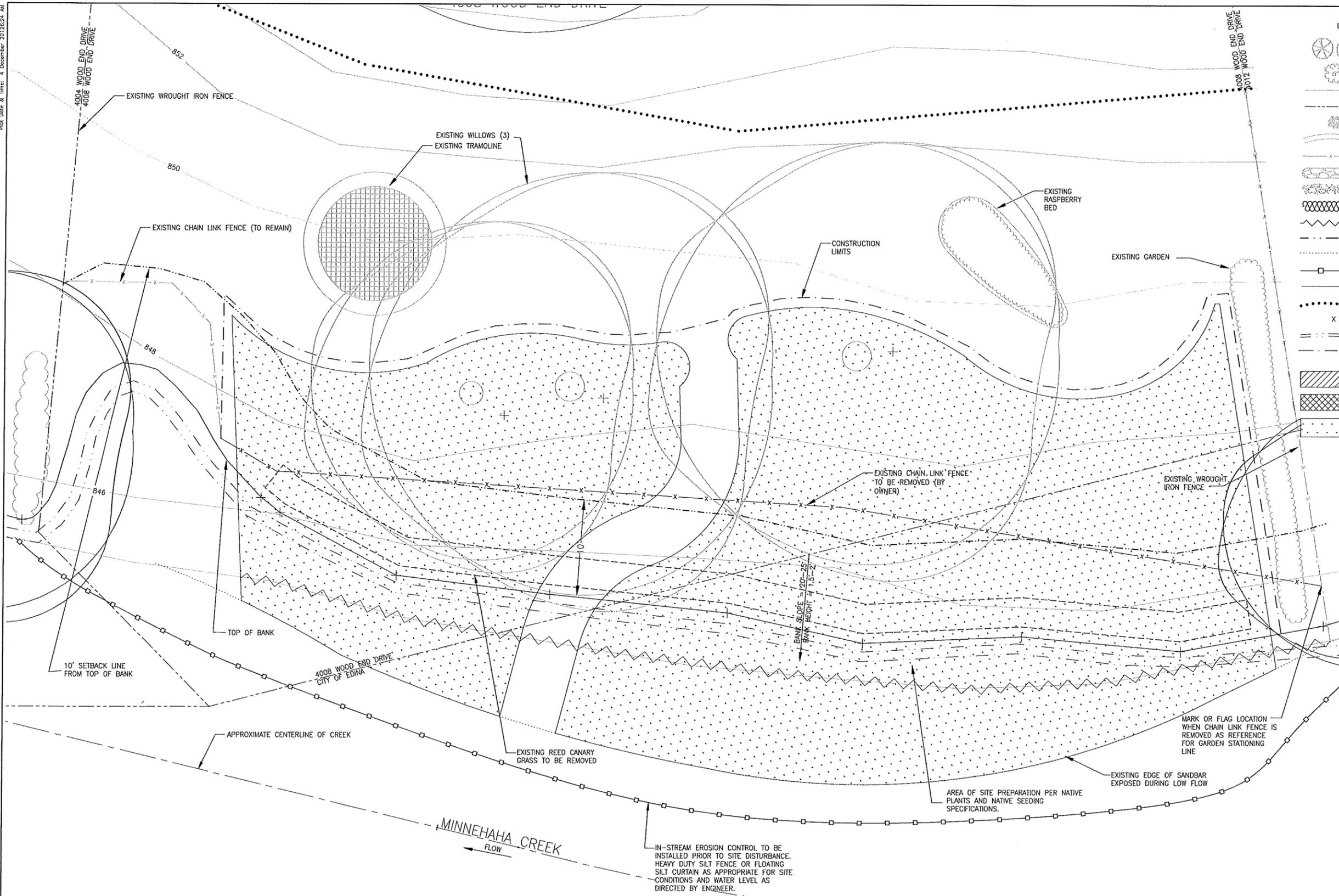
 Wenck
 Wenck Associates, Inc.
 Consulting Engineers
 763-478-4200
 WAPLE PLAN, WI 55359

PROJECT TITLE
 MCWD
 REACH 14 PROJECT

 MINNEHAHA CREEK
 WATERSHED DISTRICT
 QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE			
LANDSCAPE PLAN 4012 WOOD END DRIVE			
DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054		SCALE AS SHOWN	
SHEET NO. L-115		REV NO. 1	

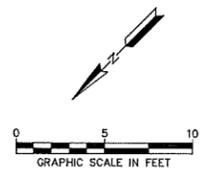
Plot Date & Time: 4 December 2012 12:24 AM
 M:\0185\5054 Reach 14\000\UN050P\L-116A_4008 Wood End Drive.dwg



LEGEND:

