REQUEST FOR LEGAL SERVICE

	TO: City Attorney's Office
	FROM: Smia Zikk
	SUBJECT: Agreement w/ Lunde Williams - Marina Dock
	Have you previously requested assistance with this subject? Yes No <u>X</u> Replacement
	If so, when?
	If so, who assisted you?
	PLEASE REVIEW:
	Resolution – Is background information attached? Yes No
	Ordinance – Is background information attached? Yes No
	Contract – Insurance Requirements/Certificates are attached. Yes No
	If not, why? Will Obtain w/ signatures
	Approve Form after approved by Atty.
	Legal Opinion
	Review and Comment/Advice or Direction
	Other - Describe:
	I HAVE ATTACHED A MEMORANDUM AND/OR ALL NECESSARY BACKGROUND INFORMATION AND DOCUMENTATION REGARDING THIS REQUEST.
	I intend to agendize for Council meeting on May 18th, 2015; or,
	I request a response by May 12th (need Signatures).
	Date: 5.8.15 Department Head Approval
25	thleen -
	1 believe Jen H. talked to you about
	this contract agreement and need on
	Reish to council. I manine.

K

CONTRACT

This contract is made and entered into this _____ day of _____, 2015, by and between Lunde Williams, LLC Professional Services (hereinafter "Contractor"), located at 2647 Pennwall Circle, Fitchburg, WI 53711 and the City of Manitowoc, Wisconsin, a Wisconsin municipal corporation (hereinafter "City"), located at 900 Quay Street, Manitowoc, Wisconsin 54220.

RECITALS

WHEREAS, Lunde Williams, LLC Professional Services located at 2647 Pennwall Circle, Fitchburg, WI 53711 intends to provide professional services for the Manitowoc Marina Dock Replacement project at 425 Maritime Drive, Manitowoc, Wisconsin 54220 as outlined in "Exhibit A", Lunde Williams, LLC Professional Services Proposal.

WHEREAS, Lunde Williams, LLC Professional Services intends to provide professional services for the Manitowoc Marina Dock Replacement project at 425 Maritime Drive, Manitowoc, Wisconsin 54220 as outlined in "Exhibit A".

NOW, THEREFORE, in consideration of the mutual covenants and representations of the parties hereinafter set forth, the undersigned parties hereby agree as follows:

- 1. <u>Recitals</u>. The above recitals are deemed to be true and correct.
- 2. <u>Scope of Work</u>. The Contractor agrees to perform the following work and/or furnish the following labor and materials in accordance with the terms of this contract:

All work shall be performed in accordance with the City of Manitowoc's Standard Specifications for Public Works Construction.

See listing of tasks for this project. (Attached is "Exhibit A", and it is incorporated into this Contract by reference).

- 3. <u>Contract Price</u>. The City agrees to pay to the Contractor for the performance of this contract the sum of **<u>\$126,000.00</u>**.
- 4. <u>Schedule</u>. Contractor agrees to commence work under this Contract upon its execution and complete performance of this contract in accordance with the City of Manitowoc's Standard Specifications, which are made part of this Contract and are incorporated by reference. The contract completion date shall be <u>November 30, 2016</u>.
- 5. <u>Payment Schedule</u>. Requests for payment shall be made to the Director of Public Infrastructure. The Director of Public Infrastructure shall make a recommendation on the payment request and submit the same to the City's Board of Public Works when applicable. Contractor shall be entitled to payment within 30 days following approval by the Director of Public Infrastructure.

- 6. <u>Assignment and Subcontracting</u>. Contractor shall not be permitted to sign or subcontract any of the work hereunder without the prior written consent of the City.
- 7. <u>Insurance and Bonding</u>. Prior to commencing work hereunder, Contractor shall provide City, for approval by the City Attorney, a Certificate of Insurance showing proof of General Liability Insurance in amounts not less \$1,000,000.00 per person per occurrence, \$2,000,000.00 in the aggregate, property damage limits of not less than \$500,000.00 per occurrence, and shall carry the statutory amounts for worker's compensation insurance. Contractor shall include with the Certificate of Insurance two endorsements, one endorsement naming the City of Manitowoc as an additional insured, and a second endorsement giving City thirty (30) days prior notice of non-renewal, modification or cancellation.
- 8. <u>Applicable Statutes</u>. Any provisions of the Wisconsin Statutes, Federal Law or local ordinances applicable to the work performed hereunder are deemed to be incorporated by reference and made a part of this contract.
- 9. <u>Contract Notice</u>. Per Wisconsin State Statues 62.15, a Class I Notice had been executed and published for this work on May 13, 2015.
- 10. <u>Other Indebtedness to City</u>. It is understood and agreed by the parties hereto that whenever a contractor is for any reason indebted to the City of Manitowoc, the contractor consents that the City of Manitowoc through its officials shall and may, deduct and retain, any such balance out of the money or monies which may be due or become due to the contractor under this contract.
- 11. <u>Indemnify</u>. Contractor shall defend, indemnify and hold harmless the City of Manitowoc, its officials, officers, employees, representatives and agents against any and all liability, claims, costs, demands, losses, damages, expenses and attorney fees of any kind on account of any injury, damage, or death to any person or property that may arise directly caused by or resulting from the work performed under this Contract where the injury, damage, or death is caused by negligence or willful misconduct on the part of the Contractor, subcontractor, officers, employees, or agents.
- 12. <u>Default</u>. In the event of default or breach in the performance of any of the obligations, covenants, representations or duties under the terms of this Contract by either party, the non-defaulting party shall forward written notice to the defaulting party outlining such default. The defaulting party shall cure such default within thirty (30) days of receiving written notice from non-defaulting party, except that the cure period may be extended to a reasonable time to cure any default that cannot reasonably be cured with the thirty (30) day period, provided that the defaulting party has commenced to cure within the thirty (30) day period and diligently pursues a cure at all times thereafter until the default is cured. The defaulting party shall be responsible for the payment to the non-defaulting party of any outstanding fees, charges or expenses that were incurred by the non-defaulting party on behalf of the defaulting party.

- 13. Permits. None Required.
- 14. <u>Termination</u>. Either party may terminate this Contact with ten (10) days written notice to the other party. Any labor and/or expenses incurred prior to cancellation will be billed at standard retail rates and will be due in full and billed immediately.
- 15. <u>Notice and Demands</u>. A notice, demand or other communication under this Contract by any party to the other party shall be sufficiently given or delivered and deemed delivered as of the date such notice is delivered to the party intended, if it is dispatched by registered or certified mail, postage prepaid, return receipt requested, or delivered personally and addressed to or personally delivered to:

CITY: City Clerk	CONTRACTOR: Lunde Williams, LLC
900 Quay Street	2647 Pennwall Circle
Manitowoc, WI 54220	Fitchburg, WI 53711

Notice and demand given shall be effective only if and when received by the party intended and acknowledged by receipt. The above addresses may be changed at any time by any party by giving written notice in the manner provided above.

- 16. <u>Assignment</u>. This Contract is not assignable without prior written consent of City.
- 17. <u>Severability</u>. If any provision of this Contract is deemed by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Contract shall not be affected thereby, and such remainder would then continue to conform to the requirements of applicable laws.
- 18. <u>Amendments</u>. This Contract can only be amended or modified in writing and signed by the parties involved.
- 19. <u>Integration</u>. This Contract represents the entire understanding of the parties as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to matters covered hereunder, unless documented in writing and signed by the parties involved.
- 20. <u>Survival of Provisions</u>. All indemnification and hold harmless obligations shall survive the expiration or termination of this Contract.
- 21. <u>Choice of Law</u>. This Contract shall be governed by and construed in accordance with the laws of the State of Wisconsin. All actions or proceedings relating directly or indirectly, to this Contract, whether sounding in contract or tort, shall be litigated only in the circuit court located in Manitowoc County, Wisconsin. All parties to this Contract hereby subject themselves to the jurisdiction of the circuit court for Manitowoc County, Wisconsin.

