

Bid Document

FOR:

80' x 6' Pedestrian Bridge

Wheeling Park District

333 West Dundee Road
Wheeling, Illinois 60090

PH: 847/465-3333

FX: 847/537-2504

Date of Bid Documents: September 9, 2011
Date of Bid Opening: September 19, 2011



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ADVERTISEMENT FOR BIDS

Wheeling Park District will receive bids for one 80' x 6' Pedestrian Bridge. Bids are due and will be opened and read aloud on Monday, September 19, 2011, at 9:00 a.m. in the Boardroom of the Wheeling Park District Community Recreation Center, 333 W. Dundee Road, Wheeling, IL 60090.

The bid document, including the 80' x 6' Pedestrian Bridge specifications, may be obtained online at www.wheelingparkdistrict.com, or in person Monday through Friday, from 9 a.m. to 5 p.m. at the Community Recreation Center, 333 W. Dundee Road, Wheeling, IL, telephone (847) 465-3333.

All bidders will be required to certify that they are in compliance with laws governing bid-rigging, bid rotation, equal opportunity employment, and sexual harassment.

Wheeling Park District expects to enter into a legal contract with the successful bidder on or about September 21, 2011, with the bridge to be delivered on the date detailed in the bid document.

No bids may be withdrawn without written consent from Wheeling Park District. The Park Board reserves the right to reject any and all bids, and to waive any formalities in the bidding process if, in its sole judgment, it shall deem it is in the best interest of the Park District to do so.

Published Friday, September 9, 2011, in the *Daily Herald*.

GENERAL INSTRUCTIONS TO BIDDERS

1. Identification of Project: The official name of the project shall henceforth be known as:

80' x 6' Pedestrian Bridge

The official name and address of the project owner shall henceforth be known as:

WHEELING PARK DISTRICT
333 W. Dundee Road
Wheeling, IL 60090

Board Approval: September 20, 2011

Contract Awarded: September 21, 2011

1. **Specifications:** Specifications are included within the bid package. Bidders must indicate any differences from the specifications in their bid proposal. Should the Bidder wish to substitute the product or material for like quality of another manufacturer as equal or equivalent, he/she shall obtain written approval from the Owner no less than five (5) working days before the bids are due. To be considered as an approved "or equal," submittals must be accompanied by the manufacturer's specifications. The Owner's decision as to the quality, equalness, and merit of the substitution will be final. The Owner will notify the other bidders in the event another item is approved. It is the responsibility of the bidder to fully understand the specifications set forth. Include any descriptive literature and indicate any options that differ from the original specifications which should be considered.
2. **Proposal:** All prices and notations must be in ink or typewritten. Mistakes may be crossed out, with corrections typed adjacent, and all corrections must be initialed in ink by the person signing the proposal. The proposal must be signed by an authorized officer or individual.
3. **Reservations:** The Board of Park Commissioners reserves the right to reject any or all bids or parts of bids when, in the Wheeling Park District's reasoned judgment, the public interest will be served thereby.

The Board of Park Commissioners may waive formalities or technicalities in bids as the interest of the Wheeling Park District may require.

- a) The Wheeling Park District reserves the right to increase or decrease the quantities to be purchased at the unit prices bid. The quantity intended to be purchased and the period and percentage amount of any such reservation will be stated in the specifications or proposal.
- b) The Wheeling Park District reserves the right to award contracts or place orders on a lump sum or individual group basis, or such combination as shall, in the Wheeling Park District's judgment, be in the best interest of the Wheeling Park District.
- c) The Wheeling Park District may waive minor differences in specifications provided these differences do not violate the specification intent nor materially affect the operation for which the item or items are being purchased.

- 4. Submission:** Sealed bids will be received by the Wheeling Park District at 333 W. Dundee Road, Wheeling, IL 60090 until the date and time of the bid opening, at which time they will be opened and publicly read. Bids must be delivered by the opening time of the bid. They should be in a sealed envelope marked "Sealed Bid" and the "material or service being proposed" indicated on the outside of the envelope. The date of the bid opening as per the "Notice to Bidders" should also be indicated. Bids will be accepted at the location of the bid opening prior to the opening of the first bid. Bids arriving AFTER THE OPENING OF THE FIRST BID WILL NOT BE ACCEPTED. It is the responsibility of the bidder to ensure that the bid has been received by the Wheeling Park District prior to the time specified in the "Notice to Bidders." The Wheeling Park District will not be responsible for undelivered mail or any other failure of any bidder or agency to deliver the bid proposal on time.
- 5. Standards:** Unless otherwise directed by the specifications, all materials, equipment, and services provided will meet standards or requirements which would normally be anticipated in common practice. The bidder guarantees that all applicable Federal, State and local laws, including OSHA, are being complied with in connection with this proposal and any resultant contract or purchase by the Wheeling Park District.
- 6. Withdrawal of Proposal:** Bidder may withdraw or cancel a proposal at any time prior to the bid opening time. After the bid opening time, a bidder cannot withdraw or cancel the bid for a period of thirty (30) calendar days after the bid opening date.
- 7. Conditions:** Bidders must be familiar with all conditions, instructions and specifications governing this bid. It is the bidder's responsibility to visit a site if necessary and any bid is considered to be based upon the knowledge of all information readily available at the site. Once the bid proposals have been opened, the failure to have read and understood all the conditions, specifications and instructions shall not be cause to alter the original proposal or for the vendor to request additional compensation.
- 8. Interpretation:** Any bidder who finds, in the bidder's opinion, a discrepancy in or omission from the specifications, or is in doubt as to their meaning, or believes that the specifications are discriminatory, shall notify the Director of Park and Recreation Services in writing not later than 5 days prior to the scheduled opening of bids. Exceptions taken do not obligate the Wheeling Park District to change the specifications. The Director of Park and Recreation Services will notify all bidders in writing, by addendum duly issued, of any interpretations made of specifications or instructions. The Wheeling Park District will assume no responsibility for oral instruction or suggestion. All official correspondence in regard to the specifications should be directed to, and will be issued by, the Director of Park and Recreation Services. Bidders will acknowledge receipt of any addendum issued by returning the addendum(s) with the proposal and so noting on the bid sheet. Oral explanations are not binding.
- 9. Quotations:** Unless clearly shown on the bid the intent that a reduced total price is being offered on the basis of receiving an award of all items covered by the total, any totals should be the actual sum of the extension of unit prices. Otherwise, in the event of any discrepancy between a unit price(s), extended price(s), and/or total price(s), unit prices will govern and the bid will be refigured accordingly. Prices bid must include all applicable costs to the Wheeling Park District, including shipping costs to any point in Wheeling.

The Wheeling Park District is exempt from paying Illinois Sales Tax and Federal Excise Taxes. Prices submitted shall not include any of these taxes. The Director of Park and Recreation Services, upon request, will execute the exemption certificates in connection with all orders when Federal Excise Tax would otherwise be due.

10. Competition: To better ensure fair competition and to permit determination of the lowest bidder:

- a) The name of any manufacturer, trade name, or manufacturer or vendor catalog number mentioned in specifications and proposal sheets is for the purpose of designating a minimum standard of quality and type and for no other. Such references are not intended to be restrictive. Bids will be considered for any brand which meets or exceeds the quality of the specifications listed for any item, unless otherwise stated in the specifications or proposal. Should the Bidder wish to substitute the product or material for like quality of another manufacturer as equal or equivalent, he/she shall obtain written approval from the Owner no less than five (5) working days before the bids are due. To be considered as an approved "or equal," submittals must be accompanied by the manufacturer's specifications. The Owner's decision as to the quality, equalness, and merit of the substitution will be final. The Owner will notify the other bidders in the event another item is approved.
- b) A bidder may offer only one price on each item, though they may have two or more types that meet specifications. Bidders must determine for themselves which to offer. Submission by a single bidder of more than one price for a single item shall be sufficient cause for rejection of all prices for that item by the bidder.
- c) Bids which show any omission, irregularity, alteration of forms, additions not called for, conditional or unconditional unresponsive bids, or bids obviously unbalanced, may be rejected.
- d) All bids must be accompanied by descriptive literature as may be called for by the specifications or proposal.
- e) Specifications provided are based on Wheeling Park District needs and uses, estimated costs of operation and maintenance, and other significant and/or limiting factors to meet Wheeling Park District requirements and shall be consistent with Wheeling Park District policies. Minimum specifications, and maximum specifications where included, are not established arbitrarily to limit competition or to exclude otherwise competitive bidders.

11. Patents: The bidder shall defend any suit or proceeding brought against the Wheeling Park District based on a claim on any equipment, or on any part thereof, furnished under this contract which constitutes an infringement of any patent of the United States, if notified promptly in writing and given authority, information and assistance (at the bidder's expense) for the defense of same, and the bidder shall pay all damages and costs awarded therein against the Wheeling Park District. In case said equipment or any part thereof, in such suit is held to constitute infringement and the use of said equipment or part if enjoined, the bidder shall, at its own expense, either procure for the Wheeling Park District the right to continue using said equipment, or part, or replace same with non-infringing equipment, or modify so that it becomes non-infringing.

Bidder agrees to indemnify, defend and hold the Wheeling Park District harmless from and against all demands, claims, suits, costs, expenses, damages and adjustments based upon any infringement of any patent relating to goods specified in the contract.