- EXISTING TREES
- EXISTING SHRUBS
- EXISTING PATH
- PARCEL BOUNDARY
- EXISTING PLANTS
- EXISTING EDGING FOR GARDEN
- EXISTING FENCE
- EXISTING RIPRAP
- PROPOSED VEGETATED RIPRAP
- GRADED BANK - WITHOUT SANDBAR
- GRADED BANK - WITH SANDBAR
- 10' BUFFER SETBACK FROM TOP OF BANK
- EDGE OF SANDBAR
- IN-STREAM EROSION CONTROL
- TOP OF BANK
- 100 YEAR FLOOD LINE
- SURVEY POINT
- STREAM WATER LINES
- CONSTRUCTION LIMIT
- AREA TO BE SEEDDED WITH SUNNY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA TO BE SEEDDED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
- AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

- NOTE:**
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 6. STREAM BANK AND CHANNEL WORK SHALL BE DONE WITHIN CHANNEL. HEAVY EQUIPMENT ACCESS IS NOT ON THIS PROPERTY, SEE EQUIPMENT ACCESS PLAN FOR ACCESS ROUTES.
 7. PROTECT EXISTING PLANTINGS NOT DESIGNATED FOR REMOVAL.



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	VB	LNJ	1/21/12

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PRINT NAME: ED A. MATTHIASEN

SIGNATURE: *[Signature]*

DATE: 11/21/2012 REG. NO.: 16800

PRIME CONSULTANT

Wenck
 Wenck Associates, Inc.
 Consulting Engineers
 763-479-4200
 www.wenck.com
 WAPLE PLAN, WI 55359