- 22. <u>Heading</u>. The section titles have been inserted in this Contract primarily for convenience, and do not define, limit or construe the contents of such paragraphs. If headings conflict with the text, the text shall control.
- 23. <u>Remedies Cumulative</u>. All rights and remedies hereunder are cumulative, and not exclusive, and shall be in addition to all other rights and remedies provided by applicable law. Failure to exercise or delay in exercising any right or remedy hereunder shall not operate as a waiver thereof, nor excuse future performance. No waiver discharge or renunciation of any claim or right arising out of a breach of these terms and conditions shall be effective unless in writing signed by the party so waiving. Any waiver of any breach shall be a waiver of that breach only and not of any other breach, whether prior to subsequent thereto.
- 24. <u>Construction</u>. All parties have contributed to the drafting of this Contract. In the event of a controversy, dispute or contest over the meaning, interpretation, validity of enforcement of this document or any of its terms or conditions, there shall be no inferences, presumption or conclusion drawn whatsoever against any party whatsoever by virtue of that party having drafted the document or any portion thereof.

[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have made and executed this Contract as of the day and year first above written.

SOLE PROPRIETORSHIP OR PARTNERSHIP

CORPORATION

Name of Proprietor or Partnership

Sole Proprietor or Partner

Name of Corporation

By:

(Seal)

(Seal)

(Seal)

.....

Jerry Schaus, President

Attest:

Tom Schaus, Secretary

CORPORATE SEAL

(Seal)

CITY OF MANITOWOC

By: _

Justin M. Nickels, Mayor

Attest:

Jennifer Hudon, City Clerk

STATE OF WISCONSIN)) ss.

MANITOWOC COUNTY)

Personally came before me, this _____ day of _____, the above named Justin M. Nickels and Jennifer Hudon, known to me to be the Mayor and City Clerk/Deputy Treasurer of the City of Manitowoc and acknowledge they executed the foregoing instrument.

Notary Public Manitowoc County, WI My commission (expires)(is)_____

STATE OF WISCONSIN)

MANITOWOC COUNTY)

) ss.

Personally came before me, this _____ day of _____, 2015, the above named Bruce Lunde and Dan Williams, for Lunde Williams, LLC Professional Services and acknowledge they executed the foregoing instrument.

Notary Public Manitowoc County, WI My commission (expires)(is)_____

Partner

Partner

Mr. Jim Muenzenmeyer City of Manitowoc 900 Quay Street Manitowoc, WI 54220

Amendment to Lunde Williams, LLC Professional Services Proposal for the Manitowoc Marina Dock Replacement Project



Dear Mr. Muenzenmeyer;

Based on our discussions of May 7, 2015, we hereby amend our proposal submitted on April 17, 2015. Items removed from the project scope include:

- 1. Fuel system design will not be included in the Scope of Services. Since the rules for fuel systems are changing and the dock replacement is not scheduled for implementation, the fuel system design will be performed under a separate agreement at a later date.
- 2. The survey review meeting identified in phase 1 and the preliminary design and project update meeting will be eliminated. Due to the expedited schedule for the project the information will be gathered during the initial kick-off and data gathering meeting.

We will include in our scope of services an evaluation of expected long term maintenance costs. Based on the changes in project services, our amended professional services fee is \$126,000.00. The Phase breakdown is:

0

Totals	\$104,000	\$22,000
We sincerely look forward to working with	n the City of Manitowo	oc and Marina staff.

Sincerely,

2647 Pennwall Circle Fitchburg, WI 53711 414 704 0344 **BRUCE LUNDE, PRINCIPAL**

Professional Services Proposal for the Manitowoc Marina Dock Replacement City of Manitowoc, Wisconsin



Submitted By:



LUNDE WILLIAMS, LLC



2647 Pennwall Circle Fitchburg, WI 53711 414.704.0344

Manitowoc Marina Dock Replacement



Table of Contents

Introduction	4
Executive Summary	5
Project Approach	6
Firm Qualifications	12
Team Qualifications	26
References	36
Fee Proposal	37

2647 Pennwall Circle Fitchburg, WI 53711 414.704.0344

Introduction

We at Lunde Williams, LLC are pleased to submit our proposal of professional services for the Manitowoc Marina Dock Replacement project. We propose to supply the professional services for the complete project as described in the March 18, 2015 Request for Proposal solicited by the City of Manitowoc.

Qualified & Experienced



Our team has over 70 years of marina design and renovation experience. We will use our senior team members to manage the work including Bruce Lunde as Project Manager, Dan Williams as Design Lead and Larry Ryan as Project Engineer. Our team has managed marina renovation projects throughout the Midwest with significant emphasis on Lake Michigan facilities.

As members of the Association of Marina Industries, States Organizations for Boating Access, and the Wisconsin Marine Association, Lunde Williams has unparalleled understanding of the needs of marinas in the United States.

Project Understanding

The initial need at the Manitowoc Marina is to replace the aging and failing docks with new ones that will function for the next 20 years or more. The desire for simple dock replacement is complicated by the facts that since the original construction codes and regulations have significantly changed and the boaters on Lake Michigan have bought larger boats with increased utility demands. This project needs to balance budget constraints with the newer, more complicated regulations.

Significantly, Codes and Regulations that will impact the reconstruction process include:

- The Americans with Disabilities Act (ADA) rules promulgated in 2012 place the responsibility for providing access to the docks as a priority.
- Electrical Codes for Marinas, NFPA 30A <u>Motor Fuel Dispensing Facilities and Repair</u> <u>Garages</u> and NFPA 303 <u>Fire Protection Standards for Marinas and Boatyards</u> have significantly altered the way marinas are wired and people are protected.

Understanding these codes and managing their financial impacts on the project is one of our most significant responsibilities. We will manage the project in the manner best able to control costs while providing a quality and compliant design.

We intend to work with City and Marina management to phase the bidding and construction consistent with the financial capabilities of the client. This will mean at least two bid cycles with possibly more. The project will be engineered as a unit, but the bidding and construction will be done in phases. Our design will accommodate this approach.

Our team looks forward to working with you to develop plans and specifications designed to make the Manitowoc Marina a true destination for boaters across Lake Michigan.

Sincerely,

Bur St

Bruce E. Lunde Principal

LUNDE WILLIAMS, LLC

2647 Pennwall Circle Fitchburg, WI 53711 414.704.0344

www.lundewilliams.com

4 | Page

Executive Summary

The mid-1980's saw an explosion of recreation marinas along the Lake Michigan waterfronts. From Marinette, Wisconsin to Hammond Indiana, marinas were built to accommodate the post-WWII and boomer generations' desires tor quality family recreation. Now, many of those facilities are in need or updating and renovation. Marina facility redevelopment has evolved from an early band aid approach to an opportunity to increase facility's ability to succeed in a competitive market. Many Lake Michigan marinas have gone through the revitalization process. McKinley Marina was rebuilt in a series of phases at the turn of the millennium. Quarterdeck in 2002, Winthrop Harbor in 2007, Egg Harbor in 2010, have all been reworked and our team members at Lunde Williams have been involved in each of these renovations. ReefPoint is currently undergoing improvements and we are there, too. Our experience in marina renovation is unparalleled.

The Manitowoc Marina has a proud history as a boating destination and as a first class facility for service, storage and boating fun. Lunde Williams would be proud to manage the redesign and reconstruction process. We have the experience and the vision to see the project through to completion and to ensure that the renovation process safely meets the needs of the current and future boating clients.

We propose to provide the complete professional services for data acquisition, design and construction administration services for the renovation of the Manitowoc Marina. Our team of professionals includes the principals of Lunde Williams, Bruce Lunde, Dan Williams, ASLA, and our resident engineer, Larry Ryan, PE. Utility engineering will be handled by our subconsultant Harwood Engineering.

- We will obtain the needed information to document the existing conditions at the marina and needs for building a sustainable marina for the foreseeable future.
- We will design the renovated facility to meet the Codes and regulations now in force. Significant changes to the requirements have occurred since the original construction and these changes need to be acknowledged and incorporated into the design.
- We will prepare the appropriate permit applications for the changes to the marina and work with you to obtain the required permissions.
- We will explore grant opportunities for the renovations and discuss the implications of each potential grant with you.
- We will prepare the construction documents and be your guide through the bid acquisition process.
- We can provide a range of construction administration services and tailor them to meet your needs.

Design and engineering documents will be prepared as a unit, but the bid documents can be tailored to meet the project phasing needs and can be used with little modification for potential multiple bids and project construction phasing.

