

WASHINGTON STREET GRADE SEPARATION

CONSTRUCTION, MAINTENANCE AND OWNERSHIP AGREEMENT

This WASHINGTON STREET GRADE SEPARATION CONSTRUCTION, MAINTENANCE AND OWNERSHIP AGREEMENT ("Agreement") is entered into as of the 4TH day of SEPT, 2014, by and between the Wisconsin Central Ltd., an Illinois corporation ("WCL"), and the County of Lake, Illinois, an Illinois body politic and corporate, acting by and through its Chair and County Board ("County"). WCL and County are hereinafter sometimes individually referred to as a "Party" and jointly referred to as the "Parties".

RECITALS

A. An at-grade highway-railroad crossing extends over that portion of WCL's railroad right-of-way and tracks (collectively the "WCL Property") in the Village of Grayslake, Lake County, Illinois, as delineated on Exhibit A, attached to and made a part of this Agreement ("WCL Property with Existing At-Grade Crossing").

B. In the interests of public safety and convenience, the County has proposed to replace the existing at-grade crossing with a grade separated crossing by means of a bridge ("Bridge") to carry WCL's tracks over the roadway, to be located as shown on Exhibit B, attached to and made a part of this Agreement ("Plans for New Grade Separation") and desires to reimburse WCL for related work performed and provided by WCL to accommodate the County's Bridge construction, and to otherwise clarify construction, maintenance, ownership and related issues.

C. The above listed construction work, plus other necessary associated work items, shall be known as County Section Number 11-00121-11-BR. The bid letting date for the County's improvement is currently scheduled for September, 2014. (The bid letting date is subject to change, dependent upon project readiness and the availability of project funding).

D. WCL is amenable to providing the work provided for herein and otherwise cooperating with the County's proposed Bridge construction project, but only under the terms and conditions stated herein.

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements set forth below, the aforementioned Recitals which are hereby incorporated into this Agreement, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the Parties, County and WCL agree as follows:

1. Construction.

(A) Plan Review and Approval. County shall submit to WCL for its review and prior written consent (not to be unreasonably withheld, delayed or conditioned) plans and specifications for the design, engineering, and construction of the Bridge (the "County Bridge Work"), and a site plan delineating the location and identifying the dimensions of the WCL Property affected by the County Bridge Work (collectively "County Plans"). The County Plans

shall conform to WCL's Bridge Design Specifications, as shown on Exhibit C, attached to and made a part of this Agreement, unless a deviation is approved in writing by WCL, said approval not to be unreasonably withheld, delayed or conditioned. County shall also describe and depict the following (collectively "Related Work"):

(i) County Bridge Work to or affecting WCL's existing facilities, improvements, and equipment; and

(ii) To the extent reasonably necessary and appropriate for the continued operation and maintenance of WCL's existing facilities following the completion of the County Bridge Work, the work necessary to install and construct additional WCL facilities and equipment required as a result of the County Bridge Work.

(The County Bridge Work, together with Related Work, is hereinafter referred to collectively as the "Project".)

The proposed County Plans shall specifically state which portions of the Related Work, if any, are to be performed by WCL ("WCL's Related Work"), and which portions are to be performed by the County ("County's Related Work"). Subject to the terms of this Agreement, the cost of the Project shall be the responsibility of the County and no cost or expense with respect thereto shall be borne by WCL except as specified in paragraph 1.(E)(i). Upon receipt of proposed County Plans, including without limitation, engineering and design plans for the Related Work, WCL shall provide detailed estimates of the total cost of WCL's Related Work shown on said County Plans within ninety (90) days. WCL agrees that it will not deny or withhold its consent for reasons that are contrary to the Exhibits to this Agreement. Attached hereto as Exhibit D is WCL's Force Account Estimate setting forth certain WCL's currently projected costs and expenses of WCL's Related Work.

The proposed County Plans shall include construction of abutments sufficient to accommodate two (2) railroad bridge spans, but the parties agree that only one (1) span will be constructed as an element of the Project. At any time in the future after completion of the Project, should WCL determine, in its sole discretion, that its operations warrant installation of a second railroad bridge span, WCL shall, at its sole cost and expense, design and construct said second railroad bridge span. County shall have the right to review and approve WCL's bridge and aesthetic designs for said second railroad span, said approval not to be unreasonably delayed, denied or conditioned, except that (i) the County shall be solely responsible for the payment of all costs and expenses for aesthetic treatments sought by the County and not included as an element of WCL's design of the second span, and (ii) any aesthetic element that would interfere in any way with WCL's operation, inspection or maintenance of WCL's property or facilities on the second span shall be automatically deemed unreasonable. Upon completion of construction of the second railroad span and related railroad facilities, WCL shall own the subballast, ballast, ties, rail, other track materials, and railroad signal equipment on the second railroad span, and County shall own all remaining aspects of the second railroad span. Upon completion of construction of the second railroad span, said second railroad span shall be deemed an element of the Bridge for all purposes hereunder.

(B) Coordination of Activities.

(i) The Parties agree to act reasonably to coordinate their respective work to work toward completion of all work in a timely manner. In addition, WCL shall have the right to reinstall or reattach on the Bridge those facilities, utilities and related appurtenances removed or relocated as a result of the Project, at Project expense as estimated in Exhibit D. The County Bridge Work and the Related Work shall at all times be staged and performed so that WCL has uninterrupted use of the WCL Property for the provision of freight and passenger rail service and maintenance of WCL's railroad facilities. County acknowledges that WCL hosts commuter passenger service on the WCL Property, that such service is the subject of a contract that provides incentive payments to WCL as shown in Exhibit J. All reduced incentives incurred by WCL as a result of delays caused by the Project shall be deemed a reimbursable Project expense. County agrees and the contract between County and County's contractor(s) shall provide that except for circumstances beyond its control there shall be no train delays or interference with WCL operations in the performance of the County Bridge Work or the County's Related Work, and that the County's contractor(s) shall not unduly delay or interfere with WCL in performing WCL's Related Work and shall take all steps reasonably necessary or requested by WCL to facilitate WCL's Related Work. County's contractor(s) shall execute WCL's standard form Right of Entry Agreement, Exhibit E, attached to and made a part of this Agreement

(ii) WCL agrees to cooperate with County, County's contractor(s) and its subcontractors in the performance of the County Bridge Work and the County's Related Work. WCL shall not unduly delay or interfere with County, County's contractor(s), or its subcontractors in performing the County's Related Work and shall take all steps reasonably necessary or requested by the County or the County's contractor(s) to facilitate the County's Related Work, so long as the requirements of Section 1(B) (i) regarding the uninterrupted use of WCL's Property are strictly adhered to.

(iii) County shall require its contractor(s) to remove all machinery, surplus materials, falsework, rubbish and temporary buildings from WCL's Property upon completion of the County Bridge Work and the County's Related Work, and to leave WCL's Property in a neat and clean condition reasonably satisfactory to the authorized representative of WCL.