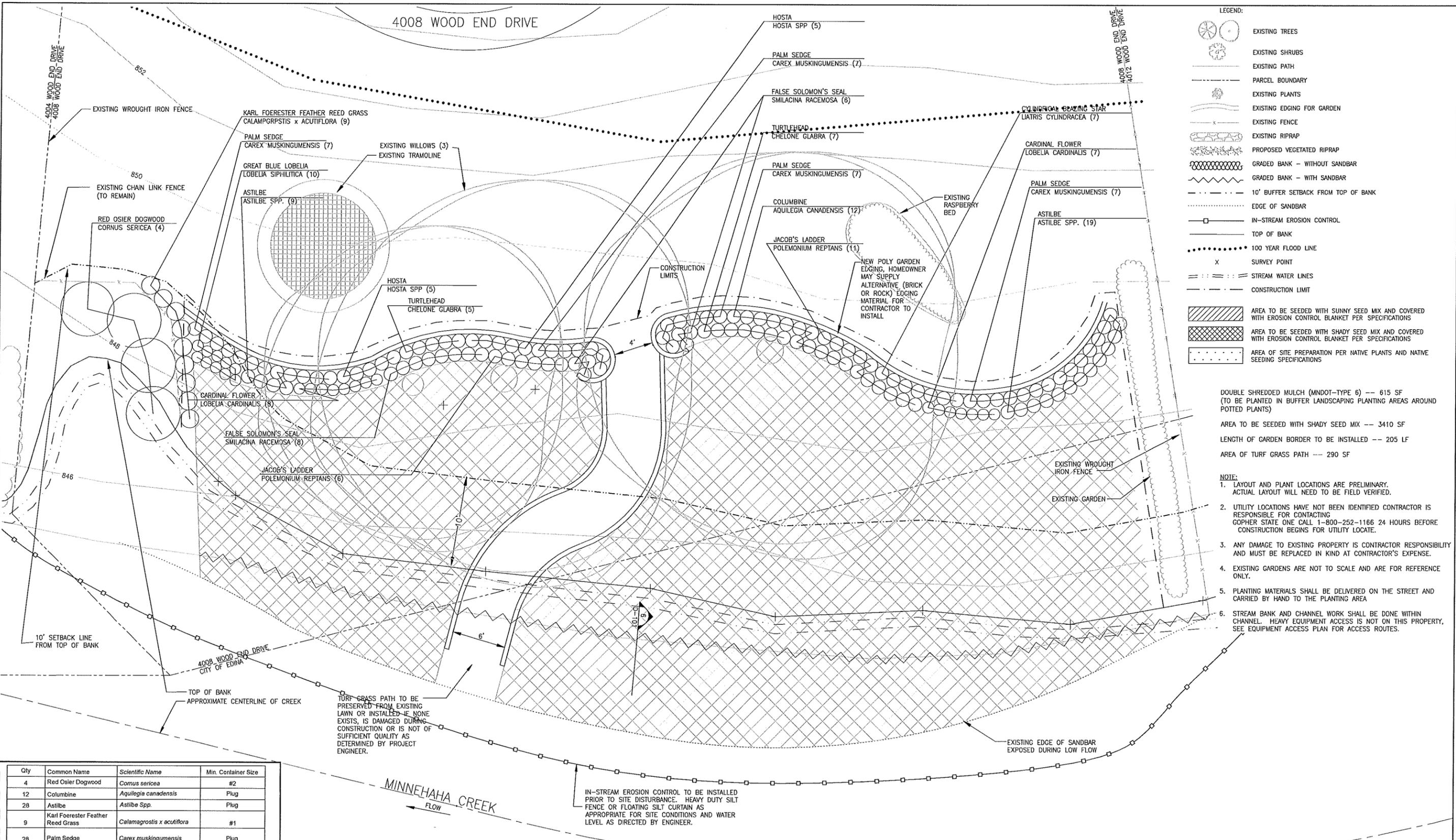
PROJECT TITLE
 MCWD
 REACH 14 PROJECT

MINNEHAHA CREEK
 WATERSHED DISTRICT
 QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE			
REMOVAL PLAN 4008 WOOD END DRIVE			
DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054		SHEET NO. L-116A	
			REV NO. 1

Plot Date & Time: 4 December 2012 10:07 AM

MA:\0185\5054 - Reach 14\CAD\LANDSCAPE\118-4008 Wood End Drive.dwg



- LEGEND:**
- EXISTING TREES
 - EXISTING SHRUBS
 - EXISTING PATH
 - PARCEL BOUNDARY
 - EXISTING EDGING FOR GARDEN
 - EXISTING FENCE
 - EXISTING RIPRAP
 - PROPOSED VEGETATED RIPRAP
 - GRADED BANK - WITHOUT SANDBAR
 - GRADED BANK - WITH SANDBAR
 - 10' BUFFER SETBACK FROM TOP OF BANK
 - EDGE OF SANDBAR
 - IN-STREAM EROSION CONTROL
 - TOP OF BANK
 - 100 YEAR FLOOD LINE
 - SURVEY POINT
 - STREAM WATER LINES
 - CONSTRUCTION LIMIT
 - AREA TO BE SEEDDED WITH SUNNY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
 - AREA TO BE SEEDDED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
 - AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

DOUBLE SHREDDED MULCH (MNDOT-TYPE 6) -- 615 SF
(TO BE PLANTED IN BUFFER LANDSCAPING PLANTING AREAS AROUND POTTED PLANTS)

AREA TO BE SEEDDED WITH SHADY SEED MIX -- 3410 SF

LENGTH OF GARDEN BORDER TO BE INSTALLED -- 205 LF

AREA OF TURF GRASS PATH -- 290 SF

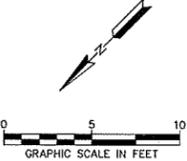
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Qty	Common Name	Scientific Name	Min. Container Size
4	Red Osier Dogwood	<i>Cornus sericea</i>	#2
12	Columbine	<i>Aquilegia canadensis</i>	Plug
28	Astilbe	<i>Astilbe Spp.</i>	Plug
9	Karl Foerester Feather Reed Grass	<i>Calamagrostis x acutiflora</i>	#1
28	Palm Sedge	<i>Carex muskingumensis</i>	Plug
12	Turtlehead	<i>Chelone glabra</i>	Plug
10	Hosta	<i>Hosta</i>	4 25"
7	Cylindrical Blazing Star	<i>Liatris cylindracea</i>	Plug
15	Cardinal flower	<i>Lobelia cardinalis</i>	Plug
10	Great blue lobelia	<i>Lobelia siphilitica</i>	Plug
14	False Solomon's seal	<i>Malianthemum racemosa</i>	Plug
17	Jacob's ladder	<i>Polemonium reptans</i>	Plug

TURF GRASS PATH TO BE PRESERVED FROM EXISTING LAWN OR INSTALLED IF NONE EXISTS, IS DAMAGED DURING CONSTRUCTION OR IS NOT OF SUFFICIENT QUALITY AS DETERMINED BY PROJECT ENGINEER.

IN-STREAM EROSION CONTROL TO BE INSTALLED PRIOR TO SITE DISTURBANCE. HEAVY DUTY SILT FENCE OR FLOATING SILT CURTAIN AS APPROPRIATE FOR SITE CONDITIONS AND WATER LEVEL AS DIRECTED BY ENGINEER.

MINNEHAHA CREEK



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	JVB	LNJ	11/21/12

SEAL
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PRINT NAME ED A. MATTHESEN
SIGNATURE
DATE 11/21/2012 REG. NO. 16800

