



DANE COUNTY DEPARTMENT OF ADMINISTRATION

RFP NO. 322018

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

**REQUEST FOR PROPOSALS NO. 322018
ENGINEERING SERVICES - CONSTRUCTION ADMINISTRATION
LOWER YAHARA RIVER TRAIL, PH.2
PLEASANT SPRINGS, WISCONSIN**

ISSUED FOR PROPOSALS: JUNE 14, 2022

Due Date / Time: **TUESDAY, JULY 19, 2022 / 2:00 P.M.**

Location: **PUBLIC WORKS OFFICE**

FOR INFORMATION ON THIS REQUEST FOR PROPOSALS, PLEASE CONTACT:

RYAN SHORE, PROJECT MANAGER
TELEPHONE NO.: 608/445-0109
FAX NO.: 608/267-1533
E-MAIL: SHORE@COUNTYOFDANE.COM



Department of Administration
Public Works Engineering Division

608/266-4018

Greg Brockmeyer
Director of Administration

Joseph T. Parisi
County Executive

Director of Public Works
Todd Draper

1919 Alliant Energy Center Way
Madison, Wisconsin 53713
Fax: 608/267-1533

https://pwht.countyofdane.com/public_works.aspx#engineering

June 14, 2022

INVITATION FOR PROPOSALS

You are invited to submit a Proposal for RFP No. 322018 to provide professional engineering services for Construction Administration of the Lower Yahara River Trail, Ph. 2. The Proposals are due on or before **2:00 p.m., July 19, 2022**. No performance bond is required for this project.

ADDITIONAL INFORMATION

Phase 2 of the Lower Yahara River Trail includes approximately 4300 feet of helical pile boardwalk, a 90 foot clear span bridge over Door Creek, 4300 feet of paved trail and parking lot/trailhead improvements at Fish Camp County Park. The project is 100% funded by Owner, there are no Federal funds or other grants associated with this project.

SPECIAL INSTRUCTIONS

Please provide the entire proposal package in these formats: three (3) hard copies and an electronic version on a USB flash drive. Follow these instructions when submitting your proposal:

1. Place the signed Proposal Form on top as page 1.
2. Place the signed Fair Labor Practices Certification after the Proposal Form as page 2.
3. Place the Proposal information after Fair Labor Practices Certification.
4. Clearly label your envelope containing your proposal in the lower left-hand corner as follows:

Proposal No. 322018

Lower Yahara River Trail, Ph. 2 – Construction Administration

July 19,, 2022, 2:00 p.m.

5. Mail or deliver to:
Ryan Shore, Project Manager
Dane County Public Works Engineering Division
1919 Alliant Energy Center Way
Madison, Wisconsin 53713

Use the drop box outside our Office if you choose to hand deliver. If you need any additional information about this Request for Proposals, please call Ryan Shore at 608/445-0109 or send email to: shore@countyofdane.com.

Sincerely,

Ryan L Shore

Project Manager

Enclosure: Request for Proposals No. 322018 Package

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DRAWINGS

Plot drawings on 11" x 17" (ANSI B) paper for correct scale or size.
Sheet Nos. – 1 through 14, Construction Plan Set - Reference Drawings

END OF SECTION

SECTION 01 11 19

REQUEST FOR PROPOSAL

LEGAL NOTICE

Dane County Public Works, 1919 Alliant Energy Center Way, Madison, WI 53713, will receive sealed Proposals until:

2:00 P.M., TUESDAY, JULY 19, 2022

RFP NO. 322018

CONSTRUCTION ADMINISTRATION SERVICES

LOWER YAHARA RIVER TRAIL, PHASE 2

PLEASANT SPRINGS, WI

Dane County is inviting Proposals for construction administration services. Only firms with capabilities, experience & expertise with similar projects should obtain this RFP document & submit Proposals.

The RFP document may be obtained after **2:00 p.m., June 14, 2022** from bids-pwht.countyofdane.com. Call Ryan Shore, Project Mgr., 608/445-0109, or our office, 608/266-4018, with any questions.

An informational site tour will be held July 6, 2022 at 2:00 p.m. at the Fish Camp County Park, 3359 County Road, McFarland, WI 53558, starting in the parking lot. Interested firms are strongly encouraged to attend this tour.

PUBLISH: JUNE 14 & JUNE 21 - WISCONSIN STATE JOURNAL
JUNE 15 & JUNE 22 - THE DAILY REPORTER

SECTION 00 24 16

SCOPES OF PROPOSALS

1. GENERAL INFORMATION

- A. Dane County is inviting proposals for professional engineering Construction Administration services for the Lower Yahara River Trail, Ph. 2 project.
- B. The project includes approximately 4300 feet of helical pile boardwalk, a 90 foot clear span bridge over Door Creek, 4300 feet of paved trail and parking lot trailhead improvements at Fish Camp County Park. The project is 100% funded by Owner, there are no Federal funds or other grants associated with this project.
- C. To be considered for this project, the Consultant must meet or exceed the following criteria:
 - 1. Have at least one registered professional engineer as lead responsible member of the firm or project team.
 - 2. Have been in business for a period of not less than five (5) years.
 - 3. Must have been responsible for the construction administration of at least three (3) projects of similar design scope and size,
 - 4. Consideration may be given to joint ventures consisting of two or more firms organized for the purpose of furnishing professional services as a single entity, providing the assignment of and provisions for continuity of the various responsibilities within the joint venture are approved by the County, and further providing that either of the individual firms constituting the joint venture meets the eligibility requirements listed above.

2. SCOPE OF WORK

- A. The *Draft Professional Services Agreement* details project deliverables and specific tasks.
- B. Construction Phase:
 - Construction Administration services shall include providing daily site inspections, coordinating weekly construction progress meetings, field verification of Contractor provided layout and survey staking, shop drawing and material submittal reviews, contractor Q/A and monitoring for regulatory permit compliance.

3. PROPOSAL CONTENT

- A. Interested consultants shall submit the following information in their proposal, in eight distinct sections or divisions:
 - 1. Proposal Form, Fair Labor Practices Certification and Proposer's cover letter.
 - 2. Description of firm's qualifications, related experience, and resources.
 - 3. Brief list (min. of three, max. of five) of similar completed projects with the project details, name, address and telephone number of the clients. Make specific reference to

projects involving public facilities as is being proposed. You may separately list additional professional references.

4. Description of techniques for approaching the project.
5. List of staff that will be committed to the Work with their professional resumes. Dane County may interview short-listed firms' project consultant, engineer. Include listing of other consultants who may participate in this project and their area of expertise.
6. Indicate staff availability.
7. Cost for services stated as fixed fee.
8. State clearly any limitations you wish to include and detail any conditions that you may have with the *Draft Professional Services Agreement*.

4. EVALUATION CRITERIA

A. Proposing consultants will be evaluated on this criteria:

Project Personnel	30%
Organizational Capabilities	20%
Related Project Experience	40%
Pricing / Cost Proposal	<u>10%</u>
Total	100%

5. PRICING

- A. The *Draft Professional Services Agreement* details additional information about project phases, pricing & payments.
- B. Submit cost for services stated as fixed fee.

6. SITE TOUR

- A. A proposing company site tour will be on July 6, 2022 at 2:00 p.m. at Fish Camp County Park, 3359 County Rd, McFarland, WI 53558. This cursory tour will last approximately 1 hour. Proposing companies are strongly encouraged to attend this tour, however attendance is optional.

7. OWNER'S RESPONSIBILITY

- A. Dane County will provide Construction Documents, Construction Cost Estimate and the Stormwater & Erosion Control Report. These documents may not be complete. A/E firm will need to confirm accuracy of drawings and specifications.

8. TIMETABLE

- A. This project's specific and estimated dates and times of events are below. Some of the events below have specific completion dates. In the event that Dane County finds it necessary to change any of the specific dates and times in the calendar of events listed below, it will do so by issuing an addendum to this RFP. There may or may not be a formal notification issued for changes in the estimated dates and times.

DATE	EVENT
June 14, 2022	RFP issued
July 6, 2022 - 2:00 p.m.	Site tour
July 12, 2022 - 2:00 p.m.	Written inquiries due
July 14, 2022	Latest addendum (if necessary)
July 19, 2022 - 2:00 p.m.	Proposals due
July 27, 2022 (estimated)	Notification of intent to award sent
September 15, 2022 (estimated)	Agreement start date
Nov. 2022 – June 2023 (estimated)	Construction Phase

9. ADDITIONAL INFORMATION

- A. Dane County Public Works Engineering Division, 1919 Alliant Energy Center Way, Madison, Wisconsin 53713, will receive your Proposal.
- B. Obtain any additional information regarding this project from Ryan Shore, Public Works Project Manager, 608/445-0109, shore@countyofdane.com.
- C. Obtain RFP documents from the Dane County web site. Proposing company is responsible to check back there regularly for Addenda.
- D. Submit all Proposals by 2:00 p.m., Tuesday, July 19, 2022.
- E. Dane County reserves the right to accept or reject any Proposal submitted.
- F. We will review information submitted by consultants and may schedule candidates to appear before an interview panel. Those appearing for an interview shall be prepared to discuss their approach for this work, methodology, project team, a timetable, the basis of their fee schedule and answer questions from our staff.
- G. Dane County reserves the right to negotiate an Agreement after selecting the successful firm. Selection is only on the proposal submitted and subsequent interviews. Therefore, the proposals must be complete. Submission of a proposal shall constitute a valid offer, which may be accepted by the County for a period of ninety (90) calendar days following the proposal due date.
- H. Dane County is an Equal Opportunity Employer.

END OF SECTION



Department of Administration
Public Works Engineering Division

608/266-4018

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SECTION 00 42 13

PROPOSAL FORM

PROPOSAL NO. 322018

PROJECT: CONSTRUCTION ADMINISTRATIONSERVICES – LOWER YAHARA RIVER TRAIL, PH. 2

The undersigned, submitting this Proposal, hereby agrees with all terms, conditions and requirements of the above referenced Request for Proposals, and declares that the attached Proposal and pricing are in conformity therewith.

SIGNATURE: _____

(Proposal is invalid without signature)

Print or Type Name: _____ Date: _____

Title: _____

Company: _____

Address: _____

Telephone No.: _____ Fax No.: _____

Email Address: _____

Contact Person: _____

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

Addendum No(s). _____ through _____

Dated _____

All Proposers are strongly encouraged to be a registered vendor with Dane County. Registering allows vendors an opportunity to receive notifications for RFPs & RFBs issued by the County and provides the County with up-to-date company contact information. Complete a new form or renewal online at:

danepurchasing.com/Account/Login?

This Agreement, and any amendment or addendum relating to it, may be executed and transmitted to any other party by legible facsimile reproduction or by scanned legible electronic PDF copy, and utilized in all respects as, an original, wet-inked manually executed document. Further, this Agreement and any amendment or addendum thereto, may be stored and reproduced by each party electronically, photographically, by photocopy or other similar process, and each party may at its option destroy any original document so reproduced. All parties hereto stipulate that any such legible reproduction shall be admissible in evidence as the original itself in any judicial, arbitration or administrative proceeding whether or not the original is in existence and whether or not each party made such reproduction in the regular course of business. This term does not apply to the service of notices under this Agreement.

DRAFT

COUNTY OF DANE
PROFESSIONAL SERVICES AGREEMENT
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1. ARTICLE 1: SCOPE OF AGREEMENT

- 1.A. This Agreement between COUNTY and the person or firm, duly licensed under the laws and in accordance with the regulations of the State of Wisconsin, hereinafter referred to as the "A/E" shall be governed by the following Terms and Conditions.
- 1.B. The A/E shall provide technical and professional services under this Agreement. The Terms and Conditions of this Agreement shall apply to modifications made to this Agreement and shall apply to both the services rendered in the creation of the design and to the additional services called for in carrying out the design.
- 1.C. The A/E shall serve as the professional technical advisor and consultant to COUNTY in matters arising out of or incidental to the performance of this Agreement and in that capacity, the A/E shall not have a contractual duty or responsibility to any other person or party or individual regarding the services under this Agreement, except as that duty may arise under the laws of the State of Wisconsin. The A/E is not an agent of the COUNTY within the meaning of s. 893.80 or 895.46, Wis. Stats.
- 1.D. Professional services performed or furnished under this Agreement shall be based on the care and skill ordinarily used by members of the profession involved, who practice under the authority of and who are governed by the license issued under the Wisconsin Statutes and the Wisconsin Administrative Code. The standard of care for architectural and engineering services under this Agreement shall include designing buildings, structures and/or related infrastructural systems that comply with all applicable building and safety codes.
- 1.E. By accepting this Agreement, the A/E represents possession of the necessary skill and other qualifications to perform work under this Agreement and is familiar with the practices in the locality where such services and work shall be performed.
- 1.F. The A/E shall review and become familiar with the current Division 00 & 01 requirements utilized by COUNTY in construction contracts and shall provide services and work, consistent with such requirements, so that the Contractor's schedule is not negatively impacted.
- 1.G. The A/E shall be professionally responsible for work performed under this Agreement. Upon written approval of COUNTY, the A/E may subcontract work to an approved consultant under this Agreement, to the specific extent authorized by COUNTY. The authorization to subcontract shall not relieve the A/E of professional or contractual responsibility for any work performed or delivered under this Agreement. The authorization to subcontract shall not be construed to create any contractual relationship between COUNTY and such consultant.
- 1.H. Subcontracts for services under this Agreement shall provide that work performed under such subcontract, shall be subject to provisions of this Agreement and shall also provide that any professional duty or responsibility pertaining thereto shall be accomplished to the benefit of COUNTY. Upon request, an electronic copy of each such subcontract for which COUNTY approval is granted shall be furnished to COUNTY.
- 1.I. The A/E may substitute consultants or professional staff under this Agreement only to the specific extent authorized by COUNTY in writing.
- 1.J. In the performance of this Agreement, the A/E shall become familiar with and perform such services in accordance with the specifications set forth in the Request for Proposals document. The COUNTY reserves the right to update County Master Specifications Division 00 and Division 01 at any time, including after the signing date of this Agreement.

The A/E shall use and conform to the most current County Master Specifications Division 00 and Division 01 available at the time of Final Review Documents and the A/E shall not be eligible for a change order based upon alterations to said County Master Specifications Division 00 and Division 01 occurring after the date of Agreement signing.

2. ARTICLE 2: SCOPE OF THE SERVICES TO BE PROVIDED

2.A. General:

2.A.1) Services are to be provided by the A/E in each of the following phases:

Construction Phase

2.A.2) An assigned COUNTY Public Works Project Manager will be the A/E's contact in securing COUNTY direction and for arranging the necessary meetings with COUNTY or other County Departments and obtaining the approvals required by COUNTY.

2.A.3) The term "written" or "in writing" may be either electronic or hard copy documentation, unless otherwise stated or directed by COUNTY.

2.B. Study Phase: NOT USED

2.C. Schematic Design Phase: NOT USED

2.D. Design Development Phase: NOT USED

2.E. Construction Documents Phase: NOT USED

2.F. Bidding Phase: NOT USED

2.G. Construction Phase:

2.G.1) An assigned COUNTY Project Manager will be responsible for arranging and conducting construction-related meetings as required and act as the point of contact for the construction contractors. A COUNTY approved A/E representative shall attend, take notes, publish and distribute COUNTY approved minutes of job meetings.

2.G.2) After the award of the construction contract(s), the A/E shall become an on-site technical and professional advisor to COUNTY. In this capacity the A/E will have continuous access to the site. The A/E, through COUNTY's Project Representative, will have access to data in the construction contractor(s) files or offices pertaining to the quality or time requirements of the construction contract(s), in the same mode, manner and extent that such data would be available to COUNTY.

2.G.2) a. The A/E shall provide a full-time, on-site representative who shall be qualified in construction administration and subject to the approval of COUNTY. The A/E shall keep COUNTY informed of the progress and quality of the work based on on-site observations and shall endeavor to protect COUNTY against defects and deficiencies in the work.

2.G.3) Immediately following the pre-construction meeting and prior to the start of construction, the A/E shall review the proposed schedule for submittals from the construction contractor(s). The A/E shall assess the timing feasibility of such

submittals relative to the construction schedule and review needed, and advise COUNTY in writing accordingly.