(iv) WCL shall retain a construction engineer of its choosing (subject to approval of County, said approval not to be unreasonably withheld, delayed or conditioned) to monitor progress of the Project, enforce WCL's safety requirements and WCL's engineering practices, and otherwise facilitate communications between County and WCL, all costs and expenses for same to be deemed a Project cost as estimated in Exhibit D.

(C) Construction. Upon WCL's approval of the County Plans and County's approval of the estimate of costs for WCL's Related Work as estimated in Exhibit D, the County Plans shall be deemed to be incorporated into this Agreement referenced in Exhibit B. Upon such approvals, WCL shall be deemed to have agreed to complete WCL's Related Work in a good and workmanlike manner, in accordance with all applicable law, and in accordance with the approved County Plans, all subject to Force Majeure as set forth in Section 9 of this Agreement, and County shall be deemed to have agreed to complete the County Bridge Work and the County's Related Work in a good and workmanlike manner, in accordance with all applicable law, and in accordance with the approved County Plans, all subject to Force Majeure as set forth in Section 9 of this Agreement.

(D) County shall be solely responsible for obtaining all permits, utility relocations and other permissions and approvals legally required for the Project (including but not limited to approval of the Illinois Commerce Commission, if required), provided, however, that WCL shall cooperate with County in its efforts to obtain such permits or utility relocations and County shall reimburse WCL for any such costs incurred by WCL as estimated in Exhibit D. Such cooperation shall include ordering utilities and other non-railroad entities using or occupying the WCL Property to relocate their facilities from the WCL Property at their sole cost to the extent that WCL is permitted to require relocation under the applicable agreement authorizing such use or occupation; provided, however, that such facilities do not unreasonably interfere with the County Bridge Work or the Related Work and such relocations do not damage or otherwise adversely affect WCL. Central Lake County Joint Action Water Agency has an existing license agreement with WCL to maintain and operate an underground water pipeline crossing as detailed in Exhibit I. The main will be relocated as detailed in the plans at County's sole cost and expense. All other terms of License Agreement No. 00545-W will remain unchanged.

(E) Reimbursement.

(i) Of WCL. Except for the prepayment provided for in Section 3(D) below, County shall reimburse WCL for costs incurred by WCL for work, materials, or services directly related to performing and completing WCL's Related Work, including without limitation WCL overhead costs and expenses ("Direct Costs") upon presentation of a duly executed Draw Request Form in the form attached to and incorporated in this Agreement as Exhibit F, together with paid invoices, bills, or vouchers for WCL's Related Work, including but not limited to force account work (collectively "Documents"), which Documents shall set forth in detail the Direct Costs. Each payment to WCL shall be made within thirty (30) days of presentation of the complete Documents for such payment. Direct Costs shall include any costs related to review and sign-off of any additional plans, specifications, or work plans. County acknowledges that at its request WCL has undertaken some of the WCL's Related Work prior to execution of this Agreement, and County further acknowledges that reimbursement for pre-incurred expenses shall be allowed hereunder as if incurred after the execution of this Agreement. Direct Costs shall also include the cost of any flagmen as deemed necessary by WCL in accordance with its regulations and policies, necessitated by the Project. County's obligation to reimburse WCL for Direct Costs shall survive the termination of this Agreement, but only as to those Direct Costs incurred by WCL prior to the effective date of the termination of this Agreement. The County's obligation is estimated to be \$1,071,820, as identified in Exhibit D. Additionally, (i) in exchange for County's agreement to design and construct the Bridge abutments and related structures to accommodate potential placement of a second railroad span, WCL agrees to pay to the County the sum of \$1,500,000.00 (See Exhibit D for cost participation commitment letter) when trains begin operating on the final alignment, but in no event will payment be due any earlier than January 1, 2015, and (ii) as a contribution toward costs for the Project, and without establishing any precedent or commitment for WCL to pay any contribution toward any other grade separation project that County may pursue, WCL agrees to make a one time payment as determined by ICC to County upon completion of the Project.

(iii) Audit. At any time upon reasonable notice, County may audit the Direct Costs in accordance with Generally Accepted Accounting Principles (GAAP) applied on a consistent basis, and WCL must provide all documentation, including the Documents, which are

necessary or appropriate to complete such audit. Upon completion of the audit, in the event of an underpayment, County will provide WCL with a copy of the audit report along with a payment of any additional amounts that should have been reimbursed to WCL. In the event of an overpayment, WCL must promptly pay any amounts that should not have been paid to it promptly upon receipt of a copy of the audit report and a written request for reimbursement by County. In the event of a dispute on the results of the audit performed by the County, the WCL and the County shall mutually select an independent auditor to audit the Direct Costs in accordance with GAAP. The cost of the independent auditor shall be equally borne by the WCL and the County. The results of the independent audit shall be binding. WCL agrees to maintain copies of all required documentation concerning Direct Costs for a period of three (3) years following completion of WCL's Related Work or the termination of this Agreement. WCL's covenant in the preceding sentence shall survive the expiration or termination of this Agreement.

(iv) As-Built Plans. Within six (6) months of the final completion of the County Bridge Work and the Related Work, County shall provide WCL, at County's sole cost and expense, a set of "as-built" drawings in both pdf and DWG formats of the County Bridge Work and the Related Work.

(F) Access. County acknowledges that WCL currently accesses a power turnout, track and related signal equipment via a service road located on WCL Property and adjacent to WCL's existing track, and that said service road will be inaccessible upon commencement and conclusion of the Project. At its sole cost and expense, County shall secure for WCL permanent rights to access its power turnout, track and related signal equipment via alternate means, said rights to be approved by WCL, said approval not to be unreasonably delayed, denied or conditioned. The WCL shall take over future maintenance of the service road upon completion of the Project. The Project shall be considered complete 30 days after trains and vehicles begin operating on the final track and roadway alignments. The service road shall be considered acceptable to the WCL, unless the County receives written notification otherwise within 30 days of completion of the Project.

2. Work to be Performed by or on Behalf of County.

(A) As part of the County Bridge Work and County's Related Work, County shall provide or cause to be provided, in accordance with the plans and specifications approved by WCL, all engineering, inspection, work, supplies, materials, labor and equipment required to perform and complete the following:

(i) Preparation of the plans and specifications relating to the County Bridge Work;

(ii) The County Bridge Work and County Related Work; provided, however, that County shall have no obligation to perform or construct, or cause to be performed or constructed, the WCL Related Work;

(iii) All property acquisition, utility relocation, traffic management and detours, permitting, road construction, and grading for all railroad track construction

(iv) All material acquisitions for the County Bridge Work, County Related Work, and WCL's Related Work, in conformance with WCL's materials specifications.

(v) Construction of the temporary shoofly track, temporary grade crossing, and permanent track on the final alignment.

(B) County shall give WCL twenty-one (21) days prior written notice of the commencement date of the County Bridge Work and of the County's Related Work, or any phase thereof.

(C) The County Bridge Work and the County's Related Work shall be performed in accordance with all applicable federal, state, and local laws, rules, regulations, orders, ordinances, code provisions, and approvals pertaining to all agreements, plans, estimates, specifications, awards of contracts, acceptance of work, and procedure in general.