PRIME CONSULTANT

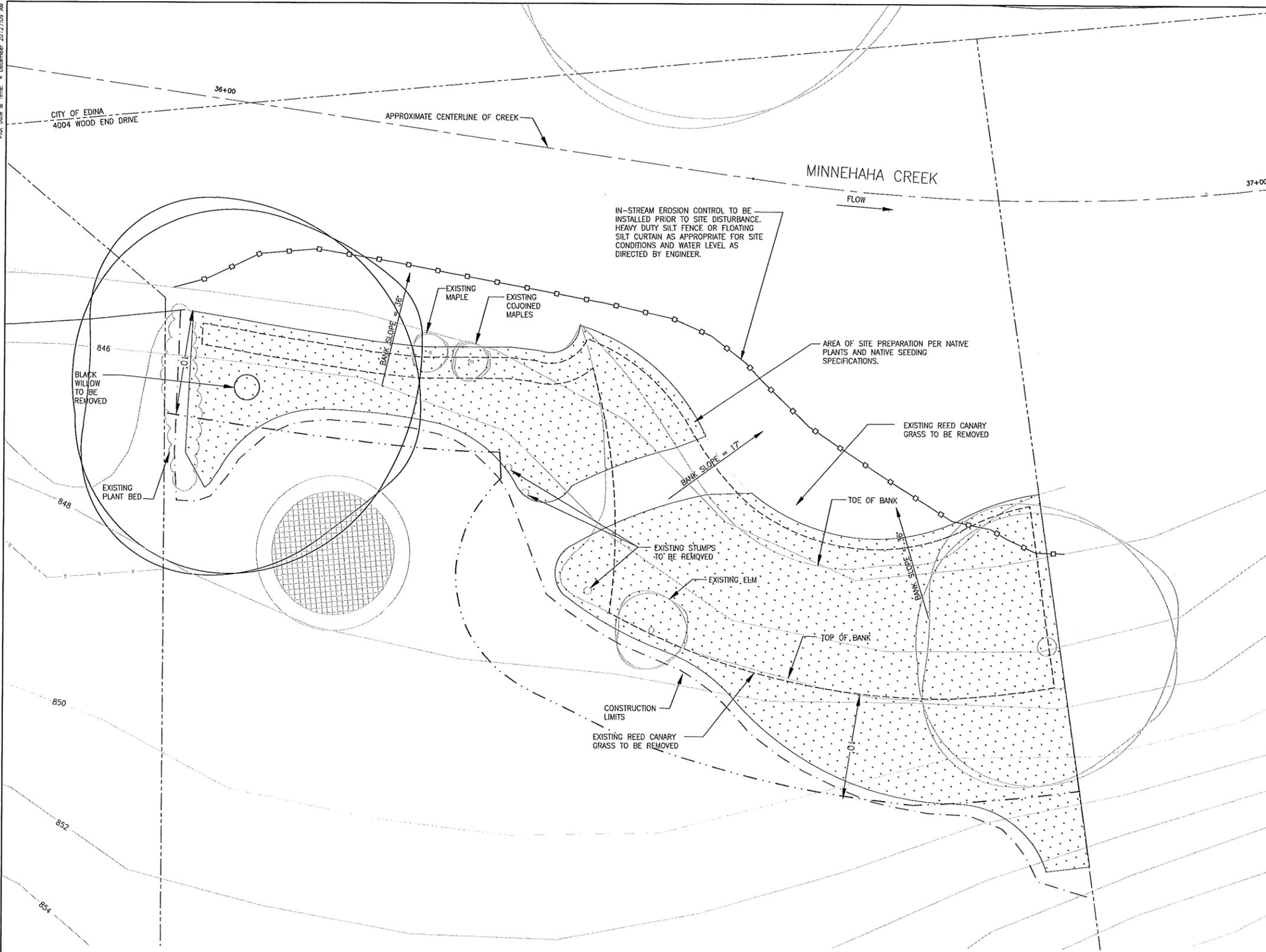
Wenck Associates, Inc.
Consulting Engineers
763-479-4200

PROJECT TITLE
MCWD
REACH 14 PROJECT

MINNEHAHA CREEK
WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE			
LANDSCAPE PLAN 4008 WOOD END DRIVE			
DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054		SHEET NO. L-116	
			REV NO. 1

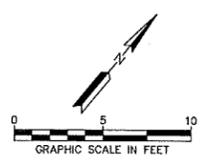
Plot Date & Time: 4 December 2012 7:05 AM
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LEGEND:

- EXISTING TREES
- EXISTING SHRUBS
- EXISTING PATH
- PARCEL BOUNDARY
- EXISTING PLANTS
- EXISTING EDGING FOR GARDEN
- EXISTING FENCE
- EXISTING RIPRAP
- PROPOSED VEGETATED RIPRAP
- GRADED BANK - WITHOUT SANDBAR
- GRADED BANK - WITH SANDBAR
- 10' BUFFER SETBACK FROM TOP OF BANK
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 7. PROTECT EXISTING PLANTINGS NOT DESIGNATED FOR REMOVAL.