2.G.3) a. The A/E shall be responsible for the professional review and approval or rejection of shop drawings, samples and other submittals from the construction contractor(s) to determine conformance with the specific portions of the Construction Documents under which the submittal was made. Deviation from the Construction Documents as noted by the contractor on submittals or otherwise observed by the A/E shall be brought to the attention of COUNTY's Project Representative and concurrence received from COUNTY before any approval is given to a contractor. Review of the submittals which have priority status as determined by COUNTY's Project Representative, must be completed within five (5) business days of receipt. Review of other submittals shall be completed within ten (10) business days of receipt, or in accordance with the submittal schedule prepared by the General Contractor and as approved by COUNTY and A/E at the start of construction. The A/E is responsible for submittal activity conducted by its consultants in the same manner as if such review were made by the A/E.

2.G.3) b. The A/E shall also review the results of all testing conducted during or after construction and report to COUNTY whether these results meet the design intent and the requirements of the Construction Documents.

2.G.4) The A/E's site representative shall observe the construction process to evaluate the adequacy and completeness of the construction contractor(s) compliance with the Construction Documents, and shall immediately report any noncompliance to the COUNTY Project Manager in writing.

2.G.4) a. The A/E shall provide on-site field verification of Contractor staked survey elevations and layout of proposed improvements.

2.G.4) b. The A/E shall monitor WDNR and Dane County permit compliance through project completion. Provide all required permit documentation.

2.G.4) c. The A/E shall conduct all necessary field verification, topographical surveying, and materials sampling in order to certify that all stormwater management practices and conveyances meet the design specifications of approved plans.

2.G.4) d. The A/E shall be responsible for the coordination and performance of on-site services performed by consultants employed by the A/E and shall review reports and other data submitted by such consultants. The A/E and each consultant engaged under Article 1.G. The A/E shall provide in each consultant agreement, a requirement for consultant visits to the site and a schedule for such visits for professional evaluation of the work monitored by each consultant and a reporting system to inform COUNTY. Site visits shall coincide with crucial times of the construction for the specialty area involved.

2.G.4) e. Following construction site visits, the A/E shall make routine, written status reports detailing observations and activities on the project, at such intervals as is elsewhere herein established and in a format approved by COUNTY. The A/E shall submit the reports within three (3) business days of the site visit by the A/E's representative. Reporting requirements for

full-time, on-site representation shall be established by each Agreement for such professional services.

2.G.4) f. The A/E's site representative will receive copies of reports submitted by the General Contractor and shall provide site observation to evaluate the reports. Discovered construction variances shall immediately be reported to COUNTY.

2.G.4) g. If it becomes necessary during construction, to interpret, construe, clarify or to otherwise determine the reasonable meaning, application or implementation of the Construction Documents, the A/E acting in good faith, based upon the facts made known to it at the time, shall recommend to COUNTY in writing, a reasonable course of conduct in connection with the issues involved. Such recommendation(s) may be considered for further contractual action by COUNTY.

2.G.4) h. Should the A/E become aware that the work of any contractor or subcontractor in place or underway does not conform to the work or quality required by the Construction Documents, the COUNTY Project Manager shall be immediately notified in writing. It is appropriate for the A/E to also immediately advise the contractors of substantial deficiencies, and that notification of these deficiencies will be made to COUNTY. The A/E shall furnish such data as necessary to inform COUNTY of the degree of the noncompliance with the Construction Documents, the cause thereof, the impact on schedule and cost, if known, and a recommended course of conduct. COUNTY shall be solely responsible for implementation of the A/E's recommendation. This assumption of responsibility by COUNTY shall not relieve the A/E or its consultants for negligence in the discovery of the condition, which was or should have been discovered.

2.G.4) i. If the A/E considers suspension of construction work appropriate, the A/E shall notify COUNTY in writing and state the reasons, which, in the professional opinion of the A/E, justify such action.

2.G.5) Necessary professional services or construction required to repair or overcome problems caused by errors, omissions, ambiguities or changes not authorized by COUNTY in the preparation of the documents or design shall be the responsibility of the A/E or its consultants, without additional cost to COUNTY.

2.G.6) The A/E shall review requests for information (RFIs) and shall respond within five (5) business days.

2.G.7) The A/E shall develop and issue appropriate construction bulletins (CBs) at the direction of the COUNTY Project Manager. The A/E shall then evaluate the CB proposals received from the construction contractors and provide COUNTY with a written recommendation regarding the appropriateness of the proposals. The evaluation and recommendation shall be completed within five (5) business days of receipt, or in accordance with another schedule approved by COUNTY. The evaluation shall consider the necessity for such change, the reasonableness of the proposed change, and an analysis of the cost proposed for effecting the change.

2.G.8) The A/E shall assist in the preparation of applications for energy incentive programs, when applicable.

2.G.9) Upon contractor's written notification and the COUNTY Project Manager's confirmation that Substantial Completion has taken place, the A/E shall observe the construction and provide a written punchlist to the COUNTY Project Manager. The COUNTY Project Manager will schedule the punchlist inspection in conjunction with the User and contractors involved. The punchlist shall contain items found not to be complete, in need of correction, replacement or otherwise not in accordance with the Construction Documents. As part of the Substantial Completion verification, the A/E shall perform or witness and document installation and operation meet the intent of the design. The A/E shall forward the results and provide written recommendations for corrective measures where systems do not meet the intent of the design. The A/E shall prepare and distribute the Certificate of Substantial Completion when appropriate.

2.G.10) COUNTY will provide a set of Construction Documents to General Contractor on which daily records of changes and deviations shall be recorded. At completion of the project, General Contractor will submit its marked-up as-built documents to the A/E who shall, based on these marked up as-built documents, revise the original documents, including the electronic files, showing changes in the work made during the construction process to produce a set of Record Documents. Electronic documents shall be in a format and on a medium required by COUNTY. This work shall be completed and submitted to COUNTY within thirty (30) calendar days of receipt of the last marked up prints. The consequences of addenda, change orders and other circumstances known by the A/E to have caused change shall be included in the production of the Record Documents. The marked-up as-built documents shall be turned over to the COUNTY at the same time as the Record Documents.

2.G.10) a. Record Documents deliverables shall be:

- DRAFT**
- (1) Original unbound, hard copy of Drawings and Project Manual in full size, paper format;
 - (2) Two, (2,) hard, bound copies of Drawings and Project Manual; and
 - (3) Electronic version of all documents delivered on a USB flash drive or compact disk:
 - (a) Drawings (.dwg files) in AutoCAD 2019 (or earlier version):
 1. Each drawing sheet shall be complete with x-refs or base plan sheets included and attached;
 2. All external data from non-AutoCAD programs (e.g., Excel or Word) shall be included and attached; and
 3. Include copy of Plot Style Table (ctb file) used to print drawings.
 - (b) Drawings in Adobe Acrobat 2020 (or earlier version; minimize pdf file size by converting files from AutoCAD or other programs);
 - (c) Project Manual in Word 2016 (or earlier version); and
 - (d) Project Manual in Adobe Acrobat 2020 (or earlier version; minimize pdf file size by converting files from Word or other programs, rather than scanning printouts).

2.G.11) It is not intended by this Agreement to impose upon the A/E the duty of a guarantor of the construction contractor(s). It is, however, the intent of the Agreement to impose upon the A/E the duty of the faithful fulfillment, in accordance with the standard of care ordinary to the profession, of the performance of the duties specifically enumerated herein and for the close monitoring of the work of its consultants as if the work were performed by the A/E. As such, this shall not

preclude the entitlement to COUNTY of reasonable expectation that systems as designed by the A/E or their consultants will operate as anticipated by COUNTY upon faithful completion of construction.

2.H. Commissioning Phase: NOT USED

3. ARTICLE 3: COUNTY'S RESPONSIBILITIES

3.A. COUNTY will determine the project scope for which the professional design services are required and will fully cooperate in achieving completion of that work.

3.B. COUNTY will establish an internal operating procedure for timely and proper performance of any COUNTY duty required to fulfill the needs of the project.

3.C. COUNTY will provide available information regarding the requirements for the project, which set forth COUNTY's objectives for program, schedule and overall budget. COUNTY will make available to the A/E data known to COUNTY or requested by the A/E, which may be needed for the fulfillment of the professional responsibility of the A/E. This data may include, but is not limited to, prints of existing buildings or record drawings and COUNTY standards and guides. Such documents will be the most recent and accurate available. The use of any such data by the A/E shall be without contractual or legal significance unless otherwise established elsewhere in this Agreement. However, providing of documents by COUNTY shall not relieve the A/E from the responsibility for conducting a field survey to verify existing conditions as specified herein.

3.D. COUNTY will communicate to the A/E the format of the documents required to be submitted.

3.E. COUNTY will examine documents submitted by the A/E and will render decisions regarding them promptly, to avoid unreasonable delay in the progress and sequence of the A/E's work. COUNTY will coordinate review comments from the User agency and COUNTY staff prior to issuance to the A/E.

3.F. COUNTY will distribute Construction Documents and any necessary addenda to prospective bidders, and conduct the bid opening for the project.

3.G. COUNTY will prepare and process the Agreements between COUNTY and A/E, and between COUNTY and construction contractor(s).

3.H. Unless otherwise specified in this Agreement, COUNTY will arrange for services of a testing laboratory to furnish structural, chemical, mechanical and other laboratory tests, inspections and reports as required by law or deemed necessary by COUNTY.

4. ARTICLE 4: COMPENSATION

4.A. A/E fees for basic services will be compensated by COUNTY in accordance with the Terms and Conditions of this Agreement as follows:

4.A.1) COUNTY will pay the A/E a lump sum fee of \$[].

4.B. The A/E's Compensation for Additional Services, as described in Article 4.D., will be computed as follows:

4.B.1) Principals' time at a fixed rate of \$[] per hour, unless separate amounts are provided for each Principal. For the purposes of this Agreement, the Principals are:

[_____]

[_____]

4.B.2) Other design staff shall be billed at these fixed rates:

Senior engineer: \$[] per hour

Junior engineer: \$[] per hour

Drafting: \$[] per hour

Clerical: \$[] per hour

4.B.3) Employee's time shall be computed using the employee's basic hourly salary and include overhead costs for clerical support and mandatory and customary benefits such as statutory employee benefits, insurance, sick leave, holidays and vacations, pensions and similar benefits for persons in consultation, research and design in producing drawings, specifications and other documents pertaining to the project and for services during construction at the site.

4.C. Reimbursable Expenses:

4.C.1) Reimbursable Expenses are actual, incidental expenses incurred by the A/E, its employees or consultants, in the interest of the project and are not included in overhead costs for the Fees for Basic Services (4.A.) and Additional Services (4.D.). Reimbursable Expenses shall be incurred or contracted for only with PRIOR written approval from COUNTY. Such approval shall be based on a written proposal delineating the nature of the services, the time involved, the estimated cost thereof, and the individuals or firms involved. Payment Requests from consultants and construction contractors providing these Reimbursable Expenses shall be reviewed by the A/E to check the accuracy of and entitlement to the sums requested. There are no markups allowed for Reimbursable Expenses. Reimbursable Expenses may include, but are not limited to, the following incidental expenses:

4.C.1) a. Expense of reproduction of drawings and specifications, excluding the review sets required in Article 2.

4.C.1) b. Expense of a site survey when needed.

4.C.1) c. Expense of a geotechnical investigation and soils & material testing when required.

4.C.1) d. Expense of State and / or City review fees when required.

4.C.2) Expenses not eligible for reimbursement shall include, but are not limited to, indirect project overhead costs associated with the Fees for Basic Services (4.A.) and Additional Services (4.D.) such as mileage, travel, lodging, replication of drawings for the design development meetings and subsequent design meetings, preliminary and final review document printing, handling and postage, cost of correspondence transmittals, telephone expenses, and CAD / electronic graphic services. Such expenses shall be included as part of the Lump Sum fee.

4.D. Additional Services:

4.D.1) The following services are in addition to but are not covered in Article 4.A. These services may be identified as part of the A/E's fee proposal and included with the lump sum fee as such. Compensation for these additional services or other services must be requested by the A/E, and subsequently approved by COUNTY prior to proceeding with the work. If the additional services are requested after the Agreement has been issued, such authorization shall be based on a written proposal delineating the nature of the services, the time involved, the estimated cost thereof, the effect on the project schedule and the individuals or firms involved. When authorized, an Agreement Change Order will be used to modify the A/E's Agreement.

4.D.1) a. Obtaining or participating in third party Value Engineering / Enhancement of the project when directed by COUNTY.

4.D.1) b. Providing services other than corrective design work and record documents, after final payment to the construction contractor(s).

4.D.1) c. Providing services as expert witness in connection with any public hearings, arbitration proceeding, or the proceedings of a court of record except when the A/E is party thereto.

4.D.1) d. Participation in post-project evaluations.

4.E. Payments to the A/E:

4.E.1) Payments of the A/E's lump sum fee will be made monthly, in proportion to services performed as confirmed by COUNTY, to increase the compensation to the following percentages of the lump sum fee at the completion of each phase of the work.

Construction Phase

100%

4.E.2) No more than ninety percent (90%) of the A/E's lump sum fee shall be paid out prior to substantial completion of the project. When COUNTY confirms that development of punch lists, review of Operating & Maintenance Manuals, submittal of record documents, has been satisfactorily completed by the A/E, COUNTY will determine how and when the remaining lump sum fee is disbursed.

4.E.3) Payments for COUNTY-approved Reimbursable Expenses as defined in Article 4.C. and Additional Services of the A/E as defined in Article 4.D., will be made monthly upon request.

4.E.4) An A/E whose work is found deficient or fails to conform to the requirements set forth in the Agreement, is not entitled to further payments, until corrected to the satisfaction of COUNTY.

4.E.4) a. Payments to the A/E may be withheld for damages sustained by COUNTY due to error, omission, unauthorized changes or negligence on the part of the A/E. COUNTY will notify the A/E in writing of the alleged, specific damages and amounts involved, on a timely basis.

4.E.5) Payments to the A/E will not be withheld due to disputes between construction contractor(s) and COUNTY.

4.E.6) If the project is suspended for more than three (3) months in whole or in part, the A/E will be paid fees for services performed prior to receipt of written notice from

COUNTY of the suspension, together with Reimbursable Expenses then due and reasonable expenses resulting from this suspension, as approved by COUNTY. If the project is resumed after being suspended for more than three (3) months, the A/E's compensation will be subject to renegotiation.

5. ARTICLE 5: ACCOUNTING RECORDS

- 5.A. Records of the A/E's direct personnel, consultants, and reimbursable expenses pertaining to the project shall be kept in accordance with Generally Accepted Accounting Principles (GAAP) and shall be available to COUNTY or an authorized representative throughout the term of this Agreement and for at least three (3) years after final payment to the A/E.

6. ARTICLE 6: TERMINATION OF AGREEMENT

- 6.A. This Agreement may be terminated by COUNTY without cause upon ten (10) calendar days written notice to the A/E. In the event of termination, the A/E will be paid fees for services performed to termination date, reimbursable expenses then due, and termination expenses as approved by COUNTY. Work performed prior to the date of termination shall be in accordance with the terms and conditions of this Agreement. Upon termination, the results of such work shall immediately be turned over to the COUNTY Project Manager and is a condition precedent to further payment by COUNTY.

- 6.B. In the event the Agreement between the A/E and any consultant on this project is terminated, the results of work by that consultant shall immediately be turned over to the A/E.

7. ARTICLE 7: OWNERSHIP OF DOCUMENTS

- 7.A. All drawings and specifications, renderings, models, scale details, approved copies of shop drawings and other such documents prepared by the A/E or any consultant pursuant to this Agreement shall become the property of COUNTY on completion and acceptance of any of the A/E's work, or upon termination of the Agreement, and shall be delivered to COUNTY upon request.

- 7.B. Documents prepared under this Agreement may be used by COUNTY for informational purposes without additional compensation to the A/E.

