

RFB NO. 317033



CONSTRUCTION DOCUMENTS PROJECT MANUAL

DANE COUNTY DEPARTMENT OF PUBLIC WORKS,
HIGHWAY AND TRANSPORTATION

PUBLIC WORKS ENGINEERING DIVISION
1919 ALLIANT ENERGY CENTER WAY
MADISON, WISCONSIN 53713

REQUEST FOR BIDS NO. 317033 DORN CREEK SEDIMENT REMOVAL DORN CREEK WILDLIFE AREA ONCKEN RD TOWN OF WESTPORT, WISCONSIN

Due Date / Time: **TUESDAY, SEPTEMBER, 26, 2017 / 2:00 P.M.**

Location: **PUBLIC WORKS OFFICE**

Performance / Payment Bond: **100% OF CONTRACT AMOUNT**

Bid Deposit: **5% OF BID AMOUNT**

FOR INFORMATION ON THIS REQUEST FOR BIDS, PLEASE CONTACT:

RYAN SHORE, PROJECT MANAGER
TELEPHONE NO.: 608/266-4475
FAX NO.: 608/267-1533
E-MAIL: SHORE@COUNTYOFDANE.COM

TABLE OF CONTENTS FOR RFB NO. 317033

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

Project Manual Cover Page
Table of Contents
Advertisement for Bids (Legal Notice)
Best Value Contracting Application
Instructions to Bidders
Bid Form
Fair Labor Practices Certification
Sample Public Works Contract
Sample Bid Bond
Sample Performance Bond
Sample Payment Bond
Equal Benefits Compliance Payment Certification Form
General Conditions of Contract
Supplementary Conditions

DIVISION 01 - GENERAL REQUIREMENTS

01 00 00 - Basic Requirements
01 74 19 - Construction Waste Management, Disposal & Recycling

DIVISION 02 - SITE WORK

02110 - Site Clearing and Stripping
02140 - Dewatering
02222 – Excavation, Fill, Backfill and Grading
02225 – Hydraulic Dredging for Sediment Removal
02240 – Geotextiles
02270 – Slope Protection and Erosion Control
02275 – Field Stone Riprap
02285 – Woody Debris Restoration
02930 – Restoration
02945 – Creek Plug
02999 – Live Stakes, Live Cuttings, and Native Rhizome Plugs

SEDIMENT SAMPLING RESULTS

Wisconsin State Laboratory of Hygiene – Laboratory Report, pages 1-8

DRAWINGS

Plot drawings on 11" x 17" (ANSI B),
Sheet No. 1 - Cover Page
Sheet No. 2 - Access Plan
Sheet No. 3 - Dredging Spoils Dewatering Site Grading & Erosion Control Plan
Sheet No. 4 - Final Disposition Grading Plan
Sheet No. 5 - Restoration Plan
Sheet No. 6 - Erosion Control Details & Symbols
Sheet No. 7 – Erosion Control & Restoration Details
Sheet No. 8 – Typical Section Details
Sheet Nos. 9-19 – Plan & Profile – Mainline Alignment
Sheet Nos. 20-21 – Plan & Profile – South Alignment
Sheet Nos. 22-32 – Cross Sections - Mainline Alignment
Sheet No. 33 – Cross Section – South Alignment

LEGAL NOTICE

INVITATION TO BID

Dane County Public Works, Highway & Transportation Dept., 1919 Alliant Energy Center Way, Madison, WI 53713, will receive sealed Bids until:

2:00 P.M., TUESDAY, SEPTEMBER 26, 2017

REQUEST FOR BIDS NO. 317033
DORN CREEK SEDIMENT REMOVAL
DORN CREEK WILDLIFE AREA
ONCKEN RD
TOWN OF WESTPORT, WISCONSIN

Dane County is inviting Bids for construction services for sediment removal in Dorn Creek including dredging, dewatering, sediment storage and site restoration.. Optional sentence: Only firms with capabilities, experience & expertise with similar projects should obtain this Request for Bids document & submit Bids.

Request for Bids document may be obtained after **2:00 p.m. on September 5, 2017** by downloading it from bids-pwht.countyofdane.com. Please call Ryan Shore, Project Manager, at 608/266-4475, or our office at 608/266-4018, for any questions or additional information.

All Bidders must be a registered vendor with Dane County & pay an annual registration fee & must be pre-qualified as a Best Value Contractor before award of Contract, Agreement. Complete Vendor Registration Form at danepurchasing.com/Account/Login? or obtain one by calling 608/266-4131. Complete Pre-qualification Application for Contractors at countyofdane.com/pwht/BVC_Application.aspx or obtain one by calling 608/266-4029.

A pre-bid site tour will be held Friday, September 15 at 10 a.m. at Dorn Creek Wildlife Area, 5916 Oncken Road . Bidders are strongly encouraged to attend this tour.

PUBLISH: SEPTEMBER 6 & 12, 2017 - WISCONSIN STATE JOURNAL
SEPTEMBER 6 & 12, 2017 - THE DAILY REPORTER



DANE COUNTY DEPARTMENT of PUBLIC WORKS, HIGHWAY and TRANSPORTATION

County Executive
Joseph T. Parisi

1919 Alliant Energy Center Way ♦ Madison, Wisconsin 53713
Phone: (608) 266-4018 ♦ FAX: (608) 267-1533

Commissioner / Director
Gerald J. Mandli

BEST VALUE CONTRACTING APPLICATION

CONTRACTORS / LICENSURE APPLICANTS

The Dane County Department of Public Works requires all contractors to be pre-qualified as a best value contractor with the County prior to being awarded a contract. In addition, the County pre-qualifies potential contractors and sub-contractors who wish to work on County contracts. Subcontractors must become pre-qualified ten (10) days prior to commencing work under any Dane County Public Works Contract. Potential subcontractors are urged to become pre-qualified as early as possible. This document shall be completed, properly executed, along with the necessary attachments and additional information that the County requires for the protection and welfare of the public in the performance of a County contract.

Contractors or subcontractors of any tier who attain pre-qualification status will retain that status for a period of two (2) years from the date of qualification. Contractors shall notify the Dane County Department of Public Works, Highway & Transportation within fifteen (15) days of any changes to its business or operations that are relevant to the pre-qualification application. Failure to do so could result in suspension, revocation of the contractor's pre-qualification, debarment from County contracts for up to three (3) years and / or other sanctions available under the law.

No contracts will be awarded for construction work performed on Dane County projects unless the contractor is currently approved as a Wisconsin Trade Trainer or has applied for approval as an Apprenticeship Trade Trainer to the Wisconsin Department of Workforce Development and agrees to an acceptable apprenticeship program. If you are not currently approved as a Wisconsin Trade Trainer, or have not applied for approval as an Apprenticeship Trade Trainer, please contact the Department of Workforce Development - Bureau of Apprenticeship Standards at 608/266-3133 or visit their web site at: dwd.wisconsin.gov/apprenticeship/.

EXEMPTIONS

- Contractors who employ less than five (5) apprenticeable trade workers are not required to pre-qualify.
- Contractors performing work that does not apply to an apprenticeable trade, as outlined in Appendix A.
- The contractor / subcontractor provides sufficient documentation to demonstrate one or more of the following:
 - apprentices are not available in a specific geographic area;
 - the applicable apprenticeship program is unsuitable or unavailable; or
 - there is a documented depression of the local construction market which prevents compliance.

SEC.	PROOF OF RESPONSIBILITY	CHECK IF APPLICABLE
1	Does your firm possess all technical qualifications and resources, including equipment, personnel and financial resources, necessary to perform the work required for any project or obtain the same through the use of responsible, pre-qualified subcontractors?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
2	Will your firm possess all valid, effective licenses, registrations or certificates required by federal, state, county, or local law, which are necessary for the type of work to be performed including, but not limited to, those for any type of trade work or specialty work?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
3	Will your firm meet all bonding requirements as required by applicable law or contract specifications?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
4	Will your firm meet all insurance requirements as required by applicable law or specifications, including general liability insurance, workers compensation insurance and unemployment insurance requirements?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
5	Will your firm maintain a substance abuse policy for employees hired for public works contracts that comply with Wis. Stats. Sec. 103.503?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
6	Does your firm acknowledge that it must pay all craft employees on public works projects the wage rates and benefits required under Section 66.0903 of the Wisconsin Statutes?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
7	Will your firm fully abide by the equal opportunity and affirmative action requirements of all applicable laws, including County ordinances?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
8	In the past three (3) years, has your firm had control or has another corporation, partnership or other business entity operating in the construction industry controlled it? If so, please attach a statement explaining the nature of the firm relationship?	Yes: <input type="checkbox"/> No: <input type="checkbox"/> If Yes, attach details.
9	In the past three (3) years, has your firm had any type of business, contracting or trade license, certification or registration revoked or suspended?	Yes: <input type="checkbox"/> No: <input type="checkbox"/> If Yes, attach details.
10	In the past three (3) years, has your firm been debarred by any federal, state or local government agency?	Yes: <input type="checkbox"/> No: <input type="checkbox"/> If Yes, attach details.
11	In the past three (3) years, has your firm defaulted or failed to complete any contract?	Yes: <input type="checkbox"/> No: <input type="checkbox"/> If Yes, attach details.
12	In the past three (3) years, has your firm committed a willful violation of federal, state or local government safety laws as determined by a final decision of a court or government agency authority.	Yes: <input type="checkbox"/> No: <input type="checkbox"/> If Yes, attach details.
13	In the past three (3) years, has your firm been in violation of any law relating to your contracting business where the penalty for such violation resulted in the imposition of a penalty greater than \$10,000?	Yes: <input type="checkbox"/> No: <input type="checkbox"/> If Yes, attach details.
14	Is your firm Executive Order 108 precertified with the State of Wisconsin?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
15	Is your firm an active Wisconsin Trade Trainer as determined by the Wisconsin Bureau of Apprenticeship Standards?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
16	Is your firm exempt from being pre-qualified with Dane County?	Yes: <input type="checkbox"/> No: <input type="checkbox"/> If Yes, attach reason for exemption.
17	Does your firm acknowledge that in doing work under any County Public Works Contract, it will be required to use as subcontractors only those contractors that are also pre-qualified with the County or become so ten days prior to commencing work?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
18	Contractor has been in business less than one year?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
19	Is your firm a first time Contractor requesting a one time exemption, but, intend to comply on all future contracts and are taking steps typical of a "good faith" effort?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
20	Not applicable. My firm does not intend to work on Best Value Contracts. Note: Best Value Contracting is required to bid on most Public Works Contracts (if unclear, please call Jan Neitzel Knox 608-266-4029).	Yes: <input type="checkbox"/> No: <input type="checkbox"/>

SIGNATURE SECTION

Your firm's Officer, or the individual who would sign a bid and / or contract documents must sign this document.

I do hereby certify that all statements herein contained are true and correct to the best of my knowledge:

Signature

Date

Printed or Typed Name and Title

NAME AND ADDRESS OF CONTRACTOR	
Name of Firm:	
Address:	
City, State, Zip:	
Telephone Number:	
Fax Number:	
E-mail Address:	

REMEMBER!

Return all to forms and attachments, or questions to:

JAN NEITZEL KNOX
EMAIL: NEITZEL-KNOX@COUNTYOFDANE.COM
OFFICE: (608)266-4029, FAX: (608)267-1533

**DANE COUNTY DEPARTMENT OF PUBLIC WORKS,
HIGHWAY & TRANSPORTATION
1919 ALLIANT ENERGY CENTER WAY
MADISON, WI 53713**

APPENDIX A

APPRENTICEABLE TRADES

Bricklayer
Carpenter
Cement Mason (Concrete Finisher)
Cement Mason (Heavy Highway)
Construction Craft Laborer
Data Communications Installer
Electrician
Elevator Mechanic / Technician
Environmental Systems Technician / HVAC Service Technician / HVAC Install & Service
Glazier
Heavy Equipment Operator / Operating Engineer
Insulation Worker (Heat & Frost)
Iron Worker (Assembler, Metal Buildings)
Painter / Decorator
Plasterer
Plumber
Roofer / Waterproofer
Sheet Metal Worker
Sprinkler Fitter
Steamfitter (Service & Refrigeration)
Taper & Finisher
Telecommunications (Voice, Data & Video) Installer / Technician
Tile Setter

INSTRUCTIONS TO BIDDERS

TABLE OF CONTENTS

1. GENERAL.....	1
2. DRAWINGS AND SPECIFICATIONS	1
3. INTERPRETATION	2
4. QUALIFICATIONS OF BIDDER (CONTRACTOR AND SUBCONTRACTOR)....	2
5. BID GUARANTEE	3
6. WITHDRAWAL OF BIDS.....	3
7. CONTRACT FORM	3
8. CONTRACT INTERESTS BY COUNTY PUBLIC OFFICIALS	3
9. EMERGING SMALL BUSINESS PROVISIONS	4
10. METHOD OF AWARD - RESERVATIONS	6
11. SECURITY FOR PERFORMANCE AND PAYMENTS	6
12. TAXES.....	6
13. SUBMISSION OF BIDS	7
14. SUBCONTRACTOR LISTING.....	7
15. ALTERNATE BIDS	7
16. INFORMATIONAL BIDS	8
17. UNIT PRICES.....	8
18. COMMENCEMENT AND COMPLETION	8
19. WORK BY OWNER	8
20. SPECIAL HAZARDS COVERAGE.....	8
FORM A	9
FORM B.....	10
FORM C.....	11
FORM D	12

1. GENERAL

- A. Before submitting Bid, bidder shall thoroughly examine all Construction Documents. Successful Bidder shall be required to provide all the Work that is shown on Drawings, set forth in Specifications, or reasonably implied as necessary to complete Contract for this project.
- B. Bidder shall visit site to become acquainted with adjacent areas, means of approach to site, conditions of actual site and facilities for delivering, storing, placing, and handling of materials and equipment.
- C. Pre-bid meeting is scheduled on Friday, September 15, 2017 at 10:00 a.m. at Dorn Creek Wildlife Area, 5916 Oncken Road. Attendance by all bidders is optional, however bidders and subcontractors are strongly encouraged to attend.
- D. Failure to visit site or failure to examine any and all Construction Documents will in no way relieve successful Bidder from necessity of furnishing any necessary materials or equipment, or performing any work, that may be required to complete the Work in accordance with Drawings and Specifications. Neglect of above requirements will not be accepted as reason for delay in the Work or additional compensation.

2. DRAWINGS AND SPECIFICATIONS

- A. Drawings and Specifications that form part of this Contract, as stated in Article 1 of General Conditions of Contract, are enumerated in Document Index of these Construction Documents.

- B. Complete sets of Drawings and Specifications for all trades will be available to all Bidders, irrespective of category of work to be bid on, in order that all Bidders may be familiar with work of other trades as they affect their bid.
- C. For deposit refund, return complete sets of Drawings and Specifications to same location they were picked up within ninety (90) calendar days after Bid Due Date. After that time, deposit will be forfeited.

3. INTERPRETATION

- A. No verbal explanation or instructions will be given in regard to meaning of Drawings or Specifications before Bid Due Date. Bidders shall bring inadequacies, omissions or conflicts to Owner or Architect / Engineer's attention at least ten (10) calendar days before Bid Due Date. Prompt clarification will be available to all bidders by Addendum.
- B. Failure to so request clarification or interpretation of Drawings and Specifications will not relieve successful Bidder of responsibility. Signing of Contract will be considered as implicitly denoting that Contractor has thorough understanding of scope of the Work and comprehension of Construction Documents.
- C. Owner or Architect / Engineer will not be responsible for verbal instructions.

4. QUALIFICATIONS OF BIDDER (CONTRACTOR AND SUBCONTRACTOR)

- A. Before award of Contract can be approved, Owner shall be satisfied that Bidder involved meets following requirements:
 - 1. Has completed at least one (1) project of at least fifty percent (50%) of size or value of Division of work being bid and type of work completed is similar to that being bid. If greater magnitude of experience is deemed necessary, other than size or value of work, such requirements will be described in appropriate section of Specifications.
 - 2. Maintains permanent place of business.
 - 3. Can be bonded for terms of proposed Contract.
 - 4. Has record of satisfactorily completing past projects and supplies list of no more than three (3) most recent, similar projects, with architect or engineer's and owner's names, addresses and telephone numbers for each project. Submit to Public Works Project Engineer with Bid, within three (3) business days after Bid Due Date, . Criteria which will be considered in determining satisfactory completion of projects by bidder will include:
 - a. Completed contracts in accordance with drawings and specifications.
 - b. Diligently pursued execution of work and completed contracts according to established time schedule unless Owner grants extensions.
 - c. Fulfilled guarantee requirements of construction documents.
 - d. Is not presently on ineligible list maintained by County's Department of Administration for noncompliance with equal employment opportunities and affirmative action requirements.
 - e. Authorized to conduct business in Wisconsin. By submitting Bid, bidder warrants that it has: complied with all necessary requirements to do business in State of Wisconsin; that persons executing contract on its behalf are authorized to do so; and, if corporation, that name and address of bidder's registered agent are as set forth in Contract. Bidder shall notify Owner immediately, in writing, of any change in its

registered agent, their address, and bidder's legal status. For partnership, term "registered agent" shall mean general partner.

- B. County's Public Works Project Engineer will make such investigations as are deemed necessary to determine ability of bidder to perform the Work, and bidder shall furnish to County's Public Works Project Engineer or designee all such information and data for this purpose as County's Public Works Project Engineer may request. Owner reserves right to reject Bid if evidence submitted by, or investigation of, bidder fails to satisfy Owner that bidder is responsible and qualified to carry out obligations of Contract and to complete the Work contemplated therein.

5. BID GUARANTEE

- A. Bank certified check, cashier's check or Bid Bond, payable to County in amount not less than five percent (5%) of maximum bid, shall accompany each Bid as guarantee that if Bid is accepted, Bidder will execute and return proposed Contract and Performance and Payment Bonds within ten (10) business days after being notified of acceptance of Bid. Company issuing bonds must be licensed to do business in Wisconsin.
- B. Any bid, which is not accompanied by bid guarantee, will be considered "No Bid" and will not be read at Bid Due Date.
- C. If successful Bidder so delivers Contract, Certificate of Insurance, and Performance and Payment Bonds, check will be returned to Bidder. In case Bidder fails to deliver such Contract, insurance, and bond, amount of bid guarantee will be forfeited to County as liquidated damages.
- D. All checks tendered as bid guarantee, except those of three (3) lowest qualified, responsible bidders, will be returned to their makers within three (3) business days after Bid Due Date. All such retained checks will be returned immediately upon signing of Contract and Performance and Payment Bonds by successful Bidder.

6. WITHDRAWAL OF BIDS

- A. Bids may be withdrawn by written request received from bidder or authorized representative thereof prior to time fixed for Bid Due Date, without prejudice to right of bidder to file new Bid. Withdrawn Bids will be returned unopened. Negligence on part of bidder in preparing their Bid confers no right for withdrawal of Bid after it has been opened.
- B. No Bid may be withdrawn for period of sixty (60) calendar days after Bid Due Date.
- C. If Bid contains error, omission or mistake, bidder may limit liability to amount of bidder's guarantee by giving written Notice of Intent not to execute Contract to Owner within seventy-two (72) hours of Bid Due Date.

7. CONTRACT FORM

- A. Sample copy of contract that successful Bidder will be required to enter into is included in these Construction Documents and bidders are required to familiarize themselves with all conditions contained therein.

8. CONTRACT INTERESTS BY COUNTY PUBLIC OFFICIALS

- A. In accordance with Wisconsin Statute 946.13, county official may not bid for or enter into any contract involving receipts or disbursements of more than \$15,000.00 in a year, in which

they have private pecuniary interest, direct or indirect if at same time they are authorized to take official action with respect to making of this Contract. Any contract entered into in violation of this Statute is void and County incurs no liability thereon. This subsection does not affect application and enforcement of Wisconsin Statute 946.13 by state prosecutors in criminal courts of this state.

9. EMERGING SMALL BUSINESS PROVISIONS

- A. **Emerging Small Business Definition.** For purposes of this provision, ESB is defined as:
1. Independent business concern that has been in business minimum of one year;
 2. Business located in State of Wisconsin;
 3. Business comprised of less than twenty-five (25) employees;
 4. Business must not have gross sales in excess of three million dollars (\$3,000,000.00) over past three years; and
 5. Business does not have history of failing to complete projects.
- B. **Emerging Small Business (ESB) Involvement.** Bidder shall make good faith effort to award minimum of ten percent (10%) of the Work to ESBs. Bidder shall submit report to Dane County Contract Compliance Officer within ten (10) business days of Bid Due Date demonstrating such efforts. Good faith efforts means significant contact with ESBs for purposes of soliciting bids from them. Failure to make or demonstrate good faith efforts will be grounds for disqualification.
- C. **Emerging Small Business Report.** Emerging Small Business Enterprise Report is to be submitted by Bidder in separate envelope marked "Emerging Small Business Report". This report is due by 2:00 p.m. following specified ten (10) business days after Bid Due Date. Bidder who fails to submit Emerging Small Business Report shall be deemed not responsive.
- D. **ESB Goal.** Goal of this project is ten percent (10%) ESB participation. ESB utilizations are shown as percentage of total Bid. If Bidder meets or exceeds specified goal, Bidder is only required to submit Form A - Certification, and Form B - Involvement. Goal shall be met if Bidder qualifies as ESB.
- E. **Report Contents.** Following award of Contract, Bidder shall submit copies of executed contracts for all Emerging Small Businesses. Emerging Small Business Report shall consist of these:
1. Form A - Certification;
 2. Form B - Involvement;
 3. Form C - Contacts;
 4. Form D - Certification Statement (if appropriate); and
 5. Supportive documentation (i.e., copies of correspondence, telephone logs, copies of advertisements).
- F. **ESB Listing.** Bidders may solicit bids from this ESB listing: pdf.countyofdane.com/commissions/2013-2015_Targeted_Business_Directory.pdf.

- G. **ESB Certification.** All contractors, subcontractors and suppliers seeking ESB certification must complete and submit Emerging Small Business Report to Dane County Contract Compliance Program.
- H. **Certification Statement.** If ESB firm has not been certified by County as ESB prior to submittal of this Bid, ESB Report cannot be used to fulfill ESB goal for this project unless firm provides “Form D - Certification Statement”. Certification statement must be completed and signed by ESB firm.
- I. **Questions.** Questions concerning Emerging Small Business provisions shall be directed to:
- Dane County Contract Compliance Officer
City-County Building, Room 421
210 Martin Luther King, Jr. Blvd.
Madison, WI 53703
608/266-5623
- J. **Substituting ESBs.** In event of any significant changes in subcontract arrangements or if need arises to substitute ESBs, Bidder shall report such proposed changes to Contract Compliance Officer to making any official changes and request authorization to substitute ESB firm. Bidder further agrees to make every possible effort to replace ESB firm with another qualified ESB firm.
- K. **Good Faith Efforts.** Good faith efforts can be demonstrated by meeting all of these obligations:
1. Selecting portions of the Work to be performed by ESBs in order to increase likelihood of meeting ESB goal including, where appropriate, breaking down Contract into smaller units to facilitate ESB participation.
 2. Advertising in general circulation, trade associations and women / minority focus media concerning subcontracting opportunities.
 3. Providing written notices to reasonable number of specific ESBs that their interest in Contract was being solicited in sufficient time to allow ESBs to participate effectively.
 4. Following up on initial solicitations of interest by contacting ESBs within five (5) business days prior to Bid Due Date to determine with certainty whether ESB were interested, to allow ESBs to prepare bids.
 5. Providing interested ESB with adequate information about Drawings, Specifications and requirements of Contract.
 6. Using services of available minority, women and small business organizations and other organizations that provide assistance in recruitment of MBEs / WBEs / ESBs.
 7. Negotiating in good faith with interested ESBs, not rejecting ESBs as unqualified without sound reason based on thorough investigation of their capabilities.
 8. Submitting required project reports and accompanying documents to County’s Contract Compliance Officer within twenty-four (24) hours after Bid Due Date.
- L. **Appeals Disqualification of Bid.** Bidder who is disqualified may appeal to Public Works & Transportation Committee and Equal Opportunity Commission.

10. METHOD OF AWARD - RESERVATIONS

- A. Following will be basis of award of Contract, providing cost does not exceed amount of funds then estimated by County as available to finance Contract(s):
 - 1. Lowest dollar amount submitted by qualified responsible bidder on Base Bid for all work comprising project, combined with such additive Owner accepted alternates.
 - 2. Owner reserves right to reject all bids or any bid, to waive any informality in any bid, and to accept any bid that will best serve interests of County.
 - 3. Unit Prices and Informational Bids will not be considered in establishing low bidder.

11. SECURITY FOR PERFORMANCE AND PAYMENTS

- A. Simultaneous with delivery of signed Contract, Bidder shall be required to furnish Performance and Payment Bonds as specified in Article 29 of General Conditions of Contract, "Contract Security". Surety Company shall be licensed to do business in Wisconsin. Performance and Payment Bonds must be dated same date or subsequent to date of Contract. Performance and Payment Bonds must emulate information in Sample Performance and Payment Bonds in Construction Documents.
- B. Provide certified copy of power of attorney from Surety Company showing that agent who signs Bond has power of attorney to sign for Surety Company. Secretary or Assistant Secretary of company must sign this certification, not attorney-in-fact. Certification must bear same or later date as Bond. Power of Attorney must emulate model power of attorney information detailed in Sample Performance and Payment Bonds.
- C. If Bidder is partnership or joint venture, State certified list, providing names of individuals constituting partnership or joint venture must be furnished. Contract itself may be signed by one partner of partnership, or one partner of each firm comprising joint venture, but Performance and Payment Bonds must be signed by all partners.
- D. If Bidder is corporation, it is necessary that current certified copy of resolution or other official act of directors of corporation be submitted showing that person who signs Contract is authorized to sign contracts for corporation. It is also necessary that corporate seal be affixed to resolution, contract, and performance and payment bonds. If your corporation has no seal, it is required that above documents include statement or notation to effect that corporation has no seal.

12. TAXES

- A. Wisconsin Statute 77.54 (9m) allows building materials that become part of local unit government facilities to be exempt from sales & use tax. Vendors & materials suppliers may not charge Bidders sales & use tax on these purchases. This does not include highways, streets or roads. Any other Sales, Consumer, Use & other similar taxes or fees required by law shall be included in Bid.
- B. In accordance with Wisconsin Statute 71.80(16)(a), successful nonresident bidder, whether incorporated or not, and not otherwise regularly engaged in business in this state, shall file surety bond with State of Wisconsin Department of Revenue payable to Department of Revenue, to guarantee payment of income taxes, required unemployment compensation contributions, sales and use taxes and income taxes withheld from wages of employees, together with any penalties and interest thereon. Amount of bond shall be three percent (3%) of Contract or subcontract price on all contracts of \$50,000 or more.

13. SUBMISSION OF BIDS

- A. All Bids shall be submitted on standard Bid Form bound herein and only Bids that are made on this Bid Form will be considered. Entire Bid Form and other supporting documents, if any, shall be removed or copied from Construction Documents, filled out, and submitted in manner specified hereinafter. Submit completed Bid Bond with Bid as well.
- B. No bids for any subdivision or any sub-classification of this Work, except as indicated, will be accepted. Any conditional Bid, amendment to Bid Form or appended item thereto, or inclusion of any correspondence, written or printed matter, or details of any nature other than that specifically called for, which would alter any essential provision of Construction Documents, or require consideration of unsolicited material or data in determining award of Contract, will disqualify Bid. Telecommunication alterations to Bid will not be accepted.
- C. Bidders must submit single Bid for all the Work.
- D. Bid amounts shall be inserted in words and in figures in spaces provided on Bid Form; in case of conflict, written word amounts will govern.
- E. Addenda issued after Bid Letting shall become part of Construction Documents. Bidders shall acknowledge receipt of such addenda in appropriate space provided on Bid Form. Bid may be rejected if receipt of any particular addendum applicable to award of Contract has not been acknowledged on Bid Form.
- F. Bids shall be signed, placed in envelope, sealed and delivered before due time to place designated in Invitation to Bid, and identified with project name, bid number, location, category of work being bid upon, Bid Due Date, name and address of bidder.
- G. Bidder shall be responsible for sealed Bid being delivered to place designated for Bid Due Date on or before date and time specified. Bids received after time of closing will be rejected and returned to bidder unopened.
- H. Bid will be considered invalid and will be rejected if bidder has not signed it.
- I. Faxed or emailed Bids will not be accepted.
- J. Bidder's organization shall submit completed with Bid, Fair Labor Practices Certification form, included in these Construction Documents.

14. SUBCONTRACTOR LISTING

- A. Bidders shall be required to submit list of major subcontractors for General Construction, Plumbing, HVAC, and Electrical work proposed for this project to include committed prices for each subcontractor. List shall be placed in separate sealed envelope that must be clearly identified as "Major Subcontractor List", for named project and name of Bidder submitting it. County must receive envelope no later than date by which successful Bidder is required to submit his or her signed Contract, as established in Construction Documents.

15. ALTERNATE BIDS

- A. Bidder shall carefully read requests for Alternate Bids, and thoroughly examine Drawings and Specifications to determine extent various changes and conditions will affect Bid.

- B. Space is provided in Bid Form for requested Alternate Bids. Failure to submit bid for any requested Alternate Bids may result in rejection of entire Bid.
- C. Bidder shall state amount to be added / subtracted to Base Bid for providing alternates, including all incidentals, omissions, additions, and adjustments as may be necessary or required by such changes. If there is no difference in price, Bidder shall state, "No Change".
- D. Descriptions of requested Alternate Bids are as set forth in Construction Documents.

16. INFORMATIONAL BIDS

- A. Not Applicable.

17. UNIT PRICES

- A. Not Applicable.

18. COMMENCEMENT AND COMPLETION

- A. Successful Bidder shall commence work when schedule and weather permit, but no later than stated in Bid Form. Contractor shall pursue the Work regularly and continuously at reasonable rate to insure completion of the Work within time stated in Bid.
- B. Should it be found impossible to complete the Work on or before time specified for completion, written request may be submitted for extension of time setting forth reasons believed to justify granting of such request. Refer to Article 20 of General Conditions of Contract, titled "Time for Completion.

19. WORK BY OWNER

- A. Not Applicable.

20. SPECIAL HAZARDS COVERAGE

- A. Not Applicable.

FORM A

**DANE COUNTY
EMERGING SMALL BUSINESS REPORT - CERTIFICATION**

In accordance with General Conditions of Contract, submit this Emerging Small Business Report within ten (10) days after Bid Due Date.

PROJECT NAME: _____

BID NO.: _____ BID DUE DATE: _____

BIDDER INFORMATION

COMPANY NAME: _____

ADDRESS: _____

TELEPHONE NO.: _____

CONTACT PERSON: _____

EMAIL ADDRESS: _____

FORM B

Page ___ of ___

DANE COUNTY

(Copy this Form as necessary to provide complete information)

EMERGING SMALL BUSINESS REPORT - INVOLVEMENT

COMPANY NAME: _____

PROJECT NAME: _____

BID NO.: _____ BID DUE DATE: _____

ESB NAME: _____

CONTACT PERSON: _____

ADDRESS: _____

PHONE NO & EMAIL.: _____

Indicate percentage of financial commitment to this ESB: _____ % Amount: \$ _____

ESB NAME: _____

CONTACT PERSON: _____

ADDRESS: _____

PHONE NO & EMAIL.: _____

Indicate percentage of financial commitment to this ESB: _____ % Amount: \$ _____

FORM C

Page ___ of ___

**DANE COUNTY
EMERGING SMALL BUSINESS REPORT - CONTACTS**

(Copy this Form as necessary to provide complete information)

COMPANY NAME: _____

PROJECT NAME: _____

BID NO.: _____ BID DUE DATE: _____

	<u>ESB FIRM NAME CONTACTED</u>	<u>DATE</u>	<u>PERSON CONTACTED</u>	<u>DID ESB BID?</u>	<u>ACC- EPT BID?</u>	<u>REASON FOR REJECTION</u>
1)	_____	_____	_____	_____	_____	_____
2)	_____	_____	_____	_____	_____	_____
3)	_____	_____	_____	_____	_____	_____
4)	_____	_____	_____	_____	_____	_____
5)	_____	_____	_____	_____	_____	_____
6)	_____	_____	_____	_____	_____	_____
7)	_____	_____	_____	_____	_____	_____
8)	_____	_____	_____	_____	_____	_____

FORM D

**DANE COUNTY
EMERGING SMALL BUSINESS REPORT - CERTIFICATION STATEMENT**

I, _____, _____ of
Name Title

_____ certify to best of my knowledge and
Company

belief that this business meets Emerging Small Business definition as indicated in Article 9 and
that information contained in this Emerging Small Business Report is true and correct.

Bidder's Signature

Date

BID FORM

BID NO. 317033

**PROJECT: DORN CREEK SEDIMENT REMOVAL
DORN CREEK WILDLIFE AREA**

**TO: DANE COUNTY DEPARTMENT OF PUBLIC WORKS, HIGHWAY &
TRANSPORTATION PROJECT MANAGER
1919 ALLIANT ENERGY CENTER WAY
MADISON, WISCONSIN 53713**

**NOTE: WISCONSIN STATUTE 77.54 (9M) ALLOWS FOR NO SALES & USE TAX ON
THE PURCHASE OF MATERIALS FOR COUNTY PUBLIC WORKS PROJECTS.**

BASE BID - LUMP SUM:

Dane County is inviting Bids for construction services for sediment removal in Dorn Creek, including dredging, dewatering, storage of dredged material and site restoration. The undersigned, having examined the site where the Work is to be executed and having become familiar with local conditions affecting the cost of the Work and having carefully examined the Drawings and Specifications, all other Construction Documents and Addenda thereto prepared by Dane County Department of Public Works, Highway & Transportation hereby agrees to provide all labor, materials, equipment and services necessary for the complete and satisfactory execution of the entire Work, as specified in the Construction Documents, for the Base Bid stipulated sum of:

_____ and _____ /100 Dollars
Written Price

\$ _____
Numeric Price

ALTERNATE BID 1 - LUMP SUM:

Add price for providing dredging, dewatering, sediment storage and restoration of South Alignment as shown in Bid Documents

_____ and _____ /100 Dollars
Written Price

\$ _____
Numeric Price (circle: Add or Deduct)

Receipt of the following addenda and inclusion of their provisions in this Bid is hereby acknowledged:

Addendum No(s). _____ through _____

Dated _____

Dane County Department of Land & Water Resources must have the dredge portion of the project completed by May 18, 2018 and full site restoration completed by September 1, 2018. Assuming this Work can be started by October 30, 2017, what dates can you commence and complete this job?

Commencement Date: _____ Completion Date: _____
(final, not substantial)

I hereby certify that all statements herein are made on behalf of:

(Name of Corporation, Partnership or Person submitting Bid)

Select one of the following:

1. A corporation organized and existing under the laws of the State of _____, or

2. A partnership consisting of _____, or

3. A person conducting business as _____;

Of the City, Village, or Town of _____ of the State of _____.

I have examined and carefully prepared this Bid from the associated Construction Documents and have checked the same in detail before submitting this Bid; that I have full authority to make such statements and submit this Bid in (its) (their) (my) behalf; and that the said statements are true and correct. In signing this Bid, we also certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit a Bid; that this Bid has been independently arrived at without collusion with any other bidder, competitor, or potential competitor; that this Bid has not been knowingly disclosed prior to the Bids Due Date to another bidder or competitor; that the above statement is accurate under penalty of perjury.

The undersigned further agrees to honor the Base Bid and the Alternate Bid(s) for sixty (60) calendar days from date of Award of Contract.

SIGNATURE: _____
(Bid is invalid without signature)

Print Name: _____ Date: _____

Title: _____

Address: _____

Telephone No.: _____ Fax No.: _____

Email Address: _____

Contact Person: _____

THIS PAGE IS FOR BIDDERS' REFERENCE AND NEED NOT BE SUBMITTED WITH BID FORM.

BID CHECK LIST:

These items **must** be included with Bid:

- | | | |
|---|-----------------------------------|---|
| <input type="checkbox"/> Bid Form | <input type="checkbox"/> Bid Bond | <input type="checkbox"/> Fair Labor Practices Certification |
| <input type="checkbox"/> Project Experience / Reference Summary | | <input type="checkbox"/> Waste Management Plan |

BIDDERS SHOULD BE AWARE OF THE FOLLOWING:

DANE COUNTY VENDOR REGISTRATION PROGRAM

Any person bidding on any County contract must be registered with the Dane County Purchasing Division & pay an annual registration fee. A contract will not be awarded to an unregistered vendor. Obtain a *Vendor Registration Form* by calling 608/266-4131 or complete a new form or renewal online at:

www.danepurchasing.com/registration

DANE COUNTY BEST VALUE CONTRACTING PRE-QUALIFICATION

Contractors must be pre-qualified as a Best Value Contractor with the Dane County Public Works Engineering Division before the award of contract. Obtain a *Best Value Contracting Application* by calling 608/266-4018 or complete one online at:

www.countyofdane.com/pwht/BVC_Application.aspx

EQUAL BENEFITS REQUIREMENT

By submitting a Bid, the contractor acknowledges that a condition of this contract is to provide equal benefits as required by Dane County Code of Ordinances Chapter 25.016. Contractor shall provide equal benefits as required by that Ordinance to all required employees during the term of the contract. Equal Benefits Compliance Payment Certification shall be submitted with final pay request. For more information:

www.danepurchasing.com/partner_benefit.aspx

FAIR LABOR PRACTICES CERTIFICATION

The undersigned, for and on behalf of the BIDDER, APPLICANT or PROPOSER named herein, certifies as follows:

- A. That he or she is an officer or duly authorized agent of the above-referenced BIDDER, APPLICANT or PROPOSER, which has submitted a bid, application or proposal for a contract or agreement with the county of Dane.

- B. That BIDDER, APPLICANT or PROPOSER has (check one):

_____ not been found by the National Labor Relations Board (“NLRB”) or the Wisconsin Employment Relations Commission (“WERC”) to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the signature date of this Certification.

_____ been found by the National Labor Relations Board (“NLRB”) or the Wisconsin Employment Relations Commission (“WERC”) to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the signature date of this Certification.

Officer or Authorized Agent Signature Date

Printed or Typed Name and Title

Printed or Typed Business Name

NOTE: You can find information regarding the violations described above at: www.nlrb.gov and werc.wi.gov.

For reference, Dane County Ordinance 25.11(28)(a) is as follows:
(28) BIDDER RESPONSIBILITY. (a) Any bid, application or proposal for any contract with the county, including public works contracts regulated under chapter 40, shall include a certification indicating whether the bidder has been found by the National Labor Relations Board (NLRB) or the Wisconsin Employment Relations Committee (WERC) to have violated any statute or regulation regarding labor standards or relations within the last seven years. The purchasing manager shall investigate any such finding and make a recommendation to the committee, which shall determine whether the conduct resulting in the finding affects the bidder’s responsibility to perform the contract.

If you indicated that the NLRB or WERC have found you to have such a violation, you must include copies of any relevant information regarding such violation with your proposal, bid or application.

Include this completed Certification with your bid, application or proposal.

COUNTY OF DANE

PUBLIC WORKS CONSTRUCTION CONTRACT

Contract No. _____ Bid No. 317033

Authority: 2017 RES - _____

THIS CONTRACT, made and entered into as of the date by which authorized representatives of both parties have affixed their signatures, by and between the County of Dane (hereafter referred to as "COUNTY") and _____ (hereafter, "CONTRACTOR"), and

WITNESSETH:

WHEREAS, COUNTY, whose address is c/o Assistant Public Works Director, 1919 Alliant Energy Center Way, Madison, WI 53713, desires to have CONTRACTOR provide construction services for the Dorn Creek Sediment Removal project, Dorn Creek Wildlife Area including Alternate Bid ("the Project"); and

WHEREAS, CONTRACTOR, whose address is _____ is able and willing to construct the Project, in accordance with the Construction Documents;

NOW, THEREFORE, in consideration of the above premises and the mutual covenants of the parties hereinafter set forth, the receipt and sufficiency of which is acknowledged by each party for itself, COUNTY and CONTRACTOR do agree as follows:

1. CONTRACTOR agrees to construct, for the price of \$ _____ the Project and at the CONTRACTOR'S own proper cost and expense to furnish all materials, supplies, machinery, equipment, tools, superintendence labor, insurance, and other accessories and services necessary to complete the Project in accordance with the conditions and prices stated in the Bid Form, General Conditions of Contract, the drawings which include all maps, plats, plans, and other drawings and printed or written explanatory matter thereof, and the specifications therefore as prepared by Strand Associates, Inc. (hereinafter referred to as "the Architect / Engineer"), and as enumerated in the Project Manual Table of Contents, all of which are made a part hereof and collectively evidence and constitute the Contract.
2. COUNTY agrees to pay the CONTRACTOR in current funds for the performance of the Contract subject to additions and deductions, as provided in the General Conditions of Contract, and to make payments on account thereof as provided in Article entitled, "Payments to Contractor" of the General Conditions of Contract.
3. During the term of this Contract, CONTRACTOR agrees to take affirmative action to ensure equal employment opportunities. The CONTRACTOR agrees in accordance with Wisconsin Statute 111.321 and Chapter 19 of the Dane County Code of Ordinances not to discriminate on the basis of age, race, ethnicity, religion, color, gender, disability, marital status, sexual orientation, national origin, cultural differences, ancestry, physical appearance, arrest record or conviction record, military participation or membership in the national guard, state defense force or any other reserve component of the military forces of the United States, or political beliefs. Such equal opportunity shall include, but not be limited to, the following: employment,

upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, rates of pay, and any other form of compensation. CONTRACTOR agrees to post in conspicuous places, available to all employees and applicants for employment, notices setting forth the provisions of this paragraph.

4. CONTRACTOR shall file an Affirmative Action Plan with the Dane County Contract Compliance Officer in accord with Chapter 19 of the Dane County Code of Ordinances. CONTRACTOR must file such plan within fifteen (15) business days of the effective date of this Contract. During the term of this Contract CONTRACTOR shall also provide copies of all announcements of employment opportunities to COUNTY'S Contract Compliance Office, and shall report annually the number of persons, by race, ethnicity, gender, and disability status, which apply for employment and, similarly classified, the number hired and number rejected.

5. During the term of this Contract, all solicitations for employment placed on CONTRACTOR'S behalf shall include a statement to the effect that CONTRACTOR is an "Equal Opportunity Employer".

6. CONTRACTOR agrees to comply with provisions of Chapter 25.016 of the Dane County Code of Ordinances, which pertains to domestic partnership benefits.

7. CONTRACTOR agrees to furnish all information and reports required by COUNTY'S Contract Compliance Officer as the same relate to affirmative action and nondiscrimination, which may include any books, records, or accounts deemed appropriate to determine compliance with Chapter 19, Dane County Code of Ordinances, and the provisions of this Contract.

8. CONTRACTOR agrees that all persons employed by CONTRACTOR or any subcontractor shall be paid no less than the minimum wage established under Chapter 40, Subchapter II, Dane County Code of Ordinances. CONTRACTOR agrees to abide by and comply with the provisions of Chapter 40, Subchapter II of the Dane County Code of Ordinances, and said Subchapter is fully incorporated herein by reference.

9. This Contract is intended to be a Contract solely between the parties hereto and for their benefit only. No part of this Contract shall be construed to add to, supplement, amend, abridge or repeal existing rights, benefits or privileges of any third party or parties including, but not limited to, employees of either of the parties.

10. The entire agreement of the parties is contained herein and this Contract supersedes any and all oral agreements and negotiations between the parties relating to the subject matter hereof. The parties expressly agree that the express terms of this Contract shall not be amended in any fashion except in writing, executed by both parties.

11. CONTRACTOR must be pre-qualified as a Best Value Contractor with Dane County Public Works Engineering Division before award of Contract. Subcontractors must be pre-qualified ten (10) business days prior to commencing Work under this Contract.

