

RESOLUTION NO. 24 - 2

**A RESOLUTION OF THE NAR PROJECT TEAM APPROVING CERTAIN
AGREEMENTS PERTAINING TO THE NORTH AURORA ROAD
ROAD WIDENING PROJECT**

[Wisconsin Central Ltd.]

Recitals

1. North Aurora Road is an east-west minor arterial roadway which is, at different points, under the jurisdiction of the City of Naperville, the City of Aurora, and Naperville Township.
2. For several years the City of Naperville, the City of Aurora, and Naperville Township (together referenced herein as the “Road Authority”) have been working together to widen and reconstruct North Aurora Road from Pennsbury Lane to Frontenac Road which is located, at different points, within the City of Naperville, the City of Aurora, and Naperville Township, in southwest DuPage County, Illinois (the “Project”). The entities which comprise the Road Authority have entered into an “Intergovernmental Agreement between the City of Naperville, the City of Aurora, and Naperville Township to Replace and Widen the Existing Highway Underpass on North Aurora Road at the Elgin, Joliet, & Eastern Railway Company’s Railroad Crossing” for that purpose, as amended from time to time (the “**Intergovernmental Agreement**”). The City of Naperville is the Lead Local Agency for the Project.
3. The goals of the Project include: (1) widening North Aurora Road roadway and roadway appurtenances to accommodate two 12-foot through lanes in each direction with an 18-foot grassed median and outside curb and gutter and associated lighting; (2) an 8-foot multi-use path on the south side of the roadway; (3) a 5-foot sidewalk on the north side of the roadway; (4) stormwater drainage and detention improvements and a pump station; (5) three retaining walls (Northeast, Northwest, and Southwest retaining walls); (6) underpass roadway lighting and associated electrical connections and appurtenances attached to the WCL railway bridge; (7) electric, storm sewer, and water utilities; and (8) communication conduits.
4. In order to accomplish the goals of the Project it will be necessary for the members of the Road Authority to enter into agreements (“**Agreements**”) necessary to further the Project, including but not limited to agreements to demolish and reconstruct an existing railroad bridge owned by Wisconsin Central Ltd and used by Wisconsin Central Ltd and BNSF; to obtain certain easements; to relocate certain ComEd utilities which, at their current locations, would obstruct the Project; and to relocate or modify certain pipelines which, at their current locations, would obstruct the Project.

5. Pursuant to the Fifth Amendment to the Intergovernmental Agreement, and so that the Project can proceed on a timely and efficient basis, a North Aurora Road project team (the “**NAR Project Team**”), comprised representatives of each member of the Road Authority, was created and delegated limited authority, including the responsibility to review and approve future Project Agreements (as reviewed and approved by their respective legal counsel (“Legal Counsel”)), to be executed by the Naperville Township Supervisor, the Mayor of the City of Aurora, and the City Manager of the City of Naperville.
6. The NAR Project Team, and Legal Counsel for each member of the Road Authority, have reviewed and approved the following agreements with Wisconsin Central Ltd. (the “**WCL Agreements**”): a Construction and Management Agreement, a Temporary Easement Agreement, and a Permanent Easement Agreement.

WHEREFORE, the NAR Project Team, in exercise of the limited delegation of authority described and referenced herein, resolves as follows:

Section 1: The forgoing recitals are incorporated in this Section 1 as though fully set forth herein.

Section 2: The NAR Project Team hereby approves the WCL Agreements described herein and will submit them for execution by the Naperville Township Supervisor, the Mayor of the City of Aurora, and the City Manager of the City of Naperville.

Section 3: If any section, paragraph, or provision of this Resolution is held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph, or provision, shall not affect any of the remaining provisions of this Resolution. Technical and minor substantive revisions to the Agreements described herein, as deemed acceptable to Legal Counsel for the Road Authority may be made to this Resolution and to the Agreements referenced herein prior to execution.

Section 4. This Resolution shall be in full force and effect upon its passage and approval.

ADOPTED this _____ day of _____, 2024.

AYES:

NAYS:

ABSENT:

APPROVED this _____ day of _____, 2024.

/SIGNATURES ON FOLLOWING PAGE/

NAR Project Team/City of Aurora

Tim Weidner

Brian Witkowski

NAR Project Team/City of Naperville

William Novack

Andy Hynes

Matthew Calpin

NAR Project Team/Naperville Township

Eddie Bedford

Paul Santucci

**CONSTRUCTION AND MAINTENANCE AGREEMENT
FOR RECONSTRUCTION OF GRADE SEPARATION
WISCONSIN CENTRAL LTD.**

Route: 1509 (North Aurora)
Section: 06-00133-00-BR
County: DuPage
Federal Project Number: XUXZ(984)

Agreement No.: UT _____
IDOT Contract No: 61G79
Job No.: C-91-424-19

THIS CONSTRUCTION AND MAINTENANCE AGREEMENT FOR RECONSTRUCTION OF GRADE SEPARATION – WISCONSIN CENTRAL LTD. (“**Agreement**”) is entered into by and between the City of Naperville, the City of Aurora, and Naperville Township, jointly and severally (cumulatively referenced herein as the “**Road Authority**”) and Wisconsin Central Ltd., a Delaware corporation (“**WCL**”) authorized to transact business in the State of Illinois. WCL and the Road Authority are hereinafter sometimes individually referred to as a “**Party**” and jointly referred to as the “**Parties**”.

RECITALS

A. North Aurora Road (FAU 1509), an east-west minor arterial roadway is (at different points) under the jurisdiction of the City of Naperville, the City of Aurora, and Naperville Township (the **Road Authority**). The roadway under the railroad overpass is currently a two-lane roadway with a 12-foot wide through lane in each direction.

B. The project (“**Project**”) is generally described as the widening and reconstruction of North Aurora Road from Pennsbury Lane to Frontenac Road which is located, at different points, within the City of Naperville, the City of Aurora, and Naperville Township, in southwest DuPage County, Illinois as generally depicted on Exhibit A attached hereto. The Project is referenced as County Section Number 06-00133-00-BR.

C. WCL’s two railroad tracks are carried over the North Aurora Road underpass on an existing two-way through girder bridge which is supported on concrete gravity abutment walls with footing foundations (the “**Existing Bridge**”). Each bay carries one track and shares a common center girder. The Existing Bridge is owned and maintained by WCL.

D. WCL’s Existing Bridge, built in approximately 1913, is in need of replacement due to aging infrastructure and also due to substandard vertical clearance.

E. The Project includes, but is not limited to:

(E1) Project Roadway Improvements. Construction and installation of certain North Aurora roadway improvements include, but are not limited to, the following which shall be referenced herein as the “**Roadway Project Improvements**”: (1) widening North Aurora Road roadway and roadway appurtenances to accommodate two 12-foot through lanes in each direction with an 18-foot grassed median and

outside curb and gutter and associated lighting; (2) an 8-foot multi-use path on the south side of the roadway; (3) a 5-foot sidewalk on the north side of the roadway; (4) stormwater drainage and detention improvements and a pump station; (5) three retaining walls (Northeast, Northwest, and Southwest retaining walls); (6) underpass roadway lighting and associated electrical connections and appurtenances attached to the WCL railway bridge; (7) electric, storm sewer, and water utilities; and (8) communication conduits; and

(E2) Bridge Project Improvements. The Bridge Project Improvements, as defined herein, generally consist of:

- (1) Removal of the Existing Bridge;
- (2) Construction and removal of a temporary shoo-fly structure with related embankment, sub-ballast, and temporary retaining wall (together referenced herein as the “**Shoo-Fly**”); and
- (3) Replacement of the Existing Bridge with two single span track bridges, including but not limited to the bridge superstructure and substructure, the Northwest, and Southwest wing walls (approximately 21’ and 22’ in length respectively) and their foundations, the Southeast retaining wall (approximately 32’ in length) and its foundation, embankment, sub-ballast, ballast, rails, and ties, and other related railroad facilities (together referenced herein as “**Replacement Bridges**”).

Work associated with removal of the Existing Bridge, construction and removal of the Shoo-Fly, and construction of the Replacement Bridges are together referenced herein as the “**Bridge Project Improvements**”.

F. The bid letting date for the Project, which is subject to change depending upon Project readiness and availability of Project funding, is currently scheduled for November 8, 2024. The Illinois Department of Transportation (“**IDOT**”) will let the Project on behalf of the Road Authority to a general contractor and by said contract (“**Contract**”) the Contractor may hire subcontractors to perform aspects of the Project, including but not limited to the Road Authority Related Work described herein. The general contractor and general contractor’s subcontractors shall together hereinafter be referenced as the “**Contractor**”. The Road Authority will include WCL requirements set forth in this Agreement in the Design Plans, as Design Plans are defined herein. The Design Plans will be submitted to IDOT for inclusion in any bidding for a Contractor for the Project which includes Road Authority Related Work. WCL concurrence in the IDOT award of said Contract is not required, but the Road Authority shall notify WCL as to the identity of said Contractor.

G. The portion of the Bridge Project Improvements to be performed by the Contractor as generally described in Section 3 hereof is referenced herein as “**Road Authority Related Work**”. The Road Authority Related Work will be completed in accord with Design Plans described and referenced in Section 2(a) hereof and attached hereto as Exhibit B attached, which Design Plans may be modified upon written approval of WCL which approval shall not be unreasonably withheld, delayed, or conditioned.

H. The portion of the Bridge Project Improvements to be performed by WCL as set forth in Section 4 hereof shall be performed in accord with WCL Related Work Plans, if any, referenced in Section 5 hereof, and shall be referenced herein as “**WCL Related Work**”.

I. Any work which the Parties agree is necessary to be performed for the Bridge Project Improvements which is not included in the WCL Related Work (as WCL Related Work is generally described in Section 4 and in the WCL “**Force Account**” set forth on Exhibit E) shall be the responsibility of the Road Authority and shall be included in the definition of Road Authority Related Work.

J. The Road Authority has identified a portion of real property owned by WCL for which a grant of a permanent easement will be needed for the Bridge Project Improvements. The parcel needed for said permanent easement is depicted on Exhibit C and legally described on Exhibit D.

K. The Road Authority has identified portions of WCL Property for which a temporary easement will be needed for the Bridge Project Improvements. The parcels needed for said temporary easement are also depicted on Exhibit C and legally described on Exhibit D.

L. The permanent easement property referenced in Recital J above and the temporary easement property referenced in Recital K above shall hereinafter be referenced together as the “**WCL Property**”.

M. WCL is amenable to the Bridge Project Improvements, to providing the WCL Related Work as defined herein, to allowing the Road Authority Related Work, and to otherwise cooperate with the Road Authority as provided herein subject to the terms and conditions stated herein.

N. In entering into this Agreement, the City of Naperville, the City of Aurora, and Naperville Township are acting pursuant to their authority under the laws of the State of Illinois; the City of Naperville and the City of Aurora are also acting under their home rule authority under the Constitution and laws of the State of Illinois.

O. In performing the work under this Agreement, the Parties shall comply with all applicable laws, including but not limited to federal and state statutes and regulations. WCL Related Work herein contemplated shall be subject to FHWA requirements and applicable Federal and State laws, rules, regulations, orders and approvals pertaining to all Agreements, plans, estimates, specifications, award of contract, acceptance of work and procedure in general as well as all those pertaining to nondiscrimination equal, employment opportunity. WCL shall meet the Buy America requirements specified in 23 CFR 635.410. Upon Completion of Construction, WCL shall sign and return with its final invoice the Certification of Compliance with Buy America attached hereto as Exhibit L.

All costs and expenses for which reimbursement is sought by WCL under this Agreement will comply with the terms and provisions of the Title 23 U.S. Code, Title 23 Code of Federal Regulations, and the Federal-Aid Policy Guide, U.S. Department of Transportation, as amended

from time to time, which manual is hereby incorporated into and made a part of this Agreement by reference.

It is the policy of the U.S. Department of Transportation that disadvantaged business enterprises, as defined in 49 C.F.R. Part 26, shall have the maximum opportunity to participate in the performance of agreements financed in whole or in part with federal funds. Consequently, the disadvantaged business enterprises requirements of 49 C.F.R. §26 apply to this Agreement. WCL agrees to take all necessary and reasonable steps to ensure that disadvantaged business enterprises, as defined in 49 C.F.R. §26, have the maximum opportunity to participate in the performance of the Agreement.

WCL and any WCL contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Agreement. WCL shall carry out applicable requirements of 49 C.F.R. Part 26 relative to WCL's obligations contemplated herein.

This Agreement is subject to all terms contained in the "General Provisions for Utility Adjustment Agreements" attached hereto as **Exhibit M** and made a part hereof.

NOW THEREFORE, for and in consideration of the mutual covenants and agreements set forth herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the Parties, the Road Authority and WCL agree as follows:

1. Recitals Incorporated.

The foregoing Recitals are incorporated into and made a part of this Agreement as if fully set forth in this Section 1.

2. Construction.

2(a) Plan Approval.

The Road Authority has delivered to WCL, and WCL has approved, plans and specifications for the Road Authority Related Work set forth in said design plans and specifications ("**Design Plans**") dated May 8, 2024 and attached hereto as **Exhibit B** which Design Plans may be revised subject to written approval by WCL, which approval shall not be unreasonably withheld, delayed, or conditioned.

2(b) Coordination of Activities.

(i) Prior to commencement of any Road Authority Related Work, a pre-construction meeting shall be held among the representatives of the Road Authority, the Contractor, IDOT, WCL, and the Road Authority's contractor(s) for the purpose of coordinating the Road Authority Related Work and the WCL Related Work to be performed hereunder at which time a schedule for the performance of the such work shall be agreed upon and adopted by IDOT and the Contractor.

(ii) The Road Authority Related Work and the WCL Related Work, including but not limited to procurement of necessary materials, shall commence upon written notice to proceed ("**Notice to Proceed**") issued by the Road Authority and submitted to WCL.

Until said Notice to Proceed is issued, WCL shall not perform any WCL Related Work hereunder or order or otherwise obtain any materials for which it expects payment or reimbursement hereunder. WCL Related Work shall be completed within eighteen (18) months of the Notice to Proceed or as otherwise agreed by the parties in writing or provided in an ICC Order.

(iii) The Parties agree to act reasonably to coordinate their respective work. The Road Authority 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 rail service and maintenance of WCL's railroad facilities. Under no circumstances shall the Contractor cause any train delays or interference with WCL operations not authorized in advance and in writing by WCL in the performance of the Road Authority Related Work, and the Contractor shall not unduly delay or interfere with the performance of WCL Related Work and shall take all steps reasonably necessary or requested by WCL to facilitate WCL's Related Work.

(iv) WCL agrees to cooperate with the Road Authority and the Contractor in the performance of the Road Authority Related Work. WCL shall not unduly delay or interfere with the Contractor in performing the Road Authority Related Work and shall take all steps reasonably necessary or requested by the Road Authority or the Contractor to facilitate the Road Authority Related Work.

(v) The Contractor shall remove all machinery, surplus materials, falsework, rubbish and temporary buildings from any property owned by WCL and any WCL rights-of-way upon completion of the Road Authority Related Work and to leave real property owned by WCL and WCL rights-of-way in a neat and clean condition that they were in prior to the Road Authority Related Work.

(vi) Upon Completion of Construction of the Bridge Project Improvements the Road Authority and WCL shall schedule and thereafter conduct a final walk-through to review all aspects of the Bridge Project Improvements and assure that all work has been performed in conformance with the terms and conditions of this Agreement, as may be amended in writing from time to time. Completion of Construction is defined in Section 2(c)(iii) hereof.

(vii) Within six (6) months of Completion of Construction as defined in Section 2(c)(iii) hereof, the Road Authority shall provide WCL, at the Road Authority's sole cost and expense, a set of "as-built" drawings of the Road Authority Related Work.

2(c) **Construction.**

(i) The Road Authority Related Work shall be completed in a good and workmanlike manner, in accordance with all applicable law, and in accordance with the Design Plans, all subject to Force Majeure as set forth in Section 10 of this Agreement. WCL agrees to complete the WCL Related Work in a good and workmanlike manner, in accordance with all applicable law, and in accordance with the approved WCL Related Work Plan as set forth in Section 5 hereof (if any), all subject to Force Majeure as set forth in Section 10 of this Agreement. All Road Authority Related Work and all WCL Related Work shall be subject to all applicable laws, rules, regulations, orders and approvals pertaining to this Agreement, including but not

limited to federal, state, and local laws, in compliance with agreed upon plans, estimates, specifications, and acceptance of work.

(ii) Pursuant to 820 ILCS 130/1 et seq., if any WCL Related Work is performed by other than WCL forces, the provisions of the Illinois Prevailing Wage Act, "an act regulating wages of laborers, mechanics and other workers employed in public works by the state, county, city or any public body or any political subdivision or by anyone under contract for public works" shall apply. The Act requires contractors and subcontractors to pay laborers, workers and mechanics performing services on public works projects no less than the "prevailing rate of wages" (hourly cash wages plus fringe benefits) in the county where the work is performed. Pursuant to 820 ILCS 130/4, WCL is hereby notified that the prevailing rate of wages are revised by the Department of Labor and are available on the Department's official website.

(iii) The Road Authority shall give notice of completion of construction ("**Completion of Construction**") of the Bridge Project Improvements and shall schedule the walk-through described in Section 2(b)(vi) hereof. The Bridge Project Improvements shall be deemed to be complete within thirty (30) days of receipt by WCL of said notice of Completion of Construction unless, within said thirty (30) day timeframe, WCL gives written notice to the Road Authority of any outstanding Road Authority Related Work required to be completed. Such notice from WCL, if any, shall describe with specificity what outstanding work needs to be completed by the Road Authority. If such notice of outstanding work is timely given to the Road Authority by WCL, Completion of Construction shall be deemed to have occurred within thirty (30) days of receipt by WCL of notice from the Road Authority that the outstanding work identified by WCL has been completed.

2(d) **Permits, approvals, utilities.** The Road Authority and/or the Contractor shall be solely responsible for obtaining all permits, approvals, and utility relocations legally required for the Road Authority Related Work, provided, however, that WCL shall cooperate with the Road Authority in its efforts to obtain such permits or utility relocations and the Road Authority shall reimburse or pay WCL for any cost incurred by WCL in assisting with such permit, approval or utility relocation. Such cooperation shall include ordering utilities and other non-railroad entities using or occupying the property owned by WCL to relocate their facilities from such property at their sole cost to the extent necessary for the Project and 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 Road Authority Related Work and such relocations do not damage or otherwise adversely affect WCL.

2(e) **Funding.**

(i) **Cost Allocation.** Subject to the terms of this Agreement the cost of the Road Authority Related Work and the cost of WCL Related Work shall be entirely borne by the Road Authority and no cost or expense with respect thereto shall be borne by WCL. Attached hereto as **Exhibit E** is WCL's Force Account Estimate setting forth WCL's currently projected costs and expenses for WCL Related Work. WCL shall promptly notify the City of Naperville if it anticipates exceeding the Force Account estimates set forth on **Exhibit E**.

(ii) Reimbursement of WCL. The Road Authority shall reimburse WCL for all 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 as Exhibit F together with paid invoices, bills, or vouchers for WCL's Related Work, for the Force Account work set forth on Exhibit E (collectively “**Documents**”), which Documents shall set forth in detail the Direct Costs. Each payment to WCL shall be made within sixty (60) days of presentation of the complete Documents for such payment. Direct Costs shall include any costs related to review and approval of any additional plans, specifications, or work plans. Direct Costs shall also include the cost of any flaggers as deemed necessary by WCL in accordance with its customary and applicable regulations and policies (“**WCL Regulations and Policies**”), necessitated by the Bridge Project Improvements. WCL shall submit all Draw Request Forms to the attention of the City Engineer of the City of Naperville. WCL’s final Draw Request Form for reimbursement shall be received by the City of Naperville no later than one year after Completion of Construction. Any Draw Request Form submitted after that date shall not be eligible for reimbursement. The Road Authority's obligation to reimburse WCL for Direct Costs as provided herein shall survive the termination of this Agreement, but only as to those Direct Costs timely submitted and only as to those Direct Costs incurred prior to the Road Authority’s delivery of a Notice of Termination to WCL as set forth in Section 12 hereof, or as to Direct Costs incurred prior to an agreed upon termination of this Agreement as set forth in Section 12 hereof. The Road Authority will reimburse WCL as provided herein only for such items of work and expense, and in such amounts and forms as are proper and eligible for payment.

(iii) Audit. At any time upon reasonable notice, the Road Authority or the Illinois Department of Transportation 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, the Road Authority 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 the Road Authority. WCL shall not be bound by the result of the audit, and WCL reserves its right to contest the results of any audit. WCL agrees to maintain copies of all required documentation concerning Direct Costs for a period of a minimum 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.

3. Road Authority Related Work to be Performed by or on Behalf of the Road Authority for the Bridge Project Improvements.

3(a) The Road Authority shall provide or cause to be provided, in accordance with the Design Plans attached as Exhibit B, all engineering, inspection, work, supplies, materials, labor and equipment required to perform and complete the following:

- (i) Preparation of Design Plans relating to the Road Authority Related Work as described in Recital G;

- (ii) All property acquisition required for the Bridge Project Improvements, permitting, and grading for all railroad track construction;
- (iii) Demolition of the Existing Bridge;
- (iv) Construction of the following temporary improvements: the Shoo-Fly; and
- (v) Construction of the following permanent improvements: the Replacement Bridges as set forth in the Road Authority Related Work.

3(b) The Design Plans shall require that temporary or permanent minimum clearances, with reference to WCL's tracks, or necessary falsework, bracing or forms, as required for the Bridge Project Improvements, shall be not less than the existing vertical and lateral clearances unless otherwise agreed to in writing by WCL.

3(c) Except in cases of Emergency, as described in Section 7 hereof, the Contractor shall provide not less than ten business days' notice of the need for flaggers and WCL shall schedule them accordingly. For the purposes of this Agreement, a "Business Day" is defined as any day shown on the calendar that is not a federal holiday.

3(d) Nothing in this Agreement shall be construed to allow the Road Authority or the Contractor to allow a third party to install or operate any utility or facility on any portion of WCL Property without WCL's express written approval, which may be withheld for any reason or no reason.

3(e) WCL's Special Provisions governing contractors attached to and made a part of this Agreement as **Exhibit G** must be adhered to any time representatives of the Road Authority or Contractor are on any WCL Property for the purposes set forth in this Agreement.

4. WCL Related Work to be Performed by or on Behalf of WCL.

4(a) As part of the WCL Related Work, WCL shall supply or cause to be supplied, in accordance with approved plans and specifications, all engineering, inspection, work, supplies, materials, labor, and equipment set forth in the detailed estimate (which estimate shall include all anticipated Direct Costs) provided in the WCL Force Account attached hereto as **Exhibit E** and the WCL Related Work Plans (as provided in Section 5 hereof), if any. Any additional work to be performed by WCL in addition to that listed in the Force Account shall be agreed upon by the Parties in writing and added to the Force Account Exhibit.

If WCL retains a contractor for any aspect of WCL Related Work, no concurrence in the award thereof shall be required by the Road Authority, but WCL shall notify the Road Authority of the identity of said contractor.

4(b) WCL Related Work shall not extend beyond that necessary for the Bridge Project Improvements and the restoration of those WCL facilities affected by the Bridge Project Improvements and shall be performed in accordance with standard railroad practices.

4(d) WCL shall, at the expense of the Road Authority or the Contractor, provide flaggers and other suitable personnel as WCL deems necessary to accommodate the Road Authority Related Work. Except in the case of an Emergency, as set forth in Section 7 hereof, the Road Authority shall notify WCL at least ten (10) Business Days in advance of needing flagging services and WCL shall make reasonable efforts to furnish the services of such flagger or flaggers when requested.

4(e) WCL's authorized representative(s) shall have full authority concerning the operations of the railroad and the Road Authority's contractor(s) must comply with WCL's representatives' directions regarding any matter impacting the operations of the railroad. The Road Authority's contractor(s) shall not perform any work on the WCL Property without authorization to do so from the railroad flaggers.

5. **WCL Plans.**

If reasonably deemed necessary by WCL, WCL shall prepare, or cause to be prepared, plans and specifications for the WCL Related Work (“**WCL Related Work Plans**”). On or before the commencement of WCL's Related Work, WCL shall submit such plans and specifications, if any, to the Road Authority for review and approval. The Road Authority's approval of such plans and specifications shall not be unreasonably withheld or delayed and the Road Authority shall approve or submit its comments to WCL within four (4) weeks of receipt of the WCL Related Work Plans. Failure of the Road Authority to approve or submit written comments to WCL within four (4) weeks of the Road Authority's receipt of the WCL Related Work Plans without obtaining an extension of time from WCL shall constitute approval of said Plans. The Road Authority's proposed Project is currently scheduled to begin during the summer or fall of 2024. If prepared by WCL, WCL Related Work Plans shall be submitted to the Road Authority at least twelve (12) weeks prior to the start of the Project; allowing four (4) weeks for an initial Road Authority review, four (4) weeks for WCL revisions, and four (4) weeks for a final Road Authority review. Any deviation to approved WCL Related Work Plans is subject to written approval by the Road Authority which approval shall not be unreasonably withheld, delayed, or conditioned.

6. **Pre-Construction Meeting and Agreed-Upon Schedule.**

Prior to commencement of Road Authority Related Work or WCL Related Work, a pre-construction meeting shall be held among the representatives of IDOT, the Road Authority, WCL, and the Contractor for the purpose of coordinating the work to be performed for the Bridge Project Improvements at which time a schedule for the performance of Road Authority Related Work and WCL Related Work shall be agreed upon and adopted by the Road Authority and WCL.

7. **Right of Entry.**

Except in cases of Emergency as defined below, not less than seven (7) calendar days prior to entering upon the WCL Property or any other property owned by WCL for the

purposes set forth in this Agreement, the Contractor shall execute and deliver to WCL's Chief Engineer, or his or her designee, a **Right of Entry Application** in the form attached and incorporated in this Agreement as **Exhibit H** along with evidence of all of the insurance required by such form. Provided, however, that the Contractor's and Road Authority's employees may enter property owned by WCL to conduct inspections without a Right of Entry Agreement provided that all such activities are governed by a railroad flagger if Contractor's or Road Authority employees have the potential to be within twenty-five feet (25') of an active railroad track.

Except in case of a substantial risk of imminent personal injury or death or substantial property damage (an "**Emergency**"), the Contractor must give WCL not less than ten (10) Business Days prior written notice to enable WCL to arrange for proposed work and for the flaggers. In the event of an Emergency, the Contractor or the Road Authority shall provide WCL with such telephone, email, text or other notice as is practicable given the nature and extent of the Emergency and the Contractor and the Road Authority may enter the property owned by WCL to address the Emergency prior to the arrival of the flaggers. In such event, the WCL shall provide a flagger as soon as practicable for the work required by the Emergency. In all cases, the maintenance, repairs, and replacements, as the case may be, shall be performed in accordance with all applicable laws.

8. **Insurance.**

Prior to its entry upon WCL Property or any other property owned by WCL for the Road Authority Related Work, the Contractor shall obtain or cause its contractors to obtain insurance which includes the requirements set forth on the Right of Entry Application attached hereto as **Exhibit H**. WCL shall be named as an additional insured on all policies described in **Exhibit H** except Worker's Compensation and Automobile Liability policies. WCL shall be a named insured on the Railroad Protective Liability Policy.

WCL shall include the City of Naperville, the City of Aurora, and Naperville Township and their respective officers, agents, and employees as additional insureds on any contracts of insurance pertaining to work performed by or on behalf of WCL for the WCL Related Work described herein except Worker's Compensation and Automobile Liability policies. Said insurance shall provide that any insurance or self-insurance maintained by the City of Naperville, the City of Aurora, and Naperville Township, or their respective officers, agents, or employees shall be in excess of such insurance and shall not contribute with it and that the insuring entities agree to waive subrogation rights which they may acquire by virtue of payment of any loss and shall obtain any endorsement that may be necessary to effectuate said waiver of subrogation. The Worker's Compensation policy of each insuring entity shall be endorsed with a waiver of subrogation in favor of the City of Naperville, the City of Aurora, and Naperville Township for all work performed by said entity and its employees, agents, subconsultants, and subcontractors. Notwithstanding the previous sentence, if WCL performs work with its own forces, it may self-insure for any and all insurance, including but not limited to the provisions set forth above.

9. **Indemnity.**

The Road Authority 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, or property damage proximately caused by construction, maintenance or related activities upon any WCL Property or WCL right-of-way as described in this Agreement by the Road Authority or its employees, officers, agents, contractors, or such other persons, firms, or corporations acting at the direction of or with the authority of the Road Authority, to the extent authorized by Illinois law and 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, and except claims of environmental contamination raised by any third party or by a regulatory agency duly authorized by any State or Federal law to cause or enforce the removal of any hazardous waste or the remediation of any adverse environmental condition upon the WCL Property which arose or resulted from WCL's, or WCL's predecessor's use or possession of the WCL Property. It is the understanding of the parties that the foregoing indemnification has been duly authorized by an ordinance of the Road Authority. However, in the event that a court shall determine that the foregoing indemnification was not validly authorized to supersede any statutory bar on indemnity, then the Road Authority shall pass an ordinance specifically authorizing this indemnity provision and overriding the restrictions set forth in the statute, and in such event, the rights and benefits to be granted to the Road Authority pursuant to this Agreement shall be suspended until the Road Authority properly authorizes the provision and passes such an ordinance. Notwithstanding any other provision in this Agreement, the Road Authority shall be liable only for direct damages incurred by WCL, its agents and employees. In no event shall the Road Authority be liable to pay for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever. Nothing contained herein shall be construed as a limitation or waiver of defenses available to the Road Authority, or any component thereof, and its officers, agents, and employees, including but not limited to the Illinois Local Government and Local Government Employees Tort Immunity Act. There are no third party beneficiaries to the provisions contained in this section or this Agreement.

10. **Force Majeure.**

With respect to the Road Authority Related Work and the WCL 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 of 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 seven (7) 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.

11. **Ownership.**

11(a) After Completion of Construction of the Bridge Project Improvements: (i) WCL shall, at its sole cost, own, maintain, repair or replace, if necessary, the Replacement Bridges as defined herein and the southeast retaining wall (noting that a small portion of the Southeast retaining wall, which is a component of the Replacement Bridges, is located on City of Naperville owned public right-of-way for which a permit will be required from the City in order for WCL to perform maintenance work); and (ii) one or more of the public entities which comprise the Road Authority shall, at its sole cost, own, maintain, repair or replace, if necessary, the North Aurora Road roadway, the Northeast, Northwest and Southwest retaining walls, the pump station, and drainage and related roadway appurtenances (including but not limited to sidewalks, a multi-use trail, lighting, Road Authority owned utilities, and underpass roadway lighting attached to and beneath the railroad bridge. A memorandum of ownership (“**Memorandum of Ownership**”) shall be recorded simultaneously with recordation of the Memorandum of Permanent Easement for the Permanent Easement referenced in Recital J and Section 14(a) hereof in the form set forth on **Exhibit K.**

12. **Termination.**

This Agreement may be terminated by the Road Authority upon not less than thirty (30) days’ notice (“**Notice of Termination**”) if delays or difficulties arise in securing federal approval, in acquiring rights-of-way, or for any other cause related to the Project which in the opinion of the Road Authority renders it impracticable to proceed with the construction of the Project. The Road Authority shall be obligated to pay WCL any amounts for which WCL remains legally obligated to pay for WCL Related Work that was initiated prior to Notice of Termination. This Agreement may also be terminated by written agreement of the Parties.

13. **Construction.**

13(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.

13(b) Except as set forth in the Temporary Easement Agreement and the Permanent Easement Agreement referenced herein, 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 Bridge Project Improvements.

13(c) This Agreement is not intended to, and shall not be construed to, create or give rise to: (i) any rights or obligations except as expressly stated herein; or (ii) any joint venture, partnership, employment, agency, construction manager, general contractor, subcontractor, or other relationship of any sort between the Road Authority and WCL or any other person(s), or any third-party beneficiary rights of any nature whatsoever.

14. **Temporary Construction Easement and Permanent Easement Agreements.**

14(a) Attached hereto as **Exhibit I** is a Permanent Easement Agreement for the permanent easement referenced in Recital J hereof.

14(b) Attached hereto as **Exhibit J** is a Temporary Easement Agreement for the temporary easement referenced in Recital K hereof.

15. **General Provisions.**

15(a) **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.

15(b) **Binding Effect.** The terms of this Agreement shall be binding upon and inure to the benefit of the Parties and their successors, assigns, and transferees, and upon any subsidiary, affiliate or parent of either Party or any corporation or other business entity that has a controlling interest in either Party either now or in the future.

15(c) **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 and all necessary or required approvals from the State of Illinois Department of Transportation, the Federal Government, the Chicago Road Authority Council or WCL's Board of Directors.

15(d) **Severability.** If any provision of this Agreement, or any paragraph, sentence, clause, phrase or word or the application thereof is held invalid, (a) 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.

15(e) **Exhibits.** Each Exhibit referenced herein is attached to this Agreement and deemed incorporated herein in its entirety.

15(f) **Governing Law/Venue.** 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). Venue for any action arising out of the terms or conditions of this Agreement shall be proper only in the Circuit Court for the Eighteenth Judicial Circuit, DuPage County, Illinois.

15(g) **Ambiguity.** This Agreement, which has been negotiated by and between the Parties, shall be deemed drafted by each of the Parties and shall not be construed against any Party hereto.

15(h) **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.

15(i) **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.

15(j) **Notices.** All notices to be sent hereunder shall be in writing, personally delivered or sent by prepaid overnight mail sent by a nationally recognized delivery service, to the following individuals and addresses:

To WCL: Regional Chief Engineer - CN
17641 S. Ashland Avenue
Homewood, IL 60430

To Road Authority: [City of Aurora, City of Naperville, and Naperville Township (with City of Naperville as Lead Local Agency)]:

City Engineer
City of Naperville
400 S. Eagle Street
Naperville, IL 60540

With a copy to: City Attorney
City of Naperville
400 S. Eagle Street
Naperville, IL 60540

With a copy to: City Engineer
City of Aurora
44 E. Downer Place
Aurora, IL 60507

With a copy to: Corporation Counsel
City of Aurora
44 E. Downer Place
Aurora, IL 60507

Richard Veenstra, Esq.
Schain, Banks, Kenny & Schwartz, Ltd.
70 W Madison St. Suite 5400
Chicago, Illinois 60602-4213

With a copy to: Naperville Township Supervisor
Attention: Eddie Bedford
139 Water Street
Naperville, IL 60540

Ross Secler, Esq.
Odelson, Sterk, Murphey, Frazier & McGrath. Ltd.
3318 West 95th Street
Evergreen Park, Illinois 60805-2233

15(k) **Survival.** The following provisions shall survive the expiration or termination of this Agreement: 1, 2(e), 9, 11, 13 (a) through (c), 15(a) through (k).

15(l) **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.

15(m) **Captions.** Captions and paragraph headings are for convenience only and are not a part of this Agreement and shall not be used in construing it.

15(n) **Effective Date.** This Agreement shall take effect upon the last date it is signed by WCL and each of the three entities which constitute the Road Authority.

/SIGNATURES ON FOLLOWING PAGES/

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

**ROAD AUTHORITY: CITY OF
NAPERVILLE, CITY OF AURORA,
NAPERVILLE TOWNSHIP**

CITY OF NAPERVILLE

By: _____
Douglas A. Krieger
City Manager of the City of Naperville

Attest
By: _____
Dawn C. Portner
City Clerk

CITY OF AURORA

By: _____
Richard Irvin
Mayor of the City of Aurora

Attest
By: _____
Jennifer Stallings
City Clerk

Date: _____

NAPERVILLE TOWNSHIP

By: _____
Eddie Bedford
Naperville Township Supervisor

Attest
By: _____
Nathanael Sippel
Town Clerk

Date: _____

WISCONSIN CENTRAL LTD.

By: _____
(Signature)

Printed Name: _____

Title: _____

Date: _____

EXHIBITS:

A – Project Depiction

B – Design Plans

C – Depiction of temporary and permanent easement areas

D – Legal descriptions of temporary and permanent easement areas

E – WCL Force Account

F – WCL Draw Request Form

G – WCL Special Provisions

H – Right of Entry Agreement

I – Permanent Easement Agreement

J- Temporary Easement Agreement

K – Memorandum of Ownership

L - Certification of Compliance with Buy America

M – General Provisions for Utility Adjustment Agreements

EXHIBIT "K"

MEMORANDUM OF OWNERSHIP

THIS MEMORANDUM OF OWNERSHIP is hereby executed this ____ day this ____ day of _____, 20__, by and between WISCONSIN CENTRAL LTD., a Delaware corporation authorized to transact business in the State of Illinois (hereinafter “**WCL**”) whose address for purposes of this instrument is 17641 S. Ashland Avenue, Homewood, IL 60430, and the CITY OF NAPERVILLE, a political subdivision of the State of Illinois whose address for purposes of this instrument is 400 S. Eagle Street, Naperville, Illinois 60540, the CITY OF AURORA, a political subdivision of the State of Illinois whose address for the purpose of this instrument is 44 E. Downer Place, Aurora, IL 60505, and NAPERVILLE TOWNSHIP, whose address for the purposes of this instrument is 139 Water Street, Naperville, IL 60540 (together referenced herein as “**Road Authority**”), which terms “**WCL**” and “**Road Authority**” shall include, wherever the context permits or requires, singular or plural, and the heirs, legal representatives, successors and assigns of the respective parties:

WITNESSETH:

WHEREAS, WCL and the Road Authority entered into a Construction and Management Agreement (“**C&M Agreement**”) dated _____ in furtherance of a roadway widening project (“**Project**”) generally described as the widening and reconstruction of North Aurora Road from Pennsbury Lane to Frontenac Road; and

WHEREAS, as part of the Project the Road Authority will remove an existing railroad bridge located at WCL Leighton Subdivision at railroad milepost 21.59 which bridge is owned and maintained by WCL and replace it with two single span track bridges, including but not limited to the bridge superstructure and substructure, the Northwest, and Southwest wing walls and their foundations, the Southeast retaining wall and its foundation, embankment, sub-ballast, ballast, rails, and ties (hereinafter together referenced herein as the “**Replacement Bridges**”). Work associated with removal of the existing WCL bridge, construction and removal of a Shoo-Fly bridge, and construction of the Replacement Bridges are together referenced herein as the “**Bridge Project Improvements**”.

