

Engineering or No Engineering? – That is the Question



WISCONSIN TOWNS
ASSOCIATION

Paula Vandehey, PE – Business Development Specialist
Dave Pantzlauff, PE – Director Structural Engineering
Craig Schuh, PE – Manager Municipal Services

Ingenuity, Integrity,
and Intelligence.

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Your Presenters

- Dave Pantzloff, PE | Director – Structural Engineering out of the Eau Claire and Madison Offices
 - Federally funded projects
- Craig Schuh, PE | Manager – Municipal Services out of the Green Bay Office
 - State and locally funded projects



Agenda

- Background
- Federally Funded Projects
- Non-Federally Funded Projects
- Summary
- Questions

Background

- What services does a typical engineering firm provide to Towns?
 - Studies, planning and funding applications
 - Surveying, plans & specifications, permitting, bidding, contracting and construction oversight



Background

- Project funding types
 - Funding type drives the required services and engineer selection
 - STP Rural, STP Urban, STP Local, Bridge Replacement, Bridge Aid
 - ARIP, TAP, LRIP-D, LRIP-S, CDBG
 - Your own funding (GTA)



Federally Funded Projects

- WisDOT Bid Letting
- Design and/or Construction funded
- Steps in the project development process
 - Engineer selection, design, letting, construction oversight, and administration
 - More reports, more environmental documentation, etc
 - Rigorous WisDOT review process
 - Real Estate acquisition
 - Comprehensive WisDOT letting package
- Time Span
 - About an extra year
 - More if right-of-way required



Town of Dewhurst Riviera Avenue over Black River

Federally Funded Projects

- Local Cost Share Benefits
 - STP Rural Local Roadway (80/20%)
 - Local Bridge Replacement/Rehabilitation (100% or 80/20%)
 - Can get increase in funding (inflation protection)
 - Billed for local share only
 - Get high quality construction project



Consulting Engineer Selection Process

- Qualifications Based Selection (QBS)
 - Required by Brooks Law
 - Establish selection committee (3 members minimum)
 - Solicitation methods (RFQ)
 - WisDOT roster
 - Invite 3 to 5 local firms you know
 - Sample forms, letters, etc available
 - No price at this point
 - Evaluate and rank firms
 - Criteria (WisDOT FDM or your own)
 - Interview, if desired



Sample Selection Criteria

- Experience
 - Firm, project manager, staff
 - Similar projects
- Proximity to Project
- Availability/Capacity
- Past Performance
 - Timeliness, quality of work
 - References
- Project Approach / Understanding

CONSULTANT INTERVIEW RATING SHEET FIRM _____							
RATING FACTORS							
1.	Resources Available To Do Job	Unsat --0--	Margn --2--	Norml --4--	Above --6--	Excel --8--	Outst --10--
	Outlook in general, interest in work.						
2.	Project Manager/Engineer	Unsat --0--	Margn --2--	Norml --4--	Above --6--	Excel --8--	Outst --10--
	General impression, self expression, knowledge and experience, self confidence, persuasiveness.						
3.	Public Involvement	Unsat --0--	Margn --2--	Norml --4--	Above --6--	Excel --8--	Outst --10--
	Proposal or plan, sensitivity.						
	Other Issues	Unsat --0--	Margn --2--	Norml --4--	Above --6--	Excel --8--	Outst --10--
						Excel	Outst

Engineer Fee Determination Process

- Discuss engineering scope and your expectations
- Estimate hours of effort
- Apply wage rates, overhead and modest fee
- WisDOT negotiates contract (Federal funding/QBS)
- Actual cost, cost plus fixed fee, or lump sum
- 3-party design contract



Why QBS?

- Saves money during construction
- Qualifications more important than price
- Matches engineering effort to project scope
- Public Health, Safety and Welfare

"The whole QBS process was very helpful. My only regret is that I wish we would have adopted it sooner."

*– Rick Manchester, Parks and Recreation Director
City of Two Rivers, WI.*

“ QBS is a proven procurement method that emphasizes quality throughout the evaluation and product selection process. **Communities that utilize QBS report their long-term costs are lower** because of this emphasis.”

Jerry Deschane
Executive Director
League of Wisconsin Municipalities

Professional Engineer Selection

- Engineer Solicitation Methods
 - QBS
 - Required for federally funded projects
 - Preferred for many projects
 - Two envelope system
 - Two step alternative
 - Pre-determined point system
 - Sole Source
 - Price based only
 - Need very specific scope



Non-Federally Funded Projects

- Funding types and local share
 - ARIP, LRIP, LRIP-D, LRIP-S, CDBG, TAP
 - Reimbursable after construction
 - Funding is capped
 - Your own funding (Town Budget)
- Design engineering
 - 2-party design except TAP
 - Flexibility in hiring design engineer
 - Reduced agency review w/o Federal Funds
 - Local letting



Non-Federally Funded Projects

- Bidding - Do's and Don'ts
 - Clearly Define the Work you want done
 - Clearly Define the Materials
 - Asphalt, Base Gradation, Chipseal Aggregate
 - Open Bids before meeting
 - Discuss options with board
 - Allow contractors to ask questions before regular meeting

Road Work Quotes 2025

WISCONSIN BROWN COUNTY NOTICE FOR ROAD QUOTES TOWN OF XXXXXXXX, WISCONSIN ROAD BIDS TOWN OF XXXXXXXXXX, BROWN COUNTY

Town of XXXXXXXXX designated TRIP road for 2025
Lark Road – Dickinson Rd to Fairview Road

- Option # 1- 2" hot mix, pulverize w/2" base, 2' shoulders
 - Option # 2- 2" hot mix, pulverize w/4" base, 2' shoulders
- This is for the TOWN ROAD IMPROVEMENT PROGRAM**

Additional Road Bids

1) Morrison Rd Hwy 96-Mill Rd

- Option #1 – 2" Hot Mix-pulverized w/2"base, 2' shoulders
- Option #2 – 2" Hot Mix pulverized w/4"base, 2' shoulders
- Option #3 Wedging w/Black Granite Seal

2) Sunnyview Rd Wayside Rd – Man-~~ca~~ Rd

- Chipsealed

* The Board will consider all options

Questions-Contact Town Chairman Xxxxx_Xxxxxxxx 920-XXX-XXXX

* Anyone sending quoted must be pre-qualified in all areas bid

* Qualified quotes due by 5:00 p.m. Monday April 7, 2025 & will be opened at the April 8, 2025 monthly Town of XXXXXXXXX meeting

* Mail all quotes or hand deliver sealed quotes to Town Hall

* The Town has the right to accept or reject any or all bids

Professional Engineer Considerations

- When consider hiring a consulting engineer?

- 10-year certification for LRIP
- Public bidding required
 - Funding Type and Dollar Amount
- Permitting and Regulations
- Funding Requirements



Professional Engineer Considerations

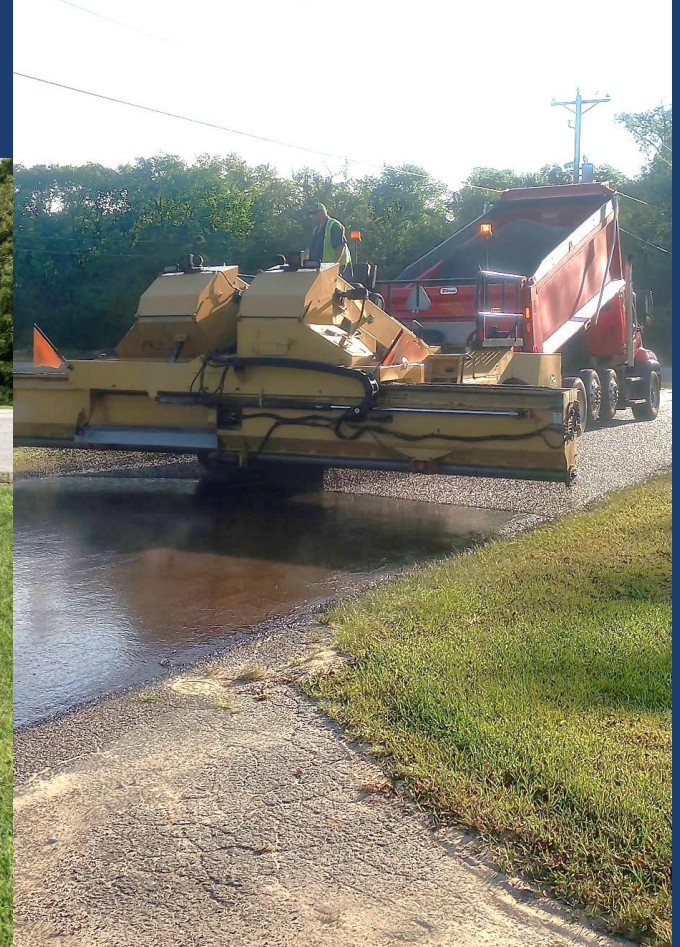
- When consider hiring a consulting engineer?
 - Protection; peace of mind; insurance
 - Performance Bonds
 - Payment Bonds
 - Risk transfer
 - Liquidated Damages
 - Safety
 - Best value



Professional Engineer Considerations

- When don't need to hire a consulting engineer?

- Simple project, low cost
- Familiar with public bidding
- Easy permitting
- Familiar with funding
- Have construction experts on staff
- Have good relationship with contractor



Professional Engineer Considerations

- Do's and Don'ts - if no consulting engineer on board
 - Don't incur costs without signed SMA
 - Do follow precise steps for public bidding
 - Do publicly award project
 - Do get signed contract, bonds, insurance
 - Don't deviate from application/SMA details
 - Do collect appropriate invoices and cert's



Design Engineer Selection

- How do I decide who to help me?
 - Existing Relationship
 - Referral from others
 - Advertise for qualifications and interest
 - Multiple discipline firm
 - Project experience
 - Location
 - Discuss with Highway Commissioner or WTA



Master Agreements

- General contract with single firm
- Pre-approved Terms and Conditions
- Execute Project Work Orders
 - Scope
 - Schedule
 - Fee
- Readily available engineering services
- Advice a phone call away



Summary

- When MUST you hire an Engineer?
- When SHOULD you hire an Engineer?
- When you might NOT hire an Engineer?



Questions

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