IN WITNESS WHEREOF, COUNTY and CONTRACTOR, by their respective authorized agents, have caused this Contract and its Schedules to be executed, effective as of the date by which all parties hereto have affixed their respective signatures, as indicated below.

* * * * *

FOR CONTRACTOR:

Signature Date

Printed or Typed Name and Title

Signature Date

Printed or Typed Name and Title

NOTE: If CONTRACTOR is a corporation, Secretary should attest. In accordance with IRS Regulations, unincorporated entities are required to provide either their Social Security or Employer Number in order to receive payment for services rendered.

* * * * *

This Contract is not valid or effectual for any purpose until approved by the appropriate authority designated below, and no work is authorized until the CONTRACTOR has been given notice to proceed by COUNTY'S Assistant Public Works Director.

FOR COUNTY:

Joseph T. Parisi, County Executive Date

Scott McDonell, County Clerk Date

AIA[®] Document A310[™] – 2010

Bid Bond

CONTRACTOR:

(Name, legal status and address)

SURETY:

(Name, legal status and principal place of business)

OWNER:

(Name, legal status and address)

BOND AMOUNT:**PROJECT:**

(Name, location or address, and Project number, if any)

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this _____ day of _____

_____	(Contractor as Principal)	_____	(Seal)
(Witness)		_____	(Title)
		_____	(Surety)
_____		_____	(Seal)
(Witness)		_____	(Title)

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

AIA[®] Document A312[™] – 2010

Performance Bond

CONTRACTOR:

(Name, legal status and address)

SURETY:

(Name, legal status and principal place of business)

OWNER:

(Name, legal status and address)

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

AIA Document A312–2010 combines two separate bonds, a Performance Bond and a Payment Bond, into one form. This is not a single combined Performance and Payment Bond.

CONSTRUCTION CONTRACT

Date:

Amount:

Description:

(Name and location)

BOND

Date:

(Not earlier than Construction Contract Date)

Amount:

Modifications to this Bond: None See Section 16

CONTRACTOR AS PRINCIPAL

Company: *(Corporate Seal)*

SURETY

Company: *(Corporate Seal)*

Signature: _____

Name _____
and Title: _____

Signature: _____

Name _____
and Title: _____

(Any additional signatures appear on the last page of this Performance Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or BROKER:

OWNER'S REPRESENTATIVE:

(Architect, Engineer or other party:)

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

§ 2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after

- .1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;
- .2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
- .3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

§ 4 Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

§ 5 When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

§ 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

§ 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

§ 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

§ 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

- .1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
- .2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

§ 6 If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

§ 7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

- .1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
- .2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and
- .3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

§ 8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.

§ 9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

§ 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

§ 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 14 Definitions

§ 14.1 **Balance of the Contract Price.** The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

§ 14.2 **Construction Contract.** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

§ 14.3 **Contractor Default.** Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

§ 14.4 **Owner Default.** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 14.5 **Contract Documents.** All the documents that comprise the agreement between the Owner and Contractor.

§ 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 16 Modifications to this bond are as follows:

Sample

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL

SURETY

Company: _____

(Corporate Seal)

Company: _____

(Corporate Seal)

Signature: _____

Name and Title: _____

Address _____

Signature: _____

Name and Title: _____

Address _____

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.



AIA® Document A312™ – 2010

Payment Bond

CONTRACTOR:

(Name, legal status and address)

SURETY:

(Name, legal status and principal place of business)

OWNER:

(Name, legal status and address)

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

AIA Document A312–2010 combines two separate bonds, a Performance Bond and a Payment Bond, into one form. This is not a single combined Performance and Payment Bond.

CONSTRUCTION CONTRACT

Date:

Amount:

Description:

(Name and location)

BOND

Date:

(Not earlier than Construction Contract Date)

Amount:

Modifications to this Bond: None See Section 18

CONTRACTOR AS PRINCIPAL

Company: *(Corporate Seal)*

SURETY

Company: *(Corporate Seal)*

Signature: _____

Name _____
and Title: _____

Signature: _____

Name _____
and Title: _____

(Any additional signatures appear on the last page of this Payment Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or BROKER:**OWNER'S REPRESENTATIVE:**

(Architect, Engineer or other party:)

§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

§ 2 If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

§ 4 When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

§ 5 The Surety's obligations to a Claimant under this Bond shall arise after the following:

§ 5.1 Claimants, who do not have a direct contract with the Contractor,

- .1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
- .2 have sent a Claim to the Surety (at the address described in Section 13).

§ 5.2 Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

§ 6 If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.

§ 7 When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

§ 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

§ 7.2 Pay or arrange for payment of any undisputed amounts.

§ 7.3 The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

§ 8 The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

§ 9 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

§ 10 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

§ 11 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 12 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 13 Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

§ 14 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 15 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

§ 16 Definitions

§ 16.1 Claim. A written statement by the Claimant including at a minimum:

- .1 the name of the Claimant;
- .2 the name of the person for whom the labor was done, or materials or equipment furnished;
- .3 a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
- .4 a brief description of the labor, materials or equipment furnished;
- .5 the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
- .6 the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim;
- .7 the total amount of previous payments received by the Claimant; and
- .8 the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

§ 16.2 Claimant. An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

§ 16.3 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

§ 16.4 **Owner Default.** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 16.5 **Contract Documents.** All the documents that comprise the agreement between the Owner and Contractor.

§ 17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 18 Modifications to this bond are as follows:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL

Company: _____

(Corporate Seal)

SURETY

Company: _____

(Corporate Seal)

Signature: _____

Name and Title: _____

Address _____

Signature: _____

Name and Title: _____

Address _____

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

EQUAL BENEFITS COMPLIANCE PAYMENT CERTIFICATION FORM

PURPOSE

25.016(8) of the Dane County Ordinance requires that each contractor receiving payment for contracted services must certify that he or she has complied fully with the requirements of Chapter 25.016 “Equal Benefits Requirement” of the Dane County Ordinances. Such certification must be submitted prior to the final payment on the contract.

This form should be included with a copy of the final contract invoice forwarded to your contract representative at Dane County.

CERTIFICATION

I, _____ certify that
Printed or Typed Name and Title

Printed or Typed Name of Contractor

has complied fully with the requirements of Chapter 25.016 of the Dane County Ordinances “Equal Benefits Requirements”.

Signed _____

Date _____

For questions on this form, please contact Chuck Hicklin at 608-266-4109 or your contract representative at Dane County.

GENERAL CONDITIONS OF CONTRACT

TABLE OF CONTENTS

1. CONSTRUCTION DOCUMENTS	2
2. DEFINITIONS	2
3. ADDITIONAL INSTRUCTIONS AND DRAWINGS	2
4. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES	3
5. CUTTING AND PATCHING.....	4
6. CLEANING UP	4
7. USE OF SITE.....	4
8. MATERIALS AND WORKMANSHIP	5
9. CONTRACTOR'S TITLE TO MATERIALS	5
10. "OR EQUAL" CLAUSE.....	5
11. PATENTS AND ROYALTIES.....	6
12. SURVEYS, PERMITS, REGULATIONS AND TAXES.....	7
13. CONTRACTOR'S OBLIGATIONS AND SUPERINTENDENCE.....	7
14. WEATHER CONDITIONS	8
15. PROTECTION OF WORK AND PROPERTY	8
16. INSPECTION AND TESTING OF MATERIALS	8
17. REPORTS, RECORDS AND DATA	9
18. CHANGES IN THE WORK	9
19. EXTRAS	10
20. TIME FOR COMPLETION.....	10
21. CORRECTION OF WORK.....	10
22. SUBSURFACE CONDITIONS FOUND DIFFERENT	11
23. RIGHT OF DEPARTMENT TO TERMINATE CONTRACT	11
24. CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES	11
25. PAYMENTS TO CONTRACTOR	12
26. WITHHOLDING OF PAYMENTS.....	13
27. ACCEPTANCE OF FINAL PAYMENT AS RELEASE	14
28. PAYMENTS BY CONTRACTOR.....	14
29. CONTRACT SECURITY	14
30. ASSIGNMENTS.....	15
31. MUTUAL RESPONSIBILITY OF CONTRACTORS	15
32. SEPARATE CONTRACTS	15
33. SUBCONTRACTS	15
34. PUBLIC WORKS PROJECT MANAGER'S AUTHORITY	16
35. ARCHITECT / ENGINEER'S AUTHORITY	16
36. STATED ALLOWANCES	17
37. ESTIMATES OF QUANTITIES	17
38. LANDS AND RIGHTS-OF-WAY	17
39. GENERAL GUARANTEE.....	17
40. CONFLICTING CONDITIONS	18
41. NOTICE AND SERVICE THEREOF	18
42. PROTECTION OF LIVES AND HEALTH	18
43. AFFIRMATIVE ACTION PROVISION AND MINORITY / WOMEN / DISADVANTAGED BUSINESS ENTERPRISES	18
44. COMPLIANCE WITH FAIR LABOR STANDARDS	19
45. DOMESTIC PARTNERSHIP BENEFITS	19
46. USE AND OCCUPANCY PRIOR TO ACCEPTANCE	20
47. MINIMUM WAGES	20
48. CLAIMS	21
49. ANTITRUST AGREEMENT	21
50. INSURANCE.....	21
51. WISCONSIN LAW CONTROLLING	23

1. CONSTRUCTION DOCUMENTS

- A. Construction Documents, listed in Table of Contents of this Specification volume shall form part of this Contract and provisions of Construction Documents shall be as binding upon parties as if they were fully set forth in Contract itself.
- B. These shall also be considered as part of Construction Documents: Addenda, including additions and modifications incorporated in such addenda before execution of Contract; requests for information; construction bulletins; change orders; and written interpretations by Architect / Engineer or Public Works Project Manager that are made after execution of Contract.
- C. Construction Documents are complementary, and what is required by one shall be as binding as if required by all. Intent of Construction Documents is to include all labor, materials and equipment necessary for proper execution of the Work.

2. DEFINITIONS

- A. These terms as used in this Contract are respectively defined as follows:
 - 1. All uses of term “County” in Construction Documents shall mean Dane County.
 - 2. All uses of term “Department” in Construction Documents shall mean Department of Public Works, Highway & Transportation, which is a unit of Dane County government. Department is County agency overseeing Contract with Contractor.
 - 3. Public Works Project Manager is appointed by and responsible to Department. Public Works Project Manager has authority to act on behalf of Department and will sign change orders, payment requests and other administrative matters related to projects.
 - 4. Public Works Project Manager is responsible for supervision, administration and management of field operations involved in construction phase of this Work.
 - 5. Term “Work” includes all labor, equipment and materials necessary to produce project required by Construction Documents.
 - 6. Term “Substantial Completion” is date when project or specified area of project is certified by Architect / Engineer that construction is sufficiently completed, in accordance with Construction Documents, and as modified by any subsequent changes agreed to by parties, so that County may occupy project or specified area of project for use for which it was intended subject to permit approval for occupancy.
 - 7. Contractor is person, firm, or corporation with whom County makes Contract. Though multiple contracts may be involved, Construction Documents treat them throughout as if each were of singular number.

3. ADDITIONAL INSTRUCTIONS AND DRAWINGS

- A. Contractor may be furnished additional instructions and detail drawings as necessary to carry out the Work included in Contract. Additional drawings and instructions thus supplied to Contractor will coordinate with Construction Documents and will be so prepared that they can be reasonably interpreted as part thereof. Contractor shall carry out the Work in accordance with additional detail drawings and instructions.

4. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- A. Unless otherwise specified, Contractor shall submit three (3) copies of all Shop Drawings for each submission, until receiving final approval. After final approval, provide five (5) additional copies for distribution and such other copies as may be required.
- B. Contractor shall submit, on an on-going basis and as directed, Product Data such as brochures that shall contain catalog cuts and specifications of all furnished mechanical and electrical equipment. After Architect / Engineer's approval, one (1) copy shall remain in Architect / Engineer's file, one (1) kept at Department's office and one (1) kept at job site by Contractor for reference purposes.
- C. Samples shall consist of physical examples furnished by Contractor in sufficient size and quantity to illustrate materials, equipment or workmanship, and to establish standards to compare the Work.
 - 1. Submit Samples in sufficient quantity (minimum of two (2)) to permit Architect / Engineer to make all necessary tests and of adequate size showing quality, type, color range, finish, and texture. Label each Sample stating material, type, color, thickness, size, project name, and Contractor's name.
 - 2. Submit transmittal letter requesting approval, and prepay transportation charges to Architect / Engineer's office on samples forwarded.
 - 3. Materials installed shall match approved Samples.
- D. Contractor shall review Shop Drawings and place their dated stamp thereon to evidence their review and approval and shall submit with reasonable promptness and in orderly sequence to cause no delay in the Work or in work of any other contractor. At time of submission, Contractor shall inform Architect / Engineer in writing of any deviation in Shop Drawings or Samples from requirements of Construction Documents. Architect / Engineer will not consider partial lists.
- E. Architect / Engineer will review and approve or reject Shop Drawings with reasonable promptness to cause no delay. Architect / Engineer's approval shall not relieve Contractor from responsibility for errors or omissions in Shop Drawings.
- F. Contractor shall not commence any work requiring Shop Drawing, Product Data or Sample submission until Architect / Engineer has approved submission. All such work shall be in accordance with approved Shop Drawings, Product Data and Samples.
- G. Contractor shall keep on site of the Work, approved or conformed copy of Shop Drawings and shall at all time give Department access thereto.
- H. By stamping and submitting Shop Drawings, Product Data and Samples, Contractor thereby represents that he or she has or will determine and verify all field measurements, field construction criteria, materials, catalog numbers, and similar data and that he or she has checked and coordinated each Shop Drawing, Product Data and Sample with requirements of the Work and of Construction Documents. Architect / Engineer shall return without examination, Shop Drawings, Product Data and Samples not so noted.
- I. All Shop Drawings from any one Contractor should be numbered consecutively and on cover sheet shall bear name and location of project, name of Contractor, date of submittal and date of each correction or revision and associated Specification section and page number.

5. CUTTING AND PATCHING

- A. Contractor shall be responsible for all cutting, fitting or patching required to complete the Work or to make its parts fit together properly.
- B. Contractor shall not damage or endanger portion of the Work or fully or partially completed construction of County or separate contractors by cutting, patching or otherwise altering such construction, or by excavation. Contractor shall not cut or otherwise alter such construction by County or separate contractor except with written consent of County and of such separate contractor; such consent shall not be unreasonably withheld. Contractor shall not withhold unreasonably from County or separate contractor, Contractor's consent to cutting or otherwise altering the Work.

6. CLEANING UP

- A. Contractor shall keep premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under Contract. Contractor shall remove from and about the Work waste materials, rubbish, Contractor's tools, construction equipment, machinery, and surplus materials at completion of the Work. Contractor shall maintain streets and sidewalks around the Work site in clean condition. Contractor shall remove all spillage and prevent tracking of spillage arising from performance of the Work, into, out of, and within the Work site. Contractor shall establish regular maintenance program of sweeping, vacuuming and / or hosing to minimize accumulation of dirt and dust upon such areas.
- B. If Contractor fails to clean up as directed in Construction Documents, County may do so and shall charge Contractor cost thereof.
- C. Contractor shall be responsible for broken windows and glass, and at completion of the Work shall replace such damaged or broken windows and glass. After replacing damaged or broken windows and glass, Contractor shall remove all labels, wash and polish both sides of all windows and glass.
- D. In addition to general cleaning (sweeping, vacuuming and / or hosing, as is appropriate to work surface), Contractor shall perform following final cleaning for all trades at completion of the Work:
 - 1. Remove temporary protections;
 - 2. Remove marks, stains, fingerprints and other soil or dirt from painted, decorated and finished woodwork and wall surfaces;
 - 3. Remove spots, plaster, soil and paint from ceramic tile, marble and other finished materials, and wash or wipe clean;
 - 4. Clean fixtures, cabinet work and equipment, removing stains, paint, dirt and dust, and leave same in undamaged, new condition;
 - 5. Clean aluminum in accordance with recommendations of manufacturer; and
 - 6. Clean resilient floors thoroughly with well-rinsed mop containing only enough moisture to clean off any surface dirt or dust and buff dry by machine to bring surfaces to sheen.

7. USE OF SITE

- A. Contractor shall provide County and Architect / Engineer access to the Work under all circumstances.

- B. Contractor shall confine operations at site to areas permitted by County, law, ordinance, permits and Construction Documents and shall not unreasonably encumber site with materials or equipment. Contractor shall assure free, convenient, unencumbered, direct and safe access to all properties adjacent to the Work for County, its employees, invitees and guests.

8. MATERIALS AND WORKMANSHIP

- A. Contractor shall perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, necessary to complete the Work required by this Contract, within time specified, in accordance with provisions of Construction Documents.
- B. All equipment and materials incorporated in the Work covered by this Contract are to be new; use recycled and / or recovered materials to extent that such use is technically and economically feasible. Recovered materials are products recovered from solid waste in form identical to original form for use that is same as, or similar to original use. Recycled materials are products manufactured from solid waste.
- C. If requested, Contractor shall furnish satisfactory evidence as to kind and quality of construction materials proposed or used. Contractor shall furnish to Architect / Engineer, for approval, manufacturer name and model, performance capacities and other pertinent information of machinery, mechanical, electrical or other types of equipment, which Contractor plans to install.
- D. If not otherwise provided, materials and labor called for in this Contract shall be provided and performed in accordance with established practice and standards recognized by Architects, Engineers, Department, and construction industry.
- E. Reference to "Standard" specifications of any association or manufacturer, or codes of County authorities, intends most recent printed edition or catalog in effect on date that corresponds with date of Construction Documents.
- F. Whenever reference is made in Specifications that work shall be "performed", "applied", in accordance with "manufacturer's directions or instructions", Contractor to whom those instructions are directed shall furnish three (3) printed copies of such instructions to Architect / Engineer before execution of the Work.

9. CONTRACTOR'S TITLE TO MATERIALS

- A. Contractor or any subcontractor shall not purchase materials or supplies for the Work subject to any chattel mortgage or under conditional sale contract or other agreement by which seller retains interest. Contractor warrants that all materials and supplies used in the Work are free from all liens, claims or encumbrances and Contractor has good title to them.

10. "OR EQUAL" CLAUSE

- A. Whenever equipment or materials are identified on Drawings or in Specifications by reference to manufacturer's or vendor's name, trade name, catalog number, and other identifying information, it is intended to establish standards; and any equipment or material of other manufacturers and vendors which will perform adequately duties imposed by general design will be considered equally accepted provided equipment or material so proposed is, in opinion of Architect / Engineer, of equal substance and function. Architect / Engineer and Department shall provide written approval before Contractor may purchase or install it.

- B. Equipment or materials of manufacturers, other than those named, may be used only upon following conditions:
1. That, in opinion of Architect / Engineer and Department, proposed material or equipment item is fully equal or superior (in design, materials, construction, workmanship, performance, finish, etc.) to named item. No compromise in quality level, however small, is acceptable.
 2. That, in substituting materials or equipment, Contractor assumes responsibility for any changes in system or for modifications required in adjacent or related work to accommodate such substitution despite Architect / Engineer's and Department's approval, and all costs growing out of approval of "or equal" items shall be responsibility of Contractor. No extra costs resulting from such approval shall become responsibility of Department, Architect / Engineer or any other separate Contractor.
 3. It shall be understood that use of materials or equipment other than those specified, or approved equal by Architect / Engineer and Department, shall constitute violation of Contract, and that Architect / Engineer and Department shall have right to require removal of such materials or equipment and their replacement with specified materials or equipment at Contractor's expense.
 4. Product and manufacturer named first in Specifications or on information shown on Drawings is basis of selection of manufactured items and equipment, particularly mechanical equipment. In using other than first named products or manufacturers, including those specified as additionally approved or acceptable, Contractor assumes responsibility for any changes in system and for modifications in any work required to accommodate them. Architect / Engineer's approval of such additionally acceptable products or manufacturers, either in Specifications or in Addendum, does not relieve Contractor from obligation to coordinate such optional products with other Contractors, whose work may be affected by them, and to pay all additional costs resulting from their inclusion into the Work. Contractor's liability shall include payment of Architect / Engineer's fees for any additional services made necessary by or directly connected to such product changes. No extra costs resulting from such changes shall become responsibility of Department, Architect / Engineer or any other separate Contractor.
- C. No request for approval of "or equal" materials will be entertained except from Contractor. Identify any request for substitution as substitution on Contractor's letter of transmittal and give reasons for substitution. Department may in its sole discretion allow substitutions of materials.

11. PATENTS AND ROYALTIES

- A. If Contractor uses any design, device or material covered by letters, patent or copyright, it is mutually agreed and understood, that, without exception, contract prices shall include all royalties or costs arising from use of such design, device or materials, in any way involved in the Work.
- B. Contractor shall indemnify and save harmless County from any and all claims for infringement by reason of use of such patent or copyright in connection with the Work agreed to be performed under this Contract, and shall indemnify County for any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during prosecution of the Work or after completion of the Work.

12. SURVEYS, PERMITS, REGULATIONS AND TAXES

- A. Department will furnish to Contractor all site, topography and property surveys necessary for execution of the Work.
- B. Contractor shall procure all permits, licenses and approvals necessary for execution of this Contract.
- C. Contractor shall give all notices and comply with all State of Wisconsin, Federal and local laws, codes, rules and regulations relating to performance of the Work, protection of adjacent property, and maintenance of passageways, guard fences or other protective facilities.
- D. Contractor shall pay all Sales, Consumer, Use and other similar taxes required by law.
- E. Contractor shall promptly notify Architect / Engineer of any variances of Drawings or Specifications with that of any State of Wisconsin, federal or local law, code, rule or regulation. Upon such notification, Architect / Engineer will require correction of variance to comply with applicable law, code, rule or regulation at no additional cost to Contractor.
- F. Work under this Contract shall comply with all applicable State of Wisconsin, Federal and local laws, codes and regulations.
- G. Contractor shall pay charges for water, sewer and other utility connections made by municipalities where required by Specifications.

13. CONTRACTOR'S OBLIGATIONS AND SUPERINTENDENCE

- A. Contractor shall provide and pay for all materials, labor, tools, equipment, transportation and superintendence necessary to execute, complete and deliver the Work within specified time. Contractor agrees to secure at their own expense all personnel necessary to carry out the Work. Such personnel shall not be deemed County employees nor shall they have or be deemed to have any direct contractual relationship with County.
- B. Performance of any work necessary after regular working hours, on Sundays or Legal Holidays shall be without additional expense to County. Performance of any work at site at other than normal working hours must be coordinated with Public Works Project Manager.
- C. Contractor shall furnish, erect, maintain and remove such temporary works as may be required.
- D. Contractor shall observe, comply with, and be subject to all terms, conditions, requirements and limitations of Construction Documents.
- E. At the Work site, Contractor shall give personal superintendence to the Work or shall employ construction superintendent or foreman, experienced in character of work covered by Contract, who shall have full authority to act for Contractor. Understand that such superintendent or foreman shall be acceptable to Architect / Engineer and Department.
- F. Remove from project or take other corrective action upon notice from Architect / Engineer or Department for Contractor's employees whose work is considered by Architect / Engineer or Department to be unsatisfactory, careless, incompetent, unskilled or otherwise objectionable.

- G. Contractor and subcontractors shall be required to conform to Labor Laws of State of Wisconsin and various acts amendatory and supplementary thereto and to other laws, ordinances and legal requirements applicable to the Work.
- H. Presence and observation of the Work by Architect / Engineer or Public Works Project Manager shall not relieve Contractor of any obligations.

14. WEATHER CONDITIONS

- A. In event of temporary suspension of work, or during inclement weather, or whenever Architect / Engineer shall direct, Contractor shall, and shall cause subcontractors to protect carefully all work and materials against damage or injury from weather. If, in opinion of Architect / Engineer or Department, any work or materials that have been damaged or injured due to failure on part of Contractor or any subcontractors so to protect the Work, such materials shall be removed and replaced at expense of Contractor.

15. PROTECTION OF WORK AND PROPERTY

- A. Contractor shall at all times safely guard County's property from injury or loss in connection with this Contract. Contractor shall at all times safely guard and protect the Work, and adjacent property, from damage. Contractor shall replace or make good any such damage, loss or injury unless such is caused directly by errors contained in Contract, or by County, or County's duly authorized representative.
- B. Contractor may act diligently, without previous instructions from Architect / Engineer and / or Department, in emergency that threatens loss or injury of property, or safety of life. Contractor shall notify Architect / Engineer and / or Department immediately thereafter. Promptly submit any claim for compensation by Contractor due to such extra work to Architect / Engineer and / or Department for approval as provided for in Article 18 herein.

16. INSPECTION AND TESTING OF MATERIALS

- A. Authorized representatives and agents of County government shall have access at all times to the Work wherever it is in preparation or progress and Contractor shall provide facilities for such access and for inspection.
- B. Should it be considered necessary or advisable at any time before final acceptance of the Work to make examination of work already completed, by removing or tearing out same, Contractor shall upon request, promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any aspect, due to fault of Contractor or subcontractors thereof, Contractor shall assume all expenses of such examination and of satisfactory reconstruction. Contractor will be reimbursed for such examination and replacement in accordance with Article 18 - A.3., of these General Conditions of Contract if such work is found to meet requirements of Contract.
- C. If Specifications, Architect / Engineer's, or Public Works Project Manager's instructions require any work to be specially tested or approved, Contractor shall give Architect / Engineer and Public Works Project Manager timely notice of its readiness for testing or inspection. Test all materials and equipment requiring testing in accordance with accepted or specified standards, as applicable. Architect / Engineer shall recommend laboratory or inspection agency and Department will select and pay for all initial laboratory inspection

services. Should retesting be required, due to failure of initial testing, cost of such retesting shall be borne by Contractor.

- D. Cost of any testing performed by manufacturers or Contractor for substantiating acceptability of proposed substitution of materials and equipment, or necessary conformance testing in conjunction with manufacturing processes or factory assemblage, shall be borne by Contractor or manufacturer responsible.

17. REPORTS, RECORDS AND DATA

- A. Contractor shall submit to Architect / Engineer and Public Works Project Manager such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, invoices, records and other data as either may request concerning work performed or to be performed under this Contract.

18. CHANGES IN THE WORK

- A. Make no changes, except in cases of emergency, in the Work covered by approved Construction Documents without having prior written approval of Department. Charges or credits for the Work covered by approved change shall be determined by one of these methods:
1. Unit bid prices previously approved.
 2. Agreed lump sum based on actual cost of:
 - a) Labor, including foremen, and all fringe benefits that are associated with their wages.
 - b) Materials entering permanently into the Work.
 - c) Ownership or rental cost of construction tools and equipment during time of use on extra work.
 - d) Power and consumable supplies for operation of power equipment.
 - e) Workmen's Compensation Insurance, Contractor's Public Liability and Property Damage Insurance, and Comprehensive Automobile Liability Insurance.
 - f) Social Security and old age and unemployment contributions.
 - g) Add to cost under (2), fixed fee to be agreed upon, but not to exceed fifteen percent (15%) of actual cost of work performed with their own labor force. Fee shall be compensation to cover cost of supervision, overhead, bond, profit and any other general expense.
 - h) On that portion of the Work under (2) done under subcontract, Contractor may include not over seven and one-half percent (7½%) for supervision, overhead, bond, profit and any other general expense.
 - i) Department may require correct amount of costs with supporting vouchers; Contractor shall keep and present in such form as directed.
 3. Cost-plus work, with not-to-exceed dollar limit, based on actual cost of:
 - a) Labor, including foremen, and all fringe benefits that are associated with their wages.
 - b) Materials entering permanently into the Work.
 - c) Ownership or rental cost of construction tools and equipment during time of use on extra work. Rental cost cannot exceed fifty percent (50%) replacement value of rented equipment.
 - d) Power and consumable supplies for operation of power equipment.
 - e) Workmen's Compensation Insurance, Contractor's Public Liability and Property Damage Insurance, and Comprehensive Automobile Liability Insurance.
 - f) Social Security and old age and unemployment contributions.
 - g) To cost under (3), there shall be added fixed fee to be agreed upon but not to exceed fifteen percent (15%) of actual cost of work performed with their own labor force.

Fee shall be compensation to cover cost of supervision, overhead, bond, profit, and any other general expense.

- h) On that portion of the Work under (3) done under subcontract, Contractor may include not over seven and one-half percent (7½%) for supervision, overhead, bond, profit, and any other general expense.
 - i) Contractor shall keep and present, in such form as directed, correct amount of cost together with such supporting vouchers as may be required by Department.
- B. If Contractor claims that by any instructions given by Architect / Engineer, Department, by drawings or otherwise, regarding performance of the Work or furnishing of material under Contract, involves extra cost, Contractor shall give Department written notice of cost thereof within two (2) weeks after receipt of such instructions and in any event before proceeding to execute work, unless delay in executing work would endanger life or property.
- C. No claim for extra work or cost shall be allowed unless it was done in pursuance of written Change Order from Architect / Engineer and approved by Department, as previously mentioned, and claim presented with payment request submitted after changed or extra work is completed.
- D. Negotiation of cost for change in the Work shall not be cause for Contractor to delay prosecution of the Work if Contractor has been authorized in writing by Public Works Project Manager to proceed.

19. EXTRAS

- A. Without invalidating Contract, Department may order extra work or make changes by altering, adding to or deducting from the Work, contract sum being adjusted in accordance with Article 18 herein.

20. TIME FOR COMPLETION

- A. Contractor agrees that the Work shall be prosecuted regularly and diligently and complete the Work as stated in Construction Documents.

21. CORRECTION OF WORK

- A. All work, all materials whether incorporated in the Work or not, and all processes of manufacture shall at all times and places be subject to inspection of Architect / Engineer and Public Works Project Manager who shall be judge of quality and suitability of the Work, materials, and processes of manufacture for purposes for which they are used. Should they fail to meet Architect / Engineer's and Public Works Project Manager's approval they shall be reconstructed, made good, replaced or corrected, by Contractor at Contractor's expense. Immediately remove all rejected material from site.
- B. If Contractor defaults or neglects to carry out the Work in accordance with Construction Documents or fails to perform any provision of Contract, Department may, after ten (10) business days' written notice to Contractor and without prejudice to any other remedy County may have, make good such deficiencies. In such case, appropriate Change Order shall be issued deducting from Contractor's payments then or thereafter, cost of correcting such deficiencies, including cost of Architect / Engineer's additional services made necessary by such default, neglect or failure.

22. SUBSURFACE CONDITIONS FOUND DIFFERENT

- A. If Contractor encounters subsurface or latent conditions at site materially differing from those shown on Drawings or indicated in Specifications, Contractor shall immediately give notice to Architect / Engineer and Public Works Project Manager of such conditions before they are disturbed. Architect / Engineer will thereupon promptly investigate conditions, and if Architect / Engineer finds that they materially differ from those shown on Drawings or indicated in Specifications, Architect / Engineer will at once make such changes as necessary, any increase or decrease of cost resulting from such changes to be adjusted in manner provided in above Article 18 entitled "Changes in the Work".

23. RIGHT OF DEPARTMENT TO TERMINATE CONTRACT

- A. In event that any provisions of this Contract are violated by Contractor or by any subcontractors, County may serve written notice upon Contractor and Surety of its intention to terminate Contract, such notice to contain reasons for such intention to terminate Contract, and unless within ten (10) business days after serving of such notice upon Contractor, such violation or delay shall cease and satisfactory arrangement or correction be made, Contract shall, upon expiration of said ten (10) business days, cease and terminate.
- B. In event of any such termination, County shall immediately serve notice thereof upon Surety and Contractor, and Surety shall have right to take over and perform Contract subject to County's approval; provided, however, that if Surety does not commence performance thereof within ten (10) business days from date of mailing to such Surety of notice of termination, County may take over the Work and prosecute same to completion by contract, or by force account, at expense of Contractor; Contractor and Surety shall be liable to County for any excess cost occasioned County thereby, and in such event County may take possession of and utilize in completing the Work, such materials and equipment as may be on the Work site and therefore necessary.

24. CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES

- A. Contractor shall be responsible for Construction Schedule and coordination. Immediately after execution and delivery of Contract and before making first payment, Contractor shall notify all subcontractors to furnish all required information to develop Construction Schedule. Contractor and all subcontractors associated with the Work shall furnish following information from each Division of Specifications:
1. List of construction activities;
 2. Start, finish and time required for completion of each activity;
 3. Sequential relationships between activities;
 4. Identify all long lead-time items, key events, meetings or activities such as required submittals, fabrication and delivery, procurement of materials, installation and testing;
 5. Weekly definition of extent of work and areas of activity for each trade or Subcontract; and
 6. Other information as determined by Public Works Project Manager.
- B. In addition to above requested items, Contractor shall request delivery dates for all County-furnished equipment, materials or labor. This shall include any work handled by Department under separate contracts such as asbestos abatement, air and water balancing, etc. Indicate on Construction Schedule these associated delivery and installation dates.
- C. Progress Reporting:

1. Contractor shall update and publish Construction Schedule on monthly basis. Revisions to Schedule shall be by Contractor and made in same detail as original Schedule and accompanied by explanation of reasons for revision; and shall be subject to approval by Department.
 2. Failure of Contractor to keep Schedule in updated format shall result in County hiring firm specializing in construction schedule development and deducting those costs associated with updating process from payments due Contractor.
 3. Contractor shall submit show actual percentage of each activity completed, estimated future progress, and anticipated completion time.
- D. Responsibility for timely completion requires:
1. Contractor and subcontractors understand that performance of each is interdependent upon performance of others.
 2. Whenever it becomes apparent from current schedule, that phasing or progress completion dates will not be met, Contractor must take some or all following actions at no additional cost to County:
 - a) Increase construction labor in such quantities and crafts as will eliminate backlog of work.
 - b) Increase number of working hours per shift, shifts per working day, working days per week, amount of construction equipment, or any combination of foregoing to eliminate backlog of work.
 - c) Reschedule work (yet remain in conformance with Drawings and Specifications).
 3. Prior to proceeding with any of above actions, Contractor shall notify Public Works Project Manager.
- E. Maintain current Construction Schedule at all times. Revise Construction Schedule in same detail as original and accompany with explanation of reasons for revision. Schedule shall be subject to approval by Architect / Engineer and Public Works Project Manager.

25. PAYMENTS TO CONTRACTOR

- A. Contractor shall provide:
1. Detailed estimate giving complete breakdown of contract price by Specification Division; and
 2. Periodic itemized estimates of work done for purpose of making partial payments thereon.
- B. Submit these estimates for approval first to Architect / Engineer, then to Public Works Project Manager. Costs employed in making up any of these schedules are for determining basis of partial payments and not considered as fixing basis for additions to or deductions from Contract price.
- C. County will make partial payments to Contractor for value, proportionate to amount of Contract, of all labor and material incorporated in the Work during preceding calendar month upon receipt of Application and Certificate for Payment form from Architect / Engineer and approval of Department.
- D. Contractor shall submit for approval first to Architect / Engineer, and then to Public Works Project Manager all Application and Certificate for Payment forms. If requested, Application and Certificate for Payment shall be supported by such additional evidence as may be required, showing Contractor's right to payment claimed.

- E. Application and Certificate for Payment for preparatory work and materials delivered and suitably stored at site to be incorporated into the Work at some future period, will be given due consideration. Requesting payment for materials stored off site, may be rejected, however, if deemed essential for reasons of job progress, protection, or other sufficient cause, requests will be considered, conditional upon submission by Contractor of bills of sale, photographs and such other procedures as will adequately protect County's interest such as storage in bonded warehouse with adequate coverage. If there is any error in payment, Contractor is obligated to notify Department immediately, but no longer than ten (10) business days from receipt of payment.
- F. Payments by County will be due within forty-five (45) business days after receipt by Department of Application and Certificate for Payment.
- G. County will retain five percent (5%) of each Application and Certificate for Payment until final completion and acceptance of all the Work covered by Contract. However, anytime after fifty percent (50%) of the Work has been furnished and installed at site, County will make remaining payments in full if Architect / Engineer and Public Works Project Manager find that progress of the Work corresponds with Construction Schedule. If Architect / Engineer and Public Works Project Manager find that progress of the Work does not correspond with Construction Schedule, County may retain up to ten percent (10%) of each Application and Certificate for Payment for the Work completed.
- H. All material and work covered by partial payments made shall become sole property of County, but this provision shall not be construed as relieving Contractor from sole responsibility for care and protection of materials and work upon which payments have been made, or restoration of any damaged work, or as waiver of right of County to require fulfillment of all of terms of Contract.
- I. County will make final payment within sixty (60) calendar days after final completion of the Work, and will constitute acceptance thereof. Submit Equal Benefits Compliance Payment Certification with final pay request. Payment may be denied if Certification is not included.
- J. County may make payment in full, including retained percentages and less authorized deductions, upon completion and acceptance of each Division where price is stated separately in Contract.
- K. Every contractor engaged in performance of any contract for Department of Public Works, Highway & Transportation shall submit to this Department, as requested and with final application for payment for work under said contract, affidavit(s) as required to prove that all debts and claims against this Work are paid in full or otherwise satisfied, and give final evidence of release of all liens against the Work and County. If Wisconsin Prevailing Wage Rate Determination is required for this Work, use "Prime Contractor Affidavit of Compliance with Prevailing Wage Rate Determination" and "Agent or Subcontractor Affidavit of Compliance with Prevailing Wage Rate Determination" (if applicable). If Wisconsin Prevailing Wage Rate Determination is not required for this Work, use "Dane County, Wisconsin Contractor Wage Affidavit". Forms of such affidavits are included in Supplementary Conditions.

26. WITHHOLDING OF PAYMENTS

- A. County, after having served written notice on said Contractor, may either pay directly any unpaid bills of which Department has written notice, or withhold from Contractor's unpaid compensation sum of money deemed reasonably sufficient to pay any and all such lawful

claims until satisfactory evidence is furnished that all liabilities have been fully discharged; whereupon, payment to Contractor shall be resumed in accordance with terms of this Contract, but in no event shall these provisions be construed to impose any obligations upon County to either Contractor or Contractor's Surety.

- B. In paying any unpaid bills of Contractor, County shall be deemed agent of Contractor, and any payment so made by County, shall be considered as payment made under Contract by County to Contractor and County shall not be liable to Contractor for any such payment made in good faith.
- C. Contractor shall indemnify, hold harmless and defend Dane County, its boards, commissions, agencies, officers, employees and representatives from all claims growing out of lawful demands of subcontractors, laborers, workers, mechanics, material men, and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in performance of this Contract.
- D. At Department's request, Contractor shall furnish satisfactory evidence that all obligations of nature designated above have been paid, discharged or waived.

27. ACCEPTANCE OF FINAL PAYMENT AS RELEASE

- A. Making of final payment shall constitute waiver of all claims by County except those arising from:
 - 1. Unsettled lien;
 - 2. Faulty or defective work appearing after substantial completion;
 - 3. Failure of the Work to comply with requirements of Construction Documents; or
 - 4. Terms of any special guarantees required by Construction Documents.
- B. Acceptance of final payment shall constitute waiver of all claims by Contractor.

28. PAYMENTS BY CONTRACTOR

- A. Contractor shall pay following not later than fifth (5th) business day following each payment received from County:
 - 1. All transportation and utility services rendered;
 - 2. All materials, tools, and other expendable equipment that have been delivered at site of the Work to extent of ninety percent (90%) of cost thereof, and balance of cost thereof when said balance is paid to Contractor; and
 - 3. Each subcontractor, respective amount allowed Contractor because of work performed by subcontractor to extent of subcontractor's interest therein.

29. CONTRACT SECURITY

- A. Contractor shall furnish Performance and Payment Bonds in amount at least equal to one hundred percent (100%) of Contract price as security for faithful performance of this Contract and payment of all persons performing labor on project under this Contract and furnishing materials in connection with this Contract.
- B. Sample Performance and Payment Bonds that Contractor will be required to execute is bound into these Construction Documents. Before construction Contract is consummated, completed Performance and Payment Bonds must be approved by Department.

30. ASSIGNMENTS

- A. Contractor shall not assign whole or any part of this Contract or any moneys due or to become due hereunder without written consent of Department. In case Contractor assigns all or any part of any moneys due or to become due under this Contract, instrument of assignment shall contain clause substantially to effect that it is agreed that right of assignee in and to any moneys due or to become due to Contractor shall be subject to prior claims of all persons, firms and corporations for services rendered or materials supplied for performance of the Work called for in this Contract.

31. MUTUAL RESPONSIBILITY OF CONTRACTORS

- A. If, through acts of neglect on part of Contractor or any subcontractor shall suffer loss or damage on the Work, Contractor agrees to settle with such subcontractor by agreement or arbitration if such other subcontractor will so settle. If such subcontractor shall assert any claim against County on account of any damage alleged to have been sustained, Department shall notify Contractor, who shall indemnify, hold harmless and defend Dane County, its boards, commissions, agencies, officers, employees and representatives against any such claim.

32. SEPARATE CONTRACTS

- A. Department may award other contracts for the Work and all Contractors shall fully cooperate with each other and carefully adjust their work to that provided under other contracts as may be directed by Department. No Contractor shall commit or permit any act that will interfere with performance of the Work by any other Contractor.
- B. Contractor shall coordinate the Work with those of other Contractors. Cooperation will be required in arrangement for storage of materials and in detailed execution of the Work. Contractor, including subcontractors, shall keep informed of progress and detail work of others and shall notify Architect / Engineer or Department immediately of lack of progress or defective workmanship on part of others. Failure of Contractor to keep informed of the Work progressing on site and failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by Contractor of status of the Work as being satisfactory for proper coordination with Contractor's own work.

33. SUBCONTRACTS

- A. Contractor may use services of specialty subcontractors on those parts of the Work that, under normal contracting practices, are performed by specialty subcontractors.
- B. Contractor shall not award any work to any subcontractor without prior approval of Department. Qualifications of subcontractors shall be same as qualifications of Contractor. Request for subcontractor approval shall be submitted to Department fifteen (15) business days before start of subcontractor's work. If subcontractors are changed or added, Contractor shall notify Department in writing.
- C. Contractor shall be as fully responsible to County for acts and omissions of subcontractors, and of persons either directly or indirectly employed by them, as Contractor is for acts and omissions of persons directly employed by Contractor.

- D. Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind subcontractors to Contractor by terms of General Conditions of Contract and other Construction Documents insofar as applicable to work of subcontractors and to give Contractor same power as regards terminating any subcontract that Department may exercise over Contractor under any provision of Construction Documents.
- E. Nothing contained in this Contract shall create any contractual relation between any subcontractor and County.
- F. Contractor shall insert in all subcontracts, Articles 26, 33, 43 and 45, respectively entitled: “Withholding of Payments”, “Subcontracts”, “Affirmative Action Provision and Minority / Women / Disadvantaged Business Enterprises”, and “Minimum Wages”, and shall further require all subcontractors to incorporate physically these same Articles in all subcontracts.

34. PUBLIC WORKS PROJECT MANAGER’S AUTHORITY

- A. Public Works Project Manager shall:
 - 1. Administer and ensure compliance with Construction Documents;
 - 2. Provide responsible on-site observations of construction and have authority to request work and to stop work whenever necessary to insure proper enforcement of Construction Documents;
 - 3. Convene and chair project meetings and foreman’s coordination meetings when necessary to coordinate resolution of conflicts between Contractors, Architects, Engineers, Consultants, and Department; and
 - 4. Check and inspect material, equipment and installation procedures of all trades for proper workmanship and for compliance with Drawings, Specifications and Shop Drawings, permit no material on project site that is not satisfactory and reject work not in compliance with Construction Documents.