WHEREAS, the C&M Agreement sets forth, among other things, ownership of the Replacement Bridges upon Completion of Construction of the Bridge Project Improvements as follows:

1. Except as set forth in Section 2, below, WCL shall, at its sole cost, own, maintain, repair and replace the Replacement Bridges.
2. One or more of the public entities which comprise the Road Authority shall, at its sole cost, own, maintain, repair or replace, if necessary, the North Aurora Road roadway,

City Manager

ATTEST

By: _____
Dawn C. Portner
City Clerk

Date: _____

CITY OF AURORA

By: _____
Richard Irvin
Mayor of the City of Aurora

ATTEST

By: _____
Jennifer Stallings
City Clerk

Date: _____

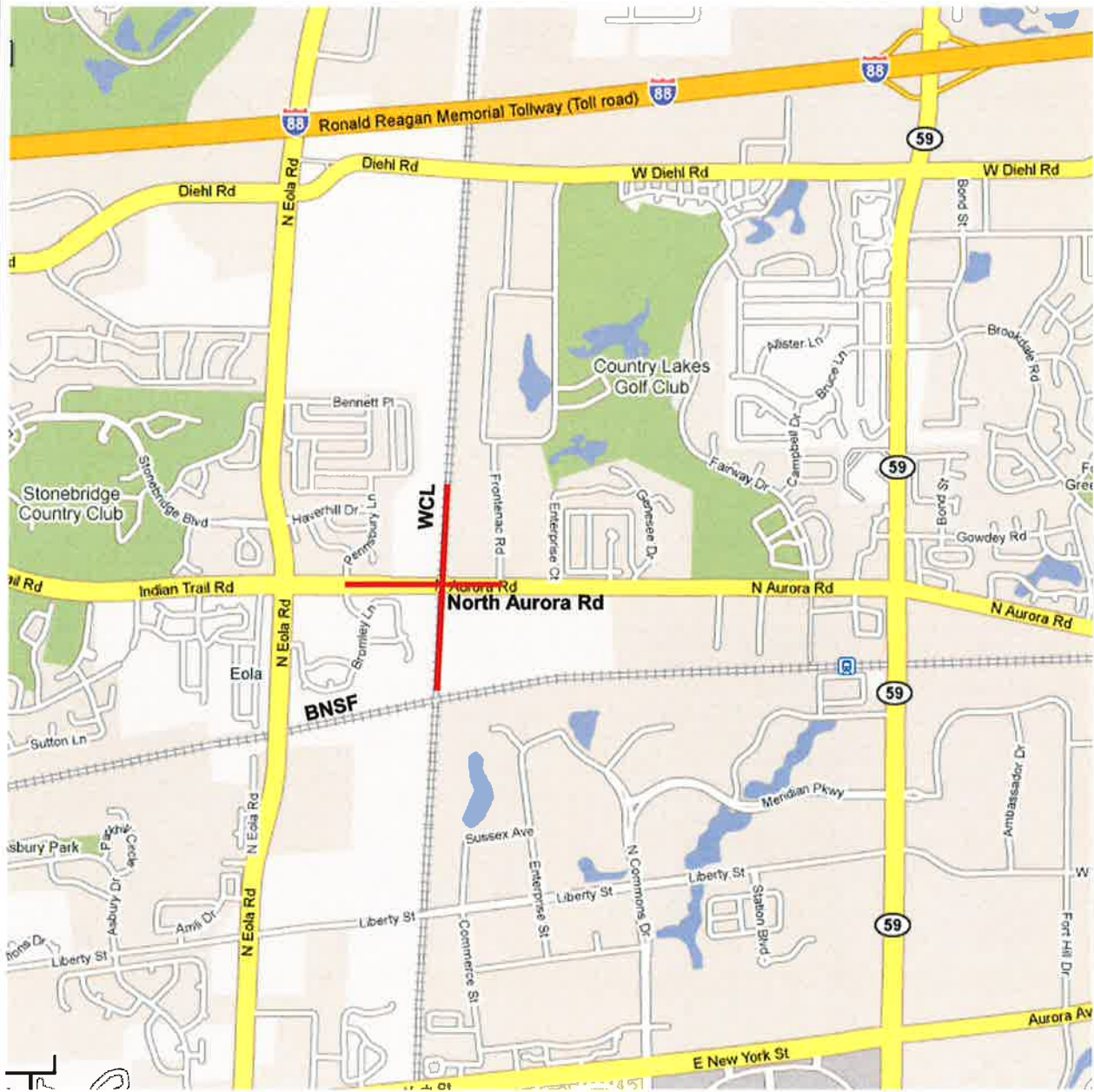
NAPERVILLE TOWNSHIP

By: _____
Eddie Bedford
Naperville Township Supervisor

ATTEST

By: _____
Nathanael Sippel
Town Clerk

Date: _____



NAPERVILLE / AURORA / NAPERVILLE TOWNSHIP
NORTH AURORA ROAD UNDERPASS

PROJECT DEPICTION

 PROJECT LIMITS

NOT TO SCALE

EXHIBIT B
DESIGN PLANS

CONTRACT NO. 61G79	SECTION	COUNTY
1009	06-00133-00-BR	DUPAGE
		423

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
**PLANS FOR PROPOSED
 FEDERAL AID HIGHWAY**
 FAU 1509 (NORTH AURORA ROAD)
 PENNSBURY LANE TO FRONTENAC ROAD
 RECONSTRUCTION
 SECTION NO.: 06-00133-00-BR
 PROJECT NO.: XUXZ(984)
 DUPAGE COUNTY
 C-91-424-19

FOR INDEX OF SHEETS AND LIST OF
 HIGHWAY STANDARDS, SEE SHEET NO. 2

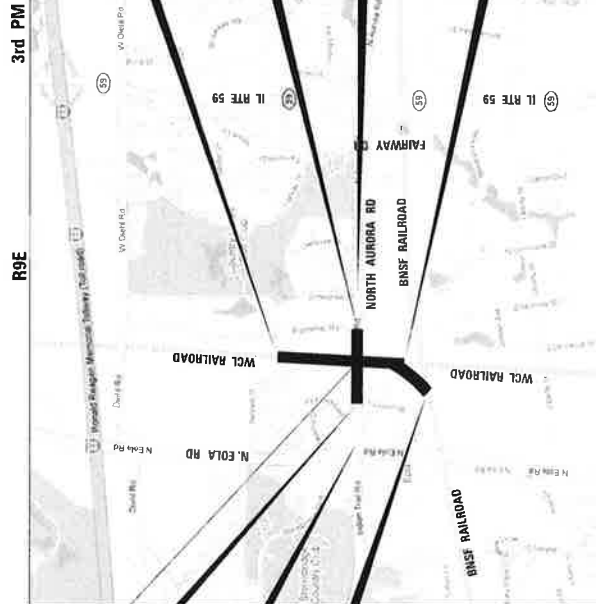
DESIGN DESIGNATION

2715 (40) MINOR ARTERIAL 3.56 (FD-20)

TRAFFIC DATA

LOCATION: AURORA ROAD
 POSTED SPEED: 40 MPH
 ADT: 15,700 (2020)
 ADT: 33,200 (2040)

**PROJECT IS LOCATED IN:
 THE CITY OF NAPERVILLE,
 UNINCORPORATED NAPERVILLE
 TOWNSHIP AND CITY OF AURORA**



EXISTING STRUCTURE

SN: 022-9950

**PROJECT BEGINS
 NORTH AURORA ROAD
 STATION 98 + 00.00**

**IMPROVEMENT BEGINS
 NORTH AURORA ROAD
 STATION 85 + 79.00**

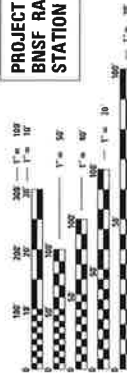
**PROJECT ENDS
 BNSF RAILROAD TRACK
 STATION 2749 + 24.90**

**PROJECT BEGINS
 WCL RAILROAD TRACK
 STATION 2712 + 00.00**

**PROJECT ENDS
 NORTH AURORA ROAD
 STATION 117 + 85.00**

**IMPROVEMENT ENDS
 NORTH AURORA ROAD
 STATION 126 + 60.00**

**PROJECT ENDS
 WCL RAILROAD TRACK
 STATION 2743 + 51.46**



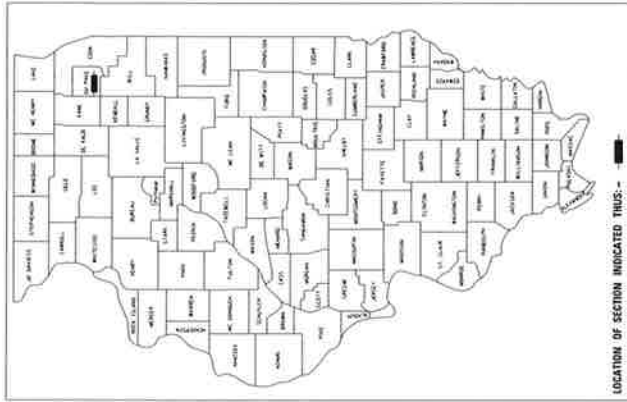
JULIE
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-892-4123
 OR 811

CITY OF NAPERVILLE AND NAPERVILLE TOWNSHIP

LOCATION MAP

NOT TO SCALE

PROJECT LENGTH (GROSS /NET)
 GROSS ROADWAY LENGTH = 1,965.00 FT. = 0.38 MILE



LOCATION OF SECTION INDICATED THIS SHEET

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
APPROVED ON: <i>May 8 2024</i> CITY OF NAPERVILLE DEPUTY CITY ENGINEER
APPROVED ON: <i>[Signature]</i> MAY 8, 2024 CITY OF AURORA CITY ENGINEER
APPROVED ON: <i>[Signature]</i> MAY 8, 2024 NAPERVILLE TOWNSHIP HIGHWAY COMMISSIONER
PASSED _____ DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS
REASONING FOR LIMITS BASED ON REVIEW _____ REGIONAL ENGINEER
PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO.: 61G79

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32			REMOVAL PLANS
33-34			PLAN AND PROFILE
35-36			DETOUR ROUTE
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39-48			MAINTENANCE OF TRAFFIC SUGGESTED SCHEDULES OF CONSTRUCTION
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NO.	DATE	BY	DESCRIPTION
1	08/11/2011
2	03/25/2012
3	03/25/2012

NO.	DATE	BY	DESCRIPTION
1	08/11/2011
2	03/25/2012
3	03/25/2012

HIGHWAY STANDARDS

080001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
01001-02	AREAS OF REINFORCEMENT BARS
01006	SECTION OF AN INCH AND OF A FOOT
28001-07	TEMPORARY EROSION CONTROL SYSTEMS
47001-10	PAVEMENT JOINTS
42001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
42006-05	DIAGONAL CURB RAMPS FOR SIDEWALKS
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61001-05	FRAME AND GRATE TYPE A
61001-06	FRAME AND GRATE TYPE B
61001-07	FRAME AND GRATE TYPE C
61001-08	FRAME AND GRATE TYPE D
61001-09	FRAME AND GRATE TYPE E
61001-10	FRAME AND GRATE TYPE F
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61001-12	FRAME AND GRATE TYPE H
61001-13	FRAME AND GRATE TYPE I
61001-14	FRAME AND GRATE TYPE J
61001-15	FRAME AND GRATE TYPE K
61001-16	FRAME AND GRATE TYPE L
61001-17	FRAME AND GRATE TYPE M
61001-18	FRAME AND GRATE TYPE N
61001-19	FRAME AND GRATE TYPE O
61001-20	FRAME AND GRATE TYPE P
61001-21	FRAME AND GRATE TYPE Q
61001-22	FRAME AND GRATE TYPE R
61001-23	FRAME AND GRATE TYPE S
61001-24	FRAME AND GRATE TYPE T
61001-25	FRAME AND GRATE TYPE U
61001-26	FRAME AND GRATE TYPE V
61001-27	FRAME AND GRATE TYPE W
61001-28	FRAME AND GRATE TYPE X
61001-29	FRAME AND GRATE TYPE Y
61001-30	FRAME AND GRATE TYPE Z
61001-31	FRAME AND GRATE TYPE AA
61001-32	FRAME AND GRATE TYPE AB
61001-33	FRAME AND GRATE TYPE AC
61001-34	FRAME AND GRATE TYPE AD
61001-35	FRAME AND GRATE TYPE AE
61001-36	FRAME AND GRATE TYPE AF
61001-37	FRAME AND GRATE TYPE AG
61001-38	FRAME AND GRATE TYPE AH
61001-39	FRAME AND GRATE TYPE AI
61001-40	FRAME AND GRATE TYPE AJ
61001-41	FRAME AND GRATE TYPE AK
61001-42	FRAME AND GRATE TYPE AL
61001-43	FRAME AND GRATE TYPE AM
61001-44	FRAME AND GRATE TYPE AN
61001-45	FRAME AND GRATE TYPE AO
61001-46	FRAME AND GRATE TYPE AP
61001-47	FRAME AND GRATE TYPE AQ
61001-48	FRAME AND GRATE TYPE AR
61001-49	FRAME AND GRATE TYPE AS
61001-50	FRAME AND GRATE TYPE AT
61001-51	FRAME AND GRATE TYPE AU
61001-52	FRAME AND GRATE TYPE AV
61001-53	FRAME AND GRATE TYPE AW
61001-54	FRAME AND GRATE TYPE AX
61001-55	FRAME AND GRATE TYPE AY
61001-56	FRAME AND GRATE TYPE AZ
61001-57	FRAME AND GRATE TYPE BA
61001-58	FRAME AND GRATE TYPE BB
61001-59	FRAME AND GRATE TYPE BC
61001-60	FRAME AND GRATE TYPE BD
61001-61	FRAME AND GRATE TYPE BE
61001-62	FRAME AND GRATE TYPE BF
61001-63	FRAME AND GRATE TYPE BG
61001-64	FRAME AND GRATE TYPE BH
61001-65	FRAME AND GRATE TYPE BI
61001-66	FRAME AND GRATE TYPE BJ
61001-67	FRAME AND GRATE TYPE BK
61001-68	FRAME AND GRATE TYPE BL
61001-69	FRAME AND GRATE TYPE BM
61001-70	FRAME AND GRATE TYPE BN
61001-71	FRAME AND GRATE TYPE BO
61001-72	FRAME AND GRATE TYPE BP
61001-73	FRAME AND GRATE TYPE BQ
61001-74	FRAME AND GRATE TYPE BR
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61001-78	FRAME AND GRATE TYPE BV
61001-79	FRAME AND GRATE TYPE BW
61001-80	FRAME AND GRATE TYPE BX
61001-81	FRAME AND GRATE TYPE BY
61001-82	FRAME AND GRATE TYPE BZ
61001-83	FRAME AND GRATE TYPE CA
61001-84	FRAME AND GRATE TYPE CB
61001-85	FRAME AND GRATE TYPE CC
61001-86	FRAME AND GRATE TYPE CD
61001-87	FRAME AND GRATE TYPE CE
61001-88	FRAME AND GRATE TYPE CF
61001-89	FRAME AND GRATE TYPE CG
61001-90	FRAME AND GRATE TYPE CH
61001-91	FRAME AND GRATE TYPE CI
61001-92	FRAME AND GRATE TYPE CJ
61001-93	FRAME AND GRATE TYPE CK
61001-94	FRAME AND GRATE TYPE CL
61001-95	FRAME AND GRATE TYPE CM
61001-96	FRAME AND GRATE TYPE CN
61001-97	FRAME AND GRATE TYPE CO
61001-98	FRAME AND GRATE TYPE CP
61001-99	FRAME AND GRATE TYPE CQ
61001-100	FRAME AND GRATE TYPE CR
61001-101	FRAME AND GRATE TYPE CS
61001-102	FRAME AND GRATE TYPE CT
61001-103	FRAME AND GRATE TYPE CU
61001-104	FRAME AND GRATE TYPE CV
61001-105	FRAME AND GRATE TYPE CW
61001-106	FRAME AND GRATE TYPE CX
61001-107	FRAME AND GRATE TYPE CY
61001-108	FRAME AND GRATE TYPE CZ
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61001-110	FRAME AND GRATE TYPE DB
61001-111	FRAME AND GRATE TYPE DC
61001-112	FRAME AND GRATE TYPE DD
61001-113	FRAME AND GRATE TYPE DE
61001-114	FRAME AND GRATE TYPE DF
61001-115	FRAME AND GRATE TYPE DG
61001-116	FRAME AND GRATE TYPE DH
61001-117	FRAME AND GRATE TYPE DI
61001-118	FRAME AND GRATE TYPE DJ
61001-119	FRAME AND GRATE TYPE DK
61001-120	FRAME AND GRATE TYPE DL
61001-121	FRAME AND GRATE TYPE DM
61001-122	FRAME AND GRATE TYPE DN
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61001-126	FRAME AND GRATE TYPE DR
61001-127	FRAME AND GRATE TYPE DS
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61001-129	FRAME AND GRATE TYPE DU
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61001-132	FRAME AND GRATE TYPE DX
61001-133	FRAME AND GRATE TYPE DY
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61001-135	FRAME AND GRATE TYPE EA
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61001-137	FRAME AND GRATE TYPE EC
61001-138	FRAME AND GRATE TYPE ED
61001-139	FRAME AND GRATE TYPE EE
61001-140	FRAME AND GRATE TYPE EF
61001-141	FRAME AND GRATE TYPE EG
61001-142	FRAME AND GRATE TYPE EH
61001-143	FRAME AND GRATE TYPE EI
61001-144	FRAME AND GRATE TYPE EJ
61001-145	FRAME AND GRATE TYPE EK
61001-146	FRAME AND GRATE TYPE EL
61001-147	FRAME AND GRATE TYPE EM
61001-148	FRAME AND GRATE TYPE EN
61001-149	FRAME AND GRATE TYPE EO
61001-150	FRAME AND GRATE TYPE EP
61001-151	FRAME AND GRATE TYPE EQ
61001-152	FRAME AND GRATE TYPE ER
61001-153	FRAME AND GRATE TYPE ES
61001-154	FRAME AND GRATE TYPE ET
61001-155	FRAME AND GRATE TYPE EU
61001-156	FRAME AND GRATE TYPE EV
61001-157	FRAME AND GRATE TYPE EW
61001-158	FRAME AND GRATE TYPE EX
61001-159	FRAME AND GRATE TYPE EY
61001-160	FRAME AND GRATE TYPE EZ
61001-161	FRAME AND GRATE TYPE FA
61001-162	FRAME AND GRATE TYPE FB
61001-163	FRAME AND GRATE TYPE FC
61001-164	FRAME AND GRATE TYPE FD
61001-165	FRAME AND GRATE TYPE FE
61001-166	FRAME AND GRATE TYPE FF
61001-167	FRAME AND GRATE TYPE FG
61001-168	FRAME AND GRATE TYPE FH
61001-169	FRAME AND GRATE TYPE FI
61001-170	FRAME AND GRATE TYPE FJ
61001-171	FRAME AND GRATE TYPE FK
61001-172	FRAME AND GRATE TYPE FL
61001-173	FRAME AND GRATE TYPE FM
61001-174	FRAME AND GRATE TYPE FN
61001-175	FRAME AND GRATE TYPE FO
61001-176	FRAME AND GRATE TYPE FP
61001-177	FRAME AND GRATE TYPE FQ
61001-178	FRAME AND GRATE TYPE FR
61001-179	FRAME AND GRATE TYPE FS
61001-180	FRAME AND GRATE TYPE FT
61001-181	FRAME AND GRATE TYPE FU
61001-182	FRAME AND GRATE TYPE FV
61001-183	FRAME AND GRATE TYPE FW
61001-184	FRAME AND GRATE TYPE FX
61001-185	FRAME AND GRATE TYPE FY
61001-186	FRAME AND GRATE TYPE FZ
61001-187	FRAME AND GRATE TYPE GA
61001-188	FRAME AND GRATE TYPE GB
61001-189	FRAME AND GRATE TYPE GC
61001-190	FRAME AND GRATE TYPE GD
61001-191	FRAME AND GRATE TYPE GE
61001-192	FRAME AND GRATE TYPE GF
61001-193	FRAME AND GRATE TYPE GG
61001-194	FRAME AND GRATE TYPE GH
61001-195	FRAME AND GRATE TYPE GI
61001-196	FRAME AND GRATE TYPE GJ
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61001-212	FRAME AND GRATE TYPE GZ
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61001-234	FRAME AND GRATE TYPE HV
61001-235	FRAME AND GRATE TYPE HW
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61001-244	FRAME AND GRATE TYPE IF
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61001-255	FRAME AND GRATE TYPE IQ
61001-256	FRAME AND GRATE TYPE IR
61001-257	FRAME AND GRATE TYPE IS
61001-258	FRAME AND GRATE TYPE IT
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61001-261	FRAME AND GRATE TYPE IW

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3	General Detail and Elevation
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TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Porous Granular Embankment				
Removal of Existing Structures	Cu. Yd.	386		386
Structure Excavation	Each	1		1
Form Liner Textured Surface	Sq. Ft.	2,848		2,848
Reinforcement Bars, Epoxy Coated	Cu. Ft.	2,493		2,493
Bar Splicers	Each	178		178
Pipe Handrail	Foot	10		10
Furnishing Steel Piles HP14x89	Foot	9,090		9,090
Driving Piles	Foot	9,090		9,090
Test Pile Steel HP14x89	Each	2		2
Pile Shoes	Each	106		106
Name Plates	Each	1		1
Drainage System for Structures	Each	1		1
4" Dia. Galvanized Steel	L. Sum	1		1
Geomembrane Wall Drain	Sq. Yd.	304		304
Pipe Underdrains for Structures 4"	Foot	84		84
Concrete Gutter, Type B	Foot	226		226
Conduit Attached to Structure	Foot			
4" Dia. Galvanized Steel	Foot			
Concrete Structures (Special)				
Furnishing and Erecting Structural Steel, Special	Cu. Yd.	900.5		900.5
Temporary Soil Retention System (Special)	L. Sum	1		1
Membrane Waterproofing (Special)	Sq. Ft.	7,011		7,011
Chain Link Fence, 4' Attached to Structure	Sq. Ft.	4,064		4,064
Furnish and Install Walkway	Foot	44		44
Anti-graftiti Protection System	Foot	227		227
Structural Repair of Concrete	Sq. Ft.	3,215		3,215
(Depth Greater Than 5 Inches)	Sq. Ft.	25		25

GENERAL NOTES

- SPECIFICATIONS**
- Design is in accordance with the American Railway Engineering and Maintenance-of-Way Association (AREMA) Manual for Railway Engineering, 2019 edition as modified by CN Railway Guidelines for Design of Railway Structures, January 2006 revision. Steel and bearing design is in accordance with AREMA Chapter 15. Steel Structures, Concrete and foundation design is in accordance with AREMA Chapter 8. Concrete Structures and Foundations.
 - Workmanship and Materials shall be in accordance with the Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation, adopted Jan. 1, 2022, and the Supplemental Specifications and Recurring Special Provisions, adopted Jan. 1, 2024. Steel fabrication shall be in accordance with the AREMA Specifications as modified by CN Railway's Specification HCD5121 Structural Steel Fabrication for Railway Bridges (Modified).
 - All railroad related work of the contractor shall be completed to the satisfaction of the Railroad Engineer. The decision of the Railroad Engineer shall be final on all questions which may arise regarding, including but not limited to, the quality and acceptability of materials and work, the manner in which the work is done, the progress on the work, the interpretation of the contract plans and specifications, and the fulfillment of the contract.
- STRUCTURAL STEEL**
- All structural steel shall be ASTM A709, Grade 50W, unless otherwise noted.
 - Fabrication of structural steel shall be performed by a fabricator certified under the AISC Certification Program, Category ABR, Advanced Bridges, with Fracture Critical Endorsement.
 - The webs and tension flanges of the through plate girders and end floor beams of the bridge are designated as "Fracture Critical Members" and shall conform to the fracture control plan for fracture critical members in the AREMA Specifications, Chapter 15 for Zone 3. These members are designated "F.C.M." on the plans.
 - The main load carrying components subjected to tensile stress, other than fracture critical members, shall be fabricated in accordance with the minimum requirements for notch toughness, Zone 3. These components are designated "N.T.R." on the plans.
 - Material noted on the plans to be corrosion-resistant (C.R.) steel shall conform to ASTM A709 Grade 50W.
 - The upper floor plate must have raised pattern conforming to the requirements of ASTM A786 and be corrosion resistant steel according to ASTM A709 Grade 50W.
 - Calculated weight of Structural Steel = 884,655 lbs. (ASTM A709 Grade 50W)
 - Furnishing and Erecting Structural Steel. Special shall include all steel components of the proposed through plate girder, spans including bearings, anchor bolts, walkway brackets, protection beams, all bolts and connections. See Special Provisions.
 - All bolted connections shall be made with high-strength bolts conforming to ASTM F3125 Grade A325, Type 3. Bolts shall be 1/2" diameter in 1/2" diameter holes, unless otherwise noted. All bolt holes shall be punched or drilled and reamed to size in accordance with the Special Provisions. Bolts shall be tightened by the "turn of the nut" method as described in the AREMA Specifications.
 - All bolted surfaces are designed for F3125 Grade A325 Class B (Slip Coefficient = 0.5) requiring all surfaces to be blast cleaned to a min. standard of SPSC 6.

GENERAL NOTES (CONCL.)

- Plan dimensions and details relative to the existing structure have been taken from existing plans and subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Concrete shall have a minimum compressive strength of 5,000 psi in 28 days.
- Reinforcement bars designated (E) shall be epoxy coated in accordance with ASTM A775.
- All exposed corners shall be chamfered 1/4", unless otherwise noted.
- Anti-Graffiti Protection System shall be applied to the exposed areas of the abutments and wingwalls.

CAST-IN-PLACE CONCRETE

- Concrete shall have a minimum compressive strength of 5,000 psi in 28 days.
- Reinforcement bars designated (E) shall be epoxy coated in accordance with ASTM A775.
- All exposed corners shall be chamfered 1/4", unless otherwise noted.
- Anti-Graffiti Protection System shall be applied to the exposed areas of the abutments and wingwalls.

WISCONSIN CENTRAL RR.
BUILT BY
CITY OF WAUWATOSA
F.A.U. RTE. 1509
SEC. 06-00133-00-BR
STA. 109+88.63 LOADING E90
STRUCTURE NO. 022-9948

NAME PLATE
See Std. 515001

TRANSYSTEMS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 022-9948
SHEET 4 OF 4 SHEETS

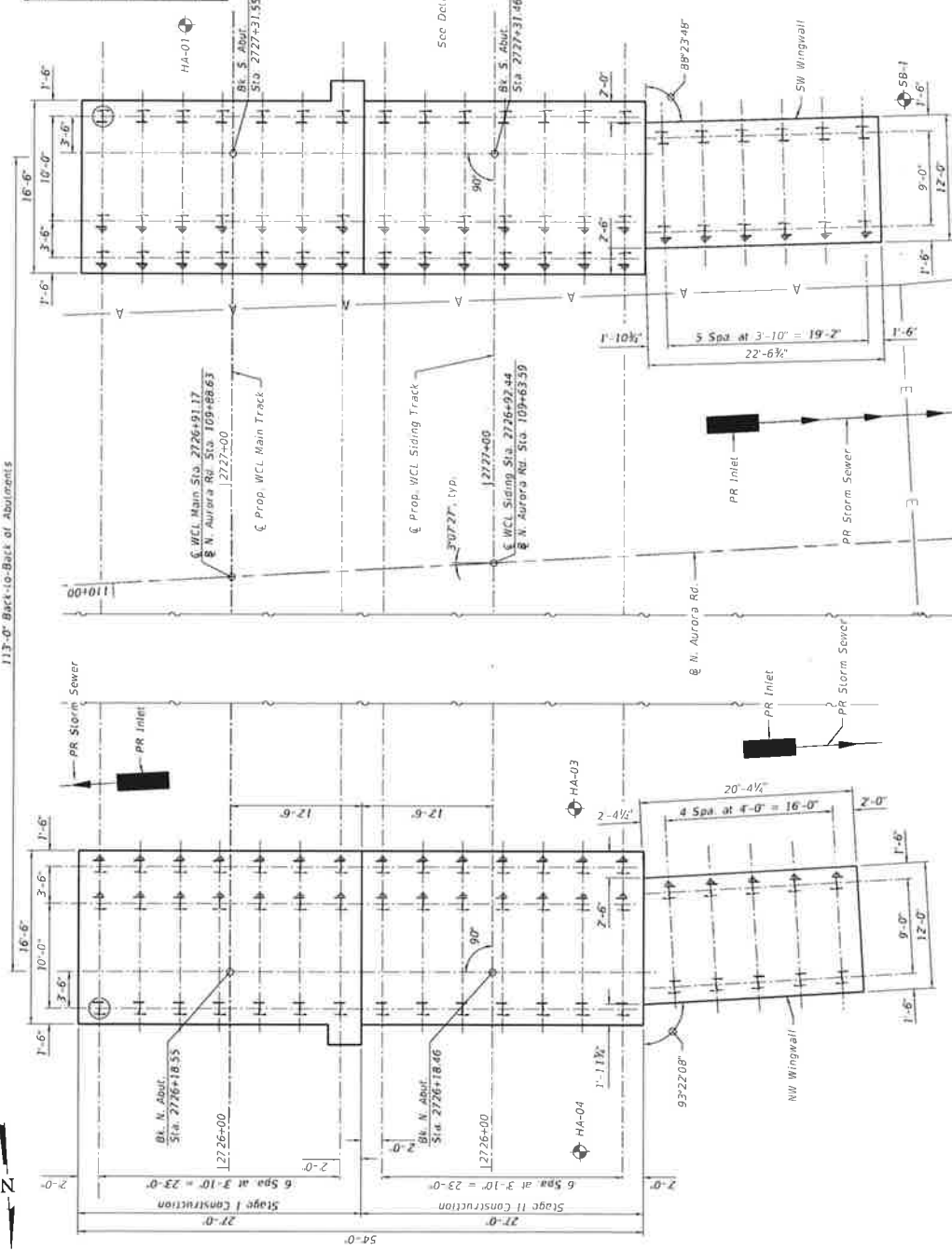
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SECTION	COUNTY	PROJECT SHEET
06-00133-00-BR	DAWADE	473
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06-00133-00-BR	DAWADE	475
06-00133-00-BR	DAWADE	476
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06-00133-00-BR	DAWADE	498
06-00133-00-BR	DAWADE	499
06-00133-00-BR	DAWADE	500

CONTRACT NO. 61G78

EXHIBIT B - SHEET 5 of 104

113'-0" Back-to-Back of Abutments



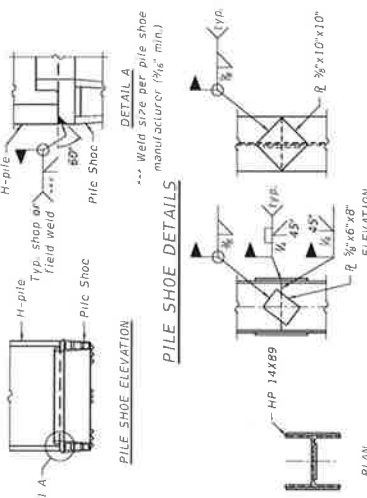
NORTH ABUTMENT PILE LAYOUT

SOUTH ABUTMENT PILE LAYOUT

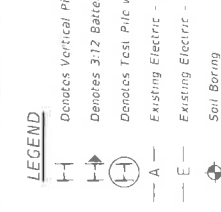
Location	Type	Estimated Total Length (Lin. Ft.)		Allowable Resistance Available (Tons)	Cut-Off Elevation
		No. Piles	Length		
North Abutment	Vertical	13	87	1131	164
	Battered	28	90	2,520	164
South Abutment	Vertical	13	84	1,092	164
	Battered	28	87	2,436	164
Northwest Wingwall	Vertical	5	87	435	164
	Battered	5	90	450	164
Southwest Wingwall	Vertical	6	84	504	164
	Battered	6	87	522	164

PILE DATA:

All Piles shall be HP14x89 with pile shoes.
 Estimated Pile Tip Elev. = 620.00 (N. Abut.); 623.00 (S. Abut.)
 Nominal Required Bearing = 329 tons.
 *Test pile length furnished shall be at least 10' greater than estimated production pile lengths shown.



PILE SPLICE DETAILS



- Notes:
- The Steel H-Piles shall be according to ASTM A572 Grade 50.
 - All piles shall be driven to 329 ton capacity or practical refusal. If any pile cannot be driven to this capacity, the Engineer shall be notified.

DATE	BY	SECTION	COUNTY	TOTAL SHEET NO.	SHEET NO.
12/28/11	12/28/11	12/28/11	12/28/11	12/28/11	12/28/11

FOUNDATION LAYOUT PLAN
 STRUCTURE NO. 022-9948

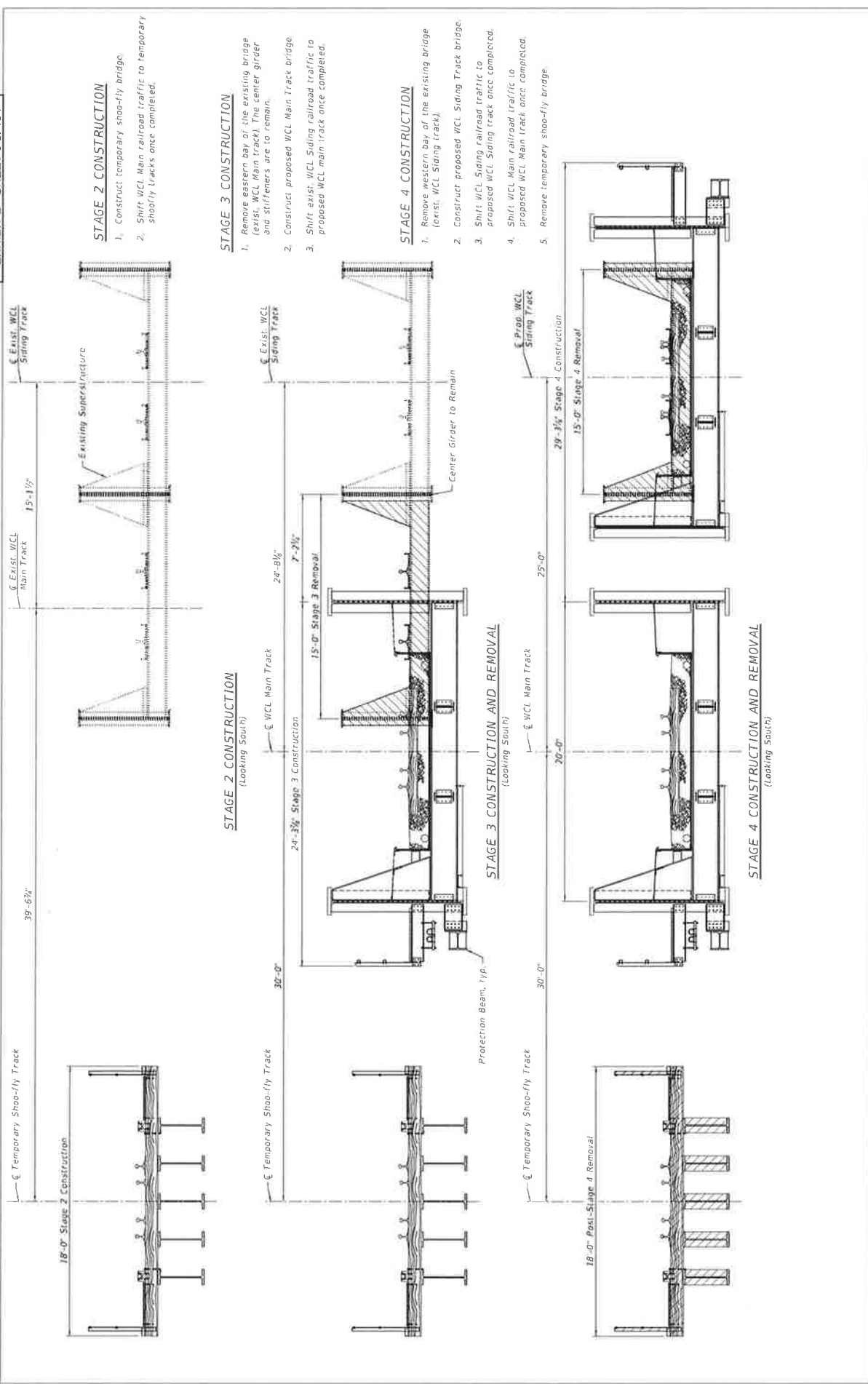
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

REVISIONS

NO.	DATE	BY	REASON

DATE	BY	DESCRIPTION

TRANSYSTEMS



STAGE 2 CONSTRUCTION

1. Construct temporary shoo-fly bridge.
2. Shift WCL Main railroad traffic to temporary shoo-fly tracks once completed.

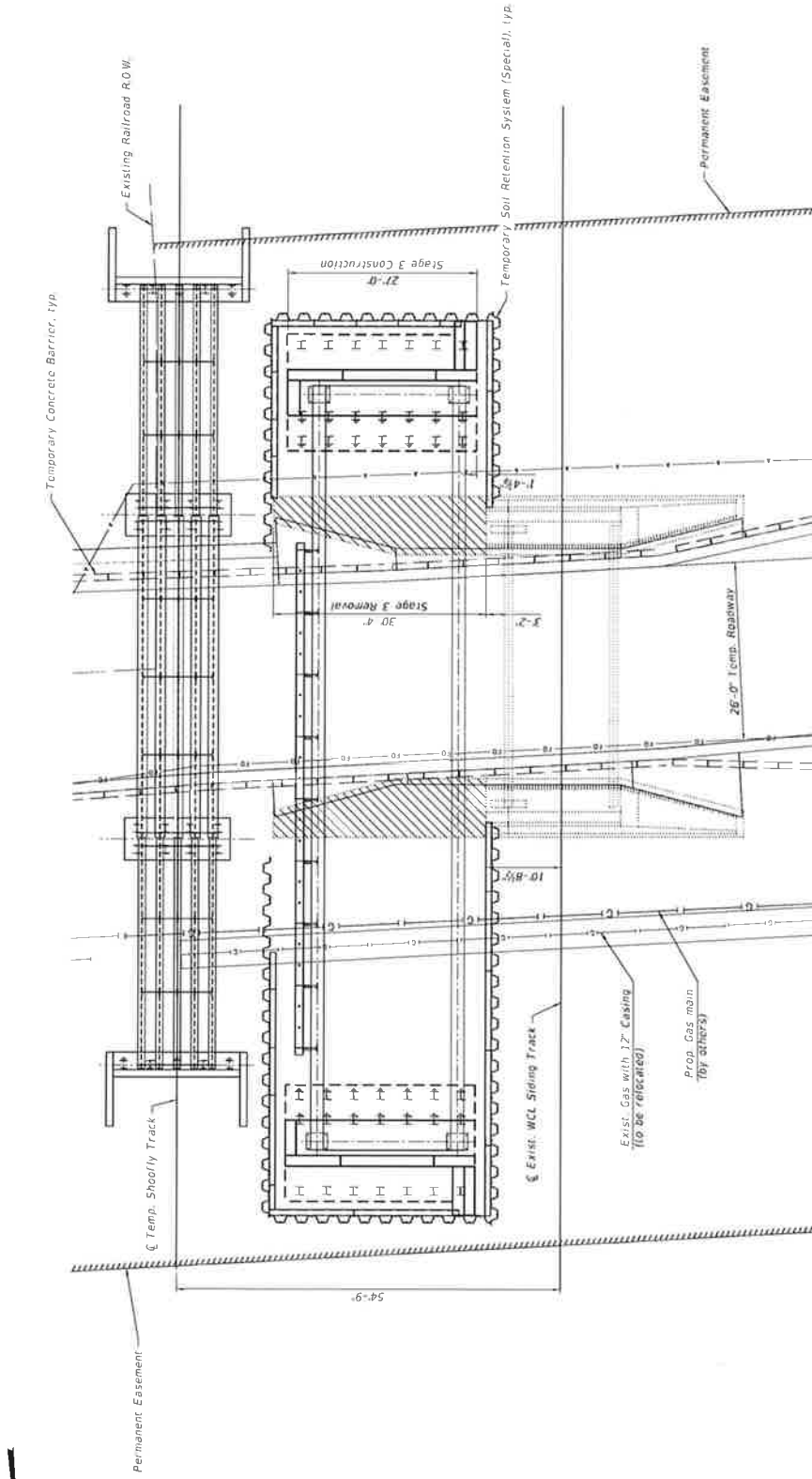
STAGE 3 CONSTRUCTION

1. Remove eastern bay of the existing bridge (exist. WCL Main track). The center girder and stiffeners are to remain.
2. Construct proposed WCL Main Track bridge.
3. Shift exist. WCL Siding railroad traffic to proposed WCL main track once completed.

STAGE 4 CONSTRUCTION

1. Remove western bay of the existing bridge (exist. WCL Siding track).
2. Construct proposed WCL Siding Track bridge.
3. Shift WCL Siding railroad traffic to proposed WCL Siding track once completed.
4. Shift WCL Main railroad traffic to proposed WCL Main track once completed.
5. Remove temporary shoo-fly bridge.

TRANSYSTEMS		DATE: 11/12/24		PROJECT NO: 022-9948		SHEET 6 OF 45 SHEETS	
DESIGNED BY: JAM	CHECKED BY: MDE	DATE: 11/12/24	PROJECT NO: 022-9948	SECTION: 96-0013-06-B	COUNTY: JONES	TOTAL SHEETS: 45	TRACT NO: 6173
DRAWN BY: MDE	CHECKED BY: JRM	DATE: 11/12/24	PROJECT NO: 022-9948	DATE: 10/21/24	SECTION: 96-0013-06-B	TOTAL SHEETS: 45	TRACT NO: 6173
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				STAGE CONSTRUCTION DETAILS STRUCTURE NO. 022-9948			



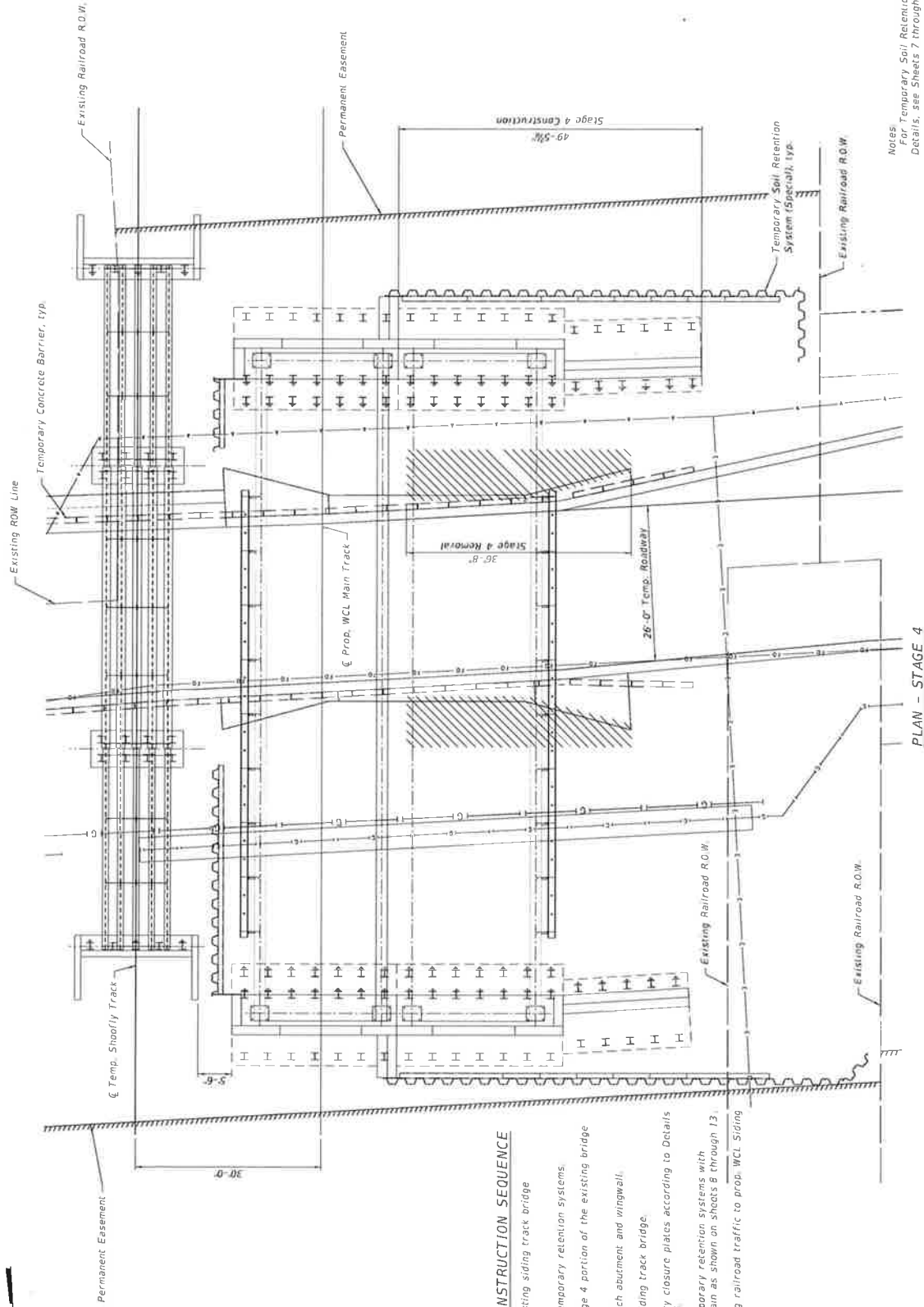
PLAN - STAGE 3

PROPOSED CONSTRUCTION SEQUENCE

1. Remove the existing main track bridge superstructure (center girder remains).
2. Construct the temporary retention systems.
3. Remove the Stage 3 portion of the existing substructure.
4. Excavate for each abutment.
5. Construct the main track bridge abutments and superstructure.
6. Install temporary closure plates according to Details on sheet 9 of 45.
7. Remove the temporary retention systems with sections to remain as shown on sheets 8 through 13.
8. Shift exist. WCL Siding railroad traffic to prop. WCL Main track.

Notes: Temporary Soil Retention System (Special)
 Details, see Sheets 7 through 14 of 45

TRANSYSTEMS DESIGNER - WCL CHECKED - JAM DRAWN - WCL PLOT DATE - 11/20/2017 PLOT SCALE - 1/8"=1'-0"	DESIGNED - WCL CHECKED - JAM DRAWN - WCL CHECKED - JAM	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		CONSTRUCTION STAGING PLAN - STAGE 3 STRUCTURE NO. 022-9948		SHEET 3 OF 45 SHEETS	
		CONTRACT NO. 01079	COUNTY SURFACE	SECTION 24-071310-08	TOTAL SHEETS 45	SHEET NO. 03	CONTRACT NO. 01079



Notes:
For Temporary Soil Retention System (Special)
Details, see Sheets 7 through 14 of 45.

PROPOSED CONSTRUCTION SEQUENCE

1. Remove the existing siding track bridge superstructure.
2. Construct the temporary retention systems.
3. Remove the Stage 4 portion of the existing bridge substructure.
4. Excavate for each abutment and wingwall.
5. Construct the siding track bridge.
6. Install temporary closure plates according to Details on sheet 9 of 45.
7. Remove the temporary retention systems with sections to remain as shown on sheets 8 through 13.
8. Shift WCL Siding railroad traffic to prop. WCL Siding track.

<p>TRANSYSTEMS</p>	<p>DESIGNED BY: W.C. ZWI</p> <p>CHECKED BY: J.W. ZWI</p> <p>DRAWN BY: W.C. ZWI</p> <p>DATE: 11/11/2024</p>	<p>REVISED BY:</p> <p>REVISED BY:</p> <p>REVISED BY:</p>	<p>SCALE: 1/8"=1'-0"</p> <p>DATE: 11/11/2024</p>
	<p>PROJECT NO. 022-9948</p> <p>CONTRACT NO. 61073</p>	<p>SECTION: 06-0010-00-00</p> <p>SHEET: 402</p>	<p>COUNTY: DAVIDSON</p> <p>DATE: 11/11/2024</p>

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION STAGING PLAN - STAGE 4
STRUCTURE NO. 022-9948

PLAN - STAGE 4

GENERAL NOTES - TEMPORARY SOIL RETENTION SYSTEM

PRE-CONSTRUCTION REQUIREMENTS

- The Contractor shall be responsible for confirming or establishing the location of all utilities relevant to their exact locations, and schedule all necessary utility relocations.
- Contractor must coordinate all sheet pile and pile-driving activities with NICTD for the construction of the temporary soil retention system.
- All elevations and dimensions must be verified in the field.

REGROUTABLE GROUND ANCHORS

- Drill approximately a minimum 8-inch diameter hole to the lengths shown on the Anchor Schedule. Anchor locations and elevations are shown on plan and section views. Grout the anchor hole. Insert tendon after the anchor hole is filled with grout.
- Regrout the bond length as necessary to develop the required anchor capacity.
- Allow grout to harden a minimum of five (5) days. Then tension each anchor in accordance with the anchor testing procedures.
- All anchors within the Railroad R.O.W. shall be fully removed.

MATERIALS:

- Steel:** ASTM A 572, Grade 50 (or steel sheet piles)
ASTM A 372, Grade 50 (or steel walers and bearing plates)
- Anchor:** 1 1/2" diameter, 150 ksi, Grade, conforming to AASHTO M275 (ASTM A722), with Class I corrosion protection (double).
- Grout:** Neat cement grout having a 28-day compressive strength of 3,000 psi, consisting of portland cement Type I, II or III, and conforming to Section 1001 of the Standard Specifications. Testing of grout is not required since grout will be tested with anchor stressing as part of system performance.
- Welds:** E70XX weld strength level, low hydrogen electrode. Testing of welds is not required since welds will be tested with anchor stressing as part of system performance.
- MISC:** Bolts, nuts and washers shall conform to the requirements of ASTM F3125 Grade A325, A363 and F436, respectively. Pipe spacers shall conform to the requirements of ASTM A53.
- Loads:** Anchor Types 1, 3, and 4 were design to withstand E80 loading, while Anchor Types 2, 5, and 6 were designed for a construction load of 300 psf.

Equivalent members may be substituted for those shown, if alternate members are used, the contractor must submit a re-design of the wall for approval.

For more information, see the Special Provisions for Temporary Soil Retention System (Spacers), Ground Anchors, and Helical Ground Anchors.

Lateral live load deflection shall be limited to 1/8" for shoring located within 18'-0" of centerline of track and 1/2" for shoring located outside 18'-0". The maximum allowable vertical or horizontal displacement of rail shall be 1/2".

See sheet 14 of 45 for Ground Anchor Schedule.