(D) County shall require its contractor(s) abide by the temporary or permanent minimum clearances, with reference to WCL's tracks, or necessary falsework, bracing or forms, as required for the County Bridge Work.

3. Work to be Performed by or on Behalf of WCL.

(A) As part of WCL's Related Work, WCL shall supply or cause to be supplied, in accordance with approved plans and specifications, all engineering, inspection, work, supplies, list of required materials (subject to Section 4(C) herein)(attached hereto and incorporated herein by reference as Exhibit K), labor, and equipment, as set forth on the detailed estimate for WCL's Related Work to be provided by WCL in accordance with the terms and provisions of this Agreement, including but not limited to all flagging, construction (track, full depth rubber crossing and signal), and testing for cutovers. WCL shall also construct the cut-over to the shoofly track and the cut-over to the permanent alignment and shall provide any materials needed for such work.

(B) WCL's Related Work shall not extend beyond that necessary for the County Bridge Work and the restoration of those WCL facilities affected by the County Bridge Work and shall be performed in accordance with standard railroad practices.

(C) WCL's Special Provisions attached to and made a part of this Agreement as Exhibit G must be adhered to any time representatives of County and County-engaged contractors and agents are on any WCL Property for the purposes set forth in this Agreement.

(D) WCL shall, at the expense of County or County's contractor(s) and via prepayment to WCL from County or its contractor(s), provide flagmen and other suitable personnel to County's contractor(s) as WCL deems necessary to accommodate the County Bridge Work and the County Related Work. WCL's authorized representative(s) shall have full authority concerning the operations of the railroad and County's contractor(s) must comply with WCL's representatives' directions. County's contractor(s) shall not perform any work on the WCL Property without authorization to do so from the railroad flagman.

(E) WCL shall retain and pay, subject to reimbursement by County, for a construction engineer as described further herein in Section 1 B (iv) and Exhibit D. IDOT will provide all required structural steel shop inspections during fabrication of all steel components used in the Project. The WCL will not be required to perform this work.

4. Plans and Specifications.

(A) If deemed necessary by WCL, WCL shall prepare, or cause to be prepared, plans and specifications for WCL's Related Work ("WCL Plans"). On or before the commencement of WCL's Related Work, WCL shall submit such plans and specifications, if any, to County for review. County's approval of such plans and specifications shall not be unreasonably withheld, delayed or conditioned, and County shall approve or submit its comments to WCL within four (4) weeks of receipt of the WCL Plans. Failure of County to approve or submit written comments to WCL within four (4) weeks of County's receipt of the WCL Plans shall constitute approval of the WCL Plans. The County's proposed Bridge construction project is currently scheduled to begin November 2014. If prepared by WCL, WCL Plans shall be submitted at least twelve (12) weeks prior to the start of the Bridge project; allowing four (4) weeks for an initial County review, four (4) weeks for WCL revisions, and four (4) weeks for a final County review.

(B) Once approved and agreed upon, the County Plans and the WCL Plans shall be incorporated into this Agreement and no changes shall be made to the County Plans or the WCL Plans without the prior written consent of the other Party.

(C) In performing the work under this contract, the parties shall comply with all applicable federal and state statutes and regulations.

5. Pre-Construction Meeting, Agreed-Upon Schedule, and Final Walk-Through.

(i) Prior to commencement of any County Bridge Work, a pre-construction meeting shall be held among the representatives of County, WCL and County's contractor(s) for the purpose of coordinating the County Bridge Work to be performed by the respective Parties and at which time a schedule for the performance of the County Bridge Work shall be agreed upon and adopted by County and WCL.

(ii) Upon completion of all County Bridge Work and all Related Work, County and WCL shall schedule and thereafter conduct a final walk-through to review all aspects of the Project and assure that all work has been performed in conformance with the terms and conditions of this Agreement, as may be amended from time to time.

6. Right of Entry. Except in cases of emergency, not less than seven (7) days prior to entering upon the WCL Property or any other WCL property for the purposes set forth in this Agreement, County contractors and subcontractors performing work on or providing maintenance for the Bridge shall execute and deliver to WCL's Chief Engineer, or his or her designee, a Right of Entry Agreement incorporated in this Agreement as Exhibit E, along with evidence of all of the insurance required by such form.

7. Insurance. Prior to its entry upon the WCL Property or any other WCL property for the County's Related Work, County shall obtain or cause its contractors to obtain insurance in accordance with the requirements set forth in Exhibit H. WCL, the Northeast Illinois Regional Commuter Railroad Corporation ("NIRCRC") and the Regional Transportation Authority ("RTA") shall be named as an additional insured on all policies described in Exhibit H except Worker's Compensation and Automobile Liability policies. WCL, the NIRCRC and the RTA shall be a named insured on the Railroad Protective Liability Policy.

Indemnity. COUNTY AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS WCL, ITS AGENTS AND EMPLOYEES, FROM AND AGAINST ANY AND ALL CLAIMS, DAMAGES, LIABILITIES, SUITS, JUDGMENTS, EXPENSES, COSTS AND ATTORNEYS' FEES RESULTING FROM PERSONAL INJURY, INCLUDING DEATH, AND ALL PROPERTY LOSS OR DAMAGE PROXIMATELY CAUSED BY (I) THE NEGLIGENCE OF COUNTY OR ITS CONTRACTOR(S); (II) COUNTY'S BREACH OF ANY TERM OR CONDITION OF THIS AGREEMENT; (III) COUNTY'S VIOLATION OF ANY APPLICABLE LAW, RULE, ORDINANCE, REGULATION, STATUTE, OR OTHER LEGAL REQUIREMENT; OR (IV) THE PRESENCE UPON THE WCL PROPERTY OF THE COUNTY OR ITS EMPLOYEES, OFFICERS, AGENTS, CONTRACTORS, OR SUCH OTHER PERSONS, FIRMS, OR CORPORATIONS ACTING AT THE DIRECTION OF OR WITH THE AUTHORITY OF THE COUNTY, EXCEPT TO THE EXTENT PROXIMATELY CAUSED BY WCL'S OR WCL'S AGENT'S OR EMPLOYEE'S NEGLIGENT, WILLFUL AND WANTON, OR INTENTIONALLY TORTIOUS CONDUCT. THE INDEMNITIES CONTAINED IN THIS SECTION SHALL SURVIVE EXPIRATION OR TERMINATION OF THIS AGREEMENT.