35. ARCHITECT / ENGINEER’S AUTHORITY

- A. Architect / Engineer is retained by, and is responsible to Department acting for County.
- B. Architect / Engineer shall determine amount, quality, acceptability, and fitness of several kinds of work and materials that are provided under this Contract and shall decide all questions that may arise in relation to said work and construction thereof.
- C. Architect / Engineer shall decide meaning and intent of any portion of Specifications and of any Drawings where they may be found obscure or be in dispute.
- D. Architect / Engineer shall provide responsible observation of construction. Architect / Engineer has authority to stop the Work whenever such stoppage may be necessary to insure proper execution of Construction Documents.
- E. Architect / Engineer shall be interpreter of conditions of Construction Documents and judge of its performance.
- F. Within reasonable time, Architect / Engineer shall make decisions on all matters relating to progress of the Work or interpretation of Construction Documents.
- G. Architect / Engineer’s decisions are subject to review by Public Works Project Manager.

36. STATED ALLOWANCES

- A. Stated allowances enumerated in Instructions to Bidders shall cover net cost of materials or equipment, and all applicable taxes. Contractor's cost of delivery and unloading at site, handling costs on site, labor, installation costs, overhead, profit and any other incidental costs shall be included in Contractor's bid, but not as part of cash allowance.
- B. Department will solicit at least two (2) bids on materials or equipment for which allowance is stated and select on basis of lowest qualified responsible bid. Contractor will then be instructed to purchase "Allowed Materials". If actual price for purchasing "Allowed Materials", including taxes, is more or less than "Cash Allowance", Contract price shall be adjusted accordingly. Adjustment in Contract price shall not contain any cost items excluded from cash allowance.

37. ESTIMATES OF QUANTITIES

- A. Whenever estimated quantities of work to be done and materials to be furnished under this Contract are shown in any of Construction Documents, they are given for use in comparing bids and right is especially reserved to increase or diminish them as they may be deemed reasonably necessary or desirable by Department to complete the Work included in this Contract, and cost for such increase or diminution shall be adjusted in manner provided for in General Conditions of Contract Article 18 entitled "Changes in the Work".

38. LANDS AND RIGHTS-OF-WAY

- A. Prior to start of construction, County shall furnish all land and rights-of-way necessary for carrying out and completion of the Work to be performed under this Contract.

39. GENERAL GUARANTEE

- A. Neither final certificate of payment nor any provision in Construction Documents nor partial or entire occupancy of premises by County shall constitute acceptance of work not done in accordance with Construction Documents or relieve Contractor of liability in respect to any expressed warranties or responsibility for faulty materials or workmanship.
 - 1. In no event shall making of any payment required by Contract constitute or be construed as waiver by County of any breach of covenants of Contract or waiver of any default of Contractor and making of any such payment by County while any such default or breach shall exist shall in no way impair or prejudice right of County with respect to recovery of damages or other remedy as result of such breach or default.
- B. Contractor shall remedy and make good all defective workmanship and materials and pay for any damage to other work resulting there from, which appear within period of one (1) year from date of substantial completion, providing such defects are not clearly due to abuse or misuse by County. Department will give notice of observed defects with reasonable promptness.
- C. Guarantee on work executed after certified date of substantial completion will begin on date when such work is inspected and approved by Architect / Engineer and Public Works Project Manager.

- D. Where guarantees or warranties are required in sections of Specifications for periods in excess of one (1) year, such longer terms shall apply; however, Contractor's Performance and Payment Bonds shall not apply to any guarantee or warranty period in excess of one (1) year.

40. CONFLICTING CONDITIONS

- A. Any provision in any of Construction Documents which may be in conflict or inconsistent with any Articles in these General Conditions of Contract or Supplementary Conditions shall be void to extent of such conflict or inconsistency.
- B. In case of ambiguity or conflict between Drawings and Specifications, Specifications shall govern.
- C. Printed dimensions shall be followed in preference to measurements by scale. Large-scale drawings take precedence over small-scale drawings. Dimensions on Drawings and details are subject to field measurements of adjacent work.

41. NOTICE AND SERVICE THEREOF

- A. Any notice to Contractor from Department relative to any part of this Contract shall be in writing and considered delivered and service thereof completed, when said notice is posted, by certified or registered mail, to Contractor at Contractor's last given address, or delivered in person to said Contractor, or Contractor's authorized representative on the Work.

42. PROTECTION OF LIVES AND HEALTH

- A. In order to protect lives and health of Contractor's employees under Contract, Contractor shall comply with all pertinent provisions of Wisconsin Administrative Code, Rules of Department of Commerce, relating to Safety and Health.
- B. Contractor alone shall be responsible for safety, efficiency and adequacy of Contractor's tools, equipment and methods, and for any damage that may result from their failure or their improper construction, maintenance or operation.

43. AFFIRMATIVE ACTION PROVISION AND MINORITY / WOMEN / DISADVANTAGED BUSINESS ENTERPRISES

- A. Affirmative Action Provisions.
 - 1. During term of their Contract, Contractor agrees not to discriminate on basis of race, religion, color, sex, handicap, age, sexual preference, marital status, physical appearance, or national origin against any person, whether recipient of services (actual or potential), employee, or applicant for employment. Such equal opportunity shall include but not be limited to following: employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, rates of pay, and any other form of compensation or level of service(s). Contractor agrees to post in conspicuous places, these affirmative action standards so as to be visible to all employees, service recipients and applicants for this paragraph. Listing of prohibited bases for discrimination shall not be construed to amend in any fashion state or federal law setting forth additional bases and exceptions shall be permitted only to extent allowable in state or federal law.
 - 2. Contractor is subject to this Article only if Contractor has ten (10) or more employees and receives \$10,000.00 or more in annual aggregate contracts with County. Contractor

shall file and Affirmative Action Plan with Dane County Contract Compliance Officer in accord with Chapter 19 of Dane County Code of Ordinances. Such plan must be filed within fifteen (15) business days of effective date of this Contract and failure to do so by said date shall constitute ground for immediate termination of Contract by County.

Contractor shall also, during term of this Contract, provide copies of all announcements of employment opportunities to County's Contract Compliance Office, and shall report annually number of persons, by race, sex and handicap status, who apply for employment, and, similarly classified, number hired and number rejected.

3. Contact Dane County Contract Compliance Officer at Dane County Contract Compliance Office, 210 Martin Luther King, Jr. Blvd., Room 421, Madison, WI 53703, 608/266-4114.
4. In all solicitations for employment placed on Contractor's behalf during term of this Contract, Contractor shall include statement to affect Contractor is "Equal Opportunity Employer". Contractor agrees to furnish all information and reports required by County's Contract Compliance Officer as same relate to affirmative action and nondiscrimination, which may include any books, records, or accounts deemed appropriate to determine compliance with Chapter 19, Dane County Code of Ordinances, and provision of this Contract.

B. Minority / Women / Disadvantaged / Emerging Small Business Enterprises.

1. Chapter 19.508 of Dane County Code of Ordinances is official policy of Dane County regarding utilization of, to fullest extent of, Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs) Disadvantage Business Enterprises (DBEs) and Emerging Small Business Enterprises (ESBEs).
2. Contractor may utilize MBEs / WBEs / DBEs / ESBEs as subcontractors or suppliers. List of subcontractors will be required of low bidder as stated in this Contract. List shall indicate which are MBEs / WBEs / DBEs / ESBEs and percentage of subcontract awarded, shown as percentage of total dollar amount of bid.

44. COMPLIANCE WITH FAIR LABOR STANDARDS

- A. During term of this Contract, Contractor shall report to County Contract Compliance Officer, within ten (10) business days, any allegations to, or findings by National Labor Relations Board (NLRB) or Wisconsin Employment Relations Commission (WERC) that Contractor has violated statute or regulation regarding labor standards or relations. If investigation by Contract Compliance Officer results in final determination that matter adversely affects Contractor's responsibilities under this Contract, and which recommends termination, suspension or cancellation of this Contract, County may take such action.
- B. Contractor may appeal any adverse finding by Contract Compliance Officer as set forth in Dane County Ordinance 25.015(11)(c) through (e).
- C. Contractor shall post this statement in prominent place visible to employees: "As condition of receiving and maintaining contract with Dane County, this employer shall comply with federal, state and all other applicable laws prohibiting retaliation or union organizing."

45. DOMESTIC PARTNERSHIP BENEFITS

- A. Contractor agrees to provide same economic benefits to all of its employees with domestic partners as it does to employees with spouses, or cash equivalent if such benefit cannot reasonably be provided. Contractor agrees to make available for County inspection Contractor's payroll records relating to employees providing services on or under this Contract or subcontract. If any payroll records of Contractor contain any false, misleading or

fraudulent information, or if Contractor fails to comply with provisions of Chapter 25.016, Dane County Ordinances, contract compliance officer may withhold payments on Contract; terminate, cancel or suspend Contract in whole or in part; or, after due process hearing, deny Contractor right to participate in bidding on future County contracts for period of one year after first violation is found and for period of three years after second or subsequent violation is found.

46. USE AND OCCUPANCY PRIOR TO ACCEPTANCE

- A. Contractor agrees to use and occupancy of portion or unit of the Work before formal acceptance by Department, provided Department:
 - 1. Secures written consent of Contractor; except when in opinion of Public Works Project Manager, Contractor is chargeable with unwarranted delay in final cleanup of punch list items or other Contract requirements.
 - 2. Secures endorsement from insurance carrier and consent of Surety permitting occupancy of building or use of the Work during remaining period of construction, or, secures consent of Surety.
 - 3. Assumes all costs and maintenance of heat, electricity and water.
 - 4. Accepts all work completed within that portion or unit of the Work to be occupied, at time of occupancy.

47. MINIMUM WAGES

- A. Contractor shall post, at appropriate conspicuous point on site of project, schedule showing all determined minimum wage rates for various classes of laborers and mechanics to be engaged in the Work under this Contract and all deductions, if any, required by law to be made from unpaid wages actually earned by laborers and mechanics so engaged.
- B. Supplementary Conditions section in Construction Documents lists wage determinations required by State Law.
- C. If, after award of Contract, it becomes necessary to employ any person in trade or occupation not classified in wage determinations, such person shall be paid at not less than such rate as shall be determined by Wisconsin Department of Workforce Development. Such approved minimum rate shall be retroactive to time of initial employment of such person in such trade or occupation. Contractor shall notify Department of Contractor's intention to employ persons in trades or occupations not so classified in sufficient time for Department to obtain approved rates for such trades or occupations.
- D. Specified wage rates are minimum rates only, and Department will not consider any claims for additional compensation made by Contractor because of payment by Contractor of any wage rate in excess of applicable rate contained in this Contract. Contractor shall adjust any disputes in regard to payment of wages in excess of those specified in this Contract.
- E. Submit required affidavit(s) to Department of Public Works, Highway & Transportation, as requested and with final application for payment for work under said contract. Affidavit(s) shall clearly indicate name, trade or occupation, and paid wages of every laborer, worker or mechanic employed by Contractor and all subcontractors during billing period including accurate record of number of hours worked by each employee and actual wages paid as stipulated in Wisconsin Statute 66.0903. If Wisconsin Prevailing Wage Rate Determination is required for this Work, use "Prime Contractor Affidavit of Compliance with Prevailing Wage Rate Determination" and "Agent or Subcontractor Affidavit of Compliance with Prevailing Wage Rate Determination" (if applicable). If Wisconsin Prevailing Wage Rate

Determination is not required for this Work, use “Dane County, Wisconsin Contractor Wage Affidavit”. Forms of such affidavits are included in Supplementary Conditions.

48. CLAIMS

- A. No claim may be made until Department’s Assistant Public Works Director has reviewed Architect / Engineer’s decision as provided for in Article 35 of General Conditions of Contract. If any claim remains unresolved after such review by Department’s Assistant Public Works Director the claim may be filed under Wisconsin Statute 893.80. Work shall progress during period of any dispute or claim. Unless specifically agreed between parties, venue will be in Dane County, Wisconsin.

49. ANTITRUST AGREEMENT

- A. Contractor and County recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by County. Therefore, Contractor hereby assigns to County any and all claims for such overcharges as to goods and materials purchased in connection with this Contract, except as to overcharges which result from antitrust violations commencing after price is established under this Contract and any change order thereto.

50. INSURANCE

- A. Contractor Carried Insurance:
 - 1. Contractor shall not commence work under this Contract until Contractor has obtained all insurance required under this Article and has provided evidence of such insurance to Risk Manager, 425 City-County Building, 210 Martin Luther King Jr. Blvd., Madison, WI 53703. Contractor shall not allow any subcontractor to commence work until insurance required of subcontractor has been so obtained and approved. Company providing insurance must be licensed to do business in Wisconsin.
 - 2. Worker’s Compensation Insurance:
 - a) Contractor shall procure and shall maintain during life of this Contract, Worker’s Compensation Insurance as required by statute for all of Contractor’s employees engaged in work at site of project under this Contract and, in case of any such work sublet, Contractor shall require subcontractor similarly to provide Worker’s Compensation Insurance for all of latter’s employees to be engaged in such work unless such employees are covered by protection afforded by Contractor’s Worker’s Compensation Insurance.
 - b) If any claim of employees engaged in hazardous work on project under this Contract is not protected under Worker’s Compensation Statute, Contractor shall provide and shall cause each subcontractor to provide adequate Employer’s Liability Insurance for protection of such of Contractor’s employees as are not otherwise protected.
 - 3. Contractor’s Public Liability and Property Damage Insurance:
 - a) Contractor shall procure and maintain during life of this Contract, Contractor’s Public Liability Insurance and Contractor’s Property Damage Insurance in amount not less than \$1,000,000 bodily injury, including accidental death, to any one person, and subject to same limit for each person, in amount not less than \$1,000,000 on account of one accident, and Contractor’s Property Damage Insurance in amount not less than \$1,000,000 or combined single limit of at least \$1,000,000 with excess coverage over and above general liability in amount not less than \$5,000,000. Contractor shall add “Dane County” as additional insured for each project.
 - b) Contractor’s Public Liability and Property Damage Insurance shall include Products, Completed Operation, and Contractual Liability under Insurance Contract.

“Contractor shall in all instances save, defend, indemnify and hold harmless County and Architect / Engineer against all claims, demands, liabilities, damages or any other costs which may accrue in prosecution of the Work and that Contractor will save, defend, indemnify and hold harmless County and Architect / Engineer from all damages caused by or as result of Contractor’s operations” and each shall be listed as additional insured on Contractor’s and sub-contractors’ insurance policies.

- c) Obligations of Contractor under Article 50.A.2.b) shall not extend to liability of Architect / Engineer, agents or employees thereof, arising out of:
 - 1) Preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications; or
 - 2) Giving of or failure to give directions or instructions by Architect / Engineer, agents or employees thereof provided such giving or failure to give is primary cause of injury or damage.
- d) Contractor shall procure and shall maintain during life of this Contract, Comprehensive Automobile Liability Insurance covering owned, non-owned and hired automobiles for limits of not less than \$1,000,000 each accident single limit, bodily injury and property damage combined with excess coverage over and above general liability in amount not less than \$5,000,000.
- e) Contractor shall either:
 - 1) Require each subcontractor to procure and to maintain during life of subcontract, subcontractor’s Public Liability Property Damage Insurance, and Comprehensive Automobile Liability Insurance of type and in same amount specified in preceding paragraphs; or
 - 2) Insure activities of subcontractors in Contractor’s own policy.
- 4. Scope of Insurance and Special Hazards: Insurance required under Article 50.A.2 & 50.A.3. hereof shall provide adequate protection for Contractor and subcontractors, respectively, against damage claims which may arise from operations under this Contract, whether such operation be by insured or by anyone directly or indirectly employed by insured and also against any of special hazards which may be encountered in performance of this Contract as enumerated in Supplementary Conditions.
- 5. Proof of Carriage of Insurance: Contractor shall furnish Risk Manager with certificates showing type, amount, class of operations covered, effective dates, dates of expiration of policies and “Dane County” listed as additional insured. Such certificates shall also contain (substantially) following statement: “Insurance covered by this certificate will not be canceled or materially altered, except after ten (10) business days written notice has been received by Risk Manager.”

B. Builder’s Risk:

- 1. County shall provide Builder’s Risk insurance coverage for its insurable interests in construction or renovation projects with completed value of \$500,000 or less. Therefore, if project completed value is more than \$500,000, Contractor shall obtain and maintain in force, at its own expense, Builder’s Risk Insurance on all risks for amount equal to full completed value of covered structure or replacement value of alterations or additions. Any deductible shall not exceed \$25,000 for each loss. Policy shall include occupancy clause and list Dane County as loss payee.

C. Indemnification / Hold Harmless:

- 1. Contractor shall indemnify, hold harmless and defend Dane County, its boards, commissions, agencies, officers, employees and representatives from and against all claims, damages, losses and expenses including attorneys’ fees arising out of or resulting from performance of the Work, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including loss of use resulting therefrom, and is caused in whole or in part by any act or omission of Contractor, any subcontractor,

- anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by part indemnified hereunder.
2. In any and all claims against Dane County, its boards, commissions, agencies, officers, employees and representatives or by any employee of Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, indemnification obligation under this Contract shall not be limited in any way by any limitation on amount or type of damages, compensation or benefits payable by or for Contractor or any subcontractor under worker's compensation acts, disability benefits or other employee benefit acts.
 3. Obligations of Contractor under this Contract shall not extend to liability of Architect / Engineer, its agents or employees arising out of:
 - a) Preparation or approval of maps, drawings, opinion, reports, surveys, change orders, designs or specifications; or
 - b) Giving of or failure to give directions or instruction by Architect / Engineer, its agents or employees provided such giving or failure to give is primary cause of injury or damage.
 4. Dane County shall not be liable to Contractor for damages or delays resulting from work by third parties or by injunctions or other restraining orders obtained by third parties.

51. WISCONSIN LAW CONTROLLING

- A. It is expressly understood and agreed to by parties hereto that in event of any disagreement or controversy between parties, Wisconsin law shall be controlling.

SUPPLEMENTARY CONDITIONS

1. APPLICATION & CERTIFICATE FOR PAYMENT

- A. Every contractor engaged in performance of any contract for Department of Public Works, Highway & Transportation shall submit partial and final Application & Certificate for Payment for work under said contract. Form shall provide similar information as shown on AIA G702™ and G703™ forms (samples shown below). Forms shall be submitted to Public Works Project Manager for approval.


AIA Document G702™ – 1992

Application and Certificate for Payment

TO OWNER:	PROJECT:	APPLICATION NO:	Distribution to:
FROM CONTRACTOR:	VIA ARCHITECT:	PERIOD TO:	OWNER <input type="checkbox"/>
		CONTRACT FOR:	ARCHITECT <input type="checkbox"/>
		CONTRACT DATE:	CONTRACTOR <input type="checkbox"/>
		PROJECT NOS:	FIELD <input type="checkbox"/>
			OTHER <input type="checkbox"/>

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract. AIA Document G703™, Continuation Sheet, is attached.

1. ORIGINAL CONTRACT SUM \$ _____

2. NET CHANGE BY CHANGE ORDERS \$ _____

3. CONTRACT SUM TO DATE (Line 1 + 2) \$ _____

4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) \$ _____

5. RETAINAGE:

a. _____ % of Completed Work
(Columns D + E on G703) \$ _____

b. _____ % of Stored Material
(Column F on G703) \$ _____

Total Retainage (Lines 5a + 5b, or Total in Column I of G703) \$ _____

6. TOTAL EARNED LESS RETAINAGE \$ _____
(Line 4 minus Line 5 Total)

7. LESS PREVIOUS CERTIFICATES FOR PAYMENT \$ _____
(Line 6 from prior Certificate)

8. CURRENT PAYMENT DUE \$ _____

9. BALANCE TO FINISH, INCLUDING RETAINAGE \$ _____
(Line 3 minus Line 6)

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:
By: _____ Date: _____
State of: _____
County of: _____
Subscribed and sworn to before me this _____ day of _____

Notary Public:
My commission expires: _____

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$ _____	\$ _____
Total approved this month	\$ _____	\$ _____
TOTAL	\$ _____	\$ _____
NET CHANGES by Change Order	\$ _____	\$ _____

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$ _____
(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:
By: _____ Date: _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.
 AIA Document G702™ – 1992, Copyright © 1963, 1963, 1965, 1971, 1978, 1983 and 1992 by The American Institute of Architects. All rights reserved. WARNING: This AIA® Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are permitted to reproduce ten (10) copies of this document when completed. To report copyright violations of AIA Contract Documents, e-mail The American Institute of Architects' legal counsel, copyright@aia.org.

Continuation Sheet

AIA Document G702™-1992, Application and Certificate for Payment, or G732™-2009, Application and Certificate for Payment, Construction Manager as Adviser Edition, containing Contractor's signed certification is attached. In tabulations below, amounts are in US dollars. Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO:
APPLICATION DATE:
PERIOD TO:
ARCHITECT'S PROJECT NO:

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		F MATERIALS PRESENTLY STORED <i>(Not in D or E)</i>	G TOTAL COMPLETED AND STORED TO DATE <i>(D+E-F)</i>	H BALANCE TO FINISH <i>(C-G)</i>	I RETAINAGE <i>(if variable rate)</i>
			FROM PREVIOUS APPLICATION <i>(D-E)</i>	THIS PERIOD				
GRAND TOTAL								

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

AIA Document G703™ – 1992. Copyright © 1963, 1965, 1966, 1967, 1970, 1978, 1983 and 1992 by The American Institute of Architects. All rights reserved. WARNING: This AIA® Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are permitted to reproduce ten (10) copies of this document when completed. To report copyright violations of AIA Contract Documents, e-mail The American Institute of Architects' legal counsel, copyright@aia.org. 10-0204504

2. CONTRACTOR WAGE AFFIDAVIT

- A. Every contractor engaged in performance of any contract for Department of Public Works, Highway & Transportation shall submit to this Department, as requested and with final application for payment for work under said contract, affidavit in form as hereinafter set forth in this section. Affidavit affirms that all persons employed by contractor or by any of contractor's subcontractors on such contract have been paid no less than minimum wages established under Dane County Ordinances, Chapter 40, Subchapter II (Minimum Wage Ordinance) and in effect at date of execution of contract, that full payment of wages earned has been made, and that no rebates either directly or indirectly have been made. Form of such affidavit is included in this section.
- B. Form should be included with a copy of the final contract invoice forwarded to your contract representative at Dane County.

3. INSURANCE

- A. **Contractor Carried Insurance.** In order to protect itself and the County, Contractor shall not commence work under this Contract until obtaining all required insurance and the County has approved such insurance. Contractor shall not allow any subcontractor to commence work on subcontract until insurance required of subcontractor has been so obtained and approved.

SAMPLE ONLY -
NOT FOR
SUBMITTAL

SECTION 01 00 00
BASIC REQUIREMENTS

PART 1 GENERAL

1.1 SECTION SUMMARY

- A. Section Includes:
1. Section Summary
 2. Summary of the Work
 3. Contractor Use of Premises
 4. Applications for Payment
 5. Change Procedures
 6. Alternates
 7. Coordination
 8. Cutting and Patching
 9. Conferences
 10. Progress Meetings
 11. Submittal Procedures
 12. Proposed Products List
 13. Shop Drawings
 14. Product Data
 15. Samples
 16. Manufacturers' Instructions
 17. Manufacturers' Certificates
 18. Quality Assurance / Quality Control of Installation
 19. References
 20. Interior Enclosures
 21. Protection of Installed Work
 22. Parking
 23. Staging Areas
 24. Occupancy During Construction and Conduct of Work
 25. Protection
 26. Progress Cleaning
 27. Products
 28. Transportation, Handling, Storage and Protection
 29. Product Options
 30. Substitutions
 31. Starting Systems
 32. Demonstration and Instructions
 33. Contract Closeout Procedures
 34. Final Cleaning
 35. Adjusting
 36. Operation and Maintenance Data
 37. Spare Parts and Maintenance Materials
 38. As-Built and Record Drawings and Specifications

1.2 SUMMARY OF THE WORK

- A. Project Description: Perform the Work as specified and detailed in Construction Documents package. Contractor to provide construction services for the Dorn Creek Sediment Removal project
- B. Work by Owner: Not applicable.
- C. Permits: Prior to commencement of the Work, Contractor to secure any and all necessary permits for completion of the Work and facility occupancy.
- D. Diggers Hotline:
 - 1. It is General Contractor's responsibility to contact Diggers Hotline to have all utility locations marked prior to excavation and planning an excavation in a timely manner so as not to delay the Work.
 - 2. Diggers Hotline shall also be used to obtain information on safe working clearances from overhead lines.
 - 3. Completely comply with all requirements of each affected utility company.
 - 4. It is General Contractor's responsibility to contact & hire private utility locating services if necessary.

1.3 CONTRACTOR USE OF PREMISES

- A. Limit use of premises to allow work by Contractors or Subcontractors and access by Owner.
- B. Coordinate utility outages and shutdowns with Owner.

1.4 APPLICATIONS FOR PAYMENT

- A. Submit one (1) original copies with "wet" signatures of each application on AIA G702™ and G703™ forms or approved contractors invoice form.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Payment Period: Monthly..
- D. Submit Applications for Payment to Public Works Project Manager for approval & processing for payment.

1.5 CHANGE PROCEDURES

- A. Change Order Forms: Dane County Contract Change Order, Form 014-32-20 (latest issue)
- B. Contractor's costs for Products, delivery, installation, labor, insurance, payroll, taxes, bonding, equipment rental, overhead and profit will be included in Change Orders authorizing expenditure of funds from contingency allowance.

1.6 ALTERNATES

- A. Alternates quoted on Bid Form shall be reviewed and accepted or rejected at Owner's option.
- B. Coordinate related work and modify surrounding work as required.
- C. Schedule of Alternates:
 - 1. Alternate Bid 1 - South Alignment.
 - a. Add price for dredging, dewatering , sediment storage and restoration of South Alignment channel as described in the Bid Documents .

1.7 COORDINATION

- A. Coordinate scheduling, submittals, and work of various sections of Specifications to assure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify utility requirement characteristics of operating equipment are compatible with building utilities.
- C. Coordinate space requirements and installation of mechanical and electrical work that are indicated diagrammatically on Drawings.
- D. Refer to Drawings for recommended work sequence and duration.
- E. Contractor shall provide Public Works Project Engineer with work plan that ensures the Work will be completed within required time of completion.
- F. Public Works Project Manager may choose to photograph or videotape site or workers as the Work progresses.

1.8 CUTTING AND PATCHING

- A. Employ a skilled and experienced installer to perform cutting and patching new work; restore work with new Products.

1.9 CONFERENCES

- A. There will be pre-bid conference for this project; see Instructions to Bidders.
- B. Owner will schedule a preconstruction conference after Award of Contract for all affected parties.
- C. Contractor shall submit Construction Schedule at pre-construction meeting.
- D. When required in individual Specification section, convene a pre-installation conference at project site prior to commencing work of Section.

1.10 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at minimum of one (1) per week with Public Works Project Manager.
- B. Preside at meetings, record minutes, and distribute copies within two (2) business days to those affected by decisions made.
- C. Attendance at progress meetings by General Contractor, subcontractors, or their authorized representative, is mandatory.
- D. Contractors shall give verbal reports of progress on the Work, discuss schedule for upcoming period and present all conflicts, discrepancies or other difficulties for resolution.
- E. Day & time of progress meetings to be determined at pre-construction meeting.

1.11 SUBMITTAL PROCEDURES

- A. Submittal form to identify Project, Contractor, Subcontractor or supplier; and pertinent Construction Documents references.
- B. Apply Contractor's stamp, signed or initialed, certifying that review, verification of Products required, field dimensions, adjacent construction work, and coordination of information is in accordance with requirements of the Work and Construction Documents.
- C. Identify variations from Construction Documents and Product or system limitations that may be detrimental to successful performance of completing the Work.
- D. Revise and resubmit submittals as required; identify all changes made since previous submittal.

1.12 PROPOSED PRODUCTS LIST

- A. Within fifteen (15) business days after date of Award of Contract, submit complete list of major Products proposed for use, with name of manufacturer, trade name, and model number of each Product.

1.13 SHOP DRAWINGS

- A. Submit number of copies that Contractor requires, plus three (3) copies that shall be retained by Public Works Project Manager.

1.14 PRODUCT DATA

- A. Submit number of copies that Contractor requires, plus two (2) copies that shall be retained by Public Works Project Manager.

- B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information unique to this Project.

1.15 SAMPLES

- A. Submit samples to illustrate functional and aesthetic characteristics of Product.
- B. Submit samples of finishes from full range of manufacturers' standard colors, textures, and patterns for Public Works Project Manager's selection.

1.16 MANUFACTURERS' INSTRUCTIONS

- A. When specified in individual Specification sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.

1.17 MANUFACTURERS' CERTIFICATES

- A. When specified in individual Specification sections, submit manufacturers' certificate to Public Works Project Manager for review, in quantities specified for Product Data.
- B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

1.18 QUALITY ASSURANCE / QUALITY CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply fully with manufacturers' instructions.
- C. Comply with specified standards as minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

1.19 REFERENCES

- A. Conform to reference standard by date of issue current as of date for receiving bids.
- B. Should specified reference standard conflict with Construction Documents, request clarification from Public Works Project Manager before proceeding.

1.20 INTERIOR ENCLOSURES

- A. Provide temporary partitions as required to separate work areas from Owner occupied areas, to prevent distribution of dust and moisture into Owner occupied areas, and to prevent damage to existing materials and equipment.

1.21 PROTECTION OF INSTALLED WORK

- A. Protect installed work and provide special protection where specified in individual Specification sections.

1.22 PARKING

- A. Arrange for temporary parking areas to accommodate construction personnel. Parking shall be available at the Work site.
- B. All contractors and their employees shall cooperate with General Contractor and others in parking of vehicles to avoid interference with normal operations and construction activities.
- C. Do not obstruct existing service drives and parking lots with equipment, materials and / or vehicles. Keep accessible for Owner's use at all times.

1.23 STAGING AREAS

- A. Coordinate staging areas with Public Works Project Manager prior to starting the Work.
- B. On-site space for use as staging areas and storage of materials is limited and will be apportioned among various Contractors as their needs dictate with due regard for storage requirements of each Contractor. Each Contractor shall be responsible for safety of equipment and materials that are stored on site.

1.24 OCCUPANCY DURING CONSTRUCTION AND CONDUCT OF WORK

- A. Smoking is prohibited on Dane County property.
- B. Owner reserves right at any time to dismiss from premises any Contractor or construction personnel that do not uphold requirements of this Section.
- C. Owner shall not be held liable for any lost time, wages, or impacts to construction schedule by any Contractor or construction personnel dismissed for failure to uphold requirements of this Section.
- D. Contractor is responsible for providing & maintaining temporary toilet facilities.

1.25 PROTECTION

- A. Contractor shall protect from damage / injury all trees, shrubs, hedges, plantings, grass, mechanical, electrical & plumbing equipment, walks and driveways and pay for any damage to same resulting from insufficient or improper protection.
- B. Contractor shall provide and maintain barricades & signage to prohibit public access to construction site.

- C. Contractor shall provide and maintain guard lights at all barricades, railings, obstructions in streets, roads or sidewalks and at all trenches adjacent to public walks or roads.

1.26 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.

1.27 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components specifically identified for reuse.
- B. Do not use materials and equipment removed from existing premises, except as specifically identified or allowed by Construction Documents.

1.28 TRANSPORTATION, HANDLING, STORAGE AND PROTECTION

- A. Transport, handle, store and protect Products in accordance with manufacturer's instructions.

1.29 PRODUCT OPTIONS

- A. Where definite material is specified, it is not intentional to discriminate against "equal" product made by another manufacturer. Intention is to set definite standard of material quality. Should bidder choose to bid materials other than those specified, bidder shall submit said materials specifications to Public Works Project Manager for approval at least seven (7) business days prior to Bid Due Date.
- B. Products and materials that are not specified, but have been approved for use by Public Works Project Manager shall be identified in addenda to all bidding contractors.
- C. Requests for material or product substitutions submitted after Bid Due Date may be considered. Owner reserves right to approve or reject substitutions based on Specification requirements and intended use.

1.30 SUBSTITUTIONS

- A. Public Works Project Manager shall consider requests for Substitutions only within fifteen (15) calendar days after date of Public Works Construction Contract.
- B. Document each request with complete data substantiating compliance of proposed Substitution with Construction Documents.
- C. Submit three (3) copies of requests for Substitution for consideration. Limit each request to one (1) proposed Substitution.

- D. Substitutions shall not change contract price established at Bid Due Date.
- 1.31 STARTING SYSTEMS
- A. Execute start-up under supervision of responsible persons in accordance with manufacturers' instructions.
 - B. Submit written report that equipment or system has been properly installed and is functioning correctly.
- 1.32 DEMONSTRATION AND INSTRUCTIONS
- A. Not Used.
- 1.33 CONTRACT CLOSEOUT PROCEDURES
- A. Submit written certification that Construction Documents have been reviewed, the Work has been inspected, and the Work is complete in accordance with Construction Documents and ready for Public Works Project Manager's inspection.
 - B. Submit final Application for Payment identifying total adjusted Contract Sum / Price, previous payments, and amount remaining due.
- 1.34 FINAL CLEANING
- A. Remove waste and surplus materials, rubbish, and construction facilities from site.
- 1.35 ADJUSTING
- A. Not Used.
- 1.36 OPERATION AND MAINTENANCE MANUAL
- A. Not Used.
- 1.37 SPARE PARTS AND MAINTENANCE MATERIALS
- A. Not Used.
- 1.38 AS-BUILT AND RECORD DRAWINGS AND SPECIFICATIONS
- A. Contractor-produced Drawings and Specifications shall remain property of Contractor whether Project for which they are made is executed or not. Contractor shall furnish Architect / Engineer with original marked up redlines of Construction Documents' drawings and specifications that shall include all Addendums, Change Orders, Construction Bulletins, on-site changes, field corrections, etc. These are project As-Built Drawings & Specifications.

- B. Architect / Engineer shall update original Construction Documents to include all Addendums & any other changes including those provided by Contractor in As-Built Drawings & Specifications. These updates are project Record Drawings & Specifications.
- C. Architect / Engineer shall furnish Public Works Project Manager with Record Drawings as detailed in Professional Services Agreement.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01 74 19

CONSTRUCTION WASTE MANAGEMENT, DISPOSAL & RECYCLING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Summary
 - 2. Waste Management Goals
 - 3. Construction and / or Demolition Waste Management
 - 4. Waste Management Plan
 - 5. Reuse
 - 6. Recycling
 - 7. Materials Sorting and Storage On Site
 - 8. Lists of Recycling Facilities Processors and Haulers
 - 9. Waste Management Plan Form

- B. Related Sections:
 - 1. Section 01 00 00 - Basic Requirements

1.2 WASTE MANAGEMENT GOALS

- A. Dane County requires that as many waste materials as possible produced as result of this project be salvaged, reused or recycled in order to minimize impact of construction waste on landfills and to minimize expenditure of energy and cost in fabricating new materials. Additional information may be found in Dane County Green Building Policy, Resolution 299, 1999-2000.

1.3 CONSTRUCTION AND / OR DEMOLITION WASTE MANAGEMENT

- A. All construction and demolition waste suitable for recycling may go to Dane County Construction & Demolition Recycling Facility located at 7102 US Hwy 12, Madison, located across from Yahara Hills Golf Course. This facility can receive mixed loads of construction and demolition waste. For complete list of acceptable materials see www.countyofdane.com/pwht/recycle/CD_Recycle.aspx.
- B. Dane County Landfill, also at 7102 US Hwy 12, Madison, must receive all other waste from this project. www.countyofdane.com/pwht/recycle/landfill.aspx.

1.4 WASTE MANAGEMENT PLAN

- A. Contractor shall develop Waste Management Plan (WMP) for this project. Dane County's Special Projects & Materials Manager may be contacted with questions. Outlined in RECYCLING section of this specification are examples of materials that can be recycled or reused as well as recommendations for waste sorting methods.

B. Contractor shall complete WMP and include cost of recycling / reuse in Bid. WMP will be submitted to Public Works Project Manager within fifteen (15) business days of Bid Due date. Copy of blank WMP form is in this Section. Submittal shall include cover letter and WMP form with:

1. Information on:
 - a. Types of waste materials produced as result of work performed on site;
 - b. Estimated quantities of waste produced;
 - c. Identification of materials with potential to be recycled or reused;
 - d. How materials will be recycled or reused;
 - e. On-site storage and separation requirements (on site containers);
 - f. Transportation methods; and
 - g. Destinations.

1.5 REUSE

A. Contractors and subcontractors are encouraged to reuse as many waste materials as possible. Salvage should be investigated for materials not reusable on site.

1.6 RECYCLING

A. These materials may be recycled at Dane County Construction & Demolition Recycling Facility:

1. Wood.
2. Wood Pallets.
3. PVC Plastic (pipe, siding, etc.).
4. Asphalt & Concrete.
5. Bricks & Masonry.
6. Cardboard.
7. Metal.
8. Shingles.

B. These materials can be recycled elsewhere in Dane County area:

1. Fluorescent Lamps.
2. Foam Insulation & Packaging (extruded and expanded).
3. Carpet Padding.
4. Barrels & Drums.

C. All materials must be recycled at WDNR permitted waste processing facilities that adhere to all State Statutes.

1.7 MATERIALS SORTING AND STORAGE ON SITE

A. Contractor shall provide separate containers for recyclable materials. Number of containers will be dependent upon project and site conditions.

B. Contractor shall provide on-site locations for subcontractors supplied recycling containers to help facilitate recycling.

- C. Mixed loads of recycled materials are allowed only per instructions at www.countyofdane.com/pwht/recycle/CD_Recycle.aspx.

1.8 LISTS OF RECYCLING FACILITIES PROCESSORS AND HAULERS

- A. Refer to www.countyofdane.com/pwht/recycle/CD_Recycle.aspx for information on Dane County Construction & Demolition Recycling Facility.
- B. Web site www.countyofdane.com/pwht/recycle/categories.aspx lists current information for Dane County Recycling Markets. Contractors can also contact Allison Hackner at 608/266-4990, or local city, village, town recycling staff listed at site www.countyofdane.com/pwht/recycle/contacts.aspx. Statewide listings of recycling / reuse markets are available from UW Extension at <https://www.uwgb.edu/shwec/>.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

WASTE MANAGEMENT PLAN FORM



Contractor Name: _____

Address: _____

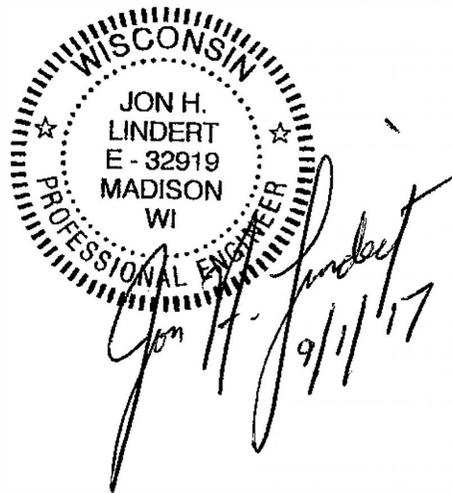
Phone No.: _____ Recycling Coordinator: _____

MATERIAL	ESTIMATED QUANTITY	DISPOSAL METHOD (CHECK ONE)		RECYCLING / REUSE COMPANY OR DISPOSAL SITE
Salvaged & reused building materials	_____ cu. yds. _____ tons	_____ Recycled	_____ Reused	Name: _____
Wood	_____ cu. yds. _____ tons	_____ Recycled	_____ Reused	Name: _____
Wood Pallets	_____ units	_____ Recycled	_____ Reused	Name: _____
PVC Plastic	_____ cu. ft. _____ lbs.	_____ Recycled	_____ Reused	Name: _____
Asphalt & Concrete	_____ cu. ft. _____ lbs.	_____ Recycled	_____ Reused	Name: _____
Bricks & Masonry	_____ cu. ft. _____ lbs.	_____ Recycled	_____ Reused	Name: _____
Cardboard	_____ cu. ft. _____ lbs.	_____ Recycled	_____ Reused	Name: _____
Metals	_____ cu. yds. _____ tons	_____ Recycled	_____ Reused	Name: _____
Shingles	_____ cu. yds. _____ tons	_____ Recycled	_____ Reused	Name: _____
Fluorescent Lamps	_____ cu. ft. _____ lbs.	_____ Recycled	_____ Reused	Name: _____
Foam Insulation	_____ cu. ft. _____ lbs.	_____ Recycled	_____ Reused	Name: _____
Carpet Padding	_____ cu. ft. _____ lbs.	_____ Recycled	_____ Reused	Name: _____
Barrels & Drums	_____ units	_____ Recycled	_____ Reused	Name: _____
Glass	_____ cu. yds. _____ tons	_____ Recycled	_____ Reused	Name: _____
Other	_____	_____ Recycled	_____ Reused	Name: _____

PLAN HOLDER: _____

Set No.: _____

PROJECT MANUAL
SEDIMENT REMOVAL IN DORN CREEK
REQUEST FOR BIDS NO. 317033
DANE COUNTY



Prepared by:

STRAND ASSOCIATES, INC.®
910 West Wingra Drive
Madison, WI 53715
www.strand.com

Issued for Bid
September 1, 2017



SECTION 02110

SITE CLEARING AND STRIPPING

PART 1–GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Removal of surface debris.
 - 2. Removal of trees, shrubs, and other plant life.
 - 3. Strip and stockpile topsoil.
- B. Related Sections and Divisions: Applicable provisions of Division 1 shall govern work in this section.
- C. Payment:
 - 1. Payment for site clearing and stripping will be included in the Lump Sum Bid for the project.
 - 2. Topsoil removal and stockpiling shall be considered unclassified excavation.

PART 2–PRODUCTS

NOT APPLICABLE

PART 3–EXECUTION

3.01 PREPARATION

- A. CONTRACTOR shall identify existing plant life to remain and shall tag accordingly.

3.02 PROTECTION

- A. CONTRACTOR shall protect from damage trees, plant life and critical ecological areas shown on the Access Plan drawing.
- B. See Division 1 for protection of survey monumentation.

3.03 CLEARING AND GRUBBING

- A. Perform Clearing and Grubbing in accordance with Section 201, Clearing and Grubbing, of the Standard Specifications for Highway and Structure Construction 2017 edition and as modified herein.
- B. In cut areas, grubbing below the proposed grade is not required. In fill areas, grubbing is not required.

- C. CONTRACTOR shall clear overhanging vegetation within the creek to accommodate CONTRACTOR's hydraulic dredging operations. Roots within streambank areas shall not be removed.
- D. CONTRACTOR shall minimize clearing efforts along access routes to only that necessary for CONTRACTOR's hydraulic dredging operations. Grubbing will not be allowed in wetland areas.
- E. Payment for Clearing and Grubbing will be included in the Lump Sum Bid for the project.

3.04 STRIPPING

- A. Excavate topsoil from areas to be cut or filled or otherwise built upon. In areas of fill that haven't been grubbed, salvage the topsoil to the maximum extent practicable.
- B. Stockpile topsoil on-site and protect from erosion. CONTRACTOR shall provide additional topsoil as required.
- C. OWNER maintains ownership of any excess topsoil.
- D. All salvaged topsoil shall be used in restoration of the site.

END OF SECTION

SECTION 02140

DEWATERING

PART 1–GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Removal of groundwater to allow belowgrade construction.
 - 2. Site grading to prevent surface water from entering the excavation.
- B. Related Sections and Divisions: Applicable provisions of Division 1 shall govern work in this section.
- C. Payment:
 - 1. The expense for making all extra excavations necessary to prevent water from interfering with the proper construction of the work and for forming all dams or diversions, digging of sumps or pump wells, bailing, and installation and pumping of wells shall be borne by CONTRACTOR.
 - 2. The cost for removal of groundwater and surface water shall be included in the Lump Sum Bid for the project. No separate payment will be made for dewatering whether accomplished by use of sumps and pumps, well point systems, deep wells, or any other method.

1.02 REFERENCES

- A. Wisconsin Administrative Code Chapter NR 141 and NR 811.
- B. See Division 1, Regulatory Requirements for permit requirements and water, erosion, and sediment control.