- 12. M.S.D.S.:** Contractor is to supply Materials Safety Data Sheets (M.S.D.S.) in accordance with Federal Requirements, if applicable.
- 13. Subletting:** A successful bidder shall not assign the contract, or subcontract the whole or any part of the contract without written consent of the Wheeling Park District, except as may be noted on the bid proposal. Such consent shall not relieve the bidder from obligation nor change the terms of the contract.
- 14. Material Inspection:** Authorized agents of the Wheeling Park District shall have the right to inspect any material to be used in carrying out the proposal. The Wheeling Park District does not assume any responsibility for the availability of any other materials and equipment required. The contractor shall be responsible for the contracted quality and standards of all materials, components or completed work furnished under this proposal until final acceptance by the Wheeling Park District. Materials, components or completed work not complying therewith may be rejected by the Wheeling Park District and shall be replaced by the contractor at no expense to the Wheeling Park District. Any material or component rejected shall be removed from the premises of the Wheeling Park District at the entire expense of the contractor, after written notice by the Wheeling Park District to contractor that such materials or components have been rejected.
- 15. Warranty and Guarantee:** Bidders shall state the nature and period of any warranty or guarantee. Manufacturer's specifications shall be submitted with the bid and shall be considered a part of the contract where such specifications meet the minimum Wheeling Park District specifications. All warranties and guarantees normally provided for this type of bid will be provided to the Wheeling Park District.
- 16. Catalogues or Literature:** Each bidder shall submit all necessary catalogues, descriptive literature, and other documentation needed to fully describe the material or work proposed to be furnished.
- 17. Delivery:** Bidders shall state the delivery date for commodities in terms of calendar days after notification of the award. Where the contract calls for performance of labor, the bidder shall also state the number of calendar days required for completion after notification of award, as well as estimated date of the start of work. Materials being shipped to the Wheeling Park District must be shipped F.O.B. freight prepaid, designated location, Wheeling, Illinois. If delivery is being made by truck, arrangements for the Wheeling Park District's receipt for the material should be made in advance. No truck deliveries will be accepted before 9:00 a.m. or after 4:00 p.m. on weekdays or all day on Saturdays, Sundays or Holidays unless specific permission has been received from the responsible Wheeling Park District official.

Bidders shall guarantee delivery of supplies in accordance with such delivery schedule as may be provided in the specifications and proposal.

The Wheeling Park District reserves the right to charge the contractor or vendor for each day the supplies or services are not delivered in accordance with the delivery schedule. The per diem charge may be invoked at the discretion of the Wheeling Park District and said sum to be taken as liquidated damages and deducted from the final payment, or charged back to the contractor or vendor.

- 18. Protest of Award:** Any person who has an objection to the awarding of a solicitation by the Wheeling Park District, pursuant to competitive bidding procedures, shall lodge that protest, in writing, with the Director of Park and Recreation Services, and Executive Director prior to award by the Board of Park Commissioners. A protest lodged after award by the Wheeling Park District Board will not be considered.
- 19. Discounts:** Cash discounts will be considered in evaluation of the bids. Bidders providing cash discount shall indicate terms; e.g., 1%-10 days, net 30 days, or 2%-10 days, net 60 days. When cash discounts are offered, the discount date shall begin with the invoice date or delivery date to the Wheeling Park District, whichever is later.
- 20. Acceptance:** After the acceptance and award of the bid, and upon receipt of a written purchase order executed by the proper officials of the Wheeling Park District, this instruction to bidders, including the specifications, will constitute part of the legal contract between the Wheeling Park District and the successful bidder.
- 21. Materials and Equipment:** Except where the specifications indicate otherwise, the Wheeling Park District is not responsible to provide any tools, equipment or storage to the contractor in order to permit him/her to complete any contractual obligation under any contract which may be awarded as the result of the bid.
- 22. Exceptions:** Any bidder's exceptions to the terms or conditions, or deviations from the written specifications, must be in writing and attached to the bid form. No verbal exceptions or alleged agreements with employees of the Wheeling Park District will be considered legal or binding. Any bidder's exceptions or deviations may be cause for rejection of the bid proposal. The submission of a bid shall be considered an agreement to all the terms, conditions and specifications provided herein and in the various bid documents, unless specifically noted otherwise in the proposal.
- 23. Required Insurance:** Contractor shall maintain for the duration of this contract and any extensions thereof insurance issued by a company or companies qualified to do business in the State of Illinois. The insurance companies providing coverage shall be rated in the Best's Key Rating Guide. The Wheeling Park District will accept companies with a rating of A- or better and shall have a financial size category of VII or better.

WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY:

Worker's Compensation	Minimum
Employer's Liability	
a) Each Accident:	\$1,000,000
b) Disease – policy limit	\$1,000,000
c) Disease – each employee	\$1,000,000

COMPREHENSIVE GENERAL LIABILITY:

General Aggregate Limit	\$2,000,000
Products-Completed Operations	\$2,000,000
Each Occurrence Limit	\$1,000,000

The Wheeling Park District is named an additional insured on General Liability policy. The Wheeling Park District may accept a separate owner's protective liability policy, provided all coverage, limits and endorsements are in conformity with this section. The Wheeling Park District is a Named Insured on OCP policy.

COMMERCIAL AUTOMOBILE LIABILITY:

The policy shall cover all owned, non-owned and hired vehicles.

Combined Single Limit \$1,000,000

Contractor agrees that with respect to above insurance, the Wheeling Park District shall:

- a) Be provided with thirty (30) days written notice of cancellation or material change.
- b) Be provided with Certificates of Insurance evidencing the above-required insurance prior to commencement of this contract, and thereafter with certificates evidencing renewals or replacements of said policies of insurance at least fifteen (15) days prior to the expiration or cancellation of any such policies. Said Notices and Certificates of Insurance shall be provided to the Director of Finance, Wheeling Park District, 333 W. Dundee Road, Wheeling, IL 60090.

24. Indemnity: If a contract is awarded, the successful bidder will be required to indemnify and hold the Wheeling Park District harmless from and against all liability and expenses, including attorney's fees, howsoever arising or incurred, alleging damage to property or injury to, or death of, any person, arising out of, or attributable to, the bidder's performance of the contract awarded.

Any property or work to be provided by the bidder under this contract will remain at the bidder's risk until written acceptance by the Wheeling Park District; and the bidder will replace, at bidder's expense, all property or work damaged or destroyed by any cause whatsoever.

25. Collusion: In submitting a proposal, the bidder certifies to the Wheeling Park District that the prices contained in the proposal have been established without knowledge of any other proposal on this item and the bidder has not colluded, conspired, connived, or agreed, directly or indirectly, with any other bidder, Wheeling Park District employee or any other person, to fix the bid price submitted by the bidder or any other bidder, and agrees to indemnify the Wheeling Park District for any losses sustained by it due to illegal actions of the bidder. (State of Illinois Criminal Code of 1961, Section 33E-3 or 33E0-4 as amended.)

26. Termination for Default: When the contractor has not performed, or has unsatisfactorily performed, the contract, the Wheeling Park District may terminate the contract for default. The Wheeling Park District may terminate a contract by providing written notice of default to the contractor if:

- a) The contractor fails to make delivery of the materials or perform the services within the time specified in the contract;
- b) The contractor fails to make progress so as to endanger performance of the contract; or,
- c) The contractor fails to provide or maintain in full force and effect the liability and indemnification coverage or performance bond as is required.

In case of default by the contractor, the Wheeling Park District may procure supplies or services similar from other sources and may deduct from unpaid balance due the contractor, or may collect against the bond or surety for excess costs so paid, and the prices paid by the Wheeling Park District shall be considered the prevailing market price at the time such purchase is made.

- 27. Termination for Convenience:** The Wheeling Park District may terminate a contract, in whole or in part, whenever the Wheeling Park District determines that such termination is in the best interest of the Wheeling Park District, without showing cause, upon giving written notice to the contractor. The Wheeling Park District shall pay all reasonable costs incurred by the contractor up to the date of termination. However, in no event shall the contractor be paid an amount which exceeds the price bid for the work performed. The contractor shall not be reimbursed for any profits which may have been anticipated but which have not been earned up to the date of termination.
- 28. Other Requirements:** The bidder certifies that any equipment to be furnished shall be new, current model, standard production, and fully operable unless otherwise indicated on the bid form. Operating and maintenance manuals will be furnished at no cost.
- 29. Additional:** The bidder or manufacturer may be required to clarify the bid or acknowledge by written confirmation that the minimum requirements of the specifications are included in the bidder's proposal either before or after the bid opening but prior to the award of the contract.
- 30. Public Advertising:** The successful bidder is specifically denied the right of use in any form or medium the name of the Wheeling Park District for public advertising unless the Wheeling Park District grants express permission.
- 31. Trade-In:** (If applicable) Trade-in vehicles or equipment shall be inspected prior to the bid opening. The Wheeling Park District is not responsible for any assumptions made by the bidder in evaluating the trade-ins, but is responsible for any material change in the condition from when inspected until actually traded-in.
- 32. Fair Employment Practices:** The bidder, in the submission of a proposal, assures the Wheeling Park District that he/she is an "Equal Opportunity Employer," as defined by Section 2000(E) of Chapter 21, Title 42 of the United States Code Annotated and Federal Executive Orders #11246 and #11375, which are incorporated herein by reference, and as such, will not discriminate against any person by reason of race, creed, color, religion, age, sex, or physical and mental handicaps with respect to the hiring, application for employment, tenure, terms or condition of employment of any person.
- 33. Illinois Drug Free Workplace Act:** In submission of any proposal, the contractor acknowledges and warrants that the contractor's workplace notifies employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the contractor's workplace (30ILCS 580/1 et seq.).
- 34. The Americans with Disabilities Act:** In submission of any proposal, the bidder acknowledges and warrants that the work or service shall be designed in full compliance with the Americans with Disabilities Act (42 U.S.C. 12101 et seq.) and with applicable regulations and accessibility guidelines thereunder. In addition, the bidder acknowledges the

Environmental Barriers Act (IL Rev Stat Ch 111 1/2, par. 3711 et seq.) and its regulations in the Illinois Accessibility Code (71 IL Admin. Code S400.110 et seq.) that all products, services and programs conform to, and be delivered in a manner consistent with the Americans with Disabilities Act. As a condition of receiving a contract with the Wheeling Park District, the vendor certifies that services, programs, and activities provided under said contract are and will continue to be in compliance with the ADA. Further, the vendor agrees to indemnify the Wheeling Park District against any and all claims and the costs of legal defense resulting from the vendor's failure to be in compliance with the ADA.

35. Taxes: The Wheeling Park District is a tax-exempt entity. If requested, the Wheeling Park District will submit its tax-exempt number to material suppliers.

36. Contractor's Certification: Each bidder must certify that he/she is not barred from bidding on this public contract as a result of violation of Section 33E-3 or 33E-4 (bid-rigging or bid rotation) with the attached form. The form must be completed, signed and returned with the bid.