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Project Approach

Lunde Williams believes that our experience and drive will make the development of the renovation documents valuable, clear, and understandable to the contractors that will perform the construction tasks. Professional services for new facilities traditionally take significant time and use traditional sequences to build the design from scratch.

Rebuilding marina facilities can fall into the trap of following the traditional long lead time approach. With our experience and the sophistication of the current marina management at Manitowoc Marina, we believe that some significant streamlining and efficiencies can be gained.

We intend to work closely with the marina management and the City's assigned liaison at every step. Development of designs, estimates and phasing strategies cooperatively with the marina management and City personnel is key to the success of this project. Meetings will be documented and minutes from each session will be shared with the client in a timely manner. These meeting minutes will help everyone to have similar understandings and common expectations.

All deliverables for this project will be primarily in electronic format, (PDF, Word, Excel, or other common format as appropriate). Where hard copy is requested, printing charges will be at cost.

Since total project cost is important to the City, we will obtain the information needed to design the project success, but will forego those data collection tasks that do not add to the project value. Examples of information gathering not currently under consideration are soil borings and sampling, dive examinations of underwater facilities, and resistance testing of the existing pedestals.

The schedule for developing the design, engineering, through bid documents requires the rapid development of the condition assessments, design drawings, and estimates of the costs of the construction by August, 14th, 2015. Assuming a two week lag between the April 17th proposal opening and contract signing, there are fourteen weeks for the condition assessment, design and engineering, review and acceptance of the designs, and preparation of the necessary bid documents. Our team can meet this schedule and provide the quality needed for a great replacement system.

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Phase 1 - Existing Conditions Survey

We will begin by obtaining all available design documents from the City and arranging to review all existing documentation. We assume that basic survey data from the original construction will allow us to develop a site map that will allow us to locate the docks, utilities. With the available documentation we will begin by walking through the site and documenting our observations.



Since the overall site plan isn't currently available, a marina plan will need to be surveyed and documented to provide a project base map. The limited site map will include the marina basin edges, locations of the dock connections to shore, utility locations, and limited upland features that will allow for development of new utilities needed as part of the renovations.

Our team will meet with the Marina Manager and the City engineering representative to identify the in water and upland components that will require replacement or renewal. Our team will walk the site, documenting photographically the items of concern and also documenting the docks and near shore marina in particular. We will update the base map to reflect the current as found condition. Not included will be an assessment of the storage buildings, ship's store, or parking areas.

Of particular note, the electrical system from the secondary transformers and switchgear will be inspected and possible component replacement to meet current codes will be identified. The condition assessment program will document the current dock and utility As a result of the site investigations and the document reviews, we will prepare a report summarizing the inventory findings. This report will then be presented to the City and Marina liaisons and the implications of the findings discussed. The resultant understandings will be used as a basis for the design phase.

Meetings

- 1. Kickoff meeting and existing drawing review
- 2. Site survey review meeting

Deliverables

- 1. Base map of the marina dockage and nearshore uplands
- 2. Report summarizing inventory findings
- 3. Condition assessment report with field notes, photographic documentation, and project definition recommendations

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Phase 2 - Design Phase

Generation of prioritized goals and identification of required project components is accomplished during this phase. We will develop the plans and detail the project to the point of being able to assemble a meaningful project estimate.

Planning for the renovation includes a thorough review of the facilities requirements. The slip mix should be reviewed to accommodate the expected boating demographics and allow for future revenue growth.

LUNDE WILLIAMS Once the needed facilities are defined, engineering development may begin and the overall project costs may be defined. Understanding the costs, along with clarifying the project priorities is essential in the planning process. It is likely that the renovation will need to be completed in phases, to allow for funding availability and to match with requirements that may attached to grants and other funding opportunities.

Meetings

- 1. Preliminary design and project update meetings
- 2. Phasing and project estimating presentation

Deliverables

- 1. Design Development level plans
- 2. Outline specifications
- 3. Opinion of Probable Construction Costs (OPCC) and phased reconstruction recommendation reports
- 4. Funding strategies report



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Phase 3 - Construction Documents

Formal engineering documents suitable for bidding and contracting will be prepared. This includes stamped engineering drawings and specifications, revised OPCC, front end specifications tailored to the City of Manitowoc's bidding requirements, and proposal evaluation criteria. Where possible, the existing structures and site features will be maintained.



During the engineering process, communication between engineering and the client is essential. We plan to have review and presentation sessions during this process. We will work with the City to develop and submit permit applications appropriate for the redevelopment of the marina to the WDNR and USACE.

Meetings

- 1. 30% review presentation
- 2. 90% review presentation

Deliverables

- 1. Electronic files of PE Stamped drawings for use in bidding the dockage reconstruction in two phases.
- 2. Electronic files of specifications for use in bidding the dockage reconstruction in two phases.



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Phase 4 - Bid Cycle Services

Bidding for contracted services must follow the constraints of the City of Manitowoc and State of Wisconsin. We will work with the City's Purchasing department to prepare plans, specifications and contracting documents. Project construction is to be phased into two bidding cycles, the first phase (Dock E replacement) is to be done in autumn 2015 and the second phase (Docks A-D) is to be done some time in the future. The project cycle for each phase is identical. The meetings and deliverables are applicable to both phases.



1. Pre issuance meeting with the City to review project details.

2. Pre bid meeting with potential contractors.

Deliverables

- 1. Electronic form of plans, specifications, and bid documents for promulgation by the city.
- 2. Bid Addenda as necessary.
- 3. Bid tabulation and recommendations memorandum.



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Phase 5 - Contract and Construction Administration

We will work with the City to generate the appropriate contract documents. Construction Contract Administration for this project consists of primarily reviewing the submittals and pay requests for compliance with the contract documents. On site progress review is to be limited to three trips for each phase unless otherwise negotiated. Phasing is to be identical to those described in the Bid Cycle Services section.

Meetings



- 1. Preconstruction meeting with general contractor
- 2. Progress meeting during construction
- 3. Substantial completion walkthrough

Deliverables

- 1. Contract Document s generated in cooperation with the City of Manitowoc.
- 2. Monthly project status reports
- 3. Payment recommendations based on monthly pay requests by Contractor.
- 4. Punchlist and substantial completion review documents.



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Firm Qualifications

LUNDE WILLIAMS, LLC

Land and Water. Simply put, these are our passions.

Just as the two seem like opposites that meet in perfect harmony, so goes Lunde Williams.

LUNDE WILLIAMS We are planning and design professionals for environments on land and on water, each of us with expertise that complements the other. Together, our creative synergy and professional balance help meet the goals of our clients.



"They have produced creative, practical and usable solutions to our design issues." Bob Evans, Manager. Dillon Marina, Dillon, Colorado 2012 Marina of the Year

At Lunde Williams, we build dreams for communities, plan for their changing needs through time and provide elegant solutions to problems with land and water environments that are already in place.

Founding partners Bruce Lunde and Dan Williams have designed and overseen implementation of major projects throughout the nation, from traditional site designs such as campus, office and park systems to specialized waterfronts, riverwalks and marinas.

The two have been featured experts at national and international conferences on planning and design of waterfront facilities, and they are contributing authors of the updated Planning and Design Guidelines for Small Craft Harbors. Published by the American Society of Civil Engineers, the guidelines are a leading resource for the development of marinas and related waterfront facilities.

Similarly, every Lunde Williams project - whether for land or for water - sets a high standard. Simply put, that's our passion.



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Harwood Engineering Consultants, LTD.

HARWOOD ENGINEERING CONSULTANTS, LTD. is a full support design engineering firm. Our qualified staff includes (6) LEED[®] Accredited Professionals, Structural Engineers, Civil Engineers, Plumbing / Fire Suppression Designers, Mechanical Engineers and Designers, Electrical Engineers, Specialty Lighting Designer, and Licensed Registered Communications Distribution Designer.