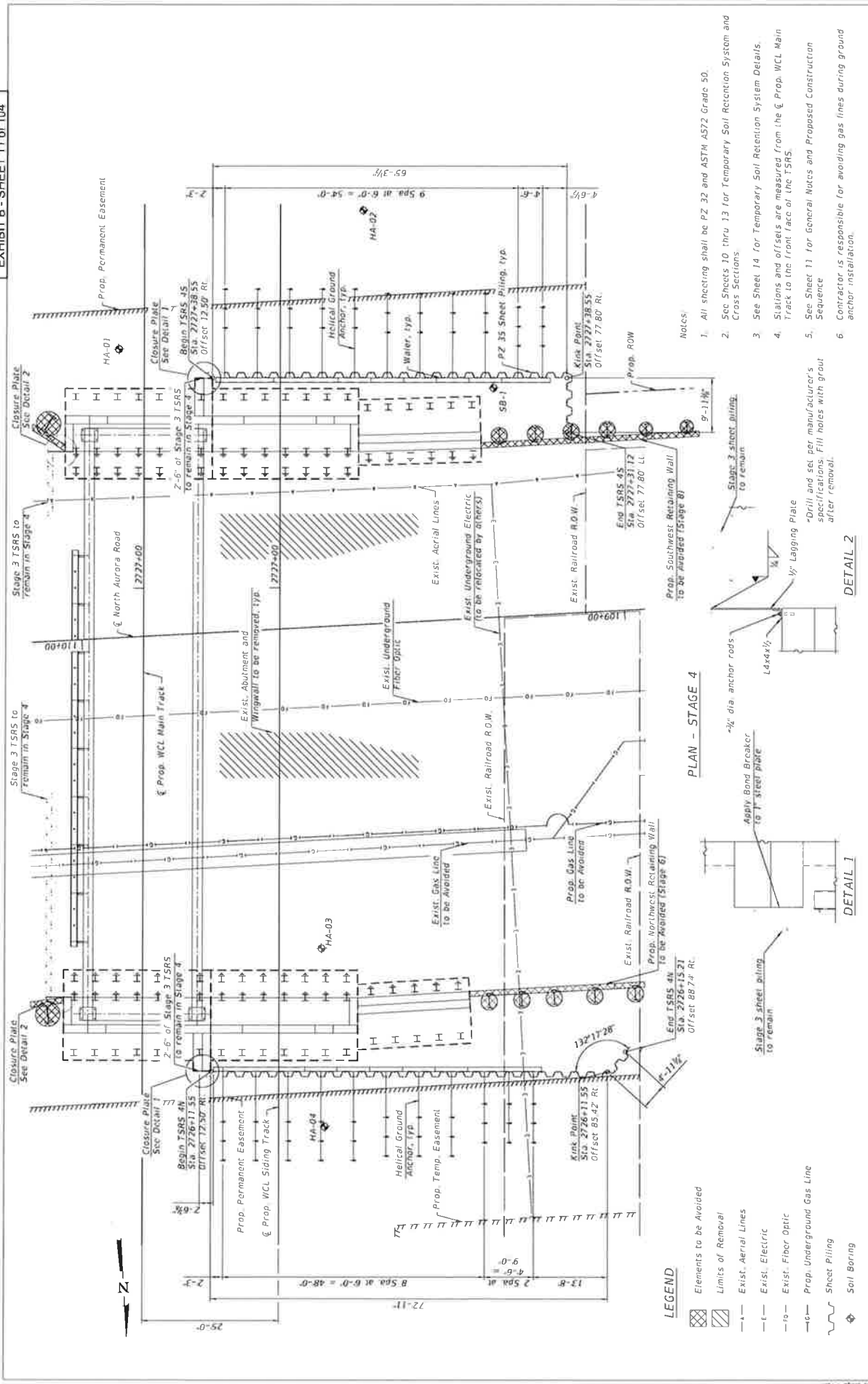
ANCHOR TESTING PROCEDURES

PERFORMANCE TEST

Five percent of the ground anchors or a minimum of three ground anchors, whichever is greater, shall be performance-tested according to the following procedures. The Engineer shall select the ground anchors to be performance tested. The remaining anchors shall be tested according to the proof test procedures.

The performance test shall be made by incrementally loading and unloading the ground anchors in accordance with the following schedule:

PERFORMANCE TEST SCHEDULE	
LOAD	AL
0.25DL*	1.00DL
0.50DL	1.20DL*
0.75DL	1.40DL*
1.00DL*	1.60DL*
1.20DL	1.80DL*
1.40DL*	2.00DL
1.60DL*	2.20DL*
1.80DL*	2.40DL*
2.00DL	2.60DL*
2.20DL*	2.80DL*
2.40DL*	3.00DL*
2.60DL*	3.20DL*
2.80DL*	3.40DL*
3.00DL*	3.60DL*
3.20DL*	3.80DL*
3.40DL*	4.00DL*
3.60DL*	4.20DL*
3.80DL*	4.40DL*
4.00DL*	4.60DL*
4.20DL*	4.80DL*
4.40DL*	5.00DL*
4.60DL*	5.20DL*
4.80DL*	5.40DL*
5.00DL*	5.60DL*
5.20DL*	5.80DL*
5.40DL*	6.00DL*
5.60DL*	6.20DL*
5.80DL*	6.40DL*
6.00DL*	6.60DL*
6.20DL*	6.80DL*
6.40DL*	7.00DL*
6.60DL*	7.20DL*
6.80DL*	7.40DL*
7.00DL*	7.60DL*
7.20DL*	7.80DL*
7.40DL*	8.00DL*
7.60DL*	8.20DL*
7.80DL*	8.40DL*
8.00DL*	8.60DL*
8.20DL*	8.80DL*
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8.80DL*	9.40DL*
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70.00DL*	70.60DL*
70.20DL*	70.80DL*
70.40DL*	71.00DL*
70.60DL*	71.20DL*
70.80DL*	71.40DL*
71.00DL*	71.60DL*
71.20DL*	71.



LEGEND

- Elements to be Avoided
- Limits of Removal
- Exist. Aerial Lines
- Exist. Electric
- Exist. Fiber-Optic
- Prop. Underground Gas Line
- Sheet Piling
- Soil Boring

PLAN - STAGE 4

DETAIL 1

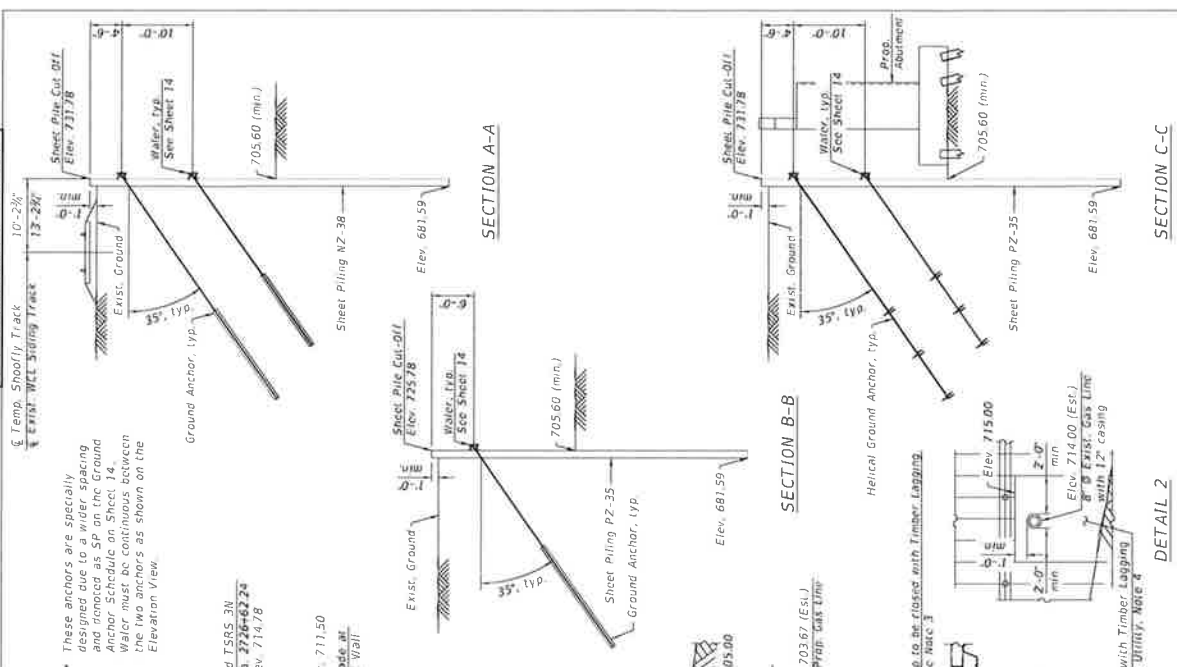
DETAIL 2

NOTES:

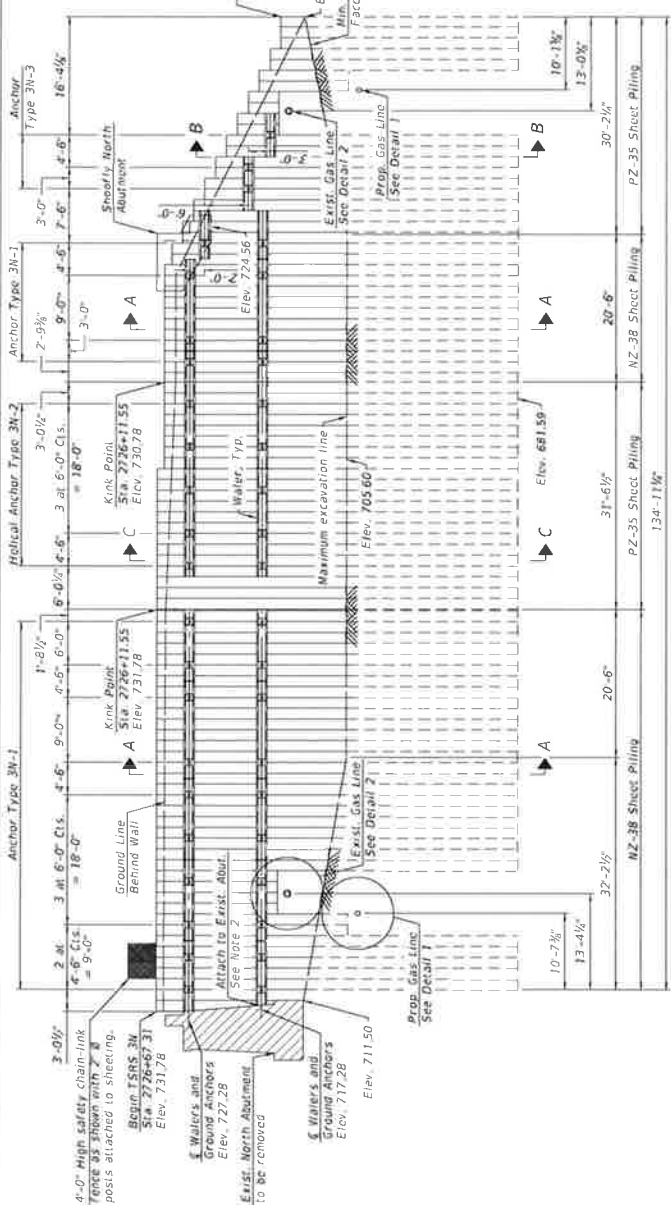
1. All sheeting shall be PZ 32 and ASTM A572 Grade-50.
2. See Sheets 10 thru 13 for Temporary Soil Retention System and Cross Sections
3. See Sheet 14 for Temporary Soil Retention System Details.
4. Stations and offsets are measured from the \pm Prop. WCL Main Track to the front face of the TSRS
5. See Sheet 11 for General Notes and Proposed Construction Sequence
6. Contractor is responsible for avoiding gas lines during ground anchor installation.

TRANSYSTEMS	DESIGNED BY	CHECKED BY	DATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
	DRAWN BY	DATE	SCALE	CONTRACT NO.	DATE	PROJECT
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION			TEMPORARY SOIL RETENTION SYSTEM PLAN - STAGE 4 STRUCTURE NO. 022-9948			

EXHIBIT B - SHEET 12 of 104



These anchors are specially designed due to a wider spacing and intended as SP on the Ground for the purpose of Sheet Piling. Walers must be installed between the two anchors as shown on the Elevation View.



TEMPORARY SOIL RETENTION SYSTEM - ELEVATION

NORTH ABUTMENT - STAGE 3

(Looking North, Unaligned View, Measured along F.F. of Wall)

- EXISTING GAS UTILITY**
- Temporary Soil Retention System shall be constructed to avoid the existing PROPOSED GAS UTILITY. Installation of TSRS Service shall be maintained through the proposed gas line throughout the duration of the project.
 - Before driving sheet piling over the existing utility structure, the Contractor shall verify the location and depth of the structure by probing.
 - Sheet piling shall not be driven to embedment depth shown on plans at the location of the existing gas line as shown on Sheet B.
 - Prior to driving sheet piling, the Contractor shall submit to the Engineer a contingency plan in the event the gas line is damaged or located. If the gas line is damaged, the Contractor shall repair the proposed gas line utility service shall be repaired at the expense of the Contractor.

TSRS 3N BILL OF MATERIAL

Item	Unit	Total
Temporary Soil Retention System (Special)	Sq. Ft.	2,856
Walers	Pound	15,730
Ground Anchors	Each	31
Helical Ground Anchors	Each	10

*For information only. Cost included with Temporary Soil Retention System (Special).
(Walers includes weight of all structural steel related to waler system).

<p>TRANSYSTEMS</p> <p>DESIGNED BY: [] CHECKED BY: [] DRAWN BY: [] DATE: []</p>	<p>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>		<p>TEMPORARY SOIL RETENTION SYSTEM ELEV. - N. ABUT - STAGE 3 STRUCTURE NO. 022-9948</p>		<p>SHEET 12 OF 43 SHEETS</p>
	<p>PROJECT NO. [] CONTRACT NO. []</p>	<p>COUNTY [] DISTRICT []</p>	<p>SECTION [] DATE []</p>	<p>SCALE [] SHEET []</p>	<p>DATE []</p>

EXHIBIT B - SHEET 13 of 104

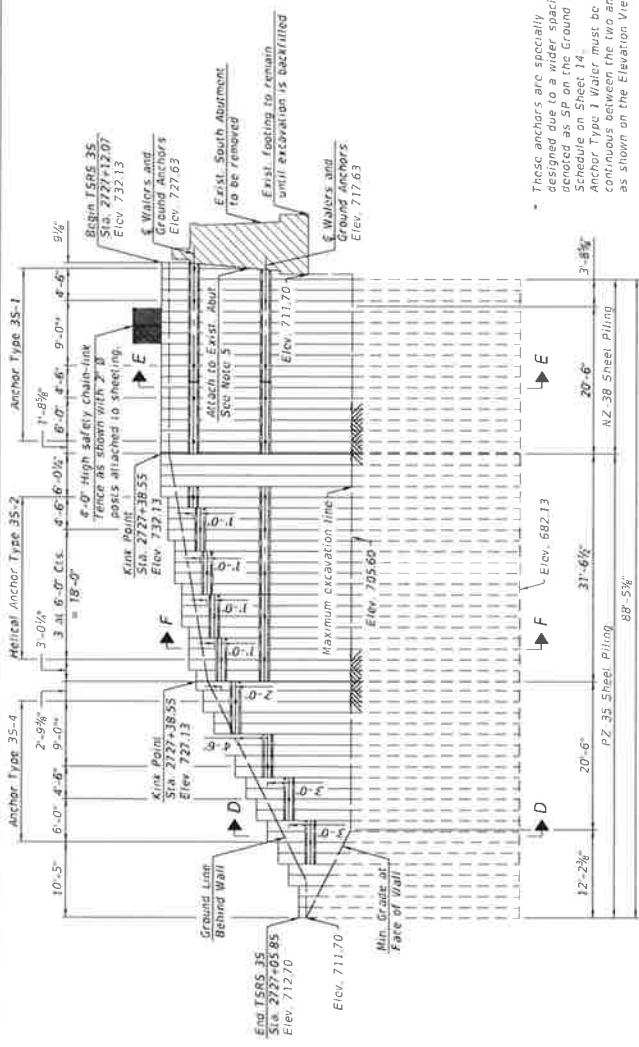
PROPOSED CONSTRUCTION SEQUENCE (PER STAGE):

1. Construction of TSRS 3N and 3S shall begin at the start of Stage 3 ahead of all excavation for proposed bridge substructure. Construction of TSRS 4N and 4S shall begin at the start of Stage 4 ahead of all excavation for proposed railroad bridge substructure.
2. Drive sheet piles to toe elevations shown. All modifications required to avoid existing utilities shall be approved by the Engineer.
3. Excavate approximately 1'-0" below elevation of top row of ground anchors. Drill and install anchors. Do not further excavate below anchor elevations until all anchors are stressed and load locked in. See sheet 7 of 45 for details on anchor installation requirements.
4. Repeat operation 3 for each level of ground anchors.
5. Excavate to final stage ground elevation shown.
6. Construct abutment. Install temporary closure plates.
7. Backfill to approximately 1'-0" below elevation of bottom row of ground anchors. Remove bottom row of anchors.
8. Repeat operation 7 for each level of ground anchors. Backfill to finished grade.
9. Remove all remaining elements of the Temporary Soil Retention System with portions to remain as indicated.

GENERAL NOTES:

1. Contractor shall verify location of all existing utility structures to be discontinued and confirm they have been discontinued prior to installation of sheet piling and anchors.
2. Contractor shall cease installation operations prior to impacting the discontinued utilities. Determine a method of severing or penetrating structures without damaging sheet pile tops. All mitigation actions shall be approved by the Engineer.
3. Any sheet piling or anchor modifications required to avoid interference with existing or proposed utility structures shall be approved by the Engineer.
4. Cost to repair any sheet piling or ground anchors damaged by impacting existing utility structures shall be at the expense of the Contractor.
5. See Sheet 14 for Backfill to Sheet Pile Connection Detail and Fencs Connection Detail.
6. The Contractor shall connect the first sheet to the existing ground anchor, ensuring stability of sheets prior to the top of excavation. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Soil Retention System (Special).

* These anchors are specially designed due to a wider spacing and denoted as SP on the Ground Anchor Schedule on Sheet 14. Anchor Type 1 Waler must be continuous between the two anchors as shown on the Elevation View.



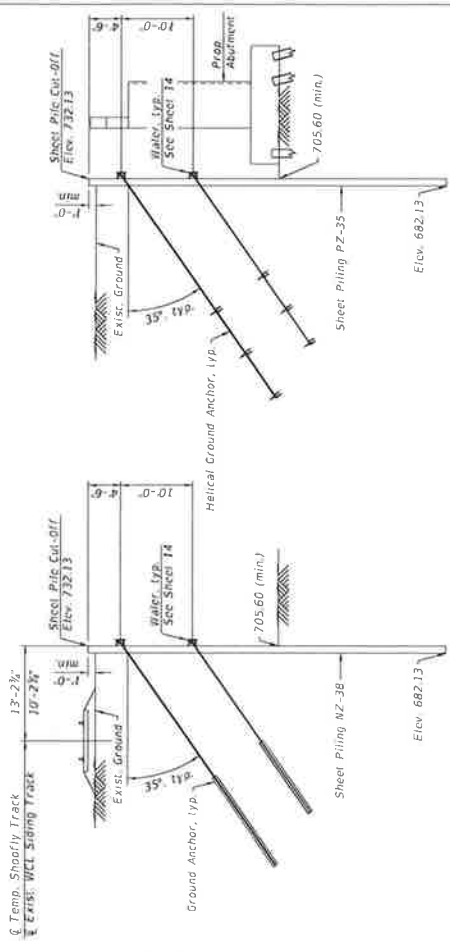
TEMPORARY SOIL RETENTION SYSTEM - ELEVATION SOUTH ABUTMENT - STAGE 3

(Looking South, Unrolled View, Measured along F.F. of Wall)

TSRS 3S BILL OF MATERIAL

Item	Unit	Total
Temporary Soil Retention System (Special)	Sq. Ft.	1,723
*Walers	Pound	11,280
*Ground Anchors	Each	13
*Helical Ground Anchors	Each	10

*For information only. Cost included with Temporary Soil Retention System (Special).
 (Walers include weight of all structural steel related to water system.)



SECTION D-D

SECTION E-E

SECTION F-F

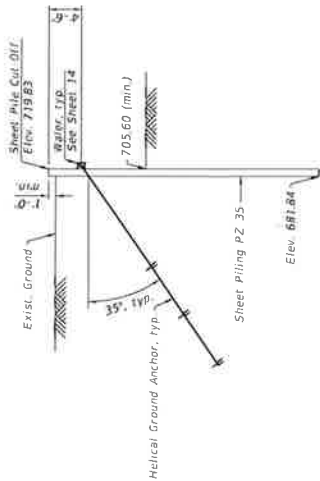
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY SOIL RETENTION SYSTEM ELEV. - S. ABUT - STAGE 3
STRUCTURE NO. 022-9948

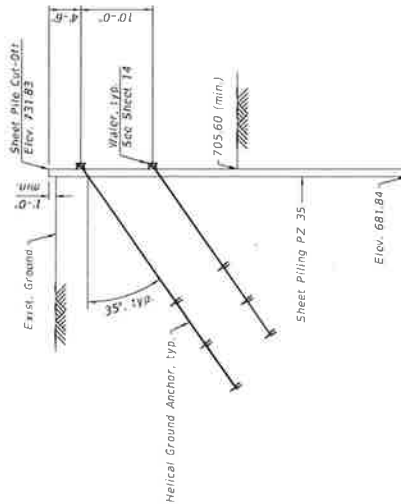
DESIGNED BY	REVIEWED BY	DATE
CHECKED BY	REVIEWED BY	DATE
DRAWN BY	REVIEWED BY	DATE
IN CHARGE	REVIEWED BY	DATE

PROJECT NO. 1543 Stage 3S Retention and Earth Section
 SHEET 13 OF 45 SHEETS
 COUNTY DUPAGE
 DISTRICT 423
 CONTRACT NO. 16178

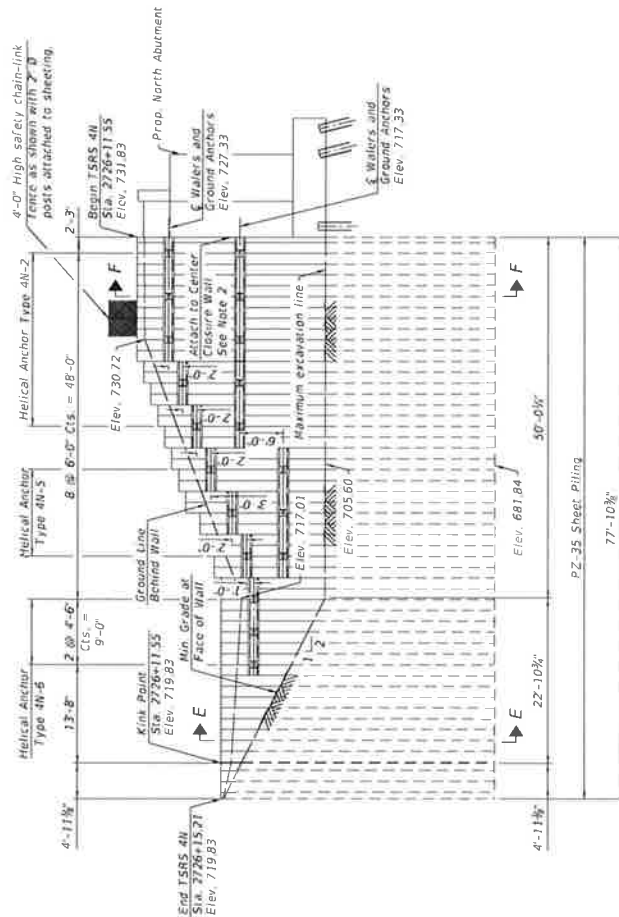




SECTION E-E



SECTION F-F



TEMPORARY SOIL RETENTION SYSTEM - ELEVATION
NORTH ABUTMENT - STAGE 4

(Looking North, Unfolded View, Measured along F.F. of Wall)

TSRS 4N BILL OF MATERIAL

Item	Unit	Total
Temporary Soil Retention System (Special)	Sq. Ft.	1,163
*Walters	Pound	9,190
*Helical Ground Anchors	Each	19

*For information only. Cost included with Temporary Soil Retention System (Special).
(Walters include weight of all structural steel related to waler system.)

- Note:
1. See Sheet 11 for General Notes and Proposed Construction Sequence.
2. See Sheet 9 for Band Breaker Details.
3. See Sheet 14 for Fence Connection Detail.

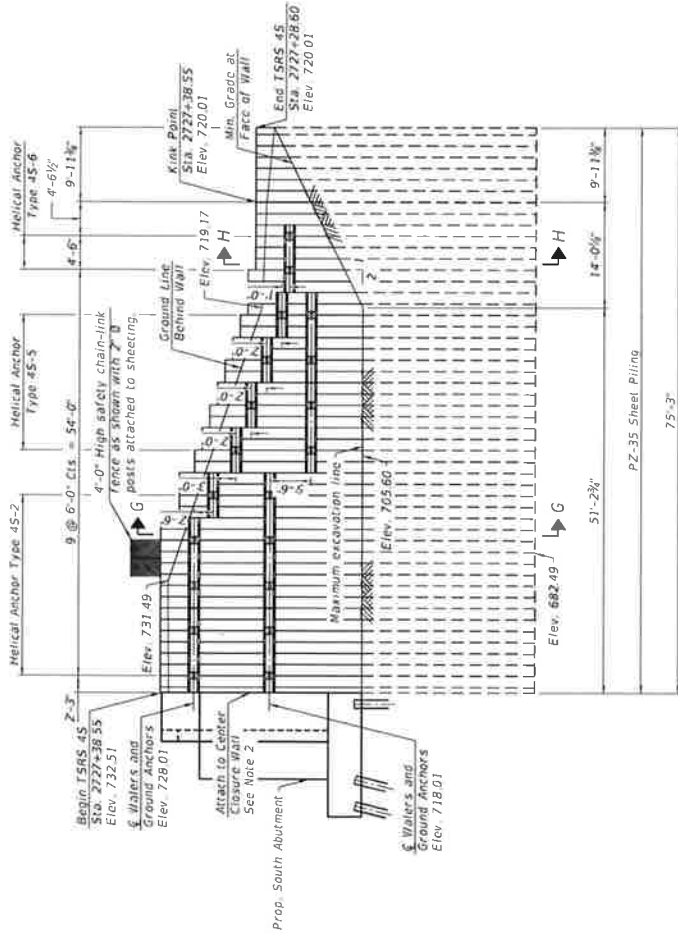
TRANSYSTEMS

DATE: 11/10/24
SCALE: 3/16" = 1'-0"
NO. 2411 - 11/10/24

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY SOIL RETENTION SYSTEM ELEV. - N. ABUT. - STAGE 4
STRUCTURE NO. 022-9948

SECTION	DATE	TOTAL SHEETS
02-07-25-08	12/09	427
CONTRACT NO.	022-9948	8179
SHEET NO.	14	OF 15 SHEETS



TEMPORARY SOIL RETENTION SYSTEM - ELEVATION
SOUTH ABUTMENT - STAGE 4

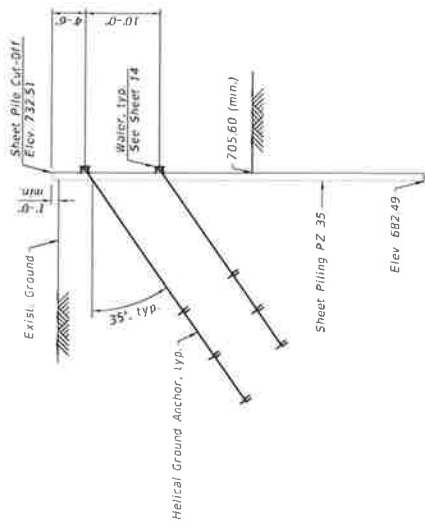
(Looking South, Unfolded View, Measured along F.F. of Wall)

TSRS 4S BILL OF MATERIAL

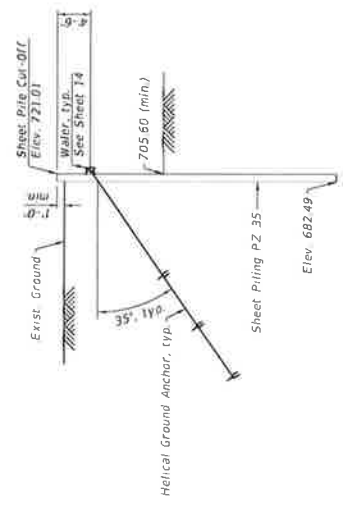
Item	Unit	Total
Temporary Soil Retention System (Special)	Sq. Ft.	1,209
WALERS	Pounds	9,780
Helical Ground Anchors	Each	20

- Note:
- See Sheet 11 for General Notes and Proposed Construction Sequence.
 - See Sheet 9 for Bond Breaker Details.
 - See Sheet 14 for Fence Connection Detail.

*For information only. Cost included with Temporary Soil Retention System (Special).
Walers include weight of all structural steel related to water system.



SECTION G-G



SECTION H-H

<p>TRANSYSTEMS</p>		<p>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>		<p>TEMPORARY SOIL RETENTION SYSTEM ELEV. - S. ABUT. - STAGE 4 STRUCTURE NO. 022-9949</p>	
<p>DESIGNED BY TRANSSYSTEMS</p>	<p>CHECKED BY TRANSSYSTEMS</p>	<p>REVISIONS</p>	<p>DATE</p>	<p>SECTION 02-023-00-04</p>	<p>COUNTY DAUNDE</p>
<p>PROJECT NO. 15-00007-10</p>	<p>DATE 11/13/2014</p>	<p>NO. OF SHEETS 15</p>	<p>SHEET NO. 15</p>	<p>SCALE AS SHOWN</p>	<p>TOTAL SHEETS 15</p>
<p>PROJECT NO. 15-00007-10</p>	<p>DATE 11/13/2014</p>	<p>NO. OF SHEETS 15</p>	<p>SHEET NO. 15</p>	<p>SCALE AS SHOWN</p>	<p>TOTAL SHEETS 15</p>

EXHIBIT B - SHEET 16 of 104

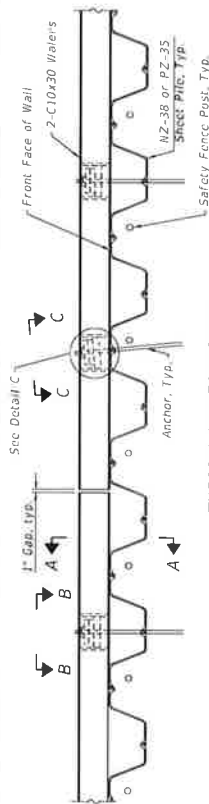
GROUND ANCHOR SCHEDULE

Type	Design Load (kips)	Elevation (feet)	Angle (degrees)	Min. Unbonded Length (feet)	Est. Bonded Length (feet)	Total Length (feet)
3N-1T	48.13	727.28	35	15	22	37
3N-1T-5P	53.63	727.28	35	15	24	39
3N-1T-2	48.13	725.28	35	15	22	37
3N-1B	48.41	717.28	35	15	22	37
3N-1B-5P	53.71	717.28	35	15	24	39
3N-2T	28.14	727.28	35	11	9	20
3N-2B	31.60	717.28	35	13	9	22
3N-3T	27.14	719.28	35	15	12	27
3N-3T-2	27.14	719.28	35	15	12	27
35-1T	48.13	727.63	35	15	22	37
35-1T-5P	53.63	727.63	35	15	24	39
35-1B	48.41	717.63	35	15	22	37
35-1B-5P	53.71	717.63	35	15	24	39
35-2T	28.14	727.63	35	11	9	20
35-2T-3	28.14	726.63	35	11	9	20
35-2T-4	28.14	724.63	35	11	9	20
35-2T-5	28.14	722.63	35	11	9	20
35-2B	31.60	717.63	35	13	9	22
35-4T-2-5P	17.39	721.63	35	15	6	23
35-4T-3	15.55	714.13	35	15	6	23
35-4T-4	15.55	711.13	35	15	7	22
4N-2T	28.14	727.33	35	11	9	20
4N-2T-2	28.14	725.33	35	11	9	20
4N-2T-3	28.14	723.33	35	11	9	20
4N-2B	31.60	717.33	35	13	9	22
4N-5T	24.88	721.33	35	10	9	19
4N-5T-2	24.88	718.33	35	10	9	19
4N-5T-3	24.88	716.33	35	10	9	19
4N-5B	22.20	711.33	35	10	9	19
4N-6T	17.97	715.33	35	7	9	16
4S-2T-2	28.14	728.01	35	11	9	20
4S-2T-3	28.14	725.51	35	11	9	20
4S-2B	31.60	718.01	35	13	9	22
4S-5T	24.88	722.51	35	10	9	19
4S-5T-3	24.88	720.51	35	10	9	19
4S-5T-4	24.88	718.51	35	10	9	19
4S-5B	22.20	712.51	35	10	9	19
4S-6T	17.97	715.51	35	7	9	16

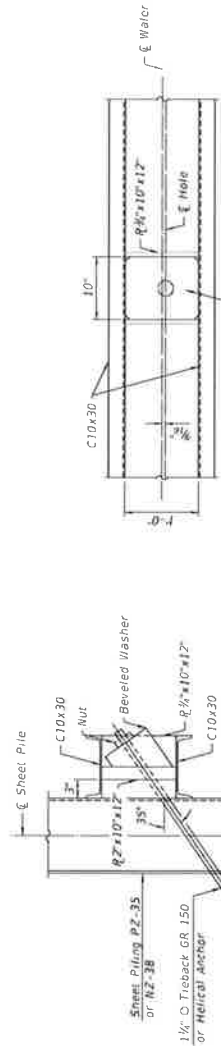
NOTE

Estimated bonded and unbonded lengths are specified in the ground anchor schedule; actual length and depth required to develop the design load specified shall be determined by the anchor supplier. Minimum ultimate load capacity shall be 2 x design load. Changes in bonded and unbonded length shall be approved by the Engineer.

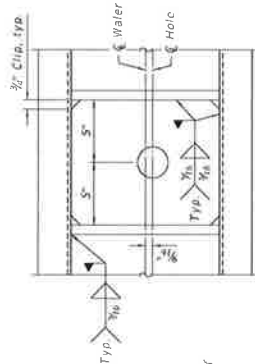
T = Top Anchor
B = Bottom Anchor
SP = Special Anchor



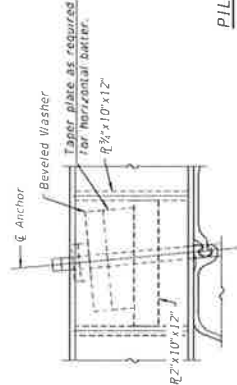
TYPICAL WALER DETAIL



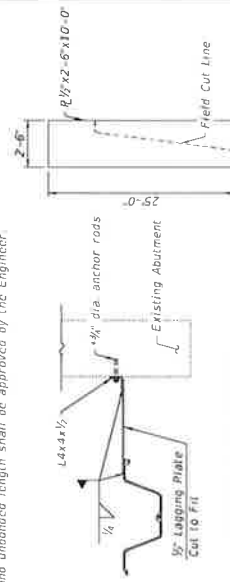
VIEW B-B



VIEW C-C



DETAIL C



BACKWALL SHEET

BACKWALL TO SHEET

PILE CONNECTION DETAIL

CONNECTION PLATE

*Drill and set per manufacturer's specifications

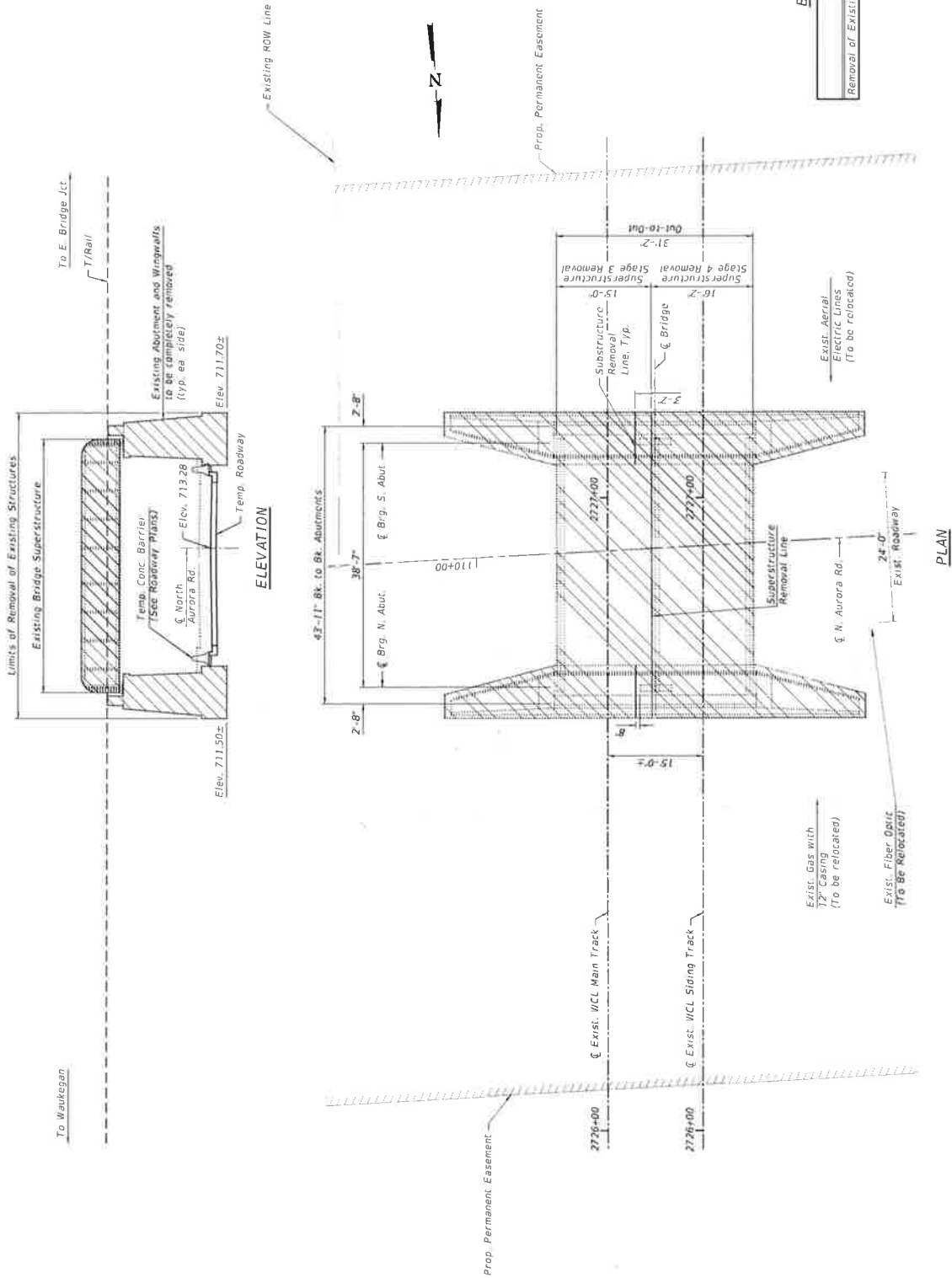
- All structural steel shall meet the requirements of ASTM A572 Grade 50.
- All bolts, nuts and washers shall meet the requirements of ASTM F3125 Grade A325, ASTM A563 and ASTM F436, respectively.
- Anchors and walers must be installed when bottom of excavation is a maximum of 1'-0" below the level of walers. The removal process shall be the reverse of the installation process.
- Sheeting is to be removed after backfilling is complete or temporary embankment is removed and ground anchor system must be removed during backfilling.
- All sheet piling, walers, ground anchors, miscellaneous steel shapes, and connecting hardware required for temporary sheet piling will be paid for under the Temporary Soil Retention System (Specialty Item).
- All elevations and dimensions must be verified in the field.
- Contractor shall verify that each ground anchor does not interfere with existing or proposed structures prior to installation. Any anchor modifications required for existing or proposed utility structures shall be approved by the Engineer.
- Any excavation beyond limits shown must be approved by the Engineer.
- If the temporary soil retention system outlined in these plans is not used, the Contractor must provide design calculations and working drawings of the soil retention system stamped by a licensed Illinois Structural Engineer.
- See Special Provision "Ground Anchors" and "Helical Ground Anchors" for information regarding ground anchors for Temporary Soil Retention System (Specialty).
- Safety fence shall be according to Article 664 in the Standard Specifications. Cost included with Temporary Soil Retention System (Specialty). See Hwy. Std. 66-1001.

TRANSYSTEMS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY SOIL RETENTION SYSTEM DETAILS
STRUCTURE NO. 022-9948

DATE	SECTION	COUNTY	TOTAL SHEET
11/10/2024	04013-008	DAVIE	432
NO.	NO.	NO.	NO.
11/10/2024	11/10/2024	11/10/2024	11/10/2024



LEGEND:



BILL OF MATERIAL

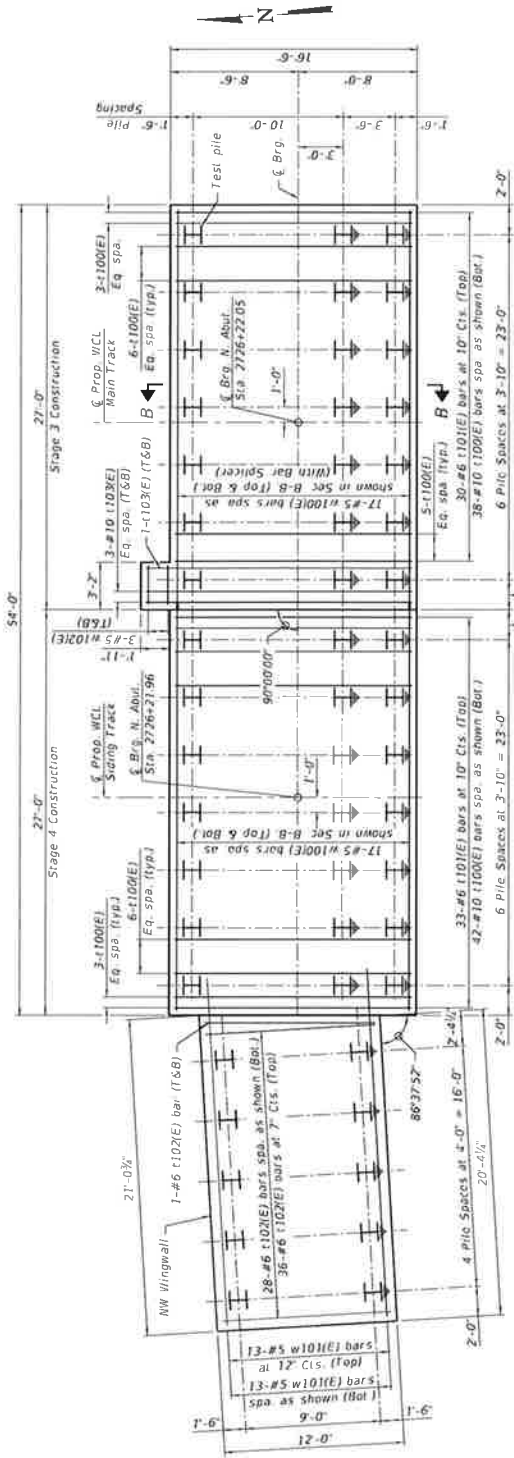
Item	Unit	Total
Removal of Existing Structures	Each	1

Note: For substructure removal limits, see sheet 16 of 45.

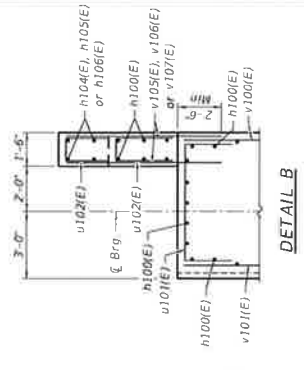
TRANSYSTEMS 278133 Pk 1811 North Lincoln Road, Suite 1000, Chicago, IL 60642 TEL: (773) 442-1000 FAX: (773) 442-1001	DESIGNED BY: JAW CHECKED BY: MDS DRAWN BY: GJZ CHECKED BY: MDS	REVISIONS: REVISION 1 REVISION 2 REVISION 3	EXISTING STRUCTURE REMOVAL DETAILS 1 STRUCTURE NO. 022-9948	SHEET 19 OF 43 SHEETS
	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	COUNTY: COOK DISTRICT: 02 PROJECT: 06-0073-20-008	CONTRACT NO. 61G7B	PROJECT NO. 022-9948

EXHIBIT B - SHEET 20 OF 104

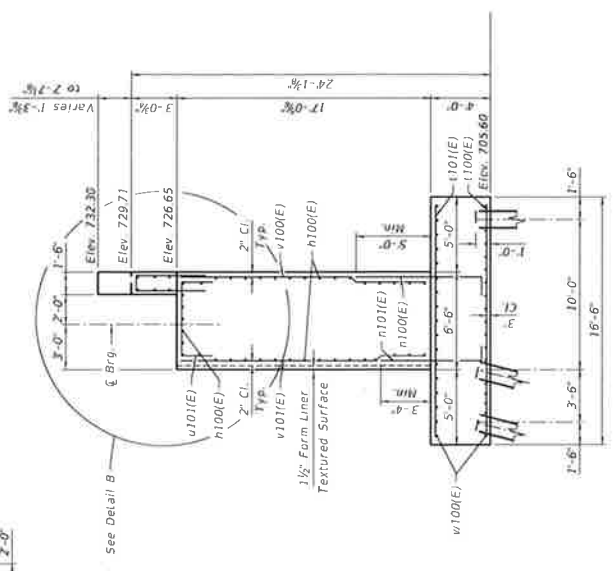
Notes:
For pile data, see sheet 3 of 45.
For drainage details, see sheet 39 of 45.