- 7.C. Specifications and isolated, detail drawings inherent to the engineering design of the project, whether provided by the COUNTY or generated by the A/E, shall be available for future use by the parties to this Agreement and other parties, each at their own risk.

8. ARTICLE 8: LIABILITY- HOLD HARMLESS AND INDEMNIFICATION

- 8.A. A/E shall indemnify, hold harmless and defend COUNTY, its boards, commissions, agencies, officers, employees and representatives against any and all liability, loss (including, but not limited to, property damage, bodily injury and loss of life), damages, costs or expenses which COUNTY, its officers, employees, agencies, boards, commissions and representatives may sustain, incur or be required to pay by reason of A/E furnishing the services required to be provided under this Agreement, provided, however, that the provisions of this paragraph shall not apply to liabilities, losses, charges, costs, or expenses caused or resulting from the acts or omissions of COUNTY, its agencies, boards, commissions, officers, employees or representatives. The obligations of A/E under this paragraph shall survive the expiration or termination of this Agreement.

9. ARTICLE 9: PROFESSIONAL LIABILITY INSURANCE

9.A. The A/E and its consultants retained under the terms of this Agreement shall procure and maintain a professional liability insurance policy with at least \$1,000,000 in coverage that provides for payment of the insured's liability for errors, omissions or negligent acts arising out of the performance of the professional services required under this Agreement. The A/E shall provide up-to-date, accurate professional liability information on the A/E's Data Record, including amount of insurance, deductible, carrier and expiration date of coverage. Upon request by COUNTY, the A/E shall furnish COUNTY with a Certificate of Insurance showing the type, amount, deductible, effective date and date of expiration of such policy. Such certificate shall also contain substantially the following statement: "The insurance covered by this certificate shall not be canceled, the coverage changed or reduced by endorsement, by the insurance company, except after thirty (30) calendar days written notice has been received by COUNTY." The A/E shall not cancel or materially alter this coverage without prior written approval by COUNTY. The A/E shall be responsible for consultants maintaining professional liability insurance during the life of their Agreement.

10. ARTICLE 10: OTHER INSURANCE

10.A. The A/E and its consultants retained under terms of this Agreement shall:

10.A.1) Maintain Worker's Compensation Insurance:

10.A.1) a. Procure and maintain Worker's Compensation Insurance as required by State of Wisconsin Statutes for all of the A/E's and consultant's employees engaged in work associated with the project under this Agreement.

10.A.1) b. Maintain Employer's Liability Insurance with a policy limit of not less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate. Insurance may be met by a combination of primary and excess coverage.

10.A.2) Procure and maintain during the life of this Agreement, and until one year after the completion of this Agreement, Commercial General Liability Insurance, including Products and Completed Operations for all claims that might occur in carrying out the Agreement. Minimum coverage shall be \$1,000,000 per occurrence, \$1,000,000 general aggregate, combined single limit for bodily injury, personal injury, and property damage. Such coverage shall be of the "occurrence" type form and shall include the employees of the A/E as insureds.

10.A.3) Procure and maintain Commercial Automobile Liability Insurance for all owned, non-owned, and hired vehicles that are used in carrying out the Agreement. Minimum coverage shall be \$1,000,000 per occurrence combined single limit for bodily injury and property damage. Insurance may be met by a combination of primary and excess coverage.

10.A.4) Provide an insurance certificate indicating the above Commercial Liability Insurance and property damage coverage, countersigned by an insurer licensed to do business in Wisconsin, covering and maintained for the period of the Agreement. Upon request by COUNTY, the insurance certificate is to be presented on or before execution of the Agreement.

11. ARTICLE 11: MISCELLANEOUS PROVISIONS

11.A. A/E warrants that it has complied with all necessary requirements to do business in the State of Wisconsin, that the persons executing this Agreement on its behalf are authorized to do so.

- 11.B. Legal Relations. The A/E shall comply with and observe federal and state laws and regulations and local zoning ordinances applicable to this project and in effect on the date of this Agreement.
- 11.C. Approvals or Inspections. None of the approvals or inspections performed by COUNTY shall be construed or implied to relieve the A/E from any duty or responsibility it has for its professional performance, unless COUNTY formally assumes such responsibility in writing from COUNTY so stating that the responsibility has been assumed.
- 11.D. Successors, Subrogees and Assigns. COUNTY and A/E each bind themselves, their partners, successors, subrogees, assigns, and legal representatives to the other party to this Agreement and to the partners, successors, subrogees, assigns and legal representatives of such other party with respect to covenants of this Agreement.
- 11.E. Claims. The A/E's project manager will meet with COUNTY's Project Manager to attempt to resolve claims, disputes and other matters in question arising out of, or relating to, this Agreement or the breach thereof. Issues not settled are to be presented in writing to the COUNTY Director of Public Works for review and resolution. The decision of the Director of Public Works shall be final. Work shall progress during the period of any dispute or claim. Unless specifically agreed between the parties, venue will be in Dane County, Wisconsin.
- 11.F. Amendment of Agreement. This Agreement may be amended in writing by both COUNTY and A/E.
- 11.G. It is expressly understood and agreed to by the parties hereto that in the event of any disagreement or controversy between the parties, Wisconsin law shall be controlling. Venue for any legal proceedings shall be in the Dane County Circuit Court.
- 11.H. This Agreement is intended to be an agreement solely between the parties hereto and for their benefit only. No part of this Agreement shall be construed to add to, supplement, amend, abridge or repeal existing duties, rights, benefits or privileges of any third party or parties, including but not limited to employees of either of the parties.
- 11.I. The entire agreement of the parties is contained herein and this Agreement supersedes any and all oral agreements and negotiations between the parties relating to the subject matter hereof. The parties expressly agree that this Agreement shall not be amended in any fashion except in writing, executed by both parties.

12. ARTICLE 12: NONDISCRIMINATION IN EMPLOYMENT

- 12.A. During the term of this Agreement, A/E agrees 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 against any person, whether a recipient of services (actual or potential) or an employee or applicant for employment. 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 or level of service(s). A/E agrees to post in conspicuous places, available to all employees, service recipients and applicants for employment and services, notices setting forth the provisions of this paragraph. The 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 the extent allowable in state or federal law.

12.B. Civil Rights Compliance:

12.B.1) If A/E has twenty (20) or more employees and receives \$20,000 in annual contracts with COUNTY, the A/E shall submit to COUNTY a current Civil Rights Compliance Plan (CRC) for Meeting Equal Opportunity Requirements under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title VI and XVI of the Public Service Health Act, the Age Discrimination Act of 1975, the Omnibus Budget Reconciliation Act of 1981 and Americans with Disabilities Act (ADA) of 1990. A/E shall also file an Affirmative Action (AA) Plan with COUNTY in accordance with the requirements of Chapter 19 of the Dane County Code of Ordinances. A/E shall submit a copy of its discrimination complaint form with its CRC/AA Plan. The CRC/AA Plan must be submitted prior to the effective date of this Agreement and failure to do so by said date shall constitute grounds for immediate termination of this Agreement by COUNTY. If an approved plan has been received during the previous calendar year, a plan update is acceptable. The plan may cover a two-year period. If A/E has less than twenty (20) employees, but receives more than \$20,000 from the COUNTY in annual contracts, it may be required to submit a CRC Action Plan to correct any problems discovered as the result of a complaint investigation or other Civil Rights Compliance monitoring efforts set forth herein below. If A/E submits a CRC/AA Plan to a Department of Workforce Development Division or to a Department of Health and Family Services Division that covers the services purchased by COUNTY, a verification of acceptance by the State of A/E's Plan is sufficient.

12.B.2) A/E agrees to comply with the COUNTY's civil rights compliance policies and procedures. A/E agrees to comply with civil rights monitoring reviews performed by the COUNTY, including the examination of records and relevant files maintained by the A/E. A/E agrees to furnish all information and reports required by the COUNTY as they relate to affirmative action and non-discrimination. A/E further agrees to cooperate with COUNTY in developing, implementing, and monitoring corrective action plans that result from any reviews.

12.B.3) A/E shall post the Equal Opportunity Policy, the name of A/E's designated Equal Opportunity Coordinator and the discrimination complaint process in conspicuous places available to applicants and clients of services, applicants for employment and employees. The complaint process will be according to COUNTY's policies and procedures and made available in languages and formats understandable to applicants, clients and employees. A/E shall supply to COUNTY's Contract Compliance Specialist upon request a summary document of all client complaints related to perceived discrimination in service delivery. These documents shall include names of the involved persons, nature of the complaints, and a description of any attempts made to achieve complaint resolution.

12.B.4) A/E shall provide copies of all announcements of new employment opportunities to COUNTY's Contract Compliance Specialist when such announcements are issued.

SECTION 00 73 11

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 a 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.nlr.gov and werc.wi.gov.

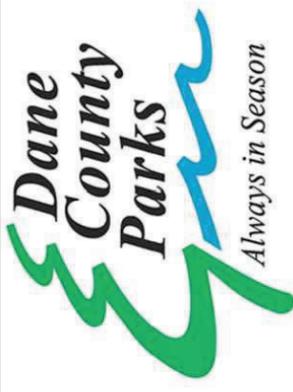
For reference, Dane County Ordinance 25.09 is as follows:

(1) 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 Controller 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.

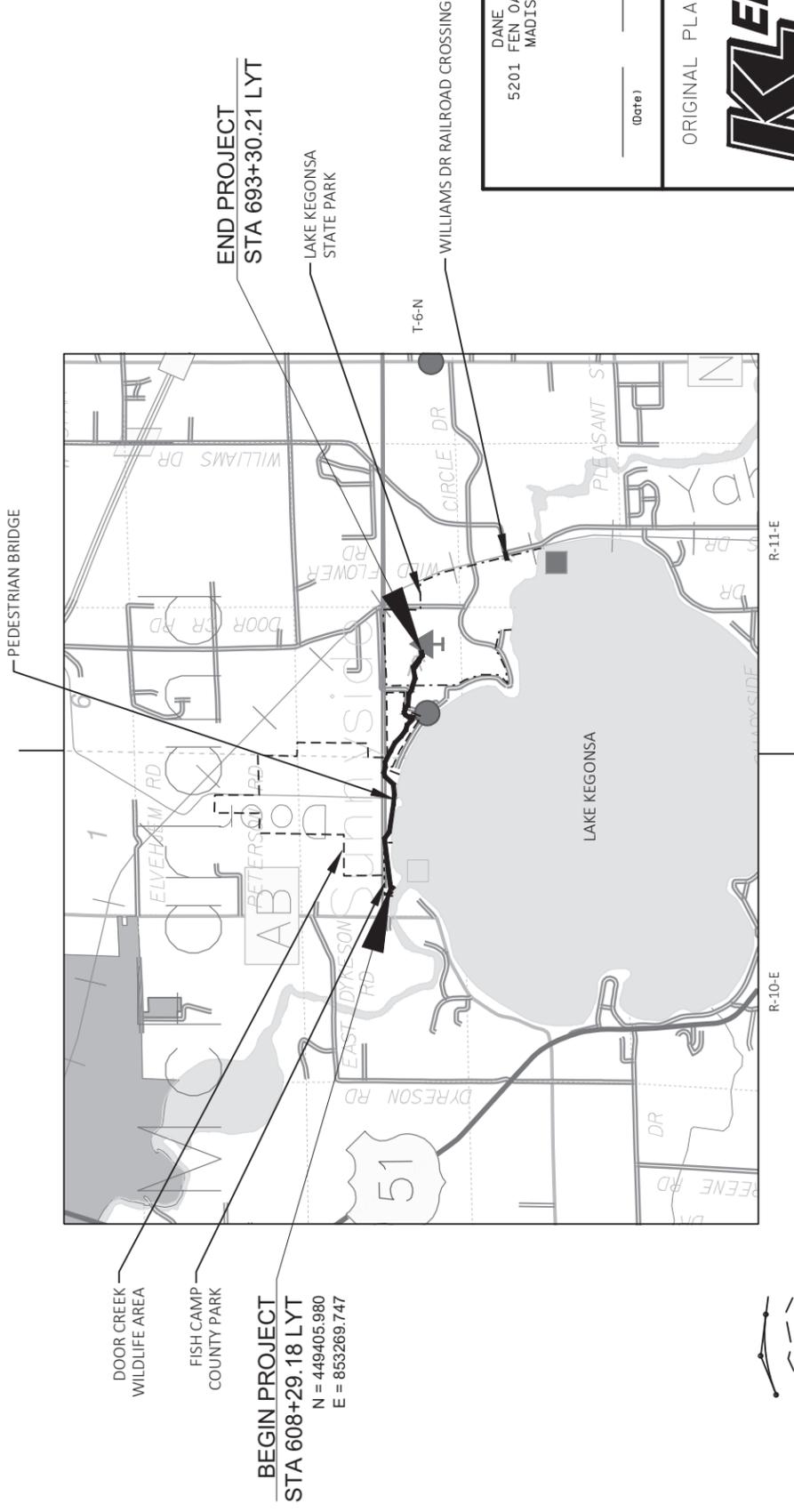
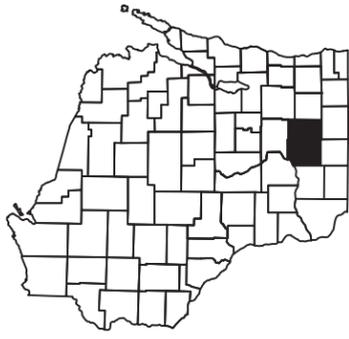
Include this completed Certification with your bid, application or proposal.

END OF SECTION



PLAN OF PROPOSED IMPROVEMENT
LOWER YAHARA RIVER TRAIL
PHASE TWO
 FISH CAMP COUNTY PARK TO LAKE KEGONSA STATE PARK
 DANE COUNTY

PROJECT NUMBER
19044-000



BEGIN PROJECT
 STA 608+29.18 LYT
 N = 449405.980
 E = 853269.747

END PROJECT
 STA 693+30.21 LYT

CONVENTIONAL SYMBOLS

- PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY/EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS
- MARSH AREA
- WOODED OR SHRUB AREA

- PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such)
- SPECIAL DITCH
- GRADE ELEVATION
- CULVERT (Profile View)
- UTILITIES
- ELECTRIC
- FIBER OPTIC
- GAS
- SANITARY SEWER
- STORM SEWER
- TELEPHONE
- WATER
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

- ROCK
- LABEL
- 9' C 56'
- E
- FO
- G
- SAN
- SS
- T
- W

SCALE 0 1.0 MI
 LAYOUT

TOTAL NET LENGTH OF CENTERLINE = 1.610MI

COORDINATE REFERENCE SYSTEM: WCCS DANE CO.
 HORIZONTAL DATUM AND ADJUSTMENT: NAD 83 (2011)
 VERTICAL DATUM AND ADJUSTMENT: NAVD 88 (2012)



LOWER YAHARA RIVER TRAIL PHASE 2
 TITLE SHEET

Project No: 19044-000
 Designed By: KL Engineering
 Drafted By: BUS
 Checked By: SDH

Revisions:

SHEET NO.