Organized:	1973	FEIN No.:	39-1498508
ncorporated:	1983	Legal Status:	Corporation
Total Years In Business:	42	WI Professional Registration:	2053-11

MARKETS WE SERVE

Commercial/Retail:	Offices, Financial Institutions, Retail Shopping Centers, Airport Kiosks, Restaurants		
Healthcare:	Research / Laboratory, Clean Rooms, Hospital, Medical Office Buildings, Clinic, Specialty Practice, Nursing Homes, Independent Living/Assisted Living, Community Based Residential Facility (CBRF)		
Hospitality:	: Hotel, Motel, Casino / Gaming		
Housing:	Mixed-Use, Multi-Family, Student Residence		
Industrial:	Factory, Manufacturing Plant		
Parking Structures:	es: Underground Post Tensioned Structure Multi Story Buildings, Post Tensioned Stand Alone, Precast Stand Alone, Skywalk Connectors		
Places of Worship:	Churches, Synagogues, Temples, Fellowship Halls		
Public Buildings:	911 Communications Centers, Emergency Operations Centers, Police Stations, Fire Stations, Municipal Garages, Courthouses, Justice Centers, Jails, Maximum Security Institutions, Data Centers, Libraries		
Recreational:	Fitness & Wellness Centers, Public Attraction, Parks, Ice Arenas, Waterparks		

MISSION

The mission of Harwood Engineering Consultants, Ltd. is to deliver professional engineering designs that are functional, economical, and enhance the quality of the human environment.

In working toward this goal, our team is committed to completely understanding the project scope and the clients' needs. On every project, we will strive to bring you the best design solutions, to ensure that our services live up to your expectations and success of the project. Throughout this process, we will conduct ourselves ethically, honestly, and with integrity.



STAFF BREAKDOWN

Structural
Civil
Plumbing / Fire Suppression
Mechanical
Electrical
Lighting Designer
IT Communications / Security
AutoCAD Technicians
Administrative/Marketing





RESOURCES

Harwood Engineering Consultants, Ltd. is a wholly owned subsidiary of **Zimmerman Architectural Studios**, one of Milwaukee's largest and most successful architectural firms, established in 1906. Zimmerman Architectural Studios' staff of 105 is comprised of individuals representing multiple building design disciplines including:

Architectural Planning and Design Landscape Architecture Interior Design Space Planning Cost Estimation Specifications Development Graphic Design Sustainable Design

DESIGN ENGINEERING SERVICES

Harwood Engineering Consultants, Ltd. provides full support engineering design services, including Civil, Structural, Plumbing, Fire Protection, Mechanical (HVAC), Electrical, Lighting, Information Technology Design, Feasibility Studies, Sustainable Design, Engineering Analysis (life cycle costs/benefits), Project Management, and Construction Observation Services. We have extensive project experience in new construction, remodeling, adaptive reuse, green architecture, mixed use, feasibility studies and all types of project delivery methods (traditional design-bid build, design-build, and design-build-operate-maintain).



Harwood Engineering Consultants, Ltd. has mastered outstanding service with first class engineering design services. We staff a diverse group of professionals who proficiently design functionality, energy efficiency, and who identify issues while providing solutions to complex projects.

We work closely with the Client and the entire Project Team to ensure our designs are integrated into the Architecture and coordinated with all building systems. Our firm has extensive experience with BIM Revit 3D Modeling. We collaborate with consultants, contractors, and other parties with BIM models towards a common goal of merging our models to allow virtual construction, clash detection, phasing studies. Our common goal is to enhance collaboration, reduce errors and find efficiencies.

Harwood Engineering Consultants, Ltd. understands the distinct requirements for a prosperous project. Each project requires quality / value designs, proficiency and cost effectiveness, which includes detailed engineering design analysis to obtain maximum value in equipment and energy efficiencies. Our project team's attention to detail will ensure your project goals and performance objectives are met or surpassed.

Our **Civil Engineering Department** provides Design, Coordination, and Construction Management for Land Surveying, Stormwater Management, Site Development, Redevelopment Watermain, Sanitary Sewer Design, Roadways, Sanitary Lift Stations, Force Mains, Gravity Collection Systems, Subdivision Design, Water Meter Replacement Projects, Development of Grading Plans, Erosion Control Plans, Grant Application Writing, and Construction Permitting.

Our **Structural Engineering Department** provides Design of New Building Construction, Renovation and Restoration. Services include Evaluation of Existing Facilities, Structural Systems Design, and Construction Inspection Services.

Our **Plumbing / Fire Protection Engineering Department** provides all services related to Plumbing Systems Design, including Sanitary Waste and Vent, Stormwater, Water Distribution, Compressed Air, Water Conditioning, and Medical Gas Systems. These services may include Retrofits of Existing Systems, Value Engineering of Systems, Performance Based Specifications for Fire Protection Systems, and System Assessments / Evaluations of Condition and Expansion Capabilities.

Our **HVAC Engineering Department** provides System Analysis and Design of Heating, Ventilating, and Air Conditioning. Mechanical Equipment Components include Air Handling Systems, Rooftop Units, Boilers, Chillers, Cooling Towers, Temperature Controls, and Industrial Process for Makeup Air, Summer Ventilation, Desiccant Dehumidification, Fume & Dust Collection, and Process Compressed Air. Geothermal Systems have been designed for LEED projects.

Our **Electrical Engineering Department** provides Primary and Secondary Power Distribution Design, Specialty Lighting Design, **Solar Photovoltaic Systems**, and Design of Information Technology Systems. Power Distribution consists of Normal and Emergency Power (Emergency Standby Motor Generator Sets, Uninterruptible Power Systems, and Central Invertors).

Our Information Technology Designers provide all services related to Voice/Data Cabling Infrastructure, Data Network Components, Voice Systems (PBX, VoIP), Video (CATV, CCTV, Video Conferencing), Paging and Intercom Systems, Wireless (LAN, Building To Building Bridging), Free Space Optics (FSO), and Network Documentation. Power Distribution consists of Normal and Emergency Power (Emergency Standby Motor Generator Sets, Uninterruptible Power Systems, and Central Invertors).

Creative Lighting Design includes Interior and Exterior (Site, Parking, Roads, Walkways, Landscape, and Signage).



McKinley Marina Reconstruction

Milwaukee, WI



PROJECT SUMMARY

Milwaukee County's McKinley Marina was a 750 slip fixed dock facility in need of transformation into a modern floating dock marina. The renovation changed the slip configuration to meet the boater demand and increase the revenue to the marina. Larry Ryan, then working for Baird & Associates, was principal engineer for the project that transformed the facility into a floating dock marina. Bruce Lunde, then working for Skipper Marine Development, was the general contractor for the project. The transformation was completed in three separate phases in 1998, 1999, and 2001. The current configuration includes 655 slips. Total construction costs for all three phases of the renovation \$12,000,000.

PROJECT ROLE

This project was completed while the team members were working at other firms. Mr. Ryan was the principal engineer and project manager and Mr. Lunde was the general contractor. Together the team successfully designed and built the marina under budget and on time.

PROJECT CONTACT Karl Stave, PE, Milwaukee County DPW (414) 278-4863 kstave@milwcnty.com

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CLINTON MARINA RECONSTRUCTION Clinton, IA

*Project prepared while at another firm



PROJECT SUMMARY

Clinton Marina's 150 slips were undersized and poor repair, the City wanted to repair its waterfront image and provide quality transient marina dockage to supplement the seasonal rental revenue stream. Bruce Lunde and Dan Williams teamed while at JJR, LLC to design a new layout and successfully managed the renovation process. The project was completed in 2009. Total Construction Costs, \$4,500,000

PROJECT ROLE

This project was completed while the team members were working at other firms. Condition assessments and preliminary design requirements were developed by Mr. Lunde, refined design and final layouts were generated by Mr. Williams,

PROJECT CONTACT

Jeff Kooistra, City of Clinton, City Manager (563) 242-2144 jeffkooistra@ci.clinton.ia.us



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REEFPOINT MARINA RECONSTRUCTION

Racine, Wl



PROJECT SUMMARY

ReefPoint Marina's 921 slips on Lake Michigan was a watershed for the industry when if was built in 1986. At that time, Larry Ryan was project manager for the design of this project. Recently, Lunde Williams, LLC was hired to design a reconstruction of the fuel dock system. Currently, Lunde Williams is working with Siegel Gallagher - Marina in preparing a long-range plan for the renovation of the entire facility.

PROJECT ROLE

When originally designed, Mr. Ryan had a pivotal role in the design and construction of this significant facility. More recently, Lunde Williams, LLC has become the trusted advisor for the developing reconstruction efforts.

PROJECT CONTACT

John Matheson, COO SG - Marina (414) 270-4114 jmatheson@sg-re.com

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LAND

LUNDE WILLIAMS







LAND

WATER

WAUKEGAN PORT DISTRICT MARINA RENOVATION

Waukegan, Illinois

*Project prepared while at another firm





PROJECT SUMMARY

The Waukegan Port District, with prime location to the north suburbs of Chicago has direct access to Lake Michigan. The Port is successful 780 slip marina that was facing many challenges. Other regional marinas had floating docks instead of fixed piers found at Waukegan which provided up to date facilities. Since 2000 the Lake levels have dropped significantly resulting in customers migrating to newer floating facilities that provided better access to their boats. Additionally the existing slip mix did not meet the market demands. Realizing the loss, Waukegan Port District decided to replace the fixed slips with floating.

Phase One renovations included significant dredging and replacement of the south half of the marina with new slips that updated utilities and provided compliant accessibility to their facility. The wood fixed piers were replaced with concrete decked floating system which included integrated utility runs making installation efficient. New handrails and secure entryways were added to the existing fixed concrete main pier. The access points were designed to continue the ability for fire trucks to provide emergency service to boaters and restroom facilities located at the tip of the main pier structure. Gangways were designed to allow for mobile cart access to the most remote slips in the system.

PROJECT ROLE

Project Manager and Lead designer of project, assisted in preparation of construction documentation, wrote project specifications, directed bidding, and provided construction administration. Created all details and 3 dimension images for the project.

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WATE

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DILLON MARINA AND MARINA PARK

Dillon, Colorado

*Project prepared while at another firm



LUNDE WILLIAMS

PROJECT SUMMARY

The Town of Dillon is located in the heart of Colorado's ski resort country and on the shore of the vast Dillon Reservoir. A unique facility, Dillon Marina required the development of specialized design ideas and technical detailing. Popular for fishing and boating, this pristine lake is an important catalyst for the summer tourism economy, and the Dillon Marina is the focal point of the community. Through a community-based planning process plans for an updated marina and waterfront park were crafted, linking the town center with its waterfront while providing a number of much-needed improvements.

Dillon Reservoir is the last storage facility in the Denver Water Board holdings. The Lake levels very dramatically and at 9,800 feet elevation (highest marina in U.S.) the winter ice conditions are unmatched by any other facility in the U.S. Design and detailing required careful consideration for the up to 40 foot water fluctuation. A new wharf with multiple gangways, fixed pier structures and floating buildings were developed.

The master plan and project report provided the Town of Dillon guidelines for phasing installation of the marina improvements. The project also includes upland improvements for realigning and lessening the slope of the main access road while adding an underground parking structure to serve both marina and town center users. Dillon Marina recently won the 2012 Large Marina of the Year Award.

PROJECT ROLE

Project Manager and Lead Designer of project, prepared construction documentation, wrote project specifications, directed bidding, and provided construction administration.

Reference

Bob Evans, CMM General Manager Dillon Marina 970.418.3242 Bob.evans@dillonmarina.com

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Team Qualifications

Lead Project Manager

Bruce Lunde, co-owner of Lunde Williams began designing marinas in 1994; working for a boat sales and marina operations firm that had just begun developing marinas. During the first phase of his marina education, Bruce attended training classes and seminars, learning from the more experienced industry leaders. Eventually, his experience in marina design led him into sharing his insights as a speaker and author at regional and international conferences and seminars. Bruce has managed over 40 new and renovation marina design and construction projects.

Bruce Lunde will be the team leader and will be working full time to accomplish this project within the scheduled deadlines.

Lead Designer

Dan Williams, ASLA, was an accomplished site designer of recreational and commercial project long before he began working on waterfronts in the 1990s. His projects have won over 30 National and State awards.

Bruce and Dan started working together in 2004, among their waterfront successes are the renovations at Waukegan transforming the old marina into a modern first rate facility. Together they formed Lunde Williams in 2011 with a focus on the recreational waterfront industry.

Since the formation of Lunde Williams, they have worked on recreational marina projects in Colorado, Illinois, Kentucky, Michigan, Ohio, Texas, Utah and Wisconsin. Their work in Ohio recently won the Wisconsin ASLA 2014 Honor Award.

Dan will be responsible for design development and drawing management for the project.

Lead Engineer

Larry Ryan has been instrumental in the development or redevelopment of many Lake Michigan marinas over the last 30 years. He understands the structural needs of marinas in the harsh local environments. He will also be performing Quality Assurance functions for this project.

Electrical Engineers

Tom Peterson and Dennis Hess have provided engineered electrical systems for many of our project marinas. We trust their ability to manage the electrical system design and keep the related costs under control.



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Similar Selected Projects by Our Team



Projects	Permit/ Grant Acquisition	Design & Engineering	Construction Management
Alton Marina - Alton, IL			
Clarksville Marina and Liberty Park - Clarksville, TN			
Clinton Marina Renovations - Clinton, IA			
Crab Orchard Nat. Wildlife Refuge Marina - Marion, IL			
Dillon Marina and Park - Dillon, CO			
Egg Harbor Marina - Egg Harbor, WI			
English Jim's Marina - Daytona Beach, FL			
Great Lakes Aquatarium/Discovery World - Milwaukee, WI			
Harbor Club Marina, Sturgeon Bay, WI			
Isle of Capri Casino Transient Dock - Bettendorf, IA			
McKinley Marina - Milwaukee, WI			
Owensboro Marina Master Plan - Owensboro, KY			
Port of Dubuque Transient Marina - Dubuque, IA			
Port Washington Marina - Port Washington, WI			
Schwiebert Park Transient Marina - Rock Island, IL			
Univ. of WI Shoreline Restoration - Madison, WI			
Waukegan Harbor Marina Renovation - Waukegan, IL			

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BRUCE E. LUNDE, CSI Principal





PROJECT ADMINISTRATOR Co-Founder Lunde Williams 2011

PROFESSIONAL AFFILIATIONS Construction Specifications Institute Association of Marina Industries States Organization for Boating Access (SOBA) Wisconsin Marina Association

PRESENTATIONS

Guest Lecturer, International Marinas and Boatyards Conference, 2009, 2010, 2012, 2013, 2014 Guest Lecturer, International Boat Builders Exposition, 2011 Guest Lecturer SOBA Annual Conference, - 2007, 2010, 2011, 2014

Guest Lecturer, "Marina Design and Redesign," Kentucky and Tennessee Marina Association Conference, Chattanooga, TN - 2006

Guest Lecturer, "Rebuilding Marinas," Docks and Marinas Conference, University of Wisconsin, Madison, WI – 2001

PUBLICATIONS

"Ohio Government Operators Assess its Facilities to Develop Standards" July/ August 2014"

"Clarksville's Liberty Park and Marina," Marina Dock Age, May 2013

"The Role of Engineering in Marina Reconstruction" Marina Dock Age, March 2012

"1988 to 2008: 20 Years of Marina Design Progress," Marina Dock Age, July/August 2008

"How to Choose the Right Marina Design Consultant," Marina Dock Age, March 2008

"Designing a Rebuilt Marina for the 21st Century: The Renovation of Waukegan's South Harbor Marina," Marina Dock Age, April 2007

- "Choosing the Right Docks is Every Marina Owner's Dilemma," Marina Dock Age, May/June 2006
- "Selecting a Consultant That's Right for the Job," Marina Dock Age, February 2005

"What Goes Up Must Come Down: Meeting ADA Requirements with Fluctuating Lake Levels," Marina Dock Age, March 2004

EDUCATION

Bachelor of Science-Architecture, University of

Mr. Lunde is an experienced project leader with over 30 years of design, construction, business development, and contract management experience. During the last 20 years, Mr. Lunde has focused on waterfront projects and become an acknowledged authority on marina design and construction. Mr. Lunde has become a nationally recognized speaker and author on Marina design, renovations, and ADA related construction. Mr. Lunde's expertise includes project management, planning, feasibility studies, cost estimating, budgeting and scheduling, engineering and design, management of engineering teams and trades people, contract and contractor oversight, and general project construction management and orchestration.

SELECTED RELEVANT EXPERIENCE

Alton Marina, Alton, IL

Project Manager for design and construction, post construction and development manager

Chatfield Marina, Chatfield Reservoir Water Reallocation Impact Study on Marina Facility, Littleton, CO

Managed site assessment project and future development estimating

Chicago Park District Lakefront Harbor Framework Plan, Chicago, IL

Assessment and condition documentation project for 18 existing marina facilities

Chicago 31st Street Harbor Floating Pool Project, Chicago, IL

Design and construction assistance for floating pool and lounge

Clarksville Marina and Fairgrounds Park Design, Clarksville, TN

Client manager for development of Municipal Park and marina

Clinton Marina Renovation, Clinton, IA

Developed marina renovation design and dockage specifications

Crab Orchard National Wildlife Refuge Marina Assessment and Dockage Design, Marion, IL Marina reconstruction project manager

Pier St. Louis Site Evaluation Study, St. Louis, MO Site assessment and feasibility study for marina facility

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Dillon Marina and Waterfront Master Plan, Dillon, CO Marina condition assessment and master planning project; marina reconstruction

English Jim's Marina, Daytona Beach, FL Marina condition assessment and reconstruction project

Great Lakes Aquatarium and Discovery World Museum, Milwaukee, WI Floating dockage specifications

Halifax Harbor Marina Assessment, Dayton Beach, FL Condition assessment and marina upgrades

Harbor Club Marina, Sturgeon Bay, WI Design and construction of 150 slip marina facility

Harbor of Refuge Feasibility Study, Gills Rock, WI Maritime commercial fishing museum study

Heyburn State Park, Chatcolet Marina Concept Layouts, Coeur d'Alene, ID Marina expansion and renovation study

Isle of Capri Casino Transient Dockage Design and Construction of 53 slip boating facility

Lakeshore State Park, Milwaukee, WI Floating dockage design and specifications

Large Yacht Mooring Design, Sheboygan, WI Design and specification of large yacht facility along Sheboygan River

Marina Assessment and Reconstruction, Egg Harbor, WI Design, permitting, estimating, of expanded marina and harbor of refuge

McKinley Marina, Milwaukee, WI General contractor for 780 slip marina reconstruction

Muskingum Watershed Conservation District, New Philadelphia, OH Business plan development and design for Seneca and Piedmont Lake Marinas as part of the MWCD Master Plan project.

Owensboro Marina and English Park, Owensboro, KY Business plan development, cost estimate preparation, and design of the downtown transient

Pikes Bay Marina Study, Pikes Bay, WI Post disaster marina condition assessment

dock. BIG application.

Port of Dubuque Transient Marina, Dubuque, IA Dockage design and floating dockage specifications

Port Washington Marina and Harborwalk Expansion, Port Washington, WI Marina condition assessment, marina expansion design and upland development

Rock Island Schwiebert Park Transient Marina 26 slip transient marina design and construction management

Trinity River Vision, Fort Worth, TX

Safety analysis for the development of a 2 mile bypass channel of the Trinity River as part of the redevelopment of 800 acres in central Fort Worth

UW-Madison Marina (Hoofers) Assessment and Remediation Program, Madison, WI Dockage condition assessment and recommendation plan

Waukegan Harbor Marina Renovation, Waukegan, IL

Reconstruction of 780 slip marina removal of fixed piers with floating dockage.

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DANIEL J. WILLIAMS, ASLA, APA Principal



Lunde =Williams

SENIOR LANDSCAPE ARCHITECT Co-Founder Lunde Williams in 2011

REGISTRATIONS Wisconsin 92-014, Colorado 623

PROFESSIONAL AFFILIATIONS American Society of Landscape Architects American Planning Association

PRESENTATIONS

Guest Lecturer, "Planning Process for Marina Design" Docks and Marinas Conference, University of Wisconsin College of Engineering - 2008, 2009, and 2010 Guest Lecturer, "Landscape and Home Garden", National Garden Society - 2002,

2003, and 2006 Guest Lecturer, "Site and Lighting Design", University of Wisconsin Engineering Ext –

2002 and 2003. Guest Lecturer, International Marinas and Boatyards Conference - 2012, 2013

PUBLICATIONS

Coauthor, Chapter 1, ASCE Manual 50 "Planning and Design for Small Craft Harbors".

"Clarksville's Liberty Park and Marina" Marina Dock Age, May 2013

APPOINTMENTS

- Wisconsin Chapter of the American Society of Landscape Architects, Executive Board Secretary 1997, President 2005-2006 and 2006-2007.
- Department of Landscape Architecture, University of Wisconsin-Madison, Continual Lecturer forLA375J Computer Design (1/1995-12/1997).

Madison Design Professionals, Downtown Madison Incorporated (2009 to Present)

EDUCATION

Bachelor of Science in Landscape Architecture, University of Kentucky, Lexington, Kentucky Microstation CADD Training, Advance CADD Solutions, Nicholasville, Kentucky With over 25 years of landscape architectural experience, Mr. Williams takes pride in his ability to make every project, large or small, something special. He is energized by the challenges offered by each new site. Mr. Williams design philosophy is uncomplicated and based on two foundational factors, understanding and vision. Understanding involves developing a solid comprehension of the environmental, social, and economic factors related to a project. This knowledge provides a framework for building an inspiring vision for the landscape. Mr. Williams enjoys the energy of collaborating with others to create special places. He continues to grow professionally through interaction with teammates and clients as design solutions are tested. Mr. Williams thrive on the progression of thought process. He has managed and directed design for over 30 award winning projects including 5 national recipients.

SELECTED RELEVANT EXPERIENCE

Ashland Waterfront Master Plan - Ashland, WI

Lead Designer – Master planning for the development of addition 250 slip municipal marina, waterfront plan and modification to the Kiyi Research Vessel dock.

Chatfield State Park Marina, Littleton, CO

Principal Designer for the assessment and relocation plan 334 slip marina and floating administration /restaurant. Design includes new upland facilities for parking, boat launch, park restrooms, and trail system.

Chicago Parks District Harbors Master Plan and 2016 Olympic Bid - Chicago, IL

Lead Designer – Master planning for modifications to 9 existing harbors and 3 new marinas. Total slip capacity 7,500, the largest municipal system in the world. Prepared plans for the white water course, rowing, and sailing venues for the 2016 Olympic Bid.

Clarksville Marina/Liberty Park - Clarksville, TN

Principal Designer for new 200 slip marina, and 135 acre park redevelopment along the Cumberland River.

Cleveland Waterfront Master Plan – Cleveland, OH

Site Designer – Master planning for 7 miles of Lake Erie waterfront.

Dillon Marina and Park - Dillon, CO

Principal Designer for renovation of 318 slip marina, upland marina facilities, and lakefront park.

Egg Harbor Marina – Egg Harbor, WI

Principal Designer for renovation of 75 slip marina on Green Bay of Lake Michigan.

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Gills Rock Marina Feasibility Study – Gills Rock, WI

Principal Designer – 100 slip Marina, conservancy, and maritime museum on Green Bay of Lake Michigan.

Heyburn State Park/Chatcolet Marina – Coeur d'Alene, ID

Principal designer for the renovation of a 139 slip marina with 24 floating homes, boat launch, marina building, park shelter, and Trail of Coeur d'Alene multiuse trail.

Hoakalei/Ocean Pointe - Awa Beach, HI

Lead Designer of 750 slip marina with 7 lane boat launch, boater facility, and yacht club located on the Pacific Ocean.

Horseshoe Bay Resort - Egg Harbor, WI

Project Manager – Master planning 900 acre residential resort with 300 slip marina, golf course, and marina on Green Bay of Lake Michigan.

La Pointe Waterfront Master Plan - Madeline Island, WI

Principal Designer for the improvements to the Village Dock, Ferry Terminal, and the addition of 150 to 250 slip marina on Lake Superior.

Lakeshore State Park - Milwaukee, WI

Lead Designer for the creation of Wisconsin's first urban state park. Located on a 17 acre island the park includes cruise ship terminal, boaters beach, transient slips, fishing pier, nature trails and a signature award winning pedestrian bridge.