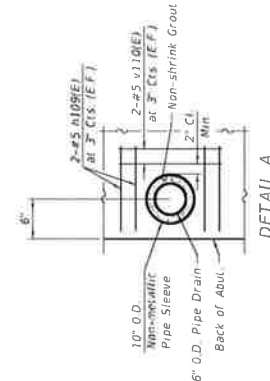
FOOTING PLAN



DETAIL B

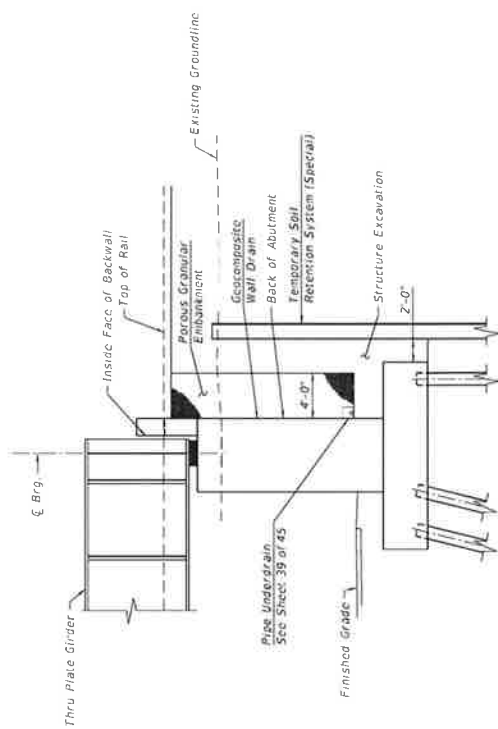


SECTION B-B



DETAIL A

(Cost of non metallic sleeve and non shrink grout included in Drainage System for Structures.)

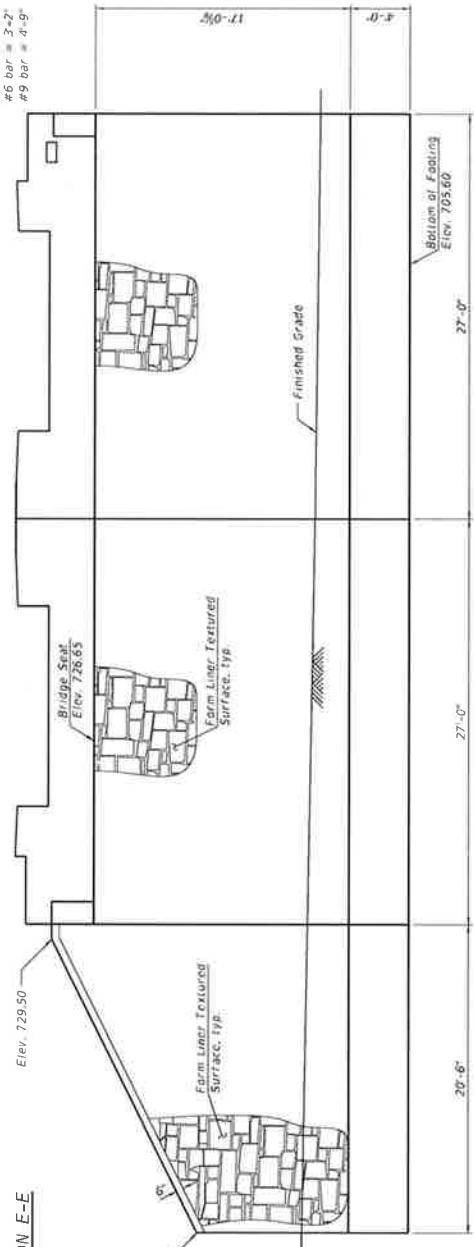
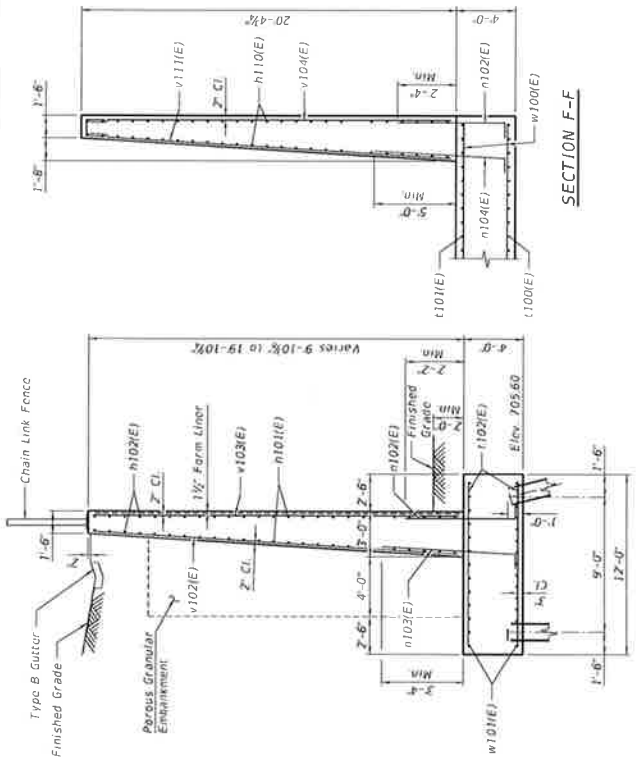
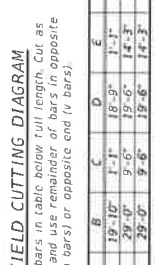
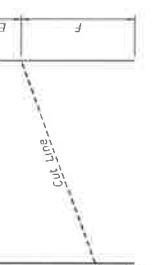
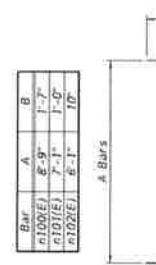
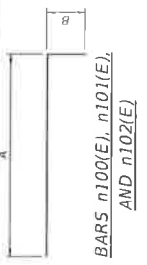
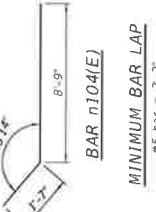
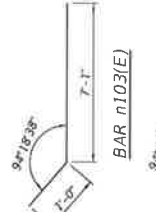
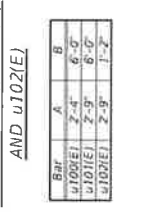


SECTION THRU ABUTMENT

TRANSYSTEMS 2025 1911 1811 MAIN ST. NORTH ARLINGTON HEIGHTS, ILL. 60018	SHEET NO. 20 OF 104	SHEET NO. 45 OF 45 SHEETS	CONTRACT NO. 61079
	PROJECT NO. 103000-1-1P DATE: 11/15/2024	DRAWN BY: JRM CHECKED BY: JRM	COUNTY: DUPage DISTRICT: 427
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	NORTH ABUTMENT FOOTING PLAN STRUCTURE NO. 022-9948	TOTAL SHEETS: 104 SHEETS: 45	NAME: SEE ATTACHED

BILL OF MATERIAL

Bar No.	Size	Length	Shape
n100(E)	#8	26'-8"	
n101(E)	#5	20'-2"	
n102(E)	#5	20'-2"	
n103(E)	#5	19'-10"	
n104(E)	#5	6'-2"	
n105(E)	#5	7'-6"	
n106(E)	#5	3'-0"	
n107(E)	#5	5'-6"	
n108(E)	#5	2'-11"	
n109(E)	#5	7'-5"	
n110(E)	#5	8'-1"	
n111(E)	#9	10'-4"	
n112(E)	#6	8'-1"	
n113(E)	#5	6'-11"	
n114(E)	#6	8'-11"	
n115(E)	#6	8'-11"	
n116(E)	#9	10'-4"	
n117(E)	#10	16'-2"	
n118(E)	#6	16'-2"	
n119(E)	#6	11'-8"	
n120(E)	#6	18'-1"	
w100(E)	#5	10'-8"	U
w101(E)	#6	11'-8"	U
w102(E)	#6	6'-8"	U
w103(E)	#9	16'-9"	
w104(E)	#6	16'-9"	
w105(E)	#6	20'-0"	
w106(E)	#5	28'-0"	
w107(E)	#5	20'-1"	
w108(E)	#6	6'-8"	
w109(E)	#6	7'-8"	
w110(E)	#8	5'-1"	
w111(E)	#4	3'-4"	
w112(E)	#4	7'-4"	
w113(E)	#5	1'-9"	
w114(E)	#9	20'-1"	
w115(E)	#5	36'-8"	
w116(E)	#5	27'-10"	
Parsons Granular Embankment		Cu. Yd. 173	
Structure Encasement		Cu. Yd. 1,550	
Form Liner Textured Surface		Sq. Ft. 1,216	
Reinforcement Epoxy Coated		Pound 35,210	
Bar Splitters		Each 89	
Pipe Handrail		Foot 5	
Furnishing Steel Piles, #12x89		Foot 4,536	
Driving PILES		Foot 4,536	
Steel HP14x89		Each 57	
Pipe Shoes		Each 57	
Geocomposite Wall Drain		Sq. Yd. 132	
Concrete Structures (Social)		Cu. Yd. 443.2	
Chain Link Fence, 4' Attached to Structure		Foot 21	
Anti-Graffiti Protection System		Sq. Ft. 1,605	



NORTH ABUTMENT ARCHITECTURAL DETAILS

(Looking North at Front Face)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT DETAILS 2
STRUCTURE NO. 022-9948

CONTRACT NO. 81028

SECTION 28-00132-00-BR

SHEET 22 OF 45 SHEETS

QUANTITY QUANTITY

REVISIONS

DESIGNED BY: J.A.

CHECKED BY: J.M.

DRAWN BY: M.D.

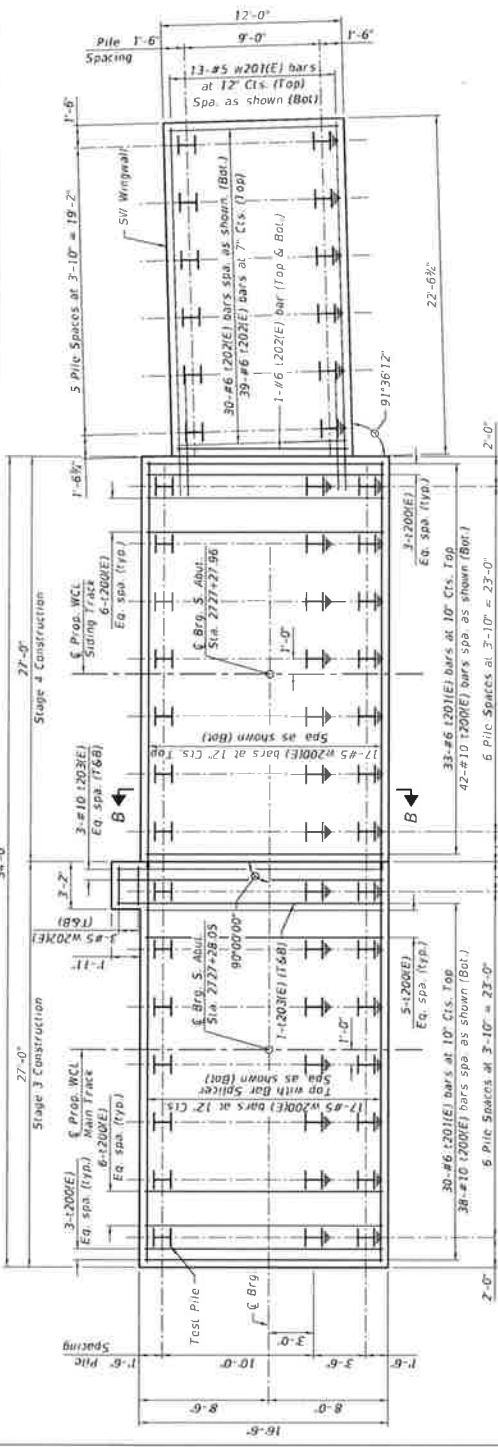
PROJECT NO. 022-9948

TRANSYSTEMS

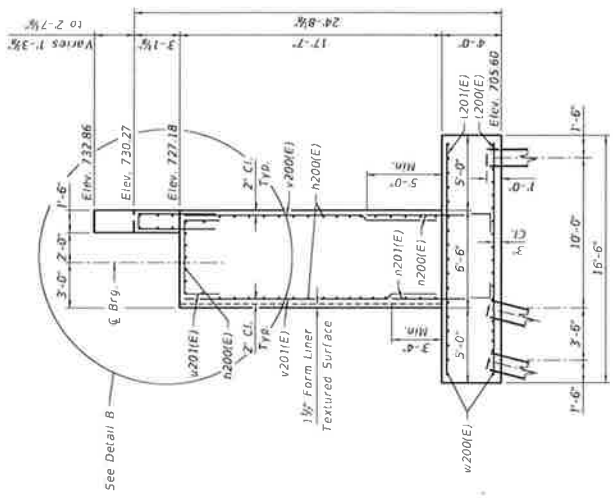
Notes: For drainage details, see sheet 39 of 45.

EXHIBIT B - SHEET 24 of 104

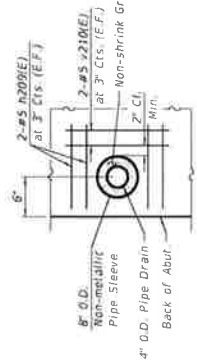
Notes:
For pile data, see sheet 3 of 45.
For drainage details, see sheet 39 of 45.



FOOTING PLAN

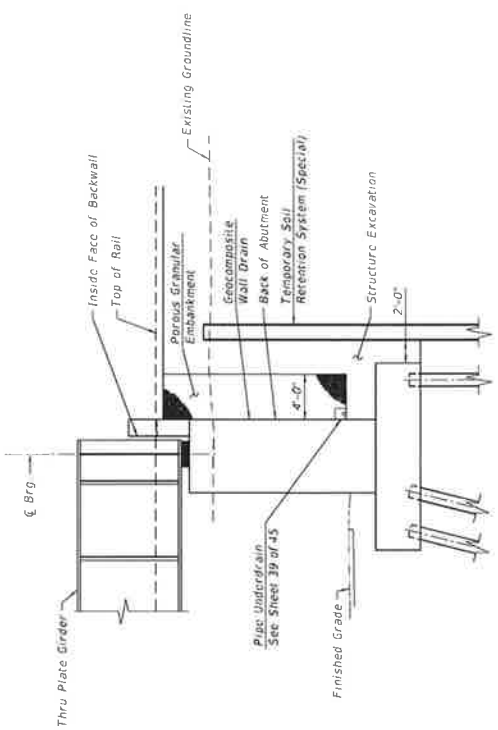


SECTION B-B



DETAIL A

(Cost of non metallic sleeve and non shrink
grout included in Pipe Underdrains for
Structures, 4')

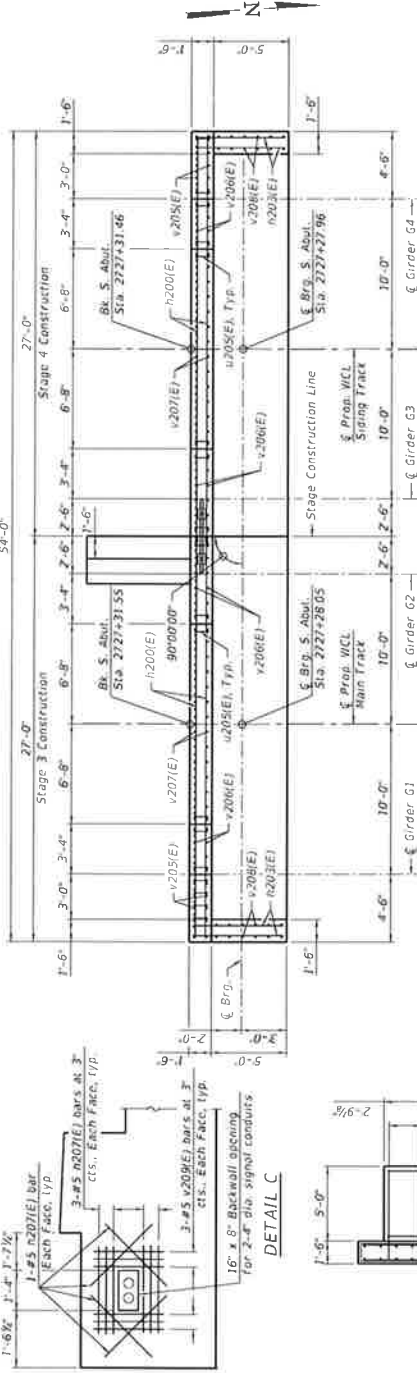


SECTION THRU ABUTMENT

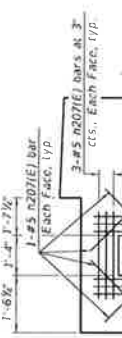
<p>TRANSYSTEMS</p>	<p>DESIGNED - T.A.</p> <p>CHECKED - J.M.</p> <p>DRAWN - T.A.</p> <p>DATE - 11/02/24</p>	<p>REVISIONS</p> <p>NO. 1</p> <p>DATE</p> <p>DESCRIPTION</p>	<p>STATE OF ILLINOIS</p> <p>DEPARTMENT OF TRANSPORTATION</p>	<p>SOUTH ABUTMENT FOOTING PLAN</p> <p>STRUCTURE NO. 022-9948</p>	<p>PROJECT NO. 110224</p> <p>CONTRACT NO. 61078</p>
	<p>PROJECT NO. 110224</p> <p>CONTRACT NO. 61078</p>	<p>SECTION</p> <p>DATE</p> <p>SCALE</p>	<p>COUNTY</p> <p>DISTRICT</p> <p>SECTION</p>	<p>PROJECT NO. 110224</p> <p>CONTRACT NO. 61078</p>	<p>DATE</p> <p>SCALE</p>

EXHIBIT B - SHEET 25 of 104

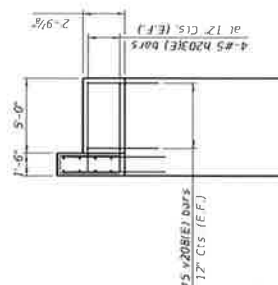
Notes:
 All steel rail elements, base plates, and bolts shall be galvanized.
 Fill backwall opening with non-shrink grout.
 Cast included with Concrete Structures (Special).



BACKWALL PLAN

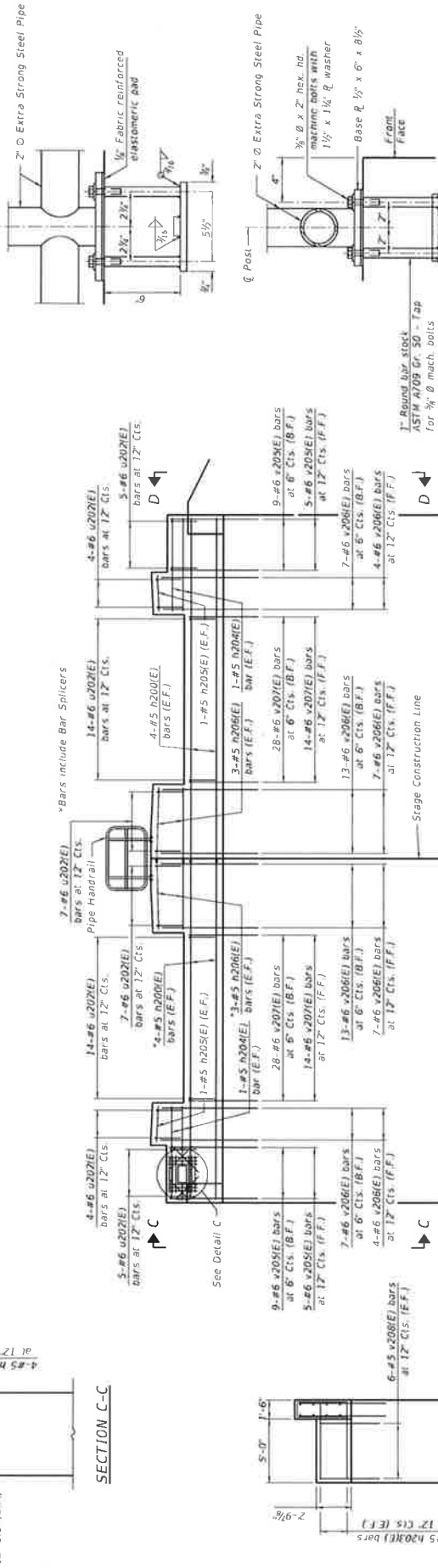


SECTION C-C



SECTION D-D

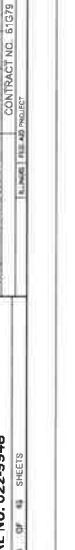
BACKWALL ELEVATION
 (Looking South)



ANCHOR BOLT DETAILS

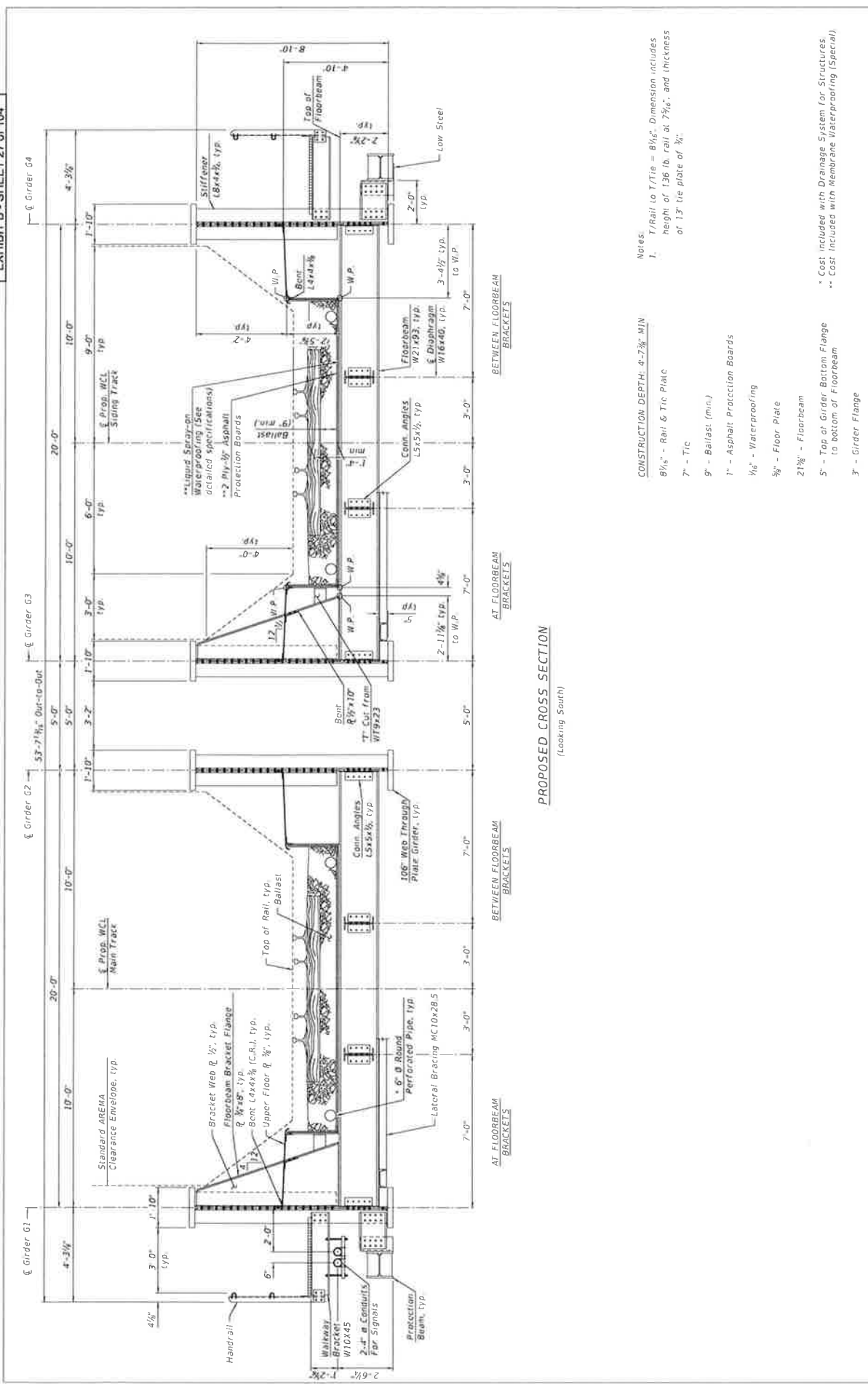


PIPE HANDRAIL DETAILS



In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 3/8" anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

TRANSYSTEMS		DATE: 11/11/2024		PROJECT: I-55/US 52		SHEET: 25 OF 43 SHEETS	
DESIGNED BY: JRM	CHECKED BY: JRM	DRAWN BY: JRM	CHECKED BY: JRM	DATE: 11/11/2024	PROJECT: I-55/US 52	SHEET: 25 OF 43 SHEETS	
STATE OF ILLINOIS				SOUTH ABUTMENT DETAILS 1			
DEPARTMENT OF TRANSPORTATION				STRUCTURE NO. 022-9948			
COUNTY: ILLINOIS		SECTION: I-55/US 52		TOTAL SHEETS: 43		CONTRACT NO. 022-9948	
SHEET: 25 OF 43 SHEETS		DATE: 11/11/2024		PROJECT: I-55/US 52		SHEET: 25 OF 43 SHEETS	



PROPOSED CROSS SECTION
(Looking South)

Notes:
1. T/Rail to T/Tie = 8 1/2". Dimension includes height of 136 lb. rail at 7 1/2", and thickness of 1 1/2" tie plate of 3/4".

CONSTRUCTION DEPTH: 4-7 3/4" MIN

8 1/2" - Rail & Tie Plate

7" - Tie

9" - Ballast (min.)

7" - Asphalt Protection Boards

1/8" - Waterproofing

3/8" - Floor Plate

2 1/8" - Floorbeam

5" - Top of Girder Bottom Flange to bottom of Floorbeam

3" - Girder Flange

* Cost included with Drainage System for Structures.
** Cost included with Membrane Waterproofing (Special)

TRANSYSTEMS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK CROSS SECTION
STRUCTURE NO. 022-9948

DATE	NO.	DESCRIPTION
05-01-13	02	ISSUED FOR PERMIT
05-01-13	03	DUPAGE
05-01-13	04	CONTRACT NO. 6107B

DATE	NO.	DESCRIPTION

DATE	NO.	DESCRIPTION

DATE	NO.	DESCRIPTION

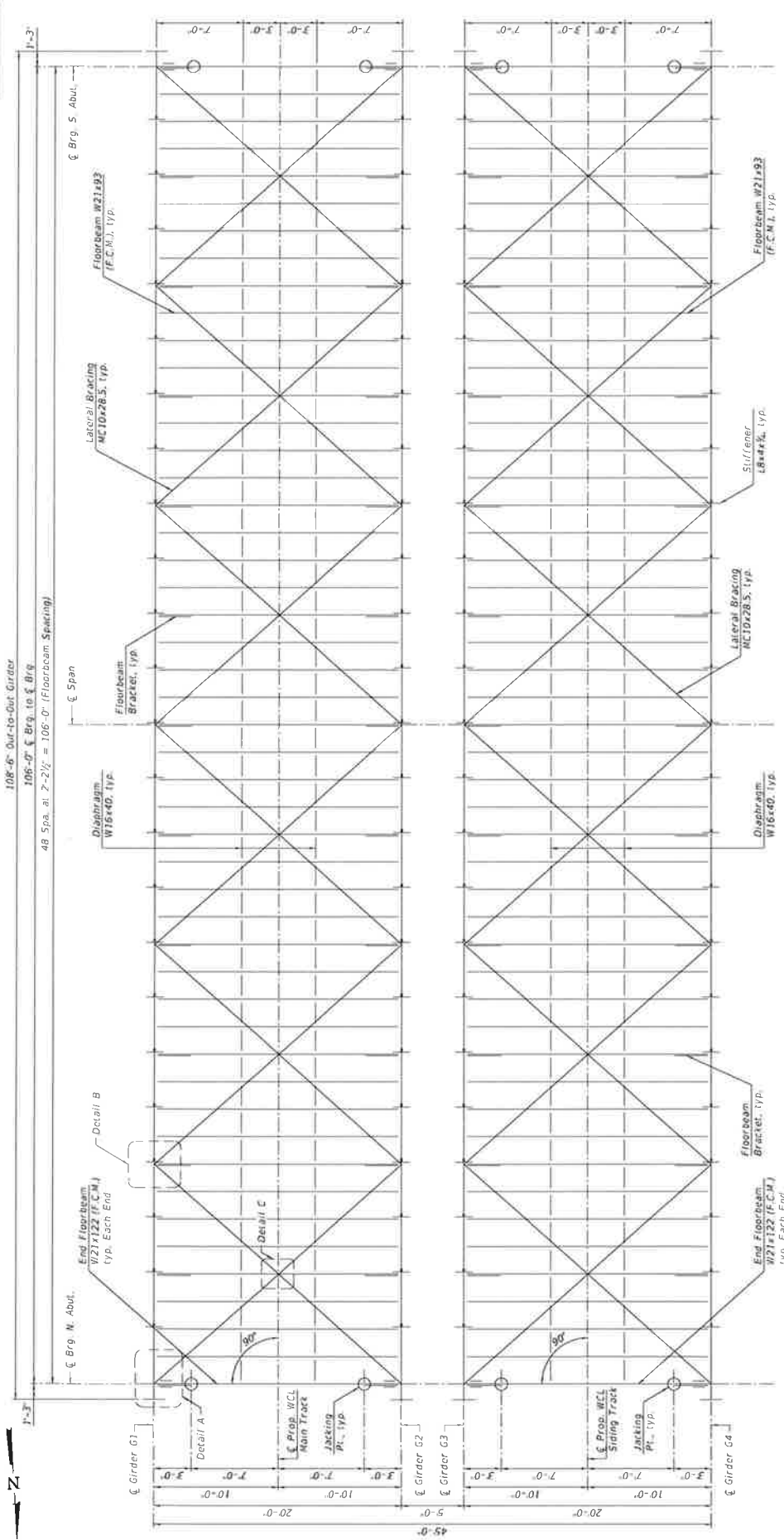
DATE	NO.	DESCRIPTION

DATE	NO.	DESCRIPTION

DATE	NO.	DESCRIPTION

EXHIBIT B - SHEET 28 of 104

To E. Bridge Jct.



- Notes:
1. (F.C.M.) indicates Fracture Critical Member.
 2. For Details A, B, and C, see sheet 31 of 45
 3. For Protection Beam Details, see sheet 38 of 45.

FRAMING PLAN

TRANSYSTEMS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 022-9948
SHEET 28 OF 48 SHEETS

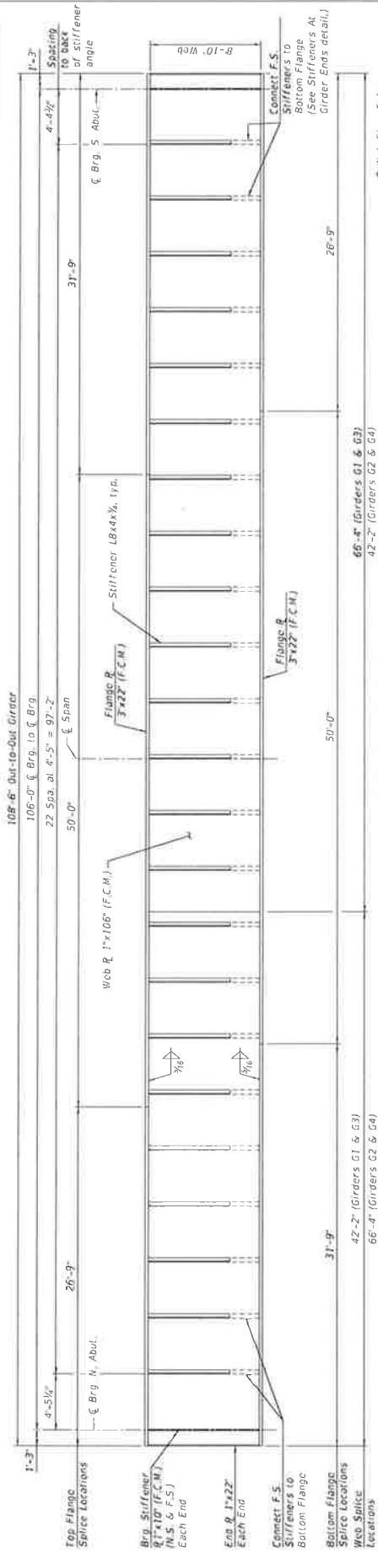
PLANNING	DESIGN	CONSTRUCTION	TOTAL SHEETS
100	100	427	427
100	100	427	427
100	100	427	427

DESIGNED - JRM	CHECKED - JRM	APPROVED - JRM
DRAWN - JRM	CHECKED - JRM	APPROVED - JRM
SCALE - AS SHOWN	DATE - 03/20/2014	PROJECT - I-55/US 52
PROJECT - I-55/US 52	DATE - 03/20/2014	PROJECT - I-55/US 52

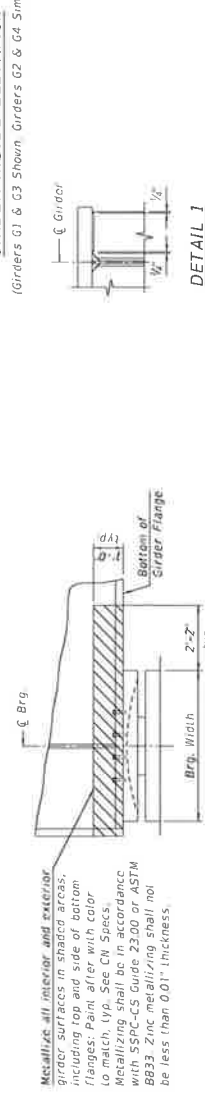
EXHIBIT B - SHEET 29 of 104

To Waukegan

To E. Bridge Jct.



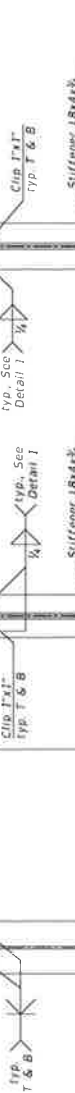
GIRDER INSIDE ELEVATION
 (Girders G1 & G3 Shown, Girders G2 & G4 Similar)



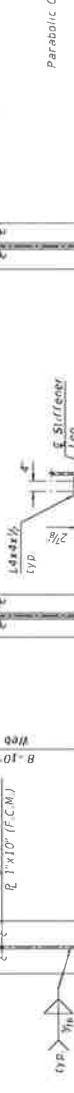
BEARING STIFFENERS



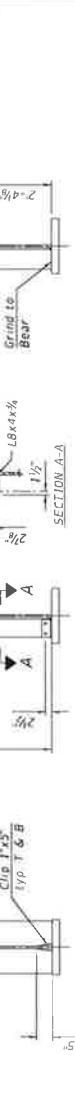
INTERMEDIATE STIFFENERS



STIFFENERS AT GIRDER ENDS



BEARING STIFFENERS



INTERMEDIATE STIFFENERS



STIFFENERS AT GIRDER ENDS



- Notes:**
- (F.C.M.) indicates Fracture Critical Member.
 - Flange and Web Shop Splices are optional and shall be confirmed by the Fabricator.
 - Deviation from straightness of main girders shall not exceed 1/4".
 - Deviation resulting in negative camber shall not be permitted.
 - N.S. denotes Near Side, F.S. denotes Far Side.

ASD	SECTION	TOTAL SHEET
100	02-8033-008	420
100	02-8033-008	131
100	02-8033-008	131

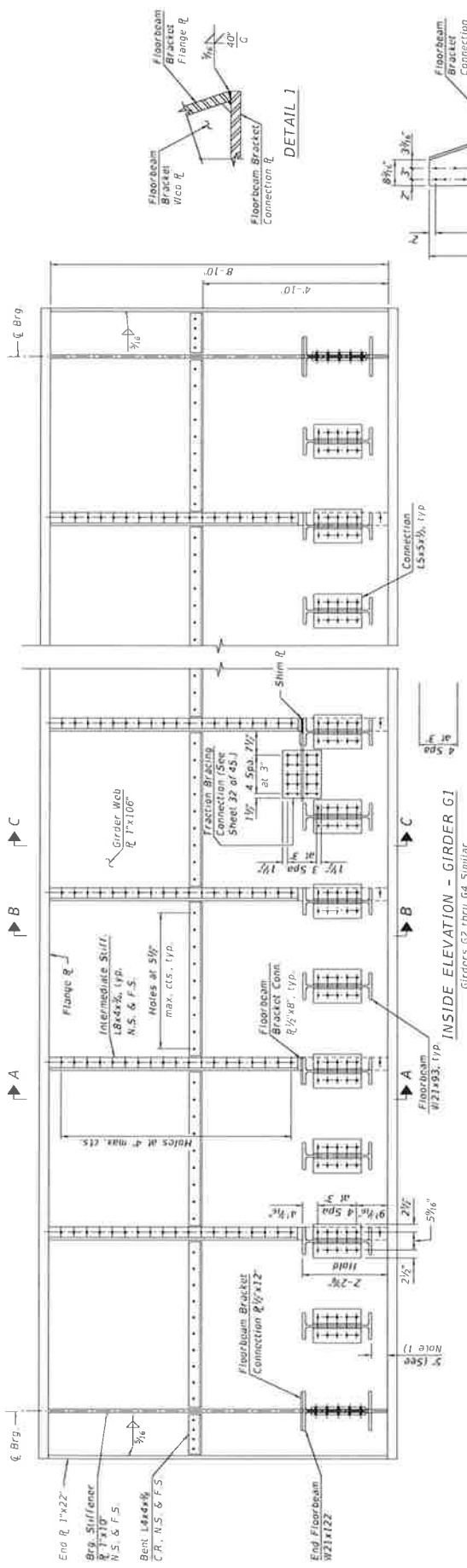
GIRDER DETAILS 1
STRUCTURE NO. 022-9948
 SHEET 27 OF 49 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

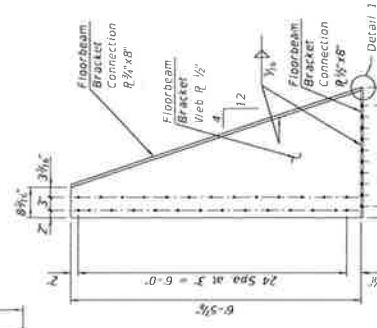
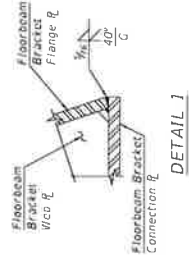
DESIGNED BY	CHECKED BY	INCHES	REVISION

DESIGNED BY	CHECKED BY	INCHES	REVISION

TRANSYSTEMS

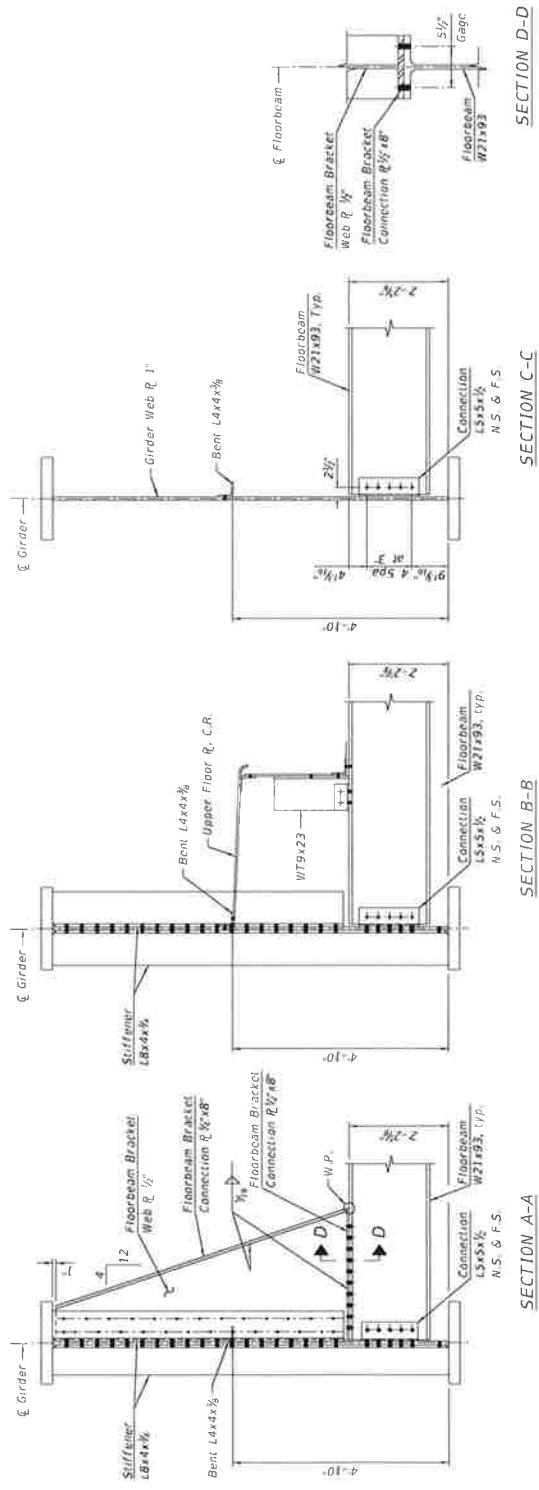


INSIDE ELEVATION - GIRDER G1
Girders G2 thru G4 Similar



FLOORBEAM BRACKET DETAIL
Floorbeam Bracket flange plates shall be flat and at right angles to the bracket web plate after welding has been completed.

Notes:
1. Top flange of all floorbeams to be in the same plane. Dimensions from bottom of floorbeam flange to bottom of girder web will vary to compensate for the natural camber of the floorbeams.



SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

DESIGNED BY TRANSSYSTEMS	CHECKED BY TRANSSYSTEMS	DRAWN BY TRANSSYSTEMS	DATE 11/13/2024	REVISIONS	STATE OF ILLINOIS		GIRDER DETAILS 2	
					DEPARTMENT OF TRANSPORTATION		STRUCTURE NO. 022-9948	
PROJECT NO.	DATE	SCALE	BY	APP'D	SHEET	NO. OF SHEETS	TOTAL SHEETS	COUNTY
					30	45	400	COCKER

MOMENT AND SHEAR PER GIRDER

Girders G1 Thru G4

DESCRIPTION	AT 0.5L	
	MOMENT	
Dead Load	(k)	5.685
Live Load (E90)	(k)	8.089
Impact	(k)	2.103
Total	(k)	15.876
Section	Web	1*106"
	Flanges	3*22"
Gross I. Furnished	(in ⁴)	491,423
Net I. Furnished	(in ⁴)	491,423
Net Section Modulus	(in ³)	8.775
Allow. Max. Compressive Stress in Flange	(ksi)	27.5
Actual Max. Compressive Stress in Flange	(ksi)	21.7
Allow. Max. Tensile Stress in Flange	(ksi)	27.5
Actual Max. Tensile Stress in Flange	(ksi)	21.7
Allow. Max. Deflection Live Load + Impact	(in)	1.70
Actual Max. Deflection Live Load + Impact	(in)	1.46
SHEAR		
Dead Load	(k)	214.5
Live Load (E90)	(k)	353.8
Impact	(k)	92.0
Total	(k)	660.3
Allow. Max. Web Shear Stress	(ksi)	17.5
Actual Max. Web Shear Stress	(ksi)	6.2
End Stiffener Column Area Req'd	(in ²)	27.7
Section (2 Plates)	(in ²)	1*10"
End Stiffener Column Area Furn.	(in ²)	32.0
FATIGUE		
Allowable Stress Range Fatigue S _{wh} (Calc. B)	(ksi)	16.0
Actual Stress Range Fatigue S _{wh}	(ksi)	12.1

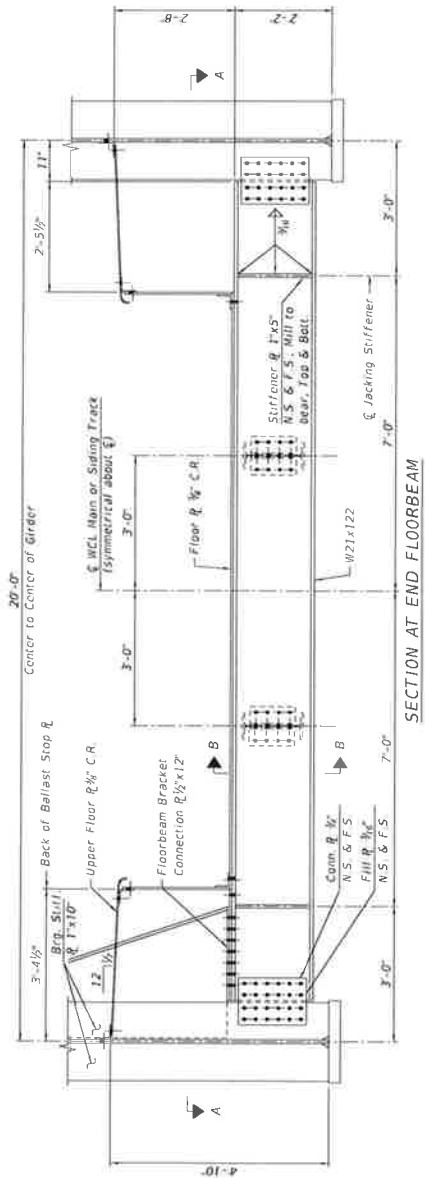
MOMENT AND SHEAR PER GIRDER

Girders G1 Thru G4

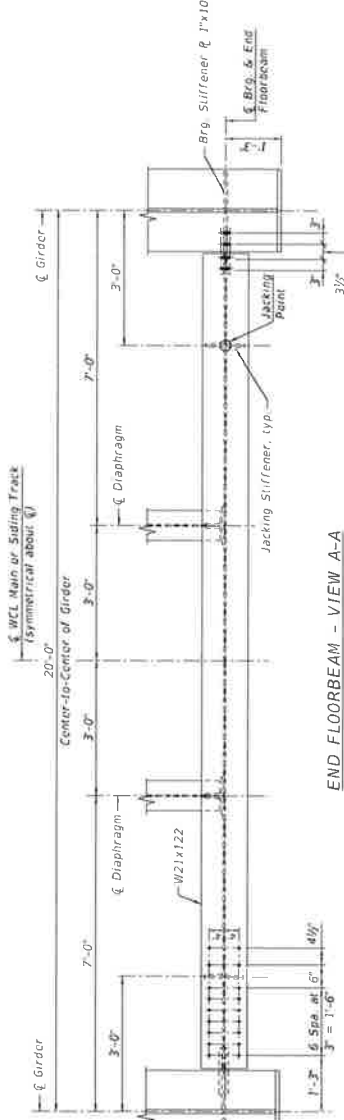
DESCRIPTION	FLOORBEAM		END FLOORBEAM BRIDGE		JACKING
	MOMENT				
Dead Load	(k)	39.1	54.6	653.7	
Live Load (E90)	(k)	190.5	267.7		
Impact	(k)	76.8	108.0		
Total	(k)	306.4	430.3	653.7	
Section	(k)	W21*93	W21x122		
Gross I. Furnished	(in ⁴)	2,070	2,960		
Net I. Furnished	(in ⁴)	2,070	2,745		
Net Section Modulus	(in ³)	192	267		
Allow. Max. Compressive Stress in Flange	(ksi)	27.5	27.5	41.3	
Actual Max. Compressive Stress in Flange	(ksi)	19.2	18.9	28.7	
Allow. Max. Tensile Stress in Flange	(ksi)	27.5	27.5	41.3	
Actual Max. Tensile Stress in Flange	(ksi)	19.2	19.4	32.6	
Allow. Max. Deflection Live Load + Impact	(in)	0.32	0.32		
Actual Max. Deflection Live Load + Impact	(in)	0.30	0.30		
SHEAR					
Dead Load	(k)	8.3	71.6	227.8	
Live Load (E90)	(k)	25.4	35.7		
Impact	(k)	10.3	74.4		
Total	(k)	44.0	61.7	227.8	
Allow. Max. Web Shear Stress	(ksi)	17.5	17.5	26.3	
Actual Max. Web Shear Stress	(ksi)	3.8	5.2	19.2	
FATIGUE					
Allowable Stress Range Fatigue S _{wh} (Calc. B)	(ksi)	16.0	16.0		
Actual Stress Range Fatigue S _{wh}	(ksi)	14.0	14.1		

DESCRIPTION	Girders G1 Thru G4
Total Reaction	661 k
Net Bearing Area Furnished	1,046 in ²
Average Bearing Pressure	632 psi

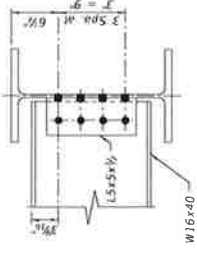
BEARING ON CONCRETE



SECTION AT END FLOORBEAM

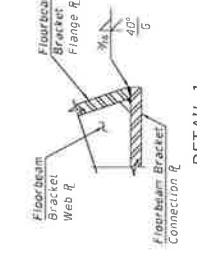


END FLOORBEAM - VIEW A-A

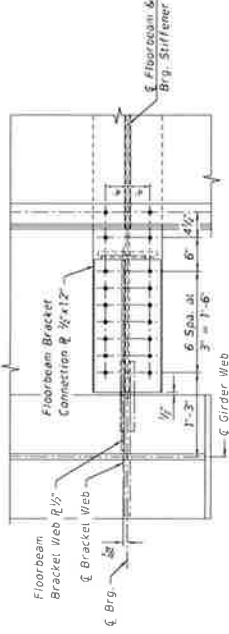


SECTION B-B

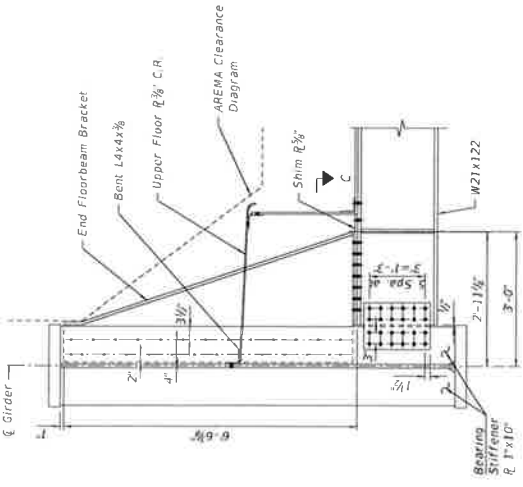
Connection typical for all diaphragms



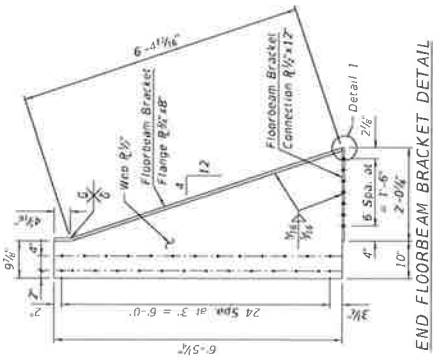
DETAIL 1



SECTION C-C



END FLOORBEAM BRACKET DETAIL

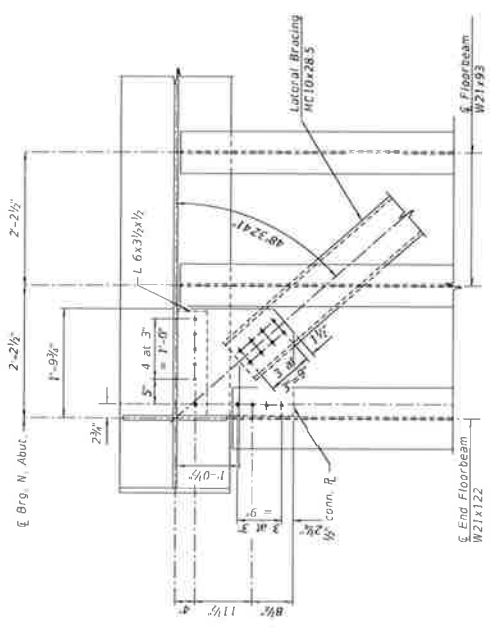


END FLOORBEAM BRACKET DETAIL

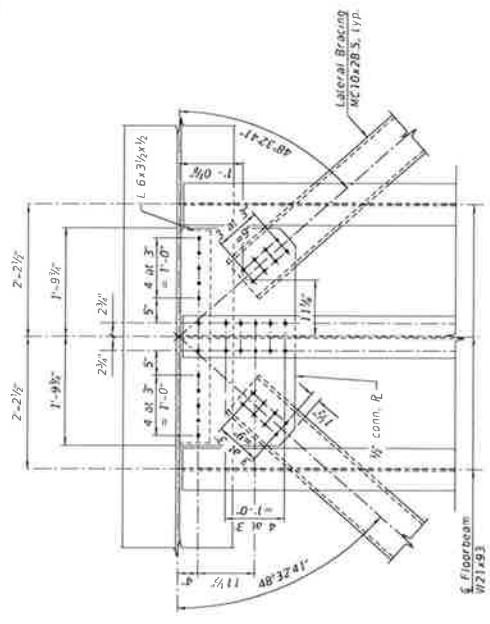
Note: For location of countersunk bolts connecting the floor plate to the floorbeams, see sheet 32 of 45.

TRANSYSTEMS 21300 7/16 21300 7/16 21300 7/16	DESIGNED BY JPM CHECKED BY RMW DRAWN BY MGC CREAMED BY JPM	REVISIONS REVISION 1 REVISION 2 REVISION 3	DEPARTMENT OF TRANSPORTATION STATE OF ILLINOIS		END FLOORBEAM DETAILS STRUCTURE NO. 022-9948	
			SHEET NO. 32 OF 45 SHEETS	SECTION NO. 06-0132-00-BN	COUNTY DUPAGE	DRAWING NO. 423

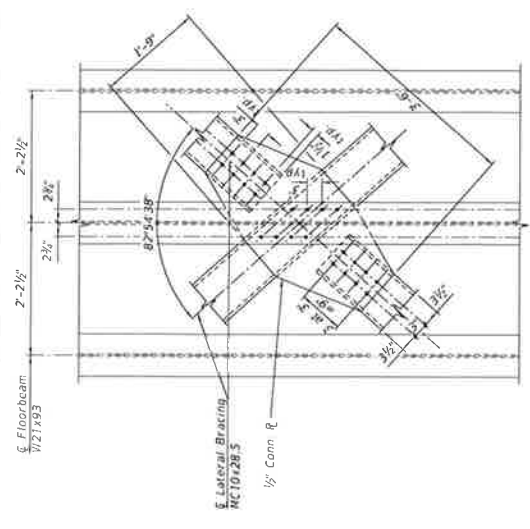
EXHIBIT B - SHEET 33 of 104



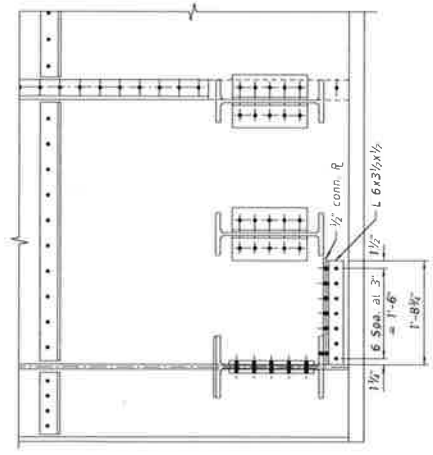
DETAIL A



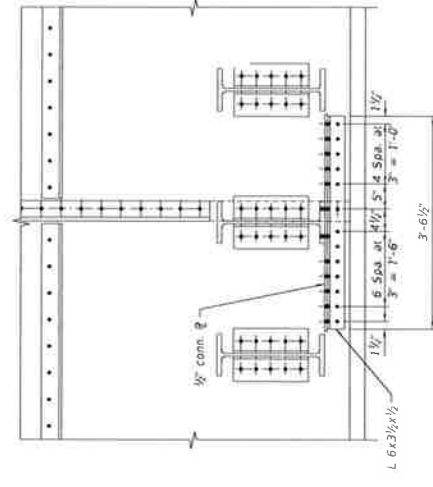
DETAIL B



DETAIL C



DETAIL A ELEVATION
(Lateral bracing not shown for clarity.)



DETAIL B ELEVATION
(Lateral bracing not shown for clarity.)

Notes:
1. All holes shall be 1/8\"/>

TRANSYSTEMS

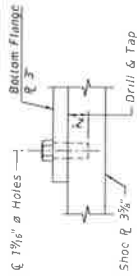
DESIGNED BY: JRM
CHECKED BY: JRM
DRAWN BY: JRM
DATE: 10/12/2011
PROJECT: 102-1100-011

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LATERAL BRACING DETAILS
STRUCTURE NO. 022-9948

SCALE	SECTION	COUNTY	PROJECT NO.
1/8\"/>			

EXHIBIT B - SHEET 37 of 104



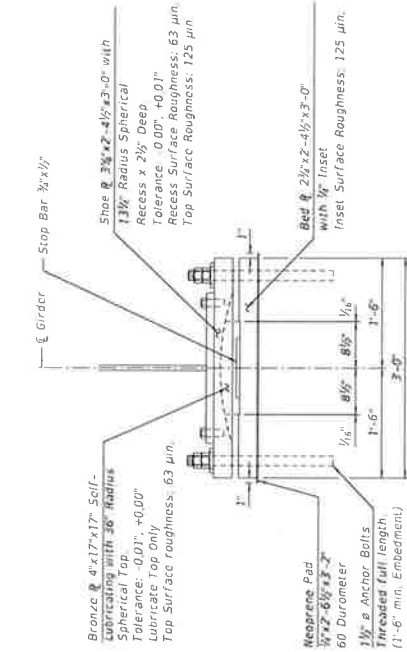
DETAIL 1

BEARING LOADS

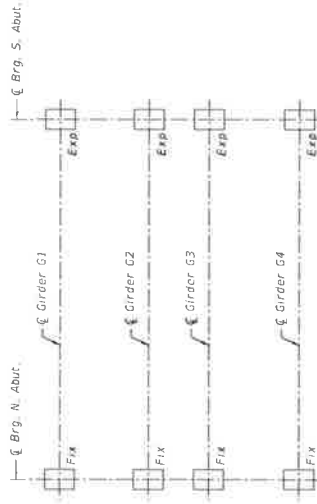
	APPLIED	ALLOWABLE
V_{max}	149 kips	-
V_{min}	215 kips	-
$V_{max}^{(1)}$	337 kips	-
$V_{max}^{(2)}$	448 kips	-
$V_{max}^{(3)}$	488 kips	-
$V_{max}^{(4)}$	661 kips	865 kips
H_{max}	119 kips	173 kips
H_{min}	20 kips	173 kips

Notes

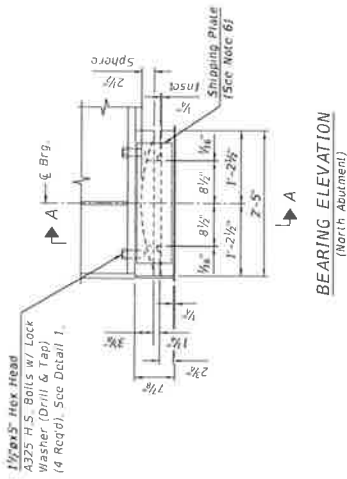
- Design and Workmanship shall be in accordance with the current AREMA Manual Chapter 15.
- Material shall be in accordance with the following specifications:
 Structural Steel: ASTM A709 Grade 50W for Bed and Shoe Plates
 Bronze Plates: ASTM B22-08 Copper Alloy UNS No. C86300
 Welding: AWS D1.5.
 Anchor Bolts: ASTM F1554, Gr. 105
 High Strength Bolts: ASTM F3125 Grade A325 Type 1.
- All holes shall be drilled or sub punched and reamed.
- All non-sliding surfaces of bearing plates shall be zinc-metalized in accordance with ASTM B833. Zinc coating shall not be less than 0.01".
- All Anchor Bolts, nuts, and washers shall be galvanized in accordance with ASTM F2329. Concrete to be drilled after determining bolt location. Bolts to be grouted using non-shrink grout.
- Bearings shall be shipped assembled with plates $3/16 \times 6 \times 2-0$ " and $1/2$ " Machine Bolts. Plates shall be removed after Anchor Bolts have been installed (3 Plates per Bearing).
- Two $1/8$ " adjusting, galv. shim plates shall be provided for each bearing in addition to all other plates or shims and they shall be placed between the Bed Plate and the Neoprene Pad if required. Shim plates shall match the footprint of the Bed Plate.
- Estimated weight of structural steel = 1,195 pounds per bearing (2 reqd). Cost of fixed bearings and bronze plates included with Furnishing and Erecting Structural Steel, Special.
- Surface roughness of sliding and rotational elements shall not exceed the limits indicated (RMS) in accordance with ANSI/ASME B46.1, Surface Texture.



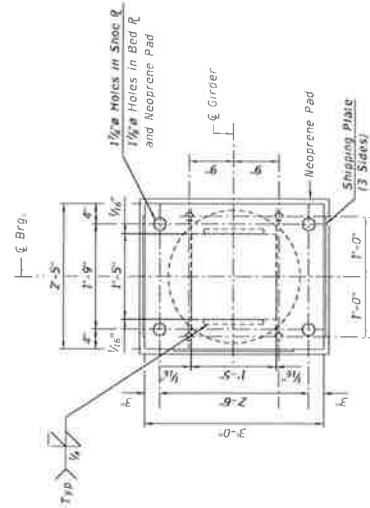
SECTION A-A



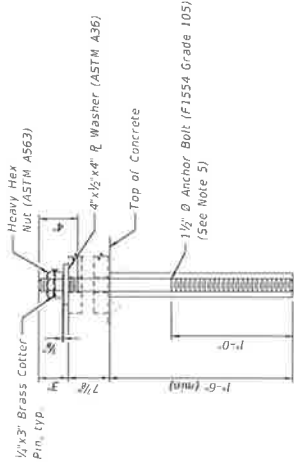
BEARING LOCATION PLAN



BEARING ELEVATION (North Abutment)



BEARING PLAN (North Abutment)



ANCHOR BOLT DETAIL

TRANSYSTEMS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIXED BEARING DETAILS
STRUCTURE NO. 022-9948

DATE	BY	REVISION
7/11/2024 <td>MM <td>CHECKED</td> </td>	MM <td>CHECKED</td>	CHECKED
	MM <td>DESIGNED</td>	DESIGNED
	MM <td>DRAWN</td>	DRAWN
	MM <td>REVIEWED</td>	REVIEWED
	MM <td>REVIEWED</td>	REVIEWED

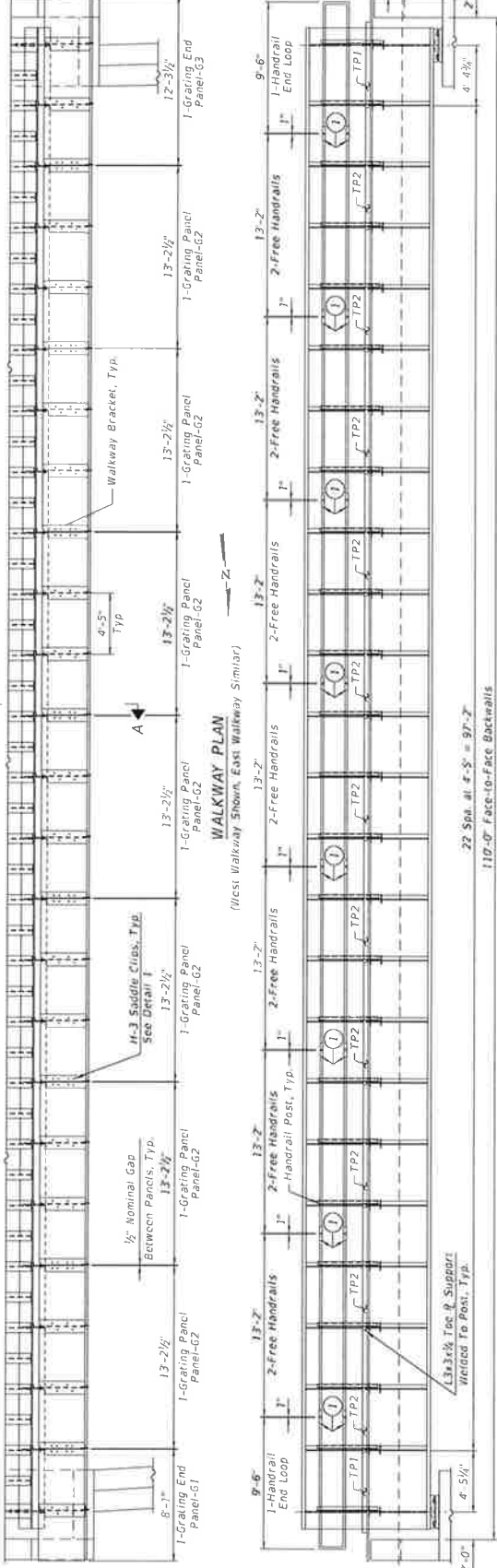
SECTION	SHEET NO.	TOTAL SHEETS
24-80132-08	473	478

PROJECT	CONTRACT NO.	SHEET NO.
11-1001 (110-10) PROJECT		38 OF 48 SHEETS

EXHIBIT B - SHEET 39 of 104

To E. Bridge, etc.

To Waukegan



ELEVATION

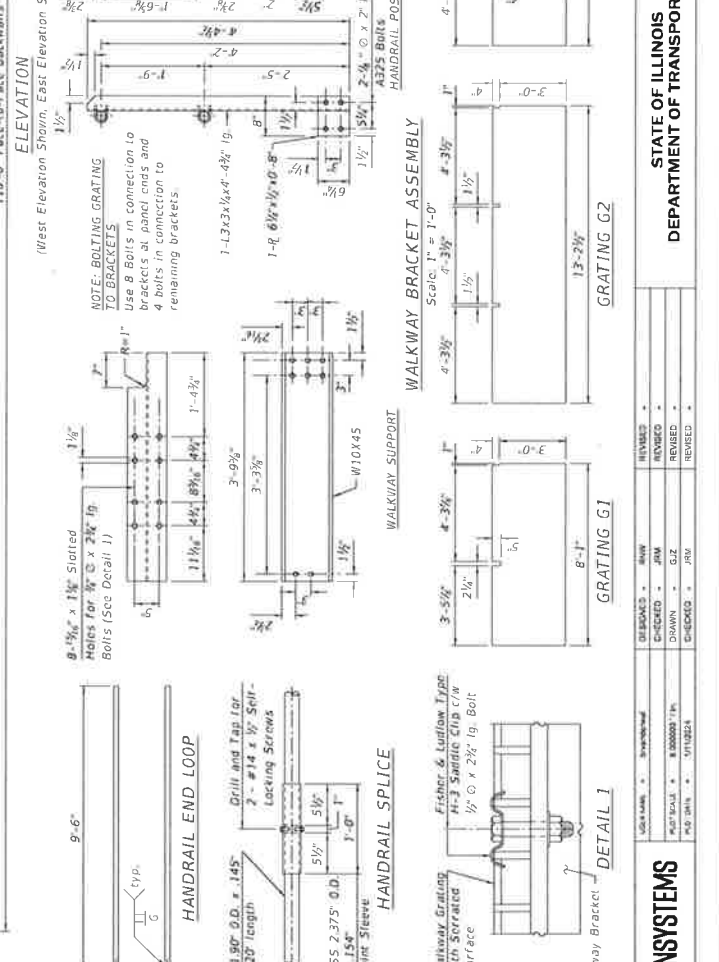
(West Elevation Shown, East Elevation Similar)

110'-0" Face-to-Face Backrails

22 Sp. at 4'-5" = 97'-2"

(West Elevation Shown, East Elevation Similar)

1-Handrail Splice Each Rail (1" Gap, typ.)



TOE R DETAIL

No Scale

Varies, See Table

1/2" Toe R

1/2" O Holes for 1/2" Bolts at all Posts

4-1/2" O Holes for 1/2" min. 1/2" length 1/2" bolts for 1.90" O.D. Handrail

1/2" Toe R Bolts

1/2" O Holes for 1/2" Bolts

1/2" Toe R Bolts

1/2" Toe R Bolts

1/2" Toe R Bolts

1/2" Toe R Bolts

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1/2" Toe R Bolts

HANDRAIL END LOOP

9'-6"

1/2" Toe R Support Welded To Post, Typ.

1/2" Toe R Support

1/2" Toe R Support

1/2" Toe R Support

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1/2" Toe R Support

HANDRAIL SPLICE

HSS 1.90" O.D. x 1.45" max. 20' length

Drill and Tap for 2 - #14 x 1/2" Self-Locking Screws

HSS 2.375" O.D. x 1.54"

1/2" Toe R Support

1/2" Toe R Support

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SECTION A-A

1/2" Toe R

1/2" Toe R

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1/2" Toe R

WALKWAY BRACKET ASSEMBLY

Scale: 1" = 1'-0"

1-3x3x1/4x4-4 1/2" Iq

1-R 6Wx1/2" O-8"

1-1/2" x 1/2" x 1/2" Iq

1-1/2" x 1/2" x 1/2" Iq

1-1/2" x 1/2" x 1/2" Iq

1-1/2" x 1/2" x 1/2" Iq

1-1/2" x 1/2" x 1/2" Iq

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1-1/2" x 1/2" x 1/2" Iq

1-1/2" x 1/2" x 1/2" Iq

GRATING G1

8'-1"

3'-5 1/2"

4'-3 3/8"

4'-3 3/8"

4'-3 3/8"

4'-3 3/8"

4'-3 3/8"

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4'-3 3/8"

GRATING G2

13'-2 1/2"

4'-3 3/8"

4'-3 3/8"

4'-3 3/8"

4'-3 3/8"

4'-3 3/8"

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4'-3 3/8"

4'-3 3/8"

GRATING G3

12'-3 1/2"

4'-2 1/2"

4'-2 1/2"

4'-2 1/2"

4'-2 1/2"

4'-2 1/2"

4'-2 1/2"

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4'-2 1/2"

4'-2 1/2"

4'-2 1/2"

BILL OF MATERIAL

Item

Unit

Total

Sq. Yd.

B4

1-Handrail Splice

2-Free Handrails

1-Grating Panel

1-Grating Panel

1-Grating Panel

1-Grating Panel

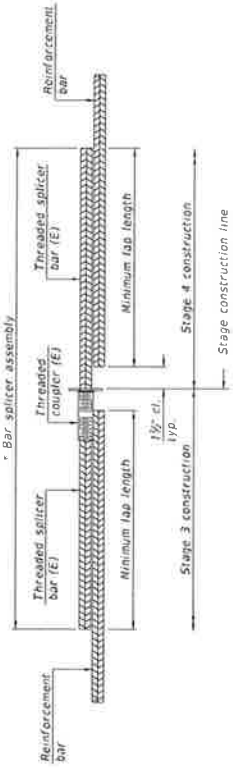
1-Grating Panel

1-Grating Panel

1-Grating Panel

1-Grating Panel

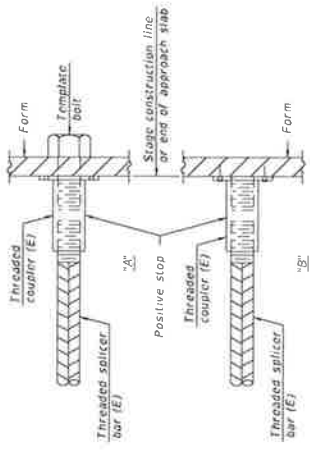
1-Grating Panel



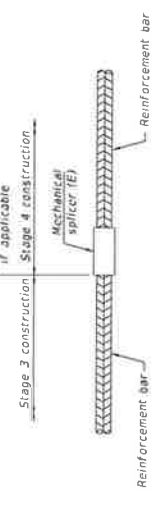
STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length
 * Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No assemblies required	Minimum lap length
North Abutment Backwall	#5	14	2'-2"
North Abutment Stem	#5	36	2'-2"
North Abutment Stem Top	#5	5	3'-0"
North Abutment Footing	#5	34	3'-0"
South Abutment Backwall	#5	14	2'-2"
South Abutment Stem	#5	36	2'-2"
South Abutment Stem Top	#5	5	3'-0"
South Abutment Footing	#5	34	3'-0"



INSTALLATION AND SETTING METHODS
 "A": Set bar splicer assembly by means of a template bolt.
 "B": Set bar splicer by nailing to wood forms or remaining to steel forms.
 (E): Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No assemblies required

Notes:
 Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

TRANSYSTEMS

DESIGNED BY: JAM
 CHECKED BY: JAM
 DRAWN BY: JAM

REVISED BY: JAM
 REVISED BY: JAM
 REVISED BY: JAM

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

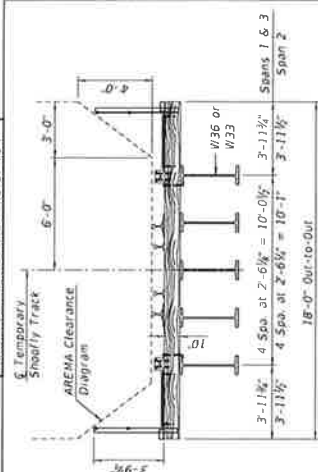
BAR SPICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 022-9948

SHEET NO. OF 48 SHEETS

SCALE: 1/8" = 1'-0"

SECTION: 08-013-00-08R
 COUNTY: DUPAGE
 PROJECT NO.: 61079

EXHIBIT B - SHEET 43 of 104



TYPICAL SECTION

DESIGN SPECIFICATIONS
 2019 AREMA Manual for Railway Engineering
 CN Guidelines for Design of Railway Structures,
 January 2006

LOADING COOPER E-80
 Cooper E-80 or Alternate Load plus
 Diesel Impact without hammer blow

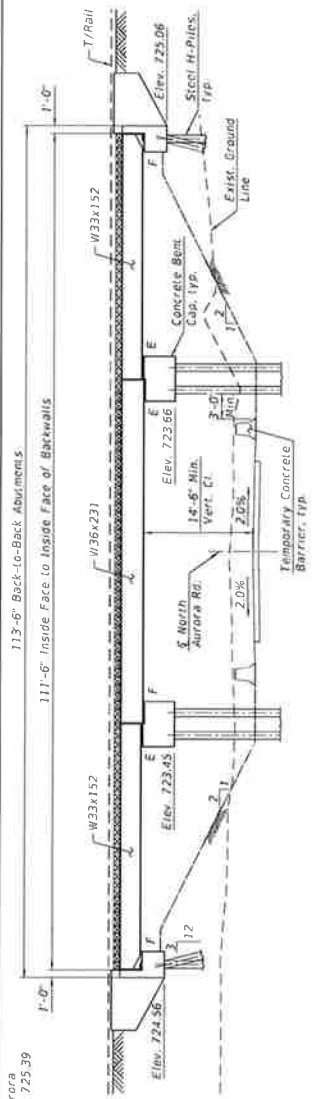
DESIGN STRESSES
 FIELD UNITS
 $f_c = 5,000$ psi (Precast Concrete)
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (ASTM A709 Gr. 50)

SEISMIC DATA
 Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 10 sec (S_{D10}) = 0.064g
 Design Spectral Acceleration at 0.2 sec ($S_{D0.2}$) = 0.123g
 Soil Site Class = C



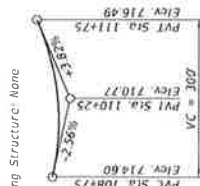
LOCATION SKETCH

GENERAL PLAN AND ELEVATION
TEMPORARY BRIDGE
WISCONSIN CENTRAL LTD
OVER NORTH AURORA ROAD
F.A.U. RT. 1509 - SEC. 06-00133-00-BR
DUPAGE COUNTY
STATION 110+18.67



ELEVATION

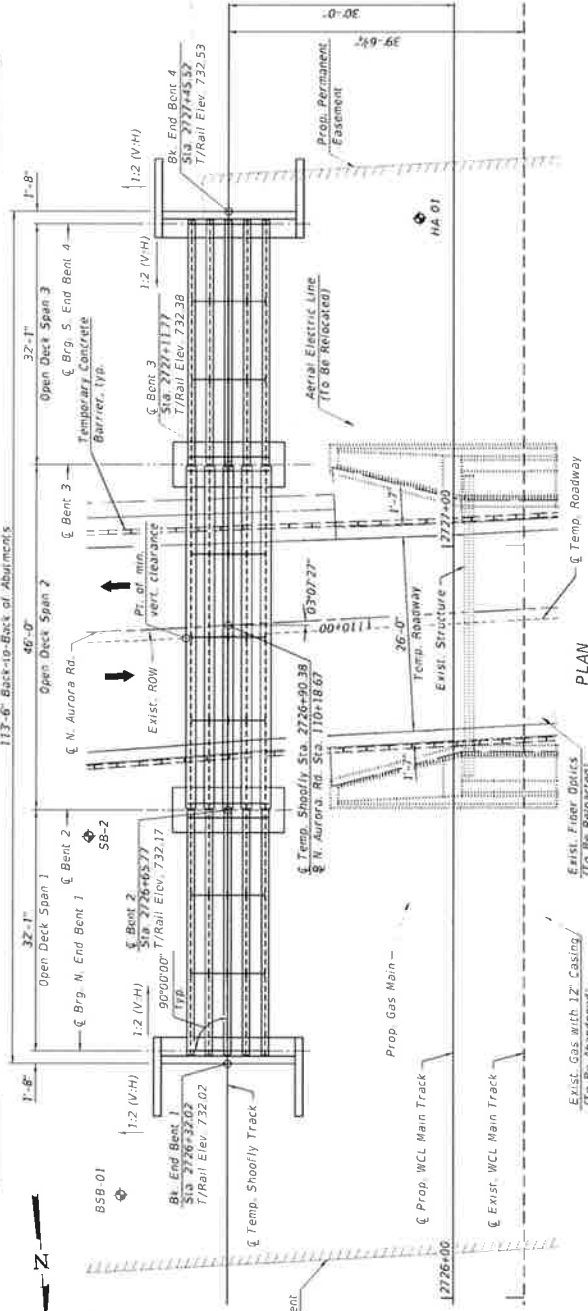
Benchmark: CP#4, Set Mag nail, E North Aurora Rd at fence line W of Field Entrance, Elev. 725.39
 Existing Structure: None



PROFILE GRADE
 (Along Temporary E N. Aurora Rd.)

TOP OF RAIL ELEVATIONS
 (Along E Temporary Shoofly Track)

To E. Bridge Jct.



PLAN

Legend: Soil Boring

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		GENERAL PLAN AND ELEVATION TEMPORARY BRIDGE	
SHEET 43 OF 104 CONTRACT NO. 61G19	COUNTY: DUPAGE DISTRICT: 433 DIVISION: 201	SECTION: 06-00133-00-BR DRAWING: 110-18.67	PROJECT: WISCONSIN CENTRAL LTD OVER NORTH AURORA ROAD CONTRACT NO. 61G19

DESIGNER: JMW CHECKED: MDE DRAWN: JAW CHECKED: JAW	REVISIONS: REVISED: REVISED: REVISED
---	---

SCALE: 1/8" = 1'-0" DATE: 11/20/20	PROJECT: WISCONSIN CENTRAL LTD OVER NORTH AURORA ROAD CONTRACT NO. 61G19
---------------------------------------	---

GENERAL NOTES

GENERAL

- See Sheet 156 of 423 for additional General Notes.
- Temporary Bridge shall include all structural steel components, bearings, precast concrete, piles, handrail, railroad ties and all miscellaneous items necessary to construct the shorly bridge. See Special Provisions.

PRECAST CONCRETE

- All concrete material, placement and workmanship shall be in accordance with Chapter 8 of the AREMA Specifications.
- Concrete shall have a minimum compressive strength of 5,000 psi at 28 days.
- Exposed surfaces shall be formed in a manner that will produce a smooth and uniform appearance without rubbing or plastering. Exposed edges of 90 degrees or less are to be chamfered $\frac{1}{4}$ " x $\frac{1}{4}$ ". Top surface to have a smooth finish. Free of all float or trowel marks.
- The Fabricator shall stencil the Fabricator's name, date of fabrication, the bridge number, lifting weight and piece mark on each component.
- The Fabricator will be responsible for the design of the lifting loops or lift anchors for the erection of the precast members. Required details to be coordinated with the Contractor and approved by the Engineer. The area around all lifting loops shall be recessed so that the loops can be removed to a depth of $\frac{3}{8}$ " and grouted.
- The Fabricator will be responsible for the loading and properly securing the precast concrete members for shipment. All concrete components shall be made available for inspection by the Engineer at the Fabricator's plant prior to shipment.

STRUCTURAL STEEL

- All structural steel shall be ASTM A709, Grade 50W. Handrail posts and pile plates shall be ASTM A709 Grade 36.
- Calculated weight of Structural Steel = 116,442 pounds (ASTM A709 Grade 50W).
Calculated weight of Structural Steel = 68,976 pounds (ASTM A709 Grade 36).
- The main load carrying components subjected to tensile stress, other than Tractors, critical members, shall conform to the supplemental requirements for Notch Toughness, Zone 3. These components are designated "N.T.R." on the plans.
- All bolted connections shall be made with high-strength bolts conforming to ASTM F3125 Grade A325, Type 1. Bolts shall be $\frac{7}{8}$ " diameter in $\frac{1}{8}$ " diameter holes, unless otherwise noted. All bolt holes shall be subpunched or subdrilled and reamed to size in accordance with the Special Provisions. Bolts shall be tightened by the "turn of the nut" method as described in the AREMA Specifications.

FIELD WELDING

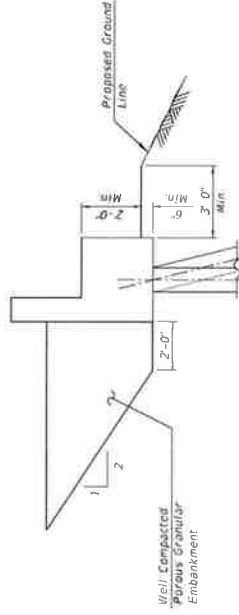
- Welding must be accomplished with the SMAW or FCAW process. Welding must be in accordance with the requirements specified in AWS D1.5, except $\frac{3}{16}$ " fillet welds may be made with a single pass. Welding electrodes must be E7018 for SMAW or E70T-1 or E-70T-3 for FCAW.
- Welders must possess valid certification. Welding must be performed by operators who have been qualified previously by tests as prescribed by the American Welding Society's standard qualification procedure to perform the work required. The qualifications of the personnel must be submitted to the Engineer in advance of the work.

INDEX OF SHEETS

- General Plan & Elevation
- General Data
- Foundation Layout Plan
- End Bent Details 1
- End Bent Precast Details 2
- End Bent Wingwall Details
- Bents 2 & 3 Details 1
- Bents 2 & 3 Details 2
- Deck Plan
- Deck Sections and Details
- Framing Plan & Design Data
- Beam Details
- Handrail Details
- Boring Logs

TOTAL BILL OF MATERIAL

Description	Unit	Total
Temporary Bridge	Each	1



SECTION AT END BENT

TRANSYSTEMS

DESIGNED	BY	REVIEWED
DRAWN	BY	REVIEWED
CHECKED	BY	REVIEWED

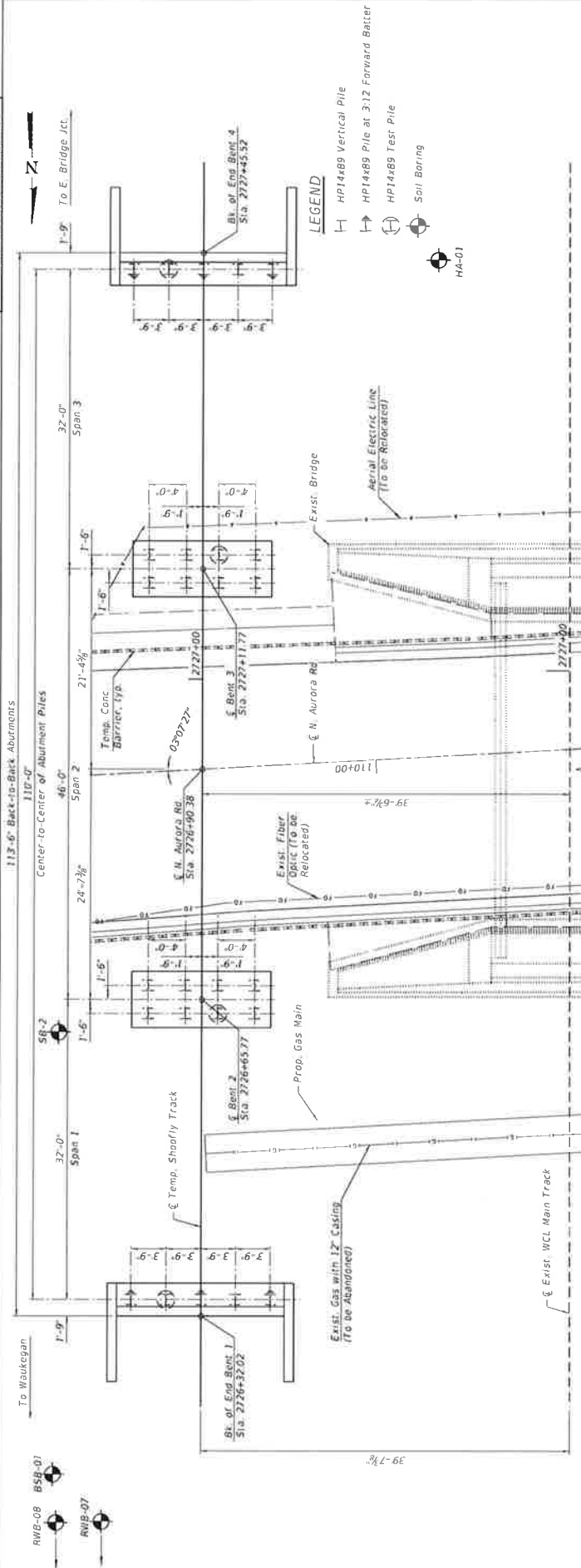
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
TEMPORARY BRIDGE

SHEET 2 OF 14 SHEETS

PROJECT NO.	SECTION	DATE
100-1000-100	100-1000-100	10/10/2024
CONTRACT NO.	CONTRACT NO.	CONTRACT NO.
100-1000-100	100-1000-100	100-1000-100

EXHIBIT B - SHEET 45 of 104



FOUNDATION PLAN & PILE LAYOUT

BILL OF MATERIAL

Item	Unit	Total
Furnishing Steel Piles HPI4x89	Foot	2,658
Driving Piles	Foot	2,658
Test Pile Steel HPI4x89	Each	4
Pile Shoes	Each	26

* For Information Only, Items are Included in cost of Temporary Bridge.

ESTIMATED PILE LENGTHS PILE DRIVING NOTES

- End Bent 1 = 105 ft.
- Bent 2 = 100 ft.
- Bent 3 = 100 ft.
- End Bent 4 = 103 ft.

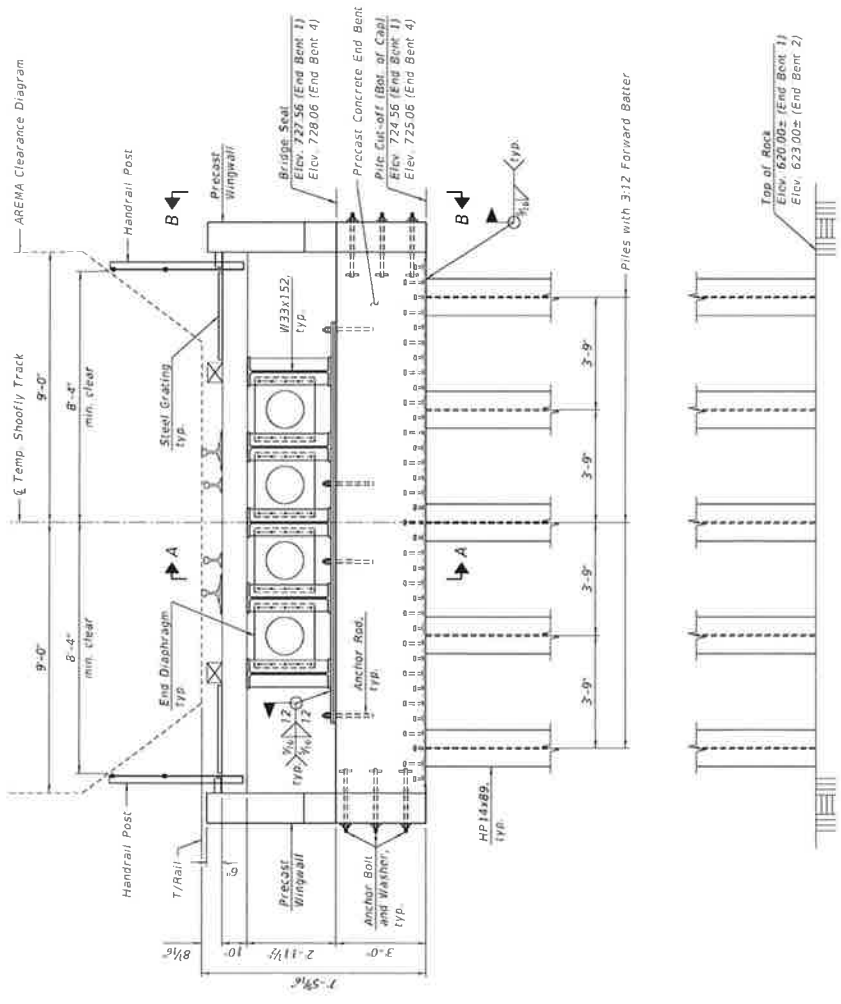
- All piles shall be driven to 329 ton capacity or practical refusal. If any pile cannot be driven to this capacity, the Engineer shall be notified.
- The steel H-piles shall be HPI4x89 according to ASTM A572 Grade 50, with pile shoes.
- For Pile Splice and Pile Shoe Details, See sheet 157 of 423.