8. **Easement For and Maintenance of Bridge; Ownership.** The County shall secure a permanent easement (0066 PE) for WCL to operated and maintain the service road described in paragraph 1. (F) and WCL shall grant the County temporary easement (0074 TE) and permanent easements (0074 PE & 0075 PE), attached to and made a part of this Agreement as Exhibit I, to provide to County and its contractor(s) sufficient rights on WCL Property to construct and thereafter operate and maintain the Bridge and all related components. Upon the completion of the Project, County shall maintain, repair or replace, if necessary, the Bridge and all related components, and keep it in good and suitable repair for WCL's railroad operations over the Bridge, at its sole cost and expense and at no cost or expense to WCL, except to the extent that the Bridge is damaged or destroyed through the negligence of WCL. In the event County deems it necessary to inspect the Bridge and/or to perform any maintenance, repairs or replacement of any materials, as the case may be, County shall give WCL prior written notice outlining the work that County intends to perform. WCL shall provide approval (said approval not to be unreasonably withheld, delayed or conditioned) or comments on said proposed work within twenty-eight (28) days of receipt of same. If WCL does not approve or comment on the work within twenty-eight (28) days, said work shall be deemed approved by WCL. In all instances, such work shall be observed by a railroad flagman at County's expense. County must give WCL not less than one week prior written notice to enable WCL to arrange for such proposed work and for the flagman. Upon the completion of the Project, WCL shall own, maintain, repair or replace, if necessary the subballast, ballast, ties, rail, other track materials, the uncontaminated soil behind the abutments, and railroad signal equipment on the Bridge, and County shall own, maintain, repair or replace, if necessary, all remaining aspects of the Bridge, including but not limited to abutments, wing walls, and decking of the Bridge. Nothing in this Agreement shall be construed to allow the County to allow a third party to install or operate any utility or facility on the Bridge or any portion of WCL Property without WCL's express written approval, which may be withheld for any reason or no reason.

9. **Force Majeure.** With respect to the County Bridge Work and the Related Work, no Party shall be considered in breach of its obligations with respect to the commencement or completion of any obligation to install, construct, operate, inspect, maintain, repair, replace,

reconstruct, rehabilitate or remove to the extent of a delay in the performance of such obligations due to unforeseeable causes beyond such Party's control and without such Party's fault or negligence, including but not limited to, delays or halts in construction which are compelled by court order, or caused by acts of God, acts of the public enemy, acts of the United States government, acts of the other Party, fires, floods, epidemics, quarantine restrictions, strikes, embargoes and unusually severe weather or delays of contractors or subcontractors due to any such cause. The time for the performance of the obligations shall be extended only for the period of the delay if the obligated Party notifies the other Party in writing within five (5) days after the beginning or its discovery of any such delay, whichever comes later. This provision shall not apply to the obligations of any Party to defend, indemnify and hold harmless set forth in this Agreement, or for the payment of money hereunder.

10. No Personal Liability. No officer, director, employee, representative, or agent of either of the Parties shall have any personal obligation or liability arising hereunder or relating hereto, including but not limited to any liability for breach of the terms of this Agreement.

11. Binding Effect. The terms of this Agreement shall be binding upon, inure to the benefit of, and be enforceable by, the Parties and their respective successors and assigns.

12. Amendments and Assignments. No term of this Agreement may be altered, amended, changed, terminated, waived, or modified in any respect, and no right or obligations under this Agreement may be assigned or transferred, without the express written consent of the Parties.

13. Severability. If any provision of this Agreement, or any paragraph, sentence, clause, phrase or word or the application thereof is held invalid, the remainder of this Agreement shall be construed as if such invalid part were never included and this Agreement shall be and remain valid and enforceable to the fullest extent permitted by law provided that this Agreement, in its entirety as so reconstituted, does not represent a material change to the rights or obligations of the Parties.

14. Governing Law. This Agreement shall be construed in accordance with and its validity and effect (including any claims of breach of any of the terms hereof) shall be governed by the laws of the State of Illinois without regard to Illinois conflicts of interest laws.

15. Construction and Interpretation.

(A) This Agreement modifies any current contract(s) between the Parties only to the extent of the matters expressly stated herein. No other modifications are intended and none shall be implied; and the Parties do not intend to, and shall not be construed to have, modified or waived any other rights or obligations they may have under any current contract(s) between the Parties.

(B) This Agreement is the complete agreement of the Parties with respect to the matters set forth herein and all matters relating in any way to the Project. With respect to the matters set forth herein and all matters relating in any way to the Project, the Parties do not rely upon any previous oral, written or implied representation, endorsement agreement, or understanding of any kind, which may have been communicated by any person.

(C) This Agreement is not intended to, and shall not be construed to, create or give rise to, (a) any rights or obligations except as expressly stated herein, (b) any joint venture, partnership, corporate, employment, agency, construction manager, general contractor, subcontractor, or other relationship of any sort between County and WCL or any other person(s), or any third-party beneficiary rights of any nature whatsoever.

16. Waiver. No waiver of any obligation or default of a Party shall be implied from the omission by a Party to take any action on account of such obligation or default and no express waiver shall affect any obligation or default other than the obligation or default specified in any express waiver and then only for the time and to the extent therein stated.

17. Breach. If a party breaches or otherwise violates the terms and conditions of this Agreement, then the other Party shall have the right to pursue all remedies available at law or in equity, including without limitation, specific performance of this Agreement.

18. Notices. All notices to be sent hereunder shall be in writing, personally delivered or sent via national overnight courier services, to the following addresses:

To WCL:

Regional Chief Engineer
CN
17641 S. Ashland Avenue
Homewood, IL 60430

To County:

Director of Transportation/County Engineer
Lake County Division of Transportation
600 W. Winchester Road
Libertyville, IL 60048

19. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which shall, together, constitute one and the same instrument.

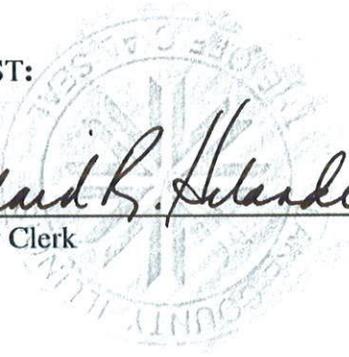
IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed on or as of the day and year first above written.

RECOMMENDED FOR EXECUTION

By: Paula Tiigg
Director of Transportation/County Engineer

ATTEST:

Willard R. Schneider
County Clerk



COUNTY OF LAKE:

By: [Signature]
Chairman
Lake County Board

Date: Sept 4, 2014

WISCONSIN CENTRAL LTD.:

By: [Signature]
LUC JOBIN

ATTEST:

Assistant Secretary

EXHIBIT A

WCL PROPERTY WITH EXISTING AT-GRADE CROSSING

EXHIBIT B

PLANS FOR NEW GRADE SEPARATION

Note: Contract Plans for Section #11-00121-11-BR are an independent document that shall be incorporated into EXHIBIT B

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

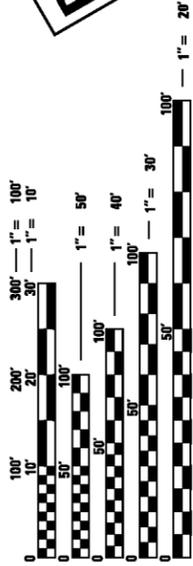
PROPOSED HIGHWAY PLANS

FAU 187 (WASHINGTON STREET)
HARYAN WAY TO LAKE STREET
ROADWAY RECONSTRUCTION
AND GRADE SEPARATION

PROJECT NO.: # CMM-9003(923)
JOB # C-91-181-12
SECTION # 11-00121-11-BR
LAKE COUNTY

VOLUME 1

PRE-FINAL 95%



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123 OR 811

**PLANS PREPARED BY:
PATRICK ENGINEERING, INC.**

CONTRACT NO.