37. Prevailing Wages: Bidders and contractors shall comply with the law as enacted by the State of Illinois, being 820 ILS 130/0.01 *et seq.* in which the State has enacted an act regulating wages of laborers, mechanics and other workmen employed in public work by the State, County, City or any public body or political subdivision or by anyone under contract for public work. If applicable, a Contractor's Certification has been provided with this document. The form must be completed, signed and returned with the bid.

38. Sexual Harassment: The undersigned certifies that as part of the Bidder's bid proposal on the above-referenced Contract, that the Bidder has enacted, and has in full force and effect, a written sexual harassment policy in accordance with the Illinois Human Rights Act ("Act") (775 ILCS 5/1-101 *et seq.*), including at least the following:

1. A statement on the illegality of sexual harassment;
2. The definition of sexual harassment under Illinois law;
3. A description of sexual harassment utilizing examples;
4. An internal complaint process, including penalties;
5. The legal recourse, investigative and complaint process available through the Illinois Dept. of Human Rights ("Department") and the Illinois Human Rights Commission ("Commission");
6. Direction on how to contact the Department and the Commission; and
7. Protection against retaliation as provided by section 6-101 of the Act

The undersigned further certifies that such policy shall remain in full force and effect throughout the term of this Contract.

39. Equal Employment Opportunity: The undersigned certifies that for the entire duration of the work, the Contractor shall conform to all federal and state laws on equal opportunity and fair employment, and to all rules and regulations now or hereafter issued pursuant thereto, including, but not limited to, the Illinois Human Rights Act (Illinois Revised Statutes Chapter 68, par. 1-101 *et seq.*), and an act to prohibit discrimination, etc. (Illinois Revised Statutes Chapter 29, par. 17-24).

CLEAN AIR ACT: All successful bidders must comply with the provisions, applicable standards, orders or regulations pursuant to the Clean Air Act of 1970.

COPELAND "ANTI-KICK BACK" ACT: All successful bidders must comply with the Copeland "Anti-kick back" Act (18 U.S.C. 874) as supplemented in the Department of Labor regulations (29 CFR, Part 3).

40. The Bidder: States the total quote is the gross total cost to the Park District for services and products provided.

41. Guarantee of Price: Sixty (60) days from the date of bid proposed, if accepted.

42. At Time of Delivery: The following procedure must be adhered to.

1. Delivery will be made during any regular workday, Monday through Friday, between the hours of 8:00 a.m. and 4:00 p.m. at 333 W. Dundee Road, Wheeling, Illinois 60090.
2. Deliveries made either before or after the times and days listed above will not be accepted. Deliveries shall be made in exact compliance with specifications.

The bidder agrees that if awarded the contract, he or she will begin work, or make delivery of the product within ten (10) days after the Wheeling Park District has approved the bid proposal.

44. Equal Employment Clause: In the event of the contractor's noncompliance with any provision of this Equal Employment Opportunity Clause, the Illinois Fair Employment Practices Act or the Fair Employment Practices Commission's Rules and Regulations for Public Contracts, the contractor may be declared non-responsible and therefore ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulations.

During the performance of this contract, the contractor agrees as follows:

a) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin or ancestry; and further that it will examine all job classifications to determine if minority persons or women are under utilized and will take appropriate affirmative action to rectify any such under utilization.

b) That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability (in accordance with the Commission's Rules and Regulations for Public Contracts) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not under utilized.

c) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, national origin or ancestry.

d) That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the contractor's obligation under the Illinois Fair Employment Practices Act and the Commission's Rules and Regulations for Public Contracts. If any such labor organization or representative fails or refuses to cooperate with the contractor in its efforts to comply with such Act and Rules and Regulations, the contractor will promptly so notify the Illinois Fair Employment Practices Commission and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

e) That it will submit reports as required by the Illinois Fair Employment Practices Commission's Rules and Regulations for Public Contracts, furnish all relevant information as may from time to time be requested by the Commission or the contracting agency, and in all respects comply with the Illinois Fair Employment Practices Act and the Commission's Rules and Regulations for Public Contracts.

f) That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Illinois Fair Employment Practices Commission for purposes of investigation to ascertain compliance with the Illinois Fair Employment Practices Act and the Commission's Rules and Regulations for Public Contracts.

g) That it will include verbatim or by reference the provisions of paragraphs a through g of this clause in every performance subcontract as defined in Section 2.10(b) of the Commission Rules and Regulations for Public Contracts so that such provision will be binding upon every such subcontractor; and that it will also so include the provision of paragraphs a, e, f, and in every supply subcontract as defined in Section 2.10(a) of the Commission's Rules and Regulations for Public Contracts so that such provisions will be binding upon every such subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by all its subcontractors; and further it will promptly notify the contracting agency and the Illinois Fair Employment Practices Commission in the event any subcontractor fails or refuses to comply therewith. In addition, no contractor will utilize any subcontractor declared by the commission to be non-responsible and therefore ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

SPECIFIC CONDITIONS

The equipment listed on the proposal forms is to be used as the description, size and style of the particular equipment to be purchased.

All materials specified are to be new, clean, and free from defects. Where the product, material, or equipment of a particular manufacturer is specified, it is intended that the proposal submitted by the Contractor include that particular product material or equipment.

Where the specific manufacturer's product is listed on the proposal form, the specification requires that specific piece of equipment to be bid. No substitutions for specific equipment shall be allowed without the prior approval of the Park District. Should the Bidder wish to substitute the product or material for like quality of another manufacturer as equal or equivalent, he/she shall obtain written approval from the Owner no less than five (5) working days before the bids are due. To be considered as an approved "or equal," submittals must be accompanied by the manufacturer's specifications. The Owner's decision as to the quality, equalness, and merit of the substitution will be final. The Owner will notify the other bidders in the event another item is approved.

If a substitute item, or variation from the bid specifications is quoted, the supplier shall note on his or her proposal form the name of the manufacturer.

A copy of the manufacturer's specifications must be included with the proposal forms for either listed or substituted equipment.

The Board of Park Commissioners of the Wheeling Park District will accept or reject bids within sixty (60) days after receipt, and reserves the right to combine, add, select, delete or separate any bids on the equipment if it is in the best interest of the public.

Contract awards will be made based on price, manufacturer's specifications and past performance.

Wheeling Park District will take possession no later than December 15, 2011

SPECIAL PROVISIONS

1. Hardware: Price quotations on listed or substituted equipment must include all necessary hardware for a complete, functional unit.
2. Delivery: All prices shall be FOB Wheeling, Illinois.
3. Manuals: After the contract(s) has been awarded, the firm(s) shall provide the Wheeling Park District with two (2) sets of shop repair manuals, operational manuals, and parts manuals.
4. Payment: Payment shall be made within sixty (60) days after delivery and acceptance of all equipment.

Project Scope

The scope of work involves furnishing all the required labor, materials, equipment, implements, parts and supplies necessary for the manufacturing and delivery of one (1) 80' x 6' pedestrian bridge to Childerley Park, in Wheeling, IL. The bridge shall be manufactured in accordance with the plans, specifications and drawings in the Bid Document dated September 9, 2011.

Location: Childerley Park
506 McHenry Road
Wheeling, IL 60090

Owner: Wheeling Park District
333 W. Dundee Road
Wheeling, IL 60090

Contact: Matt Wehby, Director of Park and Recreation Services
(847) 465-2937

WHEELING PARK DISTRICT

SPECIFICATIONS

SECTION: GENERAL

Supply and deliver ONE (1) 80' x 6' Pedestrian Bridge as per the specifications and bid requirements. All prices are to include delivery to the Wheeling Park District, Illinois.

Price shall include all applicable tax, fees, charges, etc. The Wheeling Park District is exempt from sales tax.

BIDDER'S FORM

BID FORM

Bid to: Wheeling Park District

Date: _____

Bid from (Company): _____

Address: _____

PH: _____/_____

FX: _____/_____

CEL: _____/_____

Email: _____

The Undersigned:

1. Acknowledges receipt of:

A. Bid Documents for: 2011 Chevrolet Traverse LS

Dated: _____ Bidder's Signature: _____

B. Addenda no. _____ Dated: _____ Bidder's Signature: _____

Addenda no. _____ Dated: _____ Bidder's Signature: _____

Addenda no. _____ Dated: _____ Bidder's Signature: _____

Addenda no. _____ Dated: _____ Bidder's Signature: _____

2. Has examined all of the Bid Documents.

3. Agrees:

A. To hold the bid open for sixty days subsequent to the date of the bid opening.

B. To enter into and execute a Contract with the Owner, if awarded on the basis of this bid, and in connection therewith to:

(1) Furnish all bonds and insurance required by the Contract Documents

(2) Accomplish the Work in accordance with the Contract Documents

(3) Complete the Work within the time requirements as set forth in the Contract Documents.

C. That the Bidder has carefully examined the Instructions to Bidders, the Drawings, and the Project Manual in its entirety, in order to determine how these affect the bid proposal, the forms of the Contract, the required contract bonds, and duration thereof, and that the Bidder has inspected in detail the site of the proposed work, and been familiarized with all of the requirements of construction, and of the governing municipalities under whose jurisdiction the project falls (its codes, ordinances and construction requirements therein),

and understands that in making this proposal, the Bidder waives all rights to plead any misunderstanding regarding the same.

D. That if this proposal is accepted, the Bidder is to provide all of the necessary equipment, tools, apparatus, labor, and other means of construction, and to do all of the work and to furnish all of the materials specified in the Contract Documents in the manner and at the time therein prescribed, and in accordance with the requirements set forth.

E. Bid Guarantee: (see Instructions to Bidders).

F. Performance/Labor and Material Payment Guarantee (see Instructions to Bidders).

G. To commence work as specified in the Instructions to Bidders, and to prosecute the work in such a manner, and with sufficient materials, equipment and labor as will ensure its completion within reasonable time, it being understood and agreed that the completion within such reasonable time is an essential part of this Contract.

H. The Bidder proposes to utilize the products and services of the following subcontractors and major suppliers for the completion of the Contract. All other subcontractors, or the substitution of any of those listed below, shall be approved by the Director of Park and Recreation Services prior to start of their work on the project. If no subcontractors or major suppliers are to be used, indicate "NONE".