1.03 SYSTEM REQUIREMENTS

- A. CONTRACTOR shall, at its own expense, keep the excavation clear of water while structures, mains, and appurtenances are being built, utilities are being installed, and fill and backfill are being compacted. Under no conditions shall the work be laid in or under water.
- B. Dewatering shall be sufficient to lower the piezometric level to at least 2 feet below the bottom of the excavation. Additional lowering shall be provided as necessary to create a stable subgrade.
- C. In areas where rock is encountered, the water level shall be kept at or below top of rock, but at least 6 inches below bottom of concrete. Additional rock shall be removed as needed to provide clearances.
- D. The control of groundwater shall be such that softening or heaving of the bottom of excavations or formation of “quick” conditions or “boils” shall be prevented.
- E. Dewatering systems shall be designed and operated so as to prevent the migration or removal of soils.

1.04 QUALITY ASSURANCE

- A. All dewatering shall be done in accordance with applicable federal, state, and local code requirements.
- B. In particular, groundwater observation wells shall be provided and subsequently abandoned in accordance with NR 141. CONTRACTOR shall complete all observation well construction and abandonment forms as required by NR 141 and shall submit the forms to OWNER within 15 days of construction or abandonment activities.

PART 2-PRODUCTS

NOT APPLICABLE

PART 3-EXECUTION

3.01 DEWATERING

- A. Dewatering shall be started, and the water level shall be lowered as specified herein prior to beginning excavation and shall be continued until structure, main, or appurtenance has been completed and fill has been placed and compacted to final grade.
- B. CONTRACTOR shall provide at least two groundwater observation wells near each area to be excavated to aid CONTRACTOR in determining whether the minimum specified requirements have been met prior to excavation. The observation well shall be a minimum 2-inch-diameter slotted PVC pipe. The observation well shall be installed and backfilled in such a way as to allow an accurate determination of actual groundwater levels. The observation well shall be properly abandoned after use unless specified otherwise.
- C. CONTRACTOR shall provide all necessary materials and equipment to keep the excavation free from water during construction. CONTRACTOR shall at all times have on hand sufficient pumping equipment and machinery in good working condition for all ordinary emergencies, including power outages, and shall have available at all times competent workers for the operation of the pumping equipment. The dewatering systems shall not be shut down between shifts, on holidays or weekends, or during the work stoppages.
- D. CONTRACTOR shall meet all requirements of applicable WDNR permits for construction pit or trench dewatering.
- E. The release of groundwater to its static level shall be performed in such a manner as to maintain the undisturbed state of the natural foundation soils, prevent disturbance of compacted fill or backfill, and prevent floatation or movement of all structures and pipelines.

3.02 PROTECTION

- A. In areas where continuous operation of dewatering pumps is required, CONTRACTOR shall avoid noise disturbance to nearby residences to the greatest extent possible by using electric-driven pumps, or intake and exhaust silencers or housing to minimize noise from engine-driven generators or engine-driven pumps.

END OF SECTION

SECTION 02222

EXCAVATION, FILL, BACKFILL, AND GRADING

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included: Excavating, filling, backfilling, and grading for this work includes, but is not necessarily limited to:
 - 1. Excavation and grading related to dredging spoils dewatering site.
 - 2. Placing and compacting all fill and backfill.
 - 3. Rough and finish grading prior to seeding.
- B. Related Sections and Divisions: Applicable provisions of Division 1 shall govern work in this section.
- C. Payment: All general excavation, fill, backfill, and grading shall be included in the Lump Sum Bid.

1.02 REFERENCES

- A. ASTM D698—Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)).
- B. ASTM D1557—Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2,700 kN-m/m³)).
- C. Standard Specifications: Unless otherwise indicated, Standard Specifications within this section shall refer to the State of Wisconsin Department of Transportation, Standard Specifications for Highway and Structure Construction, current edition, including all issued supplemental specifications.

1.03 SUBMITTALS

- A. CONTRACTOR shall submit samples of materials proposed for use as fill to soils testing laboratory for analysis of their suitability and for recommendations on moisture content during compaction, compaction methods, or other appropriate information.
- B. CONTRACTOR shall submit sufficient samples of each different type or classification of soil to obtain representative values.

1.04 JOB CONDITIONS

- A. The elevations shown for existing work and ground are reasonably correct, but are not guaranteed to be absolutely accurate. No extras will be allowed because of variations between drawings and actual grades.
- B. No soil borings were made for this project. CONTRACTOR shall conduct its own investigation to determine physical conditions at the site which may affect the work. CONTRACTOR shall coordinate any investigations with OWNER.

PART 2-PRODUCTS

2.01 EMBANKMENT FILL

- A. Embankment fill shall contain no stumps, brush, rubbish, or other perishable material. The top 12 inches of the earth embankment shall be earthy material free from large stones.

2.02 CLAY FILL

- A. Clay fill shall contain at least 25% clay minerals (material finer than 0.002 mm).

PART 3-EXECUTION

3.01 GENERAL

- A. Prior to all excavating, CONTRACTOR shall become thoroughly familiar with the site and site conditions.

3.02 PROTECTION

- A. CONTRACTOR shall provide all necessary sheeting, shoring, or other soil retention systems including all labor, material, equipment, and tools required, or as necessary to maintain the excavation in a condition to provide safe working conditions, to permit the safe and efficient installation of all items of Contract work, and to protect adjacent property. CONTRACTOR shall be held liable for any damage which may result to property from excavation or construction operations. Sheeting, shoring, and other soil retainage systems shall be withdrawn or removed in a manner so as to prevent subsequent settlement of structures, utilities, and other improvements.
- B. Design of sheet piling and other soil retaining systems shall be the sole responsibility of CONTRACTOR. Where such systems are shown on the drawings, no parameters such as embedment depth, section profile, presence or lack of walers, etc., nor system type or suitability shall be inferred. CONTRACTOR is responsible for designing and providing a fully functional system compatible with construction and site requirements.
- C. Nothing in this specification shall be deemed to allow the use of protective systems less effective than those required by the Occupational Safety and Health Administration (OSHA) and other applicable code requirements.

3.03 UTILITIES

- A. Before starting excavations, CONTRACTOR shall locate existing underground utilities in all areas of the work.
- B. If utilities are to remain in place, CONTRACTOR shall provide adequate means of protection during earthwork operations.
- C. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, consult utility owner immediately for directions.

- D. Cooperate with OWNER and utility companies in keeping respective services and facilities in operation, and repair any damaged utilities to satisfaction of utility owner.
- E. CONTRACTOR shall not interrupt existing utilities serving facilities occupied and used by OWNER or others except when permitted in writing by OWNER.
- F. CONTRACTOR shall demolish and completely remove from the site existing underground utilities indicated to be removed after utility has been capped and sealed.
- G. CONTRACTOR shall accurately locate and record abandoned and active utility lines rerouted or extended on project record drawings.

3.04 FINISH ELEVATIONS AND LINES

- A. CONTRACTOR is responsible for setting and establishing finish elevations and lines.

3.05 EXCAVATION

- A. After the site has been cleared and stripped, the site shall be cut and filled to the indicated subgrade as shown or specified.
- B. Excavations scheduled to extend below groundwater shall not be started until the area has been dewatered. See Section 02140–Dewatering.

3.06 PREPARATION OF SUBGRADE

- A. After the site has been cleared, stripped, and excavated to subgrade, thoroughly compact subgrade to the requirements specified for compacted fill below. Scarify and moisture condition the subgrade as recommended by the Project Soils Engineer.
- B. Remove all ruts, hummocks, and other uneven surfaces by surface grading prior to placement of fill.

3.07 COMPACTED FILL AND BACKFILL

- A. All fill and backfill, except as otherwise specified, shall be compacted fill placed to within 4 inches of the bottom of the topsoil or to the bottom of the structure or other improvement.
- B. No fill shall be placed under water or over unsuitable subgrade conditions.
- C. No frozen material shall be placed nor shall any material be placed on frozen ground.

3.08 EMBANKMENT FILL

- A. Embankment fill may be placed in fill areas to be seeded.
- B. Embankment fill shall be deposited, spread, and leveled in layers generally not exceeding 12 inches in thickness before compaction. Each layer shall be compacted to the degree that no further appreciable consolidation is evidenced under the action of the compaction equipment. The required compaction shall be obtained for each layer before any material for a succeeding layer is placed thereon. Compaction shall be obtained using the hauling and

leveling equipment, and in addition, tamping rollers, pneumatic-tired rollers, vibratory rollers, or other types of equipment required to produce the desired results.

3.09 GRADING

- A. CONTRACTOR shall perform all rough and finish grading required to attain the elevations shown on the drawings.
- B. Grading Tolerances:
 - 1. Restored Areas: ± 0.10 feet.
 - 2. Grading shown on the final grading plan west and final grading plan east shall be adjusted accordingly to reflect actual sediment volume removed and consolidation rates of the sediment.

3.10 COMPACTION TESTING

- A. Compaction tests shall be done by the Project Soils Engineer hired by CONTRACTOR. Location and frequency of the tests shall be as recommended by the Project Soils Engineer.

END OF SECTION

SECTION 02225

HYDRAULIC DREDGING FOR SEDIMENT REMOVAL

PART 1–GENERAL

1.01 SUMMARY

- A. Work Included: Hydraulic dredging for this work includes, but is not necessarily limited to:
1. Hydraulic dredging of sediment including all necessary piping and booster pumps to convey carriage water to the dredging spoils dewatering site. Excavation and disposal of incidental parent material and debris.
 2. Clearing of overhanging vegetation within creek and vegetation along pipeline routes necessary to accommodate CONTRACTOR's hydraulic dredging operations per Section 02110-Site Clearing and Stripping.
 3. Preparation of the dredging spoils dewatering site to accommodate CONTRACTOR's dewatering operations per Section 02110-Site Clearing and Stripping, Section 02222-Excavation, Fill, Backfill, and Grading, and the drawings.
 4. Dewatering of hydraulically dredged sediment and return of water to creek including sampling and testing of return water meeting regulatory permit requirements and Section 02140–Dewatering.
 5. Restoration of the dredging spoils dewatering site per Section 02222–Excavation, Fill, Backfill, and Grading, Section 02935–Seeding, Section 02270–Slope Protection and Erosion Control, and the drawings.
 6. Spreading of dewatered sediment on OWNER lands and restoration as shown on the drawings.
 7. Removal of piping, booster pumps, and return water features and restoration of access routes per Section 02935–Seeding, Section 02270–Slope Protection and Erosion Control, and the drawings.
 8. Hydraulic dredging plan submitted to OWNER for approval prior to the commencement of construction.
 9. Securing of WPDES Permit No. WI-0046558-05-0 for Carriage and/or Interstitial Water Resulting from Dredging Operations and any other necessary permits by CONTRACTOR.
- B. Related Sections and Divisions: Applicable provisions of Division 1 shall govern work in this section.
- C. Payment: All costs for hydraulic dredging for sediment removal shall be included in the Lump Sum Bid for the project. For CONTRACTOR's information, ENGINEER's estimated quantity for in-situ sediment to be hydraulically dredged is approximately 16,010 cubic yards along the mainline alignment and 7,600 cubic yards along the south alignment (restored spawning area) based on surveyed cross sections provided by OWNER.

1.02 REFERENCES

- A. Standard Specifications: Unless otherwise indicated, Standard Specifications within this section shall refer to the State of Wisconsin Department of Transportation, Standard Specifications for Highway and Structure Construction, current edition, including all issued supplemental specifications.

1.03 SUBMITTALS

- A. CONTRACTOR shall submit a hydraulic dredging plan for approval by OWNER prior to the commencement of construction. At a minimum, the hydraulic dredging plan shall include the following.
1. Proposed hydraulic dredge manufacturer, model number, pumping capacity, and flow rate delivery to the dredging spoils dewatering site. Provide plan for launching and removing of the hydraulic dredge including restoration of any disturbed areas to original condition. Provide a traffic control plan meeting the requirements of Part 6 of the Manual on Uniform Traffic Control Devices of the State of Wisconsin requirements if the dredge is launched and/or removed from CTH M or CTH Q right-of-ways. Obtain any necessary permits for operating in County M or CTH Q rights-of-way. Provide any necessary coordination with utility companies in the project area.
 2. Proposed pumping system plan including documentation showing conformance with the following performance standards.
 - a. Provide layout of pumping system within allowable access areas including specific locations of piping and booster pumps. Indicate what equipment will be utilized to layout and maintain the pumping system.
 - b. Provide pumping system information including proposed pump system controls, number of booster pumps, horsepower of booster pumps, model number of pumps, impeller size of pumps, certified pump curves, and sizing, type, and lengths of piping.
 - c. Provide plan for a stable return water feature to the creek.
 - d. Pumping system shall be capable of pumping from all expected creek bottom elevations within the project limits up to the highest dredging spoils dewatering site elevation as shown on the drawings.
 - e. Provide piping with a minimum pressure rating equal to twice the maximum total dynamic head of the pumps included in the pumping system.
 - f. Provide pumps that are non-overloading throughout its pump curve.
 - g. Provide pumps that are capable of passing a 3-inch solid.
 - h. All pumps shall have a check valve and shut off valve near the discharge to isolate the pump.
 - i. Forcemains shall have a pressure rating of twice the maximum operating pressure of the pumping system, 160 pounds per square inch (psi) minimum.
 - j. Forcemains and fittings shall be watertight and shall be securely restrained to a pressure twice the design and surge pressures.
 - k. Velocities in forcemains shall be a minimum of 2 feet per second and a maximum of 6 feet per second.
 - l. During operation of the pumping system, CONTRACTOR shall have a designated operator of the system separate from the other work and dedicated strictly for the pumping system at all times that the pumping operation is in progress.
 - m. Contractor shall have a system to collect drainage from the forcemain to prevent this drainage from reentering wetlands or waterways when emptying the forcemain.
 3. Proposed method of dewatering (pits, geo-tubes) and proposed WDNR-approved polymers including addition rates to achieve compliance with requirements contained in the WPDES Permit No. WI-0046558-05-0 for Carriage and/or Interstitial Water Resulting from Dredging Operations. Jar test results of creek sediments and report for polymer additions shall be submitted.
 4. Proposed water quality sampling, testing and reporting plan for meeting return water and in-stream water regulatory permit requirements including proposed method of meeting the in-stream water regulatory permit requirements.

5. Proposed emergency action plan in the event of a flooding event to protect dredge and pumping systems from storm flows.
6. Any proposed changes to the dredging spoils dewatering site shown on the drawings to accommodate CONTRACTOR's operations.
7. Any proposed changes to the final grading and restoration plan shown on the drawings to accommodate CONTRACTOR's operations.

B. CONTRACTOR shall submit to OWNER all permits and approvals required for CONTRACTOR's operations prior to the commencement of construction.

1.04 JOB CONDITIONS

- A. The elevations shown for existing work and ground are reasonably correct, but are not guaranteed to be absolutely accurate. No extras will be allowed because of variations between drawings and actual grades.
- B. Sediment sampling was completed and the testing results are included in an appendix to these Specifications. The information contained is not guaranteed to be indicative of conditions to be encountered during construction. It is CONTRACTOR's responsibility to make its own investigations to determine physical conditions at the site, which may affect the work. CONTRACTOR shall satisfy itself as to the quantity and characteristics of the materials to be hydraulically dredged.
- C. No soil borings were made for this project. CONTRACTOR shall conduct its own investigation to determine physical conditions at the site which may affect the work.

PART 2--PRODUCTS

2.01 SEDIMENT

- A. Sediment means the solid, semi-solid, or liquid generated by storm water runoff and represented by the surveyed cross-sections in the drawings.

2.02 PARENT MATERIAL

- A. Parent material means the solid or semi-solid material beneath the sediment.

2.03 DEBRIS

- A. Debris means all other materials not defined as sediment or parent material.

2.04 DORN CREEK FLOW DATA

- A. Dorn Creek flow data is available online for USGS gage 05427930 at CTH M and USGS gage 05427927 at CTH Q.

PART 3-EXECUTION

3.01 GENERAL

- A. Prior to all hydraulic dredging, CONTRACTOR shall become thoroughly familiar with the site and site conditions.

3.02 PROTECTION

- A. CONTRACTOR shall protect the USGS monitoring station and apparatus located upstream of CTH M.
- B. CONTRACTOR shall protect all vegetation shown to be protected on the drawings.

3.03 UTILITIES

- A. Before starting hydraulic dredging, CONTRACTOR shall locate existing underground utilities in all areas of the work.
- B. If utilities are to remain in place, CONTRACTOR shall provide adequate means of protection during earthwork operations.
- C. Should uncharted or incorrectly charted piping or other utilities be encountered during hydraulic dredging, consult utility owner immediately for directions.
- D. Cooperate with OWNER and utility companies in keeping respective services and facilities in operation, and repair any damaged utilities to satisfaction of utility owner.
- E. CONTRACTOR shall not interrupt existing utilities serving facilities occupied and used by OWNER or others except when permitted in writing by OWNER.
- F. CONTRACTOR shall demolish and completely remove from the site existing underground utilities indicated to be removed after utility has been capped and sealed.
- G. CONTRACTOR shall accurately locate and record abandoned and active utility lines rerouted or extended on project record drawings.

3.04 HYDRAULIC DREDGING

- A. All sediment as indicated in the drawings shall be hydraulically dredged and disposed of on County-owned land at the dredging spoils dewatering site shown on the drawings. CONTRACTOR is responsible for setting and establishing finish elevations and lines. Grading shown on the dredging spoils dewatering site grading plan and the final grading plan is a guide and CONTRACTOR shall propose modifications necessary to accommodate CONTRACTOR's operations as part of the required dredging plan submittal. No additional compensation will be provided for proposed modifications to the dredging spoils dewatering site grading plan and the final grading plan to accommodate CONTRACTOR's operations.
- B. CONTRACTOR may propose alternate disposal locations for review and approval by OWNER and WDNR. Alternate disposal locations shall provide the same or better containment of sediments as proposed at the County-owned land. Alternative disposal locations shall have proper erosion control, be outside of wetland and wetland indicator soils,

be outside of floodplains, and be permanently restored in a manner acceptable to the County. If the alternate disposal location is to field apply sediments, the disposed of material shall be accounted for in the 590 nutrient management plan for the field(s).

- C. Parent material shall be exposed by hydraulic dredging operations but excavation into the parent material is not required. No additional compensation will be provided for intentional or unintentional overexcavation into the parent material.
- D. Excavation and disposal of debris shall be considered incidental to construction. Debris shall be drained free of water at the construction site and shall be disposed of at a licensed sanitary landfill, if necessary.
- E. It is the CONTRACTOR's responsibility to provide all means, methods, procedures, and safety precautions for the removal of all sediment, incidental parent material, and debris from the creek.
- F. It is the CONTRACTOR's responsibility for all operations required to accomplish grades shown on the drawings. CONTRACTOR shall determine its own quantities of hydraulic dredging which shall be included in the lump sum bid for the project. No changes will be made to quantities/payment for hydraulic dredging unless OWNER requests a specific change to the drawings and specifications during construction. All costs associated with downtime related to hydraulic dredging are considered incidental to construction.
- G. If aqua bags are used to temporarily raise water levels in the creek, the weather shall be monitored and the aqua bags shall be temporarily disabled or removed in advance of storms to allow storm flows to pass without impedence.
- H. CONTRACTOR is responsible to determine the number and size of booster pumps necessary to convey dredged material to the dredging spoils dewatering site. CONTRACTOR shall provide the pumps required, as well as have available additional pumps in the event a pump becomes disabled or to cover periods when pumps are out of operation for routine service.
- I. CONTRACTOR shall be responsible for providing all pumps, hoses, pipelines, fuel tanks, and other items required to accommodate CONTRACTOR's hydraulic dredging operations and for providing supervision of the pumping operation during all hours the pumps are running.
- J. CONTRACTOR shall provide pumps that are in good operating order and free of leaks. Pumps that are leaking fuel, lubricants, or other material, shall be removed immediately from the work area and repaired or replaced as necessary. All pump equipment shall be properly equipped with mufflers and other noise suppression equipment to minimize noise impacts on the surrounding landowners. In the event of a leak or spill from the dredging spoils conveyance or pumping system, CONTRACTOR is responsible for removing leaked or spilled materials and restoration of the affected area to its condition prior to the leak.
- K. Discharge hoses shall be reasonably free of leaks at either the fittings or the discharge hose casing. No leaks from discharge lines shall be allowed to create excessively wet spots or to cause erosion.

- L. Supplemental fuel tanks, used to minimize refueling requirements, must be installed in accordance with all federal, state, and local requirements, in such a manner so as to eliminate any leaks from fuel lines, and so they are protected from damage in the event of high water or flood which may occur during the project. Fuel tanks over 5 gallons in capacity will require a containment system, unless such tank is a component of the pump itself. Supplemental fuel tanks shall be placed no closer than 25 feet from the creek edge such that they will be located out of the creek in the event of sudden high water. CONTRACTOR is responsible to ensure that all supplemental fuel storage facilities meet or exceed the National Fire Protection Agency (NFPA) standards or other applicable local, state, and federal regulations.
- M. The dredging spoils dewatering area shall be prepared by CONTRACTOR to accommodate CONTRACTOR's operations including return water features meeting regulatory permit requirements. The dredging spoils dewatering area shall be stripped of enough topsoil sufficient to place 6 inches of topsoil on the containment berm and the topsoil shall be stockpiled on-site. The dredging spoils dewatering area and the inner face of the containment berm shall be lined with an impermeable liner (minimum 20 mil plastic sheeting). No sediment or topsoil shall be disposed of or stockpiled in wetland or floodplain areas.
- N. CONTRACTOR shall provide return water sampling and testing as required by regulatory permit requirements. CONTRACTOR shall adjust polymer additions to achieve compliance with regulatory permit requirements. CONTRACTOR shall limit return water total suspended solids concentrations to a maximum of 80 mg/l measured at the point of discharge from the dredging spoils dewatering area back into the creek.
- O. CONTRACTOR shall provide in-stream water sampling and testing as required by regulatory permit requirements. CONTRACTOR shall provide treatment adequate to meet regulatory permit requirements. CONTRACTOR shall limit in-stream total suspended solids to a maximum of 40 mg/l above background total suspended solids concentrations in the creek measured downstream of the CTH M bridge. It is anticipated that additional treatment will be necessary immediately upstream of the CTH M bridge to accomplish this requirement. If CONTRACTOR creates multiple work zones along the creek, CONTRACTOR shall limit in-stream total suspended solids to a maximum of 40 mg/l above background total suspended solids concentrations measured at the downstream end of each work zone.
- P. CONTRACTOR shall clear overhanging vegetation within the creek and vegetation along pipeline routes necessary to accommodate CONTRACTOR's hydraulic dredging operations.
- Q. Restoration of the dredging spoils dewatering area shall consist of seeding over the dewatering bags with a cover crop in the Spring of 2018 per Section 02935-Seeding, cutting open dewatering bags in late-summer 2018 to spread the sediment over adjacent lands consistent with the final disposition grading plan, removal of the underlying plastic liner, and seeding with a cover crop and mulch by September 1, 2018 per Section 02935-Seeding.
- R. In late-summer 2018, the dredging spoils dewatering area shall be graded in general conformance with the final disposition grading plan as identified on the drawings. It is acknowledged that the final grading plan may need to be adjusted to accommodate the actual sediment volume removed and consolidation rate of the sediment. It is anticipated that the sediment bags will have dewatered sufficiently by the late-summer of 2018 to allow grading to occur.

- S. CONTRACTOR shall conform to the following access-related provisions.
1. In-stream hydraulic dredging shall be performed within the **Dredging Work Zone** defined as within 3 feet of the toe of slope on each side of the creek. All streambanks disturbed by the hydraulic dredging operations shall be restored as shown on the drawings. No additional compensation will be provided for streambank restoration required as a result of CONTRACTOR's operations. CONTRACTOR shall minimize streambank disturbance to the maximum extent practical.
 2. Ancillary work to facilitate the hydraulic dredging operation (i.e., pipes, hoses, booster pumps, etc.) shall be performed within the **Support Work Zone** shown on the drawings consisting of a 20-foot wide corridor on easements or land owned by the WDNR or Dane County. The **Support Work Zone** shall avoid specific areas identified on the drawings and protect all oak trees to the maximum extent practical. Clearing is allowed within the **Support Work Zone**. Grubbing is not allowed within the **Support Work Zone**. Restore all lands to their original condition after completion of the dredging operations with topsoil, seed, and mulch. Use only light equipment (<10,000 pounds) within the **Support Work Zone** or provide marsh mats for equipment heavier equipment (>10,000 pounds).
 3. Allowable access between the **Dredging Work Zone** and **Support Work Zone** for pipes and hoses is allowed every 500 feet along the creek in a 20 foot wide corridor.
 4. Perform all sediment dewatering within the **Dredging Spoils Dewatering Site**.
 5. Stockpile salvaged topsoil within the **Temporary Topsoil Pile** area.
- T. All sediment within the channel shall be removed as shown on the drawings. A minimum of 70% of sediment within channel flanks shall be removed as shown on the drawings. OWNER shall provide a hand-probe survey of the dredged areas to check that this level of sediment is removed and acknowledge dredging is complete before CONTRACTOR moves dredge to next section. The channel bottom shall be clean at the time of the check. CONTRACTOR shall coordinate checks with OWNER.

3.05 DEWATERING

- A. The release of return water to the creek shall be performed in such a manner as to maintain the undisturbed site along the return water route. Measures shall be provided to trap sediment and other pollutants in effluent prior to discharge to Waters of the State. Measures may include discharge to a sediment trap or other gravity-based settling system, passive infiltration system, geotextile bag, or other acceptable Best Management Practice.
- B. During the dewatering operations, CONTRACTOR shall provide adequate protection from erosion at the discharge area. The discharge of water from the pumping operations shall be undertaken so as to prevent erosion of soils and the downstream introduction of sediment. When discharges from the dewatering operation involve large volumes of water, the discharge area will require a concrete and/or stone structure to provide for dispersion of the discharge energy. CONTRACTOR shall use geotextiles as appropriate to provide erosion protection. Discharge structures shall be capable of dispersing the energy of the expected discharge from the pumps. All materials placed for the protection of discharge outfalls are temporary in nature, and shall be removed from the project area upon completion of the dewatering process.
- C. CONTRACTOR shall maintain all dewatering measures in good operating form until such time as the measures are no longer required.
- D. Upon completion of the work and when acceptable to OWNER, CONTRACTOR shall remove all dewatering measures.

3.06 DECONTAMINATION FOR INVASIVE AND EXOTIC VIRUSES AND SPECIES

- A. All equipment used for the project including but not limited to tracked vehicles, barges, boats, hoses, sheet pile and pumps shall be decontaminated for invasive and exotic viruses and species prior to and after use.
- B. The following steps must be taken every time CONTRACTOR's equipment is moved to avoid transporting invasive and exotic viruses and species. To the extent practicable, equipment and gear used on infested waters shall not be used on other non-infested waters.
 - 1. Inspect and remove aquatic plants, animals, and mud from CONTRACTOR's equipment.
 - 2. Drain all water from CONTRACTOR's equipment that comes in contact with infested waters, including but not limited to tracked vehicles, barges, boats, hoses, sheet pile, and pumps.
 - 3. Dispose of aquatic plants and animals in the trash. Never release or transfer aquatic plants, animals or water from one waterbody to another.
 - 4. CONTRACTOR shall wash equipment with hot (>140°F) and/or high pressure water.
OR,
 - 5. CONTRACTOR shall allow CONTRACTOR's equipment to dry thoroughly for 5 days.

END OF SECTION

SECTION 02240

GEOTEXTILES

PART 1–GENERAL

1.01 SUMMARY

- A. Work Included: Geotextiles for areas below riprap.
- B. Related Sections and Divisions: Applicable provisions of Division 1 shall govern work in this section.
- C. Payment: Payment for geotextile shall be included in the Lump Sum Bid for the project.

1.02 SUBMITTALS

- A. Submit shop drawing for proposed geotextile.

PART 2–PRODUCTS

2.01 MATERIALS

- A. Geotextile below field stone riprap shall be Mirafi 180N, or equal.

PART 3–EXECUTION

3.01 INSTALLATION

- A. Geotextile shall be installed in accordance with manufacturer's recommendations.
- B. Geotextile shall be lapped a minimum of 24 inches.
- C. CONTRACTOR shall protect the construction fabric from exposure to the sun until installation. Construction fabric shall be covered with stone or soil immediately upon placement.

END OF SECTION

SECTION 02270

SLOPE PROTECTION AND EROSION CONTROL

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included: Erosion control devices.
- B. Related Sections and Divisions: Applicable provisions of Division 1 shall govern work in this section.

1.02 PAYMENT

- A. All costs associated with slope protection and erosion control shall be included in Lump Sum Bid for the project. This work shall include, but is not limited to, erecting fence, excavation, placing posts, backfilling, attaching woven wire and geotextile fabric; placing ditch checks; installing sediment traps; removing the fence at completion of project; cleaning and repairing; removing or spreading accumulated sediment to form a surface suitable for seeding; replacing silt fence and damages caused by overloading of sediment material or ponding of water adjacent to silt fence; and furnishing labor, tools, equipment, and incidentals necessary to complete the work in accordance with the Contract.

1.03 REFERENCES

- A. Wisconsin Department of Natural Resources Conservation Practice Standards-Construction Site Erosion and Sediment Control (Conservation Practice Standards).
http://dnr.wi.gov/topic/Stormwater/standards/const_standards.html
- B. Erosion Control Product Applicability List (PAL) for Multi-Modal Applications (PAL) Wisconsin Department of Transportation.
- C. Dane County Erosion Control and Stormwater Management Manual (http://www.danewaters.com/pdf/manual/ecsm_manual.pdf).

1.04 SUBMITTALS

- A. Submit shop drawings for all slope protection and erosion control products used on the project.

1.05 REGULATORY REQUIREMENTS

- A. Land disturbance greater than one acre and OWNER obtains NOI.
 - 1. OWNER has prepared a Storm Water Management and Erosion Control Plan in conjunction with the development of the Contract Documents and has submitted a "Notice of Intent" (NOI) for Storm Water Discharges Associated with Land Disturbing Activities. The NOI is included as an attachment to the Contract Documents. CONTRACTOR as designated operator of activities at the construction site shall be responsible for compliance with all permit conditions. This includes but is not limited to the following:

- a. Implement erosion and sediment control practices necessary to meet federal, state, and local performance standards.
- b. Receive required approvals from OWNER and regulatory agencies for any modifications to the erosion control plan necessitated by site conditions or CONTRACTOR's operations.
- c. Provide a "qualified" inspector to inspect erosion control and sediment controls. Inspector shall have prior experience with and knowledge of installation and maintenance of erosion and sediment controls. Inspector shall be identified to OWNER.
- d. Perform all inspection, maintenance, and record keeping activities required by the permit. This shall include inspecting erosion and sediment control facilities weekly and within 24 hours after a precipitation event of 0.5 inches or greater. CONTRACTOR shall maintain weekly written reports of all inspections.
- e. CONTRACTOR shall respond within 24 hours to all corrective measures noted on the inspection report to address pollution issues.
- f. CONTRACTOR shall submit to OWNER a written notice stating the times, dates and actions taken to rectify the defective pollution and erosion controls.
- g. Pay any fines or other fees resulting from failure of CONTRACTOR to comply with the permit requirements.
- h. Submit a "Notice of Termination" (NOT) to DNR at end of the Project.

B. CONTRACTOR and its subcontractors shall execute and sign the following certification:

"I certify under penalty of law that I understand the terms and conditions of the General Pollutant Discharge Elimination System Permit that authorizes the storm water discharges associated with industrial activities from the construction site and as may be detailed in the Contract Documents. I agree to indemnify and hold OWNER harmless from any claims, demands, suits, causes of action, settlements, fines, or judgments and the costs of litigation, including, but not limited to, reasonable attorneys fees and costs of investigation and arising from a condition, obligation or requirement assumed or to be performed by CONTRACTOR for storm water pollution and erosion control."

C. CONTRACTOR shall pay any fines or other fees resulting from failure of CONTRACTOR to comply with the permit requirements.

1.06 QUALITY CONTROL

- A. Construct and maintain erosion sediment control measures in accordance with the WDNR Conservation Practice Standards.
- B. Check facilities weekly and after any rainfall event, and make needed repairs within 24 hours.

PART 2--PRODUCTS

2.01 EROSION CONTROL PRODUCTS

- A. Erosion control products shall be as listed in the *Erosion Control Product Acceptability List for Multi-Modal Applications (PAL)* of the Wisconsin Department of Transportation.

Contractors may obtain copies of the PAL and PAL qualification procedures from the WisDOT Bureau of Highway Construction.

2.02 EROSION MATS

- A. Erosion mat products shall be selected from the PAL in conformance with criteria specified in Conservation Practice Standard 1052 (Nonchannel Erosion Mat) and 1053 (Channel Erosion Mat).
- B. Unless designated on the drawings, CONTRACTOR may furnish any prequalified erosion mat product of the class and type listed in the PAL.
- C. A 300 mm by 300 mm sample of a product proposed for erosion mat may be required to verify that it is prequalified. When a sample is required, it shall be accompanied by the manufacturer's literature for the proposed product.
- D. Erosion control mat for restoration of the dredging spoils dewatering site berm and side slopes shall be Class 1, Urban Type A.
- E. The TRM (Turf Reinforcement Mat) System shall consist of an erosion control mat (Class 2, Type C) and a turf reinforcement mat (Class 3, Type B).

2.03 SILT FENCE

- A. Silt fence shall conform to Conservation Practice Standard 1056-Silt Fence. Silt fence shall conform to Table 2 of Conservation Practice Standard 1056.
- B. Furnish wrapping on each roll of fabric to protect the fabric from ultraviolet radiation and from abrasion during shipping and handling. Keep geotextile dry until installed.

2.04 SOIL STABILIZER

- A. Soil stabilizer shall be Type A or Type B. Type A is either a cementitious soil binder added to wood cellulose fiber mulch or a bonded fiber matrix. Type B is a water soluble anionic polyacrylamide meeting requirements specified in Conservation Practice Standard 1050-Land Application of Anionic Polyacrylamide. CONTRACTOR shall provide soil stabilizer products from the PAL.

2.05 STONE TRACKING PADS AND TIRE WASHING STATION

- A. Stone tracking pads and tire washing stations shall conform to Conservation Practice Standard 1057-Stone Tracking Pad and Tire Washing.

2.06 DITCH CHECKS

- A. Ditch checks shall conform to Conservation Practice Standard 1062-Ditch Check (Channel).

2.07 MULCHING

- A. Mulching for construction sites shall conform to Conservation Standard Practice 1058-Mulching for Construction Sites.

2.08 VEGETATIVE BUFFER FOR CONSTRUCTION SITES

- A. Vegetative buffer shall conform to Conservation Standard Practice 1054-Vegetative Buffer for Construction Sites.

2.09 TEMPORARY SEEDING

- A. Temporary seeding for construction site erosion control shall conform to Conservation Standard Practice 1059-Seeding for Construction Site Erosion Control.

2.10 STRAW WATTLE

- A. Straw wattles shall be 12-inch diameter straw wattle as manufactured by American Excelsior Company, or equal.

2.11 COIR FIBER ROLL

- A. Coir fiber rolls shall be fabricated from 100% coir (coconut husk). Coir fiber rolls shall include high tensile strength (minimum of 200 pounds tensile strength) synthetic mesh for the knotted or braided mesh exterior of the coir fascine.

PART 3-EXECUTION

3.01 GENERAL

- A. Install devices before construction activities begin.
- B. Proceed carefully with construction adjacent to stream channels to avoid washing, sloughing, or deposition of materials into the stream. If possible, the work area should be diked off and the volume and velocity of water that crosses disturbed areas be reduced by means of planned engineering works (diversion, detention basins, berms).
- C. Unless noted on drawings, do not remove trees and surface vegetation.
- D. Expose the smallest practical area of soil at any given time through construction scheduling. Make the duration of such exposure before application of temporary erosion control measures or final revegetation as short as practicable.
- E. CONTRACTOR shall provide a "qualified" inspector to inspect erosion control and sediment controls once in place. Inspector shall have prior experience with and knowledge of installation and maintenance of erosion and pollution controls. Unless stricter requirements are mandated by DNR or by any local permits, project site erosion control inspection shall be conducted every seven days and after each one-half-inch rainfall or greater. CONTRACTOR shall maintain hard copies of the inspection reports for the duration of the Project.
- F. Any necessary repairs to erosion and sediment control facilities shall be provided within 24 hours to all corrective measures noted on the inspection reports to address pollution issues. CONTRACTOR shall submit to OWNER a written notice stating the times, dates and actions taken to rectify the defective erosion and sediment controls.

- G. CONTRACTOR shall also make any necessary additions for erosion and sediment control as may result from on-site conditions or the progress of the Work or as may be required by DNR or OWNER.
- H. Disturbed areas shall be stabilized with temporary or permanent measures within 14 calendar days of the soil disturbance or redisturbance.
- I. All temporary erosion and sediment control measures shall be removed within 30 days after final stabilization is achieved or after the temporary measures are no longer needed. All sediment accumulated in temporary and permanent facilities shall be removed and properly disposed of and the area restored.

3.02 EROSION MAT

- A. Erosion mats shall be installed in accordance with manufacturer's requirements and with Conservation Practices Standards 1052 and 1053.
- B. Place erosion mats immediately after seeding operations have been completed. Before mat placement, remove all material or clods over 1 1/2 inches in diameter and all organic material or other foreign material which may interfere with the mat bearing completely on the soil.
- C. Any small stones or clods which prevent contact of the mat with the soil shall be pressed in the soil with a small lawn-type roller or by other means. The mat shall have its lateral edge so impressed in the soil so as to permit runoff water to flow over it.
- D. The matting strips shall be rolled on or laid in direction of flow. Spread mat evenly and smoothly in a natural position without stretching and with all parts bearing on soil. Place blanket with netting on top. Overlap adjacent strips at least 4 inches. Overlap strip ends at least 10 inches. Make overlaps with upgrade section on top.
- E. Bury upgrade end of each strip of fabric or blanket at least 6 inches in a vertical slot cut in the soil and press soil firmly against the imbedded fabric or blanket.
- F. Anchor mats in place with vertically driven staples, driven until their tops are flush with the soil. Space staples on 3-foot centers along mat edges and stagger space at 3-foot centers through the center. Place staples at 10-inch centers at end or junction slots.
- G. Reseed areas damaged or destroyed during erosion mat placing operations as specified for original seeding.
- H. Dispose of surplus excavated materials during erosion mat placing operation as specified for original seeding.
- I. Following mat placement, uniformly apply water to the area to moisten seed bed to 2-inch depth and in a manner to avoid erosion.
- J. Maintain erosion mat and make satisfactory repairs of damage from erosion, traffic, fires, or other causes until Work is accepted.

3.03 SILT FENCE

- A. Silt fence shall be constructed in conformance with the criteria specified in Conservation Practice Standard 1056–Silt Fence.

3.04 SOIL STABILIZER

- A. Soil Stabilizer Type A shall be applied with conventional hydraulic seeding equipment. CONTRACTOR shall take care to ensure that surrounding surfaces, structures, trees, and shrubs are not over-sprayed. Before Work is accepted any over-spray must be satisfactorily cleaned from surfaces. The finished application shall be 3/16 inches to 1/4 inch thick. For permanent slope applications, CONTRACTOR shall sow seed separately before applying the soil stabilizer to ensure that the seed has direct contact with the soil.
- B. Soil Stabilizer Type B shall be applied with conventional hydraulic seeding equipment or by dry spreading. CONTRACTOR shall apply material at the manufacturer's recommended rate. For permanent slope applications, CONTRACTOR shall apply an approved mulch when the soil stabilizer is applied or after it is applied to protect the seed.

3.05 STONE TRACKING PADS AND TIRE WASHING

- A. Tracking pads (tire washing stations as required) shall be installed in accordance with the criteria in Conservation Practice Standard 1057–Stone Tracking Pad and Tire Washing.
- B. Surface water must be prevented from passing through tracking pads. Flows shall be diverted away from tracking pads and conveyed under and around them such as with culverts.
- C. Any sediment tracked onto a road shall be removed before the end of each day. Flushing sediment shall not be allowed.

3.06 DITCH CHECKS

- A. Ditch checks shall be provided in conformance with the criteria specified in Conservation Practice Standard 1062–Ditch Checks.

3.07 MULCHING

- A. Mulching shall be provided in conformance with the criteria specified in Conservation Practice Standard 1060–Mulching for Construction Sites.

3.08 VEGETATIVE BUFFER

- A. Vegetative buffer shall be provided in conformance with the criteria specified in Conservation Practice Standard 1060–Vegetative Buffer for Construction Sites.

3.09 SEEDING FOR EROSION CONTROL

- A. Temporary seeding for erosion control shall be provided in conformance with the criteria specified in Conservation Practice Standard 1059–Seeding for Construction Site Erosion Control.

3.10 SEDIMENT TRAPS AND SEDIMENT BASINS

- A. Sediment traps for erosion and sedimentation control during interim construction stages shall be installed in accordance with the criteria in Conservation Practice Standard 1063–Sediment Trap and sediment basins with the criteria in 1064–Sediment Basin. They

shall be constructed prior to any disturbances and shall be placed so they function during all phases of the Work.

3.11 STRAW WATTLE

- A. Straw wattle shall be installed in accordance with manufacturer's directions.

3.12 COIR FIBER ROLL

- A. Coir fiber roll shall be installed in accordance with manufacturer's recommendations.
- B. Coir fiber roll shall be placed in direct contact with the bank profile shown on the drawings.
- C. The coir fiber roll shall be anchored securely in contact with the adjacent soil. This shall require a pair of stakes placed every two feet along the coir fascine, one on each side. Do not pierce the coir fiber roll with stakes. They must be placed alongside it, either tightly sandwiching the coir fiber roll in place, or use rope or cables to tie around the coir fascine. Coir fiber rolls displaced due to storm flows shall be replaced by CONTRACTOR at no additional cost to OWNER.
- D. Coir fiber rolls shall be tied together end-to-end to form a continuous unit. Strong synthetic rope shall be used to stitch the ends together, with knots tied at frequent intervals to ensure a reliable connection.
- E. After anchoring is complete, coir fiber rolls shall be planted with native rhizome plugs in or behind the coir fiber roll at a rate of one plant per two linear foot of coir fiber roll.

END OF SECTION

SECTION 02275

FIELD STONE RIPRAP

PART 1–GENERAL

1.01 SUMMARY

- A. Work Included: Furnishing and placing riprap.
- B. Related Sections and Divisions: Applicable provisions of Division 1 shall govern work in this section.
- C. Payment: All costs for field stone riprap shall be included in the Lump Sum Bid for the project.

1.02 REFERENCES

- A. Standard Specifications: Unless otherwise indicated, Standard Specifications shall refer to the State of Wisconsin Department of Transportation, Standard Specifications for Highway and Structure Construction, current edition, including all issued supplemental specifications.

PART 2–PRODUCTS

2.01 MATERIALS

- A. Stone for creek plug shall be durable stone hauled in from off-site source(s). It shall be sound, hard, dense, resistant to the action of air and water, and free from seams, cracks, or other structural defects.
- B. The stone shall be field stone of varying sizes and weights, as specified in the following table. Field stone shall not be uniform in color, type, or geometry. Available on-site field stone meeting specifications herein may be reused for this project.

(feet) D50	(feet) Min D	(feet) Max D	(feet) Riprap Depth	Courses
1.00	0.75	1.25	1.00	1

D50: The median riprap particle size.

Diameter (D) measurement shall be the average of the diameters arrived at by measuring in TWO DIRECTIONS perpendicular to each other.

- C. The stone shall be placed randomly. Geotextile fabric shall be installed under the bed. A suitable foundation, as approved by OWNER or OWNER's representative, shall be provided to preclude settlement. Some chinking may be required to secure stability of the stones.