MICHAEL J. PINE, P.E.
NO. 062-062776
EXP. DATE: 1/30/15
APPLY TO DRAWINGS:
1-17-21-60-338-481



SARAH L. CZAPLUCKI, S.E.
NO. 061-006191
EXP. DATE: 1/30/14
APPLY TO DRAWINGS:
95-103, 163-200, 208-235



GARY GOODHEART, P.E.
NO. 062-059595
EXP. DATE: 1/30/15
APPLY TO DRAWINGS:
61-87, 95, 144-169



STEPHEN P. HEATH, P.E.
NO. 062-036680
EXP. DATE: 1/30/15
APPLY TO DRAWINGS:
236-287



DONALD E. FREESTON, P.E.
NO. 062-054933
EXP. DATE: 1/30/15
APPLY TO DRAWINGS:
96-98, 104-108



ERIK R. OLSON, P.E.
NO. 062-054976
EXP. DATE: 1/30/15
APPLY TO DRAWINGS:
18-20, 93-94, 136-143, 170-182



BRANDON J. CELAYA, P.E.
NO. 062-063159
EXP. DATE: 1/30/15
APPLY TO DRAWINGS:
88-92

FOR INDEX OF SHEETS, SEE SHEET NO.2

HIGHWAY CLASSIFICATION

PRINCIPAL ARTERIAL

WASHINGTON STREET TRAFFIC DATA

2009 ADT = 16,300

2030 ADT = 18,000

POSTED SPEED = 40 MPH

DESIGN SPEED = 45 MPH

PROJECT DESCRIPTION

THE PROPOSED IMPROVEMENT CONSISTS OF THE WIDENING AND RECONSTRUCTION OF WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET INCLUDING A GRADE SEPARATION AT CN RAILROAD, A NEW STORM SEWER SYSTEM AND PEDESTRIAN ACCOMMODATIONS.

PROJECT LOCATED IN VILLAGE OF GRAYSLAKE

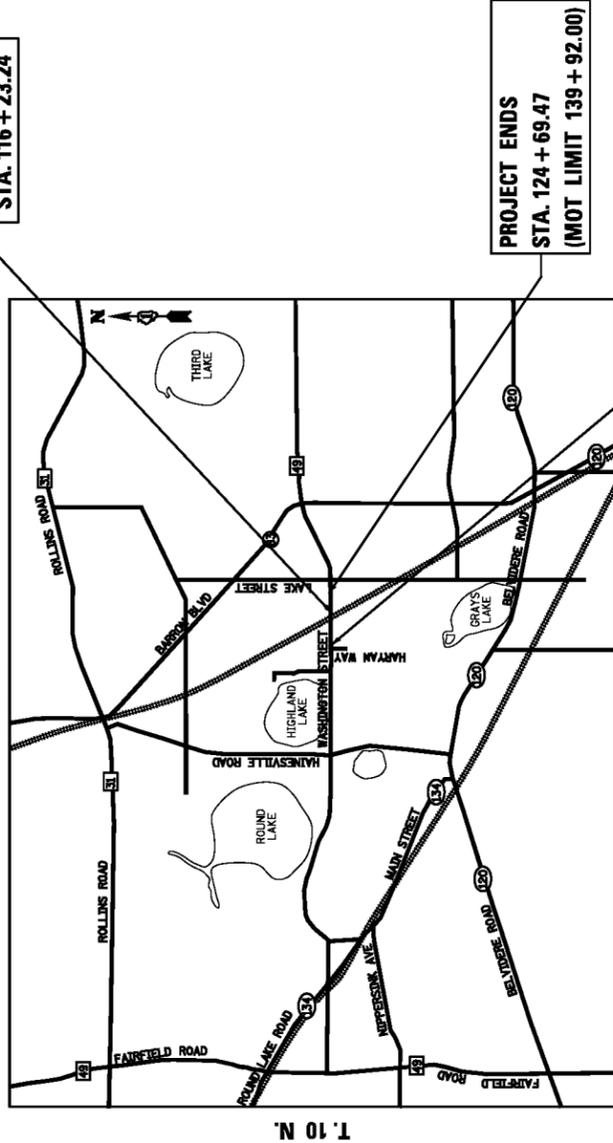
LOCATION MAP N.T.S.

GROSS LENGTH = 1,994.47 FEET = 0.38 MILE

NET LENGTH = 1,994.47 FEET = 0.38 MILE

CN RAIL BRIDGE
STA. 116 + 23.24

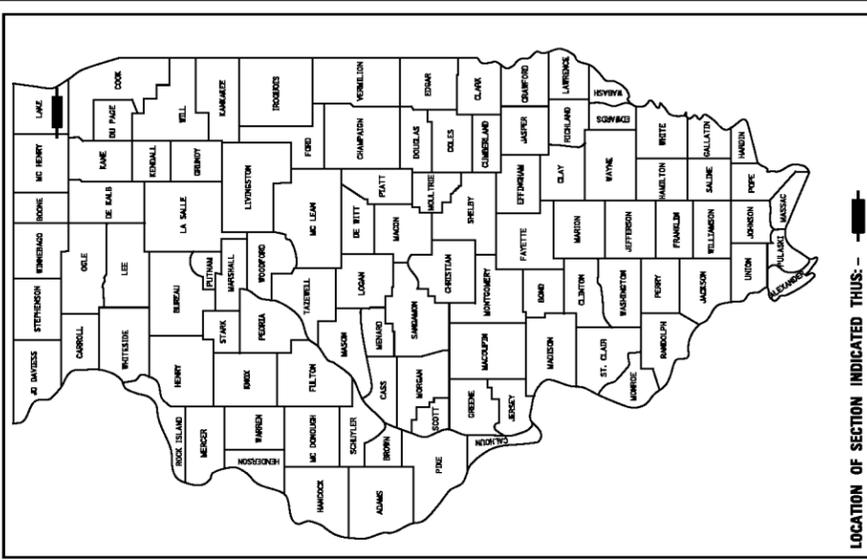
R. 10 E.



PROJECT ENDS
STA. 124 + 69.47
(MOT LIMIT 139 + 92.00)

PROJECT BEGINS
STA. 104 + 75.00
(MOT LIMIT 98 + 79.00)

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
187	11-00121-11-BR	LAKE	481
FED. ROAD DIST. NO.	ILLINOIS CONTRACT NO.		1



LOCATION OF SECTION INDICATED THIS: —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED _____ 20 _____
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

ENGINEER OF DESIGN AND ENVIRONMENT

DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

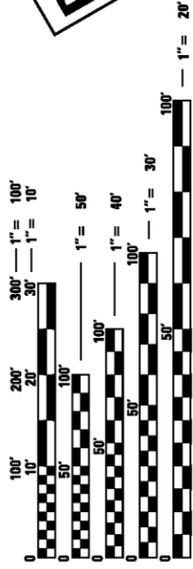
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**FAU 187 (WASHINGTON STREET)
HARYAN WAY TO LAKE STREET
ROADWAY RECONSTRUCTION
AND GRADE SEPARATION**

**PROJECT NO.: # CMM-9003(923)
JOB # C-91-181-12
SECTION # 11-00121-11-BR
LAKE COUNTY**

VOLUME 2

PRE-FINAL 95%



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J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123 OR 811

**PLANS PREPARED BY:
PATRICK ENGINEERING, INC.**

CONTRACT NO.