Lummi Nation – Fisherman's Cove Working Waterfront, Bellingham, WA

Principal Designer for the development of 200 slip marina for tribal fishing fleet including 60' seiners, crab boats and small craft. Project planning included relocation of the San Juan Island Ferry Terminal for the Whatcom Chief. Project located on Pacific Coast

Muskingum Watershed Conservation District - New Philadelphia, OH

Principal Designer for the improvements to Seneca and Piedmont Lake Marinas as part of the MWCD Master Plan. MWCD encompasses 20% of Ohio and contains 9 parks on storage facilities of this, the first stormwater protection system in the U.S. circa 1930's.

Ocean Reef - Panama City, Panama

Lead Designer for 200 slip mega yacht marina. Vessels up to 300 ft. (90m) with private yacht club and two level access walk system on island development.

Oshkosh Riverfront Design Guidelines – Oshkosh, WI

Project Manager – Design Guidelines, Riverwalk design, 250 municipal slips and site detailing for the City waterfront along the Fox River.

Owensboro Marina and English Park – Owensboro, KY

Principal Designer for the development of 3 marina options; 150 slips at English Park, 800 slips at Yager Quarry, and a downtown transient dock. Currently providing design for the implementation of the downtown transient dock adjacent to the new Smothers Park.

Sand Island Recreation Area - Honolulu, HI

Principal Designer for 500 slip marina and 50 acre park expansion with DOBAR office, yacht club/restaurant, hale' (canoe) facility, campground, beach, and 4 lane boat launch

South Pier/Blue Harbor Resort - Sheboygan, WI

Lead Designer for the redevelopment of a 42 acre peninsula located on the shores of Lake Michigan and the Sheboygan River. The site includes a hotel/conference center with water park, condominiums, shoppes and restaurants, beach, and multiple boat slips in this maritime heritage development.

Tribute Marina - Dallas, TX

Principal Designer for a 135 to 300 slip marina, yatch club, marina administration, pool club, and chapel within the 1,600 acre Colony development.

Waukegan Harbor Marina Renovation - Waukegan, IL

Lead Designer for the renovation of 700 slips, pier railing, and entry gateways.

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LARRY W. RYAN, P.E. Civil Engineer



LUNDE WILLIAMS

LAND

SENIOR CIVIL ENGINEER Consultant

REGISTRATIONS Registered Professional Engineer, Wisconsin Registered Professional Engineer, Michigan

PROFESSIONAL AFFILIATIONS

Member, Concrete Reinforcing Steel Institute Member, American Concrete Institute Member of the American Society of Civil Engineers, Past President SW Branch and Director, Wisconsin Section Board

Member, Society of American Military Engineers

PRESENTATIONS

- Speaker at the Docks and Marina Conference, University of Wisconsin, Case Study on Racine Harbor, Madison, Wisconsin.
- Speaker at the Eleventh National Conference of the Coastal Society on the subject of Harbor Rehabilitation and Recreational Development in Racine, Wisconsin; Boston, Massachusetts.
- Speaker at the International Great Lakes St. Lawrence Mayor's Conference on the subject of "Planning, Financing and Impacts of the Racine
- Harbor Marina Development," Milwaukee, WI. Speaker at the ASCE International Conference & Exposition on Marinas, Parks & Recreation Developments on the subject of "Breakwater Design and Construction Harbor Centre Marina, Sheboygan, Wisconsin.

PUBLICATIONS

Gibson, R. and Ryan, L.W. "Harbor Conversion and Recreational Boating in Racine, Wisconsin." Presented at ASCE 'PORTS '89. Boston, Massachusetts, May 1989. Ryan, L.W. "The Racine Harbor Revived," Civil Engineering. September 1987.

EDUCATION

B.S., Civil Engineering, University of Wisconsin, 1969 Continuing Education, Project Management and Technical Seminars Mr. Ryan has 43 years of engineering expertise in the design of commercial, light industrial and marine facilities. His background and abilities include project management of the planning and design of multidisciplinary projects; structural design; and site design/civil engineering. Mr. Ryan has focused his experience in support of the design and project management of marine construction projects over the past 32 years, including site planning, regulatory approvals, marine structures design, and dredging.

SELECTED RELEVANT EXPERIENCE

Racine Harbor and Reef Point Marina 1983 to 1989 -Racine, Wisconsin

Project Manager and lead structural engineer for the performance of feasibility analyses, preliminary and final design, permit acquisition and construction phase services for new breakwaters, fuel pier, dockage system and landside amenities serving a 920-slip marina. The landside amenities included 17 acres of new land, an administration/boater facilities building, fishing cleaning station, two boater restroom facilities, parking lots and landscaping.

Sheboygan Harbor Centre Marina 1989 to 1993 – Sheboygan, WI

Project Manager and Structural Engineer for the planning and design of a protected marina basin and a new 400 slip marina in Sheboygan, Wisconsin. The project included the performance of physical modeling of rubblemound breakwaters needed to provide the appropriate level of wave protection for the marina. The project also included site planning and design, the design of a new floating dockage system and a marina administration building housing administrative offices, toilet and shower facilities and meeting space.

McKinley Marina and Harbor 1994 to 2003 -Milwaukee, WI

Project Manager and Lead Structural Engineer for the feasibility analysis, preliminary and final design, permit acquisition and construction phase services for new breakwaters, fuel pier and dockage systems serving a 650slip marina. The original dockage system was a fixed system, unresponsive to frequently changing water levels. On more than one occasion, the finger piers were below water. The new floating dockage systems accommodate the fluctuating water levels, providing constant freeboards for all boats in the marina. Improvements made to the marina during the conversion of the dockage systems included the construction of water's-edge promenades, accessible to the general public, in areas where only boaters had previously been allowed.

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Lexington Marina - Lexington, MI

Project Manager and lead engineer for the performance of a real estate assessment of the harbor structures, docks, and landside amenities serving a small marina in Lexington, Michigan. The assessment included the preparation of an estimate of the present worth of the State-owned and Village-owned facilities. The present worth analysis was incorporated into a real estate assessment. The marina facilities for which the study was performed included harbor breakwaters, steel sheet pile bulkhead structures, dockage systems, water and sanitary systems, fuel system, electrical service, marina toilet, shower and maintenance building, parking lots and land.

Port Washington Marinas - Port Washington, WI



South Shore Revetment and Breakwater Improvements 2003 to 2006 - Milwaukee, WI

Project Manager for the redevelopment of approximately 2,000 lf of urban waterfront and 5,000 lf of offshore rubblemound breakwater on Milwaukee's south shore. Master planning addressed improvements to an offshore breakwater, shoreline protection systems, sand and cobble beaches, nearshore habitat islands, pedestrian overlooks and fishing jetties, public access, a new bike trail and rehabilitation of a offshore breakwater. The planning effort included a significant public participation and regulatory process. The revetment and breakwater rehabilitation have been completed. The total cost of the work was approximately \$4.5 million.

South Breakwater Repair, Racine Harbor 1994 to 2011- Racine, WI

Project Manager and Lead Structural Engineer for the design of 2,300 linear feet of tied-back steel sheet-pile required to encase a failing concrete-capped, Wakefield sheeting and concrete breakwaters. The project was one of several projects performed for Racine County since 1983. The repairs were required to stabilize the former Federal breakwater and to prevent sand fill materials from leeching into Lake Michigan. The project also resulted in a widened walking surface for fishermen and pedestrians. Construction was completed on time and under budget.

WE Power – Port Washington - Port Washington, WI

Project Manager for the design of a porous dike, protecting a power plant cooling water intake system from fish and debris. Project involved creating stable dike design, and detailed through-flow calculations to relate extreme low water levels and head loss through a proposed dike to plant operations. Assisted on study of power plant cooling water discharge circulation study, to determine effects of proposed increased discharges on the harbor. The project is about to go out for Bids and will be constructed in 2008.

WE Power - Oak Creek Power Plant Intake Protection - Oak Creek, WI

Project Manager for the design and construction of a rubblemound breakwater required for the protection of the existing cooling water intake system serving the power plant. The breakwater was required to reduce the wave activity within the intake channel and to reduce the rate at which sediments entered and deposited in the channel. Under certain conditions, wave action resulted in widely fluctuating pump intake pressure, putting undesirable stress on the pumps. The breakwater also prevents excessive amounts of algae from entering the channel and clogging the intake screens. Algae had previously caused one or two plant shutdowns each summer.