- D. After placement of the boulders, all remaining surface voids greater than 6 inches and less than 12 inches shall be filled with field stone having a diameter of between 6 and 9 inches. The maximum size field stone appropriate to fill each void shall be used. Surface voids greater than 12 inches shall be filled with the specified field stone.

PART 3–EXECUTION

3.01 PREPARATION

- A. The bed for the riprap shall be properly trimmed and shaped before geotextile and field stone is placed.
- B. Geotextile shall be placed below field stone riprap. See Section 02240–Geotextiles.

3.02 INSTALLATION

- A. Field stone riprap shall be provided in areas as designated on the drawings.
- B. Field stone rip rap placed above the water line shall be placed by hand. It shall be laid with close, broken joints and shall be firmly bedded into the slope and against the adjoining stones. The stones shall be laid perpendicular to the slope with ends in contact.
- C. The field stone riprap shall be thoroughly compacted as construction progresses, and the finished surface shall present an even, tight surface.
- D. The large stone shall be placed in the lower courses. Interstices between stones shall be chinked with spalls firmly rammed into place.

END OF SECTION

SECTION 02285

WOODY DEBRIS RESTORATION

PART 1–GENERAL

1.01 SUMMARY

- A. CONTRACTOR shall seek to not disturb or minimize disturbance of creek banks during hydraulic dredging operations. Any creek banks that are disturbed during hydraulic dredging operations shall be restored using woody debris restoration.
- B. This work is only necessary where the creek bank has been disturbed by CONTRACTOR's hydraulic dredging operations. Creek bank disturbance shall be minimized but it is acknowledged that some bank disturbance may occur within the dredging work zone shown on the drawings.
- C. Related Sections and Divisions: Applicable provisions of Division 1 shall govern work in this section.
- D. Payment: Payment for any necessary woody debris restoration of disturbed creek banks, if necessary due to CONTRACTOR's hydraulic dredging operations, shall be included in the Lump Sum Bid for the project.

PART 2–PRODUCTS

2.01 GENERAL

- A. Trees used as woody debris must be sound and free from significant decay. Woody debris installation requires a length of tree trunk with the root mass attached. Prior to clearing operations, CONTRACTOR shall identify trees to be used from clearing operations at the dredging spoils dewatering site, subject to OWNER's approval. Trees shall be marked prior to clearing.
- B. Woody debris should have a 12-inch maximum diameter, and a minimum of 8 feet of the trunk must be attached to provide for adequate anchoring in the bank.
- C. The root mass should not exceed 4 feet in diameter. Trimming of root systems may be necessary to achieve root mass diameter.
- D. Trees used for woody debris can consist of any hardwood species that provides a dense, flattened root mass. Trees with primarily a deep tap root are not generally suitable for woody debris.
- E. Provide coir fiber rolls per Section 02270-Slope Protection and Erosion Control.
- F. Provide live stakes, live cuttings, and native rhizome plugs per Section 02999-Live Stakes, Live Cuttings, and Native Rhizome Plugs.
- G. Provide compacted clay per Section 02222-Excavation, Fill, Backfill, and Grading.

PART 3-EXECUTION

3.01 GENERAL

- A. Woody debris restoration construction is as shown in Drawings.

END OF SECTION

SECTION 02930

RESTORATION

PART 1–GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Subsoil preparation.
 - 2. Topsoil placement.
 - 3. Seeding.
 - 4. Erosion Control Mat.
 - 5. Mulching.
 - 6. Maintenance.
- B. Dredging spoils dewatering site and all access routes shall be restored.
- C. Related Sections and Divisions: Applicable provisions of Division 1 shall govern work in this section.
- D. Payment: Payment for restoration shall be at the lump sum price bid for the project. Costs for subsoil preparation, topsoiling, seeding, erosion control mat, mulching, and maintenance of restored areas shall be included in the lump sum price bid. One percent of the total Contract price shall be retained following project completion until a uniform 2-inch growth of vegetation is established over all restored areas.

1.02 REFERENCES

- A. Standard Specifications: Unless otherwise indicated, Standard Specifications shall refer to the State of Wisconsin Department of Transportation, Standard Specifications for Highway and Structure Construction, current edition, including all issued supplemental specifications.

1.03 QUALITY ASSURANCE

- A. All work shall be in accordance with Standard Specifications, unless noted otherwise.
- B. Provide seed mixture in containers showing percentage of seed mix, year of production, net weight, date of packaging, and location of packaging.

1.04 DELIVERY, STORAGE, AND PROTECTION

- A. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.

1.05 SUBMITTALS

- A. Submit shop drawings for all seed mixes.

PART 2–PRODUCTS

2.01 TOPSOIL

- A. Topsoil: Fertile, agricultural soil, typical for locality, capable of sustaining vigorous plant growth, taken from drained site; free of subsoil, stones greater than 3/4 inches in size, clay or impurities, plants, weeds and roots; pH value of minimum 5.4 and maximum 7.0.
- B. Topsoil from the site may be used if it meets the above requirements.

2.02 SEED

- A. The Cool Grass Seed Mixture for restoration of the final disposition grading plan extents and access routes to the area shall be smooth bromegrass and a winter wheat cover crop in the fall of 2018. The Cool Grass Seed Mixture [smooth bromegrass and cover crop (winter wheat in fall, oats in spring)] shall be used to seed the dredging spoils dewatering site berm and side slopes in late 2017 or spring of 2018.
- B. The Access Route (Wetland) Seed Mixture for restoration of access routes in wetland areas shall be the Sample Seed Mix for Basic Wet Prairie (Seed Calculator Code 327-5) per Wisconsin Agronomy Technical Note 5-Establishing and Maintaining Native Grasses, Forbs, and Legumes, April 2013.
- C. The Access Route (Woodland) Seed Mixture for restoration of access routes in woodland areas shall be No. 80 per Section 630.2.
- D. The Turf Reinforcement Mat System Seed Mixture shall be the Detention Basin Seed Mix (Prairie Nursery, Westfield, WI), Wetter Site Seed Mix (Ion Exchange, Harpers Ferry, IA), Wet-Shore Mix (Prairie Moon Nursery, Winona, MN), or Shoreline Wet Edge Mix (Genesis Nursery, Tampico, IL).
- E. Cover Crop shall be oats for the spring 2018 seeding of the dewatering bags.
- F. Seed shall conform to Section 630.2.

PART 3–EXECUTION

3.01 SUBSOIL PREPARATION

- A. Prepare subsoil to eliminate uneven areas and low spots. Maintain lines, levels, profiles, and contours. Make changes in grade gradual. Blend slopes into level areas.
- B. Remove foreign materials, weeds, and undesirable plants and their roots.
- C. Scarify subsoil to a minimum depth of 12 inches where compaction has occurred from construction traffic.

3.02 TOPSOIL

- A. Placing topsoil shall be in accordance with Section 625.3.3 of the Standard Specifications. Topsoil shall be placed to a uniform depth of 6 inches in place. Topsoil placement shall be

incidental to seeding. Provide sufficient topsoil along access routes to restore an even grade matching into the surrounding area, if necessary.

3.03 SEEDING

- A. Seeding shall be performed in accordance with Section 630 of the Standard Specifications.
- B. The Cool Season Grass Seed Mixture shall be applied at a rate of 16 pounds smooth brome grass per acre. Plant a cover crop (winter wheat in fall, oats in spring) at a rate of 65 pounds per acre in all areas where the Cool Season Grass Seed Mixture is applied.
- C. The spring 2018 seeding of the dewatering bags shall be an oats cover crop applied at a rate of 130 pounds per acre.
- D. The Access Route (Wetland) Seed Mixture shall be applied at the seeding rates for Sample Seed Mix for Basic Wet Prairie (Seed Calculator Code 327-5) per Wisconsin Agronomy Technical Note 5-Establishing and Maintaining Native Grasses, Forbs, and Legumes, April 2013.
- E. The Access Route (Woodland) Seed Mixture shall be applied at a rate of 35 pounds per acre. Plant the oats cover crop at a rate of 65 pounds per acre in all areas where the Access Route (Wetland) Seed Mixture is applied.
- F. The Turf Reinforcement Mat System Seed Mixture shall be applied at a rate of 12 pounds per acre. Plant an oats cover crop at a rate of 65 pounds per acre with this seed mix.
- G. Seed shall be applied at the rates specified in Section 630.3.3.4.1 of the Standard Specifications and as identified herein.

3.04 PLANTING SEASON

- A. Seeding shall be performed during times allowed in Section 630 of the Standard Specifications.
- B. The Cool Season Grass Mixture shall be applied from April 1 to June 15 and August 15 to October 15. Dormant seeding is acceptable when bare ground exists between November 1 until the first significant snowfall (4 inches accumulation or greater) upon approval of OWNER.
- C. Access Route (Wetland) Seed Mixture shall be applied from April 1 to June 15 and August 15 to October 15. Dormant seeding is acceptable when bare ground exists between November 1 until the first significant snowfall (4 inches accumulation or greater) upon approval of OWNER.
- D. Access Route (Woodland) Seed Mixture shall be applied from April 1 to June 15 and August 15 to October 15. Dormant seeding is acceptable when bare ground exists between November 1 until the first significant snowfall (4 inches accumulation or greater) upon approval of OWNER.
- E. The Turf Reinforcement Mat System Seed Mixture shall be applied from April 1 to June 15 and August 15 to October 15. Dormant seeding is acceptable when bare ground exists

between November 1 until the first significant snowfall (4 inches accumulation or greater) upon approval of OWNER.

3.05 EROSION CONTROL MAT

- A. The late 2017 or spring of 2018 Cool Grass Seed Mixture for restoration of the dredging spoils dewatering site berm and side slopes shall require installation of an erosion control mat. The mat shall be a Class 1, Urban Type A per the Wisconsin Department of Transportation Erosion Control Product Acceptability List for Multi-Modal Applications (PAL).

3.06 MULCHING

- A. All areas receiving the Access Route (Woodland) Seed Mixture and Access Route (Wetland) Seed Mixture shall be mulched. The fall of 2018 Cool Grass Seed Mixture for restoration of the final disposition grading plan extents and access routes to the area shall be mulched.
- B. Mulching shall be performed in accordance with Method B of Section 627 of the Standard Specifications.

3.07 MAINTENANCE

- A. Seeding shall be maintained by CONTRACTOR until grass is well established. Grass is well established when it covers the entire seeded areas to a height of 2 inches.
- B. Immediately reseed areas which fail to show adequate catch. Bare spots shall not exceed 5 square feet in area and not exceed 3% of the total seeded areas.
- C. Correct damage resulting from erosion, gullies, rills, or other causes by filling with topsoil, tamping, and reseeding if damage occurs prior to acceptance of work.

END OF SECTION

SECTION 02945

CREEK PLUG

PART 1–GENERAL

1.01 SUMMARY

- A. Work Included: All necessary work, materials, coordination, and incidentals necessary to construct creek plug.
- B. Related Sections and Divisions: Applicable provisions of Division 1 shall govern work in this section.
- C. Payment: All costs for creek plug shall be included in the Lump Sum Bid for the project.

1.02 SUBMITTALS

- A. Prior to the commencement of clay material placement, clay material geotechnical analysis shall be submitted to OWNER for approval.

1.03 REFERENCES

- A. Natural Resources Conservation Service Conservation Practice Standard, Wetland Restoration, Code 657.
- B. Natural Resources Conservation Service Construction Specification 300, Clay Liners.

PART 2–PRODUCTS

2.01 CLAY

- A. Clay shall consist of imported cohesive lean clay with the following specifications:
 - 1. A minimum of 50 percent of the particles passing the No. 200-mesh sieve.
 - 2. Maximum particle size less than 2 inches.
 - 3. Organic content less than three percent.
 - 4. Plasticity index of equal to or greater than 12 as tested by Atterberg Limits Test (ASTM D-4318).
 - 5. Clay materials shall contain no sod, brush, roots, frozen soil, or other perishable materials.
 - 6. An in-place hydraulic conductivity of 1×10^{-7} cm/sec or less.
 - 7. An average liquid limit of 25 or greater, with no value less than 20.
 - 8. Average PI of 12 or more with no values less than 10.
 - 9. Clay installed wet of optimum if using standard Proctor, and 2% wet of optimum if using modified Proctor.
 - 10. Clay compaction and documentation as specified in NRCS Wisconsin Construction Specification 300, clay liners.

2.02 GEOTEXTILE

- A. Provide geotextile per drawings and Section 02240-Geotextiles

2.03 FIELD STONE RIP RAP

- A. Provide field stone rip rap per drawings and Section 02275-Field Stone Rip Rap

2.04 BANK RESTORATION

- A. Provide bank restoration per drawings, Section 02930-Restoration, and Section 02270-Slope Protection and Erosion Control.

PART 3-EXECUTION

3.01 PLACEMENT OF CLAY MATERIAL

- A. Foundation surfaces shall be graded to remove surface irregularities and shall be scarified or otherwise acceptably scored or loosened to a minimum depth of 2 inches. The moisture content of the loosened material shall be controlled as specified for the clay material and the surface materials of the foundation shall be compacted and bonded to the first layer of the clay material as specified for subsequent layers of the clay material.
- B. The clay material shall not be placed until the required foundation preparation is completed and the foundation is observed by OWNER. The clay material shall not be placed upon a frozen surface, nor shall snow, ice, or frozen material be incorporated into the clay material. The clay material shall be placed in lifts not exceeding 6 inches in thickness. The distribution of materials throughout the clay material shall be uniform and free from lenses, pockets, streaks, or layers of materials differing substantially in texture, moisture content, or gradation from the surrounding material.
- C. The clay material shall be well-knit, such that lumps or clods are not present which would negatively impact the uniformity of the material compaction. Clod size of 1 to 2 inches or smaller is recommended. The strength of the compacted material shall have a minimum compressive strength of 1.5 tons per square foot (tsf) as determined in the field using a calibrated-spring hand penetrometer.
- D. During placement and compaction of the clay material, the moisture content of the clay shall be maintained above the optimum content determined by the standard Proctor test (ASTM D689). If the clay material cannot be properly compacted due to a high moisture content, then the moisture of the material shall be reduced by aerating via disking of the material. If the moisture content of the material is too low, then moisture will need to be added. Added moisture must be thoroughly mixed, such as by discing. The moisture should be uniform throughout the clay material.
- E. The clay material shall be compacted to a minimum of 95% of the standard Proctor dry density (ASTM D698) at a moisture content between optimum moisture content and +3% of optimum moisture content. The clay material shall be compacted with a footed compactor, or equivalent. The uncompressed lift thickness shall not exceed the smaller of 6 inches or the length of the teeth on the footed compactor used.
- F. Clay compacted to densities lower than 95% of the standard Proctor (ASTM D698) or at moisture contents lower than optimum content or otherwise not conforming to the requirements of the specifications shall be reworked to meet the specifications or removed

and replaced with acceptable clay. The replacement clay and the foundation and fill surfaces upon which it is placed shall conform to all requirements of the specifications for foundation preparation, approval, placement, moisture content, and compaction.

- G. CONTRACTOR is responsible for all earth moving required to accomplish grades shown on drawings. CONTRACTOR shall determine its own quantities of excavation which shall be included in the Lump Sum Bid for the project.
- H. No changes will be made to quantities/payment for this work unless OWNER requests a specific change to the drawings and specifications during construction.
- I. Place clay material to a tolerance within 0.10 feet of elevation shown on drawings.

3.02 TESTING

- A. Clay material construction shall be tested and documented as follows:
 - 1. Standard Proctor Test (ASTM D698), 1 test per 5,000 cubic yards of clay material.
 - 2. Field density tests and hand penetrometer readings, 6 tests of clay material including 3 at a 1 foot depth of material from the bottom and 3 at the finished surface of the creek plug.
 - 3. Atterberg limits tests (ASTM D4318), 1 test per 1,500 cubic yards of clay material.
 - 4. Grain size distribution (ASTM D422), 1 test per 1,500 cubic yards of clay material.
 - 5. Permeability (ASTM D5084) and moisture content, 1 test per 5,000 cubic yards of clay material.
 - 6. CONTRACTOR is responsible for meeting the compaction requirements. CONTRACTOR shall hire an independent testing firm to perform compaction tests to confirm the in-place density.
- B. Atterberg limits, grain size distribution, and permeability tests shall be completed on undisturbed samples obtained from the constructed clay material. The permeability test samples shall be obtained using 2-inch diameter thin-wall steel (Shelby) tubes. The resulting test holes shall be filled with granular bentonite immediately following the sample section.

END OF SECTION

SECTION 02999

LIVE STAKES, LIVE CUTTINGS, AND NATIVE RHIZOME PLUGS

PART 1—GENERAL

1.01 SUMMARY

- A. Work Included: This item describes vegetative components to be used in streambank bioengineering techniques constructed as shown in drawings. This work is only necessary where the creek bank has been disturbed by CONTRACTOR's hydraulic dredging operations. Creek bank disturbance shall be minimized but it is acknowledged that some bank disturbance may occur within the dredging work zone as shown on the drawings. Vegetative components include live stakes, live cuttings, and rhizome plugs.
- B. Related Sections: Section 02285-Woody Debris Restoration and Section 02270-Slope Protection and Erosion Control.
- C. Definitions:
 - 1. Live Stake: Small deciduous stem cuttings of live tree or shrubs sized between 1/2-inch and 2 inches diameter stock of 2 to 3 feet length plant materials.
 - 2. Live Cutting: Smaller deciduous stem cuttings of live trees and shrubs sized between 3/8-inch and 1-inch diameter stock of 1 to 1-1/2 feet length plant materials.
 - 3. Rhizome Plugs: Bare root live rhizomes, root plugs, or up to 3 1/2-inch by 3 1/2-inch potted plants of specified native aquatic emergent forbs.
 - 4. Plant Materials: Live deciduous stakes, cuttings, or rhizome plugs grown in the same climatic conditions/zone of the site and free of disease, mold, or other limitations to establishment.

1.02 REFERENCES

- A. CONTRACTOR is referred to the "Stream Restoration Design Handbook," (www.nrcs.usda.gov/stream_restoration/newgra.html) Natural Resources Conservation Service for general guidance in streambank restoration practices. Where in conflict with Contract Drawings and Specifications, Contract Drawings and Specifications shall take preference. Note that for the purpose of the Contract, live cuttings depicted in the above reference shall be referred to or defined as "Live Stakes" described under 1.01 (C) above.

1.03 PAYMENT

- A. CONTRACTOR shall be responsible for making its own estimate of quantities for bidding purposes.
- B. Live stakes, live cuttings, and native rhizome plugs related to Section 02285 Woody Debris Restoration, if necessary due to CONTRACTOR's hydraulic dredging operations, shall be included in the Lump Sum Bid for the project including obtaining, or harvesting, placement, watering, and monitoring, and furnishing all equipment, tools, labor, and incidentals necessary to complete the work in accordance with the Contract.

1.04 GUARANTEE

- A. Greater than 65% of plants installed (cuttings, stakes, and plugs shall be grouped individually) shall be guaranteed to be in healthy and flourishing condition by June 30 if planted by April 30.
- B. If planted after April 30, greater than 65% of plants installed (cuttings, stakes, and plugs shall be grouped individually) shall have a minimum of two months of growth and be guaranteed to be in healthy and flourishing condition by November 1.
- C. Sixty-five percent survival is an acceptable rate of survival. The guarantee shall not cover damage from vandalism, animals, freezing rains, high winds, or hail.
- D. At any time during the guarantee period, CONTRACTOR shall remove or replace, without cost to OWNER, and within a specified planting period, all plants not in a healthy and flourishing condition as determined by OWNER.
- E. Replacement plants shall be subject to the same specified requirements of the Contract. The guarantee of replacement plants shall extend until November 1 of the construction year. In the event that a replacement plant is not acceptable during, or at the end, of the said guarantee extension period, OWNER may choose between subsequent replacement or credit for plant materials.

PART 2--PRODUCTS

2.01 LIVE STAKES, LIVE CUTTINGS, AND NATIVE RHIZOME PLUGS

- A. Live stakes and live cuttings shall be straight, live deciduous stem sections sized as defined in Part 1. Sections shall have all side branches removed and have the bark intact. The following plant species will be accepted:
 - 1. Red Osier Dogwood (*Cornus stolonifera/serecia*).
 - 2. Button Bush (*Cephalanthus occidentalis*).
 - 3. Shrub-based Willow species, native to the region, including Pussy Willow, (*Salix discolor*) Shining Willow (*Salix luc.*), and Silky Willow (*Salix Servicea*, respectively).
- B. Rooting hormone shall contain IBA (indolebutyric acid) in powder or liquid form.
- C. Native rhizome plugs shall involve planting rhizome species randomly (equivalent number of each species) into the coir fiber roll at 2-foot intervals in two staggered rows. The species list and planting density shall be provided as follows:

Native Rhizome Plugs	
Common Name	Scientific Name
Blue flag iris	<i>Iris virginica shrevei/versicolor</i>
Prairie cordgrass	<i>Spartina pectinata</i>
River Bulrush	<i>Scirpus fluviatalis</i>
Bur Reed	<i>Sparganium eurycarpum/americanum</i>

PART 3-EXECUTION

3.01 CONSTRUCTION METHODS-LIVE STAKES AND CUTTINGS

- A. Prior to starting work, CONTRACTOR shall mark layout for OWNER's approval. Use approved spray paint or 1-inch by 2-inch by 18-inch stakes or colored pin flags to identify perimeter of various planting areas.
- B. When plant material stock are collected, each site shall be evaluated to determine the maximum amount of collection allowable that will not cause a detrimental reduction of the species on the site or change the visual character of the site to an unacceptable degree. In no instance shall more than 50% of an individual plant or plant colony be removed. When OWNER is furnished sufficient evidence that a specific plant cannot be obtained, by collection or commercially, alternative species or ratios of other species may be approved if such alternative is provided in writing.
- C. Plant material stock shall be collected in early spring when they are dormant, prior to bud swell and leaf emergence. They shall consist of above or below ground stems of the previous season's growth. Select stock from plants growing in full sun and from the healthiest portions of the plant. Stock shall be bound and labeled with the source and harvest date as they are being cut. CONTRACTOR shall not take more stock than can be prepared and installed within a 24-hour period. If an unexpected delay occurs after cutting, plant materials can be stored in a cool, damp environment for an additional 24 hours. If delays greater than 24 hours are encountered, store stock in a refrigerated unit at a temperature of 32°F to 35°F and relative humidity of 90%, for a maximum of four weeks. Stock from commercial vendors and conforming to these specifications are also acceptable. Proof of collection and cold storage within humidified chamber shall be provided.
- D. Plants shall be installed vertical. Four-fifths of the length of the cutting should be installed into the ground and soil firmly packed around it after installation. Stock are to be installed basal end down, buds up, with two to four buds exposed. Stock shall be installed per the detail sheet and as noted above.
- E. Planting Dates: November 1 to April 30 when ground is not frozen. Requests for planting outside of this time period are required in writing and a warranty requirement may be specified in the approval of such request.

3.02 LIVE STAKING

- A. Live stakes shall be installed above the normal water surface elevation. Live stakes shall be placed on approximately 1-foot centers. Live stakes shall be inserted at a 90-degree angle to the slope. Care shall be taken to prevent damage to the stakes. Remove and replace stakes that split during installation.

3.03 LIVE CUTTINGS

- A. Live cuttings shall be provided above the normal water surface elevation. Live cuttings shall be placed at approximately 1-foot centers, staggered between live stakes.
- B. Maintain soils around the live cuttings in a continually moist condition until the stock shows sufficient root growth. Water thereafter at least once every 14 days with a fine mist that soaks the soil to a depth of 2 inches unless natural rainfall or bankfull/channel flow conditions have provided equivalent watering.

- C. CONTRACTOR shall be responsible for replacing the plant material installations for stock that is not rooted or visually alive within 5 months of installation. Such replacements may be required by OWNER to be completed in the next growing season. Split stock shall be replaced immediately or pruned back to eliminate such installation injury.

3.04 NATIVE RHIZOME PLUGS

- A. Native rhizome plugs shall be provided in and approximately 1 foot above the Coir Fiber Roll in two rows, as indicated in the typical section drawing for Coir Fiber Roll. The native rhizome plugs shall be spaced at every 2 linear feet (in each row) along the stream bank and staggered between the two rows.
- B. Rhizome plugs may be either locally collected bulbs or plugs subject to above criteria or commercially available stock processed as standard to the science on landscaping industry (ANSI Z60.1). See other specifications.
- C. Planting Dates: April 1 to June 15 and September 1 to October 15 when ground is not frozen. Requests for planting outside of this time period are required in writing and a warranty requirement may be specified in the approval of such request.

END OF SECTION

SEDIMENT SAMPLING RESULTS



Wisconsin State Laboratory of Hygiene
 2601 Agriculture Drive, PO Box 7996
 Madison, WI 53707-7996
 (800)442-4618 - FAX (608)224-6213
 http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 221956001

Report To:
 JOHN REIMER
 DANE COUNTY PARKS, LAND AND WATER
 RESOURCES DEPT
 5201 FEN OAK DR
 ROOM 208
 MADISON, WI 53718

Invoice To:
 JOHN REIMER
 DANE COUNTY PARKS, LAND AND WATER
 RESOURCES DEPT
 5201 FEN OAK DR
 ROOM 208
 MADISON, WI 53718
 Customer ID: 347874

Field #: DC-1L(D) 0-6.5, 6.5-12.5 COMP
 Project No:
 Collection End: 3/24/2015 11:38:00 AM

ID#: NA
 Sample Location:
 Sample Description: COMPOSITE OF DC-1L(D) 0-6.5 AND 6.5-12.5

Collection Start:
 Collected By:
 Date Received: 3/25/2015
 Date Reported: 10/16/2015
 Sample Reason:

Sample Type: SE-SEDIMENT
 Waterbody: 805600
 Point or Outfall:
 Sample Depth: 0-12.5
 Program Code:
 Region Code:
 County: 13

Sample Comments

- Analyzed past the 28 days holding time: Method SW846 7471A analyzed on 10/12/15 1013
- Analyzed past the 28 days holding time: Method SW846 7471A analyzed on 10/12/15 1153
- Analyzed past the 28 days holding time: Method SW846 7471A analyzed on 10/12/15 1223
- Analyzed past the 180 days holding time: Method 3050B analyzed on 10/12/15 0733
- Analyzed past the 180 days holding time: Method SW846 6010B analyzed on 10/13/15 1218
- Analyzed past the 180 days holding time: Method 3050B analyzed on 10/14/15 0709
- Analyzed past the 180 days holding time: Method SW846 6010B analyzed on 10/15/15 0908

Metals, Total

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/12/15	Analysis Date 10/13/15				
Comments: Analyzed past the 180 days holding time.					
Arsenic	SW846 6010B	8.91	mg/kg	0.995	2.99



Wisconsin State Laboratory of Hygiene
 2601 Agriculture Drive, PO Box 7996
 Madison, WI 53707-7996
 (800)442-4618 - FAX (608)224-6213
<http://www.slh.wisc.edu>

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 221956001

Metals, Total

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/12/15	Analysis Date 10/13/15				
Cadmium	SW846 6010B	0.233F	mg/kg	0.0995	0.299
Chromium	SW846 6010B	29.0	mg/kg	0.498	1.59
Copper	SW846 6010B	11.5	mg/kg	0.498	1.59
Lead	SW846 6010B	1.52F	mg/kg	0.995	2.99
Prep Date 10/12/15	Analysis Date 10/12/15				
Comments: Analyzed past the 28 days holding time.					
Mercury	SW846 7471A	0.0229F	mg/kg	0.0147	0.0440
Prep Date 10/14/15	Analysis Date 10/15/15				
Comments: Analyzed past the 180 days holding time.					
Nickel	SW846 6010B	12.4	mg/kg	0.473	1.51
Zinc	SW846 6010B	44.4	mg/kg	0.473	1.51

List of Abbreviations:

LOD = Level of detection
 LOQ = Level of quantification
 ND = None detected. Results are less than the LOD
 F next to result = Result is between LOD and LOQ
 Z next to result = Result is between 0 (zero) and LOD
 if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see <http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation>
 Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.
 Results relate only to the items tested.
 This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.
 The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.



Wisconsin State Laboratory of Hygiene
2601 Agriculture Drive, PO Box 7996
Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
<http://www.slh.wisc.edu>

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790

NELAP LAB ID: E37658

EPA LAB ID: WI00007

WI DATCP ID: 105-415

WSLH Sample: 221956001

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262

Inorganic Chemistry: Tracy Hanke, Lab Manager, 608-224-6270

Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282

Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269

Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251

Environmental Toxicology: Dave Webb, Lab Manager, 608-224-6200



Wisconsin State Laboratory of Hygiene
 2601 Agriculture Drive, PO Box 7996
 Madison, WI 53707-7996
 (800)442-4618 - FAX (608)224-6213
 http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 221956002

Report To:
 JOHN REIMER
 DANE COUNTY PARKS, LAND AND WATER
 RESOURCES DEPT
 5201 FEN OAK DR
 ROOM 208
 MADISON, WI 53718

Invoice To:
 JOHN REIMER
 DANE COUNTY PARKS, LAND AND WATER
 RESOURCES DEPT
 5201 FEN OAK DR
 ROOM 208
 MADISON, WI 53718
 Customer ID: 347874

Field #: DC-2L(B) 0-6.5, 18-25 COMP
 Project No:
 Collection End: 3/24/2015 2:03:00 PM

ID#: NA
 Sample Location:
 Sample Description: COMPOSITE OF DC-2L(B) 0-6.5 AND 18-25

Collection Start:
 Collected By:
 Date Received: 3/25/2015
 Date Reported: 10/16/2015
 Sample Reason:

Sample Type: SE-SEDIMENT
 Waterbody: 805600
 Point or Outfall:
 Sample Depth: 0-25 IN
 Program Code:
 Region Code:
 County: 13

Sample Comments

- Analyzed past the 28 days holding time: Method SW846 7471A analyzed on 10/12/15 1013
- Analyzed past the 28 days holding time: Method SW846 7471A analyzed on 10/12/15 1155
- Analyzed past the 180 days holding time: Method 3050B analyzed on 10/12/15 0733
- Analyzed past the 180 days holding time: Method SW846 6010B analyzed on 10/13/15 1221
- Analyzed past the 180 days holding time: Method SW846 6010B analyzed on 10/13/15 1430
- Analyzed past the 180 days holding time: Method 3050B analyzed on 10/14/15 0709
- Analyzed past the 180 days holding time: Method SW846 6010B analyzed on 10/15/15 0910

Metals, Total

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/12/15	Analysis Date 10/12/15				
Comments: Analyzed past the 28 days holding time.					
Mercury	SW846 7471A	ND	mg/kg	0.0145	0.0435



Wisconsin State Laboratory of Hygiene
 2601 Agriculture Drive, PO Box 7996
 Madison, WI 53707-7996
 (800)442-4618 - FAX (608)224-6213
<http://www.slh.wisc.edu>

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 221956002

Metals, Total

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/12/15	Analysis Date 10/13/15				
Comments: Analyzed past the 180 days holding time.					
Cadmium	SW846 6010B	ND	mg/kg	0.0966	0.290
Chromium	SW846 6010B	12.1	mg/kg	0.483	1.55
Copper	SW846 6010B	7.14	mg/kg	0.483	1.55
Lead	SW846 6010B	ND	mg/kg	0.966	2.90
Prep Date 10/12/15	Analysis Date 10/13/15				
Comments: Analyzed past the 180 days holding time.					
Arsenic	SW846 6010B	4.26	mg/kg	0.966	2.90
Prep Date 10/14/15	Analysis Date 10/15/15				
Comments: Analyzed past the 180 days holding time.					
Nickel	SW846 6010B	6.12	mg/kg	0.466	1.49
Zinc	SW846 6010B	26.4	mg/kg	0.466	1.49

List of Abbreviations:

LOD = Level of detection
 LOQ = Level of quantification
 ND = None detected. Results are less than the LOD
 F next to result = Result is between LOD and LOQ
 Z next to result = Result is between 0 (zero) and LOD
 if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see <http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation>
 Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.
 Results relate only to the items tested.
 This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.
 The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.



Wisconsin State Laboratory of Hygiene
2601 Agriculture Drive, PO Box 7996
Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
<http://www.slh.wisc.edu>

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790

NELAP LAB ID: E37658

EPA LAB ID: WI00007

WI DATCP ID: 105-415

WSLH Sample: 221956002

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262

Inorganic Chemistry: Tracy Hanke, Lab Manager, 608-224-6270

Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282

Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269

Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251

Environmental Toxicology: Dave Webb, Lab Manager, 608-224-6200



Wisconsin State Laboratory of Hygiene
 2601 Agriculture Drive, PO Box 7996
 Madison, WI 53707-7996
 (800)442-4618 - FAX (608)224-6213
 http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 221956003

Report To:
 JOHN REIMER
 DANE COUNTY PARKS, LAND AND WATER
 RESOURCES DEPT
 5201 FEN OAK DR
 ROOM 208
 MADISON, WI 53718

Invoice To:
 JOHN REIMER
 DANE COUNTY PARKS, LAND AND WATER
 RESOURCES DEPT
 5201 FEN OAK DR
 ROOM 208
 MADISON, WI 53718
 Customer ID: 347874

Field #:	DC-3L(B) 0-6.5	ID#:	NA
Project No:		Sample Location:	
Collection End:	3/24/2015 3:28:00 PM	Sample Description:	DC-3L(B) 0-6.5
Collection Start:		Sample Type:	SE-SEDIMENT
Collected By:		Waterbody:	805600
Date Received:	3/25/2015	Point or Outfall:	
Date Reported:	10/16/2015	Sample Depth:	0-6.5
Sample Reason:		Program Code:	
		Region Code:	
		County:	13

Sample Comments

- Analyzed past the 28 days holding time: Method SW846 7471A analyzed on 10/12/15 1013
- Analyzed past the 28 days holding time: Method SW846 7471A analyzed on 10/12/15 1202
- Analyzed past the 180 days holding time: Method 3050B analyzed on 10/12/15 0733
- Analyzed past the 180 days holding time: Method SW846 6010B analyzed on 10/13/15 1226
- Analyzed past the 180 days holding time: Method 3050B analyzed on 10/14/15 0709
- Analyzed past the 180 days holding time: Method SW846 6010B analyzed on 10/15/15 0915

Metals, Total

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/12/15	Analysis Date 10/12/15				
Comments: Analyzed past the 28 days holding time.					
Mercury	SW846 7471A	0.0363F	mg/kg	0.0139	0.0418
Prep Date 10/12/15	Analysis Date 10/13/15				
Comments: Analyzed past the 180 days holding time.					



Wisconsin State Laboratory of Hygiene
 2601 Agriculture Drive, PO Box 7996
 Madison, WI 53707-7996
 (800)442-4618 - FAX (608)224-6213
<http://www.slh.wisc.edu>

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 221956003

Metals, Total

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/12/15	Analysis Date 10/13/15				
Arsenic	SW846 6010B	13.7	mg/kg	0.978	2.93
Cadmium	SW846 6010B	0.227F	mg/kg	0.0978	0.293
Chromium	SW846 6010B	28.3	mg/kg	0.489	1.56
Copper	SW846 6010B	15.4	mg/kg	0.489	1.56
Lead	SW846 6010B	ND	mg/kg	0.978	2.93
Prep Date 10/14/15	Analysis Date 10/15/15				
Comments: Analyzed past the 180 days holding time.					
Nickel	SW846 6010B	11.9	mg/kg	0.478	1.53
Zinc	SW846 6010B	64.4	mg/kg	0.478	1.53

List of Abbreviations:

LOD = Level of detection
 LOQ = Level of quantification
 ND = None detected. Results are less than the LOD
 F next to result = Result is between LOD and LOQ
 Z next to result = Result is between 0 (zero) and LOD
 if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see <http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation>

Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.

Results relate only to the items tested.

This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
 Inorganic Chemistry: Tracy Hanke, Lab Manager, 608-224-6270
 Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
 Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
 Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
 Environmental Toxicology: Dave Webb, Lab Manager, 608-224-6200

SEDIMENT REMOVAL IN DORN CREEK

FOR THE

LAND & WATER RESOURCES DEPARTMENT

DANE COUNTY, WISCONSIN

SEPTEMBER 2017

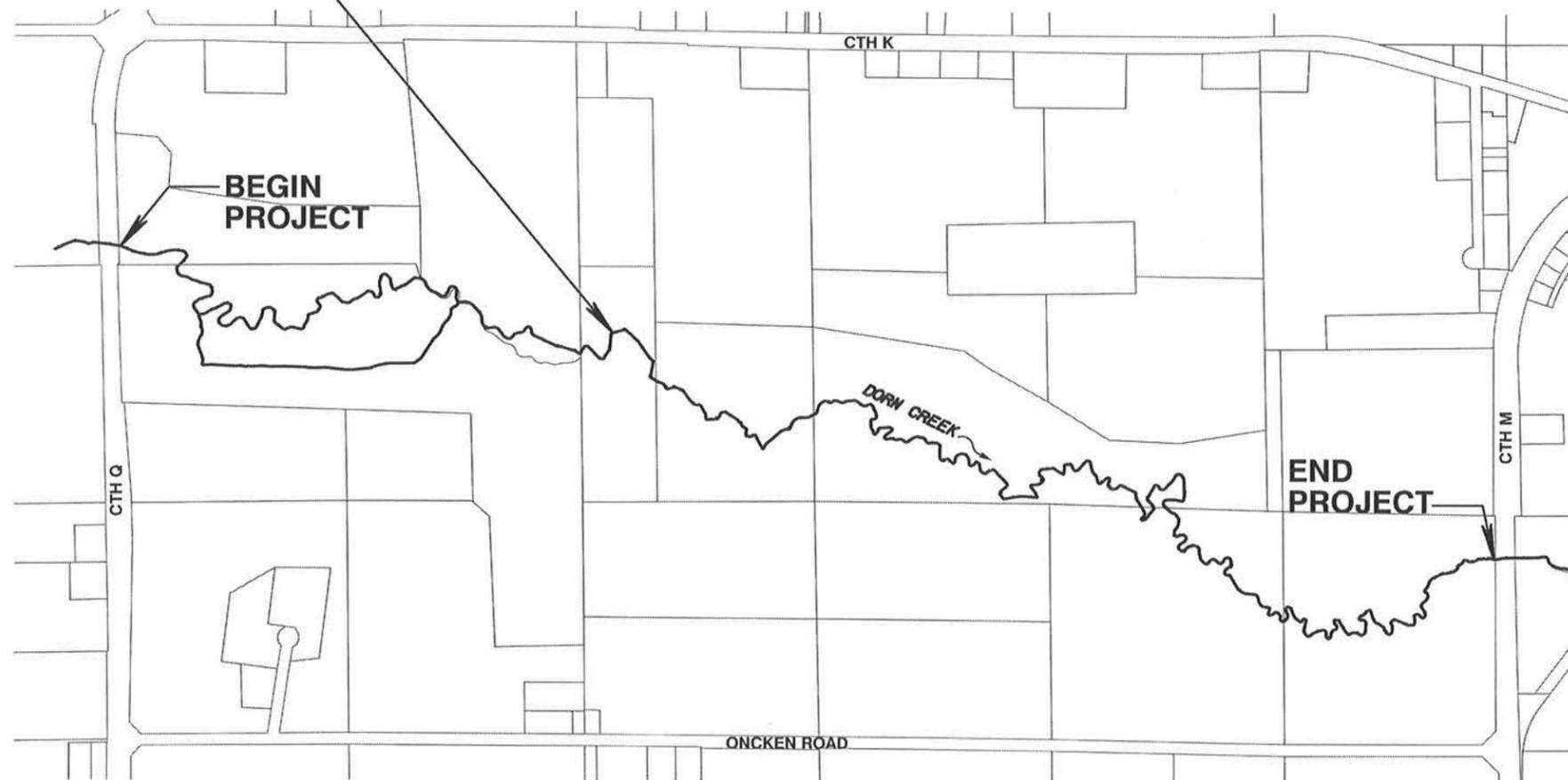


DANE COUNTY,
WISCONSIN

910 West Wingra Drive
Madison, WI 53715
608-251-4843
608-251-8655 fax
www.strand.com

REQUEST FOR BIDS NO. 317033

PROJECT
LOCATION



DRAWING TITLE	SHEET NO.
TITLE PAGE	1
ACCESS PLAN	2
DREDGING SPOILS GRADING AND EROSION CONTROL PLAN	3
FINAL DISPOSITION GRADING PLAN	4
RESTORATION PLAN	5
EROSION CONTROL DETAILS AND SYMBOLS	6
EROSION CONTROL AND RESTORATION DETAILS	7
TYPICAL SECTION DETAILS	8
PLAN AND PROFILE - MAINLINE ALIGNMENT	9-19
PLAN AND PROFILE - SOUTH ALIGNMENT	20-21
CROSS SECTIONS - MAINLINE ALIGNMENT	22-32
CROSS SECTIONS - SOUTH ALIGNMENT	33

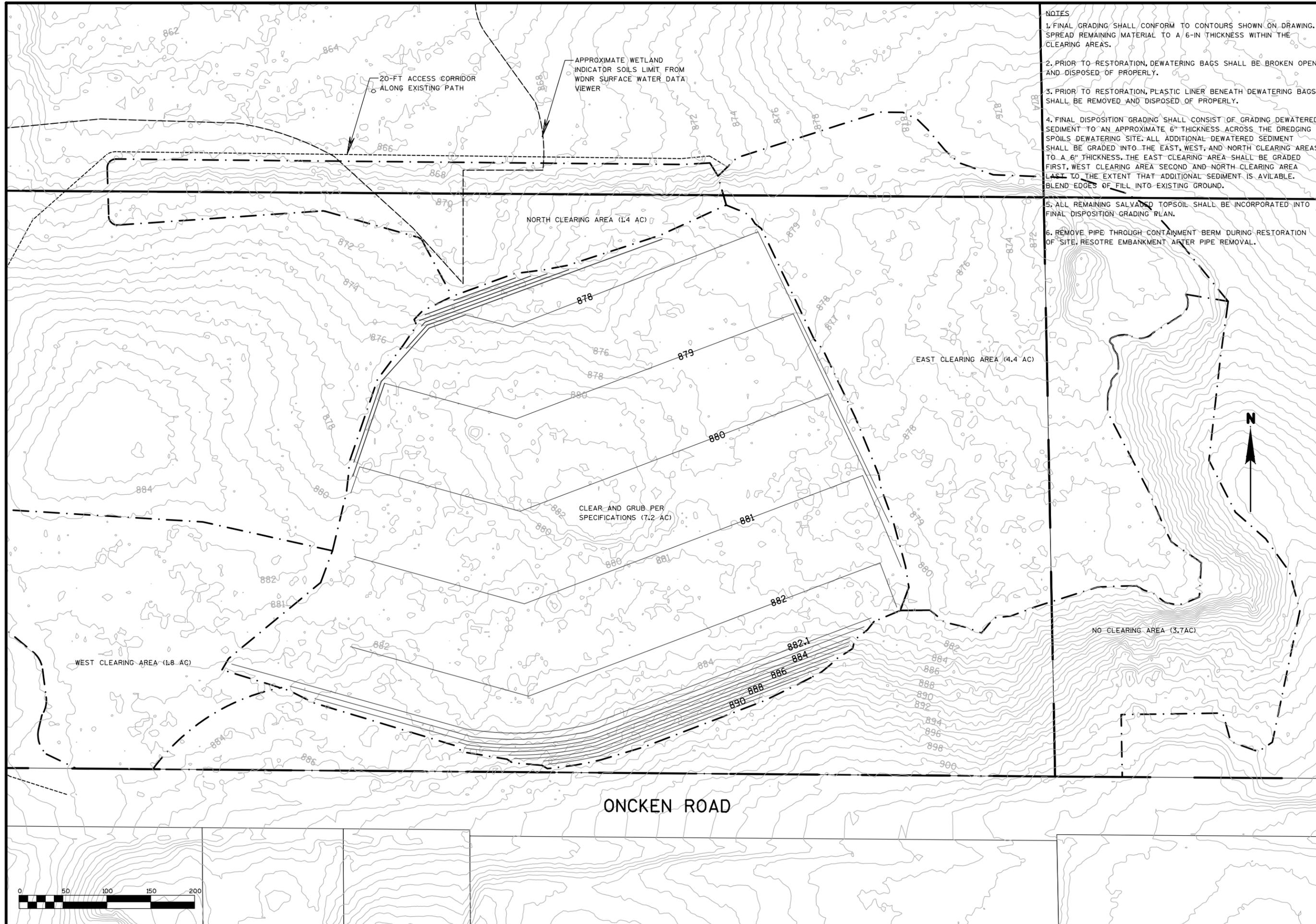


DANE COUNTY

NO SCALE



SHEET
1
JOB NO. 1124.016



- NOTES
1. FINAL GRADING SHALL CONFORM TO CONTOURS SHOWN ON DRAWING. SPREAD REMAINING MATERIAL TO A 6-IN THICKNESS WITHIN THE CLEARING AREAS.
 2. PRIOR TO RESTORATION, DEWATERING BAGS SHALL BE BROKEN OPEN AND DISPOSED OF PROPERLY.
 3. PRIOR TO RESTORATION, PLASTIC LINER BENEATH DEWATERING BAGS SHALL BE REMOVED AND DISPOSED OF PROPERLY.
 4. FINAL DISPOSITION GRADING SHALL CONSIST OF GRADING DEWATERED SEDIMENT TO AN APPROXIMATE 6" THICKNESS ACROSS THE DREDGING SPOILS DEWATERING SITE. ALL ADDITIONAL DEWATERED SEDIMENT SHALL BE GRADED INTO THE EAST, WEST, AND NORTH CLEARING AREAS TO A 6" THICKNESS. THE EAST CLEARING AREA SHALL BE GRADED FIRST, WEST CLEARING AREA SECOND AND NORTH CLEARING AREA LAST TO THE EXTENT THAT ADDITIONAL SEDIMENT IS AVAILABLE. BLEND EDGES OF FILL INTO EXISTING GROUND.
 5. ALL REMAINING SALVAGED TOPSOIL SHALL BE INCORPORATED INTO FINAL DISPOSITION GRADING PLAN.
 6. REMOVE PIPE THROUGH CONTAINMENT BERM DURING RESTORATION OF SITE. RESOTRE EMBANKMENT AFTER PIPE REMOVAL.