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NO. 062-062776
EXP. DATE: 1/30/15
APPLY TO DRAWINGS:
1-17-21-60-338-481



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FOR INDEX OF SHEETS, SEE SHEET NO.2

HIGHWAY CLASSIFICATION

PRINCIPAL ARTERIAL

WASHINGTON STREET TRAFFIC DATA

2009 ADT = 16,300

2030 ADT = 18,000

POSTED SPEED = 40 MPH

DESIGN SPEED = 45 MPH

PROJECT DESCRIPTION

THE PROPOSED IMPROVEMENT CONSISTS OF THE WIDENING AND RECONSTRUCTION OF WASHINGTON STREET FROM HARYAN WAY TO LAKE STREET INCLUDING A GRADE SEPARATION AT CN RAILROAD, A NEW STORM SEWER SYSTEM AND PEDESTRIAN ACCOMMODATIONS.

PROJECT LOCATED IN VILLAGE OF GRAYSLAKE

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

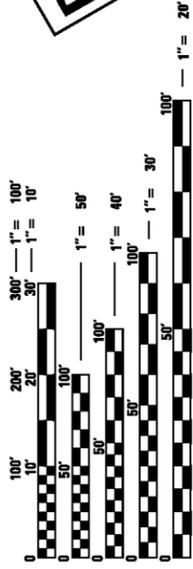
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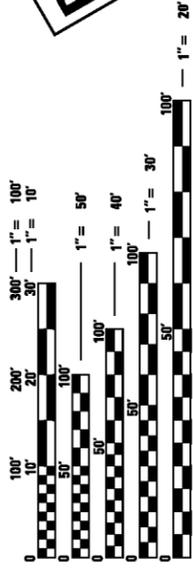
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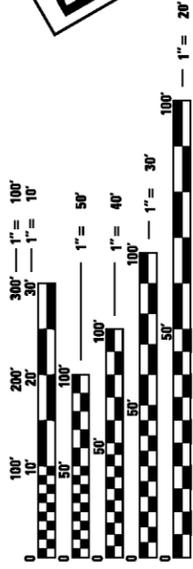
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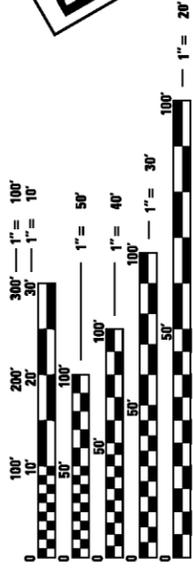
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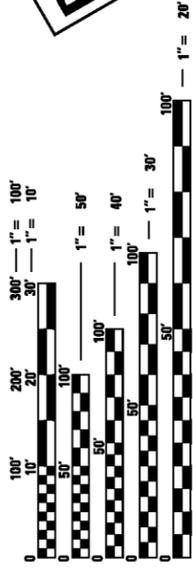
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EXHIBIT C

WCL'S BRIDGE DESIGN SPECIFICATIONS



GUIDELINES FOR DESIGN OF RAILWAY STRUCTURES

REVISION JANUARY 2006

**OFFICE OF CHIEF ENGINEER
CANADIAN NATIONAL RAILWAY
Edmonton, Alberta**

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Part 4	Design Guidelines for Bearings	2
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GENERAL GUIDELINES FOR RAILWAY BRIDGES

PART 1
REVISION JANUARY 2006

**OFFICE OF CHIEF ENGINEER
CANADIAN NATIONAL RAILWAY
Edmonton, Alberta**

PART 1 - GENERAL GUIDELINES FOR RAILWAY BRIDGES

PURPOSE AND SCOPE

The purpose of these guidelines is to modify and supplement the applicable sections of the American Railway and Maintenance Association Manual for Railway Engineering and to present CN's design guidelines, standard requirements and general details for railway bridges.

1. DESIGN DRAWINGS

- .1 Standard size of drawings is 24 in x 36 in (610 mm x 915 mm) with CN Title Block.
- .2 The complete set of design drawings shall be detailed with all relevant information necessary to complete construction, such as material specifications and work procedures.
- .3 All drawings shall be electronically signed and sealed by a Professional Engineer (unless not permitted by jurisdiction) registered in the Province or State where the bridge is located. The complete set of signed and sealed drawings shall be submitted to CN in electronic AUTOCAD "DWG" format.
- .4 Signed and sealed drawings that are to be submitted in hardcopy format are to be an approved photographic reproduction.
- .5 All CN's Capital Bridge Project's drawings shall be reviewed and signed-off by the Senior Engineer.

2. SUBMISSION OF DOCUMENTS UPON COMPLETION OF PROJECT

- .1 Upon the completion of the project, the complete set of as-built drawings, specifications and design calculations must be submitted to the Railway. As-built drawings and design calculations must be signed and sealed by a Professional Engineer.
- .2 The documents shall be emailed or posted on the FTP site to the attention of:
Manager Bridges and Structures
Canadian National Railway
(See Appendix B for contacts and addresses)
&
Canadian National Railway
Head Office
Senior Engineer
(See Appendix B for contact and address)
- .3 As-built design plans and specifications shall be submitted in electronic form. Electronic form for drawings shall be submitted in two different formats - ADOBE ACROBAT "PDF" and AUTOCAD "DWG". The specifications shall be MICROSOFT WORD "DOC" format.

GENERAL GUIDELINES (Cont'd)

- .4 Design calculations shall be submitted to the Senior Engineer.

3. WALKWAYS & INSPECTION CATWALKS

- .1 Walkways shall be provided on both sides of the bridge, unless approved by Senior Engineer.
- .2 Railings on these walkways shall be clear of CN standard clearances (Part 2A and Part 3).
- .3 Refuge bays are required at 150 ft (45.7 m) intervals, staggered on both sides of the bridge. Omission of refuge bays shall be subject to the approval of the Division Engineer.
- .4 Catwalks to facilitate inspection shall be installed inside a steel Deck Plate Girder (D.P.G.) span. Inspection catwalks shall be 2 ft (610 mm) wide and shall be located so as to maximize ease of inspection and access to structural members.
- .5 Grab bars to facilitate inspection shall be provided on steel Deck Plate Girder (D.P.G.) spans.