DANE COUNTY PARKS
 5201 FEN OAK DRIVE, ROOM 208
 MADISON, WI 53718

(Date) _____ (Signature) _____

ORIGINAL PLANS PREPARED BY



(Date) _____ (Signature) _____

ABBREVIATIONS

AEW	APRON END WALL
ASPH	ASPHALT
AVG	AVERAGE
BAD	BASE AGGREGATE DENSE
BG	BEAMGUARD
BM	BENCH MARK
C&G	CONCRETE CURB AND GUTTER
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CP	CULVERT PIPE
CSCP	CULVERT PIPE CORRUGATED STEEL
D	DEGREE OF CURVE
DESC	DESCRIPTION
DISCH	DISCHARGE
EB	EASTBOUND
EP	EDGE OF PAVEMENT
EXIST	EXISTING
HMA	HOT MIX ASPHALT
INV	INVERT
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
NB	NORTHBOUND
NC	NORMAL CROWN
NOR	NORMAL
PAVT	PAVEMENT
PC	POINT OF CURVE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PNT	POINT
PT	POINT OF TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
REQD	REQUIRED
RO	RUN OFF LENGTH
RT	RIGHT
SALV	SALVAGED
SAN	SANITARY
SB	SOUTHBOUND
SDD	STANDARD DETAIL DRAWINGS
SHLD/SHLDR	SHOULDER
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STA	STATION
T	TANGENT LENGTH
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
VCL	VERTICAL CURVE LENGTH
VPC	POINT OF VERTICAL CURVE
VPI	POINT OF VERTICAL INTERSECTION
VPT	POINT OF VERTICAL TANGENT
WAT	WATER
WB	WESTBOUND
Δ	DELTA

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, DANE COUNTY, NAD83 (2011), WISCRS DANE CO. NAVD88(2012) IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELECTRIC
 ALLIANT ENERGY
 (608) 223-2014

UTILITY CONTACTS
GAS
 ANR PIPELINE COMPANY
 (608) 752-5912

SANITARY
 KEGONSA SANITARY DISTRICT
 (608) 873-0230

COMMUNICATIONS
 AT&T DISTRIBUTION
 (262) 446-9821

ELECTRIC
 DANE COUNTY PARKS
 (608) 575-8610

GAS
 ALLIANT ENERGY
 (608) 223-2014

SANITARY
 PLEASANT SPRINGS SANITARY
 (608) 556-1503



Dial **811** or **(800)242-8511**
www.DiggersHotline.com

DESIGN CONTACT
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 MADISON, WI 53719
 (608) 663-1218
 sherheim@klengineering.com

DANE COUNTY
 CHRIS JAMES
 DANE COUNTY PARKS
 5201 FEN OAK DRIVE, RM 208
 MADISON, WI 53718
 (608) 235-2252
 james@countyofdane.com

GENERAL NOTES

ALL GRADES PROVIDED ALONG RADII ARE ALONG EDGE OF PAVEMENT.
 THE LOCATION OF EXISTING AND PROPOSED UTILITIES INSTALLATIONS AS SHOWN IN THE PLANS, ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
 UTILITY REFERENCE LINES ON THE CROSS SECTIONS ARE FOR APPROXIMATE HORIZONTAL REFERENCE ONLY.
 EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. THE ENGINEER MAY MODIFY LOCATIONS AS NEEDED. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.
 NO TREES AND/OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES AND/OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER.
 CONTRACTOR IS RESPONSIBLE FOR RESHAPING AND FINISHING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THEIR OPERATION OUTSIDE THE NORMAL CONSTRUCTION LIMITS.
 ASPHALTIC SURFACE WEIGHT CALCULATIONS BASED ON 112LBS/SY/IN.
 PIPE ELEVATIONS, LENGTHS, AND LOCATIONS AS SHOWN ON THE PLANS, MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
 STATIONING AND OFFSETS TO APRON ENDWALLS FOR CULVERT PIPES ARE SHOWN TO THE END OF THE PIPE.
 HAUL ROUTES SHALL BE DETERMINED BEFORE CONSTRUCTION BEGINS AND SHALL BE APPROVED BY THE MAINTAINING AUTHORITY. HAUL ROADS DAMAGED DURING HAULING ACTIVITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR TO THEIR ORIGINAL CONDITION AND TO THE MAINTAINING AUTHORITY'S APPROVAL AT THE CONTRACTOR'S EXPENSE.
 ALL RADII ARE MEASURED TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
 TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS, FLOODWAY, OR FLOODPLAIN OF ANY WATERWAY.
 THE CONTRACTOR SHALL NOT OPERATE MACHINERY OUTSIDE THE SLOPE INTERCEPTS IN AREAS NEAR WETLANDS.
 SEED AND MULCH OR SOD ALL TOPSOILED AREAS WITHIN 5 CALENDAR DAYS AFTER GRADING WORK IS COMPLETED.

ALIGNMENT IDENTIFIERS

LYT- LOWER YAHARA RIVER TRAIL REFERENCE LINE
 EPL - PARKING LOT SPUR TRAIL REFERENCE LINE
 FCC - FISH CAMP CONNECTOR TRAIL REFERENCE LINE
 FCP - FISH CAMP PARKING LOT REFERENCE LINE

HMA PAVEMENT, WHEN INDICATED ON THE PLANS, SHALL CONSIST OF COURSE THICKNESSES AS FOLLOWS:

TOTAL DEPTH	LAYERS	HMA MIXTURES	LOCATIONS
3-INCH	3.00" UPPER	ASPHALTIC SURFACE	TRAIL
3-INCH	1.75" UPPER 1.25" LOWER	4 LT 58-28 S 3 LT 58-28 S	PARKING LOT OVERLAY
4-INCH	1.75" UPPER 2.25" LOWER	4 LT 58-28 S 3 LT 58-28 S	PARKING LOT

**LOWER YAHARA RIVER TRAIL PHASE 2
 GENERAL NOTES**



Project No: 19044-000
 Designed By: KL Engineering
 Drawn By: BJS
 Checked By: XXX

Revisions: XX-XX-XXXX

SHEET NO.



PROJECT OVERVIEW

LOWER YAHARA RIVER TRAIL PHASE 2

KL Engineering
 [A] Better Experience
 5400 King James Way
 Suite 200
 Madison, WI, 53719
 Phone: (608) 663-1218
 Phone: (800)-810-4012
 http://klengineering.com
 email@klengineering.com

Project No: 19044-000
 Designed By: KL Engineering
 Drawn By: BUS
 Checked By: XXX

Revisions: XX-XX-XXXX

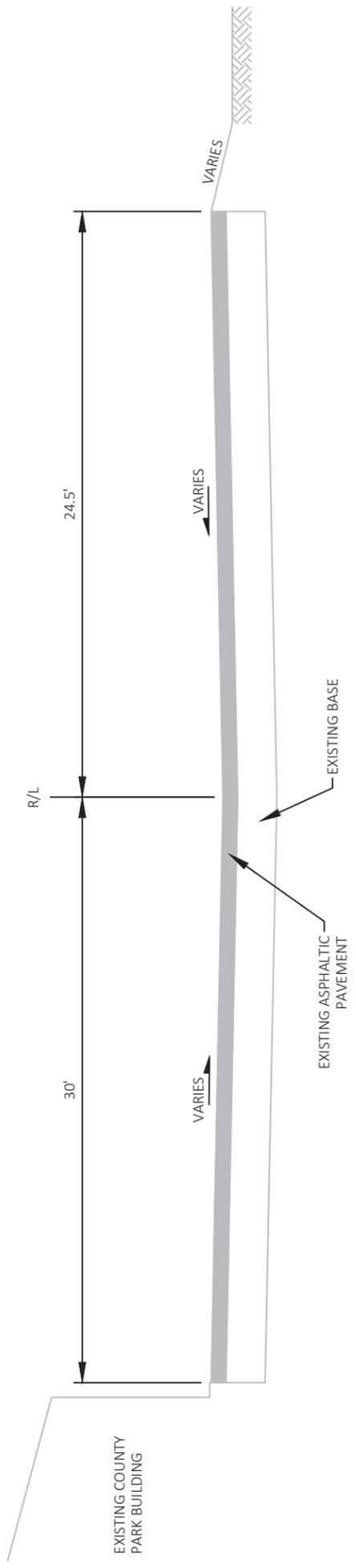
SHEET NO.

LOWER YAHARA RIVER TRAIL PHASE 2
 TYPICAL SECTIONS -
 FISH CAMP COUNTY PARK

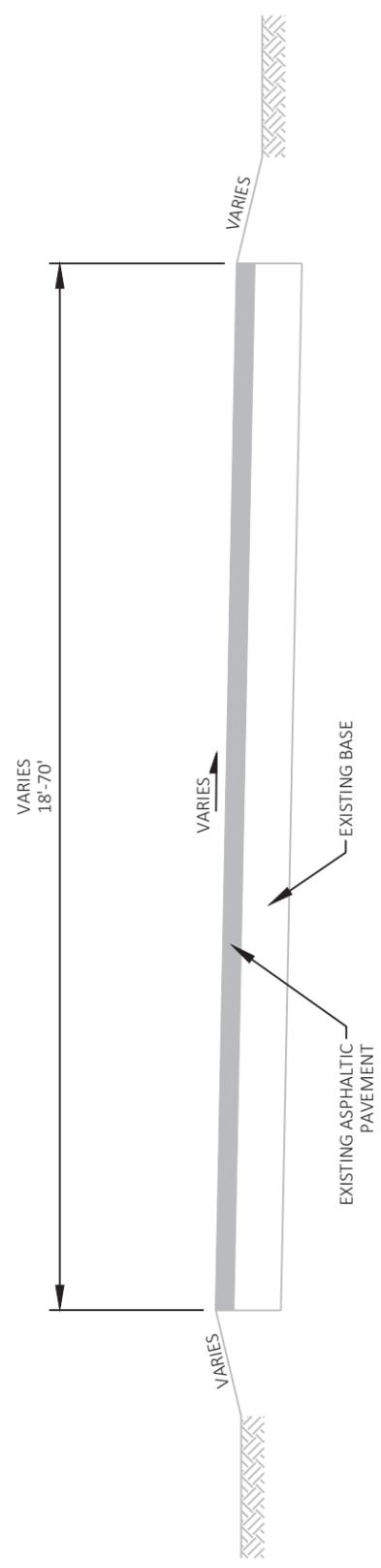
Project No: 19044-000
 Designed By: KL Engineering
 Drawn By: BUS
 Checked By: SDH

Revisions: XX-XX-XXXX

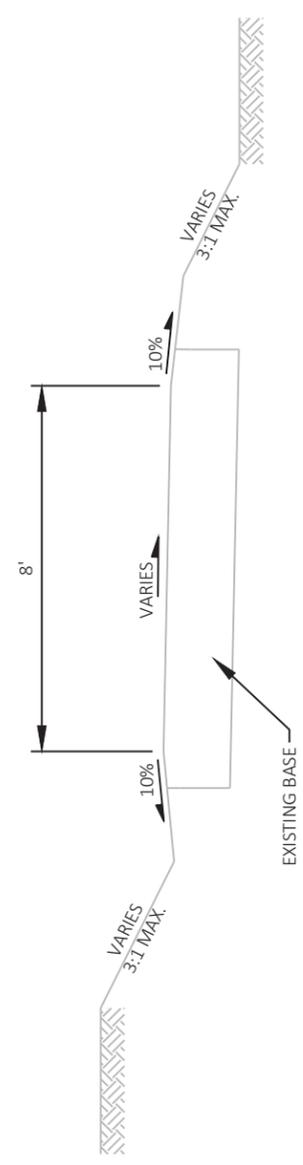
SHEET NO.



TYPICAL EXISTING SECTION
 PARKING LOT EAST



TYPICAL EXISTING SECTION
 PARKING LOT WEST



TYPICAL EXISTING SECTION
 KAYAK RAMP PATH

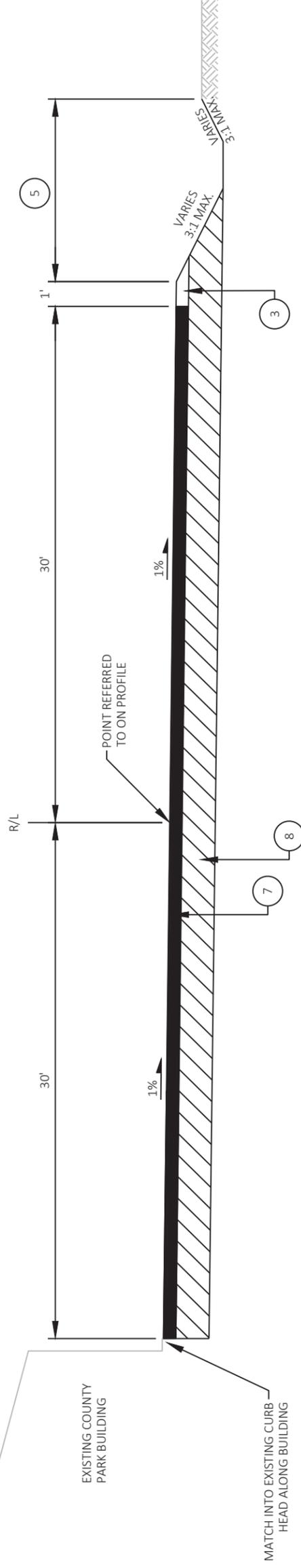
LOWER YAHARA RIVER TRAIL PHASE 2 TYPICAL SECTIONS - FISH CAMP COUNTY PARK

KL Engineering
 [A] Better Experience
 5400 King James Way
 Suite 200
 Madison, WI 53719
 Phone: (608) 863-1218
 Phone: (800)-810-4012
 http://klengineering.com
 email@klengineering.com

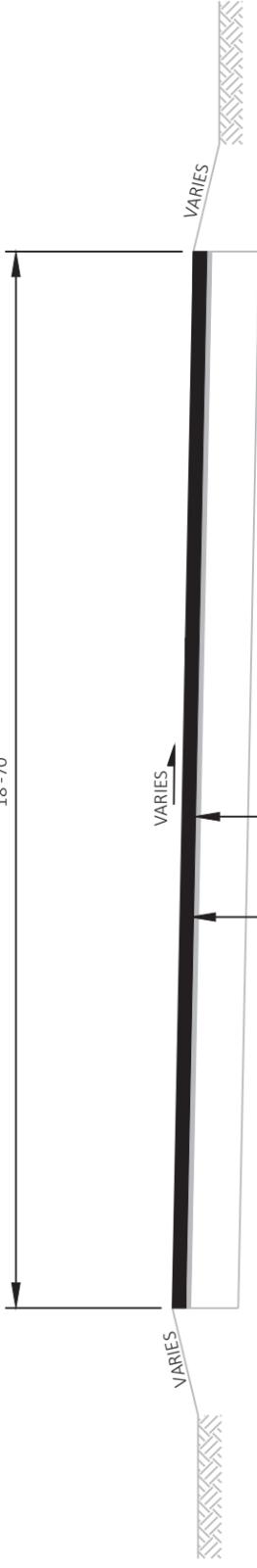
Project No: 19044-000
 Designed By: KL Engineering
 Drawn By: BUS
 Checked By: SDH

Revisions: XX-XX-XXXX

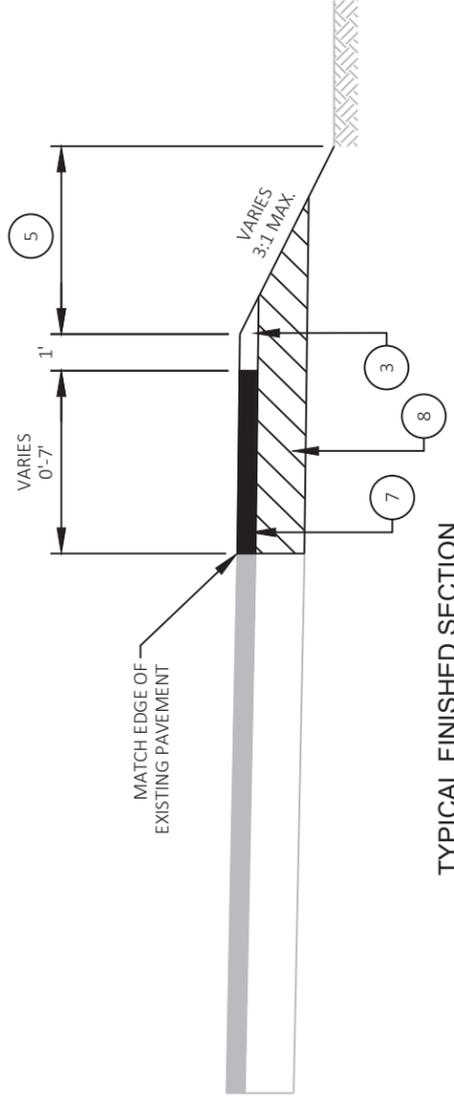
SHEET NO.