DATE	NO.	REVISIONS

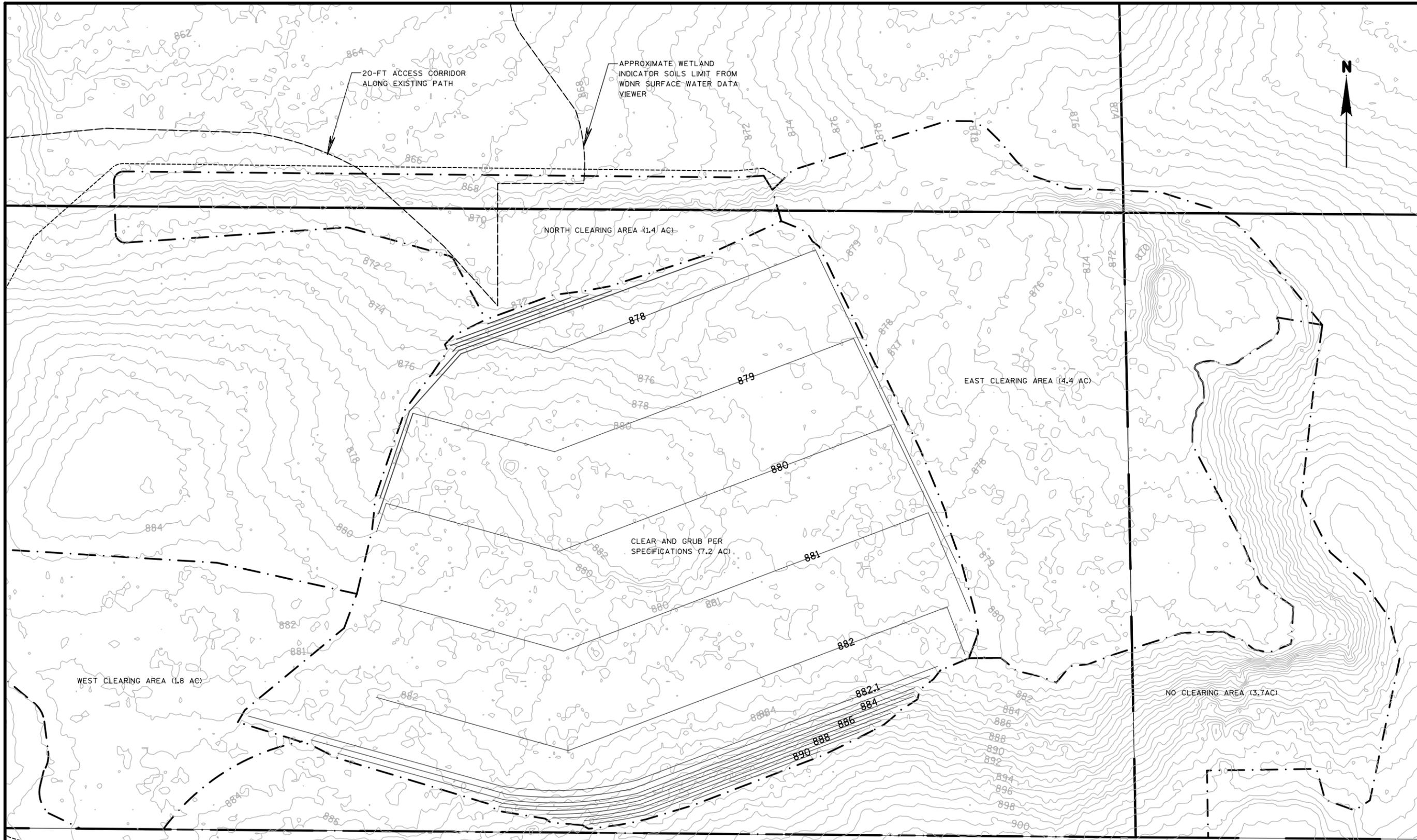
FINAL DISPOSITION GRADING PLAN
PLAN
 SEDIMENT REMOVAL IN DORN CREEK
 DANE COUNTY, WISCONSIN

JOB NO.
1124.016
 PROJECT MGR.
JHL



SHEET
4





DATE:	NO.	REVISIONS

RESTORATION PLAN
 SEDIMENT REMOVAL IN DORN CREEK
 DANE COUNTY, WISCONSIN

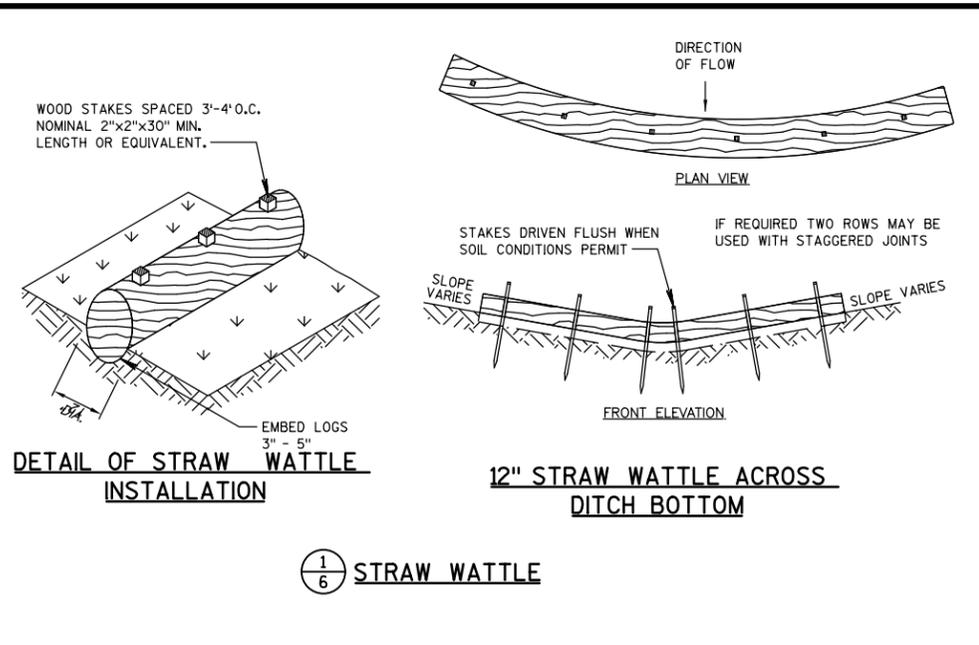
JOB NO.
1124.016
 PROJECT MGR.
JHL



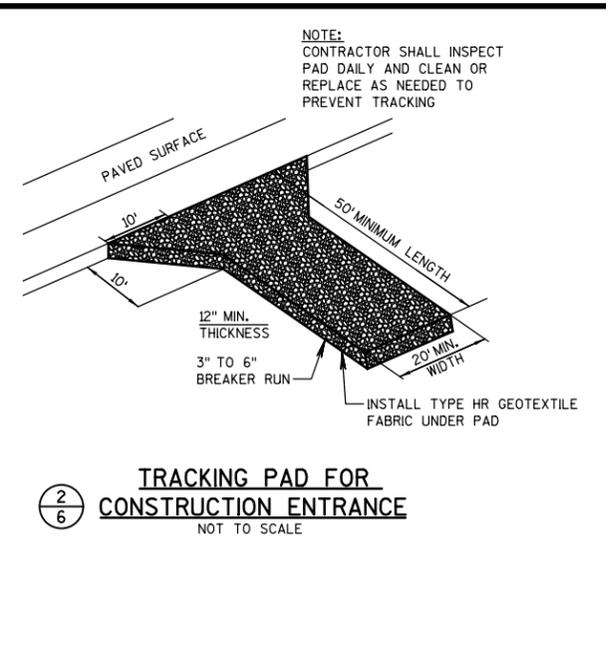
SHEET
5

1. ALL AREAS BEING FILLED WITH SEDIMENT SHALL BE RESTORED WITH COOL SEASON GRASS SEED MIXTURE, COVER CROP, AND MULCH. ALL SLOPES GREATER THAN 1 PERCENT SHALL RECEIVE AN EROSION MAT (CLASS 1, URBAN TYPE A), RATHER THAN MULCH.
2. AREAS PREVIOUSLY RESTORED WITH EROSION MAT THAT ARE DAMAGED SHALL BE REGRADED AND RESTORED WITH COOL SEASON GRASS SEED MIXTURE, COVER CROP, AND EROSION MAT (CLASS 1, URBAN TYPE A).
3. DISTURBANCE ALONG 20-FT ACCESS CORRIDOR ALONG EXISTING PATH SHALL BE RESTORED WITH COOL SEASON GRASS SEED MIXTURE, COVER CROP, AND MULCH.

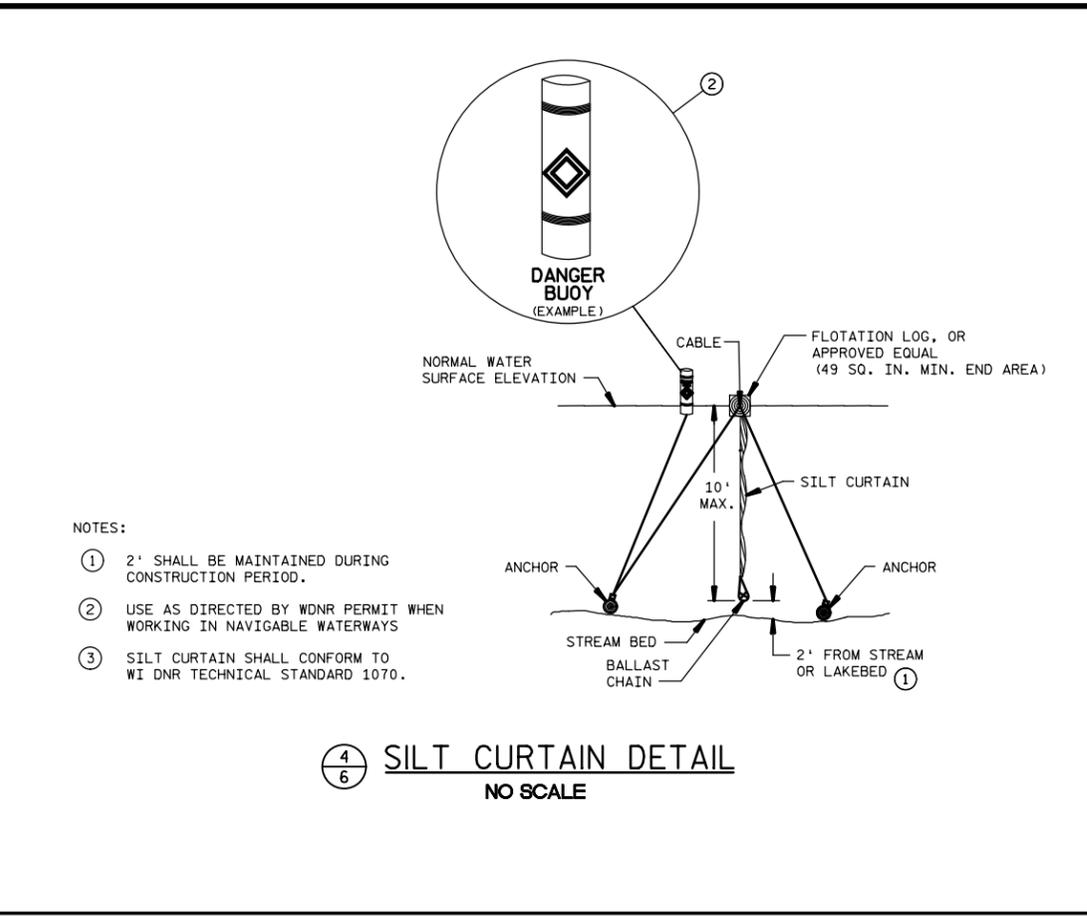




1/6 STRAW WATTLE



2/6 TRACKING PAD FOR CONSTRUCTION ENTRANCE
NOT TO SCALE



4/6 SILT CURTAIN DETAIL
NO SCALE

STANDARD SYMBOLS

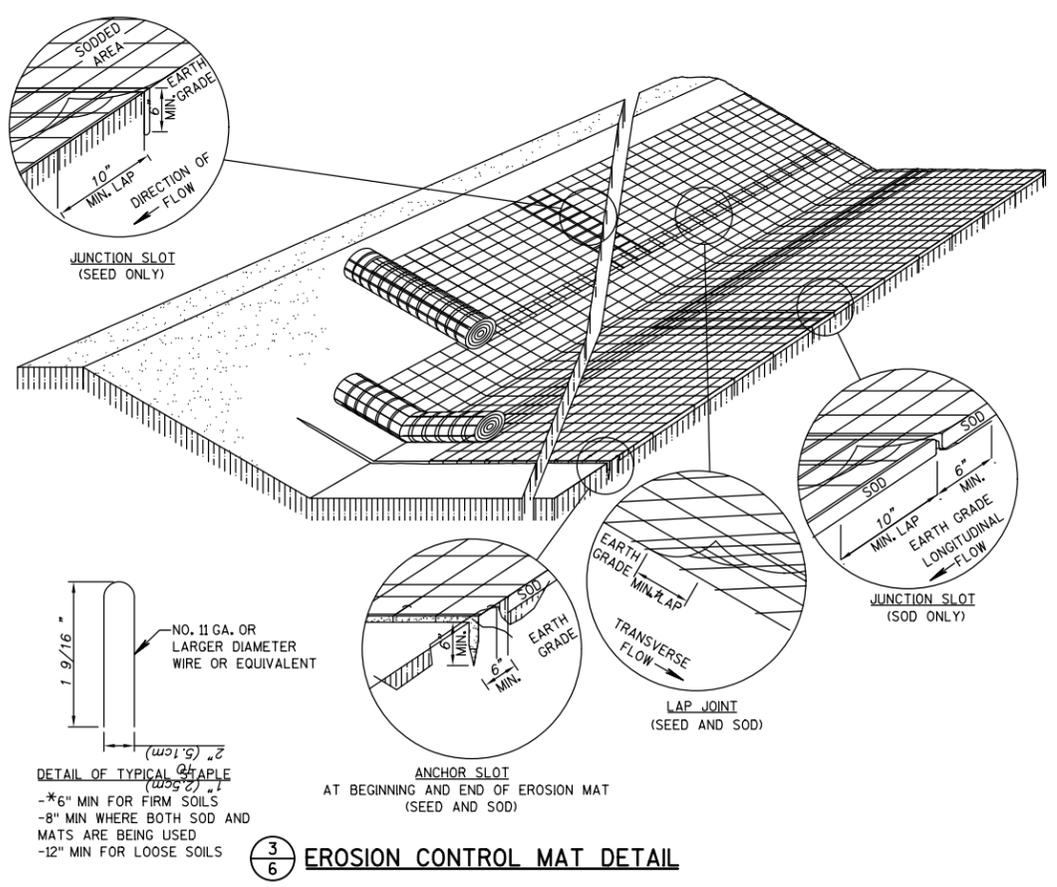
TEMPORARY EASEMENT	PAVED ROAD
PROPERTY LINE AND/OR RIGHT OF WAY	EXISTING CULVERT
SOIL BORING	NOTATION FOR COMBUSTIBLE FLUIDS
BENCH MARK	F FORCE MAIN
PROPERTY STAKE	W WATER MAIN
IRON PIPE	SS STORM SEWER
INLET	SAN SANITARY SEWER
CURB WATER BOX	6" SAN EXISTING SANITARY SEWER AND MANHOLE
ROAD SIGN	T-T TELEPHONE OR TV CABLE
PRIVATE WELL	FO-FO FIBER OPTIC CABLE
EXISTING UTILITY POLE	G-G GAS MAIN
BURIED TELEPHONE CABLE PEDESTAL SIGN	E-E UNDERGROUND ELECTRIC CABLE
LIGHT POLE	ORIGINAL GROUND IN PROFILE
MAIL BOX	FENCE
OBJECTS TO BE REMOVED	GUARD RAIL
EXISTING DECIDUOUS TREE	SILT FENCE
EXISTING CONIFEROUS TREE	CONTROL POINT
WETLAND AREA	GUY WIRE & ANCHOR

NOTES:
1. DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- VARIATIONS IN THE DIMENSIONS OR MATERIALS SHOWN HEREON SHALL BE PERMITTED IF THEY PROVIDE EQUIVALENT PROTECTION AND MATERIAL STRENGTH.
- LAP JOINTS SHALL NOT BE PLACED IN THE BOTTOM OF V-SHAPED DITCHES.
- JUNCTION SLOTS ON ADJACENT STRIPS OF MATTING SHALL BE STAGGERED A MINIMUM OF 4 FEET APART.
- EDGES OF THE EROSION MAT SHALL BE IMPRESSED IN THE SOIL.
- EROSION MAT SHALL BE MEASURED AND PAID FOR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

EROSION MAT OVER SOD
- ONLY JUTE FABRIC WILL BE PERMITTED OVER SOD.
- FLOOD STAKES FOR SOD MAY BE OMITTED IF THE EXISTING SLOPE AND SOIL CONDITIONS SO PERMIT.
- THE WIDTH OF EROSION MAT SHALL ALWAYS EQUAL THE SOD WIDTH.
- SOD STRIPS MAY BE PLACED EITHER LONGITUDINALLY OR TRANSVERSELY TO THE FLOW LINE OF THE DITCH.

EROSION MAT OVER SEEDING
- JUNCTION OR ANCHOR SLOTS SHALL BE AT MINIMUM INTERVALS OF 100 FEET ON GRADES UP TO AND INCLUDING 3 PERCENT, AND 50 FEET ON GRADES EXCEEDING 3 PERCENT.



3/6 EROSION CONTROL MAT DETAIL

NO.	REVISIONS	DATE:

EROSION CONTROL DETAILS AND SYMBOLS
 SEDIMENT REMOVAL IN DORN CREEK
 DANE COUNTY, WISCONSIN

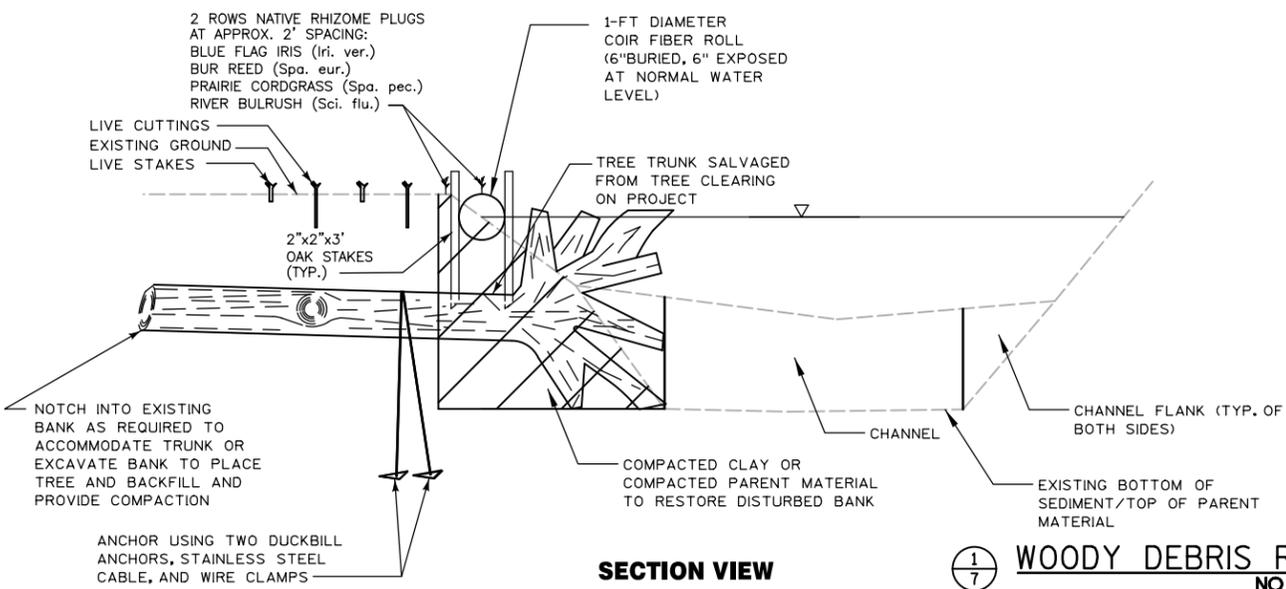
JOB NO. 1124.016
 PROJECT MGR. JHL



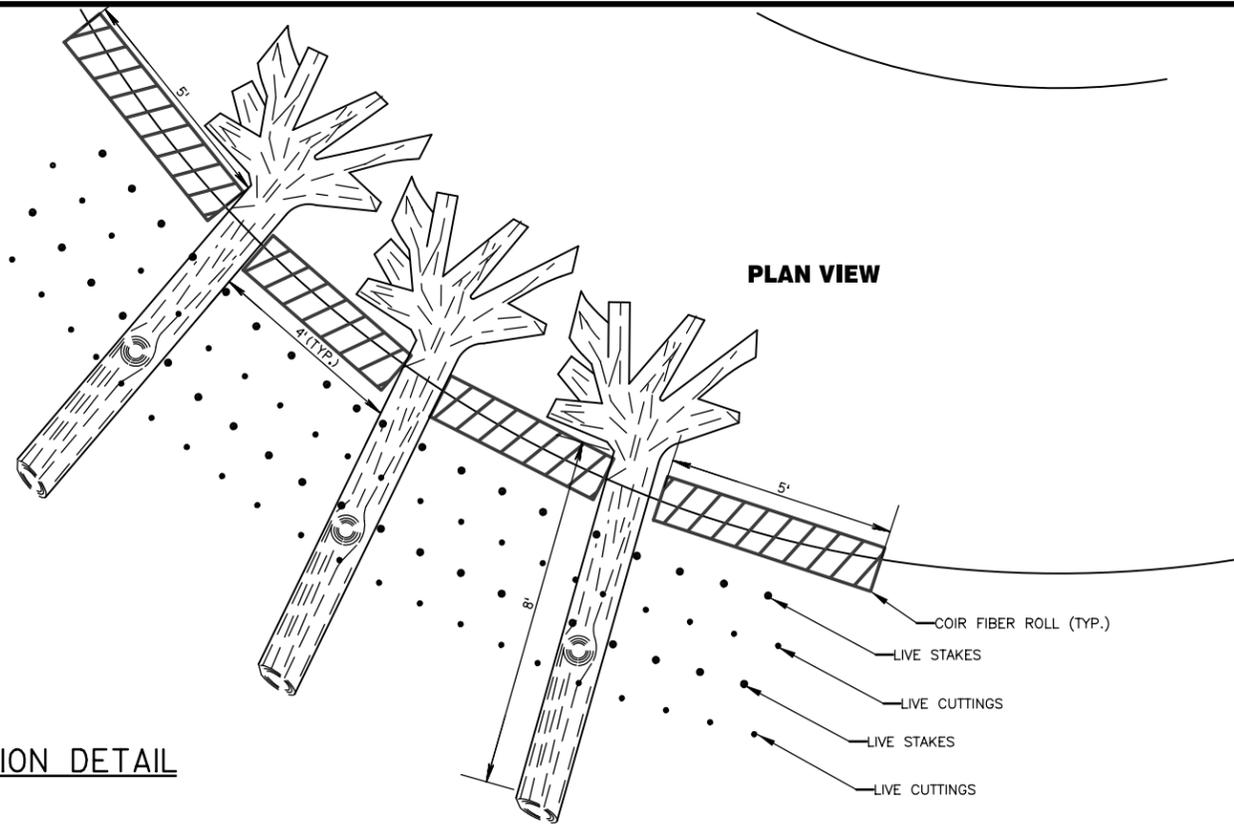
SHEET 6

NOTES:

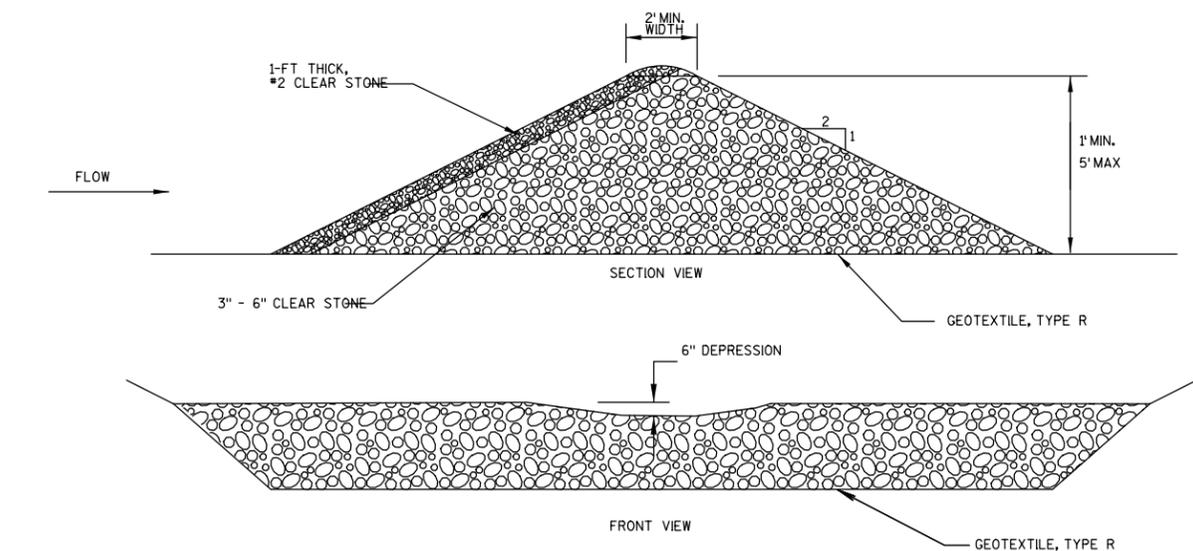
1. USE 12" MAX. DIA. HARDWOOD TREE TRUNKS FOR WOODY DEBRIS.
2. TREE TRUNK WITH ROOTWARD INTACT WILL BE HARVESTED FROM AREAS CLEARED AT DREDGING SPOILS DEWATERING SITE.
3. PLANT LIVE STAKES, LIVE CUTTINGS, AND PLUGS PER SPECIFICATION SECTION 02999.
4. CLEAR OVERBANK AREA ONLY AS NECESSARY TO INSTALL WOODY DEBRIS RESTORATION DETAIL.



1
7 **WOODY DEBRIS RESTORATION DETAIL**
NO SCALE



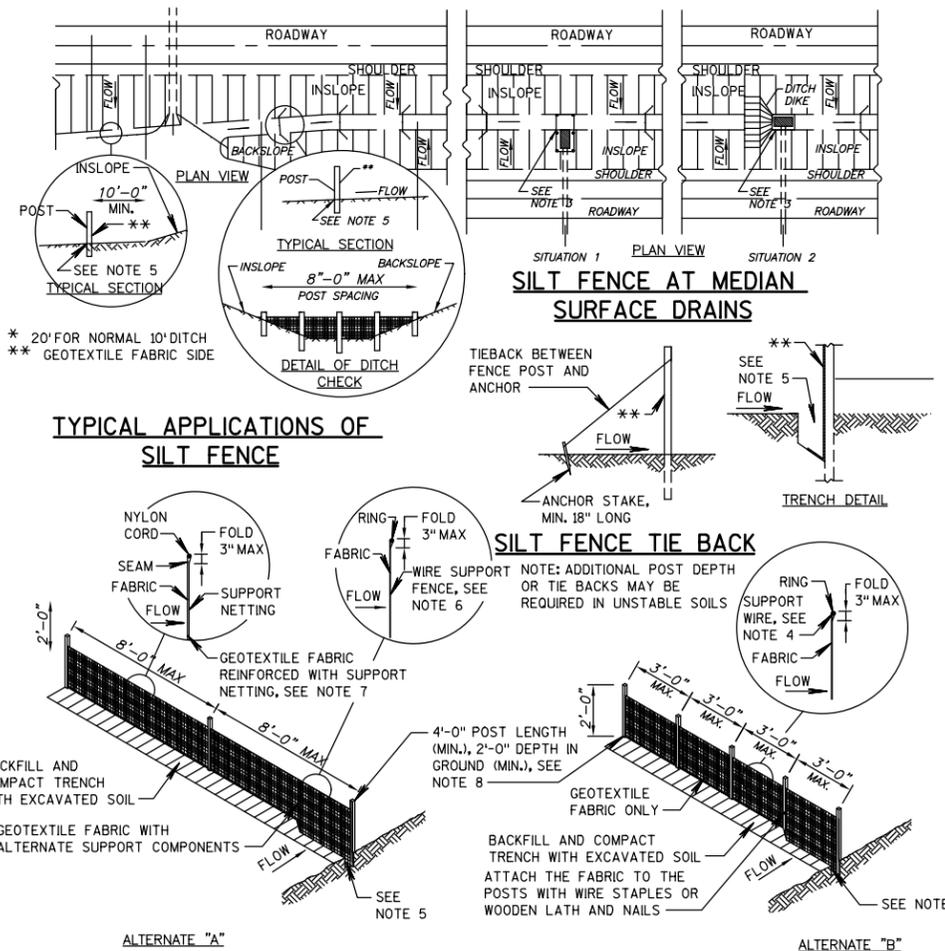
PLAN VIEW



2
7 **TEMPORARY STONE CHECK DAM**
NO SCALE

NOTES:

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.
2. WHEN POSSIBLE THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE, WITH THE ENDS POINTING UPSLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.
3. CROSS BRACE WITH 2"x4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
4. MINIMUM 14 GAGE WIRE REQUIRED, FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" C-C.
5. EXCAVATE TRENCH A MINIMUM OF 4" WIDE AND 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC, FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
6. WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". SECURE TOP OF GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C-C.
7. GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLYPROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF 1/4" OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.
8. STEEL POSTS SHALL BE STUDDED "TEE" OR "U" TYPE WITH A MINIMUM WEIGHT OF 1.2 LBS/LINEAR FOOT WITHOUT ANCHORS, OR ANCHORS SUFFICIENT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIAMETER, OR 2 1/2" X 3 1/2", EXCEPT WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTING SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OAK OR HICKORY.
9. ALTERNATES A AND B ARE EQUAL AND EITHER MAY BE USED.



TYPICAL APPLICATIONS OF SILT FENCE

SILT FENCE AT MEDIAN SURFACE DRAINS

SILT FENCE TIE BACK

3
7 **SILT FENCE DETAIL**
NO SCALE

NO.	REVISIONS	DATE:

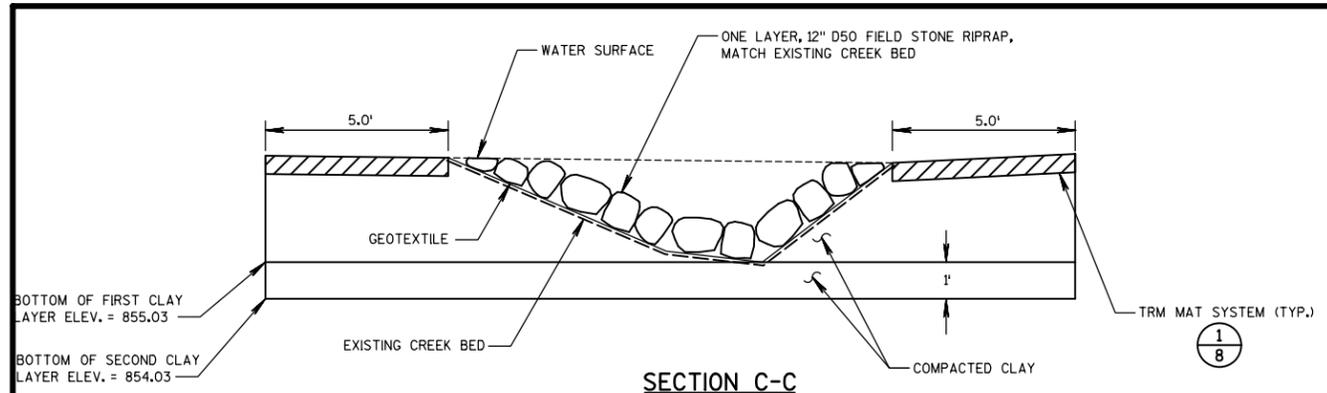
EROSION CONTROL AND RESTORATION DETAILS

SEDIMENT REMOVAL IN DORN CREEK
DANE COUNTY, WISCONSIN

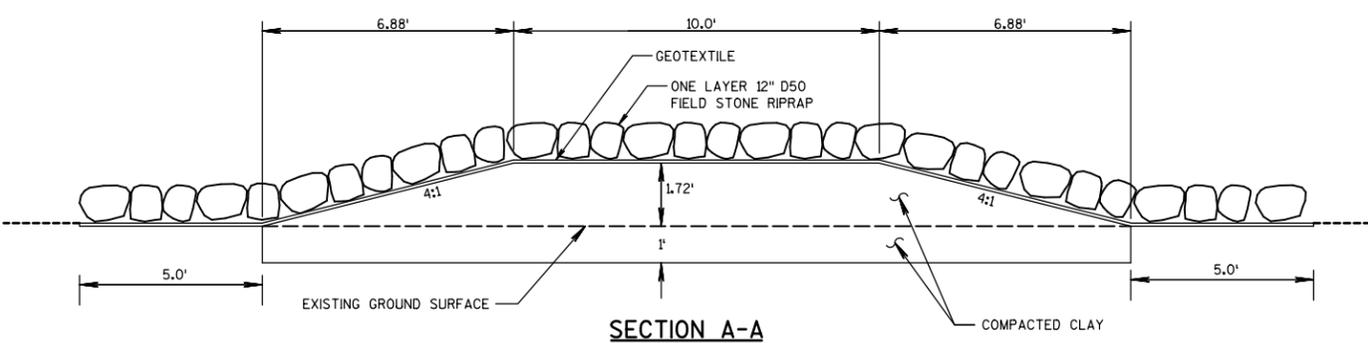
JOB NO.
1124.016
PROJECT MGR.
JHL



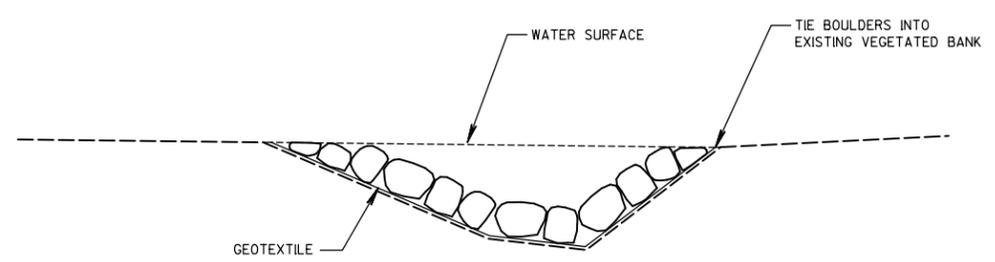
SHEET
7



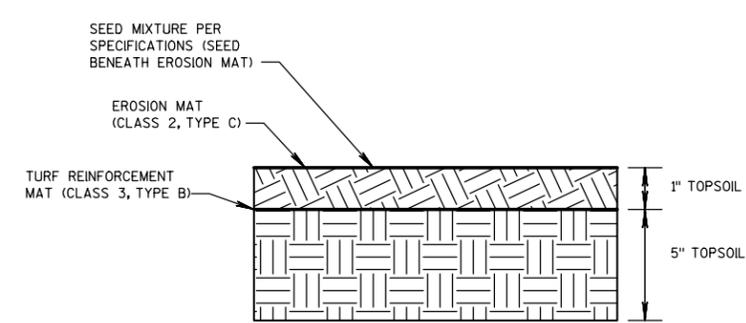
SECTION C-C



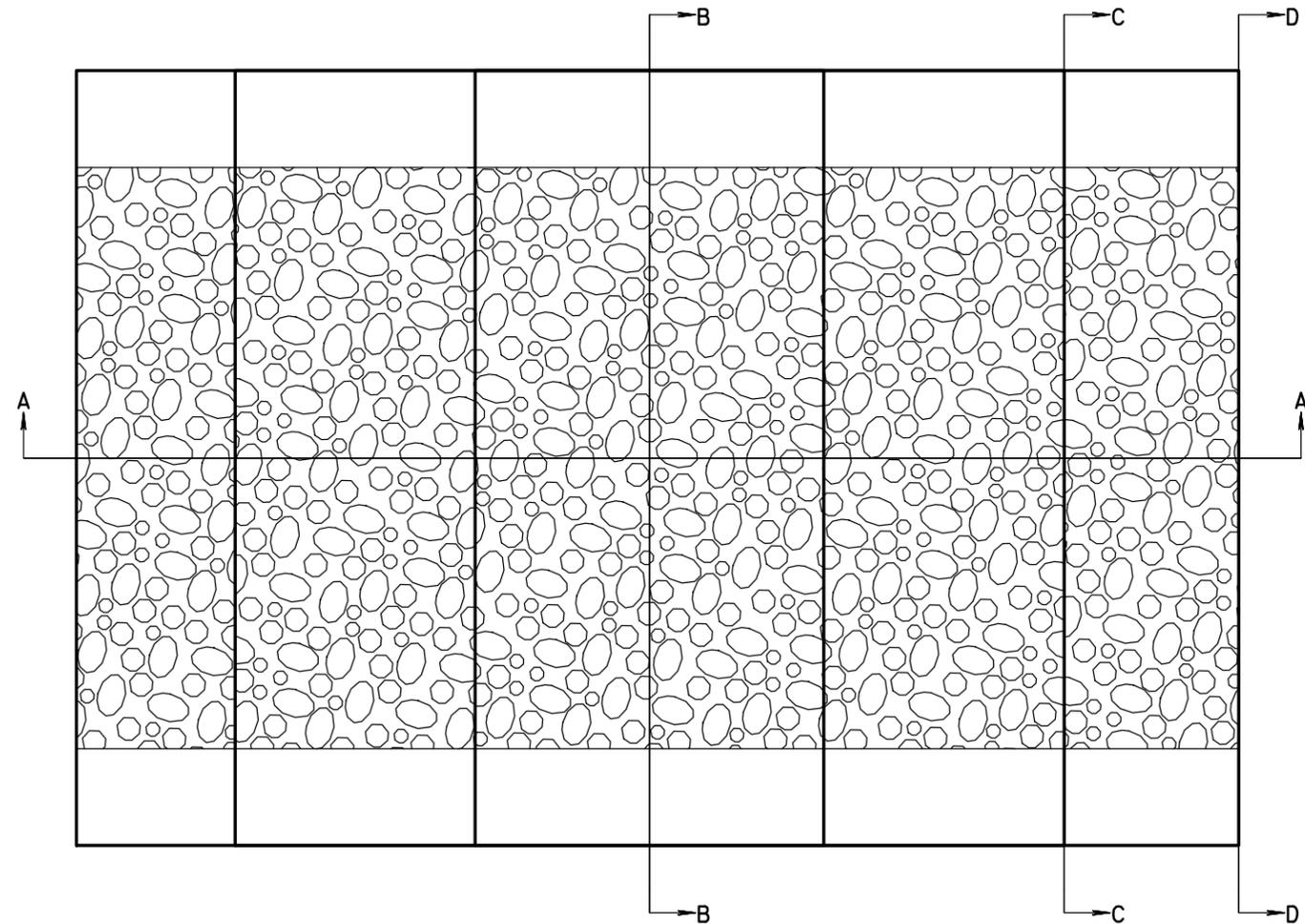
SECTION A-A



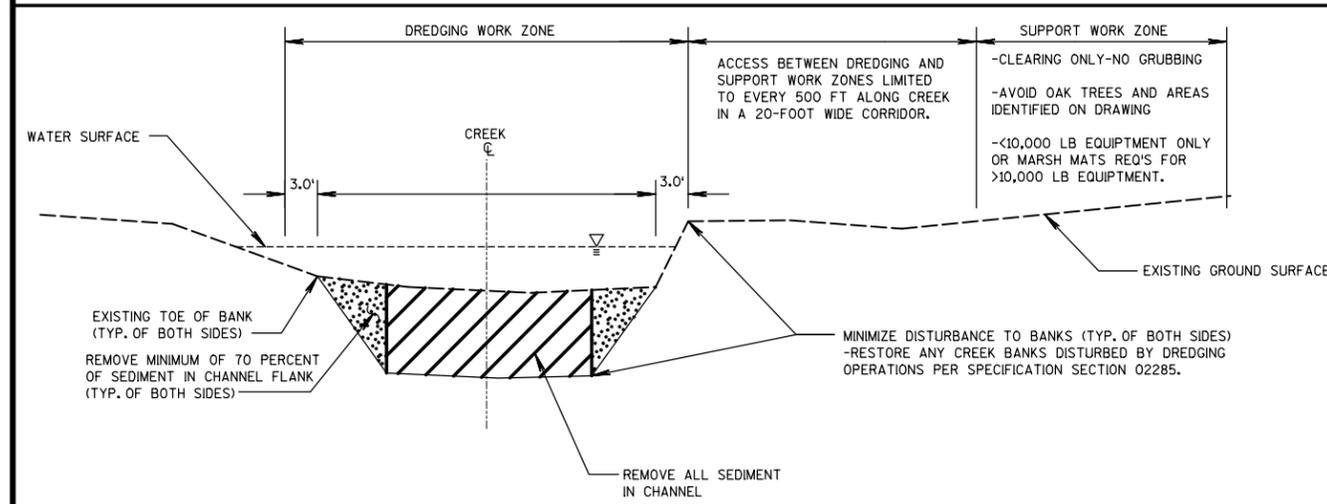
SECTION D-D



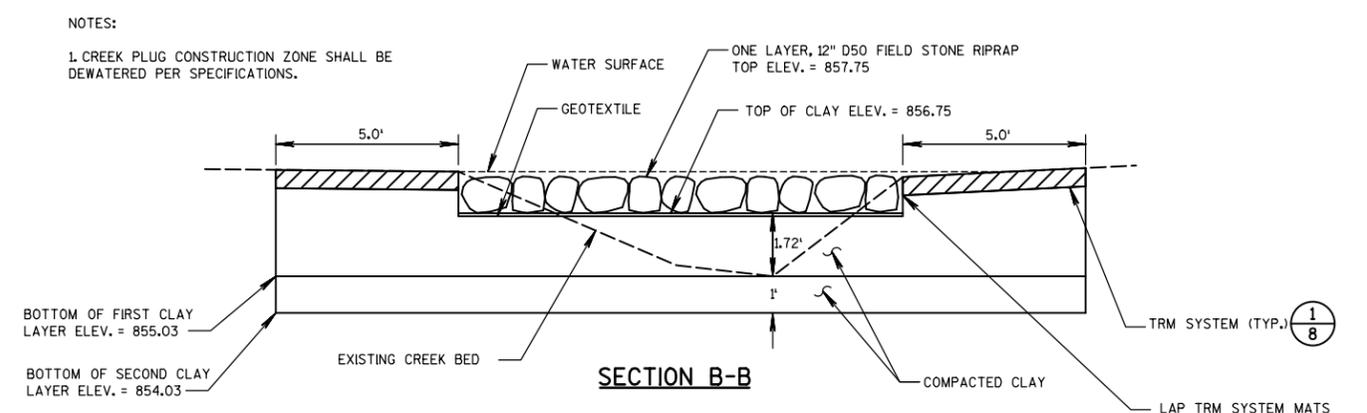
TRM (TURF REINFORCEMENT MAT) SYSTEM
NO SCALE



TYPICAL SECTION DETAILS
SEDIMENT REMOVAL IN DORN CREEK
DANE COUNTY, WISCONSIN



HYDRAULIC DREDGING TYPICAL SECTION AND WORK ZONES
NO SCALE



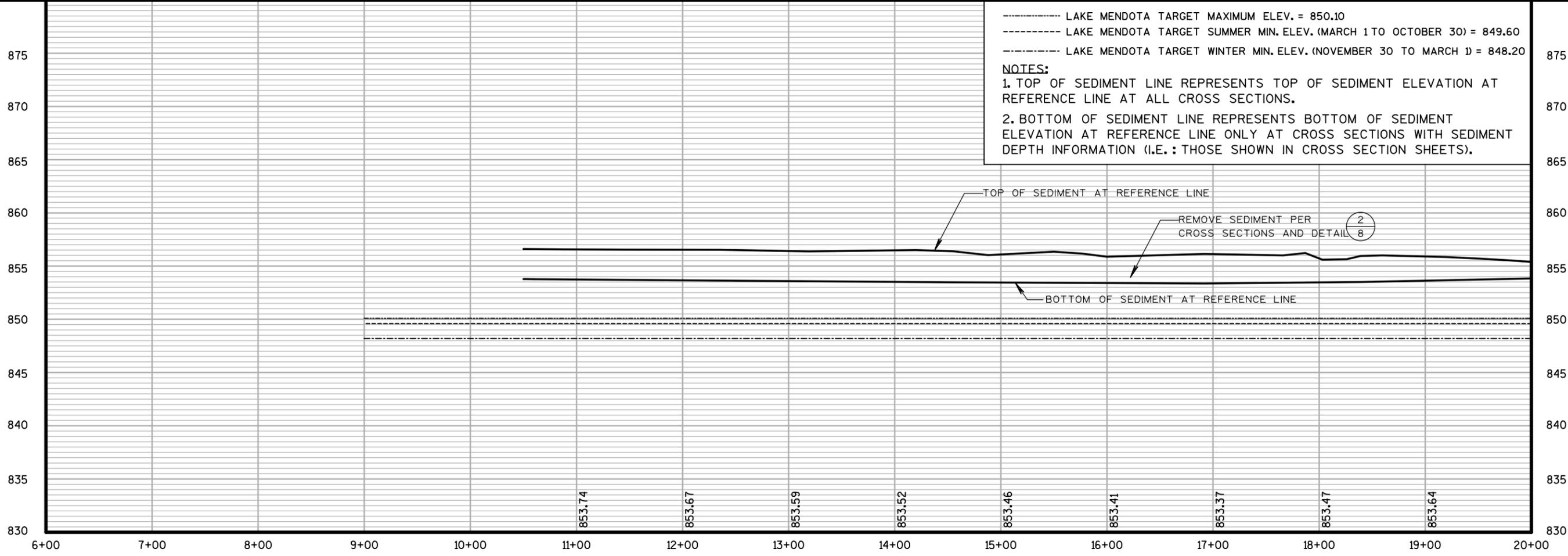
CREEK PLUG DETAIL
NO SCALE

DATE:	REVISIONS	NO.