4. DECK DRAINAGE

- .1 Minimum grade of bridge span over roadways shall be 0.5%.
- .2 All concrete decks shall have minimum transverse crossfall of 1%.
- .3 Drainage pipes are not allowed to discharge onto bridge seats and roadways below.
- .4 Horizontal drainage pipes shall be embedded in the ballast adjacent to the concrete curbs. The drainage pipes shall consist of perforated corrugated metal pipes surrounded with a geotextile filter material. The pipes shall drain to the abutments and be connected to the vertical drainage system behind the abutment walls. See Appendix A - Standard Drawing C2.
- .5 Prefabricated drainage sheets with geotextile filter material shall be placed against the backface of the abutment stem. See Appendix A - Standard Drawing C1.

5. VERTICAL CLEARANCES

- .1 Vertical clearance for vehicular traffic under the railway bridge shall be a minimum of 17 ft 4-1/2 in (5.3 m).

GENERAL GUIDELINES (Cont'd)

.2 For secondary roads or bridge sites with height constraints, a reduction in the vertical clearance may be allowed only with the written approval from the Senior Engineer.

6. TEMPORARY SHORING (Appendix A - Standard Drawings F1, F2, F3)

.1 The temporary shoring shall be designed by the Engineering Consultant or Project Engineer and approved by the Senior Engineer.

.2 Detailed drawings shall be complete with all relevant details, material notes, design loads and construction procedures.

7. STEEL INNER GUARD RAILS AND GUARD TIMBERS (Article 15.1.2.12)

.1 Guardrails or guard timbers must be installed on the following locations:

.1 All bridges that have supporting structure extending above the top of the ties;

.2 All bridges that have the underside supporting structure protruding beyond the deck of the bridge;

.3 All bridges that cross major roadways or commercially navigable waterways;

.4 All bridges longer than 100 ft (30.5 m);

.5 All bridges with curves 2 degrees and over.

.2 For any other situations, the Division Engineer shall determine the requirements for the inner guard rails or guard timbers.

-----END OF GENERAL GUIDELINES FOR RAILWAY BRIDGES-----



DESIGN GUIDELINES FOR STEEL BRIDGES

**PART 2A
REVISION JANUARY 2006**

**OFFICE OF CHIEF ENGINEER
CANADIAN NATIONAL RAILWAY
Edmonton, Alberta**

PART 2A - DESIGN GUIDELINES FOR STEEL BRIDGES

PURPOSE AND SCOPE

These guidelines modify and supplement the applicable sections of the American Railway Engineering and Maintenance Association Manual for Railway Engineering recommendations for Steel Structures Chapter 15, Part 1 and Part 8. The guidelines apply specifically to steel railway bridge spans not exceeding 400 ft (122 m) in length. For spans longer than 400 ft (122 m), these guidelines are still applicable but applied with special provisions as specified by the Railway.

CHAPTER 15 - PART 1

1. GENERAL REQUIREMENTS (Section 1.2)

.1 MATERIALS (Article 1.2.1)

.1 Structural Steel

Members	Standards	
	CSA	ASTM
Fracture Critical Members - Main / Beam Girders - Truss Members - Floor Beams Sections - Stringers Sections -Connections of FCM members	CAN3-G40.21 350AT or 350WT Category 3	A709 Grade 50 or 50W Zone 3 or as specified by Engineer
Non-Fracture Critical Members - End Bearing Stiffeners	CAN3-G40.21 350AT or 350WT Category 3	A709 Grade 50 or 50W Zone 3 or as specified by Engineer
Non-Fracture Critical Members / Secondary Members - Bracing - Struts - Stiffeners (Intermediate and Horizontal) - Deck Plates - Knee Braces - Walkway Brackets - Columns / Posts - Jacking Beams (if used solely for jacking and not part of the floor system) - Gussel Plates - Deck and Deck Joint Plates - Diaphragms	CAN3-G40.21 350A or 350W	A588/A709 A572/A36 Grade 50 or 50W

STEEL DESIGN (Cont'd)

Galvanized Secondary Members		
- Handrails – structural sections	CAN3-G40.21 300W	A572 / A36 Grade 50
- Bearing Plates		
- Fiber Optics Brackets		
- Handrails – pipe sections	CAN3-G40.21 350W Class C	ASTM A500 Grade C

In general and unless approved by the Engineer, the type of steel specified shall be in accordance with the applicable standard where the bridge is located (i.e. bridges in Canada to CSA-CAN3-G40.21, bridges in US to ASTM)

- .2 High Strength Steels
High strength steels conforming to ASTM A572 – Grades 60 and 65, ASTM A709 – Grades HPS 70W, 100 and 100W and ASTM 852 shall not be used for welded built-up main members of bridges without prior approval of the Senior Engineer.
- .3 Fracture Critical Members (FCM)
All Fracture Critical members shall be designated on the drawing plans as “FCM”. Beam Span’s girders are considered as FCM.
- .4 Members Other than Fracture Critical
All main load carrying members subject to tensile stresses, other than fracture critical members, subject to meeting notch toughness requirements shall be designated on the plans as “NTR”
- .5 Bronze Castings and Rolled Copper-Alloy Bearing and Expansion Plates
Self-lubricating bronze bearing plates shall conform to the requirements of current ASTM specifications, designated B22, Alloy C91300, C91100 or UNS C86300. Alloy C91100 may be used only if the bearing pressure is less than 1,600 psi (11.0 MPa). Self-lubricating rolled copper-alloy bearing plates shall conform to the requirements of current ASTM specifications designated B100, Alloy C51000 or C51100. Material conforming to specification B100 may not be used for plates more than ¾ inches (20 mm) thick or 18 inches (455 mm) wide. To increase service life, low bearing pressures are desirable and the bearing areas should not be reduced to bring the pressures up to the allowable. The plates shall be provided with trepanned or drilled recesses (not grooves), which shall be filled with a lubricating binder. Shellac, tars and asphalts, petroleum solvents or other non-lubricating binders shall not be used. The lubricating area shall comprise approximately 25% of the total area. The coefficient of friction shall not exceed 0.1 at a load of 2,000 psi (13.8 MPa).

STEEL DESIGN (Cont'd)

.2 TYPES OF BRIDGES (Article 1.2.3)

The preferred types of bridge shall be in accordance with Article 1.2.3 except as modified below:

- .1 All spans shall be ballasted simple span bridges consisting of Beam Spans (BS), Deck Plate Girder Spans (DPG) or Through Plate Girder Spans (TPG).
- .2 Skewed, continuous, or cantilevered spans will not be permitted without written approval from the Senior Engineer.
- .3 Pin connected trusses will not be permitted.
- .4 Through Truss (TT) or Deck Truss (DT) will be permitted only with the approval of the Senior Engineer.
- .5 Pony Truss designs are not permitted.

.3 SPACING OF TRUSSES, GIRDERS AND STRINGERS (Article 1.2.4)

The distance between centers of a two-girder span shall not be less than 7 ft (2.135 m).

.4 DEFLECTION (Article 1.2.5)

The computed live load deflections shall not exceed $L/750$ unless otherwise approved by the Senior Engineer.

.5 CLEARANCES (Article 1.2.6)

In general, new construction in Canada and US, the bridge span layout shall meet AREMA Clearance Diagram (see Drg. K1U-10.1 in Appendix A) with the exception of bridges in the State of Wisconsin where the minimum vertical clearance is 24 ft (7.315 m).