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
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 SIGNATURE *[Signature]*
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PRIME CONSULTANT

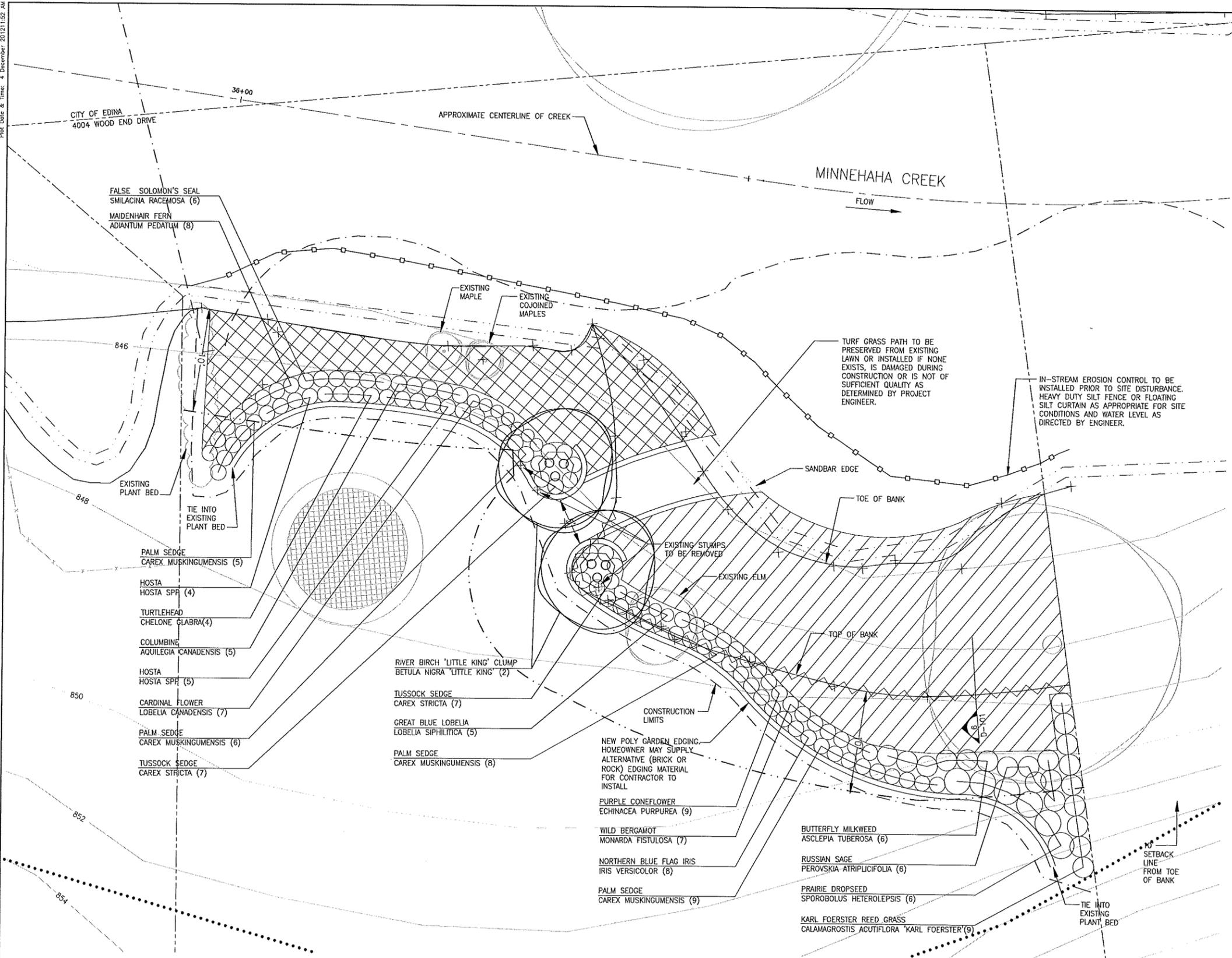
 Wenck
 Wenck Associates, Inc.
 Consulting Engineers
 MAPLE, MN 55359 763-479-4200

PROJECT TITLE
 MCWD
 REACH 14 PROJECT

 MINNEHAHA CREEK
 WATERSHED DISTRICT
 QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE		DWG DATE		SCALE	
REMOVAL PLAN 4004 WOOD END DRIVE		AUGUST 2012		AS SHOWN	
PROJECT NO.	SHEET NO.	REV NO.			
0185-5054	L-117A	1			

Plot Date & Time: 4 December 2012 1:52 AM
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- LEGEND:**
- EXISTING TREES
 - EXISTING SHRUBS
 - EXISTING PATH
 - PARCEL BOUNDARY
 - EXISTING PLANTS
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 - AREA TO BE SEEDED WITH SHADY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
 - AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

DOUBLE SHREDDED MULCH (MNDOT-TYPE 6) --- 430 SF (3" DEPTH)
 (TO BE PLACED IN BUFFER LANDSCAPING PLANTING AREAS AROUND POTTED PLANTS)