TRANSYSTEMS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOUNDATION LAYOUT PLAN
TEMPORARY BRIDGE

DATE	1/20/24	SECTION	38-0012-00-88	COUNTY	DAKE	SHEET	45
PROJECT	1587710	DRAWN	BLZ	CHECKED	BLZ	CONTRACT NO.	6179
REVISED	1/11/2024	CHECKED	JEM	NOVISED	JEM	SCALE	AS SHOWN



NOTES:

1. For Precast Concrete End Bent and Anchor Bolt details, see sheet 5 of 14.
2. T/Rail to T/Tie = 8 1/2". Dimension includes 7 1/2" height for 136 lb. rail and a 1/4" tie plate.
3. For bearing Anchor Rod details, see sheet 12 of 14.

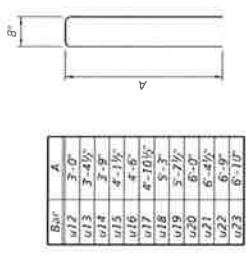
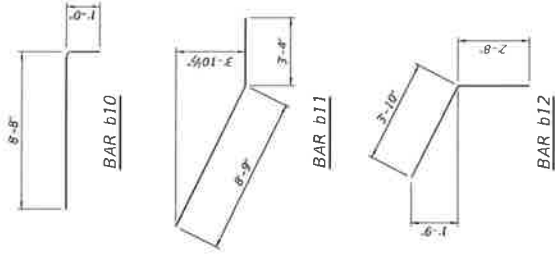
TRANSYSTEMS DESIGNER • JAM CHECKED • MDS DRAWN • GDF PLOTTED • JAM PROJECT NO. • 4-0000-174 SHEET NO. • 0110224	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		END BENT DETAILS 1 TEMPORARY BRIDGE		COUNTY • COOK DISTRICT • 09-04-120-08-B SHEET NO. • 402 CONTRACT NO. • 81079
	SHEET # 01 OF 14 SHEET 13		SECTION 09-04-120-08-B		COUNTY DISTRICT SHEET NO. CONTRACT NO.

EXHIBIT B - SHEET 48 of 104

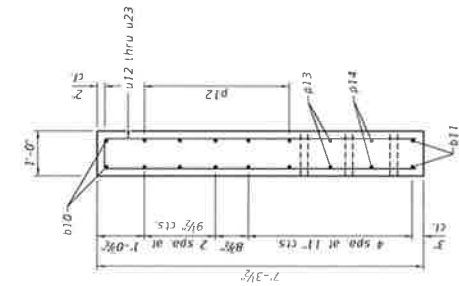
BILL OF MATERIAL
(Per Wingwall)

Bar No.	Size	Length	Shape
b10	#4	3'-9"	
b11	#4	3'-9"	
b12	#4	6'-6"	
b13	#5	6'-8"	
b14	#5	7'-0"	
b15	#4	5'-2"	
b16	#4	6'-8"	
b17	#4	10'-5"	
b18	#4	11'-7"	
b19	#4	11'-7"	
b20	#4	11'-7"	
b21	#4	11'-7"	
b22	#4	14'-2"	
b23	#4	14'-4"	
v10	#4	3'-2"	
v11	#4	3'-8"	
Precast Concrete			
Structures			
Reinforcement Bars			
Cu. Yd. 2.2			
Paving 250			

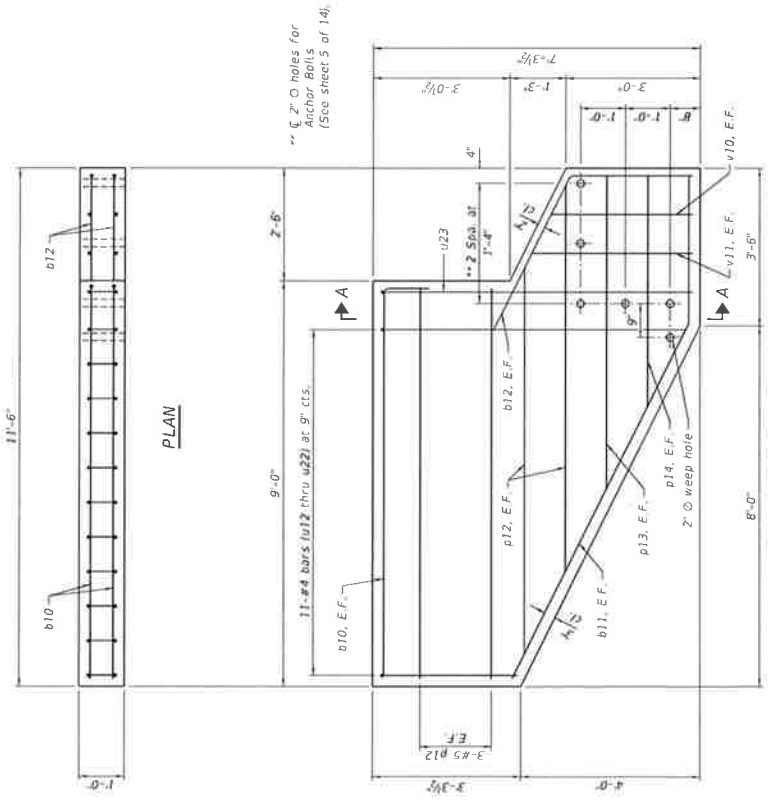
* For Information Only
Items are included in cost
of "Temporary Bridge".



BARS u12 thru u23



SECTION A-A



PRECAST WINGWALL ELEVATION
(Estimated Wt. = 4.5 Tons)

** 2'-0" holes for
Anchor Bolts
(See Sheet 5 of 14).

NOTES:

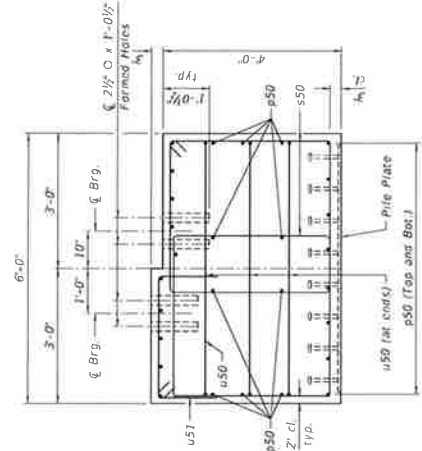
- The Fabricator will be responsible for the design of the lifting loops or lift anchors for the erection of the precast members. Required details to be coordinated with the Contractor and approved by the Engineer.
- E.F. denotes Each Face.

TRANSYSTEMS		DESIGNED BY: JAM		CHECKED BY: MOJ		DRAWN BY: CLJ		DATE: 11/12/2024		SHEET 6 OF 14 SHEETS	
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		END BENT WINGWALL DETAILS TEMPORARY BRIDGE		SECTION: 30-013-08-08		COUNTY: JOY		DURAGE: 202		TOTAL SHEET: 205	
CONTRACT NO. 81G79		SHEET 6 OF 14 SHEETS		SECTION: 30-013-08-08		COUNTY: JOY		DURAGE: 202		TOTAL SHEET: 205	

BILL OF MATERIAL
(Per Bent Cap)

Bar	No.	Size	Length	Shape
p50	28	#6	7'-8"	
s50	32	#5	14'-9"	
u50	6	#5	8'-1"	
u51	16	#5	5'-2"	
Precast Concrete Structures				
Reinforcement Bars POUND 1,250				
Pile Plate POUND 2,780				
Stud Shear Connectors				
Each 152				

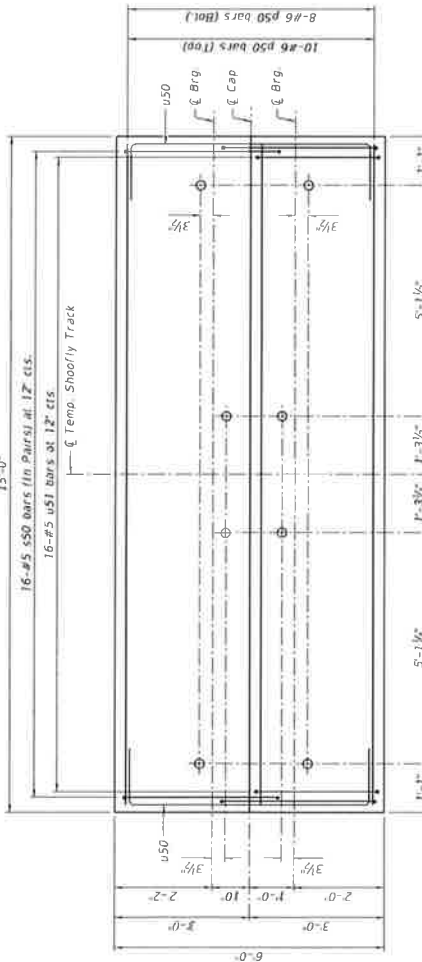
* For information only. Items are included in cost of "Temporary Bridge".



SECTION THRU BENT CAP

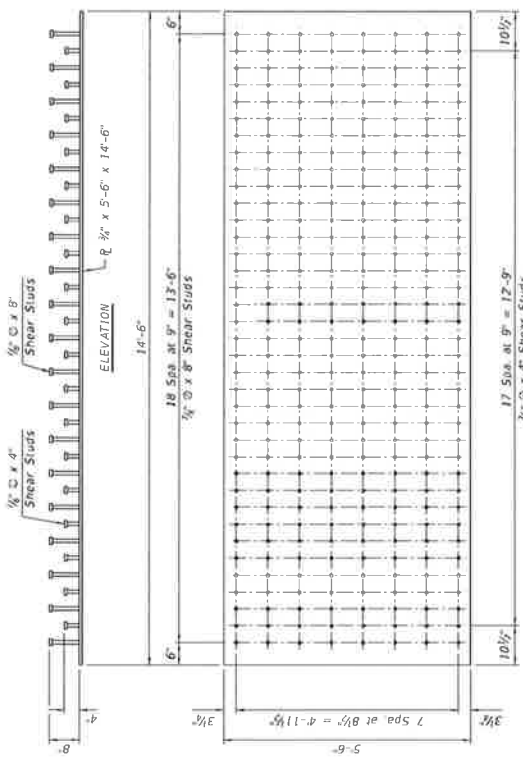
(Bent 2 shown)
(Bent 3 similar, opposite hand)

To E. Bridge Jct.
Bent 2
To E. Bridge Jct.
Bent 3



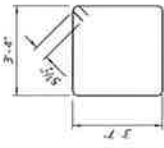
PLAN - PRECAST BENT CAP

Estimated Wt. = 27 Tons
(2 Required)



PILE PLATE

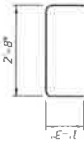
Estimated Wt. = 2,780 lbs.
(2 Required)



BAR s50



BAR u50



BAR u51

NOTES:

- The Fabricator will be responsible for the design of the lifting loops or lift anchors for the erection of the precast members. Required details to be coordinated with the Contractor and approved by the Engineer.
- Locate reinforcement to miss formed holes and shear studs.

BENTS 2 & 3 PRECAST DETAILS 2
TEMPORARY BRIDGE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGNED BY: JRM
CHECKED BY: JRM
DRAWN BY: DJZ
DATE: 11/10/2018

REVISIONS:
REVISED BY: JRM
REVISED DATE: 11/10/2018

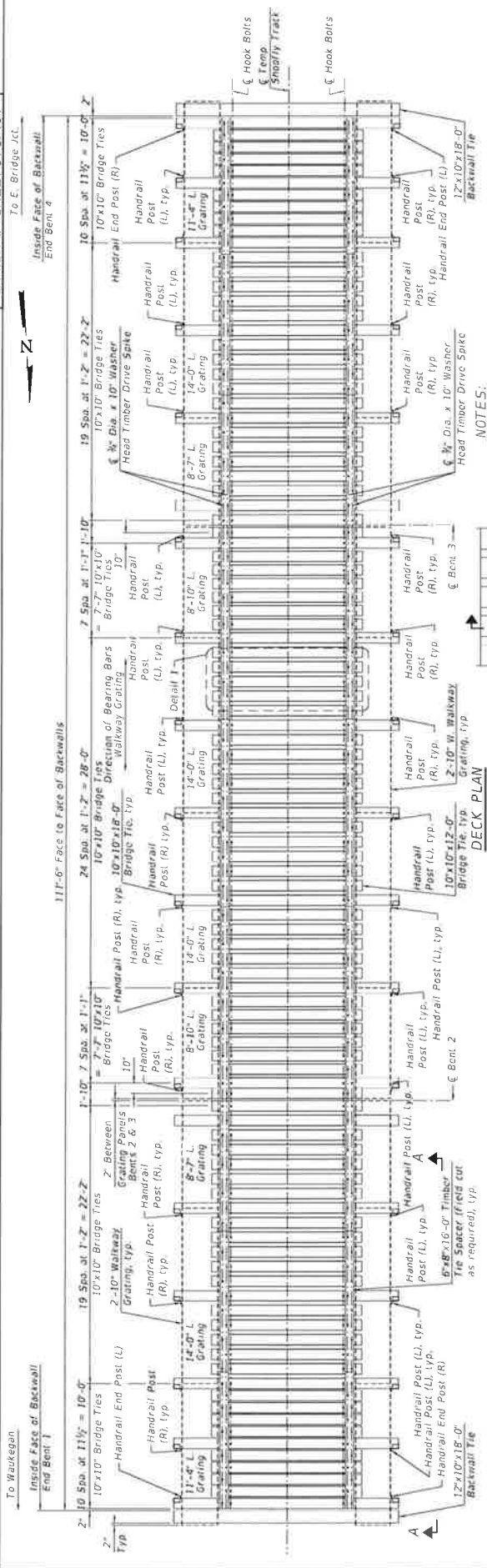
TRANSYSTEMS

PROJECT NO. 1509
SECTION 06-0013-06-RR
COUNTY DUPage
CONTRACT NO. 81078

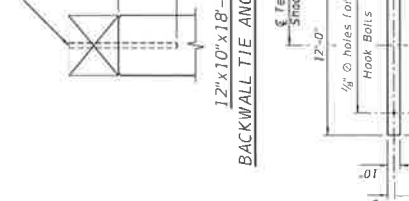
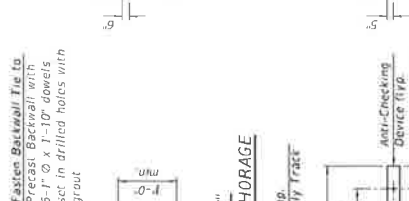
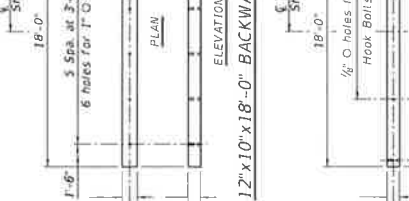
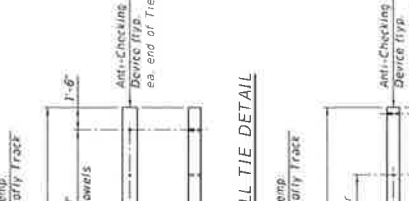
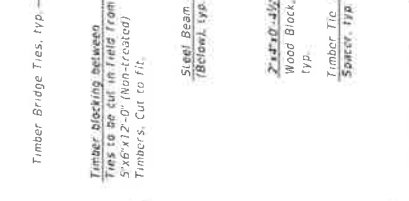
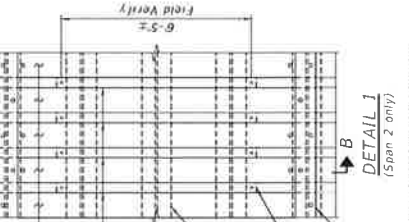
SHEET 8 OF 14 SHEETS

DATE	BY	REVISION	TOTAL SHEETS
11/10/2018	JRM	DESIGNED	407
		CHECKED	207
		DRAWN	207
		DATE	207
		CONTRACT NO.	81078
		CONTRACT NO.	81078

EXHIBIT B - SHEET 51 of 104



- NOTES:**
- 1 Field verify all dimensions, stations and elevations prior to start of construction
 - 2 Bridge ties and timber tie spacers to be produced from Softwood Species, West Coast Douglas Fir Select Structural or Southern Pine No. 1 Dense.
 - 3 Timber to be well seasoned and conditioned. Timber to be pressure treated per AEMA specifications.
 - 4 All bridge ties and timber tie spacers shall have anti-checking devices installed at each end.
 - 5 All ties shall be bundled in groups of no more than 16 ties.
 - 6 All holes for hook bolts to be pre-drilled.
 - 7 Field holes, abrasions and cuts shall be treated with a preservative that meets the specifications of the American Wood-Preservers Association. Treatment shall follow AWWA Standard M4-06.
 - 8 Ties, call and OTM to be provided by the Contractor. Additional material required and not listed in the Bill of Material to be provided by the Contractor.
 - 9 Walkway grating shall be Type WJ8 with 1 1/2" x 3/4" serrated bearing bars.
 - 10 Use 8 cut spikes for all ties (cut spikes for inside guardrail not included)
 - 11 Timber blocking to be installed between Timber Ties. (Span 2 only), to prevent material from dropping thru deck to roadway below. Timber blocking to be cut 0 ft in field. Secure 2x4 wood block of Timber blocking prior to installing blocking.
 - 12 See sheet 10 of 14 for View A-A.

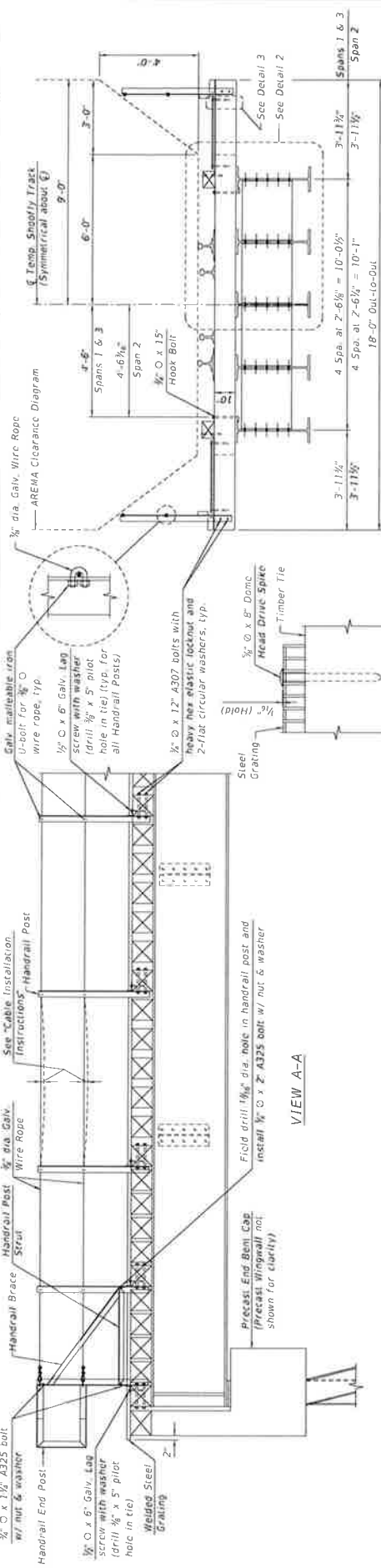


DECK PLAN
TEMPORARY BRIDGE
 SHEET 51 OF 104 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE PLOTTED: 11/11/2024	PROJECT NO: 11110024	DESIGNED BY: JPM	REVISIONS:
DATE PLOTTED: 11/11/2024	PROJECT NO: 11110024	CHECKED BY: JPM	NO. 1
DATE PLOTTED: 11/11/2024	PROJECT NO: 11110024	APPROVED BY: JPM	NO. 2
DATE PLOTTED: 11/11/2024	PROJECT NO: 11110024	CHECKED BY: JPM	NO. 3
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DATE PLOTTED: 11/11/2024	PROJECT NO: 11110024	APPROVED BY: JPM	NO. 12
DATE PLOTTED: 11/11/2024	PROJECT NO: 11110024	CHECKED BY: JPM	NO. 13
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DATE PLOTTED: 11/11/2024	PROJECT NO: 11110024	CHECKED BY: JPM	NO. 15
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DATE PLOTTED: 11/11/2024	PROJECT NO: 11110024	CHECKED BY: JPM	NO. 29
DATE PLOTTED: 11/11/2024	PROJECT NO: 11110024	APPROVED BY: JPM	NO. 30

EXHIBIT B - SHEET 52 of 104



***TIMBER DECK & WALKWAY SCHEDULE**

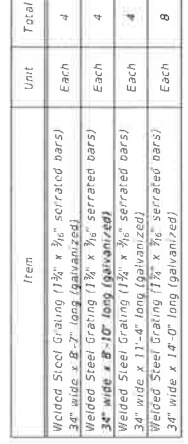
Item	Unit	Total
12"x10"x18'-0" Backwall Ties, Treated, (per detail)	Each	2
10"x10"x12'-0" Bridge Ties, Treated, (per detail)	Each	82
10"x10"x18'-0" Bridge Ties, Treated, (per detail)	Each	19
6"x8"x15'-0" Timber Tie Spacer	Each	18
Timber Blocking 5'-6"x12'-0"	Each	38
Wood Block 2"x4"x4"	Each	76
3/8" Nominal Diameter Wire Rope, 7 wire, galv. steel strand, Simmons Martins Grade, A-coating (ASTM A475)	Foot	440
Galv. Malleable Iron U-bolt Clips w/ 2 elastic locknuts, zinc plated, for 3/8" dia Wire Rope	Each	16
Galv. Malleable Iron U-bolt w/ 2 elastic locknuts, zinc plated, for 3/8" dia Wire Rope	Each	60
3/8" Galv. Eye-Bolt with 2 nuts & 2 washers	Each	6
3/8" Galv. Wire Rope Thimble for 3/8" dia Wire Rope	Each	8
Galv. Malleable Iron U-bolt Clips w/ 2 elastic washers (A563 lubricated) and flat circular washer (F436), each component hot dip or mechanically zinc coated	Each	8
3/8" x 7" A325 H.S. Bolt, Type 1 w/ Heavy Hex Nut (A563 lubricated) and flat circular washer (F436), each component hot dip or mechanically zinc coated	Each	4
3/8" x 12" A307 Heavy Hex Grade A Bolt w/ elastic locknut & 1/4" flat circular washer (F436), each component hot dip or mechanically zinc coated	Each	68
3/8" x 6" lag screw and flat circular washer, each component hot dip or mechanically zinc coated	Each	30
3/8" x 10" washer head timber drive spike	Each	202
3/8" x 8" B' dome head drive spike (AREMA spec) (Galv)	Each	104
3/8" x 15" hook bolt w/ 3" thread	Each	116
#10 malleable washer for 3/8" dia bolt	Each	116
#10 security locknut part SH 515	Each	116
Spikes for wood ties	Keg	1
1 1/2" x 3/8" W8 Serrated Walkway Grating (per schedule, this steel)	Lot	1
3/8" x 4" Lag Screws	Each	76
1" x 4" x 1'-10" Steel Dowels	Each	12

***WALKWAY GRATING SCHEDULE**

Item	Unit	Total
Welded Steel Grating (1 1/2" x 3/8" serrated bars) 36" wide x long (galvanized)	Each	4
Welded Steel Grating (1 1/2" x 3/8" serrated bars) 36" wide x long (galvanized)	Each	4
Welded Steel Grating (1 1/2" x 3/8" serrated bars) 34" wide x 11'-4" long (galvanized)	Each	4
Welded Steel Grating (1 1/2" x 3/8" serrated bars) 34" wide x 14'-0" long (galvanized)	Each	8

CABLE END INSTALLATION DETAIL

- CABLE INSTALLATION INSTRUCTION (PER SPAN)**
- Prior to installing cable, make sure all Handrail Posts, Braces and Struts are installed with connections complete.
 - Thread Cable through all U-bolt clips and secure at End Posts. (Do not stretch)
 - Hang a minimum of 15 lbs. on cable between 2 Posts near mid-span. Span 2 and stretch cable to remove sag. Allow 2" max. sag to remain.
 - Tighten U-bolt clips and Eye-Bolts at End Posts.
 - Remove hanging weights.
 - Tighten U-bolt clips at intermediate Handrail Posts.



TRANSYSTEMS

DESIGNED BY: JRM
 CHECKED BY: CJS
 DATE: 08/03/11
 PROJECT NO.: 1110201

REVISIONS:

NO.	DATE	DESCRIPTION
1	08/03/11	ISSUED FOR PERMIT

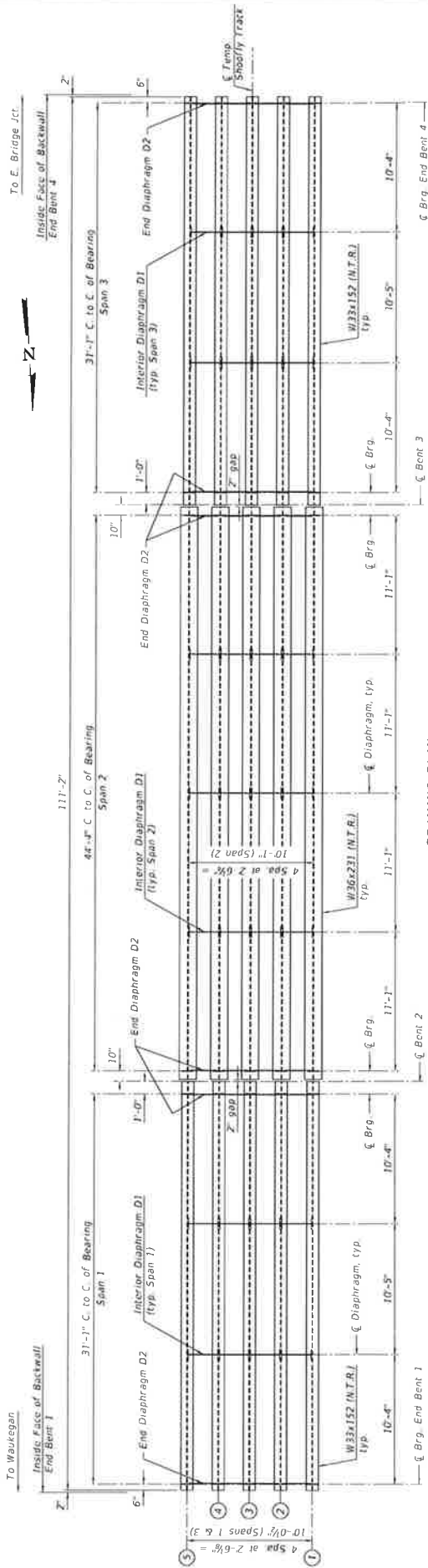
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DECK SECTIONS AND DETAILS
 TEMPORARY BRIDGE

SHEET 52 OF 104 SHEETS

SECTION: 24-0112-00-BR
 DRAWING: 24-0112-00-BR
 CONTRACT NO. 61079

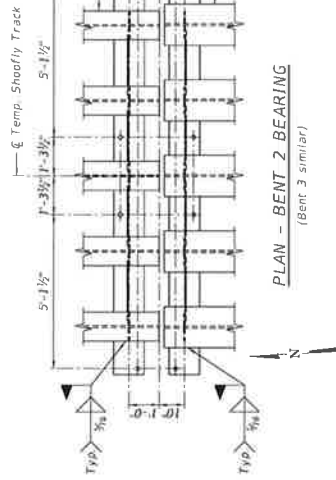
EXHIBIT B - SHEET 53 of 104



FRAMING PLAN

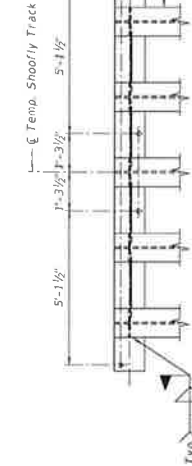
MOMENT AND SHEAR PER BEAM

	MOMENT	
	Spans 1 & 3	Span 2
Dead Load	34 k-ft	94 k-ft
Live Load (E80 or All)	403 k-ft	667 k-ft
Impact	233 k-ft	374 k-ft
Total	669 k-ft	1,135 k-ft
Section (ASTM A709 Gr. 50)	W33x152	W36x231
Gross I Furnished	8,160 in ⁴	15,600 in ⁴
Net I Furnished	487 in ³	854 in ³
Allowable Max. Stress in Flange	27.5 ksi	27.5 ksi
Actual stress Tension	16.5 ksi	15.9 ksi
Actual stress Compression	16.5 ksi	15.9 ksi
Allowable Max. Deflection (Live Load & Impact)	0.50"	0.83"
Actual Max. Deflection	0.47"	0.78"
Live Load + Impact		
SHEAR		
Dead Load	5 k	9 k
Live Load (E80)	60 k	66 k
Impact	35 k	37 k
Total	100 k	112 k
Allowable Web Shear Stress	17.5 ksi	17.5 ksi
Actual Web Shear Stress	4.9 ksi	4.3 ksi
End Stiffener Column		
Area Required	3.7 in ²	4.1 in ²
Section (2 Plates)	3/8" x 5"	3/8" x 5"
End Stiffener Column	11.1 in ²	13.2 in ²
Area Furnished		



PLAN - BENT 2 BEARING

(Bent 3 similar)



PLAN - END BENT BEARING

BILL OF MATERIAL*

Item	Unit	Total
Furnished and Erecting Structural Steel	Pound	116,442

* For information only. Furnishing and Erecting Structural Steel is included in cost of Temporary Bridge.

BEARING ON CONCRETE

	Spans 1 & 3	Span 2
Total Reaction	100 k	112 k
Net Bearing Area Furnished	139 in ²	196 in ²
Average Bearing Pressure	719 psi	566 psi

NOTES:

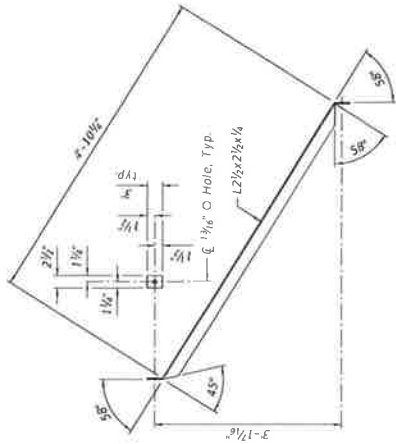
1. N.T.R. denotes Notch Toughness Requirements.

TRANSYSTEMS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

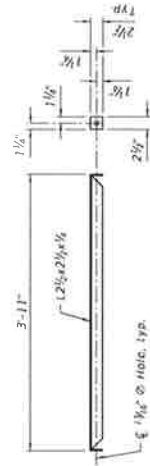
FRAMING PLAN
TEMPORARY BRIDGE

PLAN NO. 24-031-008
SECTION 24-031-008
COUNTY JAMES
TOTAL SHEET NO. 213
SHEET 11 OF 14 SHEETS
CONTRACT NO. 6107
ILLINOIS RELAY SERVICE



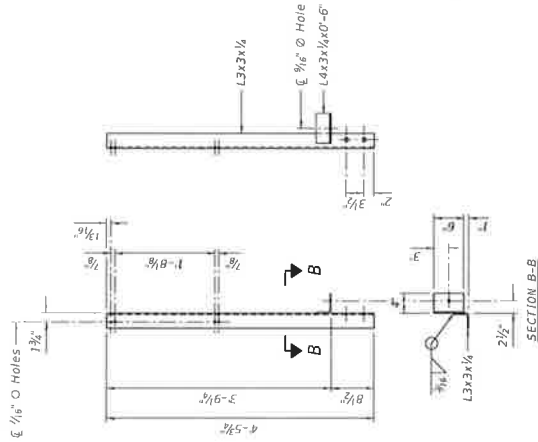
HANDRAIL BRACE

Est. Wt. = 22.0 lb. Ea.
Right Brace Shown, Left Brace Opposite Hand
(4 Req'd)



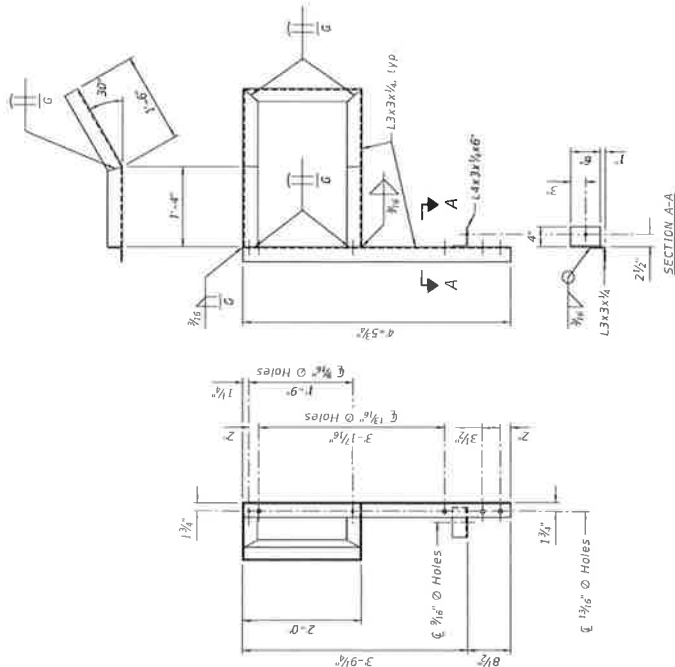
HANDRAIL POST STRUT

Est. Wt. = 17.8 lb. Ea.
(4 Req'd)



HANDRAIL POST

Est. Wt. = 24.4 lb. Ea.
Right Post Shown, Left Post Opposite Hand
(15 Req'd, each Right & Left)



HANDRAIL END POST

Est. Wt. = 62.0 lb. Ea.
Right Post Shown, Left Post Opposite Hand
(2 Req'd, each Right & Left)

NOTES:

- All steel for the handrails shall be ASTM A709 Grade 36.

TRANSYSTEMS	DESIGNED BY	JAU	REVIEWED BY	
	CHECKED BY	MOS	REVIEWED BY	
	DRAWN BY	GLZ	REVIEWED BY	
	PROJECT NO.	5118202	REVIEWED BY	
	DATE	05-20-2008	SECTION	1509
	COUNTY	DECATUR	SECTION	05-20-2008
	DURAGE	02	SECTION	05-20-2008
	CONTRACT NO.	61076	SECTION	05-20-2008
	SHEET NO.	55	SECTION	05-20-2008
	SHEET TOTAL	104	SECTION	05-20-2008

EXHIBIT B - SHEET 56 of 104

Benchmark, CP #4, Set Mag nahl, & North Aurora Rd. at Fence Line W. of Field Entrance. Elev. 725.39

Existing Structure: None

Traffic on North Aurora Rd. to be maintained with stage construction

DESIGN SPECIFICATIONS:
 2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

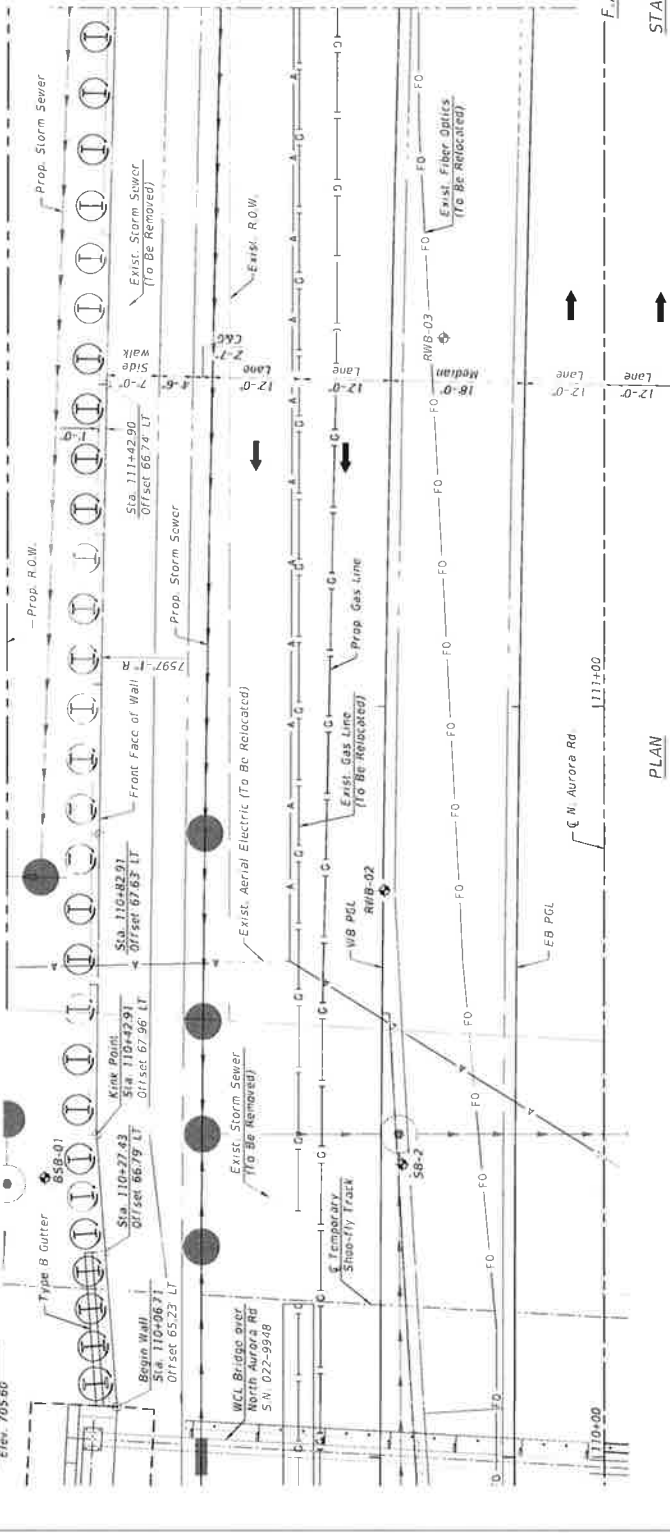
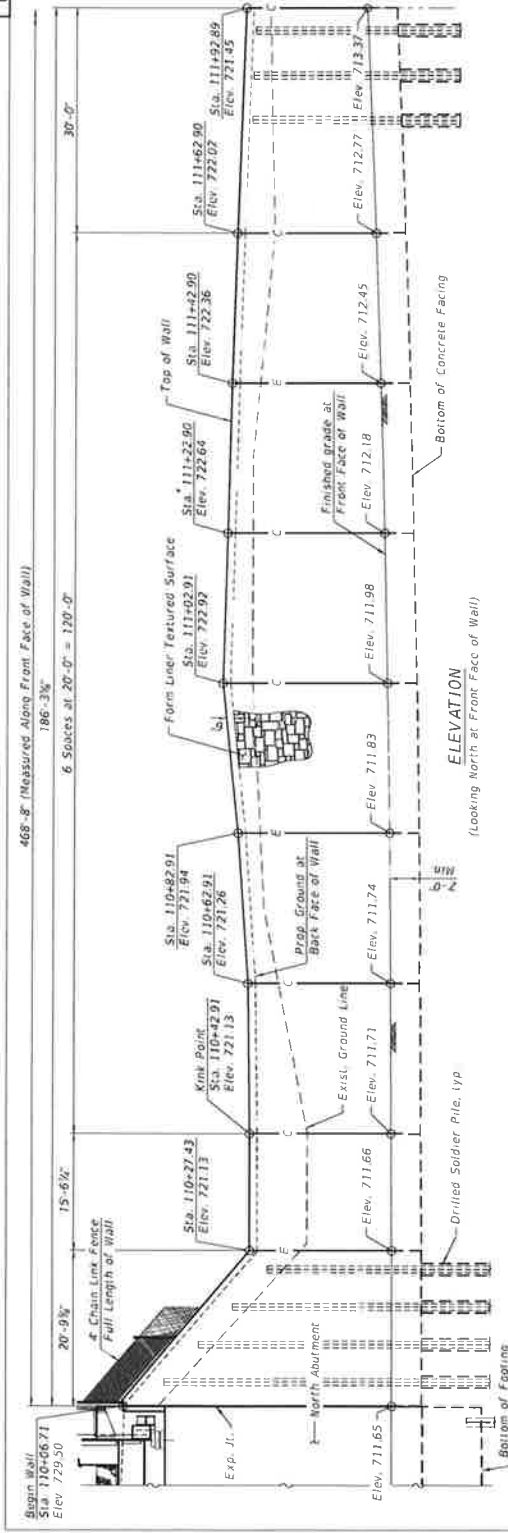
DESIGN STRESSES:
 FIELD UNITS
 f_c = 3,500 psi
 f_y = 60,000 psi (Reinforcement)
 f_y = 50,000 psi (M270 Grade 50)

NOTES:
 1. C denotes Construction Joint
 2. E denotes Expansion Joint

LEGEND
 ◊ Soil Boring

GENERAL PLAN AND ELEVATION 1
 NORTHEAST RETAINING WALL
 WISCONSIN CENTRAL LTD
 OVER NORTH AURORA ROAD
 F.A.U. RT. 1509 - SEC. 06-00133-00-BR
 DUPAGE COUNTY
 STATION 110+06.71 TO STATION 114+75.00

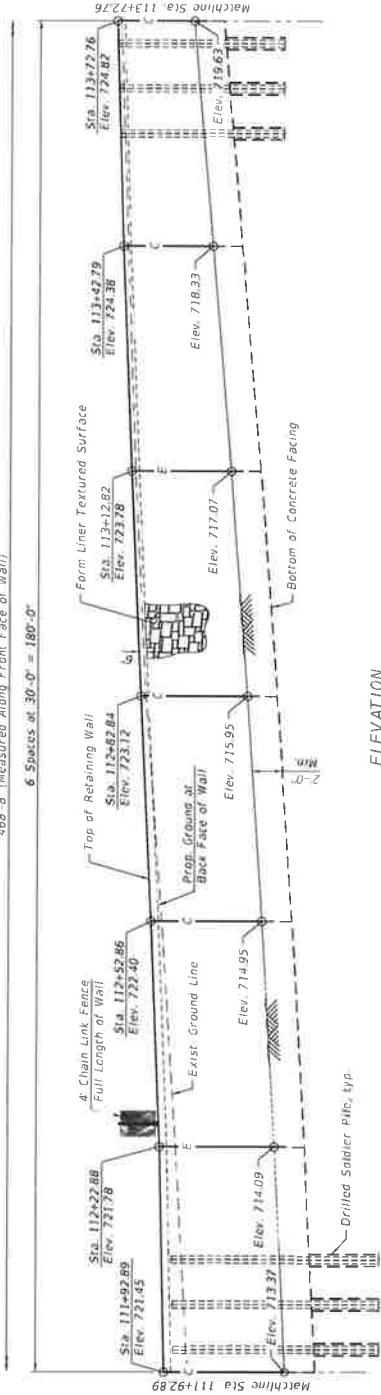
DATE	1/10/2018	SECTION	06-00133-00-BR	COUNTY	DUPAGE	SHEET NO.	421	TOTAL SHEETS	214
PROJECT	GENERAL PLAN AND ELEVATION 1								
CONTRACT NO.	NORTHEAST RETAINING WALL (STRUCTURE NO. 022-9948)								
SCALE	AS SHOWN								
DESIGNED BY	JMG	CHECKED BY	JMG	APPROVED BY	JMG	DATE	1/10/2018	PROJECT NO.	022-9948
DESIGNED BY	JMG	CHECKED BY	JMG	APPROVED BY	JMG	DATE	1/10/2018	PROJECT NO.	022-9948



TRANSYSTEMS

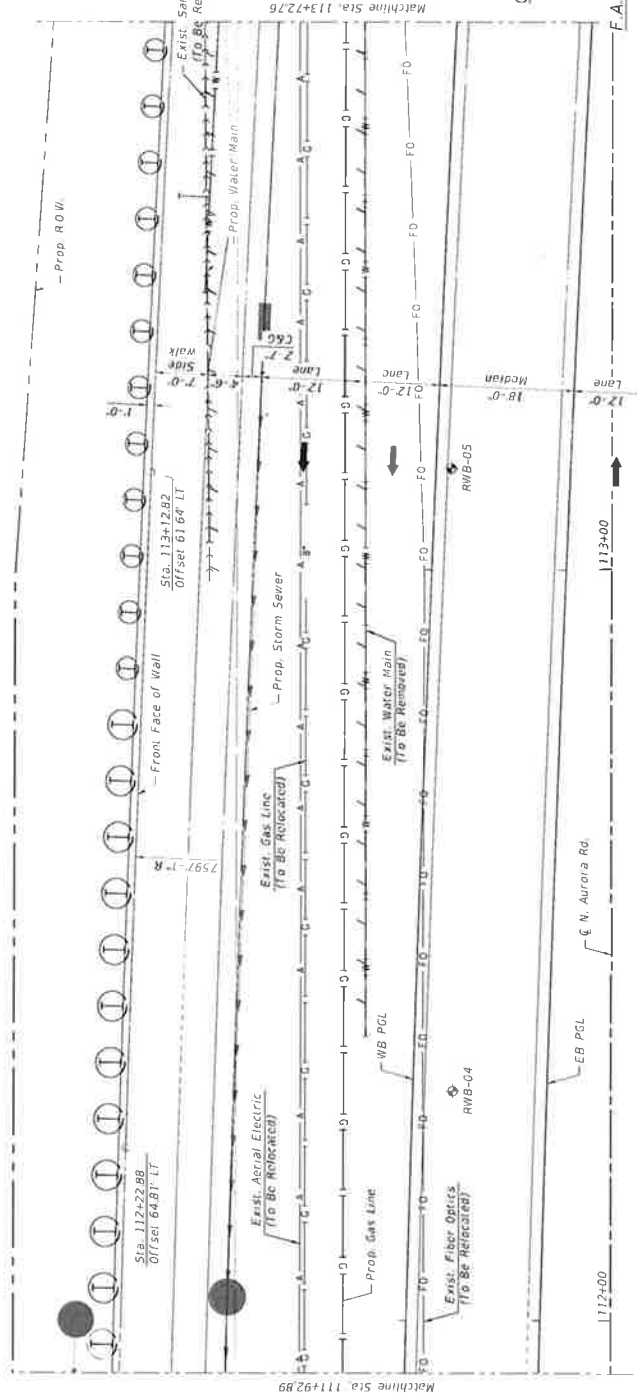
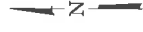
468'-8" (Measured Along Front Face of Wall)

6 Spaces at 30'-0" = 180'-0"



ELEVATION

(Looking North at Front Face of Wall)



PLAN

- NOTES:
1. C denotes Construction Joint
 2. E denotes Expansion Joint

- LEGEND
- ◆ Soil Boring

GENERAL PLAN AND ELEVATION 2
 NORTHEAST RETAINING WALL
 WISCONSIN CENTRAL LTD
 OVER NORTH AURORA ROAD
 F.A.U. RT. 1509 - SEC. 06-00133-00-08
 DUPAGE COUNTY
 STATION 110+06.71 TO STATION 114+75.00

TRANSYSTEMS 7100 S. PULASKI CHICAGO, IL 60629 TEL: 773.439.1000 FAX: 773.439.1001	PROJECT NO. 022-9948 SHEET NO. 57 OF 104	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN AND ELEVATION 2 NORTHEAST RETAINING WALL (STRUCTURE NO. 022-9948)	SHEET 57 OF 104 SHEETS
	DATE: 11/10/04 DRAWN BY: JAM CHECKED BY: JAM IN CHARGE: JAM	REVISIONS: 1. 11/10/04 JAM 2. 11/10/04 JAM 3. 11/10/04 JAM	COUNTY: DUPAGE DISTRICT: 427 PROJECT NO.: 06-00133-00-08 CONTRACT NO.: 01076	SCALE: AS SHOWN DATE: 11/10/04

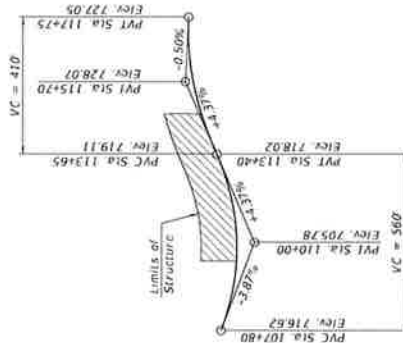
EXHIBIT B - SHEET 59 of 104

TOTAL BILL OF MATERIAL

Item	Unit	Total
Structure Excavation	Cu. Yd.	442
Concrete Structures	Cu. Yd.	165.1
Form Liner Textured Surface	Sq. Ft.	4,223
Sold Shear Connectors	Each	540
Reinforcement Bars, Epoxy Coated	Pound	17,400
Furnishing Soldier Piles (W Section)	Foot	2,875
Drilling And Setting Soldier Piles (In Soil)	Sq. Ft.	30,809
Unreinforced Timber Lagging	Sq. Yd.	740
Geocomposite Wall Drain	Foot	22
Pipe Underdrains For Structures 4	Foot	469
Concrete Gutter, Type B	Foot	472
Chain Link Fence, 4' Attached To Structure	Sq. Ft.	3,991
Anti-Graffiti Protection System	Sq. Ft.	3,991

INDEX OF SHEETS

- 1 General Plan and Elevation 1
- 2 General Plan and Elevation 2
- 3 General Plan and Elevation 3
- 4 General Data
- 5 Plan and Elevation 1
- 6 Plan and Elevation 2
- 7 Plan and Elevation 3
- 8 Plan and Elevation 4
- 9 Plan and Elevation 5
- 10 Plan and Elevation 6
- 11 Wall Sections and Details 1
- 12 Wall Sections and Details 2
- 13 Chain Link Fence
- 14 Boring Logs 1
- 15 Boring Logs 2



GENERAL NOTES:

1. Wall stations and offsets are measured from the centerline of North Aurora Road to the front face of the concrete facing.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Anti-Graffiti Protection System shall be applied to exposed surfaces of the facing.
4. Soldier piles shall be cleaned and given one shop coat of Inorganic Zinc Rich Primer. Cost included with Furnishing Soldier Piles (W Section).
5. All Exposed concrete edges shall have a standard 3/8" chamfer, unless otherwise noted.
6. Wall to be built along straight chords between soldier piles and construction/expansion joints.
7. The Contractor is responsible for the design and performance of the timber lagging using no less than a 3 inch nominal rough-sawn thickness and minimum allowable bending stress of 1,000 PSI.
8. The existing soil in the drilled soldier pile areas contains groundwater. Temporary casing is likely required for the construction of the drilled shafts. See Section 516 of the Standard Specifications for direction on the use of temporary casing. The cost of temporary casing is included with Drilling and Setting Soldier Piles (In Soil).

TRANSYSTEMS

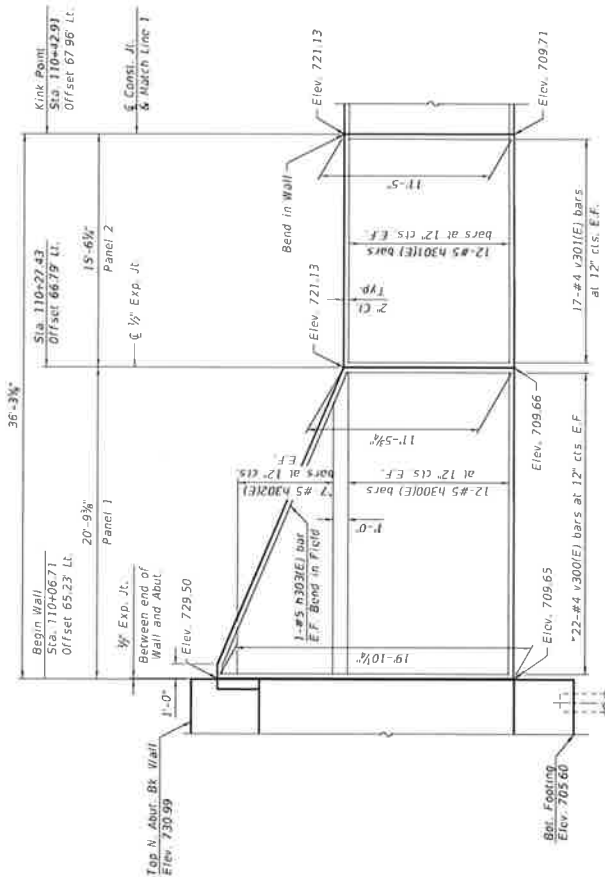
DESIGNED BY	JAG	INVESTIGATED BY	
CHECKED BY	GU	INVESTIGATED BY	
DRAWN BY	GU	INVESTIGATED BY	
CHECKED BY	JAM	INVESTIGATED BY	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

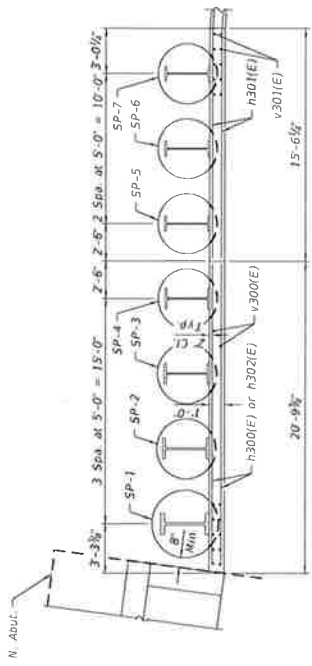
NORTHEAST RETAINING WALL (STRUCTURE NO. 022-9948)

SHEET 4 OF 13 SHEETS

DATE	SECTION	COUNTY	SHEET NO.
1/28/08	05-0015-00-08	DUNAGE	402 OF 217
PROJECT NO.		CONTRACT NO.	
022-9948		01079	



ELEVATION



PLAN

NOTES:

1. For soldier pile wall cross sections and details, see sheet 11 of 15.
2. For soldier pile layout and Bill of Material, see sheet 12 of 15.
3. Based on the high groundwater table, the use of temporary casing will be required. The contractor shall provide and install the drilled shafts. Casing may be pulled or left in place as determined by the contractor. Cost included with Drilling and Setting Soldier Piles (in Soil).

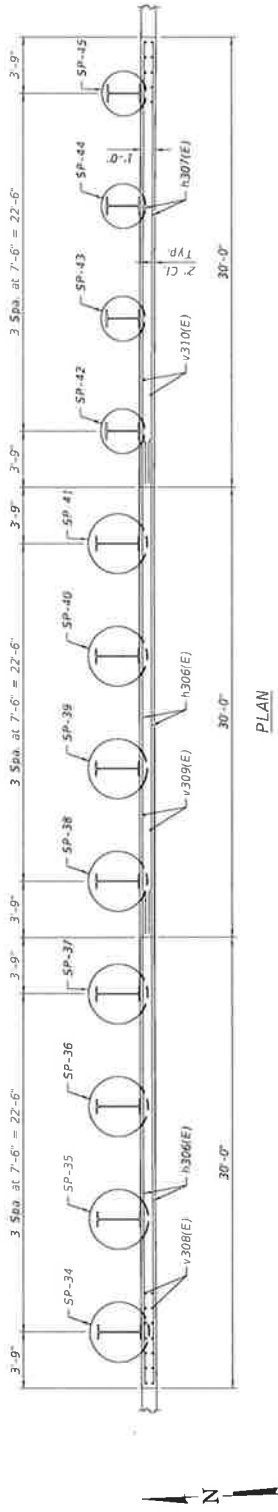
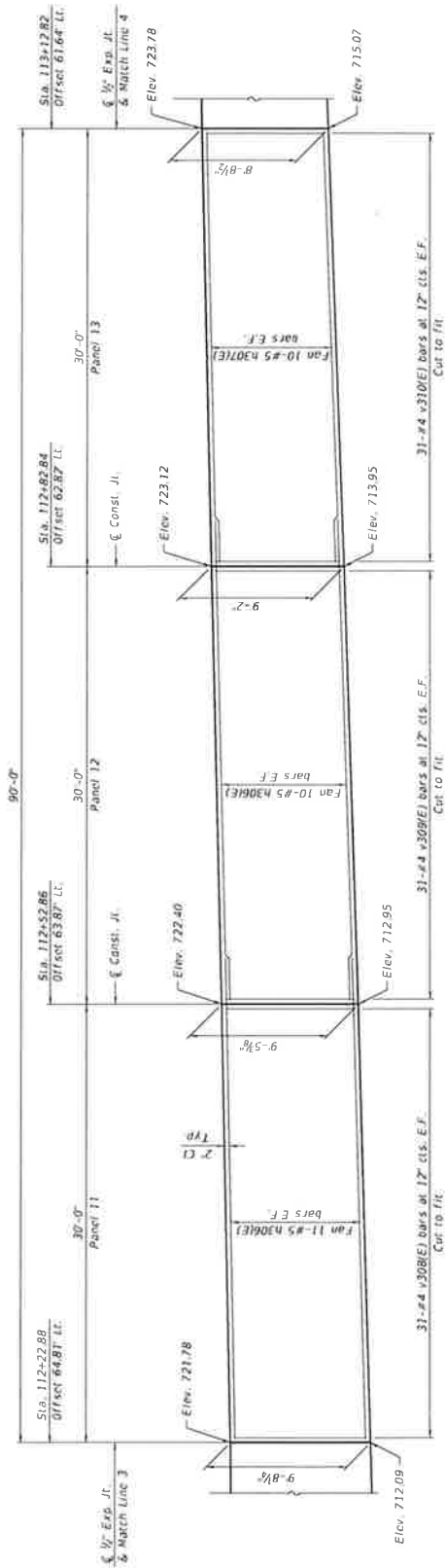
*See Field Cutting Diagram on sheet 17 of 15.

TRANSYSTEMS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND ELEVATION 1
NORTHEAST RETAINING WALL (STRUCTURE NO. 022-9948)

PROJECT NO.	SECTION	COUNTY	SHEET NO.
11100224	402	DUPAGE	215
DATE	DATE	DATE	DATE
11/10/2024	08/12/2024	08/12/2024	08/12/2024
DESIGNED BY	DRAWN BY	CHECKED BY	IN CHARGE
JRM	JRM	JRM	JRM
SHEET 3 OF 13 SHEETS			
CONTRACT NO. 6107B			



NOTES:

1. For soldier pile wall cross sections and details, see sheet 11 of 15.
2. For soldier pile layout and Bill of Material, see sheet 12 of 15.
3. Based on the high groundwater table, the use of temporary casing will be required down to elev. 697.0 in order to properly construct the drilled shafts. Casing may be pulled or left in place, as determined by the contractor. Cost included with Drilling and Setting Soldier Piles (In Soil).

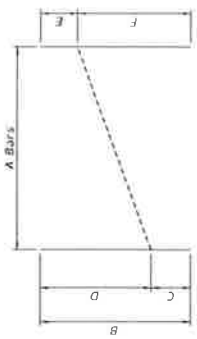
<p>TRANSYSTEMS</p> <p>DATE: 11/14/13 BY: JWB/RSW/MS/K</p>	<p>DESIGNED: JRC</p> <p>CHECKED: JRC</p> <p>DATE: 8/20/13</p> <p>BY: JWB/RSW/MS/K</p>	<p>REVISED: -</p> <p>REVISED: -</p> <p>REVISED: -</p> <p>REVISED: -</p>	<p>SECTION: 20-0210-00-B</p> <p>COUNTY: ILLINOIS</p> <p>DISTRICT: 02</p> <p>PROJECT: 0107</p>	<p>TOTAL SHEETS: 107</p> <p>SHEET NO.: 63</p> <p>CONTRACT NO.: 9107</p>
	<p>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>			<p>PLAN AND ELEVATION 4 NORTHEAST RETAINING WALL (STRUCTURE NO. 022-9948)</p>

EXHIBIT B - SHEET 67 of 104

PILE SUMMARY

Station	Top of Pile Elev.	Bottom of Pile Elev.	Pile Length	Bar No.	Bar Size	Length	Shape
SP-1	110+09.78	68+10.41	76.87	24	#5	20'-5"	
SP-2	110+14.77	68+12.41	72.45	24	#5	18'-8"	
SP-3	110+19.76	68+15.41	67.35	24	#5	18'-8"	
SP-4	110+24.75	68+18.41	62.34	24	#5	18'-8"	
SP-5	110+29.74	68+21.41	57.33	106	#5	23'-2"	
SP-6	110+34.73	68+24.41	52.32	106	#5	23'-2"	
SP-7	110+39.72	68+27.41	47.31	106	#5	23'-2"	
SP-8	110+44.71	68+30.41	42.30	106	#5	23'-2"	
SP-9	110+49.70	68+33.41	37.29	106	#5	23'-2"	
SP-10	110+54.69	68+36.41	32.28	106	#5	23'-2"	
SP-11	110+59.68	68+39.41	27.27	106	#5	23'-2"	
SP-12	110+64.67	68+42.41	22.26	106	#5	23'-2"	
SP-13	110+69.66	68+45.41	17.25	106	#5	23'-2"	
SP-14	110+74.65	68+48.41	12.24	106	#5	23'-2"	
SP-15	110+79.64	68+51.41	7.23	106	#5	23'-2"	
SP-16	110+84.63	68+54.41	2.22	106	#5	23'-2"	
SP-17	110+89.62	68+57.41	-2.79	106	#5	23'-2"	
SP-18	110+94.61	68+60.41	-7.78	106	#5	23'-2"	
SP-19	110+99.60	68+63.41	-12.77	106	#5	23'-2"	
SP-20	111+04.59	68+66.41	-17.76	106	#5	23'-2"	
SP-21	111+09.58	68+69.41	-22.75	106	#5	23'-2"	
SP-22	111+14.57	68+72.41	-27.74	106	#5	23'-2"	
SP-23	111+19.56	68+75.41	-32.73	106	#5	23'-2"	
SP-24	111+24.55	68+78.41	-37.72	106	#5	23'-2"	
SP-25	111+29.54	68+81.41	-42.71	106	#5	23'-2"	
SP-26	111+34.53	68+84.41	-47.70	106	#5	23'-2"	
SP-27	111+39.52	68+87.41	-52.69	106	#5	23'-2"	
SP-28	111+44.51	68+90.41	-57.68	106	#5	23'-2"	
SP-29	111+49.50	68+93.41	-62.67	106	#5	23'-2"	
SP-30	111+54.49	68+96.41	-67.66	106	#5	23'-2"	
SP-31	111+59.48	68+99.41	-72.65	106	#5	23'-2"	
SP-32	111+64.47	68+102.41	-77.64	106	#5	23'-2"	
SP-33	111+69.46	68+105.41	-82.63	106	#5	23'-2"	
SP-34	111+74.45	68+108.41	-87.62	106	#5	23'-2"	
SP-35	111+79.44	68+111.41	-92.61	106	#5	23'-2"	
SP-36	111+84.43	68+114.41	-97.60	106	#5	23'-2"	
SP-37	111+89.42	68+117.41	-102.59	106	#5	23'-2"	
SP-38	111+94.41	68+120.41	-107.58	106	#5	23'-2"	
SP-39	111+99.40	68+123.41	-112.57	106	#5	23'-2"	
SP-40	112+04.39	68+126.41	-117.56	106	#5	23'-2"	
SP-41	112+09.38	68+129.41	-122.55	106	#5	23'-2"	
SP-42	112+14.37	68+132.41	-127.54	106	#5	23'-2"	
SP-43	112+19.36	68+135.41	-132.53	106	#5	23'-2"	
SP-44	112+24.35	68+138.41	-137.52	106	#5	23'-2"	
SP-45	112+29.34	68+141.41	-142.51	106	#5	23'-2"	
SP-46	112+34.33	68+144.41	-147.50	106	#5	23'-2"	
SP-47	112+39.32	68+147.41	-152.49	106	#5	23'-2"	
SP-48	112+44.31	68+150.41	-157.48	106	#5	23'-2"	
SP-49	112+49.30	68+153.41	-162.47	106	#5	23'-2"	
SP-50	112+54.29	68+156.41	-167.46	106	#5	23'-2"	
SP-51	112+59.28	68+159.41	-172.45	106	#5	23'-2"	
SP-52	112+64.27	68+162.41	-177.44	106	#5	23'-2"	
SP-53	112+69.26	68+165.41	-182.43	106	#5	23'-2"	
SP-54	112+74.25	68+168.41	-187.42	106	#5	23'-2"	
SP-55	112+79.24	68+171.41	-192.41	106	#5	23'-2"	
SP-56	112+84.23	68+174.41	-197.40	106	#5	23'-2"	
SP-57	112+89.22	68+177.41	-202.39	106	#5	23'-2"	
SP-58	112+94.21	68+180.41	-207.38	106	#5	23'-2"	
SP-59	112+99.20	68+183.41	-212.37	106	#5	23'-2"	
SP-60	113+04.19	68+186.41	-217.36	106	#5	23'-2"	
SP-61	113+09.18	68+189.41	-222.35	106	#5	23'-2"	
SP-62	113+14.17	68+192.41	-227.34	106	#5	23'-2"	
SP-63	113+19.16	68+195.41	-232.33	106	#5	23'-2"	
SP-64	113+24.15	68+198.41	-237.32	106	#5	23'-2"	
SP-65	113+29.14	68+201.41	-242.31	106	#5	23'-2"	
SP-66	113+34.13	68+204.41	-247.30	106	#5	23'-2"	
SP-67	113+39.12	68+207.41	-252.29	106	#5	23'-2"	

* Stations and offsets are located at the center of the pile.



FIELD CUTTING DIAGRAM

Order h302(E) and v300(E) bars full length. Cut as shown and use remainder of bars in opposite face.

Bar	A	B	C	D	E	F
h302(E)	22	30'-7"	11'-1"	19'-6"	7'-4"	18'-5"
v300(E)	22	30'-7"	11'-1"	19'-6"	7'-4"	18'-5"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h302(E)	24	#5	20'-5"	
h302(E)	24	#5	18'-8"	
h302(E)	7	#5	21'-9"	
h302(E)	7	#5	23'-2"	
h302(E)	106	#5	23'-2"	
h302(E)	52	#5	19'-8"	
h302(E)	130	#5	33'-2"	
h302(E)	58	#5	29'-8"	
h302(E)	10	#5	12'-0"	
v300(E)	32	#4	30'-7"	
v300(E)	76	#4	11'-1"	
v300(E)	42	#4	11'-9"	
v300(E)	84	#4	12'-7"	
v300(E)	42	#4	12'-1"	
v300(E)	62	#4	11'-6"	
v300(E)	62	#4	9'-9"	
v300(E)	62	#4	9'-1"	
v300(E)	62	#4	9'-10"	
v300(E)	62	#4	8'-10"	
v300(E)	62	#4	8'-10"	
v300(E)	62	#4	8'-10"	
v300(E)	26	#4	4'-2"	
Structure Excavation			Cu. Yd	442
Concrete Structures			Cu. Yd	1651
Farm Liner Textures			Sq. Ft.	4,223
Stud Shear Connectors			Each	550
Reinforcement Bars			Pound	17,400
Epoxycast			Foot	2,825
Furnishing Soldier Piles			Cu. Ft.	30,809
Drilling And Setting Soldier Piles (in Soil)			Sq. Ft.	3,205
Unreclaimed Timber Logging			Sq. Yd.	240
Geocomposite Mesh Drain			Sq. Yd.	240
Structures for			Foot	469
Concrete Gutter, Type B			Foot	22
Chain Link Fence, 4' Attached to Structure			Foot	472
Anti-Graffiti Protection System			Sq. Ft.	3,991

Minimum Bar Laps
Bar
#5(E)
3'-2"

TRANSYSTEMS

DESIGNED BY: JRC
 CHECKED BY: JRM
 DRAWN BY: GJZ
 CHECKED BY: JRM

JOB NO.: 22-0000-11A
 PROJECT: 111300A

MINUTES: REVISED: REVISED: REVISED:

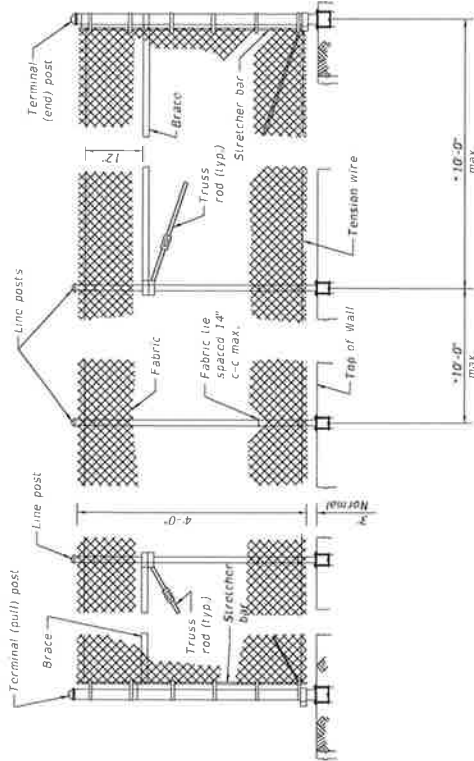
DATE: 04-02-2024

COUNTY: CLATSOP
 SHEET NO.: 61279
 CONTRACT NO.: 022-9948

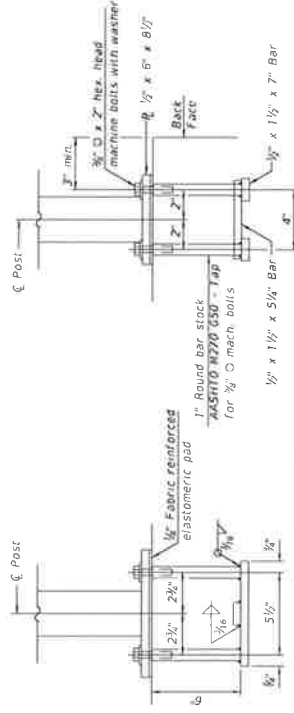
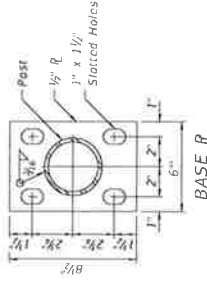
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL SECTIONS AND DETAILS 2
NORTHEAST RETAINING WALL (STRUCTURE NO. 022-9948)

SHEET 67 OF 104 SHEETS



* The Post Anchors Shall be At Least 7'-0" From Wall Expansion Joints.

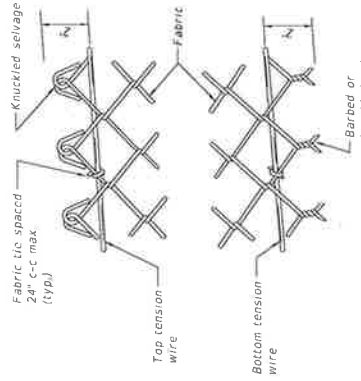


ANCHOR BOLT DETAILS
 In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 3/8" O anchor rods according to Article 509.05 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

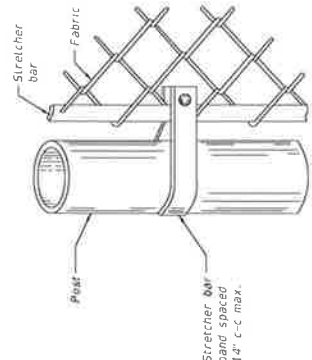
PULL POST ARRANGEMENT

LINE POST ARRANGEMENT

END POST ARRANGEMENT



METHOD OF TYING FABRIC TO TENSION WIRES



METHOD OF FASTENING STRETCHER BAR TO POST

LINE POST Section	lbs./ft.
Pipe Type A 1.90 (48.3) O.D.	2.72
Pipe Type B 1.90 (48.3) O.D.	2.28
Pipe Type C 1.90 (48.3) O.D.	2.26
H 1.875x1.625 (47.6x41.3)	2.72

TERMINAL POST Section	lbs./ft.
Pipe Type A 2.375 O.D.	3.65
Pipe Type B 2.375 O.D.	3.11
Pipe Type C 2.375 O.D.	3.09
Roll Formed 3 1/2 x 3 1/2	See detail
Sq Tubing 2 1/2 x 2 1/2	4.32

Chain Link Fence, # Attached to Structure	Unit	Quantity
	Post	471

NOTES:
 Cost of all the anchor bolts and accessories required for Chain Link Supports are included in Chain Link Fence, # Attached to Structure.

HORIZONTAL BRACES Section	lbs./ft.
Pipe Type A 1.66 O.D.	2.27
Pipe Type B 1.66 O.D.	1.83
Pipe Type C 1.66 O.D.	1.82
H 1.31x1.5	2.25
Roll Formed 1 1/2 x 1 1/2	See detail

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CHAIN LINK FENCE NORTHEAST RETAINING WALL (STRUCTURE NO. 022-9948)

SHEET 13 OF 15 SHEETS

DESIGNED BY	CH	REVIEWED BY	
CHECKED BY		DATE	
DRAWN BY		SCALE	AS SHOWN
CHECKED BY		DATE	

TRANSYSTEMS

TOTAL SHEETS: 104
 SHEETS USED: 104
 COUNTY: ILLINOIS
 SURFACE: ASPHALT
 CONTRACT NO.: 022-9948
 DRAWN BY: J. W. BROWN

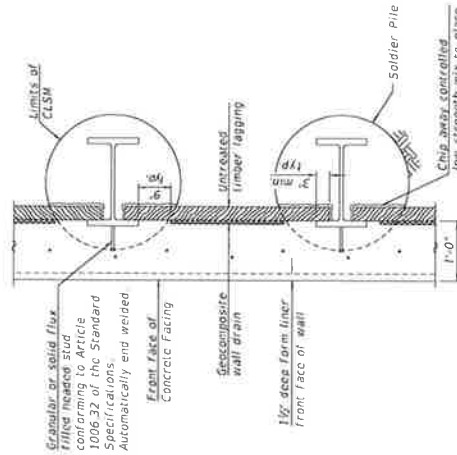
PILE SUMMARY

PILE	*Station	*Offset	PILE SIZE	SHORT DIAMETER	TOP OF PILE (TOP OF SMM)	BOV. OF PILE ELEV.	PILE LENGTH
SP-1	110+23.24	57.60 R	W21x68	2'-6"	716.31	686.31	30'-0"
SP-2	110+18.42	49.15 R	W27x84	3'-0"	718.81	683.84	35'-0"
SP-3	110+13.52	46.42 R	W18x150	4'-0"	721.37	676.37	45'-0"
SP-4	110+08.63	33.12 R	W36x102	4'-0"	723.90	671.90	50'-0"
SP-5	110+04.09	39.63 R	W36x141	4'-6"	726.43	656.43	70'-0"

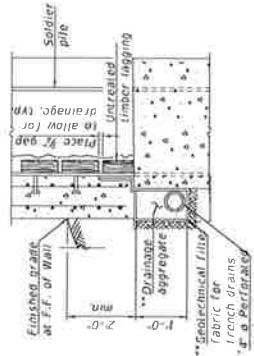
* Stations and offsets are located at the center of the pile.

BILL OF MATERIAL

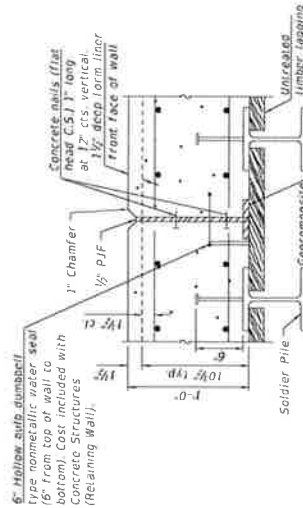
Bar No.	Size	Length	Shape
H400(E)	#5	32'-7"	
H401(E)	#5	31'-8"	
H402(E)	#5	27'-5"	
H403(E)	#5	34'-6"	
H404(E)	#5	31'-10"	
V400(E)	#4	22'-4"	
V401(E)	#4	19'-7"	
Structure Excavation	Cu. Yd		35
Concrete Structures	Cu. Yd		13.7
Form Liner Textured Surface	Sq. Ft.		353
Stud Shear Connectors	Each		50
Reinforcement Bars Epoxy Coated	Pound		1,600
Furnishing Soldier Piles (W Section)	Foot		230
Drilling And Setting Soldier Piles (In Soil)	Cu. Ft.		2,608
Untreated Timber Lagging	Sq. Ft.		265
Geocomposite Wall Drain	Sq. Yd.		15
Plate 1/2" gap	Foot		33
Chain Link Fence, 4' Attached to Structure	Foot		35
Anti-Graffiti Protection System	Sq. Ft.		339



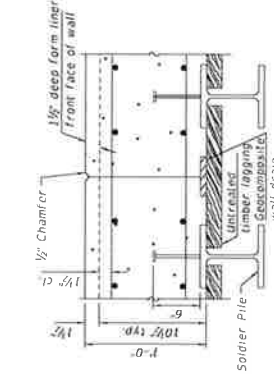
SECTION A-A



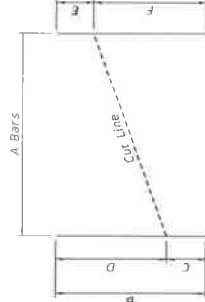
PIPE UNDERDRAIN DETAIL AT SOLDIER PILE



EXPANSION JOINT DETAILS



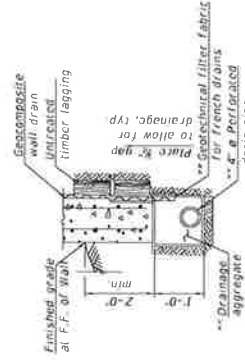
CONSTRUCTION JOINT DETAILS



FIELD CUTTING DIAGRAM

Order H400(E), H402(E) and V400(E) bars (full length) Cut as shown and use remainder in opposite face.

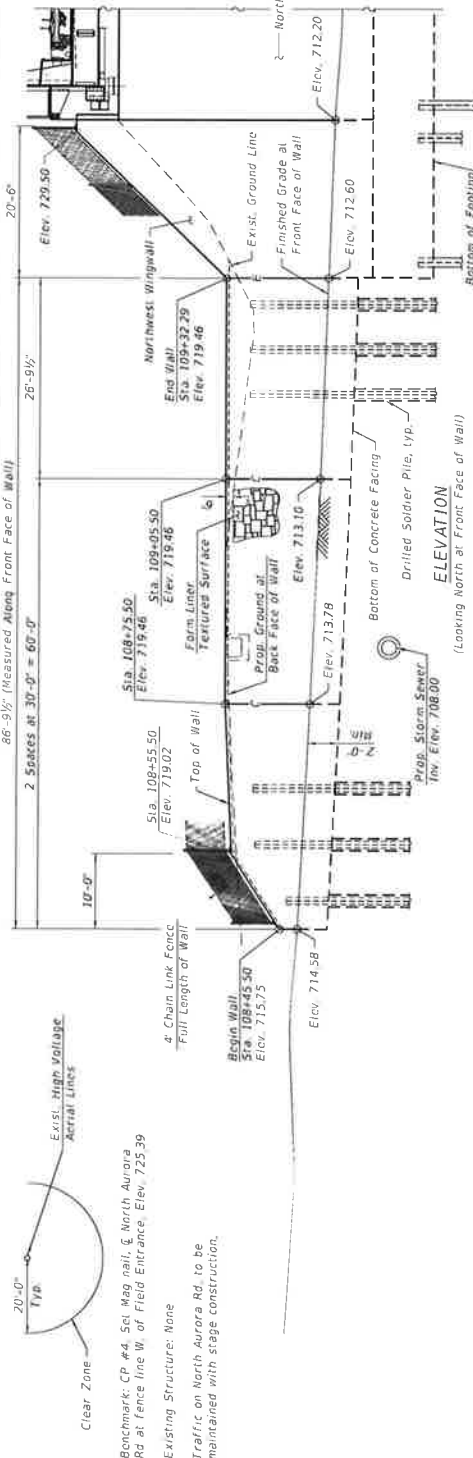
Bar	A	B	C	D	E	F
H400(E)	17	32'-7"	2'-7"	30'-0"	2'-7"	30'-0"
H402(E)	4	27'-5"	2'-11"	24'-6"	2'-11"	24'-6"
V400(E)	32	22'-4"	2'-9"	19'-7"	2'-9"	19'-7"



PIPE UNDERDRAIN DETAIL BETWEEN SOLDIER PILES

** Included in the cost of Pipe Underdrain for Structures, 4"

EXHIBIT B - SHEET 72 of 104



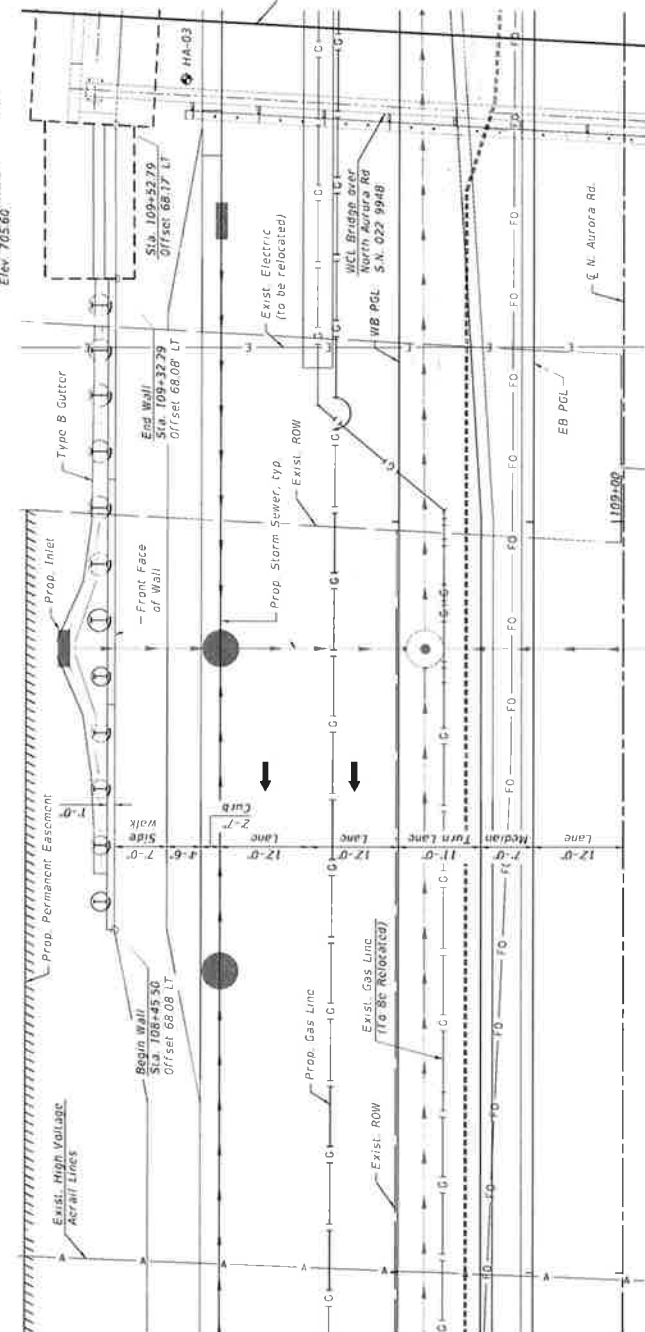
ELEVATION
(Looking North at Front Face of Wall)

DESIGN SPECIFICATIONS:
2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

DESIGN STRESSES:
FIELD UNITS
f_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)
f_v = 50,000 psi (M270 Grade 50)



PROFILE GRADE
(Along Proposed @ N. Aurora Rd.)



PLAN

GENERAL PLAN AND ELEVATION
NORTHWEST RETAINING WALL
WISCONSIN CENTRAL LTD
OVER NORTH AURORA ROAD
F.A.U. RT. 1509 - SEC. 06-00133-00-BR
DUPAGE COUNTY
STATION 108+45.50 TO STATION 109+32.29

LEGEND
◆ Soil Boring

NOTES:
1. C denotes Construction Joint
2. E denotes Expansion Joint

DESIGNED BY: JMG
CHECKED BY: JMW
DATE: 10/20/2017
SCALE: 1/8" = 1'-0"

REVISIONS:
NO. 1: REVISED
NO. 2: REVISED
NO. 3: REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
NORTHWEST RETAINING WALL (STRUCTURE NO. 022-9948)

PROJECT NO.: 06-00133-00-BR
CONTRACT NO.: 61019

TRANSYSTEMS

TOTAL BILL OF MATERIAL

Item	Unit	Total
Structure Excavation	Cu. Yd.	72
Concrete Structures	Cu. Yd.	24.7
Form Liner Textured Surface	Sq. Ft.	622
Stud Shear Connectors	Each	79
Reinforcement Bars, Epoxy Coated	Pound	2,220
Curbing Soldier Piles (W Section)	Foot	423
Drilling And Setting Soldier Piles (In Soil)	Cu. Ft.	2,646
Untreated Timber Lagging	Sq. Ft.	499
Geocomposite Wall Drain	Sq. Yd.	35
Pipe Underdrains For Structures 4"	Foot	87
Concrete Gutter, Type B	Foot	87
Chain Link Fence, 4' Attached To Structure	Foot	87
Anti-Craffiti Protection System	Sq. Ft.	578

INDEX OF SHEETS

- 1 General Plan and Elevation
- 2 General Data
- 3 Plan and Elevation
- 4 Wall Sections and Details

GENERAL NOTES:

1. Wall stations and offsets are measured from the centerline of North Aurora Road to the front face of the concrete facing.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Anti-Craffiti Protection System shall be applied to exposed surfaces of the facing.
4. Soldier piles shall be cleaned and given one shop coat of Inorganic Zinc Rich Primer. Cost included with Furnishing Soldier Piles (W Section).
5. All Exposed concrete edges shall have a standard 3/4" chamfer, unless otherwise noted.
6. For Chain Link Fence details, see sheet 226 of 423.
7. The Contractor is responsible for the design and performance of the timber lagging using no less than a 3 inch nominal rough-sawn thickness and minimum allowable bending stress of 1,000 psi.
8. The existing soil in the drilled soldier pile areas contains groundwater. Temporary casing is likely required for the construction of the drilled shafts. See Section 516 of the Standard Specifications for direction on the use of temporary casing. The cost of temporary casing is included with Drilling and Setting Soldier Piles (In Soil).