For retrofit construction or branchline locations, a reduction in clearances may be allowed only with the written approval of the Senior Engineer.

2. LOADS, FORCES AND STRESSES (Section 1.3)

- .1 Steel bridges shall be designed for all loads stated in Chapter 15 of AREMA except as modified herein.

.1 DEAD LOAD (Article 1.3.2)

The dead load on ballast bridges shall be minimum 16 in (405 mm) of ballast to top of tie plus 12 in (305 mm) of ballast for future track surfacing. For track on a curve, the minimum ballast to the top of tie shall be 16 in (405 mm) at the low end of crossties.

.2 LIVE LOAD (Article 1.3.3)

Cooper E90 or Alternate Live Load as shown in Figure 15-1-3 of AREMA manual; which ever produces the greater stresses.

STEEL DESIGN (Cont'd)

- .3 IMPACT LOAD (Article 1.3.5)
Percentage of live load for rolling equipment without hammer blow.
- 3. BASIC ALLOWABLE STRESSES (Section 1.4)
 - .1 High Strength Bolts (Article 1.4.1)
 - .1 Allowable shear in ASTM A 325 bolts shall be 17 ksi (117.2 MPa) except at connections where the bolts may be subject to moment tension, allowable shear is limited to 13.5 ksi (93.0 MPa).
 - .2 The use of ASTM A490 bolts is not permitted.
 - .2 Bearing Pressure on Concrete (Article 1.4.4)
 - .1 When strength of existing concrete is unknown or shows signs of deterioration, allowable bearing pressure shall be limited to 700 psi (4.8 MPa).
- 4. MINIMUM DIMENSIONS OF MATERIAL
 - .1 Metal (Article 1.5.4)
Minimum thickness except for fillers shall not be less than 3/8 in (10 mm).
 - .2 High Strength Bolts (Article 1.9.5)
Minimum bolt diameter shall be 7/8 in (22 mm).
- 5. GENERAL RULES - ACCESSIBILITY OF PARTS (Article 1.5.5)
 - .1 In addition, rolled or built-up sections of beam spans shall preferably have a mean clearance between flanges of 14 in (355 mm).
- 6. MEMBERS STRESSED PRIMARILY IN BENDING (Section 1.7)
 - .1 FLANGE SECTIONS (Article 1.7.2)
 - .1 Add the following to Article 1.7.2.1.
Cover plates of girders with bolted flanges shall be equal in thickness, or shall reduce gradually in thickness on the outer face. No plate shall be thicker than the flange angles. The gross area of cover plates in any flange shall not exceed 70% of the total flange, consisting of cover plates, flange angles directly connected to cover plates, and side plates. The area of any flange element (flange angle, cover plate or side plate) shall not exceed 50% of the total flange.
 - .2 Article 1.7.2.2.b
Welding of cover plates to top and bottom flanges of girder is not allowed.

STEEL DESIGN (Cont'd)

.2 THICKNESS OF WEB PLATE (Article 1.7.3)

Minimum web thickness for Beam Spans, DPGs and TPGs shall not be less than 1/2 in (13 mm).

.3 FLANGE-TO-WEB CONNECTION OF PLATE GIRDERS (Article 1.7.4)

The flange plates of all welded plate girders shall be connected to the web plate with continuous fillet welds except for open deck plate girders whereby the connection shall be continuous, full penetration groove welds.

.4 MAIN GIRDER FLANGE AND WEB SPLICES (Article 1.7.5 and 1.7.6)

.1 Splices shall be avoided whenever possible. Designer and/or steel supplier must have prior written approval from the Senior Engineer to use splices. For spans longer than 60 ft (18.3 m), locations of web and flange splices shall be shown on the design drawings.

.2 The top and bottom flange splice locations shall be staggered in position and shall be shown on the design drawings. Splices shall preferably be located at between 0.2L - 0.3L of span.

.3 The web splice locations shall be staggered in position between left and right girders. Splices shall preferably be located at between 0.35L - 0.45L of span.

.4 The distance apart between flanges and web splices shall be a minimum 0.1L of span.

.5 Bolted splices in the webs of plate girders shall be designed for the full strength of the web in both shear and bending.

.5 STIFFENERS AT POINTS OF BEARINGS (Article 1.7.7)

.1 Bearing stiffeners shall be 1 in (25 mm) minimum thickness and shall be connected to the web of the girders with fillet welds and connected to the flanges with full penetration groove welds.

.2 Top and bottom ends of bearing stiffeners shall be welded to the outstanding portion of the flanges with full penetration, double bevel groove weld.

.6 WEB PLATE STIFFENERS (Article 1.7.8)

.1 Intermediate web stiffeners shall be bolted to the plate girder or beam webs with high strength bolts. Welding of the stiffeners is not permitted except at the top end of the stiffener connection to the top flange of the girder.

STEEL DESIGN (Cont'd)

- .2 Top ends of intermediate stiffeners shall be welded with fillet weld while the bottom shall be milled to bear.
7. FLOOR MEMBERS AND FLOORBEAM HANGERS (Section 1.8)
- .1 END FLOORBEAMS (Article 1.8.1)
End floor beams shall be bolted to the end bearing stiffeners.
 - .2 END CONNECTIONS OF FLOOR MEMBERS (Article 1.8.3)
Intermediate floor beams shall be bolted to the web of the girder or stiffener with double connection angles.
8. WELDED CONSTRUCTION (Section 1.10)
- .1 All welding must be done with shielded metal-arc or submerged arc processes. All flange-to-web "T-Joint" welds and shop welded splices in flanges or webs shall be by approved continuous automatic feed and travel submerged arc weld.
 - .2 Main members subjected to tensile stress shall be welded by the submerged arc process.
 - .3 Electro-slag, gas metal-arc and electro-gas welding are not permitted.
 - .4 Welded attachments to main members will not be permitted except at non-critical locations. Designer must have prior written approval from the Senior Engineer to use welded attachments.
 - .5 All welding shall be carried out by Operators qualified under the provisions of CSA W47.1 Division 1 or AWS D1.5.
9. BRACING (Section 1.11)
- .1 BRACING OF TOP FLANGES OF THROUGH GIRDERS (Article 1.11.1)
Floor beam brackets may be made up of welded plates or cut from rolled sections and shall be bolted to the girder stiffeners and to the floor beams.
 - .2 LATERAL BRACING (Article 1.11.2)
For ballasted deck plate girder and beam spans having four (4) or more girders/beams per track, top and bottom lateral bracing will not be required except for spans more than 70 ft (21.35 m) long, spans on curves greater than 2 degrees or unless otherwise instructed by Senior Engineer.
 - .3 CROSS FRAMES AND DIAPHRAGMS FOR DECK SPANS (Article 1.11.4)
 - .1 Cross frames shall be spaced not more than 12 feet (3.66 m) apart.
 - .2 Revise sections (f) and (g) of Article 1.11.4 by deleting the reference to diaphragms in the first sentence of each.