(1) _____ PH: ____ / _____
Subcontractor/major supplier

Address

Work to be performed/materials to be supplied

(2) _____ PH: ____ / _____
Subcontractor/major supplier

Address

Work to be performed/materials to be supplied

- I. To give lump sum (ls) total item amounts for each item as described herein, and subject to the conditions as set forth in the Contract Documents.
- J. To give the total base bid amount, the total add alternate and/or subtract alternate amounts (if requested) both in words and in figures. The total bid amount in each case shall be the sum of all of the total item amounts as applicable and as described above.
- K. Bidders must quote on all items within the proposal form. The owner reserves the right to add or deduct from the total items as the Owner's interest may be best served.
- L. The Bidder agrees to perform all of the work in accordance with the Contract Documents, for the following lump sum(s)

BASE BID

80' x 6' Pedestrian Bridge Base Bid: \$ _____

FOR THE LUMP SUM OF:

_____ **DOLLARS**

BID PARAMETERS: Please check each box to acknowledge understanding and compliance of said parameters.

- The bidder hereby agrees to provide all labor, materials, tools and equipment required to complete project.

BID WILL BE AWARDED TO LOWEST RESPONSIBLE TOTAL BASE BID AMOUNT WITH ANY ACCEPTED ALTERNATE PACKAGES AND/OR SPECIFIC ITEMS WITHIN THE BID.

Bid from:
(Company:) _____

Address: _____ PH: _____ / _____

Bidder's Signature: _____ Date: _____

End of section

BIDDER'S CERTIFICATION

Bidder certifies that no owner, shareholder, officer, director or employee of the Bidder is related by blood or marriage to any Park Commissioner, officer, or employee of the Wheeling Park District, except as listed below.

Pursuant to 720 ILCS 5/33-11m, effective January 1, 1989, the undersigned certifies that he or she is a duly authorized agent of the Bidder submitting the attached bid to the Wheeling Park District, and that said Bidder is not barred from bidding on this public contract as a result of a violation of either Section 33E-3 or 33E-4 of said Act.

The undersigned further certifies that the bidder is in compliance with the provisions in the General Instructions to Bidders concerning Sexual Harassment and Equal Employment Opportunity.

Failure to (i) execute said certification, or (ii) to list all information requested above, or (iii) to make a truthful certification may result in disqualification of the bidder or, if the Bidder has been awarded the contract, cancellation of said contract at any time and such other and additional remedies at law and/or in equity as the Park District may have against the Bidder caused by such un-executed, incomplete or false certification.

Signed this _____ day of _____, 2011.

By: _____
(Signature of authorized agent)

(Print name of authorized agent)

(Title of authorized agent)

(Company Name)

Mailing Address: _____

Telephone Number: _____

Subscribed and sworn to before me

this _____ day of _____, 2011.

(SEAL)

(Signature of Notary Public)

STATE OF ILLINOIS)
) SS.
COUNTY OF _____)

CONTRACTOR'S CERTIFICATION (BID RIGGING OR BID ROTATION)

Pursuant to Illinois Public Act 85-1295, effective January 1, 1989, the undersigned certifies that he/she is a duly authorized agent of the contract submitting the attached bid to the Wheeling Park District, and that said contractor is not barred from bidding on this public contract as a result of a violation of either Section 33E-3 or 33-E4 of said Act.

Signed this _____ day of _____, 2011.

By: _____

Title: _____

Address: _____

SUBSCRIBED AND SWORN TO before me
this _____ day of _____, 2011.

Notary Public

Signed this _____ day of _____, 2011

By (Signature): _____
Company: _____
Title: _____
Address: _____

Subscribed and sworn to before me this _____ day of _____, 2011.

Notary Public: _____ My commission expires: _____.

End of Section

BIDDER'S REFERENCES

The Bidder shall list below information to be used by the Owner for the purpose of contacting Owners, Architects, Landscape Architects and/or Engineers of projects of similar scope and contract amount. A minimum of three references shall be required.

1. Project Name: _____
Project Address: _____
Contract Amount: \$ _____
Owner or Agent: _____ PH: _____ / _____
Architect, Landscape
Architect or Engineer: _____ PH: _____ / _____

2. Project Name: _____
Project Address: _____
Contract Amount: \$ _____
Owner or Agent: _____ PH: _____ / _____
Architect, Landscape
Architect or Engineer: _____ PH: _____ / _____

3. Project Name: _____
Project Address: _____
Contract Amount: \$ _____
Owner or Agent: _____ PH: _____ / _____
Architect, Landscape
Architect or Engineer: _____ PH: _____ / _____

4. Project Name: _____
Project Address: _____
Contract Amount: \$ _____
Owner or Agent: _____ PH: _____ / _____
Architect, Landscape
Architect or Engineer: _____ PH: _____ / _____

End of Section

1.0 GENERAL

1.1 Scope

These specifications are for a fully engineered clear span bridge of steel construction and shall be regarded as minimum standards for design and construction. These specifications are based on products designed and manufactured by CONTECH Bridge Solutions a Continental Bridge brand, 8301 State Highway 29 North, Alexandria, MN 56308.
Phone: 1-800-328-2047 or (320) 852-7500 Fax: 320-852-7067
E-mail: continental@contechbridge.com

1.2 Qualified Suppliers

Each bidder is required to identify their intended bridge supplier as part of the bid submittal. Qualified suppliers must have at least 5 years experience fabricating these type structures.

Pre-approved Manufacturers:
CONTECH Bridge Solutions Inc.
8301 State Highway 29 North
Alexandria, Minnesota 56308
1-800-328-2047

Suppliers other than those listed above may be used provided the engineer or owner's agent evaluates the proposed supplier and approves the supplier 5 days prior to bid.

The contractor must provide the following documentation, for any proposed supplier who is not pre-approved, at least 10 days prior to bid:

- * Product Literature
- * All documentation to insure the proposed substitution will be in compliance with these specifications. This shall include:
 - Representative design calculations
 - Representative drawings
 - Splicing and erection procedures
 - Warranty information
 - Inspection and Maintenance procedures
 - AISC Shop Certification
 - Welder Qualifications
- * Proposed suppliers must have at least five (5) years experience designing and fabricating these type structures and a minimum of five (5) successful bridge projects, of similar construction, each of which has been in service at least three (3) years. List the location, bridge size, owner, and a contact for reference for each project.

The engineer will evaluate and verify the accuracy of the submittal prior to bid. If the engineer determines that the qualifying criteria have not been met, the contractor's proposed supplier shall be rejected. The engineer's ruling shall be final.

2.0 GENERAL FEATURES OF DESIGN

2.1 Span

Bridge span shall be 80'-0" (straight line dimension) and shall be as measured from each end of the bridge structure.

2.2 Width

Bridge width shall be 6'-0" and shall be as measured from the inside face of structural elements at deck level.

2.3 Bridge System Type

Bridge(s) shall be designed as a Continental Connector Truss (P1-SQ) (or equal), that has one (1) diagonal per panel and plumb end vertical members. Interior vertical members may be either plumb or perpendicular to the chord faces.

- 2.3.1 Bridge(s) shall be designed utilizing an underhung floor beam (top of floor beam welded to the bottom of the bottom chord).
- 2.3.2 The bridge manufacturer shall determine the distance from the top of the deck to the top and bottom truss members based upon structural and/or shipping requirements.
- 2.3.3 The top of the top chord shall not be less than 42 inches above the deck (measured from the high point of the riding surface) on bike path structures.

2.4 Member Components

All members of the vertical trusses (top and bottom chords, verticals, and diagonals) shall be fabricated from square and/or rectangular structural steel tubing. Other structural members and bracing shall be fabricated from structural steel shapes or square and rectangular structural steel tubing.

Unless the floor and fastenings are specifically designed to provide adequate lateral support to the top flange of open shape stringers (w-shapes or channels), a minimum of one stiffener shall be provided in each stringer at every floor beam location.

2.5 Attachments

2.5.1 Safety Rails

Horizontal safety rails shall be placed on the structure up to a minimum height of 3'-6" above the deck surface.

Safety rails shall be placed so as to prevent a 4" sphere from passing through the truss. Safety rails shall be placed on the inside or outside of the structure at the bridge fabricator's option. Safety rails placed on the inside of the truss shall have their ends sealed and ground smooth so as to produce no sharp edges.

The safety rail system shall be designed for an infill loading of 200 pounds, applied horizontally at right angles, to a one square foot area at any point in the system.

2.6 Camber

The bridge shall have a camber as shown on the drawing to match the existing bridge.

2.7 Elevation Difference

The bridge abutments shall be constructed at the same elevation on both ends of the bridge.

3.0. ENGINEERING

Structural design of the bridge structure(s) shall be performed by or under the direct supervision of a licensed professional engineer and done in accordance with recognized engineering practices and principles. The engineer shall be licensed to practice in *Illinois*.

3.1 Design Loads

In considering design and fabrication issues, this structure shall be assumed to be statically loaded. No dynamic analysis shall be required nor shall fabrication issues typically considered for dynamically loaded structures be considered for this bridge.

3.1.1 Dead Load

The bridge structure shall be designed considering its own dead load (superstructure and original decking) only.

No additional dead loading need be considered.

3.1.2 Uniform Live Load

3.1.2.1 Pedestrian Live Load

Main Members: Main supporting members, including girders, trusses and arches shall be designed for a pedestrian live load of 85 pounds per square foot of bridge walkway area. The pedestrian live load shall be applied to those areas of the walkway so as to produce maximum stress in the member being designed. If the bridge walkway area to which the pedestrian live load is applied (deck influence area) exceeds 400 square feet, the pedestrian live load may be reduced by the following equation:

$$w = 85 \left[0.25 + \frac{15}{\sqrt{A_I}} \right]$$

Where w is the design pedestrian load (psf) and A_I is the deck influence area in square feet.

The reduced design live load shall not be less than 65 pounds per square foot of bridge walkway area.