GENERAL DATA		SECTION	COUNTY	PROJECT NO.
NORTHWEST RETAINING WALL (STRUCTURE NO. 022-9948)		DEPARTMENT	ILLINOIS	423
SHEET 3 OF 4 SHEETS		CONTRACT NO.	81079	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DESIGNED	JRG	REVIEWED	
CHECKED	JWM	REVIEWED	
APPROVED	JPM	REVIEWED	

TRANSSYSTEMS

3/28/2021

TRANS SYSTEMS

EXHIBIT B - SHEET 75 OF 104

BILL OF MATERIAL

Bar No.	Size	Length	Shape
H300(E)	#3	33'-2"	—
H301(E)	#5	26'-5"	—
V300(E)	#4	7'-4"	—
V301(E)	#4	8'-0"	—
V302(E)	#3	5'-6"	—

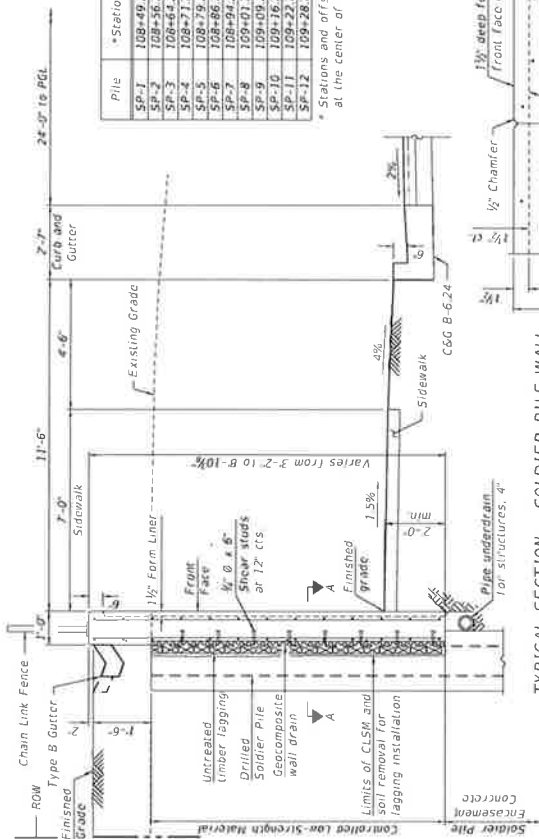
Structure	Excavation	Cu. Yd.	77
Concrete Structures	Cu. To.	24.7	
Corp. Liner Textured	Each	622	
Shank Stud Connectors	Each	79	
Reinforcement Bars	Paired	2,220	
Furnishing Soldier Piles	Foot	423	
Drilling And Setting Soldier Piles (In Soil)	Cu. Ft.	2,646	
Untreated Timber Lagging	Sq. Ft.	499	
Geocomposite Wall Drain	Sq. Yd.	35	
Pipe Underdrains for Structures 4"	Foot	87	
Concrete Gutter, Type B	Foot	87	
Main Link Fence, 4"	Foot	87	
Anti-Graffiti Protection System	Sq. Ft.	578	

Minimum Bar Laps	
Bar	Lap
#5(E)	3'-2"

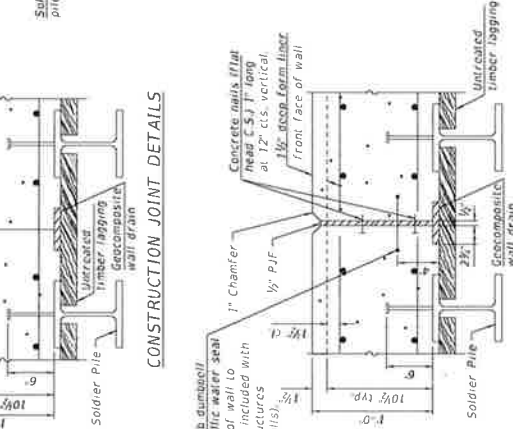
PILE SUMMARY

Station	Off-set	PILE SIZE	Short Diameter	Top of Pile Elev.	Top of Shaft Elev.	Bot. of Pile Elev.	PILE LENGTH
SP-1	108-49.25	W21x44	2'-6"	715.22	712.48	691.22	24'-0"
SP-2	108-45.25	W21x63	2'-6"	715.55	712.81	691.55	24'-0"
SP-3	108-41.25	W21x63	2'-6"	715.88	713.14	691.88	24'-0"
SP-4	108-37.25	W21x63	2'-6"	716.21	713.47	692.21	24'-0"
SP-5	108-33.25	W21x63	2'-6"	716.54	713.80	692.54	24'-0"
SP-6	108-29.25	W21x63	2'-6"	716.87	714.13	692.87	24'-0"
SP-7	108-25.25	W21x63	2'-6"	717.20	714.46	693.20	24'-0"
SP-8	108-21.25	W21x63	2'-6"	717.53	714.79	693.53	24'-0"
SP-9	109-01.75	W21x102	3'-0"	717.86	715.12	693.86	24'-0"
SP-10	109-07.75	W21x102	3'-0"	718.19	715.45	694.19	24'-0"
SP-11	109-13.75	W21x102	3'-0"	718.52	715.78	694.52	24'-0"
SP-12	109-19.75	W21x102	3'-0"	718.85	716.11	694.85	24'-0"

* Stations and off-sets are located at the center of the pile.

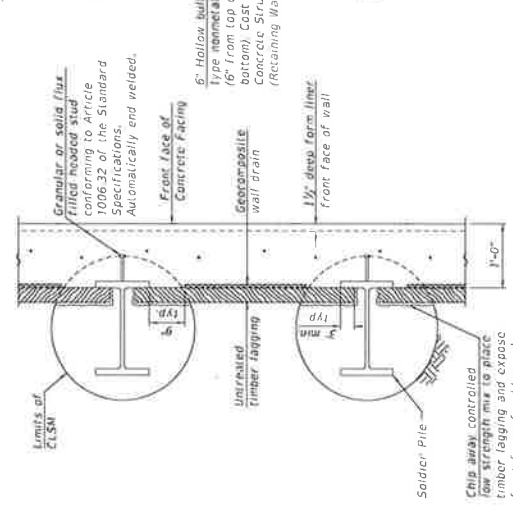


TYPICAL SECTION - SOLDIER PILE WALL
(Looking East)

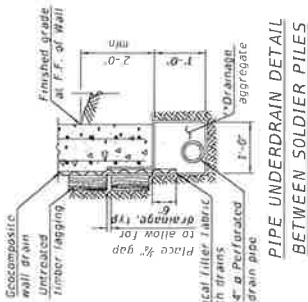


CONSTRUCTION JOINT DETAILS

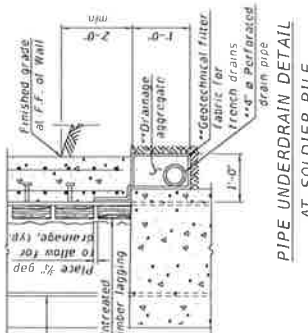
EXPANSION JOINT DETAILS



SECTION A-A



PIPE UNDERDRAIN DETAIL BETWEEN SOLDIER PILES



PIPE UNDERDRAIN DETAIL AT SOLDIER PILE

** Included in the cost of Pipe Underdrain for Structures, 4"

NO.	DATE	BY	CHKD.	APP.	DESCRIPTION
1	03/06/08	JFA	JFA	JFA	ISSUED FOR PERMITS
2	08/13/08	JFA	JFA	JFA	REVISED
3	08/13/08	JFA	JFA	JFA	REVISED
4	08/13/08	JFA	JFA	JFA	REVISED

EXHIBIT B - SHEET 76 of 104

Benchmark: CP #4, Set Mag nail,
 @ North Aurora Rd at Fence line
 W. of Field Entrance
 Elev. 725.39

Existing Structure: None

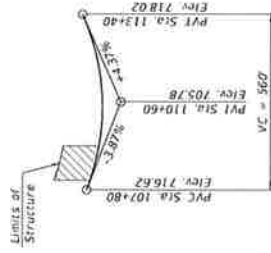
Traffic on North Aurora Rd. to be
 maintained with stage construction.

DESIGN SPECIFICATIONS:
 2017 AASHTO LRFD Bridge Design
 Specifications, 8th Edition

DESIGN STRESSES:

FIELD UNITS

$f_c = 3,500$ psi (Wall Facing)
 $f_c = 6,000$ psi (Reinforcement)
 $f_t = 50,000$ psi (A270 Grade 50)



PROFILE GRADE
 (Along Proposed @ N. Aurora Rd.)

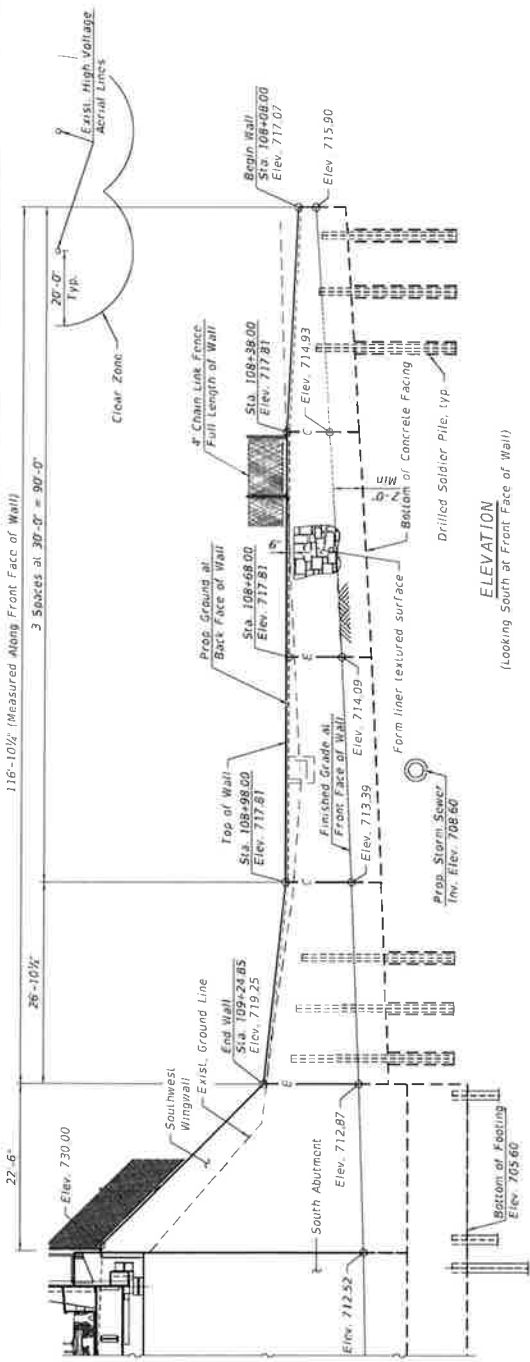
NOTES:
 1. C denotes Construction Joint.
 2. E denotes Expansion Joint.

LEGEND

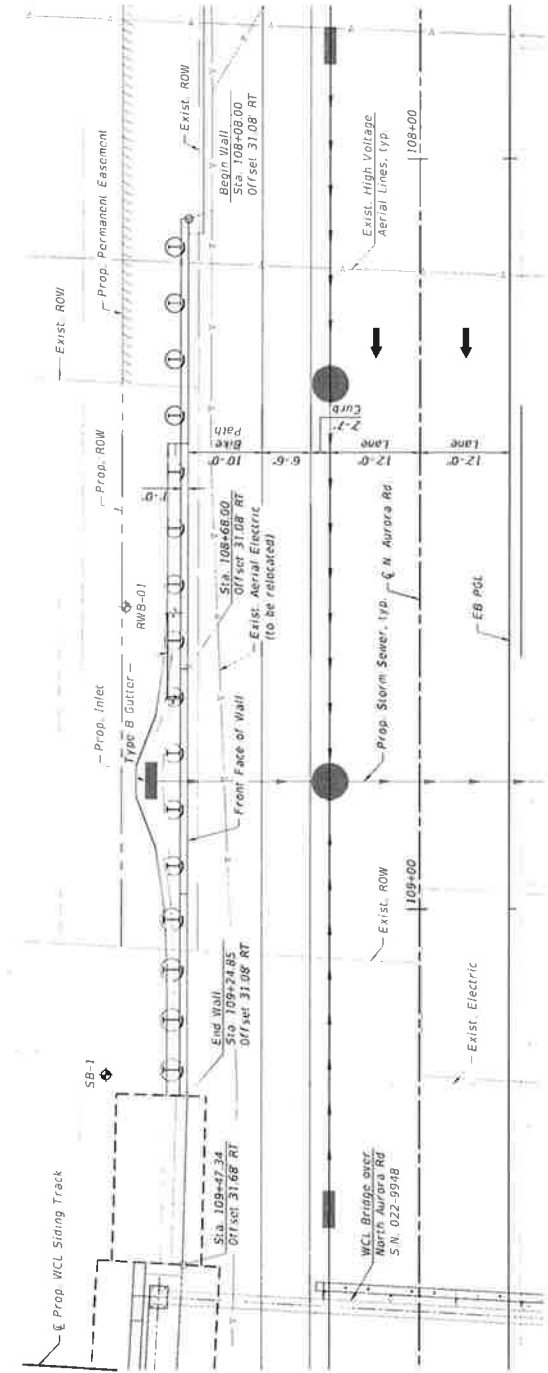
↕ Soil Boring

GENERAL PLAN AND ELEVATION
SOUTHWEST RETAINING WALL
WISCONSIN CENTRAL LTD
OVER NORTH AURORA ROAD
F.A.U. RT. 1509 - SEC. 06-00133-00-BR
DUPAGE COUNTY
STATION 108+08.00 STATION 109+24.85

DATE	REVISED	BY	CHKD
10/28	06/07/13	02/08/18	02/08/18
PROJECT		CONTRACT NO.	
1509		61G79	



ELEVATION
 (Looking South at Front Face of Wall)



PLAN

TRANSYSTEMS

DESIGNED BY: JRC
 CHECKED BY: JRM
 DRAWN BY: ENI
 DATE: 01/20/24

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
 SOUTHWEST RETAINING WALL (STRUCTURE NO. 022-9948)

SHEET 1 OF 3 SHEETS

EXHIBIT B - SHEET 77 of 104

GENERAL NOTES:

1. Wall stations and offsets are measured from the centerline of North Aurora Road to the front face of the concrete facing.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Anti-graft (i) Protection System shall be applied to exposed surfaces of the facing.
4. Soldier piles shall be cleaned and given one shop coat of Inorganic Zinc Rich Primer. Cost included with Furnishing Soldier Piles (III Section).
5. All Exposed concrete edges shall have a standard 3/4" chamfer, unless otherwise noted.
6. For Chain Link Fence details, see sheet 226 of 423.
7. The Contractor is responsible for the design and performance of the timber lagging using no less than a 3 inch nominal rough-sawn thickness and minimum allowable bending stress of 1,000 psi.
8. The existing soil in the drilled soldier pile areas contains groundwater. Temporary casing is likely required for the construction of the drilled shafts. See Section 516 for the Standard Specifications for direction on the use of temporary casing. The cost of temporary casing is included with Drilling and Setting Soldier Piles (in Soil).

TOTAL BILL OF MATERIAL

Item	Unit	Total
Structure Excavation	Cu. Yd.	73
Concrete Structures	Cu. Yd.	24.5
Form Liner Textured Surface	Sq. Ft.	603
Stud Shear Connectors	EACH	72
Reinforcement Bars, Epoxy Coated	Pound	2,390
Furnishing Soldier Piles (IV Section)	Foot	504
Drilling And Setting Soldier Piles (In Soil)	Cu. Ft.	2,929
Untreated Timber Lagging	Sq. Ft.	452
Geocomposite Wall Drain	Sq. Yd.	36
Pipe Underdrains For Structures 4"	Foot	117
Concrete Gutter, Type B	Foot	117
Chain Link Fence, 4" Attached To Structure	Foot	117
Anti-Graffiti Protection System	Sq. Ft.	544

INDEX OF SHEETS

- 1 General Plan and Elevation
- 2 General Data
- 3 Plan and Elevation
- 4 Wall Sections and Details
- 5 Boring Logs

GENERAL DATA		SHEET 77 OF 104	
SOUTHWEST RETAINING WALL (STRUCTURE NO. 022-9948)		CONTRACT NO. 81078	
DESIGNED BY	JAC	COUNTY	DAWSON
CHECKED BY	JAM	DISTRICT	422
DRAWN BY	PH	SURFACE	237
DATE	8/11/2024	SECTION	M-0212-05-08
SHEET 77 OF 104		SHEET 77 OF 104	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

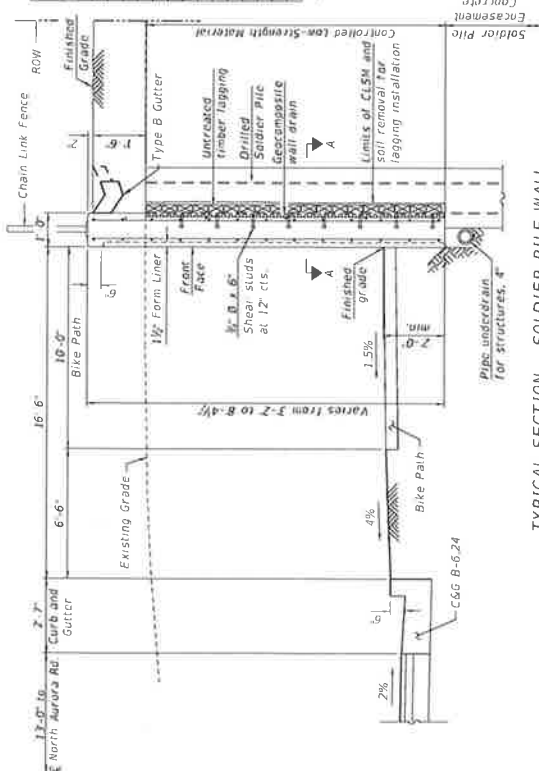
DESIGNED BY	JAC	REVIEWED BY	
CHECKED BY	JAM	REVIEWED BY	
DRAWN BY	PH	REVIEWED BY	
DATE	8/11/2024	REVIEWED BY	

TRANSYSYSTEMS

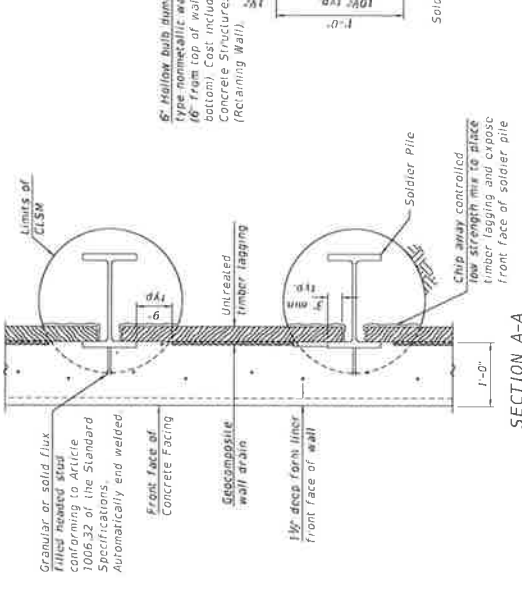
PILE SUMMARY

Station	Station	*Off/sect	Pile Size	Shaft Diameter	Top of Pile Elev.	Top of Shaft Elev.	Bot. of Pile Elev.	Pile Length
SP-1	109+21.42	33.21' RI	W27x102	3'-0"	717.40	710.94	680.40	37'-0"
SP-2	109+14.75	33.21' RI	W27x102	3'-0"	717.04	711.07	680.04	37'-0"
SP-3	109+08.08	33.21' RI	W27x102	3'-0"	716.68	711.19	679.68	37'-0"
SP-4	109+01.42	33.21' RI	W27x102	3'-0"	716.33	711.32	679.33	37'-0"
SP-5	108+94.25	32.98' RI	W21x93	2'-6"	716.14	711.48	681.14	35'-0"
SP-6	108+86.75	32.98' RI	W21x93	2'-6"	716.14	711.65	681.14	35'-0"
SP-7	108+79.25	32.98' RI	W21x93	2'-6"	716.14	711.83	681.14	35'-0"
SP-8	108+71.75	32.98' RI	W21x93	2'-6"	716.14	712.00	686.14	30'-0"
SP-9	108+64.25	32.98' RI	W21x93	2'-6"	716.14	712.41	696.14	30'-0"
SP-10	108+56.75	32.98' RI	W21x93	2'-6"	716.14	712.62	696.14	30'-0"
SP-11	108+49.25	32.98' RI	W21x93	2'-6"	716.14	712.83	696.14	30'-0"
SP-12	108+41.75	32.98' RI	W21x93	2'-6"	716.14	713.04	696.14	30'-0"
SP-13	108+34.25	32.98' RI	W21x93	2'-6"	716.14	713.25	696.14	30'-0"
SP-14	108+26.75	32.98' RI	W21x93	2'-6"	716.14	713.46	696.14	30'-0"
SP-15	108+19.25	32.98' RI	W21x93	2'-6"	716.14	713.67	696.14	30'-0"
SP-16	108+11.75	32.98' RI	W21x93	2'-6"	716.14	713.88	691.50	24'-0"

* Stations and offsets are located at the center of the pile.



TYPICAL SECTION - SOLDIER PILE WALL (Looking East)



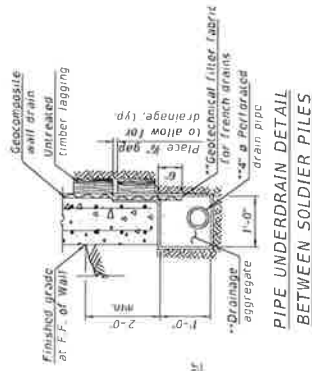
SECTION A-A

BILL OF MATERIAL

Bar No.	Size	Length	Shape
N600(E)	#5	26'-7"	
N601(E)	#5	33'-7"	
N602(E)	#5	29'-8"	
N603(E)	#4	8'-0"	
N604(E)	#4	6'-1"	
N605(E)	#4	5'-4"	
N606(E)	#4	4'-6"	
Structure Excavation	Cu. Yd	73	
Concrete Structures	Cu. Yd	24.5	
Soldier Pile Surface	Sq. Ft.	603	
Steel Shear Connectors	Each	72	
Reinforcement Bars	Pound	2,390	
Epoxy Coated			
Furnishing Soldier Piles (W Section)	Foot	504	
Drilling And Setting Soldier Piles (In Soil)	Cu. Ft.	2,929	
Untreated Timber Lagging	Sq. Ft.	452	
Geocomposite Wall Drain	Sq. Yd.	36	
15" deep Underdrains For Structures	Foot	117	
Concrete gutter, Type B	Foot	117	
Attached to Structure	Foot	117	
Anti-Seaffish Protection System	Sq. Ft.	544	

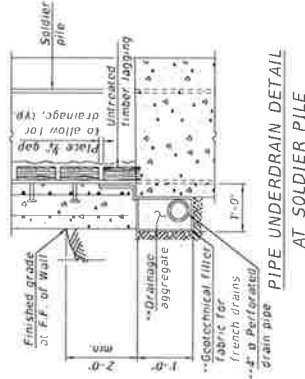
Minimum Bar Laps

Bar	Lap
#5(E)	3'-2"



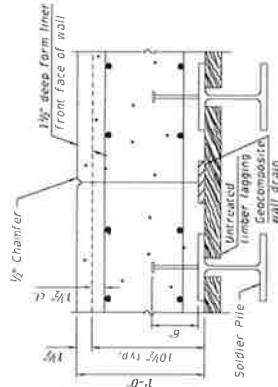
PIPE UNDERDRAIN DETAIL BETWEEN SOLDIER PILES

**Included in the cost of Pipe Underdrain for Structures, 4"

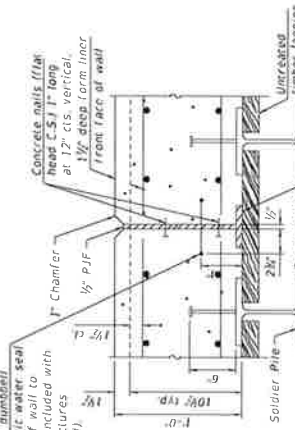


PIPE UNDERDRAIN DETAIL AT SOLDIER PILE

CONSTRUCTION JOINT DETAILS



EXPANSION JOINT DETAILS



LEGEND

- RAILROAD SYMBOLS**
- EX TRACK TO BE RAISED
 - EX TRACK TO BE SHUT DOWN
 - EX TRACK TO BE REMOVED
 - PR TRACK
 - EX TURNOUT TO BE REMOVED
 - EX TURNOUT TO BE RELOCATED
 - PR TURNOUT

- UTILITY SYMBOLS**
- TO BE REMOVED
 - EXISTING
 - ELECTRIC
 - TELEPHONE
 - FIBER OPTIC
 - OVERHEAD ELECTRIC
 - SEWAGE
 - SANITARY SEWER
 - STORM SEWER
 - NATURAL GAS
 - WATER
 - UTILITY POLL

WETLAND SYMBOLS

- EX WETLANDS
- EX WETLANDS BUFFER
- IMPACTED WETLANDS
- IMPACTED WETLANDS SOI GUITER
- WETLAND RESTORATION AREA

MISCELLANEOUS SYMBOLS

- EX BUILDING
- EX TRANSMISSION TOWER
- EX CONDUIT

NOTES SYMBOLS

- NOTES THAT APPLY TO RAILROAD WORK
- NOTES THAT APPLY TO HIGHWAY WORK
- ALL OTHER NOTES

ABBREVIATIONS

- BSF BURIED
- CB CATCH BASIN
- COM COMMUNICATIONS
- DC DECK OF CURVE
- DEM DEMOLITION
- EL ELEVATION
- EX EXISTING
- FD FIBER OPTIC
- HW HAND WALKER
- HL HUMP LEAD
- HML HIGH MAST LIGHT
- HT HUMP TAPER
- LY LEFT HAND
- LL LAST LONG LEG
- WH WHOLE
- NUM NUMBER
- PC POINT OF CURVE
- PI POINT OF INTERSECTION
- PL POINT LEAD
- PO POWER OPENED
- PS POINT OF SWITCH
- PT POINT OF TANGENT
- PI VERTICAL POINT OF INTERSECTION
- RAVE RATE OF CHANGE
- R RADIUS
- RH RIGHT HAND
- RF REPAIR IN PLACE
- ROW ROAD OF WAY
- SPR SWIFT PROGRESSIVELY REMOVED
- STA STATION
- TEMP TEMPORARY
- TOP OF
- TOP OF RAIL
- TURNOUT
- TYP TYPICAL
- UPC VERTICAL POINT OF CURVE
- VPT VERTICAL POINT OF TANGENT
- WCL WISCONSIN CENTRAL, LTD.
- WDO DOWNSIDE

EXHIBIT B - SHEET 81 of 104

SHEET NUMBER	DRAWING TITLE	DRAWING NUMBER
1	GENERAL	G-001
2	GENERAL NOTES	G-002
3	GENERAL NOTES	G-003
4	TEXT PLAN - PROPOSED TRACK	G-004
5	TRACK SCHEDULE	G-005
6	SCHEDULE OF QUANTITIES	G-006
7	TYPICAL SECTIONS - TEMP. ALIGNMENT	G-007
8	TYPICAL SECTIONS - FINAL ALIGNMENT	G-008
9	CONTRACTOR ACCESS PLAN	G-009
10	STAGING	G-010
11	PROPOSED STAGING SCHEDULE - OVERVIEW	G-011
12	TEMPORARY DEMOLITION PLAN - AREA 1	G-012
13	TEMPORARY DEMOLITION PLAN - AREA 2	G-013
14	TEMPORARY DEMOLITION PLAN - AREA 3	G-014
15	TEMPORARY DEMOLITION PLAN - AREA 4	G-015
16	TEMPORARY ALIGNMENT EROSION CONTROL	G-016
17	EROSION CONTROL PLAN - AREA 1	G-017
18	EROSION CONTROL PLAN - AREA 2	G-018
19	EROSION CONTROL PLAN - AREA 3	G-019
20	EROSION CONTROL PLAN - AREA 4	G-020
21	TEMPORARY ALIGNMENT GRADING AND DRAINAGE	G-021
22	GRADING AND DRAINAGE PLAN - AREA 1	G-022
23	GRADING AND DRAINAGE PLAN - AREA 2	G-023
24	GRADING AND DRAINAGE PLAN - AREA 3	G-024
25	GRADING AND DRAINAGE PLAN - AREA 4	G-025
26	TEMPORARY ALIGNMENT TRACKWORK	G-026
27	TEMP. ON MAINLINE TRACK PLAN & PROFILE - AREA 1	G-027
28	TEMP. ON MAINLINE TRACK PLAN & PROFILE - AREA 2	G-028
29	TEMP. ON MAINLINE TRACK PLAN & PROFILE - AREA 3	G-029
30	TEMP. ON MAINLINE TRACK PLAN & PROFILE - AREA 4	G-030
31	TEMP. BNSF LEAD TRACK PLAN & PROFILE - AREA 1	G-031
32	TEMP. BNSF LEAD TRACK PLAN & PROFILE - AREA 2	G-032
33	TEMP. BNSF LEAD TRACK PLAN & PROFILE - AREA 3	G-033
34	TEMP. BNSF LEAD TRACK PLAN & PROFILE - AREA 4	G-034
35	TEMPORARY TRACK PROFILE - ON STAGING	G-035
36	FINAL ALIGNMENT DEMOLITION	G-036
37	FINAL DEMOLITION PLAN - AREA 1	G-037
38	FINAL DEMOLITION PLAN - AREA 2	G-038
39	FINAL DEMOLITION PLAN - AREA 3	G-039
40	FINAL DEMOLITION PLAN - AREA 4	G-040
41	FINAL ALIGNMENT EROSION CONTROL	G-041
42	FINAL EROSION CONTROL PLAN - AREA 1	G-042
43	FINAL EROSION CONTROL PLAN - AREA 2	G-043
44	FINAL EROSION CONTROL PLAN - AREA 3	G-044
45	FINAL EROSION CONTROL PLAN - AREA 4	G-045
46	FINAL ALIGNMENT GRADING AND DRAINAGE	G-046
47	FINAL GRADING AND DRAINAGE PLAN - AREA 1	G-047
48	FINAL GRADING AND DRAINAGE PLAN - AREA 2	G-048
49	FINAL GRADING AND DRAINAGE PLAN - AREA 3	G-049
50	FINAL GRADING AND DRAINAGE PLAN - AREA 4	G-050
51	FINAL ALIGNMENT TRACKWORK	G-051
52	FINAL ON MAINLINE TRACK PLAN & PROFILE - AREA 1	G-052
53	FINAL ON MAINLINE TRACK PLAN & PROFILE - AREA 2	G-053
54	FINAL ON MAINLINE TRACK PLAN & PROFILE - AREA 3	G-054
55	FINAL ON MAINLINE TRACK PLAN & PROFILE - AREA 4	G-055
56	FINAL BNSF LEAD TRACK PLAN & PROFILE - AREA 1	G-056
57	FINAL BNSF LEAD TRACK PLAN & PROFILE - AREA 2	G-057
58	FINAL BNSF LEAD TRACK PLAN & PROFILE - AREA 3	G-058
59	FINAL BNSF LEAD TRACK PLAN & PROFILE - AREA 4	G-059
60	FINAL TRACK PROFILE - ON STAGING	G-060
61	FINAL ALIGNMENT DEMOLITION	G-061
62	FINAL DEMOLITION PLAN - AREA 1	G-062
63	FINAL DEMOLITION PLAN - AREA 2	G-063
64	FINAL DEMOLITION PLAN - AREA 3	G-064
65	FINAL DEMOLITION PLAN - AREA 4	G-065
66	FINAL ALIGNMENT EROSION CONTROL	G-066
67	FINAL EROSION CONTROL PLAN - AREA 1	G-067
68	FINAL EROSION CONTROL PLAN - AREA 2	G-068
69	FINAL EROSION CONTROL PLAN - AREA 3	G-069
70	FINAL EROSION CONTROL PLAN - AREA 4	G-070
71	FINAL ALIGNMENT GRADING AND DRAINAGE	G-071
72	FINAL GRADING AND DRAINAGE PLAN - AREA 1	G-072
73	FINAL GRADING AND DRAINAGE PLAN - AREA 2	G-073
74	FINAL GRADING AND DRAINAGE PLAN - AREA 3	G-074
75	FINAL GRADING AND DRAINAGE PLAN - AREA 4	G-075
76	FINAL ALIGNMENT TRACKWORK	G-076
77	FINAL ON MAINLINE TRACK PLAN & PROFILE - AREA 1	G-077
78	FINAL ON MAINLINE TRACK PLAN & PROFILE - AREA 2	G-078
79	FINAL ON MAINLINE TRACK PLAN & PROFILE - AREA 3	G-079
80	FINAL ON MAINLINE TRACK PLAN & PROFILE - AREA 4	G-080
81	FINAL BNSF LEAD TRACK PLAN & PROFILE - AREA 1	G-081
82	FINAL BNSF LEAD TRACK PLAN & PROFILE - AREA 2	G-082
83	FINAL BNSF LEAD TRACK PLAN & PROFILE - AREA 3	G-083
84	FINAL BNSF LEAD TRACK PLAN & PROFILE - AREA 4	G-084
85	FINAL TRACK PROFILE - ON STAGING	G-085
86	FINAL ALIGNMENT DEMOLITION	G-086
87	FINAL DEMOLITION PLAN - AREA 1	G-087
88	FINAL DEMOLITION PLAN - AREA 2	G-088
89	FINAL DEMOLITION PLAN - AREA 3	G-089
90	FINAL DEMOLITION PLAN - AREA 4	G-090
91	FINAL ALIGNMENT EROSION CONTROL	G-091
92	FINAL EROSION CONTROL PLAN - AREA 1	G-092
93	FINAL EROSION CONTROL PLAN - AREA 2	G-093
94	FINAL EROSION CONTROL PLAN - AREA 3	G-094
95	FINAL EROSION CONTROL PLAN - AREA 4	G-095
96	FINAL ALIGNMENT GRADING AND DRAINAGE	G-096
97	FINAL GRADING AND DRAINAGE PLAN - AREA 1	G-097
98	FINAL GRADING AND DRAINAGE PLAN - AREA 2	G-098
99	FINAL GRADING AND DRAINAGE PLAN - AREA 3	G-099
100	FINAL GRADING AND DRAINAGE PLAN - AREA 4	G-100
101	FINAL ALIGNMENT TRACKWORK	G-101
102	FINAL ON MAINLINE TRACK PLAN & PROFILE - AREA 1	G-102
103	FINAL ON MAINLINE TRACK PLAN & PROFILE - AREA 2	G-103
104	FINAL ON MAINLINE TRACK PLAN & PROFILE - AREA 3	G-104
105	FINAL ON MAINLINE TRACK PLAN & PROFILE - AREA 4	G-105
106	FINAL BNSF LEAD TRACK PLAN & PROFILE - AREA 1	G-106
107	FINAL BNSF LEAD TRACK PLAN & PROFILE - AREA 2	G-107
108	FINAL BNSF LEAD TRACK PLAN & PROFILE - AREA 3	G-108
109	FINAL BNSF LEAD TRACK PLAN & PROFILE - AREA 4	G-109
110	FINAL TRACK PROFILE - ON STAGING	G-110

SHEET NUMBER	DRAWING TITLE	DRAWING NUMBER
47	TRACK CURVE DATA & TURNOUT SCHEDULE	CT-401
48	WCL STAGING PLAN - 20 TURNOUT - 1 OF 2	CT-402
49	WCL STAGING PLAN - 20 TURNOUT - 2 OF 2	CT-403
50	TEMP. ALIGNMENT CROSS SECTIONS	CT-404
51	TEMPORARY ALIGNMENT - EARTHWORK SCHEDULE	CT-405
52	TEMP. ALIGNMENT CROSS SECTIONS - STA 2710+00 TO STA 2715+00	CT-406
53	TEMP. ALIGNMENT CROSS SECTIONS - STA 2715+00 TO STA 2720+00	CT-407
54	TEMP. ALIGNMENT CROSS SECTIONS - STA 2720+00 TO STA 2725+00	CT-408
55	TEMP. ALIGNMENT CROSS SECTIONS - STA 2725+00 TO STA 2730+00	CT-409
56	TEMP. ALIGNMENT CROSS SECTIONS - STA 2730+00 TO STA 2735+00	CT-410
57	TEMP. ALIGNMENT CROSS SECTIONS - STA 2735+00 TO STA 2740+00	CT-411
58	TEMP. ALIGNMENT CROSS SECTIONS - STA 2740+00 TO STA 2745+00	CT-412
59	TEMP. ALIGNMENT CROSS SECTIONS - STA 2745+00 TO STA 2750+00	CT-413
60	TEMP. ALIGNMENT CROSS SECTIONS - STA 2750+00 TO STA 2755+00	CT-414
61	TEMP. ALIGNMENT CROSS SECTIONS - STA 2755+00 TO STA 2760+00	CT-415
62	TEMP. ALIGNMENT CROSS SECTIONS - STA 2760+00 TO STA 2765+00	CT-416
63	TEMP. ALIGNMENT CROSS SECTIONS - STA 2765+00 TO STA 2770+00	CT-417
64	TEMP. ALIGNMENT CROSS SECTIONS - STA 2770+00 TO STA 2775+00	CT-418
65	TEMP. ALIGNMENT CROSS SECTIONS - STA 2775+00 TO STA 2780+00	CT-419
66	TEMP. BNSF LEAD CROSS SECTIONS - STA 2780+00 TO STA 2785+00	CT-420
67	TEMP. BNSF LEAD CROSS SECTIONS - STA 2785+00 TO STA 2790+00	CT-421
68	TEMP. BNSF LEAD CROSS SECTIONS - STA 2790+00 TO STA 2795+00	CT-422
69	TEMP. BNSF LEAD CROSS SECTIONS - STA 2795+00 TO STA 2800+00	CT-423
70	TEMP. BNSF LEAD CROSS SECTIONS - STA 2800+00 TO STA 2805+00	CT-424
71	TEMP. BNSF LEAD CROSS SECTIONS - STA 2805+00 TO STA 2810+00	CT-425
72	TEMP. BNSF LEAD CROSS SECTIONS - STA 2810+00 TO STA 2815+00	CT-426
73	TEMP. BNSF LEAD CROSS SECTIONS - STA 2815+00 TO STA 2820+00	CT-427
74	TEMP. BNSF LEAD CROSS SECTIONS - STA 2820+00 TO STA 2825+00	CT-428
75	TEMP. BNSF LEAD CROSS SECTIONS - STA 2825+00 TO STA 2830+00	CT-429
76	TEMP. BNSF LEAD CROSS SECTIONS - STA 2830+00 TO STA 2835+00	CT-430
77	TEMP. BNSF LEAD CROSS SECTIONS - STA 2835+00 TO STA 2840+00	CT-431
78	TEMP. BNSF LEAD CROSS SECTIONS - STA 2840+00 TO STA 2845+00	CT-432
79	TEMP. BNSF LEAD CROSS SECTIONS - STA 2845+00 TO STA 2850+00	CT-433
80	TEMP. BNSF LEAD CROSS SECTIONS - STA 2850+00 TO STA 2855+00	CT-434
81	TEMP. BNSF LEAD CROSS SECTIONS - STA 2855+00 TO STA 2860+00	CT-435
82	TEMP. BNSF LEAD CROSS SECTIONS - STA 2860+00 TO STA 2865+00	CT-436
83	TEMP. BNSF LEAD CROSS SECTIONS - STA 2865+00 TO STA 2870+00	CT-437
84	TEMP. BNSF LEAD CROSS SECTIONS - STA 2870+00 TO STA 2875+00	CT-438
85	TEMP. BNSF LEAD CROSS SECTIONS - STA 2875+00 TO STA 2880+00	CT-439
86	TEMP. BNSF LEAD CROSS SECTIONS - STA 2880+00 TO STA 2885+00	CT-440
87	TEMP. BNSF LEAD CROSS SECTIONS - STA 2885+00 TO STA 2890+00	CT-441
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89	TEMP. BNSF LEAD CROSS SECTIONS - STA 2895+00 TO STA 2900+00	CT-443
90	TEMP. BNSF LEAD CROSS SECTIONS - STA 2900+00 TO STA 2905+00	CT-444
91	TEMP. BNSF LEAD CROSS SECTIONS - STA 2905+00 TO STA 2910+00	CT-445
92	TEMP. BNSF LEAD CROSS SECTIONS - STA 2910+00 TO STA 2915+00	CT-446
93	TEMP. BNSF LEAD CROSS SECTIONS - STA 2915+00 TO STA 2920+00	CT-447
94	TEMP. BNSF LEAD CROSS SECTIONS - STA 2920+00 TO STA 2925+00	CT-448
95	TEMP. BNSF LEAD CROSS SECTIONS - STA 2925+00 TO STA 2930+00	CT-449
96	TEMP. BNSF LEAD CROSS SECTIONS - STA 2930+00 TO STA 2935+00	CT-450
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98	TEMP. BNSF LEAD CROSS SECTIONS - STA 2940+00 TO STA 2945+00	CT-452
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101	TEMP. BNSF LEAD CROSS SECTIONS - STA 2955+00 TO STA 2960+00	CT-455
102	TEMP. BNSF LEAD CROSS SECTIONS - STA 2960+00 TO STA 2965+00	CT-456
103	TEMP. BNSF LEAD CROSS SECTIONS - STA 2965+00 TO STA 2970+00	CT-457
104	TEMP. BNSF LEAD CROSS SECTIONS - STA 2970+00 TO STA 2975+00	CT-458
105	TEMP. BNSF LEAD CROSS SECTIONS - STA 2975+00 TO STA 2980+00	CT-459
106	TEMP. BNSF LEAD CROSS SECTIONS - STA 2980+00 TO STA 2985+00	CT-460
107	TEMP. BNSF LEAD CROSS SECTIONS - STA 2985+00 TO STA 2990+00	CT-461
108	TEMP. BNSF LEAD CROSS SECTIONS - STA 2990+00 TO STA 2995+00	CT-462
109	TEMP. BNSF LEAD CROSS SECTIONS - STA 2995+00 TO STA 3000+00	CT-463
110	TEMP. BNSF LEAD CROSS SECTIONS - STA 3000+00 TO STA 3005+00	CT-464
111	TEMP. BNSF LEAD CROSS SECTIONS - STA 3005+00 TO STA 3010+00	CT-465
112	TEMP. BNSF LEAD CROSS SECTIONS - STA 3010+00 TO STA 3015+00	CT-466
113	TEMP. BNSF LEAD CROSS SECTIONS - STA 3015+00 TO STA 3020+00	CT-467
114	TEMP. BNSF LEAD CROSS SECTIONS - STA 3020+00 TO STA 3025+00	CT-468
115	TEMP. BNSF LEAD CROSS SECTIONS - STA 3025+00 TO STA 3030+00	CT-469
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117	TEMP. BNSF LEAD CROSS SECTIONS - STA 3035+00 TO STA 3040+00	CT-471
118	TEMP. BNSF LEAD CROSS SECTIONS - STA 3040+00 TO STA 3045+00	CT-472
119	TEMP. BNSF LEAD CROSS SECTIONS - STA 3045+00 TO STA 3050+00	CT-473
120	TEMP. BNSF LEAD CROSS SECTIONS - STA 3050+00 TO STA 3055+00	CT-474
121	TEMP. BNSF LEAD CROSS SECTIONS - STA 3055+00 TO STA 3060+00	CT-475
122	TEMP. BNSF LEAD CROSS SECTIONS - STA 3060+00 TO STA 3065+00	CT-476
123	TEMP. BNSF LEAD CROSS SECTIONS - STA 3065+00 TO STA 3070+00	CT-477
124	TEMP. BNSF LEAD CROSS SECTIONS - STA 3070+00 TO STA 3075+00	CT-478
125	TEMP. BNSF LEAD CROSS SECTIONS - STA 3075+00 TO STA 3080+00	CT-479
126	TEMP. BNSF LEAD CROSS SECTIONS - STA 3080+00 TO STA 3085+00	CT-480
127	TEMP. BNSF LEAD CROSS SECTIONS - STA 3085+00 TO STA 3090+00	CT-481
128	TEMP. BNSF LEAD CROSS SECTIONS - STA 3090+00 TO STA 3095+00	CT-482
129	TEMP. BNSF LEAD CROSS SECTIONS - STA 3095+00 TO STA 3100+00	CT-483
130	TEMP. BNSF LEAD CROSS SECTIONS - STA 3100+00 TO STA 3105+00	CT-484
131	TEMP. BNSF LEAD CROSS SECTIONS - STA 3105+00 TO STA 3110+00	CT-485
132	TEMP. BNSF LEAD CROSS SECTIONS - STA 3110+00 TO STA 3115+00	CT-486
133	TEMP. BNSF LEAD CROSS SECTIONS - STA 3115+00 TO STA 3120+00	CT-487
134	TEMP. BNSF LEAD CROSS SECTIONS - STA 3120+00 TO STA 3125+00	CT-488
135	TEMP. BNSF LEAD CROSS SECTIONS - STA 3125+00 TO STA 3130+00	CT-489
136	TEMP. BNSF LEAD CROSS SECTIONS - STA 3130+00 TO STA 3135+00	CT-490
137	TEMP. BNSF LEAD CROSS SECTIONS - STA 3135+00 TO STA 3140+00	CT-491
138	TEMP. BNSF LEAD CROSS SECTIONS - STA 3140+00 TO STA 3145+00	CT-492
139	TEMP. BNSF LEAD CROSS SECTIONS - STA 3145+00 TO STA 3150+00	CT-493
140	TEMP. BNSF LEAD CROSS SECTIONS - STA 3150+00 TO STA 3155+00	CT-494
141	TEMP. BNSF LEAD CROSS SECTIONS - STA 3155+00 TO STA 3160+00	CT-495
142	TEMP. BNSF LEAD CROSS SECTIONS - STA 3160+00 TO STA 3165+00	CT-496
143	TEMP. BNSF LEAD CROSS SECTIONS - STA 3165+00 TO STA 3170+00	CT-497
144	TEMP. BNSF LEAD CROSS SECTIONS - STA 3170+00 TO STA 3175+00	CT-498
145	TEMP. BNSF LEAD CROSS SECTIONS - STA 3175+00 TO STA 3180+00	CT-499
146	TEMP. BNSF LEAD CROSS SECTIONS - STA 3180+00 TO STA 3185+00	CT-500
147	TEMP. BNSF LEAD CROSS SECTIONS - STA 3185+00 TO STA 3190+00	CT-501
148	TEMP. BNSF LEAD CROSS SECTIONS - STA 3190+00 TO STA 3195+00	CT-502
149	TEMP. BNSF LEAD CROSS SECTIONS - STA 3195+00 TO STA 3200+00	CT-503
150	TEMP. BNSF LEAD CROSS SECTIONS - STA	