AREA TOO TO BE SEEDED WITH SUNNY SEED MIX --- 750 SF

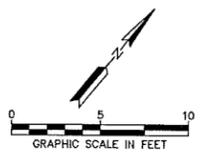
AREA TO BE SEEDED WITH SHADY SEED MIX --- 325 SF

LENGTH OF GARDEN BORDER TO BE INSTALLED --- 140 LF

AREA OF TURF GRASS PATH --- 105 SF

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Qty	Common Name	Scientific Name	Min. Container Size
2	River Birch 'Little King' Clump	<i>Betula nigra</i> 'Little King'	#25
8	Maidenhair fern	<i>Adiantum pedatum</i>	Plug
8	Columbine	<i>Aquilegia canadensis</i>	Plug
6	Butterfly milkweed	<i>Asclepias tuberosa</i>	Plug
9	Karl Foerster Feather Reed Grass	<i>Calamagrostis acutiflora</i> 'Karl Foerster'	#1
28	Palm Sedge	<i>Carex muskingumensis</i>	Plug
14	Tussock sedge	<i>Carex stricta</i>	Plug
3	Turtlehead	<i>Chelone glabra</i>	Plug
9	Purple coneflower	<i>Echinacea purpurea</i>	Plug
9	Hosta	Hosta	4.25" Pot
8	Northern Blue Flag Iris	<i>Iris versicolor</i>	Plug
7	Cardinal flower	<i>Lobelia cardinalis</i>	Plug
5	Great blue lobelia	<i>Lobelia siphilitica</i>	Plug
6	False Solomon's seal	<i>Maianthemum racemosum</i>	Plug
7	Wild bergamot	<i>Monarda fistulosa</i>	Plug
6	Russian sage	<i>Perovskia atriplicifolia</i>	Plug
6	Prairie dropseed	<i>Sporobolus heterolepis</i>	Plug