	EXISTING TOP OF BANK
	EXISTING TOE OF BANK
	CROSS SECTION LOCATION SHOWN IN CROSS SECTION SHEETS
	CROSS SECTIONS OF EXISTING GROUND AND CREEK SURFACE ONLY

DATE:									
REVISIONS									
NO.									



----- LAKE MENDOTA TARGET MAXIMUM ELEV. = 850.10
 ----- LAKE MENDOTA TARGET SUMMER MIN. ELEV. (MARCH 1 TO OCTOBER 30) = 849.60
 ----- LAKE MENDOTA TARGET WINTER MIN. ELEV. (NOVEMBER 30 TO MARCH 1) = 848.20

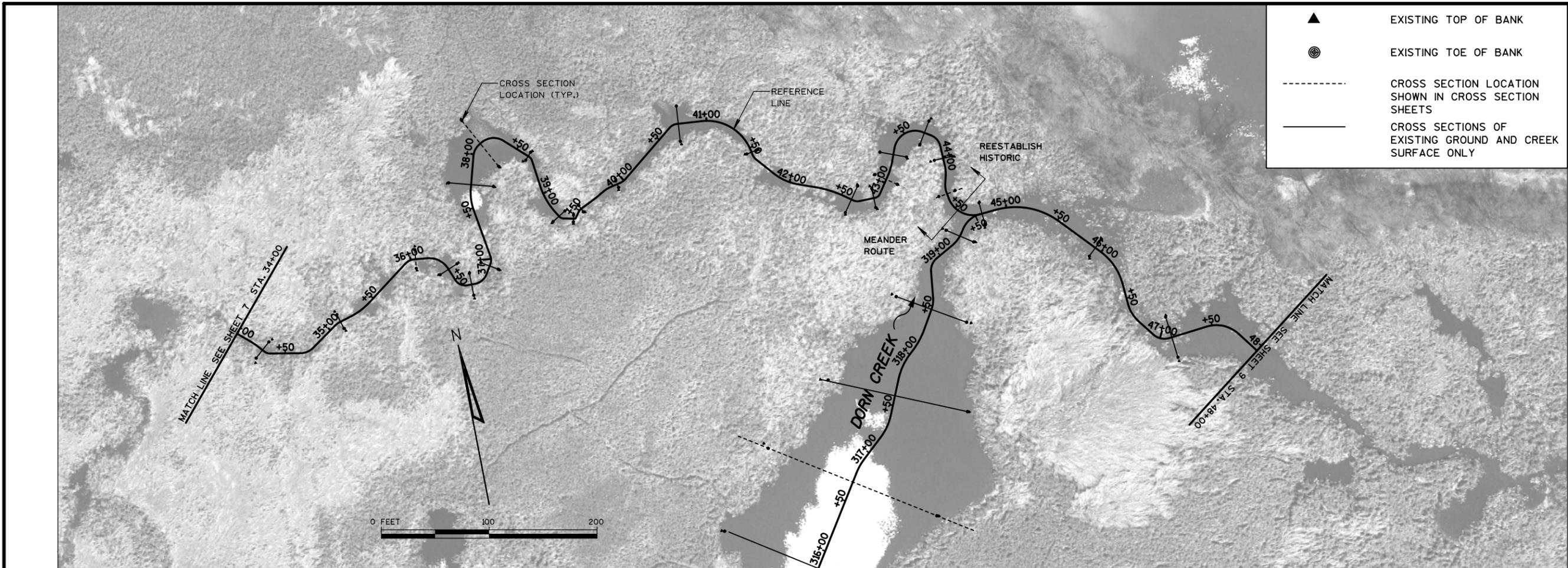
NOTES:
 1. TOP OF SEDIMENT LINE REPRESENTS TOP OF SEDIMENT ELEVATION AT REFERENCE LINE AT ALL CROSS SECTIONS.
 2. BOTTOM OF SEDIMENT LINE REPRESENTS BOTTOM OF SEDIMENT ELEVATION AT REFERENCE LINE ONLY AT CROSS SECTIONS WITH SEDIMENT DEPTH INFORMATION (I.E. : THOSE SHOWN IN CROSS SECTION SHEETS).

PLAN AND PROFILE - MAINLINE ALIGNMENT
 SEDIMENT REMOVAL IN DORN CREEK
 DANE COUNTY
 DANE COUNTY, WISCONSIN

JOB NO.
 1124.016
 PROJECT MGR.
 JHL

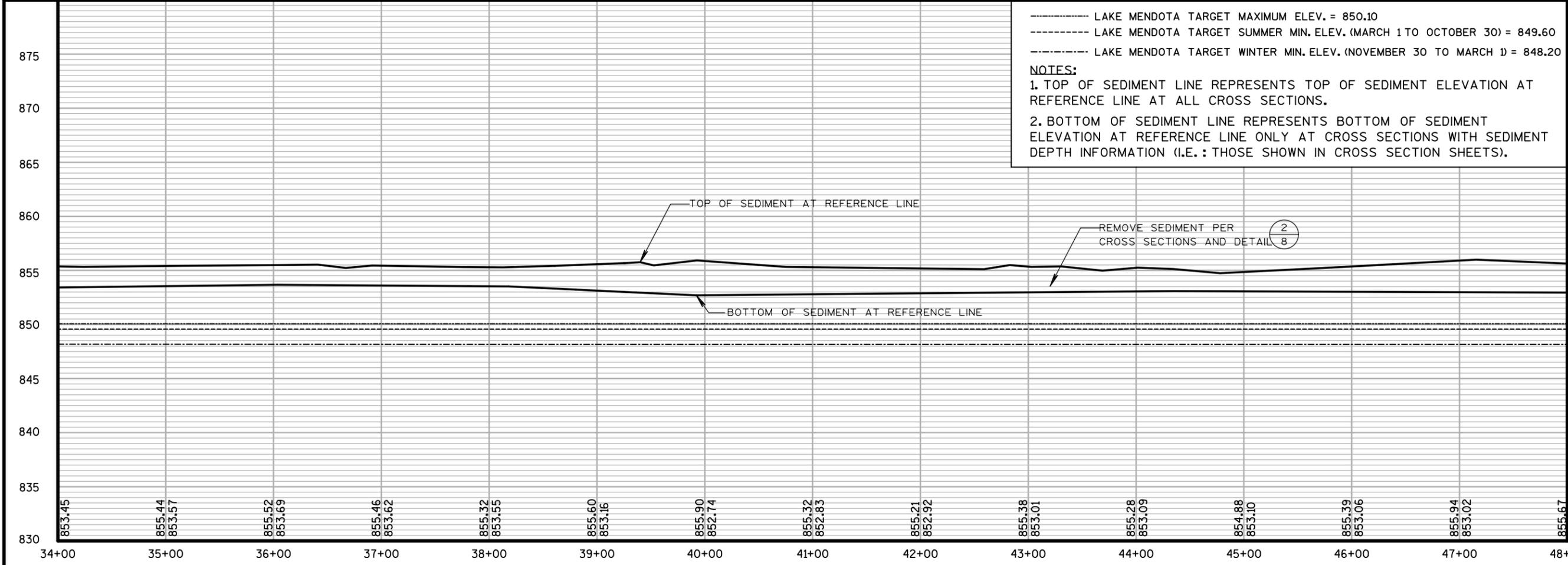


SHEET
 9



▲ EXISTING TOP OF BANK
 ⊙ EXISTING TOE OF BANK
 - - - - - CROSS SECTION LOCATION SHOWN IN CROSS SECTION SHEETS
 ———— CROSS SECTIONS OF EXISTING GROUND AND CREEK SURFACE ONLY

NO.	REVISIONS	DATE



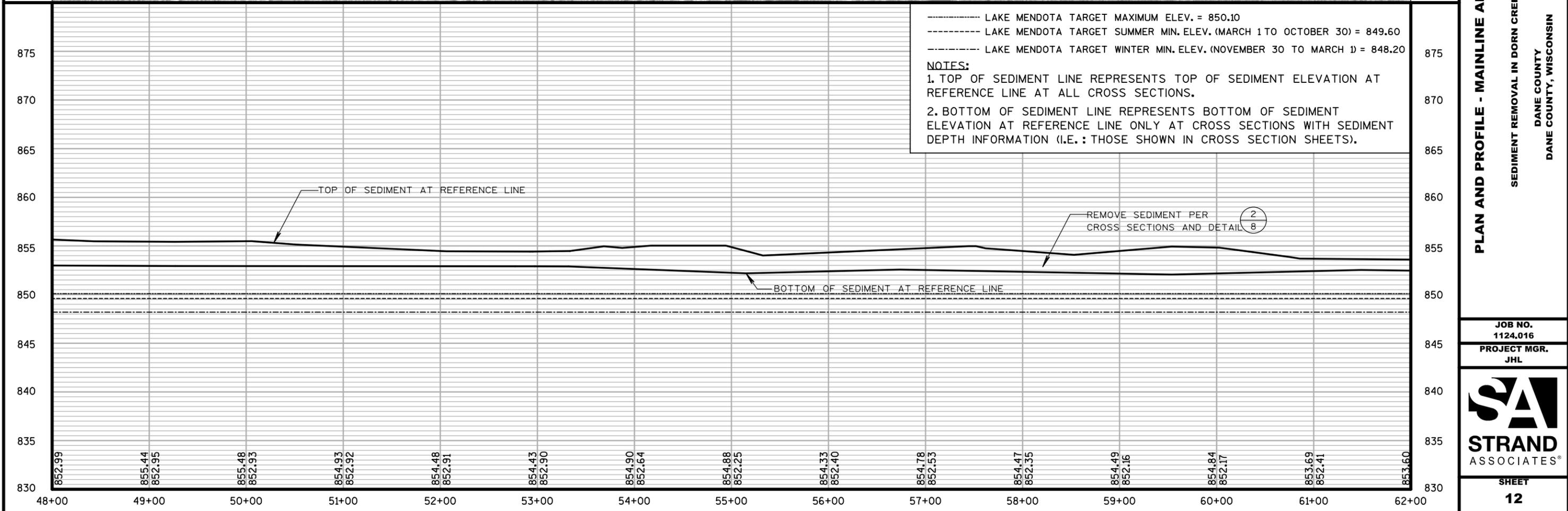
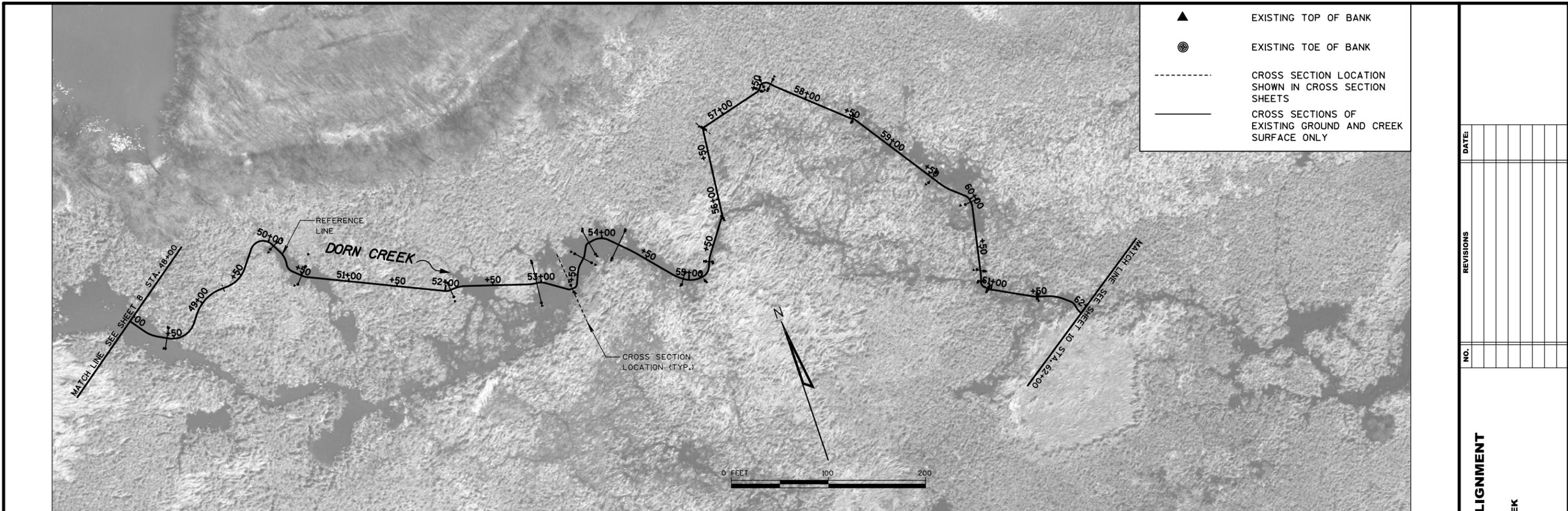
----- LAKE MENDOTA TARGET MAXIMUM ELEV. = 850.10
 - - - - - LAKE MENDOTA TARGET SUMMER MIN. ELEV. (MARCH 1 TO OCTOBER 30) = 849.60
 - - - - - LAKE MENDOTA TARGET WINTER MIN. ELEV. (NOVEMBER 30 TO MARCH 1) = 848.20

NOTES:
 1. TOP OF SEDIMENT LINE REPRESENTS TOP OF SEDIMENT ELEVATION AT REFERENCE LINE AT ALL CROSS SECTIONS.
 2. BOTTOM OF SEDIMENT LINE REPRESENTS BOTTOM OF SEDIMENT ELEVATION AT REFERENCE LINE ONLY AT CROSS SECTIONS WITH SEDIMENT DEPTH INFORMATION (I.E. : THOSE SHOWN IN CROSS SECTION SHEETS).

PLAN AND PROFILE - MAINLINE ALIGNMENT
 SEDIMENT REMOVAL IN DORN CREEK
 DANE COUNTY
 DANE COUNTY, WISCONSIN

JOB NO. 1124.016
 PROJECT MGR. JHL

 SHEET 11

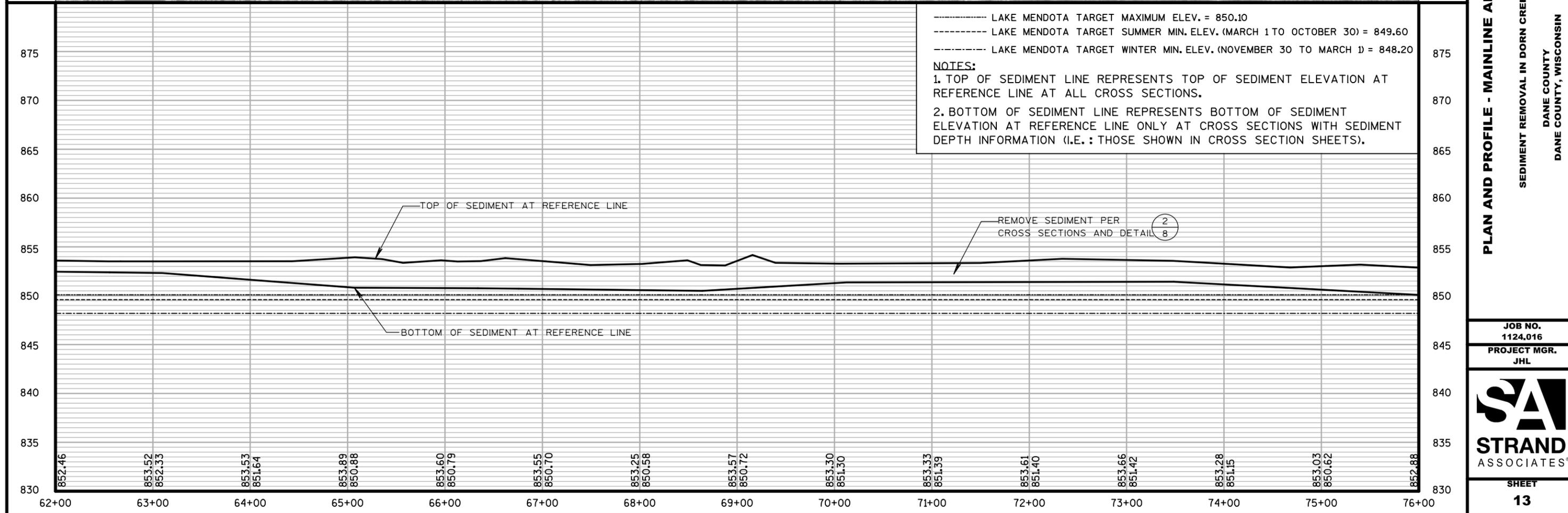
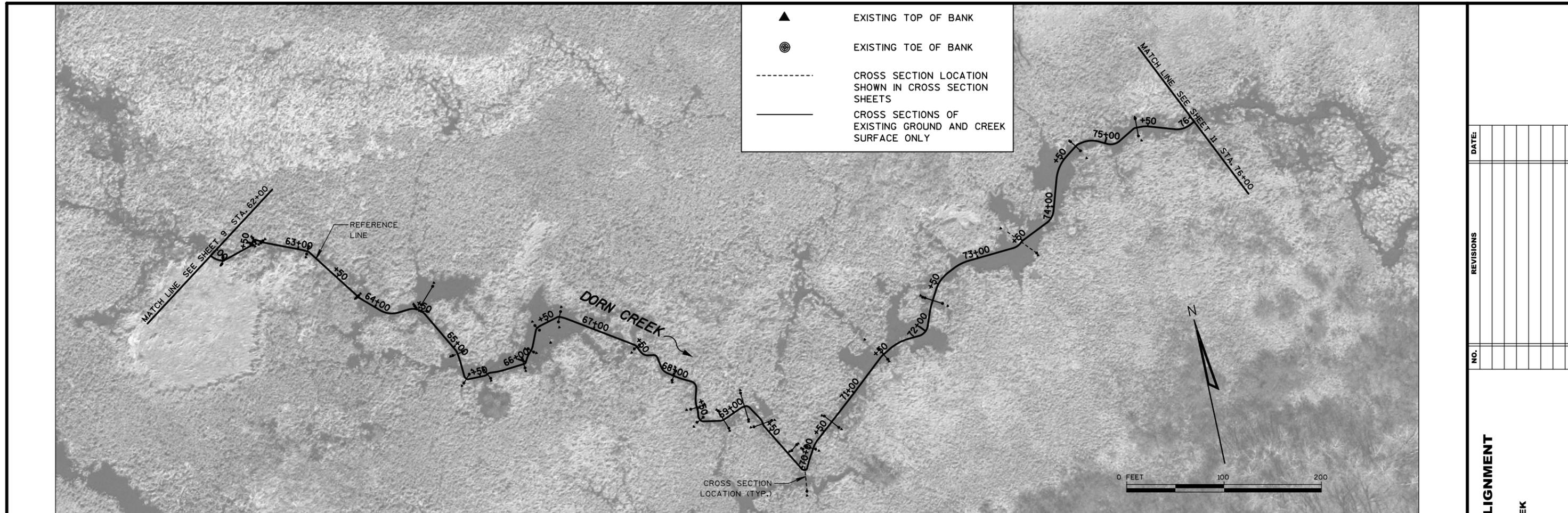


DATE:									
REVISIONS									
NO.									

PLAN AND PROFILE - MAINLINE ALIGNMENT
 SEDIMENT REMOVAL IN DORN CREEK
 DANE COUNTY
 DANE COUNTY, WISCONSIN

JOB NO. 1124.016
 PROJECT MGR. JHL

SHEET 12



NO.	REVISIONS	DATE

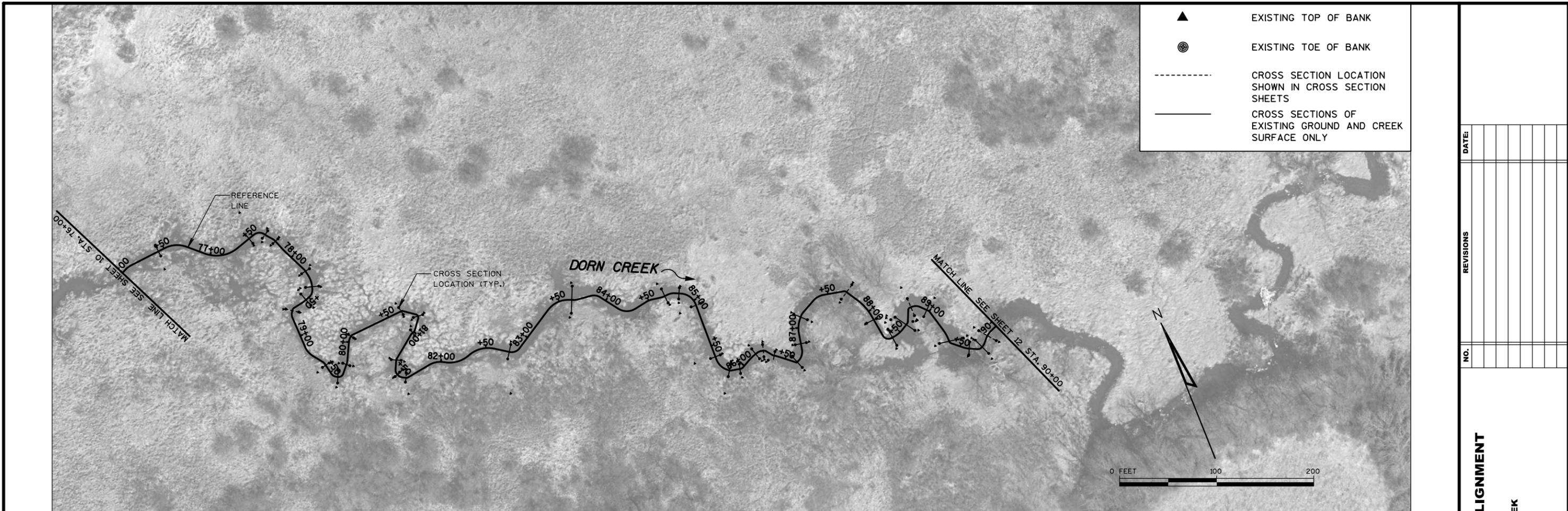
PLAN AND PROFILE - MAINLINE ALIGNMENT

SEDIMENT REMOVAL IN DORN CREEK
DANE COUNTY
DANE COUNTY, WISCONSIN

JOB NO.
1124.016
PROJECT MGR.
JHL

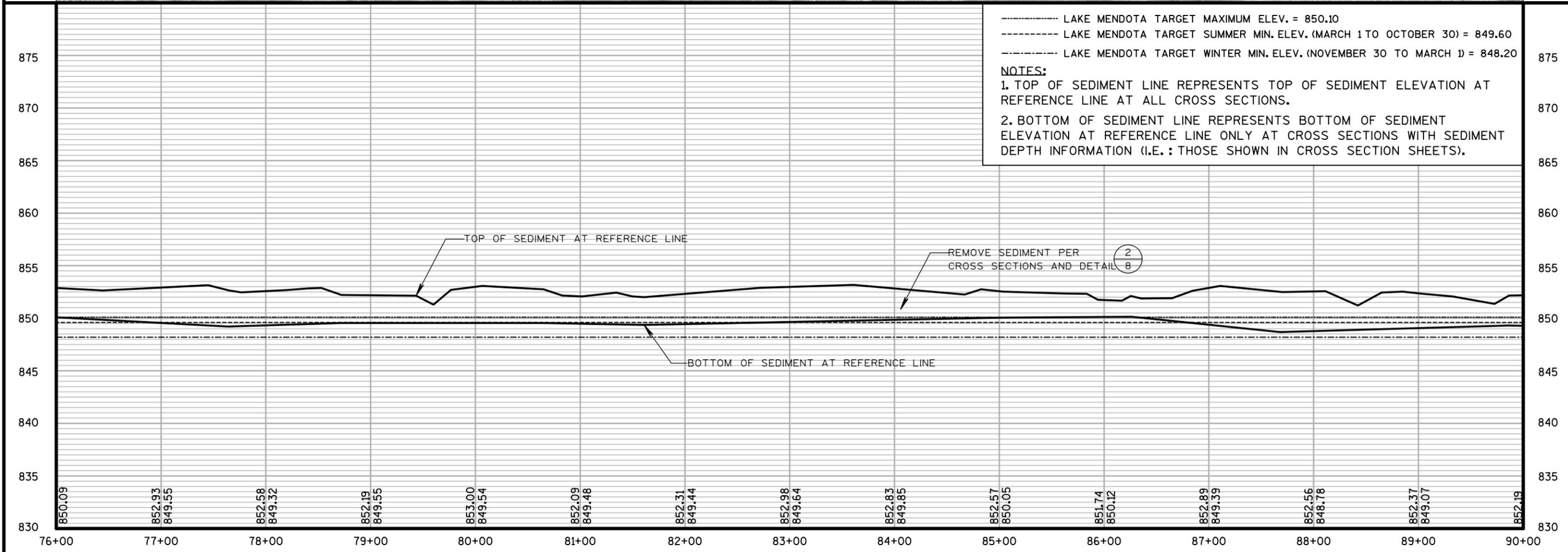


SHEET
13



▲ EXISTING TOP OF BANK
 ● EXISTING TOE OF BANK
 - - - - - CROSS SECTION LOCATION SHOWN IN CROSS SECTION SHEETS
 ——— CROSS SECTIONS OF EXISTING GROUND AND CREEK SURFACE ONLY

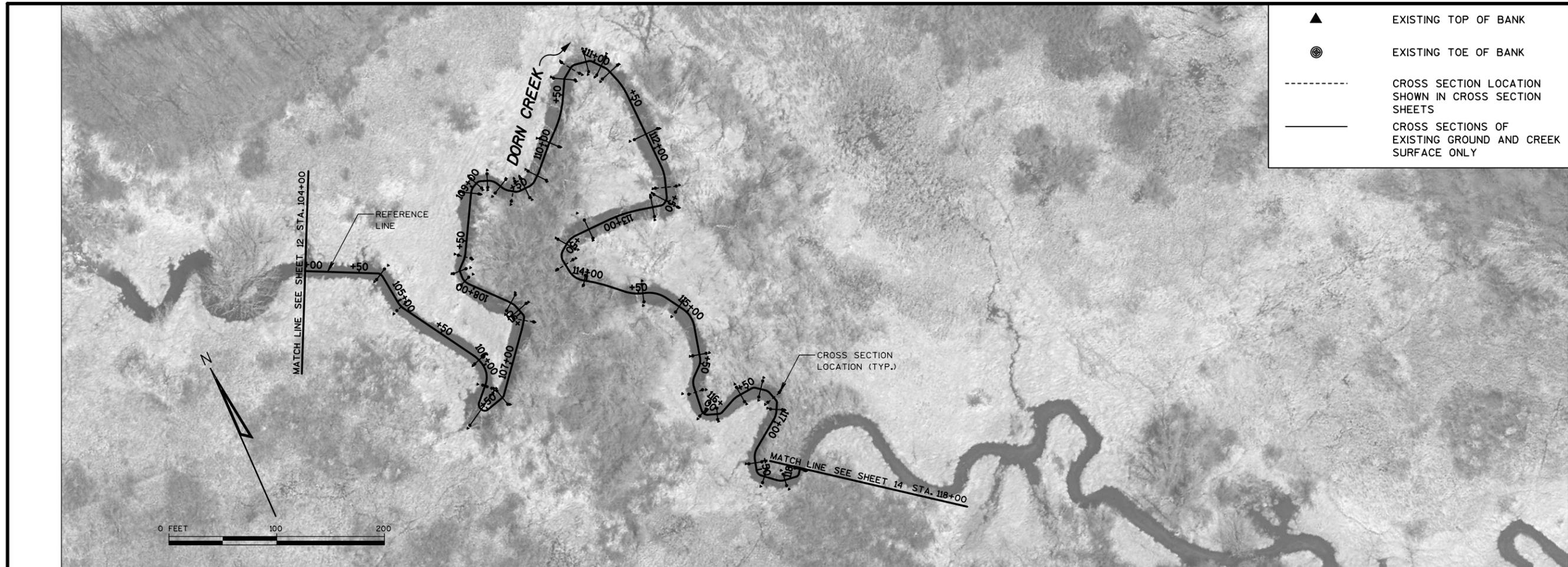
NO.	REVISIONS	DATE



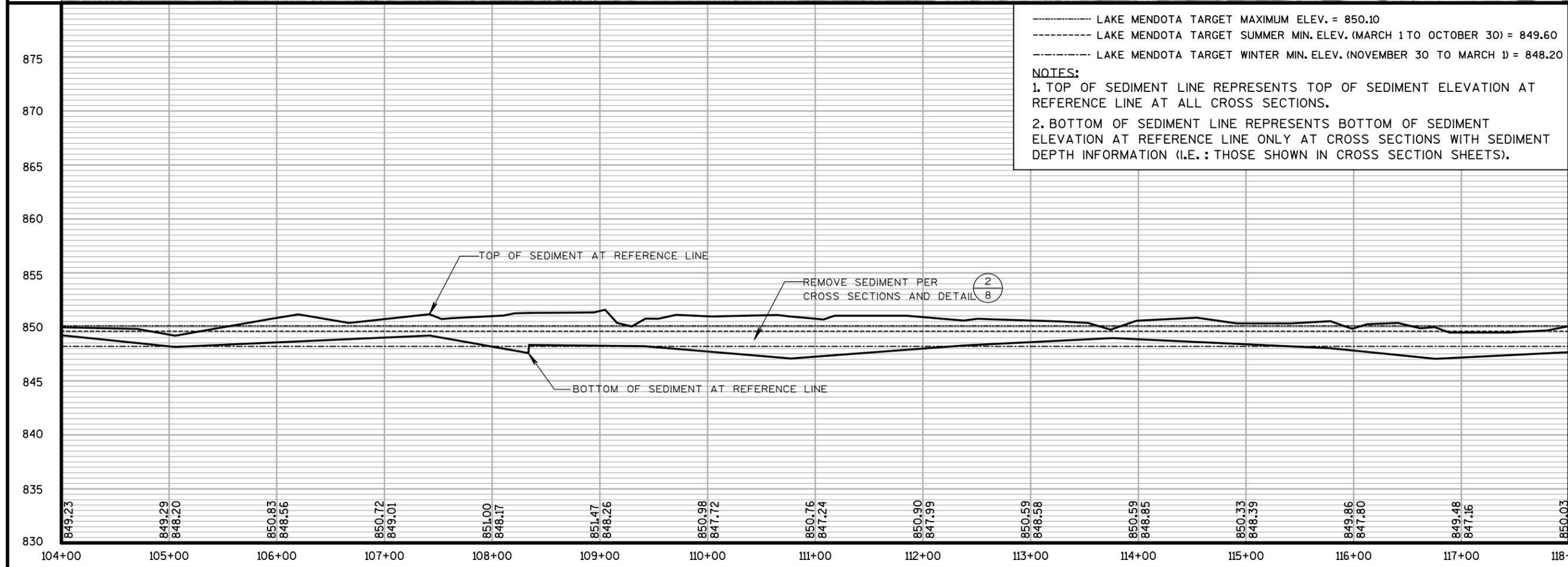
PLAN AND PROFILE - MAINLINE ALIGNMENT
 SEDIMENT REMOVAL IN DORN CREEK
 DANE COUNTY
 DANE COUNTY, WISCONSIN

JOB NO. 1124.016
 PROJECT MGR. JHL

 SHEET 14



▲ EXISTING TOP OF BANK
 ● EXISTING TOE OF BANK
 - - - - - CROSS SECTION LOCATION SHOWN IN CROSS SECTION SHEETS
 ——— CROSS SECTIONS OF EXISTING GROUND AND CREEK SURFACE ONLY



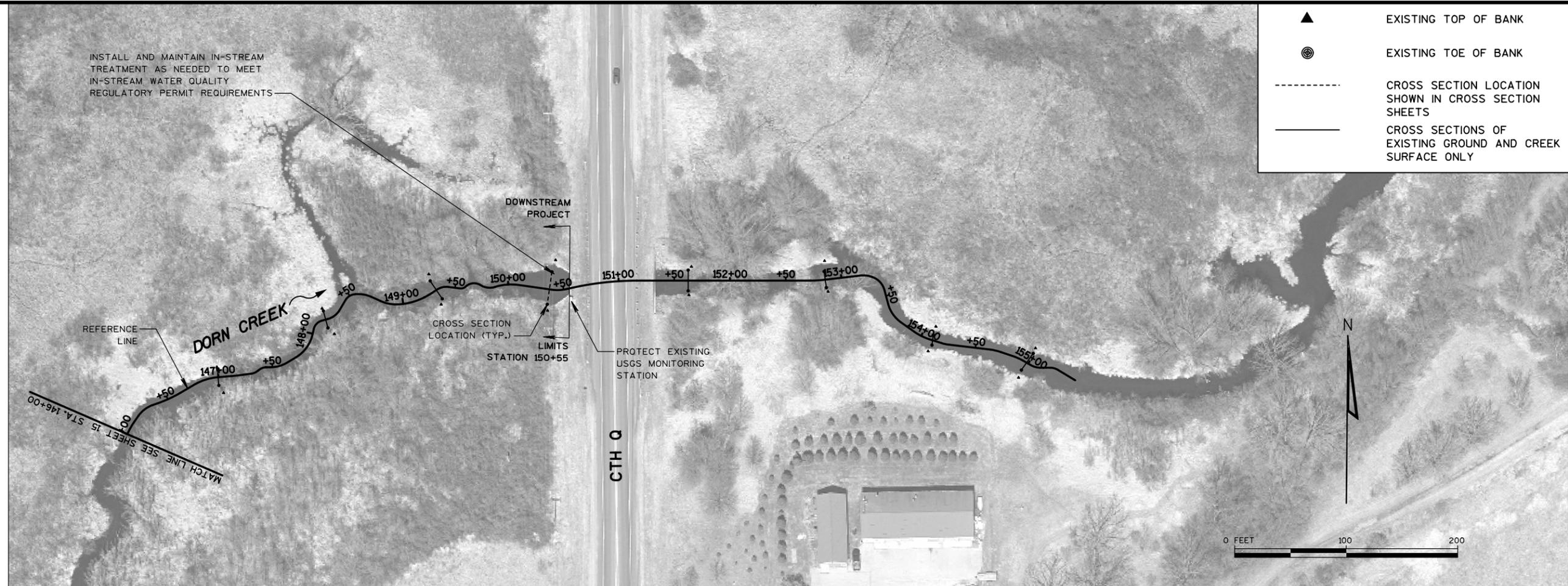
NO.	REVISIONS	DATE

PLAN AND PROFILE - MAINLINE ALIGNMENT
 SEDIMENT REMOVAL IN DORN CREEK
 DANE COUNTY
 DANE COUNTY, WISCONSIN

JOB NO. 1124.016
 PROJECT MGR. JHL

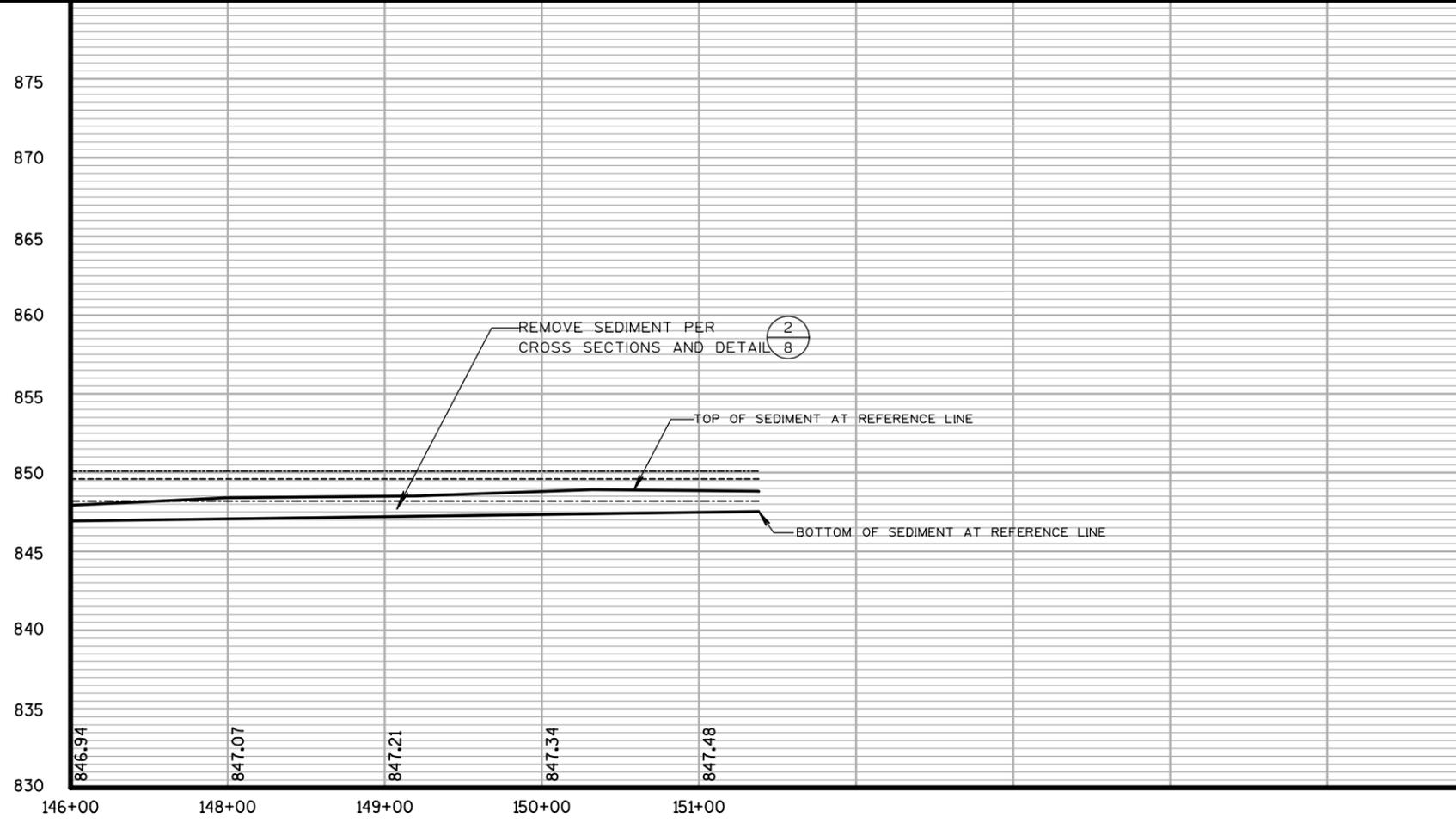
STRAND ASSOCIATES

SHEET 16



▲ EXISTING TOP OF BANK
 ● EXISTING TOE OF BANK
 - - - - - CROSS SECTION LOCATION SHOWN IN CROSS SECTION SHEETS
 ———— CROSS SECTIONS OF EXISTING GROUND AND CREEK SURFACE ONLY

DATE:	NO.	REVISIONS



----- LAKE MENDOTA TARGET MAXIMUM ELEV. = 850.10
 - - - - - LAKE MENDOTA TARGET SUMMER MIN. ELEV. (MARCH 1 TO OCTOBER 30) = 849.60
 - - - - - LAKE MENDOTA TARGET WINTER MIN. ELEV. (NOVEMBER 30 TO MARCH 1) = 848.20

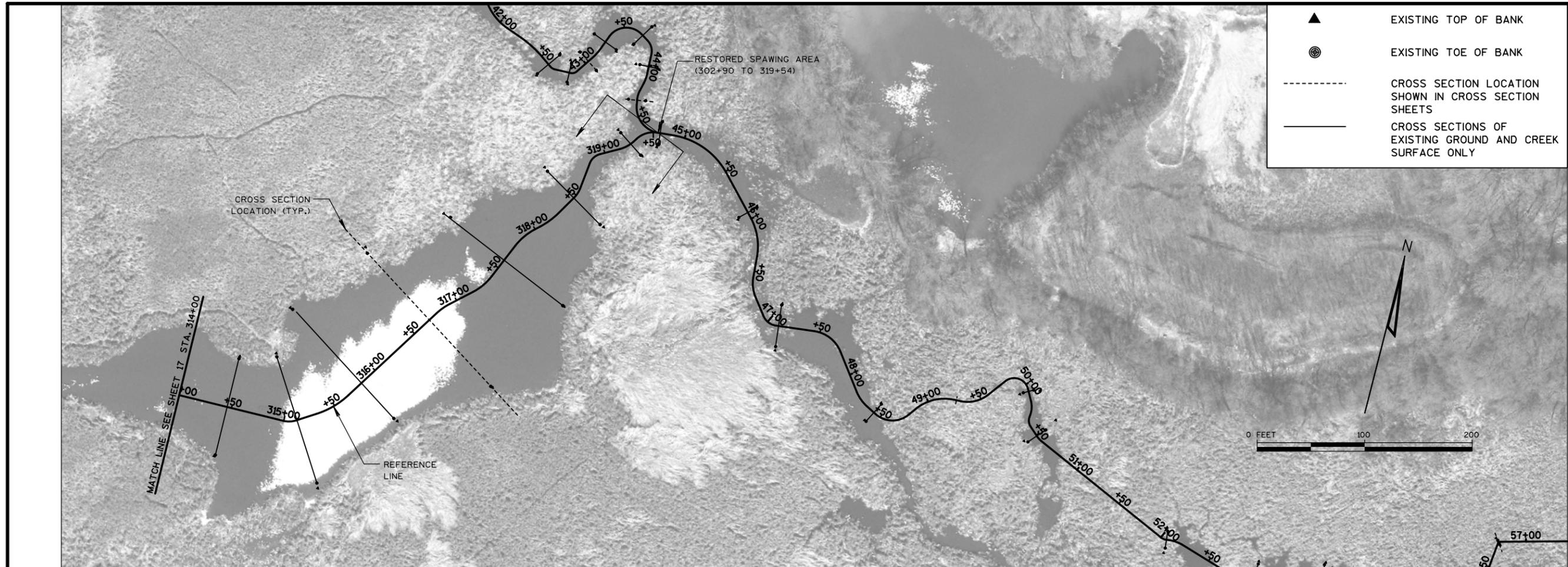
NOTES:
 1. TOP OF SEDIMENT LINE REPRESENTS TOP OF SEDIMENT ELEVATION AT REFERENCE LINE AT ALL CROSS SECTIONS.
 2. BOTTOM OF SEDIMENT LINE REPRESENTS BOTTOM OF SEDIMENT ELEVATION AT REFERENCE LINE ONLY AT CROSS SECTIONS WITH SEDIMENT DEPTH INFORMATION (I.E. : THOSE SHOWN IN CROSS SECTION SHEETS).