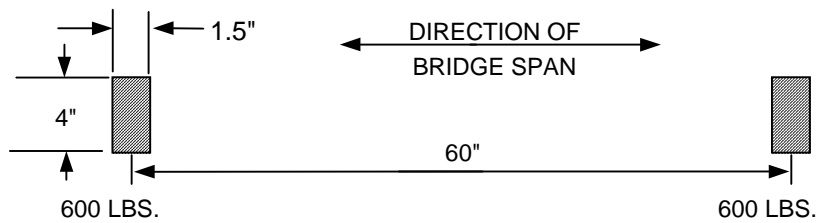
Secondary Members: Bridge decks and supporting floor systems, including secondary stringers, floor beams and their connections to main supporting members shall be designed for a live load of 85 pounds per square foot, with no reduction allowed.

3.1.3 Concentrated Loads

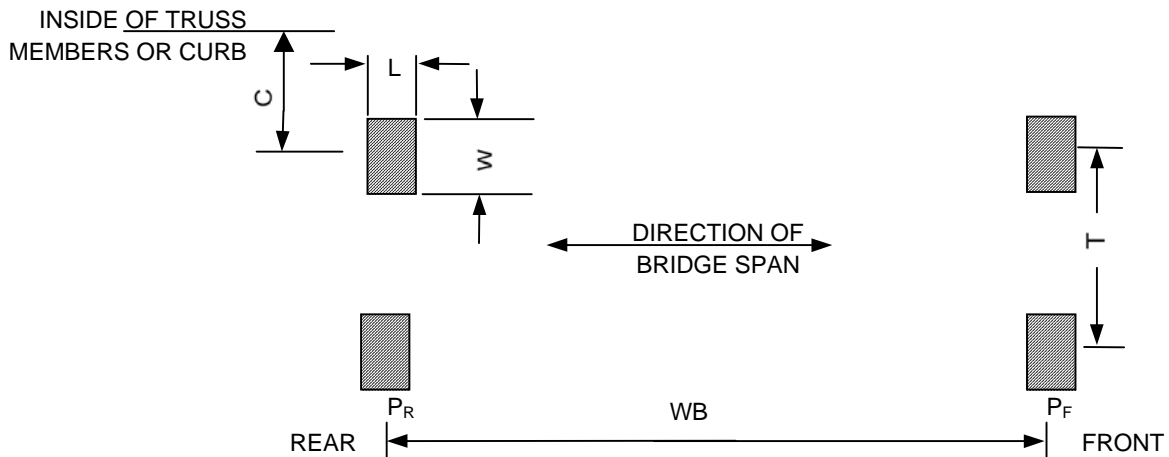
The bridge superstructure, floor system and decking shall be designed for each of the following point load conditions:

3.1.3.1 A concentrated load of 1000 pounds placed on any area 2.5 ft x 2.5 ft square.

3.1.3.2 A 1200 pound two wheel vehicle with a wheelbase and tire print area as shown in the following diagram:



3.1.3.3 A 6,000 pound four wheeled vehicle with the appropriate wheelbase, tire track and tire print area as shown in the following diagram: (See Table I for the values corresponding to the selected vehicle.)



Vehicle	Axle and Wheel Spacings		Front Wheels			Rear Wheels			C*
	WB	T	P _F	L	W	P _R	L	W	
4,000#	48"	32"	1,000#	2.0"	5.0"	1,000#	2.0"	5.0"	9"
6,000#	66"	48"	1,500#	2.5"	6.0"	1,500#	2.5"	6.0"	12"
8,000#	102"	60"	1,600#	3.0"	8.0"	2,400#	3.0"	8.0"	15"
10,000#	120"	72"	2,000#	3.5"	8.5"	3,000#	3.5"	8.5"	18"

(* C is the minimum dimension from center of wheel to the inside face of truss or curb.)

TABLE I

All of the concentrated or wheel loads shall be placed so as to produce the maximum stress in each member being analyzed. Critical stresses need be calculated assuming there is only one vehicle on the bridge at any given time. Assumptions that vehicles only travel down the center of the bridge or that the vehicle load is a uniform line load will not be allowed.

Each four wheeled vehicle load listed in Table I, up to and including the maximum weight vehicle selected, must be used in determining critical deck stresses. The wheel distribution for deck design shall be as specified in Section 4.3.1. Stringers shall be designed for the applied wheel loads assuming no lateral load distribution to adjacent stringers.

A vehicle impact allowance is not required.

3.1.4 Wind Load

3.1.4.1 Horizontal Forces

The bridge(s) shall be designed for a wind load of 25 pounds per square foot on the full vertical projected area of the bridge as if enclosed. The wind load shall be applied horizontally at right angles to the longitudinal axis of the structure.

The wind loading shall be considered both in the design of the lateral load bracing system and in the design of the truss vertical members, floor beams and their connections.

3.1.4.2 Overturning Forces

The effect of forces tending to overturn structures shall be calculated assuming that the wind direction is at right angles to the longitudinal axis of the structure. In addition, an upward force shall be applied at the windward quarter point of the transverse superstructure width. This force shall be 20 pounds per square foot of deck.

3.1.7 Top Chord/Railing Loads

The top chord, truss verticals, and floor beams shall be designed for lateral wind loads (per section 3.1.4.1) and for any loads required to provide top chord stability as outlined in Section 3.3.6; however, in no case shall the load be less than 50 pounds per lineal foot or a 200 pound point load, whichever produces greater stresses, applied in any direction at any point along the top chord or at the top of the safety system (42" or 54" above deck level), if higher than the top chord.

3.1.9 Load Combinations

The loads listed herein shall be considered to act in the following combinations, whichever produce the most unfavorable effects on the bridge superstructure or structural member concerned. [DL=Dead Load; LL = Live Load; WL = Wind Load; VEH = Vehicle Load]

DL + LL
DL + VEH
DL+WL
DL+LL+WL
DL+VEH+.3WL

NOTE: Allowable stresses may be increased 1/3 above the values otherwise provided when produced by wind loading, acting alone or in combination with the design dead and live loads.

It shall be the responsibility of the foundation engineer to determine any additional loads (i.e. earth pressure, stream force on abutments, wind loads other than those applied perpendicular to the long axis of the bridge, etc.) and load combinations required for design of the abutments.

3.2 Design Limitations

3.2.1 Deflection

3.2.1.1 Vertical Deflection

The vertical deflection of the main trusses due to service pedestrian live load shall not exceed 1/400 of the span.

The vertical deflection of cantilever spans of the structure due to service pedestrian live load shall not exceed 1/300 of the cantilever arm length.

The deflection of the floor system members (floor beams and stringers) due to service pedestrian live load shall not exceed 1/360 of their respective spans.

The service pedestrian live load shall be 85 PSF, reduced in accordance with Section 3.1.2.1, but should in no case be less than 65 PSF for deflection checks.

Deflection limits due to occasional vehicular traffic shall not be considered.

3.2.1.2 Horizontal Deflection

The horizontal deflection of the structure due to lateral wind loads shall not exceed 1/500 of the span under an 85 MPH (25 PSF) wind load.

3.2.2 Minimum Thickness of Metal

The minimum thickness of all structural steel members shall be 3/16" nominal and be in accordance with the AISC Manual of Steel Construction's "Standard Mill Practice Guidelines". For ASTM A500 and ASTM A847 tubing, the section properties used for design shall be per the Steel Tube Institute of North America's Hollow Structural Sections "Dimensions and Section Properties".

3.3 Governing Design Codes / References

Structural members shall be designed in accordance with recognized engineering practices and principles as follows:

3.3.1 Structural Steel Allowable Stresses

American Institute of Steel Construction (AISC).

Structural steel design shall be in accordance with those sections of the "Manual of Steel Construction: Allowable Stress Design" related to design requirements and allowable stresses.

3.3.2 Welded Tubular Connections

American National Standards Institute / American Welding Society (ANSI/AWS) and the Canadian Institute of Steel Construction (CISC).

All welded tubular connections shall be checked, when within applicable limits, for the limiting failure modes outlined in the ANSI/AWS D1.1 Structural Welding Code or in accordance with the "Design Guide for Hollow Structural Section Connections" as published by the Canadian Institute of Steel Construction (CISC).

When outside the "validity range" defined in these design guidelines, the following limit states or failure modes must be checked:

- * Chord face plastification
- * Punching shear (through main member face)
- * Material failure
 - Tension failure of the web member
 - Local buckling of a compression web member
- * Weld failure

- Allowable stress based on “effective lengths”
- “Ultimate” capacity
- * Local buckling of a main member face
- * Main member failure:
 - Web or sidewall yielding
 - Web or sidewall crippling
 - Web or sidewall buckling
 - Overall shear failure

All tubular joints shall be plain unstiffened joints (made without the use of reinforcing plates) except as follows:

- * Floor beams hung beneath the lower chord of the structure may be constructed with or without stiffener (or gusset) plates, as required by design.
- * Floor beams which frame directly into the truss verticals (H-Section bridges) may be designed with or without end stiffening plates as required by design.
- * Where chords, end floor beams and in high profiles the top end struts weld to the end verticals, the end verticals (or connections) may require stiffening to transfer the forces from these members into the end vertical.
- * Truss vertical to chord connections.

NOTE: The effects of fabrication tolerances shall be accounted for in the design of the structure. Special attention shall be given to the actual fit-up gap at welded truss joints.

3.3.4 Wood

American Institute of Timber Construction (AITC), the U.S. Forest Products Laboratory, and the American Forest & Paper Association (AF&PA).

Sawn lumber shall be designed in accordance with the ANSI/AF&PA NDS, “National Design Standard for Wood Construction”, as published by the American Forest & Paper Association or the “Timber Construction Manual” as published by the American Institute of Timber Construction (AITC). Design properties for naturally durable hardwoods shall be in accordance with “Tropical Timbers of the World”, as published by the U.S. Forest Products Laboratory.

3.3.6 Top Chord Stability

Structural Stability Research Council (SSRC), formerly Column Research Council.

The top chord shall be considered as a column with elastic lateral supports at the panel points. The critical buckling force of the column, so determined, shall exceed the maximum force from dead load and live load (uniform or vehicular) in any panel of the top chord by not less than 50 percent for parallel chord truss bridges or 100 percent for bowstring bridges. The design approach to prevent top chord buckling shall be as outlined by E.C. Holt's research work in conjunction with the Column Research Council on the stability of the top chord of a half-through truss. See Appendix A for the calculation of the spring constant C and the determination of an appropriate K factor for out-of-plane buckling.