REV	REVISION DESCRIPTION	DWN	APP	REV DATE
1	ISSUED FOR APPROVAL	JVB	LNJ	11/21/12

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PRINT NAME ED A. MATTHIASEN

SIGNATURE

DATE 11/21/2012 REG. NO. 16800

PRIME CONSULTANT

Wenck

Wenck Associates, Inc.
Consulting Engineers

Web Site: www.wenck.com

WAPLE PLAIN, MN 55359 763-479-4200

PROJECT TITLE

MCWD
REACH 14 PROJECT

**MINNEHAHA CREEK
WATERSHED DISTRICT**
QUALITY OF WATER, QUALITY OF LIFE

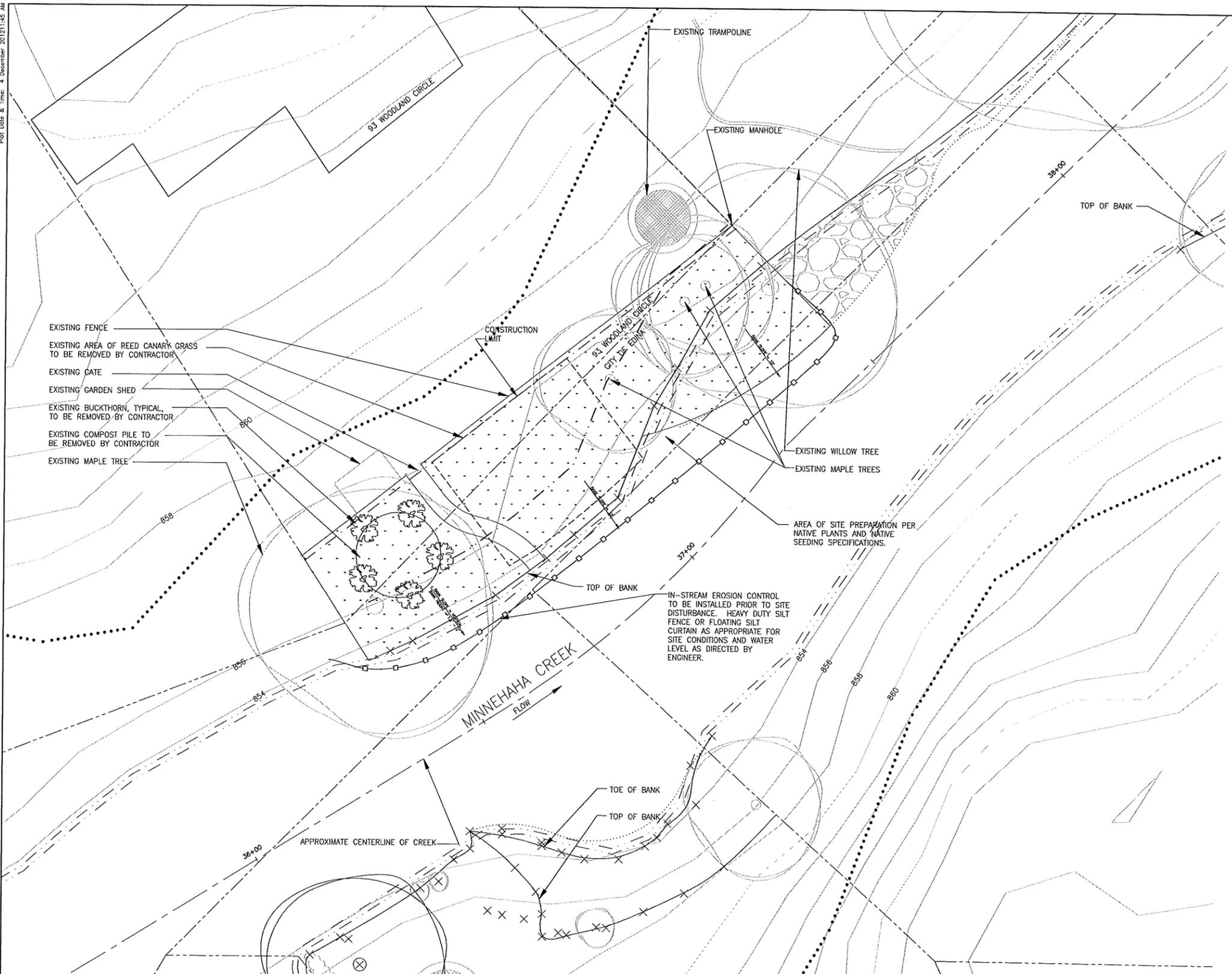
SHEET TITLE

LANDSCAPE PLAN
4004 WOOD END DRIVE

DWN BY	CHK'D	APP'D	DWG DATE
KDK	JVB	LNJ	AUGUST 2012
PROJECT NO.			SCALE
0185-5054			AS SHOWN
SHEET NO.		REV NO.	
L-117		1	

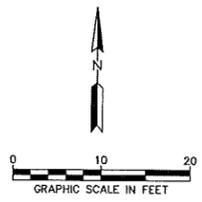
Plot Date & Time: 4 December 2012 11:45 AM

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- LEGEND:**
- EXISTING TREES
 - EXISTING SHRUBS
 - EXISTING PATH
 - PARCEL BOUNDARY
 - EXISTING PLANTS
 - EXISTING EDGING FOR GARDEN
 - EXISTING FENCE
 - EXISTING RIPRAP
 - PROPOSED VEGETATED RIPRAP
 - GRADED BANK - WITHOUT SANDBAR
 - GRADED BANK - WITH SANDBAR
 - 10' SETBACK FROM TOP OF BANK
 - EDGE OF SANDBAR
 - IN-STREAM EROSION CONTROL
 - TOP OF BANK
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 - SURVEY POINT
 - STREAM WATER LINES
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 - AREA TO BE SEEDED WITH SUNNY SEED MIX AND COVERED WITH EROSION CONTROL BLANKET PER SPECIFICATIONS
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SIGNATURE