PLAN AND PROFILE - MAINLINE ALIGNMENT
 SEDIMENT REMOVAL IN DORN CREEK
 DANE COUNTY
 DANE COUNTY, WISCONSIN

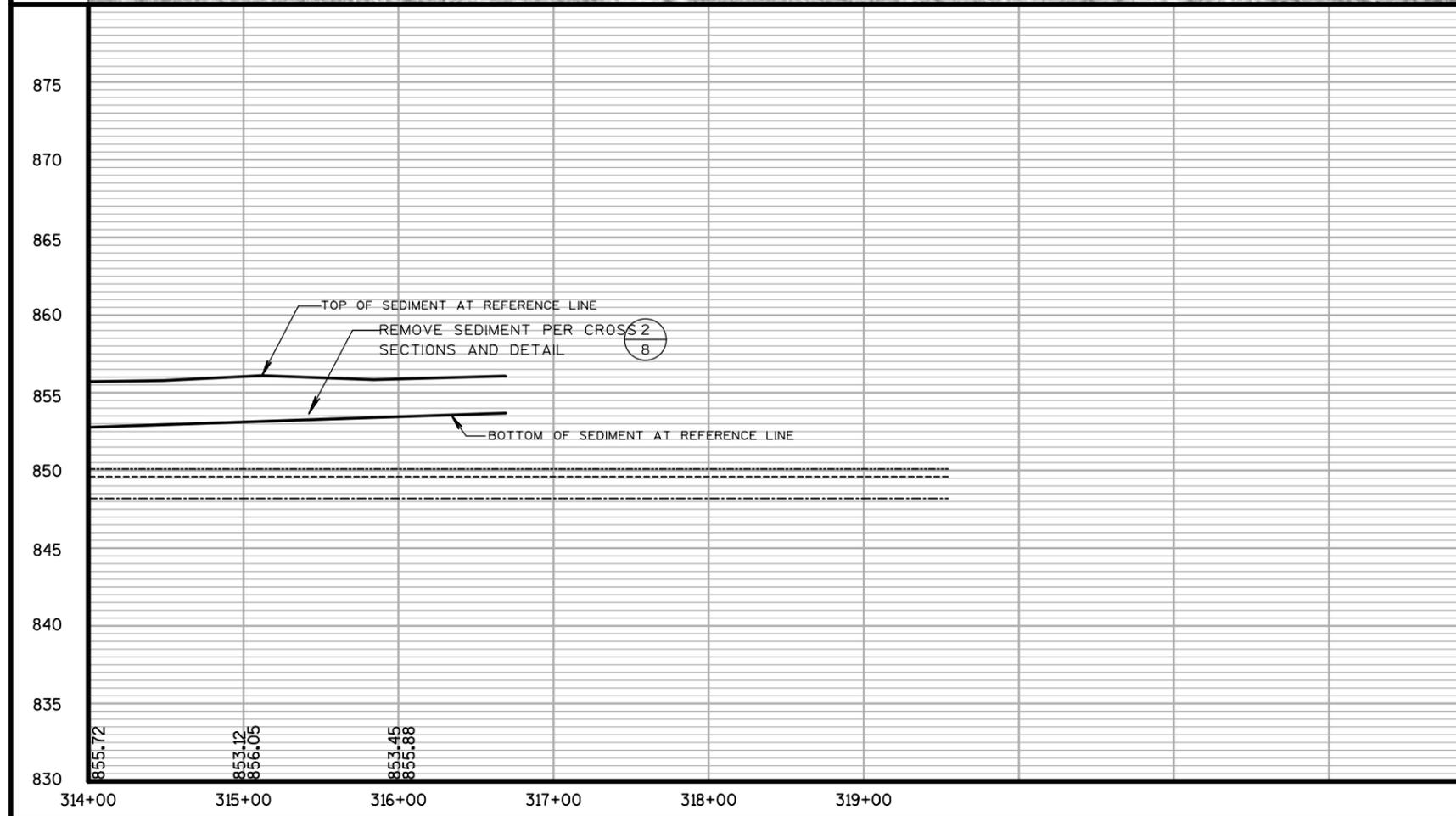
JOB NO.
1124.016
 PROJECT MGR.
JHL



SHEET
19



DATE:	NO.	REVISIONS



----- LAKE MENDOTA TARGET MAXIMUM ELEV. = 850.10
 ----- LAKE MENDOTA TARGET SUMMER MIN. ELEV. (MARCH 1 TO OCTOBER 30) = 849.60
 ----- LAKE MENDOTA TARGET WINTER MIN. ELEV. (NOVEMBER 30 TO MARCH 1) = 848.20

NOTES:
 1. TOP OF SEDIMENT LINE REPRESENTS TOP OF SEDIMENT ELEVATION AT REFERENCE LINE AT ALL CROSS SECTIONS.
 2. BOTTOM OF SEDIMENT LINE REPRESENTS BOTTOM OF SEDIMENT ELEVATION AT REFERENCE LINE ONLY AT CROSS SECTIONS WITH SEDIMENT DEPTH INFORMATION (I.E. : THOSE SHOWN IN CROSS SECTION SHEETS).

PLAN AND PROFILE - SOUTH ALIGNMENT
 SEDIMENT REMOVAL IN DORN CREEK
 DANE COUNTY
 DANE COUNTY, WISCONSIN

JOB NO.
 1124.016
 PROJECT MGR.
 JHL



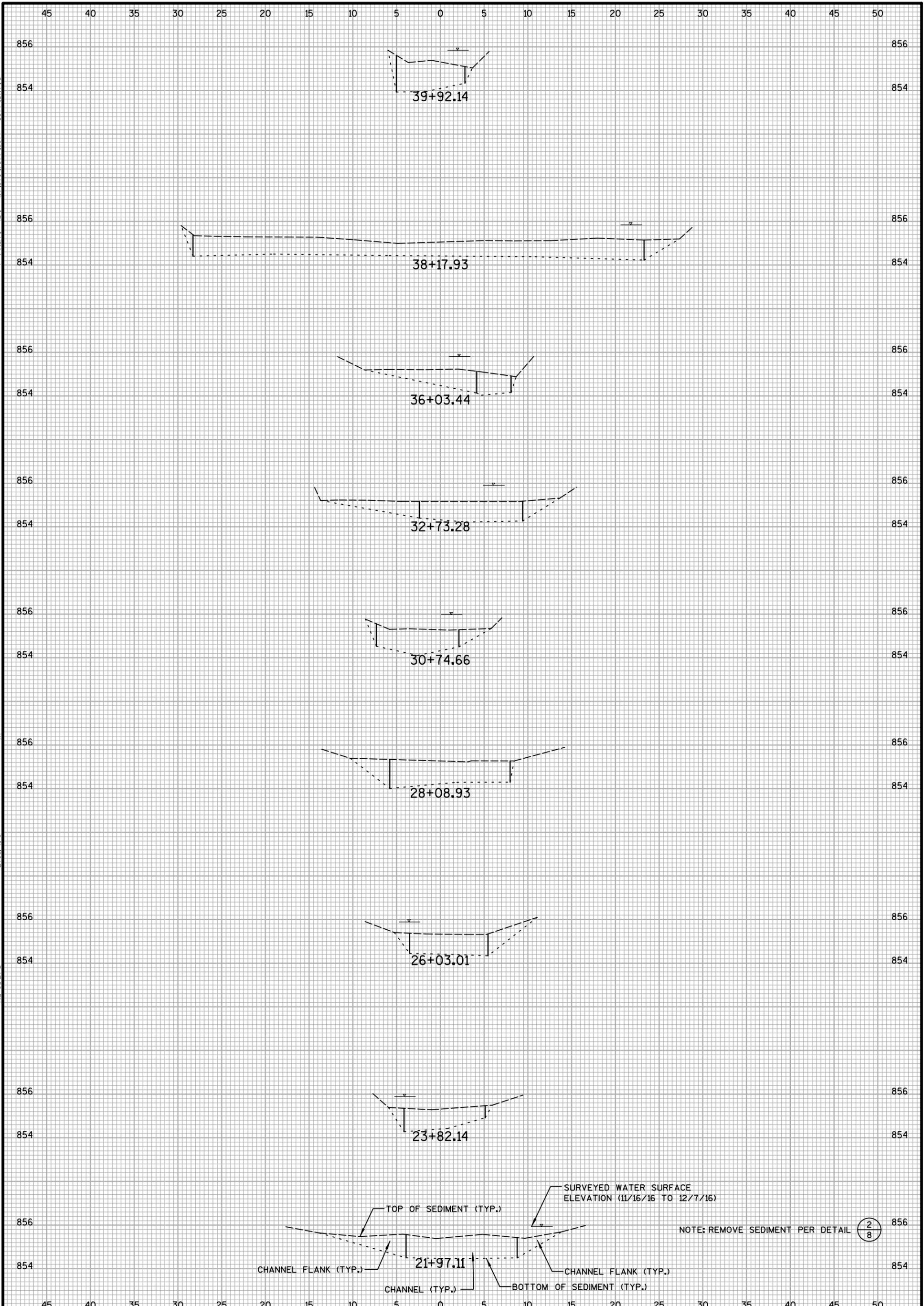
SHEET
 21

S:\MAD\1100-1199\1124\016\Micros\Plans\SSMain.dgn

user: mdhewar

9/1/2017

3:17:56 PM



CROSS SECTIONS - MAINLINE ALIGNMENT

SEDIMENT REMOVAL IN DORN CREEK

**DANE COUNTY
DANE COUNTY, WISCONSIN**

NO.	REVISIONS	DATE:

STRAND ASSOCIATES
SHEET 23

JOB NO.
1124.016
PROJECT MGR.
JHL

2/8

S:\MAD\1100-1199\124\016\Micro\Plans\SSMain.dgn

user: mdhewar

9/1/2017

3:17:57 PM

45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50

854 854

852 852

850 850

856 856

854 854

856 856

854 854

856 856

854 854

856 856

854 854

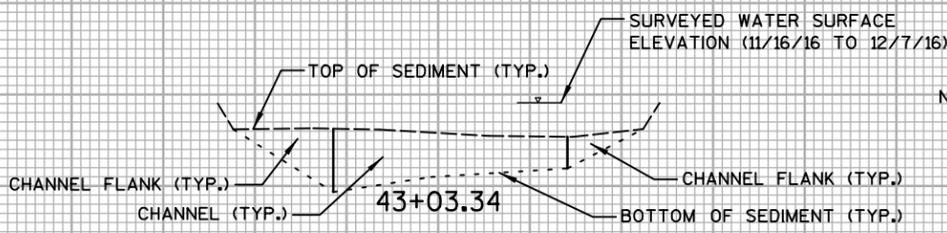
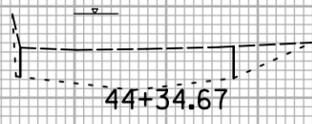
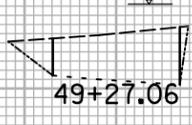
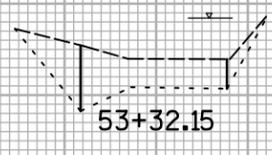
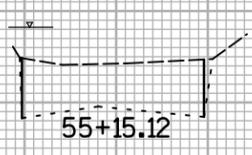
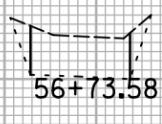
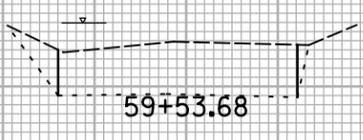
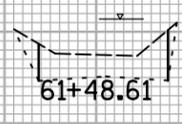
856 856

854 854

856 856

854 854

45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50



NOTE: REMOVE SEDIMENT PER DETAIL (2/8)

CROSS SECTIONS - MAINLINE ALIGNMENT

SEDIMENT REMOVAL IN DORN CREEK

**DANE COUNTY
DANE COUNTY, WISCONSIN**

NO.	REVISIONS	DATE:

STRAND ASSOCIATES

SA

SHEET 24

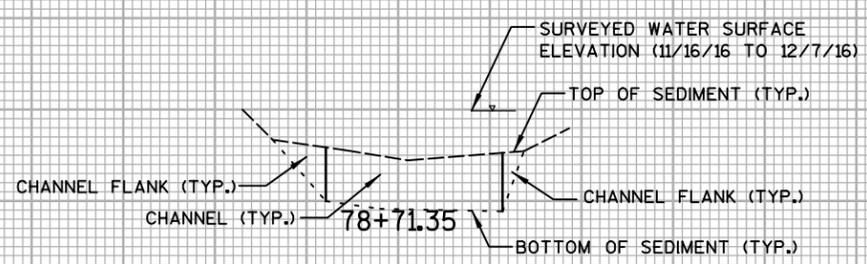
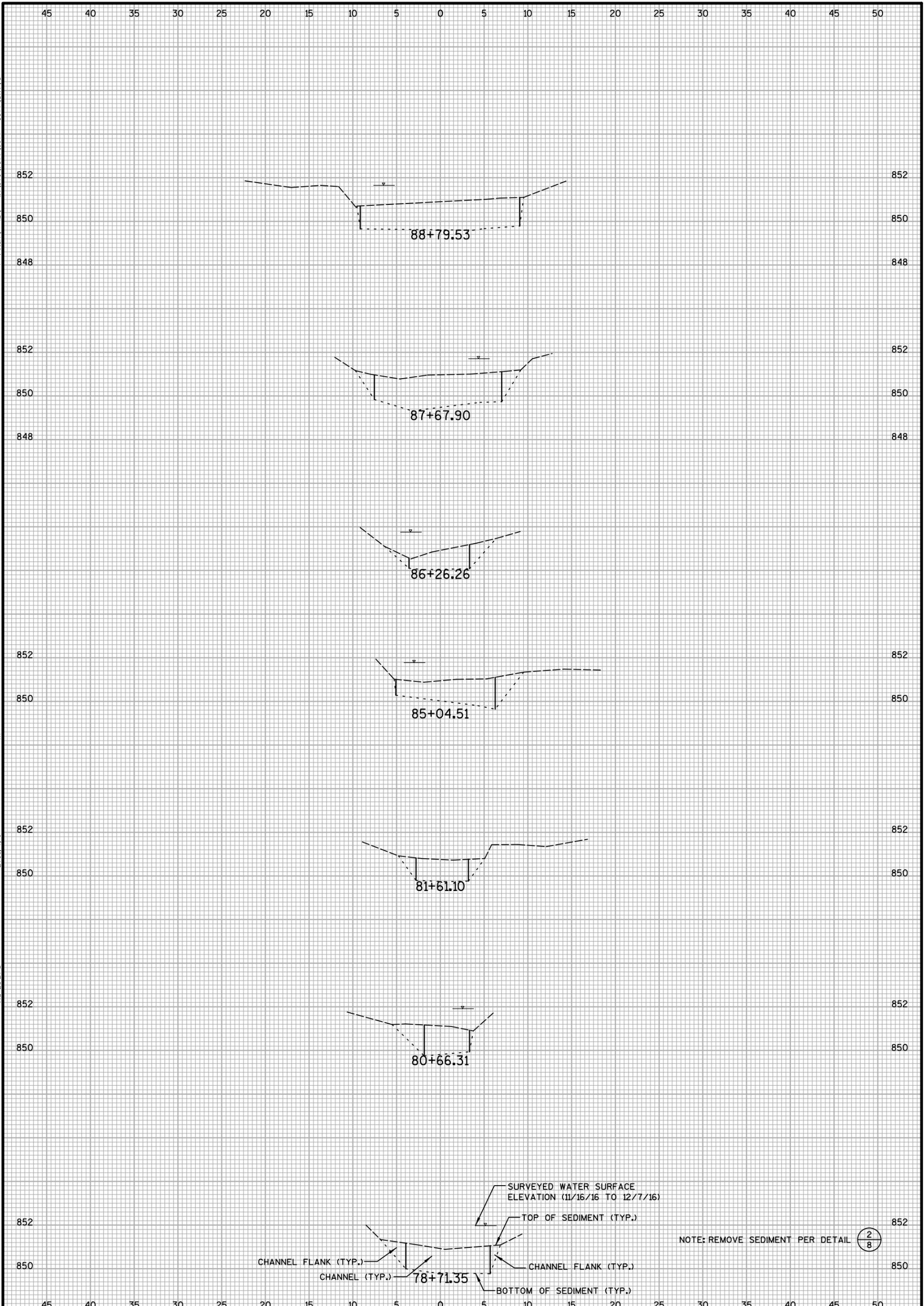
JOB NO. 1124.016
PROJECT MGR. JHL

S:\MAD\1100-1199\124\016\Micros\Plans\SSMain.dgn

user: mdhewar

9/1/2017

3:17:57 PM



NOTE: REMOVE SEDIMENT PER DETAIL

2/8

CROSS SECTIONS - MAINLINE ALIGNMENT

SEDIMENT REMOVAL IN DORN CREEK

DANE COUNTY
DANE COUNTY, WISCONSIN

NO.	REVISIONS	DATE:

STRAND ASSOCIATES

SHEET 26

JOB NO.
1124.016

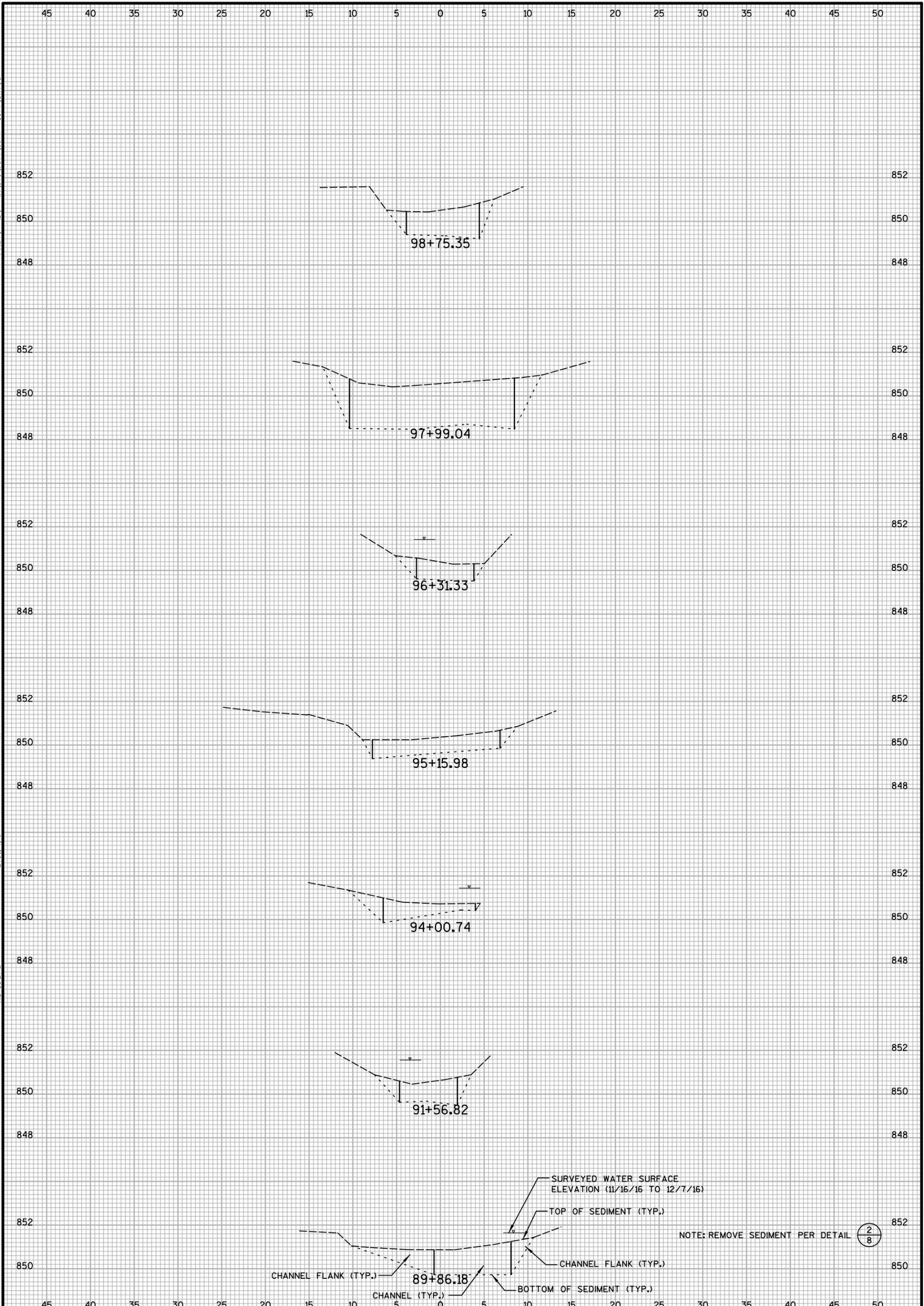
PROJECT MGR.
JHL

S:\MAD\1100-1199\1124\016\Micros\Plans\SSMain.dgn

user: mdhewar

9/1/2017

3:17:58 PM



SURVEYED WATER SURFACE ELEVATION (11/16/16 TO 12/7/16)
 TOP OF SEDIMENT (TYP.)
 CHANNEL FLANK (TYP.)
 BOTTOM OF SEDIMENT (TYP.)
 CHANNEL FLANK (TYP.)
 CHANNEL (TYP.)

NOTE: REMOVE SEDIMENT PER DETAIL 2/8

CROSS SECTIONS - MAINLINE ALIGNMENT

SEDIMENT REMOVAL IN DORN CREEK

**DANE COUNTY
DANE COUNTY, WISCONSIN**

NO.	REVISIONS	DATE:

STRAND ASSOCIATES

SHEET 27

JOB NO.
1124.016

PROJECT MGR.
JHL

S:\MAD\1100-1199\124\016\Micros\Plans\SMain.dgn

user: mdhewar

9/1/2017

3:17:58 PM

45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50

852 852

850 850

848 848

852 852

850 850

848 848

852 852

850 850

848 848

852 852

850 850

848 848

852 852

850 850

848 848

852 852

850 850

848 848

852 852

850 850

848 848

852 852

850 850

848 848

108+33.62

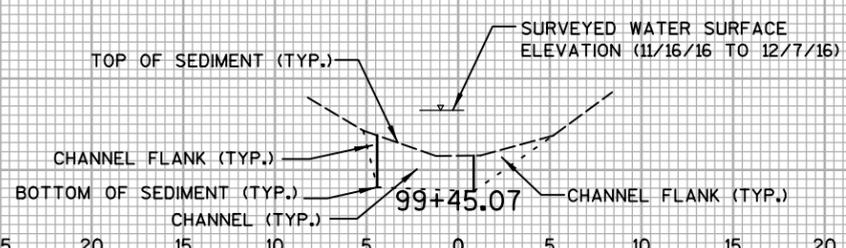
107+42.07

105+05.65

103+21.65

102+50.68

101+00.56



NOTE: REMOVE SEDIMENT PER DETAIL (2/8)

CROSS SECTIONS - MAINLINE ALIGNMENT

SEDIMENT REMOVAL IN DORN CREEK

**DANE COUNTY
DANE COUNTY, WISCONSIN**

NO.	REVISIONS	DATE:

STRAND ASSOCIATES

SHEET 28

JOB NO. 1124.016

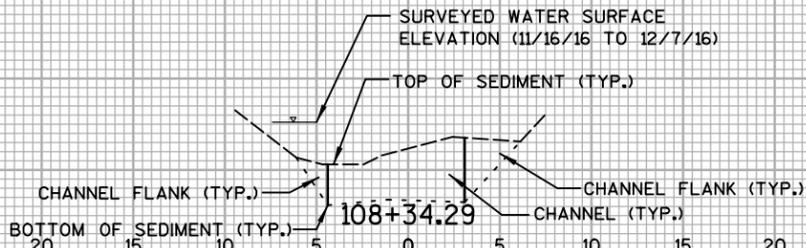
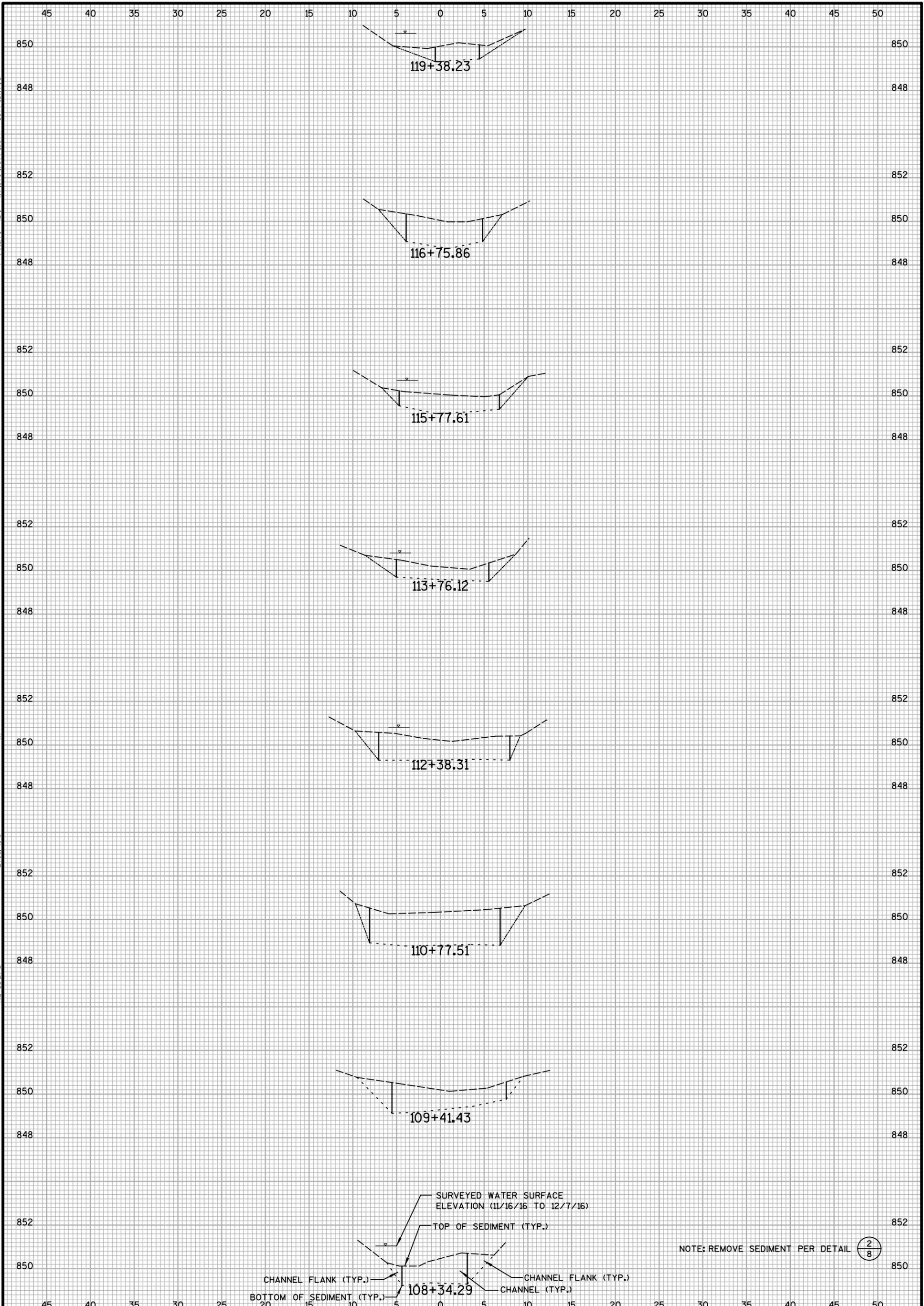
PROJECT MGR. JHL

S:\MAD\1100-1199\1124\016\Micros\Plans\SSMain.dgn

user: mdhewar

9/1/2017

3:17:58 PM



NOTE: REMOVE SEDIMENT PER DETAIL (2/8)

CROSS SECTIONS - MAINLINE ALIGNMENT

SEDIMENT REMOVAL IN DORN CREEK

**DANE COUNTY
DANE COUNTY, WISCONSIN**

NO.	REVISIONS	DATE:

STRAND ASSOCIATES
SHEET 29

JOB NO.
1124.016

PROJECT MGR.
JHL

S:\MAD\1100-1199\124\016\Micros\Plans\SSMain.dgn

user: mdhewar

9/1/2017

3:17:58 PM

45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50

852

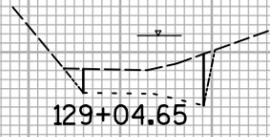
850

848

852

850

848



852

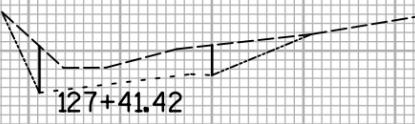
850

848

852

850

848



852

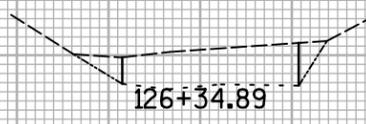
850

848

852

850

848



852

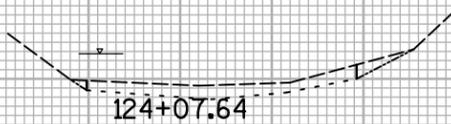
850

848

852

850

848



852

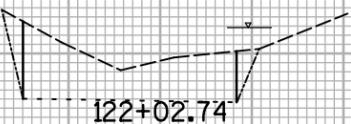
850

848

852

850

848



852

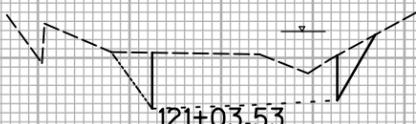
850

848

852

850

848



852

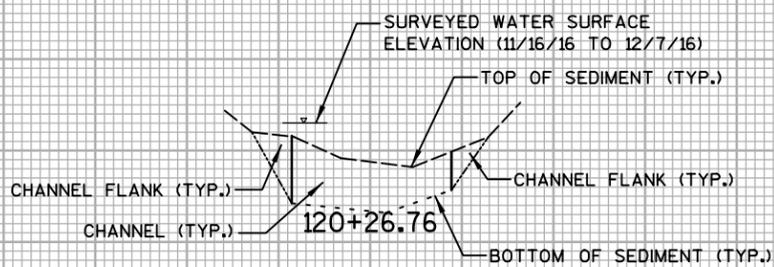
850

848

852

850

848



NOTE: REMOVE SEDIMENT PER DETAIL (2/8)

45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50

CROSS SECTIONS - MAINLINE ALIGNMENT

SEDIMENT REMOVAL IN DORN CREEK

DANE COUNTY
DANE COUNTY, WISCONSIN

NO.	REVISIONS	DATE:

STRAND ASSOCIATES

SHEET 30

JOB NO. 1124.016
PROJECT MGR. JHL

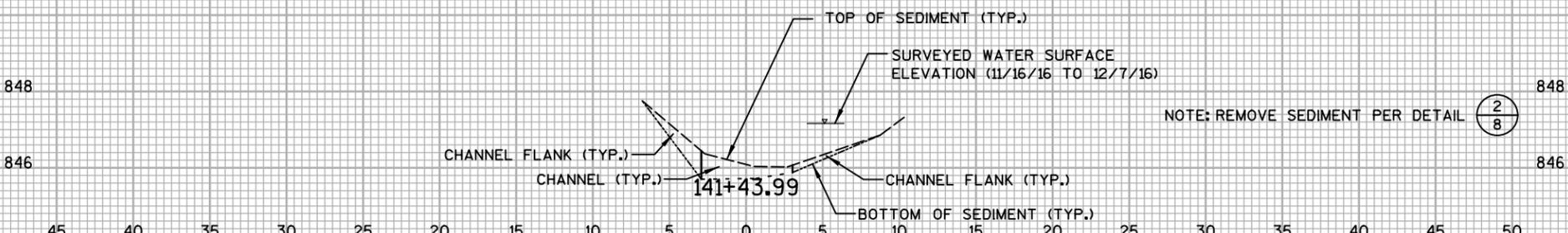
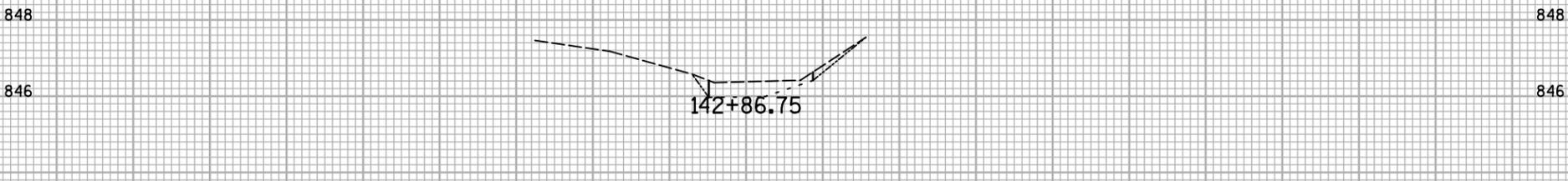
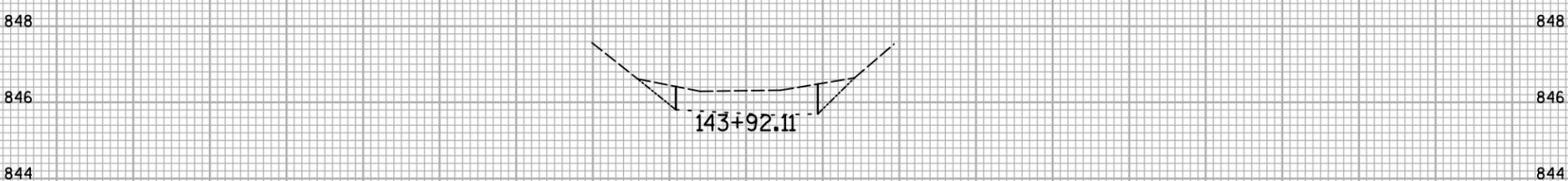
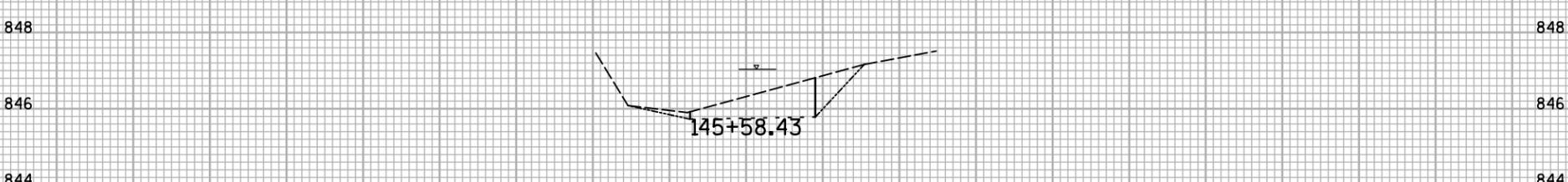
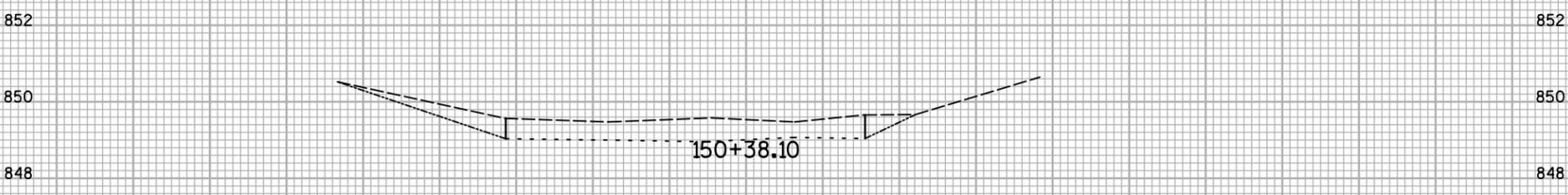
S:\MAD\1100-1199\124\016\Micros\Plans\SSMdn.dgn

user: mdhewar

9/1/2017

3:17:59 PM

45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50



NOTE: REMOVE SEDIMENT PER DETAIL (2/8)

CROSS SECTIONS - MAINLINE ALIGNMENT

SEDIMENT REMOVAL IN DORN CREEK

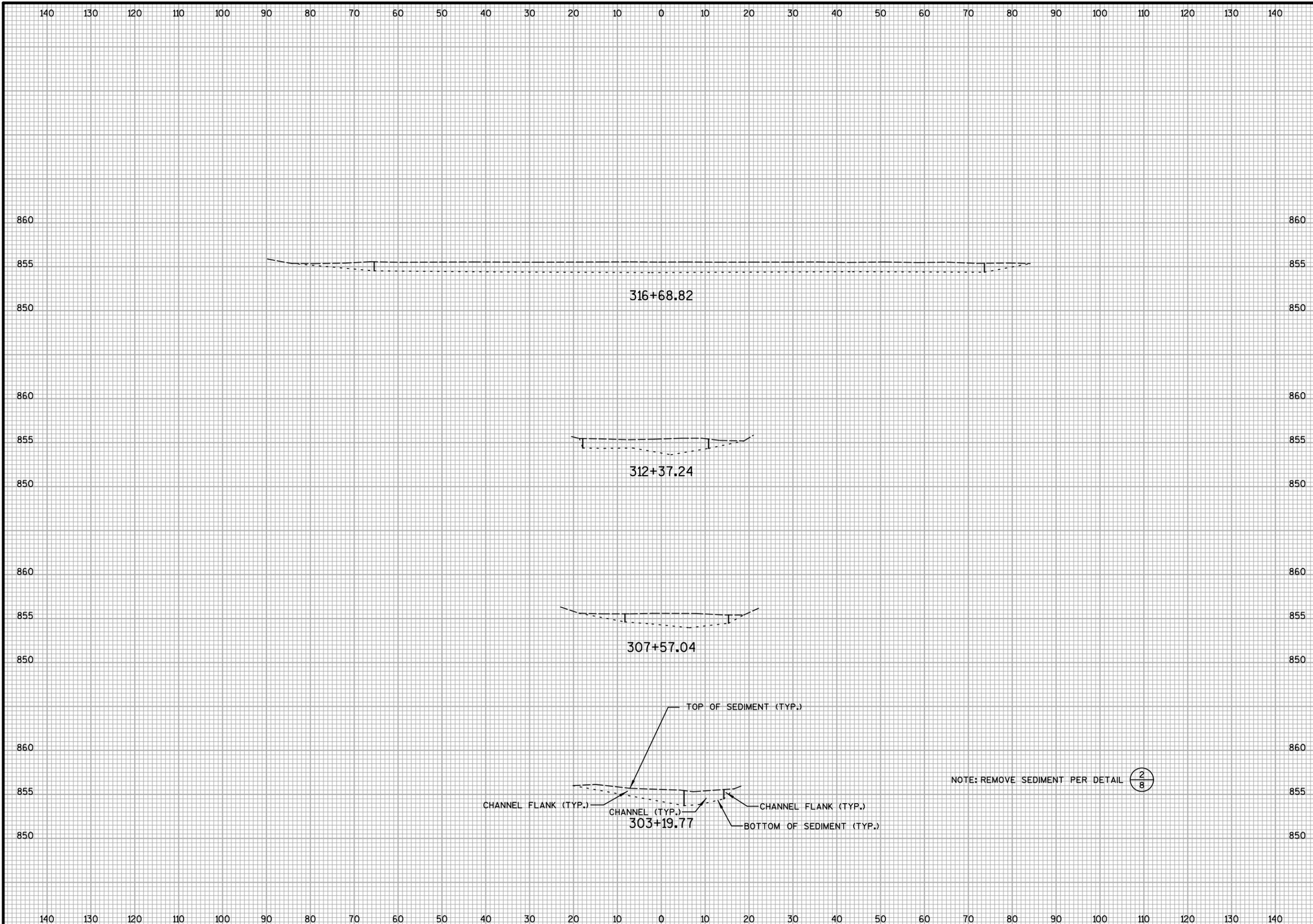
**DANE COUNTY
DANE COUNTY, WISCONSIN**

NO.	REVISIONS	DATE:

STRAND ASSOCIATES

SHEET 32

JOB NO. 1124.016
PROJECT MGR. JHL



NOTE: REMOVE SEDIMENT PER DETAIL 2
8

DATE:	NO.	REVISIONS

CROSS SECTIONS - SOUTH ALIGNMENT
 SEDIMENT REMOVAL IN DORN CREEK
 DANE COUNTY
 DANE COUNTY, WISCONSIN

JOB NO.
1124.016
 PROJECT MGR.
JHL



SHEET
33