In addition, for the dead load plus vehicle load combination, the spring constant “C” furnished by the transverse “U-Frames” shall not be less than “C” required as defined by:

$$C \text{ required} = \frac{1.46 P_c}{L}$$

where P_c is the maximum top chord compression due to dead load plus the vehicle load times the appropriate safety factor (1.5 for parallel chord truss bridges or 2.0 for bowstring bridges) and L is the length in inches of one truss panel or bay.

For uniformly loaded bridges, the vertical truss members, the floor beams and their connections (transverse frames) shall be proportioned to resist a lateral force of not less than 1/100k times the top chord compressive load, but not less than .004 times that top chord load, applied at the top chord panel points of each truss. The top chord load is determined by using the larger top chord axial force in the members on either side of the "U-frame" being analyzed. For end frames, the same concept applies except the transverse force is 1% of the axial load in the end post member.

For bridges with vehicle loads, the lateral force applied at the top chord elevation for design of the transverse frames shall not be less than 1% of the top chord compression due to dead load plus any vehicle loading.

The bending forces in the transverse frames, as determined above, act in conjunction with all forces produced by the actual bridge loads as determined by an appropriate analysis which assumes that the floor beams are “fixed” to the trusses at each end.

NOTE: The effects of three dimensional loading (including “U-frame” requirements) shall be considered in the design of the structure. The “U-frame” forces shall be added to the forces derived from a three dimensional analysis of the bridge.

4.0 MATERIALS

4.1 Steel

4.1.1 Unpainted Weathering Steel

Bridges which are not to be painted shall be fabricated from high strength, low alloy, atmospheric corrosion resistant ASTM A847 cold-formed welded square and rectangular tubing and/or ASTM A588, or ASTM A242, ASTM A606 plate and structural steel shapes ($F_y = 50,000$ psi). The minimum corrosion index of atmospheric corrosion resistant steel, as determined in accordance with ASTM G101, shall be 6.0.

4.3 Decking

4.3.1 Treated Fir Decking

4.3.1.1 Wood decking shall be Select Structural Fir planks (Minimum $F_b=1,450$ psi). Decking to be treated to AWWA standards. Preservative utilized shall be Alkaline Copper Quaternary (ACQ). Decking shall be treated to a total absorption of 0.40 pounds per cubic foot of wood or to refusal.

4.3.1.2 Wood Decking Attachment

* At time of installation, planks are to be placed tight together with no gaps.

- * Every plank must be attached with at least one fastener at each end.
 - * All fasteners to be zinc plated. Self-tapping screws or hex-head bolts, with a steel plank holddown, are to be used at the ends of planks. Self-tapping screws or carriage bolts are to be used as interior connection fasteners when required. Power actuated fasteners will not be allowed.
- * Planks are to be drilled prior to installation of bolts and/or screws.
 - * In addition to at least one fastener at each end of every plank (typical for all installations), planks for bridges with widths of 72" to 143" shall be attached with a minimum of two fasteners at a location approximately near the center of the bridge width. Bridges wider than 143" are to have two fasteners located at a minimum of two interior stringer locations, approximately at the third points of the bridge width.

NOTE: Attachments at the ends of the planks may be modified as required when obstructions, such as interior safety system elements, prevent installation of the specified holddown system.

5.0 WELDING

5.1 Welding

Welding and weld procedure qualification tests shall conform to the provisions of ANSI/AWS D1.1 "Structural Welding Code", 1996 Edition. Filler metal shall be in accordance with the applicable AWS Filler Metal Specification (i.e. AWS A 5.28 for the GMAW Process). For exposed, bare, unpainted applications of corrosion resistant steels (i.e. ASTM A588 and A847), the filler metal shall be in accordance with AWS D1.1, Section 3.7.3.

5.2 Welders

Welders shall be properly accredited operators, each of whom shall submit certification of satisfactorily passing AWS standard qualification tests for all positions with unlimited thickness of base metal, have a minimum of 6 months experience in welding tubular structures and have demonstrated the ability to make uniform sound welds of the type required.

6.0 SUBMITTALS

6.1 Submittal Drawings

Schematic drawings and diagrams shall be submitted to the customer for their review after receipt of order. Submittal drawings shall be unique drawings, prepared to illustrate the specific portion of the work to be done. All relative design information such as member sizes, bridge reactions, and general notes shall be clearly specified on the drawings. Drawings shall have cross referenced details and sheet numbers. All drawings shall be signed and sealed by a Professional Engineer who is licensed in accordance with Section 3.0.

6.2 Structural Calculations

Structural calculations for the bridge superstructure shall be submitted by the bridge manufacturer and reviewed by the approving engineer. All calculations shall be signed and sealed by a Professional

Engineer who is licensed in accordance with Section 3.0. The calculations shall include all design information necessary to determine the structural adequacy of the bridge. The calculations shall include the following:

- * All AISC allowable stress checks for axial, bending and shear forces in the critical member of each truss member type (i.e. top chord, bottom chord, floor beam, vertical, etc.).
- * Checks for the critical connection failure modes for each truss member type (i.e. vertical, diagonal, floor beam, etc.). Special attention shall be given to all welded tube on tube connections (see section 3.3.2 for design check requirements).
- * All bolted splice connections.
- * Main truss deflection checks.
- * U-Frame stiffness checks (used to determine K factors for out-of-plane buckling of the top chord) for all half through or "pony" truss bridges.
- * Deck design.

NOTE: The analysis and design of triangulated truss bridges shall account for moments induced in members due to joint fixity where applicable. Moments due to both truss deflection and joint eccentricity must be considered.

6.3 Welder certifications in compliance with AWS standard qualification tests.

6.4 Welding procedures in compliance with Section 5.1.

7.0 FABRICATION

7.1 General Requirements

7.1.1 Drain Holes

When the collection of water inside a structural tube is a possibility, either during construction or during service, the tube shall be provided with a drain hole at its lowest point to let water out.

7.1.2 Welds

Special attention shall be given to developing sufficient weld throats on tubular members. Fillet weld details shall be in accordance with AWS D1.1, Section 3.9 (See AWS Figure 3.2). Unless determined otherwise by testing, the loss factor "Z" for heel welds shall be in accordance with AWS Table 2.8. Fillet welds which run onto the radius of a tube shall be built up to obtain the full throat thickness (See Figure 7.1). The maximum root openings of fillet welds shall not exceed 3/16" in conformance with AWS D1.1, Section 5.22. Weld size or effective throat dimensions shall be increased in accordance with this same section when applicable (i.e. fit-up gaps > 1/16").

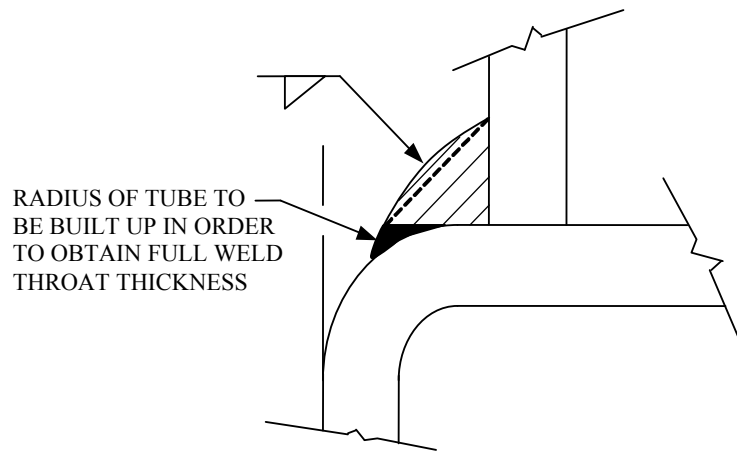


FIGURE 7.1
BUILD UP RADIUS WELD

The fabricator shall have verified that the throat thickness of partial joint penetration groove welds (primarily matched edge welds or the flare-bevel-groove welds on underhung floor beams) shall be obtainable with their fit-up and weld procedures. Matched edge welds shall be “flushed” out when required to obtain the full throat or branch member wall thickness.

For full penetration butt welds of tubular members, the backing material shall be fabricated prior to installation in the tube so as to be continuous around the full tube perimeter, including corners. Backing may be of four types:

- * A “box” welded up from four (4) plates.
- * Two “channel” sections, bent to fit the inside radius of the tube, welded together with full penetration welds.
- * A smaller tube section which slides inside the spliced tube.
- * A solid plate cut to fit the inside radius of the tube.

Corners of the “box” backing, made from four plates, shall be welded and ground to match the inside corner radii of the chords. The solid plate option shall require a weep hole either in the chord wall above the “high side” of the plate or in the plate itself. In all types of backing, the minimum fit-up tolerances for backing must be maintained at the corners of the tubes as well as across the “flats”.

7.2 Quality Certification

Bridge(s) shall be fabricated by a fabricator who is currently certified by the American Institute of Steel Construction to have the personnel, organization, experience, capability, and commitment to produce fabricated structural steel for the category “Major Steel Bridges” as set forth in the AISC Certification Program with Fracture Critical Endorsement. Quality control shall be in accordance with procedures outlined for AISC certification. For painted structures, the fabricator must hold a

"Sophisticated Paint Endorsement" as set forth in the AISC certification program. Furthermore, the bridge(s) shall be fabricated in a facility owned and/or leased by the corporate owner of the manufacturer, and fully dedicated to bridge manufacturing.

8.0 FINISHING

8.1 Blast Cleaning

8.1.1 Bare applications of enhanced corrosion resistant steels.

All Blast Cleaning shall be done in a dedicated OSHA approved indoor facility owned and operated by the bridge fabricator. Blast operations shall use Best Management Practices and exercise environmentally friendly blast media recovery systems.

To aid in providing a uniformly "weathered" appearance, all exposed surfaces of steel shall be blast cleaned in accordance with Steel Structures Painting Council Surface Preparation Specifications No. 7 Brush-Off Blast Cleaning, SSPC-SP7 latest edition.

Exposed surfaces of steel shall be defined as those surfaces seen from the deck and from outside of the structure. Stringers, floor beams, lower brace diagonals and the inside face of the truss below deck and bottom face of the bottom chord shall not be blasted.

9.0 DELIVERY AND ERECTION

Delivery is made to a location nearest the site which is easily accessible to normal over-the-road tractor/trailer equipment. All trucks delivering bridge materials will need to be unloaded at the time of arrival.