Menominee River Commercial Dock Wall - Marinette, WI

Project Structural Engineer for improvement of an existing bulk handling facility on the Menominee River. Duties included directing the analysis and design related to a new steel sheet pile bulkhead wall fronting 1600 ft of shoreline.



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Registration(s)

Tom E. Petersen, PE, LEED AP Principal | Director of Electrical Engineering

Experience Electrical Engineer since 1986

Education

Masters-Business Administration, Arizona State University, 1994

Bachelor of Science-Electrical Engineering, University of Wisconsin-Madison, 1986



Registered Professional Engineer, Wisconsin 31637-6, 1996

Registered Professional Engineer in the following States: Arizona, Arkansas, California, Colorado, Florida, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, Wisconsin, Wyoming

Registered with NCEES 11954

LEED Accredited Professional

Certifications/Membership(s)

Certified in Fire Alarm Technology, NICET Level 3 – 1995 Certified Electrical Inspector, International Association of Electrical Inspectors – 1991 Certified Electrical Plan Reviewer, International Association of Electrical Inspectors – 1989 Member, International Association of Electrical Inspectors (IAEI) Member, Automatic Fire Alarm Association (AFAA)

Biography

Mr. Petersen joined the Harwood Engineering Consultants Electrical Staff after working as a department head for a Phoenix based engineering firm for 8 years. His responsibilities at both businesses included staffing development and design quality of the entire Engineering Department.

Mr. Petersen also has extensive experience working for an electrical contractor and a design/build contractor for. This experience enables him to take a unique perspective and insight into the research, remodeling and construction side of the business.

In 2011, Mr. Petersen became the Director of Electrical Engineering.

Project Experience (partial list)

Egg Harbor Marina – Marina & Harbor Improvement Project – Power & Lighting Design, Egg Harbor, WI

Edgewater Hotel Boat Dock, Madison, WI

Edgewater Marina Study, Cleveland, OH

Lewis and Clark Marina Study, Yankton, SD

City of Brookfield – Public Safety Building, Fire Dept. Apparatus Bay, Police Dept.. Design - Energy Efficiency Upgrade & Focus on Energy Grant, Brookfield, WI

Concordia University Wisconsin - New 300 Stall Parking Structure, Mequon, WI

Oneida County - Jail Garage Addition, Rhinelander, WI

University of Wisconsin-Milwaukee – Parking Structure Maintenance & Repair, Milwaukee, WI



Dennis M. Hess, PE Senior Associate | Electrical Engineer/Manager

Experience Engineer since 1991

Education

Bachelor of Science-Electrical Engineering, Milwaukee School of Engineering, 1989

Registration(s) Professional Engineer: Wisconsin 33662-6, 1999 HARWOOD ENGINEERING

CONSULTANTS, LTD

Biography

Mr. Hess started his professional career with an Architectural/Engineering firm. He worked on new and renovation projects ranging from Hotels, Casinos, Schools, Airports, Hospitals, Offices, Industrial, Warehouses. and His experience includes the designing of Lighting, Power Distribution, Fire Alarm Systems, and Communications. Mr. Hess is proficient in estimating, field coordination and overall project management. He also has extensive experience in developing electrical specifications.

Mr. Hess has experience in Governmental work, including projects with the United States Postal Service, and the Air National Guard at Milwaukee's General Mitchell International Airport and Volk Field. His private sector work includes, but is not limited to, projects of new or renovations of Recreational,/Cultural Facilities, Libraries, Airport Concourses, Office and Control Towers, Major Chain Mass Marketers, Fire Stations, Educational Facilities, Hospitals, Parking Structures, Office Buildings, Industrial Manufacturing Plants, Restaurants, and Worship Facilities.

Mr. Hess is responsible for designing, preparing electrical bid documents, and specifications that include lighting design, power distribution, and special systems. He is also responsible for the construction phase of projects. With his proficiency in AutoCAD, lighting, and power computer programs along with his past design experience, Mr. Hess is a valuable project engineer and support person for other project engineers at Harwood Engineering Consultants, Ltd.

Project Experience (partial list) Apostle Island Marina – Bayfield, WI Crab Orchard Natural Wildlife Refuge – Williamson County, IL Waukegan Harbor Redesign - Waukegan, IL Sister Bay Marina – Village of Sister Bay, WI Egg Harbor Marina – Village of Egg Harbor, WI Washburn Marina - Washburn, WI Lewis and Clark Marina - Yankton, SD Bayside Police Department, Communication Center Expansion, Bayside, WI Elkhorn Police Department Remodeling of Existing Building, Elkhorn, WI Glendale Department of Public Works Remodeling, Glendale, WI Waukesha County, New Health and Human Services Building, Waukesha, WI Waukesha County, New Campus Grounds and Service Center, Waukesha, WI Waukesha County Courthouse IT Data Center Engineering Services, Waukesha, WI West Bend City Hall & Police Department, Study for Addition of 1-story Police Department, and New Parking Wisconsin Department of Natural Resources Ranger Station, Tomah, WI BloodCenter of Wisconsin, Brown Deer Donor Center, Brown Deer, WI Wilderness at the Smokies, Family Entertainment Center Addition, Sevierville, TN Mount Mary College, Student Success and Learning Center, Milwaukee, WI Wilderness at the Smokies, Phase II - Indoor Waterpark Expansion, Sevierville, TN Wildnerness in the Ozarks, Indoor Waterpark & Resort, Hollister, MO Kettle Moraine YMCA, Recreation Pool Addition, West Bend, WI Minocqua Public Library, Expansion, Minocqua, WI

References

The Alton Marina

Karen Baker- Brncic, General Manager 101 Henry Street, Alton, IL 62002 (618) 462-9860 <u>Karen@altonmarina.com</u>



LUNDE WILLIAMS Dillon Marina

Bob Evans, General Manager 150 Marina Drive Dillon, CO 80435 (970) 468-5100 bobevans@dillonmarina.com

ReefPoint Marina

John Matheson, COO SG Marina 252 East Highland Avenue Milwaukee, WI 53202 (414) 270-4114 jmatheson@sg-re.com

2647 Pennwall Circle Fitchburg, WI 53711 414.704.0344

Fee Proposal

We will provide the aforementioned services on a firm fixed price basis. These services include basic services and travel related expenses; printing and postage costs will be added to the fees at cost. Fees by phase are: Fees by Phase:

	Phase 1- Existing Con	ditions Survey	\$15,000.00
	Phase 2- Design Phas	e	\$30,000.00
	Phase 3-Construction	Documents	\$48,000.00
LUNDE – WILLIAMS	Phase 4-Bid Cycle Ser	vices	
		E Dock Replacement	\$7,500.00
		A-D Dock Replacement	\$8,500.00
	Phase 5-Construction	Administration	
		E Dock Replacement	\$14,500.00
		A-D Dock Replacement	<u>\$17,500.00</u>
	Total		\$141,000.00

Project Team Members and their roles

Bruce Lunde – Project Leader

Bruce's role will be as liaison to the Marina Management and the City of Manitowoc, as contract administrator and as quality assurance for team. Bruce will perform lead roles for the condition assessment and will author the assessment reports. He will also lead the bid cycle and construction administration work,

Dan Williams, ASLA- Lead Designer

Dan will assist in the condition assessments, provide design leadership during the design phase, and provide construction document generation during the engineering phase.

Larry Ryan, PE- Project Engineer

Larry will lead all of the engineering efforts for the project, coordinating our electrical engineering and the changes to the plumbing that may be required.

Tom Peterson, PE and Dennis Hess, PE

Dennis will provide condition assessment and design recommendations for the electrical utilities, Tom will provide engineering design for the replacement electrical system during the Construction Documents phase. Tom will also provide construction administration services for the electrical portion of the construction.

Hourly Rates

Bruce Lunde	\$120/ hour
Dan Williams	\$120/ hour
Larry Ryan	\$120/ hour
Dennis Hess	\$110/ hour
Tom Peterson	\$150/ hour
CAD Tech	\$ 90/ hour

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