DATE 11/21/2012 REG. NO. 16800

PRIME CONSULTANT

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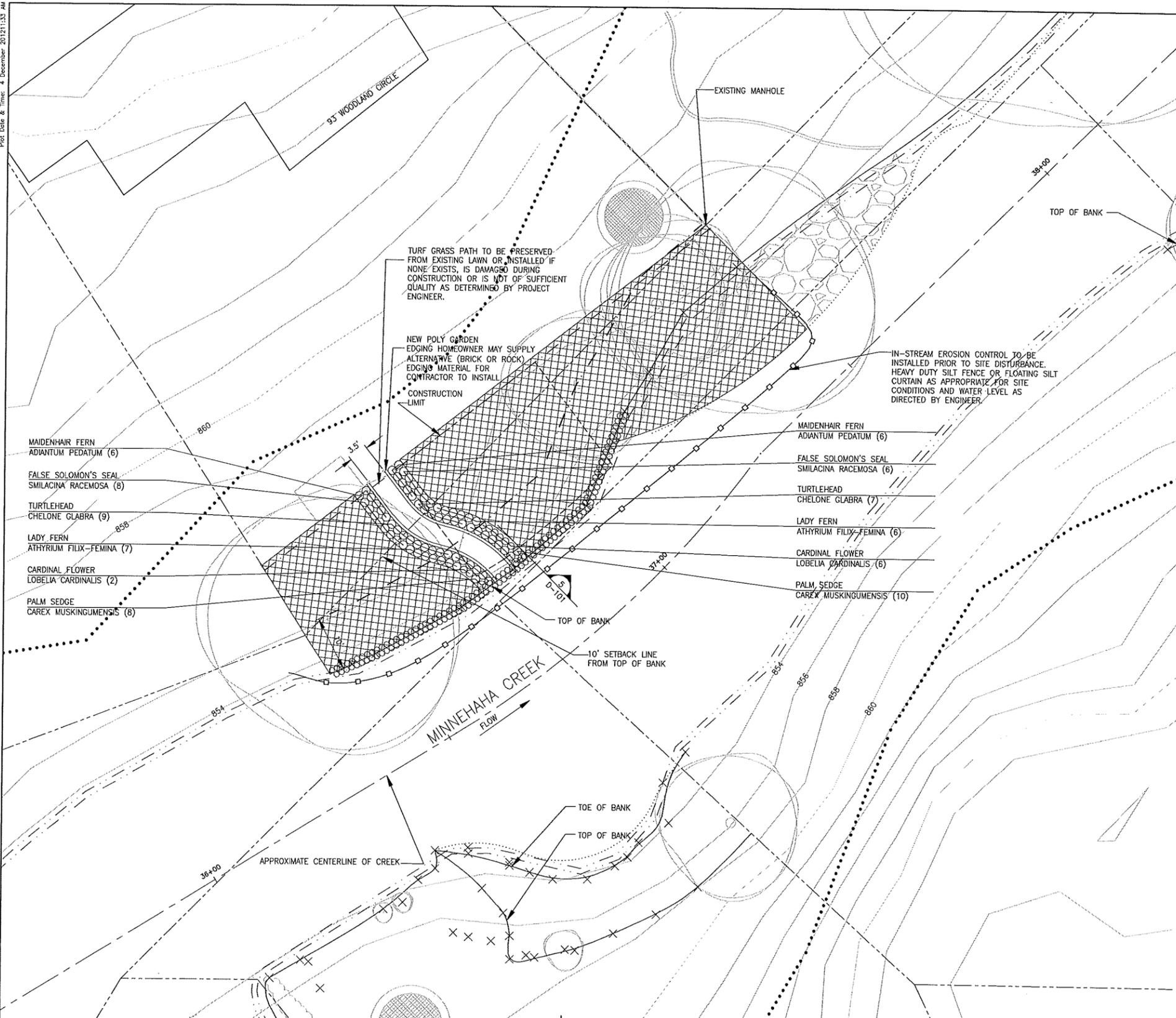
MAPLE PLAIN, MN 55359 763-479-4200

PROJECT TITLE

MCWD
REACH 14 PROJECT

MINNEHAHA CREEK
WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

REMOVAL PLAN			
93 WOODLAND CIRCLE			
DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054		SCALE AS SHOWN	SHEET NO. L-118A
			REV NO. 1



LEGEND:

- EXISTING TREES
- EXISTING SHRUBS
- EXISTING PATH
- PARCEL BOUNDARY
- EXISTING PLANTS
- EXISTING EDGING FOR GARDEN
- EXISTING FENCE
- EXISTING RIPRAP
- PROPOSED VEGETATED RIPRAP
- GRADED BANK - WITHOUT SANDBAR
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- AREA OF SITE PREPARATION PER NATIVE PLANTS AND NATIVE SEEDING SPECIFICATIONS

DOUBLE SHREDDED MULCH (MNDOT-TYPE 6) -- 195 SF (3" DEPTH)
 TO BE PLACED IN BUFFER LANDSCAPING PLANTING AREAS AROUND POTTED PLANTS)

AREA TO BE SEED WITH SHADY SEED MIX -- 2425 SF

LENGTH OF GARDEN BORDER TO BE INSTALLED -- 65 LF

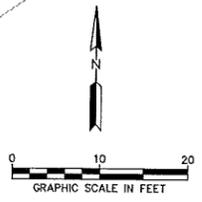
AREA OF TURF GRASS PATH -- 105 SF

NOTE:

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PLANT LIST

Qty	Common Name	Scientific Name	Min. Container Size
12	Maidenhair fern	<i>Adiantum pedatum</i>	Plug
13	Lady Fern	<i>Athyrium filix-femina</i>	Plug
18	Palm Sedge	<i>Carex muskingumensis</i>	Plug
16	Turtlehead	<i>Chelone glabra</i>	Plug
8	Cardinal flower	<i>Lobelia cardinalis</i>	Plug
14	False Solomon's seal	<i>Maianthemum racemosum</i>	Plug



1	ISSUED FOR APPROVAL	JVB	LNJ	11/21/12
REV	REVISION DESCRIPTION	DWN	APP	REV DATE

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PRIME CONSULTANT

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 Consulting Engineers
 WAPLE PLAIN, MN 55359 763-478-4200

PROJECT TITLE
 MCWD
 REACH 14 PROJECT

MINNEHAHA CREEK
 WATERSHED DISTRICT
 QUALITY OF WATER, QUALITY OF LIFE

SHEET TITLE
 LANDSCAPE PLAN
 93 WOODLAND CIRCLE

DWN BY KDK	CHK'D JVB	APP'D LNJ	DWG DATE AUGUST 2012
PROJECT NO. 0185-5054	SHEET NO. L-118	SCALE AS SHOWN	REV NO. 1