The manufacturer will provide detailed, written instruction in the proper lifting procedures and splicing procedures (if required). The method and sequence of erection shall be the responsibility of others.

The bridge manufacturer shall provide written inspection and maintenance procedures to be followed by the bridge owner.

10.0 BEARINGS

10.1 Bearing Devices

Bridge bearings shall consist of a steel setting or slide plate placed on the abutment or grout pad. The bridge bearing plate which is welded to the bridge structure shall bear on this setting plate. One end of the bridge will be fixed by fully tightening the nuts on the anchor bolts at that end. The opposite end will have finger tight only nuts to allow movement under thermal expansion or contraction.

The bridge bearings shall sit in a recessed pocket on the concrete abutment. Minimum 28-day strength for the abutment concrete shall be 3,000 PSI. The bearing seat shall be a minimum of 16" wide. The step height (from bottom of bearing to top-of-deck) shall be determined by the bridge manufacturer.

Bridges in excess of 100 feet in length or bridges with dead load reactions of 15,000 pounds or more (at each bearing location) shall have teflon on teflon or stainless steel on teflon slide bearings placed

between the bridge bearing plate and the setting plate. The top slide plate shall be large enough to cover the lower teflon slide surface at both temperature extremes.

11.0 FOUNDATIONS

Unless specified otherwise, the bridge manufacturer shall determine the number, diameter, minimum grade and finish of all anchor bolts. The anchor bolts shall be designed to resist all horizontal and uplift forces to be transferred by the superstructure to the supporting foundations. Engineering design of the bridge supporting foundations (abutment, pier, bracket and/or footings), including design of anchor bolt embedments, shall be the responsibility of the foundation engineer. The contractor shall provide all materials for (including anchor bolts) and construction of the bridge supporting foundations. The contractor shall install the anchor bolts in accordance with the manufacturer's anchor bolt spacing dimensions.

Information as to bridge support reactions and anchor bolt locations will be furnished by the bridge manufacturer after receipt of order and after the bridge design is complete.

12.0 PAYMENT

A partial payment or "deposit" for the prefabricated bridge shall be made upon order and storage as required by the terms of the manufacturer.

13.0 WARRANTY

The bridge manufacturer shall warrant that it can convey good title to the goods, that they are free of liens and encumbrances and that their steel structure(s) are free of design, material and workmanship defects for a period of ten years from the date of delivery. Durable hardwood decking and hardwood attachments shall carry a ten-year warranty against rot, termite damage or fungal decay. Other types of wood and decking material such as Southern Yellow Pine, Douglas Fir and composites carry no warranty. There are no warranties, expressed or implied with respect to structures sold hereunder which are used, supplied for use or made available for use in any nuclear application of which bridge manufacturer has not been notified in writing at the time of order of the structure(s).

This warranty shall not cover defects in the bridge caused by abuse, misuse, overloading, accident, improper installation, maintenance, alteration or any other cause not expressly warranted. This warranty does not cover damage resulting from or relating to the use of any kind of de-icing material. This warranty shall be void unless owner's records are supplied which show compliance with the minimum guidelines specified in the "Recommendations for the Inspection and Maintenance of Steadfast Vehicular Steel Bridges and Continental Pedestrian Steel Bridges," attached hereto and incorporated herein by this reference.

Repair, replacement or adjustment, at the sole discretion of the bridge manufacturer, shall be the exclusive remedy for defects under this warranty. Under no circumstances shall the bridge manufacturer be liable for any consequential or incidental damages.

Any claim under this warranty shall be made promptly and directly to CONTECH Bridge Solutions Inc who shall have the option, at its sole discretion, to repair, replace or adjust any covered defect without charge to the original purchaser.

SELLER MAKES NO OTHER WARRANTY WHATSOEVER, EXPRESS OR IMPLIED. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND ALL IMPLIED WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE ARE DISCLAIMED BY SELLER AND EXCLUDED FROM THIS CONTRACT.

14.0 APPROVAL CHECKLIST

The following checklist will be used in the evaluation of all submittals to assure compliance with the Special Specifications for Prefabricated Bridge. This checklist is considered the minimum acceptable requirements for compliance with these specifications. Any deviations from this checklist shall be considered grounds for rejection of the submittal. Any costs associated with delays caused by the rejection of the submittal, due to non-compliance with this checklist, shall be fully borne by the contractor and bridge supplier.

SUBMITTAL DRAWINGS

Data Required to be Shown:

- | | |
|--|---|
| <input type="checkbox"/> Bridge Elevation | <input type="checkbox"/> Weld Failure Checks (Ultimate) |
| Member Face Checks | <input type="checkbox"/> Local Buckling of the Main |
| <input type="checkbox"/> Bridge Cross Section Checks | <input type="checkbox"/> Main Member Yielding Failure |
| <input type="checkbox"/> All Member Sizes Checks | <input type="checkbox"/> Main Member Crippling Failure |
| <input type="checkbox"/> All Vertical Truss Members are Square Checks
or Rectangular Tubing | <input type="checkbox"/> Main Member Buckling Failure |
| <input type="checkbox"/> Bridge Reactions (if applicable) | <input type="checkbox"/> Main Member Shear Failure |
| <input type="checkbox"/> General Notes Indicating | <input type="checkbox"/> All Bolted Splice Checks (if applicable) |
| <input type="checkbox"/> AISC Stress Conformance | <input type="checkbox"/> Main Truss Deflection Checks |
| <input type="checkbox"/> Material Specifications to be Followed (if applicable) | <input type="checkbox"/> Decking Material Checks |
| <input type="checkbox"/> Design Live Load | <input type="checkbox"/> "U-Frame" Stiffness Checks (if applicable) |
| Design Checks (if applicable) | <input type="checkbox"/> Interior and End Portal |
| <input type="checkbox"/> Design Vehicle Load (If Applicable) | <input type="checkbox"/> Determination of Top Chord |
| K Factor Based on "U-Frame" | |
| Stiffness (if applicable) | |
| <input type="checkbox"/> Design Wind Load | |
| <input type="checkbox"/> Other Specified Design Loads | <input type="checkbox"/> Consideration of Individual |
| Member Moments Due to | |
| <input type="checkbox"/> Welding Process | Truss Deflection, Joint Fixity and |
| Joint Eccentricity | |

- Blast Cleaning
- Paint System to be Used (If Applicable)
- Paint Color Chart (If Applicable)
- Detailed Bolted Splices (If Applicable)
- Bolted Splice Location (If applicable)
- Signature and Seal of Professional Engineer,
licensed in Accordance with Section 3.0

Instructions

DESIGN CALCULATIONS

Data Required to be Shown:
applicable)

- Data Input for 3-D Analysis of Bridge
 - Joint Coordinates & Member Incidences
 - Joint and Member Loads
 - Member Properties
 - Load Combinations
- applicable)
- AASHTO Member Stress Checks for Each Member Type
- applicable)
- Member Type
 - Chord Face Plastification Checks
- submitted
- Punching Shear Checks
- Design Calculations.
- Material Failure Checks (Truss Webs)
- marked are
- Weld Failure Checks (Effective Length)
- bridge.

FABRICATION SUBMITTALS

Data Required to be Shown:

- ** Written Installation Instructions
- ** Written Splicing Instructions
- ** Written Maintenance & Inspection

- ** Welder Certifications
- ** Welding Procedures
- Material Certifications (if

- Structural Steel (if applicable)
- Decking (if applicable)
- Structural Bolts (if applicable)
- ** Quality Control Section of AISC
Certification Manual (if applicable)
- ** Painter Certifications (if

- Weld Testing Reports (if

Critical Connection Failure Mode Checks For Each

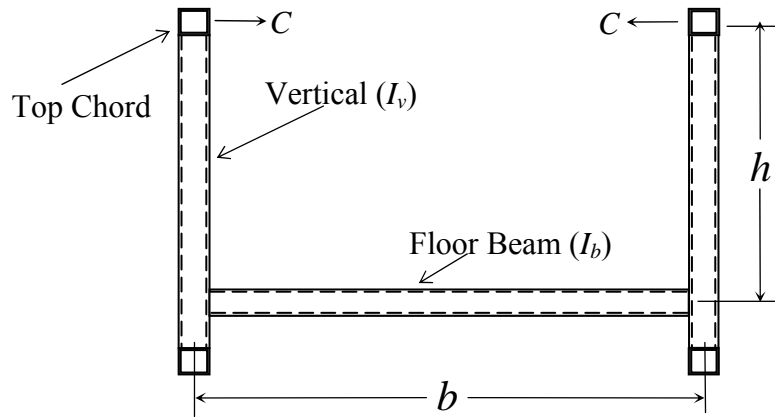
** NOTE: These items are required to be
along with Submittal Drawings and
Those Fabrication Submittal Items not
to be submitted prior to shipment of the

Appendix A

1/K FOR VARIOUS VALUES OF CL/P_c and n

1/K	n						
	4	6	8	10	12	14	16
1.000	3.686	3.616	3.660	3.714	3.754	3.785	3.809
0.980		3.284	2.944	2.806	2.787	2.771	2.774
0.960		3.000	2.665	2.542	2.456	2.454	2.479
0.950			2.595				
0.940		2.754		2.303	2.252	2.254	2.282
0.920		2.643		2.146	2.094	2.101	2.121
0.900	3.352	2.593	2.263	2.045	1.951	1.968	1.981
0.850		2.460	2.013	1.794	1.709	1.681	1.694
0.800	2.961	2.313	1.889	1.629	1.480	1.456	1.465
0.750		2.147	1.750	1.501	1.344	1.273	1.262
0.700	2.448	1.955	1.595	1.359	1.200	1.111	1.088
0.650		1.739	1.442	1.236	1.087	0.988	0.940

0.600	2.035	1.639	1.338	1.133	0.985	0.878	0.808
0.550		1.517	1.211	1.007	0.860	0.768	0.708
0.500	1.750	1.362	1.047	0.847	0.750	0.668	0.600
0.450		1.158	0.829	0.714	0.624	0.537	0.500
0.400	1.232	0.886	0.627	0.555	0.454	0.428	0.383



“U - Frame”