TYPICAL FINISHED SECTION
 PARKING LOT EAST
 STA. 700+34 FCP TO STA. 702+29 FCP



TYPICAL FINISHED SECTION
 PARKING LOT WEST



TYPICAL FINISHED SECTION
 PARKING LOT WIDENING
 STA. 702+29 FCP TO STA. 704+34 FCP

- LEGEND**
- 3 BASE AGGREGATE DENSE 3/4-INCH
 - 5 TOPSOIL, FERTILIZER, SEED, AND EROSION MAT CLASS I TYPE B URBAN OR MULCH*
 - 7 HMA PAVEMENT 4-INCH
 - 8 BASE AGGREGATE DENSE 1 1/4-INCH, 10-INCH
 - 10 REMOVING ASPHALTIC SURFACE MILLING, 3-INCH
 - 11 HMA PAVEMENT 3-INCH

*DO NOT USE FERTILIZER ADJACENT TO WETLANDS, WATER BODIES, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS

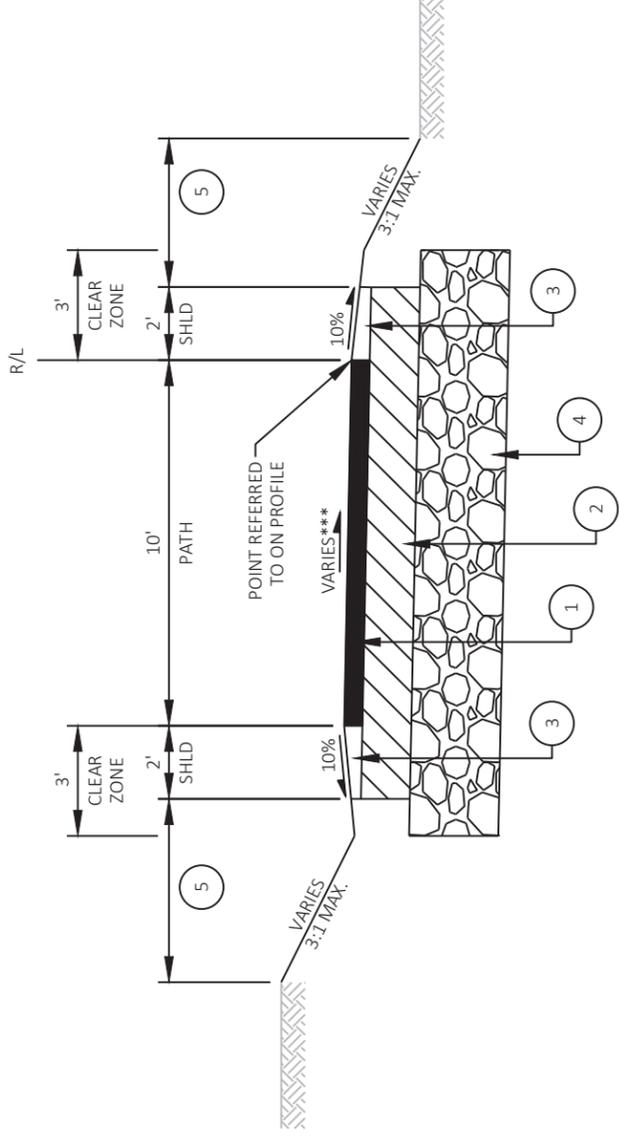
TYPICAL SECTIONS

LOWER YAHARA RIVER TRAIL PHASE 2

Project No: 19044-000
 Designed By: KL Engineering
 Drafted By: BJS
 Checked By: SDH

Revisions: XX-XX-XXXX

SHEET NO.



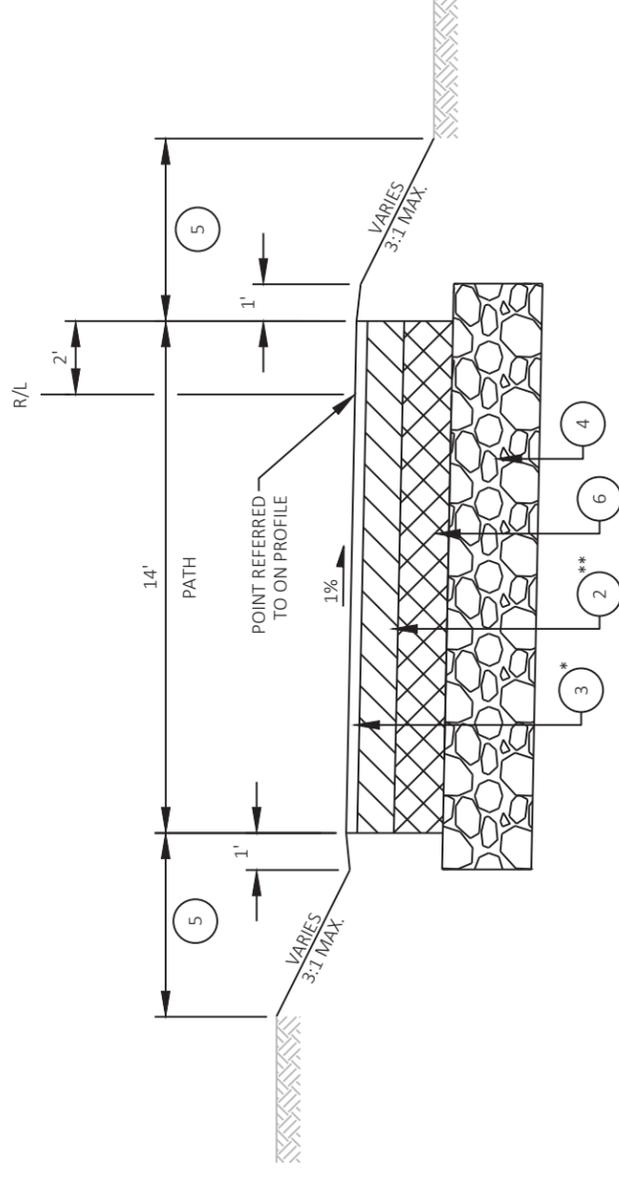
TYPICAL FINISHED SECTION

AT-GRADE TRAIL
 STA 608+15 LYT TO 614+93 LYT
 STA 648+41 LYT TO 663+50 LYT
 STA 672+78 LYT TO 693+30 LYT
 STA 800+26 WDC TO 801+51 WDC

LEGEND

- 1 ASPHALTIC SURFACE, 3-INCH
- 2 BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH
- 3 BASE AGGREGATE DENSE 3/4-INCH
- 4 2' EBS IN WETLAND AND MARSHY AREAS BACKFILLED WITH BREAKER RUN & GEOTEXTILE FABRIC AS DIRECTED BY THE ENGINEER
- 5 TOPSOIL, FERTILIZER, SEED, AND EROSION MAT CLASS I TYPE B URBAN OR MULCH*****
- 6 BASE AGGREGATE DENSE 3-INCH, 8-INCH

*2-INCH, CRUSHED STONE OR GRAVEL ONLY
 **6-INCH
 *** SLOPE VARIES 1% TO -1%
 *****DO NOT USE FERTILIZER ADJACENT TO WETLANDS, WATER BODIES, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS



TYPICAL FINISHED SECTION

AT-GRADE TRAIL
 STA 667+46 LYT TO 668+10 LYT
 STA 200+32 EPL TO 202+28 EPL

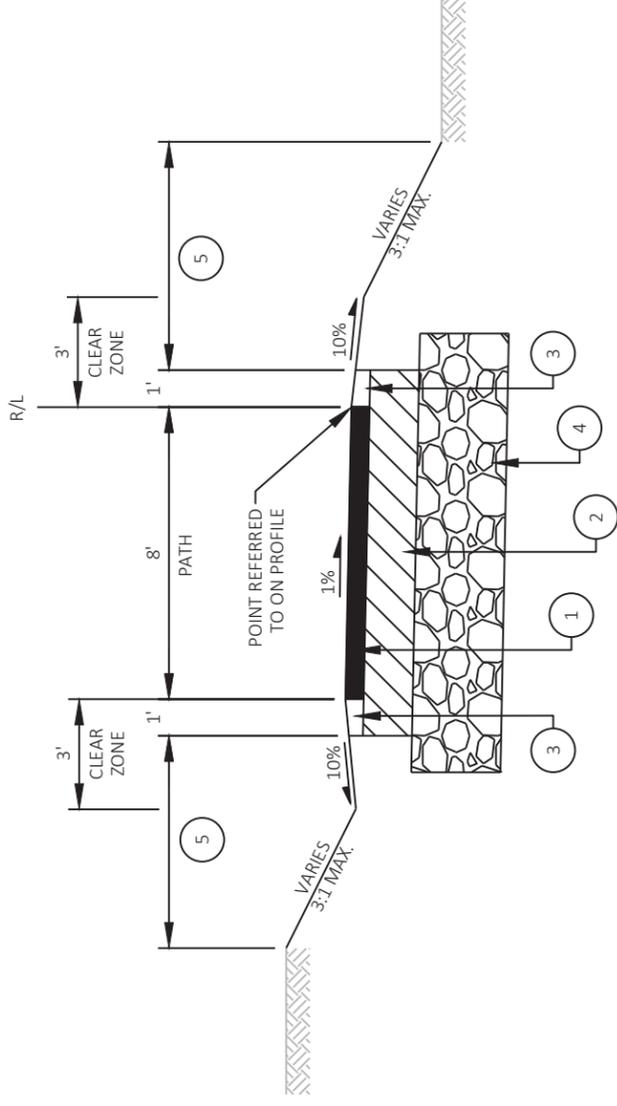
TYPICAL SECTIONS

LOWER YAHARA RIVER TRAIL PHASE 2

Project No: 19044-000
 Designed By: KL Engineering
 Drawn By: BUS
 Checked By: SDH

Revisions: XX-XX-XXXX

SHEET NO.



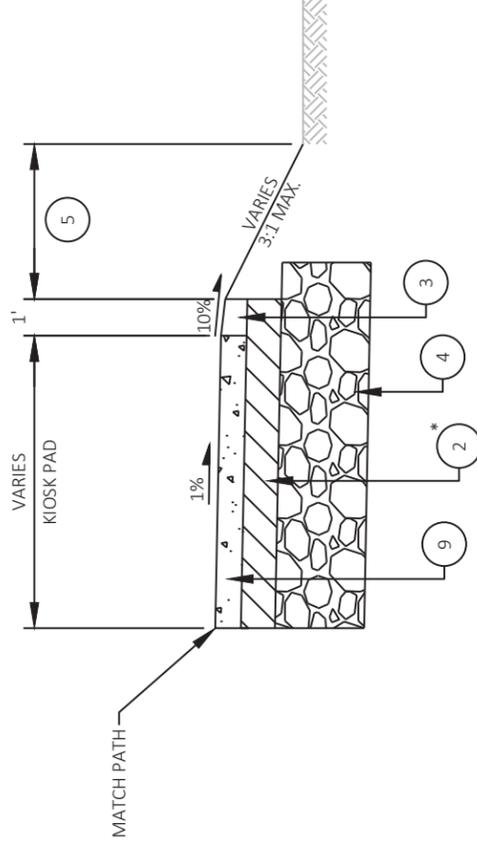
TYPICAL FINISHED SECTION
 AT-GRADE TRAIL
 STA 400+25 FCC TO 401+72 FCC

LEGEND

- 1 ASPHALTIC SURFACE, 3-INCH
- 2 BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH
- 3 BASE AGGREGATE DENSE 3/4-INCH
- 4 2' EBS IN WETLAND AND MARSHY AREAS BACKFILLED WITH BREAKER RUN & GEOTEXTILE FABRIC AS DIRECTED BY THE ENGINEER
- 5 TOPSOIL, FERTILIZER, SEED, AND EROSION MAT CLASS I TYPE B URBAN OR MULCH**
- 9 CONCRETE SIDEWALK 4-INCH

*6-INCH

**DO NOT USE FERTILIZER ADJACENT TO WETLANDS, WATER BODIES, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS



TYPICAL FINISHED SECTION
 KIOSK PAD

- STA. 401+53 FCC TO STA. 401+72 FCC
- STA. 608+53 LYT TO STA. 608+82 LYT
- STA. 667+89 LYT TO STA. 668+00 LYT
- STA. 692+43 LYT TO STA. 692+80 LYT
- STA. 200+31 EPL TO STA. 200+89 EPL

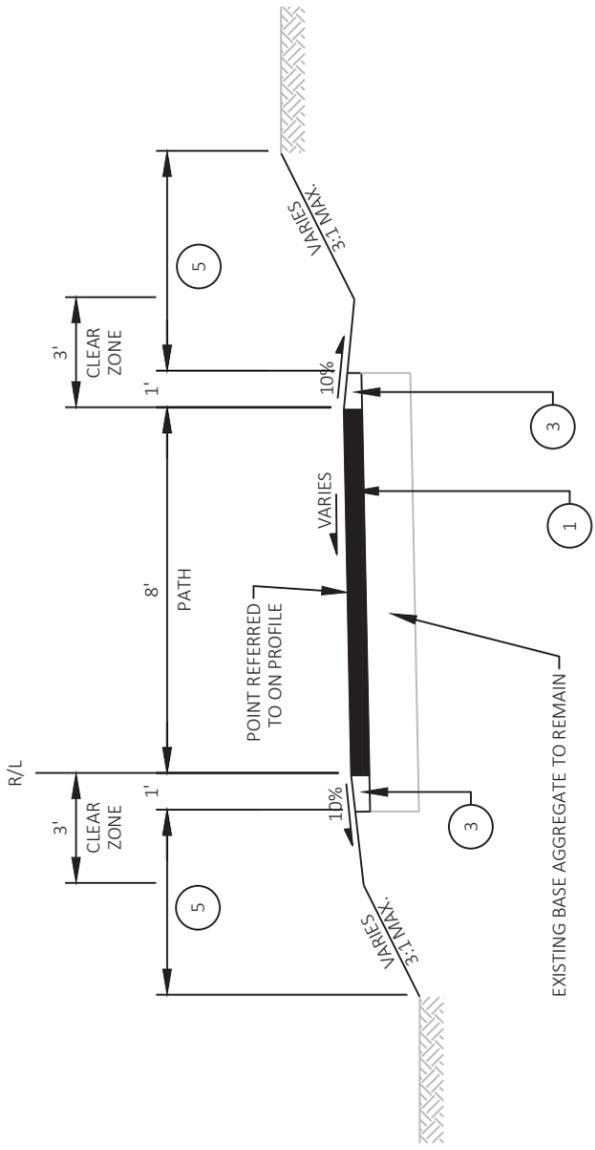
TYPICAL SECTIONS

LOWER YAHARA RIVER TRAIL PHASE 2

Project No: 19044-000
 Designed By: KL Engineering
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Revisions: XX-XX-XXXX

SHEET NO.

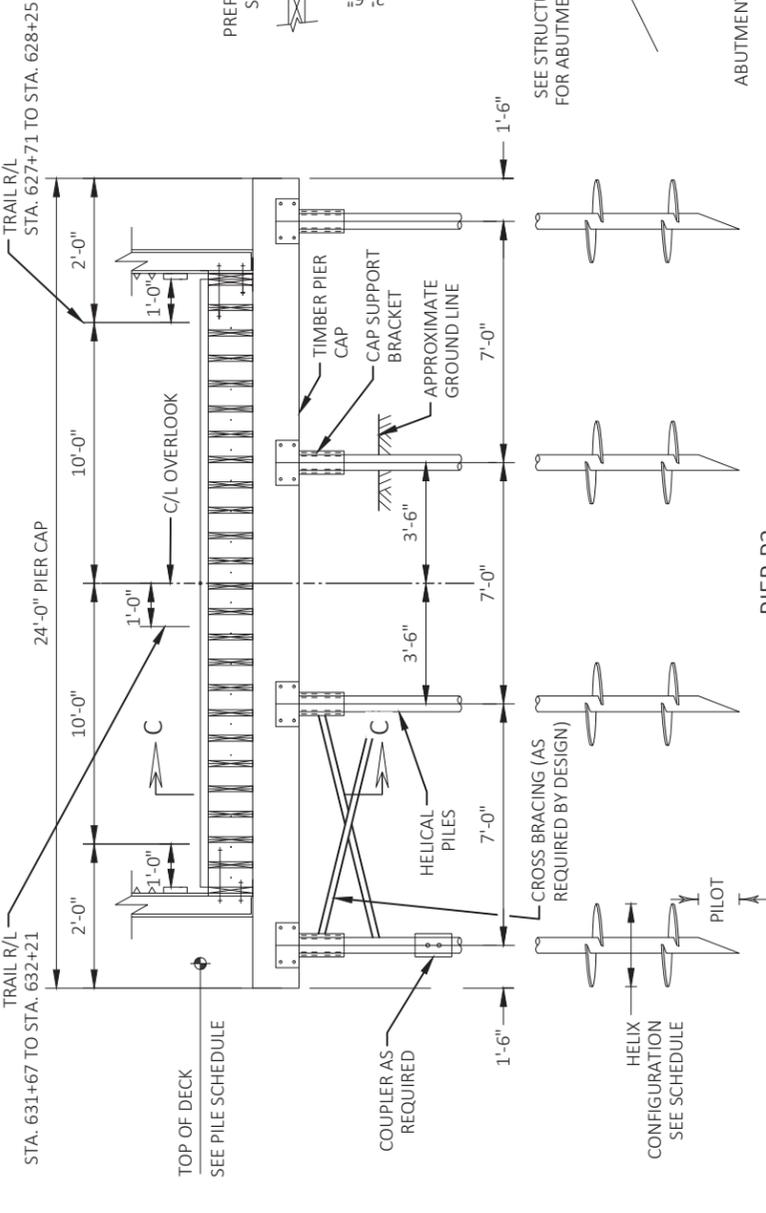


TYPICAL FINISHED SECTION
 STA. 450+06 KPR TO STA. 450+45 KPR

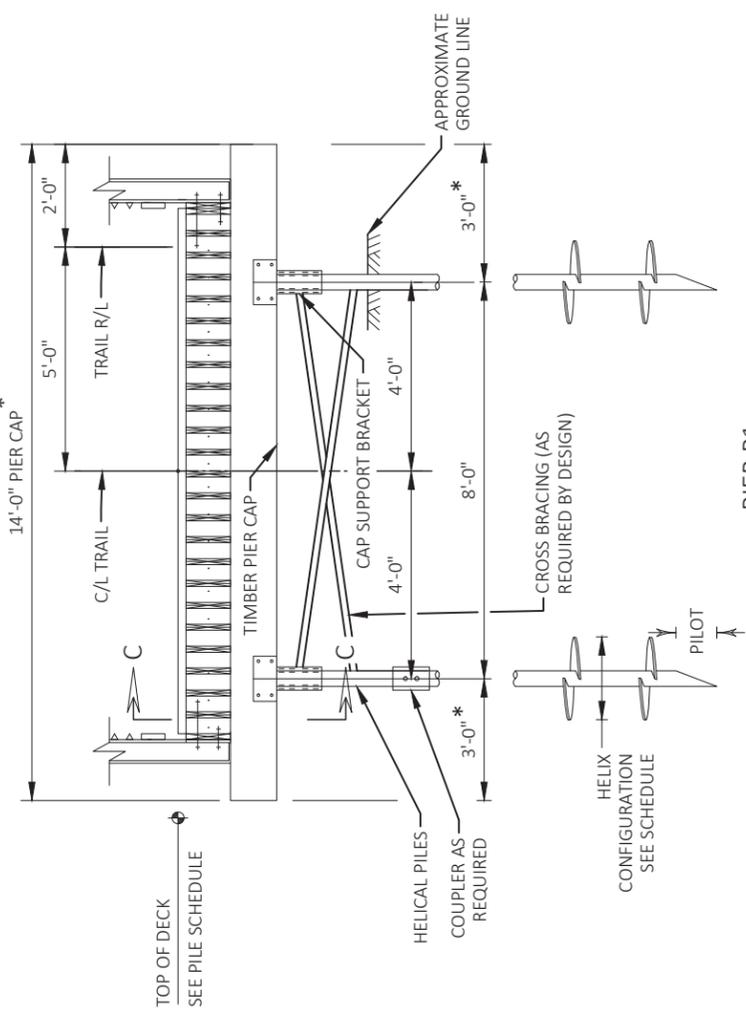
LEGEND

- 1 ASPHALTIC SURFACE, 3-INCH
- 2 BASE AGGREGATE DENSE 1 1/4-INCH, 8-INCH
- 3 BASE AGGREGATE DENSE 3/4-INCH
- 4 2' EBS IN WETLAND AND MARSHY AREAS BACKFILLED WITH BREAKER RUN & GEOTEXTILE FABRIC AS DIRECTED BY THE ENGINEER
- 5 TOPSOIL, FERTILIZER, SEED, AND EROSION MAT CLASS I TYPE B URBAN OR MULCH**
- 9 CONCRETE SIDEWALK 4-INCH

*6-INCH
 **DO NOT USE FERTILIZER ADJACENT TO WETLANDS, WATER BODIES, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS

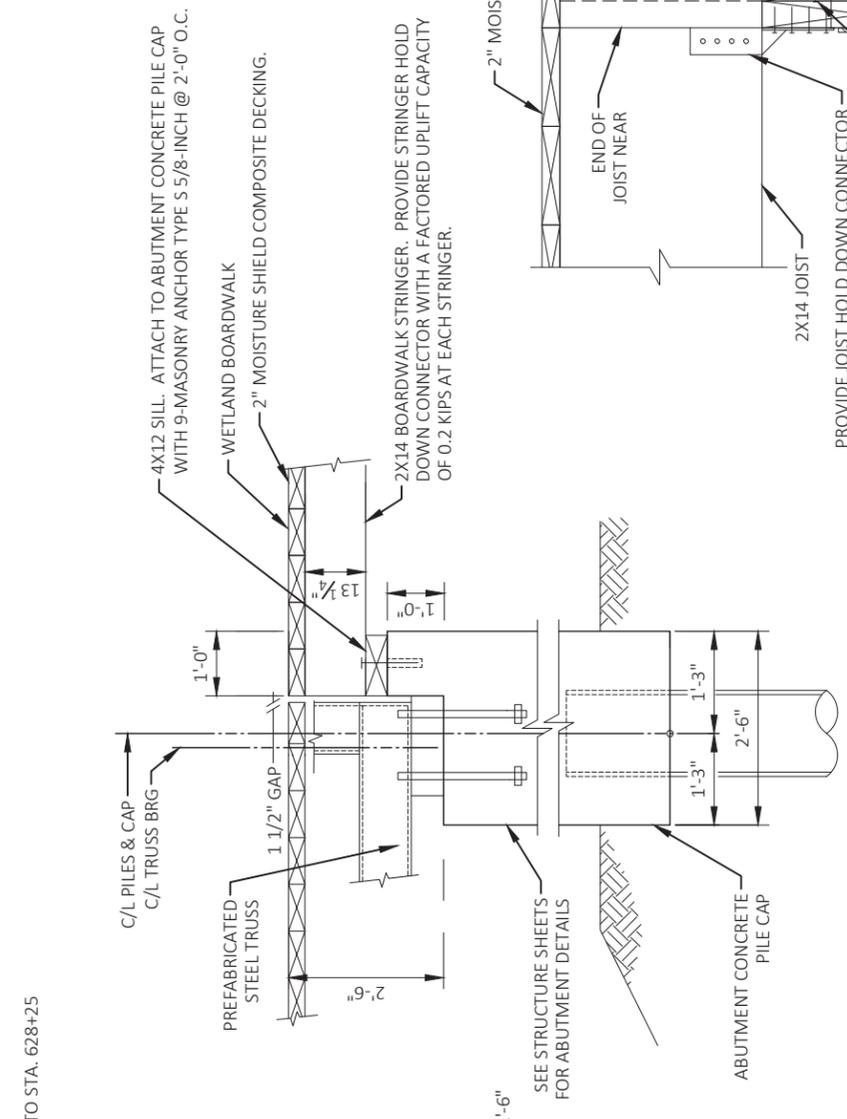


PIER P2
STA. 627+71 TO STA. 628+25
STA. 631+67 TO STA. 632+21



PIER P1
STA. 614+93 TO STA. 615+49
STA. 628+43 TO STA. 631+49
STA. 632+39 TO STA. 637+07
STA. 638+33 TO STA. 648+41
STA. 663+50 TO STA. 667+46
STA. 668+10 TO STA. 672+78

* PROVIDE 20'-0" PIER CAP FOR ABUTMENT. TIMBER PIER CAP OVERHANG DIMENSION = 6'-0" AT THESE LOCATIONS.



BRIDGE TO BOARDWALK TRANSITION
STA. 637+25
STA. 638+15

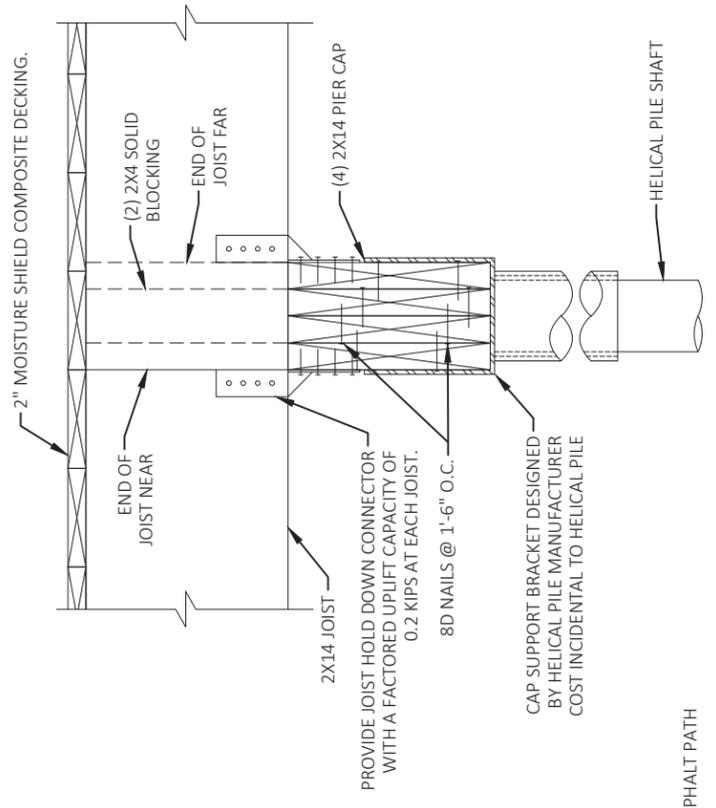
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[A] Better Experience
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Madison, WI. 53719
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LOWER YAHARA RIVER TRAIL PHASE 2
CONSTRUCTION DETAILS

Project No: 19044-000
Designed By: KL Engineering
Drawn By: STD
Checked By: CDH

Revisions: XX-XX-XXXX

SHEET NO.



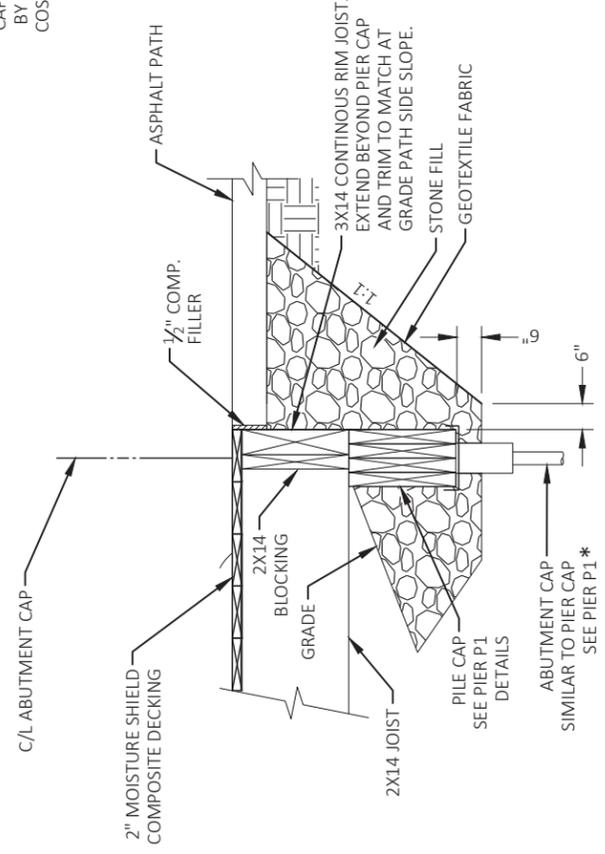
SECTION C-C

NOTES

BOARDWALK PIERS FROM STA. XXX+XX TO STA. XXX+XX TO BE SUPPORTED ON HELICAL PILES INSTALLED TO A MINIMUM ULTIMATE AXIAL RESISTANCE OF 5.5 TONS ** PER PILE. ESTIMATED 10-FT LONG.

BOARDWALK PIERS FROM STA. XXX+XX TO STA. XXX+XX TO BE SUPPORTED ON HELICAL PILES INSTALLED TO A MINIMUM ULTIMATE AXIAL RESISTANCE OF 14.5 TONS ** PER PILE. ESTIMATED 15-FT LONG.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR THE DESIGN OF THE HELICAL PILES IS THE REQUIRED ULTIMATE AXIAL RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5.



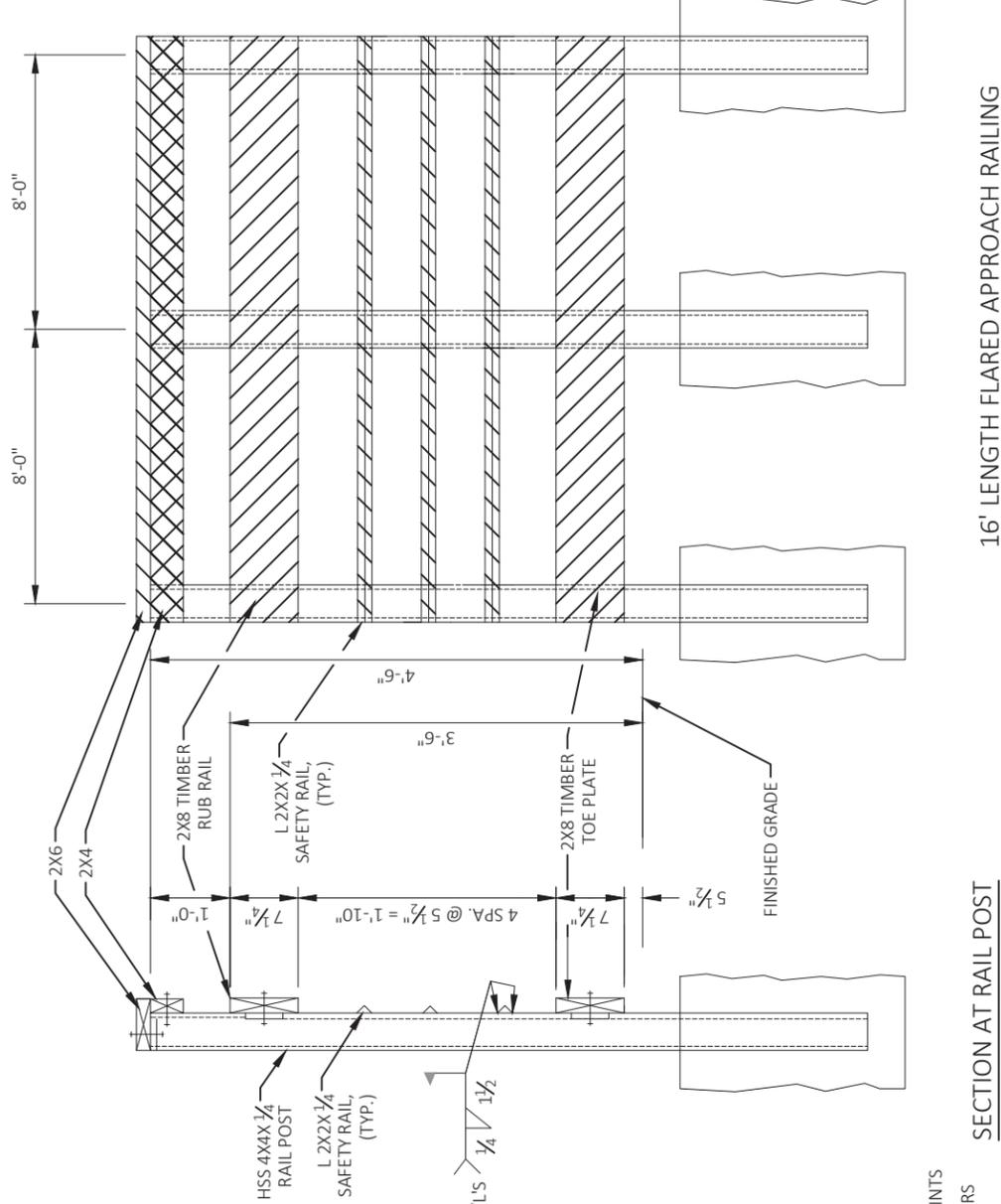
ASPHALT TO WETLAND BOARDWALK TRANSITION
STA. 614+93
STA. 648+41
STA. 663+50
STA. 667+46
STA. 668+10
STA. 672+78

LOWER YAHARA RIVER TRAIL PHASE 2 CONSTRUCTION DETAILS

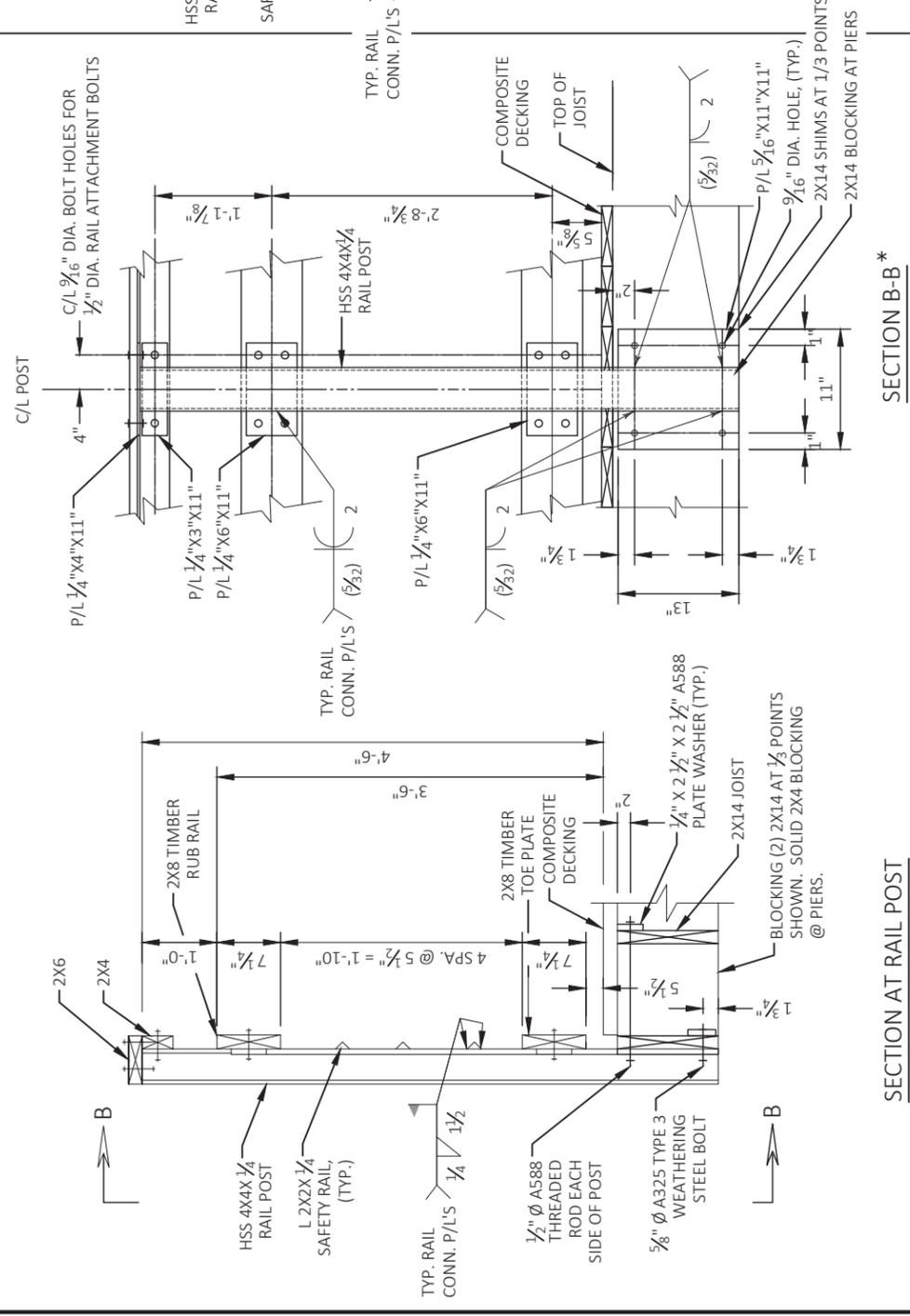
Project No: 19044-000
 Designed By: KL Engineering
 Drafted By: STD
 Checked By: CDH

Revisions: XX-XX-XXXX

SHEET NO.



STRUCTURE APPROACH RAILING
 PAID FOR AS RAIL SYSTEM FOR ELEVATION BOARDWALK (SPV.0090.01)
 AND SHALL INCLUDE CONCRETE BASES FOR RAILING



BOARDWALK RAILING
 * COMMERCIALY AVAILABLE GUARDRAIL POST CONNECTORS MAY BE USED AT THE APPROVAL OF THE ENGINEER. OUTWARD HORIZONTAL LOAD ON RAIL POST 4'-6" ABOVE DECK = 300 LB SERVICE, 480 LB FACTORED.

WETLAND BOARDWALK - HELICAL PIPE SCHEDULE

POINT NUMBER	STATION	PIER TYPE	PATH PROFILE ELEV.	BOTTOM OF PILE CAP ELEV.	APPROX. EXISTING GRADE ELEV.	FACTORED PILE AXIAL LOAD (KIPS)	APPROXIMATE PILE LENGTH (FT)	REQUIRED NO. OF PILES	APPROXIMATE HELIX CONFIGURATION
1	614+93.00	P1	846.64	844.22	845.81	28	25	2	14 IN / 12 IN / 10 IN
2	615+11.00	P1	846.95	844.53	845.87	28	25	2	14 IN / 12 IN / 10 IN
3	615+29.00	P1	847.25	844.83	845.69	28	25	2	14 IN / 12 IN / 10 IN
4	615+47.00	P1	847.56	845.14	845.35	28	25	2	14 IN / 12 IN / 10 IN
5	615+65.00	P1	847.86	845.44	845.07	28	25	2	14 IN / 12 IN / 10 IN
6	615+83.00	P1	848.17	845.75	845.07	28	25	2	14 IN / 12 IN / 10 IN
7	616+01.00	P1	848.47	846.05	845.06	28	25	2	14 IN / 12 IN / 10 IN
8	616+19.00	P1	848.78	846.36	845.08	28	25	2	14 IN / 12 IN / 10 IN
9	616+37.00	P1	849.08	846.66	845.08	28	25	2	14 IN / 12 IN / 10 IN
10	616+55.00	P1	849.39	846.97	845.01	28	25	2	14 IN / 12 IN / 10 IN
11	616+73.00	P1	849.69	847.27	844.92	28	25	2	14 IN / 12 IN / 10 IN
12	616+91.00	P1	850.00	847.58	844.78	28	25	2	14 IN / 12 IN / 10 IN
13	617+09.00	P1	850.00	847.58	844.51	28	25	2	14 IN / 12 IN / 10 IN
14	617+27.00	P1	850.00	847.58	844.62	28	25	2	14 IN / 12 IN / 10 IN
15	617+45.00	P1	850.00	847.58	844.64	28	25	2	14 IN / 12 IN / 10 IN
16	617+63.00	P1	850.00	847.58	844.41	28	25	2	14 IN / 12 IN / 10 IN
17	617+81.00	P1	850.00	847.58	844.64	28	25	2	14 IN / 12 IN / 10 IN
18	617+99.00	P1	850.00	847.58	844.87	28	25	2	14 IN / 12 IN / 10 IN
19	618+17.00	P1	850.00	847.58	844.81	28	25	2	14 IN / 12 IN / 10 IN
20	618+35.00	P1	850.00	847.58	844.75	28	25	2	14 IN / 12 IN / 10 IN
21	618+53.00	P1	850.00	847.58	844.80	28	25	2	14 IN / 12 IN / 10 IN
22	618+71.00	P1	850.00	847.58	844.71	28	25	2	14 IN / 12 IN / 10 IN
23	618+89.00	P1	850.00	847.58	844.62	28	25	2	14 IN / 12 IN / 10 IN
24	619+07.00	P1	850.00	847.58	844.58	28	25	2	14 IN / 12 IN / 10 IN
25	619+25.00	P1	850.00	847.58	844.57	28	25	2	14 IN / 12 IN / 10 IN
26	619+43.00	P1	850.00	847.58	844.47	28	25	2	14 IN / 12 IN / 10 IN
27	619+61.00	P1	850.00	847.58	844.42	28	25	2	14 IN / 12 IN / 10 IN
28	619+79.00	P1	850.00	847.58	844.41	28	25	2	14 IN / 12 IN / 10 IN
29	619+97.00	P1	850.00	847.58	844.50	28	25	2	14 IN / 12 IN / 10 IN
30	620+15.00	P1	850.09	847.67	844.74	28	25	2	14 IN / 12 IN / 10 IN
31	620+33.00	P1	850.19	847.77	844.90	28	25	2	14 IN / 12 IN / 10 IN
32	620+51.00	P1	850.28	847.86	845.03	28	25	2	14 IN / 12 IN / 10 IN
33	620+69.00	P1	850.38	847.96	845.09	28	25	2	14 IN / 12 IN / 10 IN
34	620+87.00	P1	850.47	848.05	845.19	28	25	2	14 IN / 12 IN / 10 IN
35	621+05.00	P1	850.56	848.14	845.26	28	25	2	14 IN / 12 IN / 10 IN
36	621+23.00	P1	850.66	848.24	845.49	28	25	2	14 IN / 12 IN / 10 IN
37	621+41.00	P1	850.75	848.33	845.53	28	25	2	14 IN / 12 IN / 10 IN
38	621+59.00	P1	850.75	848.33	845.50	28	25	2	14 IN / 12 IN / 10 IN
39	621+77.00	P1	850.75	848.33	845.38	28	25	2	14 IN / 12 IN / 10 IN
40	621+95.00	P1	850.75	848.33	845.23	28	20	2	14 IN / 12 IN / 10 IN
41	622+13.00	P1	850.75	848.33	845.22	28	20	2	14 IN / 12 IN / 10 IN
42	622+31.00	P1	850.75	848.33	845.23	28	20	2	14 IN / 12 IN / 10 IN
43	622+49.00	P1	850.75	848.33	845.35	28	20	2	14 IN / 12 IN / 10 IN
44	622+67.00	P1	850.75	848.33	845.45	28	20	2	14 IN / 12 IN / 10 IN
45	622+85.00	P1	850.75	848.33	845.51	28	20	2	14 IN / 12 IN / 10 IN
46	623+03.00	P1	850.75	848.33	845.60	28	20	2	14 IN / 12 IN / 10 IN
47	623+21.00	P1	850.75	848.33	845.79	28	20	2	14 IN / 12 IN / 10 IN
48	623+39.00	P1	850.75	848.33	845.95	28	20	2	14 IN / 12 IN / 10 IN
49	623+57.00	P1	850.75	848.33	845.61	28	20	2	14 IN / 12 IN / 10 IN
50	623+75.00	P1	850.75	848.33	845.60	28	20	2	14 IN / 12 IN / 10 IN
51	623+93.00	P1	850.75	848.33	845.59	28	20	2	14 IN / 12 IN / 10 IN
52	624+11.00	P1	850.75	848.33	845.20	28	20	2	14 IN / 12 IN / 10 IN
53	624+29.00	P1	850.59	848.17	844.49	28	20	2	14 IN / 12 IN / 10 IN
54	624+47.00	P1	850.44	848.02	843.93	28	20	2	14 IN / 12 IN / 10 IN
55	624+65.00	P1	850.28	847.86	844.00	28	20	2	14 IN / 12 IN / 10 IN
56	624+83.00	P1	850.13	847.71	844.12	28	20	2	14 IN / 12 IN / 10 IN
57	625+01.00	P1	849.97	847.55	844.28	28	20	2	14 IN / 12 IN / 10 IN
58	625+19.00	P1	849.81	847.39	843.96	28	20	2	14 IN / 12 IN / 10 IN
59	625+37.00	P1	849.66	847.24	844.27	28	20	2	14 IN / 12 IN / 10 IN
60	625+55.00	P1	849.50	847.08	844.17	28	20	2	14 IN / 12 IN / 10 IN
61	625+73.00	P1	849.50	847.08	844.08	28	20	2	14 IN / 12 IN / 10 IN
62	625+91.00	P1	849.50	847.08	844.11	28	25	2	14 IN / 12 IN / 10 IN
63	626+09.00	P1	849.50	847.08	844.08	28	25	2	14 IN / 12 IN / 10 IN
64	626+27.00	P1	849.50	847.08	844.15	28	25	2	14 IN / 12 IN / 10 IN
65	626+45.00	P1	849.50	847.08	844.59	28	25	2	14 IN / 12 IN / 10 IN

WETLAND BOARDWALK - HELICAL PIPE SCHEDULE

POINT NUMBER	STATION	PIER TYPE	PATH PROFILE ELEV.	BOTTOM OF PILE CAP ELEV.	APPROX. EXISTING GRADE ELEV.	FACTORED PILE AXIAL LOAD (KIPS)	APPROXIMATE PILE LENGTH (FT)	REQUIRED NO. OF PILES	APPROXIMATE HELIX CONFIGURATION
66	626+63.00	P1	849.50	847.08	844.26	28	25	2	14 IN / 12 IN / 10 IN
67	626+81.00	P1	849.50	847.08	844.08	28	25	2	14 IN / 12 IN / 10 IN
68	626+99.00	P1	849.50	847.08	843.63	28	25	2	14 IN / 12 IN / 10 IN
69	627+17.00	P1	849.50	847.08	843.98	28	25	2	14 IN / 12 IN / 10 IN
70	627+35.00	P1	849.50	847.08	844.73	28	25	2	14 IN / 12 IN / 10 IN
71	627+53.00	P1	849.50	847.08	844.31	28	25	2	14 IN / 12 IN / 10 IN
72	627+71.00	P2	849.50	847.08	843.89	24	25	4	14 IN / 12 IN / 10 IN
73	627+89.00	P2	849.50	847.08	844.53	24	25	4	14 IN / 12 IN / 10 IN
74	628+07.00	P2	849.50	847.08	844.87	24	25	4	14 IN / 12 IN / 10 IN
75	628+25.00	P2	849.50	847.08	844.43	24	25	4	14 IN / 12 IN / 10 IN
76	628+43.00	P1	849.50	847.08	844.74	28	25	2	14 IN / 12 IN / 10 IN
77	628+61.00	P1	849.50	847.08	844.27	28	25	2	14 IN / 12 IN / 10 IN
78	628+79.00	P1	849.50	847.08	844.25	28	25	2	14 IN / 12 IN / 10 IN
79	628+97.00	P1	849.50	847.08	844.19	28	25	2	14 IN / 12 IN / 10 IN
80	629+15.00	P1	849.50	847.08	844.21	28	25	2	14 IN / 12 IN / 10 IN
81	629+33.00	P1	849.50	847.08	844.14	28	20	2	14 IN / 12 IN / 10 IN
82	629+51.00	P1	849.50	847.08	843.81	28	20	2	14 IN / 12 IN / 10 IN
83	629+69.00	P1	849.50	847.08	844.22	28	20	2	14 IN / 12 IN / 10 IN
84	629+87.00	P1	849.50	847.08	844.50	28	20	2	14 IN / 12 IN / 10 IN
85	630+05.00	P1	849.50	847.08	844.05	28	20	2	14 IN / 12 IN / 10 IN
86	630+23.00	P1	849.50	847.08	844.80	28	20	2	14 IN / 12 IN / 10 IN
87	630+41.00	P1	849.50	847.08	844.85	28	20	2	14 IN / 12 IN / 10 IN
88	630+59.00	P1	849.50	847.08	844.26	28	20	2	14 IN / 12 IN / 10 IN
89	630+77.00	P1	849.50	847.08	844.34	28	20	2	14 IN / 12 IN / 10 IN
90	630+95.00	P1	849.50	847.08	844.14	28	20	2	14 IN / 12 IN / 10 IN
91	631+13.00	P1	849.50	847.08	844.33	28	20	2	14 IN / 12 IN / 10 IN
92	631+31.00	P1	849.50	847.08	844.24	28	20	2	14 IN / 12 IN / 10 IN
93	631+49.00	P1	849.50	847.08	844.15	28	20	2	14 IN / 12 IN / 10 IN
94	631+67.00	P2	849.50	847.08	844.41	24	20	4	14 IN / 12 IN / 10 IN
95	631+85.00	P2	849.50	847.08	844.33	24	20	4	14 IN / 12 IN / 10 IN
96	632+03.00	P2	849.50	847.08	844.40	24	20	4	14 IN / 12 IN / 10 IN
97	632+21.00	P2	849.50	847.08	844.30	24	20	4	14 IN / 12 IN / 10 IN
98	632+39.00	P1	849.50	847.08	844.22	28	20	2	14 IN / 12 IN / 10 IN
99	632+57.00	P1	849.50	847.08	844.30	28	20	2	14 IN / 12 IN / 10 IN
100	632+75.00	P1	849.50	847.08	844.14	28	20	2	14 IN / 12 IN / 10 IN
101	632+93.00	P1	849.50	847.08	844.31	28	20	2	14 IN / 12 IN / 10 IN
102	633+11.00	P1	849.50	847.08	844.42	28	20	2	14 IN / 12 IN / 10 IN
103	633+29.00	P1	849.50	847.08	844.41	28	20	2	14 IN / 12 IN / 10 IN
104	633+47.00	P1	849.50	847.08	844.16	28	20	2	14 IN / 12 IN / 10 IN
105	633+65.00	P1	849.50	847.08	844.30	28	20	2	14 IN / 12 IN / 10 IN
106	633+83.00	P1	849.50	847.08	844.31	28	20	2	14 IN / 12 IN / 10 IN
107	634+01.00	P1	849.50	847.08	844.14	28	20	2	14 IN / 12 IN / 10 IN
108	634+19.00	P1	849.50	847.08	844.13	28	20	2	14 IN / 12 IN / 10 IN
109	634+37.00	P1	849.50	847.08	844.24	28	20	2	14 IN / 12 IN / 10 IN
110	634+55.00	P1	849.50	847.08	844.20	28	15	2	14 IN / 12 IN / 10 IN
111	634+73.00	P1	849.50	847.08	844.35	28	15	2	14 IN / 12 IN / 10 IN
112	634+91.00	P1	849.50	847.08	844.24	28	15	2	14 IN / 12 IN / 10 IN
113	635+09.00	P1	849.50	847.08	844.35	28	15	2	14 IN / 12 IN / 10 IN
114	635+27.00	P1	849.50	847.08	844.61	28	15	2	14 IN / 12 IN / 10 IN
115	635+45.00	P1	849.50	847.08	844.25				

WETLAND BOARDWALK - HELICAL PIPE SCHEDULE

POINT NUMBER	STATION	PIER TYPE	PATH PROFILE ELEV.	BOTTOM OF PILE CAP ELEV.	APPROX. EXISTING GRADE ELEV.	FACTORED PILE AXIAL LOAD (KIPS)	APPROXIMATE PILE LENGTH (FT)	REQUIRED NO. OF PILES	APPROXIMATE HELIX CONFIGURATION
129	639+05.00	P1	850.50	848.08	844.19	28	15	2	14 IN / 12 IN / 10 IN
130	639+23.00	P1	850.00	847.58	844.20	28	15	2	14 IN / 12 IN / 10 IN
131	639+41.00	P1	849.50	847.08	844.34	28	15	2	14 IN / 12 IN / 10 IN
132	639+59.00	P1	849.50	847.08	844.17	28	15	2	14 IN / 12 IN / 10 IN
133	639+77.00	P1	849.50	847.08	844.01	28	15	2	14 IN / 12 IN / 10 IN
134	639+95.00	P1	849.50	847.08	844.04	28	15	2	14 IN / 12 IN / 10 IN
135	640+13.00	P1	849.50	847.08	844.11	28	15	2	14 IN / 12 IN / 10 IN
136	640+31.00	P1	849.50	847.08	844.43	28	15	2	14 IN / 12 IN / 10 IN
137	640+49.00	P1	849.50	847.08	844.56	28	15	2	14 IN / 12 IN / 10 IN
138	640+67.00	P1	849.50	847.08	844.31	28	15	2	14 IN / 12 IN / 10 IN
139	640+85.00	P1	849.50	847.08	844.58	28	15	2	14 IN / 12 IN / 10 IN
140	641+03.00	P1	849.50	847.08	844.58	28	15	2	14 IN / 12 IN / 10 IN
141	641+21.00	P1	849.50	847.08	844.35	28	15	2	14 IN / 12 IN / 10 IN
142	641+39.00	P1	849.50	847.08	844.64	28	15	2	14 IN / 12 IN / 10 IN
143	641+57.00	P1	849.50	847.08	844.05	28	15	2	14 IN / 12 IN / 10 IN
144	641+75.00	P1	849.50	847.08	844.10	28	15	2	14 IN / 12 IN / 10 IN
145	641+93.00	P1	849.50	847.08	844.20	28	15	2	14 IN / 12 IN / 10 IN
146	642+11.00	P1	849.50	847.08	844.19	28	15	2	14 IN / 12 IN / 10 IN
147	642+29.00	P1	849.50	847.08	844.22	28	15	2	14 IN / 12 IN / 10 IN
148	642+47.00	P1	849.50	847.08	844.20	28	15	2	14 IN / 12 IN / 10 IN
149	642+65.00	P1	849.50	847.08	844.07	28	15	2	14 IN / 12 IN / 10 IN
150	642+83.00	P1	849.50	847.08	844.00	28	15	2	14 IN / 12 IN / 10 IN
151	643+01.00	P1	849.50	847.08	844.05	28	15	2	14 IN / 12 IN / 10 IN
152	643+19.00	P1	849.50	847.08	844.30	28	15	2	14 IN / 12 IN / 10 IN
153	643+37.00	P1	849.50	847.08	844.11	28	15	2	14 IN / 12 IN / 10 IN
154	643+55.00	P1	849.50	847.08	844.44	28	15	2	14 IN / 12 IN / 10 IN
155	643+73.00	P1	849.50	847.08	844.23	28	15	2	14 IN / 12 IN / 10 IN
156	643+91.00	P1	849.50	847.08	844.25	28	15	2	14 IN / 12 IN / 10 IN
157	644+09.00	P1	849.50	847.08	844.29	28	15	2	14 IN / 12 IN / 10 IN
158	644+27.00	P1	849.50	847.08	844.32	28	15	2	14 IN / 12 IN / 10 IN
159	644+45.00	P1	849.50	847.08	844.37	28	15	2	14 IN / 12 IN / 10 IN
160	644+63.00	P1	849.50	847.08	844.29	28	15	2	14 IN / 12 IN / 10 IN
161	644+81.00	P1	849.50	847.08	844.13	28	15	2	14 IN / 12 IN / 10 IN
162	644+99.00	P1	849.50	847.08	844.20	28	15	2	14 IN / 12 IN / 10 IN
163	645+17.00	P1	849.50	847.08	844.27	28	15	2	14 IN / 12 IN / 10 IN
164	645+35.00	P1	849.50	847.08	844.18	28	15	2	14 IN / 12 IN / 10 IN
165	645+53.00	P1	849.50	847.08	844.19	28	15	2	14 IN / 12 IN / 10 IN
166	645+71.00	P1	849.50	847.08	844.43	28	15	2	14 IN / 12 IN / 10 IN
167	645+89.00	P1	849.50	847.08	844.72	28	15	2	14 IN / 12 IN / 10 IN
168	646+07.00	P1	849.50	847.08	844.43	28	15	2	14 IN / 12 IN / 10 IN
169	646+25.00	P1	849.50	847.08	844.90	28	15	2	14 IN / 12 IN / 10 IN
170	646+43.00	P1	849.50	847.08	844.62	28	15	2	14 IN / 12 IN / 10 IN
171	646+61.00	P1	849.28	846.86	845.18	28	15	2	14 IN / 12 IN / 10 IN
172	646+79.00	P1	849.05	846.63	845.38	28	15	2	14 IN / 12 IN / 10 IN
173	646+97.00	P1	848.83	846.41	845.79	28	15	2	14 IN / 12 IN / 10 IN
174	647+15.00	P1	848.60	846.18	846.10	28	15	2	14 IN / 12 IN / 10 IN
175	647+33.00	P1	848.38	845.96	846.40	28	15	2	14 IN / 12 IN / 10 IN
176	647+51.00	P1	848.15	845.73	846.59	28	15	2	14 IN / 12 IN / 10 IN
177	647+69.00	P1	847.93	845.51	846.56	28	15	2	14 IN / 12 IN / 10 IN
178	647+87.00	P1	847.70	845.28	846.39	28	15	2	14 IN / 12 IN / 10 IN
179	648+05.00	P1	847.48	845.06	846.56	28	15	2	14 IN / 12 IN / 10 IN
180	648+23.00	P1	847.25	844.83	846.44	28	15	2	14 IN / 12 IN / 10 IN
181	648+41.00	P1	847.03	844.61	846.49	28	15	2	14 IN / 12 IN / 10 IN
182	663+50.00	P1	848.50	846.08	847.199	28	20	2	14 IN / 12 IN / 10 IN
183	663+68.00	P1	848.50	846.08	846.572	28	20	2	14 IN / 12 IN / 10 IN
184	663+86.00	P1	848.50	846.08	846.1	28	20	2	14 IN / 12 IN / 10 IN
185	664+04.00	P1	848.50	846.08	845.392	28	20	2	14 IN / 12 IN / 10 IN
186	664+22.00	P1	848.50	846.08	844.861	28	20	2	14 IN / 12 IN / 10 IN
187	664+40.00	P1	848.50	846.08	845.345	28	20	2	14 IN / 12 IN / 10 IN
188	664+58.00	P1	848.50	846.08	844.695	28	20	2	14 IN / 12 IN / 10 IN
189	664+76.00	P1	848.50	846.08	844.754	28	20	2	14 IN / 12 IN / 10 IN
190	664+94.00	P1	848.50	846.08	844.798	28	20	2	14 IN / 12 IN / 10 IN
191	665+12.00	P1	848.50	846.08	844.718	28	20	2	14 IN / 12 IN / 10 IN

WETLAND BOARDWALK - HELICAL PIPE SCHEDULE

POINT NUMBER	STATION	PIER TYPE	PATH PROFILE ELEV.	BOTTOM OF PILE CAP ELEV.	APPROX. EXISTING GRADE ELEV.	FACTORED PILE AXIAL LOAD (KIPS)	APPROXIMATE PILE LENGTH (FT)	REQUIRED NO. OF PILES	APPROXIMATE HELIX CONFIGURATION
192	665+30.00	P1	848.50	846.08	844.591	28	20	2	14 IN / 12 IN / 10 IN
193	665+48.00	P1	848.50	846.08	845.056	28	20	2	14 IN / 12 IN / 10 IN
194	665+66.00	P1	848.50	846.08	844.836	28	20	2	14 IN / 12 IN / 10 IN
195	665+84.00	P1	848.50	846.08	844.856	28	20	2	14 IN / 12 IN / 10 IN
196	666+02.00	P1	848.50	846.08	844.988	28	20	2	14 IN / 12 IN / 10 IN
197	666+20.00	P1	848.50	846.08	844.848	28	20	2	14 IN / 12 IN / 10 IN
198	666+38.00	P1	848.50	846.08	845.532	28	20	2	14 IN / 12 IN / 10 IN
199	666+56.00	P1	848.50	846.08	845.572	28	15	2	14 IN / 12 IN / 10 IN
200	666+74.00	P1	847.94	845.52	845.604	28	15	2	14 IN / 12 IN / 10 IN
201	666+92.00	P1	847.38	844.96	845.648	28	15	2	14 IN / 12 IN / 10 IN
202	667+10.00	P1	846.82	844.40	845.456	28	15	2	14 IN / 12 IN / 10 IN
203	667+28.00	P1	846.26	843.84	845.569	28	15	2	14 IN / 12 IN / 10 IN
204	667+46.00	P1	845.70	843.28	845.593	28	15	2	14 IN / 12 IN / 10 IN
205	668+10.00	P1	845.70	843.28	844.822	28	15	2	14 IN / 12 IN / 10 IN
206	668+28.00	P1	846.21	843.79	844.825	28	15	2	14 IN / 12 IN / 10 IN
207	668+46.00	P1	846.72	844.30	844.929	28	15	2	14 IN / 12 IN / 10 IN
208	668+64.00	P1	847.23	844.81	844.713	28	15	2	14 IN / 12 IN / 10 IN
209	668+82.00	P1	847.74	845.32	844.843	28	15	2	14 IN / 12 IN / 10 IN
210	669+00.00	P1	848.25	845.83	845.087	28	15	2	14 IN / 12 IN / 10 IN
211	669+18.00	P1	848.25	845.83	845.083	28	15	2	14 IN / 12 IN / 10 IN
212	669+36.00	P1	848.25	845.83	844.896	28	15	2	14 IN / 12 IN / 10 IN
213	669+54.00	P1	848.25	845.83	844.908	28	15	2	14 IN / 12 IN / 10 IN
214	669+72.00	P1	848.25	845.83	844.958	28	15	2	14 IN / 12 IN / 10 IN
215	669+90.00	P1	848.25	845.83	844.984	28	15	2	14 IN / 12 IN / 10 IN
216	670+08.00	P1	848.25	845.83	844.906	28	15	2	14 IN / 12 IN / 10 IN
217	670+26.00	P1	848.25	845.83	844.842	28	15	2	14 IN / 12 IN / 10 IN
218	670+44.00	P1	848.25	845.83	844.858	28	15	2	14 IN / 12 IN / 10 IN
219	670+62.00	P1	848.25	845.83	845.051	28	15	2	14 IN / 12 IN / 10 IN
220	670+80.00	P1	848.25	845.83	845.256	28	15	2	14 IN / 12 IN / 10 IN
221	670+98.00	P1	848.25	845.83	845.102	28	15	2	14 IN / 12 IN / 10 IN
222	671+16.00	P1	848.25	845.83	845.246	28	15	2	14 IN / 12 IN / 10 IN
223	671+34.00	P1	848.25	845.83	845.402	28	15	2	14 IN / 12 IN / 10 IN
224	671+52.00	P1	848.25	845.83	845.284	28	15	2	14 IN / 12 IN / 10 IN
225	671+70.00	P1	848.25	845.83	845.45	28	15	2	14 IN / 12 IN / 10 IN
226	671+88.00	P1	848.25	845.83	845.398	28	15	2	14 IN / 12 IN / 10 IN
227	672+06.00	P1	848.25	845.83	845.206	28	15	2	14 IN / 12 IN / 10 IN
228	672+24.00	P1	848.25	845.83	845.405	28	15	2	14 IN / 12 IN / 10 IN
229	672+42.00	P1	848.25	845.83	845.645	28	15	2	14 IN / 12 IN / 10 IN
230	672+60.00	P1	848.25	845.83	845.774	28	15	2	14 IN / 12 IN / 10 IN
231	672+78.00	P1	848.25	845.83	846.054	28	15	2	14 IN / 12 IN / 10 IN

LOWER YAHARA RIVER TRAIL PHASE 2 CONSTRUCTION DETAILS



Project No: 19044-000
 Designed By: KL Engineering
 Drawn By: STD
 Checked By: CDH

Revisions: XX-XX-XXXX

SHEET NO.