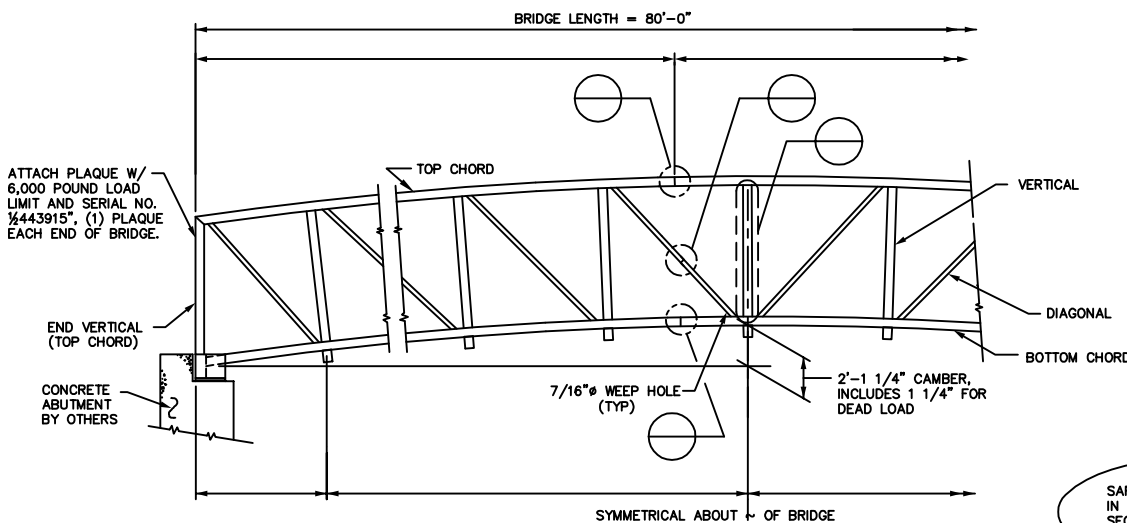
Where: $C = \frac{E}{h^2 [h/3I_v + b/2I_b]}$

$L =$ Length in inches of one truss panel

$P_c =$ Buckling Load (= Top Chord Compression \times F.S.)

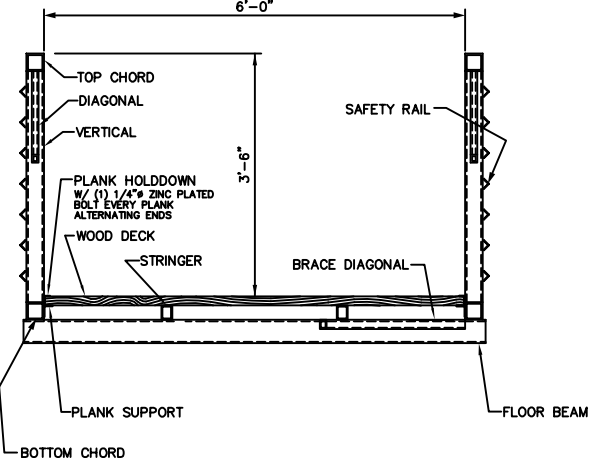
$n =$ Number of Panels

Reference: Galambos, T.V. (1988) “Guide to Stability Design Criteria for Metal Structures”, 4th Ed., PP 515-529. Copyright © 1988. Reprinted by permission of John Wiley and Sons, Inc.

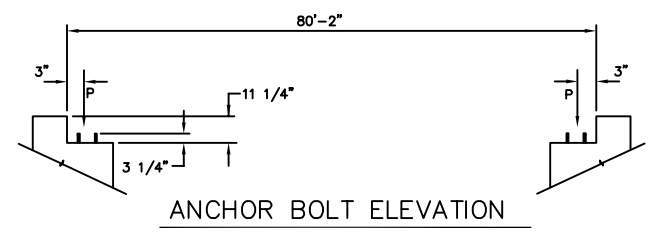


ELEVATION

SPACING OF SAFETY RAIL PRODUCES MAXIMUM OPENINGS OF 4 INCHES.

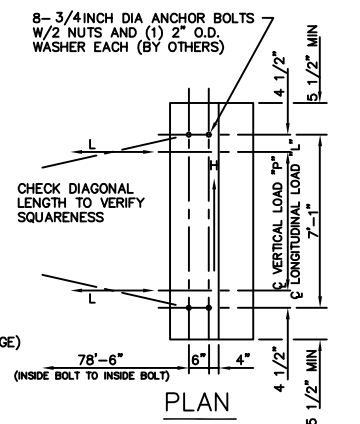


BRIDGE SECTION



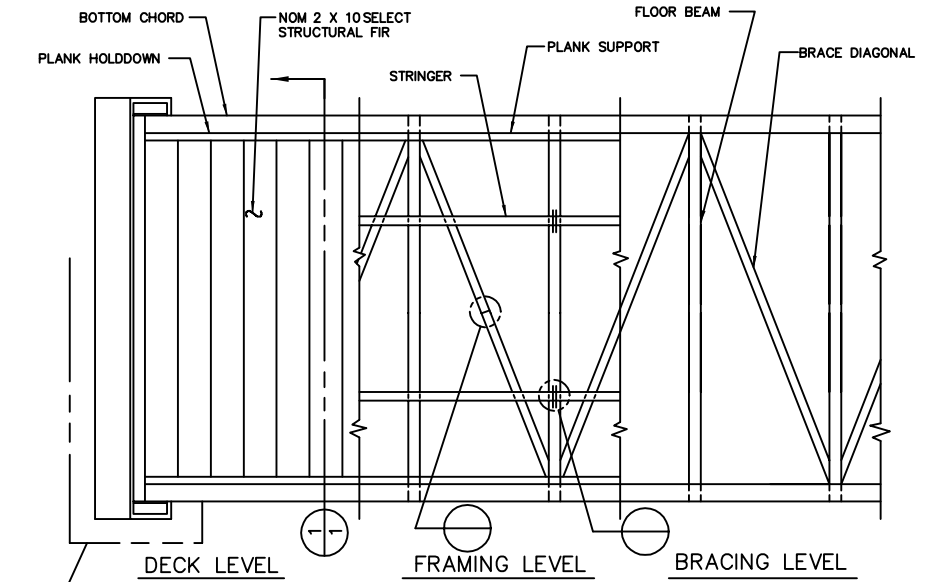
COMBINE REACTIONS AS PER LOCAL OR GOVERNING BUILDING CODES AS REQUIRED

	BRIDGE REACTIONS		
	P (LBS)	H (LBS)	L (LBS)
DEAD LOAD	3045		
UNIFORM LIVE LOAD	7200		
VEHICLE LOAD	3000		
WIND UPLIFT 20 PSF	-4000		
WIND	+2320	4125	
THERMAL			1070



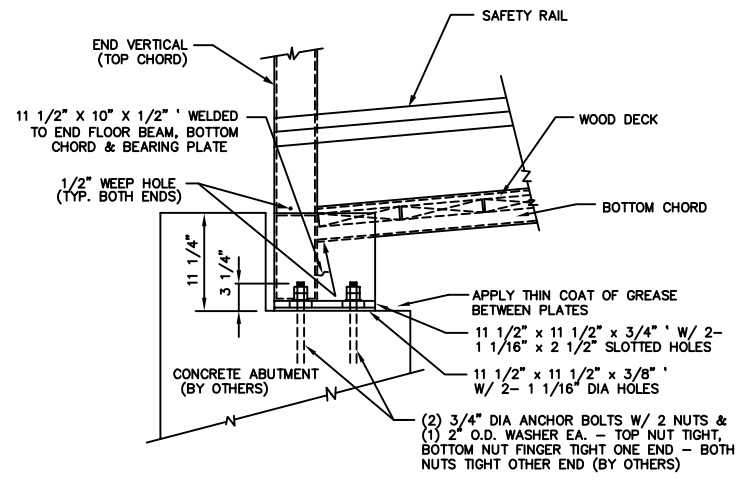
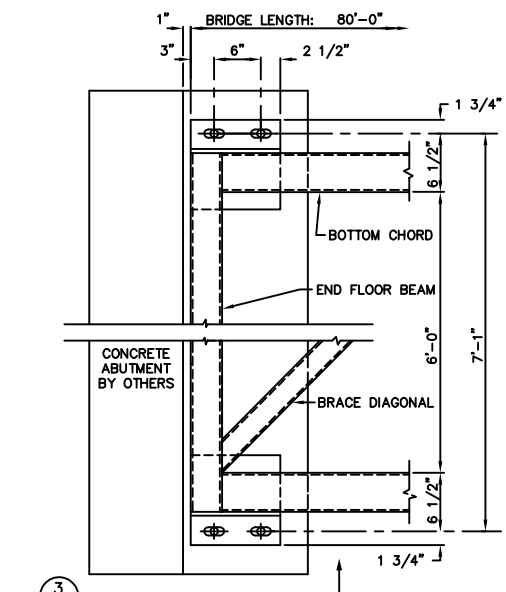
"P" - VERTICAL LOAD EACH BASE PLATE (4 PER BRIDGE)
 "H" - HORIZONTAL LOAD EACH FOOTING (2 PER BRIDGE)
 "L" - LONGITUDINAL LOAD EACH BASE PLATE (4 PER BRIDGE)

BRIDGE LIFTING WEIGHT: 12,180 LBS



BRIDGE PLAN

PRELIMINARY ONLY
NOT FOR CONSTRUCTION



SIDE VIEW - BEARING ASSEMBLY

PLAN - BEARING ASSEMBLY

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

REG. NO. 21197

DATE:

THESE PLANS, AS INSTRUMENTS OF SERVICE ARE PROPERTY SOLELY OF CONTINENTAL BRIDGE. THEY ARE NOT TO BE REPRODUCED FOR ANY PURPOSE OR USED IN ANY OTHER LOCATION WITHOUT WRITTEN AUTHORIZATION.

DRAWN BY: DJB
 CHECKED BY:
 DATE: 9/08/11
 80'-0" X 6'-0" PEDESTRIAN BRIDGE WHEELING, IL
 SHEET NO. 1 OF 1
 JOB # 443915

REV. BY:	DATE:	LEVEL:	REVISION: