



OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION
682 Prospect Street
Berea, Ohio 44017
(440) 971-2081

LOI NO. 16-2021

**REQUEST FOR LETTERS OF INTEREST (LOIs) TO PERFORM
PROFESSIONAL ENGINEERING SERVICES FOR:**

BRIDGE DECK REHABILITATION
PROJECT NO. 71-21-05

DECK REPLACEMENT OF THE FOUGHT ROAD BRIDGE (COUNTY ROUTE 106) OVER THE MAINLINE AT MILEPOST 86.6, DECK OVERLAY OF THE RIVER ROAD BRIDGE (COUNTY ROUTE 234) OVER THE MAINLINE AT MILEPOST 93.0, AND DECK REPLACEMENT OF THE CARLEY ROAD BRIDGE (TOWNSHIP ROUTE 202) OVER THE MAINLINE AT MILEPOST 94.7 IN SANDUSKY COUNTY, OHIO

ISSUE DATE: August 27, 2021

INQUIRY END DATE: 5:00 PM (Eastern) on September 10, 2021

LETTERS OF INTEREST DUE 5:00 P.M. (Eastern) on September 17, 2021

COMMISSION MEETING: October 18, 2021 (anticipated meeting for contract award; subject to change)

The SBE goal for this project is 20%

In lieu of taking exceptions to the Request for Letters of Interests requirements, including but not limited to terms and conditions, scope of work statements, service levels requirements, etc., or providing assumptions that may be unacceptable to the Commission, Respondents are strongly encouraged to use the inquiry process in PART VI of this Request for Letters of Interest.

SUBMITTED BY:

COMPANY NAME _____

CONTACT NAME _____

STREET ADDRESS _____

CITY AND STATE _____

ZIP CODE _____ TELEPHONE NUMBER _____

EMAIL ADDRESS _____

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**REQUEST FOR LETTERS OF INTEREST (LOIs) TO PERFORM
PROFESSIONAL ENGINEERING SERVICES FOR PROJECT NO. 71-21-05**

PART I. BACKGROUND INFORMATION

The Ohio Turnpike and Infrastructure Commission (“Commission”), a body corporate and politic constituting an instrumentality of the State of Ohio, is responsible for operating and maintaining the Ohio Turnpike, a toll road officially known as the James W. Shocknessy Ohio Turnpike. The Ohio Turnpike is a limited access highway extending 241 miles across northern Ohio. Additional information regarding the Commission and the Ohio Turnpike can be found at <https://www.ohioturnpike.org/home>.

The Commission issues this Request for Letters of Interest seeking to select a qualified consultant (“Consultant”) to perform professional engineering services (Phase I – Site Inspection/Engineering Report/Design/Plan Preparation; Phase II – Engineering Support During Construction), as further described in Appendix A, for Project No. 71-21-05, Bridge Deck Rehabilitation, Deck Replacement of the Fought Road Bridge (County Route 106) over the Mainline at Milepost 86.6, Deck Overlay of the River Road Bridge (County Route 234) over the Mainline at Milepost 93.0, and Deck Replacement of the Carley Road Bridge (Township Route 202) over the Mainline at Milepost 94.7 in Sandusky County, Ohio (the “Project”).

As-Built drawings of the bridges are attached to this LOI as Appendix G.

Letters of Interest shall serve to provide information for the Commission to evaluate the Respondent’s qualifications to perform the services required for the Project. The Commission intends to select one consultant to enter into a contract for the Project based on the LOI submittals.

Those firms interested in responding to the Request for Letters of Interest must have a completed “Request for Qualifications” (“RFQ”) package for calendar years 2021-2022 on file with the Commission to be considered as a potential Respondent. If a firm has not already responded to the RFQ, the RFQ package may be obtained through the inquiry process and its response submitted simultaneously with the LOI.

Any person responding (a “Respondent”) must clearly demonstrate depth of experience in providing construction administration and inspection services, including familiarity with the various methodologies and industry best practices for performing the required tasks. Demonstrated experience in providing the necessary services is required.

PART II. ASSISTANCE FROM COMMISSION PERSONNEL

Commission personnel will be assigned to assist, as needed, with the coordination of the various aspects of any assignments. Commission personnel will also make available all documents in the Commission’s possession to the Consultant required for completion of its duties. Generally, the Commission’s Chief Engineer will administer and manage the contract for the Consultant’s services.

PART III. LOI REQUIREMENTS

The general nature and scope of work for the Project are set forth in Appendix A ("Scope of Services"). The Commission expects that Respondents will have experience in providing the services of this nature and should understand the general scope of the services necessary to successfully fulfill the Commission's requirements. Respondents should prepare Letters of Interest that are concise and that include an explicit response to the items listed below:

1. Plainly identify the Consultant's legal name, contact person(s) and their email, phone number and physical address. Describe your organizational structure, staffing of the project, and specify the number of professional personnel by discipline based in the Ohio office(s) in which a bulk of the services will be performed.
2. List the types/categories of services for which the Consultant has a current Qualifications Statement on file with the Commission in response to the 2021-2022 RFQ and all ODOT Prequalifications.
3. List the Project Manager and other key staff members including key subconsultant staff. Address the experience of the key staff members on similar projects. Provide a one (1) page résumé of the proposed Project Manager. The proposed Project Manager must be a professional engineer registered in the State of Ohio. Additionally, provide an organizational chart and no more than half-page resumes for each staff member assigned to the Project, which shall not exceed five (5) pages. Resumes should include the qualifications of the key staff and descriptions of work performed on similar projects.
4. Describe your firm's approach to quality control and any programs for providing technical direction and administrative control to assure conformance with industry-accepted standards of quality for the Project.
5. List significant subconsultants, their categories of service, qualifications, and the percentage of work to be performed by each proposed subconsultant.
6. Provide a description of your Project approach, not to exceed two (2) pages. Confirm the firm's understanding of the project, proposed technical approach, cost containment practices, innovative ideas for this type of project and any other relevant information concerning your firm's qualifications to perform the services contemplated under the project.
7. Describe the capacity of your firm's staff and its ability to perform the work in a timely manner relative to present workload and the availability of assigned staff.
8. Provide references from three (3) organizations other than the Ohio Turnpike and Infrastructure Commission for similar projects and services completed in the past three (3) years. For each reference, provide a contact name and phone number.
9. List all services performed for the Ohio Turnpike and Infrastructure Commission over the last five (5) years.

Items 1 through 9 must be included in the LOI on single sided 8 1/2" x 11" sheets of paper. Items 1 through 9 shall not exceed fifteen (15) pages and Item 6 shall not exceed two (2) pages and shall be in no smaller than size 11 font. The Letter of Interest shall not exceed fifteen (15) pages. Items B, C, D and E listed in PART V below are excluded from the page limit. A one (1) page cover letter and a Table of Contents may be included and will not be considered as part of the fifteen (15) page limit.

PART IV. FORM CONTRACT FOR PROFESSIONAL SERVICES FOR A CONSTRUCTION PROJECT REQUIREMENTS

In submitting a Letter of Interest, the Respondent agrees to sign the Contract for Professional Services for a Construction Project attached as Appendix B, incorporating the Scope of Services, within ten (10) days of the Commission's delivering of a notice of award.

PART V. SUBMISSION REQUIREMENTS

For Respondent's Letter of Interest to be responsive, Respondent must submit the following:

- A. A Letter of Interest addressing the items listed in PART III, and limited to 15-pages, not including items B, C, D and E listed below.
- B. An explanation of any concerns, requested information or exceptions related to the Request for LOIs, Scope of Services or the Contract for Professional Services for a Construction Project (attached as Appendix B).
- C. A completed, signed, and notarized Non-interest/Non-collusion Affidavit (see Appendix C attached hereto; see also, Ethics Policy attached as Appendix D which is referenced in the affidavit).
- D. Completed and Signed Disclosure and Acknowledgement Governing the Expenditure of Public Funds on Offshore Services (see Appendix E attached hereto).
- E. Completed Small Business Enterprise ("SBE") Utilization Certification and Plan demonstrating the commitment and means for achieving SBE participation on the Respondent's team (see Appendix F attached hereto). If the Certification and Plan fails to meet or exceed the **20% Goal**, the Respondent is required to demonstrate that it used Good Faith Efforts to attain SBE participation that meets or exceeds the Goal. As described in Appendix F, the Commission recognizes SBEs that are certified with the Commission or ODOT as SBE and considers DBEs certified with ODOT and firms certified as EDGE through DAS as eligible for SBE certification. Contact the Commission's Office of Equity and Inclusion with any questions concerning the SBE Program.

PART VI. INQUIRY SUBMISSION INSTRUCTIONS

All interested parties are welcome to submit specific questions or requests for clarifications of the LOI requirements. Respondents are expected to raise any questions, exceptions, or additions they have concerning the LOI prior to the end of the Inquiry Period indicated on the cover page. These questions shall be addressed in writing and **emailed to purchasing@ohioturnpike.org**. **Do not contact the Commission by phone. Do not direct questions regarding the Request for LOIs to anyone other than through the email address provided.** At the completion of the Inquiry Period, a summary of all questions and answers will be compiled, posted on the Commission's website (<https://www.ohioturnpike.org/business/doing-business-with-us/rfps>), and provided via email to the interested parties on file. In the event that it becomes necessary to provide additional clarifying data or information or to revise any part of this Request for Letters of Interest, addenda will be posted publicly (at the same link as answers) and provided directly to all recipients of this Request for Letters of Interest.

PART VII. LOI SUBMISSION INSTRUCTIONS

Respondents must timely submit its Letters of Interest electronically to purchasing@ohioturnpike.org in pdf format by the deadline specified on the cover page of this Request for Letters of Interest. Paper copies received will be considered non-responsive.

PART VIII. EVALUATION OF LOIs

The Commission will form an Evaluation Team consisting of members of the Commission Engineering staff to review the Letters of Interest. Respondents may be required to make a presentation to the Evaluation Team. A Consulting Services Contract will be awarded, if any award be made, to the Respondent determined to be the most qualified to perform the required services. In determining whether a Respondent is responsive, the Commission will consider the Respondent's experience, conduct and performance on previous contracts (if any) and ability to execute the Contract properly. Factors that may be considered by the Commission are:

- A. Competence to perform the required professional design services as indicated by the technical training, education, and experience of the firm's personnel, especially the technical training, education, and experience of the employees within the firm who would be assigned to perform the services; 20 points
- B. Ability of the responding firm in terms of its workload and the availability of qualified personnel, equipment, and facilities to perform the required professional design services or design-build services competently and expeditiously; 15 points
- C. Past performance of the responding firm as reflected by the evaluations of previous clients with respect to such factors as control of costs, quality of work, and meeting of deadlines; 15 points
- D. Any other relevant factors as determined by the Commission, including but not limited to completion and submission of all items required under this Request for Letters of Interest, and any exceptions or requested deviations; 20 points
- E. Committing to a plan for meeting or exceeding the SBE Goal or satisfactorily demonstrating use of Good Faith Efforts to attain SBE certified firms' participation on the Project – pass/fail;
- F. Fostering competition and economic development – pass/fail; and
- G. Disclosure of any conflict of interest – pass/fail.

Following the ranking of the Letters of Interest submitted, a "Scope of Services" meeting will be held with the top-ranked Respondent to ensure the Respondent's understanding of the contract requirements and fee negotiations may commence. Following this meeting, the Respondent shall submit to the Commission its proposed hourly billing rates and classifications for all permanent employees in accordance with the Ohio Turnpike and Infrastructure Commission Professional Services Method of

Compensation – Hourly Billing FY 2021 Summary, and a fee proposal for all tasks defined at the Scope of Services meeting. The top-ranked Respondent’s fee will be compared to the Commission’s estimates. If necessary, the Commission will attempt to negotiate a mutually acceptable fee. If those negotiations are unsuccessful, the process will be repeated with the Respondent that submitted the next ranked Letter of Interest. Following successful negotiations, a contract (see [Appendix B](#) for form of Contract) will be entered into based on the Scope of Services. Furthermore, the Commission will not agree to pay or reimburse for the successful Respondent’s travel time and mileage to and from the work site, nor overnight lodging and/or per diems in connection with providing those services as set forth in the Scope of Services.

PART IX. OFFICE OF EQUITY AND INCLUSION

The Commission adopted its Small, Minority Business Inclusion Program in 2016 to ensure that businesses certified as a Small Business Enterprise (SBE), Minority Business Enterprise (MBE), and/or Disadvantaged Business Enterprise (LDBEs) have the fullest possible opportunity to participate in contracts involving the expenditure of Commission funds. The program is administered by the Commission’s Office of Equity and Inclusion (OEI), which reviews each proposed contract and determines if opportunities exist and if so, applies a goal to the proposed contract. In some cases, no goal is applied to a proposed contract due to a lack of opportunity and availability of certified businesses.

The Commission’s Office of Equity and Inclusion Standards and Practice Manual for the Small, Minority and Disadvantaged Business Inclusion Program is available on the Commission’s website at <https://www.ohioturnpike.org/business/oei>.

When a goal is identified in an LOI, the respondent must submit the documentation provided by the Commission to show how the respondent will meet the goal. When the goal is waived, the program standards still require respondents to use “good faith efforts” or necessary and reasonable actions that would reasonably be expected to attain SBE or MBE or LDBE participation in the respondent’s performance of the scope of work.

Additionally, whether the Commission applies a goal to a proposed contract or not, the program standards provide that the Commission may apply an evaluation credit of five percent (5%) to the total points awarded for responses received from SBEs, or MBEs and LDBEs consultants to perform the personal or professional services set forth in the Scope of Services. The Commission may apply this credit in the evaluation process for responses submitted in response to this LOI.

For questions about the Commission’s Small, Minority and Disadvantaged Business Inclusion Program, please visit the Commission’s website at <https://www.ohioturnpike.org/business/oei>.

PART X. DEVIATIONS, EXCEPTIONS AND ADDENDA TO REQUEST FOR LOIs

Respondents should raise any questions, exceptions or requested changes they have concerning the Request for LOIs during the Inquiry Period. If a Respondent discovers any ambiguity, error, conflict, discrepancy, omission or other deficiency in this Request for LOIs, that Respondent should immediately notify the Commission of such error and request modification or clarification of the Request for LOIs in accordance with the procedures outlined in PART VI. In the event that it becomes necessary to provide additional clarifying data or information or to revise any part of this Request for LOIs, addenda will be issued and posted on the Commission’s website (<https://www.ohioturnpike.org/business/doing-business-with-us/rfps>) to modify the necessary provisions of the Request for LOIs.

Respondents should specify in the Proposals whether they take exception to any of the Scope of Services or the Consulting Services Contract. If a Respondent fails to notify the Commission of a known error in the Request for LOIs, and a Consulting Services Contract is awarded to that Respondent, that Consultant shall not be entitled to additional compensation or time by reason of the error or its later correction.

The Commission reserves the right to make changes to the scope of this Request for LOIs and to clarify any of the requirements, information and/or provisions of this Request for LOIs as it deems necessary. Any changes to the Request for LOIs will be made via addenda issued prior to the submission deadline. The Commission further reserves the right, if necessary, to extend the submission deadline.

PART XI. LEGAL REQUIREMENTS

The Respondent is required to adhere to the rules and regulations promulgated by the Commission and the State of Ohio, and all terms and conditions set forth in this Request for LOIs. Additionally, the Respondent agrees to the following:

- A. A Respondent may withdraw or modify its proposal only if notice of such withdrawal or modification is prior to the Letter of Interest due date as identified on the front cover of this Request for LOIs.
- B. Once opened, the Respondent agrees that its Letter of Interest cannot be altered, modified, or withdrawn.
- C. By submitting a Letter of Interest, the Respondent acknowledges it has read this Request for LOIs, understands it, and agrees to be bound by the terms and conditions set forth herein.
- D. The Commission is not responsible for the accuracy of any information regarding this Request for LOIs that was gathered through a source other than the Commission's website or the inquiry process described above.

The Commission reserves the right to:

- A. Reject any and all Letters of Interest in whole or in part;
- B. Require any Respondent to submit additional written or oral clarification of their Letter of Interest and to meet with any, but not necessarily all, of the Respondents to obtain additional information and/or clarification and/or to negotiate terms of any Letter of Interest submitted;
- C. May consider financial information other than any financial information required by this Request for Letters of Interest (if any) as part of the evaluation process, including but not limited to credit reports from third-party reporting agencies.
- D. Enter into a Contract with the Consultant on the basis of the Letter of Interest submitted, without written or oral modifications thereto; and
- E. Waive minor irregularities noted in a Letter of Interest when in the best interest of the Commission.

Under no circumstances will the Commission be responsible for any costs incurred by any Respondent in submitting a Letter of Interest.

PART XII. INQUIRY AND LOI SUBMISSION INSTRUCTIONS

Respondents must timely submit one electronic version of its Letter of Interest electronically to purchasing@ohioturnpike.org in pdf format before the deadline specified on the cover page of this RFP.

PART XIII. ONLINE NOTARY PUBLIC SERVICES

The Commission has the capability to provide online notary public services which are available to any respondent without access to a notary public for documents that must be notarized and submitted with a bid. Please allow at least 3 business days to process any request for online notary public services. Requesting party must have computer internet access and a webcam. Please contact the Commission at purchasing@ohioturnpike.org for online notary public information and services.

PART XIV. APPEAL PROCESS

Any aggrieved Respondent desiring to challenge the award of a contract as a result of this Request for Letters of Interest must state its complaint in writing, through electronic submission in pdf format to purchasing@ohioturnpike.org within five (5) calendar days of notification of the contract award. Upon receipt of a timely challenge, one or more representative(s) of the Commission shall meet with the protesting party to hear its objections. ORC Chapter 119 shall not be applicable to such meeting. No final award shall be made until the Commission either affirms or reverses its earlier determination for such contract award.

APPENDIX A
LOI NO. 16-2021
DRAFT SCOPE OF SERVICES
PROJECT NO. 71-21-05

A. PROJECT OVERVIEW

Project 71-21-05 includes, but is not limited to:

- a. Design of a deck replacement for the **MP 86.6 – Fought Road Bridge (County Route 106) over the Mainline** and also includes all necessary substructure and superstructure repairs, as well as approach work to provide proper transition to the bridge.
- b. Design of a deck overlay for the **MP 93.0 – River Road Bridge (County Route 234) over the Mainline** and also includes all necessary substructure and superstructure repairs, as well as approach work to provide proper transition to the bridge.
- c. Design of a deck replacement for the **MP 94.7 – Carley Road Bridge (Township Route 202) over the Mainline** and also includes all necessary substructure and superstructure repairs, as well as approach work to provide proper transition to the bridge.
- d. Performance of a site inspection and engineering investigation of the structural components of the bridges listed above for the purpose of determining required construction work.
- e. Preparation of an engineering report summarizing the site inspection and engineering investigation.
- f. Preparation of maintenance of traffic plans to construct the proposed work while maintaining traffic on the Ohio Turnpike for the bridges in each respective Project.
- g. Communication and coordination with all stakeholders, including obtaining the necessary approvals and access required concerning the property interests of others.
- h. Consultation with the Commission staff on the recommendations.
- i. Preparation of final Construction Plans and Specifications for bidding.
- j. Provide for engineering support during construction.
- k. Prepare record drawings and final load rating reflecting the as-built condition of the structures.

B. SITE INSPECTION/ENGINEERING REPORT/DESIGN/PLAN PREPARATION– PHASE I

The complete scope of this Phase will be further refined at a “Scope of Work” meeting with the Consultant. A partial scope of this phase is as follows:

1. Site inspections and engineering investigation shall be performed to determine all deficiencies, estimated quantities, repair recommendations, removal limits, removal procedures and project staging. The Consultant is to determine the project limits, subject to the approval of the Chief Engineer.
2. Preparation of an engineering report summarizing the site inspection and engineering investigation, including all deficiencies and repair recommendations, as well as removal limits, removal procedures, and project staging recommendations for the bridges. The Consultant shall also provide a recommended design and construction schedule.
3. Preparation of Construction Drawings and Contract Documents for bidding. The Construction Drawings and Contract Documents items shall address, but not be limited to, those items listed in the Project Overview.
4. Additional Specifications and Special Provisions shall be prepared if not covered by ODOT Specifications and the Ohio Turnpike & Infrastructure Commission's Special Provisions. Specifications and Special Provisions submitted by the Consultant shall include reference to any and all required permits to complete the Project.
5. Preparation of all required Temporary Traffic Control Plans on the Turnpike. The Consultant shall coordinate with the Ohio Department of Transportation and Sandusky County as appropriate for the Project.
6. Communication and coordination with all stakeholders during the design and construction activities to prevent conflicts with other planned projects and to address concerns of the stakeholders and to facilitate timely design completion.
7. Preparation of a construction cost estimate for the project.
8. Review and evaluation of construction bids received for the Project and submission of a recommendation concerning award to the Chief Engineer.
9. Plans shall be prepared for anticipated 2024 construction, with final Plans, Specifications, and Estimate due to the Commission on April 1, 2023.

C. ENGINEERING SUPPORT DURING CONSTRUCTION– PHASE II

The Consultant is to provide engineering support during construction operations as designated by the Commission. Construction services are to include, but not be limited to, the following:

1. Consulting with the Commission on all questions of engineering with regard to construction of the Project.
2. Reviewing the Contractor's fabrication Plans, material and products submittals and brochures and shop drawing submittals. Advising the Commission on the acceptability of such submittals.
3. Preparing Record Plans of the completed construction from information provided by the construction contractor and field records of construction activity. Revisions are to be noted on the original Project AutoCAD drawings.
4. Updating the Bridge Load Rating for the rehabilitated condition (if required), utilizing AASHTO's AASHTOWARE software.

D. GENERAL

The Commission expects three stages of design review to occur. In addition to the Commission's Engineering staff performing reviews at each stage, the Commission anticipates causing a third-party engineering consultant to review each deliverable. The three design review stages are anticipated upon the following milestones: (1) completion of the investigation and evaluation phase; (2) completion of preliminary plans (approximately 30%); (3) completion of 90% plans. Consultants shall incorporate review time of at least two weeks for each stage into its design schedule.

The Commission's Sample Specifications, Standard Drawings, Standard Conditions for Public Improvement Contracts, and original Construction Plans are available for download through .ftp site system upon request from any interested firm with a 2021-2022 Biennial Statement of Qualifications on file with the Commission.

APPENDIX B

CONTRACT FOR PROFESSIONAL SERVICES FOR A CONSTRUCTION PROJECT for Project No. 71-21-05

This Contract, entered into as of the last date of the signature below, is between the **Ohio Turnpike and Infrastructure Commission**, a body corporate and politic constituting an instrumentality of the State of Ohio, located at 682 Prospect Street, Berea, Ohio 44017 (the “Commission”), through its Executive Director under the authority of Section 5537.04(A)(12), Article V, Section 1.00 of its Code of Bylaws, and Resolution No. _____, adopted _____, 2021, and [**Consultant**], an Ohio [*corporation, limited liability company, etc.*], located at [*insert address*] (“Consultant”), through its authorized representative.

This Contract pertains to architectural/engineering design services during construction for the following: Project No. 71-21-05, **Bridge Deck Rehabilitation**, Deck Replacement of the Fought Road Bridge (County Route 106) over the Mainline at Milepost 86.6, Deck Overlay of the River Road Bridge (County Route 234) over the Mainline at Milepost 93.0, and Deck Replacement of the Carley Road Bridge (Township Route 202) over the Mainline at Milepost 94.7 in Sandusky County, Ohio (the “Project”).

RECITALS

WHEREAS, on _____, 2021, the Commission issued Request for Letters of Interest No. 16-2021(“Request for LOIs”) to select a consultant to provide architectural/engineering design services during needed for the Project;

WHEREAS, the Consultant submitted a Letter of Interest dated _____, 2021 to perform the necessary consulting services described in the Request for LOIs; and

WHEREAS, the Commission’s Engineering staff reviewed the Letters of Interest received to perform the consulting services for the Project, and among those submitting letters of interest, determined that the Consultant was the most qualified firm to perform the necessary services;

WHEREAS, on _____, 2021, the Consultant submitted a fee proposal to perform the professional consulting services required for the Project (the “Fee Proposal”);

WHEREAS, the Commission’s Engineering staff reviewed the fee proposal and deemed it reasonable and appropriate;

WHEREAS, the Executive Director approved the Chief Engineer’s recommendation to award this Contract to Consultant; and,

WHEREAS, the Commission authorized the award of the Contract to Consultant under Resolution No. _____, adopted _____, 2021.

APPENDIX B

NOW, THEREFORE, in consideration of the mutual promises set forth herein, the Commission agrees to pay for, and the Consultant agrees to provide the professional services identified herein on the terms and conditions set forth below.

ARTICLE 1 GOVERNING DOCUMENTS

- 1.1 Contract Documents.** The documents that comprise this Contract include this Contract, the Consultant's Fee Proposal, dated _____, 2021 (attached hereto as Exhibit A) and the Final Project Scope, if any (attached hereto as Exhibit B) (the "Contract Documents"). In the event of a conflict, the terms and conditions of this Contract control.
- 1.2 Designated Personnel.** Prior to performing any services, the Consultant shall provide to the Commission for approval a list of personnel designated to perform the services along with their resumes and certifications, as required. Only those designated personnel may perform those services unless Consultant obtains the Commission's approval of any substitutions or additions in advance of any change.
- 1.3 Specifications.**
 - 1.3.1** Unless otherwise instructed in writing, any inspection, test or sampling to be performed by the Consultant, shall be in accordance with the Contract Documents of the Commission's Public Improvement Contract, as well as the Specifications for the inspection or testing as most recently published by the American Society for Testing Materials ("ASTM"), the American Association of State Highway and Transportation Officials ("AASHTO"), or the current edition of the State of Ohio Department of Transportation ("ODOT") manual entitled, Construction and Material Specifications, whichever is applicable, unless other standards and requirements are applicable, in which case the current publications containing such standards or specifications shall be followed.
 - 1.3.2** If assigned to perform inspection services, the Consultant shall inspect the work of each contractor for Defective Work in accordance with the duties and responsibilities described in the Contract Documents of the Commission's Public Improvement Contract, which is incorporated by reference into any assignment issued to the Consultant for inspection services. If, through inspection or otherwise, the Consultant shall become aware of any Defective Work on the Project, the Consultant shall report all Defective Work to the Commission, together with recommendations for the correction thereof. Upon completion of any inspection services assigned to the Consultant, it shall provide certification, in writing, to the Commission that the inspections were completed in strict accordance with the specifications set forth in the Contract Documents for that particular project. Such certification shall be on behalf of both the Consultant as an entity and the individual inspector assigned to perform the inspection services.

APPENDIX B

ARTICLE 2 TERM, CONTRACT FEES AND PAYMENT

- 2.1 Term.** This Contract shall become effective upon the last date written below and, subject to the termination provisions of this Contract, continue to be in full force and effect until the work required under the Contract is completed by the Consultant to the satisfaction of the Commission.
- 2.2 Contract Fee.** The Commission shall pay the Consultant for its proper performance under this Contract an amount up to the not-to-exceed amount of \$ *[insert]* as set forth in Exhibit A, to perform the services. The Commission may amend the Contract in writing, prior to the performance of any modified or additional work, in order to incorporate additional Fee Proposals as sought by the Commission. Should the Commission authorize an amendment of this Contract for the performance of any additional services on this Project, any unexpended funds allocated for compensation to the Consultant for a phase within the Project shall not be allocated or added to the not-to-exceed amount established for the performance of any other phases or services. The Commission will not pay for travel time to and from the work site.
- 2.3 Billing Rates.** The Commission shall compensate the Consultant based upon the actual effort expended performing the necessary services and Approved Billing Rates derived from actual wage rates, overhead rate and fixed fee using the following formula:

Billing Rate = [Hourly Rate + (Hourly Rate)(Approved Overhead Rate)] x 1.10 with the following definitions:

- 2.3.1 Hourly Rates.** Hourly Rates shall mean the direct cost of salaries and/or wages of the personnel of the Consultant, as applicable, including professional, technical, management, administrative and clerical employees, and principals engaged on the Project as related to their time devoted to the Project. All hourly rates are subject to the approval of the Commission's Chief Engineer. The Commission also reserves the right to "cap" the hourly billing rates for any individual assigned to a project in accordance with the document entitled Ohio Turnpike and Infrastructure Commission Professional Services Method of Compensation – Hourly Billing FY 2021 Summary. (Attachment G of the 2021-2022 Biennial Request for Qualifications) This document will be updated annually.
- 2.3.2 Approved Overhead Rate.** The Consultant's overhead rate shall be reviewed by the Commission in accordance with the ODOT Consultant Audit Guide. The overhead rate for this Contract shall be approved by the Chief Engineer but shall not exceed 160.00%. The rate may only be amended by mutual agreement of the parties in writing.
- 2.3.3 Fee.** The Consultant shall be entitled to receive a profit as a part of the Approved Billing Rate described in Subsection 2.3.4 below attributable to the approved

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personnel on the Project. The profit allowance shall be ten percent (10%), and thus the profit multiplier for any given assignment will be 1.10.

2.3.4 Billing Rate Approval. The Consultant, prior to beginning work on the Project, must submit and obtain written approval from the Commission of the Billing Rate for each individual it expects to work on the Project, including their job classification. Prior to assignment of any new personnel to the Project, the proposed Billing Rates and résumés must be submitted for prior written approval by the Commission. Overtime rates will only be paid as approved by the Commission. The Commission reserves the right to cap billing rates for any personnel assigned to the Project. The Consultant shall invoice its personnel expenses based on its Approved Billing Rates. Compensation for any services not specifically provided for shall be determined by prior agreement between the Executive Director or the Chief Engineer of the Commission and the Consultant; otherwise the Commission agrees to compensate the Consultant in accordance with rates submitted. The schedule of rates include all overhead costs except as hereinafter modified. Overtime must have prior approval of the Executive Director or the Chief Engineer of the Commission. Overtime rates will only be in effect after 40 (forty) hours of regular time is worked unless this provision is in conflict with other labor agreements to which the Consultant is a party. The time period for the assessment of regular time shall be from Monday through Friday of a standard work week, and for purposes of overtime, said personnel must have worked on the assigned Turnpike project or at another Ohio Turnpike location on another Commission project. Time in excess of forty (40) hours for this period as well as Saturday and Sunday will be considered as overtime.

2.4 Reimbursable Expenses. No extra charges will be assessed for preparation of invoices, computer time, travel time to and from the job site, or for incidental material, services or equipment, except as hereinafter provided. The Commission agrees to pay the actual costs of telephone, printing, postage and other similar incidental expenses incurred by the Consultant in connection with any services performed pursuant to this Contract when such expenses are fully documented. In the event that specialized materials or equipment is required, they shall be provided by the Consultant at the expense of the Commission provided that the Chief Engineer has given prior approval to such expenditure.

2.4.1 Vehicles. The Commission also agrees to reimburse the Consultant for the use of Consultant's vehicles (or vehicles of Consultant's employees) at the rate the Consultant reimburses its employees, when such vehicles are used pursuant to this Contract, up to the current IRS mileage allowance rate. Mileage to and from the work site shall not be reimbursed. . The approved mileage charges shall not exceed \$43.00 per day per vehicle, unless previously authorized in writing by the Chief Engineer. Furthermore, mileage logs shall be completed daily by the Consultant's employees and submitted with monthly invoices as supporting documentation for mileage reimbursement. If mileage logs are not completed daily, no reimbursement will be made.

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2.4.2 Toll Free Access. The Consultant and its employees shall have toll-free passage on the Ohio Turnpike in performing work pursuant to this Contract. However, such toll-free passage shall be strictly prohibited for any personal use by the Consultant's employees. Non-Revenue transponders will be issued to the Consultant upon the submittal of a written request for the requested number of transponders. These transponders are for assigned project use only and it shall be the responsibility of the Consultant to manage and monitor the proper usage of these transponders. The Commission will audit these transponders on a regular basis and should unauthorized activity be detected, the authorization for non-revenue privilege may be revoked. These transponders shall be returned at the completion of the assignment. Should the Consultant return less than the number of transponders issued, there shall be a charge of \$100.00 per transponder for each one not returned.

2.4.3 Meals and Lodging. During performance of said professional services, overnight lodging will be provided for Consultant's employees only when it is deemed advantageous to the assignment, and prior approval in writing is granted by the Commission's Executive Director or Chief Engineer. In the event said overnight lodging has been approved by the Executive Director or the Chief Engineer, the cost of meals and lodging shall be reimbursed at a rate the Consultant reimburses its employees, but not in amounts that exceed the Federal CONUS (Continental United States) rates established by the Federal Government and published at <https://www.gsa.gov/travel/plan-book/per-diem-rates>. CONUS rates will dictate the maximum reimbursement a traveler will receive for lodging and meals (excluding incidentals) by city. Travel reimbursement is based on the location of the work activities and not the accommodations. The location of the work activities shall be the city/county where a majority of the work is being performed for the Project. Reimbursement for lodging and meals (excluding taxes) will be provided on an actual costs basis up to the maximum CONUS rates. Documentation of actual expenditures for lodging and meals is required. For meals, the per diem rates may be used for reimbursement with verification of travel status – refer to the CONUS rules concerning partial days. The Commission agrees to reimburse the Consultant for meals up to the maximum CONUS per diem rates, or at the actual rate the Consultant reimburses its employees, whichever is less.

2.5 Reporting. The Consultant shall provide, and shall require all sub-consultants to provide, any requested data to determine compliance with the representations made in the approved SBE Participation Certification, Utilization Plan, Demonstration of Good Faith Efforts and Statements of Intent to Contract and Perform for each invoice through the Commission's online diversity compliance portal: <https://ohioturnpike.diversitycompliance.com/Default.asp>. The Consultant and all sub-consultants shall timely submit all required data prior to any reasonable due dates, and to check the online diversity compliance portal on a regular basis to manage contact information and contract records. The Consultant shall require all sub-consultants to have completed all requested items and maintain contact information on record that is accurate and up to date. The Consultant shall include these disclosure and reporting requirements in all subcontracts under the Contract and further require that all subcontractors place the same obligation in each of their lower tier contracts.

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The Commission may require additional information related to compliance at any time before, during, or after contract award.

- 2.6 Taxes.** The Commission is a tax-exempt entity and will provide the Consultant a copy of the Commission's tax exemption certificate.
- 2.7 Invoices and Payment.** The Consultant shall submit invoices no more frequently than once a month in a form agreeable to the Commission. The Consultant shall render its invoices to the Commission on or about the 10th day of the month after any such services are performed. Undisputed invoices shall be due and payable by the Commission within thirty (30) days from the date of receipt thereof. Invoices for any other amounts will be submitted to the Commission as the amounts come due. For any services performed on a time and materials basis, the invoice will also state the total number of hours worked by each individual performing services during the preceding month. Invoices shall be accompanied by such supporting documentation as required by the Commission. The Commission may withhold payment for services that have not been properly performed or completed, and shall not be responsible for cost overruns incurred by the Consultant due to errors and omissions by the Consultant made during the performance of its services on any Turnpike project.
- 2.8 Audit.** The Consultant shall keep full and detailed records and accounts related to its rates, fee and reimbursable expenses and exercise such controls as may be necessary for proper financial management and to substantiate all costs incurred by implementing the accounting and control systems generally followed by consultants in the area or projects similar in nature. The accounting and control systems shall be satisfactory to the Commission. The Commission and the Commission's auditors shall, during regular business hours and upon reasonable notice, be afforded access to, and shall be permitted to audit and copy, the Consultant's records and accounts, including complete documentation supporting accounting entries, books, correspondence, instructions, drawings, receipts, subcontracts, Subcontractor's proposals, purchase orders, vouchers, memoranda and other data relating to this Contract. The Consultant shall preserve these records for a period of three years after final payment, or for such longer period as may be required by law.

ARTICLE 3 TIME FOR COMPLETION

- 3.1 Time for Completion.** Time is the essence of this Contract. The Consultant is to complete its work [*describe*], unless the Chief Engineer grants a request for an extension from the Consultant. Such extension request must be made in writing to the Chief Engineer no later than seven (7) days following the date upon which any event occurs that gives rise to the need for additional time. The extension request must include a description of the event, the reasons why that event justifies an extension, the duration of the extension sought, and any other documentation requested by the Chief Engineer.
- 3.2 Authorization to Proceed.** The Consultant is to proceed with the required services upon the execution of this Contract.

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ARTICLE 4 THIRD PARTIES

- 4.1 Assignment.** Consultant may not assign, transfer, convey or otherwise transfer or dispose of its rights, title, interest in, or its duty to perform or supervise the performance of any of its obligations hereunder, to any other person, company, corporation or entity without the prior written approval of the Commission. Any purported assignment in violation of the preceding sentence will be void. Any approved assignment shall not relieve the Consultant from any of its responsibilities under the Contract or imply a willingness on the part of the Commission to give any subsequent or other consent, nor stop the Commission from refusing same; nor shall any such consent confer upon any assignee or transferee any right to assign or transfer any rights conferred upon such transferee.
- 4.2 Subcontracting.** The Consultant shall not sublet or subcontract, nor shall any approved sub-consultant commence performance of, any part of the work or services included in this Contract without the previous written approval of the Commission. Subcontracting, if permitted, shall not relieve the Consultant of any of its obligations under this Contract. The Consultant shall be and remain solely responsible to the Commission for the acts or faults of any sub-consultant and of such sub-consultant's officers, agents and employees, each of whom shall for this purpose, be considered an agent or employee of the Consultant to the extent of its subcontract. The Consultant shall file a conformed copy of the applicable subcontract with the Commission. The Consultant and any sub-consultant shall jointly and severally agree that the Commission is not obligated to pay or to be liable for the payment of any sums due any sub-consultant. References to the Consultant in this Contract include authorized sub-consultants of the Consultant.
- 4.3 Waiver of Defense.** The Consultant covenants for the benefit of the Commission that it will not defend against any claim, suit or action brought against the Consultant or the Commission on account of any tortious act or contractual liability alleged to have been committed or incurred in the Consultant's performance of the Contract during the term thereof, on the ground that said performance, or that any duty or obligation of the Consultant hereunder was in fact being discharged by any person, firm or corporation other than the Consultant, unless the alleged cause of action occurred subsequent to an assignment or transfer of the entire Contract, which assignment or transfer was duly consented to by the Commission in writing.
- 4.4 Beneficiaries.** There are no intended third-party beneficiaries of any provision of this Contract.
- 4.5 Independent Contractor.** The Consultant is an independent contractor for all purposes under this Contract. This is not an agreement of partnership or employment of the Consultant or any of the Consultant's employees by the Commission for the purpose of the Public Employees Retirement System ("PERS"), Workers' Compensation, or for any other purpose. The Consultant shall not pledge or attempt to pledge the credit of Commission or in any other way attempt to act on the Commission's behalf in an effort to bind the

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Commission to any additional agreements. The Consultant agrees to indemnify the Commission for any and all sums that are due and owing to the Internal Revenue Service (IRS) for withholding FICA and unemployment or other state and federal taxes. The Consultant further agrees to make such payments to the IRS and appropriate state authorities for withholding FICA and unemployment taxes.

- 4.6 Representations and Warranties.** The Consultant represents and warrants that: (1) so far as the Consultant knows, no member, employee, or agent of the Commission has any interest, either direct or indirect, in the Contract; (2) the Consultant has not employed or procured the employment of anyone to solicit or secure the Contract with the Commission other than those disclosed in the Proposal; and (3) the Consultant will fulfill the representations in its Small Business Utilization Certification and Plan submitted with its Letter of Interest, which the Commission relied upon in selecting the Consultant for contract award; and (4) all materials, including their use by the Commission in unaltered form, will not infringe any third party copyrights, patents or trade secrets that exist as of the date of this Contract and that arise or are enforceable under the laws of the United States of America. If the Commission shall hereafter determine that any of the foregoing representations is false, it may, upon written notice to the Consultant, immediately terminate the Contract and thereafter refuse to make payments thereunder, whether or not such payments are for Services already performed, and may also recover its damages, if any, for breach of warranty; or in the event such false representation was as to the existence of any agreement providing for a bonus, fee, commission, percentage, or other form of contingent compensation, the Commission may, in its discretion, elect to continue the Contract in force by deducting from the payments to be made thereunder to the Consultant the amount of such bonus, fee, commission, percentage, or other contingent payment.

ARTICLE 5 INDEMNIFICATION

- 5.1 Generally.** The Consultant shall defend, indemnify and hold harmless the Commission, its Commission members, Executive Director, officers and employees ("Indemnified Parties"), from and against any and all liability, including claims, demands, losses, damages, settlements, judgments, costs and expenses (including reasonable attorney's fees and any costs of defense) of every kind and description arising out of or in connection with, or occurring during the course of, performance of the Contract, whether directly or indirectly, including but not limited to where such liability is:
- 5.1.1** founded upon or grows out of, directly or indirectly, the acts, errors, omissions, undertakings, representations or warranties of the Consultant, its officers, employees, agents, independent consultants, or sub-consultants;
 - 5.1.2** founded upon, or grows out of, directly or indirectly, the breach by Consultant of any term or condition of this Contract, including but not limited to the breach of any representations or warranties and in particular the breach of its express representation that it is an independent contractor and in compliance with all applicable laws related to work as an independent contractor; or,

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- 5.1.3** founded upon claims of violation of United States patents, trademark, trade secrets, proprietary information, copyrights or other intellectual property rights in existence on the date of this Contract resulting from the Consultant's or the Commission's use of any equipment, software, technology, documentation, and/or data developed in connection with the services and products described in the Contract.
- 5.2 Application.** Nothing herein contained shall require the Consultant to reimburse the Commission for acts or omissions caused by the sole negligence of the Commission. The Consultant shall waive and shall not assert any claim against the Commission for any injury to persons, whether or not resulting in death, or any loss or damage to property occurring from any cause unless such injury, loss or damage is due solely to the negligence of the Commission, its agents or employees.
- 5.2.1** If a regulatory body or court of competent jurisdiction finds that the Consultant is not an independent contractor or is not in compliance with applicable laws related to work as an independent contractor, based on the Consultant's own actions, the Consultant will assume full responsibility and liability for all taxes, assessments, and penalties imposed against the Consultant or the Commission resulting from that contrary interpretation, including taxes, assessments, and penalties that would have been deducted from the Consultant's earnings if the Consultant had been on the Commission's payroll and employed as a Commission employee.
- 5.2.2** If a third-party claim causes the Commission's quiet enjoyment or use of any product supplied by the Consultant to be seriously endangered or disrupted, or, should a court order be issued against the Commission restricting its use of any product and should the Consultant determine not to further appeal the claim issue, at the Commission's sole option, the Consultant shall provide at its sole expense, the following: Purchase for the Commission the rights to continue using the contested product(s); or Provide substitute products to the Commission which are, in the Commission's sole opinion, of equal or greater quality, or Refund all monies paid to the Consultant for the product(s) subject to the court action. The Consultant shall also pay to the Commission all reasonable related losses related to the product(s) and for all reasonable expenses related to the installation and conversion to the new product(s).
- 5.2.3** Should the Commission elect to have the Consultant defend one or more of the Indemnified Parties, the Commission shall have the right, but not the obligation, to select the counsel that will provide that defense, to determine all points of control on behalf of the Commission, and to approve or disapprove of any settlement.
- 5.2.4** The indemnity obligations of the Consultant shall not be limited by the types, terms, conditions, or limits of liability of any insurance purchased and maintained by Consultant.
- 5.3** This agreement to defend, hold harmless and indemnify shall survive expiration or termination of this Contract.

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ARTICLE 6 INSURANCE

- 6.1 General.** Except for the Consultant's indemnification obligations with respect to infringement, the Consultant shall, at its expense, at all times during the performance of services hereunder, and for a period of ten (10) years thereafter, maintain liability insurance insuring themselves against the indemnification obligations throughout the term of the Contract and claims arising from wrongful acts, negligent acts, errors or omissions of the Consultant, its employees, agents, sub-consultants, or any other representatives of the Consultant involved in the work. The Consultant shall name the Commission as an additional insured as set forth in more detail below and shall be responsible for any retentions or deductibles due under the policies in the event of a claim. The Consultant shall require its sub-consultants to obtain insurance and shall be responsible for enforcement of its sub-consultants' obligation to obtain insurance, at limits appropriate to the exposures of the sub-consultant's work to satisfy the requirements hereunder. The policies the Consultant and its sub-consultants maintain shall be with companies authorized to do business in Ohio and rated "A" or above by A.M. Best Company or equivalent and carry the following coverages and limits:
- 6.1.1** Comprehensive Commercial General Liability that includes the Commission as an additional insured for amount not less than \$1,000,000, including those resulting in death to any one person or persons and/or property damage arising from any one (1) accident and \$2,000,000 in the aggregate, including coverage for: property damage, premises operations, liability for independent consultants, products liability, valuable papers, contractual liability and personal injury. The policy or policies shall be primary and non-contributory, provide coverage for on-going and completed operations, and shall not contain a provision that eliminates coverage for damages arising out of the negligence of the additional insured.
 - 6.1.2** Comprehensive Automobile Liability Insurance for bodily injury and property damage that includes the Commission as an additional insured for an amount not less than \$1,000,000 combined single limit. The policy or policies shall be primary and non-contributory and shall not contain a provision that eliminates coverage for damages arising out of the negligence of the additional insured.
 - 6.1.3** Professional Liability Insurance for not less than \$2,000,000 for any one incident, and if not written on an occurrence basis, shall be maintained for a period of not less than two (2) years following the completion of the services under this Contract.
 - 6.1.4** Umbrella/Excess Liability Insurance Policy over primary general liability and automobile liability following the same terms as the underlying policies and in an amount not less than \$3,000,000.
- 6.2 Certificate of Insurance.** Upon execution of this Contract, the Consultant shall submit to the Commission a certificate(s) of insurance and related additional insured endorsements

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with respect to the required policies. If the additional insured endorsements required above are not available at the execution date, the Consultant shall submit to the Commission a notation of the endorsement together with either a binder or an advice with respect to such endorsement. The endorsement shall be submitted no later than thirty (30) days after the execution date hereof. The Consultant shall provide written notification to the Commission at least 30 days in advance of any cancellation or modification of the Consultant's insurance policy terms or coverage as set forth herein.

- 6.3 Copy of Insurance Policy.** Upon the execution of this Contract, the Consultant shall provide a copy of the insurance policy or policies required under this Contract after redacting proprietary or confidential information if applicable.
- 6.4 Workers' Compensation.** The Consultant shall also procure and maintain until the Contract has been fully and completely performed, Ohio Worker's Compensation Insurance covering all employees who engage in any work in connection with the performance of the Contract except employees hired in a state other than Ohio who will not engage in any work in the State of Ohio.
- 6.5 Notice.** Within twenty-four (24) hours after the occurrence of any accident or other event that results in or might result in injury to the person or property of any person, which allegedly arises in any manner from the performance under the Contract or occurs in the area(s) for which the Consultant is responsible, the Consultant shall send written notice thereof to the Commission's General Counsel setting forth a full and precise statement of the facts pertaining thereto, and send a copy of any summons, subpoena, notice or other documents served upon or received by the Consultant, or any agent, employee or representative of the Consultant, arising in any manner from the performance of the Contract or any part thereof.

ARTICLE 7 PERFORMANCE AND SAFETY STANDARDS

- 7.1** The Consultant shall provide professional services as set forth in this Contract. The Consultant represents that it is properly licensed in the jurisdiction where the Project is located to provide the services required by this Contract or shall cause such services to be performed by appropriately licensed professionals.
- 7.2** The Consultant shall perform its services consistent with the professional skill and care ordinarily provided by Consultants practicing in the same or similar locality under the same or similar circumstances. The Consultant shall perform its services as expeditiously as is consistent with such professional skill and care and the orderly progress of the Project.
- 7.3** The representative of the Commission that is authorized to act on behalf of the Commission with respect to the Project is the Chief Engineer. The representative authorized to act on behalf of the Consultant with respect to the Project is:

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[Name
Address
Address
Telephone
Fax
Email]

- 7.4 Reasonable Behavior.** Each party will act in good faith in the performance of its respective responsibilities under the Contract and will not unreasonably delay, condition or withhold the giving of any consent, decision or approval that is either requested or reasonably required by the other party in order to perform its responsibilities under the Contract.
- 7.5 Public Records Act.** The Consultant acknowledges that the Commission is required to respond to all Public Record requests under Ohio law. The Consultant shall comply with the Public Record Act in all respects and shall not restrict or otherwise inhibit the Commission from complying.
- 7.6 Ownership of Materials.** Drawings, plans and other documents prepared by, or with the cooperation of, the Consultant pursuant to the Contract, including all copyrights, are works for hire under the United States Copyright Act and shall, upon payment therefore, become the property of the Commission, whether or not the project for which they are prepared is commenced or completed. If for any reason the product of the Consultant's services hereunder are determined at any time not to be a work made for hire, the Consultant irrevocably transfers and assigns to the Commission all right, title and interest therein, including all copyrights, as well as all renewals and extensions thereto. Any materials prepared, created, produced by, or with the cooperation of, the Consultant pursuant to the Contract, including all copyrights, are the property of the Commission. The Consultant may retain copies, including reproducible copies of such drawings and other documents for information and reference. The Commission may use such drawings or other documents, or others employed by the Commission for reference in any completion, construction, correction, remodeling, renovation, reconstruction, alteration, modification of or addition to a project, without additional compensation to the Consultant.
- 7.7 Non-Collusion.** The Consultant covenants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Contract. The Consultant further covenants that no person having any such interest shall be employed in the performance of this Contract.
- 7.8 Safety.**
- 7.8.1** Consultant shall be responsible for the safety of its personnel related to and during the performance of Services required by this Contract and will take reasonable measures to ensure that it and its sub-consultants provide and maintain a safe working environment. Consultant shall ensure that its employees and the employees of its sub-consultants, before they begin and throughout their

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employment at any Project site, are made aware of the requirements of all applicable safety and health regulations including, but not limited to, Applicable Laws and are notified that compliance therewith is a condition of their continued employment. Consultant shall remove from the site any employees or sub-consultants that fail to abide by applicable health and safety regulations. Consultant shall not knowingly permit a hazardous, unsafe, unhealthy, or environmentally unsound condition or activity to be conducted at any Project site.

- 7.8.2** If Consultant becomes aware of any hazardous, unsafe, unhealthy or environmentally unsound condition at any Project site, it shall notify the Commission and take reasonable steps to eliminate, terminate, abate or rectify any condition over which Consultant has control. The Commission may, but is not obligated to, inspect at reasonable times, the Project site and Consultant's facilities and appropriate Project records to ascertain Consultant's and its sub-consultants' compliance with the requirements of this Contract; provided however, neither the existence nor exercise of such right will relieve Consultant of its responsibility for its own and its sub-consultants' compliance with this Contract, to always use due care in the performance of services and for fulfilling all of its other obligations hereunder with respect to health and safety.
- 7.8.3** Consultant shall promptly notify the Commission of any injury, death, loss or damage to persons, animals, or property, which is in any way related to Services performed under the Contract, even though such occurrence was not caused or consented to by Consultant, its employees, sub-consultants or agents. Smoking is prohibited at the Project site. Consultant shall monitor the Commission's no smoking rule with respect to its employees and sub-consultants while they are working at the Project site.

ARTICLE 8 SUSPENSION, DEFAULT, AND TERMINATION

- 8.1 Suspension.** The Commission may at any time prior to completion of the Contract temporarily suspend any Contract when it is determined to be in the Commission's interest. Such suspension shall be provided by written notice. If such Suspension is not lifted within 120 days from the notice of Suspension, the Consultant may request that the Contract be terminated.
- 8.2 Default.** Each of the following shall constitute an event of default by the Consultant:
- 8.2.1** If the Consultant becomes insolvent, makes a general assignment for the benefit of creditors, or files a voluntary petition in bankruptcy or consents to the appointment of a receiver, trustee, or liquidator of all or substantially all of its property;
- 8.2.2** If by order or decree of a court, the Consultant is adjudged bankrupt or an order is made approving a petition filed by any creditors or, if the Consultant is a corporation, by any of the stockholders of the Consultant, seeking its reorganization

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or the readjustment of its indebtedness under the federal bankruptcy laws or any law or statute of the United States or of any state thereof;

- 8.2.3 If a petition under any part of the federal bankruptcy laws or an action under any present or future insolvency law or statute is filed against the Consultant and is not dismissed within ninety (90) days after the filing thereof;
- 8.2.4 If any lien is filed against the Commission's property because of any act or omission of the Consultant and is not released or discharged by obtaining a bond at Consultant sole expense and cost within twenty (20) days;
- 8.2.5 If the Consultant voluntarily abandons, deserts, vacates, or discontinues its operations;
- 8.2.6 If the Consultant fails duly and punctually to pay any monies required hereunder within twenty (20) days after written notice;
- 8.2.7 If the Consultant fails to keep, perform and observe any promise set forth herein on its part to be kept, performed or observed within five (5) days after receipt of notice of default from the Commission, except where fulfillment of its obligation requires activity over a period of time and Consultant has commenced whatever may be required to cure the failure to the satisfaction of the Commission within five (5) days after notice and continues such performance without interruption.

8.3 Remedies for Default. Upon occurrence of any Default or any time thereafter during the continuance thereof, the Commission may, at its option, exercise concurrently or successively any one or more of the following rights and remedies:

- 8.3.1 Upon five (5) days' notice, terminate this Contract.
- 8.3.2 Without waiving any default, pay any sum required to be paid by the Consultant to others than the Consultant and which the Consultant has failed to pay, and perform any obligation required to be performed by the Consultant hereunder, and any amounts to paid or expended by the Commission in fulfilling the obligations of Consultant hereunder, including all interest, costs, damages, attorneys' fees and penalties, shall be repaid by the Consultant to the Commission on demand with interest thereon at the rate of twelve percent (12%) per annum from the date of such payment or expenditure plus a twenty percent (20%) administrative fee.
- 8.3.3 Invoke the dispute resolution provisions of this Contract.

8.4 Convenience Termination. In addition to the termination upon five (5) days' notice after an occurrence of default as provided above, the Commission may unilaterally terminate the Contract at any time for any reason by giving thirty (30) calendar days prior written notice to the Consultant. If the Commission unilaterally terminates the Contract pursuant to this Section, the Consultant shall be paid all amounts due up to the termination date. The

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Commission and the Consultant may also mutually agree to terminate this Contract in writing.

- 8.5 Waiver.** No waiver by the Commission at any time of any of the terms or conditions of this Contract shall be deemed or taken as a waiver at any time thereafter of the same or any other term or condition herein or of the strict and prompt performance thereof. No delay, failure or omission of the Commission to exercise any right, power, privilege or option arising from any default, or subsequent payment then or thereafter accrued shall impair or be construed to impair any such right, power, privilege or option to waive any such default or relinquishment thereof, or acquiescence therein and no notice by the Commission shall be required to restore or revive any option, right, power, remedy or privilege after waiver by the Commission of default in one or more instances. No waiver shall be valid against the Commission unless reduced to writing and signed by an officer of the Commission duly empowered to execute same.
- 8.6 Force Majeure.** Neither party shall have liability to the other if it becomes unable to timely perform its obligations under this Contract due to labor disputes, fire, acts of God, tornados, flood, hurricane, earthquake, tidal wave, blizzard, or other natural disasters, acts of the state or federal government in their sovereign capacity, riots, civil commotion, quarantine restrictions, war, terrorism, incidence of disease or other illness that reaches outbreak, epidemic or pandemic proportions, unavoidable casualties, or other causes beyond their control.

ARTICLE 9 NON-DISCRIMINATION

- 9.1 Non-discrimination:** The Consultant, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin, sex, age, disability, low-income status, or limited English proficiency in the selection and retention of sub-consultants, including procurements of materials and leases of equipment. The Consultant will not participate directly or indirectly in the discrimination prohibited by applicable federal, state, and local laws.
- 9.2 Solicitations of Sub-consultants, including procurement of materials and equipment:** In all solicitations, either by competitive bidding or negotiation, made by the Consultant for work to be performed under a subcontract, including procurements of materials, or leases of equipment, the Consultant will notify each potential sub-consultant or supplier of the Consultant's obligations under this Contract. The Consultant shall also include the provisions of this Article 9 in every sub-consulting agreement, subcontract, purchase order, lease or other such document.

ARTICLE 10 LAW AND DISPUTES

- 10.1 Choice of Law.** The Contract shall be subject to the laws of the State of Ohio. All duties of either party shall be deemed performable and performed in the State of Ohio.

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- 10.2 Informal Dispute Resolution.** At the written request of either party, the parties will attempt to resolve any dispute arising under, or relating to, the Contract through the informal means. Each party will appoint a senior management representative who does not devote substantially all of his or her time to performance under the Contract. The representatives will furnish to each other all non-privileged information with respect to the dispute that the parties believe to be appropriate and germane. The representatives will negotiate in an effort to resolve the dispute without the necessity of any formal proceeding.
- 10.3 Mediation.** If the parties do not resolve their differences through Informal Dispute Resolution, the Commission may, at its sole discretion and election, choose to proceed with mediation governed by the most recently published Construction Arbitration Rules and Mediation Procedures of the American Arbitration Association, and the Consultant hereby agrees to engage in that process in accordance with those rules and procedures. The parties shall have 90-days from the date that a party serves notice of its claim on the other party to attempt to resolve their differences through mediation.
- 10.4 Formal Dispute Resolution - Litigation.** If the parties do not resolve their differences through mediation, the dispute shall be resolved through litigation. Litigation may take place only in Cuyahoga County Court of Common Pleas or the United States District Court for the Northern District of Ohio.

ARTICLE 11 GENERAL

- 11.1 Notices.** All notices or communications required or permitted as a part of the Contract shall be in writing (unless another verifiable medium is expressly authorized) and shall be deemed delivered when:
- 11.1.1** Actually received, or
 - 11.1.2** If not actually received, 3 days after transmittal through electronic mail receipt with a carbon copy sent through the United States Postal Service with proper postage affixed and addressed to the respective other party at the address set out below or such other address as the party may have designated by notice to the other party, or
 - 11.1.3** Upon delivery by the Commission of the notice to a representative of the Consultant while on the Commission property.

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The addresses of the parties to this Contract are as follows:

In the case of the Commission:	with a copy to:
Ohio Turnpike and Infrastructure Commission Chief Engineer Attn: Anthony Yacobucci, P.E. 682 Prospect Street Berea, Ohio 44017 tony.yacobucci@ohioturnpike.org	Ohio Turnpike and Infrastructure Commission General Counsel Attn: Jennifer L. Stueber, Esq. 682 Prospect Street Berea, Ohio 44017 jennifer.stueber@ohioturnpike.org
In the case of the Consultant:	
[Name Address Address Telephone Fax Email]	

- 11.2 Integration and Amendment.** The Contract constitutes the entire agreement between the parties and supersedes all other prior or contemporaneous communications between the parties (whether written or oral), and all other communications relating to the subject matter of the Contract. The Contract may be modified or extended by formal amendment of the Contract signed by the parties and made a permanent part of the Contract.
- 11.3 Severability.** The provisions of the Contract will be deemed severable, and the unenforceability of any one or more provisions will not affect the enforceability of any other provisions. In addition, if any provision of the Contract, for any reason, is declared to be unenforceable, the parties will substitute an enforceable provision that, to the maximum extent possible under applicable law, preserves the original intentions and economic positions of the parties.
- 11.4 Publicity.** Neither party may use the name or any data, pictures, or other representation of the other party in connection with any advertising or publicity materials or activities without the prior written consent of the other party. However, the Consultant may include the Commission's name on its client list and may describe briefly, and in general terms, the nature of the work performed by the Consultant for the Commission. The parties further agree that, within a reasonable time following final acceptance, the parties may work toward developing a mutually agreeable statement for public use by the parties such as in marketing materials and in their reports to stockholders.
- 11.5 Video and Audio Recordings.** The Commission has the right to video and/or audiotape any and all meetings, whether held at a Commission site, Consultant site, or via teleconference.

APPENDIX B

- 11.6 Confidentiality.** If the Consultant or Commission receives information specifically designated as “confidential” or “business proprietary,” the receiving party shall keep such information strictly confidential and shall not disclose it to any other person. The receiving party may disclose “confidential” or “business proprietary” information after seven (7) days’ notice to the other party or when required by law, arbitrator’s order, or court order, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or to the extent such information is reasonably necessary for the receiving party to defend itself in any dispute. The receiving party may also disclose such information to its employees, consultants, or contractors in order to perform services or work solely and exclusively for the Project, provided those employees, consultants and contractors are subject to the restrictions on the disclosure and use of such information as set forth in this paragraph.
- 11.7 Construction of this Contract.** All terms and words used in this Contract, regardless of the number and gender in which they are used, shall be deemed and construed to include any other number, singular or plural, and any other gender, masculine, feminine, or neuter, as the context or sense of this Contract or any paragraph or clause in the Contract may require, the same as if such words have been fully and properly written in the number and gender. Any act to be performed under the Contract by the “Commission” may be performed by the Executive Director or by such of its employees or such other persons, corporations or firms as the Executive Director may designate. “Executive Director” when used herein, shall refer to the Executive Director of the Commission and include the Chief Engineer, the Deputy Executive Director and the CFO/Comptroller. The headings of Articles and Paragraphs, to the extent used herein, are for reference only, and in no way define, limit, or describe the scope or intent of any provision hereof.
- 11.8 Counterparts.** This Contract may be executed in any number of counterparts, each of which, when so executed and delivered, shall be deemed an original, but such counterparts together shall constitute but one and the same instrument.
- 11.9 Authority.** The undersigned signatory for the Consultant hereby represents and warrants that he or she has full and complete authority to execute the Contract on behalf of the Consultant. This representation and warranty is made for the purpose of inducing the Commission to execute the Contract.
- 11.10 Electronic Signatures.** The parties agree that for purposes of facilitating the signing of this Contract, an electronic signature or an electronic or facsimile transmission of a signature shall be an original signature for all purposes.

[SIGNATURES ON NEXT PAGE]

APPENDIX B

IN WITNESS WHEREOF, the parties have caused this Contract to be executed as of the last date written below.

[CONSULTANT]

**OHIO TURNPIKE AND
INFRASTRUCTURE COMMISSION**

By: _____

By: _____

Ferzan M. Ahmed, P.E.
Executive Director

Printed: _____

Title: _____

Date: _____

Date: _____

APPROVED AS TO FORM:

By: _____

Jennifer L. Stueber, Esq.
General Counsel

Date: _____

APPENDIX B

Exhibit A Consultant's Fee Proposal

APPENDIX B

Exhibit B Final Project Scope

APPENDIX C
NON-COLLUSION AFFIDAVIT

**OHIO TURNPIKE AND
INFRASTRUCTURE COMMISSION**

State of _____ }
 } **SS:**
County of _____ }

The undersigned, being first duly sworn as provided by law, deposes and says:

1. Their name is _____,
and their office is located at _____.

2. They make this Affidavit with the knowledge and intent that it is to be filed with the Ohio Turnpike and Infrastructure Commission and with the expectation that it will be relied upon by said Commission as consideration and any action which it may take with respect to the bid or proposal accompanying this Affidavit.

3. The undersigned serves in the capacity of _____.
(Sole Owner, Partner, President, etc.)

and in that capacity makes and authorized to make representations and this Affidavit on behalf of:

Name of Corporation, Partnership, Limited Liability Company, etc...)

a _____
(Sole Proprietorship, Partnership, Corporation, Limited Liability Company, etc...)

organized under the laws of _____, and registered to do business in Ohio.
(Name of State)

4a. **Sole Proprietorship Only:** The undersigned states that the following is a complete and accurate list of the names and addresses of all individuals having an interest in the contract contemplated under the bid or proposal accompanying this Affidavit: _____

4b. **Partnership Only:** The undersigned states that the following is a complete and accurate list of the names of the general partners of the partnership and all other individuals having an interest in the contract contemplated under the bid or proposal accompanying this Affidavit, including any partners with a five percent (5%) or more equity interest in the partnership (attach additional pages if necessary): _____

APPENDIX C

AFFIDAVIT

4c. Corporation or Limited Liability Company Only: The undersigned states that the following is a complete and accurate list of the chief executive officer and all individuals that are expected to have an interest in the contract contemplated under the bid or proposal accompanying this Affidavit, including anyone owning five percent (5%) or more equity interests in the entity submitting the bid or proposal (attach additional pages as necessary):

President (or similar chief executive): _____

Owners with 5% or more equity interest: _____

Additional individuals with an expected interest in the contemplated contract: _____

5. The undersigned represents that no person, firm, agent or employee of the entity identified in paragraph 3, nor anyone else to the knowledge of the undersigned, has retained anyone to solicit or secure affirmative or favorable action by the Commission with respect to the bid or proposal accompanying this Affidavit (except a regularly employed salesman paid for services on a regular schedule of commissions and serving in the usual course of business in soliciting such consideration or action by the Commission without promise or expectation of receiving consideration other than the standard and normal fee, commission, or percentage) under any agreement providing for a bonus, fee, commission, percentage, or other form of payment whatsoever which is in any way contingent upon the action to be taken by the Commission with respect to the bid or proposal.

6. The undersigned represents that no person or firm associated with the entity identified in paragraph 3 has any interest, direct or indirect, in any other proposal or bid submitted with respect to the contract contemplated in the bid or proposal accompanying this Affidavit, except the subcontractors, material suppliers, truckers/haulers disclosed in the SBE Utilization Plan.

7. The undersigned states that the bid or proposal accompanying this Affidavit is a genuine and earnest attempt to contract with the Commission, and is not made in the interest or on behalf of any undisclosed individual, person, partnership, company, association, organization or corporation; that the bid or proposal is not collusive or a sham; that the entity identified in paragraph 3 has not, directly or indirectly, induced or solicited any other entity to submit a false or sham bid or proposal, and has not directly or indirectly, colluded, conspired, connived or agreed with any other respondent to submit a collusive or sham bid or proposal, or to refrain from submitting a bid or proposal; and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference with any person, firm or corporation, to fix the prices of any other responding entity, or to secure any advantage against the Commission or any person, firm or corporation interested in the proposed contract;

AFFIDAVIT

8. The undersigned states that the entity identified in paragraph 3 has received the Commission's Ethics Policy; the Ethics Policy has been reviewed by its managerial staff; the terms and conditions of the Policy are understood; and the entity agrees to comply and assist the Commission in complying with the Policy. Insofar as undersigned knows, no member of the Commission and no employee or agent of the Commission has or will have any interest, either direct or indirect, in the prospective contract contemplated under the bid or proposal accompanying this Affidavit.

(Affiant)

(Printed)

Sworn to before me and subscribed in my presence this ____ day of _____, 20____.

(Notary Public)



OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

ETHICS POLICY

I. PURPOSE

A. POLICY STATEMENT

It is the policy of the Ohio Turnpike and Infrastructure Commission (“Commission”) to carry out its mission in accordance with the strictest ethical guidelines and to ensure that Commission members and employees conduct themselves in a manner that fosters public confidence in the integrity of the Commission, its processes, and its accomplishments.

B. GENERAL STANDARDS OF ETHICAL CONDUCT

Commission members and employees must, at all times, abide by protections to the public embodied in Ohio’s ethics laws, as found in Chapters 102 and 2921, of the Ohio Revised Code, and as interpreted by the Ohio Ethics Commission and Ohio courts. Members and employees must conduct themselves, at all times, in a manner that avoids favoritism, bias, and the appearance of impropriety.

A general summary of the restraints upon the conduct of all members and employees include, but are not limited to, those listed below. Members and employees shall not:

- Solicit anything of value from anyone doing business with the Commission;
- Accept anything of value from anyone doing business with the Commission;
- Solicit or accept employment from anyone doing business with the Commission, unless able to completely withdraw from Commission activity regarding the party offering employment, and the Commission approves the withdrawal;
- Use public position to obtain benefits for the official or employee, a family member, or anyone with whom the official or employee has a business or employment relationship;
- Accept any form of compensation for personal services rendered on a matter before any state agency, or sell goods or services to any state agency, unless the official or employee qualifies for the exception, and files the statement, described in the Ethics Law;

APPENDIX D - ETHICS POLICY

Ohio Turnpike and Infrastructure Commission Ethics Policy
Page 2 of 3

- Hold or benefit from a contract with, authorized by, or approved by, the Commission, unless one of the exceptions in the Ethics Law and related statutes applies;
- Vote, authorize, recommend, or in any other way use his or her position to secure approval of a Commission contract (including employment or personal services) in which the official or employee, a family member, or anyone with whom the official or employee has a business or employment relationship, has an interest;
- Use, or authorize the use of, his or her title, the name “Ohio Turnpike and Infrastructure Commission,” or “Commission,” or “OTIC,” or the Commission’s logo in a manner that suggests impropriety, favoritism, or bias by the Commission or the official or employee;
- Solicit or accept honoraria prohibited by the Ethics Law;
- Use or disclose confidential information protected by law, unless appropriately authorized; and
- During public service, and for one year after leaving public service, represent any person, in any fashion, before any public agency, with respect to a matter in which the official or employee personally participated while serving with the Commission.

For purposes of this policy:

- “Anything of value” includes anything of monetary value, including, but not limited to, money, gifts, food or beverages, social event tickets and expenses, travel expenses, golf outings, consulting fees, compensation, or employment. “Value” means worth greater than de minimis or nominal.
- “Anyone doing business with the Commission” includes, but is not limited to, any person, corporation, or other party that is doing or seeking to do business with, regulated by, or has interests before the Commission.

C. FINANCIAL DISCLOSURE STATEMENTS

Every Commission member or employee required to file a financial disclosure statement by law, or Ethics Commission rule, must file a complete and accurate statement with the Ethics Commission by April 15 of each year. Any member or employee appointed or employed after February 15 shall file a statement within ninety days of appointment or employment.

APPENDIX D - ETHICS POLICY

Ohio Turnpike and Infrastructure Commission Ethics Policy
Page 3 of 3

D. ETHICS EDUCATION

All Commission members and employees subject to the financial disclosure requirement must participate in the annual ethics education required pursuant to Executive Order 2019-11D, and some form of annual ethics instruction shall be provided to all Commission employees. In addition to participating in Executive Order training, the Ethics Commission sponsors educational sessions throughout Ohio.

E. PUBLICATION OF THE COMMISSION'S ETHICS POLICY

The Commission's Ethics Policy shall be published on the Commission's website, www.ohioturnpike.org. Persons, corporations or other parties seeking to conduct business with the Commission in amounts in excess of \$10,000 shall be provided with a copy of the policy and shall be required to acknowledge receipt of the policy in writing in a form to be prescribed by the Commission's General Counsel.

F. ASSISTANCE

The Ethics Commission is available to provide advice and assistance regarding the Ethics Law and related statutes. The Ethics Commission can be contacted at (614) 466-7090. The Ethics Commission's web site address is: www.ethics.state.oh.us. The Commission's General Counsel and counsel for the Governor's Office are available to answer questions involving this policy.

G. PENALTIES

Failure of any Commission official or employee to abide by this Ethics policy, or to comply with the Ethics Law and related statutes, will result in discipline, which may include dismissal, as well as any potential civil or criminal sanctions under the law.

AFFIRMATION AND DISCLOSURE FORM
EXECUTIVE ORDER 2019-12D
Governing the Expenditure of Public Funds on Offshore Services

By the signature affixed to this response, the Respondent affirms, understands and will abide by the requirements of Executive Order 2019-12D issued by Ohio Governor Mike DeWine. If awarded a contract, the Respondent affirms on behalf of itself and any of its Subcontractors to perform no services under the Contract outside of the United States. The Executive Order is attached and is available at the following website: (<https://governor.ohio.gov/wps/portal/gov/governor/media/executive-orders/2019-12d>).

The Respondent shall provide all the name(s) and location(s) where services under this Contract will be performed in the spaces provided below or by attachment. Failure to provide this information may subject the Contractor to sanctions. If the Respondent will not be using subcontractors, indicate “Not Applicable” in the appropriate spaces. Attach any additional pages as necessary

1. Principal location of business of Contractor:

(Address)

(City, State, Zip)

2. Location where services will be performed by the Respondent:

(Address)

(City, State, Zip)

3. Name/Principal location of business of subcontractor(s):

(Name)

(Address, City, State, Zip)

(Name)

(Address, City, State, Zip)

4. Name/Location where services will be performed by subcontractor(s):

(Name)

(Address, City, State, Zip)

(Name)

(Address, City, State, Zip)

5. Location(s) where Commission data will be stored, accessed, tested, maintained or backed-up, by Respondent:

(Address, City, State, Zip)

(Address, City, State, Zip)

Name/Location(s) where Commission data will be stored, accessed, tested, maintained or backed-up by subcontractor(s):

(Name)

(Address, City, State, Zip)

(Name)

(Address, City, State, Zip)

The undersigned Respondent also affirms, understands and agrees that the Respondent and its subcontractors are under a duty to disclose to the Commission any change or shift in location of services performed by the Respondent or its subcontractors before, during and after execution of any Contract with the Commission. Respondent agrees it shall so notify the Commission immediately of any such change or shift in location of its services.

The Commission has the right to immediately terminate the contract for material breach if any services are performed overseas unless the Commission has issued the Respondent a waiver to perform the specific services outside the United States. The Commission has the sole and unlimited discretion to determine waiving some or all of the requirements of the Executive Order is necessary based on the (1) nature of and risk arising from the services being performed overseas; (2) the porportion of off-shore services compared to those performed domestically; (3) the cost savings resulting from granting the waiver; (4) the justification to perform the services overseas; and (5) the need to procure the services from the Respondent.

The undersigned represents and warrants to be authorized to execute this Affirmation and Disclosure Form on behalf of the Respondent and agree that this form is a part of any Contract that Respondent may enter into with the Commission and is incorporated therein.

Respondent: _____

By: _____
(Signature)

Printed: _____
(Name) (Title)

Date: _____

APPENDIX F

SMALL BUSINESS ENTERPRISE UTILIZATION CERTIFICATION

To be eligible for selection to award this contract, each respondent must complete and submit this Small Business Enterprise (SBE) Utilization Certification with its Proposal. The Commission may consider as non-responsive and reject any Proposal that does not contain a Certification (page 1) and Utilization Plan (page 2) that properly demonstrates that the respondent's commitments with SBEs for participation on the project if awarded the contract. The successful respondent's SBE Utilization Certification and Utilization Plan shall be incorporated as part of the resulting Contract. If the Certification and Plan fail to demonstrate a commitment to meeting or exceeding the Goal stated in the Request for Letters of Interest, the respondent is required to complete and submit a Good Faith Efforts Demonstration (page 4 and page 5). **To count towards the goal, the participants must be certified as SBEs with the Commission or as SBEs or DBEs with ODOT or EDGE certified with the Ohio Department of Administrative Services at the time of bid.**

The undersigned authorized agent of the respondent represents to the Ohio Turnpike and Infrastructure Commission, as part of its Proposal, that it will perform the duties of the respondent having: (check one)

<input type="checkbox"/>	attained commitments to meet or exceed the contract's SBE goal, and has documented SBE participation in the attached Utilization Plan for the project summarized as follows: SBE Participation Commitment: \$ _____ Total Dollar Value _____% Percent of Total Bid Attached is the Utilization Plan evidencing commitments with each SBE that will participate in the project in a manner that meets or exceeds the goal and affirming the availability and planned participation of each business identified.
<input type="checkbox"/>	failed to meet the contract's SBE goal despite its Good Faith Efforts to attain commitments to meet or exceed the goal, and has documented its efforts to achieve the goal in the attached Demonstration of Good Faith Efforts (page 4 and page 5) and documented commitments in the attached Utilization Plan to SBE participation on the project summarized as follows: SBE Participation Commitment: \$ _____ Total Dollar Value _____% Percent of Total Bid 1. Attached is the Utilization Plan evidencing commitments with each SBE that will participate in the project and affirming the availability and planned participation of each business identified; and 2. Attached is the Good Faith Efforts Demonstration evidencing those Efforts that were unsuccessful in attaining SBE participation commitments that meet or exceed the goal.

Respondent

By: _____
Signature

Name: _____

Title: _____

Date: _____

Submit the Utilization Plan (page 2) and (if necessary) the Good Faith Efforts Demonstration (page 4 and page 5) with the Proposal using the templates and instructions that follow.

Respondent's SBE Utilization Plan
(Complete and Submit with Utilization Certification)

BOX 1:

("Respondent")

certifies that the SBEs listed below have been engaged to participate on this project, and if the Respondent is selected for award of the Contract, it shall assure that its self-performance, subcontracts or other agreements are executed as follows:

Column 1 Name of SBE (See instructions)	Column 2 Project Role (See instructions)	Column 3 Description of Work (See instructions)	Column 4 Amount Subcontracted to SBE (See instructions)	Column 5 Amount to be Applied Towards Goal (See instructions)

BOX 2:

Small Business Enterprise
Contract Goal in Dollars:

BOX 3:

Total SBE Credit Commitment:

If Box 2 is greater than Box 3, proceed to complete and submit the Good Faith Efforts Documentation Form (page 4 and page 5)

Instructions for Small Business Enterprise Utilization Plan

Box 1: Name of Respondent submitting Proposal.

Column 1: Name of the Small Business Enterprise (“SBE”) participating on the project. To receive credit towards contract goal, SBEs must be certified with the Commission at time of bid, or eligible for fast track certification (i.e., certified as DBE or SBE with ODOT or EDGE certified with Ohio DAS). If a SBE is performing multiple scopes, repeat the name of the SBE for each scope that will be performed and the respective amount.

Column 2: The Project Role that the SBE will be performing as follows:

- Prime Contractor
- Manufacturer or Regular Dealer
- Broker
- Subcontractor
- Trucking/Hauler

List each project role to be performed by a single SBE individually on a separate row(s). The role is used to determine what portion of the amount to be subcontracted (Column 4) may be applied toward meeting the goal (Column 5).

Column 3: A description of the Work to be performed by the SBE must be consistent with the industry used for its certification. The Respondent may rely upon the descriptors listed in the Commission’s Certification List.

For example: <http://www.ohioturnpike.org/business/mbe-fbe>, or those eligible for Fast Track certification as DBE see: <http://www.dot.state.oh.us/Divisions/ODI/SDBE/Pages/DBE-Directory.aspx> as SBE, see: <http://www.dot.state.oh.us/Divisions/ODI/SDBE/Pages/SBE.aspx>

A respondent subletting a portion of a bid item shall state “Partial” and describe the Work that is included (e.g., “Surveying (Partial) – Site Plan”).

Column 4: List the total amount to be subcontracted to each SBE for the services they are performing.

Column 5: This is the total dollar amount of the project each line listed in the certification that the prime intends to apply towards meeting the Contract goal. It may be that only a portion of the amount subcontracted to a SBE in Column 4 is eligible to be credited toward meeting the goal. See Notes below. The Commission will utilize the sum of this column (Box 3) to determine whether or not the respondent has met the goal. In the event of an arithmetic error in summing column 5 or an error in making appropriate reductions in the amounts in Column 4, then the sum will be corrected and the total (Box 3) will be revised accordingly.

Notes: (A) For Work self-performed by a SBE bidding as a prime contractor, the respondent may claim only 20% of the amount self-performed (Column 4) towards meeting the goal (Column 5). (B) For Work performed by SBE subcontractors, the respondent may claim 100% of the Commercially Useful Functions performed by subcontractors (i.e., the subcontractor must perform or exercises responsibility for at least 30% of the total cost of its subcontract using its own workforce, and have responsibility, for negotiating prices to purchase its materials and supplies, determining quality and quantity, ordering the material, and installing and paying for the material itself). (C) For materials supplied by a Manufacturer or a Regular Dealer, the Respondent may claim 100% of the cost of the materials or supplies (Column 4) towards meeting the goal (Column 5). (D) SBE credited for the total value of the trucking services provided using its own trucks and employees and the total value of transportation services SBE provides using non-SBE trucks that do not to exceed the value provided by SBE-owned trucks operated by its employees (i.e., no more than one non-SBE truck for each SBE truck). (E) For work contracted out to a broker, the respondent may only claim the fees paid to a broker towards meeting the goal (Column 4).

Box 2: Box 2 is the Contract goal for SBE participation goal appearing on the Request for Letters of Interest.

Box 3: Box 3 is the sum of the values in Column 5. This value must equal or exceed the Contract goal amount written in Box 2, or Good Faith Effort Demonstration is required if insufficient SBE Participation has been achieved. See the following pages (page 4 and page 5) for the materials necessary for demonstrating the Respondent’s Good Faith Efforts.

DEMONSTRATION OF GOOD FAITH EFFORTS

(Complete and Submit if Utilization Certification and Plan Fail to Meet Contract Goal)

Project Name _____

Project Number _____

Respondent Name _____

Federal Tax I.D. _____

1. **Opportunities:** Indicate how the Respondent subdivided portions of the work or services to increase the likelihood of participation by firms certified as SBE with the Commission (or SBE or DBE with ODOT and/or EDGE with DAS) in the Project. (Attach additional pages if needed, and all supporting documentation.)

2. **Availability:** Indicate the services or organizations that provided assistance to you in identifying and recruiting firms certified as SBE (or DBE and EDGE) in preparing the Proposal response. (Attach additional pages if needed, and notes of each contact listed.)

A. Organization: _____ Date(s) of Contact: _____ Contact Means: _____

Subject of Inquiry: _____

B. Organization: _____ Date(s) of Contact: _____ Contact Means: _____

Subject of Inquiry: _____

C. Organization: _____ Date(s) of Contact: _____ Contact Means: _____

Subject of Inquiry: _____

3. **Efforts:** List all SBEs (including all DBEs and/or EDGE firms) that you supplied adequate and timely information about the scopes of work and requirements of the project. (Attach additional pages if needed, and copies of all transmittals, any shipping receipts or documentation of providing info. etc.)

A. Business _____	Contact Name _____	Date _____
B. Business _____	Contact Name _____	Date _____
C. Business _____	Contact Name _____	Date _____
D. Business _____	Contact Name _____	Date _____
E. Business _____	Contact Name _____	Date _____
F. Business _____	Contact Name _____	Date _____

4. **Efforts:** List all interested SBEs (including all DBE and EDGE entities), which you rejected to perform the Work of the Contract. Please provide the specific reason(s) for the decision to reject. (Attach additional pages if needed.)

A. Business: _____

Reason(s) for rejection: _____

B. Business: _____

Reason(s) for rejection: _____

C. Business: _____

Reason(s) for rejection: _____

5. **Efforts:** List the names, dates and telephone numbers of all SBEs (including DBEs and EDGE firms) with which you entered into negotiations for its participation on the project and the general scope of work negotiated, and the reason why negotiations were not successful. (Attach additional pages if needed.)

A. Business: _____

Contact: _____

Phone: _____

Date(s) of contact: _____

Scope of Work: _____

Reasons for ending negotiations: _____

B. Business: _____

Contact: _____

Phone: _____

Date(s) of contact: _____

Scope of Work: _____

Reasons for ending negotiations: _____

C. Business: _____

Contact: _____

Phone: _____

Date(s) of contact: _____

Scope of Work: _____

Reasons for ending negotiations: _____

D. Business: _____

Contact: _____

Phone: _____

Date(s) of contact: _____

Scope of Work: _____

Reasons for ending negotiations: _____

E. Business: _____

Contact: _____

Phone: _____

Date(s) of contact: _____

Scope of Work: _____

Reasons for ending negotiations: _____

F. Business: _____

Contact: _____

Phone: _____

Date(s) of contact: _____

Scope of Work: _____

Reasons for ending negotiations: _____

GUIDANCE FOR DEMONSTRATING GOOD FAITH EFFORTS TO ACHIEVE OR EXCEED THE CONTRACT GOAL

If the SBE Utilization Certification and Plan fail to document commitment to achieving the SBE Goal set forth in the Request for Letters of Interest, complete the Good Faith Effort Demonstration Form to document necessary and reasonable actions that, by their scope, intensity, and appropriateness, would reasonably be expected to attain SBE participation that meets or exceeds the goal.

The Commission's determination of Good Faith Efforts is based on consideration of the quality, quantity, and intensity of the different kinds of actions taken. The activities or efforts undertaken to when making a Good Faith Effort must be those that one could reasonably expect to deploy when seriously, actively and aggressively attempting to obtain SBE participation in relative proportion to those that are Available to capably perform Commercially Useful Functions under the Opportunities presented in given contract.

The analysis for determining whether the respondent fulfilled its obligation to use Good Faith Efforts, the Commission will consider the demonstration of the following, which the form is intended to illicit from the respondents:

1. **“Opportunities”** means the subcomponents of the project that are identifiable as economically viable scopes of work that may interest subcontractors in responding to the respondent's solicitations to participate in the Project. The unique opportunities each project presents is determined based on the nature of the project using in-house expertise and the aggregation of those that the respondents may identify.
2. **“Availability”** means the degree of ready, willing and able SBEs available to capitalize on the opportunities presented under each project. The availability consideration examines the amount of SBEs in the relevant marketplace using (1) the Commission's list of certified SBEs (available at <http://www.ohioturnpike.org/business/doing-business-with-us/mbe-fbe>); (2) the Unified Certification Program's DBE Directory (<http://www.dot.state.oh.us/DBE/pages/DBE-Directory.aspx>); (3) the Department of Administrative Service's directory of EDGE certified businesses: <http://eodreporting.oit.ohio.gov/searchEDGE.aspx>; the Ohio Department of Transportation's registry of SBEs: http://odotexttrpt.dot.state.oh.us/ViewReport.aspx?reportPath=%2fprd%2fpreconstruction%2fpublic%2fsbe_vendor_list; and (5) any other Ohio-centric database that the Commission recognizes as using standards that are substantially similar to the requirements for certification with the Commission.
3. **“Efforts”** means the documented attempt to meaningfully and earnestly solicit the interest of available SBEs to fulfill the opportunities presented to perform on the Project, including making a sufficient number of contacts to follow up with any available but non-responsive SBEs and negotiating in good faith with available SBEs to reach reasonably agreeable terms for their participation.
4. **“Commitments”** means the respondent representations in the Utilization Certification and Plan to have successfully achieved commitment(s) to utilize verified SBEs to perform on the project.

The determination that a given respondent satisfactorily used and demonstrated its Good Faith Efforts is based on the holistic review of the Opportunities, Availability, Effort and Commitment documented in the bid or proposal documents.

D. Opportunities and Availability

This assessment of opportunities and availability compiles those SBEs that the respondents may identify in their Utilization Plan and Good Faith Efforts Demonstration forms, but also may go outside the form to identify additional possible opportunities under the project and recognized certification registries for possible untapped available firms.

A respondent can demonstrate fulfilling the Opportunity component by documenting that the respondent performed actions that include the following:

- a. Selected and packaged portions of the work in order to increase the likelihood that the SBEs will respond to solicitations expressing interest in participating on the project. This includes, where appropriate, breaking out contract work into economically feasible units to facilitate participation through subcontracting.
- b. Soliciting the interest of all SBE entities available to perform on the project through reasonable, meaningful, and available means and providing a reasonable and meaningful time to respond.

The means for a respondent to fulfill the Availability component of demonstrating good faith efforts includes the following:

- a. Searching recognized registries identifying certified SBEs that potentially could fulfill the opportunities under the project.
- b. Identifying other possible ready, willing and able SBEs through the effective use of the services of available from plan rooms, community organizations, contractors' groups, local, state, and Federal minority/women business assistance offices, and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and utilization of SBE entities.

E. Efforts and Commitment

Respondents must document level of exertion used to engage the Availability pool on the Opportunities presented under the project. The Efforts component considers the active attempts to successfully reach terms with interested SBE firms, which may include the following:

- a. Negotiating in good faith with interested SBE entities so as to facilitate their participation on the Project.
- b. Not rejecting SBE entities without sound reasons based on a thorough investigation of their capabilities.
- c. Assisting SBE entities in obtaining bonding, lines of credit, or insurance as required.

The Commitment component provides a cross-check on the identified and documented Opportunities, Availability and Efforts. Unless the analyses under the Opportunities, Availability and Efforts prongs demonstrate otherwise, the utilization of Good Faith Efforts is expected to result in the respondent successfully representing its achievement of SBE participation goal for the contract. The respondent must provide justification for any lack of Commitment by showing that the failure occurred despite its Good Faith Efforts through the demonstration under the Opportunity, Availability and Efforts prongs of the test.

OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

PROJECT

FTP 43 - 89 - 13

REPLACEMENT OF BRIDGE DECK AND PARAPETS
S.R. 590 OVER THE OHIO TURNPIKE, MILEPOST 85.5

CIP 43 - 89 - 14

REPLACEMENT OF BRIDGE DECKS AND PARAPETS
FOUGHT ROAD, MILEPOST 86.6 AND
FOUR MILE HOUSE ROAD, MILEPOST 88.1 OVER
THE OHIO TURNPIKE, SANDUSKY COUNTY
ORIGINAL CONTRACT SECTION C-40

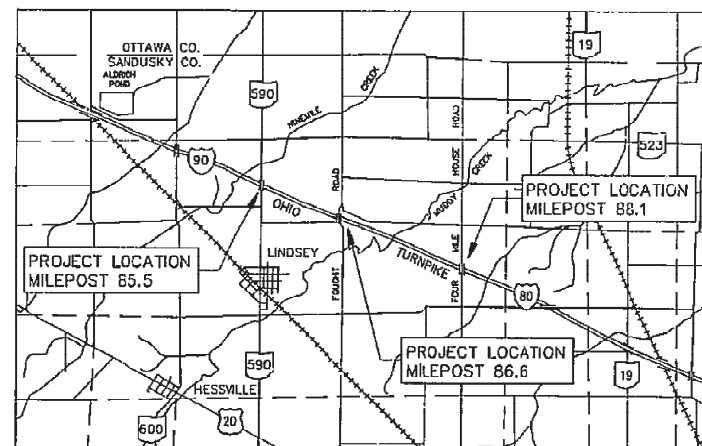
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LOCATION MAP

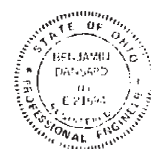
0 1 2
SCALE IN MILES

Plans Prepared By
DANSARD - GROHNKE - LONG, Limited
Consulting Engineers Toledo, Ohio

Benjamin Dansard
BENJAMIN DANSARD 21694

10-13-88
DATE

SEAL



APPROVED FOR
THE OHIO TURNPIKE COMMISSION
BY

Alan Blair
CHIEF ENGINEER

2-7-89
DATE

OHIO TURNPIKE COMMISSION STANDARD DRAWINGS

- | | |
|-------|---------------------------------------------------------|
| CL-2 | CHAIN LINK SAFETY FENCE DETAILS, TYPE II |
| CL-2A | CHAIN LINK SAFETY FENCE (ALL ALUMINUM) DETAILS, TYPE II |

GENERAL NOTES

SUBGRADE REPLACEMENT

THE CONTRACTOR UNDER THE DIRECTION OF THE ENGINEER SHALL REMOVE AND REPLACE ANY SECTION OF THE EXISTING SUBGRADE DETERMINED TO BE UNSATISFACTORY WITHIN THE LIMITS OF THE APPROACH ROADWAY WORK AS SHOWN ON THE PLANS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED ONLY AS DIRECTED BY THE ENGINEER FOR SUBGRADE REPLACEMENT.

FTP 43-88-09 S.R. 590
SP 451 COMPACTED SUBGRADE 6 C.Y.

CIP 43-88-10 FOUGHT ROAD & FOUR MILE HOUSE ROAD
SP 451 COMPACTED SUBGRADE 12 C.Y.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR PLAN ITEMS SET UP TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

GUARDRAIL LOCATIONS

THE LOCATIONS OF GUARDRAIL, AS SHOWN ON THESE PLANS, ARE SUBJECT TO ADJUSTMENT PRIOR TO FINAL ACCEPTANCE. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

THE PROPOSED GUARDRAIL LENGTHS AS SHOWN ON THE PLANS ARE MEASURED FROM THE BRIDGE PARAPET AND INCLUDE THE BRIDGE TERMINAL ASSEMBLY. WHERE NOTED ON THE PLANS, THE GUARDRAIL SHALL BE SPLICED TO TIE INTO THE EXISTING GUARDRAIL.

GUARDRAIL, REBUILT, TYPE 5

WHERE REQUIRED BY THE PLANS, EXISTING GUARDRAIL SALVAGED UNDER ITEM 202 SHALL BE REBUILT AT THE LOCATIONS SPECIFIED. THE REBUILT UNITS SHALL CONFORM TO THE SPECIFICATIONS OF TYPE 5 GUARDRAIL AS DESCRIBED IN ITEM 606.

EROSION CONTROL

ITEM 601 IS PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE SHALL NOT BE REMOVED IN ORDER TO PLACE THIS ITEM. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THIS ITEM WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

CONDUIT END TREATMENT

IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENT REQUIRED AT BOTH THE OUTLET AND INLET ENDS. THIS SHALL INCLUDE HEADWALLS, CONCRETE RIPRAP, ROCK CHANNEL PROTECTION, SODDING, ETC.

PAVEMENT REMOVALS

IN ALL PAVEMENT REMOVALS, EDGES SHALL BE CUT CAREFULLY TO NEAT LINES BY USE OF A POWER CARBORUNDUM SAW TO A MINIMUM DEPTH 1-1/2". REMOVALS SHALL BE MADE ONLY TO THE EXTENT SHOWN ON THE PLANS OR AS APPROVED BY THE ENGINEER. PAYMENT FOR REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION.

EXISTING FENCE

IF THE EXISTING FENCE THAT IS CONNECTED TO THE ABUTMENT IS REMOVED BY THE CONTRACTOR DURING CONSTRUCTION, IT SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OHIO TURNPIKE COMMISSION.

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC.

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITH THE WORK LIMITS OF THIS PROJECT:

TELECOMMUNICATIONS
JAYTEL, INC.
P.O. BOX 3168
2666 LEXINGTON AVE.
MANSFIELD, OH. 44904
(419) 884-0400

TOLEDO EDISON
2600 WEST SANDUSKY U.S. 20
LINDSEY, OH. 43442

OHIO BELL TELEPHONE
121 HURON ST.
ROOM 213
TOLEDO, OH. 43608

PLANS OF EXISTING BRIDGE

CONSTRUCTION PLANS FOR THE EXISTING BRIDGE ARE ON FILE AT THE COMMISSION'S PRINCIPAL OFFICE, 682 PROSPECT STREET, BEREA, OHIO AND ARE AVAILABLE FOR REFERENCE. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL PERTINENT DRAWINGS.

WEARING COURSE REMOVED, AS PER PLAN: PRIOR TO SAWCUTTING THE SUPERSTRUCTURE DECK, THE ASPHALT WEARING COURSE SHALL BE REMOVED FROM SPANS 2 AND 3 OF THE S.R. 590 BRIDGE DECK. ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO PERFORM THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 202, WEARING COURSE REMOVED, AS PER PLAN.

DESIGN SPECIFICATIONS

THE DESIGN IN THESE PLANS CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, DATED 1983, INCLUDING ALL SUBSEQUENT INTERIM SPECIFICATIONS AND THE OHIO SUPPLEMENT TO THESE SPECIFICATIONS. THE DESIGN LOAD IS HS-20-44 CASE II AND THE ALTERNATE MILITARY LOADING. (THIS DESIGN PROVIDES FOR A 1/2" INTEGRAL WEARING SURFACE.) THERE IS NO PROVISION FOR FUTURE WEARING SURFACE.

THE GRADES OF STRUCTURAL STEEL AND REINFORCING STEEL AND GLASSES OF CONCRETE, TOGETHER WITH THE STRENGTH FOR EACH, ARE AS FOLLOWS:

EXISTING STRUCTURAL STEEL - (ASSUMED) A-7 - UNIT STRESS 18,000 PSI
NEW STRUCTURAL STEEL - ASTM A36 - UNIT STRESS 20,000 PSI
REINFORCING STEEL - ASTM A615, A616, A617 - GRADE 60
UNIT STRESS 24,000 PSI

LIGHTWEIGHT CONCRETE - COMPRESSIVE STRENGTH 4,500 PSI

EXISTING STRUCTURE VERIFICATION

PLAN DIMENSIONS ARE FOR HORIZONTAL DISTANCES AT 50'.

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM THE DESIGN PLANS AND/OR SHOP DRAWINGS OF THE EXISTING BRIDGE EXCEPT WHEN SPECIFICALLY NOTED. CONSEQUENTLY, DETAILS AND DIMENSIONS ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. SOME VARIATION FROM PLAN DIMENSIONS IS EXPECTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER FITUP BETWEEN THE PROPOSED AND EXISTING CONSTRUCTION. ADEQUATE MEASUREMENTS SHALL BE MADE IN THE FIELD PRIOR TO FABRICATION OR INSTALLATION OF ANY PART TO INSURE THAT ALL PARTS CAN BE PROPERLY ASSEMBLED AS SPECIFIED IN THESE PLANS.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED ON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD. ANY ADDITIONAL COST RESULTING FROM VARIATIONS FROM PLAN DIMENSIONS IS THE RESPONSIBILITY OF THE CONTRACTOR AND NO ADDITIONAL PAYMENT WILL BE AWARDED BY THE COMMISSION.

REPAIR OF ABUTMENTS AND PIERS

ABUTMENTS AND PIERS ARE TO BE PATCHED IN ACCORDANCE WITH ITEM SP519 PATCHING CONCRETE STRUCTURES OR ITEM SP520 REPAIR BY SHOTCRETING, AS INDICATED ON THE PLANS.

CONCRETE WEATHERPROOFING

ITEM SP 536, CONCRETE WEATHERPROOFING SHALL BE APPLIED TO THE TOP SURFACE OF THE DECK SLAB, ALL PARAPET SURFACES, SLAB EDGES, THE BOTTOM SURFACE OF THE DECK SLAB FROM THE EDGE TO THE EXTERIOR STRINGER FLANGE, THE SURFACE OF THE ABUTMENT SLAB, ALL ABUTMENT PARAPET SURFACES, THE EDGE OF ABUTMENT SLAB, THE BOTTOM SURFACE OF THE ABUTMENT SLAB TO THE FACE OF THE WINGWALLS, AND ALL EXPOSED APPROACH SLAB SURFACES.

BRIDGE DECK ELEVATIONS, SLAB THICKNESS AND APPROACH PROFILES

IN ORDER TO MEET ROADWAY GRADES, TO ASSURE THE CONSTRUCTION OF THE REQUIRED THICKNESS OF DECK SLABS AND TO ASSURE THE PROPER LOCATION OF THE REINFORCING STEEL IN THE DECK SLABS, THE CONTRACTOR SHALL OBTAIN THE ELEVATIONS OF THE TOP OF EXISTING STEEL BEAMS AFTER THE COMPLETE REMOVAL OF THE EXISTING DECK SLABS, AT THE LOCATIONS SHOWN IN THE FINAL PAVEMENT ELEVATION TABLES ON THE SUPERSTRUCTURE SHEETS OF THE BRIDGE PLANS, AND COMPUTE THE DECK THICKNESS OVER THE BEAMS. IF THE COMPUTED DECK THICKNESS IS FOUND TO BE LESS THAN THE MINIMUM THICKNESS REQUIRED, THE TOP OF THE FINAL PAVEMENT ELEVATIONS SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL ALSO COMPUTE THE DECK SCREED ELEVATION UTILIZING THE DEAD LOAD DEFLECTIONS.

THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON 8" THICK CONCRETE OUTSIDE THE HAUNCH AREA AND THE AVERAGE THICKNESS OF CONCRETE PLACED OVER THE EXISTING BEAMS AT THE HAUNCHES. A TYPICAL HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE, HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12", PROVIDED THAT THE SLOPE NOT BE MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.

THE ABUTMENT SLAB AND THE DECK SLAB MAY BE POURED AT THE SAME TIME, HOWEVER, UPON THE COMPLETION OF THESE POURS AND PRIOR TO POURING THE CONCRETE APPROACH SLABS, THE PROFILE GRADE SHALL BE ADJUSTED, AS DIRECTED BY THE ENGINEER, TO PROVIDE A SMOOTH TRANSITION FROM THE ASPHALT ROADWAY TO THE CONCRETE ABUTMENT AND DECK SLAB, IF ANY ADJUSTMENTS IN ELEVATIONS WERE REQUIRED ON THE BRIDGE.

THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER ELEVATIONS OF THE EXISTING SURFACE ALONG THE CENTERLINE AND BOTH EDGES OF THE PAVEMENT AT INTERVALS OF 25 FEET FOR A DISTANCE OF 100 FEET BEYOND PAVING LIMITS. AFTER RECEIPT OF THESE ELEVATIONS THE ENGINEER WILL CALCULATE AND PROVIDE TO THE CONTRACTOR FINAL ELEVATIONS FOR THE CONCRETE APPROACH SLABS AND FOR BOTH THE ASPHALT BASE COURSE AND THE ITEM 404 ASPHALT CONCRETE SURFACE COURSE. NO APPROACH SLABS SHALL BE POURED NOR SHALL ASPHALT PAVING COMMENCE UNTIL RECEIPT OF THESE FINAL ELEVATIONS.

PAYMENT FOR THE ABOVE MENTIONED WORK SHALL BE INCLUDED WITH THE LUMP SUM PRICE BID FOR ITEM SP 623 CONSTRUCTION LAYOUT SURVEY.

FOAMY SCREED COMPUND (SP526) SHALL BE PLACED ON THE SURFACE AREAS OF EXISTING CONCRETE WHICH WILL BE IN CONTACT WITH THE NEW CONCRETE. PRICE INCLUDED IN THE CONTRACT BID PRICE FOR THE PERTINENT CONCRETE ITEMS.

GENERAL SUMMARIES

ITEM	TOTAL QUANTITY	UNITS	DESCRIPTION	FROM	
				SHEET NO. 3 (S.R. 590)	GENERAL NOTES
202	258	Lin. Ft.	Guardrail Removed for Re-use	258	
202	1707	Lin. Ft.	Guardrail Removed	1707	
202	4	Each	Inlet Removed & Plug Pipe	4	
203	128	Cu. Yd.	Excavation Not Including Embankment Construction	128	
203	380	Sq. Yd.	Subgrade Compaction	380	
301	14	Cu. Yd.	Bituminous Aggregate Base	14	
SP304	19	Cu. Yd.	Aggregate Base	19	
SP310	67	Cu. Yd.	Subbase, Type 1, Grading A	67	
402	32	Cu. Yd.	Asphalt Concrete, AC-20	32	
404	9	Cu. Yd.	Asphalt Concrete, AC-20	9	
408	43	Gal.	Prime Coat	43	
SP451	6	Cu. Yd.	Compacted Subgrade		6
601	2	Cu. Yd.	Rock Channel Protection, Type C without Filter	2	
603	60	Lin. Ft.	12" Conduit, Type B 706.02	60	
603	111	Lin. Ft.	12" Conduit, Type F 707.01 (except Galvanized) or 707.05 Type C without paved invert	111	
SP604	4	Each	Catch Basin	4	
SP606	175	Lin. Ft.	Guardrail, Rebuilt, Type 5	175	
606	1600	Lin. Ft.	Guardrail, Type 5	1600	
606	6	Each	Bridge Terminal Assembly, Type A	6	
606	4	Each	Anchor Assembly, Type A	4	
SP607	528	Lin. Ft.	Temporary Fence (7'-0" Chain Link with Specials including Barbed Wire)	528	
SP607	2	Each	Temporary Gate (14'-0")	2	
609	142	Lin. Ft.	Concrete Curb, Type 6	142	
SP611	108	Sq. Yd.	Class S Concrete, Approach Slab, using Shrinkage Compensating Cement (T=10")	108	
622	92	Lin. Ft.	Concrete Barrier, Type D Modified	92	
630	4	Each	Removal of Ground Mounted Sign and Reerection	4	
			For Bridge Quantities See Sheet No. 3		

ITEM	TOTAL QUANTITY	UNITS	DESCRIPTION	FROM	
				SHEET NO. 4 (FOUGHT RD.)	SHEET NO. 5 (4 MI. HOUSE RD.)
202	3992.0	Lin. Ft.	Guardrail Removed for Re-use	2112	1880
202	8	Each	Inlet Removed & Plug Pipe	4	4
203	227	Cu. Yd.	Excavation Not Including Embankment Construction	115	112
203	699	Sq. Yd.	Subgrade Compaction	359	340
301	28	Cu. Yd.	Bituminous Aggregate Base	14	14
SP304	39	Cu. Yd.	Aggregate Base	19	20
SP310	123	Cu. Yd.	Subbase, Type 1, Grading A	63	60
402	48	Cu. Yd.	Asphalt Concrete, AC-20	23	25
404	19	Cu. Yd.	Asphalt Concrete, AC-20	10	9
408	66	Gal.	Prime Coat	35	31
SP451	12	Cu. Yd.	Compacted Subgrade		12
601	4	Cu. Yd.	Rock Channel Protection, Type C without Filter	2	2
603	110	Lin. Ft.	12" Conduit, Type B 706.02	56	54
603	212	Lin. Ft.	12" Conduit, Type F 707.01 (except Galvanized) or 707.05 Type C without paved invert	121	91
SP604	8	Each	Catch Basin	4	4
SP606	512.5	Lin. Ft.	Guardrail, Rebuilt, Type 5	287.5	225
606	3144	Lin. Ft.	Guardrail, Type 5	1669	1475
606	12	Each	Bridge Terminal Assembly, Type A	6	6
606	8	Each	Anchor Assembly, Type A	4	4
SP607	1081	Lin. Ft.	Temporary Fence (7'-0" Chain Link with Specials including Barbed Wire)	536	545
SP607	4	Each	Temporary Gate (14'-0")	2	2
609	276	Lin. Ft.	Concrete Curb, Type 6	142	134
SP611	198	Sq. Yd.	Class S Concrete, Approach Slab, using Shrinkage Compensating Cement (T=10")	102	96
622	182	Lin. Ft.	Concrete Barrier, Type D Modified	92	90
			For Bridge Quantities See Sheet No. 4 and 5		

FTP 43-89-13 & CIP 43-89-14					
ITEM	TOTAL QUANTITY	UNITS	DESCRIPTION		
103.05	Lump	Lump	Premium for Contract Performance & Payment Bond		
SP619	Lump	Lump	Field Office		
SP623	Lump	Lump	Construction Layout Survey		
624	Lump	Lump	Mobilization		
SP614	Lump	Lump	Maintaining Traffic		

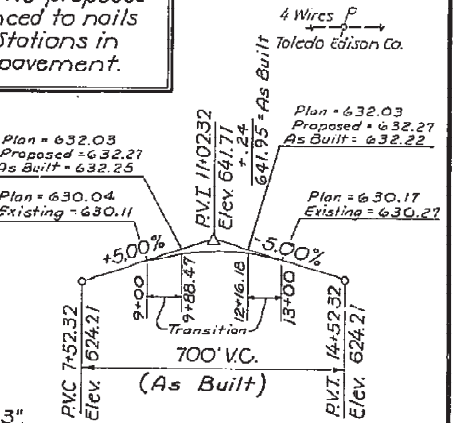
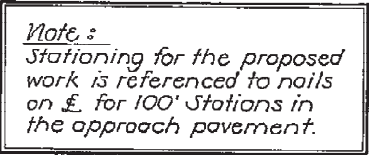
OHIO TURNPIKE COMMISSION

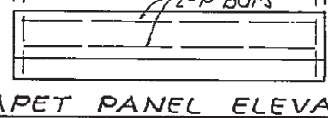
CONTRACT FTP 43-89-13
CONTRACT CIP 43-89-14
REPLACEMENT OF BRIDGE DECK AND PARAPETS

GENERAL NOTES AND GENERAL SUMMARIES

DANSARD • GROHNKE • LONG, Limited
Consulting Engineers
Toledo, Ohio

DRAWN BY LLA DATE COMM. NO. 5719 SHEET NO.
CHECKED BY TWO 7-18-89 NOTE FILE 1025 2





Parapet Panel Length
= % of Deflection Joints
"B" Equal Spa. for EX503

3"

2-P Bars

3"

100 V.C.
(As Built)

PVC Elev. 7+16
Elev.

PVT Elev. 7+16
Elev.

VERTICAL CURVE DATA USED FOR BRIDGE DECK ELEVATIONS

PARAPET PANEL ELEVATION

Parapet Panel Length	Tot. Panels For Two Parapets	P Bars Mark	No of "B" Spaces For EX503
15'-11"	4	EX519	11
13'-0"	16	EX520	9
6'-1 1/2"	12	EX521	4
15'-10 1/2"	4	EX519	11

Note

See Sheet No. 3 for Drain Pipe Plugging Detail

For additional notes on Bridge Fence, See Sheet No. 3

† See Sheet 3 For Guardrail Contingency Note.

PARAPET PANEL DETAILS

‡ Totals Carried to General Summary

OHIO TURNPIKE COMMISSION

CONTRACT CIP 43 - 89 - 14

REPLACEMENT OF BRIDGE DECK & PARAPETS

FOUGHT ROAD OVER THE OHIO TURNPIKE, M.P. 86.6 GENERAL PLAN & ELEVATION, SUB-SUMMARIES & BRIDGE QUANTITIES

DANSARD-GROHNKE-LONG, Limited
Consulting Engineers
Toledo, Ohio

DRAWN BY: <i>Worce & Short</i>	DATE	COMM. NO.	8719	SHEET NO.	
CHECKED BY: RJM, TWD	5-27-88	NOTE FILE	1025		4

FOUR MILE HOUSE ROAD

FOUR MILE HOUSE ROAD

FOUR MILE HOUSE ROAD

Sta. 12+44, 13.1' Lt.
Build Catch Basin

12" NW 679.00
12" SE 678.19
27'~12" @ 3.0%

12+50

Sta. 9+59, 13.1' Lt.
Build Catch Basin

12" NW 678.92
12" SE 678.11
27'~12" @ 3.0%

9+50

Sta. 12+44, 52' Lt.
12" E Elev. = 592.3±

Sta. 9+59, 59' Lt.
12" E Elev. = 602.4±

40'

30'

20'

10'

0'

10'

20'

30'

40'

50'

60'

70'

80'

90'

100'

110'

120'

130'

140'

150'

160'

170'

180'

190'

200'

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230'

240'

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1110'

1120'

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2110'

2120'

2130'

2140'

2150'

2160'

2170'

2180'

2190'

2200'

2210'

2220'

2230'

2240'

2250'

2260'

2270'

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2780'

2790'

2800'

2810'

2820'

2830'

2840'

2850'

2860'

2870'

2880'

2890'

2900'

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3080'

3090'

3100'

3110'

3120'

3130'

3140'

3150'

3160'

3170'

3180'

3190'

3200'

3210'

3220'

3230'

3240'

3250'

3260'

3270'

3280'

3290'

3300'

3310'

3320'

3330'

3340'

3350'

ABUTMENT REINFORCING STEEL LIST									
Mark	No.	Length	Weight	Shape	Rear	Fwd.	Bending Diagrams		
STATE ROUTE 590 OVER OHIO TURNPIKE M.P. 85.5									
EA701	62	9'-4"	1183	S	62				
EA702	62	9'-2"	1162	S	62				
EA501	32	9'-4"	311	S	32				
EA502	38	33'-0"	1308	S	19	19			
EA503	2	32'-0"	67	S	1	1			
EA504	2	32'-8"	67	S	1	1			
EA505	32	9'-2"	306	S		32			
EA506	20	10'-8"	223	S	10	10			
EY601	12	2'-10"	51	B	6	6			
EY602	4	2'-8"	16	B	2	2			
EY603	4	2'-7"	16	B	2	2			
EY604	4	2'-5"	15	B	2	2			
EY605	16	2'-3"	54	B	8	8			
EY501	8	2'-2"	18	B	4	4			
EY502	8	5'-2"	43	B	4	4			
EY503	32	7'-2"	239	S	16	16			
EY504	32	3'-6"	117	B	16	16			
EY505	32	2'-8"	89	B	16	16			
EY506	32	4'-4"	145	S	16	16			
Total = 5430									

ABUTMENT REINFORCING STEEL LIST							
Mark	No.	Length	Weight	Shape	Rear	Fwd.	Bending Diagrams
FOUGHT ROAD OVER OHIO TURNPIKE M.P. 86.6							
EA716	116	10'-11"	2588	S	58	58	
EA516	60	10'-11"	683	S	30	30	
EA517	38	30'-10"	1222	S	19	19	
EA518	2	29'-6"	62	S	1	1	
EA519	2	29'-9"	62	S	1	1	
EA520	20	10'-8"	223	S	10	10	
EY616	12	2'-10"	51	B	6	6	
EY617	4	2'-8"	16	B	2	2	
EY618	4	2'-7"	16	B	2	2	
EY619	4	2'-5"	15	B	2	2	
EY620	16	2'-3"	54	B	8	8	
EY516	8	2'-2"	18	B	4	4	
EY517	8	5'-2"	43	B	4	4	
EY518	32	8'-11"	298	S	16	16	
EY519	32	3'-6"	117	B	16	16	
EY520	32	2'-8"	89	B	16	16	
EY521	32	4'-4"	145	S	16	16	
Total = 5702							

ABUTMENT REINFORCING STEEL LIST							
Mark	No.	Length	Weight	Shape	Rear	Fwd.	Bending Diagrams
FOUR MILE HOUSE ROAD OVER OHIO TURNPIKE M.P. 88.1							
EA731	104	8'-5"	1789	S	52	52	
EA531	52	8'-5"	456	S	26	26	
EA532	42	29'-6"	1292	S	21	21	
EY631	8	2'-10"	34	B	4	4	
EY632	4	2'-8"	16	B	2	2	
EY633	4	2'-7"	16	B	2	2	
EY634	4	2'-5"	15	B	2	2	
EY635	16	2'-3"	54	B	8	8	
EY531	4	2'-2"	9	B	2	2	
EY532	4	5'-2"	22	B	2	2	
EY533	16	8'-5"	140	S	8	8	
EY534	32	3'-6"	117	B	16	16	
EY535	32	2'-6"	89	B	16	16	
EY536	32	4'-4"	145	S	16	16	
EY537	8	8'-10"	74	S	4	4	
EY538	8	7'-11"	66	S	4	4	
EA732	4	8'-0"	65	S	2	2	
EA733	4	8'-3"	67	S	2	2	
EA734	4	8'-3"	72	S	2	2	
EA533	4	8'-0"	33	S	2	2	
EA534	4	8'-7"	36	S	2	2	
EA535	20	10'-8"	223	S	10	10	
Total = 4830							

SUPERSTRUCTURE REINFORCING STEEL LIST

Mark	Number	Length	Weight	Shape	Bending Diagrams
STATE ROUTE 590 OVER OHIO TURNPIKE M.P. 85.5					

ES601 Series of 17	6	1'-11" to * 28'-9 1/4"	2351	S
ES602	259	32'-0"	12449	B
ES603	12	31'-0"	559	S
ES604	204	7'-0"	2145	B
ES501	96	30'-0"	3004	S
ES502	64	16'-6"	1101	S
ES503	64	27'-11"	1864	S
ES504	64	17'-11"	1140	S
ES505 Series of 17	6	1'-11" to * 28'-9 1/4"	1632	S
ES506	259	30'-8"	8284	S
ES507	200	3'-5"	713	B
ES401	129	30'-0"	2585	S
ES402	86	17'-0"	971	B
ES403	86	28'-7"	1642	B
ES404	86	17'-7"	1010	B
ES405	42	38'-0"	1066	S
EX401	24	30'-0"	481	S
EX402	16	17'-0"	182	B
EX403	16	28'-7"	305	B
EX404	16	17'-7"	188	B
EX405	2	38'-0"	51	S
EX501	274	2'-2"	619	B
EX502	274	2'-11"	834	B
EX503	316	5'-2"	1703	B
EX504	16	16'-0"	267	S
EX505	64	12'-6"	834	S
EX506	48	5'-7"	280	S
EX507	16	15'-5"	257	S

* Increments = 1'-8 1/2" Total = 48523

SUPERSTRUCTURE REINFORCING STEEL LIST					
Mark	Number	Length	Weight	Shape	Bending Diagrams
FOUGHT ROAD OVER OHIO TURNPIKE M.P. 86.6					
ES616		1'-11"			
Series of 15	6	to * 25'-4"	1842	S	
ES617	263	28'-8"	11324	S	
ES618	12	29'-0"	523	S	
ES516	120	16'-5"	2055	S	
ES517	60	27'-11"	1747	S	
ES518	90	30'-0"	2816	S	
ES519		1'-11"			
Series of 15	6	to * 25'-4"	1279	S	
ES520	263	28'-8"	7864	S	
ES416	164	16'-11"	1853	B	
ES417	82	28'-7"	1566	B	
ES418	123	30'-0"	2465	S	
ES419	40	38'-0"	1015	S	
EX416	32	16'-11"	362	B	
EX417	16	28'-7"	305	B	
EX418	24	30'-0"	481	S	
EX419	2	38'-0"	51	S	
EX516	272	2'-2"	615	B	
EX517	272	2'-11"	827	B	
EX518	328	5'-2"	1768	B	
EX519	32	15'-5"	515	S	
EX520	64	12'-6"	834	S	
EX521	48	5'-7"	280	S	
				Total = 42387	
				* Increments = 1'-8 1/2"	

ES507

1'-6"

45"

1'-6"

Std.

16'-5" ES416 & EX416

28'-1" ES417 & EX417

SUPERSTRUCTURE REINFORCING STEEL LIST

Mark	Number	Length	Weight	Shape	Bending Diagrams
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FOUR MILE HOUSE ROAD OVER OHIO TURNPIKE M.P. 88.

ES631	301	29'-5"	13299	S
ES531	90	30'-0"	2816	S
ES532	60	24'-10"	1554	S
ES533	289	29'-5"	8867	S
ES534	120	15'-8"	1961	S
ES431	123	30'-0"	2465	S
ES432	82	25'-6"	1397	B
ES433	164	16'-2"	1771	B
ES434	40	38'-0"	1015	S
EX431	24	30'-0"	481	S
EX432	16	25'-6"	273	B
EX433	32	16'-2"	346	B
EX434	2	38'-0"	51	S
EX531	260	2'-2"	588	B
EX532	260	2'-11"	791	B
EX533	302	5'-2"	1628	B
EX534	32	14'-9"	492	S
EX535	64	10'-11"	729	S
EX536	56	6'-0"	350	S

* Increments = 2'-9" Total = 40874

ES531: 1'-5" hook, 10'-2" straight.

ES532: 9" hook, 6" straight, 9" angle, 10'-2" straight.

ES533: 10'-2" straight.

ES534: 10'-2" straight.

EX431: 10'-2" straight.

EX432: 10'-2" straight.

EX433: 10'-2" straight.

EX434: 10'-2" straight.

EX531: 10'-2" straight.

EX532: 10'-2" straight.

EX533: 10'-2" straight.

EX534: 10'-2" straight.

Note :

All Bars to be Epoxy Coated

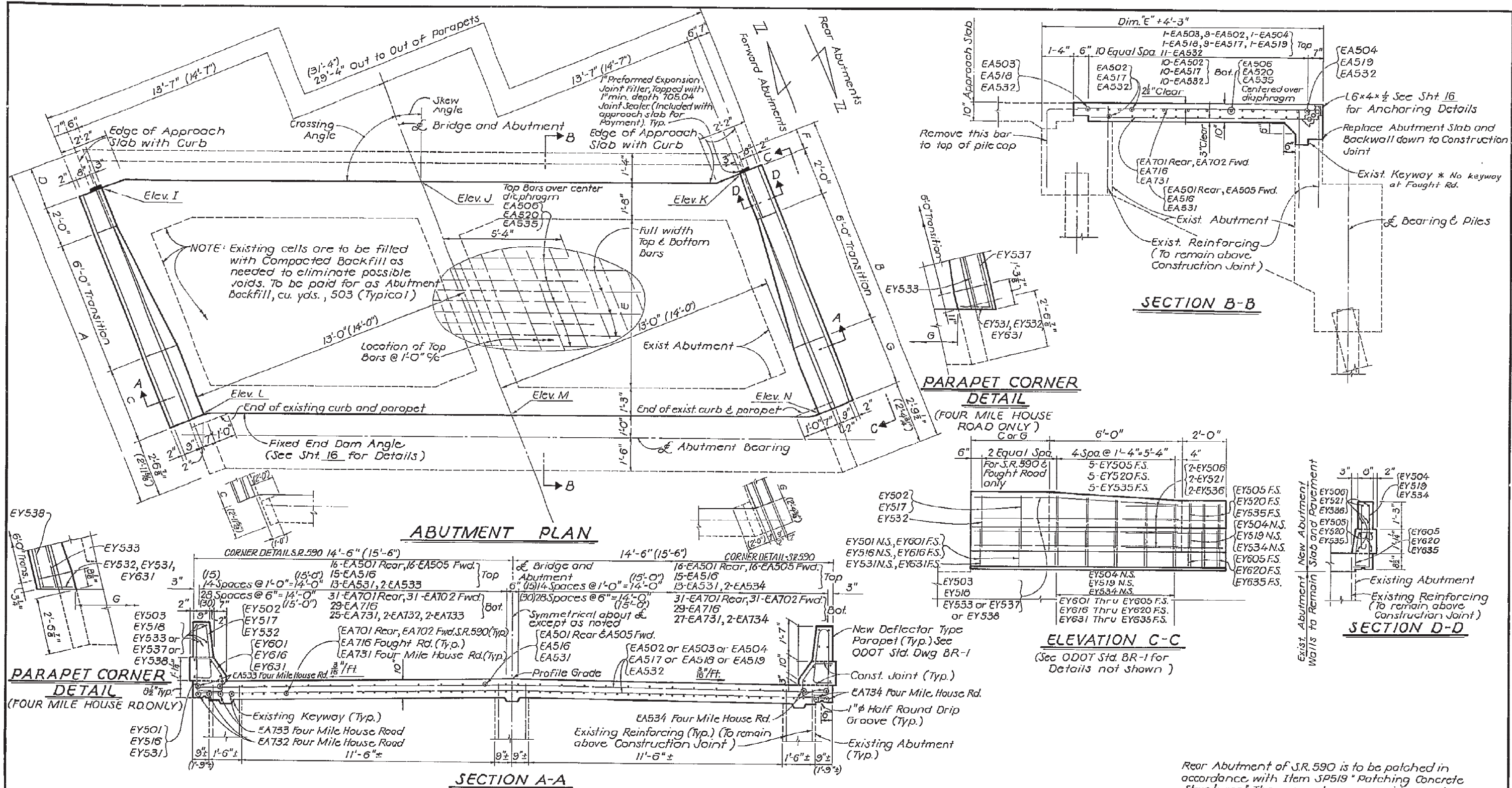
Std.
15'-8" ES433 & EX433
25'-0" ES432 & EX432

Note:
All Bars to be Epoxy Coated

For reinforcing steel samples refer to General Conditions, Section G-6.02 and the G.M.S. Sections 700, 709.01 through 709.05 and 709.08. Sufficient additional reinforcing steel shall be provided for sampling. Random samples shall be replaced in the structure by the additional steel, splice in accordance with 509.08.

At the Contractor's option, bars EX501 & EX502, EX516 & EX517, and EX531 & EX532 may be combined and supplied as one bar. Payment will be made based on bars actually supplied.

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Rear Abutment of S.R. 590 is to be patched in accordance with Item SP519 "Patching Concrete Structures." The general areas requiring such patching are as follows:

- The east corner of abutment face and wingwall.
- The face of backwall of E. abutment.
- The face of west cheekwall.

Total Estimated Quantity = 10 Sq. Ft.
Dimension shown thus (14'0") are for S.R. 590 only.

EPOXY COATED REINFORCING STEEL

In addition to the requirements of SP824 and 509.09, the top and bottom mats of all longitudinal and transverse epoxy coated reinforcing steel shall be supported by approved epoxy coated devices with spacing not exceeding 3'0" centers in each direction. Broken concrete, bricks, etc. shall not be used for support of epoxy coated reinforcing steel.

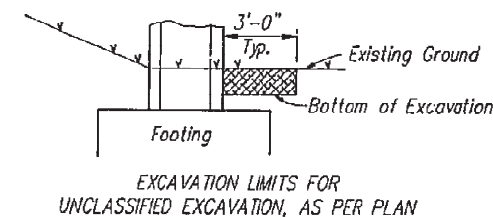
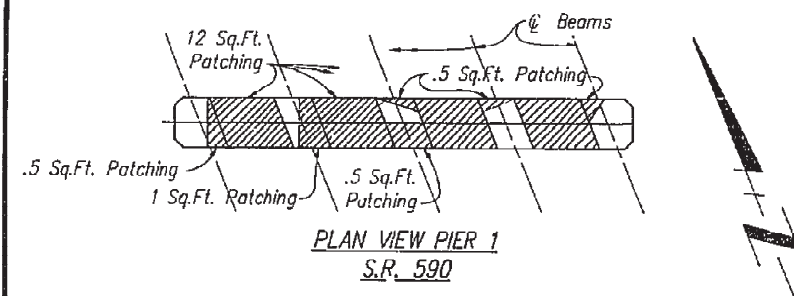
REPLACEMENT OF EXISTING REINFORCING STEEL

Any existing reinforcing bars which are to be incorporated into the new work and which are made unusable by the Contractor's concrete removal operations shall be replaced with new steel at his cost. Any existing reinforcing bars deemed by the Engineer to be unusable because of corrosion shall be replaced with new steel. An allowance is included in Item SP824 for this purpose.

Drilling dowel holes, furnishing and placing nonshrinking epoxy mortar and reinforcing bar dowels, where needed to replace existing reinforcement damaged by the contractor, shall be done at the Contractor's expense.

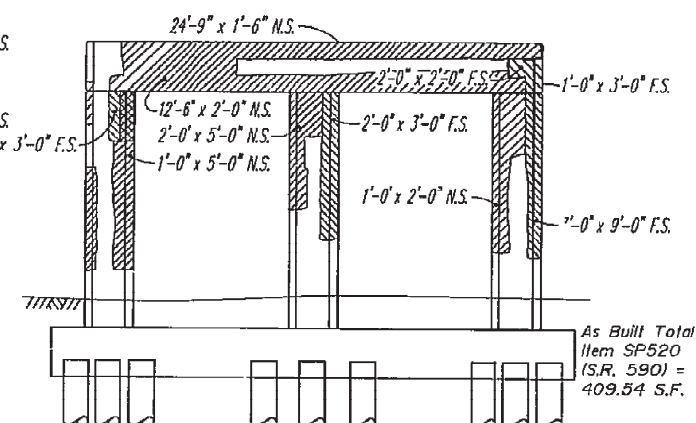
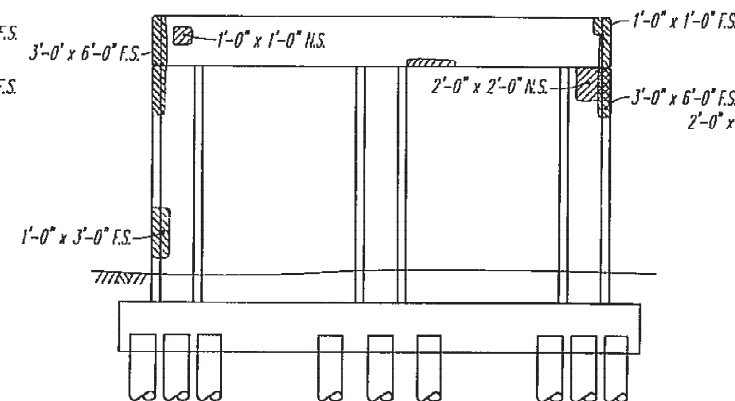
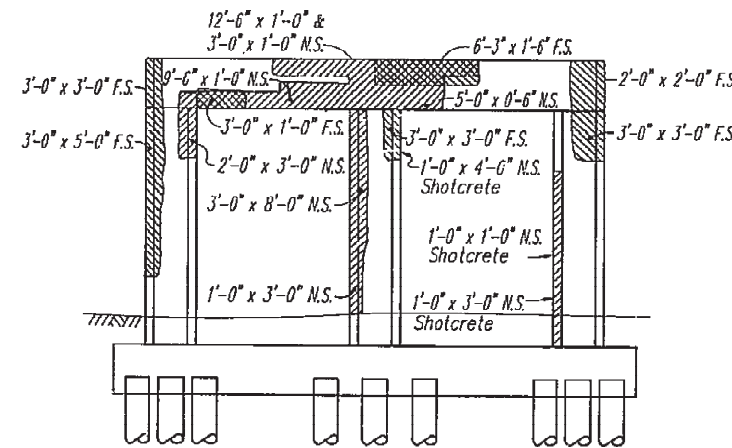
	Crossing Angle	Dimensions											Elevations				
		A	B	C	D	E	F	G	I	J	K	L	M	N			
S.R. 590 Rear	68°20'	14'1 1/2"	13'6 3/8"	1'7 3/8"	1'6 1/2"	6'1 3/8"	1'4 1/8"	1'9 1/2"	634.05	634.33	634.14	634.15	634.42	634.24			
S.R. 590 Fwd.	68°20'	13'11 5/8"	13'4 3/8"	1'5 3/8"	1'6 3/8"	5'11 1/2"	1'4"	1'8"	633.25	633.56	633.41	633.41	633.71	633.56			
Fought Rd. Rear	60°16'30"	15'8 3/8"	15'1 3/8"	3'2 3/8"	1'11 1/4"	7'7 1/8"	0'11 3/8"	3'4 3/8"	631.74	632.03	631.90	631.93	632.21	632.08			
Fought Rd. Fwd.	60°16'30"	15'8 3/8"	15'1 3/8"	3'2 3/8"	1'11 1/4"	7'7 1/8"	0'11 3/8"	3'4 3/8"	631.74	632.03	631.90	631.93	632.21	632.08			
Four Mile House Rr.	76°24'	12'11 1/8"	12'6 3/8"		1'8 3/8"	5'7 3/8"	1'0 3/8"		622.42	622.68	622.51	622.56	622.81	622.65			
Four Mile House Fwd.	76°24'	12'11 1/8"	12'6 3/8"		1'8 3/8"	5'7 3/8"	1'0 3/8"		622.42	622.68	622.51	622.56	622.81	622.65			

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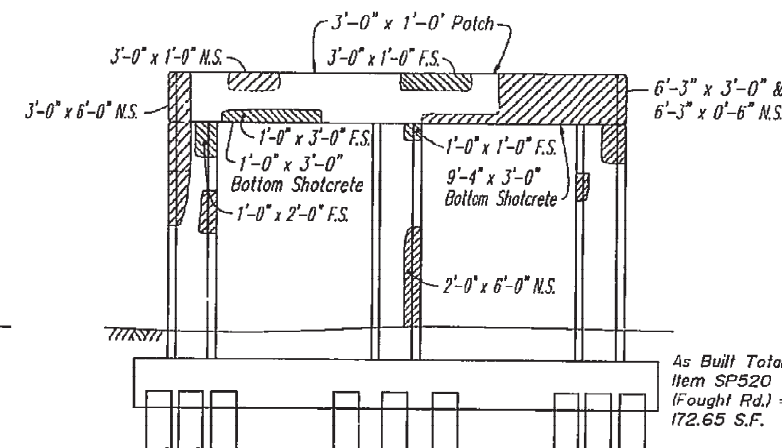
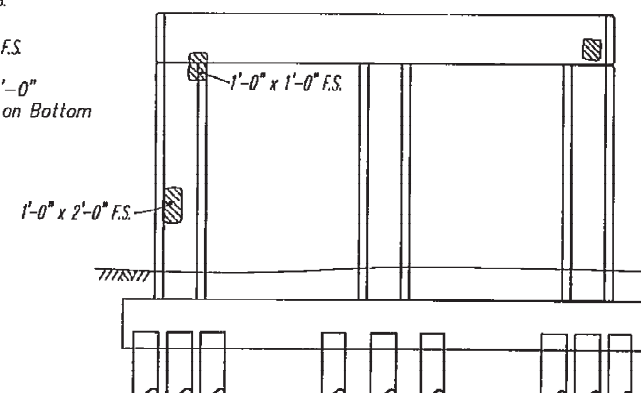
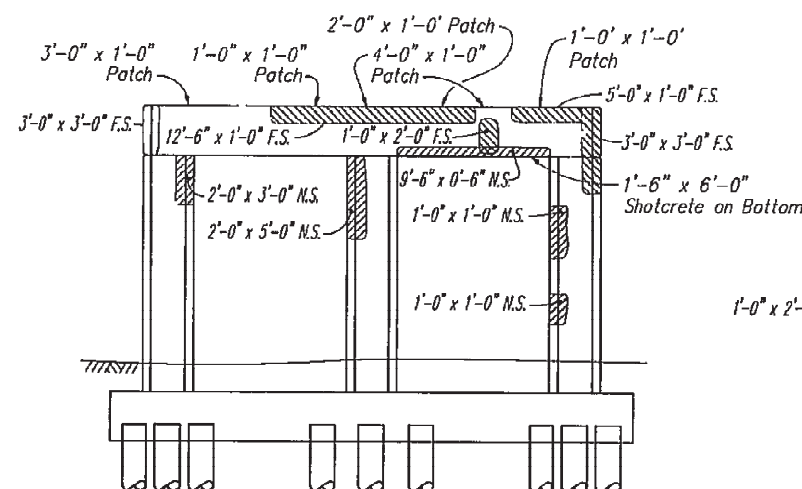


Item 503 Unclassified Excavation, as per plan

As a contingency, 6 Cu. Yds. of unclassified excavation has been included in the estimated quantities for the exposing and subsequently backfilling portions of existing pier columns, where concrete shotcreting may extend below grade, as directed by the engineer. All applicable provisions of Item 503 shall apply, except that the method of measurement shall be to the limits shown on the plan. The cost for all labor, equipment, and materials to perform the above work shall be included in the cubic yard price bid for Item 503 Unclassified Excavation, as per plan.



SUMMARY OF REPAIR QUANTITIES						
BRIDGE	PIER NO.	MEASURED QUANTITIES		ESTIMATED QUANTITIES		
		REPAIR UNIT	Item SP519 Patching	Item SP520 Shotcrete	Item SP519 Patching	Item SP520 Shotcrete
State Route 590	1	Sq. Ft.	89	89	98	98
State Route 590	2	Sq. Ft.	19	26	21	29
State Route 590	3	Sq. Ft.	44	81	48	89
Fought Road	1	Sq. Ft.	51	34	56	37
Fought Road	2	Sq. Ft.	0	3	0	3
Fought Road	3	Sq. Ft.	52	49	57	54
Four Mile House Rd.	1	Sq. Ft.	39	9	43	10
Four Mile House Rd.	2	Sq. Ft.	0	6	0	7
Four Mile House Rd.	3	Sq. Ft.	15	11	17	12



NOTES

Tops of Pier Caps are to be repaired by "Patching of Concrete Structures" after removal of Rocker Bearings as required. Payment for Removing and Resetting Rockers is to be included in the price bid for "Resetting Expansion Bearing Devices" - applies to Pier 1 & 3 at all Bridges. Remaining areas of repair are to be made by "Repair by Shotcreting".

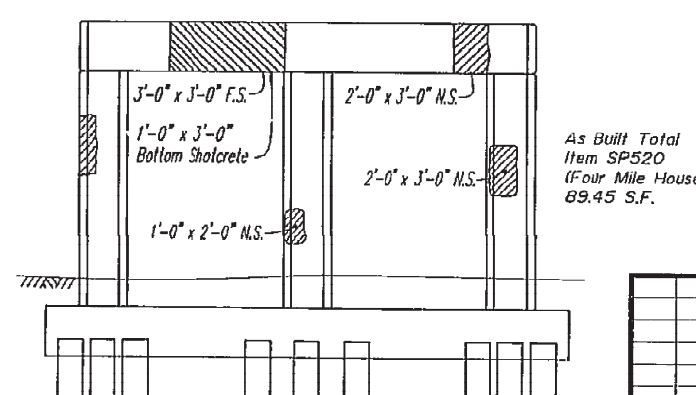
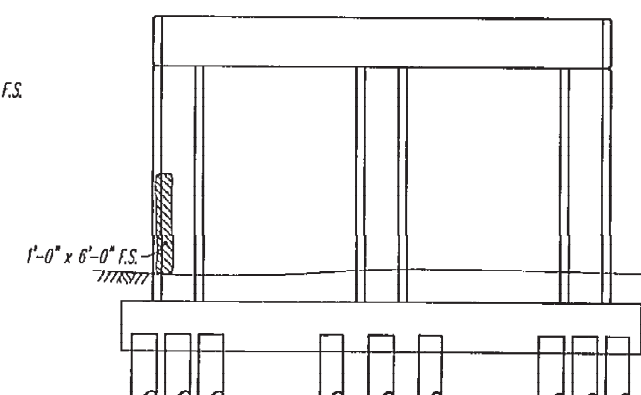
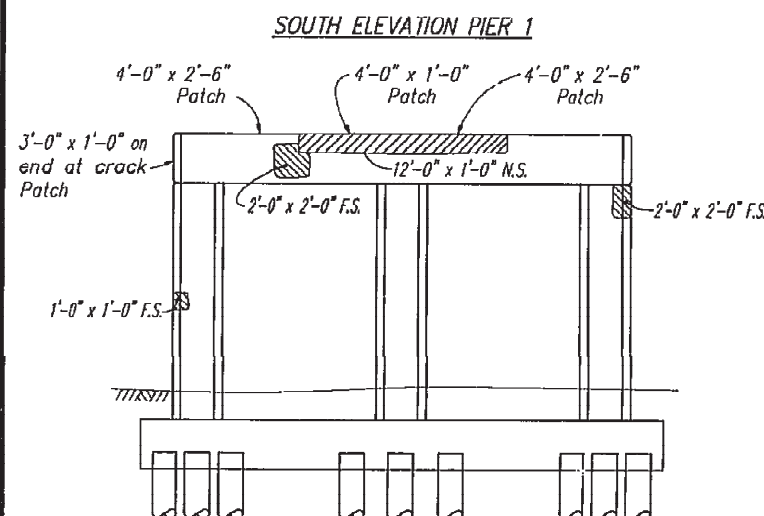
PHYSICAL INVENTORY of measured quantities of deterioration was performed in August, 1987. ESTIMATED QUANTITY has been increased over measured quantity to allow for additional deterioration.

DETERIORATION DESCRIPTION

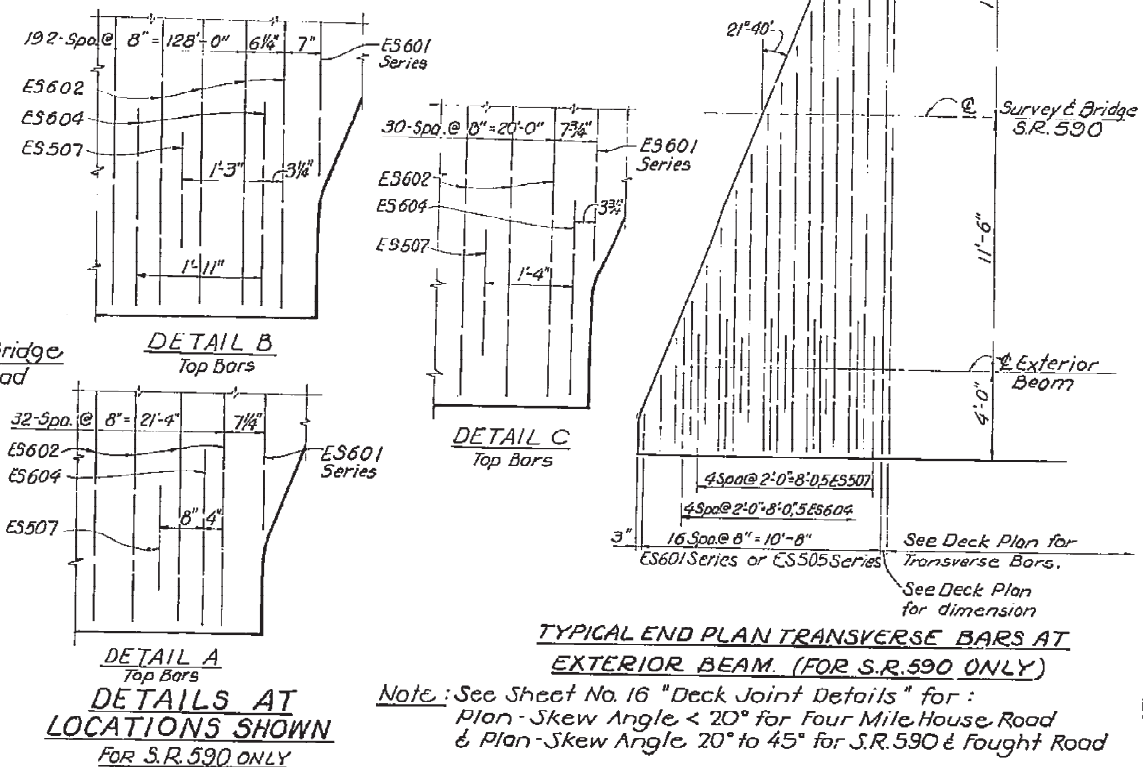
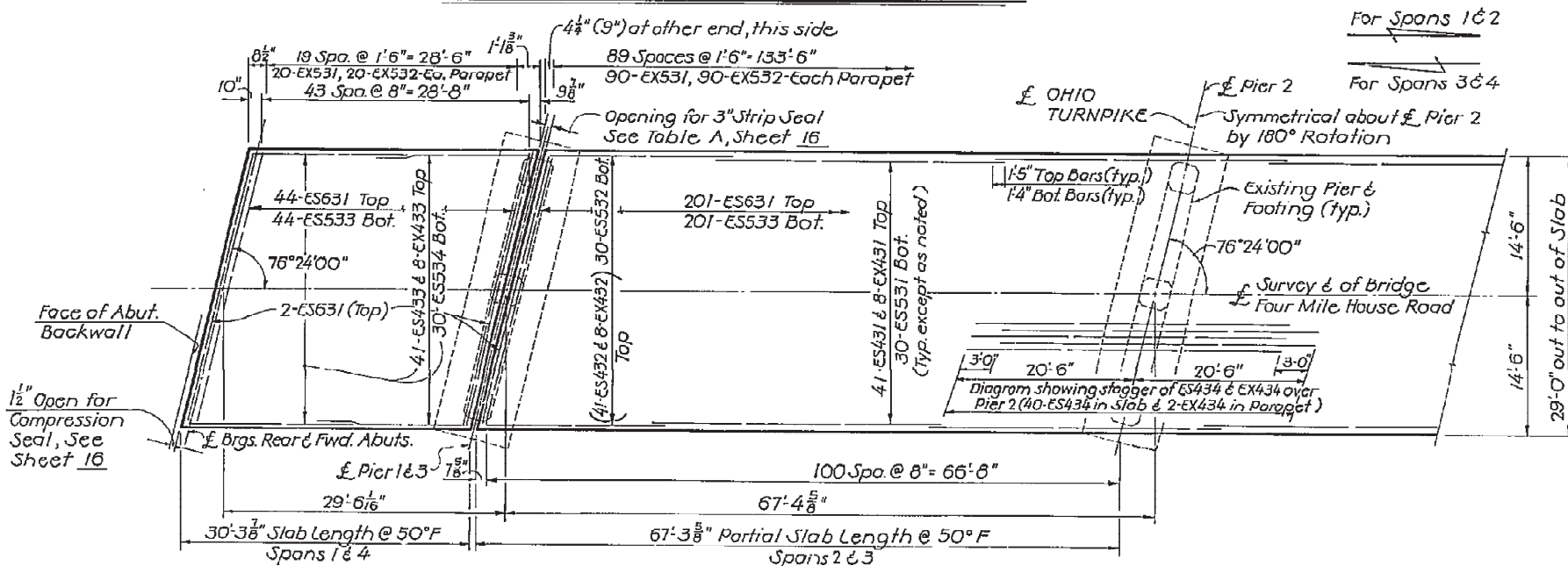
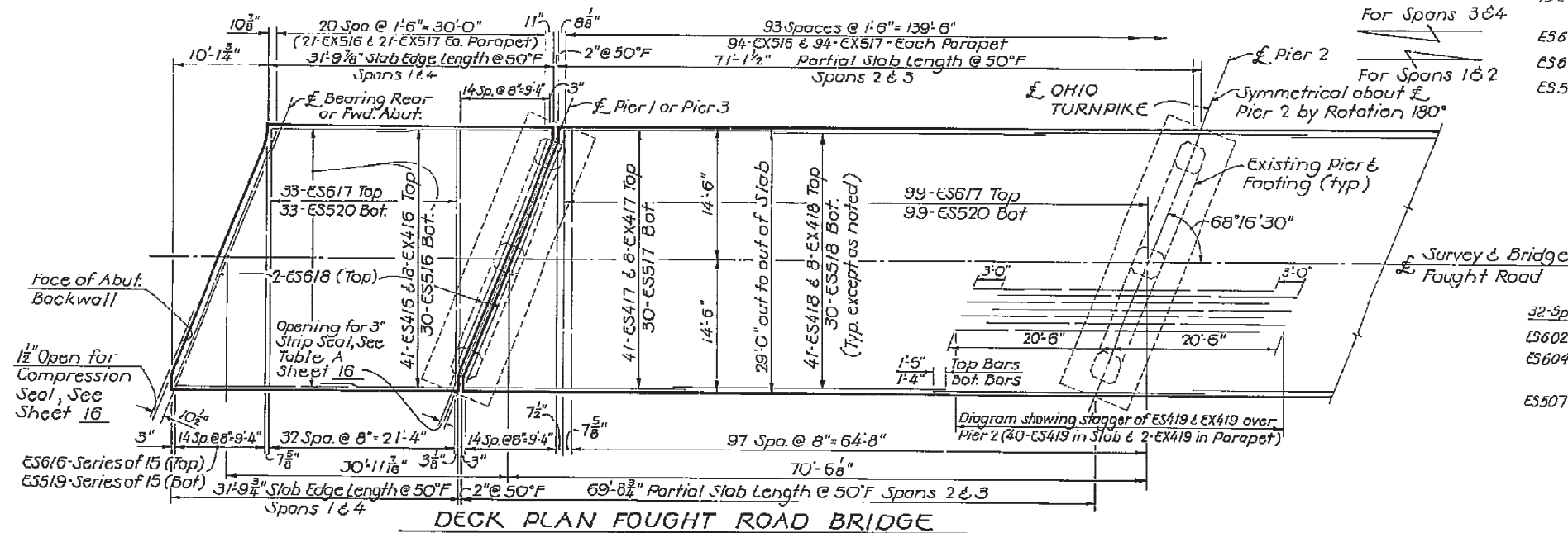
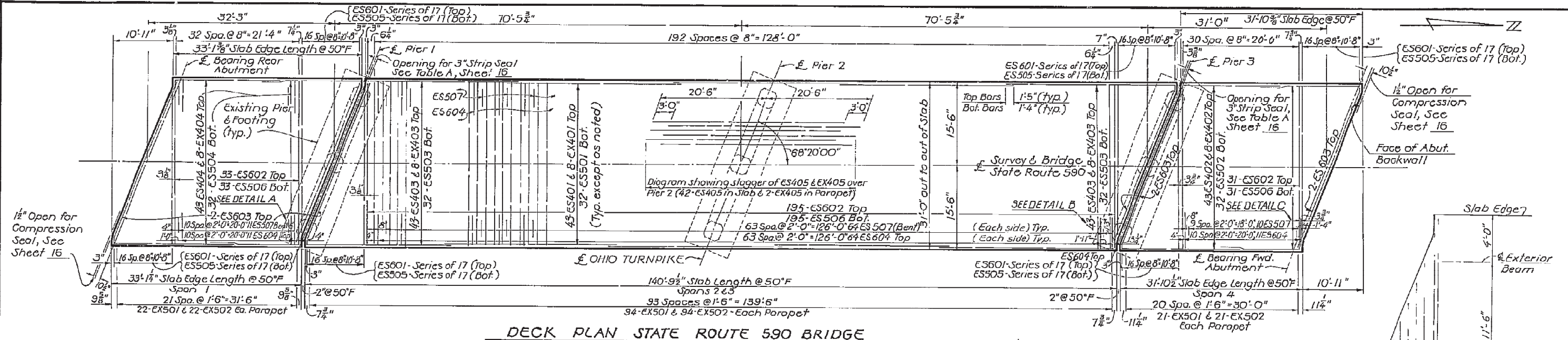
Exact dimensions and locations of patches shall be determined by the Engineer in the field for final pay quantity.

- Indicates approximate area to be patched per Item SP519 - Patching of Concrete Structures, Near Side.
- Indicates approximate area to be patched per Item SP519 - Patching of Concrete Structures, Far Side.
- Indicates approximate area to be repaired per Item SP520 - Repair by Shotcreting, Near Side.
- Indicates approximate area to be repaired per Item SP520 - Repair by Shotcreting, Far Side.

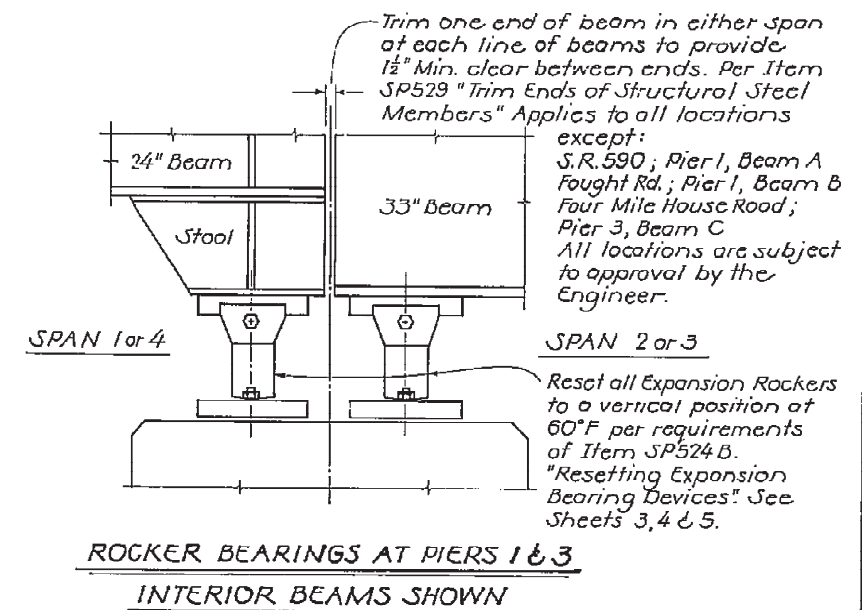
AS BUILT NOTE: All areas were repaired by Shotcreting.



OHIO TURNPIKE COMMISSION				
CONTRACT FTP 43-89-13				
CONTRACT CIP 43-89-14				
REPLACEMENT OF BRIDGE DECK AND PARAPETS				
PIER REPAIRS				
DANSARD - GROHNKE - LONG Limited				
Consulting Engineers Toledo, Ohio				
DRAWN BY	RJM	DATE	5-19-88	COMM. NO. 8719
CHECKED BY	YWD	NOTE FILE	1025	SHEET NO. 9



OHIO TURNPIKE COMMISSION				
CONTRACT FTP 43-89-13 & CONTRACT CIP 43-89-14				
REPLACEMENT OF BRIDGE DECKS & PARAPETS				
SUPERSTRUCTURE DECK PLANS				
DANSARD•GROHNKE•LONG, Limited				
Consulting Engineers Toledo, Ohio				
DRAWN BY: MARSE SHORTER	DATE: 1-18-89	COMM. NO. 8719	SHEET NO. 10	
CHECKED BY: RJM, TD.	NOTE FILE	1025		



ROCKER BEARINGS AT PIERS 1 & 3
INTERIOR BEAMS SHOWN

DECK SECTION
(LOOKING NORTH)

(LOOKING NORTH)

STATE ROUTE 590 Dimensions shown thus (14'-0") for S.R. 590 only.

FOUGHT ROAD

FOUR MILE HOUSE ROAD

SECTION X-X

SECTION Y-Y

SECTION Z-Z

ES602

ES604

ES506

ES507

4'-0"

ES604@2'-0"

ES602@8"

ES506@8"

ES507@2'-0"

ES501, ES503, ES502, ES504 Spacing

14'-0"

9"

4'-0"

ES405 over Pier 2

ES401, ES403, ES402, ES404 spacing

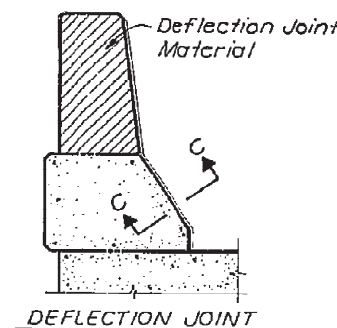
SPACING OF LONGITUDINAL BARS IN CANTILEVER FOR S.R. 590

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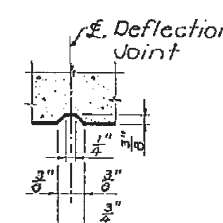
LOCATION OF TRANSVERSE BARS IN CANTILEVER FOR S.R.590

STATE ROUTE 590 - TOP OF PAVEMENT ELEVATION (FINISHED) *																			
Beam	SPAN 1				SPAN 2				SPAN 3				SPAN 4						
	£ Brg. Rear Abut.	1/4 Span	1/2 Span	3/4 Span	£ Rear Brg. Pier 1	£ Fwd. Brg. Pier 1	1/4 Span	1/2 Span	3/4 Span	£ Pier 2	1/4 Span	1/2 Span	3/4 Span	£ Rear Brg. Pier 3	£ Fwd. Brg. Pier 3	1/4 Span	1/2 Span	3/4 Span	£ Brg. Fwd. Abut.
A	634.29	634.34	634.39	634.44	634.47	634.48	634.53	634.55	634.53	634.48	634.39	634.27	634.11	633.92	633.90	633.81	633.70	633.59	633.46
B	634.36	634.42	634.47	634.52	634.55	634.56	634.62	634.64	634.63	634.58	634.49	634.38	634.22	634.03	634.02	633.93	633.82	633.72	633.60
C	634.43	634.49	634.55	634.59	634.63	634.64	634.70	634.73	634.72	634.68	634.60	634.48	634.33	634.15	634.14	634.04	633.95	633.84	633.73
D	634.32	634.38	634.44	634.49	634.53	634.54	634.61	634.64	634.63	634.59	634.52	634.41	634.27	634.09	634.07	633.98	633.89	633.78	633.67
E	634.21	634.28	634.33	634.39	634.43	634.44	634.51	634.54	634.55	634.51	634.44	634.34	634.20	634.02	634.01	633.92	633.83	633.72	633.62
AS BUILT = Add 0.24' to all elevations																			
FOUGHT ROAD - TOP OF PAVEMENT ELEVATION (FINISHED) *																			
Beam	SPAN 1				SPAN 2				SPAN 3				SPAN 4						
	£ Brg. Rear Abut.	1/4 Span	1/2 Span	3/4 Span	£ Rear Brg. Pier 1	£ Fwd. Brg. Pier 1	1/4 Span	1/2 Span	3/4 Span	£ Pier 2	1/4 Span	1/2 Span	3/4 Span	£ Rear Brg. Pier 3	£ Fwd. Brg. Pier 3	1/4 Span	1/2 Span	3/4 Span	£ Brg. Fwd. Abut.
A	632.11	632.21	632.30	632.39	632.46	632.48	632.62	632.71	632.77	632.78	632.75	632.67	632.55	632.36	632.37	632.29	632.19	632.09	631.98
B	632.17	632.27	632.37	632.45	632.53	632.54	632.69	632.79	632.85	632.87	632.84	632.77	632.66	632.50	632.49	632.40	632.31	632.21	632.10
C	632.23	632.33	632.43	632.52	632.60	632.61	632.76	632.87	632.94	632.96	632.94	632.87	632.76	632.61	632.60	632.52	632.43	632.33	632.23
D	632.10	632.21	632.31	632.40	632.49	632.50	632.66	632.77	632.84	632.87	632.85	632.79	632.69	632.54	632.53	632.45	632.37	632.27	632.17
E	631.98	632.09	632.19	632.29	632.37	632.38	632.55	632.67	632.75	632.78	632.77	632.71	632.62	632.48	632.46	632.39	632.30	632.21	632.11
FOUR MILE HOUSE ROAD - TOP OF PAVEMENT ELEVATION (FINISHED) *																			
Beam	SPAN 1				SPAN 2				SPAN 3				SPAN 4						
	£ Brg. Rear Abut.	1/4 Span	1/2 Span	3/4 Span	£ Rear Brg. Pier 1	£ Fwd. Brg. Pier 1	1/4 Span	1/2 Span	3/4 Span	£ Pier 2	1/4 Span	1/2 Span	3/4 Span	£ Rear Brg. Pier 3	£ Fwd. Brg. Pier 3	1/4 Span	1/2 Span	3/4 Span	£ Brg. Fwd. Abut.
A	622.68	622.77	622.86	622.94	623.01	623.02	623.15	623.24	623.30	623.31	623.28	623.22	623.11	622.96	622.95	622.88	622.79	622.70	622.60
B	622.75	622.84	622.93	623.01	623.08	623.09	623.23	623.33	623.38	623.40	623.38	623.31	623.21	623.07	623.06	622.98	622.90	622.81	622.71
C	622.82	622.92	623.01	623.09	623.16	623.17	623.31	623.41	623.47	623.49	623.47	623.41	623.31	623.17	623.16	623.09	623.01	622.92	622.82
D	622.71	622.81	622.90	622.98	623.06	623.07	623.21	623.31	623.38	623.40	623.38	623.33	623.23	623.09	623.08	623.01	622.93	622.84	622.75
E	622.60	622.70	622.79	622.88	622.95	622.96	623.11	623.22	623.28	623.31	623.30	623.24	623.15	623.02	623.01	622.94	622.86	622.77	622.68

* The elevations shown are finished pavement elevations. Before concrete is placed, proper allowance shall be made for the dead load deflections caused by the weight of the concrete.



DEFLECTION JOINT



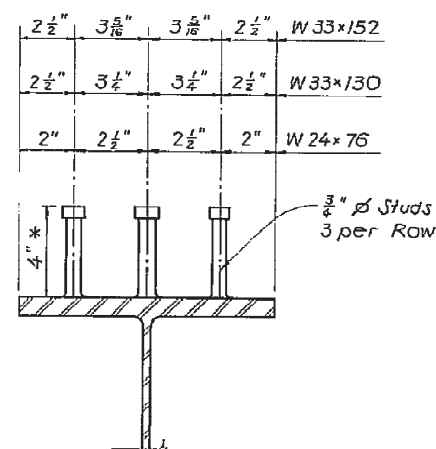
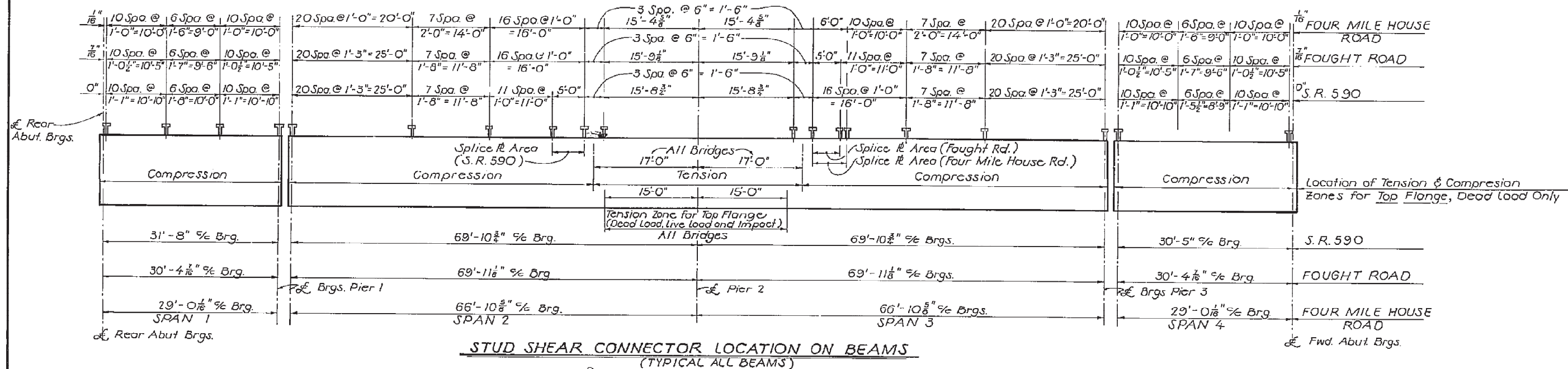
SECTION C-C
PARAPET DEFLECTION
JOINT DETAIL

STATE ROUTE 590 BRIDGE DEFLECTION SUMMARY (INCHES) DUE TO CONCRETE DECK AND PARAPETS												
	SPAN 1			SPAN 2			SPAN 3			SPAN 4		
	$\frac{1}{4}$	MID	$\frac{3}{4}$	$\frac{1}{4}$	MID	$\frac{3}{4}$	$\frac{1}{4}$	MID	$\frac{3}{4}$	$\frac{1}{4}$	MID	$\frac{3}{4}$
Interior	$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{8}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{9}{16}$	$\frac{1}{2}$	$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{8}$
Exterior	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{5}{16}$	$\frac{5}{16}$	$\frac{5}{8}$	$\frac{1}{2}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$

FOUGHT ROAD BRIDGE DEFLECTION SUMMARY (INCHES) DUE TO CONCRETE DECK AND PARAPETS												
	SPAN 1			SPAN 2			SPAN 3			SPAN 4		
	$\frac{1}{4}$	MID	$\frac{3}{4}$	$\frac{1}{4}$	MID	$\frac{3}{4}$	$\frac{1}{4}$	MID	$\frac{3}{4}$	$\frac{1}{4}$	MID	$\frac{3}{4}$
Interior	$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{8}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{3}{16}$	$\frac{1}{2}$	$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{8}$
Exterior	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{7}{16}$	$\frac{9}{16}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{9}{16}$	$\frac{7}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$

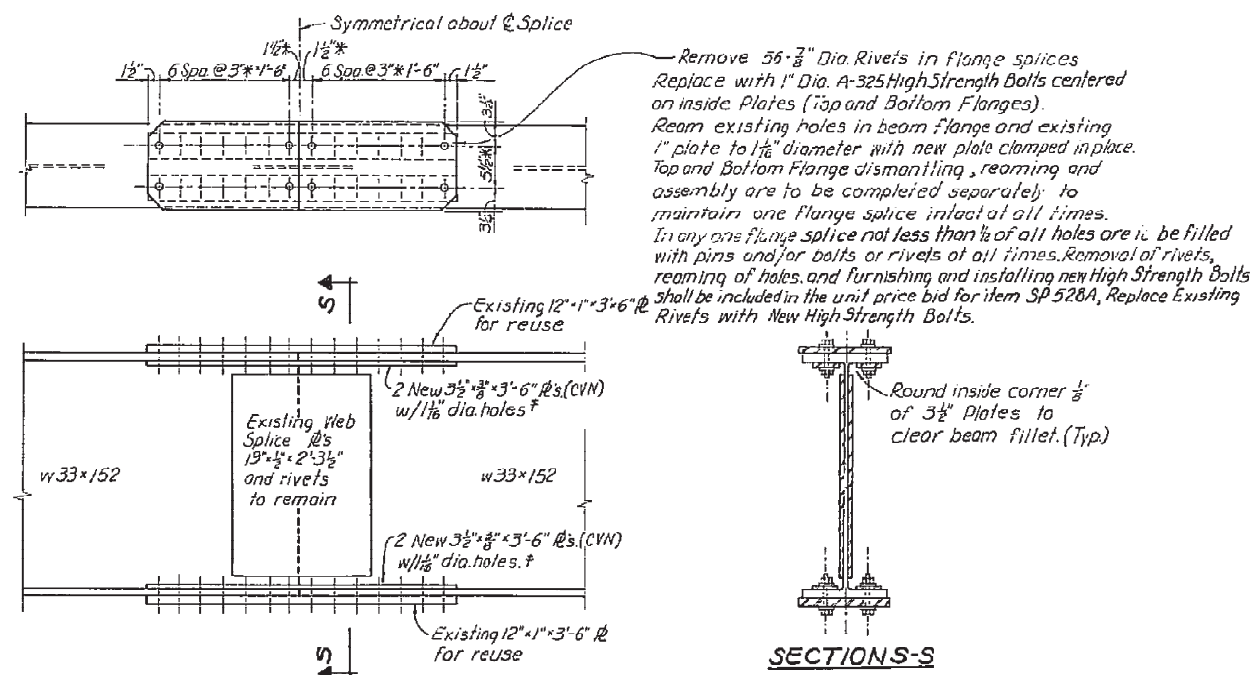
FOUR MILE HOUSE ROAD BRIDGE DEFLECTION SUMMARY (INCHES) DUE TO CONCRETE DECK AND PARAPETS												
	SPAN 1			SPAN 2			SPAN 3			SPAN 4		
	$\frac{1}{4}$	MID	$\frac{3}{4}$	$\frac{1}{4}$	MID	$\frac{3}{4}$	$\frac{1}{2}$	MID	$\frac{3}{4}$	$\frac{1}{4}$	MID	$\frac{3}{4}$
Interior	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{1}{16}$
Exterior	0	$\frac{1}{10}$	0	$\frac{3}{8}$	$\frac{7}{10}$	$\frac{3}{16}$	$\frac{3}{16}$	$\frac{7}{16}$	$\frac{3}{8}$	0	$\frac{1}{10}$	0

					OHIO TURNPIKE COMMISSION
					CONTRACT FTP 43-89-13 & CONTRACT CIP 43-89-14 REPLACEMENT OF BRIDGE DECKS & PARAPETS
					SUPERSTRUCTURE DETAILS DECK ELEVATIONS & DEFLECTIONS
					DANSARD•GROHNKE•LONG, Limited Consulting Engineers Toledo, Ohio
					DRAWN BY: MORSE & SHOOKER DATE COMM. NO. 8719 SHEET 1
					CHECKED BY: R.J.M., T.D. 1-16-89 NOTE FILE 1025 II



* Bridge Location Stud Length

FOUGHT RD.	6"
------------	----



FIELD SPICE REPAIR PLATES:

Areas where new plates are installed shall have all existing paint removed by blast cleaning in accordance with 51406 just prior to installing the plates. Plate installation shall occur after complete removal of the existing deck and before reinforcing steel and forms are placed for the new deck. Payment for all labor, material, and equipment necessary to sand blast existing steel, and furnish and install new splice plates shall be included in item 513, Structural Steel (AISC Certification not Required), As per Plan.

Where a plate is designated (CVN) the material shall meet specified minimum notch toughness requirements as specified in 711.01 of the State of Ohio Department of Transportation's Construction and Material Specifications.

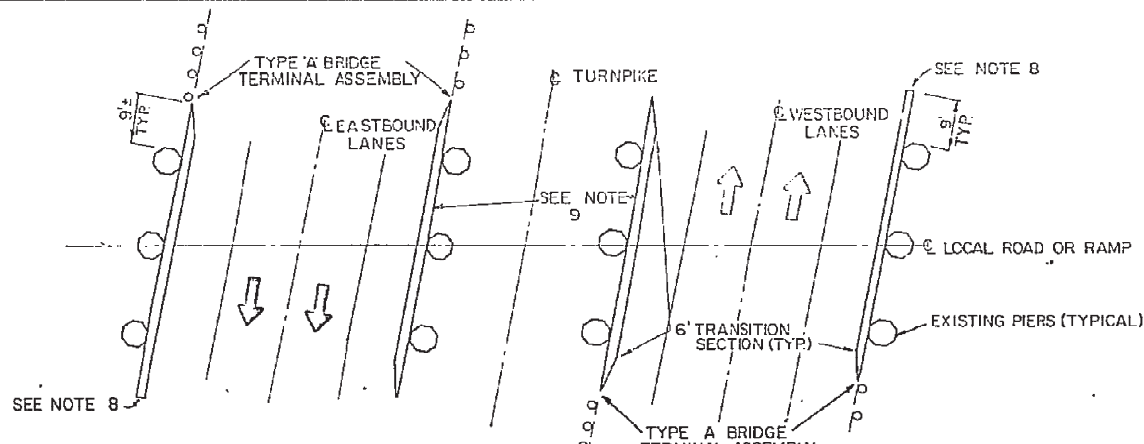
* Field verify.

* Shop drilled or punched holes in the new 3 1/2" x 3/8" x 3'-6" Plates shall be 3/16" diameter. Holes shall be reamed to 1 1/8" diameter after the new plate has been adequately clamped in place.

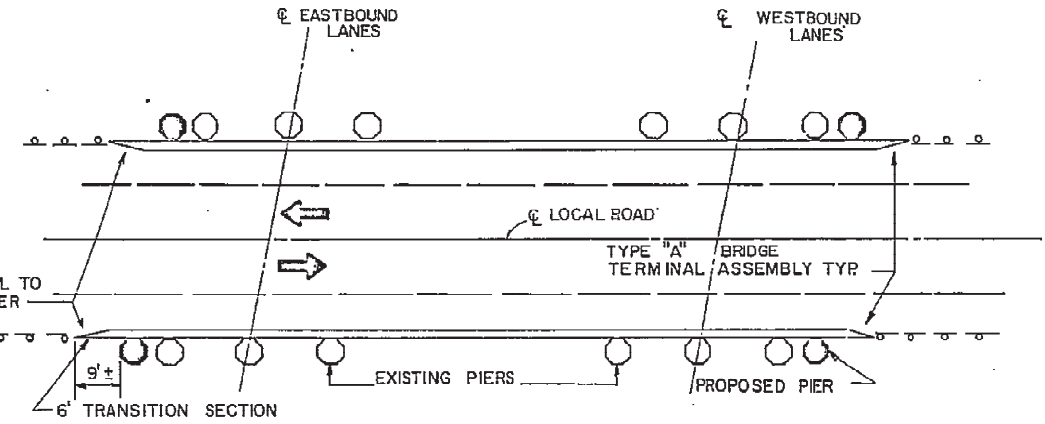
OHIO TURNPIKE COMMISSION			
CONTRACT FTP 43-89-13 & CONTRACT CIP 43-89-14			
REPLACEMENT OF BRIDGE DECKS & PARAPETS			
SUPERSTRUCTURE SHEAR CONNECTORS AND SPICE REPAIR DETAILS			
DANSARD-GROHNKE-LONG, Limited			
Consulting Engineers Toledo, Ohio			
DRAWN BY: MORSE J. JONSEN	DATE: 1-18-89	COMM. NO. 6719	SHEET NO. 12
CHECKED BY: R.J.M.		NOTE FILE 1025	

CONCRETE BARRIER - GENERAL NOTES

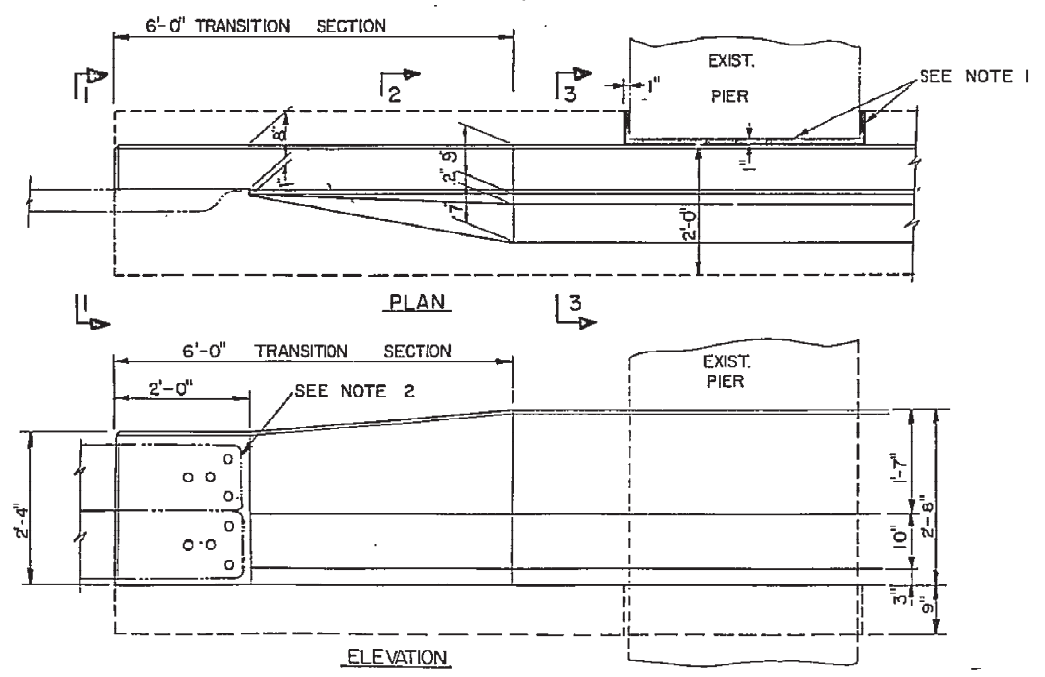
1. 1" PREFORMED EXPANSION JOINT MATERIAL IS TO BE PLACED BETWEEN ALL SURFACES WHERE THE NEW CONCRETE BARRIER WILL BUTT AGAINST THE EXISTING CONCRETE BRIDGE PIERS (TYPICAL) ALL SURFACES OF BOTH THE CONCRETE BARRIER AND BARRIER FOUNDATION).
2. ALL TRANSITION SECTIONS ARE TO HAVE EMBEDDED CONCRETE INSERT TYPE A BRIDGE TERMINAL ASSEMBLIES PLACED AS PER O.D.O.T. STANDARD CONSTRUCTION DRAWING "GR-3"
3. NO. 8 DEFORMED STEEL BARS, 12" LG., SPACED AT 2'-0" O/C IN THE TRANSITION SECTION AND SPACED AT 4'-0" O/C IN THE NORMAL SECTIONS OF THE CONCRETE BARRIER.
4. UNSEALED CONTRACTION JOINTS SPACED AT 20' O/C (MAX.) SHALL BE CONSTRUCTED THROUGHOUT THE ENTIRE RUN OF CONCRETE BARRIER. CONTRACTION JOINTS MAY BE CONSTRUCTED WITH METAL INSERTS INSIDE THE FORMS, PREFORMED FULL WIDTH JOINT FILLER, A GROOVING TOOL, OR BY SAWING. CONTRACTION JOINT TO BE A MIN. DEPTH OF 1 1/2" AND SHALL BE CONSTRUCTED FOR THE FULL HEIGHT OF THE BARRIER INCLUDING THE BARRIER FOUNDATION.
5. ALL EXCAVATION COSTS SHALL BE INCLUDED UNDER ITEM 622 "TYPE D MODIFIED CONCRETE BARRIER".
6. THERE SHALL BE NO SEPARATE PAYMENT FOR THE CONCRETE FOOTER, THESE COSTS SHALL BE INCLUDED UNDER ITEM 622 "TYPE D MODIFIED CONCRETE BARRIER."
7. WHEN IT IS NECESSARY TO REMOVE EXISTING PAVED SHOULDER IN ORDER TO CONSTRUCT THE CONCRETE BARRIER, THE SHOULDER SHALL BE REPLACED USING ITEM 402 (6" MIN. DEPTH) OVER SP 304.
8. OMIT TRANSITION SECTION ON TRAILING END OF OUTSIDE SHOULDER, UNLESS EXISTING GUARDRAIL EXTENDS BEYOND THE PIERS.
9. CONCRETE BARRIER TO BE PROVIDED IN MEDIAN ONLY IF THE STRUCTURE HAS DOUBLE MEDIAN PIERS. TRANSITION SECTION REQUIRED AT BOTH APPROACH AND TRAILING END.



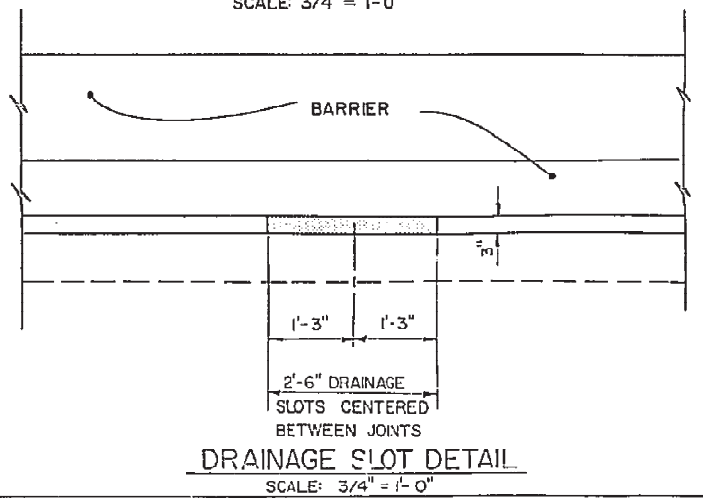
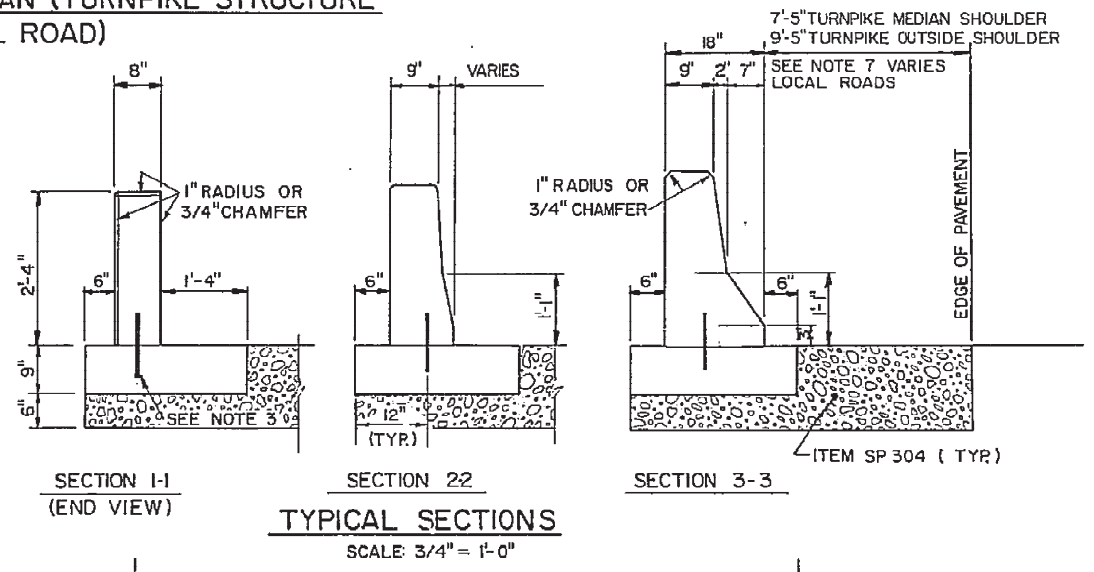
CONCRETE BARRIER PLAN (LOCAL ROAD OR RAMP STRUCTURE OVER TURNPIKE)



CONCRETE BARRIER PLAN (TURNPIKE STRUCTURE OVER LOCAL ROAD)



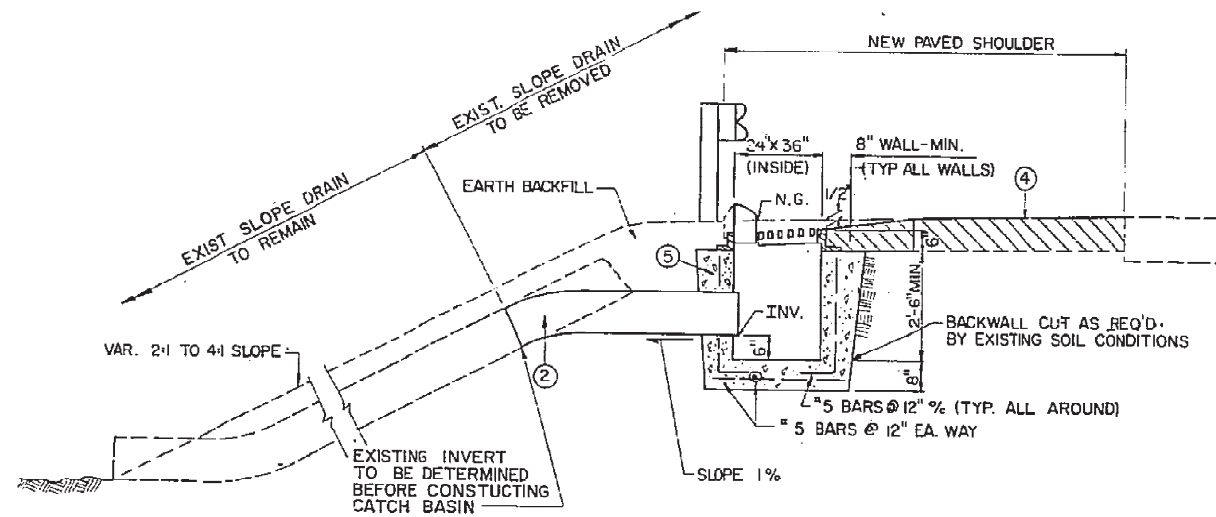
TYPICAL BARRIER END SECTION
SCALE: 3/4" = 1'-0"



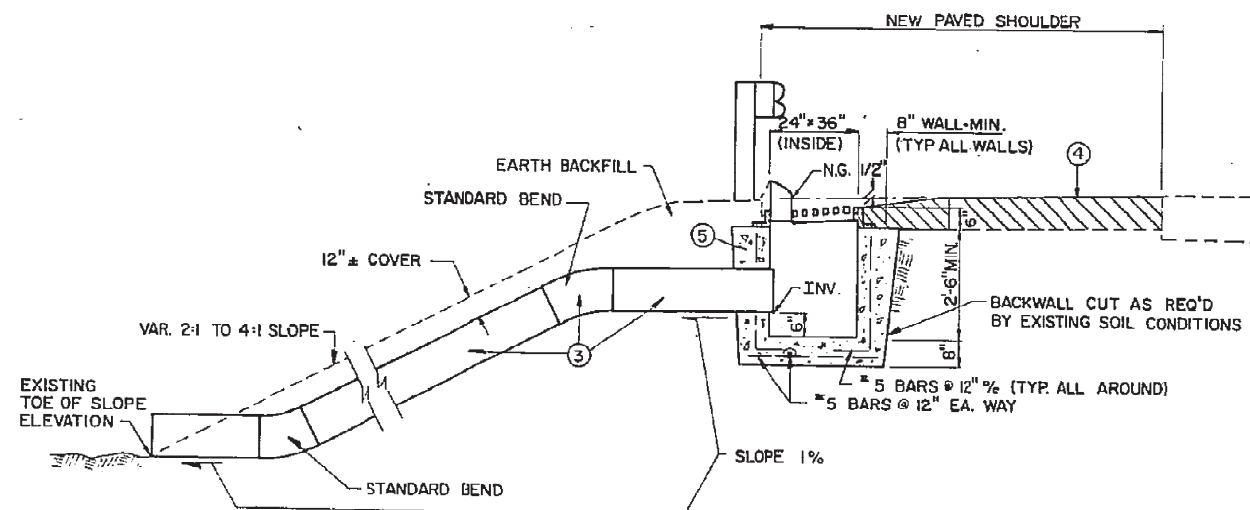
REF. NO.	622	606	606	606	202	SP 304	402
	TYPE D, MODIFIED CONCRETE BARRIER	GUARDRAIL, TYPE 5	BRIDGE TERMINAL ASSEMBLY TYPE A	TYPE A ANCHOR ASSEMBLY	GUARDRAIL REMOVED	AGGREGATE BASE	ASPHALT CONCRETE
1B							
2B							
1GR							
2GR							
3GR							
4GR							
TOT.							

See Sheets 3, 4 & 5 for Quantities

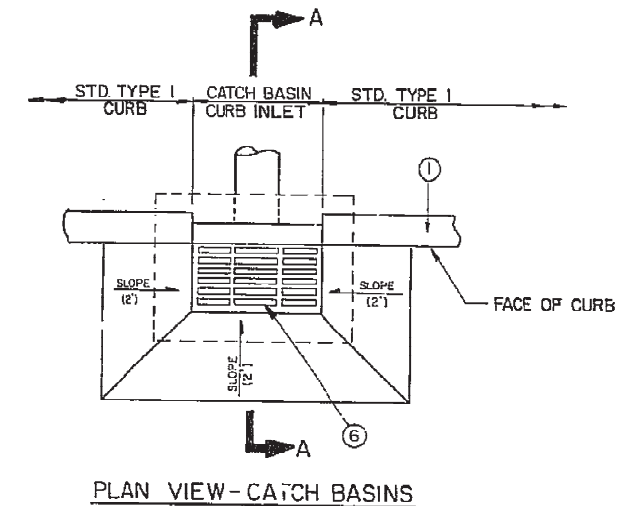
2	ADDED PLAN FOR TURNPIKE PIERS MISC. REVISIONS	JDL	7-16-87
1	ADDED 304 SHLDR. & NOTE 6	DFC	11-28-84
REV	DESCRIPTION	BY	DATE
OHIO TURNPIKE COMMISSION			
CONCRETE BARRIER PLAN & DETAILS			
DATE: MARCH 1984		SCALE: AS NOTED	
ETP 43-88-13		SHEET 13	



SECTION A-A
EXISTING SLOPE DRAIN WITH NEW CATCH BASIN



SECTION A-A
NEW SLOPE DRAIN & CATCH BASIN



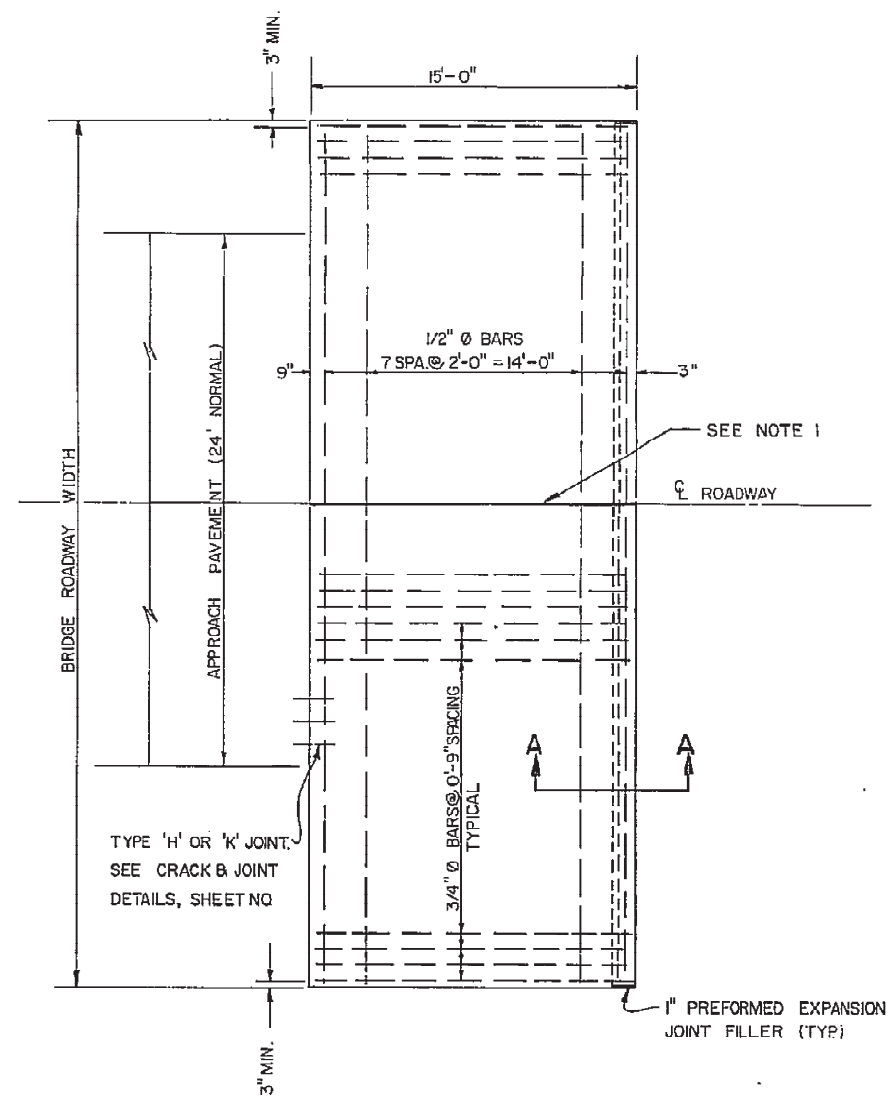
LEGEND

- ① SP 609 TYPE I ASPHALT CONCRETE CURB (SEE STANDARD DRWG. BP-5)
- ② 603 12" TYPE F CONDUIT, 707.01 (EXCEPT GALVANIZED) OR 707.05 TYPE C WITHOUT PAVED INVERT. AS REQUIRED TO FORM TRANSITION BETWEEN NEW CATCH BASIN AND EXISTING C.M.P. THAT IS TO REMAIN.
- ③ 603 12" TYPE F CONDUIT, 707.01 (EXCEPT GALVANIZED) OR 707.05 TYPE C WITHOUT PAVED INVERT. SIZE VARIES, SEE PLAN SHEETS.
- ④ NEW SHOULDER SURFACE TREATMENT
- ⑤ REINFORCED CONCRETE CATCH BASIN - CLASS "C" CONCRETE USING 499.03 WITH DEFORMED BILLET STEEL REBARS, USING 509.02.
- ⑥ HEAVY DUTY, GRAY IRON CASTING USING 711.12 CATCH BASIN CURB INLET - MODEL NO. R-3246 AS MANUFACTURED BY NEENAH FOUNDRY CO., OR EAST JORDON IRON WORKS MODEL NO. 7030.

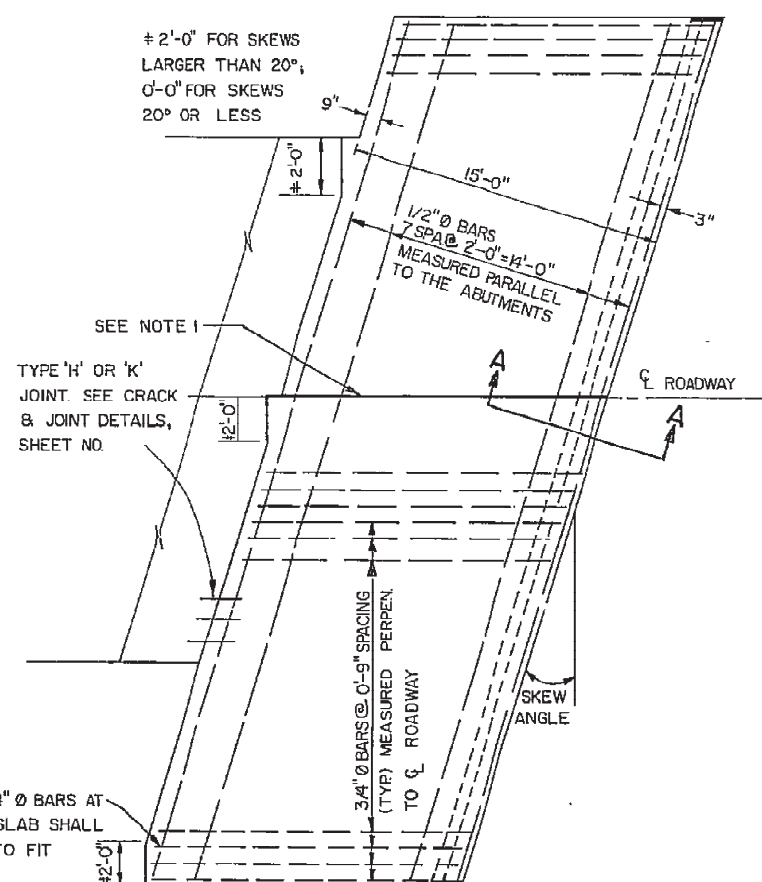
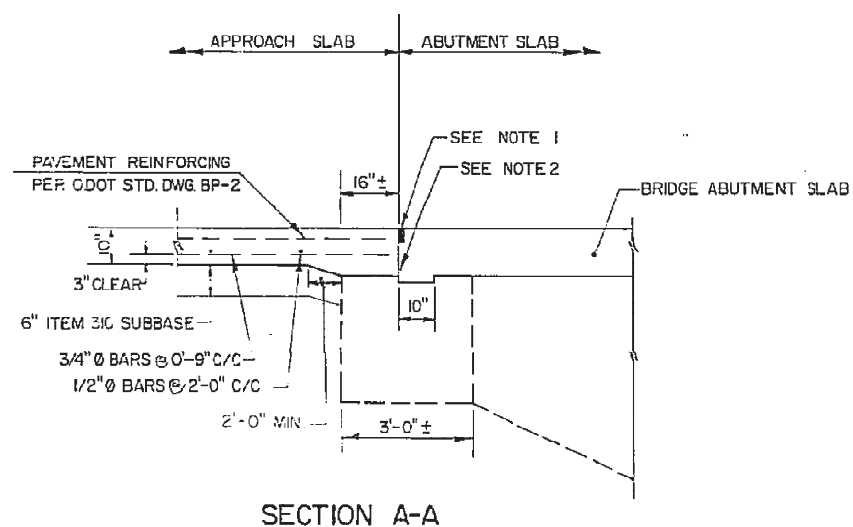
NOTES:

1. CATCH BASINS AND SLOPE DRAINS SHALL BE CONSTRUCTED TO THE APPROXIMATE STATIONS AS INDICATED ON THE PLAN, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
2. SLOPE DRAIN COUPLING BANDS SHALL BE 10 1/2" BAR & STRAP CONNECTOR WITH CONTINUOUS CORRUGATION AROUND BAND.
3. PIPE MAY BE TRIMMED FLUSH WITH INSIDE OF BASIN OR EXTEND INTO THE BASIN 1" MAX.
4. N.G. = NORMAL GUTTER ELEVATION
INV. = PIPE INVERT ELEVATION.
5. WHERE CONNECTIONS ARE MADE BETWEEN NEW AND OLD PIPES PROVIDE CONCRETE COLLAR (SEE STANDARD DRWG. MC-4).

I GENERAL		DFC 11-84
NO.	REVISIONS	BY DATE
OHIO TURNPIKE COMMISSION		
CATCH BASIN & SLOPE DRAIN DETAILS		
DATE: JANUARY 1984		SCALE: N.T.S.
FYP 43-89-13		SHEET 14
CIP 43-89-14		



PLAN



APPROACH SLAB FOR SKEWED BRIDGE

NOTE 1: GROOVE AND SEAL AS PER O.D.O.T. STD. CONST. DWG. BP-3.

NOTE 2: TYPE A WATERPROOFING SHALL NOT EXTEND ABOVE THE BOTTOM OF THE GROOVE INTO WHICH THE JOINT SEALER IS TO BE PLACED. IT SHALL BE APPLIED TO THE ENTIRE AREA OF THE ABUTMENT OR SUPERSTRUCTURE WHICH COMES INTO CONTACT WITH THE APPROACH SLAB.

NOTE 3: REPAIR OF BROKEN APPROACH SLAB SEAT SHALL BE CONSTRUCTED BY THE CONTRACTOR AS PER DETAIL OR AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE ON THE BASIS OF "DIRECT COSTS" PLUS 15% FOR OVERHEAD AND PROFIT. "DIRECT COSTS" SHALL BE DEFINED UNDER SECTION G-9.02(5) OF THE GENERAL CONDITIONS.

GENERAL THIS DRAWING PROVIDES DESIGN AND GENERAL CONSTRUCTION DETAILS THE PROJECT PLANS WILL SHOW SKEW, CURBS (IF ANY), ESTIMATED QUANTITY (SQ. YDS.), AND SPECIAL NOTES AND DETAILS, WHERE NECESSARY FOR CONDITIONS OTHER THAN THOSE INDICATED HEREON, THE APPROACH SLAB SHALL BE ADAPTED TO FIT THE ENDS OF THE BRIDGE AND THE APPROACH PAVEMENT.

DESIGN DATA

CONCRETE CLASS S USING SHRINKAGE COMPENSATING CEMENT
REINFORCING STEEL: A.S.T.M. A615, A616 OR A617 - GRADE 60 MIN YIELD STRENGTH 60,000 P.S.I.

PREFORMED EXPANSION JOINT FILLER AND SEALER AT THE CORNERS AND SIDES OF THE APPROACH SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ YARD FOR THE APPROACH SLAB

GROOVE AND JOINT SEAL SHOWN AT THE BRIDGE LIMIT END OF THE APPROACH SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ YARD FOR THE APPROACH SLAB

TYPE A WATERPROOFING SHOWN AT THE ABUTMENT SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

LONGITUDINAL CONSTRUCTION JOINTS REQUIRED FOR STAGE CONSTRUCTION SHALL BE AS PER 51109.

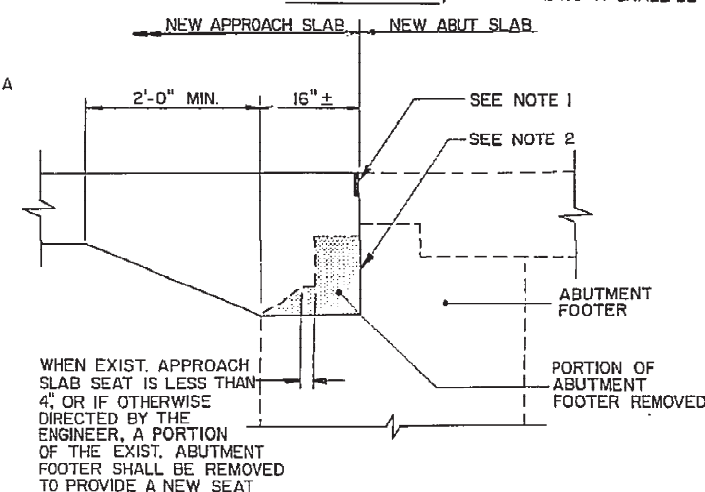
CURBS, BRIDGES WITH SIDEWALKS: FOR BRIDGES CONSTRUCTED WITH RAISED SIDEWALKS, DEFLECTOR PARAPETS OR OTHER TYPES OF CONSTRUCTION WHICH RETAIN ROADWAY SURFACE DRAINAGE, THE APPROACH SLABS SHALL EITHER INCLUDE INTEGRAL CURBS OR BE CONSTRUCTED IN CONJUNCTION WITH BRIDGE CURBS. CURB HEIGHT SHALL BE TRANSITIONED UNIFORMLY BETWEEN BRIDGE CURB HEIGHT AND APPROACH CURB HEIGHT IN LENGTH AS FOLLOWS: WHERE WINGWALL EXTENDS BEYOND END OF APPROACH SLAB, USE A MINIMUM LENGTH OF 10 FT. BEYOND END OF WINGWALL, WHERE THE APPROACH SLAB EXTENDS BEYOND THE END OF WINGWALL, TRANSITION IN THIS LENGTH. HOWEVER, THE TRANSITION LENGTH SHALL NOT BE LESS THAN 10 FT AND THE TRANSITION SHALL EXTEND BEYOND THE END OF THE APPROACH SLAB IF NECESSARY CURB PLACEMENT SHALL BE IN ACCORDANCE WITH O.D.T. STANDARD CONSTRUCTION DRAWING BR-1

APPROACH SLAB WIDTH APPROACH SLAB FOR 38'-6" BRIDGE WIDTH SHALL BE 39'-0" WIDE WHEN CURBS ARE NOT INCLUDED; 39'-3" WHEN CURB IS INCLUDED ON ONE SIDE ONLY; 39'-6" WHEN CURBS ARE INCLUDED ON BOTH SIDES.

CROWN SHALL CONFORM TO THAT OF THE APPROACH PAVEMENT AND BRIDGE DECK. IF THE RATE OF CROWN OF THE BRIDGE DECK DIFFERS FROM THAT OF THE APPROACH PAVEMENT, A SMOOTH TRANSITION SHALL BE PROVIDED WITHIN THE LIMITS OF THE APPROACH SLAB.

TRANSVERSE JOINT DETAILS AT THE APPROACH PAVEMENT END OF THE APPROACH SLAB SHALL BE EITHER TYPE 'K' OR 'H' AS DETAILED ON THE PLANS. PAYMENT FOR THE TRANSVERSE JOINT SHALL BE AT THE UNIT PRICE BID PER LIN. FT. FOR THE JOINT FURNISHED.

ITEM 310 SUBBASE TYPE I GRADING "A" SHALL BE PROVIDED UNDER ALL APPROACH SLABS.



2	ADDED IMPRESSED JOINT & CHANGED TYPE OF CEMENT	DFC	11/28/84
1	ADDED SEAT REPAIR DETAIL	DFC	10/2/84
Nº	REVISION	BY	DATE

OHIO TURNPIKE COMMISSION

REINFORCED CONCRETE
APPROACH SLABS

DATE: OCTOBER 1983	SCALE: N.T.S.
FTP 43-89-13	SHEET 15
ETP 43-89-14	

GENERAL NOTES

INSTALLATION OF SEAL: DURING INSTALLATION OF SUPPORT/ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE JOINT SEAL, THE SEATING OF BEAMS ON BEARINGS SHALL BE CAREFULLY OBSERVED TO ASSURE THAT POSITIVE BEARING IS MAINTAINED. PROPER VERTICAL FIT OF THE SUPPORT/ARMOR ON THE BEAMS SHALL BE ACHIEVED BY POSITIONING OF THE SUPPORT ANGLES RATHER THAN BY CLAMPING FORCE.

ELASTOMERIC COMPRESSION SEALS SHALL BE USED AT FIXED JOINTS ONLY, AND AT SKEWS LESS THAN 45°.

STUD ANCHORS SHALL BE LOW CARBON STEEL ASTM A-108.

A.1 WELDING SHALL CONFORM WITH A.A.S. AND AASHTO SPECIFICATIONS FOR WELDED HIGHWAY AND RAILROAD BRIDGES.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.

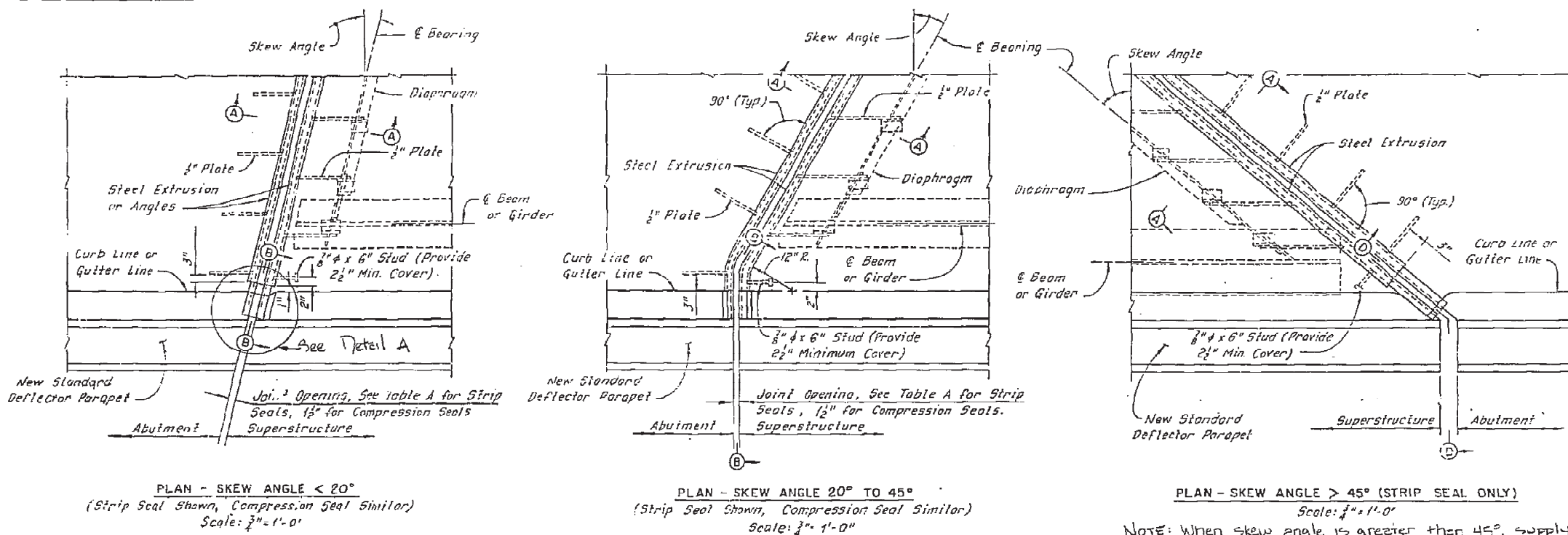
ELASTOMERIC COMPRESSION SEAL SHALL BE WABO WJ-200, D.S. BROWN C-V 2000 OR APPROVED EQUAL.

CONTINUOUS STRIP SEAL SHALL BE AS MANUFACTURED BY WABO-ACME, D.S. BROWN, ~~WABO-ACME~~ OR APPROVED EQUAL, AND SHALL BE THE SIZE AS SPECIFIED

DETAILS OF DIAPHRAGMS SHOWN. DETAILS AT BEAMS OR GIRDERS SIMILAR.

TABLE A

STRIP SEAL SIZE	STRIP SEAL JOINT OPENING INSTALLATION CHART						
	TEMPERATURE °F						
	30	40	50	60	70	80	90
3"	2-1/2"	2-1/8"	2"	1-7/8"	1-3/4"	1-5/8"	1-1/2"
4"	2 5/8"	2 1/2"	2 1/2"	2 3/8"	2 1/4"	2 1/8"	2"
5"	2 7/8"	2 3/4"	2 3/4"	2 5/8"	2 5/8"	2 1/2"	2 3/8"



2" & 4" Holes @ 12" (TYP.)
(Any voids remaining after vibration of concrete shall be filled with SP 956 epoxy mortar.)

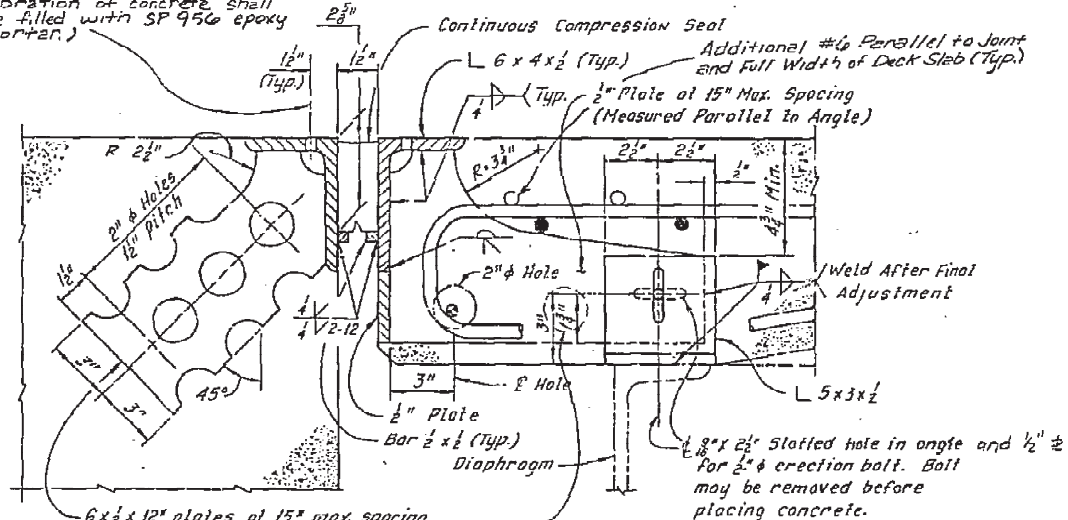
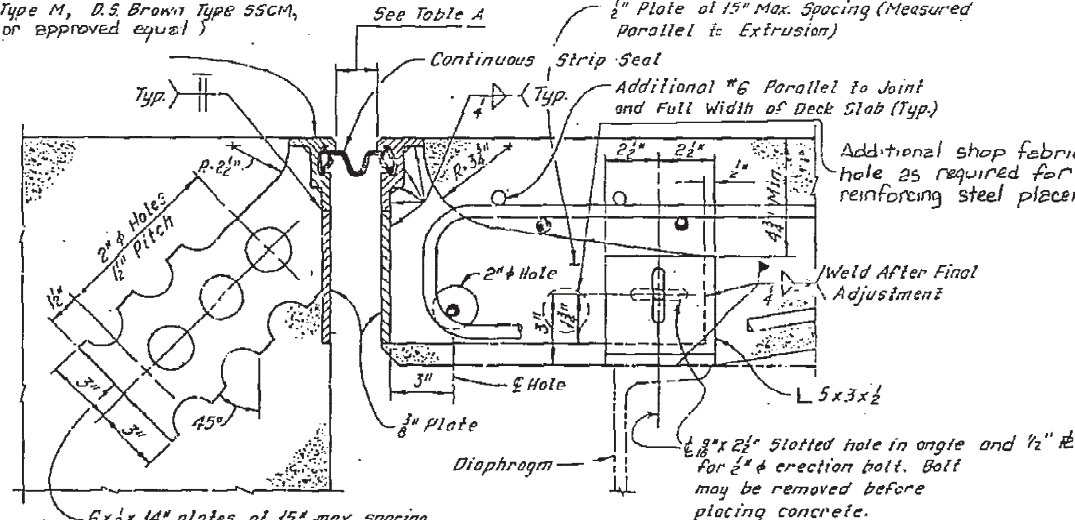


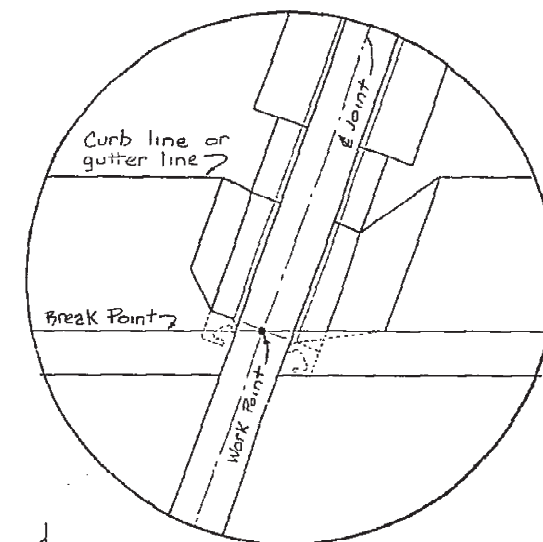
TABLE B

	SKEW ANGLE
X	< 10°
d	10° - 45°
	3/4" MIN.
X	60° - 90°
	8 7/8"

Steel Extrusion (Wabo-Acme Type M, D.S. Brown Type SSCM, or approved equal)

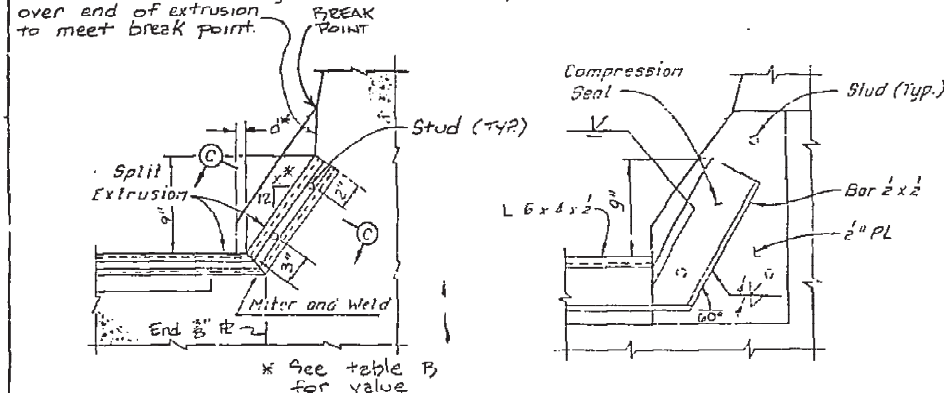


NOTE: For joint details in sidewalk see sheet #

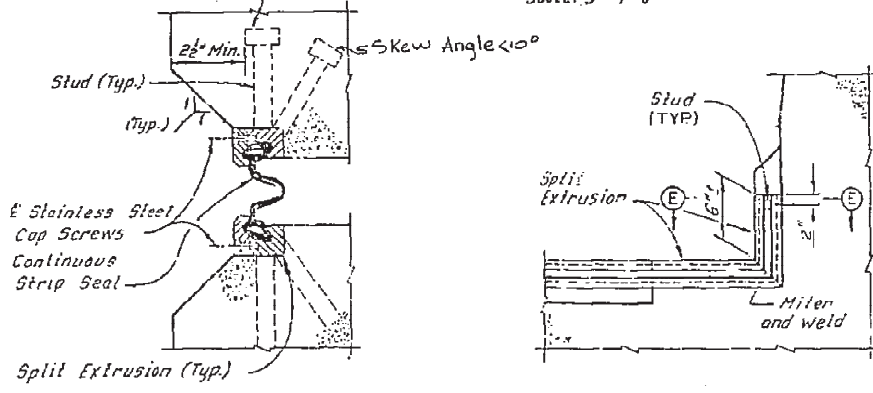


Detail A
Scale 1/4" = 1'

SECTION A-A (COMPRESSION SEAL)
Scale: 3/4" = 1'-0"



SECTION A-A (STRIP SEAL)
Scale: 3/4" = 1'-0"



SECTION D-D
Scale: 1/2" = 1'-0"

SECTION E-E
No Scale

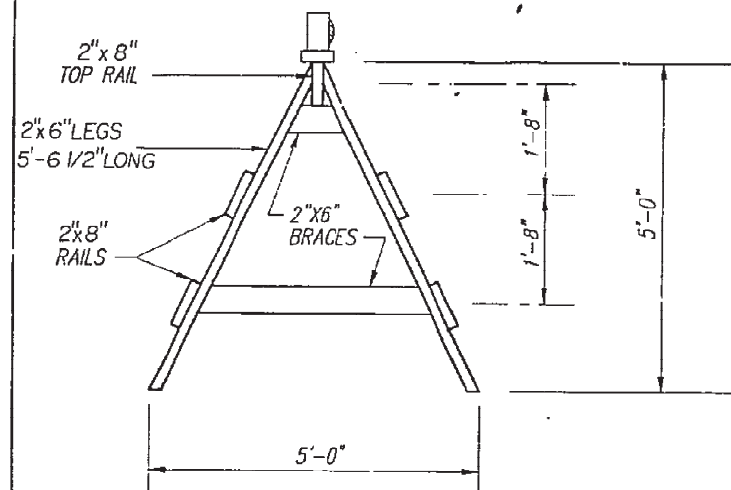
REVISED 10-87

OHIO TURNPIKE COMMISSION

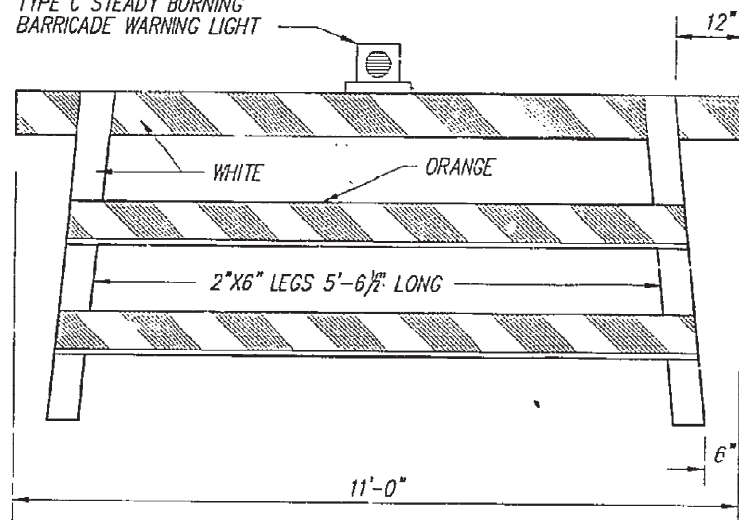
DECK JOINT DETAILS

DATE: JANUARY 1985 SCALE: AS NOTED
SHEET 16

MOVABLE GATE



TYPE C STEADY BURNING BARRICADE WARNING LIGHT



GATES SHALL BE WELL SPIKED USING SPIKES LONG ENOUGH TO CLINCH.

-NOTES-

① BARRICADES: BARRICADES SHALL BE CONSTRUCTED ACCORDING TO DETAILS SHOWN. WHEN THE ROAD IS CLOSED TO TRAFFIC, BARRICADES AND GATES SHALL BE USED TO EFFECTIVELY CLOSE THE ENTIRE ROADWAY INCLUDING THE MEDIAN OF DIVIDED HIGHWAYS. IN URBAN AREAS AND AT LOCATIONS WHERE IT IS IMPRACTICAL TO EXTEND THE BARRICADE TO THE RIGHT-OF-WAY LINE BECAUSE OF A SIDEWALK OR OTHER OBSTRUCTION, THE ENDS OF THE BARRICADE SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO EFFECT THE DESIRED CLOSING OF THE HIGHWAY.

② PAINTING AND REFLECTORIZATION: ALL RAILS OF THE BARRICADES AND GATES SHALL BE REFLECTORIZED WITH ORANGE AND WHITE REFLECTORIZED SHEETING IN 6" WIDE ALTERNATE STRIPES WHICH SLOPE DOWNWARD TOWARD THE CENTER LINE OF THE ROAD AT AN ANGLE OF 45°. ALL THREE RAILS OF THE ROAD CLOSED BARRICADE SHALL BE STRIPED ON THE SIDE FACING TRAFFIC. ALL GATE RAILS SHALL BE STRIPED ON BOTH SIDES. ALL POSTS, BRACES, GATE LEGS, AND ANY UNSTRIPED RAILS SHALL BE PAINTED WHITE.

③ GATES: ONE GATE SHALL BE ERECTED FOR EACH TRAFFIC LANE. GATES SHALL BE CHAINED AND PADLOCKED TO ONE ANOTHER AND TO ADJACENT POSTS OF THE BARRICADES. CHAINS SHALL BE 1/4" STOCK OR LARGER WITH WELDED LINKS.

A HINGED GATE MAY BE USED AND SHALL BE AN APPROVED 12'x4' STEEL FRAME FARM TYPE, OR A TYPE APPROVED BY THE ENGINEER. THE GATE SHALL BE HUNG ON HINGE SCREW HOOKS, OR AS OTHERWISE APPROVED. STRIPING SIMILAR TO THAT USED ON THE MOVABLE GATE SHALL BE ACCOMPLISHED WITH 1"x8" LUMBER OR WITH METAL STRIPS FASTENED TO THE GATE. THE GATE SHALL BE SUPPORTED AT THE CENTER IN AN APPROVED MANNER.

④ TYPE C STEADY BURNING BARRICADE WARNING LIGHTS: EACH GATE SHALL BE EQUIPPED WITH A TYPE C STEADY BURNING BARRICADE WARNING LIGHT, CONSPICUOUSLY VISIBLE AT ALL DISTANCES UP TO 1000' UNDER NORMAL ATMOSPHERIC CONDITIONS. THE LIGHT SHALL BE IN OPERATION AT ALL TIMES BETWEEN SUNSET AND SUNRISE DURING THE PERIOD THE HIGHWAY IS CLOSED.

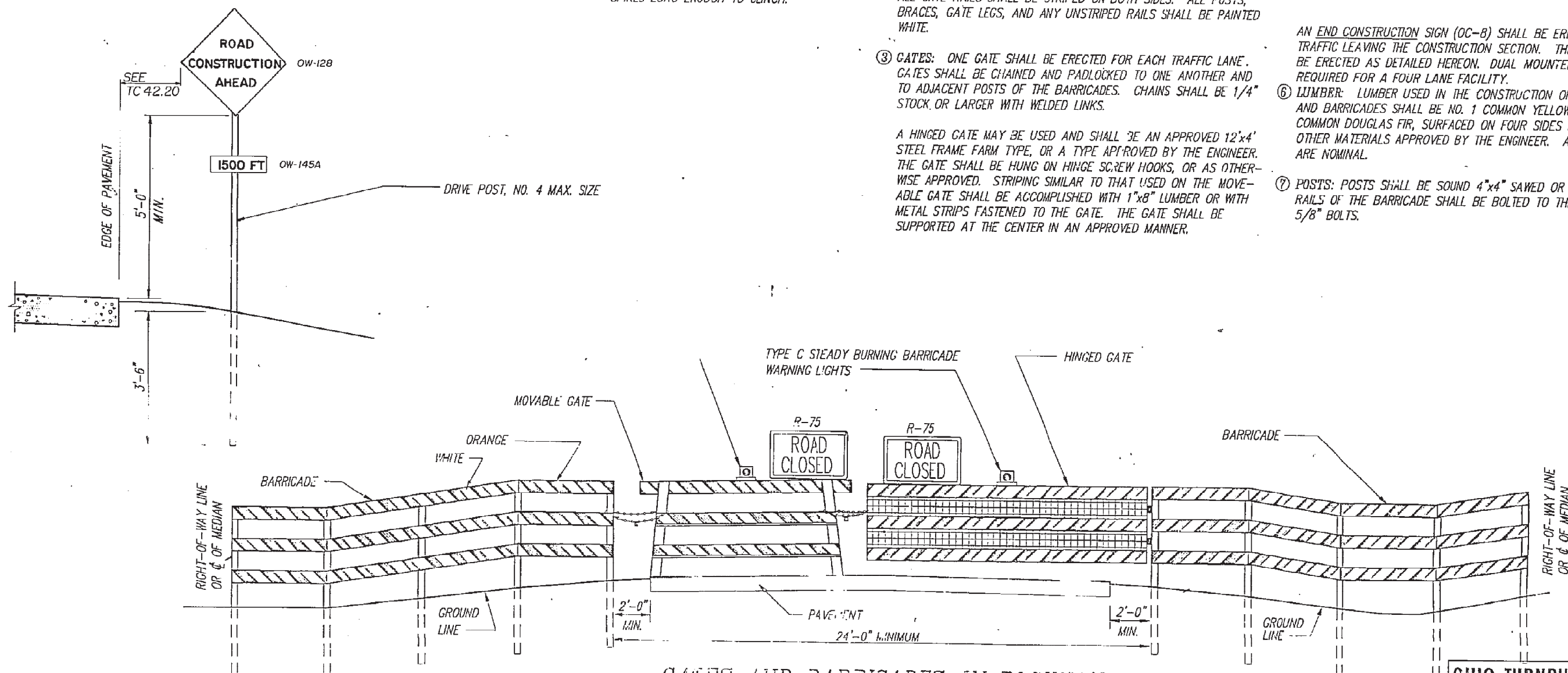
⑤ SIGNS: WHERE THE ROAD IS CLOSED TO TRAFFIC BY THE ERECTION OF GATES AND BARRICADES, ROAD CLOSED SIGNS (R-75) SHALL BE MOUNTED ON THE GATES AS SHOWN.

WHERE TRAFFIC IS MAINTAINED, A ROAD CONSTRUCTION AHEAD SIGN (OW-128) SHALL BE USED ON THE RIGHT SHOULDER ON THE APPROACHES APPROXIMATELY 500 FEET IN ADVANCE OF THE PROJECT.

AN END CONSTRUCTION SIGN (OC-8) SHALL BE ERECTED FACING TRAFFIC LEAVING THE CONSTRUCTION SECTION. THE SIGNS SHALL BE ERECTED AS DETAILED HEREON. DUAL MOUNTED SIGNS ARE REQUIRED FOR A FOUR LANE FACILITY.

⑥ LUMBER: LUMBER USED IN THE CONSTRUCTION OF THE GATES AND BARRICADES SHALL BE NO. 1 COMMON YELLOW PINE OR NO. 1 COMMON DOUGLAS FIR, SURFACED ON FOUR SIDES STANDARD, OR OTHER MATERIALS APPROVED BY THE ENGINEER. ALL SIZES ARE NOMINAL.

⑦ POSTS: POSTS SHALL BE SOUND 4"x4" SAWED OR 4 1/2" ROUND. RAILS OF THE BARRICADE SHALL BE BOLTED TO THE POSTS WITH 5/8" BOLTS.



GATES AND BARRICADES IN POSITION

OHIO TURNPIKE COMMISSION

BARRICADES
AND GATES

DATE: 11-1-88 SCALE: 1"=10'
SHEET 17 OF 18

SPECIFICATIONS: 1983 O.D.T. CONSTRUCTION AND MATERIAL SPECIFICATIONS. LATEST A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES FOR DESIGN.

MATERIALS: FABRIC SHALL BE 1" MESH WOVEN FROM NO.9 GAUGE, ALUMINUM COATED STEEL WIRE CONFORMING TO A.A.S.H.T.O. M181, TYPE II THE ENDS OF THE FABRIC SHALL BE KNUCKLED SELVAGE AT THE TOP AND BOTTOM

ALL POSTS, BRACES, FITTINGS AND HARDWARE SHALL MEET THE REQUIREMENTS OF A.A.S.H.T.O. M181. THEY SHALL BE ZINC COATED STEEL EXCEPT CASTINGS FOR OTHER THAN ORNAMENTAL PURPOSES WHICH SHALL BE ZINC COATED MALLEABLE IRON.

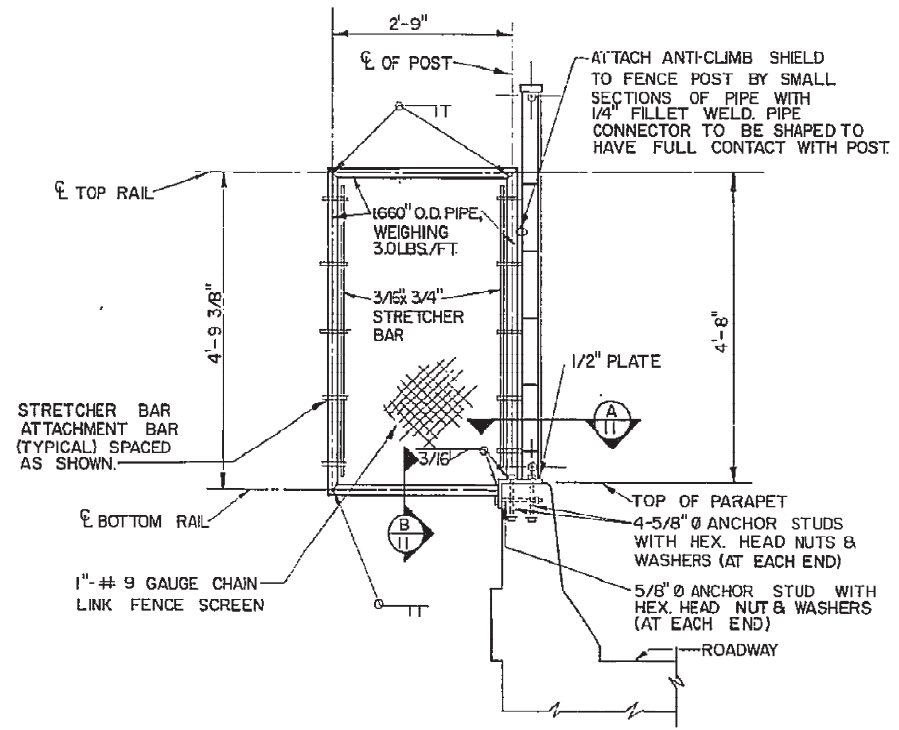
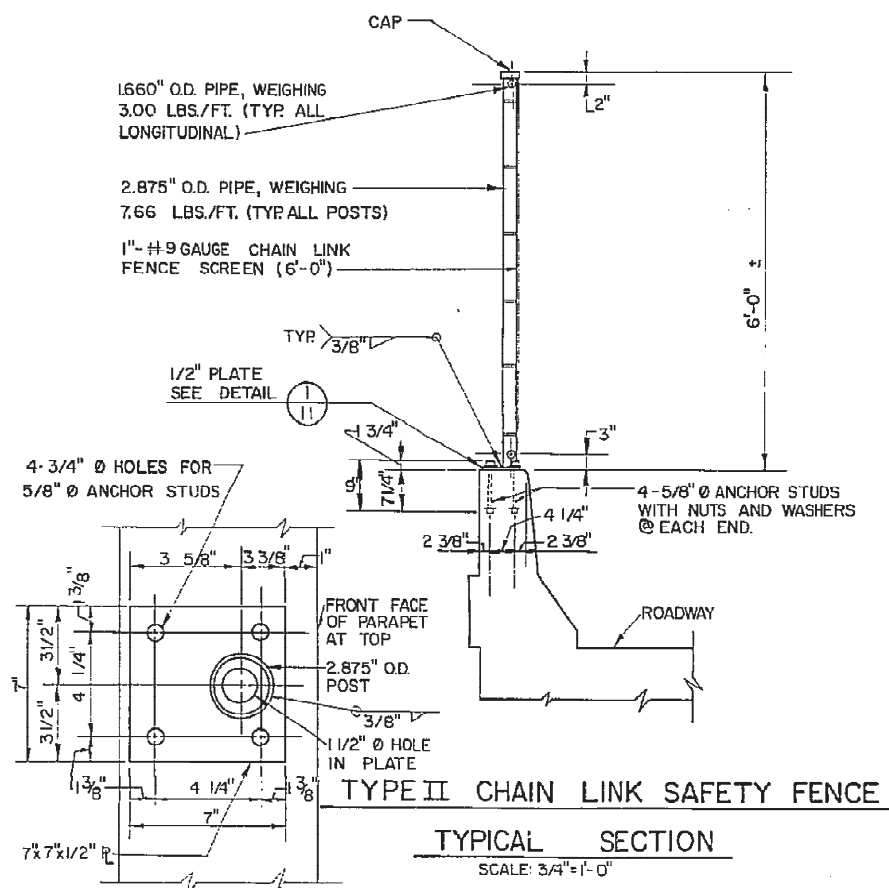
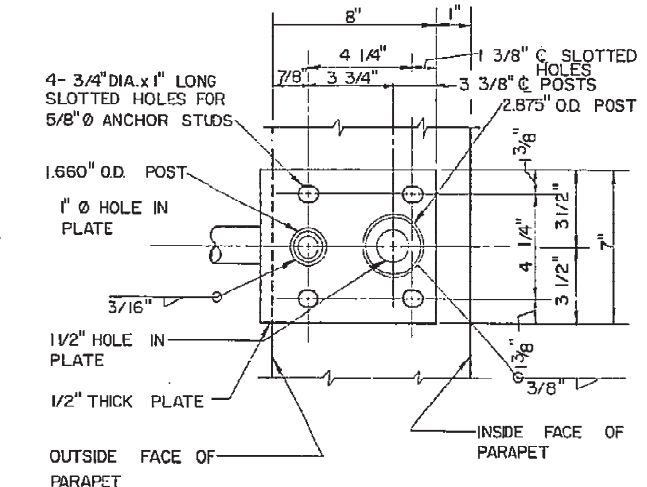
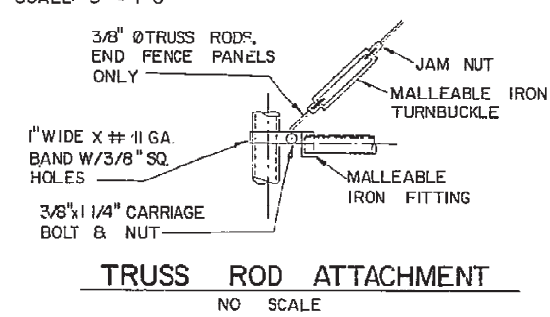
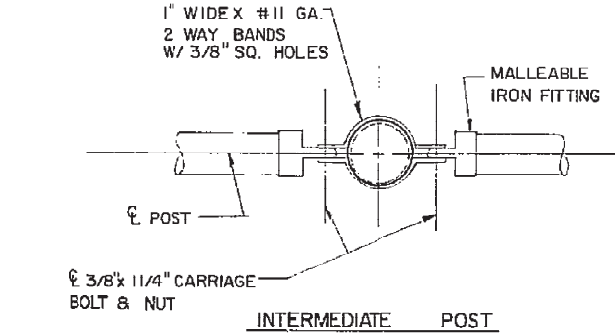
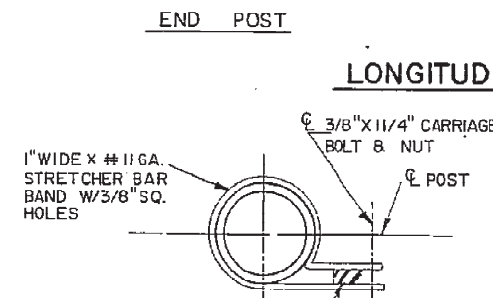
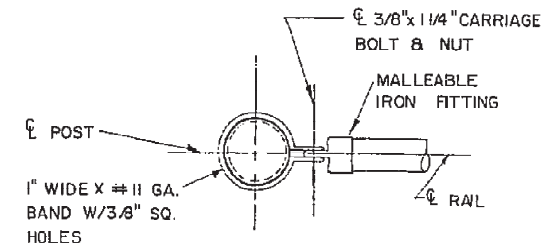
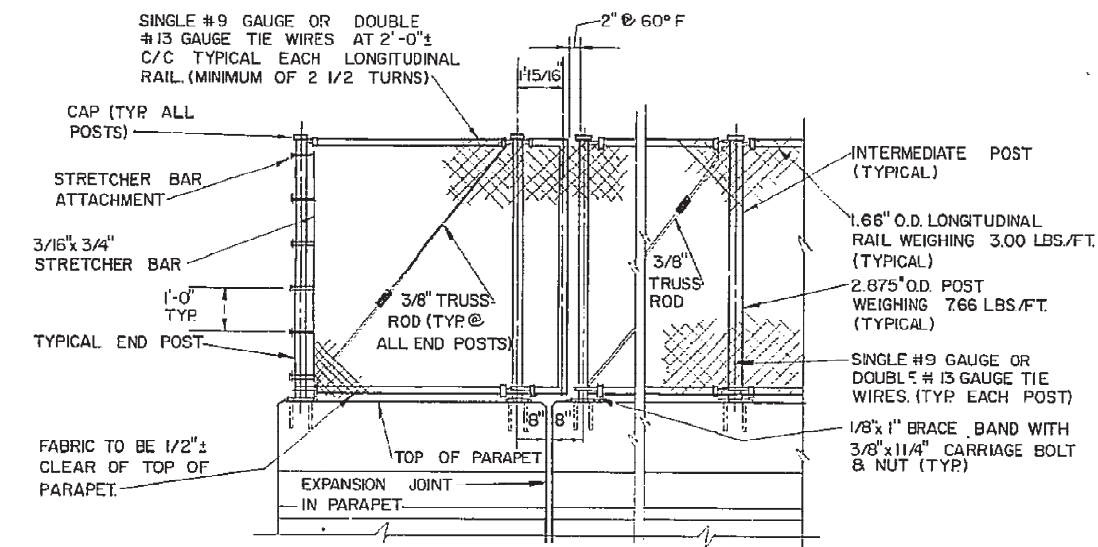
ALL PLATES SHALL BE STEEL CONFORMING TO A. S. T. M. DESIGNATION: A-36. ALL PARTS SHALL BE STEEL GALVANIZED UNLESS OTHERWISE NOTED AND ALL GALVANIZING SHALL BE DONE AFTER FABRICATION. PRECOATED LONGITUDINAL RAILS, IF CUT, WILL HAVE CUT END COATED WITH WITH A ZINC-RICH PRIMER MEETING THE REQUIREMENTS OF FEDERAL SPECIFICATIONS TT-P-64I TYPE II, PRIOR TO ERECTION.

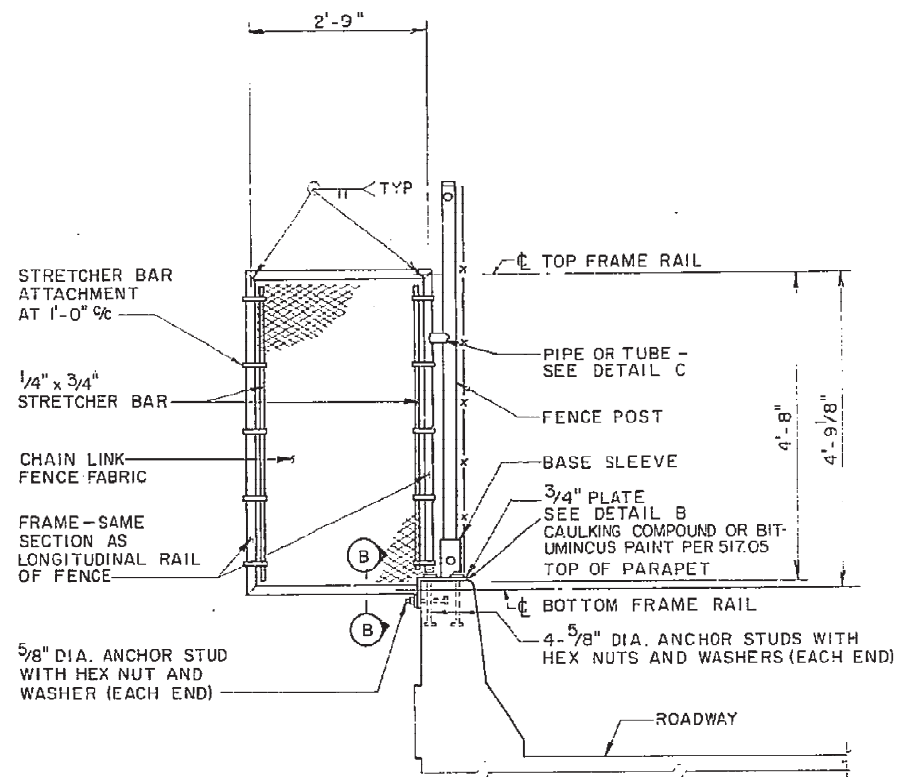
ANCHOR STUDS: MATERIAL FOR ANCHOR STUDS SHALL CONFORM TO A.S.T.M. DESIGNATION: A-276 TYPE 430 TO TYPE 304 STAINLESS STEEL ANNEALED, HOT-FINISHED, ULTIMATE STRENGTH 70,000 P.S.I. MIN., 20% MIN. ELONGATION. THREADS MAY BE ROLLED OR CUT.

POST SPACING FOR POST SPACING SEE
PERTINENT STRUCTURE SHEETS. POST SPACING
SHALL BE 8'-0" MAXIMUM.

ERECTION: ALL LONGITUDINAL RAILS TO BE
PARALLEL TO TOP OF PARAPET.

ALL POSTS TO BE SET NORMAL TO TOP OF
PARAPET.





LOCATE ANTI-CLIMB SHIELD AT POST NEAREST MIDPOINT OF END SPANS. 4 REQUIRED FOR EACH STRUCTURE.

ANTI-CLIMB SHIELD DETAIL

3/4" = 1'-0"

LONGITUDINAL RAIL

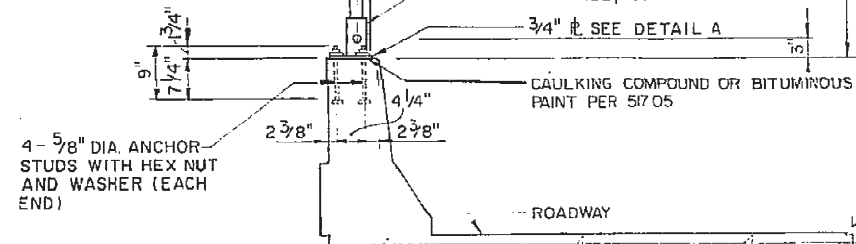
SIZE OPTIONS

1/2" SQ. x .125 TUBE
2" O.D. x .125 TUBE
1/4" SCHEDULE 40 PIPE

POST AND BASE SLEEVE

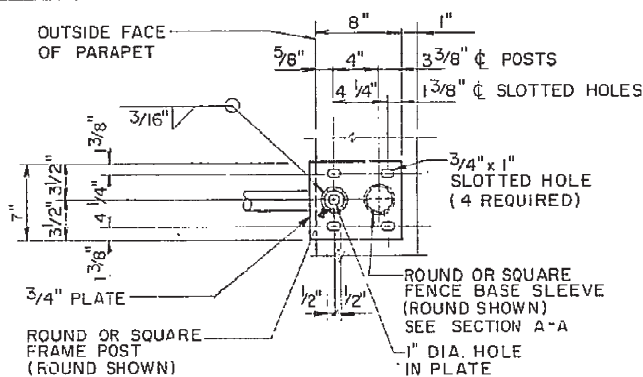
SIZE OPTIONS

2" SQ. x .25 TUBE POST WITH 2 1/2" SQ. x .25" TUBE BASE SLEEVE
2 1/2" O.D. x .25 TUBE POST WITH 3" O.D. x .25 TUBE BASE SLEEVE
2 1/2" SCHEDULE 40 PIPE POST WITH 3" SCHEDULE 80 PIPE BASE SLEEVE



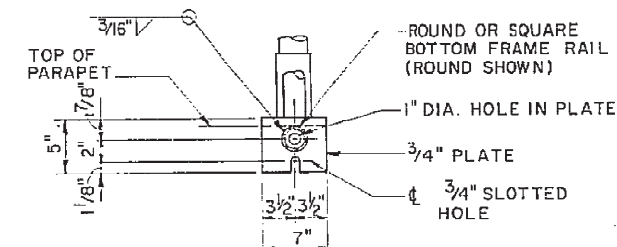
TYPE II CHAIN LINK FENCE DETAIL

NOT TO SCALE



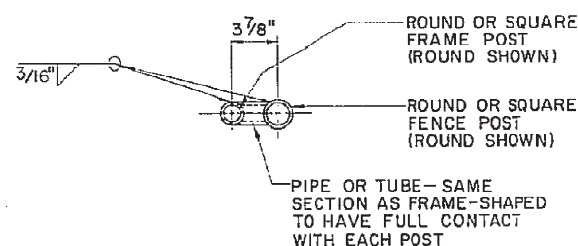
DETAIL B

NOT TO SCALE



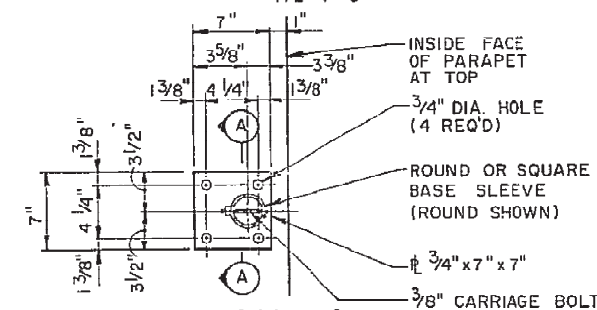
SECTION B-B

1 1/2" = 1'-0"



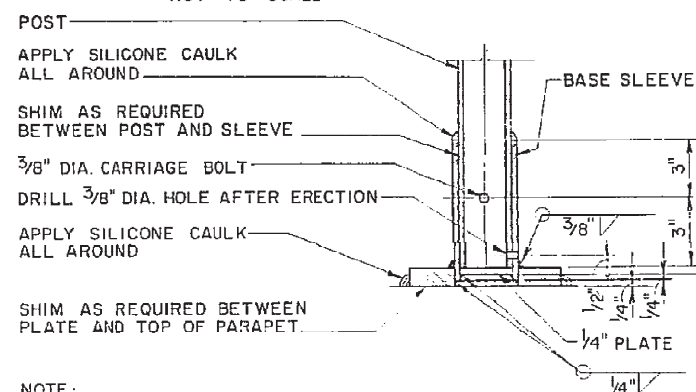
DETAIL C

1 1/2" = 1'-0"



DETAIL A

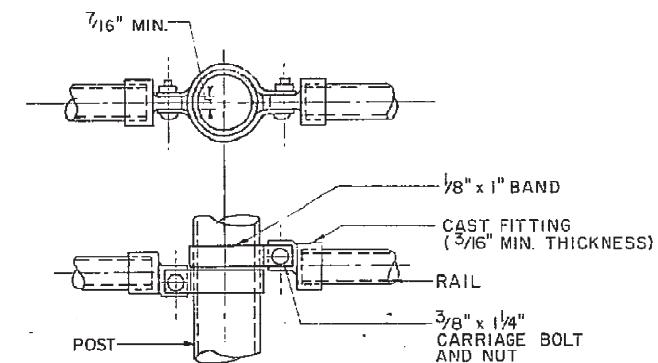
NOT TO SCALE



NOTE:
FOR BASE SLEEVE, POST AND RAIL SIZES SEE FENCE DETAIL AT LEFT

SECTION A-A

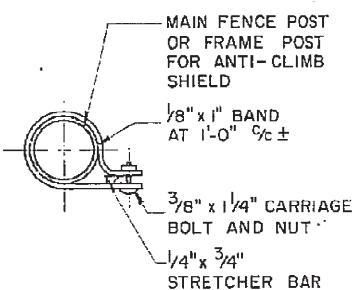
3" = 1'-0"



RAIL FITTING AND BAND

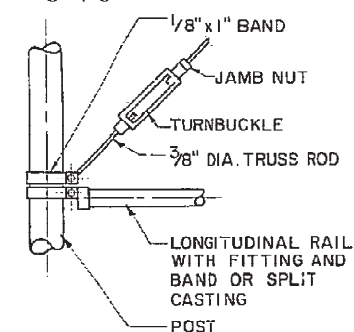
LONGITUDINAL RAIL-POST ATTACHMENT

3" = 1'-0"



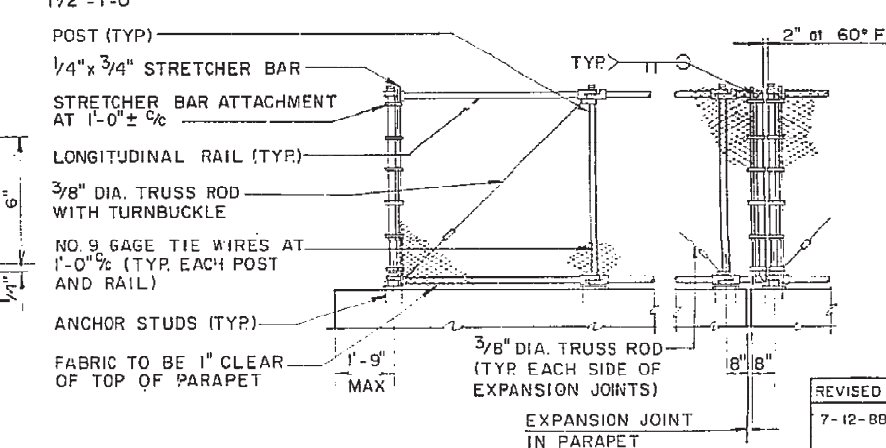
STRETCHER BAR ATTACHMENT

3" = 1'-0"



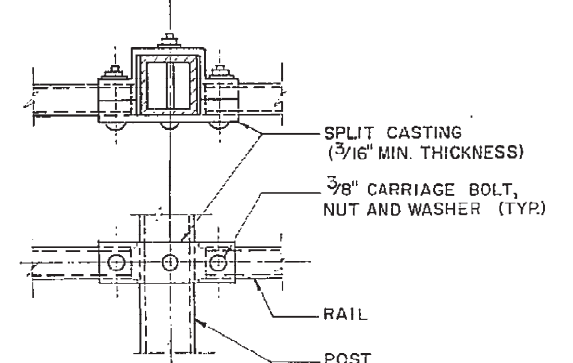
TRUSS ROD ATTACHMENT

1 1/2" = 1'-0"



INTERIOR ELEVATION

3/8" = 1'-0"



SPLIT CASTING

GENERAL NOTES

SPECIFICATIONS: 1983 O.D.O.T. "CONSTRUCTION AND MATERIAL SPECIFICATIONS"; LATEST A.A.S.H.T.O. "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" AND "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS".

MATERIALS: CHAIN LINK FENCE FABRIC SHALL BE 1" MESH WOVEN FROM NO. 9 GAGE ALUMINUM ALLOY WIRE CONFORMING TO THE REQUIREMENTS OF A.A.S.H.T.O. M181, TYPE III, AND SHALL HAVE KNUCKLED SELVAGE AT THE BOTTOM AND BARBED SELVAGE AT THE TOP. FABRIC TIES SHALL BE NO. 9 GAGE ALUMINUM ALLOY WIRE CONFORMING TO THE REQUIREMENTS OF A.S.T.M. B211, ALLOY 6061, TEMPER T6.

POSTS, RAILS, PLATES, BARS, BANDS AND TRUSS RODS SHALL BE ALUMINUM ALLOY CONFORMING TO THE REQUIREMENTS OF A.S.T.M. B221, ALLOY 6061, TEMPER T6.

SHIMS SHALL BE ALUMINUM ALLOY CONFORMING TO A.S.T.M. B209; ALLOY 1100-O.

RAIL FITTINGS, TURNBUCKLES AND SPLIT CASTINGS SHALL BE ALUMINUM ALLOY CASTINGS CONFORMING TO THE REQUIREMENTS OF A.S.T.M. B26, B85 OR B108, ALLOY S670A-T6, ZC81A-T5, S6100A, S6100B OR S12B.

CARRIAGE BOLTS AND NUTS SHALL BE ALUMINUM ALLOY CONFORMING TO THE REQUIREMENTS OF A.S.T.M. B211, ALLOY 2024-T4 FOR BOLTS, AND ALLOY 6061-T6 FOR NUTS. WASHERS SHALL BE ALUMINUM ALLOY CONFORMING TO THE REQUIREMENTS OF A.S.T.M. B209, ALLOY 6061-T6.

ANCHOR STUDS: MATERIAL FOR ANCHOR STUDS SHALL CONFORM TO A.S.T.M. DESIGNATION A-276, TYPE 430 TO TYPE 304 STAINLESS STEEL ANNEALED, HOT-FINISHED, ULTIMATE STRENGTH 70,000 P.S.I. MINIMUM, 20% MINIMUM ELONGATION, THREADS MAY BE ROLLED OR CUT.

POST SPACING: FOR POST SPACING, SEE PERTINENT STRUCTURE SHEETS. POST SPACING SHALL BE 8'-0" MAXIMUM.

ERECTION: ALL LONGITUDINAL RAILS TO BE PARALLEL TO TOP OF PARAPET.

ALL POSTS TO BE SET NORMAL TO TOP OF PARAPET.

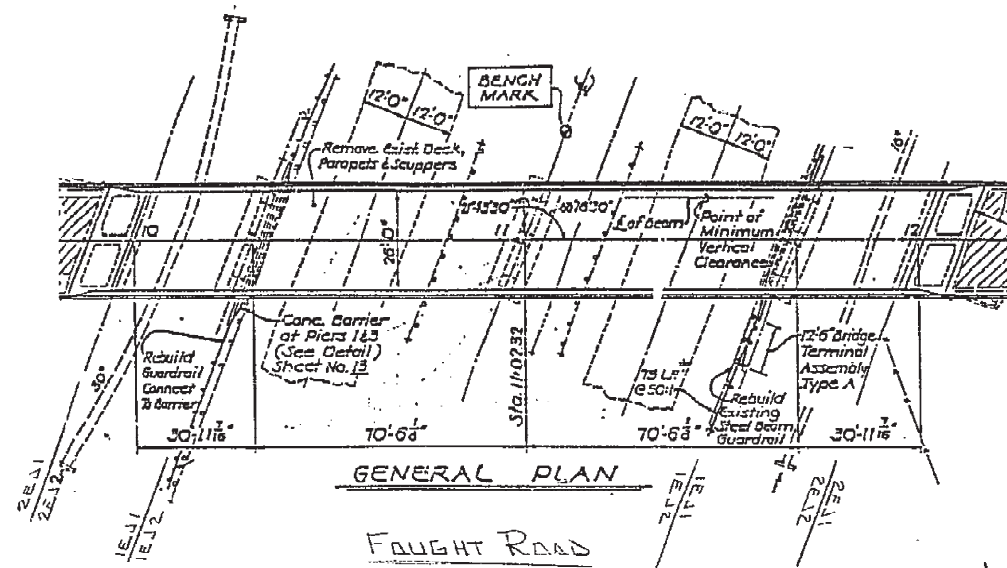
ALUMINUM SURFACES TO BE PLACED IN CONTACT WITH CONCRETE SHALL BE GIVEN A HEAVY COAT OF ALKALI-RESISTANT BITUMINOUS PAINT BEFORE INSTALLATION.

OHIO TURNPIKE COMMISSION

CHAIN LINK SAFETY FENCE
(ALL ALUMINUM)
DETAILS, TYPE II

REVISED
7-12-88

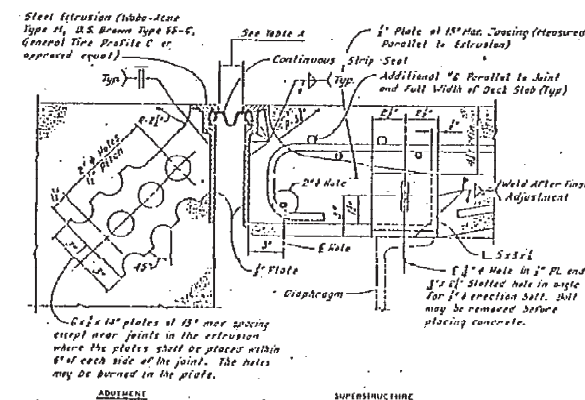
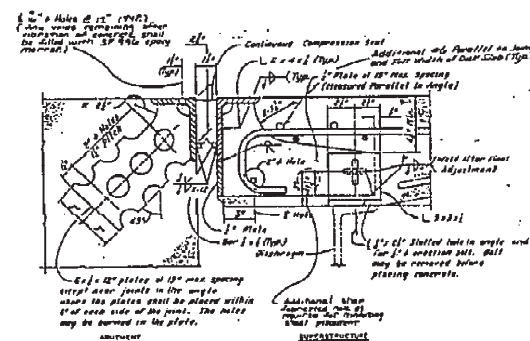
DATE: FEB., 1984 SCALE: AS NOTED
STANDARD DRAWING CL - 2A



Note: Skew Angle Shall be
Verified Prior To FABRICATION

STRIP SEAL SIZE	STRIP SEAL JT. OPNG INSTN CHART						
	TEMP. °F						
	30°	40°	50°	60°	70°	80°	90°
3"	2'4	2'8	2	1'8	1'4	1'8	1'2

TABLE A



APPROVED
3/29/89
DEPUTY EXECUTIVE DIRECTOR
OHIO TURNPIKE COMMISSION

MARBRI DISCLAIMER NOTE:
NO FIELD CHARGES WILL BE
ACCEPTED BY MARBRI ENGINEERING
UNLESS PREVIOUSLY NOTIFIED &
ACCEPTABLE METHODS FOR CORRECTION
ARE REVIEWED AND RELEASED
BY MARBRI ENGINEERING.

FOR APPROVAL

DATE 3/29/89 BY Thomas A. Heston

MARBRI ENGINEERING
7811 HICKORY HILLS LN. PARMA, OH 44134-9814

CIP 43-89-13	MILAN STEEL FABRICATING		
CIP 43-89-14			
FAUGHT RD BRIDGE	DATE	REVISED	BY
E.X.D. JOINT DETAILS	3-89		
DANIELS BRIDGE 11111	3/29/89		
SANDUSKY COUNTY			

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SOIL PROFILE/FOUNDATION INVESTIGATION
OTC STANDARD DRAWINGS

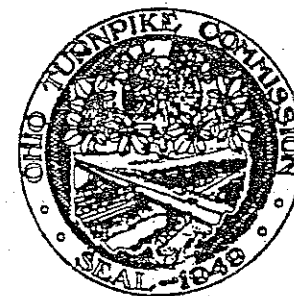
FIBER OPTIC CABLE AS-BUILT DRAWINGS
LCI COMMUNICATIONS CORP. 1,2,20-84, 98-105

OTC STANDARD DRAWINGS

AS-1	1-24-97	CB-5	6-25-97	EPA-1	4-21-97	TC-1	6-25-97	TCR-11	12-30-96
AS-2	1-24-97	CBR-1	6-25-97	F-1	4-18-97	TC-2	6-25-97	TCR-12	6-11-97
AS-3	4-22-97	CBR-3	8-6-97	GR-1	8-4-97	TCB-1	7-11-97	TCR-13	1-1-97
AS-4	4-21-97	CJ-1	7-11-97	GR-2	8-4-97	TCB-2	6-25-97	UD-1	1-1-97
AS-5	4-21-97	CJ-2	4-18-97	JB-1	1-1-97	TCR-1	1-29-97	XOV-3	1-1-97
CB-1	1-1-97	DJ-1	6-25-97	MCC-1	1-1-97	TCR-2	6-11-97		
CB-2	1-1-97	DJ-2	6-25-97	MCC-2	1-1-97	TCR-9	6-11-97		
CB-4	6-25-97	DJ-5	6-25-97	RPM-1	8-4-97	TCR-10	6-11-97		

OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS

HL-20.11	5-01-87	TC-42.10	8-19-77	MT-105.10	7-01-92	F-5	5-01-76
TC-7.65	3-01-79	TC-42.20	3-26-79	BP-1.1	2-21-92	GR-1.1	5-06-91
TC-12.30	1-20-84	TC-51.11	9-30-94	BP-1.2	2-21-92	GR-1.3	2-21-92
TC-21.10	9-01-92	TC-51.12	1-03-94	BP-2.1	10-28-94	GR-2.1	5-06-91
TC-21.20	9-01-92	TC-52.10	4-03-79	BP-2.2	10-28-94	GR-3.1	5-06-91
TC-21.40	9-01-92	TC-52.20	4-03-79	BP-2.3	2-21-92	GR-3.2	5-06-91
TC-22.20	9-01-92	TC-41.20	6-21-94	BP-3.1	2-21-92	GR-4.2	5-06-91
TC-41.40	6-18-79	MT-105.11	7-01-92	F-2	5-01-76	MC-1	6-13-69
MC-5	6-12-75	BS-1-93	12-19-94	FB-1-82	5-10-82	PCB-91	4-24-92
						RS-1-55	2-02-59
						MC-9.1	10-30-92
						MC-9.3	10-30-92
						MC-9.4	10-30-92
						HW-4B	4-01-80
						MC-4	7-26-76
						MC-11	8-01-78



OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

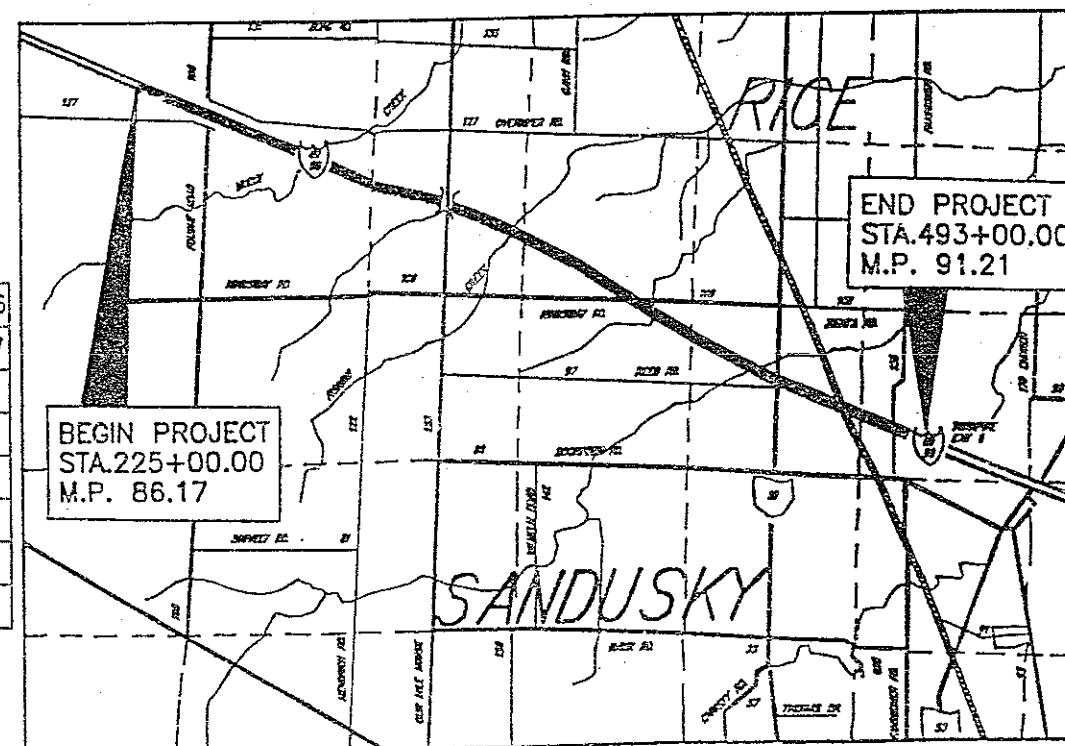
CONTRACT 77-97-08

THIRD LANE CONSTRUCTION

MP. 86.17 TO MP. 91.21

STATION 225+00 TO STATION 493+00

SANDUSKY COUNTY

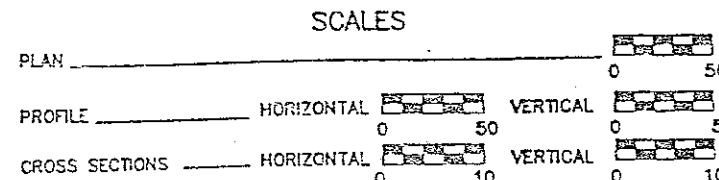


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Call 800-362-2754 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
CALL JAYTEL - (419) 884-0400
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OHIO TURNPIKE DIVISION SUPERINTENDENT
(419) 862-2922
(ROADWAY LIGHTING CABLE)

APPROVED FOR
THE OHIO TURNPIKE COMMISSION
BY
David W. Ransburg
CHIEF ENGINEER
8/21/97
DATE

RECOMMENDED FOR APPROVAL
BY
URS GREINER, INC.
Richard
REVIEW CONSULTANT
8-20-97
DATE

PLAN PREPARED BY
CT Consultants, Inc.
Engineers • Architects • Planners
10000 N. State St. • Suite 100 • Dayton, OH 45424 • (937) 233-1100



DESIGN CONTRACT NO. 71-96-44

SURVEY CONTROL PLAN

ORIGINAL
1953 ALIGNMENT
CURVE DATA

P.I. STA. 304+47.42
 $\Delta = 06^{\circ}22'15''$
 $D_c = 00^{\circ}20'00''$
 $R = 17188.74'$
 $T = 956.61'$
 $L = 1911.25'$
 $E = 26.60'$
 $e_{max} = 0.0156'/'$

ORIGINAL
1953 ALIGNMENT
CURVE DATA

P.I. STA. 359+46.98
 $\Delta = 17^{\circ}45'10''$
 $D_c = 00^{\circ}20'00''$
 $R = 17188.74'$
 $T = 2684.54'$
 $L = 5325.85'$
 $E = 208.63'$
 $e_{max} = 0.0156'/'$

RE-ESTABLISHED
CURVE DATA

P.I. STA. 304+47.03
 $\Delta = 06^{\circ}22'24''$
 $D_c = 00^{\circ}20'00''$
 $R = 17188.73'$
 $T = 957.01'$
 $L = 1912.04'$
 $E = 26.62'$
 $e_{max} = 0.0156'/'$

RE-ESTABLISHED
CURVE DATA

P.I. STA. 359+47.92
 $\Delta = 17^{\circ}44'36''$
 $D_c = 00^{\circ}20'00''$
 $R = 17188.73'$
 $T = 2682.99'$
 $L = 5323.02'$
 $E = 208.13'$
 $e_{max} = 0.0156'/'$

PROPOSED MONUMENT SUMMARY

			COORDINATES	
Monument	Station	Offset	Northing	Easting
1	225+00.00	5.00' RT.	644063.8868	1773947.4796
2	235+00.00	5.00' RT.	643689.0146	1774874.5561
3	240+00.00	5.00' RT.	643501.5785	1775338.0943
4	250+00.00(B)	5.00' RT.	643126.7063	1776265.1708
5	260+00.00	5.00' RT.	642743.8750	1777211.9304
6	270+00.00	5.00' RT.	642369.0027	1778139.0069
7	280+00.00	5.00' RT.	641994.1305	1779066.0834
8	294+90.02	5.00' RT.	641435.5620	1780447.4493
9	305+00.00	5.00' RT.	641084.5657	1781394.6329
10	314+02.06	5.00' RT.	640818.5793	1782256.7506
11	319+79.93(B)	5.00' RT.	640662.7619	1782813.2144
12	332+64.93	5.00' RT.	640321.6832	1784031.2944
13	340+00.00	5.00' RT.	640108.4676	1784734.4780
14	350+00.00	5.00' RT.	639770.5350	1785675.1894
15	360+00.00	5.00' RT.	639378.4767	1786594.6603
16	370+00.00	5.00' RT.	638933.6191	1787489.7794

NOTES

Existing Monuments To Be Destroyed

Coordinate Values Are In Ohio State
Plane System, Based On NAD 83.
Scale Factor Varies From 0.99992651
To 0.99993384.
Average Scale Factor = 0.99992972.

The Following Quantity Has Been Carried To
The General Summary:
Item 604 - Monument Assembly 16 Each



NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE 3rd LANE CONSTRUCTION			
SURVEY CONTROL PLAN			
URS Greiner			
DESIGNED: PH	CHECKED: JJS	DATE: 11-18-96	
DRAWN: JJS	IN CHARGE: PH	SCALE: AS SHOWN	
CONTRACT 77-97-08 SHEET 1A OF 332			

DATE: 11/8/96
DRAWN BY: JJS
DATE: 11/8/96
CAD FILE NAME: K:\200000\SURVEY\ESTIMATE\AUGN3

END PROJECT
STA. 225+00.00
M.P. 86.17
77-97-07

BEGIN PROJECT
STA. 225+00.00
M.P. 86.17
77-97-08

EXISTING MONUMENT SUMMARY

COORDINATES				
Monument	Station	Offset	Northing	Easting
1	247+41.00	0.13 RT.	643228.316	1776026.885
2	314+02.06	0	640823.394	1782258.099
3	328+27.00	0.01 LT.	640444.588	1783610.933
4	328+85.09	0.03 LT.	640428.950	1783666.881
5	332+62.55	0	640327.141	1784030.346

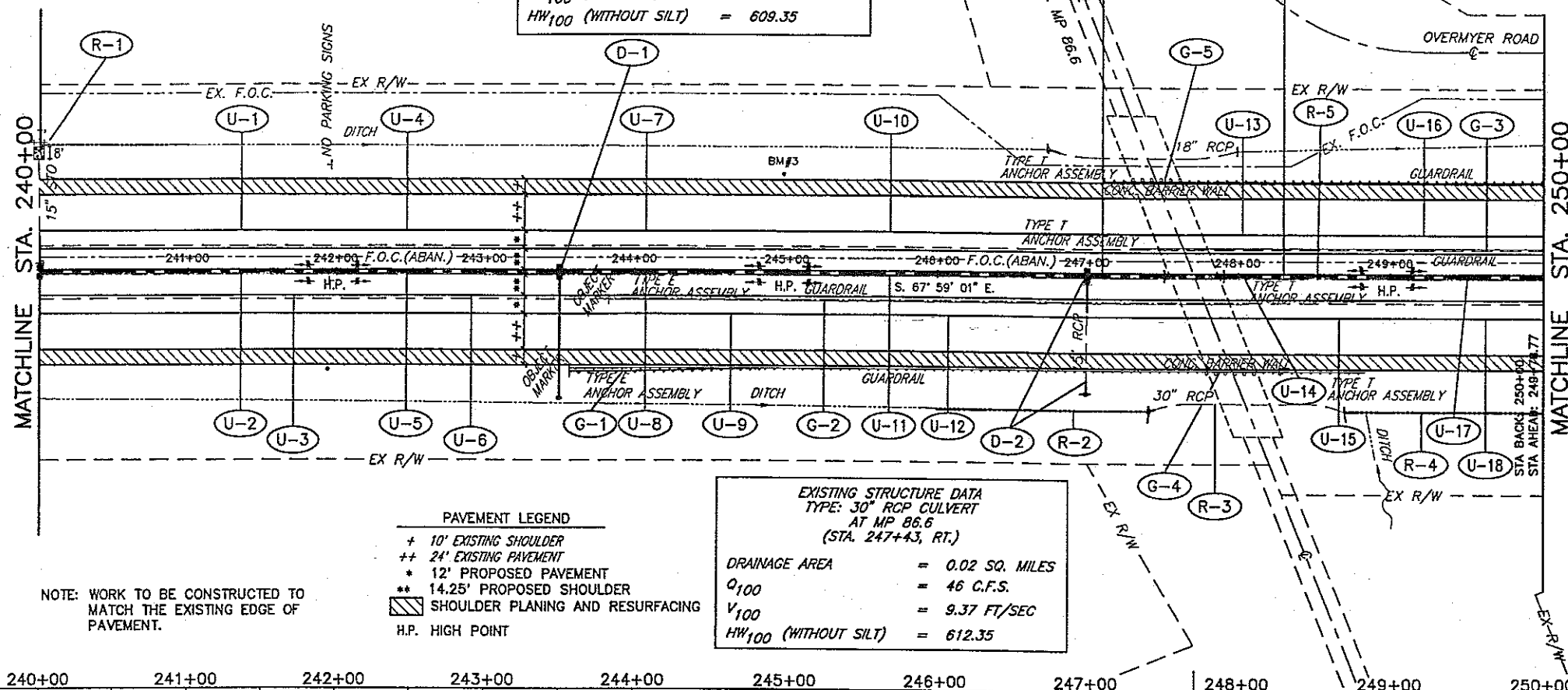
NOTE: Station & Offset of Existing Monuments From Re-Established Baseline.

BENCHMARK NO.3 - TOP OF FENO MONUMENT
REFERENCE DATUM STA. 244+97, 66± LT.
NAVD 1929 ELEVATION 612.95

EXISTING STRUCTURE DATA
TYPE: 18" RCP CULVERT
AT MP 86.6
(STA. 247+38, LT.)

DRAINAGE AREA = 0.002 SQ. MILES
 Q_{100} = 5 C.F.S.
 V_{100} = 3.97 FT/SEC
 HW_{100} (WITH SILT) = 609.88
 HW_{100} (WITHOUT SILT) = 609.35

FOR TYPICAL SECTIONS SEE SHEET 5-11.
FOR CROSS SECTIONS AND PIPE PROFILES NOT
SHOWN ON THIS SHEET SEE SHEETS 123-209
FOR SIGNING & PAV'T MARKING SEE SHEETS 221-235
FOR UNDERDRAIN QUANTITIES SEE SHEETS 60-65
FOR PAVEMENT ELEVATION TABLE SEE SHEETS 109-122
FOR UNDERDRAIN DETAILS SEE SHEETS 216
FOR DRAINAGE QUANTITIES SEE SHEETS 57-59
FOR CULVERT REPAIR DETAILS SEE SHEETS 210-214
FOR GUARDRAIL QUANTITIES SEE SHEETS 54-56
FOR ROADWAY QUANTITIES SEE SHEETS 52-53

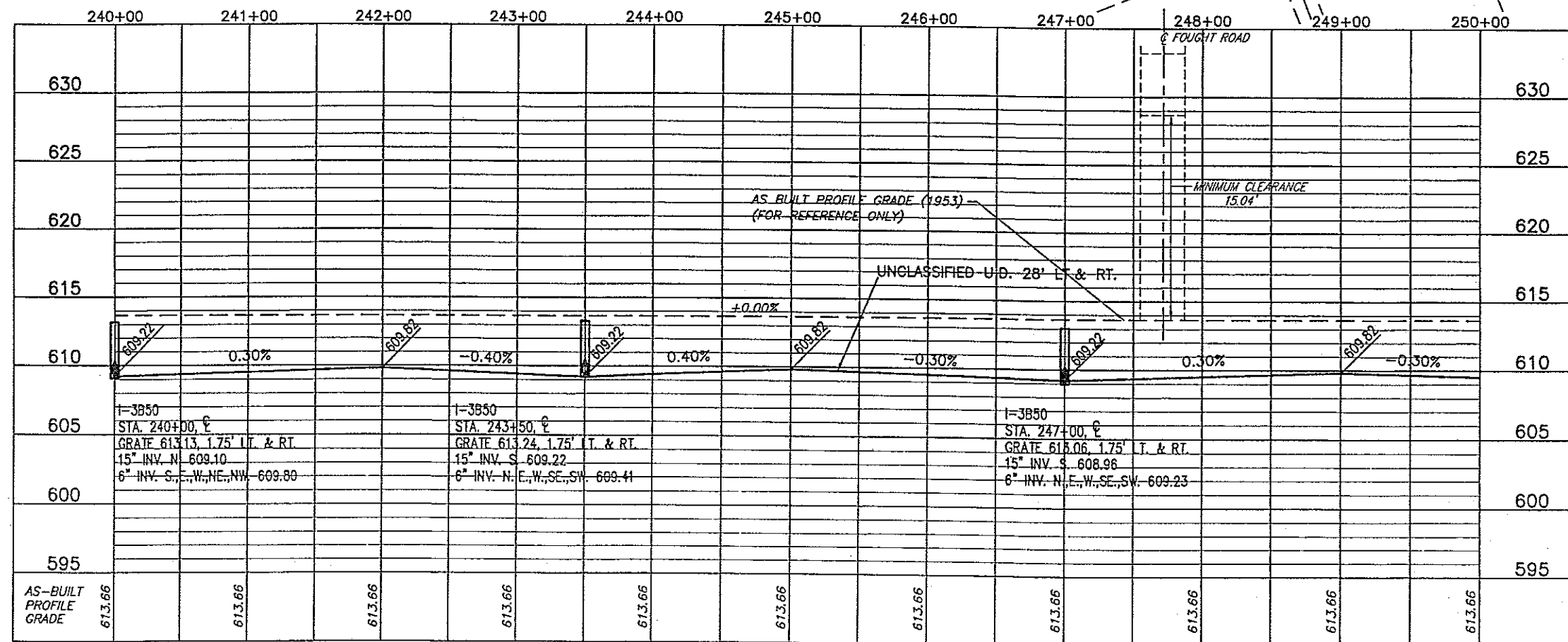


NOTE: WORK TO BE CONSTRUCTED TO
MATCH THE EXISTING EDGE OF
PAVEMENT.

PAVEMENT LEGEND
+ 10' EXISTING SHOULDER
++ 24' EXISTING PAVEMENT
* 12' PROPOSED PAVEMENT
** 14.25' PROPOSED SHOULDER
SHOULDER PLANING AND RESURFACING
H.P. HIGH POINT

EXISTING STRUCTURE DATA
TYPE: 30" RCP CULVERT
AT MP 86.6
(STA. 247+43, RT.)

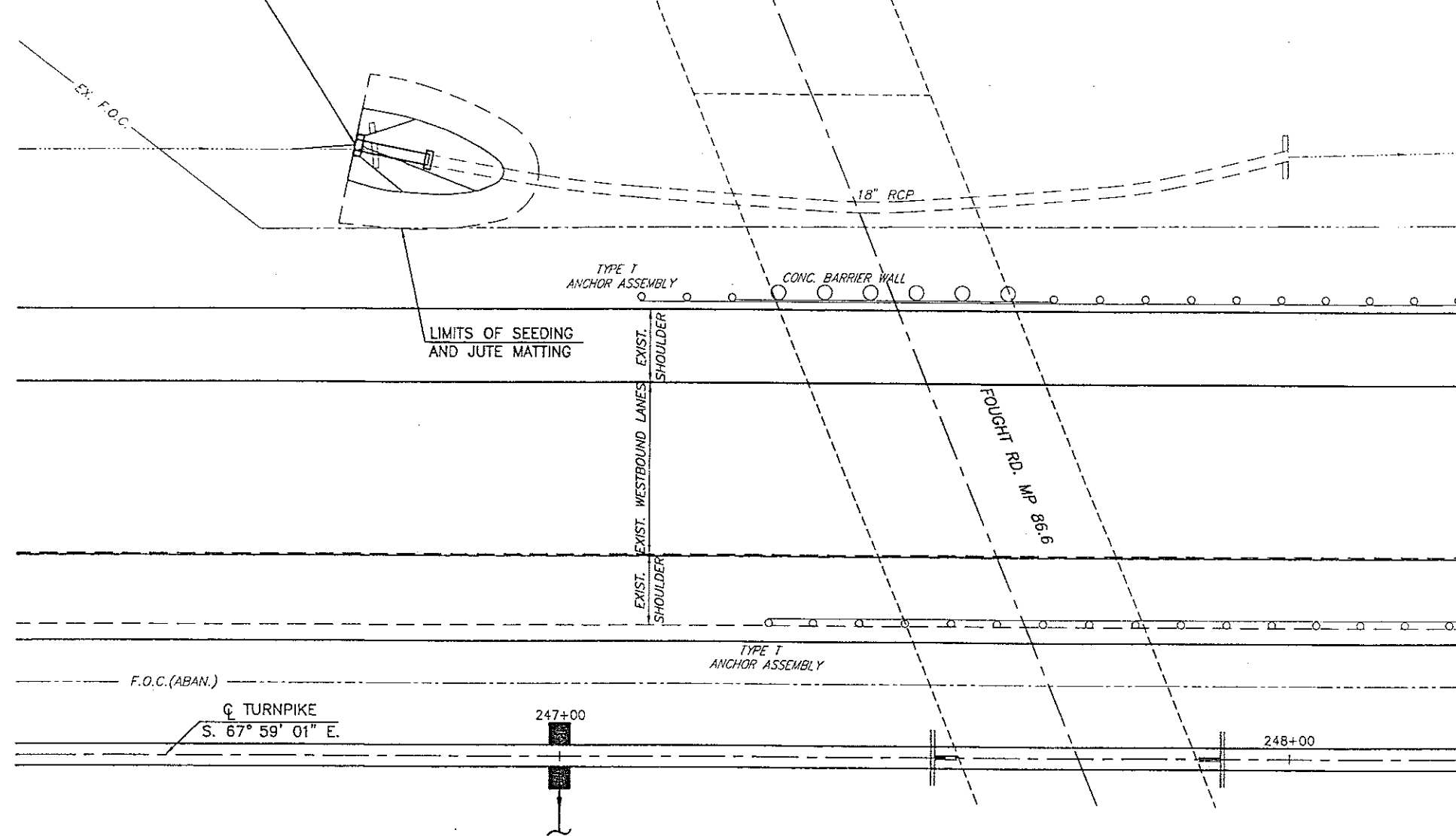
DRAINAGE AREA = 0.02 SQ. MILES
 Q_{100} = 46 C.F.S.
 V_{100} = 9.37 FT/SEC
 HW_{100} (WITHOUT SILT) = 612.35



NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
PLAN AND PROFILE STA. 240+00 TO STA. 250+00			
CT Consultants, Inc. Engineers • Architects • Planners Cincinnati • Columbus • Cleveland • Dayton • Toledo • Youngstown			
DESIGNED: WDB	CHECKED: WDB	DATE: 7/31/97	
DRAWN: PLW	IN CHARGE: JEA	SCALE: 1" = 50'	
CONTRACT 77-97-08 SHEET 83 OF 332			

DESIGNED BY: XXX CHF
DATE: X/X/XX
DRAWN BY: PLW
DATE: 1/29/97
CAD FILE NAME: 96320703.DWG

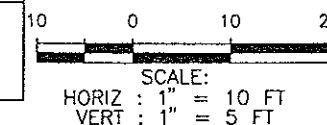
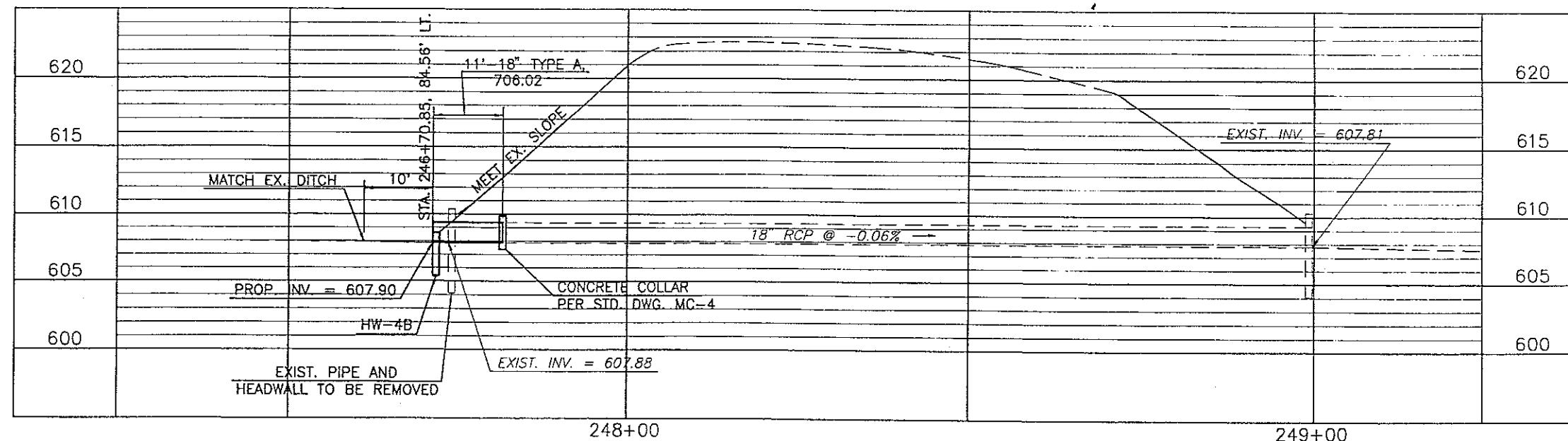
STD. HW-4B HEADWALL
STA. 246+70.85, 84.56' LT.
REMOVE EXIST. HEADWALL



HYDRAULIC DESIGN DATA	
DRAINAGE AREA	= 0.002 SQ. MI.
Q_{100}	= 5 C.F.S.
HW ₁₀₀ (WITHOUT SILT)	= 609.35
HW ₁₀₀ (WITH SILT)	= 609.88
V_{100}	= 3.97 FT./SEC.

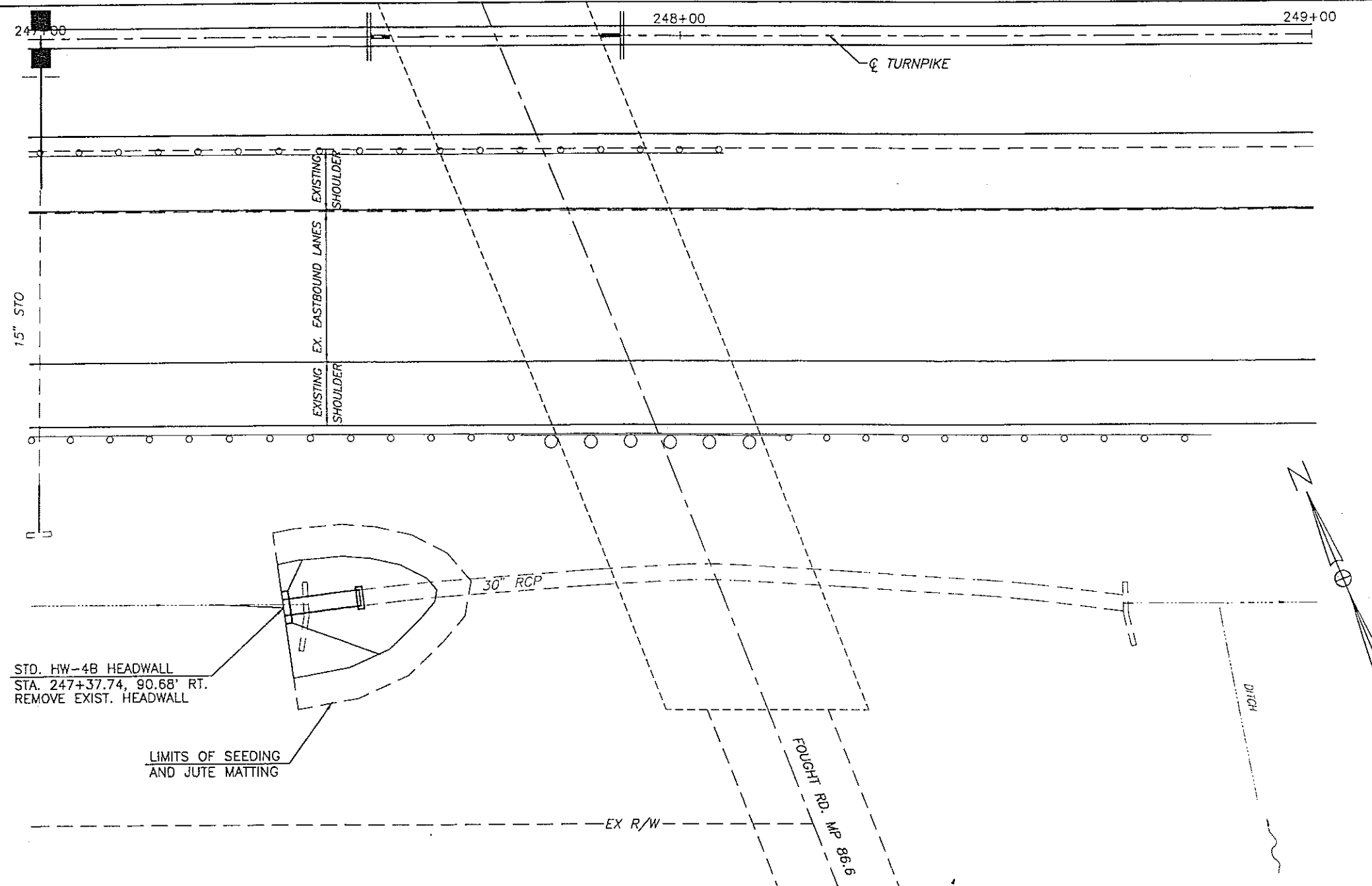
EXISTING STRUCTURE	
TYPE:	RCP
SIZE:	18"
SKEW:	N/A
ALIGNMENT:	TANGENT
DATE BUILT:	1955
CONDITION:	GOOD


ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
202	8	LIN.FT.	PIPE REMOVED, 24" & UNDER
602	0.31	CU.YD.	CONCRETE MASONRY
603	11	LIN.FT.	18" CONDUIT, TYPE A, 706.02
667	50	SQ.YD.	SEEDING AND JUTE MATTING

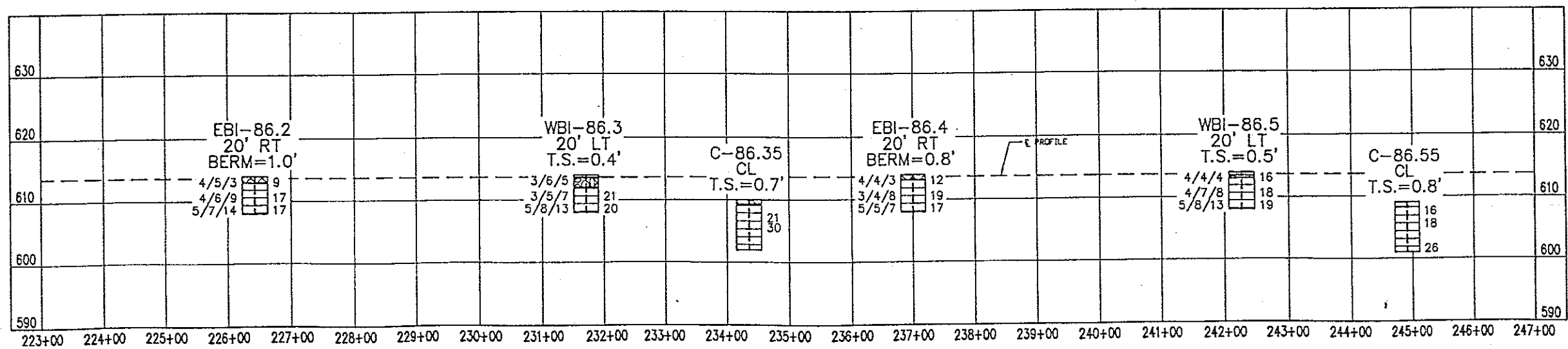
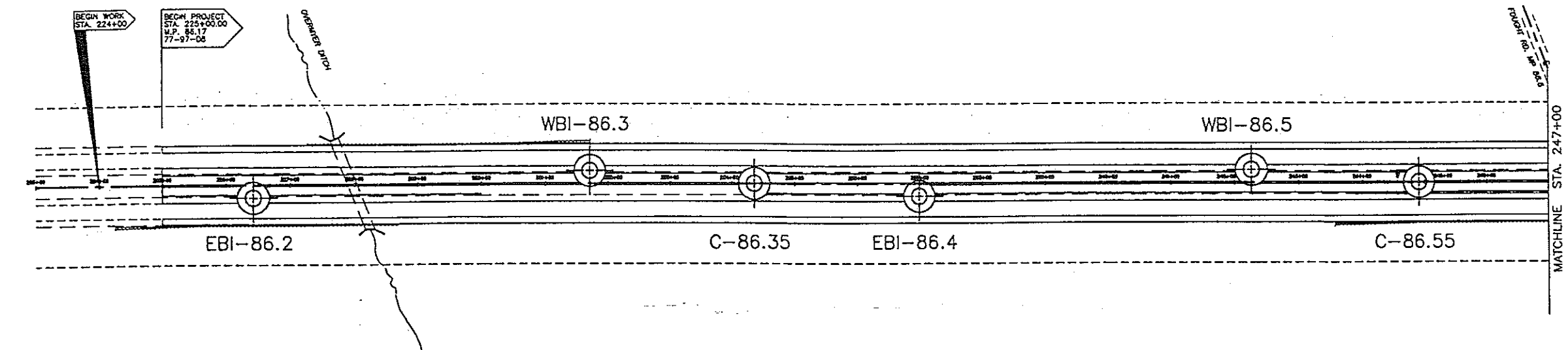


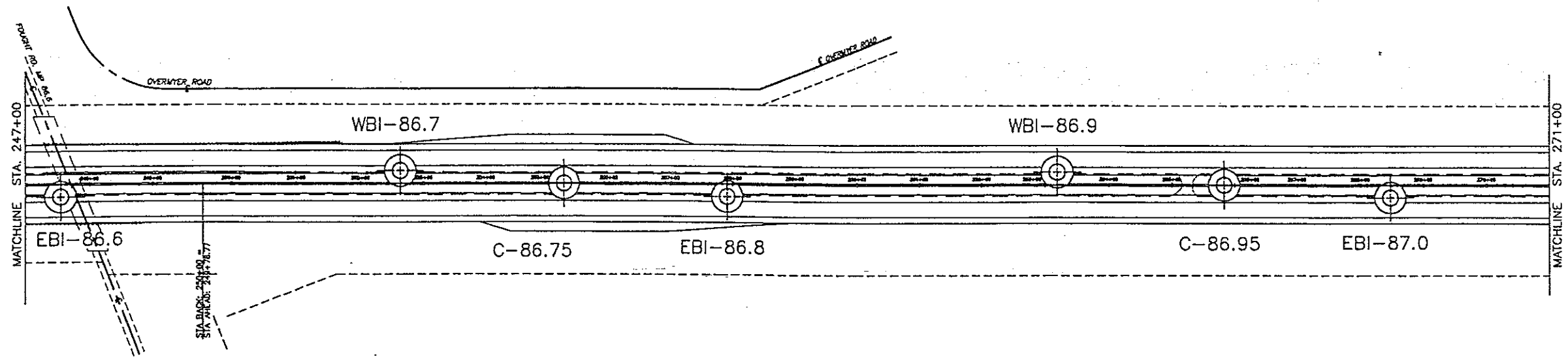
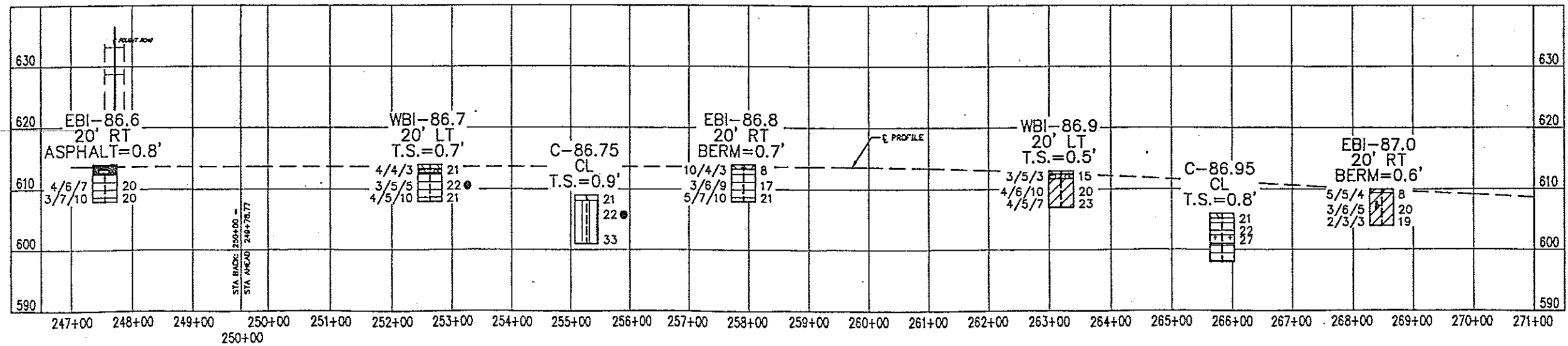
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
18" CULVERT PLAN AND PROFILE			
STA. 246+73.17, LT.-M.P. 86.6			
CT Consultants, Inc.			
Engineers • Architects • Planners			
Thoroughly • Efficiently • Economically • World-Wide • Transparencies			
DESIGNED: PLW	CHECKED: WDB	DATE: 7/31/97	
DRAWN: PLW	IN CHARGE: JEA	SCALE: 1" = 10'	
CONTRACT 77-97-08 SHEET 210 OF 337			

DESIGNED BY: WDB
DATE: 4/25/97
DRAWN BY: PLW
DATE: 4/24/97
CHECKED BY: WDB
DATE: 7/23/97
IN CHARGE: JEA
DATE: 7/31/97



NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
CULVERT PLAN AND PROFILE			
STA. 247+38.52, RT.-M.P. 86.			
 CT Consultants, Inc. <i>Engineers • Architects • Planners</i> <i>Willingly • Master • Counselor • Joint Venture • Youngsters</i>			
DESIGNED: PLW	CHECKED: WDB	DATE: 7/31/97	
DRAWN: PLW	IN CHARGE: JEA	SCALE: 1" = 10'	
CONTRACT 77-97-08		SHEET 211 OF 33	

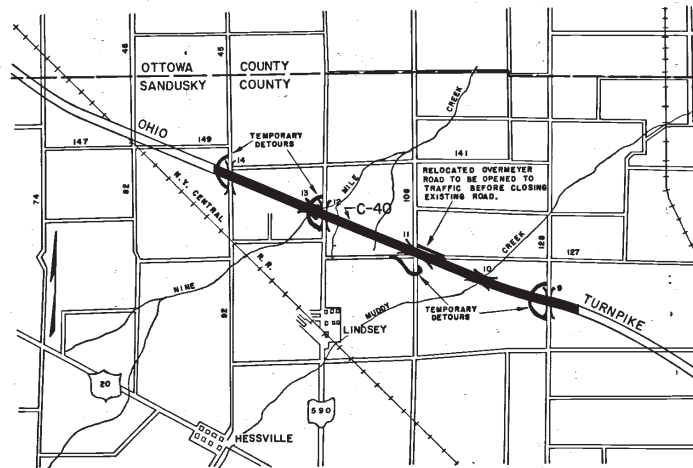




A map of Ohio showing county boundaries. Major highways are indicated: the Ohio Turnpike as a solid line and Contract-40 as a dashed line. Labeled counties include Williams, Fulton, Lucas, Wood, Sandusky, Erie, Cuyahoga, Lorain, Summit, Portage, Trumbull, and Mahoning. A star marks the location of Sandusky.



CONTRACT NO. C-40
TURNPIKE CONSTRUCTION CONTRACT
STATION 132+00 TO STATION 340+00



0 $\frac{1}{2}$ 1 2 3
SCALE IN MILES

JUNE 13, 1953

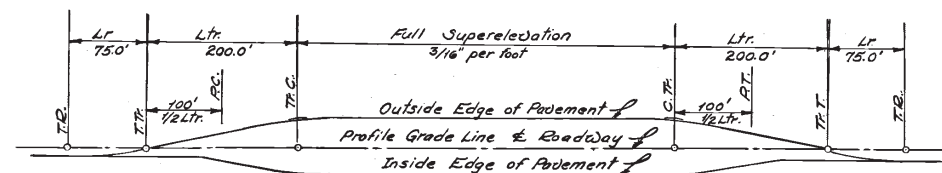
9-28-53

9-29-53

SHEET NO.	TITLE
1	Index Sheet
2	Summary Sheet
3 to 11	Plan and Profile
12	Plan and Profile Co. Rd 92, Hessville Rd.
13 to 14	Plan and Profile S.R. 590 North & South
15	Plan and Profile Relocation Co. Rds. 106 & 127
16	Plan and Profile Co. Rd. 128, Four Mile House
17	Turnpike - Roscoe Odeymer Box Culvert C-10
18	Turnpike - Israel Waggoner Box Culvert C-3
19	Roscoe Odeymer Drain, Cleanout & Deepen
20 to 36	Structures No. 9 thru No. 14
37	Typical Details for Structures
38 to 40	Boring Data for Structures

GENERAL NOTES

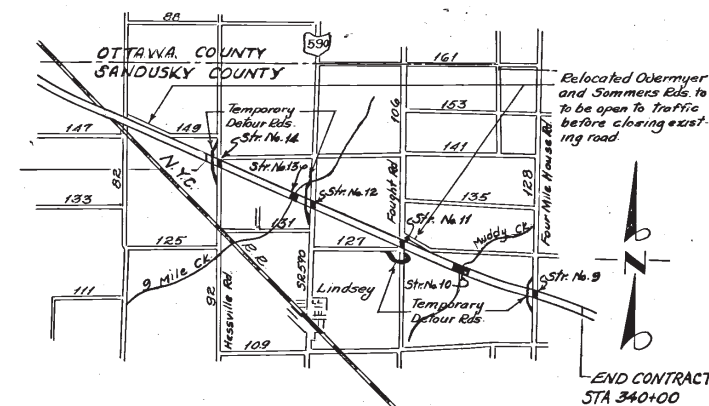
1. ELEVATION MEAN SEA LEVEL U.S.C. & G.S.
2. NORTH AS INDICATED AND REFERRED TO IN THIS SET OF PLANS IS THE GRID NORTH OF THE NORTH ZONE OF THE OHIO STATE LAMBERT PROJECTION COORDINATE SYSTEM.



SUPERELEVATION ROTATED ABOUT CENTER LINE OF PAVEMENT

T.R. = Point of Tangent Runout
T.T. = Point of Tangent Transition
T.C. = Point of Transition Curve
C.T. = Point of Curve Transition
T.T. = Point of Transition Tangent
Lr. = Length of Runout

BEGIN CONTRACT STA 132+00



MAP INDICATING METHOD OF MAINTAINING TRAFFIC
Scale 1 inch = 1 mile

THIS PROJECT SHALL BE CONSTRUCTED UNDER OHIO TURNPIKE PROJECT NO. 1, GENERAL SPECIFICATIONS, DATED DECEMBER 9, 1952

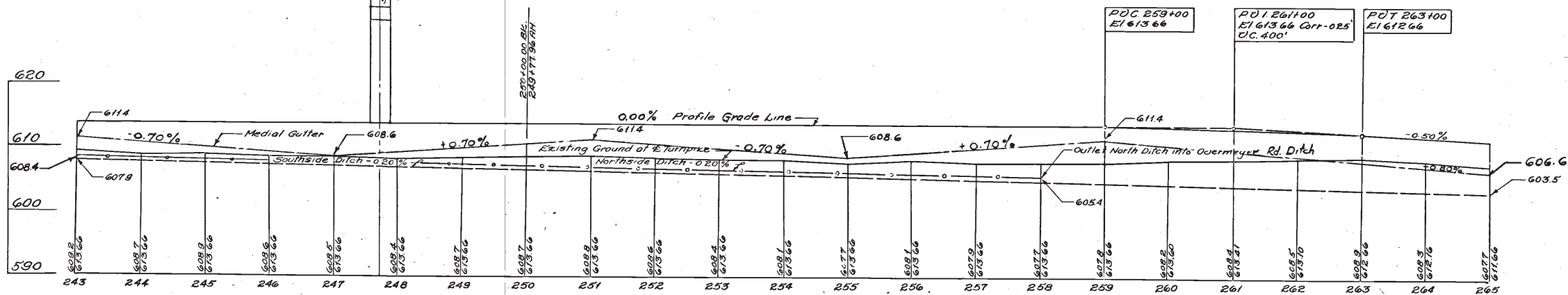
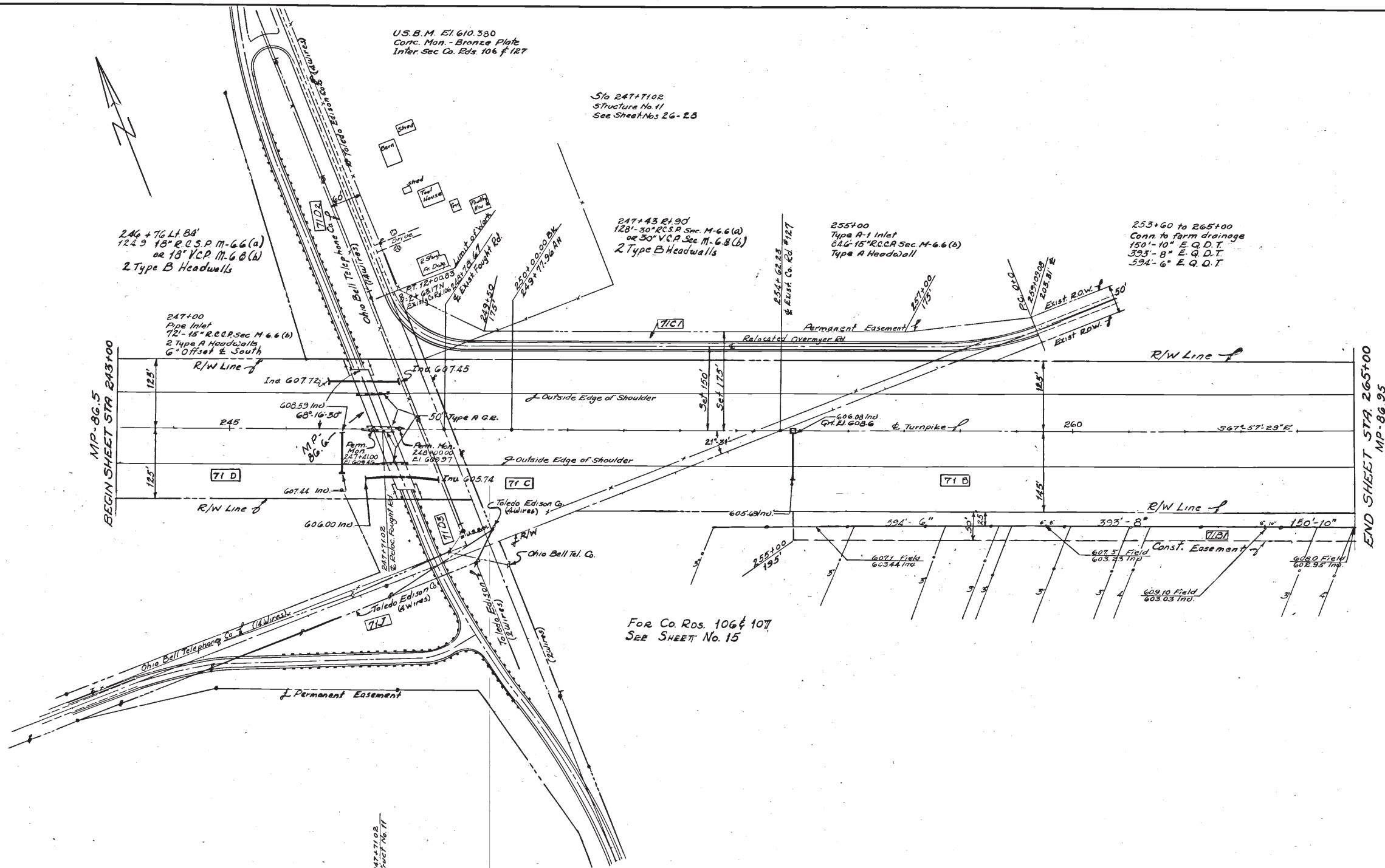
SPECIAL PROVISIONS FOR CONTRACT C-40

SUPPLEMENTAL SPECIFICATION NO. B-20 DATED DEC. 9, 1952
SUPPLEMENTAL SPECIFICATION NO. I-9 DATED DEC. 9, 1952
SUPPLEMENTAL SPECIFICATION NO. I-17 REVISED MAY 28, 1953
SUPPLEMENTAL SPECIFICATION NO. T-30 DATED DEC. 9, 1952
SUPPLEMENTAL SPECIFICATION NO. T-31 DATED DEC. 9, 1952
SUPPLEMENTAL SPECIFICATION NO. B-35 DATED DEC. 9, 1952
SUPPLEMENTAL SPECIFICATION NO. T-35 DATED DEC. 9, 1952
SUPPLEMENTAL SPECIFICATION NO. I-30 DATED JUL 9, 1953
SUPPLEMENTAL SPECIFICATION NO. A-5 DATED AUG 7, 1953
SUPPLEMENTAL SPECIFICATION NO. I-29 DATED MAY 28, 1953
SUPPLEMENTAL SPECIFICATION NO. I-18 DATED MAY 28, 1953

STANDARD DRAWINGS

No.	TITLE	DATE
1	Turnpike Ditch Details	5-6-53
2	Standard Headwalls For Pipe Sizes 48" Under	1-20-53
3	Standard Headwalls For Pipe Over 48"	1-20-53
4	Typical Roadway Sections	5-6-52
5	Handrail Details	5-6-53
6	Inlets and Curbs	5-6-52
7	Manholes	5-6-53
8	Pavement Reinforcement and Details	6-3-53
9	Transverse Pavement Joints Type A	2-7-53
10	Transverse Pavement Joints Type B	5-6-53
11	Pavement Joint Spacing	12-31-52
12	Right of Way Fence and Gates	5-6-53
13	Right of Way Fence Installation Details	5-6-53
14	Permanent Barricade, Permanent Monuments and Delineators	3-3-53
15	Drainage Details For Turnpike Overpasses and Underpasses.	4-27-53
16	Underdrains	1-20-53
17	Guard Rails Type A and B	1-24-53
18	Guard Rails Type C and D	5-6-53
19	Agricultural Tile Drainage Typical Details	12-5-52
20	Flood Gates for Right of Way Fence	1-6-53
21	Transverse Pavement Joints, Type C	1-23-53
22	Culvert Pipe Bedding and Backfill	2-19-53

DESIGNED: J.C.B.		CHECKED: R.F.P.		DATE: 5-18-53	
DRAWN: J.C.B.		IN CHARGE: F.L.D.		SCALE:	
CONTRACT NO. C-40 SHEET 1 OF 40					



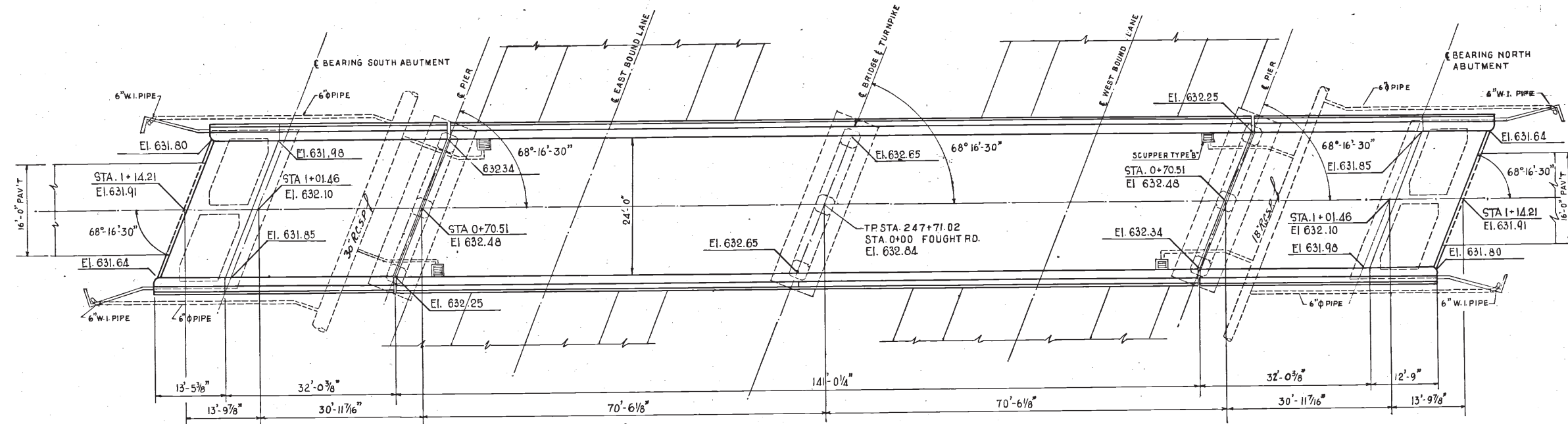
QUANTITIES				
NO.	ITEM	LOCATION & REMARKS	ESTIMATED QUANTITY	FINAL QUANTITY
E1	Right Exc		6,871	7,504
E4	Borrow		49,323	40,497
I-15	Guard Rail	Type 2"	216	200
I-23	R.O.W. Fence	Type 2	4,475	4,499
I-26	Perman. Imp.		2	2
I-3	Place Mats (Type 1)		12,366	12,333
I-9	Sec. & Prot.	Type A	12,366	12,333
I-19	Spec. Seeding		31,010	32,349
E-2	Excav. for Structures (Uncl.)		0	25
I-30	6" E.Q.D.T.		410	394
I-30	8" E.Q.D.T.		400	393
I-30	10" E.Q.D.T.		150	150
I-2	15" R.C.P. M-6.6(b)		156	157.10
I-2	15" R.C.P. M-6.6(a) (w/curb)		124	124.90
I-2	30" R.C.P. M-6.6(a) (w/curb)		158	120.00
S-1	Conn. for Street Class C		10.1	8.76
S-4	Reinf. Steel		4.85	5.38
I-22	Defect Subbase		5,638	5,650
I-33	Bit Mac Surf Course		8,888	8,888
I-71	Reinf. Conc. Pav. 10"		11,850	11,851
I-8	Inlets, Type A-1		1	1

As Built Plans				D.L.M.	1/12/50
NO.	REVISION	BY	DATE		
OHIO TURNPIKE COMMISSION					
OHIO TURNPIKE PROJECT NO. 1					
PLAN AND PROFILE					
SANDUSKY CO.					
243+00 TO 265+00					
PORTER-URQUHART ASSOCIATED					
CONTRACTING ENGINEER					
DESIGN SECTION D-14					
DESIGNED: J.H.H.	CHECKED: B.F.P.	DATE: March 16, 1953			
DRAWN: J.C.B.	IN CHARGE: F.L.D.	SCALE: 1/4" = 100'-0" V: 1" = 10'			
CONTRACT NO. C-40			SHEET 8 OF 40		

34M14A

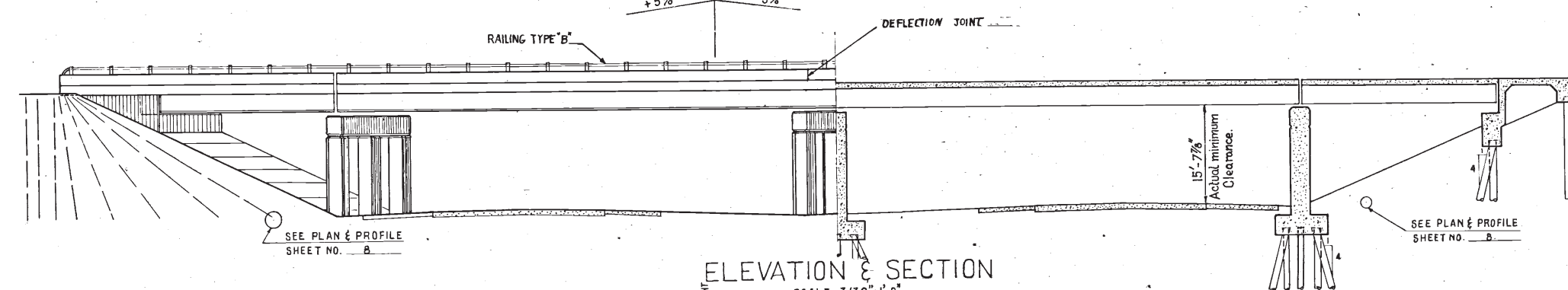
SCHEDULE OF QUANTITIES

ITEM NO.	ITEM	LOCATION & REMARKS	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
E-2	EXC. FOR STRUCTURES		CY	230	230
S-1	CLASS "E" CONCRETE FOR STRS		CY	86	83.41
S-1	CLASS "C" CONCRETE FOR STRS		CY	381	349.80
S-4	REINFORCING STEEL		LBS	84500	85,000
S-7	STRUCTURAL STEEL		LBS	173,500	176,059
S-9	STRUCTURAL EXPANSION AND/OR CONTRACTION JOINT		LBS	9240	6,966
S-14	RAILING TYPE "B"		LF	462	460.60
S-16	FIRST TEST PILE		EA	1	1
S-17	PILE TEST LOAD		EA	1	1
S-18	CAST IN PLACE CONC. PILES FURNISH		LF	2200	2112
S-18	C.I.P. PILES, SPLICES, MAKING		EA	20	0
S-18	CAST IN PLACE CONC. PILES DRIVING		LF	2069	1903
S-29	SCUPPER TYPE "B"		EA	4	4
S-29	6" W.I. DRAINAGE PIPE FOR STRS		LF	180	200.36
S-29	6" Ø DRAINAGE PIPE FOR STRS		LF	180	180

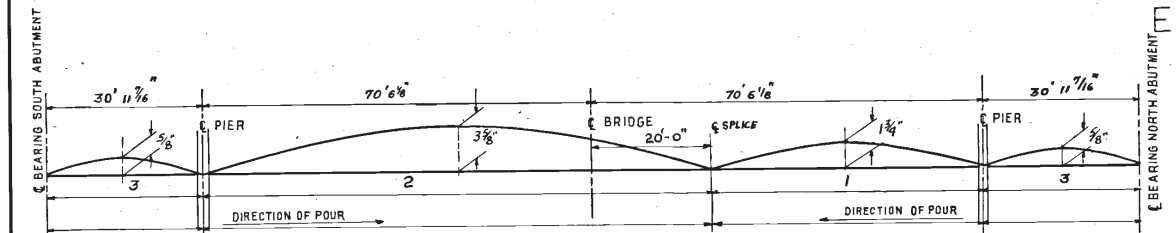


P.V.I. 0+00
E.I. 641.59 Corr 8.75
V.C. = 700

PLAN
SCALE 3/32" = 1'-0"



ELEVATION & SECTION
SCALE 3/32" = 1'-0"



CAMBER & POURING SCHEDULE
NO SCALE

TABLE OF ELEVATION																																				
LOCATION		SOUTH ABUTMENT					PIER NO. 1.										PIER NO. 2.					PIER NO. 3.										NORTH ABUTMENT				
BEAM NO.		1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5
EL. TOP OF PAV'T AT BEARING		631.98	632.05	632.10	631.98	631.86	632.35	632.41	632.48	632.37	632.25	632.35	632.42	632.49	632.38	632.26	632.66	632.75	632.84	632.75	632.66	632.26	632.38	632.49	632.42	632.35	632.25	632.37	632.48	632.41	632.35	631.86	631.98	632.10	632.05	631.98
EL. TOP OF BEARING PAD		628.40	629.24	629.27	629.45	628.28	628.13	628.23	628.30	628.17	628.04	628.13	628.24	628.30	628.17	628.04	628.36	628.51	628.40	628.57	628.32	628.04	628.17	628.30	628.24	628.13	628.04	628.17	628.30	628.24	628.13	628.04	628.17	628.30	628.24	628.13
S. = STOOD											.756	.756	.756																							
T = SHOE HEIGHT		.333	.333	.333	.333	.333	*.946	.946	.946	.946	*.946	.946	.946	.946	.946	.946	.946	.946	.946	.946	.946	.946	.946	.946	.946	.946	*.946	.946	.946	.946	*.946	.333	.333	.333	.333	.333
TYPE OF BEARING		A	A	A	A	A	D	D	D	D	D	D	D	D	D	D	C	C	C	C	C	C	D	D	D	D	D	D	D	D	D	A	A	A	A	A
* Between Pad & Masonry Plate put a plate as follows: Pier*1 Beam*1: 0.024 (¼"厚) & Beam*5: 0.023 (¼"厚) — Pier*3 Beam*6: 0.023 (¼"厚) & Beam*10: 0.024 (¼"厚).																																				

* Between Pad & Masonry Plate put a plate as follows: Pier #1 Beam #1: 0.024 (1/4") & Beam #5: 0.023 (1/4") - Pier #3 Beam #6: 0.023 (1/4") & Beam #10: 0.024 (1/4").

GENERAL NOTES :

SPECIFICATIONS:
DESIGN SPECIFICATION FOR HIGHWAY STRUCTURES STATE OF OHIO, OCTOBER 1, 1951.
REVISED JULY 15, 1952. GENERAL SPECIFICATIONS. C.F. 30

CONCRETE :

PIER FOOTINGS - CLASS "E" ALL OTHER CONCRETE - CLASS "C" ALL EXPOSED EDGES TO BE CHAMFERED 1" UNLESS OTHERWISE SHOWN.
ALL PADS TO BE POURED MONOLITHICALLY WITH PIERS AND ABUTMENTS.

REINFORCEMENT:

INTERMEDIATE HARD OR RAIL STEEL DEFORMED BARS.

STRUCTURAL STEEL :

ALL STRUCTURAL STEEL TO BE CARBON STEEL, RIVETS 7/8" Ø ; HOLES 15/16" Ø. WELDING - CLASS "A".

FOUNDATIONS:

ANY CHANGES IN REQUIRED FOUNDATION ELEVATIONS SHALL BE DETERMINED BY ENGINEER.

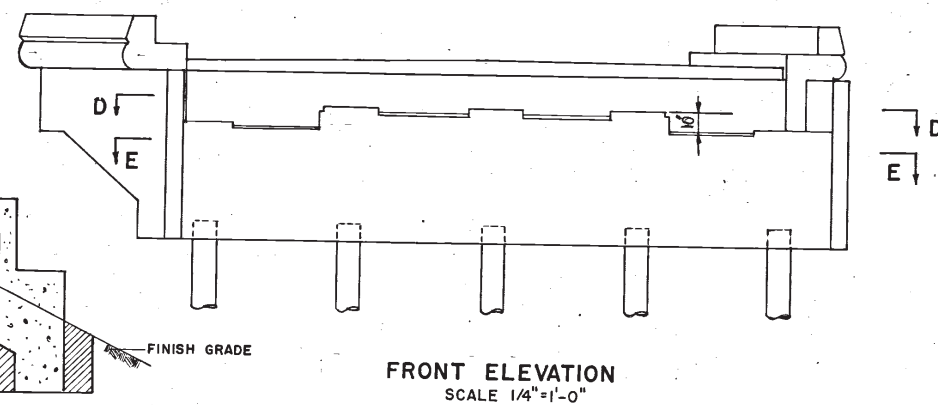
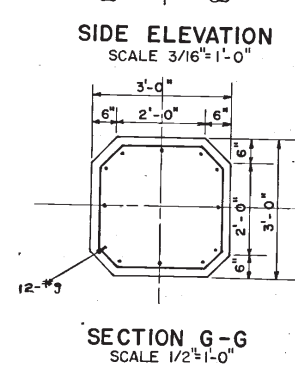
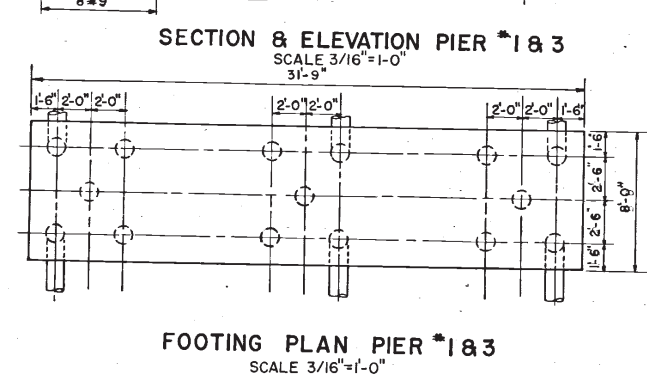
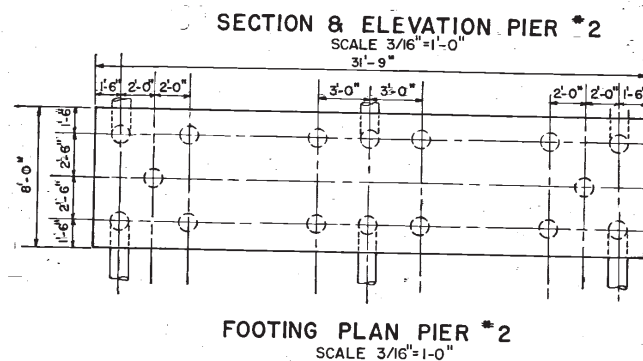
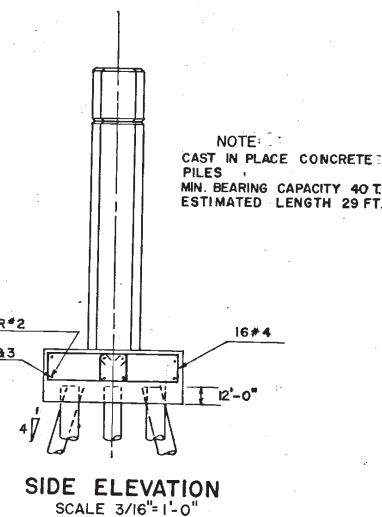
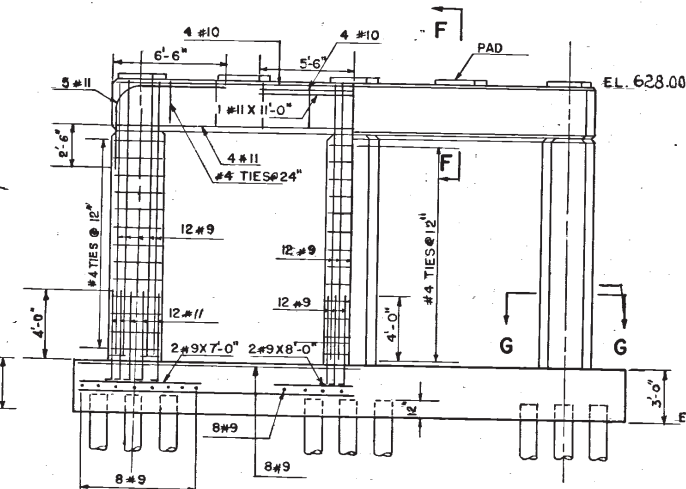
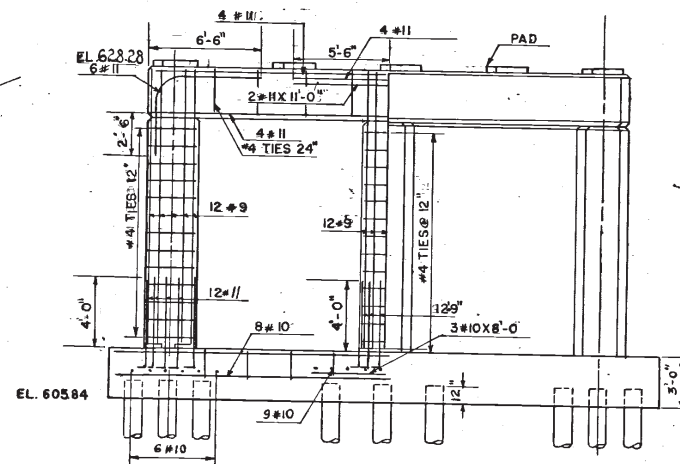
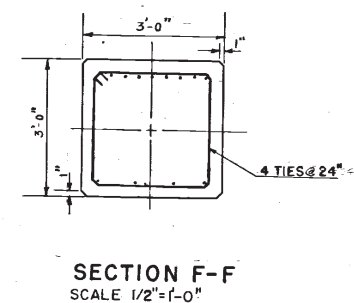
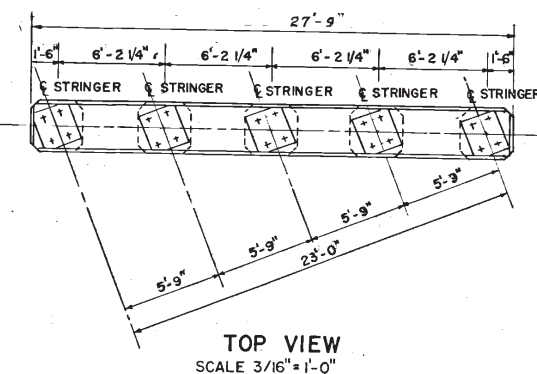
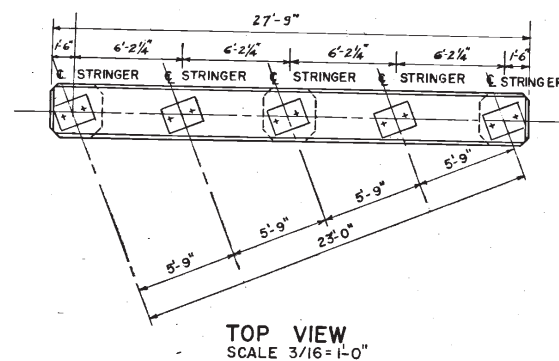
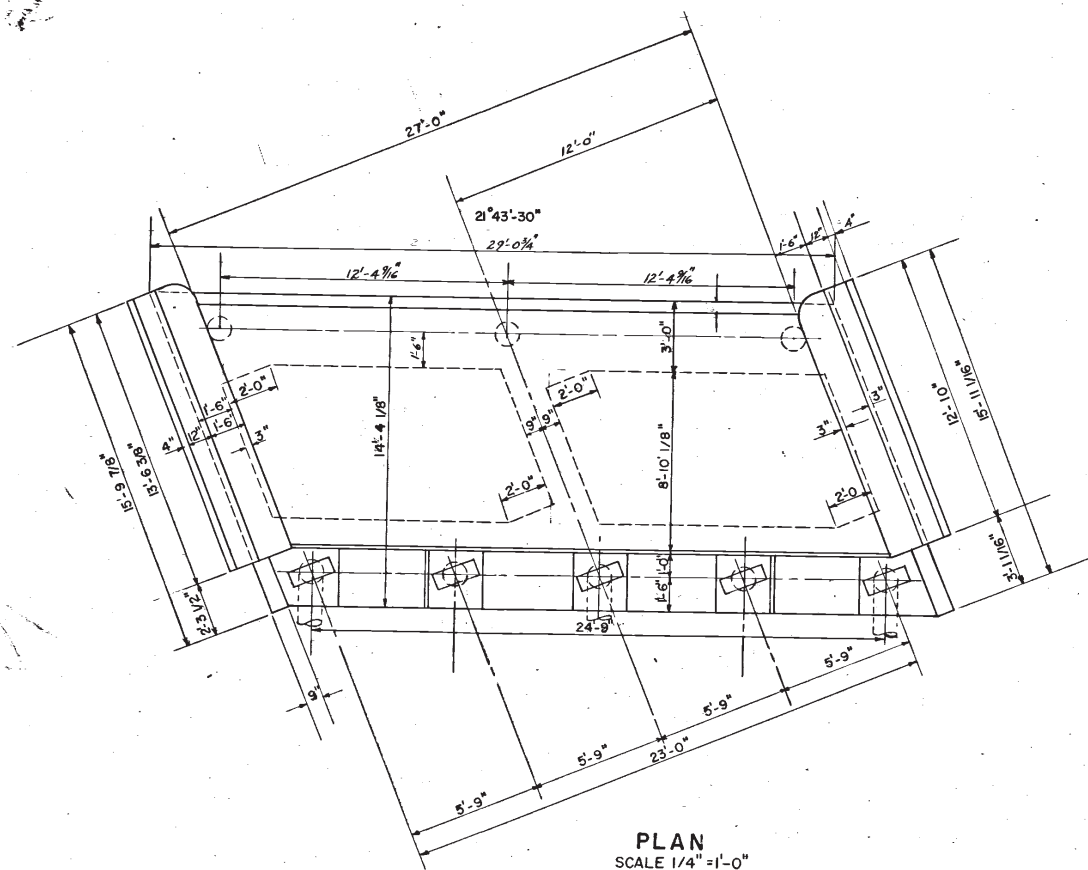
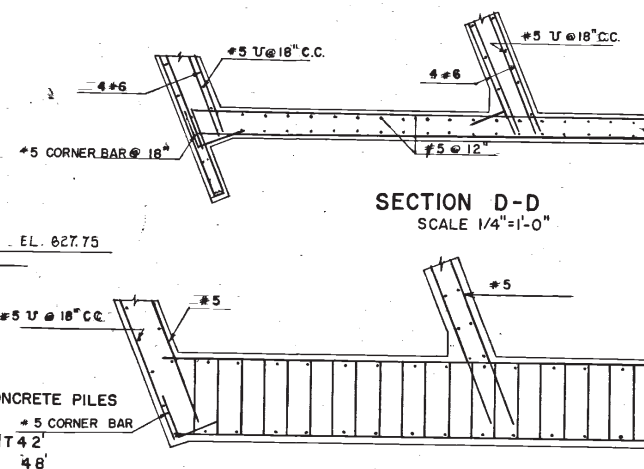
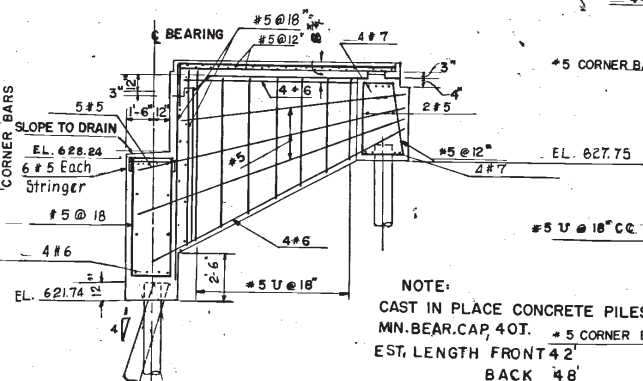
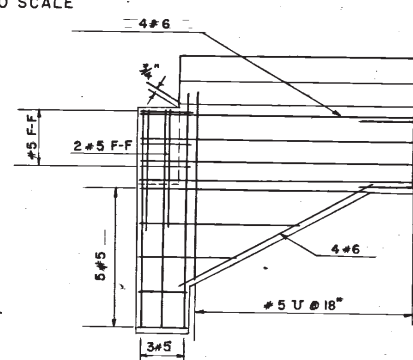
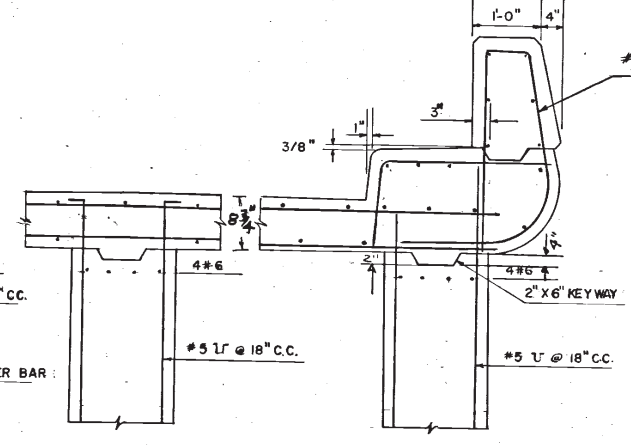
FORMING:

FOR EXPOSED PORTIONS OF ABUTMENTS AND PIERS SHALL BE "T" AND "G" PLACED VERTICAL WITH STAGGERED END JOINTS. FORMS FOR PARAPET SHALL BE LINED FOR SMOOTH FINISH.

NO CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON THE PLANS.
CORE BORING LOCATION: SEE SHEET NO. 39.

NOTE: FOR SHOE DETAILS SEE SHEET NO. 37

BRIDGE DECK REPLACED - CIP: 43-89-13			
2 As Built Plans		DLM	1/12/54
1 Revision of Camber		DLM	1/14/54
NO.	REVISION	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
FOUGHT RD. STRUCTURE NO. 11 - SANDUSKY COUNTY RD. NO. 106 - LAYOUT PLAN			
PORTER-URQUHART ASSOCIATED CONTRACTING ENGINEER DESIGN SECTION D-14			
DESIGNED: EJD	CHECKED: DLM	DATE: JUNE 10, 1953	
DRAWN: L.S.	IN CHARGE: FLD	SCALE: AS NOTED	
CONTRACT NO. C-40		SHEET 26 OF 40	

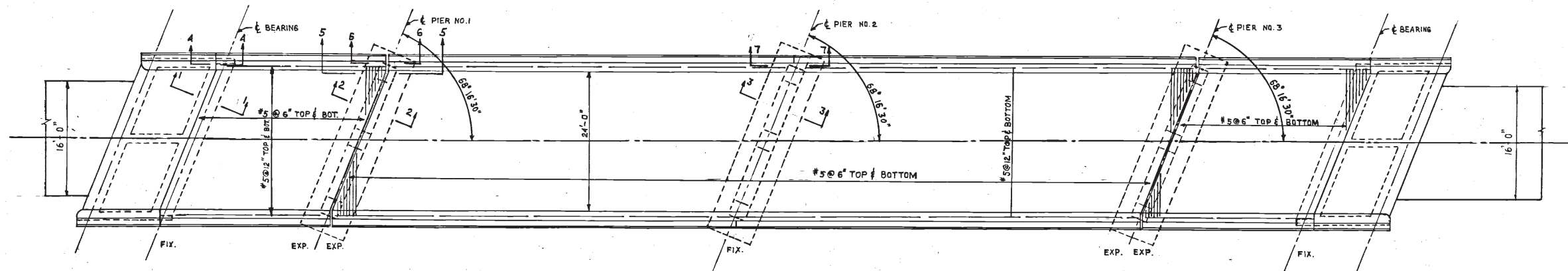
SECTION A-A
NO SCALESECTION E-E
SCALE 1/4"=1'-0"SECTION C-C
SCALE 3/4"=1'-0"

BRIDGE DECK REPLACED - CIP: 43-89-13			
NO.	As Built Plans	REVISION	DATE
1			
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
FOUGHT RD. STRUCTURE #11			
SANDUSKY COUNTY RD. #106			
ABUTMENT AND PIER DETAILS			
PORTER-URQUHART ASSOCIATED			
CONTRACTING ENGINEER			
DESIGN SECTION D-14			
DESIGNED: E.J.D.	CHECKED: D.L.M.	DATE: JUNE 13, 1983	
DRAWN: H.A.D.	IN CHARGE: F.L.D.	SCALE: AS NOTED	
CONTRACT NO. C-40 SHEET 27 OF 40			

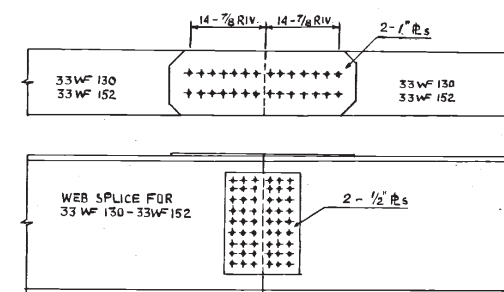
NOTE:
CAST IN PLACE CONCRETE
PILES
MIN. BEARING CAPACITY 40T
ESTIMATED LENGTH 29 FT.

NOTE:
CAST IN PLACE CONCRETE PILES
MIN. BEAR. CAP. 40T.
EST. LENGTH FRONT 42'
BACK 48'

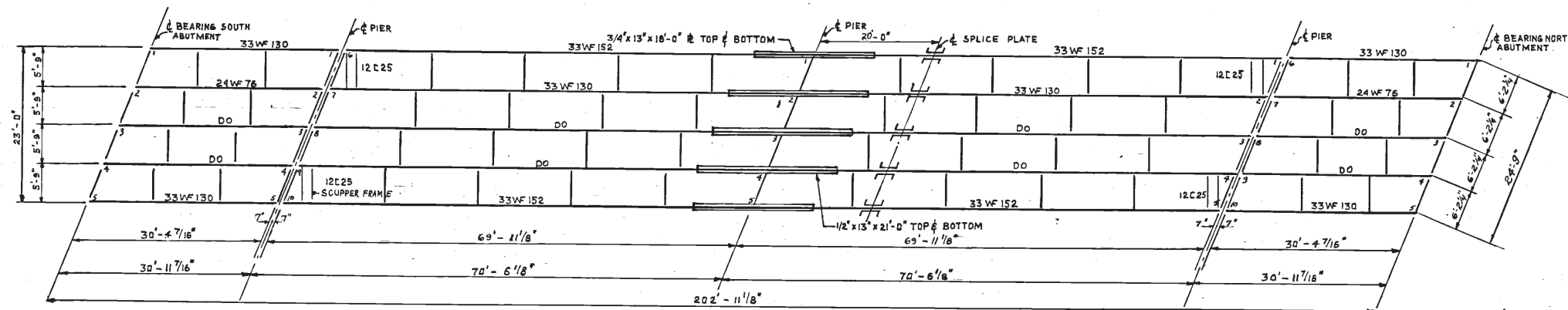
36 M144



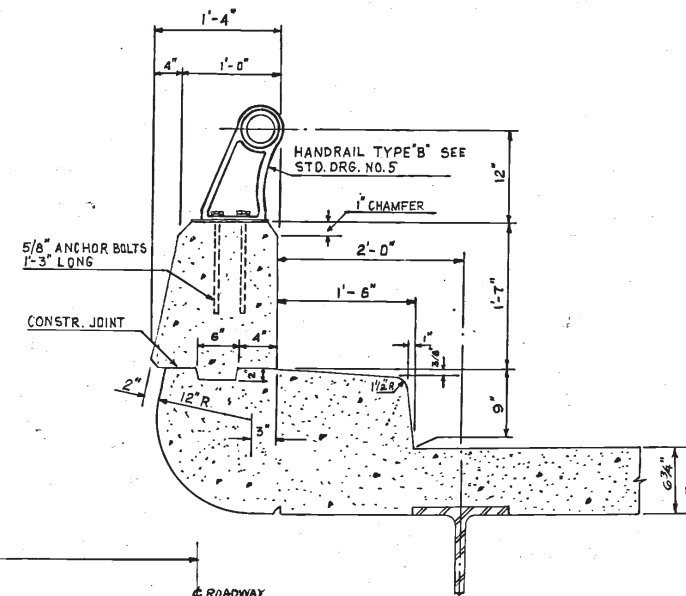
DECK SLAB
SCALE 3/32" = 1'-0"



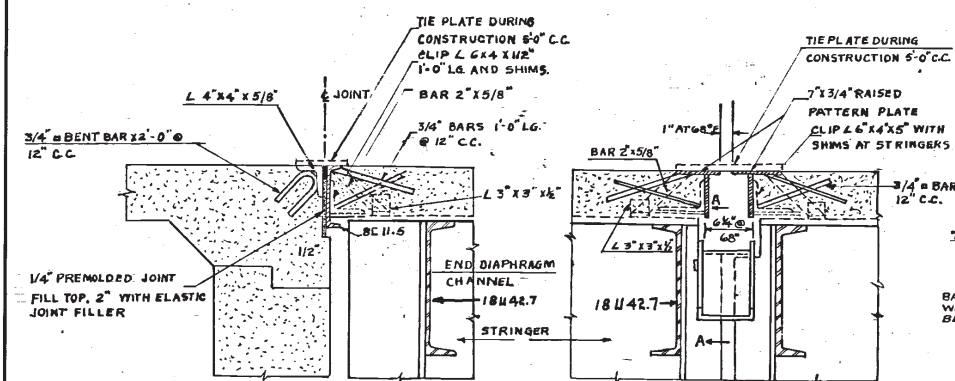
SPlice DETAILS
NO SCALE



STEEL PLAN
SCALE 3/32" = 1'-0"



PARAPET DETAIL
SCALE 1" = 1'-0"

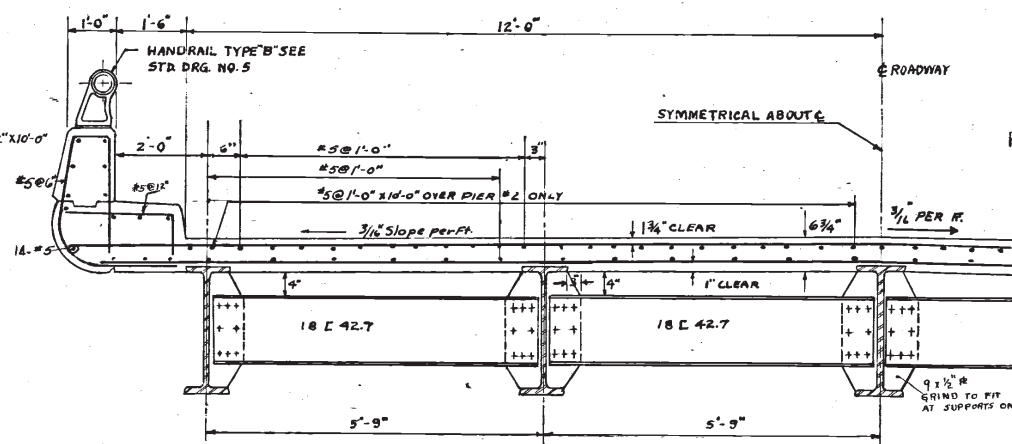


SECTION 1-1
Scale 1" = 1'-0"

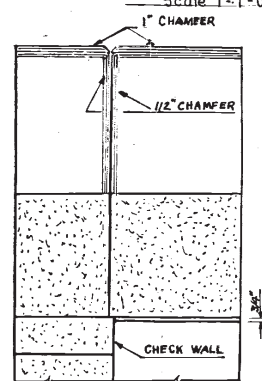
SECTION 2-2
Scale 1" = 1'-0"

SECTION A-A
Scale 1" = 1'-0"

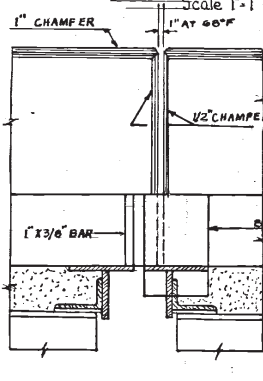
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Scale 1" = 1'-0"



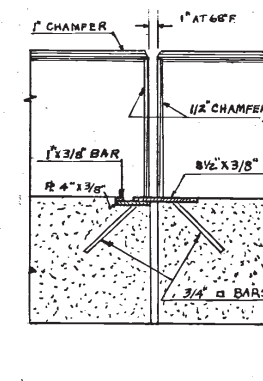
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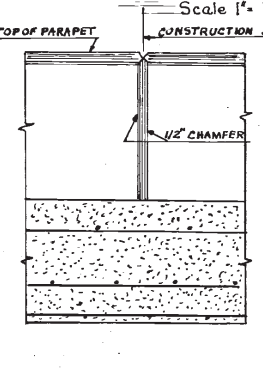
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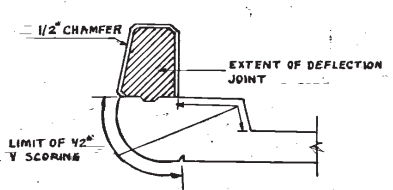
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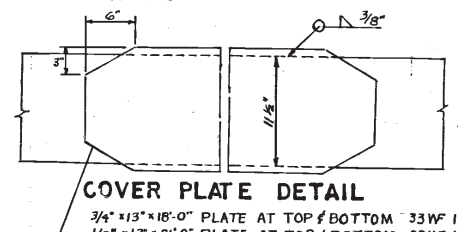
SECTION 6-6
Scale 1" = 1'-0"



SECTION 7-7
Scale 1" = 1'-0"

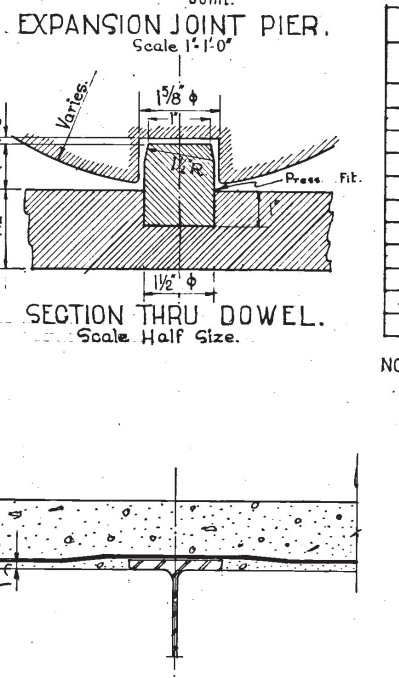
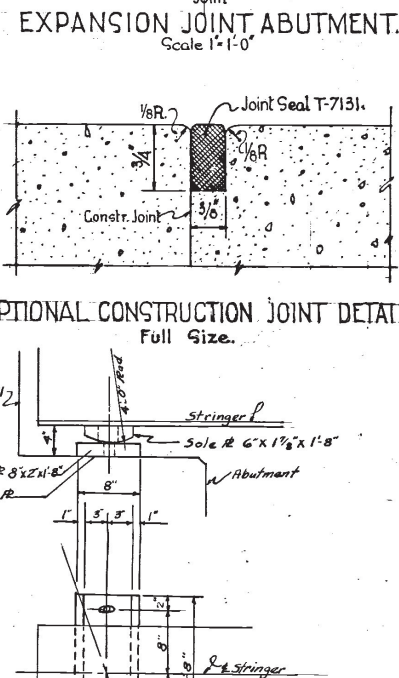
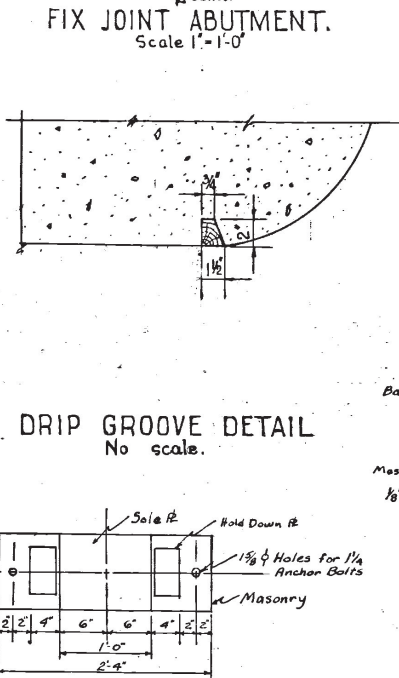
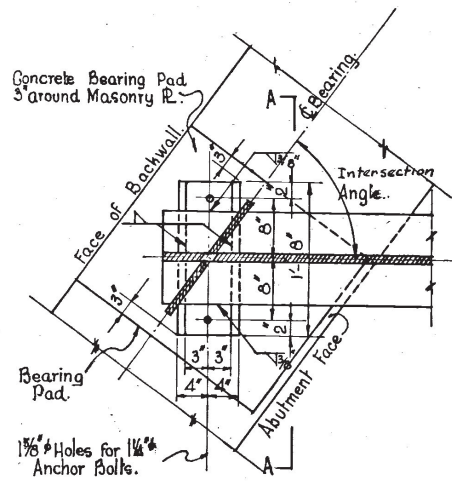
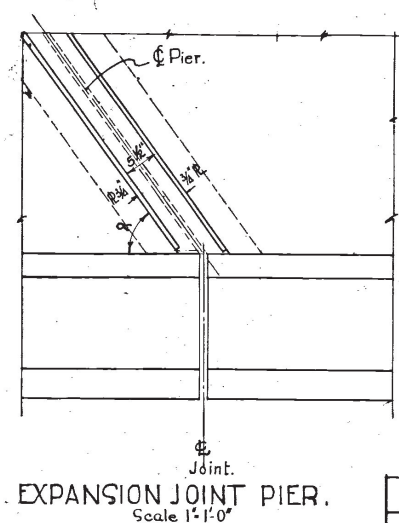
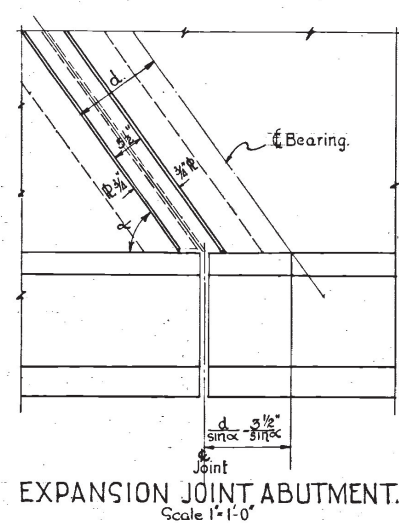
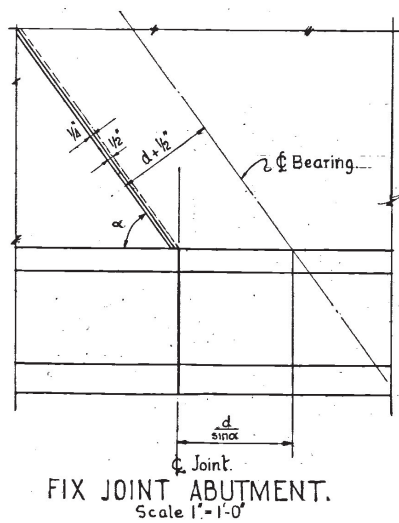
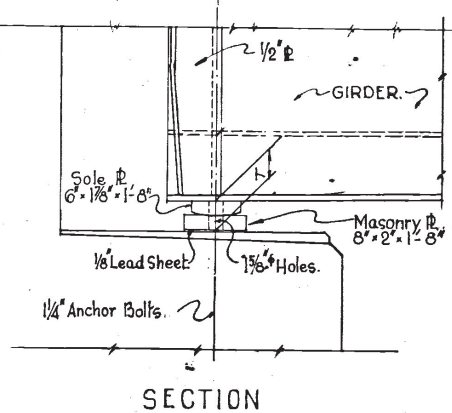


CHAMFER DETAIL
NO SCALE



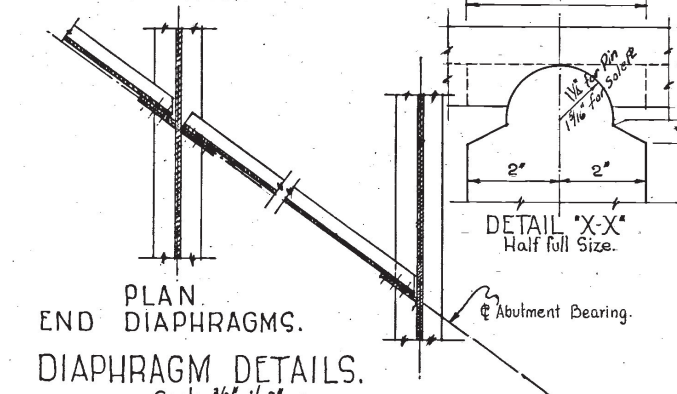
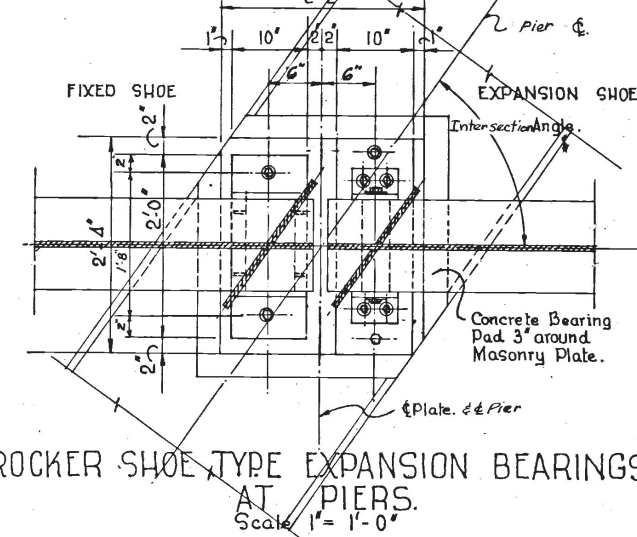
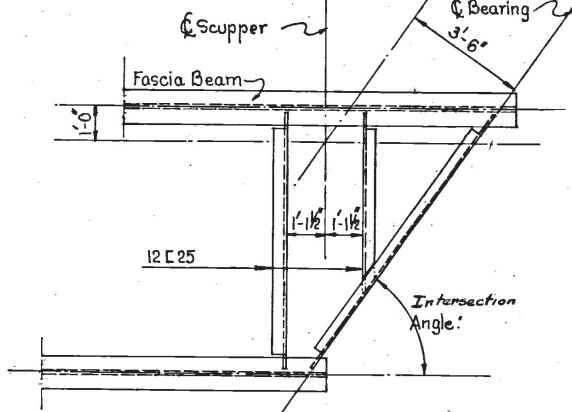
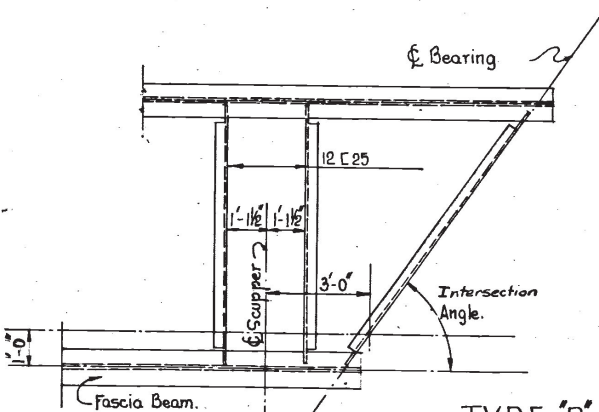
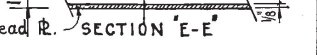
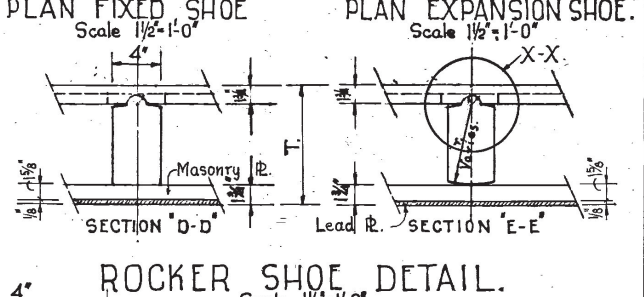
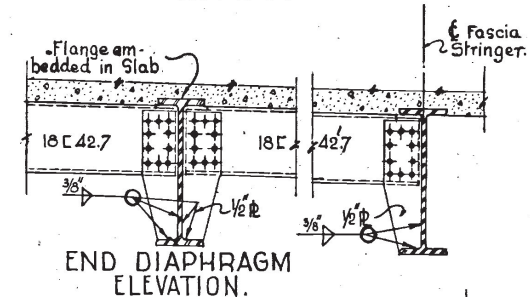
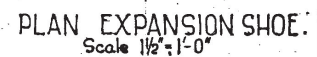
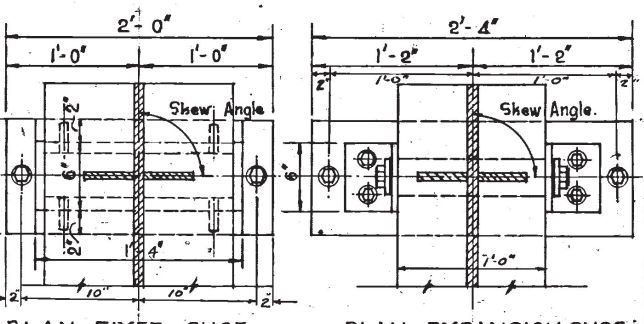
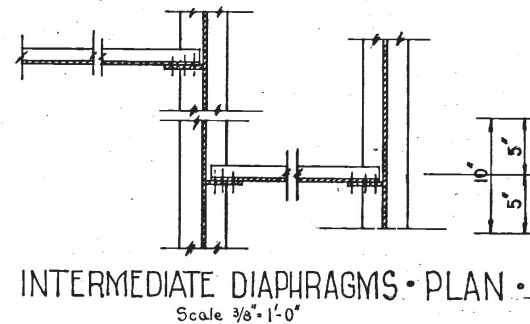
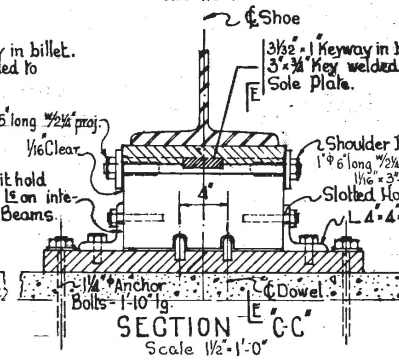
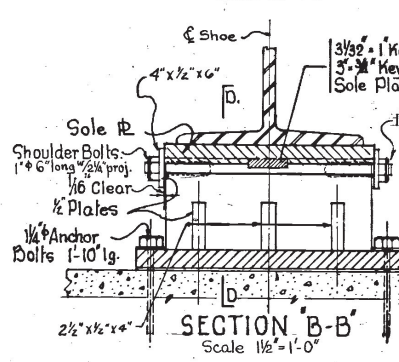
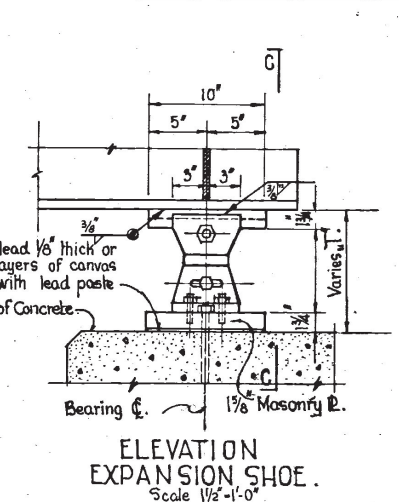
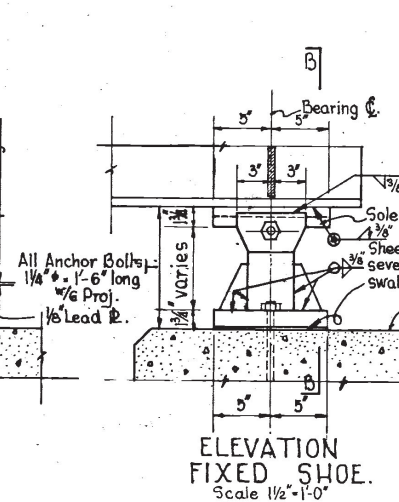
COVER PLATE DETAIL
3/4" x 13" x 16" PLATE AT TOP & BOTTOM 33WF152 BEAMS
1/2" x 13" x 21" PLATE AT TOP & BOTTOM 33WF130 BEAMS

BRIDGE DECK REPLACED - CIP: 43-89-13					
1	As Built Plans			D.L.M.	1/12/56
NO.	REVISION			BY	DATE
OHIO TURNPIKE COMMISSION					
OHIO TURNPIKE PROJECT NO. 1					
FOUGHT ROAD-STRUCTURE NO. 11					
SANDUSKY COUNTY ROAD 106					
STEEL FRAMING PLAN					
PORTER-URQUHART ASSOCIATED					
CONTRACTING ENGINEER					
DESIGN SECTION D-14					
DESIGNED: E.J.D.		CHECKED: D.L.M.		DATE: 10 JUNE 1953	
DRAWN: B.P.		IN CHARGE: E.L.D.		SCALE: AS NOTED	
CONTRACT NO. C-40 SHEET 28 OF 40					



MARK	JOINT TYPE	HEIGHT	SHOE TYPE	Rad
A	Fixed	.333	Friction	4'-0"
B	Expansion	.333	Friction	4'-0"
C	Fixed	.946	Rocker	7'-6"
D	Expansion	.946	Rocker	7'-6"
E	Fixed	1.020	Rocker	8'-0"
F	Expansion	1.020	Rocker	8'-0"
G	Fixed	1.154	Rocker	10'-0"
H	Expansion	1.154	Rocker	10'-0"

NOTE: Bevel Sole Plates to Grade where grade is greater than 1%.



NO.	As Built Plans	REVISION	BY	DATE
1	As Built Plans		DLM	1/18/56

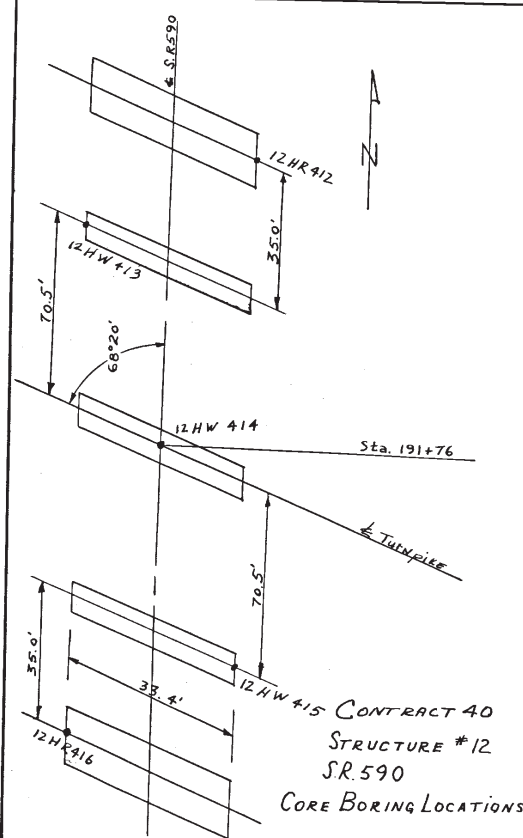
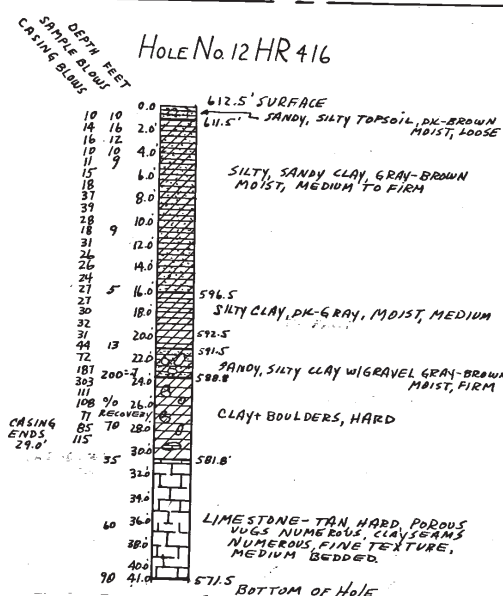
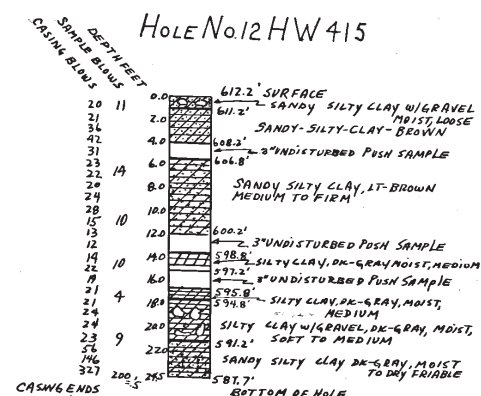
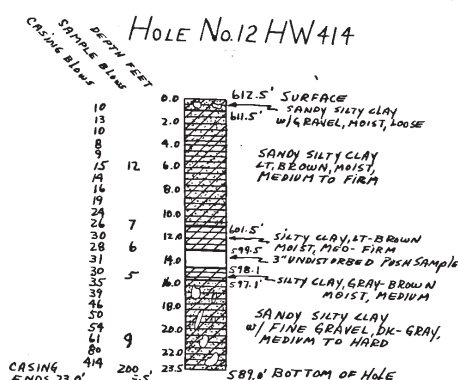
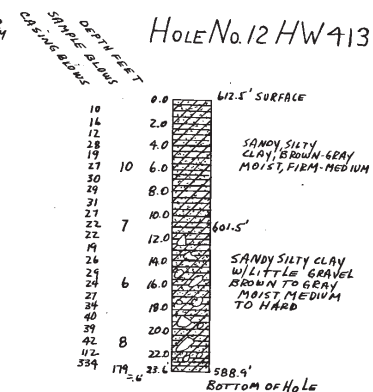
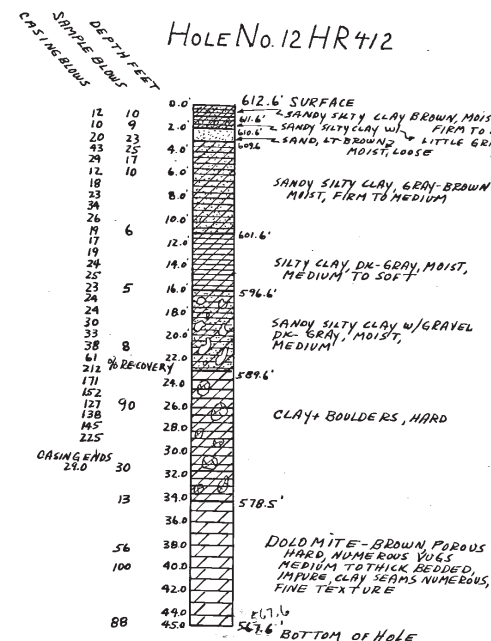
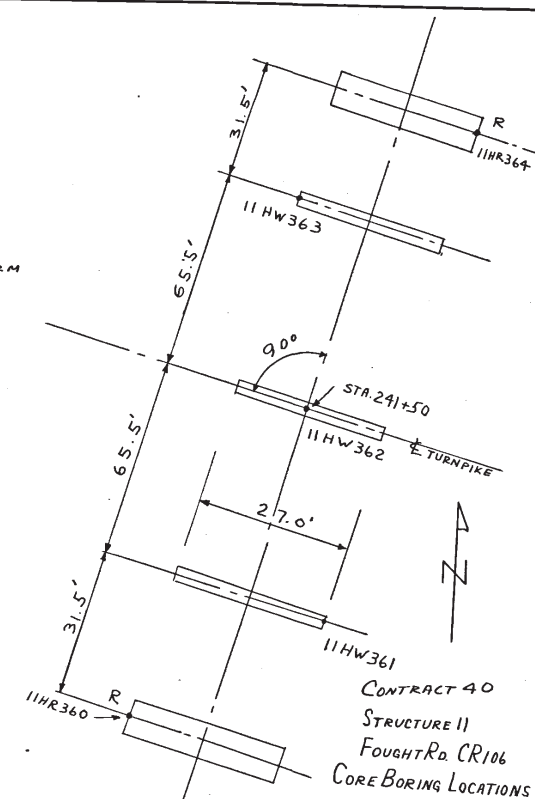
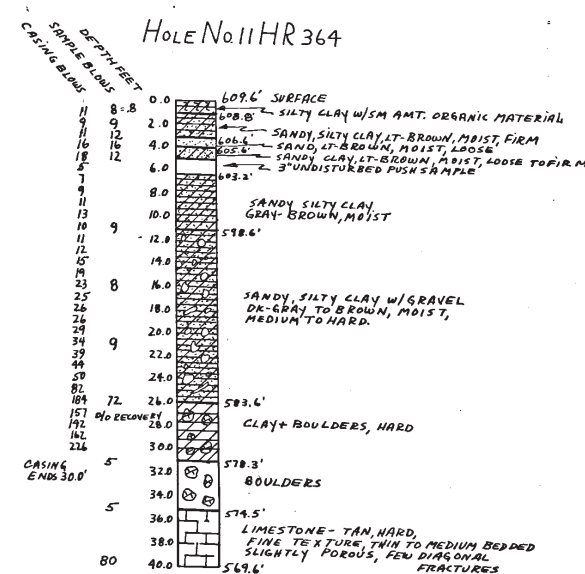
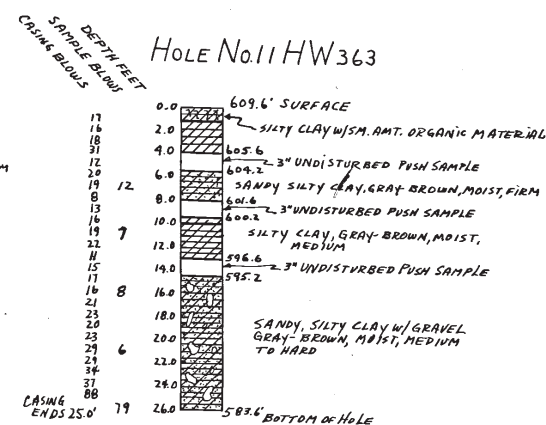
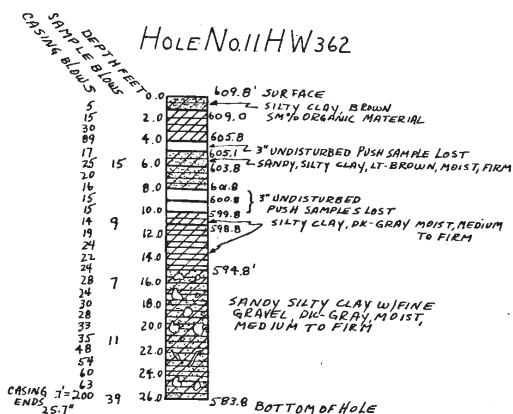
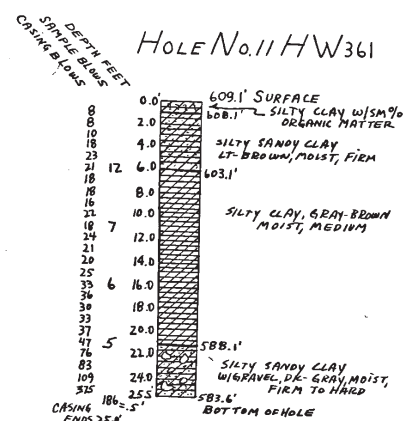
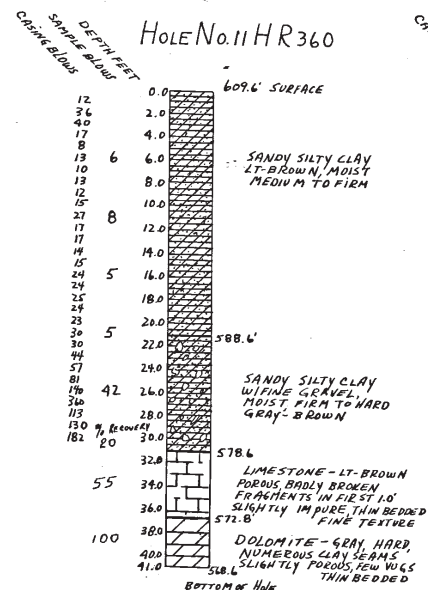
OHIO TURNPIKE PROJECT NO. 1

TYPICAL DETAILS.

PORTER-URQUHART ASSOCIATED
CONTRACTING ENGINEER
DESIGN SECTION D-14

DESIGNED: EJD CHECKED: DLM. DATE: APR 7, 1953
DRAWN: RCB IN CHARGE: FLD. SCALE: AS NOTED

CONTRACT NO. C-40 SHEET 37 OF 40



Rev. No. 1 AS BUILT PLANS by D.L.M. 1-12-56

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 11, FOUGHT RD. CR. 106.

STRUCTURE NO. 12, S.R. #12. CONTRACT 40

PORTER-URQUHART ASSOCIATED

CONTRACTING ENGINEER

DESIGN SECTION D-14

DRAWN E.K. CHECKED J.M.D. DATE 2-1-53

SCALE As Shown

CONTRACT NO. C-40 SHEET 39 OF 40

OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE
CONTRACT CIP 43-89-15 (PART 1)

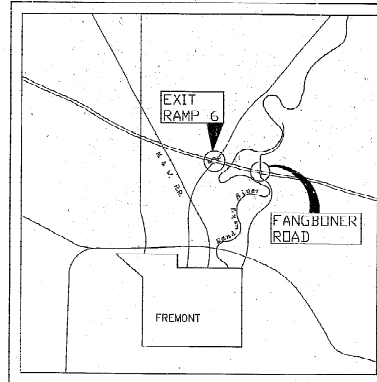
DECK REPLACEMENT TURNPIKE STRUCTURES

FANGBONER ROAD OVER THE OHIO TURNPIKE M.P. 91.1
EXIT 6 RAMP OVER THE OHIO TURNPIKE M.P. 91.6

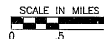
SANDUSKY COUNTY
ORIGINAL CONTRACT SECTION C-39

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TRAFFIC CONTROL	3-6
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CHAIN LINK SAFETY FENCE	CL2
CHAIN LINK SAFETY FENCE	CL2A

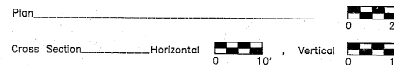


LOCATION MAP



Portion to be Improved
Other Roads

SCALES



SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

BP-2	1-11-80	GR-1	1-11-80	BR-1	5-29-79
BP-3	12-8-78	GR-2B	2-5-82	TC 35.10	8-28-84
BP-4	10-1-87	GR-3	1-21-85		
BP-5	10-1-87	GR-4	2-5-82		
BP-7	10-1-87	MC-4	7-26-78		
F-1	11-10-83	MC-6	1-30-84	CU 3A	5-1-79

APPROVED FOR
THE OHIO TURNPIKE COMMISSION
BY
Ed Alan Plavin
CHIEF ENGINEER
2-13-89
DATE

NOTE:
THIS CONTRACT IS COMBINED
WITH CONTRACT CIP 43-89-15
PART 2 TO FORM A SINGLE
CONSTRUCTION CONTRACT.

PLANS PREPARED BY:

WOOLPERT
CONSULTANTS
100 SOUTH FIVE MILE
COLLIER, PA 15116-1671

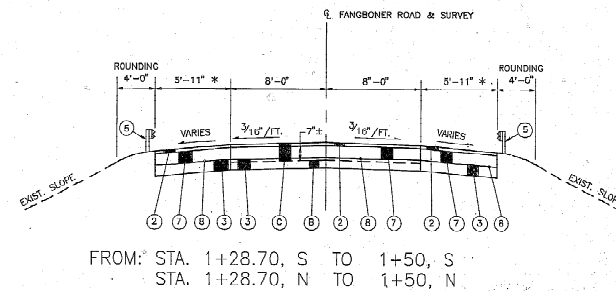
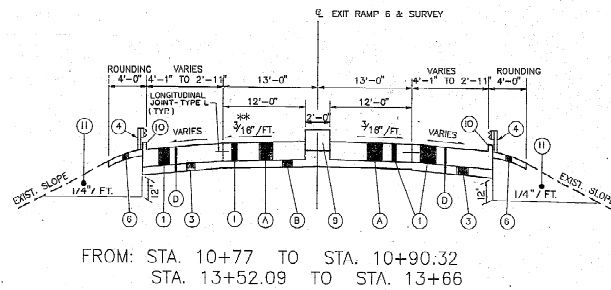


Pierre F. O'Hare
Pierre F. O'Hare, P.E.

REVISD TO AS BUILT W.E.B. 1-2-90

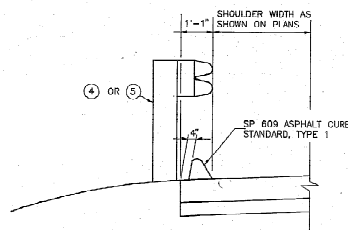
UNDERGROUND UTILITIES
2 WORKING DAYS
BEFORE YOU DIG
CALL 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

TYPICAL SECTIONS

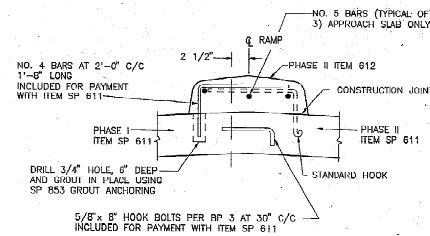


LEGEND

- (A) - EXISTING CONCRETE PAVEMENT
- (B) - EXISTING SUBBASE
- (C) - EXISTING 8"± ASPHALT CONCRETE PAVEMENT
- (D) - EXISTING PAVED SHOULDER (REMOVE UNDER ITEM 203)
- (1) SP 151 - FULL DEPTH PAVEMENT REPAIRS
- (2) 404 - 1/4" ASPHALT CONCRETE SURFACE COURSE
- (3) SP 310 - 6" SUBBASE, TYPE I, GRADING A
- (4) SP 606 - GUARDRAIL REGULI, TYPE 5
- (5) 606 - GUARDRAIL, STD TYPE 5
- (6) SP 627 - STONE SHOULDER PROTECTION (TO BE USED WITH GUARDRAIL)
- (7) 402 - 2 1/4" ASPHALT CONCRETE, AC-20
- (8) 408 - PRIME COAT (0.35 GAL./SY.)
- (9) 612 - CONCRETE MEDIAN
- (10) 609 - CONCRETE CURB - TYPE 2A
- (11) SP 605 - AGGREGATE DRAIN, TYPE II



SHOULDER WITH ASPHALT CURB

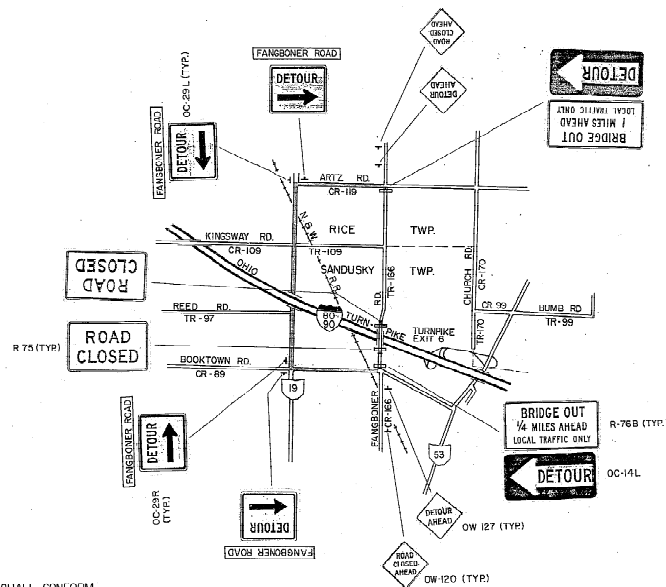


PROPOSED CONCRETE
MEDIAN CONSTRUCTION DETAIL
FOR APPROACH SLAB

* NOTE 1: WITH ITEM SP 609 - ASPHALT CONCRETE CURB, ADD 1'-1"± TO DIMENSION SHOWN. (SEE DETAIL, THIS SHEET)

* NOTE 2: SLOPE VARIES FROM 3/16" / FT. AT STA. 13+52.09 TO 0' / FT. AT STA. 13+77.00

NO.		REVISIONS		DATE
OHIO TURNPIKE COMMISSION OHIO TURNPIKE				
TYPICAL SECTIONS				
WOODPORT CONSULTANTS 400 SOUTH FIFTH STREET COLUMBUS, OHIO 43215-4127				
DESIGNED T.D.W.	CHECKED T.D.W.	DATE		
DRAWN L.A.G.	IN CHARGE P.F.O.	SCALE	N.T.S.	
CONTRACT NO. OH-43-89-13 SHEET 2 OF 20 (PART 1)				



NOTE
ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (O.M.U.T.C.D.).

LEGEND

- T SIGN MOUNTED ON POST SUPPORT
- TR SIGN MOUNTED ON PORTABLE BARRICADE. SEE FIG. C-5 OF THE O.M.U.T.C.D.
- TR SIGN MOUNTED ON GATE AND BARRICADE. SEE "BARRICADES AND GATES" SHEET A OF 28.
- DETOUR ROUTE

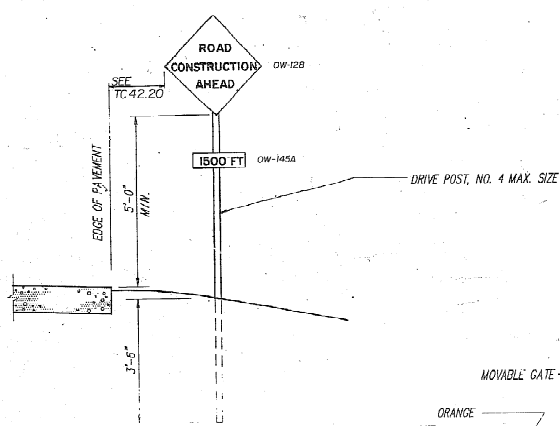
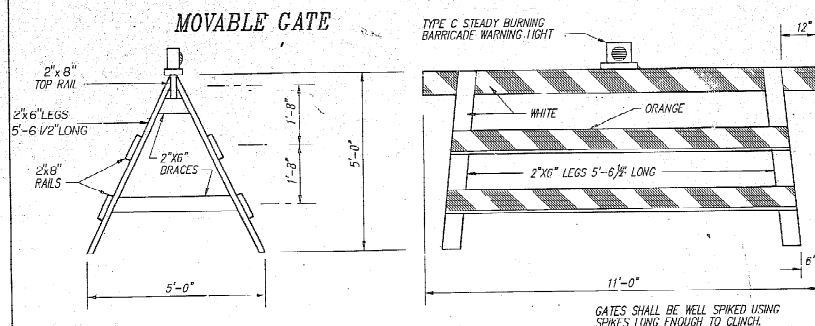
NOTE: RED LIGHTS SHALL BE MOUNTED ON PORTABLE BARRICADES.

OHIO TURNPIKE COMMISSION

TRAFFIC CONTROL

FANGBONER ROAD

DATE: NOV. 1988 SCALE:
CP: 43-89-15 (PART 1) SHEET 3 OF 20



① BARRICADES: BARRICADES SHALL BE CONSTRUCTED ACCORDING TO DETAILS SHOWN. WHEN THE ROAD IS CLOSED TO TRAFFIC, BARRICADES AND GATES SHALL BE USED TO EFFECTIVELY CLOSE THE ENTIRE ROADWAY INCLUDING THE MEDIAN OF DIVIDED HIGHWAYS. IN URBAN AREAS AND AT LOCATIONS WHERE IT IS IMPRACTICAL TO EXTEND THE BARRICADE TO THE RIGHT-OF-WAY LINE BECAUSE OF A SIDEWALK OR OTHER OBSTRUCTION, THE ENDS OF THE BARRICADE SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO EFFECT THE DESIRED CLOSING OF THE HIGHWAY.

② PAINTING AND REFLECTORIZING: ALL RAILS OF THE BARRICADES AND GATES SHALL BE REFLECTORIZED WITH ORANGE AND WHITE REFLECTORIZED SHALING IN 6" WIDE ALTERNATE STRIPES WHICH SLOPE DOWNWARD TOWARD THE CENTER LINE OF THE ROAD AT AN ANGLE OF 45°. ALL THREE RAILS OF THE ROAD CLOSED BARRICADE SHALL BE STRIPED ON THE SIDE FACING TRAFFIC. ALL GATE RAILS SHALL BE STRIPED ON BOTH SIDES. ALL POSTS, BRACES, GATE LEGS, AND ANY UNSTRIPED RAILS SHALL BE PAINTED WHITE.

③ GATES: ONE GATE SHALL BE ERECTED FOR EACH TRAFFIC LANE. GATES SHALL BE CHAINED AND HOOKED TO ONE ANOTHER AND TO ADJACENT POSTS OF THE BARRICADES. CHAINS SHALL BE 1/4" STOCK OR LARGER WITH WELDED LINKS.

A HINGED GATE MAY BE USED AND SHALL BE AN APPROVED 12"x4" STEEL FRAME FARM TYPE, OR A TYPE APPROVED BY THE ENGINEER. THE GATE SHALL BE HUNG ON HINGE SCREW HOOKS, OR AS OTHERWISE APPROVED. STRIPING SIMILAR TO THAT USED ON THE MOVABLE GATE SHALL BE ACCOMPLISHED WITH 1"x8" LUMBER OR WITH METAL STRIPS FASTENED TO THE GATE. THE GATE SHALL BE SUPPORTED AT THE CENTER IN AN APPROVED MANNER.

④ TYPE C STEADY BURNING BARRICADE WARNING LIGHTS: EACH GATE SHALL BE EQUIPPED WITH A TYPE C STEADY BURNING BARRICADE WARNING LIGHT, CONSPICUOUSLY VISIBLE AT ALL DISTANCES UP TO 1000' UNDER NORMAL ATMOSPHERIC CONDITIONS. THE LIGHT SHALL BE IN OPERATION AT ALL TIMES BETWEEN SUNSET AND SUNRISE DURING THE PERIOD THE HIGHWAY IS CLOSED.

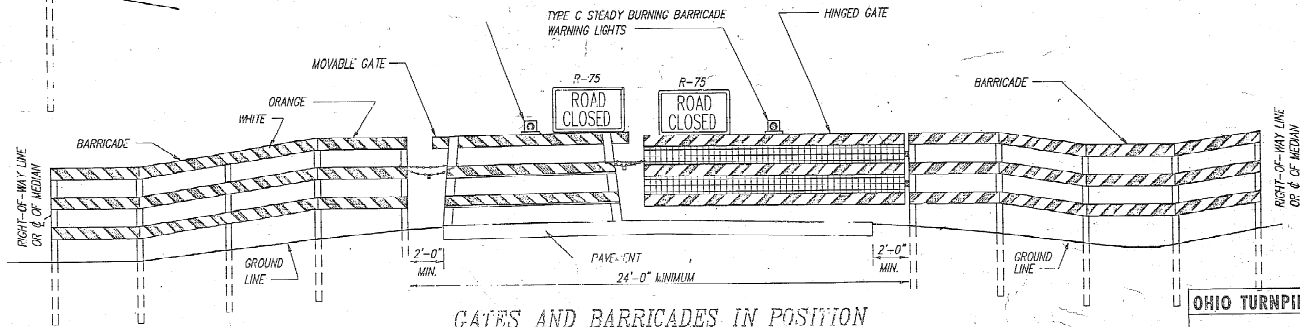
⑤ SIGNS: WHERE THE ROAD IS CLOSED TO TRAFFIC BY THE ERECTION OF GATES AND BARRICADES, ROAD CLOSED SIGNS (R-75) SHALL BE MOUNTED ON THE GATES AS SHOWN.

WHERE TRAFFIC IS MAINTAINED, A ROAD CONSTRUCTION AHEAD SIGN (OW-128) SHALL BE USED ON THE RIGHT SHOULDER ON THE APPROACHES APPROXIMATELY 500 FEET IN ADVANCE OF THE PROJECT.

AN END CONSTRUCTION SIGN (OC-8) SHALL BE ERECTED FACING TRAFFIC LEAVING THE CONSTRUCTION SECTION. THE SIGNS SHALL BE ERECTED AS DETAILED HEREON. DUAL MOUNTED SIGNS ARE REQUIRED FOR A FOUR LANE FACILITY.

⑥ LUMBER: LUMBER USED IN THE CONSTRUCTION OF THE GATES AND BARRICADES SHALL BE NO. 1 COMMON YELLOW PINE OR NO. 1 COMMON DOUGLAS FIR, SURFACED ON FOUR SIDES STANDARD, OR OTHER MATERIALS APPROVED BY THE ENGINEER. ALL SIZES ARE NOMINAL.

⑦ POSTS: POSTS SHALL BE SOUND 4"x4" SAWN OR 4 1/2" ROUND. RAILS OF THE BARRICADE SHALL BE BOLTED TO THE POSTS WITH 5/8" BOLTS.



GATES AND BARRICADES IN POSITION

OHIO TURNPIKE COMMISSION	
BARRICADES AND GATES	
DATE: NOV. 1968	SCALE: 1" = 20'
DP: 42-80-15 (PART 2) SHEET 4 OF 28	

GENERAL NOTES

- CONTRACTOR IS TO REMOVE 10" ± OF MEDIAN CURB IN ACCORDANCE WITH SP202A. CURB TEMPORARY CONCRETE BARRIER INTO THIS AREA AND PROVIDE TEMPORARY END TERMINAL.
- SUPPLEMENTARY REGULATORY SIGN TO BE PLACED BENEATH R-3L-24. SIGN WILL BE REFLECTORIZED WITH A WHITE BACKGROUND AND BLACK LEGEND. SIGN SIZE WILL BE 24" X 24".
- TEMPORARY YELLOW EDGE LINE CLASS 1 TO BE INCLUDED IN SP 614.
- TEMPORARY STOP LINE CLASS 1 TO BE INCLUDED IN SP 614.
- TOP, COOK & STOP LINES SHALL COMPLY WITH ITEM 621. REMOVABLE PAVEMENT MARKINGS MAY BE USED. EXISTING CONFLICTING PAVEMENT MARKINGS BETWEEN THE WORK AREA AND STOP LINE SHALL BE REMOVED. AFTER COMPLETION OF WORK, TEMPORARY MARKINGS SHALL BE REMOVED IN ACCORDANCE WITH 621.194.
- SIGNALS SHALL BE INSTALLED AND OPERATED IN ACCORDANCE WITH THE REQUIREMENTS OF PART 6 OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- THE TYPE "A" FLASHING BARRICADE WARNING LIGHTS SHALL BE MOUNTED ON NOVEL SIGNS AT ALL TIMES.
- CONCRETE MEDIAN SHALL BE REMOVED UPON COMPLETION OF THE DECK REPLACEMENT BETWEEN THE NEW APPROACH SLAB AND THE MEDIAN REMOVED UNDER ITEM SP 202A. MEDIAN CURB REMOVAL AND PARTIAL REPLACEMENT. PAYMENT FOR THIS REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 202 CONCRETE MEDIAN REMOVAL. THE CONCRETE MEDIAN SHALL BE REPLACED IN ACCORDANCE WITH ITEM 612, CONCRETE MEDIAN AND O.D.O.T. STANDARD DRAWING MC 6, HEREIN. THE TOP WIDTH SHALL BE 2'.

- WHEN SIGNALS ARE NOT IN USE THEY MUST BE REMOVED OR BARRAGED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE 24-HOUR PER DAY MAINTENANCE OF THE ONE LANE ROAD TRAFFIC SIGNALS. THE CONTRACTOR SHALL CORRECT ALL OUTAGES OR MALFUNCTIONS AS QUICKLY AS POSSIBLE. A DAY AND NIGHT TELEPHONE NUMBER WITH CONTRACTOR'S CONTACT PERSON MUST BE SUPPLIED TO THE COMMISSION.
- ALL TRAFFIC SIGNALS AND EQUIPMENT USED IN THIS TRAFFIC SIGNAL INSTALLATION, SUCH AS A SIGNAL CABLE AND SIGNAL HEADS, SHALL BE IN CONFORMANCE WITH SPECIFICATIONS 632 AND 732. HOWEVER, THE PERFORMANCE TEST PROVISION NOTED IN SPECIFICATION 632.27, PARAGRAPH 6 AND THE WORKING DRAWING REQUIREMENTS OF 632.03 ARE WAIVED. THE CONTROLLER, FLASHERS, LOAD SWITCHES, CONFLICT MONITOR AND OTHER CONTROLLER ACCESSORIES SHALL COMPLY WITH SPECIAL PROVISION 861 AND 861.1, EXCEPT THAT THE REQUIREMENTS OF 861.03 AND 861.05 ARE WAIVED. USED EQUIPMENT MEETING CURRENT O.D.O.T. SPECIFICATIONS IS ACCEPTABLE.

CONFLICT MONITORS SHALL BE FURNISHED AT ALL LOCATIONS UNLESS AN ELECTRO-MECHANICAL PRETIMED CONTROLLER WITH CAN SHAFT IS PROVIDED.

- SUPPLEMENTARY CONSTRUCTION SIGN TO BE PLACED BENEATH OW-47-36. SIGN WILL BE REFLECTORIZED WITH AN ORANGE BACKGROUND AND BLACK LEGEND. SIGN SIZE WILL BE 18" X 24".
- SUPPLEMENTARY CONSTRUCTION SIGN TO BE PLACED BENEATH OW-47-36. SIGN WILL BE REFLECTORIZED WITH AN ORANGE BACKGROUND AND BLACK LEGEND. SIGN SIZE WILL BE 12" X 24".

NOTE

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."

LEGEND

- TRAFFIC DRUM @ 10' SPACING
- SIGN MOUNTED ON POST SUPPORT
- BARRICADE, PER MC-3
- TEMPORARY TRAFFIC SIGNAL
- CLOSED WORK AREA
- TYPE "A" FLASHING BARRICADE WARNING LIGHT
- FLASHING ARROW PANEL TYPE B, TC-35.10

INTERCHANGE PLAN NOT TO SCALE

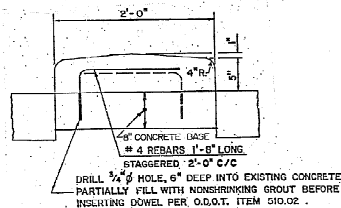
SIGNAL	OPERATION			PHASING
	NORTH APPROACH	SOUTH APPROACH	ESCAPE	
1	GREEN	RED	30	5
2	YELLOW	RED	5	
3	RED	RED	20	30
4	RED	GREEN	30	
5	RED	YELLOW	5	20
6	RED	RED	20	
TOTAL CYCLE				110

TRAFFIC CONTROL ESTIMATED QUANTITIES			
ITEM	TOTAL	UNIT	DESCRIPTION
202	155	LIN. FT.	CONCRETE MEDIAN REMOVED
SP 202A	220	LIN. FT.	MEDIAN CURB REMOVAL AND PARTIAL REPLACEMENT
612	155	LIN. FT.	CONCRETE MEDIAN
SP 612	220	LIN. FT.	CONCRETE MEDIAN
SP 614	LUMP	LUMP	MAINTAINING TRAFFIC
SP 622A	300	LIN. FT.	TEMPORARY CONCRETE BARRIER (FURNISHED BY COMMISSION)
SP 622A	100	EACH	CONCRETE BARRIER DELINEATORS

OHIO TURNPIKE COMMISSION

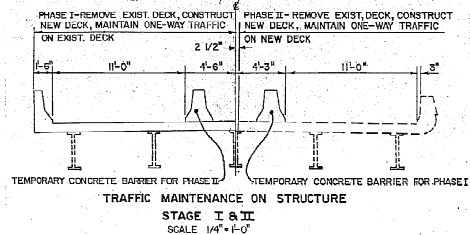
INTERCHANGE TRAFFIC MAINTENANCE PLAN STAGE I

DATE: OCTOBER 1988 SCALE: N.T.S.
DP: 43-89-15 (PART I) SHEET 5 OF 28



MEDIAN CURB REPLACEMENT DETAIL

SEE SP 202A & SP 612

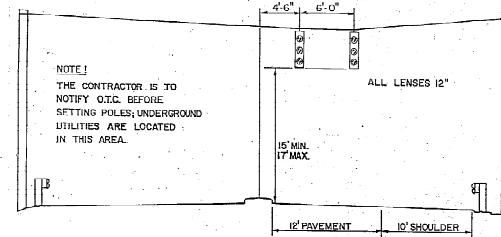
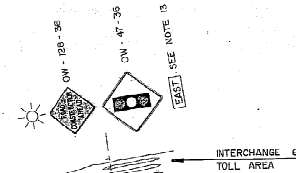


NOTE
ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" FOR STREETS AND HIGHWAYS.

LEGEND

- TRAFFIC DRUM 4' SPACING
- SIGN MOUNTED ON POST SUPPORT
- BARRICADE, PER MC-3
- ↓ TEMPORARY TRAFFIC SIGNAL
- CLOSED WORK AREA
- ☼ TYPE "M" FLASHING BARRICADE WARNING LIGHT
- FLASHING ARROW PANEL, TYPE R, TC-35.10

INTERCHANGE PLAN
NOT TO SCALE



TYPICAL POLE SUPPORTED SIGNAL
SCALE: 3/16" = 1'-0"

OHIO TURNPIKE COMMISSION

INTERCHANGE TRAFFIC MAINTENANCE PLAN STAGE II

DATE: OCTOBER 1998 SCALE: N.T.S.
D.P.: 43-89-10 (PART 1) SHEET 6 OF 28

GENERAL NOTES

7
28

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR PLAN ITEMS SET UP TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES ARE LOCATED WITHIN THE PROJECT AREA:

TELEPHONE:
GENERAL TELEPHONE COMPANY
117 NORTH SANDUSKY STREET
BELLVILLE, OHIO 44811
(419) 483-8134

ILLUINO
OHIO Edison COMPANY
237 WEST WASHINGTON ROAD
SANDUSKY, OHIO 44870
(419) 625-7420

FIBER OPTIC CABLE (ALSO SEE FOLLOWING NOTE)
LITEL TELECOMMUNICATIONS CORPORATION
610 TERMINAL TOWER
CLEVELAND, OHIO 44113
JAYWAM BOWMAN OFFICE (419) 884-0400
HOME (419) 750-6773

CURBS ON APPROACH SLABS

STANDARD TYPE 2A CURBS SHALL BE PROVIDED ON BOTH SIDES OF ALL APPROACH SLABS. COST FOR ALL MATERIALS, LABOR AND INCIDENTALS REQUIRED SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SP 611 - CLASS 3 CONCRETE, APPROACH SLAB, USING SHRINKAGE COMPENSATING CEMENT (T=10').

APPROACH CURBULES

IN ORDER TO PROVIDE A SMOOTH TRANSITION FROM THE EXISTING PAVEMENT TO THE NEW BRIDGE DECK, THE ENGINEER SHALL PROVIDE THE CONTRACTOR WITH FINISH PAVEMENT ELEVATIONS. UPON COMPLETION OF THE ABUTMENT AND DECK SLABS, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER ELEVATIONS OF THE EXISTING SURFACE ALONG THE CENTERLINE AND BOTH SIDES OF PAVEMENT AT 25' INTERVALS. ELEVATIONS OF THE NEW ABUTMENT SLAB AND THE EXISTING PAVEMENT FOR A DISTANCE 100' BEYOND THE PAVING LIMITS SHALL ALSO BE PROVIDED. UPON RECEIPT OF THESE ELEVATIONS, THE ENGINEER WILL CALCULATE AND PROVIDE THE CONTRACTOR FINAL ELEVATIONS FOR THE CONCRETE APPROACH SLABS AND FOR THE APPROACH PAVEMENT. NO APPROACH SLABS SHALL BE POURED NOR SHALL APPROACH PAVING COMMENCE UNTIL THE CONTRACTOR RECEIVES THE FINAL PAVEMENT ELEVATIONS FROM THE ENGINEER.

PAYMENT FOR THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM SP 623 - CONSTRUCTION LAYOUT SURVEY.

LOCATION OF GUARDRAIL

THE LOCATIONS OF GUARDRAIL RUNS, AS SHOWN IN THESE PLANS, ARE SUBJECT TO ADJUSTMENT PRIOR TO FINAL ACCEPTANCE. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

GUARDRAIL BEHIND CURBS

WHERE A CURB IS PROVIDED AT THE OUTER EDGE OF A PAVED SHOULDER, ANY NECESSARY GUARDRAIL SHALL BE POSITIONED SO THAT THE FACE OF THE GUARDRAIL IS LOCATED FLUSH WITH THE FACE OF THE CURB AND THE TOP OF THE RAIL SHALL BE 27" ABOVE THE GUTTER LINE.

TEMPORARY FENCE

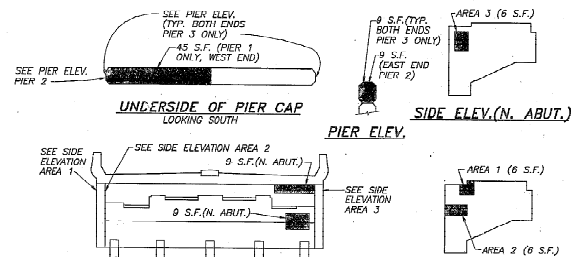
AT DESIGNATED BRIDGE APPROACHES, THE CONTRACTOR SHALL ERECT A TEMPORARY FENCE AT LOCATIONS DIRECTED BY THE ENGINEER. THE TEMPORARY FENCE WITH GATES SHALL BE AS PER THE SPECIAL PROVISIONS - 607.

EXISTING FENCE

IF THE EXISTING FENCE THAT IS CONNECTED TO THE ABUTMENT IS REMOVED BY THE CONTRACTOR DURING CONSTRUCTION, IT SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OHIO TURNPIKE COMMISSION.

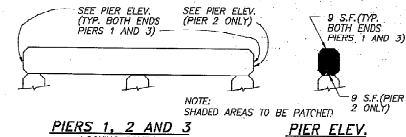
SEEDING AND MULCHING LIMITS

QUANTITIES FOR SEEDING ARE CALCULATED FOR PIPE CONSTRUCTION AND FOR THE SOIL AREAS BETWEEN 10' OUTSIDE THE WORK LIMITS, AS SHOWN ON THE CROSS SECTIONS, OR TO THE RIGHT-OF-WAY LINE, IF SUCH LINE IS LESS THAN 10' FROM THE WORK LIMITS.



ABUTMENTS FRONT ELEVATION

CONCRETE PATCHING DETAILS (EXIT RAMP 6 ONLY)



CONCRETE PATCHING DETAILS(FANGBONER ROAD ONLY)

NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
GENERAL NOTES AND DETAILS			
EXIT RAMP 6 OVER TURNPIKE M.P. 91.6			
FANGBONER ROAD OVER TURNPIKE M.P. 91.1			
WOOLFEY CONSULTANTS			
AND SUBSIDIARY			
DESIGNED	CHECKED	DATE	
DRAWN	IN CHARGE	SCALE	
CONTRACT NO. OH-43-BB-18-SH-11 (PART 1)			

A circular logo with a horizontal line. Above the line is the number '8' and below the line is the number '28'.

[illegible]


FOR FANGBONER ROAD STRUCTURE QUANTITIES, SEE SHEET 21

NO.	REVISIONS	BY	DATE

OHIO TURNPIKE COMMISSION
OHIO TURNPIKE

GENERAL SUMMARY

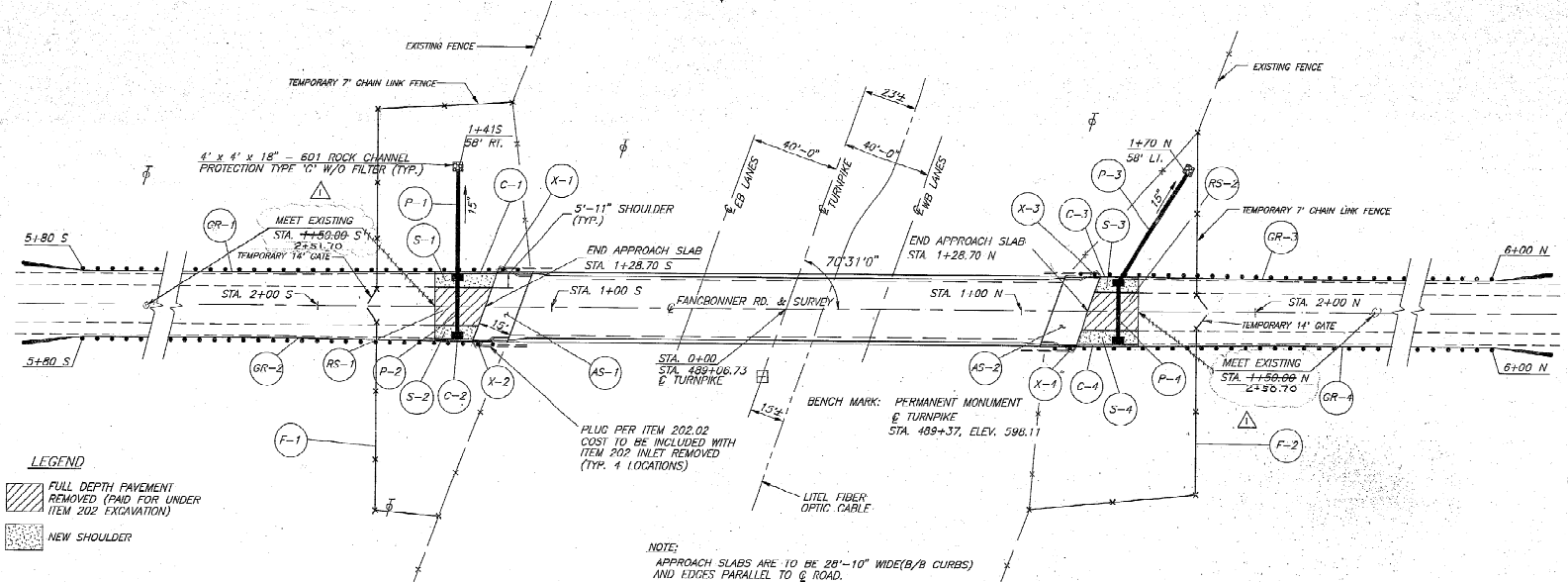
EXT RAMP & OVER TURNPIKE M.P. 91.6
FINGBOHER RD. OVER TURNPIKE M.P. 91.1

 WOOLPERT
CONSULTANTS
400 SOUTH FIRST STREET
ANN ARBOR, MICH. 48106

DESIGNED BY	IN CHARGE	P.F.O.	DATE
JOHN W. C.M.B.			

CONTRACT NO. CIP 43-89-15 SHEET 8 OF 28

(PART 1)

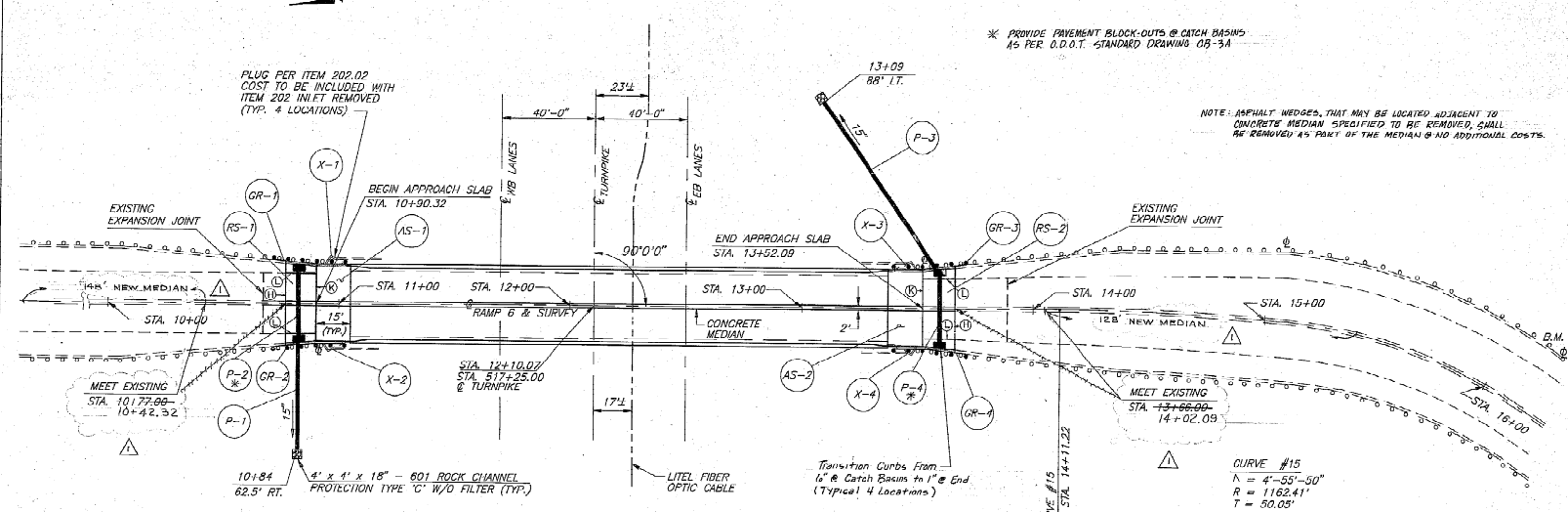


NOTE:
APPROACH SLABS ARE TO BE 28'-10" WIDE (B/B CURBS)
AND EDGES PARALLEL TO E ROAD.

REF. NO.	LOCATION	SIDE	202	603	SP604	606	SP607	601	603
			INLET REMOVED	GUARDRAIL REMOVED	15' CONDUIT TYPE F 75' 0" EXCEPT GAL W/O PAVED INSET	CATCH BASIN	ROCK CHANNEL PROTECT. TYEP W/O FILTER	ROCK CHANNEL PROTECT. TYEP W/O FILTER	ROCK CHANNEL PROTECT. TYEP W/O FILTER
P-1	1+41 S	RT							
P-2	1+41 S	RT							
P-3	1+41 N	LT							
P-4	1+41 N	LT							
GR-1	1+07.85 S TO 5+80 S	RT							
GR-2	1+17.71 S TO 5+80 S	LT							
GR-3	1+07.85 N TO 6+00 N	LT							
GR-4	1+17.71 N TO 6+00 N	RT							
X-1	1+20 S	RT							
X-2	1+30 S	RT							
X-3	1+30 N	RT							
F-1	1+135 TO 1+725								
F-2	0+728 TO 1+728								
TOTAL			4	191.5	104	4	4	1825	4

REF. NO.	LOCATION	SIDE	SP312	203	407	404	408	SP800	SP811
			SUBBASE, TYPE 11" DRAINAGE COURSE SURFACE COMPACTION	ASPHALT CONCRETE SURFACE COMPACTION	ASPHALT CONCRETE SURFACE COMPACTION	PRIME COAT	ASPHALT CONCRETE SURFACE COMPACTION	ASPHALT CONCRETE SURFACE COMPACTION	ASPHALT CONCRETE SURFACE COMPACTION
AS-1	1+12.79 S TO 1+28.70 S	RT							
AS-2	1+12.79 N TO 1+28.70 N	LT							
RS-1	1+28.70 S TO 1+50.00 S	RT							
RS-2	1+28.70 N TO 1+50.00 N	LT							
C-1	1+23.70 S TO 1+50.00 S	RT							
C-2	1+33.42 S TO 1+50.00 S	LT							
C-3	1+33.42 N TO 1+50.00 N	LT							
C-4	1+23.70 N TO 1+50.00 N	RT							
S-1	1+24.82 S TO 1+50.00 S	RT							
S-2	1+32.58 S TO 1+50.00 S	LT							
S-3	1+32.58 N TO 1+50.00 N	LT							
S-4	1+23.70 N TO 1+50.00 N	RT							
TOTAL			39.8	270	19.8	4.0	52	84	107

REVISED TO AS BUILT		WER 1-20
NO.	REVISIONS	BY DATE
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE		
ROADWAY PLAN		
FANKBONNER ROAD		
STA. 1+50.00 S TO STA. 1+50.00 N		
WOOLPERT CONSULTANTS		
DESIGNED T.O.W. CHECKED T.O.W. DATE		
DRAWN J.A.O. IN CHARGE P.F.O. SCALE 1"=20'		
CONTRACT NO. CIP-43-89-15 SHEET 9 OF 28 (PART 1)		



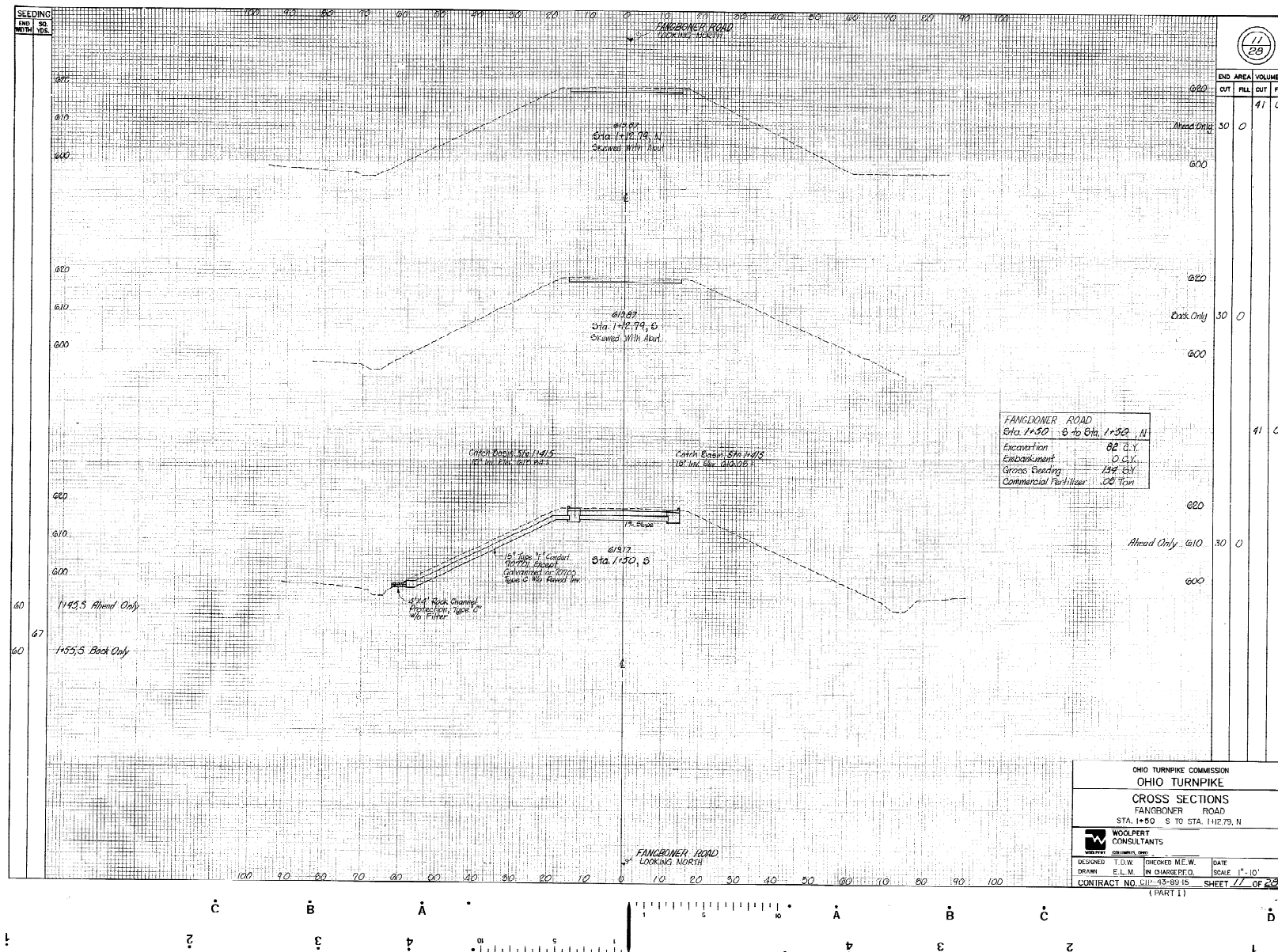
NOTE:
APPROACH SLABS ARE TO BE 32'-10" WIDE(B/B CURVES)
AND EDGES PARALLEL TO Q RAMP.

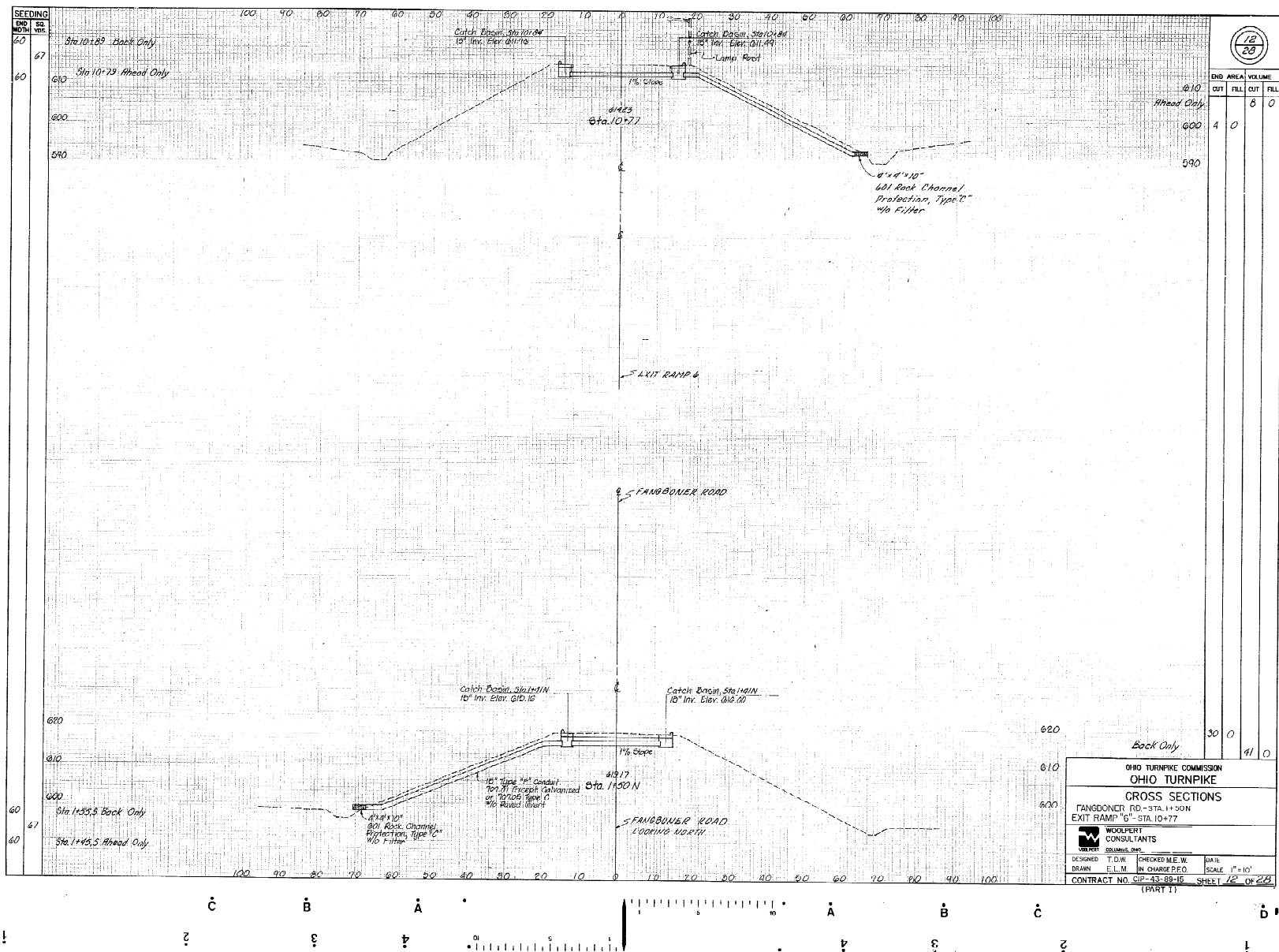
REF. NO.	LOCATION	SIDE	ITEM	QUANTITY	UNIT	ITEM	QUANTITY	UNIT	ITEM	QUANTITY	UNIT	ITEM	QUANTITY	UNIT
P-1	10+84	RI	INLET REMOVED & NEW INLET FOR RELIEF	1	EA	15' CONG. RT. TYPE 1	1	LF	STONE SHOULDER PROTECTION	1	TON	ROCK CHAN. PROTECT. TYPE C W/O FILTER	1	EA
P-2	10+84	RI	INLET REMOVED & NEW INLET FOR RELIEF	1	EA	15' CONG. RT. TYPE 1	1	LF	STONE SHOULDER PROTECTION	1	TON	ROCK CHAN. PROTECT. TYPE C W/O FILTER	1	EA
P-3	13+38	LI	INLET REMOVED & NEW INLET FOR RELIEF	1	EA	15' CONG. RT. TYPE 1	1	LF	STONE SHOULDER PROTECTION	1	TON	ROCK CHAN. PROTECT. TYPE C W/O FILTER	1	EA
P-4	13+38	LI	INLET REMOVED & NEW INLET FOR RELIEF	1	EA	15' CONG. RT. TYPE 1	1	LF	STONE SHOULDER PROTECTION	1	TON	ROCK CHAN. PROTECT. TYPE C W/O FILTER	1	EA
CR-1	10+88.00 TO 11+05.32	RI	CONCRETE CURB	37.5	LF									
CR-2	10+88.00 TO 11+05.32	RI	CONCRETE CURB	37.5	LF									
CR-3	13+37.00 TO 13+52.09	LI	CONCRETE CURB	37.5	LF									
CR-4	13+37.00 TO 13+52.09	LI	CONCRETE CURB	37.5	LF									
X-1	10+85	RI	ASPH. PATCH	1	SQ YD									
X-2	10+85	RI	ASPH. PATCH	1	SQ YD									
X-3	13+47	LI	ASPH. PATCH	1	SQ YD									
X-4	13+47	LI	ASPH. PATCH	1	SQ YD									
TOTAL				4	150		140		4	4	150		12	

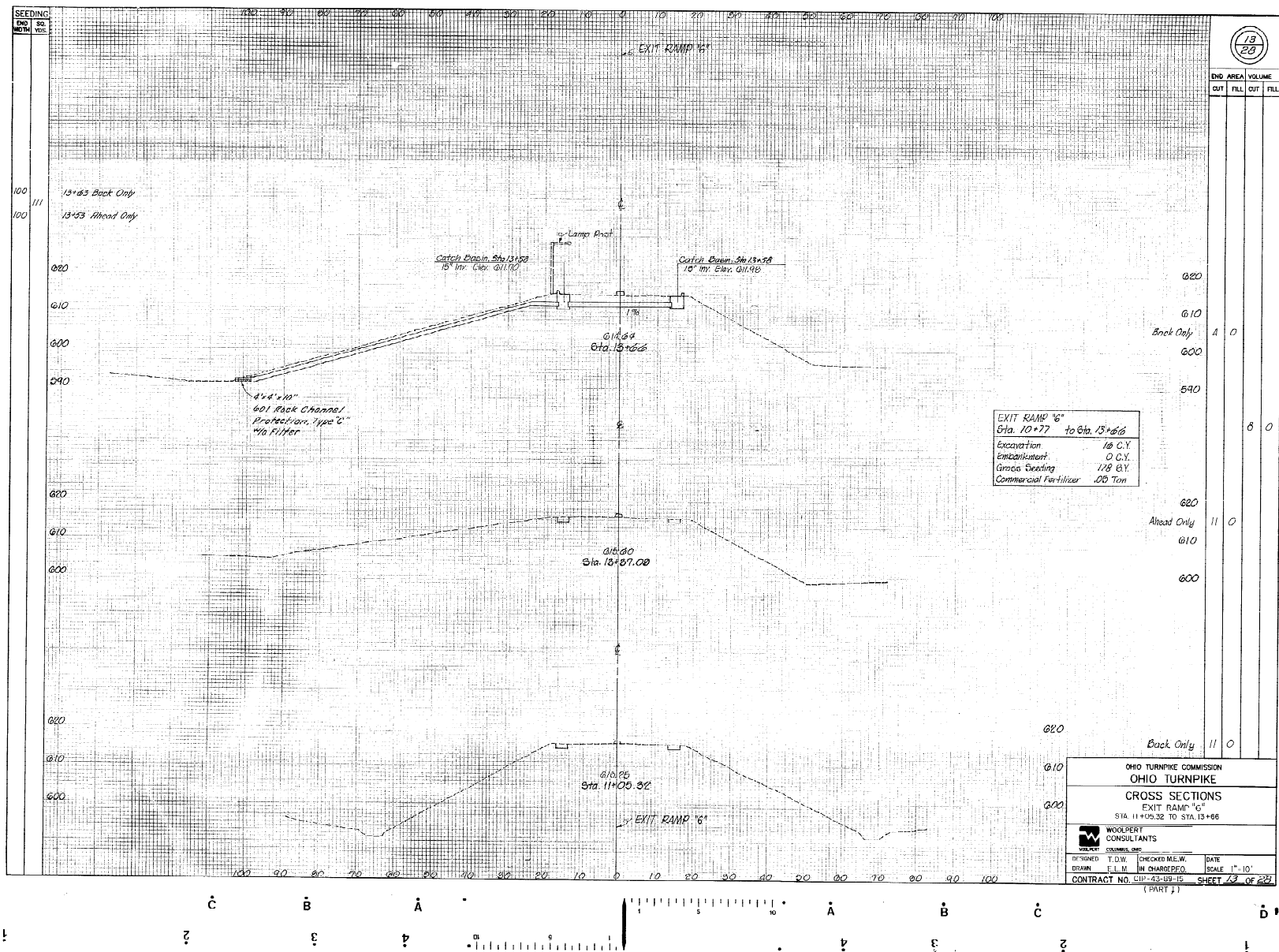
REF. NO.	LOCATION	SIDE	ITEM	QUANTITY	UNIT	ITEM	QUANTITY	UNIT	ITEM	QUANTITY	UNIT	ITEM	QUANTITY	UNIT
AS-1	10+80.32 TO 11+05.32	RI	ASPH. PATCH	8	SQ YD									
AS-2	13+37.00 TO 13+52.09	LI	ASPH. PATCH	8	SQ YD									
GR-1	10+85	RI	GRASS	1	SQ YD									
GR-2	10+85	RI	GRASS	1	SQ YD									
GR-3	13+47	LI	GRASS	1	SQ YD									
GR-4	13+47	LI	GRASS	1	SQ YD									
RS-1	10+85	RI	REINFORCING STEEL	1	TON									
RS-2	13+47	LI	REINFORCING STEEL	1	TON									
TOTAL				34	120		66		10			54	48	

BENCH MARK:
NORTH CORNER OF LAMP POST CONC.
BASE, 3rd LAMP POST SOUTH OF BRIDGE
POLY #21, STA. 16+20, ELEV. 606.70

REVISED TO AS BUILT	DATE 02-20
BY	DATE
OHIO TURNPIKE COMMISSION	
OHIO TURNPIKE	
ROADWAY PLAN	
EXIT RAMP 6	
STA. 10+77.00 TO STA. 13+52.09	
WIDOLPERT CONSULTANTS	DATE
DESIGNED BY	CHECKED BY
DRAWN BY	IN CHARGE
CONTRACT NO. CP-43-B9-15 SHEET 10 OF 28	
(PART 1)	





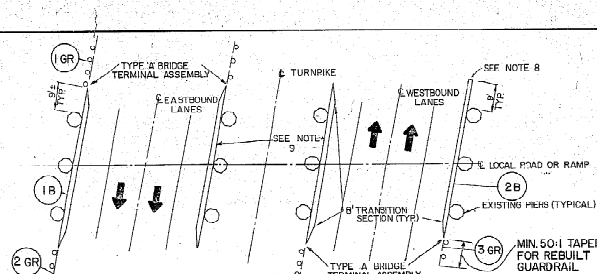


CONCRETE BARRIER - GENERAL NOTES

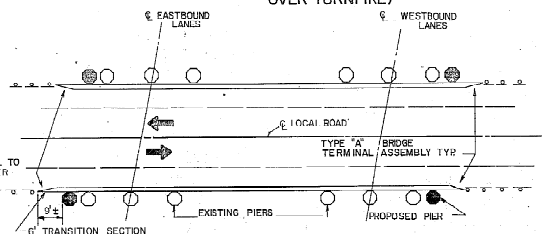
1. 1" PREFORMED EXPANSION JOINT MATERIAL IS TO BE PLACED BETWEEN ALL SURFACES WHERE THE NEW CONCRETE BARRIER WILL BUTT AGAINST THE EXISTING CONCRETE BRIDGE PIERS (TYPICAL). ALL SURFACES OF BOTH THE CONCRETE BARRIER AND BARRIER FOUNDATION.
2. ALL TRANSITION SECTIONS ARE TO HAVE EMBEDDED CONCRETE INSERT TYPE A BRIDGE TERMINAL ASSEMBLY PLACED AS PER ODOT STANDARD CONSTRUCTION DRAWING "GR-3".
3. NO. 8 DEFORMED STEEL BARS, 12" LG., SPACED AT 2'-0" O/C IN THE TRANSITION SECTION AND SPACED AT 4'-0" O/C IN THE NORMAL SECTIONS OF THE CONCRETE BARRIER.
4. UNSEALED CONTRACTION JOINTS SPACED AT 20' O/C (MAX.) SHALL BE CONSTRUCTED THROUGHOUT THE ENTIRE RUN OF CONCRETE BARRIER. CONTRACTION JOINTS MAY BE CONSTRUCTED WITH METAL INSERTS INSIDE THE FORMS, PREFORMED FULL WIDTH JOINT FILLER, A GROOVING TOOL, OR BY SAWING. CONTRACTION JOINT TO BE A MIN. DEPTH OF 1 1/2" AND SHALL BE CONSTRUCTED FOR THE FULL HEIGHT OF THE BARRIER INCLUDING THE BARRIER FOUNDATION.
5. ALL EXCAVATION COSTS SHALL BE INCLUDED UNDER ITEM 622 "TYPE D MODIFIED CONCRETE BARRIER".
6. THERE SHALL BE NO SEPARATE PAYMENT FOR THE CONCRETE FOOTER, THESE COSTS SHALL BE INCLUDED UNDER ITEM 622 "TYPE D MODIFIED CONCRETE BARRIER".
7. WHEN IT IS NECESSARY TO REMOVE EXISTING PAVED SHOULDER IN ORDER TO CONSTRUCT THE CONCRETE BARRIER, THE SHOULDER SHALL BE REPLACED USING ITEM 402 (5' MIN. DEPTH) OVER SP 504.
8. OMIT TRANSITION SECTION ON TRAILING END OF OUTSIDE SHOULDER, UNLESS EXISTING GUARDRAIL EXTENDS BEYOND THE PIERS.
9. CONCRETE BARRIER TO BE PROVIDED IN MEDIAN ONLY IF THE STRUCTURE HAS DOUBLE MEDIAN PIERS. TRANSITION SECTION REQUIRED AT BOTH APPROACH AND TRAILING END.

8. OMIT TRANSITION SECTION ON TRAILING END OF OUTSIDE SHOULDER, UNLESS EXISTING GUARDRAIL EXTENDS BEYOND THE PIERS.

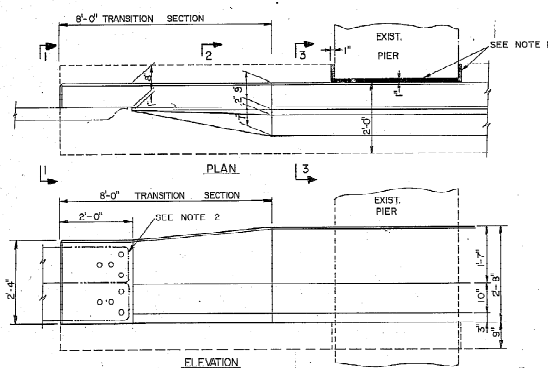
9. CONCRETE BARRIER TO BE PROVIDED IN MEDIAN ONLY IF THE STRUCTURE HAS DOUBLE MEDIAN PIERS. TRANSITION SECTION REQUIRED AT BOTH APPROACH AND TRAILING END.



CONCRETE BARRIER PLAN (LOCAL ROAD OR RAMP STRUCTURE OVER TURNPIKE)

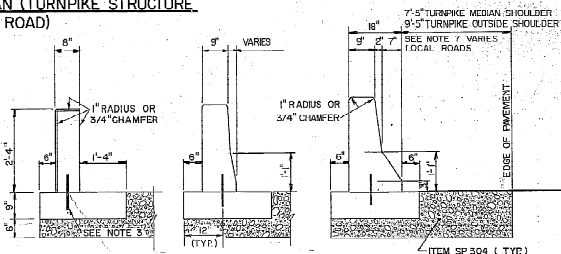


CONCRETE BARRIER PLAN (TURNPIKE STRUCTURE OVER LOCAL ROAD)



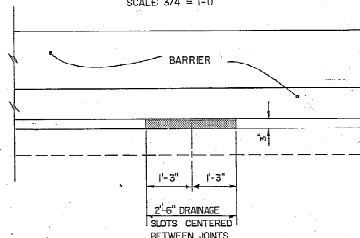
TYPICAL BARRIER END SECTION

SCALE: 3/4" = 1'-0"



TYPICAL SECTIONS

SCALE: 3/4" = 1'-0"



DRAINAGE SLOT DETAIL

SCALE: 3/4" = 1'-0"

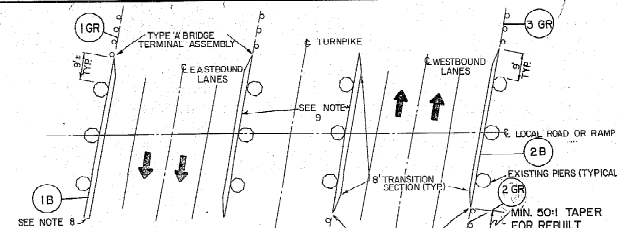
REF. NO.	622	606	606	606	202	SP304	402
	TYPE D MODIFIED CONCRETE BARRIER	TYPE D MODIFIED CONCRETE BARRIER	TYPE D MODIFIED CONCRETE BARRIER	TYPE D MODIFIED CONCRETE BARRIER	TYPE D MODIFIED CONCRETE BARRIER	TYPE D MODIFIED CONCRETE BARRIER	TYPE D MODIFIED CONCRETE BARRIER
	L.F.	L.F.	L.F.	L.F.	L.F.	C.Y.	C.Y.
1B	48				48	5	2
2B	53					6	2
1GR		50	1		50		
2GR		50	1		50		
3GR		50	1		50		
4GR							
TOT.	101	150	3		96	11	4

* THIS QUANTITY HAS BEEN ESTABLISHED AS A CONTINGENCY TO BE USED IF REQUIRED, AS DIRECTED BY THE ENGINEER, TO PROVIDE A TRANSITION SECTION BETWEEN THE EXISTING GUARDRAIL AND THE PROPOSED CONCRETE BARRIER.

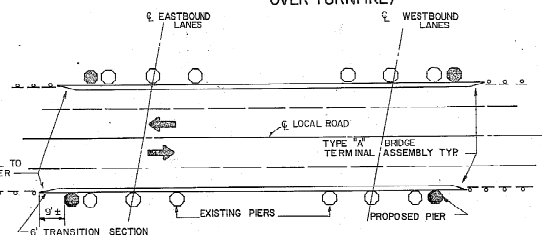
2	ADDED PLAN FOR TURNPIKE	JFI	7-15-87
1	ADDED 304 SHLDR. & NOTE 6	DFC	11-28-84
REV	DESCRIPTION	BY	DATE
OHIO TURNPIKE COMMISSION			
CONCRETE BARRIER PLAN & DETAILS			
EXIT RAMP 6			
DATE: MARCH 1984		SCALE: AS NOTED	
CIP: 43-89-15 (PART 1)		SHEET 14 OF 28	

CONCRETE BARRIER - GENERAL NOTES

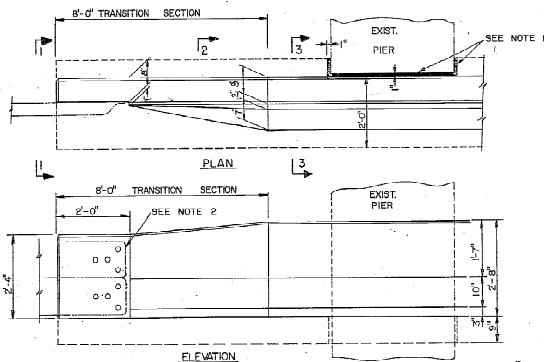
1. 1" PREFORMED EXPANSION JOINT MATERIAL IS TO BE PLACED BETWEEN ALL SURFACES WHERE THE NEW CONCRETE BARRIER WILL BUTT AGAINST THE EXISTING CONCRETE BRIDGE PIERS (TYPICAL). ALL SURFACES OF BOTH THE CONCRETE BARRIER AND BARRIER FOUNDATION.
2. ALL TRANSITION SECTIONS ARE TO HAVE EMBEDDED CONCRETE INSERT TYPE A BRIDGE TERMINAL ASSEMBLIES PLACED AS PER ODOT STANDARD CONSTRUCTION DRAWING "GR-5".
3. NO. 8 DEFORMED STEEL BARS, 12" LG, SPACED AT 2'-0" O/C IN THE TRANSITION SECTION AND SPACED AT 4'-0" O/C IN THE NORMAL SECTIONS OF THE CONCRETE BARRIER.
4. UNSEALED CONTRACTION JOINTS SPACED AT 20' O/C (MAX.) SHALL BE CONSTRUCTED THROUGHOUT THE ENTIRE RUN OF CONCRETE BARRIER. CONTRACTION JOINTS MAY BE CONSTRUCTED WITH METAL INSERTS INSIDE THE FORMS, PREFORMED FULL WIDTH JOINT FILLER, A GROOVING TOOL, OR BY SAWING. CONTRACTION JOINT TO BE A MIN. DEPTH OF 1 1/2" AND SHALL BE CONSTRUCTED FOR THE FULL HEIGHT OF THE BARRIER INCLUDING THE BARRIER FOUNDATION.
5. ALL EXCAVATION COSTS SHALL BE INCLUDED UNDER ITEM 622 "TYPE D MODIFIED CONCRETE BARRIER".
6. THERE SHALL BE NO SEPARATE PAYMENT FOR THE CONCRETE FOOTER, THESE COSTS SHALL BE INCLUDED UNDER ITEM 622 "TYPE D MODIFIED CONCRETE BARRIER".
7. WHEN IT IS NECESSARY TO REMOVE EXISTING PAVED SHOULDER IN ORDER TO CONSTRUCT THE CONCRETE BARRIER, THE SHOULDER SHALL BE REPLACED USING ITEM 402 (6" MIN. DEPTH) OVER SP 304.
8. OMIT TRANSITION SECTION ON TRAILING END OF OUTSIDE SHOULDER, UNLESS EXISTING GUARDRAIL EXTENDS BEYOND THE PIERS.
9. CONCRETE BARRIER TO BE PROVIDED IN MEDIAN ONLY IF THE STRUCTURE HAS DOUBLE MEDIAN PIERS. TRANSITION SECTION REQUIRED AT BOTH APPROACH AND TRAILING END.



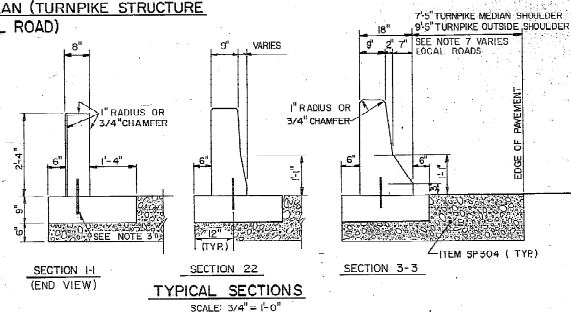
CONCRETE BARRIER PLAN (LOCAL ROAD OR RAMP STRUCTURE OVER TURNPIKE)



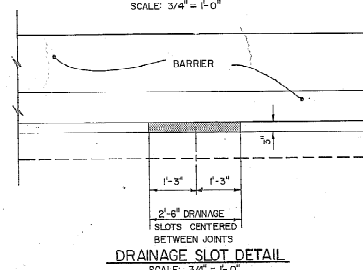
CONCRETE BARRIER PLAN (TURNPIKE STRUCTURE OVER LOCAL ROAD)



TYPICAL BARRIER END SECTION
SCALE: 3/4" = 1'-0"



TYPICAL SECTIONS
SCALE: 3/4" = 1'-0"

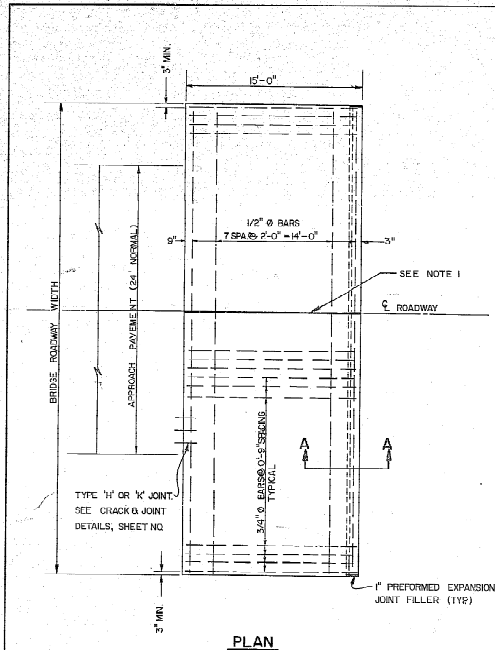


DRAINAGE SLOT DETAIL
SCALE: 3/4" = 1'-0"

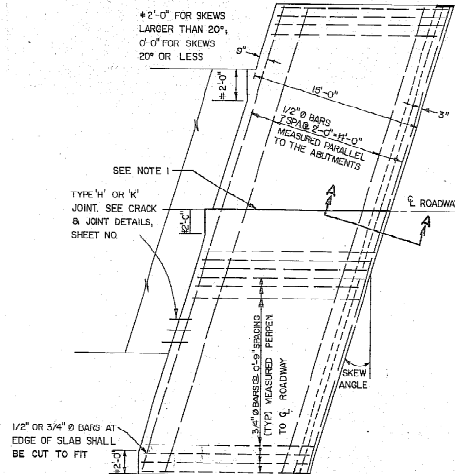
REF. NO.	622	606	606	606	202	SP 304	402
	TYPE D MODIFIED CONCRETE BARRIER	GUARDRAIL TYPE 1	GUARDRAIL TYPE 2	GUARDRAIL TYPE 3	GUARDRAIL TYPE 4	GUARDRAIL TYPE 5	GUARDRAIL TYPE 6
1B	43						
2B	48						
1 GR		50	1		50		
2 GR		50	1		50		
3 GR		50	1		50		
4 GR							
TOT.	191	150	3		84	100	4

* FOR GUARDRAIL CONTINGENCY NOTE SEE SHEET 14.

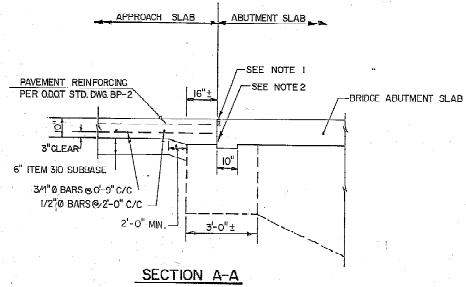
2	ADDED PLAN FOR TURNPIKE PIERS MED. REVISIONS	JDL	7-16-87
1	ADDED 204 SHLR & NOTE 6	DFC	11/28/84
REV	DESCRIPTION	BY	DATE
OHIO TURNPIKE COMMISSION			
CONCRETE BARRIER PLAN & DETAILS			
FANGRONE ROAD			
DATE: MARCH 1984		SCALE: AS NOTED	
CIP: 43-89-15 (PART) SHEET		75 OF 29	



PLAN

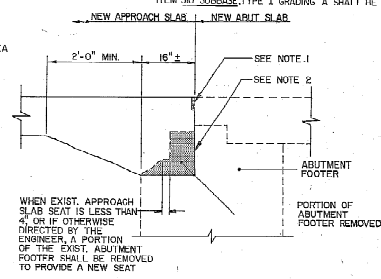


APPROACH SLAB FOR SKEWED BRIDGE



SECTION A-A

- NOTE 1: GROOVE AND SEAL AS PER O.D.O.T. STD. CONST. DWG. BP-5.
- NOTE 2: TYPE A WATERPROOFING SHALL NOT EXCEED ABOVE THE BOTTOM OF THE GROOVE INTO WHICH THE JOINT SEALER IS TO BE PLACED. IT SHALL BE APPLIED TO THE ENTIRE AREA OF THE ABUTMENT OR SUPERSTRUCTURE WHICH COMES INTO CONTACT WITH THE APPROACH SLAB.
- NOTE 3: REPAIR OF BROKEN APPROACH SLAB SEAT SHALL BE CONSTRUCTED BY THE CONTRACTOR AS PER DETAIL OR AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE ON THE BASIS OF "UNIT COST" PLUS 15% FOR OVERHEAD AND PROFIT. "UNIT COSTS" SHALL BE DEFINED UNDER SECTION G-9.02(5) OF THE GENERAL CONDITIONS.



APPROACH SLAB SEAT REPAIR DETAIL

GENERAL: THIS DRAWING PROVIDES DESIGN AND GENERAL CONSTRUCTION DETAILS. THE PROJECT PLANS WILL SHOW SKEW, CURBS (IF ANY), ESTIMATED QUANTITY (SQ YDS), AND SPECIAL NOTES AND DETAILS, WHERE NECESSARY FOR CONDITIONS OTHER THAN THOSE INDICATED HEREON. THE APPROACH SLAB SHALL BE ADAPTED TO FIT THE ENDS OF THE BRIDGE AND THE APPROACH PAVEMENT.

DESIGN DATA:
CONCRETE: CLASS 3 USING SHRINKAGE COMPENSATING CEMENT
REINFORCING STEEL: A.S.T.M. A615, A616 OR A617 - GRADE 60 MIN. YIELD STRENGTH 60,000 P.S.I.

PREFORMED EXPANSION JOINT FILLER AND SEALER AT THE CORNERS AND SIDES OF THE APPROACH SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

GROOVE AND JOINT SEAL SHOWN AT THE BRIDGE LIMIT END OF THE APPROACH SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

TYPE A WATERPROOFING SHOWN AT THE ABUTMENT SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

LONGITUDINAL CONSTRUCTION JOINTS REQUIRED FOR STAGE CONSTRUCTION SHALL BE AS PER 51109.

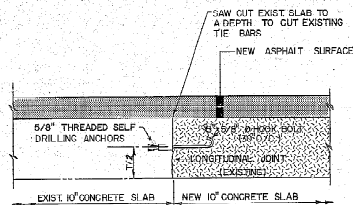
CURBS, BRIDGES WITH SIDEWALKS: FOR BRIDGES CONSTRUCTED WITH RAISED SIDEWALKS, DEFLECTOR PARAPETS OR OTHER TYPES OF CONSTRUCTION WHICH RETAIN ROADWAY SURFACE DRAINAGE, THE APPROACH SLABS SHALL EITHER INCLUDE INTEGRAL CURB OR BE CONSTRUCTED IN CONJUNCTION WITH BRIDGE CURBS. CURB HEIGHT SHALL BE TRANSITIONED UNIFORMLY BETWEEN BRIDGE CURB HEIGHT AND APPROACH CURB HEIGHT IN LENGTH AS FOLLOWS: WHERE WINGWALL EXTENDS BEYOND END OF APPROACH SLAB, USE A MINIMUM LENGTH OF 10 FT. BEYOND END OF WINGWALL WHERE THE APPROACH SLAB EXTENDS BEYOND THE END OF WINGWALL, TRANSITION IN THIS LENGTH HOWEVER, THE TRANSITION LENGTH SHALL NOT BE LESS THAN 10 FT. AND THE TRANSITION SHALL EXTEND BEYOND THE END OF THE APPROACH SLAB IF NECESSARY CURB PLACEMENT SHALL BE IN ACCORDANCE WITH O.D.O.T. STANDARD CONSTRUCTION DRAWING BR-1.

APPROACH SLAB WIDTH: APPROACH SLAB FOR 36'-6" BRIDGE WIDTH SHALL BE 39'-0" WIDE WHEN CURBS ARE NOT INCLUDED; 39'-3" WHEN CURB IS INCLUDED ON ONE SIDE ONLY; 39'-6" WHEN CURBS ARE INCLUDED ON BOTH SIDES. CROWN SHALL CONFORM TO THAT OF THE APPROACH PAVEMENT AND BRIDGE DECK. IF THE RATE OF CROWN OF THE BRIDGE DECK DIFFERS FROM THAT OF THE APPROACH PAVEMENT, A SMOOTH TRANSITION SHALL BE PROVIDED WITHIN THE LIMITS OF THE APPROACH SLAB.

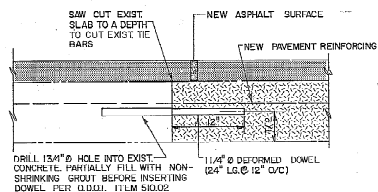
TRANSVERSE JOINT DETAILS AT THE APPROACH PAVEMENT END OF THE APPROACH SLAB SHALL BE EITHER TYPE W OR W' AS DETAILED ON THE PLANS. PAYMENT FOR THE TRANSVERSE JOINT SHALL BE AT THE UNIT PRICE BID PER LIN. FT. FOR THE JOINT FURNISHED.

ITEM 310 SUBBASE TYPE I GRADING "A" SHALL BE PROVIDED UNDER ALL APPROACH SLABS.

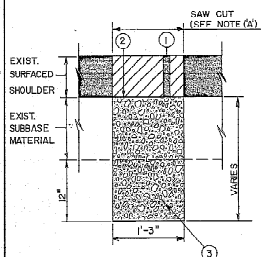
2	ADDED IMPRESSED JOINT & CHANGED TYPE OF CEMENT	DFC	10/26/94
1	ADDED SEAT REPAIR DETAIL	DFC	10/26/94
NO	REVISION	BY	DATE
OHIO TURNPIKE COMMISSION			
REINFORCED CONCRETE			
APPROACH SLABS			
DATE: OCTOBER 1993 SCALE: N.T.S.			
CIP 43-89-15 (PART 1) SHEET 76 OF 20			



TYPE 'D' JOINT



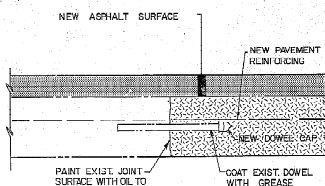
TYPE 'H' JOINT



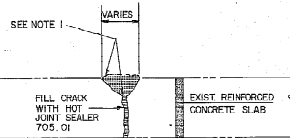
SECTION C-C

LEGEND

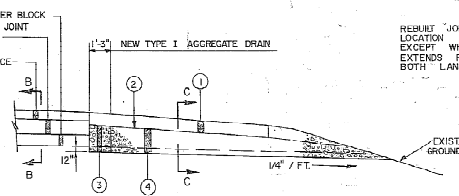
1. NEW PAVED SHOULDER
2. SP 408 PRIME COAT (0.2 TO 0.5 GAL./SQ. YD.)
3. SP 605 AGGREGATE DRAINS, TYPE I (SEE NOTE 'B')
4. SP 605 AGGREGATE DRAINS, TYPE II (SEE NOTE 'B')



TYPE 'J' JOINT



TRANSVERSE & LONGITUDINAL CRACK & JOINT REPAIRS



SECTION A-A

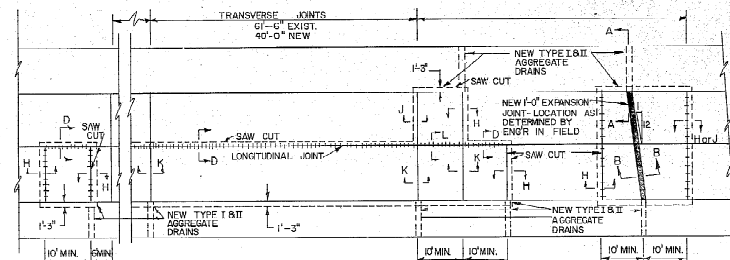
CRACK & JOINT REPAIRS DETAILS

1. CONSTRUCTION IS TO REMOVE ALL DAMAGED BITUMINOUS JOINT MATERIAL THAT MAY BE FOUND IN CRACKS AND/OR JOINTS. EACH CRACK EXISTING CRACKED SURFACE AND OVERFILL WITH 1/4" ASPHALT FOR CRACKS 1" OR LESS IN WIDTH. CRACKS GREATER THAN 1" IN WIDTH SHALL BE OVERFILLED WITH TYPE 404 ASPHALT CONCRETE. THE SAND ASPHALT AND TYPE 404 OVERFILL SHALL BE REPAIRED TO ATTAIN A MINIMUM OF 95% COMPACTED AND IN NO CASE SHALL THE ASPHALT PLACED IN CRACKS OVERLAP THE EXTREMITIES OF THE EXISTING CRACK. OVERFILL AFTER COMPACTION SHALL NOT EXCEED 1/4".
- WHEN REPAIRING CRACKS IN THE SHOULDER, CRACKS 1" OR LESS WHICH ARE NOT SPALLING AND YOU HADN'T FOR SAND ASPHALT CRACK SHALL BE FILLED WITH HOT JOINT SEALER.
- HAILING CRACKS THAT APPEAR ON THE SURFACE AFTER FILLING SHALL NOT BE REPAIRED UNLESS OTHERWISE ORDERED BY THE ENGINEER, WHEN NO UNDERLAINING CRACKS SHALL BE FILLED WITH HOT JOINT SEALER.
2. INSTALL OF LONGITUDINAL PAVEMENT SHOULDER JOINTS SIMILAR.

NOTE 'A': FULL DEPTH SAW CUT OF EXISTING ASPHALT PAVEMENT IS REQUIRED WHERE EXISTING PAVEMENT IS TO BE REMOVED FOR INSTALLATION OF EITHER TYPE I OR TYPE II DRAINS.

NOTE 'B': TYPE I AGGREGATE DRAINS WILL BE INSTALLED ADJACENT TO ALL NEW FULL DEPTH CONCRETE REPAIRS. THE EXISTING SHALL BE REPAIRED & REFERRED TO THE DEPTH INDICATED IN THE DRAWING.

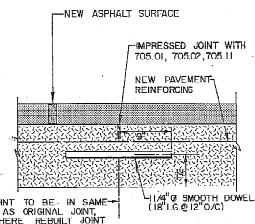
TYPE II AGGREGATE DRAINS WILL BE INSTALLED AT EACH SHOULDER JOINT & FULL DEPTH REPAIR OR AS DIRECTED BY THE ENGINEER.



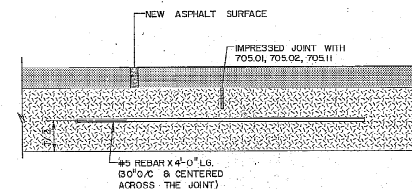
NOTE: IF A PORTION OF THE SLAB TO BE REPLACED IS CLOSER THAN 6' TO A TRANSVERSE JOINT THEN THE ENTIRE SLAB UP TO THE JOINT IS TO BE REPLACED.

NOTE: A NEW TYPE II DRAIN MAY ONLY BE REQUIRED AT ONE END OF THE EXPANSION JOINT OR SLAB REPLACEMENT AS DIRECTED BY DRAINAGE CONDITIONS IN THE FIELD.

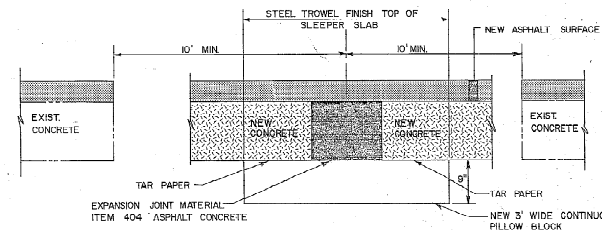
CONCRETE JOINT ARRANGEMENT PLAN



TYPE 'K' JOINT



TYPE 'L' JOINT



SECTION B-B

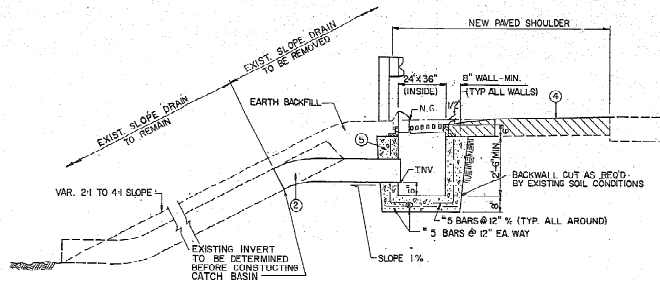
FOR DETAILS NOT SHOWN SEE O.D.O.T. STD. CONSTRUCTION. DP-37 SP-4.

OHIO TURNPIKE COMMISSION

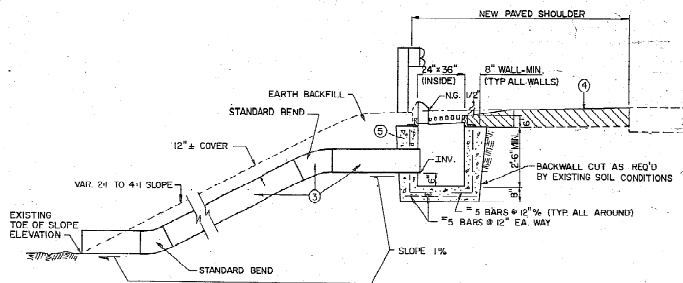
CRACK & JOINT DETAILS

DATE: AUGUST 1984 SCALE: N.T.S.

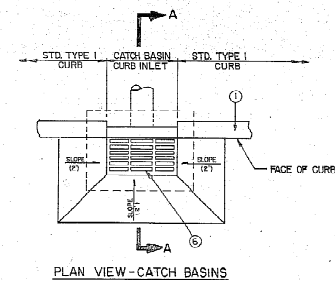
CIP: 43-89-15 (PART II) SHEET 7P OF 29



SECTION A-A
EXISTING SLOPE DRAIN WITH NEW CATCH BASIN



SECTION A-A
NEW SLOPE DRAIN & CATCH BASIN



LEGEND

- ① SP 601 TYPE 1 ASPHALT CONCRETE CURB (SEE STANDARD DRAW. BP-5)
- ② 603 12" TYPE F CONDUIT, 707.01 (EXCEPT GALVANIZED) OR 707.05 TYPE C WITHOUT PAVED INVERT. AS REQUIRED TO FORM TRANSITION BETWEEN NEW CATCH BASIN AND EXISTING C.W.P. THAT IS TO REMAIN.
- ③ 605 12" TYPE F CONDUIT, 707.01 (EXCEPT GALVANIZED) OR 707.05 TYPE C WITHOUT PAVED INVERT. SIZE: INCHES, SEE PLAN SHEETS.
- ④ NEW SHOULDER SURFACE TREATMENT
- ⑤ REINFORCED CONCRETE CATCH BASIN - CLASS "C" CONCRETE USING 999.03 WITH REINFORCED BILLET STEEL REBARS, USING 505.02.
- ⑥ HEAVY-DUTY, GRAY IRON CASTING USING 711.12 CATCH BASIN CURB INLET - MODEL NO. 83246 AS MANUFACTURED BY NEENAH FOUNDRY CO., OR EAST JORDON IRON WORKS MODEL NO. 7235.

NOTES:

1. CATCH BASINS AND SLOPE DRAINS SHALL BE CONSTRUCTED TO THE APPROXIMATE STATIONS AS INDICATED ON THE PLAN, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
2. SLOPE DRAIN COUPLING BANDS SHALL BE 10 1/2" BAR B STRAP CONNECTOR WITH CONTINUOUS CORRUGATION AROUND BAND.
3. PIPE MAY BE TRIMMED FLUSH WITH INSIDE OF BASIN OR EXTEND INTO THE BASIN 1" MAX.
4. N.G. - NORMAL GUTTER ELEVATION
INV. - PIPE INVERT ELEVATION.
5. WHERE CONNECTIONS ARE MADE BETWEEN NEW AND OLD PIPES PROVIDE CONCRETE COLLAR (SEE STANDARD DRAW. MC 4).

GENERAL		DATE: 11/84
NO.	REVISIONS	BY DATE
OHIO TURNPIKE COMMISSION		
CATCH BASIN		
8		
SLOPE DRAIN DETAILS		
DATE: JANUARY 1984 SCALE: N.T.S.		
CPI: 43-89-15 (PART I) SHEET 19 OF 20		

STRUCTURE GENERAL NOTES

19
28

DESIGN SPECIFICATIONS

THE PROPOSED WORK FOR THESE STRUCTURES CONFORMS TO THE "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983 EDITION WITH 1984, 1985 AND 1986 INTERIMS AND THE OHIO SUPPLEMENT TO THESE SPECIFICATIONS.

DESIGN DATA

DESIGN LOADING -HS 20-44 (CASE II) AND THE ALTERNATE MILITARY LOADING. NO PROVISION FOR FUTURE WEARING SURFACE.

CONCRETE CLASS S (USING SHRINKAGE COMPENSATING CEMENT) -COMPRESSIVE STRENGTH 4500 P.S.I. FOR SUPERSTRUCTURE. ABUTMENT SLAB AND CONCRETE DAMPER.

CONCRETE CLASS C -COMPRESSIVE STRENGTH 4000 P.S.I. FOR SUBSTRUCTURE.

REINFORCING STEEL -ASTM A615, A616, OR A617 - GRADE 60, MINIMUM YIELD STRENGTH 60,000 P.S.I.

EXISTING STRUCTURAL STEEL -ASTM A-7 UNIT STRESS 18,000 P.S.I.

NEW STRUCTURAL STEEL -ASTM A-36 UNIT STRESS 20,000 P.S.I.

DECK PROTECTIVE METHOD -EPOXY COATED REINFORCING STEEL FOR BOTH TOP AND BOTTOM MATS AND CONCRETE WEATHERPROOFING ON TOP SURFACE.

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1/2" THICK.

REFERENCES

REFERENCE SHALL BE MADE TO THE FOLLOWING OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS.

BR-1 DATED 5-29-79

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE, ANY/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS, SECTION 613.02 AND THE OHIO TURNPIKE COMMISSION'S GENERAL CONDITIONS G-2.04 AND G-5.02.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE-BID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD. ANY ADDITIONAL COST RESULTING FROM VARIATIONS FROM PLAN DIMENSIONS IS THE RESPONSIBILITY OF THE CONTRACTOR AND NO ADDITIONAL PAYMENT WILL BE AWARDED BY THE COMMISSION.

NO SEPARATE PAYMENT WILL BE MADE FOR ANY FIELD MEASUREMENTS BUT COST THEREOF SHALL BE INCLUDED IN THE COST OF THE OTHER ITEMS OF WORK.

THE EXISTING STRUCTURE PLANS MAY BE EXAMINED AT THE OHIO TURNPIKE COMMISSION'S OFFICE LOCATED AT 682 PROSPECT STREET, BEREA, OHIO 44017.

DEMOLITION OF PORTIONS OF EXISTING STRUCTURES

REMOVAL OF PORTIONS OF EXISTING STRUCTURES AS SHOWN ON THE CONTRACT DRAWINGS SHALL CONFORM IN ALL RESPECTS TO ITEM 202 OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS AND SPECIAL SP 202.

ITEM 510 - DOWEL HOLES, USING SP 853 GROUT ANCHORING

THIS ITEM SHALL BE PERFORMED AS DIRECTED BY THE ENGINEER AND SHALL BE USED TO REPLACE DETERIORATED BARS WHICH ARE TO REMAIN, PROTECTING FROM PORTIONS OF EXISTING CONCRETE AND TO TIE NEW CONSTRUCTION TO EXISTING CONSTRUCTION.

THIS ITEM SHALL CONFORM IN ALL RESPECTS TO ITEM 510 OF THE SPECIFICATIONS EXCEPT THAT A NONSHRINK EPOXY MORTAR SHALL BE USED IN LIEU OF A CEMENT GROUT OR A RICH CEMENT MORTAR, REFER TO SPECIAL PROVISIONS SP 853 AND SP 856.

CUTTING OR BENDING OF REINFORCING BARS

ANY CUTTING OR BENDING OF REINFORCING BARS NECESSARY TO ACCOMMODATE ANY ESSENTIAL ELEMENT OF WORK RELATED TO THE PROJECT, SHALL BE INCLUDED IN THE PRICE BID PER POUND FOR ITEM 509 - REINFORCING STEEL-GRADE 60 AND/OR ITEM SP 824 - EPOXY COATED REINFORCING STEEL, GRADE 60, OR OTHERWISE NOTED.

REPLACEMENT OF EXISTING REINFORCING STEEL

ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE MADE UNUSABLE BY THE CONTRACTOR'S CONCRETE REMOVAL OPERATIONS SHALL BE REPLACED AS DIRECTED BY THE ENGINEER WITH NEW STEEL AT THE OPTION OF THE CONTRACTOR. ANY EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION, SHALL BE REPLACED WITH NEW STEEL. PAYMENT FOR SUCH NEW STEEL SHALL BE MADE PER CONTRACT UNIT PRICE BID PER POUND OF ITEM SP 824 - EPOXY COATED REINFORCING STEEL, GRADE 60. DRILLING DOWEL HOLES, FURNISHING AND PLACING NONSHRINKING EPOXY MORTAR AND REINFORCING DOWELS, WHEN NEEDED TO REPLACE EXISTING REINFORCEMENT DAMAGED BY THE CONTRACTOR, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

EPOXY COATED REINFORCING STEEL SUPPORT

IN ACCORDANCE WITH THE REQUIREMENTS OF SP 824 AND 509.09, THE TOP AND BOTTOM MATS OF ALL LONGITUDINAL AND TRANSVERSE EPOXY COATED REINFORCING STEEL SHALL BE SUPPORTED BY APPROVED EPOXY COATED DEVICES WITH SPACING NOT EXCEEDING 3'-0" CENTER IN EACH DIRECTION. BROKEN CONCRETE, BRICKS, ETC. SHALL NOT BE USED FOR SUPPORT OF EPOXY COATED REINFORCING STEEL. SUPPORTING DEVICES SHALL BE INCIDENTAL TO ITEM SP 824 - EPOXY COATED REINFORCING STEEL, GRADE 60.

CONCRETE INSERT ASSEMBLIES

THE CONCRETE INSERT ASSEMBLIES, AS SHOWN ON STANDARD CONSTRUCTION DRAWINGS GR-1 AND GR-3, SHALL BE PROVIDED AT ALL WINGWALL TERMINALS FOR ATTACHMENT OF GUARD-RAIL TERMINAL CONNECTIONS, INCLUDE WITH ITEM SP 511A FOR PAYMENT.

MINIMUM BAR LAP, UNLESS NOTED

#4 BAR, 1'-0"
#5 BAR, 1'-6"
#6 BAR, 2'-0"

REMOVAL OF SCURPER DRAIN ENDS

THE CONTRACTOR SHALL REMOVE EXPOSED EXISTING SCURPER DRAIN PIPES AND PLUG PORTION TO REMAIN AS PER DETAIL. PAYMENT FOR THIS WORK WILL BE INCLUDED IN ITEM SP 202.

CONCRETE WEATHERPROOFING

THE CONCRETE WEATHERPROOFING SHALL BE APPLIED TO THE FOLLOWING EXPOSED CONCRETE SURFACES OF THE BRIDGE:

- ALL SIDES OF PARAPETS ON ABUTMENTS AND SUPERSTRUCTURE.
- LOGS AND UNDERSIDE OF DECK OUTSIDE OF EXTERIOR FACIA BEAMS.
- CONCRETE BRIDGE DECK WEARING SURFACE ON ABUTMENTS, SUPERSTRUCTURE, AND APPROACH SLABS, INCLUDING EXPOSED MEDIAN SURFACES (RAMP 6 ONLY).
- NEW EXPOSED CONCRETE SURFACES OF ALL ABUTMENTS AND PIERS.
- SEALING SHALL NOT BE DONE UNTIL ANY CONCRETE PATCHING REPAIRS HAVE BEEN COMPLETED AND CURED.

THE WORK SHALL BE PERFORMED PER ITEM SP 536 - CONCRETE WEATHERPROOFING.

ABUTMENT BACKFILL

THE CONTRACTOR SHALL PROVIDE AND PLACE BACKFILL BETWEEN EXISTING WINDOWWALLS AS REQUIRED TO BRING THE FILL TO THE LEVEL OF THE PROPOSED SLAB PRIOR TO PLACING THE NEW DECK SLAB. INCLUDE WITH ITEM 503 - ABUTMENT BACKFILL, AS PER 503.10 FOR PAYMENT.

EPOXY BONDING COMPOUND

EPOXY BONDING COMPOUND (SP 526) SHALL BE PLACED ON THE SURFACE AREAS OF EXISTING CONCRETE WHICH WILL BE IN CONTACT WITH NEW CONCRETE. PRICE INCLUDED IN THE CONTRACT BID PRICE FOR THE PERTINENT CONCRETE ITEMS.

ABUTMENT SLAB AND DECK SLAB POURING SEQUENCE (FOR EACH PHASE)

THE ABUTMENT SLAB AND THE DECK SLAB MAY BE POURED AT THE SAME TIME. HOWEVER, UPON THE COMPLETION OF THESE POURS AND PRIOR TO POURING THE CONCRETE APPROACH PLANS, THE CONTRACTOR WILL PROVIDE THE CONTRACTOR WITH FINISH GRADES REQUIRED TO PROVIDE A SMOOTH TRANSITION FROM THE EXISTING ROADWAY TO THE CONCRETE ABUTMENT AND DECK SLAB.

REPLACEMENT OF BEARING DEVICES

AFTER DECK REMOVAL AND PRIOR TO REPLACEMENT OF NEW DECK FORMWORK AND REINFORCING STEEL, THE BEARING DEVICE WORK SHALL BE PERFORMED AS FOLLOWS:

- EXIT RAMP 6 OVER TURNPIKE M.P. 91.6;
ITEM 516, LAMINATED ELASTOMERIC BEARINGS, COMPLETE, AS PER PLAN.
- FAIRBANKER ROAD OVER TURNPIKE M.P. 91.1;
ITEM 518, LAMINATED ELASTOMERIC BEARINGS, COMPLETE, AS PER PLAN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF AN ADEQUATE SUPPORT AND JACKING SYSTEM CAPABLE OF RAISING THE STRUCTURE TO INSTALL NEW BEARINGS AND WILL BE RESPONSIBLE FOR PROPERLY ARRANGING ALL TEMPORARY SUPPORTS SO AS NOT TO DAMAGE OR INDUCE OVERSTRESS IN ANY EXISTING BRIDGE MEMBERS AND DIAPHRAGMS. THE STRUCTURE SHALL NOT BE RAISED MORE THAN NECESSARY TO REPLACE THE BEARINGS.

THE CONTRACTOR SHALL SUBMIT DETAILS OF THE PROPOSED TEMPORARY SUPPORT AND JACKING SYSTEMS TO THE ENGINEER PRIOR TO BEGINNING WORK. THE SUBMITTAL SHALL INDICATE MATERIALS, MEMBER SIZES, SPACING, SUPPORT LOCATIONS, JACKING POINTS, REACTIONS, AND REMOVAL PROCEDURES. WELDING SHALL BE REMOVED BY THE AIR-ARC PROCESS.

PAYMENT FOR ALL LABOR, MATERIAL AND EQUIPMENT SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 202 - REMOVAL OF EXISTING BEARING DEVICES AS PER PLAN FOR EACH BRIDGE. PAYMENT FOR THE INSTALLATION OF NEW BEARING DEVICES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EACH PERTINENT ITEM.

BEARING REPLACEMENT RESTRICTIONS

JACKING AND/OR TEMPORARY SUPPORTS SHALL BE LIMITED TO ONE(1) SUBSTRUCTURE UNIT AT ANY GIVEN TIME. FOR EXAMPLE, JACKING AND/OR TEMPORARY SUPPORTS WILL NOT BE PERMITTED AT PIER 1 AND PIER 3 SIMULTANEOUSLY. ALL BEAMS AT A GIVEN SUBSTRUCTURE UNIT SHALL BE RAISED SIMULTANEOUSLY. FOR EXAMPLE, BEAM LINES A,D,G,H AND E SHALL BE RAISED SIMULTANEOUSLY WHEN REMOVING THE BEARINGS AT PIER 1. THE STRUCTURE SHALL NOT BE RAISED MORE THAN NECESSARY. THE ABOVE PROVISIONS MAY BE WAIVED IF THE ENTIRE SUPERSTRUCTURE IS RAISED UNIFORMLY AND SIMULTANEOUSLY. IN SUCH CASE, FIXED BEARINGS AT PIER 2 SHALL BE DISASSEMBLED AND REASSEMBLED UNDER THE DIRECTION OF AND TO THE SATISFACTION OF THE ENGINEER. NO SEPARATE PAYMENT WILL BE MADE FOR WORK PERFORMED ON THE FIXED BEARINGS.

TRIM ENDS OF STRUCTURAL STEEL MEMBERS AT ABUTMENTS AND PIERS

THE QUANTITY OF WORK DONE UNDER THIS ITEM WILL BE DETERMINED BY THE ENGINEER AFTER THE REMOVAL OF THE EXISTING CONCRETE BRIDGE DECK SLAB, WITH THE PRIOR APPROVAL OF THE ENGINEER. IF METHODS, THE CONTRACTOR SHALL CAREFULLY REMOVE THOSE PORTIONS OF THE EXISTING STEEL BEAMS THAT ARE LOCATED WITHIN TWO (2) INCHES OF THE EXISTING OR PROPOSED BACKWALL. AT THE PIERS, THE CONTRACTOR SHALL REMOVE THE EXISTING STEEL TO PROVIDE A 2" GAP @ 90° F, AS SHOWN ON SHEET 20A. EDGES OF THE BEAMS TO REMAIN IN PLACE WILL BE GRINDING SMOOTH. THE PRICE BID FOR EACH ITEM SP 529, TRIM ENDS OF STRUCTURAL STEEL MEMBERS, AS PER PLAN, SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, AND MATERIAL REQUIRED. NO EXTRA PAYMENTS WILL BE PERMITTED.

DECK SLAB CONSTRUCTION

IN ORDER TO MEET ROADWAY GRADES, TO ASSURE THE CONSTRUCTION OF THE REQUIRED THICKNESS OF DECK SLABS AND TO ASSURE THE PROPER LOCATION OF THE REINFORCING STEEL IN THE DECK SLABS:

THE CONTRACTOR SHALL OBTAIN THE ELEVATIONS OF THE TOP OF THE STEEL BEAMS AFTER THE COMPLETE REMOVAL OF THE EXISTING DECK SLAB AT THE LOCATIONS SHOWN IN THE TABLE ON SITS 23 AND 27 FOR THE FINAL PAVEMENT ELEVATIONS, AND COMPUTE THE DECK THICKNESS OVER THE BEAMS. IF THE COMPUTED DECK THICKNESS IS FOUND TO BE LESS THAN THE MINIMUM THICKNESS REQUIRED, THE TOP OF FINAL PAVEMENT ELEVATIONS SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL ALSO COMPUTE THE DECK SORED ELEVATION UTILIZING THE DEAD LOAD DEFLECTIONS. THE QUANTITY OF DECK CONCRETE TO BE PAID SHALL BE BASED UPON 8-1/2" THICK CONCRETE OUTSIDE THE HAUNCH AREA (EXIT RAMP 6), AND 7-1/2" THICK CONCRETE OUTSIDE THE HAUNCH AREA (FAIRBANKER RD.) AND THE AVERAGE THICKNESS OF CONCRETE PLACED OVER THE BEAMS AT THE HAUNCHES. INCLUDE WITH ITEM SP 623 FOR PAYMENT. A TYPICAL HAUNCH WIDTH OF 9' SHALL BE USED FOR COMPUTING THE QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 8' AND 12' PROVIDED THAT THE SLOPE SHALL NOT BE MORE THAN 1:4 FOR A HAUNCH LESS THAN 9' IN WIDTH. PAYMENT FOR THE ABOVE MENTIONED WORK SHALL BE INCLUDED WITH THE LUMP SUM PRICE FOR ITEM SP 623.

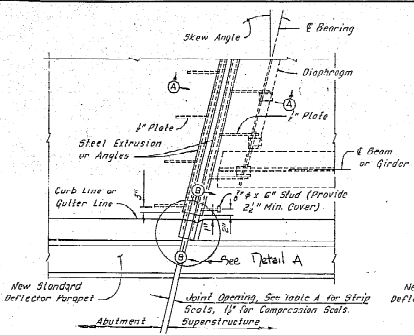
SPRASH CHANNEL REMOVAL

ANY EXISTING SPLASH CHANNEL ASSEMBLIES LOCATED AT PIERS 1 AND 3 SHALL BE REMOVED. WHEN CUTTING IS REQUIRED TO REMOVE THE ABOVE, CUT AS CLOSELY TO THE STRUCTURAL SHAPE AS POSSIBLE WITHOUT DAMAGING IT. GRIND ALL SHARP EDGES AND PREPARE SURFACE PER ITEM SP 514. PAYMENT FOR ALL WORK RELATED TO REMOVAL OF EXISTING SPLASH CHANNELS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED.

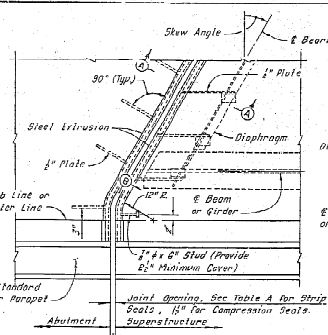
STAGED CONSTRUCTION - RAMP 6 OVER TURNPIKE

ONE LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. SUPERSTRUCTURE AND ABUTMENT SLABS SHALL BE CONSTRUCTED IN STAGES. FOR DETAILS REQUIRED TO ACCOMMODATE THE STAGED CONSTRUCTION, SEE SHEETS 26 AND 27. TEMPORARY CONCRETE BARRIERS, AS SHOWN ON SUPERSTRUCTURE STAGED CONSTRUCTION DETAIL (SHT. 25) SHALL BE CARRIED UNDER ROADWAY QUANTITIES FOR PAYMENT. ALL OTHER COSTS FOR STAGED CONSTRUCTION SHALL BE INCLUDED UNDER ROADWAY ITEM SP 814 - MAINTAINING TRAFFIC. FOR ADDITIONAL MAINTENANCE OF TRAFFIC REQUIREMENTS SEE SHTS. 3-6.

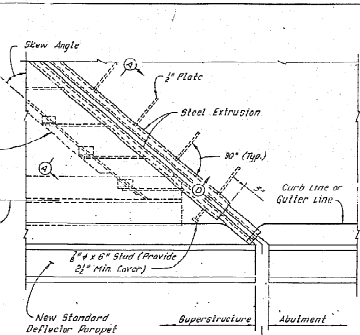
NO.		REVISION		BY DATE	
OHIO TURNPIKE COMMISSION OHIO TURNPIKE					
STRUCTURE GENERAL NOTES					
EXIT RAMP 6 OVER TURNPIKE M.P. 91.6 FAIRBANKER ROAD OVER TURNPIKE M.P. 91.1					
WOODPERT CONSULTANTS AND SURVEY ENGINEERS COLUMBUS, OHIO 43260					
DESIGNED T.D.W.	CHECKED M.E.W.	DATE			
DRAWN L.M.G.	IN CHARGE R.A.O.	SCALE N/A			
CONTRACT NO. CIP-43-89-15 SHEET 19 OF 28 (PART 1)					



PLAN - SKEW ANGLE < 10°
(Strip Seal Shown, Compression Seal Similar)
Scale: 3/4" = 1'-0"



PLAN - SKEW ANGLE 10° TO 45°
(Strip Seal Shown, Compression Seal Similar)
Scale: 3/4" = 1'-0"



PLAN - SKEW ANGLE > 45° (STRIP SEAL ONLY)
Scale: 3/4" = 1'-0"

Note: When skew angle is greater than 45°, supply joint assemblies in two sections and provide a field splice at the center line of roadway.

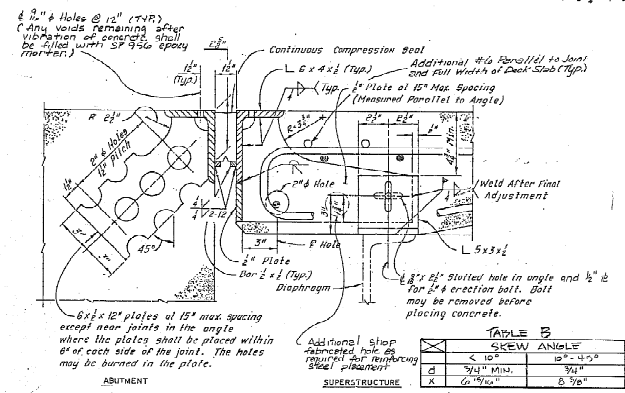
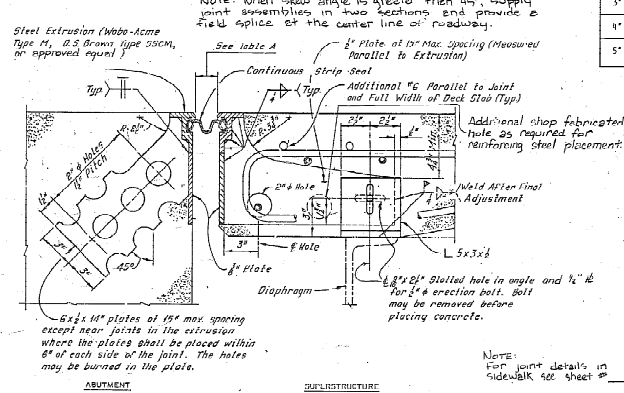


TABLE B	
SKEW ANGLE	
< 10°	15" - 45"
10° - 45°	30"
> 45°	36"



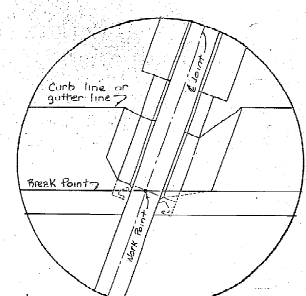
Note: For joint details in sidewalk see sheet 20.

GENERAL NOTES
INSTALLATION OF SEAL: DURING INSTALLATION OF SUPPORT / ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE JOINT SEAL, THE SEATING OF BEAMS OR GIRDERS SHALL BE CAREFULLY OBSERVED TO ASSURE THAT POSITIVE BEARING IS MAINTAINED. CROSS VERTICAL FIT OF THE SUPPORT / ARMOR ON THE BEAMS SHALL BE ATTAINED BY POSITIONING OF THE SUPPORT ANGLES RATHER THAN BY CLAMPING RINGS.
ELASTOMERIC COMPRESSION SEALS SHALL BE USED AT FIXED JOINTS ONLY, AND AT SKEWS LESS THAN 45°.
STUD ANCHORS SHALL BE LOW CARBON STEEL ASTM A-105.
ALL WELDING SHALL CONFORM WITH A.W.S. AND AASHTO SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES.
CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
ELASTOMERIC COMPRESSION SEAL SHALL BE AASHTO M-200, D-5, BROWN C-W 2000 OR APPROVED EQUAL.
CONTINUOUS STRIP SEAL SHALL BE AS MANUFACTURED BY HARD-ACOF, D-5, BROWN, OR APPROVED EQUAL, AND SHALL BE THE SIZE AS SPECIFIED.

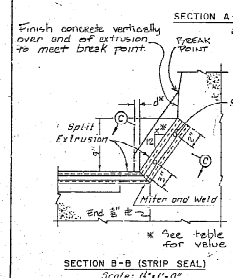
DETAILS AT BEAMS OR GIRDERS SIMILAR.

TABLE A

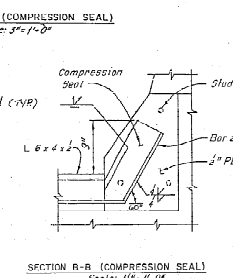
STRIP SEAL SIZE	STRIP SEAL JOINT OPENING (INSTALLATION CHART)						
	30	40	50	60	70	80	90
1" 2-1/4"	2-1/8"	2"	1-7/8"	1-3/4"	1-5/8"	1-1/2"	
4" 2-5/8"	2-1/2"	2-1/2"	2-3/8"	2-1/4"	2-1/8"	2"	
5" 2-7/8"	2-3/4"	2-3/4"	2-5/8"	2-5/8"	2-1/2"	2-3/8"	



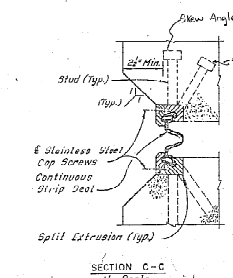
Detail A
Scale: 1/4" = 1"



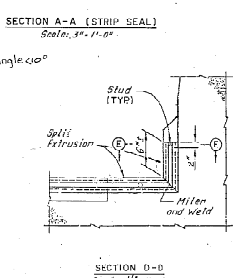
SECTION B-B (STRIP SEAL)
Scale: 1/2" = 1'-0"



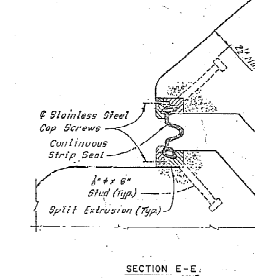
SECTION B-B (COMPRESSION SEAL)
Scale: 1/2" = 1'-0"



SECTION C-C
No Scale

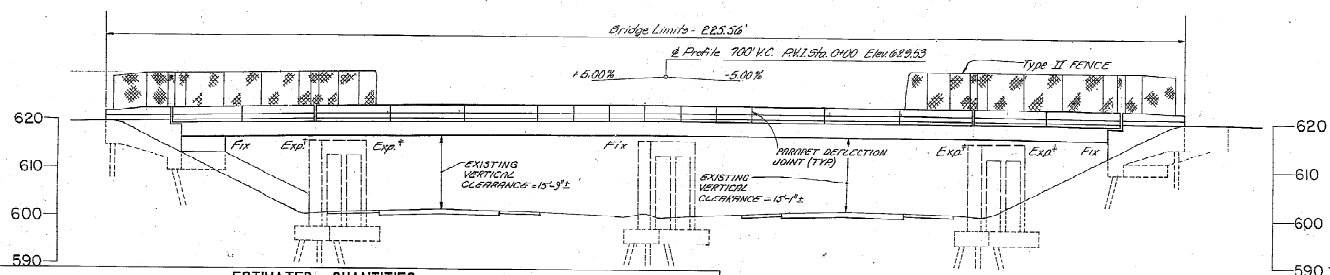
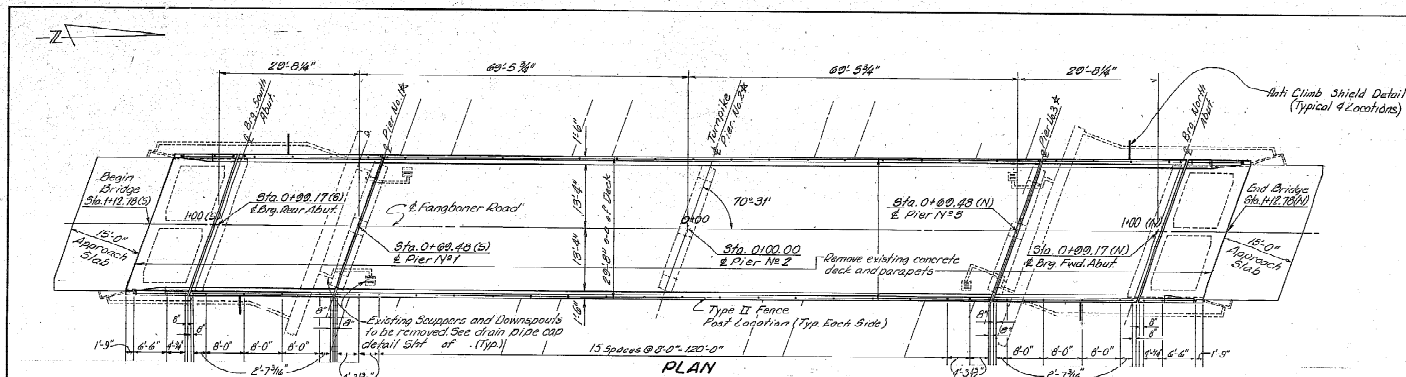


SECTION D-D
Scale: 1/2" = 1'-0"



SECTION E-E
No Scale

REVISED 10-87
OHIO TURNPIKE COMMISSION
DECK JOINT DETAILS
DATE: JANUARY 1985 SCALE: AS NOTED
TOP: 43-89-15 (PART 1) SHEET 20 OF 28



ESTIMATED QUANTITIES				Super	Abut	Pier	Gen
SP272	Lump	Portions of structures removed					Lump
SP273	Lump	Removal of Existing Bearing Beams, As Per Plan					Lump
SP274	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP275	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP276	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP277	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP278	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP279	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP280	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP281	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP282	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP283	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP284	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP285	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP286	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP287	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP288	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP289	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP290	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP291	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP292	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP293	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP294	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP295	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP296	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP297	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP298	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP299	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP300	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP301	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP302	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP303	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP304	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP305	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP306	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP307	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP308	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP309	Lump	Removal of Existing Backfill, As Per Plan					Lump
SP310	Lump	Removal of Existing Backfill, As Per Plan					Lump

* EXPANSION BEARINGS TO BE REPLACED WITH ELASTOMERIC BEARINGS SEE SHEET 20 OF 22.

* SEE SHEET 21 OF 22 FOR DETAILS OF PIER TO BE PROTECTED.

** SEE PROPOSAL.

(1) ESTIMATED QUANTITY HAS BEEN INCREASED BY 30% OVER MEASURED QUANTITY TO ALLOW FOR ADDITIONAL DETECTION.

Existing Exterior Beam

Existing Splash Channel Assembly Exterior

Existing Interior Beam

Existing Splash Channel Assembly Interior

NOTE: IN STRUCTURES REMOVED SHALL INCLUDE APPROXIMATELY 17% OF SUPERSTRUCTURE CONCRETE, 33% OF ABUTMENT SLAB CONCRETE, 45% OF BRIDGE JOINTS, INCLUDING CONCRETE AND EXPANSION JOINTS AT PIERS 1 AND 2, AND ALL OTHER MISCELLANEOUS ITEMS RELATED TO THE BRIDGE DECK, INCLUDING SPLASH PLATES AT PIERS NO. 1 AND NO. 2.

LEGEND NOTES

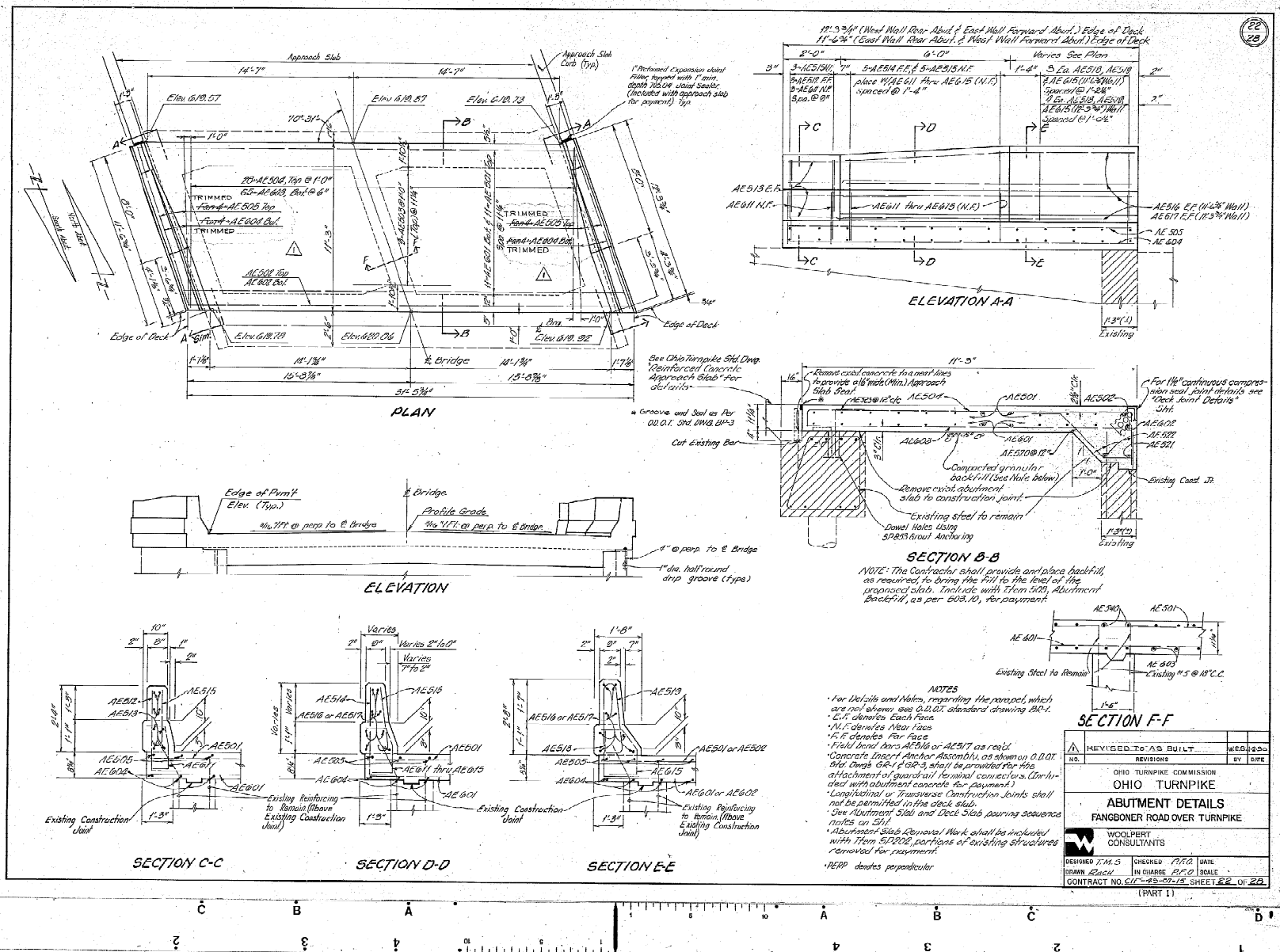
1. FENCE POSTS SHALL NOT BE SET CLOSER THAN 6' FROM ANY PARAPET DEFLECTION JOINTS.

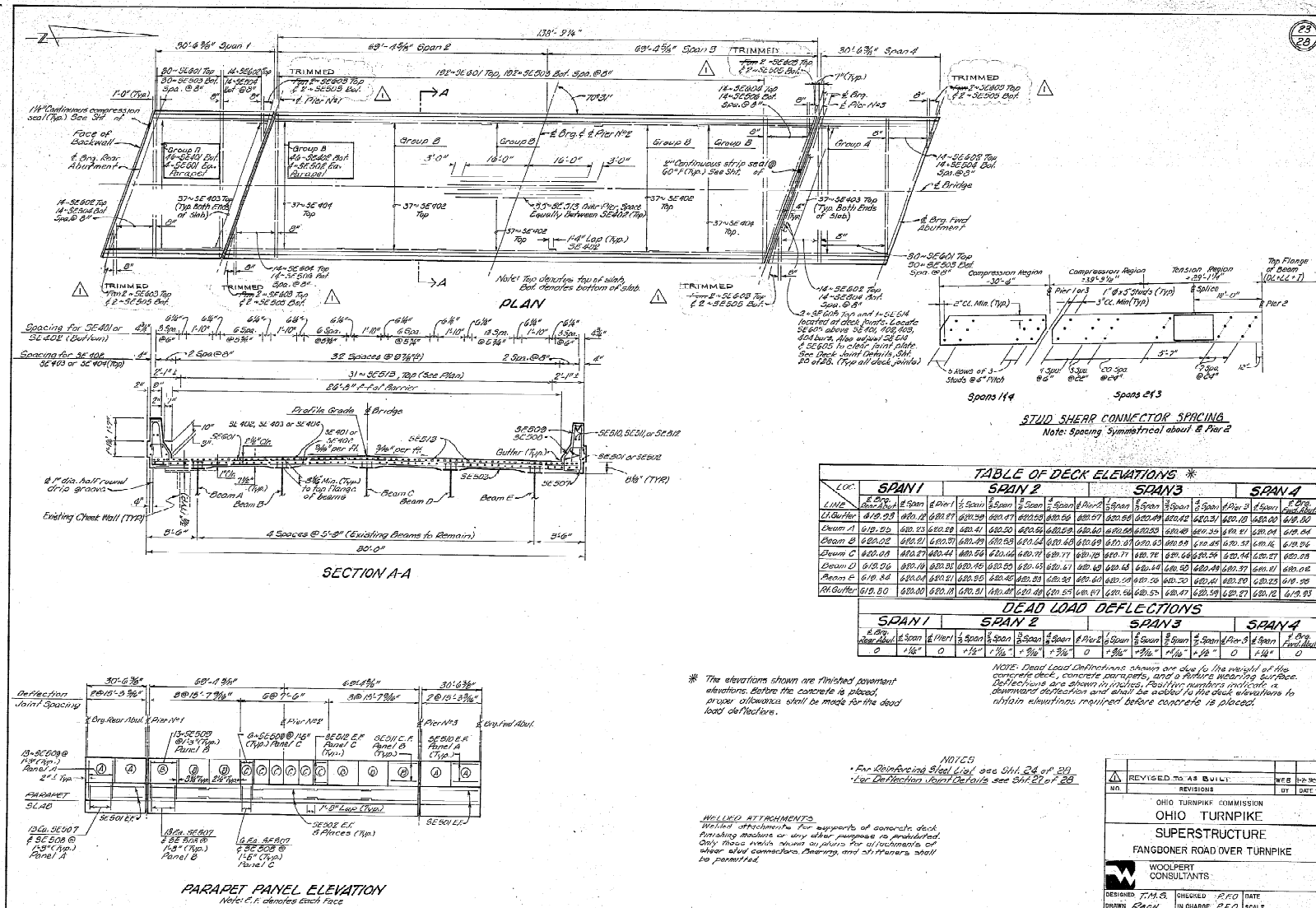
2. THE CONTRACTOR SHALL GIVE SPECIAL ATTENTION TO FENCE UNION STUD PROJECTION ABOVE TOP OF PARAPET TO PROVIDE FOR BASE PLATE THICKNESS, WASHER THICKNESS, AND A POSITIVE "JACK THROUGH" AT END OF STUD.

REACH MARK:
PERMANENT MONUMENT
C. TURNPIKE
STA. 489+57, ELEV. 598.11

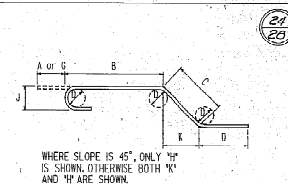
NO.	REVISIONS	BY	DATE
1	CHANGED	W	1/1/75
2	CHANGED	W	1/1/75
3	CHANGED	W	1/1/75
4	CHANGED	W	1/1/75
5	CHANGED	W	1/1/75
6	CHANGED	W	1/1/75
7	CHANGED	W	1/1/75
8	CHANGED	W	1/1/75
9	CHANGED	W	1/1/75
10	CHANGED	W	1/1/75

OHIO TURNPIKE COMMISSION
OHIO TURNPIKE
GENERAL PLAN AND ELEVATION
& ESTIMATED QUANTITIES
FANGBONER ROAD OVER TURNPIKE
WOOLPERT CONSULTANTS
DESIGNED: J.M.S. CHECKED: R.F.D. DATE: 1/1/75
IN CHARGE: R.F.D. SCALE: AS SHOWN
CONTRACT NO. 47-61-89-15 SHEET 21 OF 22
(PART 1)





BAR TYPE DIAGRAM	MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G
TYPE 1	QUANTITIES FOR THE REAR ABUTMENT AND THE FORWARD ABUTMENT ARE IDENTICAL. QUANTITIES SHOWN ARE FOR ONE ABUTMENT ONLY.											
TYPE 2	ALL REINFORCING STEEL BAR MARKS IN THE REAR ABUTMENT SHALL HAVE THE SUFFIX "R".											
TYPE 3	ALL REINFORCING STEEL BAR MARKS IN THE FORWARD ABUTMENT SHALL HAVE THE SUFFIX "F".											
TYPE 4	AL601	11	31'-1"	357	5hr							
TYPE 5	AL602	1	20'-3"	31	5hr							
TYPE 6	AL603	9	9'-0"	84	5hr							
TYPE 7	AL604	25	18'-0"	380	5	7"	10'-11"	1'-8"				
TYPE 8	AL605	8	18'-1" to 18'-7"	111	16	4"	7"	11'-0"	11'-6"	8"	1'-0"	
TYPE 9	AL606	1	14'-7"	15	6	7"	12'-8"	1'-0"				
TYPE 10	AL607	NOT USED										
TYPE 11	AL608	NOT USED										
TYPE 12	AL609	NOT USED										
TYPE 13	AL610	NOT USED										
TYPE 14	AL611	NOT USED										
TYPE 15	AL612	6	3'-10"	24	4	1'-8"	2'-0"					
TYPE 16	AL613	16	4'-4"	72	5hr							
TYPE 17	AL614	10	3'-10" to 4'-2"	42	17	5	1'-8"	2'-10"	3'-8"	1"		
TYPE 18	AL615	16	2'-8"	45	2	2'-4"						
TYPE 19	AL616	8	3'-2"	77	5hr							
TYPE 20	AL617	8	18'-0"	84	5hr							
TYPE 21	AL618	7	17'-2"	18	4	1'-8"	1'-8"					
TYPE 22	AL619	7	3'-4"	39	12	3'-4"	2'-8"	7'-8"				
TYPE 23	AL620	28	3'-8"	92	12	0'-8"	1'-0"	0'-8"	0'-8"	0'-8"	0'-8"	
TYPE 24	AL621	1	27'-0"	29	5hr							
TYPE 25	AL622	1	28'-7"	30	5hr							
TYPE 26	AL623	29	8'-8"	81	4	1'-0"	1'-10"					
TYPE 27	AL601	11	31'-1"	314	5hr							
TYPE 28	AL602	1	20'-3"	44	5hr							
TYPE 29	AL603	25	18'-0"	302	5hr							
TYPE 30	AL604	8	11'-0" to 11'-6"	135	9	4	11'-0"	11'-6"	2"			
TYPE 31	AL605	1	12'-6"	19	5hr							
TYPE 32	AL606	NOT USED										
TYPE 33	AL607	NOT USED										
TYPE 34	AL608	NOT USED										
TYPE 35	AL609	NOT USED										
TYPE 36	AL610	NOT USED										
TYPE 37	AL611	8	2'-11"	31	5	7"	0'-8"	8"	0'-8"	11"	0'-8"	
TYPE 38	AL612	2	2'-7"	0	5	7"	0'-8"	5"	0'-8"	11"	0'-8"	
TYPE 39	AL613	2	2'-10"	0	5	8"	0'-8"	4"	0'-8"	11"	0'-8"	
TYPE 40	AL614	2	2'-10"	0	5	0"	0'-8"	3"	0'-8"	11"	0'-8"	
TYPE 41	AL615	9	3'-1"	49	0	0"	10'-8"	6"	0'-8"	11"	10'-8"	
TYPE 42	TOTAL ONE ABUTMENT - 3323											
TYPE 43	TOTAL BOTH ABUTMENTS - 6646											
TYPE 44	PIERS											
TYPE 45	PE 301	40	4'-10"	285	5	2'-4"	2'-5"	2'-4"				
TYPE 46	PE 401	40	2'-0"	180	5hr							
TYPE 47	TOTAL PIERS - 465											



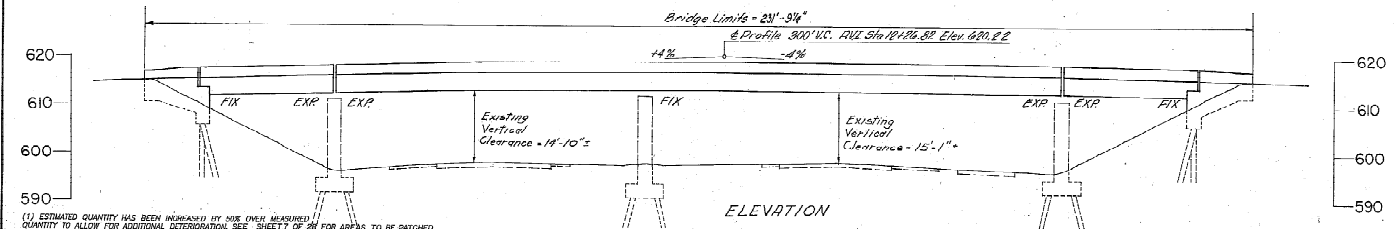
TYPICAL BAR BENDING DETAILS

NOTES

- BAR SIZE IS INDICATED IN THE BAR MARK, THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR DIGITS ARE USED INDICATE THE BAR SIZE NUMBERS. FOR EXAMPLE 4-50 IS A NO. 5 BAR AND A P-1004 IS A NO. 4 BAR.
- ALL DIMENSIONS ARE OUT TO OUT OF BAR.
- RADIUS DIMENSION "R" IS TO OUTSIDE OF BAR, RADIUS DIMENSION "R" IS TO INSIDE OF BAR.
- THE LENGTH OF BENT BARS IS MEASURED ALONG THE CENTERLINE.
- FOR STANDARD HOOK DIMENSIONS, SEE SECTION 504.05 OF THE SPECIFICATIONS.
- DIMENSION ON HOOK IS SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE.
- EPOXY COATED REINFORCING STEEL IS INDICATED BY THE LETTER "E" IN THE BAR MARK PREFIX.
- REINFORCING STEEL SAMPLES: REFER TO THE GENERAL CONDITIONS, SECTION 6-6.02 AND THE C.M.S. SECTIONS 700, 700.01 THROUGH 700.06 AND 700.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURE BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 504.08.

AT THE CONTRACTOR'S OPTION, BARS SC507 AND SC508 MAY BE COMBINED AND SUPPLIED AS ONE BAR. PAYMENT WILL BE MADE BASED ON BARS ACTUALLY SUPPLIED.

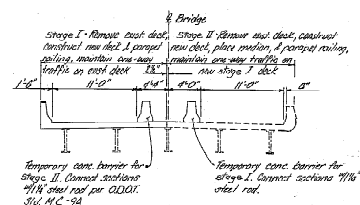
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
REINFORCING STEEL LIST			
FANGBONER ROAD OVER TURNPIKE			
WOOLPERT CONSULTANTS			
DESIGNED T.M.S.	CHECKED P.S.O.	DATE	
DRAWN R.C.M.	IN CHARGE A.C.O.	SCALE	
CONTRACT NO. CIP-83-82-12, SHEET 22 OF 23			
(PART I)			



(1) ESTIMATED QUANTITY HAS BEEN INCREASED BY 50% OVER MEASURED QUANTITY TO ALLOW FOR ADDITIONAL DETERIORATION, SEE SHEET 7 OF 28 FOR AREAS TO BE PATCHED.

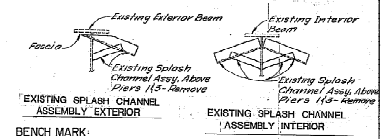
ESTIMATED QUANTITIES

Item	Total	Unit	ESTIMATED QUANTITIES	Super	Abut	Pier	Gen		
SP202	Lump	Barbure of structures, removed					Lump		
202	Lump	Removal of existing drainage structure, as per plan.					Lump		
508	B	Abutment Backfill, as per 502.10							
SP511A	3/	C.Y.	Class "B" concrete, abutment slope and barriers, using shrinkage compensating cement			3/			
SP511A	258	C.Y.	Class "B" concrete, superstructure, deck and barriers, using shrinkage compensating cement			258			
SP513	1980	EA	Welded stud shear connectors			1980			
SP514	403	S.F.	Field painting of existing structural steel			403			
SP514	1207	S.F.	Surface preparation - top flange, existing beams			1207			
516	20	EA	Laminated elastomeric bearings, complete, as per plan.		20				
SP518	162	C.F.	Retaining of concrete structures			54	108		
SP521B	Lump	Lump	Falsework temporary bracing and protective structures				Lump		
SP522	30	EA	Iron ends of structural steel members, as per plan		30				
SP523	1.3	S.F.	3" continuous strip seal in structural steel joints		6.3				
SP530	1420	C.Y.	Concrete, weatherproofing		1177	243	30	110	
SP533A	64.3	L.F.	2" Inch elastomeric compression seals in structural steel joints		64.3				
SP534	38.19	LD	Epoxy coated reinforcing steel, grade 60		52,040	8306	465		
SP531	3	C.Y.	Class C Concrete, Pier Cap Bearing Pad			3			
510	277	L.F.	Dowel Nuts, using SP535 grout anchoring.		93	124			




NOTE
INHAHNS OF STRUCTURES REMOVED SHALL INCLUDE APPROXIMATELY
2150.Y. OF SUPERSTRUCTURE CONCRETE, 320.Y. OF ABUTMENT SLAB
CONCRETE, 4631.LF. OF RAILING, SCUMPPERS, INCLUDING DOWNSPOUTS,
AND EXPANSION JOINTS AT PIERS 1 AND 3; AND ALL OTHER
MISCELLANEOUS ITEMS RELATED TO THE BRIDGE DECK, INCLUDING SPLASH
PLATES AT PIERS NO. 1 AND NO. 3.

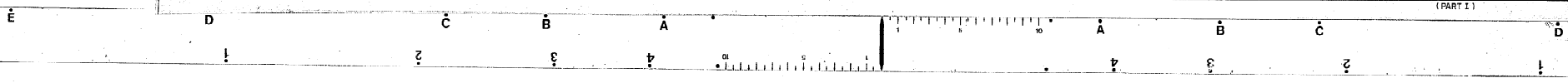
* TURNPIKE MAINTENANCE FORCES HAVE INSTALLED TEMPORARY FALSEWORK BETWEEN THE BOTTOM FLANGES OF THE SUPERSTRUCTURE BEAMS OVER THE TURNPIKE ROADWAYS. THIS FALSEWORK IS TO BE REMOVED BY THE CONTRACTOR, DURING THE REEVALUATION OF ITEM # 5272. FALSEWORK MUST BE BRACED AND PROTECTED STRUCTURES. SAID FALSEWORK SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF. OFF TURNPIKE RIGHT-OF-WAYS.














































BENCH MARK:
NORTH CORNER OF LAMP POST CONC.
BASE, 3rd LAMP POST SOUTH OF BRIDGE
POLE No.27, STA. 16+20, ELEV. 606.76

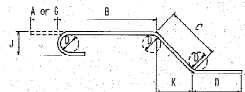
NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
GENERAL PLAN & ELEVATION AND ESTIMATED QUANTITIES			
RAMP 6 OVER TURNPIKE			
 WOOLPERT CONSULTANTS			
DESIGNED T.M.S.	CHECKED J.F.B.	DATE	
DRAWN R.C.H.	IN CHARGE A.G.	SCALE	
CONTRACT NO. 01-43-01-15		SHEET 25 OF 24	





DAR TYPE DIAGRAM										MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	E	F	G
 TYPE 1										 TYPE 2											
 TYPE 3										 TYPE 4											
 TYPE 5										 TYPE 6											
 TYPE 7										 TYPE 8											
 TYPE 9										 TYPE 10											
 TYPE 11										 TYPE 12											
 TYPE 13										 TYPE 14											
 TYPE 15										 TYPE 16											
 TYPE 17										 TYPE 18											
 TYPE 19										 TYPE 20											
 TYPE 21										 TYPE 22											
 TYPE 23										 TYPE 24											
 TYPE 25										 TYPE 26											
 TYPE 27										 TYPE 28											
 TYPE 29										 TYPE 30											
 TYPE 31										 TYPE 32											
 TYPE 33										 TYPE 34											
 TYPE 35										 TYPE 36											
 TYPE 37										 TYPE 38											
 TYPE 39										 TYPE 40											
 TYPE 41										 TYPE 42											





WHERE SLOPE IS 45°, ONLY Y "H" IS SHOWN, OTHERWISE BOTH "H" AND "Y" ARE SHOWN.

TYPICAL BAR BENDING DETAILS

NOTES

- BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST UNIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR DIGITS ARE USED, INDICATE THE BAR SIZE NUMBERS. FOR EXAMPLE A-601 IS A NO.6 SIZE BAR AND A P-1004 IS A NO.10 SIZE BAR.
- ALL DIMENSIONS ARE OUT TO OUT OF BAR.
- RADIUS DIMENSION "R" IS TO OUTSIDE OF BAR, RADIUS DIMENSION "R" IS 10 INSIDE OF BAR.
- THE LENGTH OF BENT BARS IS MEASURED ALONG THE CENTERLINE.
- FOR STANDARD HOOK DIMENSIONS, SEE SECTION 509.05 OF THE SPECIFICATIONS.
- DIMENSION ON HOOK IS SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE.
- EPOXY COATED REINFORCING STEEL IS INDICATED BY THE LETTER "E" IN THE BAR MARK PREFIX.
- REINFORCING STEEL SAMPLES: REFER TO D.T.C. GENERAL CONDITIONS C-6.03 AND CMS SECTION 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08.
- THE MECHANICAL SPLICE SYSTEM SHALL BE CAPABLE OF DEVELOPING 100% OF THE YIELD STRENGTH OF THE BARS CONNECTED. THE SPLICE SHALL BE A THREAD SYSTEM WITH OR WITHOUT A SEPARATE COUPLER, AND SHALL BE EPOXY COATED IN ACCORDANCE WITH SP824.
- WELT OR CONNECTORS TO BE INCLUDED WITH ITEM SP824, EPOXY COATED REINFORCING STEEL, GRADE 60.

NO. _____ REVISIONS _____ BY _____ DATE _____

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE

REINFORCING STEEL LIST

RAMP 6 OVER TURNPIKE

WOOLPERT CONSULTANTS

DESIGNED T.M.S. CHECKED R.F.D. DATE _____

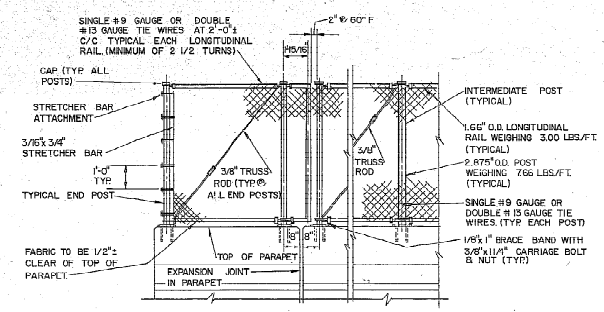
DRAWN R.W.H. IN CHARGE R.F.D. SCALE _____

CONTRACT NO. C-102-2-10-10 SHEET 23 OF 23

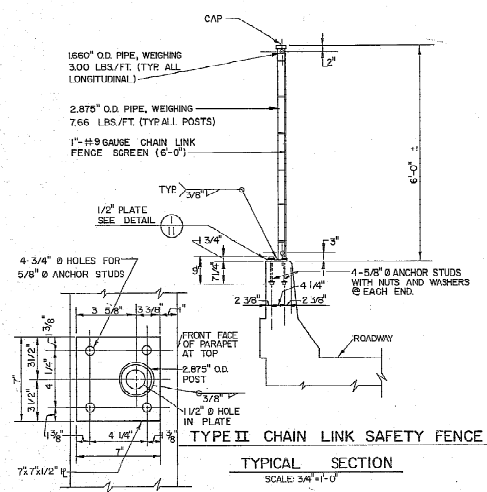
(PART 1)

11. AT CONTRACTORS OPTION, BARS SE 502 AND SE 503 MAY BE COMBINED AND SUPPLIED AS ONE BAR PAYMENT WILL BE MADE BASED ON BARS ACTUALLY SUPPLIED.

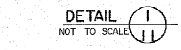
* Coordinate connector location with slagger plane of construction



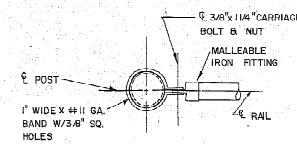
ELEVATION
SCALE 1/2"=1'-0"



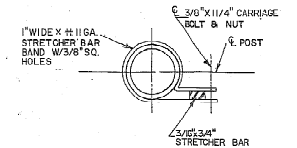
TYPICAL SECTION
SCALE 3/4"=1'-0"



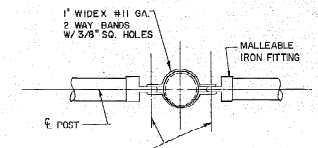
DETAIL I
NOT TO SCALE



END POST

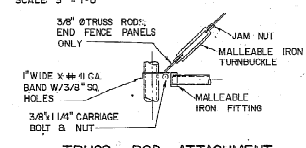


STRETCHER BAR ATTACHMENT
NO SCALE

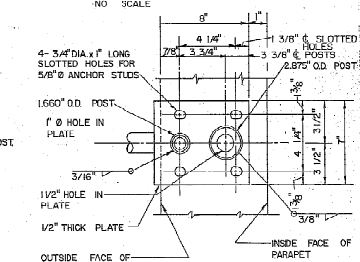


INTERMEDIATE POST

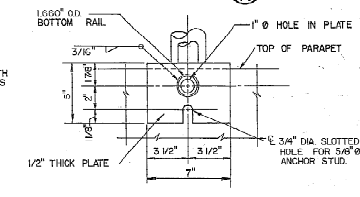
LONGITUDINAL RAIL - POST ATTACHMENT
SCALE 3"=1'-0"



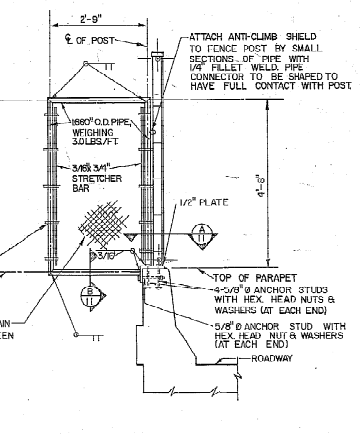
TRUSS ROD ATTACHMENT
NO SCALE



SECTION A
NOT TO SCALE



SECTION B
SCALE 3"=1'-0"



ANTI-CLIMB SHIELD
(TYPICAL OF FOUR PLACES)
TYPICAL SECTION
SCALE 3/4"=1'-0"

GENERAL NOTES

SPECIFICATIONS: 1983 ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS, LATEST A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES FOR DESIGN.

MATERIALS: FABRIC SHALL BE 1" MESH WOVEN FROM NO. 9 GAUGE, ALUMINUM COATED STEEL WIRE CONFORMING TO A.A.S.H.T.O. MBI, TYPE II. THE ENDS OF THE FABRIC SHALL BE KNUGGLED SELVAGE AT THE TOP AND BOTTOM.

ALL POSTS, BRACES, FITTINGS AND HARDWARE SHALL MEET THE REQUIREMENTS OF A.A.S.H.T.O. MBI. THEY SHALL BE ZINC COATED STEEL EXCEPT CASTINGS FOR OTHER THAN ORNAMENTAL PURPOSES WHICH SHALL BE ZINC COATED MALLEABLE IRON.

ALL PLATES SHALL BE STEEL CONFORMING TO A.S.T.M. DESIGNATION: A-36. ALL PARTS SHALL BE STEEL GALVANIZED UNLESS OTHERWISE NOTED AND ALL GALVANIZING SHALL BE DONE AFTER FABRICATION. PRECOATED LONGITUDINAL RAILS, IF CUT, WILL HAVE CUT END COATED WITH A ZINC-RICH PRIMER MEETING THE REQUIREMENTS OF FEDERAL SPECIFICATIONS T-T-P-641 TYPE II, PRIOR TO ERECTION.

ANCHOR STUDS: MATERIAL FOR ANCHOR STUDS SHALL CONFORM TO A.S.T.M. DESIGNATION: A-276 TYPE 430 TO TYPE 304 STAINLESS STEEL ANNEALED, HOT-FINISHED, ULTIMATE STRENGTH 70,000 P.S.I. MIN., 20% MIN. ELONGATION. THREADS MAY BE ROLLED OR CUT.

POST SPACING: FOR POST SPACING SEE PERTINENT STRUCTURAL SHEET. POST SPACING SHALL BE 8'-0" MAXIMUM.

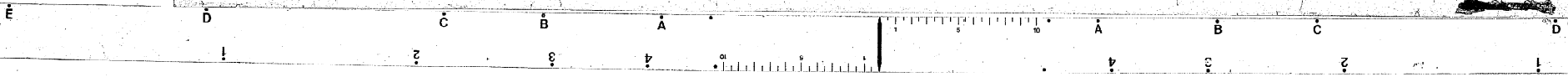
ERECTION: ALL LONGITUDINAL RAILS TO BE PARALLEL TO TOP OF PARAPET.

ALL POSTS TO BE SET NORMAL TO TOP OF PARAPET.

OHIO TURNPIKE COMMISSION

**CHAIN LINK SAFETY FENCE
DETAILS, TYPE II**

DATE: JUNE 1983 SCALE: AS NOTED
STANDARD DRAWING CL-2



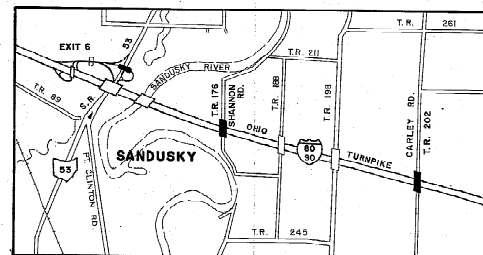
OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

CONTRACT CIP 43-89-15 - PART 2 REPLACEMENT OF BRIDGE DECKS

EXIT 6 RAMP OVER S.R. 53 (MP 92.0)
SHANNON ROAD OVER OHIO TURNPIKE (MP 93.0)
CARLEY ROAD OVER OHIO TURNPIKE (MP 94.7)

SANDUSKY COUNTY
ORIGINAL CONTRACT SECTIONS C-37 AND C-39

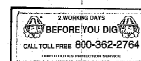


LOCATION MAP
(N.T.S.)

STANDARD CONSTRUCTION DRAWINGS OHIO DEPARTMENT OF TRANSPORTATION

DRAWING NO.	DATE
BP - 2	1-11-85
BP - 3	12-6-78
BP - 4	10-1-87
BP - 5	10-1-87
BP - 7	10-1-87
CB - 3A	5-1-79
CR - 1	1-11-85
CR - 2B	2-5-82
CR - 3	1-21-85
CR - 4	2-5-82
F - 1	11-10-83
TC - 35.10	8-29-79
UR - 1	5-29-79
MC - 6	1-30-84

PREPARED BY:
adache-ciuni-lynn associates
CONSULTING ENGINEERS & SURVEYORS
4401 ROCKSIDE RD.
CLEVELAND, OHIO 44131



NOTE:
THIS CONTRACT IS COMBINED
WITH CONTRACT CIP 43-89-15
PART 1 TO FORM A SINGLE
CONSTRUCTION CONTRACT.

INDEX OF SHEETS

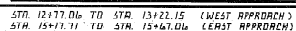
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APPROVED FOR:

THE OHIO TURNPIKE COMMISSION

BY William J. Smith 2-13-89
DATE

REVISED TO AS BUILT W.E.B. 1-2-90



CONTRACT NO. C.I.P. 43-89-15 PART 2				
OHIO TURNPIKE COMMISSION				
OHIO TURNPIKE				
adache ciuni lynn associates				
CONSULTING ENGINEERS CLEVELAND, OHIO 44131				
TYPICAL SECTIONS				
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
J.R.E.	T.M.J.	A.J.M.	R.D.H.	2-7-89

CALC
DATE
CHKD
DATE

Ohio
FHWA
REGION
3
43

PROPOSED WORK

THE EXIT 6 RAMP BRIDGE OVER STATE ROUTE 53 AND THE SHANNON ROAD BRIDGE AND CARLEY ROAD BRIDGE OVER THE OHIO TURNPIKE WILL BE REHABILITATED UNDER THIS CONTRACT. MAJOR WORK TO BE PERFORMED CONSISTS OF:

- 1.1 REPLACING THE BRIDGE DECKS AND ABUTMENT ROADWAY SLABS, APPROACH SLABS AND DECK JOINTS WITH NEW REINFORCED CONCRETE DECKS, ABUTMENT SLABS, APPROACH SLABS, SEALED DECK JOINTS AND SAFETY BARRIERS.
- 2.1 REPAIRING THE EXISTING CONCRETE ABUTMENTS AND PILES BY PATCHING THE DETERIORATED SECTIONS WITH CONCRETE.
- 3.1 ROADWAY IMPROVEMENTS INCLUDING RELOCATING/REPLACING GUARDRAIL, REPLACING PAVEMENT JOINTS, REPLACING PORTIONS OF EXISTING PAVEMENT AND RELOCATING/REPLACING DRAINAGE ITEMS. DETAILS OF THIS WORK ARE SHOWN ON THE PLANS.

CONSTRUCTION SEQUENCE

THE CONTRACTOR SHALL CONFORM TO THE SEQUENCING OF CONSTRUCTION OPERATIONS IN THE CONSTRUCTION OF THESE BRIDGE PROJECTS.

- 1.1 SHANNON AND CARLEY ROADS SHALL BE CLOSED FOR THE DURATION OF THE PROJECT. DETAILS OF SCHEDULING, BARRICADE AND TEMPORARY FENCE ARE SHOWN ON THE PLANS.
- 2.1 EXIT 6 RAMP OVER S.R. 53 SHALL BE CONSTRUCTED IN TWO (2) PHASES. ALL WORK SHALL BE COORDINATED WITH THE MAINTENANCE OF TRAFFIC DETAILS SHOWN IN THE PLANS. ALL PROVISIONS FOR SAFETY MUST BE IN PLACE PRIOR TO ANY DEMOLITION OR CONSTRUCTION WORK COMMENCEMENT.
- 3.1 THE SEQUENCE OF CONCRETE PLACEMENT SHALL BE AS SPECIFIED AND INDICATED ON THE DRAWINGS.
- 4.1 NO CHANGES IN THE SEQUENCING OF CONSTRUCTION OPERATIONS SHALL BE PERMITTED WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE ENGINEER OBTAINED NO LATER THAN 48 HOURS IN ADVANCE OF THE PROPOSED CHANGE.

ELEVATION DATA

ALL ELEVATIONS SHOWN ON THESE PLANS ARE BASED ON THE U.S. GEOLOGIC SURVEY AND ARE IN FEET ABOVE SEA LEVEL.

DATCH BASIN AND SLOPE DRAIN

WHERE PLANS PROVIDE FOR NEW DATCH BASIN AND SLOPE DRAIN, ALL WORK SHALL BE IN ACCORDANCE WITH DETAILS SHOWN. IN ADDITION, 4 FT. X 4 FT. X 1.5 FT. THICK OF ROCK CHANNEL PROTECTION TYPE C, WITHOUT FILTER SHALL BE INSTALLED. PAYMENT SHALL BE ACCORDING TO THE UNIT PRICES BID FOR THE PERTINENT ITEMS.

UTILITIES NOTIFICATION

AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE REGISTERED UTILITY PROTECTION SERVICE, TOLL FREE 1-800-362-2764, AND THE OWNERS OF EACH UNDERGROUND UTILITY SHOWN IN THE PLANS.

THE OWNER OF THE UNDERGROUND UTILITY FACILITY SHALL, WITHIN FORTY EIGHT (48) HOURS, EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, AFTER NOTICE IS RECEIVED, STAKE, MARK OR OTHERWISE IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO (2) DAYS AHEAD OF THE PLANNED CONSTRUCTION.

UNDERGROUND UTILITIES

THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.84 O.R.C.

OHIO Edison 6326 LAKE AVENUE ELYRIA, OHIO 44035 TELEPHONE: (216) 324-5431	COLUMBIA GAS OF OHIO 827 WALNUT STREET ELYRIA, OHIO 44035 TELEPHONE: (216) 323-5551
OHIO BELL TELEPHONE 119 EOOD, OHIO TELEPHONE: (619) 245-7304 ATTN: MR. MARK HYLTON	TOLEDO Edison 2600 W. SAKUSKY U.S. 20 LINDSEY, OHIO 43142 TELEPHONE: 1-(800)-355-2800 ATTN: TIM SHEARLA

LITEL TELECOMMUNICATIONS CORPORATION, FIBER OPTIC CABLE APPROXIMATELY 10 FEET NORTH OF CENTERLINE OF OHIO TURNPIKE IS LOCATED A FIBER OPTIC CABLE. EXTREME CARE MUST BE TAKEN BY THE CONTRACTOR TO PRESERVE AND PROTECT THIS CABLE DURING ALL PHASES OF CONSTRUCTION. ANY EXCAVATION IN THIS AREA FOR ANY REASON SHALL NOT BE PERFORMED WITHOUT LITEL FIRST LOCATING THE CABLE. AFTER THE CABLE HAS BEEN LOCATED BY LITEL, THE CONTRACTOR SHALL EXCAVATE TO WITHIN 12 INCHES OF THE CABLE DEPTH AS PROVIDED. LITEL REPRESENTATIVES WILL THEN HAND DIG TO EXPOSE THE CABLE.

LITEL COORDINATION SHALL BE NOTIFIED A MINIMUM OF TWO DAYS PRIOR TO ANY EXCAVATION OVER THEIR LINES AND/OR LOCATING THE CABLE.

THE FOLLOWING SHALL BE CONTACTED FOR LOCATING THE CABLE:

JAYARON BORAJAN
OFFICE: (619) 881-0400
HOME: (619) 756-6775

CONTRACT NO. D.P. 43-85-15 PART 2			
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
odochie cluni-lynn associates			
CONSULTING ENGINEERS			
GENERAL NOTES			
(ROADWAY)			
DESIGNED	DRAWN	CHECKED	DATE
J.B.C.	R.S.D.	M.J.M./R.D.R.	2-7-87

DESIGN SPECIFICATIONS:

THESE STRUCTURES CONFORM TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983, INCLUDING INTERIM SPECIFICATIONS THRU 1988, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN LOADING:

EXIT 6 RAMP OVER S.R. 53: HS20-44 CASE I, THE ALUMINUM MILITARY LOADING, AND A 30 P.S.F. FUTURE WEARING SURFACE.

SHANNON/CARLEY ROAD OVER THE OHIO TURNPIKE: HS20-44 CASE II, AND NO PROVISIONS FOR A FUTURE WEARING SURFACE.

DESIGN STRESSES:

CONCRETE CLASS 3 - COMPRESSIVE STRENGTH 4500 P.S.I.
CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 P.S.I.
REINFORCING STEEL - ASTM A615, A616, A617
GRADE 60 MIN/MIN YIELD STRENGTH 60,000 P.S.I.
EXISTING STRUCTURAL STEEL ASTM A7 (ASSUMED) - YIELD STRENGTH 33,000 P.S.I.

DECK PROTECTION METHOD FOR ABUTMENT SLAB AND SUPERSTRUCTURE DECK IS EPOXY COATED REINFORCING STEEL IN TOP AND BOTTOM MATS AND CONCRETE WEATHERPROOFING SEALER ON TOP SURFACE.

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1/2" THICK.

MATERIALS:

1) WELDED SHEAR STUD CONNECTORS: SHALL CONFORM TO AASHTO M169 AND SP513.

EXISTING STRUCTURE PLANS:

THE ORIGINAL DESIGN PLANS MAY BE EXAMINED BY PROSPECTIVE BIDDERS AT THE COMMISSION'S PRINCIPAL OFFICE, 607 PROSPECT STREET, BEREA, OHIO. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE DRAWINGS.

EXISTING STRUCTURE VERIFICATIONS:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO OHIO SECTION 513.02 AND O.T.C. GENERAL CONDITIONS G-7.04 AND G-5.02.

CONTRACT BID PRICES SHALL BE BASED UPON RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRELIMINARY EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS, DIMENSIONS, ELEVATIONS, AND SKEW ANGLES WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD. THE STRUCTURAL STEEL AND STRUCTURAL STEEL DECK JOINTS SHALL NOT BE FABRICATED UNTIL THE ACTUAL DETAILS, DIMENSIONS, ELEVATIONS, AND SKEW ANGLES HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

ANY ADDITIONAL COST RESULTING FROM VARIATIONS FROM PLAN DIMENSIONS IS THE RESPONSIBILITY OF THE CONTRACTOR AND NO ADDITIONAL PAYMENT OVER THE UNIT PRICE BID WILL BE AWARDED BY THE COMMISSION.

DIMENSIONS: GIVEN ARE MEASURED HORIZONTALLY AND AT 90 DEGREES FAHRENHEIT, UNLESS OTHERWISE NOTED.

REPLACEMENT OF EXISTING REINFORCING STEEL:

ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE MADE UNSERVICEABLE BY THE CONTRACTOR'S CONCRETE REMOVAL OPERATIONS SHALL BE REPLACED WITH NEW STEEL AT HIS COST. ANY EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNSERVICEABLE BECAUSE OF CORROSION SHALL BE REPLACED WITH NEW STEEL.

DRILLING DOWN HOLES, FURNISHING AND PLACING SP 556 NONSHRINKING EPOXY MORTAR, AND REINFORCING BAR DOUELS, WHEN REQUIRED TO REPLACE EXISTING REINFORCEMENT DAMAGED BY THE CONTRACTOR, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

ITEM SP 516 CONCRETE WEATHERPROOFING SHALL BE APPLIED TO THE FOLLOWING EXPOSED CONCRETE SURFACES OF THE BRIDGE:

- THE TOPS OF ABUTMENT AND SUPERSTRUCTURE SLABS.
 - ALL PARAPET SURFACES AND SLAB SIDE FOOTINGS.
 - THE BOTTOM SURFACE OF THE SUPERSTRUCTURE SLAB FROM THE SLAB SIDE EDGE TO THE EXTERIOR STRENGTH FLANGE.
 - APPROACH SLABS.
 - NEW EXPOSED CONCRETE SURFACES OF ALL ABUTMENTS AND PIERS. SEALING SHALL NOT BE DONE UNTIL ANY CONCRETE PATCHING REPAIRS HAVE BEEN COMPLETED AND CURED.
- CARE SHALL BE TAKEN NOT TO APPLY WEATHERPROOFING ON CONSTRUCTION JOINT SURFACES. SURFACES TO RECEIVE JOINT SEALER, AND FASOLA BEAM PAINT.

CONCRETE INSERT ASSEMBLIES, AS SHOWN ON STANDARD CONSTRUCTION DRAWING GR-1 AND GR-3, SHALL BE PROVIDED AT ALL WINDWALL TERMINALS FOR ATTACHMENT OF WINDWALL TERMINAL CONNECTORS. INCLUDE WITH ITEM SP 511 FOR PAYMENT.

PATCHING CONCRETE STRUCTURES:

A CONTINGENCY OF SP 519 PATCHING CONCRETE STRUCTURES HAS BEEN INCLUDED ON EACH OF THE STRUCTURE'S SUMMARY OF QUANTITIES FOR USE AS DIRECTED BY THE ENGINEER.

ABUTMENT BACKFILL:

THE CONTRACTOR SHALL PROVIDE AND PLACE BACKFILL BETWEEN EXISTING WINDWALLS AS REQUIRED TO BRING THE FILL TO THE LEVEL OF THE PROPOSED SLAB PRIOR TO PLACING THE NEW DECK SLAB. INCLUDE WITH ITEM 503, ABUTMENT BACKFILL, AS PER 503.10 FOR PAYMENT.

EPOXY COATING COMPOUND:

EPOXY INJECTION COMPOUND (SP 528) SHALL BE PLACED ON THE SURFACE AREA OF EXISTING CONCRETE WHICH WILL BE IN CONTACT WITH THE NEW CONCRETE. PRICE INCLUDED IN THE CONTRACT BID PRICE FOR THE PERTINENT CONCRETE ITEMS.

BRIDGE DECK ELEVATIONS, SLAB THICKNESS, AND APPROACH PROFILES:

IN ORDER TO MEET HIGHWAY GRADES, TO ASSURE THE CONSTRUCTION OF THE REQUIRED THICKNESS OF DECK SLABS, AND TO ASSURE THE PROPER LOCATION OF THE REINFORCING STEEL, IN THE DECK SLABS, THE CONTRACTOR SHALL OBTAIN THE ELEVATIONS OF THE TOP OF EXISTING STEEL BEAMS, AFTER THE COMPLETE REMOVAL OF THE EXISTING DECK SLAB, AT THE LOCATIONS SHOWN IN THE TABLE ON SHEET 30 OF 43 (FOR EXIT 6 RAMP BRIDGE) AND 41 OF 43 (FOR SHANNON AND CARLEY ROAD BRIDGES) FOR THE FINAL PAVEMENT ELEVATIONS. THE CONTRACTOR SHALL COMPUTE THE DECK BEAM ELEVATIONS UTILIZING THE DEAD LOAD DEFLECTIONS. THEN, THE CONTRACTOR SHALL CALCULATE THE DECK THICKNESS OVER THE BEAM USING THE DECK SLOPED ELEVATIONS AND THE TOP OF BEAM ELEVATIONS. IF THE COMPUTED DECK THICKNESS IS FOUND TO BE LESS THAN A MINIMUM THICKNESS REQUIRED, THE FINAL PAVEMENT ELEVATIONS SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER.

THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON A 1/2" THICK EXIT 6 RAMP (BRIDGE) AND 8" THICK SHANNON/CARLEY ROAD BRIDGES CONCRETE OUTSIDE THE HAUNCH AREAS, AND THE AVERAGE THICKNESS OF CONCRETE PLACED OVER THE EXISTING BEAMS AT THE HAUNCHES. A TYPICAL HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING THE QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 8" AND 12" PROVIDED THAT THE SLOPE SHALL NOT BE MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.

PLACEMENT OF THE ABUTMENT SLAB PRIOR TO THE DECK SLAB WILL NOT BE PERMITTED. HOWEVER, THE ABUTMENT SLAB AND THE DECK SLAB MAY BE POURED AT THE SAME TIME. UPON THE COMPLETION OF THESE POURS AND PRIOR TO POURING THE CONCRETE APPROACH SLABS, THE ENGINEER WILL PROVIDE THE CONTRACTOR WITH FINISH GRADES AND ELEVATIONS REQUIRED TO PROVIDE A SMOOTH TRANSITION FROM THE ASHMAI HIGHWAY AND APPROACH SLABS TO THE CONCRETE ABUTMENT AND DECK SLABS.

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IN ORDER TO PROVIDE A SMOOTH TRANSITION FROM THE EXISTING PAVEMENT TO THE NEW BRIDGE DECK, THE ENGINEER SHALL PROVIDE THE CONTRACTOR WITH FINISH PAVEMENT ELEVATIONS. UPON COMPLETION OF THE ABUTMENT AND DECK SLABS, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER ELEVATIONS OF THE EXISTING SURFACE ALONG THE CENTERLINE AND BOTH EDGES OF PAVEMENT AT 25' INTERVALS. ELEVATIONS OF THE NEW BRIDGE SLABS, AND THE EXISTING PAVEMENT AT A DISTANCE 100' BEYOND THE PAVING LIMITS SHALL ALSO BE PROVIDED. UPON RECEIPT OF THESE ELEVATIONS, THE ENGINEER WILL CALCULATE AND PROVIDE THE CONTRACTOR FINAL ELEVATIONS FOR THE CONCRETE APPROACH SLABS AND FOR THE APPROACH PAVEMENT. NO APPROACH SLABS SHALL BE POURED NOR SHALL APPROACH PAVING COMMENCE UNTIL THE CONTRACTOR RECEIVES THE FINAL PAVEMENT ELEVATIONS FROM THE ENGINEER.

PAYMENT FOR THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM SP 623 - CONSTRUCTION LAYOUT SURVEY.

CONTINGENCY QUANTITIES:

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE ESTIMATED QUANTITIES FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING CORRECTION OF THIS PROJECT.

EPOXY COATED REINFORCING STEEL SUPPORT:

IN ACCORDANCE WITH THE REQUIREMENTS OF SP 824 AND 800.00, THE TOP AND BOTTOM MATS OF ALL LONGITUDINAL AND TRANSVERSE EPOXY COATED REINFORCING STEEL SHALL BE SUPPORTED BY APPROVED EPOXY COATED DEVICES WITH SPACING NOT EXCEEDING 3' - 0" CENTERS IN EACH DIRECTION. BROKEN CONCRETE, CRACK, ETC. SHALL NOT BE USED FOR SUPPORT OF EPOXY COATED REINFORCING STEEL. SUPPORTING DEVICES SHALL BE INCIDENTAL TO ITEM SP 824.

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN:

AS A CONTINGENCY, 10 CU. YD. OF UNCLASSIFIED EXCAVATION HAS BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR EACH BRIDGE WHEN EXISTING AND SUBSEQUENTLY BACKFILLING PORTIONS OF EXISTING PIER COLUMNS, WHERE CONCRETE PATCHING MAY EXTEND BELOW GRADE, AS DIRECTED BY THE ENGINEER. ALL APPLICABLE PROVISIONS OF ITEM 503 SHALL APPLY, EXCEPT THAT THE METHOD OF MEASUREMENT SHALL BE TO THE LIMITS SHOWN ON THE PLAN. THE COST FOR ALL LABOR, EQUIPMENT, AND MATERIALS TO PERFORM THE ABOVE WORK SHALL BE INCLUDED IN THE CURB YARD PRICE BID FOR ITEM 503 UNCLASSIFIED EXCAVATION, AS PER PLAN.

PORTIONS OF STRUCTURES REMOVED SHALL INCLUDE SCOURERS, EXHAUSTS, SPLASH PLATES,

SUPPORT SUPPORTS, EXPANSION JOINTS AND THE FOLLOWING APPROXIMATE QUANTITIES:

UNIT	EXIT 6 RAMP	SHANNON ROAD	CARLEY ROAD
SUPERSTRUCTURE CONCRETE	C.Y.	180	180
ABUTMENT SLAB CONCRETE	C.Y.	24	30
RAILING	L.F.	335	435

CONTRACT NO. C.P. 43-89-15 PART 2

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE

odochi cluni lynn associates

TRAFFIC ENGINEER

GENERAL NOTES (BRIDGE)

DESIGNED BY: DRAWN BY: CHECKED BY: REVIEWED BY: DATE: 2-7-89

J.C.C. D.S.B. R.J.M. R.D.H.

SCALE
DATE
CHKD
DATE

OHIO
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ITEM	SHEET NO. 7	SHEET NO. 8	SHEET NO. 10	SHEET NO. 12	SHEET NO. 18	SHEET NO. 25	SHEET NO. 32	SHEET NO. 33	TOTAL	UNIT	DESCRIPTION
302							95		95	S.Y.	APPROACH SLAB REMOVED
302			200				1,500	1,700	3,200	L.F.	GUARDRAIL REMOVED
302			550		275				825	L.F.	GUARDRAIL REMOVED FOR REUSE
302					155				155	L.F.	CONCRETE MEDIAN REMOVED
302					4	4	4		12	EACH	INLET REMOVED AND PLACED IN PLACE
SP 202A					220				220	L.F.	MEDIAN CURB REMOVAL AND PARTIAL REPLACEMENT
303					117	168	168		453	S.Y.	SUBGRADE COMPACTION
303	800				138	100	100		1,138	C.Y.	EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION
303	800								800	C.Y.	SPECIAL BORROW, AS PER PLAN
SP 303			24						24	C.Y.	AGGREGATE BASE
SP 310					90	85	85		180	C.Y.	SUBBASE, TYPE I, GRADING A
402			0		24	24			54	C.Y.	ASPHALT CONCRETE, AC-20
404					5	5			10	C.Y.	ASPHALT CONCRETE, AC-20
408					50	50			100	GAL.	PRIME COAT
SP 457					300	300			600	S.Y.	FULL DEPTH PAVEMENT REPAIRS
SP 457					24	24			48	L.F.	JOINT REPLACEMENT, TYPE R
SP 457					70	70			140	L.F.	JOINT REPLACEMENT, TYPE K
SP 457					140	140			280	L.F.	JOINT REPLACEMENT, TYPE L
SP 457					32	32			64	L.F.	EXPANSION JOINT
601			10.8						10.8	C.Y.	ROCK CHANNEL PROTECTION, TYPE C, WITHOUT FILTER
603			563						563	L.F.	17" TYPE T DRAINAGE, 707.01 (EXCEPT GALVANIZED) OR 707.05 WITHOUT PAVED INVERT
SP 604					8	8			16	EACH	CATCH BASIN
SP 605					80	80			160	C.Y.	AGGREGATE DRAIN, TYPE II
606			8		8	8			24	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE "A"
606					8	8			16	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE "A"
606			300				1,307.5	1,612.5	3,200	L.F.	GUARDRAIL, TYPE S
SP 606			250		275				525	L.F.	GUARDRAIL, TYPE S
SP 607	1,200								1,200	L.F.	TEMPORARY FENCE (17'-0" CHAIN LINK WITH SPECIALS, INCLUDING BARBED WIRE)
SP 607									8	EACH	TEMPORARY GATE (11'-0" x 7'-0")
608					95	95			190	L.F.	CONCRETE CURB, TYPE B
608					182	182			364	L.F.	CONCRETE CURB, TYPE 2A
SP 611					117	99	99		315	S.Y.	CLASS 3 CONCRETE APPROACH SLAB USING SHOWNAWAY COMPENSATING CEMENT (11'-10")
612					155				155	L.F.	CONCRETE MEDIAN
SP 612					220				220	L.F.	CONCRETE MEDIAN
622			300						300	L.F.	TYPE D MODIFIED CONCRETE BARRIER
SP 622A			250						250	L.F.	TEMPORARY CONCRETE BARRIER (FURNISHED BY COMMISSION)
SP 622A			100						100	EACH	CONCRETE BARRIER DELINEATOR
SP 627					12				12	TON	STONE SHOULDER PROTECTION
653	70								70	C.Y.	2" TOPSOIL, FURNISHED AND PLACED
659	1,200								1,200	S.Y.	SEEDING AND MULCHING
669	0.11								0.11	TON	COMMERCIAL FERTILIZER
GENERAL											
103.05										LUMP SUM	PREMIUM FOR CONTRACT PERFORMANCE AND PAYMENT BOND
SP 610										LUMP SUM	MAINTAINING TRAFFIC
SP 610										LUMP SUM	FIELD OFFICE
SP 623										LUMP SUM	CONSTRUCTION LAYOUT SURVEY
624										LUMP SUM	MOBILIZATION

CONTRACT NO. C.P. 43-29-16 PART 2

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE

adache - ciuni - lynn associates

CONSULTING ENGINEERS

GENERAL SUMMARY

(ROADWAY)

DESIGNED BY: J.R.C. DRAWN BY: G.S.B. CHECKED BY: R.J.H. REVIEWED BY: R.O.H. DATE: 2-1-84

CALC
DATE
CHKD
DATE

OHIO
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EXIT 6 RAMP STRUCTURAL QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION
SP202	LUMP SUM	L.S.	PORTIONS OF STRUCTURE REMOVED
503	10	C.Y.	UNCLASSIFIED EXCAVATION, AS PER PLAN
505	5	C.Y.	ABUTMENT BACKFILL AS PER 503.10
510	200	L.F.	LOCKED HOLES USING SP 853 GROUT ANCHORING
SP 511A	3	C.Y.	CLASS 5 CONCRETE, USING SHRINKAGE COMPENSATING CEMENT, FOR PRE-POUR TESTING
SP 511A	183	C.Y.	CLASS 5 CONCRETE, SUPERSTRUCTURE DECK AND BARRIERS USING SHRINKAGE COMPENSATING CEMENT
SP 511A	31	C.Y.	CLASS 5 CONCRETE, ABUTMENT SLAB AND BARRIERS USING SHRINKAGE COMPENSATING CEMENT
SP 513	800	FACH	WELDED STUD SHEAR CONNECTORS
SP 518	800	S.F.	SURFACE PREPARATION - TOP FLANGE, EXISTING BEAMS
SP 518	200	S.F.	FIELD PAINTING OF EXISTING STRUCTURAL STEEL
SP 519	725	S.F.	PATCHING CONCRETE STRUCTURES
SP 524	1	EACH	REBUILDING EXPANSION BEARING DEVICES
SP 524B	1	EACH	RESETTING EXPANSION BEARING DEVICES
SP 527	LUMP SUM	L.S.	FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES
SP 529	30	EACH	TRIM ENDS OF STRUCTURAL STEEL MEMBERS
SP 533	88.3	L.F.	3 INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT
SP 533A	88.3	L.F.	2 INCH ELASTOMERIC COMPRESSION SEAL IN STRUCTURAL STEEL JOINT
SP 536	1,000	S.Y.	CONCRETE WEATHERPROOFING
JP 824	80,725	LBS	EPDM COATED REINFORCING STEEL, GRADE 60

SHIMMOR ROAD STRUCTURAL QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION
SP202	LUMP SUM	L.S.	PORTIONS OF STRUCTURE REMOVED
503	10	C.Y.	UNCLASSIFIED EXCAVATION, AS PER PLAN
505	5	C.Y.	ABUTMENT BACKFILL AS PER 503.10
SP 511A	192	C.Y.	CLASS 5 CONCRETE, SUPERSTRUCTURE DECK AND BARRIERS USING SHRINKAGE COMPENSATING CEMENT
SP 511A	31	C.Y.	CLASS 5 CONCRETE, ABUTMENT SLAB AND BARRIERS USING SHRINKAGE COMPENSATING CEMENT
SP 513	1,500	EACH	WELDED STUD SHEAR CONNECTORS
SP 518	900	S.F.	SURFACE PREPARATION - TOP FLANGE, EXISTING BEAMS
SP 518	175	S.F.	FIELD PAINTING OF EXISTING STRUCTURAL STEEL
SP 519	500	S.F.	PATCHING CONCRETE STRUCTURES
SP 524	1	EACH	REBUILDING EXPANSION BEARING DEVICES
SP 524B	1	EACH	RESETTING EXPANSION BEARING DEVICES
SP 527	LUMP SUM	L.S.	FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES
SP 529	30	EACH	TRIM ENDS OF STRUCTURAL STEEL MEMBERS
SP 533	58.9	L.F.	3 INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT
SP 533A	58.9	L.F.	2 INCH ELASTOMERIC COMPRESSION SEAL IN STRUCTURAL STEEL JOINT
SP 536	1,100	S.Y.	CONCRETE WEATHERPROOFING
SP 807	422	L.F.	TYPE II FENCE, 18"-0" CHAIN LINK WITH SPECIALS
SP 807	422	L.F.	TYPE II FENCE, ALL ALUMINUM 18"-0" CHAIN LINK WITH SPECIALS
JP 824	48,275	LBS	EPDM COATED REINFORCING STEEL, GRADE 60
SP 824	4	EACH	ROTARHAM ADJUSTMENT

* SEE PROPOSAL

CARLEY ROAD STRUCTURAL QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION
SP202	LUMP SUM	L.S.	PORTIONS OF STRUCTURE REMOVED
503	10	C.Y.	UNCLASSIFIED EXCAVATION, AS PER PLAN
505	5	C.Y.	ABUTMENT BACKFILL AS PER 503.10
SP 511A	103	C.Y.	CLASS 5 CONCRETE, SUPERSTRUCTURE DECK AND BARRIERS USING SHRINKAGE COMPENSATING CEMENT
SP 511A	31	C.Y.	CLASS 5 CONCRETE, ABUTMENT SLAB AND BARRIERS USING SHRINKAGE COMPENSATING CEMENT
SP 513	1,500	EACH	WELDED STUD SHEAR CONNECTORS
SP 518	900	S.F.	SURFACE PREPARATION - TOP FLANGE, EXISTING BEAMS
SP 518	175	S.F.	FIELD PAINTING OF EXISTING STRUCTURAL STEEL
SP 519	675	S.F.	PATCHING CONCRETE STRUCTURES
SP 524	1	EACH	REBUILDING EXPANSION BEARING DEVICES
SP 524B	1	EACH	RESETTING EXPANSION BEARING DEVICES
SP 527	LUMP SUM	L.S.	FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES
SP 529	30	EACH	TRIM ENDS OF STRUCTURAL STEEL MEMBERS
SP 533	58.7	L.F.	3 INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT
SP 533A	58.7	L.F.	2 INCH ELASTOMERIC COMPRESSION SEAL IN STRUCTURAL STEEL JOINT
SP 536	1,200	S.Y.	CONCRETE WEATHERPROOFING
SP 807	422	L.F.	TYPE II FENCE, 18"-0" CHAIN LINK WITH SPECIALS
SP 807	422	L.F.	TYPE II FENCE, ALL ALUMINUM 18"-0" CHAIN LINK WITH SPECIALS
JP 824	48,388	LBS	EPDM COATED REINFORCING STEEL, GRADE 60

* SEE PROPOSAL

NOTE: CONTINGENT QUANTITIES HAVE BEEN SET UP FOR SELECTED ITEMS AND ARE TO BE USED AS DIRECTED BY THE ENGINEER.

THE FOLLOWING QUANTITIES INCLUDE A CONTINGENT QUANTITY:

ITEM	DESCRIPTION
503	UNCLASSIFIED EXCAVATION, AS PER PLAN
SP 518	PATCHING CONCRETE STRUCTURES
SP 524	REBUILDING EXPANSION BEARING DEVICES
SP 524B	RESETTING EXPANSION BEARING DEVICES

CONTRACT NO. T.I.P. 43-69-15 PART 2

OHIO TURNPIKE COMMISSION

adachi-clint lynn associates
CONSULTING ENGINEERS

GENERAL SUMMARY
(BRIDGE)

DESIGNED BY: J.R.C. DRAWN BY: G.S.D. CHECKED BY: R.J.N. REVISION: DATE: 2-7-89

SLOPE FAILURE REPAIR AREA

THE GENERAL AREA OF SLOPE FAILURE REPAIR IS ON THE SOUTHEAST AND SOUTHWEST EMBANKMENT OF CARLEY ROAD.

THE FAILURE PLANE SHOWN AND THE LIMITS OF CORRECTIVE WORK IS ESTIMATED. THE ACTUAL FAILURE PLANE SHALL BE ESTABLISHED BY CAREFUL TRENCHING NORMAL TO THE EMBANKMENT PRIOR TO ANY EXCAVATION AND/OR REMOVAL OF THE FAILED EMBANKMENT MATERIAL. THE PRESENCE OF, AND THE LOCATION OF, THE FAILURE PLANE SHALL BE VERIFIED BY THE ENGINEER.

THE WORK SHALL CONSIST OF REMOVING FAILED SLOPE MATERIAL AND DISPOSING OF ALL MATERIALS SO REMOVED FROM THE PROJECT. THE EXISTING SLOPE SHALL BE BENCHMARKED AS SHOWN ON THE PLANS AND EMBANKMENT MATERIAL FURNISHED, PLACED AND COMPACTED IN ACCORDANCE WITH ITEM 203.

THE CONTRACTOR SHALL OBTAIN FIELD CROSS SECTIONS AND SUBMIT THEM TO THE ENGINEER PRIOR TO THE START OF THE REPAIRS. FROM THE CROSS SECTIONS PROVIDED, THE LIMITS OF WORK AND THE PROPOSED SLOPES WILL BE DETERMINED BY THE ENGINEER.

AFTER COMPLETION OF THE SLOPE REPAIR IN ACCORDANCE WITH THE PROPOSED CROSS SECTIONS DEVELOPED BY THE ENGINEER, THE CONTRACTOR SHALL AGAIN CROSS SECTION THE REPAIR AREA AT THE SAME STATIONS.

THE ACTUAL AMOUNT OF FAILED SLOPE MATERIAL REMOVED AND REPLACED SHALL BE DETERMINED FROM THE FIELD CROSS SECTIONS PROVIDED BY THE CONTRACTOR, BOTH BEFORE AND AFTER REPAIRS.

BENCHING AND LIMITS OF CORRECTIVE WORK SHOWN ON THE DETAIL SHALL BE MODIFIED, IF NECESSARY, IN ACCORDANCE WITH FIELD CONDITIONS TO ENSURE THAT THE FAILURE PLANE IS LOCATED AND MATERIAL IS REMOVED AND REPLACED TO THE DIMENSIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

BENCHES SHALL CUT INTO SOFT OR LOOSE MATERIAL AND EXTEND A MINIMUM OF 4 FEET BEYOND THE FAILURE PLANE INTO FIRM MATERIAL.

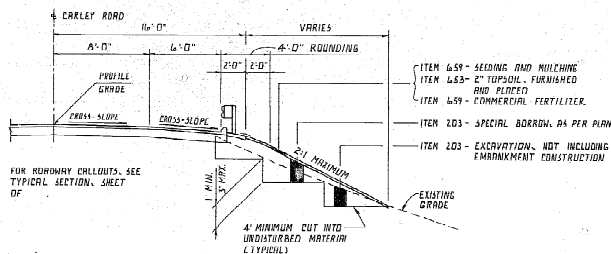
SPECIFIED BORROW TO RECONSTRUCT THE SLOPE SLOPES SHALL BE UNDO (DEPARTMENT OF TRANSPORTATION TESTING LABORATORY CLASSIFICATION A-2, A-3A, A-4 OR A-6 SOIL) AND SHALL BE COMPACTED TO A MINIMUM DENSITY OF 98% (AASHTO T-99).

THE TOP 6 INCHES OF EMBANKMENT REMAINING AFTER REMOVAL TO THE SPECIFIED DEPTH SHALL BE COMPACTED TO A MINIMUM DENSITY OF 98% (AASHTO T-99) PRIOR TO PLACING SPECIAL BORROW MATERIAL.

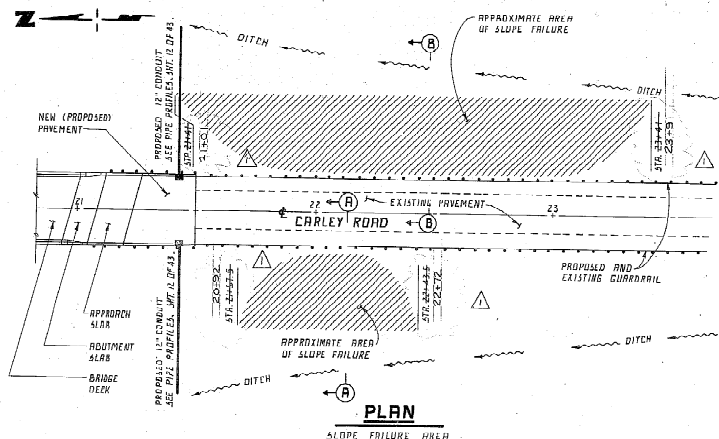
THE SURFACE OF BENCHMARKED AREAS SHALL BE SLOPED TO DRAIN DURING INCLEMENT WEATHER TO PREVENT SATURATION OF THE CONSTRUCTED BENCHES.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED ON THE GENERAL SUMMARY FOR BIDDING (UNLESS INDICATED):

ITEM 203	EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION	800 C.Y.
ITEM 203	SPECIAL BORROW, AS PER PLAN	800 C.Y.
ITEM 659	SEEDING AND MULCHING	1200 S.Y.
ITEM 653	2" TOPSOIL, FURNISHED AND PLACED	70 C.Y.
ITEM 653	COMMERCIAL FERTILIZER	0.11 TON



SLOPE FAILURE - BENCHING DETAIL



PLAN
SLOPE FAILURE AREA

DATE	7
DATE	7
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DATE	7
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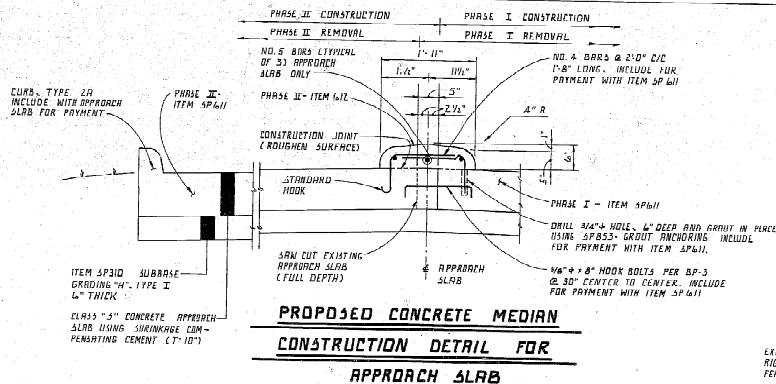
SECTION A-A

NO SCALE
EXISTING

SECTION B-B

NO SCALE
EXISTING

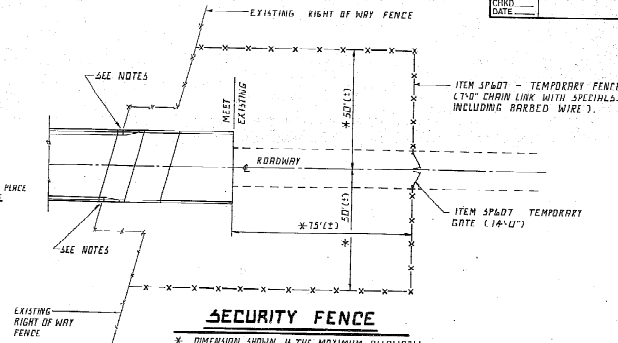
REVISION: 1.0 X. BULL. 1.0 X. BULL. 1.0 X. BULL.	
CONTRACT: NO. 117-43-89-15 PROJ. 2	
OHIO TURNPIKE COMMISSION	
adache - clint - lynn associates	
CONSULTING ENGINEERS	
SLOPE FAILURE RECONSTRUCTION	
DESIGNED	DATE: 10-1-89
DRAWN	DATE: 10-1-89
CHECKED	DATE: 10-1-89
APPROVED	DATE: 10-1-89



NOTES:
THE EXIT & RAMP BRIDGE APPROACH SLABS SHALL BE CONSTRUCTED IN PHASES AS SHOWN.

ROADWAY TURNPIKE, D.D.D.T. TYPE 2A (SEE STD. Dwg. 10-1) SHALL BE CONSTRUCTED ON ALL APPROACH SLABS AND SHALL BE INCLUDED WITH ITEM SP611 - CLASS "S" CONCRETE APPROACH SLABS USING SHRINKAGE COMPENSATING CEMENT (17-10") FOR PAYMENT.

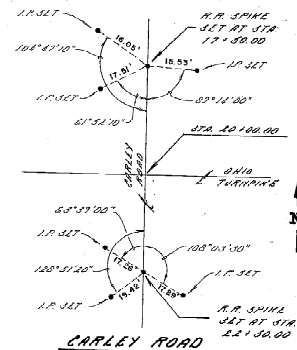
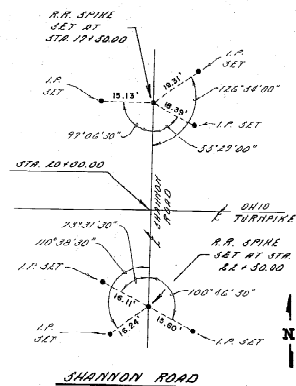
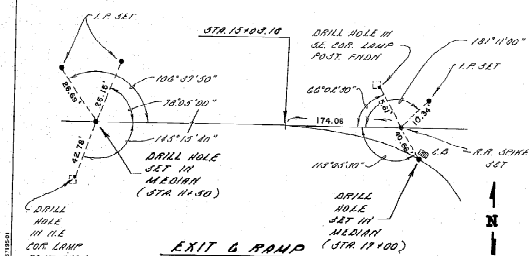
FOR APPROACH SLAB DETAILS, CALLOUTS AND NOTES NOT SHOWN, SEE "REINFORCED CONCRETE APPROACH SLABS", SHEET 13 OF 43.



* DIMENSION SHOWN IS THE MAXIMUM ALLOWABLE TO BE USED FOR PAYMENT EVEN THOUGH THE CONTRACTOR, WITH APPROVAL OF THE ENGINEER, MAY ATTEND THE LAYOUT SHOWN FOR HIS OWN CONVENIENCE (WORK AREA, STORAGE, ETC.) AT NO ADDITIONAL COST TO THE OHIO TURNPIKE COMMISSION.

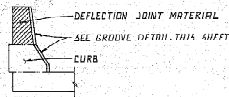
ASTRITY FENCES AND GATES SHALL BE INSTALLED AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR AT BOTH ENDS OF THE SHANNON ROAD AND THE CARLEY ROAD WORK AREAS.

IF THE EXISTING RIGHT OF WAY FENCE THAT IS CONNECTED TO THE RIGHTWAY IS REMOVED BY THE CONTRACTOR DURING CONSTRUCTION, IT SHALL BE REPLACED BY THE CONTRACTOR, TO THE SATISFACTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE OHIO TURNPIKE COMMISSION.



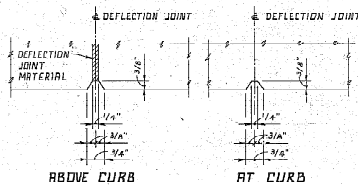
HORIZONTAL CONTROL

CONTRACT NO. C.P. 43-89-15 PART 2			
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
adache - ciuni - lynn associates			
CONSULTING ENGINEERS			
61515155, OHIO 11131			
ROADWAY DETAILS			
DESIGNED	DRAWN	CHECKED	REVIEWED
J.R.C.	T.M.J.	R.H.	R.H.
DATE: 2-1-89			

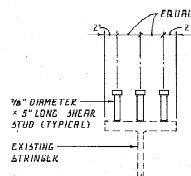


DEFLECTION JOINT DETAIL

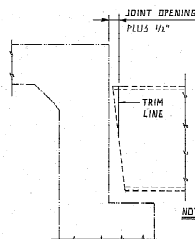
DEFLECTION JOINT MATERIAL IN THE PARAPET SHALL BE EITHER 1/4" GRAY SPONGE RUBBER OR 1/4" GRAY CELLULAR POLYVINYL CHLORIDE (PVC) SPONGE. EITHER MATERIAL SHALL MEET THE REQUIREMENTS OF ASTM M-153, TYPE I, EXCEPT THE DENSITY OF THE PVC SPONGE SHALL NOT BE LESS THAN 20 LBS. PER CUBIC FOOT.



GROOVE DETAIL



SHEAR STUD DETAIL

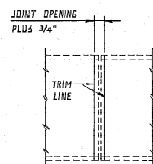


AT ABUTMENTS

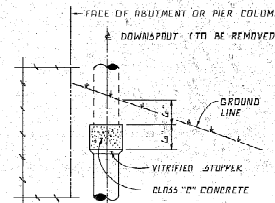
TRIM ENDS OF STRUCTURAL

STEEL MEMBERS

FOR JOINT OPENING DIMENSION, SEE DECK JOINT DETAILS, SHEET 15 OF 43.

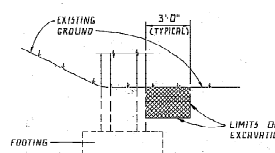


AT PIERS WITH JOINTS



DRAIN PIPE CAP DETAIL

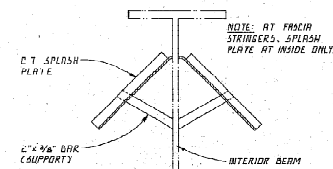
(INCLUDE WITH ITEM SP202 PORTIONS OF STRUCTURES REMOVED FOR PAYMENT.)



EXCAVATION LIMITS FOR UNCLASSIFIED EXCAVATION

AS PER PLAN

(AT REPAIR OF PIER COLUMNS)



SPLASH PLATE

REMOVAL DETAIL

AT JOINTS OVER PIERS

- 1) REMOVE SPLASH PLATE AND BRG. SUPPORT
- 2) GRIND STRINGER WED SMOOTH
- 3) PAINT AS DIRECTED UNDER ITEM 4351 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL.

CONTRACT NO. C.L.P. 43-89-15 PART 2

OHIO TURNPIKE COMMISSION

adache ciuni-lynn associates

CONSULTING ENGINEERS CLEVELAND, OHIO 44131

COMMON STRUCTURAL DETAILS

DESIGNED: J.R.D. DRAWN: T.M.J. CHECKED: R.J.M. REVIEWED: R.D.H. DATE: 2-7-89

1. A PREFORMED EXPANSION JOINT MATERIAL IS TO BE PLACED BETWEEN ALL SURFACES WHERE THE NEW CONCRETE BARRIER WILL BUTT AGAINST THE EXISTING CONCRETE BRIDGE PIERS (TYPICAL). ALL SURFACES OF BOTH THE CONCRETE BARRIER AND BARRIER FOUNDATION.

2. ALL TRANSITION SECTIONS ARE TO HAVE EMBEDDED CONCRETE INSERT TYPE A BRIDGE TERMINAL ASSEMBLIES PLACED AS PER O.D.O.T. STANDARD CONSTRUCTION DRAWING "GR-3"

3. NO. 8 DEFORMED STEEL BARS, 12" LG., SPACED AT 2'-0" O/C IN THE TRANSITION SECTION AND SPACED AT 4'-0" O/C IN THE NORMAL SECTIONS OF THE CONCRETE BARRIER.

4 UNSEALED CONTRACTION JOINTS SPACED AT 10' O/C (MAX.) SHALL BE CONSTRUCTED THROUGHOUT THE ENTIRE RUN OF CONCRETE BARBER CONTRACTION JOINTS MAY BE CONSTRUCTED WITH METAL INSERTS INSIDE THE FORMS, REFORMED FULL WIDTH JOINT FILLER, A GROOVING TOOL, OR BY SAWING. CONTRACTION JOINT TO BE A MIN. DEPTH OF 1 1/2" AND SHALL BE CONSTRUCTED FOR THE FULL HEIGHT OF THE BARRIER INCLUDING THE BARRIER FOUNDATION.

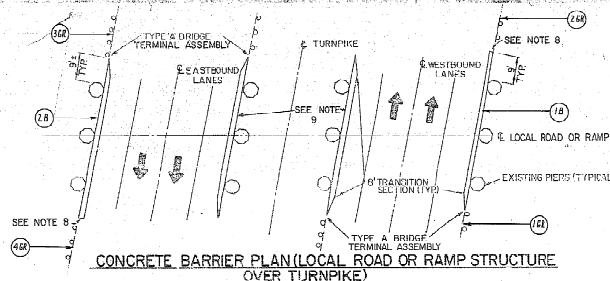
5. ALL EXCAVATION COSTS SHALL BE INCLUDED UNDER ITEM 622 "TYPE D MODIFIED CONCRETE BARRIER".

6. THERE SHALL BE NO SEPARATE PAYMENT FOR THE CONCRETE FOOTER, THESE COSTS SHALL BE INCLUDED UNDER ITEM 522 "TYPE D MODIFIED CONCRETE BARRIER."

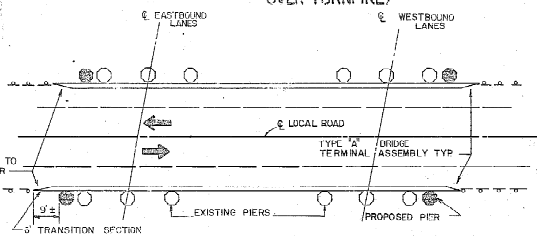
7. WHEN IT IS NECESSARY TO REMOVE EXISTING PAVED SHOULDER IN ORDER TO CONSTRUCT THE CONCRETE BARRIER, THE SHOULDER SHALL BE REPLACED USING ITEM 402 (6" MIN DEPTH) OVER SP 304.

8. OMIT TRANSITION SECTION ON TRAILING END OF OUTSIDE SHOULDER, UNLESS EXISTING GUARDRAIL EXTENDS BEYOND THE PIERS.

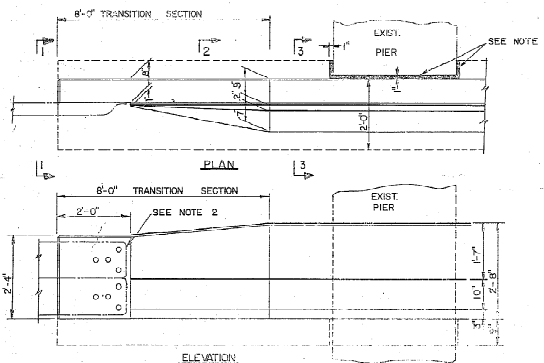
9. CONCRETE BARRIER TO BE PROVIDED IN MEDIAN-ONLY IF THE STRUCTURE HAS DOUBLE MEDIAN PIERS. TRANSITION SECTION REQUIRED AT BOTH APPROACH AND TRAILING END.



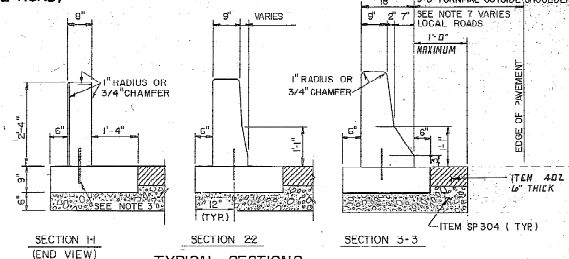
CONCRETE BARRIER PLAN (LOCAL ROAD OR RAMP STRUCTURE
OVER TURNPIKE)



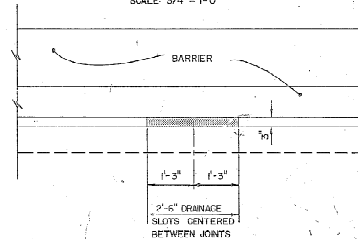
CONCRETE BARRIER PLAN (TURNPIKE STRUCTURE
OVER LOCAL ROAD)



TYPICAL BARRIER END SECTION
SCALE: 3/4" = 1'-0"



TYPICAL SECTIONS
SCALE: 3/4" = 1'-0"



DRAINAGE SLOT DETAIL
SCALE: 3/4" = 1'-0"

REF. NO.	622		606		606		202		304		402	
	TYPE D. MOORE'S		CONCRETE		ANCHOR		ANCHOR		ANCHOR		ANCHOR	
	TYPE D.	MOORE'S	CONCRETE	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR	ANCHOR
1B	50		2						4.0		1.0	
2B	50		2						4.0		1.0	
1GR	15				1							
2GR	15				1							
3GR	15				1							
4GR	15				1							
100	100	300	4	4					8.0		2.0	

CROSS MEMBERS	1B	50		1	50	4.0	1.0
	2B	50		1	50	4.0	1.0
	1GR		50		50		
	2GR		50		50		
	TOTAL	100	100	2	100	100	8.0

CABLE 6250	1 B	50		2	50		4.0	4.0
	7 B	50		1	50		4.0	1.0
			50			50		
			26R			50		
			36R			50		
	101RL	100	150	5	100	150	25.0	2.0

TURNPIKE MEDIAN SHOULDER
S TURNPIKE OUTSIDE SHOULDER
NOTE 7 VARIES TOTAL ROAD
1'-6"
MINIMUM
EDGE OF PAVEMENT
ITEM 402
6" THICK
ITEM SP 304 (1/2)

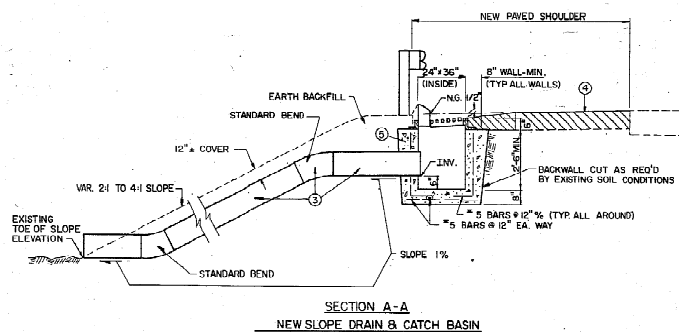
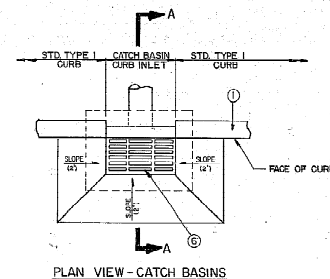
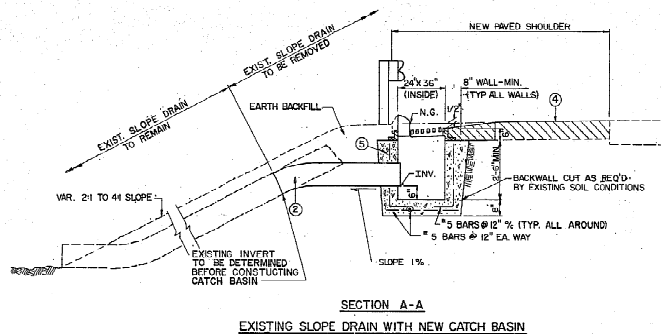
*THIS CLARITY HAS BEEN ESTABLISHED AS A CONTINGENCY
TO BE USED IF REQUIRED, AS DIRECTED BY THE ENGINEER,
TO PROVIDE FORMATION SECTION BETWEEN THE PLASTIC
GUARDRAIL AND THE PROPOSED CURB/CULVERT BARRIER. THE
TRANSITION SECTION SHALL BE SUBMIT AT A 50:1 MINIMUM
SCALE.

2	ADDED PLAN FOR TURNPIKE PIERS MISC. REVISIONS	JDL	7-16-84
1	ADDED 304 SHLDR. & NOTE 6	Dr-C	11-22-84
REV	DESCRIPTION	BY	DATE

OHIO TURNPIKE COMMISSION

CONCRETE BARRIER
PLAN, & DETAILS

DATE: MARCH 1984	SCALE: AS NOTED
	SHEET 10 OF 43



LEGEND

- ① SP 809 TYPE 1 ASPHALT CONCRETE CURB (SEE STANDARD DRG. BP-5)
- ② 603 12" TYPE F CONDUIT, 707.01 (EXCEPT GALVANIZED) OR 707.05 TYPE C WITHOUT PAVED INVERT AS REQUIRED TO FORM TRANSITION BETWEEN NEW CATCH BASIN AND EXISTING C.M.P. THAT IS TO REMAIN.
- ③ 603 12" TYPE F CONDUIT, 707.01 (EXCEPT GALVANIZED) OR 707.05 TYPE C WITHOUT PAVED INVERT SIZE VARIES, SEE PLAN SHEETS.
- ④ NEW SHOULDER SURFACE TREATMENT
- ⑤ REINFORCED CONCRETE CATCH BASIN - CLASS "C" CONCRETE USING 499.05 WITH REFORMED BILLET STEEL REBARS, USING 509.02.
- ⑥ HEAVY DUTY, GRAY IRON CASTING USING 711.12 CATCH BASIN CURB INLET - MODEL NO. R-5206 AS MANUFACTURED BY WERNER FOUNDRY CO., OR EAST JORDON IRON WORKS MODEL NO. 7030.

NOTES

1. CATCH BASINS AND SLOPE DRAINS SHALL BE CONSTRUCTED TO THE APPROXIMATE STATIONS AS INDICATED ON THE PLAN, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
2. SLOPE DRAIN COUPLING DRAWS SHALL BE 10 1/2" BAR & STRAP CONNECTOR WITH CONTINUOUS CORRUGATION AROUND BAND.
3. PIPE MAY BE TRIMMED FLUSH WITH INSIDE OF BASIN OR EXTEND INTO THE BASIN 1" MAX.
4. N.G. - NORMAL GUTTER ELEVATION
INV. = PIPE INVERT ELEVATION.
5. WHERE CONNECTIONS ARE MADE BETWEEN NEW AND OLD PIPES PROVIDE CONCRETE COLLAR (SEE STANDARD DRG. RC-4).

NO.	GENERAL	REVISIONS	DATE
1	GENERAL		DEC 11-64
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DATE: JANUARY 1964 SCALE: N.T.S.

C/D: 43-89-15 (PART 2) SHEET 11 OF 43

• 2'-0" FOR SKEWS
LARGER THAN 20°;
0'-0" FOR SKEWS
20° OR LESS

15'-0"

1/2" Ø BARS
@ 2'-0" HORIZ.
MEASURED PARALLEL
TO THE ABUTMENTS

3"

SEE NOTE I

TYPE 'H' OR 'K'
JOINT. SEE CRACK
& JOINT DETAILS,
SHEET NO.

1/2" OR 3/4" Ø BARS AT
EDGE OF SLAB SHALL
BE CUT TO FIT

3/4" Ø BASIS 0'-5" READING
WITH MEASURED PERPEND.
TO CL OF ROADWAY

SKEW ANGLE

APPROACH SLAB

ABUTMENT SLAB

BRIDGE ABUTMENT SLAB

PAVEMENT REINFORCING
PER QDOT STD. UNG. WP-2

SEL. NOTE 1
SEE NOTE 2

3" CLE/IN

6" ITEM 30 SUBBASE

3/4" Ø BARS @ 0'-8" C/C

1/2" Ø BARS @ 2'-0" C/C

2'-0" MIN

3'-0" ±

16"

10"

NOTE 1: GROOVE AND SEAL AS PER O.D.O.T. STD. CONST. DWG. BP-3.

NOTE 2: TYPE A WATERPROOFING SHALL NOT EXTEND ABOVE THE BOTTOM OF THE GROOVE INTO WHICH THE JOINT SEALER IS TO BE PLACED. IT SHALL BE APPLIED TO THE ENTIRE AREA OF THE ABUTMENT OR SUPERSTRUCTURE, WHICH COMES INTO CONTACT WITH THE APPROACH SLAB.

NOTE 3: REPAIR OF BROKEN APPROACH SLAB SPAT SHALL BE CONSTRUCTED BY THE CONTRACTOR AS PER DETAIL OR AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE ON THE BASIS OF THE QUANTITY OF SPAT. 15% FOR OVERHEAD AND PROFIT. "DIRECT COSTS" SHALL BE DEFINED UNDER SECTION 6-9.02(5) OF THE CONTRACT.

NEW APPROACH SLAB

NEW ABUT. SLAB

2'-0" MIN

18'-0"

SEE NOTE 1

SEE NOTE 2

ABUTMENT FOOTER

PORTION OF ABUTMENT FOOTER REMOVED

WHEN EXIST. APPROACH SLAB SEAT IS LESS THAN 4' OR IF OTHERWISE DIRECTED BY THE ENGINEER, A PORTION OF THE EXIST. ABUTMENT FOOTER SHALL BE REMOVED TO PROVIDE A NEW SEAT

APPROACH SLAB SEAT REPAIR DETAIL

DESIGN DATA

PREFORMED EXPANSION JOINT FILLER AND SEALER AT THE CORNERS AND SIDES OF THE APPROACH SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

GROOVE AND JOINT SEAL SHOWN AT THE BRIDGE LIMIT END OF THE APPROACH SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ YARD FOR THE APPROACH SLAB.

TYPE A WATERPROOFING SHOWN AT THE ABUTMENT SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

LONGITUDINAL CONSTRUCTION JOINTS REQUIRED FOR STAGE CONSTRUCTION SHALL BE
AS PER 51109.

CURBS, BRIDGES WITH SIDEWALKS: FOR BRIDGES CONSTRUCTED WITH RETAINED SIDEWALKS, DEFLECTOR PARAPETS OR OTHER TYPES OF CONSTRUCTION WHICH RAISE ROADWAY SURFACE DRAINAGE, THE APPROACH SLABS SHALL EITHER INCLUDE INTEGRAL CURBS OR BE CONSTRUCTED IN CONJUNCTION WITH BRIDGE CURBS. CURB HEIGHT SHALL BE TRANSITIONED UNIFORMLY BETWEEN BRIDGE CURB HEIGHT AND APPROACH CURB HEIGHT. APPROACH CURB HEIGHT SHALL BE 18" MINIMUM. APPROACH SLAB, USE A MINIMUM LENGTH OF 10 FT BEYOND END OF WINGWALL WHERE THE APPROACH SLAB EXTENDS BEYOND THE END OF WINGWALL. TRANSITION IN THIS LENGTH. HOWEVER, THE TRANSITION LENGTH SHALL NOT BE LESS THAN 10 FT AND THE TRANSITION SHALL EXTEND BEYOND THE END OF THE APPROACH SLAB. CURB OR PARAPET PLACEMENT SHALL BE IN ACCORDANCE WITH O.D.O.T. STANDARD CONSTRUCTION DRAWING BR-1.

APPROACH SLAB WIDTH: APPROACH SLAB FOR 38'-6" BRIDGE WIDTH SHALL BE 39'-0" WIDE WHEN CURBS ARE NOT INCLUDED, 39'-3" WHEN CURB IS INCLUDED ON ONE SIDE ONLY; 39'-6" WHEN CURBS ARE INCLUDED ON BOTH SIDES.

WHEN CROWN IS INCLUDED ON BOTH SIDES:
CROWN SHALL CONFORM TO THAT OF THE APPROACH PAVEMENT AND BRIDGE DECK.
IF THE RATE OF CROWN OF THE BRIDGE DECK DIFFERS FROM THAT OF THE
APPROACH PAVEMENT, A SMOOTH TRANSITION SHALL BE PROVIDED WITHIN THE
LIMITS OF THE APPROACH SLAB.

TRANSVERSE JOINT DETAILS AT THE APPROACH PAVEMENT END OF THE APPROACH
SLAB SHALL BE EITHER TYPE 'K' OR 'H' AS DETAILED ON THE PLANS.
PAYMENT FOR THE TRANSVERSE JOINT SHALL BE AT THE UNIT PRICE BID PER
LIN. FT. FOR THE JOINT FURNISHED.

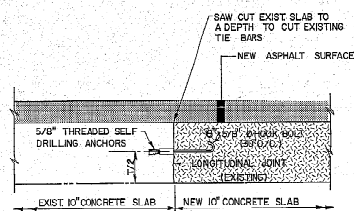
ITEM 310 SUBBASE, TYPE I GRADING "A" SHALL BE PROVIDED UNDER ALL APPROACH SLABS.

2	ADDED IMPRESSED JOINT & CHANGED TYPE OF CEMENT	DFC	10/28/83
1	ADDED SEAT REPAIR DETAIL	DFC	10/28/83
NR	REVISION	BY	DATE

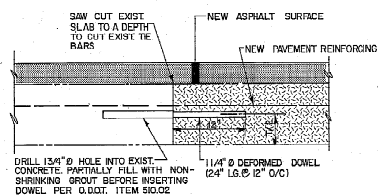
OHIO TURNPIKE COMMISSION

REINFORCED CONCRETE
APPROACH SLABS

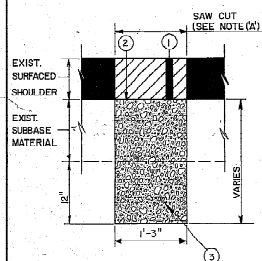
DATE: OCTOBER 1983	SCALE: N.T.S.
CIP: 43-RQ-15 (PART 2)	SHEET 14 OF 44



TYPE 'D' JOINT



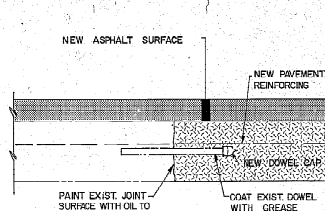
TYPE 'H' JOINT



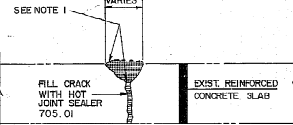
SECTION C-C

LEGEND

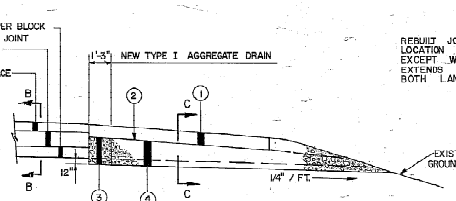
1. NEW PAVED SHOULDER
2. SP 408 PRIME COAT (0.2 TO 0.5 GAL./SQ YD)
3. SP 605 AGGREGATE DRAINS, TYPE I (SEE NOTE 'B')
4. SP 605 AGGREGATE DRAINS, TYPE II (SEE NOTE 'B')



TYPE 'J' JOINT



TRANSVERSE & LONGITUDINAL
CRACK & JOINT REPAIRS



SECTION A-A

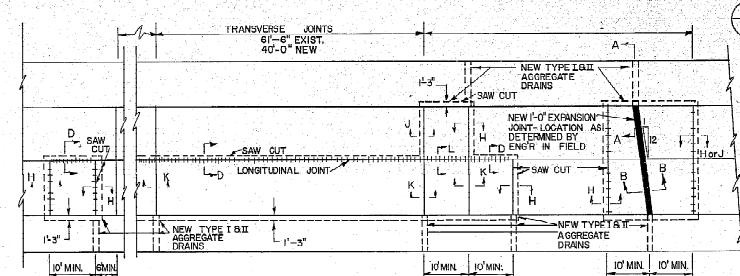
CRACK & JOINT REPAIRS DETAILS

1. CONSTRUCTION IS TO REMOVE ALL EXISTING EXTERIOR JOINT MATERIAL THAT MAY BE FOUND IN CRACKS AND/OR JOINTS. BACK COAT EXISTING CRACKED SURFACE AND OVERLAY WITH SAND ASPHALT FOR CRACKS 1" OR LESS IN WIDTH. CRACKS GREATER THAN 1" IN WIDTH SHALL BE OVERLAYED WITH 100% SAND ASPHALT CONCRETE. THE SAND ASPHALT AND TOP 400 CEMENT SHALL BE AS REQUIRED TO ACHIEVE A MINIMUM OF 95% COMPACTION AND IN NO CASE SHALL THE AFTER COMPACTION SHALL NOT EXCEED 1 1/4".
2. DETAIL OF LONGITUDINAL PAVEMENT SHOULDER JOINT DETAILS.

NOTE 'A': FILL DEPTH SAW CUT OF EXISTING ASPHALT PAVEMENT IS REQUIRED WHERE EXISTING PAVEMENT IS TO BE REMOVED FOR INSTALLATION OF EITHER TYPE I OR TYPE II DRAINS.

NOTE 'D': TYPE I AGGREGATE DRAINS WILL BE INSTALLED ADJACENT TO ALL NEW FULL DEPTH CONCRETE REPLACEMENTS; THE EXISTING DRAIN REMOVED & REPLACED TO THE DEPTH INDICATED HEREIN.

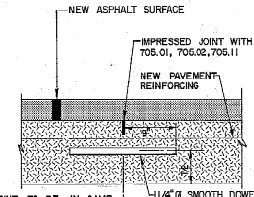
TYPE II AGGREGATE DRAINS WILL BE INSTALLED AT EACH EXPANSION JOINT & FULL DEPTH REPAIR OR AS DIRECTED BY THE ENGINEER.



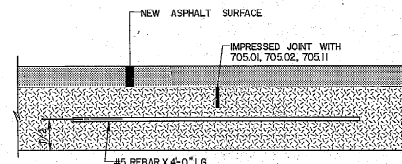
CONCRETE JOINT ARRANGEMENT PLAN

NOTE: IF A PORTION OF THE SLAB TO BE REPLACED IS CLOSER THAN 6' TO A TRANSVERSE JOINT THEN THE ENTIRE SLAB UP TO THE JOINT IS TO BE REPLACED.

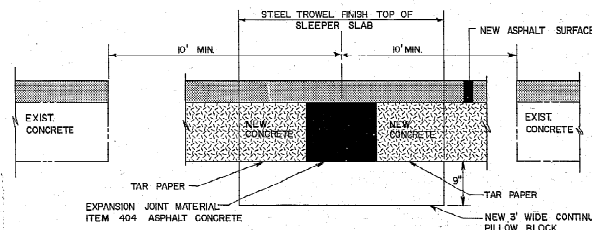
NOTE: A NEW TYPE II DRAIN MAY ONLY BE REQUIRED AT ONE END OF THE EXPANSION JOINT OR SLAB REPLACEMENT AS DIRECTED BY DRAINAGE CONDITIONS IN THE FIELD.



TYPE 'K' JOINT



TYPE 'L' JOINT



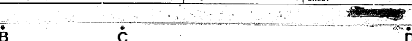
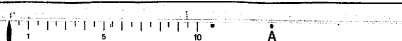
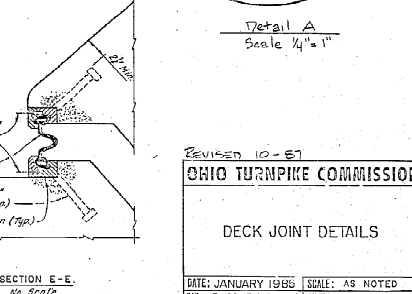
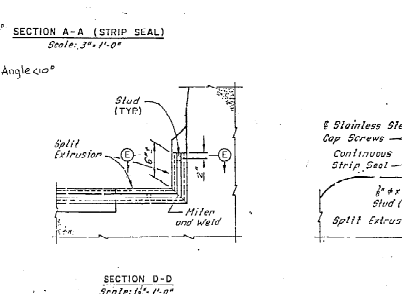
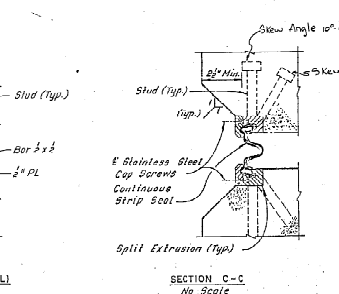
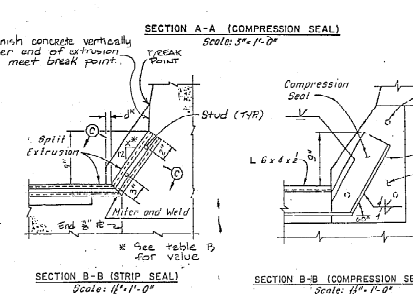
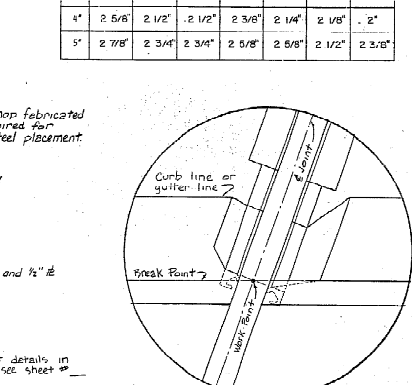
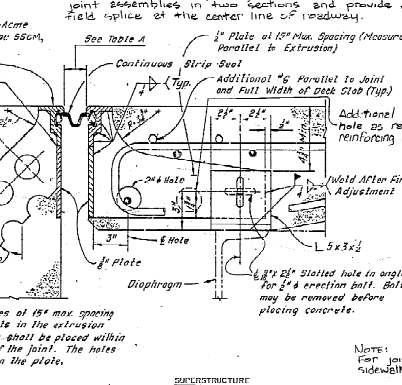
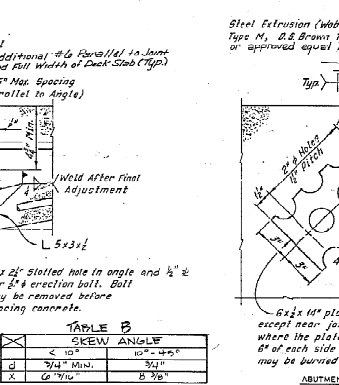
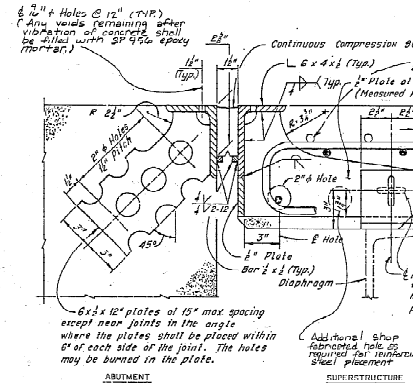
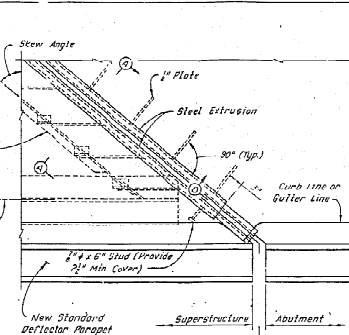
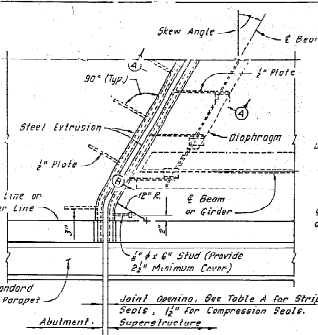
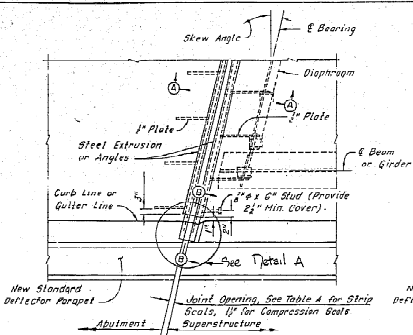
SECTION B-B

FOR DETAILS NOT SHOWN SEE O.D.T. STD. CONST. DWG. BP-35 OF-4.

OHIO TURNPIKE COMMISSION

CRACK & JOINT DETAILS

DATE: AUGUST 1964 SCALE: N.T.S.
CIP: 43-59-B (PART 2) SHEET 14 OF 43



GENERAL NOTES

1. INSTALLATION OF SEAL DURING INSTALLATION OF SUPPORT ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE JOINT SEAL, THE SEATING OF BEAMS ON BEARINGS MUST BE COMPLETED FIRST. THE SEALING OF THE JOINT ARMOR ON THE BEAMS SHALL BE COMPLETED BY POSITIONING OF THE SUPPORT ANGLES RATHER THAN BY CLAMPING FORCE.

2. ELASTOMERIC COMPRESSION SEALS SHALL BE USED AT FIXED JOINTS ONLY, AND AT SKEWS LESS THAN 45°.

3. STUD ANCHORS SHALL BE LOW CARBON STEEL ASTM A-108.

4. ALL WELDING SHALL CONFORM WITH A.W.S. AND AASHTO SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES.

5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.

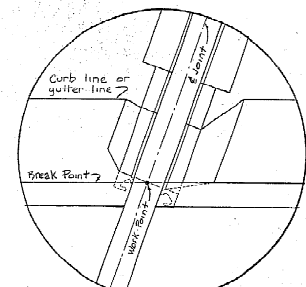
6. ELASTOMERIC COMPRESSION SEAL SHALL BE WABO-WU-200, D.S. BROWN C-4 2000 OR APPROVED EQUAL.

7. CONTINUOUS STRIP SEAL SHALL BE AS MANUFACTURED BY WABO-ACME, D.S. BROWN, OR APPROVED EQUAL, AND SHALL BE THE SIZE AS SPECIFIED.

8. DETAILS AT DIAPHRAGMS SHOWN. DETAILS AT BEAMS ON GIRDERS SIMILAR.

TABLE A

STRIP SEAL SIZE	STRIP SEAL JOINT OPENING INSTALLATION CHART							
	TEMPERATURE °F							
	30	40	50	60	70	80	90	
3"	2-1/4"	2-1/8"	2"	1-7/8"	1-3/4"	1-5/8"	1-1/2"	
4"	2-5/8"	2-1/2"	2-1/2"	2-3/8"	2-1/4"	2-1/8"	2"	
5"	2-7/8"	2-3/4"	2-3/4"	2-5/8"	2-5/8"	2-1/2"	2-3/8"	



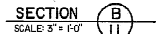
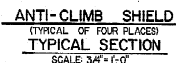
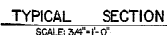
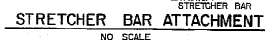
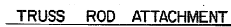
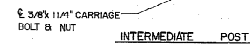
REVISED 10-67

OHIO TURNPIKE COMMISSION

DECK JOINT DETAILS

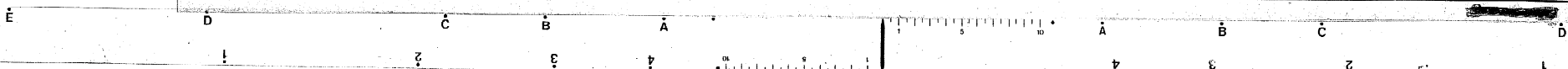
DATE: JANUARY 1985 SCALE: AS NOTED

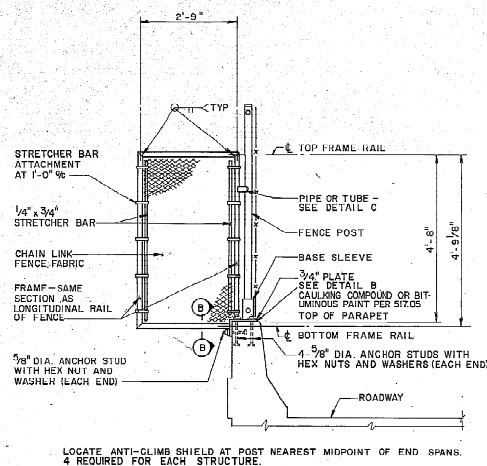
TP: 45-89-10 (PART 2) SHEET 15 OF 43



ALL POSTS TO BE SET NORMAL TO TOP OF
PARAPET.

DATE: JUNE 1983	SCALE: AS NOTED
STANDARD DRAWING	CL-2





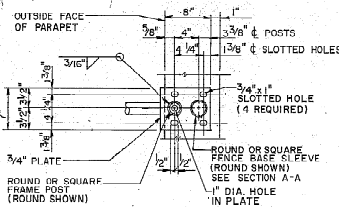
ANTI-CLIMB SHIELD DETAIL
3/4" x 1'-0"

LONGITUDINAL RAIL
SIZE OPTIONS:
1 1/2" SQ. x 125 TUBE
2" OD x 125 TUBE
1 1/4" SCHEDULE 40 PIPE

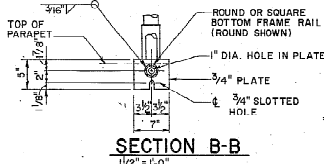
POST AND BASE SLEEVE
SIZE OPTIONS:
2" SQ. x 25 TUBE POST WITH 2 1/2" SQ. x 25" TUBE BASE SLEEVE
2 1/2" OD x 25 TUBE POST WITH 2" OD x 25 TUBE BASE SLEEVE
2 1/2" SCHEDULE 40 PIPE POST WITH 3" SCHEDULE 80 PIPE BASE SLEEVE

4- 5/8" DIA. ANCHOR STUDS WITH HEX NUT AND WASHER (EACH END)

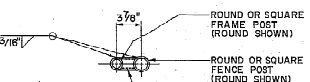
TYPE II CHAIN LINK FENCE DETAIL
NOT TO SCALE



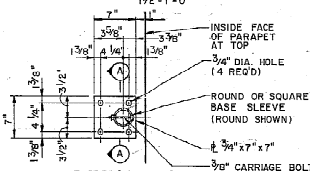
DETAIL B
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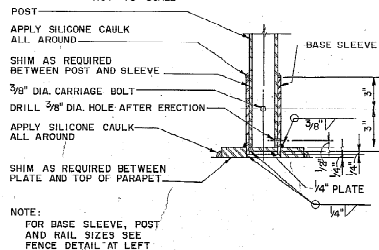
SECTION B-B
1/2" x 1'-0"



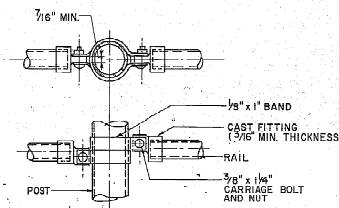
DETAIL C
1/2" x 1'-0"



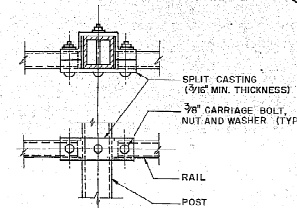
DETAIL A
NOT TO SCALE



SECTION A-A
3" x 1'-0"



RAIL FITTING AND BAND
LONGITUDINAL RAIL-POST ATTACHMENT
3" x 1'-0"



SPLIT CASTING

GENERAL NOTES

SPECIFICATIONS: 1983 O.D.T. "CONSTRUCTION AND MATERIAL SPECIFICATIONS", LATEST A.A.S.H.T.O. "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" AND "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS".

MATERIALS: CHAIN LINK FENCE FABRIC SHALL BE 1" MESH WOVEN FROM NO. 9 GAGE ALUMINUM ALLOY WIRE CONFORMING TO THE REQUIREMENTS OF A.A.S.H.T.O. M81, TYPE III, AND SHALL HAVE KNUCKLED SELVAGE AT THE BOTTOM AND BARRED SELVAGE AT THE TOP. FABRIC TIES SHALL BE NO. 9 GAGE ALUMINUM ALLOY WIRE CONFORMING TO THE REQUIREMENTS OF A.S.T.M. B211, ALLOY 6061, TEMPER T6.

POSTS, RAILS, PLATES, BARS, BANDS AND TRUSS RODS SHALL BE ALUMINUM ALLOY CONFORMING TO THE REQUIREMENTS OF A.S.T.M. B221, ALLOY 6061, TEMPER T6.

SHIMS SHALL BE ALUMINUM ALLOY CONFORMING TO A.S.T.M. B209, ALLOY 1100-O.

RAIL FITTINGS, TURNBUCKLES AND SPLIT CASTINGS SHALL BE ALUMINUM ALLOY CASTINGS CONFORMING TO THE REQUIREMENTS OF A.S.T.M. B26, B85 OR B108, ALLOY 5670A-T6, 2024A-T3, 56100A, 56100B OR 512B.

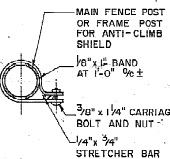
CARRIAGE BOLTS AND NUTS SHALL BE ALUMINUM ALLOY CONFORMING TO THE REQUIREMENTS OF A.S.T.M. B211, ALLOY 2024-T4 FOR BOLTS, AND ALLOY 6061-T6 FOR NUTS. WASHERS SHALL BE ALUMINUM ALLOY CONFORMING TO THE REQUIREMENTS OF A.S.T.M. B209, ALLOY 6061-T6.

ANCHOR STUDS: MATERIAL FOR ANCHOR STUDS SHALL CONFORM TO A.S.T.M. DESIGNATION A-276, TYPE 304 TO TYPE 304 STAINLESS STEEL ANNEALED, HOT-FINISHED, ULTIMATE STRENGTH 70,000 P.S.I. MINIMUM, 20% MINIMUM ELONGATION, THREADS MAY BE ROLLED OR CUT.

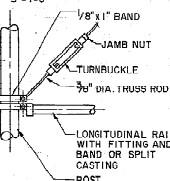
POST SPACING: FOR POST SPACING, SEE PERTINENT STRUCTURE SHEETS. POST SPACING SHALL BE 8'-0" MAXIMUM.

SECTION: ALL LONGITUDINAL RAILS TO BE PARALLEL TO TOP OF PARAPET. ALL POSTS TO BE SET NORMAL TO TOP OF PARAPET.

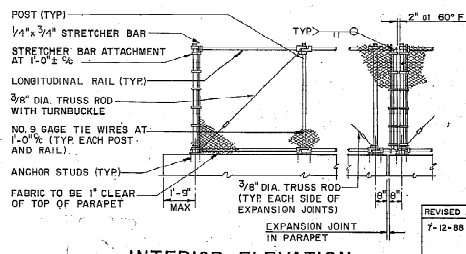
ALUMINUM SURFACES TO BE PLACED IN CONTACT WITH CONCRETE SHALL BE GIVEN A HEAVY COAT OF ALKALI-RESISTANT BITUMINOUS PAINT BEFORE INSTALLATION.



STRETCHER BAR ATTACHMENT
3" x 1'-0"



TRUSS ROD ATTACHMENT
1/2" x 1'-0"



INTERIOR ELEVATION
3/8" x 1'-0"

OHIO TURNPIKE COMMISSION

CHAIN LINK SAFETY FENCE (ALL ALUMINUM) DETAILS, TYPE II

DATE: FEB. 1984 SCALE: AS NOTED

STANDARD DRAWING CL-2A

REVISED 7-12-88

- CONFLICT MONITORS SHALL BE FURNISHED AT ALL LOCATIONS UNLESS AN ELECTRO-MECHANICAL PRETIMED CONTROLLER WITH CAM SHAFT IS PROVIDED.



ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."

LEGEND

- TRAFFIC DRUM 810' SPACING
- ⊥ SIGN MOUNTED ON POST SUPPORT
- ⊥ BARRICADE
- TEMPORARY TRAFFIC SIGNAL
- CLOSED WORK AREA
- ☀ TYPE "A" FLASHING BARRICADE WARNING LIGHT
- ➡ FLASHING ARROW PANEL TYPE B, TC-35-10

SIGNAL	OPERATION	PHASING
INTERVAL	EAST APPROACH	WEST APPROACH
1	GREEN	RED
2	YELLOW	RED
3	RED	RED
4	RED	GREEN
5	RED	YELLOW
6	RED	RED
TOTAL CYCLE		110

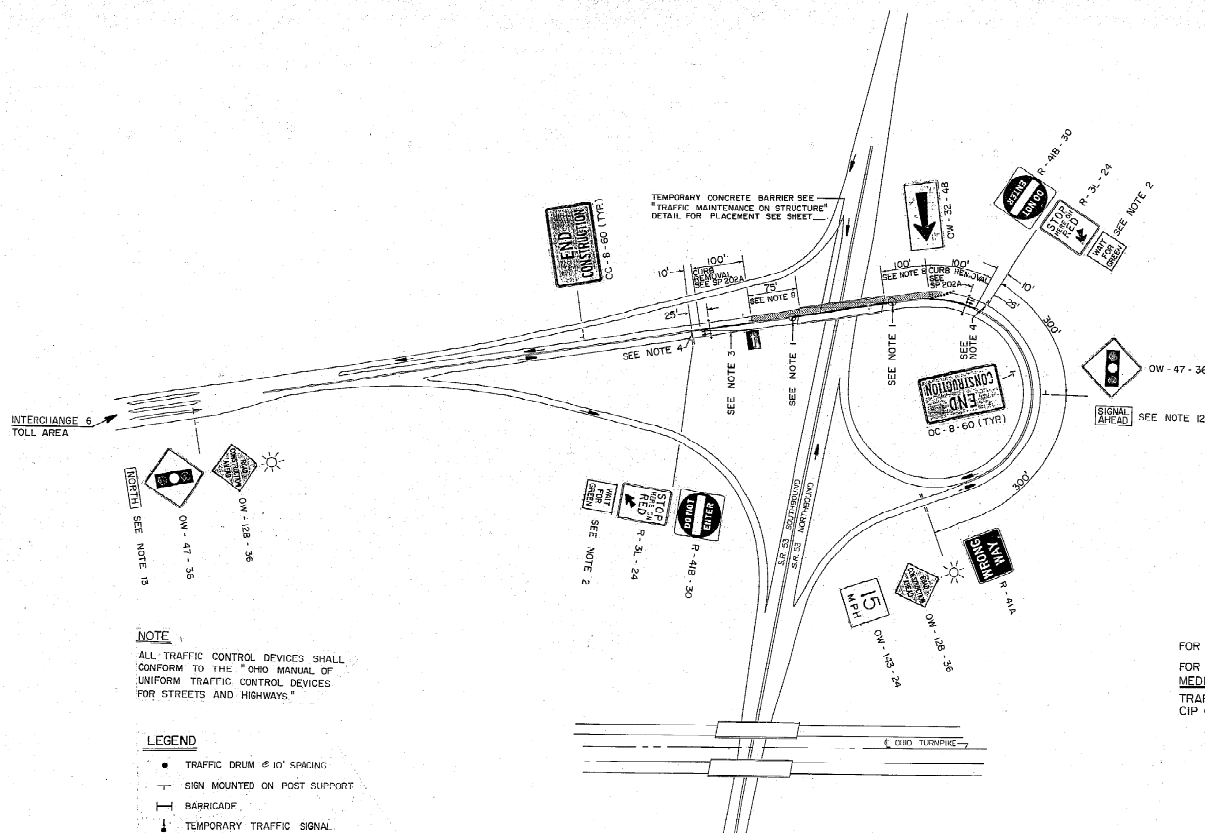
INTERCHANGE PLAN
NOT TO SCALE

TRAFFIC CONTROL ESTIMATED QUANTITIES			
ITEM	TOTAL	UNIT	DESCRIPTION
202	125	LIN. FT.	CONCRETE MEDIAN REMOVED
SP 202A	120	LIN. FT.	MEDIAN CURB REMOVAL AND PARTIAL REPLACEMENT.
612	155	LIN. FT.	CONCRETE MEDIAN
SP 612	220	LIN. FT.	CONCRETE MEDIAN
SP 611	LUMP	LUMP	MAIN LAINING , TRAFFIC
SP 622A	150	LIN. FT.	TEMPORARY CONCRETE BARRIER (FURNISHED BY COMMISSION)
SP 622A	290	EACH	CONCRETE BARRIER DELINEATOR

OHIO TURNPIKE COMMISSION

INTERCHANGE
TRAFFIC MAINTENANCE PLAN
STAGE I

DATE: OCTOBER 1988	SCALE: N.T.S.
CIP: 43-89-15 PART 2	SHEET 18



NOTE
ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."

- LEGEND**
- TRAFFIC DRUM @ 10' SPACING
 - SIGN MOUNTED ON POST SUPPORT
 - BARRICADE
 - TEMPORARY TRAFFIC SIGNAL
 - CLOSED WORK AREA
 - ☀ TYPE "A" FLASHING BARRICADE WARNING LIGHT
 - FLASHING ARROW PANEL TYPE B, TC-35.10

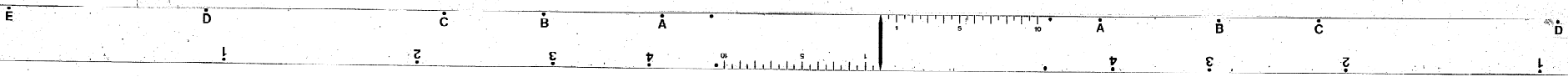
FOR GENERAL NOTES SEE SHEET 18 OF 43.
FOR TYPICAL POLE SUPPORTED SIGNAL, MEDIAN CURB REPLACEMENT DETAIL & TRAFFIC MAINTENANCE ON STRUCTURE, SEE CIP 43-89-15 PART I (SHEET 6 OF 28)

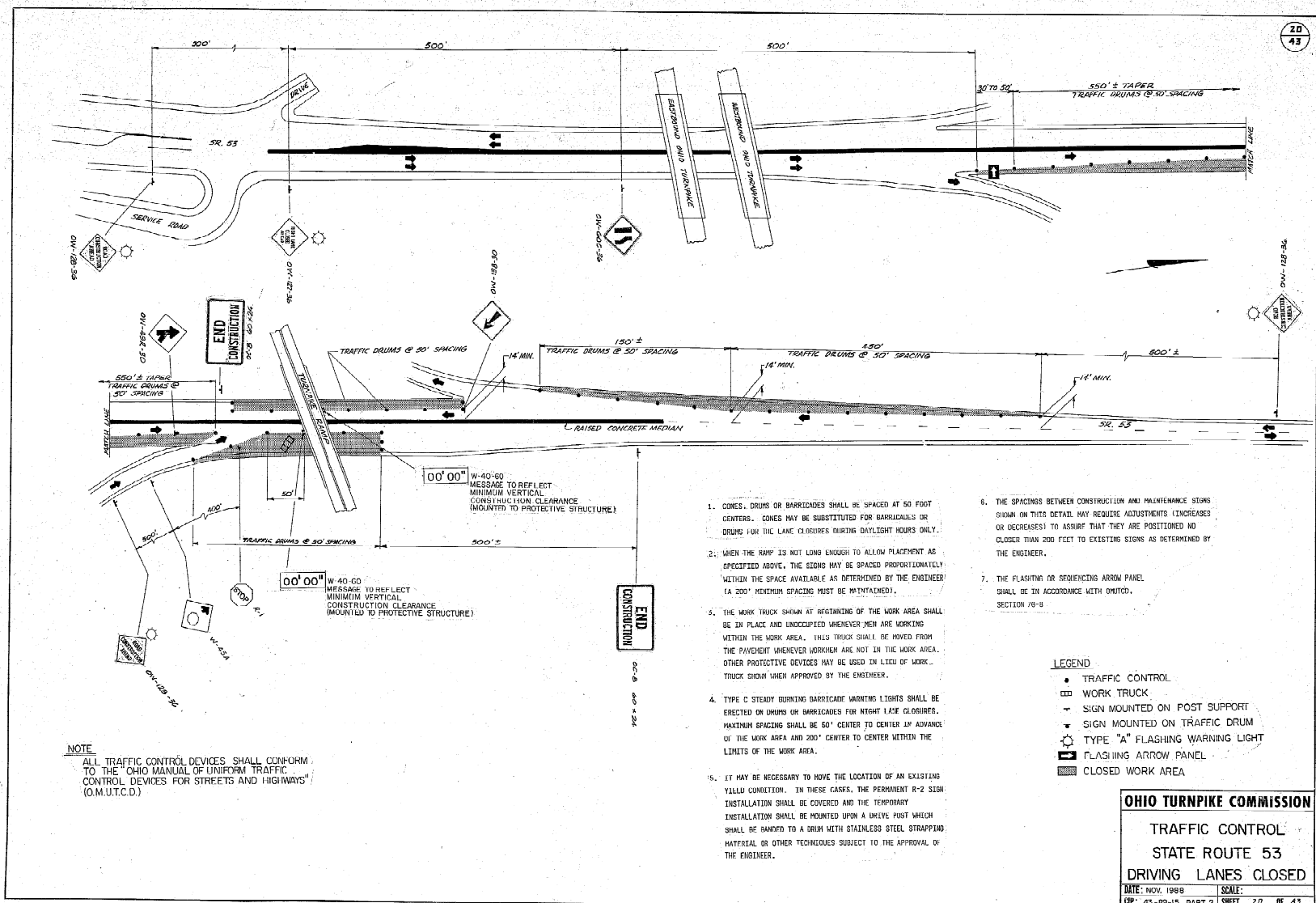
INTERCHANGE PLAN
NOT TO SCALE

OHIO TURNPIKE COMMISSION

INTERCHANGE
TRAFFIC MAINTENANCE PLAN
STAGE II

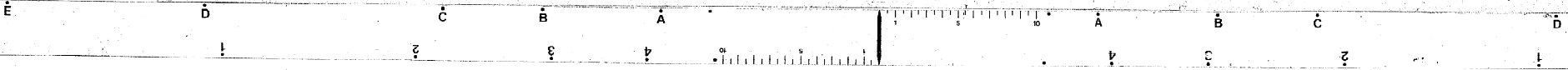
DATE: OCTOBER 1988 SCALE: N.T.S.
DP: 13-89-15 PART 2 SHEET 19 OF 43

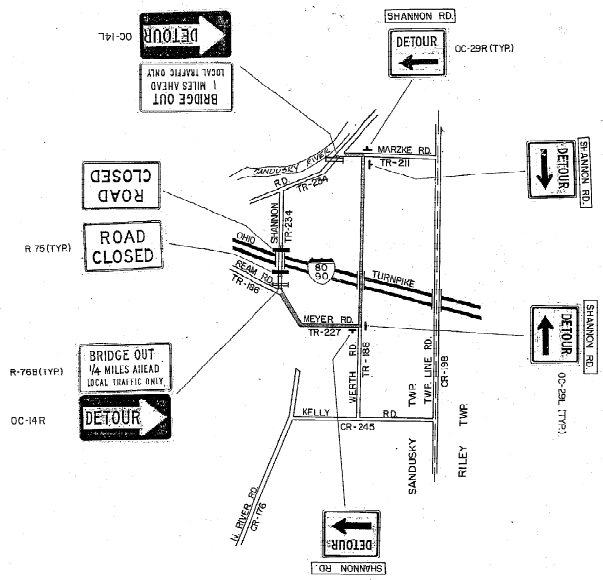




1. CONES, DRUMS OR BARRICADES SHALL BE SPACED AT 50 FOOT CENTERS. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS FOR THE LANE CLOSURES DURING DAYLIGHT HOURS ONLY.
2. WHEN THE 14" IS NOT LONG ENOUGH TO ALLOW PLACEMENT AS SPECIFIED ABOVE, THE SIGNS MAY BE SPACED PROPORTIONATELY WITHIN THE SPACE AVAILABLE AS DETERMINED BY THE ENGINEER (A 200' MINIMUM SPACING MUST BE MAINTAINED).
3. THE WORK TRUCK SHOWN AT BEGINNING OF THE WORK AREA SHALL BE IN PLACE AND UNOCCUPIED WHENEVER MEN ARE WORKING WITHIN THE WORK AREA. THIS TRUCK SHALL BE MOVED FROM THE PAVEMENT WHENEVER WORKMEN ARE NOT IN THE WORK AREA. OTHER PROTECTIVE DEVICES MAY BE USED IN LIEU OF WORK TRUCK SHOWN WHEN APPROVED BY THE ENGINEER.
4. TYPE C STEADY BURNING BARRICADE WARNING LIGHTS SHALL BE ERECTED ON DRUMS OR BARRICADES FOR NIGHT LANE CLOSURES. MAXIMUM SPACING SHALL BE 50' CENTER TO CENTER IN ADVANCE OF THE WORK AREA AND 200' CENTER TO CENTER WITHIN THE LIMITS OF THE WORK AREA.
5. IT MAY BE NECESSARY TO MOVE THE LOCATION OF AN EXISTING YELLOW CONE. IN THESE CASES, THE PERMANENT R-2 SIGN INSTALLATION SHALL BE COVERED AND THE TEMPORARY INSTALLATION SHALL BE MOUNTED UPON A DRIVE POST WHICH SHALL BE BANDO TO A DRUM WITH STAINLESS STEEL STRAPPING MATERIAL OR OTHER TECHNIQUES SUBJECT TO THE APPROVAL OF THE ENGINEER.

6. THE SPACINGS BETWEEN CONSTRUCTION AND MAINTENANCE SIGNS SHOWN ON THIS DETAIL MAY REQUIRE ADJUSTMENTS (INCREASES OR DECREASES) TO ASSURE THAT THEY ARE POSITIONED NO CLOSER THAN 200 FEET TO EXISTING SIGNS AS DETERMINED BY THE ENGINEER.
7. THE FLASHING OR SEQUENTIAL ARROW PANEL SHALL BE IN ACCORDANCE WITH DETAIL SECTION 10-8.

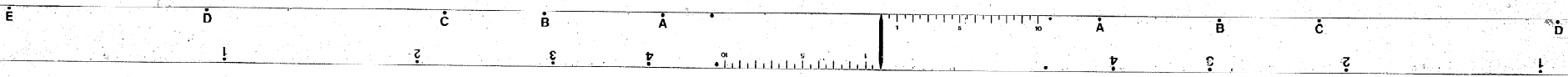


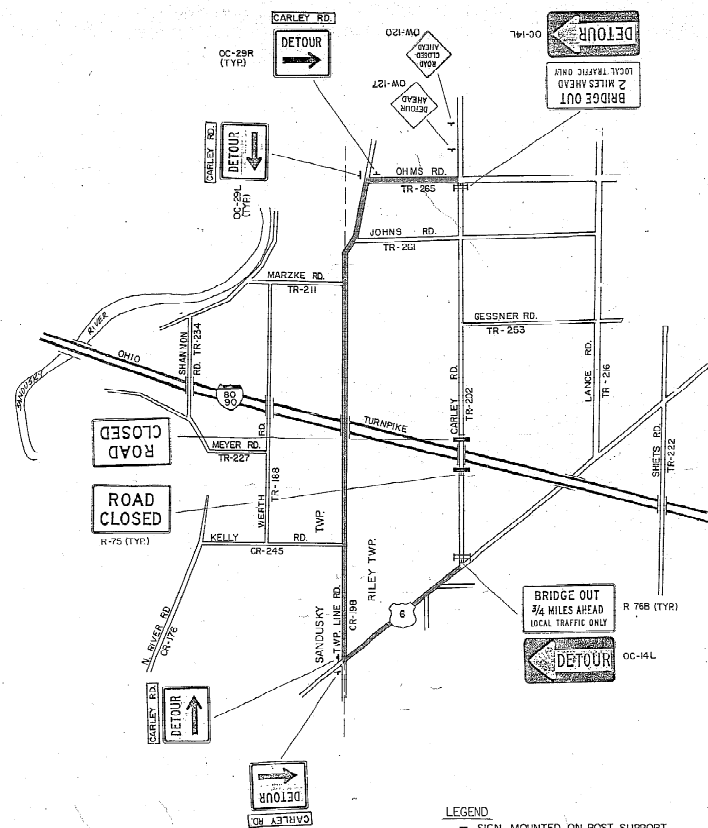


NOTE
ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (O.M.U.T.C.D.)

LEGEND
 T- SIGN MOUNTED ON POST SUPPORT
 H- SIGN MOUNTED ON PORTABLE BARRICADE, SEE FIG. C-5 OF THE O.M.U.T.C.D.
 + SIGNS MOUNTED ON GATE AND BARRICADE, SEE "BARRICADES AND GATES" SHEET 24 OF 43
 ■ DETOUR ROUTE
NOTE:
 RED LIGHTS SHALL BE MOUNTED ON PORTABLE BARRICADES.

OHIO TURNPIKE COMMISSION	
TRAFFIC CONTROL	
SHANNON ROAD	
DATE: NOV. 1988	SCALE:
OSP: 43-89-15 PART 2	SHEET 22 OF 43

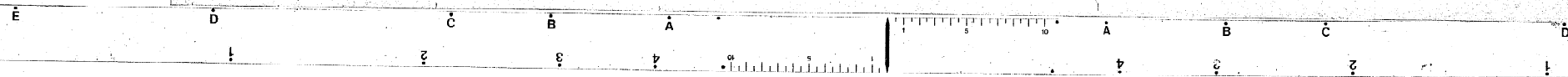




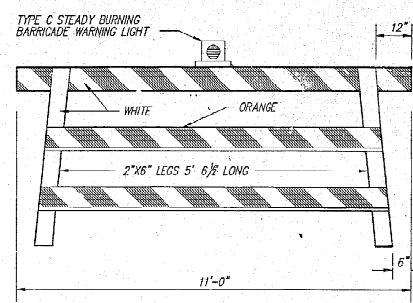
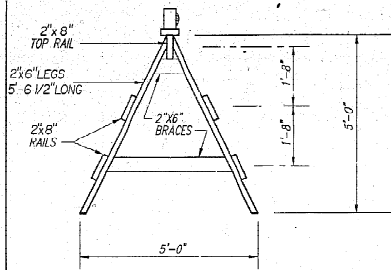
NOTE
ALL TRAFFIC CONTROL DEVICES SHALL CONFORM
TO THE "OHIO MANUAL OF UNIFORM TRAFFIC
CONTROL DEVICES FOR STREETS AND HIGHWAYS"
(O.M.U.T.C.D.)

LEGEND
 -- SIGN MOUNTED ON POST SUPPORT
 [] SIGN MOUNTED ON PORTABLE BARRICADE. SEE FIG. C-5 OF THE O.M.U.T.C.D.
 [] SIGNS MOUNTED ON GATE AND BARRICADE. SEE "BARRICADES AND GATES"
 SHEET 24 OF 43
 [] DETOUR ROUTE
 NOTE:
 RED LIGHTS SHALL BE MOUNTED ON PORTABLE BARRICADES.

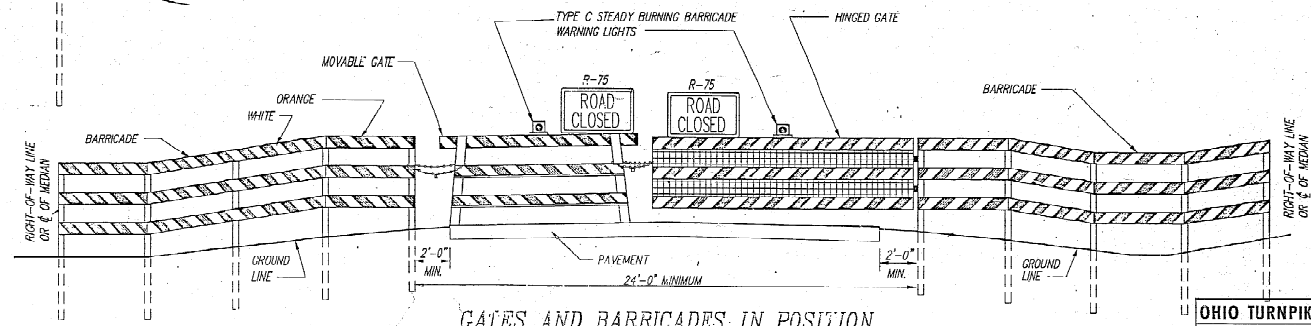
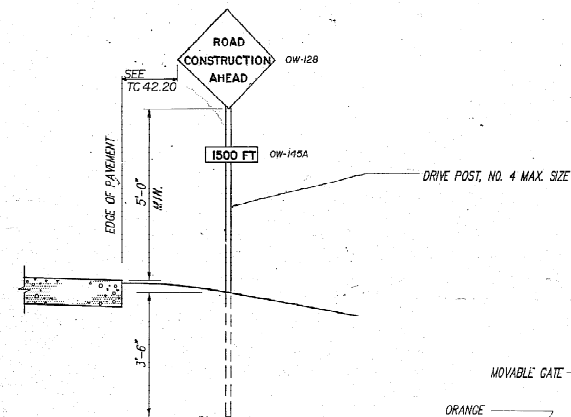
OHIO TURNPIKE COMMISSION	
TRAFFIC CONTROL	
CARLEY ROAD	
DATE: NOV. 1988	SCALE:
DIP: 43-89-15 PART 2	SHEET 23 OF 43



MOVABLE GATE



GATES SHALL BE WELL SPIKED USING SPIKES LONG ENOUGH TO CLINCH.



GATES AND BARRICADES IN POSITION

- NOTES -

- 1) BARRICADES: BARRICADES SHALL BE CONSTRUCTED ACCORDING TO DETAILS SHOWN. WHEN THE ROAD IS CLOSED TO TRAFFIC, BARRICADES AND GATES SHALL BE USED TO EFFECTIVELY CLOSE THE ENTIRE ROADWAY INCLUDING THE MEDIAN OF DIVIDED HIGHWAYS. IN URBAN AREAS AND AT LOCATIONS WHERE IT IS IMPRACTICAL TO EXTEND THE BARRICADE TO THE RIGHT-OF-WAY LINE BECAUSE OF A SIDEWALK OR OTHER OBSTRUCTION, THE ENDS OF THE BARRICADE SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO EFFECT THE DESIRED CLOSING OF THE HIGHWAY.
- 2) PAINTING AND REFLECTORIZING: ALL RAILS OF THE BARRICADES AND GATES SHALL BE REFLECTORIZED WITH ORANGE AND WHITE REFLECTORIZED SHEETING IN 6" WIDE ALTERNATE STRIPES WHICH SLOPE DOWNWARD TOWARD THE CENTER LINE OF THE ROAD AT AN ANGLE OF 45°. ALL THREE RAILS OF THE ROAD CLOSED BARRICADE SHALL BE STRIPED ON THE SIDE FACING TRAFFIC. ALL GATE RAILS SHALL BE STRIPED ON BOTH SIDES. ALL POSTS, BRACES, GATE LEGS, AND ANY UNSTRIPED RAILS SHALL BE PAINTED WHITE.
- 3) GATES: ONE GATE SHALL BE ERECTED FOR EACH TRAFFIC LANE. GATES SHALL BE CHAINED AND PADLOCKED TO ONE ANOTHER AND TO ADJACENT POSTS OF THE BARRICADES. CHAINS SHALL BE 1/4" STOCK OR LARGER WITH WELDED LINKS.
A HINGED GATE MAY BE USED AND SHALL BE AN APPROVED 12"x4" STEEL FRAME, FARM TYPE, OR A TYPE APPROVED BY THE ENGINEER. THE GATE SHALL BE HUNG ON HINGE SCREW HOOKS, OR AS OTHERWISE APPROVED. STRIPING SIMILAR TO THAT USED ON THE MOVABLE GATE SHALL BE ACCOMPLISHED WITH 1"x8" LUMBER OR WITH METAL STRIPS FASTENED TO THE GATE. THE GATE SHALL BE SUPPORTED AT THE CENTER IN AN APPROVED MANNER.
- 4) TYPE C STEADY BURNING BARRICADE WARNING LIGHTS: EACH GATE SHALL BE EQUIPPED WITH A TYPE C STEADY BURNING BARRICADE WARNING LIGHT, CONSPICUOUSLY VISIBLE AT ALL DISTANCES UP TO 1000' UNDER NORMAL ATMOSPHERIC CONDITIONS. THE LIGHT SHALL BE IN OPERATION AT ALL TIMES BETWEEN SUNSET AND SUNRISE DURING THE PERIOD THE HIGHWAY IS CLOSED.
- 5) SIGNS: WHERE THE ROAD IS CLOSED TO TRAFFIC BY THE ERECTION OF GATES AND BARRICADES, ROAD CLOSED SIGNS (R-75) SHALL BE MOUNTED ON THE GATES AS SHOWN.
WHERE TRAFFIC IS MAINTAINED, A ROAD CONSTRUCTION AHEAD SIGN (OW-128) SHALL BE USED ON THE RIGHT SHOULDER ON THE APPROACHES APPROXIMATELY 500 FEET IN ADVANCE OF THE PROJECT.
AN END CONSTRUCTION SIGN (OC-8) SHALL BE ERECTED FACING TRAFFIC LEAVING THE CONSTRUCTION SECTION. THE SIGNS SHALL BE ERECTED AS DETAILED HEREON. DUAL MOUNTED SIGNS ARE REQUIRED FOR A FOUR LANE FACILITY.
- 6) LUMBER: LUMBER USED IN THE CONSTRUCTION OF THE GATES AND BARRICADES SHALL BE NO. 1 COMMON YELLOW PINE OR NO. 1 COMMON DOUGLAS FIR, SURFACED ON FOUR SIDES STANDARD, OR OTHER MATERIALS APPROVED BY THE ENGINEER. ALL SIZES ARE NOMINAL.
- 7) POSTS: POSTS SHALL BE SOUND 4"x4" SAWED OR 4 1/2" ROUND. RAILS OF THE BARRICADE SHALL BE BOLTED TO THE POSTS WITH 5/8" BOLTS.

CALC.	DATE	DATE	DATE
DATE	DATE	DATE	DATE
DATE	DATE	DATE	DATE
DATE	DATE	DATE	DATE

OHIO	26
PAVING	43

EXIT & RAMP OVER S.R. 53 ABUT. PATCHING QUANTITIES			
LOCATION	MEASURED QUANTITY	CONTINGENT QUANTITY	TOTAL
WEST ABUT.	55SF	45SF	50SF
EAST ABUT.	45SF	46SF	50SF

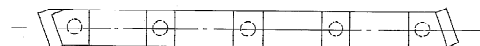
NOTES:

ITEM SP 511 - PATCHING CONCRETE STRUCTURES

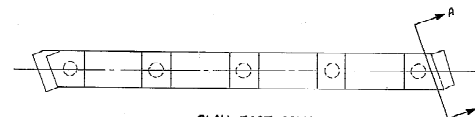
PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN OCTOBER, 1988.

ESTIMATED QUANTITY HAS BEEN INCREASED OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

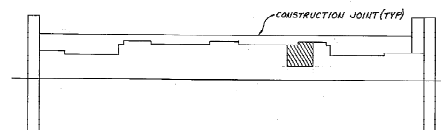
EXACT DIMENSIONS AND LOCATIONS OF PATCHES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITY.



PLAN WEST ABUTMENT



PLAN EAST ABUTMENT



ELEVATION WEST ABUTMENT



ELEVATION EAST ABUTMENT



SECTION A-A



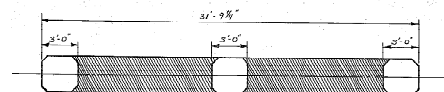
INDICATES APPROXIMATE AREA OF DETERIORATION

CONTRACT NO. C.R. 42-81-15 PART 2		2 / 7
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE		
adache - cluni - lynn associates		
CONSULTING ENGINEERS CLEVELAND, OHIO 44122		
ABUTMENT REPAIR		
EXIT 16 RAMP		
OVER		
STATE ROUTE 53		
STA. 13+37.15 TO STA. 15+02.71		
DESIGNED BY	CHECKED BY	DATE REVISED
J.R.D.	C.M.H.	R.J.M. R.D.H. 2-7-89

DATE: 10/18/88

APP. FORM NO. B-1

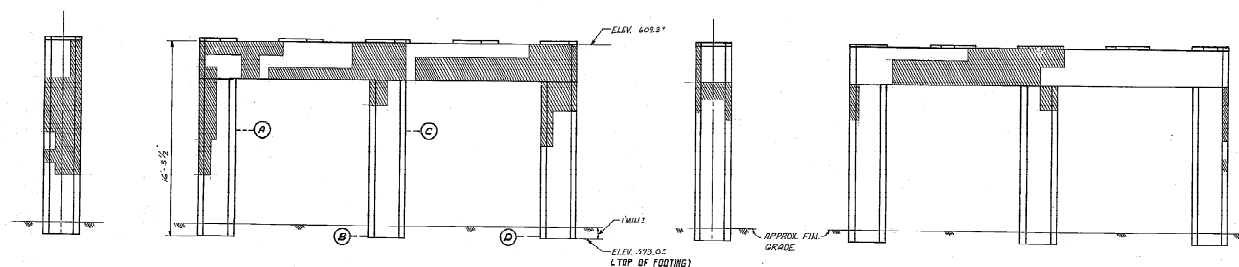
CALL		OHIO	27
DATE		FIGURE	43
CHD.			
DATE			



PIER CAP BOTTOM



PLAN



SOUTH
ELEVATION

EAST
ELEVATION

NORTH
ELEVATION

WEST
ELEVATION



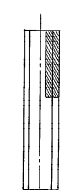
VIEW 'A'



VIEW 'B'



VIEW 'C'



VIEW 'D'

INDICATES APPROXIMATE
AREAS OF DETEIORATION

EXIT RAMP & OVER SR 53 PIER PATCHING QUANTITIES			
LOCATION	MEASURED QUANTITY	CONTINGENT QUANTITY	TOTAL
PIER NO. 1	240 SF	100 SF	340 SF
PIER NO. 2	175 SF	100 SF	275 SF

NOTES:

ITEM SP 519- PATCHING CONCRETE STRUCTURES.

PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETEIORATION WAS PERFORMED IN OCTOBER, 1968.

ESTIMATED QUANTITY HAS BEEN INCREASED OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETEIORATION.

EXACT LOCATIONS AND DIMENSIONS OF PATCHES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITY.

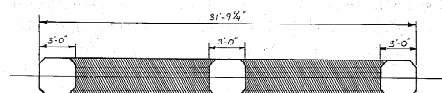
CONTRACT NO. CIP 13-61-15 PART 3 / 7	
OHIO TURNPIKE COMMISSION	
OHIO TURNPIKE	
adache - ciuni - lynn associates	
CONSULTING ENGINEERS CLEVELAND, OHIO 44115	
PIER NO. 1, REPAIR	
EXIT 6 RAMP	
OVER	
STATE ROUTE 53	
STA. 13+57.15 TO STA. 15+02.11	
J.R.D.	C.H.H. H.L.M. R.D.H. 2-7-69

SCALE: 1/4" = 1'-0"

DATE
DATE
DATE

OHIO
ENGR.
REG.

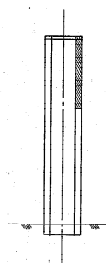
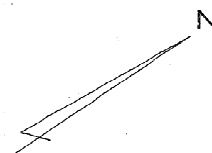
28
43



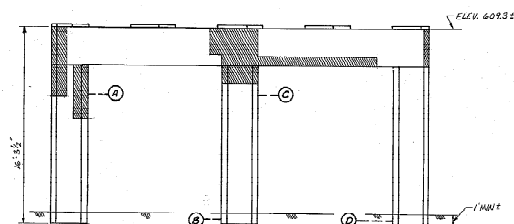
PIER CAP BOTTOM



PLAN



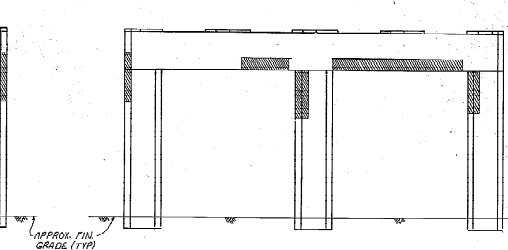
SOUTH
ELEVATION



EAST
ELEVATION



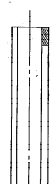
NORTH
ELEVATION



WEST
ELEVATION



VIEW 'A'



VIEW 'B'



VIEW 'C'



VIEW 'D'

INDICATES APPROXIMATE
AREAS OF DETEIORATION

FOR ITEM SPREAD PATCHING QUANTITY TABLE
SEE SHEET 3 / 1

CONTRACT N° C.P. 13-09-25 PART 2		A / 7
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE		
adapche - ciuni - lynn associates		
CONSULTING ENGINEERS CLEVELAND, OHIO 44115		
PIER NO. 2 - REPAIR		
EXIT 6 RAMP		
STATE ROUTE 53		
STA. 13+27.15 TO STA. 15+02.71		
DESIGNED	DRAWN	CHECKED
J.R.R.	C.H.H.	H.J.M.
DATE	DATE	DATE
11/11	11/11	11/11

SCALE 1/4" = 1'-0"

D

C

B

A

A

B

C

D

1

2

3

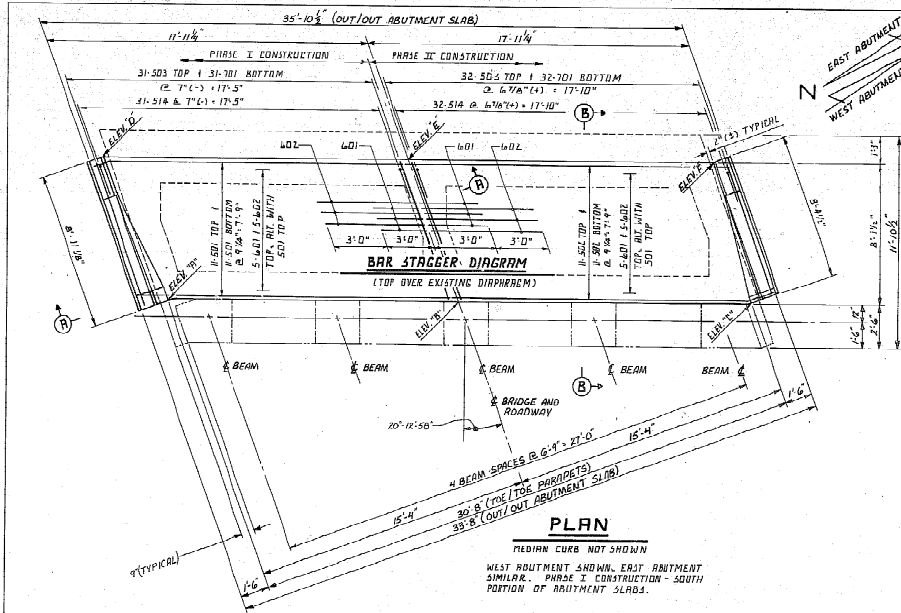
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4

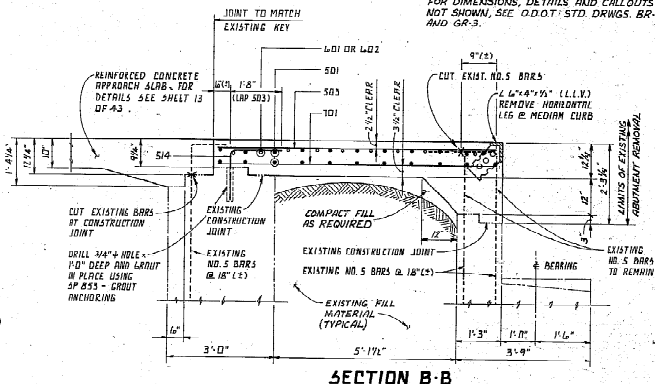
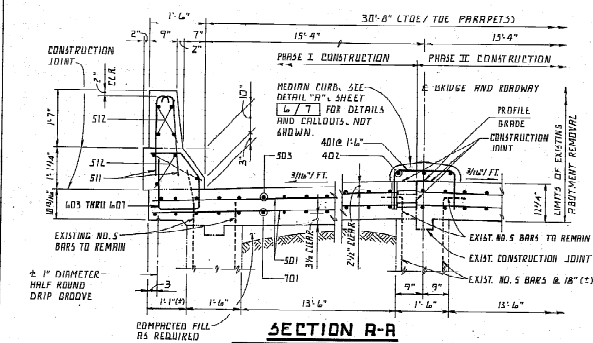
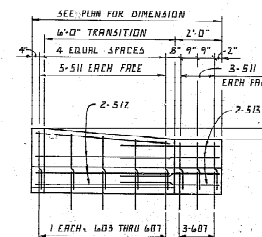
3

2

1



FINAL PAVEMENT ELEVATIONS		
POINT	WEST ABUT.	EAST ABUT.
A'	614.08	614.74
B'	614.45	614.59
C'	614.32	614.41
D'	613.86	614.03
E'	614.25	614.42
F'	614.14	614.29



NOTES:

LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINTS OTHER THAN THE SPECIFIED JOINTS SHALL NOT BE PERMITTED IN THE ABUTMENT SLAB.

EXISTING REINFORCING STEEL DESIGNATED TO REMAIN SHALL BE FIELD BENT WHERE REQUIRED. INCLUDE WITH ITEM SP-BRM-1 EPOXY COATED REINFORCING STEEL, GRADE 60, FOR PAYMENT.

THE S01, S02, L01 AND L02 BARS SHALL BE FIELD BENT AS REQUIRED. INCLUDE WITH ITEM SP-BRM-1 EPOXY COATED REINFORCING STEEL, GRADE 60, FOR PAYMENT.

THE PREFIX 'AC' SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE ABUTMENT SLAB AND BARRIERS.

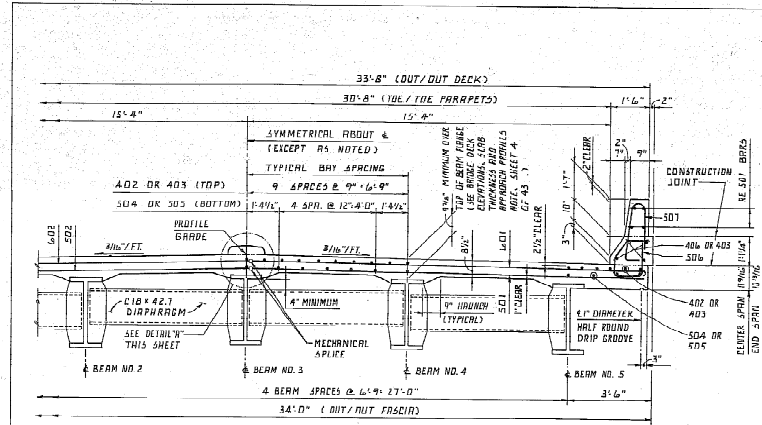
ALL REINFORCING STEEL SHALL BE EPOXY COATED.

FOR REINFORCING BAR SCHEDULE AND BAR BENDING DIAGRAMS SEE SHEET 171.

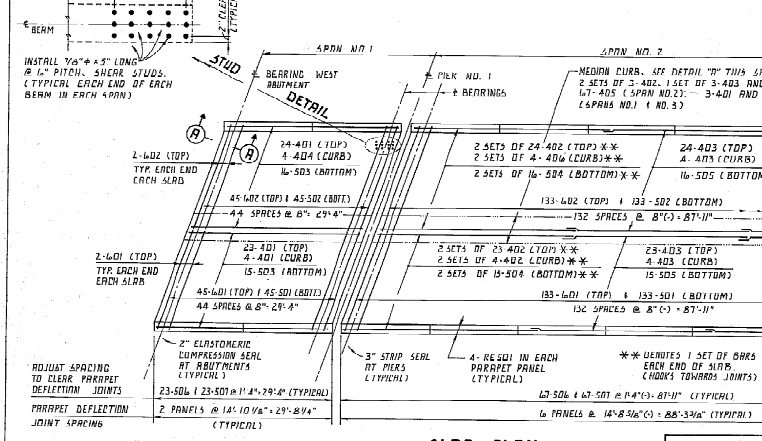
CONCRETE INSERT ASSEMBLIES AS SHOWN ON O.D.D.T. STD. DRWGS. GR-1 AND GR-3 SHALL BE PROVIDED AT ALL WALL TERMINALS FOR ATTACHMENT OF GUARDRAIL TERMINAL CONNECTORS. INCLUDE WITH ITEM SP-BRM-1 EPOXY COATED REINFORCING STEEL, GRADE 60, FOR PAYMENT.

EPOXY BONDING COMPOUND (SP-BRM) SHALL BE PLACED ON THE SURFACE AREAS OF EXISTING CONCRETE WHICH WILL BE IN CONTACT WITH NEW CONCRETE. PRICE INCLUDED IN THE CONTRACT BID PRICE FOR THE PERTINENT CONCRETE ITEMS.

CONTRACT NO. C.P. 43-89-15 PART 2 5/1				
OHIO TURNPIKE COMMISSION				
adache, ciuni, lynn associates				
CONSULTING ENGINEERS - CLEVELAND, OHIO 44115				
ABUTMENT DETAILS				
EXIT 6 RAMP				
STATE ROUTE 53				
STA. 13+37.15 TO STA. 15+02.71				
DESIGNED BY	CHIEF ENGINEER	CHECKED BY	DATE	REVIEW
J.R.C.	D.M.H.	R.J.M.	R.O.P.	E.T.S.



TRANSVERSE SECTION
CENTER SPAN SHOWN, END SPANS SIMILAR, LOOKING UPSTATION

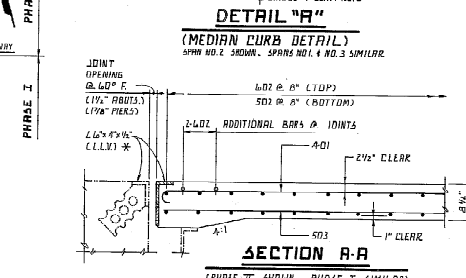
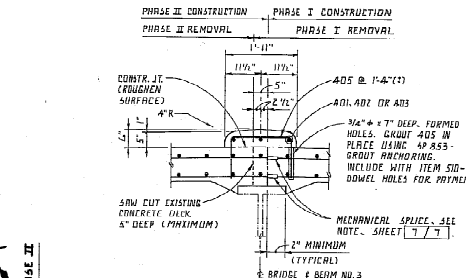


SLAB PLAN
(WEST HALF SHOWN, EAST HALF SIMILAR)

MINIMUM LAP SPLICES

NO. 4 BAR	= 1'-4"
NO. 5 BAR	= 1'-8"

ELEVATIONS AND DEFLECTIONS								
DESCRIPTION	FINAL PAVEMENT ELEVATIONS					DEAD LOAD DEFLECTIONS FOR WEIGHT OF CONCRETE		
	LOCATION					LOCATION		
	BEAM NO. 1	BEAM NO. 2	BEAM NO. 3	BEAM NO. 4	BEAM NO. 5	BEAM NO. 13	BEAM NO. 134	
SPRIN. ADJ. 1	6 BRG. W. ABUT.	614.36	614.42	614.47	614.51	614.55	0.00'	0.00'
	1/4 POINT	614.49	614.55	614.61	614.66	614.70	0.00'	0.01'
	3/4 POINT	614.61	614.68	614.74	614.79	614.84	0.00'	0.01'
	6 BRG. PIER NO. 1	614.72	614.79	614.86	614.91	614.97	0.00'	0.01'
SPRIN. ADJ. 2	6 BRG. PIER NO. 1	614.81	614.88	614.96	614.92	614.98	0.00'	0.01'
	1/4 POINT	614.82	614.90	614.97	615.03	615.08	0.00'	0.02'
	3/4 POINT	615.01	615.10	615.19	615.07	614.96	0.00'	0.02'
	6 BRG. PIER NO. 2	615.07	615.17	615.28	615.16	615.06	0.11'	0.12'
SPRIN. ADJ. 3	3/4 POINT	615.00	615.12	615.23	615.11	615.05	0.08'	0.08'
	1/4 POINT	615.19	614.93	615.06	614.98	614.90	0.00'	0.00'
	6 BRG. PIER NO. 3	614.77	614.91	615.05	614.97	614.89	0.00'	0.00'
	1/4 POINT	614.68	614.82	615.56	614.89	614.81	0.00'	0.01'
SPRIN. ADJ. 4	1/4 POINT	614.57	614.71	614.86	614.82	614.77	0.01'	0.01'
	3/4 POINT	614.44	614.59	614.79	614.68	614.61	0.01'	0.01'
	6 BRG. C. ABUT.	614.50	614.46	614.61	614.56	614.50	0.00'	0.00'



SECTION A-A
(PHASE II SHOWN, PHASE I SIMILAR)
FOR DECK JOINT DETAILS, SEE SHEET 15 OF 43

* REMOVE HORIZONTAL LEG OF ANGLE AT MEDIAN CURB, AT ABUTMENTS.
REMOVE HORIZONTAL LEG OF STAP SERIAL EXTRUSION AT MEDIAN CURB, AT PIERS.

NOTES:
CONSTRUCTION OF TRANSVERSE CONSTRUCTION JOINTS: OTHER THAN THE SPECIFIED JOINTS SHALL NOT BE PERMITTED IN THE BRIDGE DECK SLAB.
A BRANCH WIDTH OF 4\"/>

FINAL PAVEMENT ELEVATIONS: THE ELEVATIONS SHOWN ARE FINISHED PAVEMENT ELEVATIONS. PROPER ADJUSTMENTS SHALL BE MADE FOR THE DEAD LOAD DEFLECTIONS MADE BY THE WEIGHT OF THE CONCRETE.
THE EXISTING DECK DRAINAGE SYSTEM (INCLUDING SCUPPERS, COLLECTORS, DOWNSPOUTS AND SPLASH PLATES) SHALL BE REMOVED. INCLUDE WITH ITEM SPICE - PORTIONS OF STRUCTURES REMOVED FOR PAYMENT.

THE PREFIX "AC" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE SUPERSTRUCTURE.
FOR PARAPET DEFLECTION JOINT DETAILS, SEE SHEET 9 OF 43

THE END OF THE STRUCTURAL STEEL MEMBERS SHALL BE TERMINATED AS REQUIRED AND PAID FOR UNDER THE UNIT PRICE BID FOR LASH - ITEM SPICE - TRIM ENDS OF STRUCTURAL STEEL MEMBERS.

FOR DETAILS OF TRIMMING ENDS OF STRUCTURAL STEEL MEMBERS, SEE SHEET 9 OF 43

WELDED ATTACHMENTS IN SUPPORTS FOR CONCRETE DECK FINISHING MACHINE OR ANY OTHER PURPOSE IS PROHIBITED. ONLY THOSE WELDS SHOWN ON THE PLANS FOR ATTACHMENT OF SHEAR STUD CONNECTORS, BEARINGS AND STIFFENERS SHALL BE PERMITTED.

ALL REINFORCING BARS SHALL BE EPOXY COATED.

THE 502 AND 502 REINFORCING BARS SHALL BE FIELD BENT TO CONFORM TO THE DECK CROWN. INCLUDE FIELD BENDING WITH ITEM SPICE - BEND - EPOXY COATED REINFORCING STEEL, GRADE 60.

FOR REINFORCING STEEL (SEE AND BENDING DIAGRAMS, SEE SHEET 17 OF 43).

MEDIAN CURB SHALL BE CONSTRUCTED IN ONE UNIT WITH PHASE II DECK CONSTRUCTION AND TIED WITH ITEM SPICE - CURB - 1\"/>

CONTRACT NO. C.P. 43-85-15 PART 2 16/7

OHIO TURNPIKE

adacoe - cluni lynn associates
CONSULTING ENGINEERS CLEVELAND, OHIO 44115

SUPERSTRUCTURE
EXIT & RAMP
OVER
STATE ROUTE 53

STA. 13+37.15 TO STA. 15+02.31

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISION
J.E.C.	T.M.J.	A.J.M.	R.O.H.	2-7-84	

WEST ABUTMENT

MARK	NUMBER REQUIRED		LENGTH FEET	TYPE	DIMENSIONS IN FEET								WEIGHT (LBS.)
	PHASE I	PHASE II			1	2	3	4	5	6	7	8	
AE 401	1	1	1	1	1	1	1	1	1	1	1	1	1
AE 402	1	1	1	1	1	1	1	1	1	1	1	1	1
AE 501	22	22	22	17	7	1	1	1	1	1	1	1	1
AE 502	31	31	31	18	0	1	1	1	1	1	1	1	1
AE 511	16	16	16	2	0	1	1	1	1	1	1	1	1
AE 512	8	8	8	1	0	1	1	1	1	1	1	1	1
AE 514	31	31	31	16	4	9	1	1	1	1	1	1	1
AE 601	3	3	3	10	9	0	1	1	1	1	1	1	1
AE 602	3	3	3	10	9	0	1	1	1	1	1	1	1
AE 604	1	1	1	2	4	4	1	1	1	1	1	1	1
AE 605	1	1	1	2	4	4	1	1	1	1	1	1	1
AE 606	1	1	1	2	4	4	1	1	1	1	1	1	1
AE 607	1	1	1	2	4	4	1	1	1	1	1	1	1
AE 701	21	22	63	A	0	1	1	1	1	1	1	1	1
TOTAL WEIGHT													3115

EAST ABUTMENT

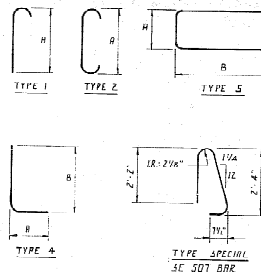
MARK	NUMBER REQUIRED		LENGTH FEET	TYPE	DIMENSIONS IN FEET								WEIGHT (LBS.)
	PHASE I	PHASE II			1	2	3	4	5	6	7	8	
AE 401	1	1	1	1	1	1	1	1	1	1	1	1	1
AE 402	1	1	1	1	1	1	1	1	1	1	1	1	1
AE 501	22	22	22	17	7	1	1	1	1	1	1	1	1
AE 502	31	31	31	18	0	1	1	1	1	1	1	1	1
AE 511	16	16	16	2	0	1	1	1	1	1	1	1	1
AE 512	8	8	8	1	0	1	1	1	1	1	1	1	1
AE 514	31	31	31	16	4	9	1	1	1	1	1	1	1
AE 601	3	3	3	10	9	0	1	1	1	1	1	1	1
AE 602	3	3	3	10	9	0	1	1	1	1	1	1	1
AE 604	1	1	1	2	4	4	1	1	1	1	1	1	1
AE 605	1	1	1	2	4	4	1	1	1	1	1	1	1
AE 606	1	1	1	2	4	4	1	1	1	1	1	1	1
AE 607	1	1	1	2	4	4	1	1	1	1	1	1	1
AE 701	21	22	63	A	0	1	1	1	1	1	1	1	1
TOTAL WEIGHT													3115

SUPERSTRUCTURE

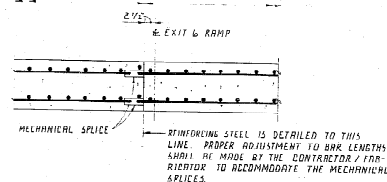
MARK	NUMBER REQUIRED		LENGTH FEET	TYPE	DIMENSIONS IN FEET								WEIGHT (LBS.)
	PHASE I	PHASE II			1	2	3	4	5	6	7	8	
SE 401	16	16	16	10	30	4	2	20	4				3036
SE 402	46	46	46	100	31	2	1	30	8				2082
SE 403	27	27	27	38	100	0	1	30	8				1162
SE 404	8	8	8	16	29	4	1	1	1				314
SE 405	113	113	113	2	1	2	1	7	0	10			238
SE 406	8	8	8	10	50	4	1	1	1				228
SE 501	229	229	229	16	5	1	1	1	1				3938
SE 502	229	229	229	16	5	1	1	1	1				3938
SE 503	20	20	20	62	29	4	1	1	1				1097
SE 504	20	20	20	62	29	4	1	1	1				1097
SE 505	13	13	13	31	50	6	1	1	1				978
SE 506	113	113	113	200	4	8	1	1	1				1709
SE 507	113	113	113	200	4	8	1	1	1				1709
SE 601	235	235	235	17	2	1	1	1	1				6059
SE 602	235	235	235	17	2	1	1	1	1				6177
SE 701	40	40	40	10	5	1	1	1	1				1196
TOTAL WEIGHT													34651

REINFORCING STEEL SAMPLES REFER TO DTG GENERAL CONDITIONS C-10.02 AND C-10.03. SECTION 700.109.01 THROUGH 700.109.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPIRED IN THE STRUCTURES AT THE ADDITIONAL STEEL. SHIPMENT IN ACCORDANCE WITH SDY.06.

BAR BENDING DIAGRAM



PHASE I CONSTRUCTION PHASE II CONSTRUCTION

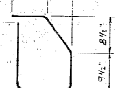


MECHANICAL SPLICE DETAIL

THE MECHANICAL SPLICE SYSTEM SHALL BE CAPABLE OF DEVELOPING 125 PERCENT OF THE YIELD STRENGTH OF THE BARS CONNECTED. THE SPLICE SHALL BE A THERMOPLASTIC SYSTEM WITH OR WITHOUT A SEPARATE COUPLER, AND SHALL BE EXACTLY COATED IN ACCORDANCE WITH SPEC. THREADS THAT REMAIN EXPOSED AFTER THE ROD AND COUPLER ARE SCREWED TOGETHER SHALL BE CLEANED, COATED WITH AN APPROVED EPOXY PATCHING MATERIAL, AND CURED. ALL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

THE MECHANICAL SPLICE SYSTEM SHALL BE INFILTRATED WITH ITEM SPEC. - EPOXY COATED REINFORCING STEEL, GRADE 60, FOR PAYMENT. NO SEPARATE PAYMENT SHALL BE ALLOWED THEREOF.

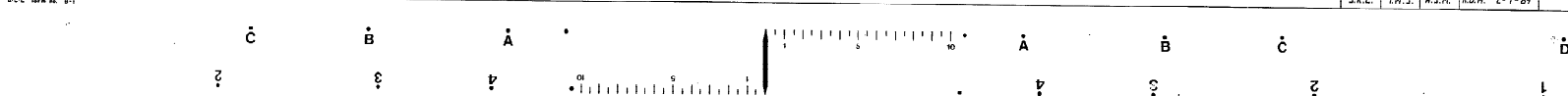
9"	6"	RE 601
8"	5"	RE 604
8"	4"	RE 605
7"	3"	RE 606
7"	2"	RE 607
7"	6"	SE 506



11"	2"	RE 601
11"	1"	RE 604
10"	1"	RE 605
10"	1"	RE 606
10"	1"	RE 607
11"	2"	SE 506

TYPE SPECIAL

CONTRACT NO. PIP 43-89-15	PART 2	7 / 7
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE		
adache cuni lynn associates		
CONSULTING ENGINEERS		
REINFORCING SCHEDULE		
EXIT & RAMP		
OVER		
STATE ROUTE 53		
STA. 13+15.15 TO STA. 15+07.11		
DESIGNED BY	DRIVEN	SUBMITTED
J.R.C.	T.M.J.	A.J.M./R.B.H.
2-1-89		

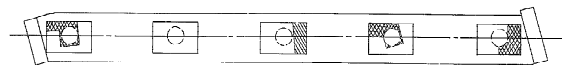




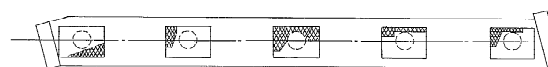
DATE	_____	OHIO	34
DATE	_____	PH.W.S.	43
DATE	_____	REVISION	

SHANNON RD. ABUTMENT PATCHING QUANTITIES			
LOCATION	MEASURED QUANTITY	CONTINGENT QUANTITY	TOTAL
NORTH ABUT.	55F	455F	510F
SOUTH ABUT.	105F	405F	510F

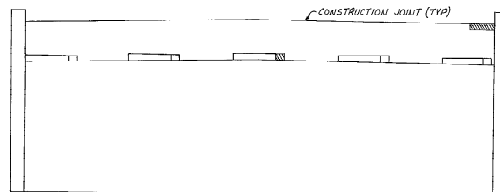
NOTE:
FOR ITEM SP-519 PATCHING NOTES SEE
SHEET 6/12



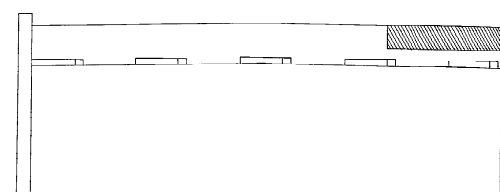
PLAN NORTH ABUTMENT



PLAN SOUTH ABUTMENT



ELEVATION NORTH ABUTMENT



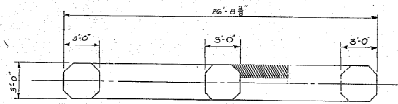
ELEVATION SOUTH ABUTMENT

INDICATES APPROXIMATE AREA OF DETERIORATION
INDICATES APPROXIMATE AREA OF PREVIOUS PATCHING

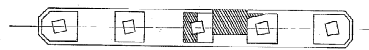
CONTRACT N° C.P. 73-87-15 PART 2				3	12
OHIO TURNPIKE COMMISSION					
OHIO TURNPIKE					
adache ciuni-lynn associates					
CONSULTING ENGINEERS CLEVELAND OHIO 44131					
ABUTMENT REPAIR					
SHANNON ROAD					
OVER					
THE OHIO TURNPIKE					
STA 18+92.61 TO STA 21+07.39					
DESIGNED BY	IR.C.	CH.H.	R.J.M.	R.D.H.	2-7-87
CHECKED BY					
APPROVED BY					

401 1/8" = 1'

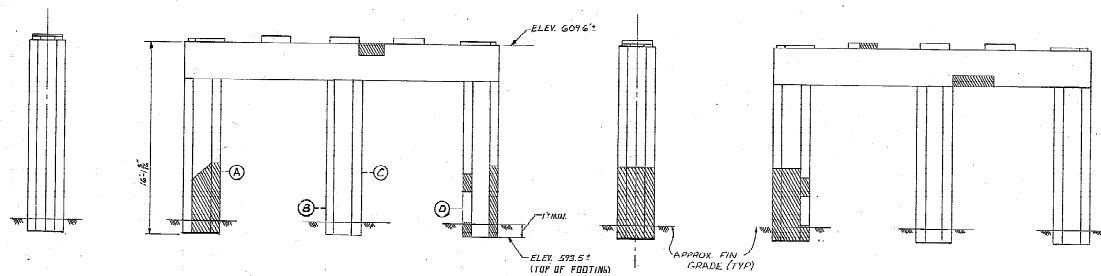




PIER CAP UNDERSIDE



PLAN



WEST ELEVATION

SOUTH ELEVATION

EAST ELEVATION

NORTH ELEVATION

VIEW A

VIEW B

VIEW C

VIEW D

INDICATES APPROXIMATE AREA OF DETERIORATION

DATE	OHIO	35
DATE	REVISION	43
DATE		

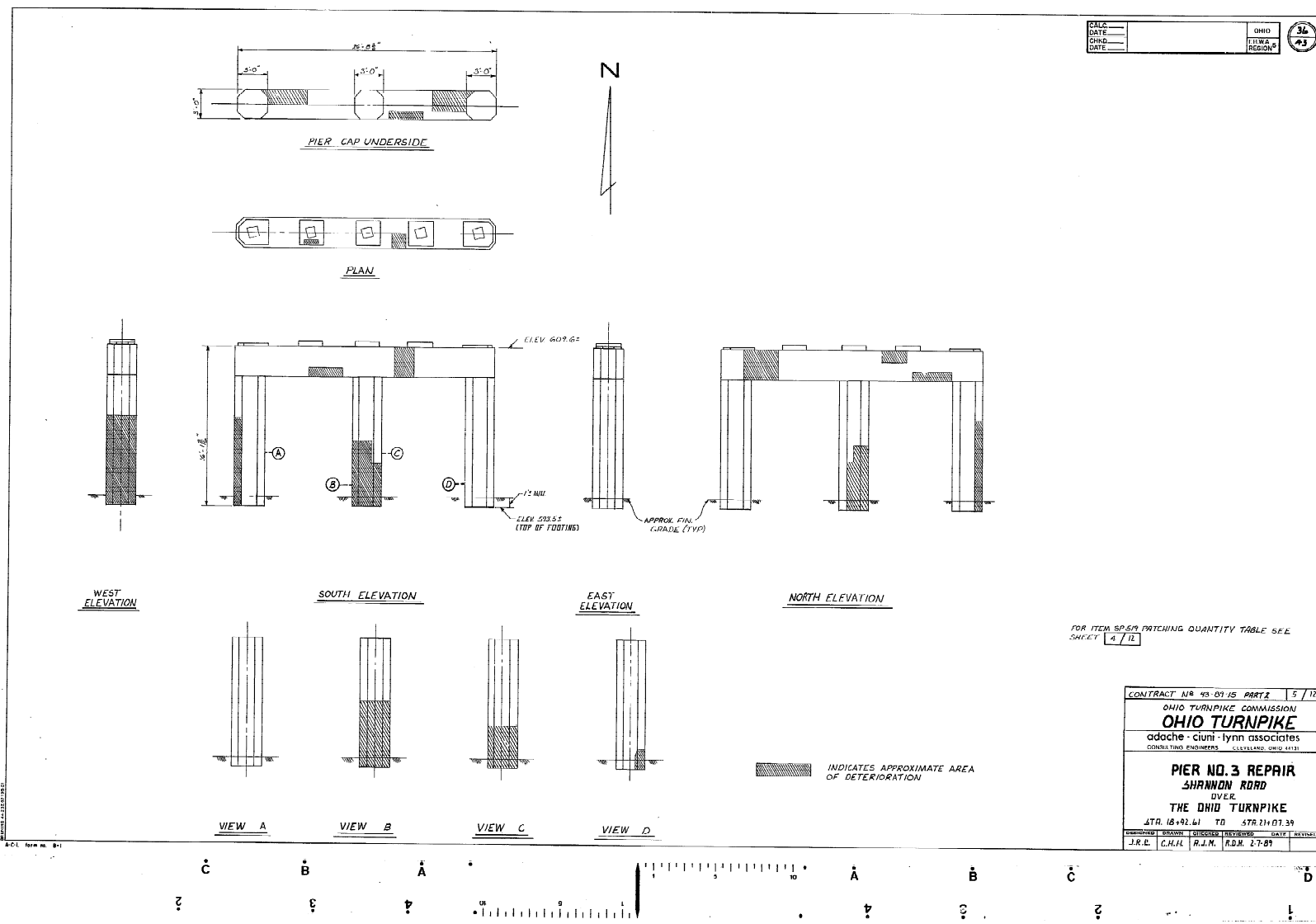
LOCATION	MEASURED QUANTITY	CONTINGENT QUANTITY	TOTAL
PIER NO. 1	64 S.F.	36 S.F.	100 S.F.
PIER NO. 2	0 S.F.	60 S.F.	60 S.F.
PIER NO. 3	180 S.F.	170 S.F.	350 S.F.

FOR ITEM 3519 PATCHING NOTES SEE SHEET 7/12

NOTE:

NO SPECIFIC REPAIR IS ANTICIPATED AT PIER NO. 2. HOWEVER, A CONTINGENT QUANTITY IS PROVIDED FOR USE AS DIRECTED BY THE ENGINEER.

CONTRACT NO. 43-89-15	PART 2	4/12
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE		
adache - ciuni - lynn associates		
CONSULTING ENGINEER CLEVELAND, OHIO 44115		
PIER NO. 1 REPAIR		
SHANNON FORD		
OVER		
THE OHIO TURNPIKE		
STR. 18+92.61 TO STR. 21+07.39		
DESIGNED	DRAWN	CHECKED
J.R.D.	C.H.J.	R.J.M.
		K.D.H.
		2-7-89



DATE	_____	OHIO	37
DATE	_____	TURNPIKE	43
DATE	_____	REPAIR	

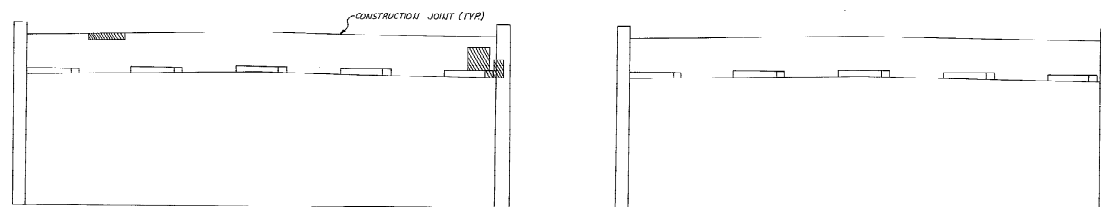
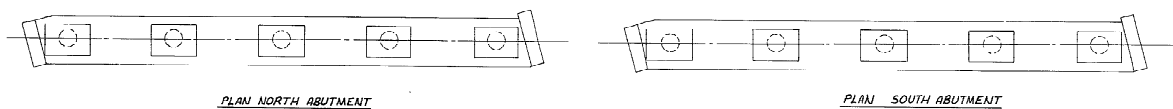
CARLEY RD. ABUTMENT PATCHING QUANTITIES			
LOCATION	MEASURED QUANTITY	CONTINGENT QUANTITY	TOTAL
NORTH ABUT	55F	455F	505F
SOUTH ABUT	55F	455F	505F

ITEM SP 519 - PATCHING CONCRETE STRUCTURES:

PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN OCTOBER, 1988.

ESTIMATED QUANTITY HAS BEEN INCREASED OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

EXACT DIMENSIONS AND LOCATIONS OF PATCHES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITY.



ELEVATION NORTH ABUTMENT

ELEVATION SOUTH ABUTMENT

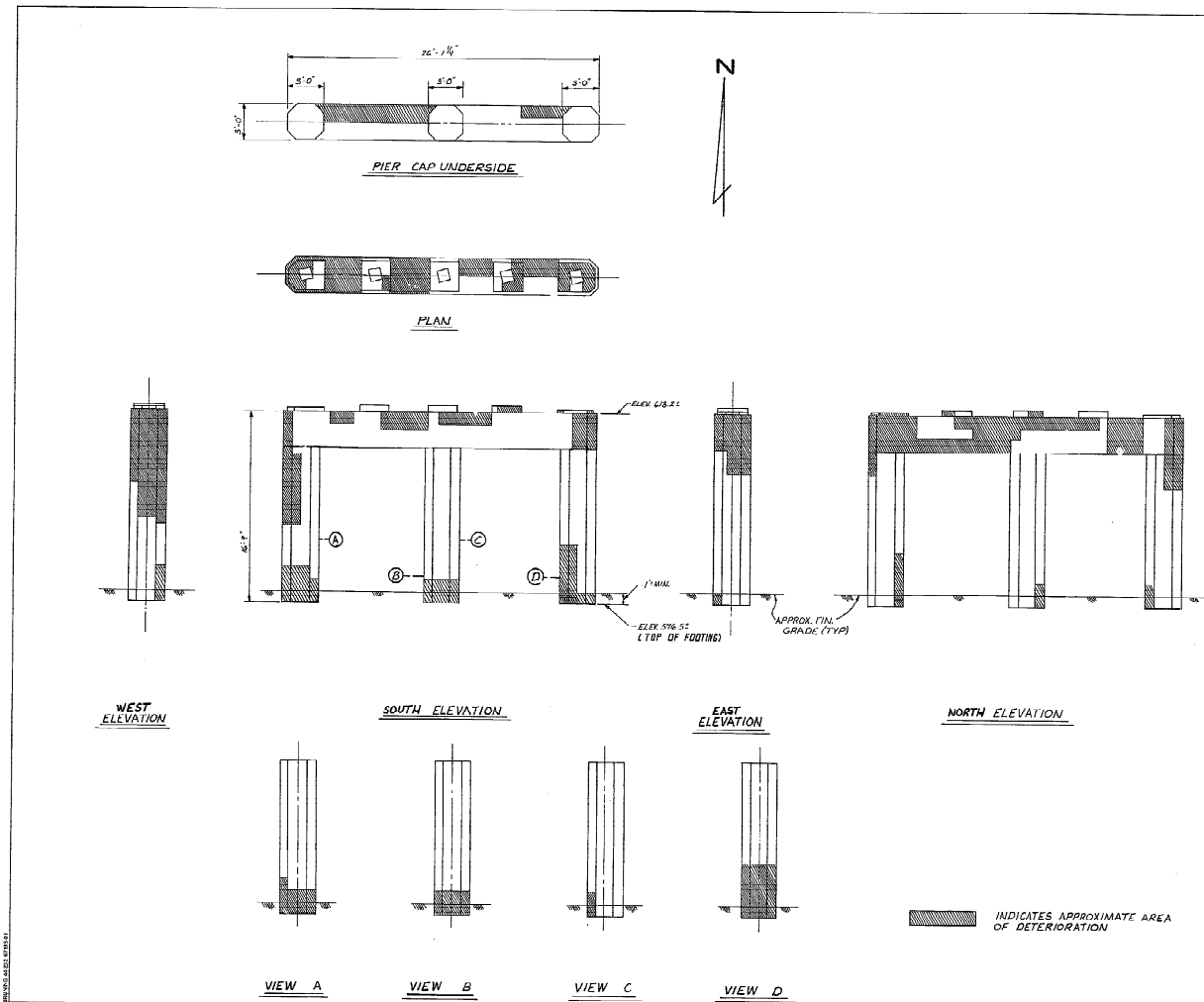
INDICATES APPROXIMATE AREA OF DETERIORATION

INDICATES APPROXIMATE AREA OF PREVIOUS PATCHING

CONTRACT NO. C-110 VS-89-15 PART 2 6/12			
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
adache - ciuni - lynn associates			
CONSULTING ENGINEERS			
ABUTMENT REPAIR			
CARLEY ROAD			
OVER			
THE OHIO TURNPIKE			
STA 18+72.22 TO STA 21+07.78			
DESIGNED BY	DRAWN BY	CHECKED BY	DATE
J.R.C.	C.H.M.	R.J.M.	8.2.89

SCALE: 1/4" = 1'-0"





DATE	OHIO	38
DATE	REVISION	43

CARLEY ROAD PIER PATCHING QUANTITIES			
LOCATION	MEASURED QUANTITY	CONTINGENT QUANTITY	TOTAL
PIER NO. 1	200 S.F.	100 S.F.	300 S.F.
PIER NO. 2	0 S.F.	50 S.F.	50 S.F.
PIER NO. 3	180 S.F.	75 S.F.	255 S.F.

NOTES:

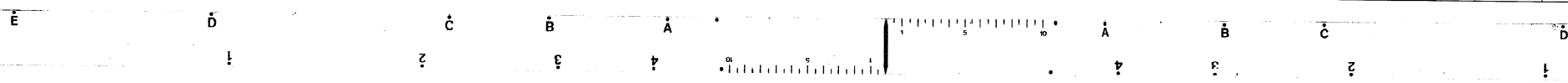
ITEM SP419 - PATCHING CONCRETE STRUCTURES:
 PHYSICAL INVENTORY OF MEASURED QUANTITIES OF
 DETEIORATION WAS PERFORMED IN OCTOBER, 1988.
 ESTIMATED QUANTITY HAS BEEN INCREASED OVER
 MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL
 DETEIORATION.

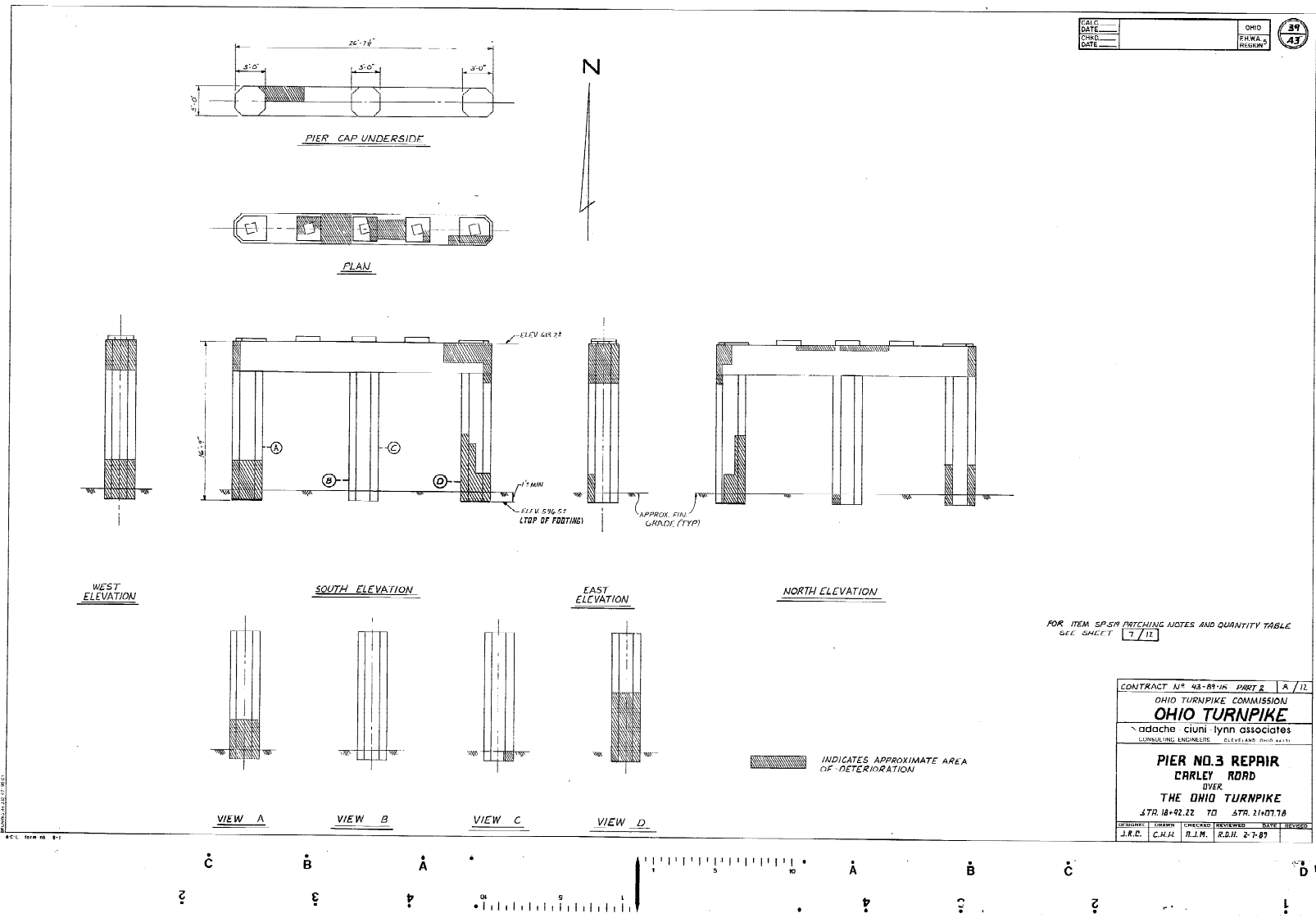
EXACT DIMENSIONS AND LOCATIONS OF PATCHES SHALL
 BE DETERMINED BY THE ENGINEER IN THE FIELD FOR
 FINAL PAY QUANTITY.

FOR LIMITS OF EXCAVATION AT PIER COLUMNS, SEE "COMMON
 STRUCTURAL DETAILS", SHEET 9 OF 43.

NO SPECIFIC REPAIR IS ANTICIPATED AT PIER NO. 2 -
 HOWEVER A CONTINGENT QUANTITY IS PROVIDED FOR
 USE AS DIRECTED BY THE ENGINEER.

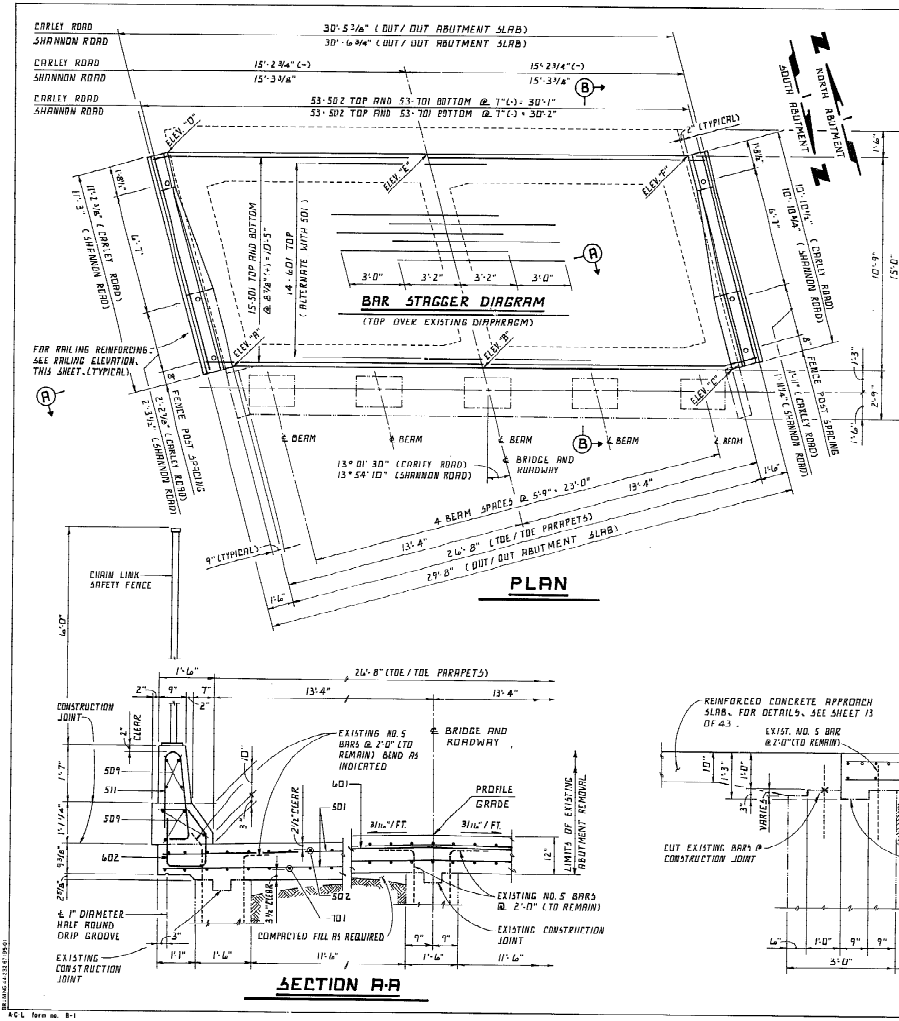
CONTRACT NO. 43-07-15		PART 2	7 / 17
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
adache - ciuni - lyon associates			
CONSULTING ENGINEERS CLEVELAND, OHIO 44115			
PIER NO. 1 REPAIR			
CARLEY ROAD			
OVER			
THE OHIO TURNPIKE			
L.T.R. 18-01-22 TO STR. 21-07-78			
DESIGNED BY	DRAWN BY	CHECKED BY	DATE REQUIRED
J.R.C.	C.M.H.	R.J.M.	R.D.H. 2-7-89





DATE		OHIO	39
DATE		FWHA	43
DATE		REVIEW	

CONTRACT NO. 48-89-16 PART 2 A / 12			
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
adache ciuni lynn associates			
CONSULTING ENGINEERS CLEVELAND, OHIO 44115			
PIER NO. 3 REPAIR			
CARLEY ROAD			
OVER			
THE OHIO TURNPIKE			
STR. 18+92.22 TO STR. 21+07.76			
DESIGNED	DRAWN	CHECKED	REVIEWED
J.R.C.	C.H.M.	R.J.M.	R.J.M. 2-7-87



FINAL PAVEMENT ELEVATIONS		
POINT	CARLEY ROAD	SHANNON ROAD
"A"	617.53	613.51
"B"	117.78	613.77
"C"	617.62	613.60
"D"	617.35	613.33
"E"	617.62	613.60
"F"	617.45	613.44

NOTES:
 EXISTING REINFORCING STEEL DESIGNATED TO REMAIN, SHALL BE FIELD BENT WHERE REQUIRED. INCLUDE WITH ITEM 5P24 - EPOXY COATED REINFORCING STEEL, GRADE 60 FOR PAYMENT.

THE S01, S09 AND L01 BARS SHALL BE FIELD BENT AS REQUIRED. INCLUDE WITH ITEM 5P24 - EPOXY COATED REINFORCING STEEL, GRADE 60 FOR PAYMENT.

THE PREPARED "RE" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE ABUTMENT ALBES AND BARRILAS.

ALL REINFORCING STEEL SHALL BE EPOXY COATED.

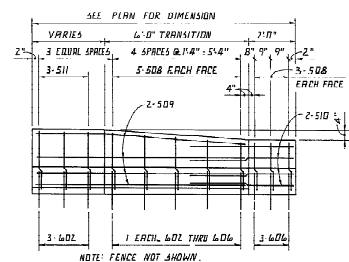
FOR REINFORCING BAR SCHEDULE AND BAR BENDING DIAGRAMS, SEE SHEET 11/12.

CONCRETE INSULT ASSEMBLIES, AS SHOWN ON D.O.D. STD. DRAWING OR 1 AND 6R-3, SHALL BE PROVIDED AT ALL WINDOW TERMINALS FOR ATTACHMENT OF SURROUNDING TERMINAL CONNECTORS. INCLUDE WITH ITEM 5P519 FOR PAYMENT.

EPOXY BONDING COMPOUND (5P526) SHALL BE PLACED ON THE SURFACE AREAS OF EXISTING CONCRETE WHICH WILL BE IN CONTACT WITH NEW CONCRETE. PRICE INCLUDED IN THE CONTRACT BID PRICE FOR THE PERTINENT CONCRETE ITEMS.

LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINTS OTHER THAN THE SPECIFIED JOINTS SHALL NOT BE PERMITTED IN THE ABUTMENT SLAB.

FOR PARAPET FENCE AND FENCE POST ANCHOR DETAILS, SEE SHEETS 16 AND 17 OF 43.



RAILING ELEVATION

ALONG INSIDE OF RAILING FOR DIMENSIONS, DETAILS AND ELEVATIONS NOT SHOWN, SEE D.O.D. STD. DRAWING OR 1 AND 6R-3.

CONTRACT NO. CIP 43-89-15 PART 2 9 / 12

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE

adache - ciuni - lynn associates

CONSULTING ENGINEERS (CLEVELAND, OHIO 44131)

ABUTMENT DETAILS

CARLEY RD. & SHANNON RD.

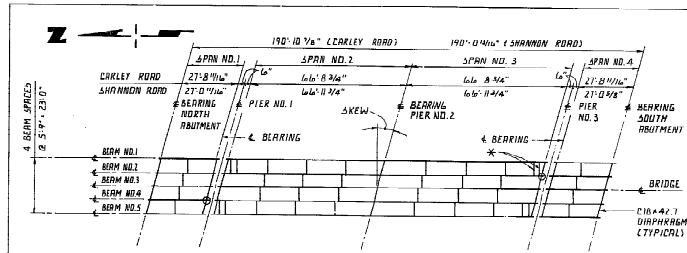
OVER

THE OHIO TURNPIKE

STA. 18+92.12 TO STA. 21+07.18 (CARLEY RD.)

STA. 18+92.64 TO STA. 21+07.51 (SHANNON RD.)

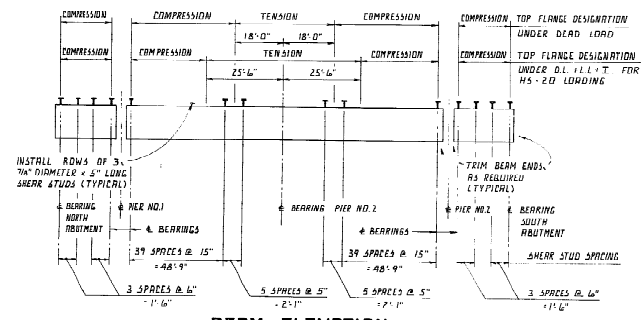
DRAWN BY: J.M.J. CHECKED BY: R.J.M. DATE: 10/1/89



SKIEW = 15° DI 30° (EARLEY ROAD)
= 13° 54' 10" (SHANNON ROAD)

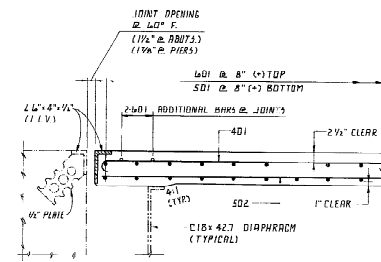
FRAMING PLAN (EXISTING)

- DENOTES RESET BEARING AT SHANNON ROAD, ONLY. IN RECORDS, WITH ITEM SPECIAL - DIAPHRAGM ADJUSTMENT (SEE SPECIFICATION).
- * REMOVE C12x25 SCUPPER SUPPORTS WHERE REQUIRED TO ACCOMMODATE RESETTING OF BEARINGS. INCLUDE WITH ITEM SP202 - PORTIONS OF STRUCTURES REMOVED, FOR PAYMENT.



BEAM ELEVATION

INSTALL SHERR STUDS AS SHOWN TO EXISTING BEAMS (TYPICAL ALL 5 BEAMS)



SECTION A-A

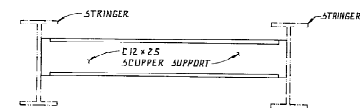
FOR LOCATION OF SECTION A-A, SEE SHEET 10/12.

SECTIONS AT ABUTMENTS SHOWN. SECTIONS AT PIERS ARE SIMILAR.

1 1/2" JOINT OPENING IS FOR 2" COMPRESSION SEALS AT ABUTMENTS MEASURED @ 60 DEGREES PARALLEL. USE 1 1/2" JOINT OPENING @ 60" FOR 3" STRIP SEALS AT PIERS NO.1 AND NO.3.

FOR ABUTMENT DETAILS, SEE SHEET 9/12.

FOR JOINT DETAILS, SEE SHEET 15 OF 43.



SCUPPER SUPPORT

REMOVAL DETAIL

- WHERE REQUIRED TO ACCOMMODATE RESETTING OF BEARING (S).
- 1) REMOVE C12x25 SCUPPER SUPPORT
 - 2) BURN STRINGER WEB SMOOTH
 - 3) PAINT AS DIRECTED UNDER ITEM SP514 - "FIELD PAINTING OF EXISTING STRUCTURAL STEEL".

DATE	27
DATE	43
DATE	
DATE	

NOTES:

THE ENDS OF THE STRUCTURAL STEEL MEMBERS SHALL BE TRIMMED AS REQUIRED AND PAID FOR UNDER THE UNIT PRICE BID FOR EACH ITEM SP274 - TRIM ENDS OF STRUCTURAL STEEL MEMBERS.

FOR DETAILS OF TRIMMING ENDS OF STRUCTURAL STEEL MEMBERS, SEE SHEET 9 OF 43.

FOR SHERR STUD DETAILS, SEE SHEET 9 OF 43.

FOR TRANSVERSE SECTION, SHOWN, ADDITIONAL DETAILS AND NOTES, SEE SHEET 10/12.

DECK DRAINAGE SYSTEM (INCLUDING SCUPPERS, COLLECTORS, DOWNSPOUTS AND SPLASH PLATES) SHALL BE REMOVED. INCLUDE WITH ITEM SP202 - PORTIONS OF STRUCTURES REMOVED, FOR PAYMENT.

WELDED ATTACHMENTS FOR SUPPORTS OF CONCRETE DECK FINISHING MACHINE OR ANY OTHER PURPOSE IS PROHIBITED. ONLY THOSE WELDS SHOWN ON THE PLANS FOR ATTACHMENT OF SHERR STUD CONNECTORS, BEARINGS AND STIFFENERS SHALL BE PERMITTED.

CONTRACT NO. C.I.P. 43-89-15 PART 2	11/12
OHIO TURNPIKE COMMISSION	
OHIO TURNPIKE	
adache - ciuni - lynn associates	
CONSULTING ENGINEERS	CLEVELAND OHIO 44115
SUPERSTRUCTURE DETAILS	
EARLEY RD. & SHANNON RD.	
OVER	
THE OHIO TURNPIKE	
STA. 16+92.22 TO STA. 21+07.78 (EARLEY RD.)	
STA. 16+92.61 TO STA. 21+07.39 (SHANNON RD.)	
DESIGNED BY: J.R.C. / R.J.M. / K.D.H.	2-7-89

CARLEY ROAD

ABUTMENTS

MARK	NUMBER REQUIRED		LENGTH FEET	TYPE	DIN A DIN B DIN C DIN D						INCREMENT INCHES	WEIGHT LBS.
	NORTH	SOUTH			FEET	IN	FEET	IN	FEET	IN	FEET	
AK 501	30	30	100	1	1	1	1	1	1	1	1	1802
AK 502	53	73	100	10	8	1	1	1	1	1	1	1180
AF 508	32	32	64	2	8	1	2	1				124
AF 509	16	16	32	8	1	1	1	1				290
AE 510	16	16	32	4	1	1	1	1				144
AE 511	16	16	32	2	1	1	1	1				64
AE 601	14	14	78	9	4	1	1	1				392
AE 602	8	8	16	4	1	1	1	1				112
AE 603	2	2	4	4	1	1	1	1				26
AE 604	2	2	4	4	1	1	1	1				26
AE 605	2	2	4	4	1	1	1	1				24
AE 606	4	8	16	3	1	1	1	1				56
AE 701	53	53	100	10	8	1	1	1				2312
TOTAL WEIGHT												6724

SUPERSTRUCTURE

MARK	NUMBER REQUIRED		LENGTH FEET	TYPE	DIN A DIN B DIN C DIN D						INCREMENT INCHES	WEIGHT LBS.
	NORTH	SOUTH			FEET	IN	FEET	IN	FEET	IN	FEET	
SP 401	86	25	11	2	20	11						1719
SE 402	189	30	0	1	1	1						3966
SE 403	86	25	2	1	24	8						1446
SP 404	46	13	8	1	1	1						426
SE 405	16	24	4	1	1	1						309
SE 406	16	21	8	1	1	1						264
SE 501	290	30	1	1	1	1						9099
SE 502	54	28	11	1	1	1						1220
SP 503	108	30	0	1	1	1						2226
SE 504	27	20	8	1	1	1						900
SE 505	294	4	5	1	1	1						1431
SE 506	294	5	2	1	1	1						1284
RE 601	302	31	5	2	30	1						14251
RE 501	32	14	2	1	1	1						473
RE 502	16	13	8	1	1	1						228
RE 503	22	15	6	1	1	1						917
RE 504	48	6	6	1	1	1						360
TOTAL WEIGHT												45646

SHANNON ROAD

ABUTMENTS

MARK	NUMBER REQUIRED		LENGTH FEET	TYPE	DIN A DIN B DIN C DIN D						INCREMENT INCHES	WEIGHT LBS.
	NORTH	SOUTH			FEET	IN	FEET	IN	FEET	IN	FEET	
AE 501	30	30	100	10	10	1	1	1	1	1	1	1888
AE 502	53	53	100	10	10	1	1	1	1	1	1	1358
AE 508	32	32	64	2	8	1	2	1				178
AE 509	16	16	32	8	1	1	1	1				250
AE 510	16	16	32	4	1	1	1	1				144
AE 511	16	16	32	2	1	1	1	1				64
AE 601	14	14	78	9	4	1	1	1				392
AE 602	8	8	16	4	1	1	1	1				112
AE 603	2	2	4	4	1	1	1	1				26
AE 604	2	2	4	4	1	1	1	1				26
AE 605	2	2	4	4	1	1	1	1				24
AE 606	4	8	16	3	1	1	1	1				56
AE 701	53	53	100	10	10	1	1	1				2320
TOTAL WEIGHT												6756

SUPERSTRUCTURE

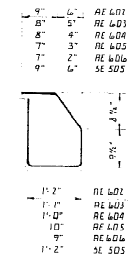
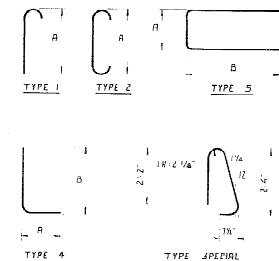
MARK	NUMBER REQUIRED		LENGTH FEET	TYPE	DIN A DIN B DIN C DIN D						INCREMENT INCHES	WEIGHT LBS.
	NORTH	SOUTH			FEET	IN	FEET	IN	FEET	IN	FEET	
SE 401	86	25	3	2	28	2						1660
SE 402	170	30	0	1	1	1						3966
SE 403	86	25	0	1	1	1						1436
SE 404	46	13	8	1	1	1						426
SP 405	16	20	2	1	1	1						302
SP 406	16	21	8	1	1	1						262
SE 501	289	30	1	1	1	1						9093
SE 502	54	28	1	1	1	1						1221
SE 503	108	30	0	1	1	1						2225
SE 504	27	21	2	1	1	1						900
SE 505	292	4	8	1	1	1						1421
SE 506	292	5	2	1	1	1						1274
RE 601	301	31	5	2	30	2						14241
RE 501	32	14	10	1	1	1						462
RE 502	16	13	11	1	1	1						333
RE 503	22	15	6	1	1	1						917
RE 504	48	6	6	1	1	1						325
TOTAL WEIGHT												47519

NOTE:

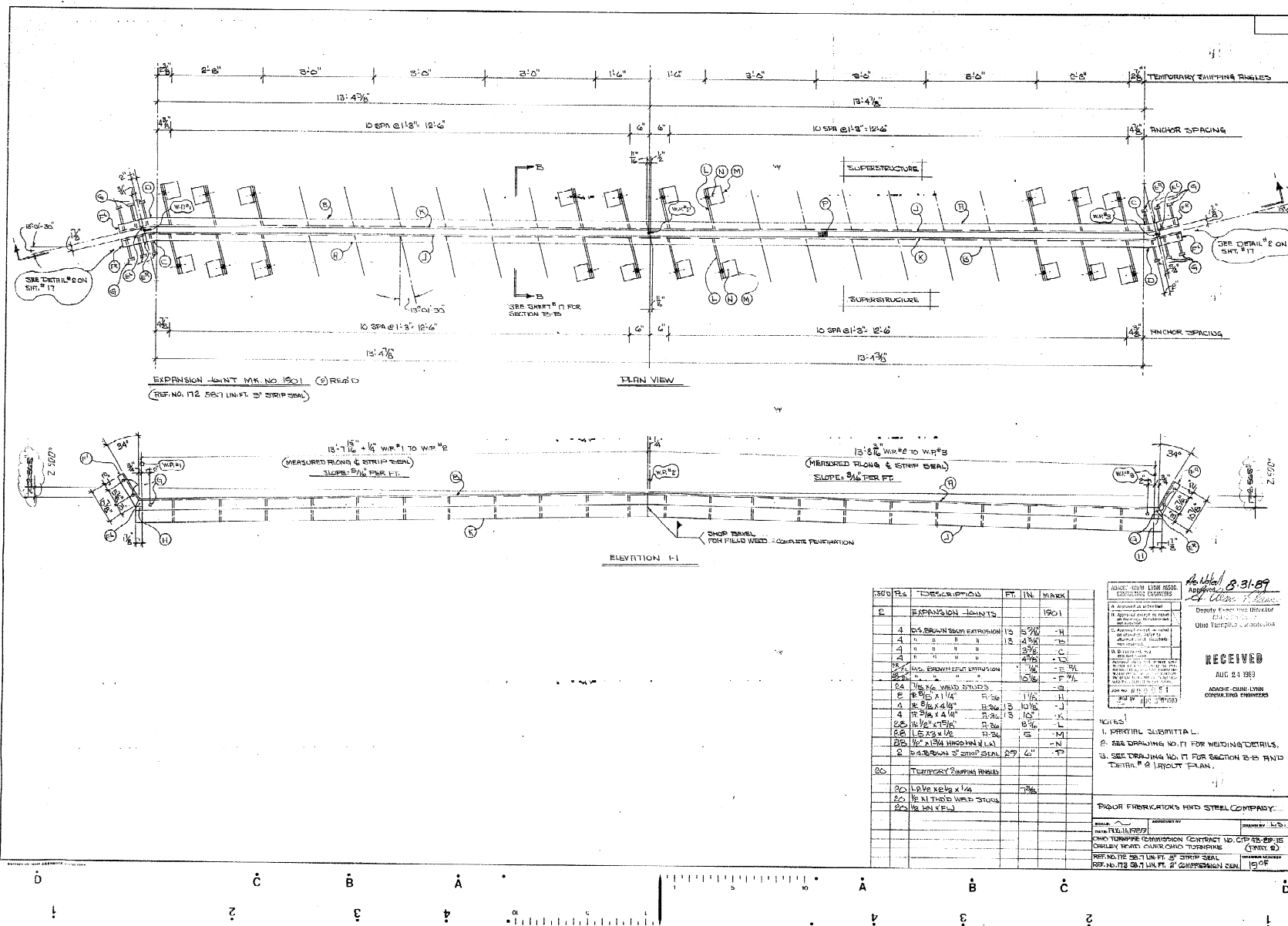
REINFORCING STEEL (SAMPLE) REFER TO THE GENERAL CONDITIONS 5-602 AND 5-603 SECTION 100, 100' THROUGH 100' AND 100' 30' SIFT CEMENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR THE SAMPLES. SAMPLES SHALL BE REPLACED IN THE STRUCTURE BY THE ADDITIONAL STEEL, SPICED IN ACCORDANCE WITH 5-603.

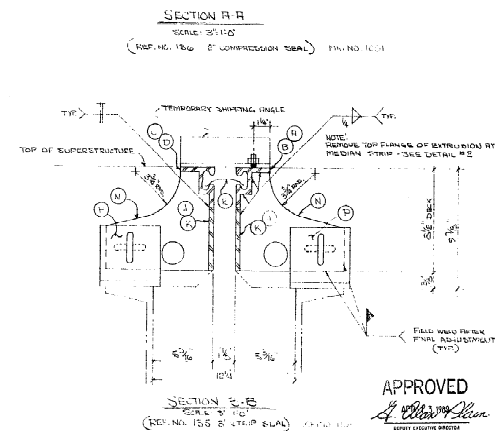
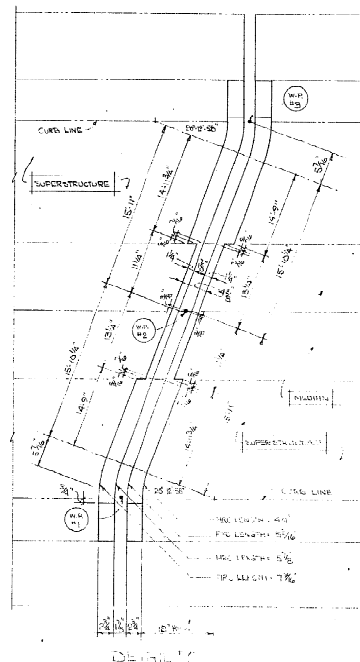
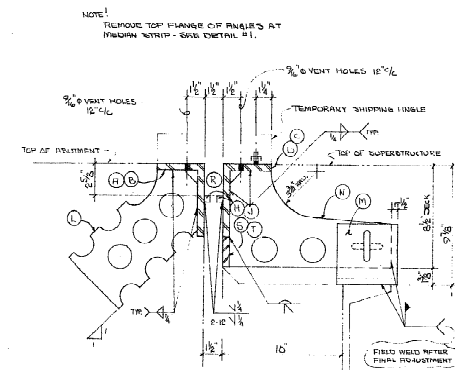
CALC.	DATE	CHKD.	DATE

BAR BENDING DIAGRAM



CONTRACT NO. CIP 43-89-15 PART 2 12/12			
OHIO TURNPIKE COMMISSION			
adache ciuni lynn associates			
REINFORCING SCHEDULE			
CARLEY RD. SHANNON RD.			
THE OHIO TURNPIKE			
STA. 18+91.32 TO STA. 21+01.78 (CARLEY RD.)			
STA. 18+91.61 TO STA. 21+01.16 (SHANNON RD.)			
DESIGNED	CHKD.	APPROVED	DATE





ADAMCHIK, GURMI-LYNN ASSOC.
CONSULTING ENGINEERS.

A. Approved as submitted	<input checked="" type="checkbox"/>
B. Approved except as noted on drawings. Remarks: none noted.	<input type="checkbox"/>
C. Approved except as noted on drawings. Remarks: attached sheet No. 60001 is not required.	<input type="checkbox"/>
D. Disapproved. See 2010-01-10 sheet.	<input type="checkbox"/>

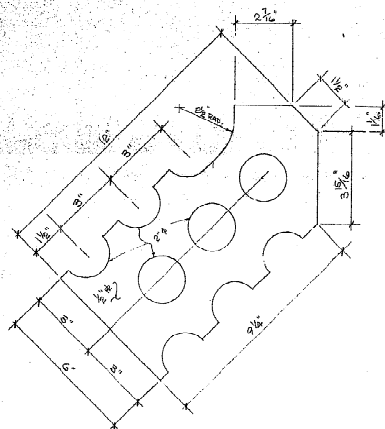
APPROVED: I HAVE READ AND AM SURE OF THE ACCURACY OF THE INFORMATION ON THIS DRAWING. I HAVE REVIEWED THE DRAWING FOR THE PURPOSE OF THE DESIGN AND THE PREPARATION OF THE DRAWING. I HAVE REVIEWED THE DRAWING FOR THE PURPOSE OF THE DESIGN AND THE PREPARATION OF THE DRAWING. I HAVE REVIEWED THE DRAWING FOR THE PURPOSE OF THE DESIGN AND THE PREPARATION OF THE DRAWING.

DATE: 11-11-99

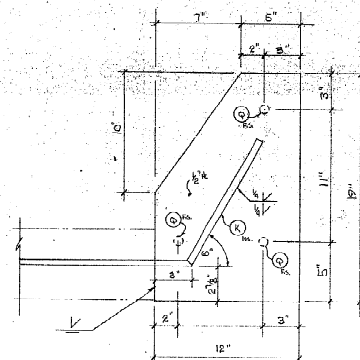
4-11-99

TEMP	20	40	60	80	100	120	140
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1	25	24	24	23	24	24	2
5	24	23	24	25	25	24	23

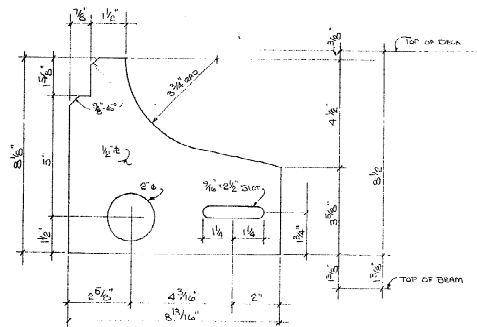
PIQUET FABRICATIONS AND HOTEL COMPANY		
NAME: <u>PIQUET, J. B.</u>	ADDRESS: <u>1000 N. 10th St.</u>	CITY: <u>LAKE CHARLES, LA.</u>
1-10 TELEPHONE: <u>COMMERCIAL 0-2700</u> <u>LAKE CHARLES, LA.</u> 2-10 TELEPHONE: <u>LAKE CHARLES, LA.</u> <u>LAKE CHARLES, LA.</u>		
3-10 TELEPHONE: <u>LAKE CHARLES, LA.</u> <u>LAKE CHARLES, LA.</u>		
4-10 TELEPHONE: <u>LAKE CHARLES, LA.</u> <u>LAKE CHARLES, LA.</u>		
5-10 TELEPHONE: <u>LAKE CHARLES, LA.</u> <u>LAKE CHARLES, LA.</u>		
6-10 TELEPHONE: <u>LAKE CHARLES, LA.</u> <u>LAKE CHARLES, LA.</u>		
7-10 TELEPHONE: <u>LAKE CHARLES, LA.</u> <u>LAKE CHARLES, LA.</u>		
8-10 TELEPHONE: <u>LAKE CHARLES, LA.</u> <u>LAKE CHARLES, LA.</u>		
9-10 TELEPHONE: <u>LAKE CHARLES, LA.</u> <u>LAKE CHARLES, LA.</u>		
10-10 TELEPHONE: <u>LAKE CHARLES, LA.</u> <u>LAKE CHARLES, LA.</u>		



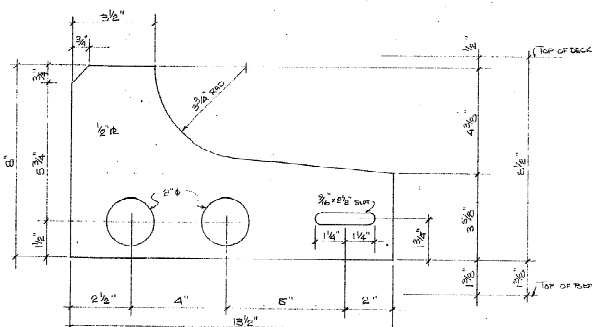
MK. NO. 1001-L SC RES'D



MK. NO. 1001-S (SPECIAL) 4 RES'D
MK. NO. 1001-S (COMMON) 4 RES'D



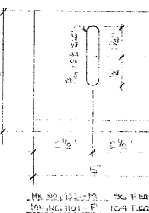
MK. NO. 1001-N 104 RES'D



MK. NO. 1001-L SC RES'D

ADAMS-OWEN LUMBER ASSOCIATES
CONSULTING ENGINEERS
A. Approved as submitted
B. Approved as modified
C. Approved as modified
D. Disapproved, use
other design
Note: This drawing is for
information only. It is not
to be used for construction
without the approval of the
design engineer.
Job No. 87651
JAA 1/4-51

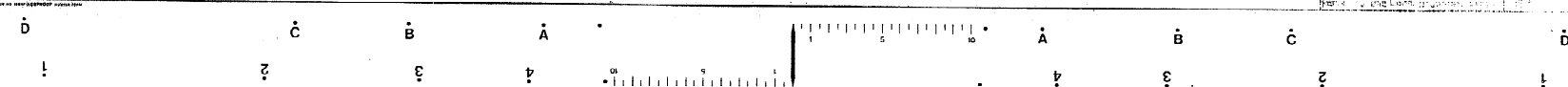
APPROVED
J. J. Adams
CHIEF ENGINEER

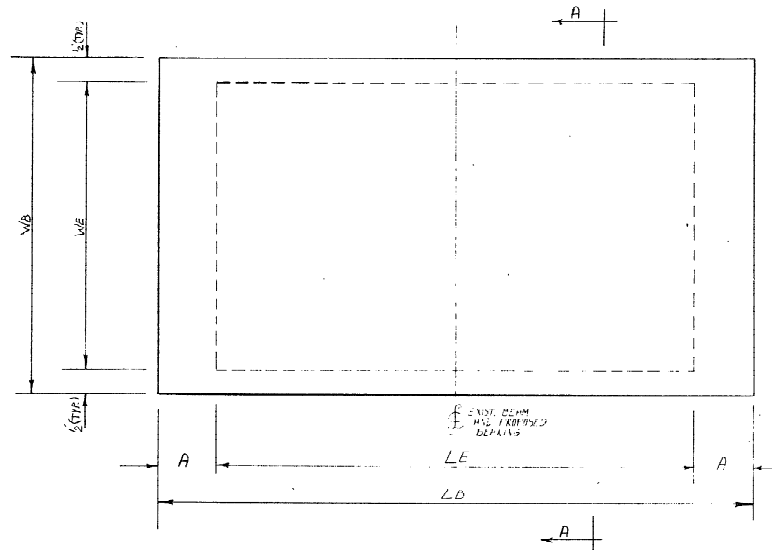


MK. NO. 1001-S 104 RES'D

NOTE:
1. PARTIAL SUBSTITUTION
2. SEE SHEET NO. 9 THRU 11 FOR LOCATIONS

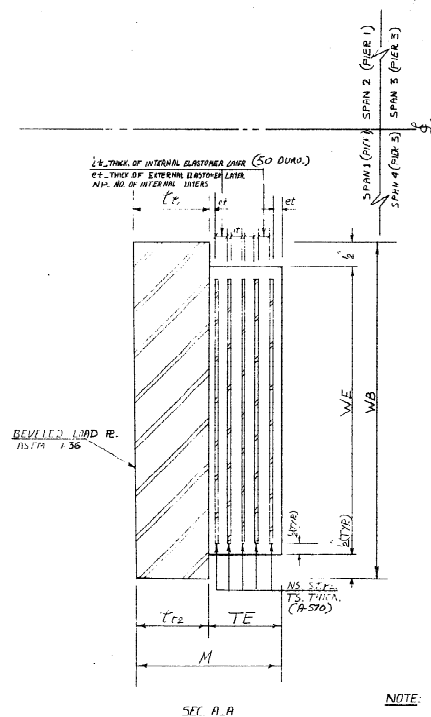
DATE	BY	CHKD BY	APP'D BY
1/4/51	JAA		
1/4/51	JAA		
1/4/51	JAA		
1/4/51	JAA		





QTY.	LOCATION	LB	WB	LE	WE	A	τ_1	τ_2	TE	M	EF	LE	NP	TS	NS
5	SPAN 1 (PIER 1)	12' 4"	7"	10'	6"	14'	1 1/8"	1 1/8"	1 1/8"	2 1/8"	0.15	0.18	4	0.0741	5
5	SPAN 4 (PIER 3)	12' 4"	7"	10'	6"	14'	1 1/8"	1 1/8"	1 1/8"	2 1/8"	0.15	0.18	4	0.0741	5
5	SPAN 2 (PIER 1)	12' 4"	8"	11'	7"	14'	1 1/8"	1 1/8"	1 1/8"	2 1/8"	0.15	0.18	4	0.0741	5
5	SPAN 5 (PIER 3)	12' 4"	8"	11'	7"	14'	1 1/8"	1 1/8"	1 1/8"	2 1/8"	0.15	0.18	4	0.0741	5

LAMINATED ELASTOMERIC BRG.
PIERS 1 AND 3 - FANGDONER ROAD ONLY
REF # 50

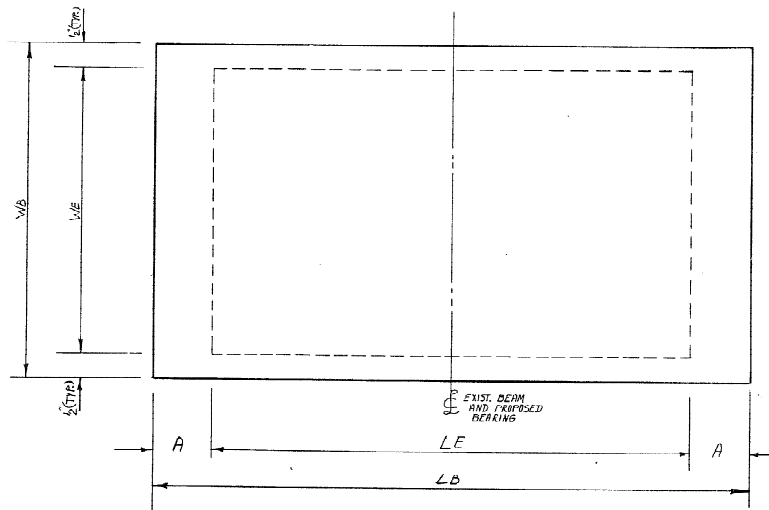


NOTE:
- STEEL LOAD PLATE SHALL BE ASTM A36, UNPAINTED UNLESS NOTED OTHERWISE. TO BE FABRICATED IN ACCORDANCE WITH OHIO TURNPIKE COMMISSION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND 1967 EDITION, SECT. 711.23.

APPROVED

1. Approved for use on all bridges.
2. Approved for use on all bridges.
3. Approved for use on all bridges.
4. Approved for use on all bridges.
5. Approved for use on all bridges.
6. Approved for use on all bridges.
7. Approved for use on all bridges.
8. Approved for use on all bridges.
9. Approved for use on all bridges.
10. Approved for use on all bridges.

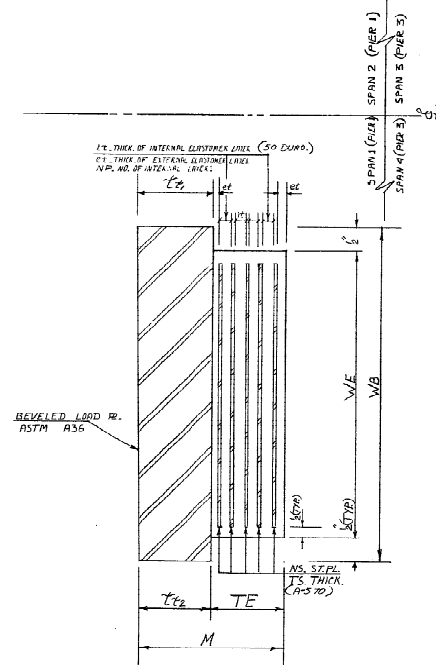
TABI ENGINEERING, INC.	
84 Goshawk Drive Ex. 000000, Miami 33137	
ELASTOMERIC BEARING DETAILS	
OHIO TURNPIKE COMMISSION CIP-43-BP-15	
SANDUSKY COUNTY	
CONTRACT NO. 17-89	
DESIGNED BY N.M.	CHECKED BY J.M.
DATE 3-23-89	BY J.M.



QTY.	LOCATION	LB	WB	LE	WE	A	TE	TE	TE	M	LE	LE	NP	TS	NS
5	SPAN 1 (PIER 1)	13"	5"	12"	4"	1/2"	1 1/2"	1 1/2"	1 1/2"	2 1/2"	0.09	0.128 (TYR)	4	0.0741	5
5	SPAN 4 (PIER 3)	13 1/2"	9"	12"	8"	3/4"	1 1/2"	1 1/2"	1 1/2"	3"	0.15	0.20 (TYR)	4	0.0741	5

SEE P. 100 SHEET 1
17 1/2" x 5 1/2" x 1 1/2"

LAMINATED ELASTOMERIC BRG.
PIERS 1 AND 3 & EXIT RAMP 6 ONLY
REF # 70



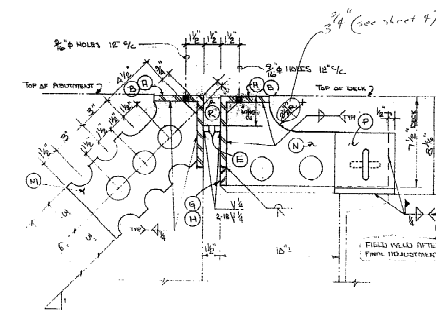
NOTE:

STEEL LOAD PLATE SHALL BE ASTM A36, UNPAINTED UNLESS NOTED. BEARINGS TO BE FABRICATED IN ACCORDANCE WITH OHIO TURNPIKE COMMISSION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ODOT STANDARD SPECIFICATIONS 1987 EDITION SECT. VII, 23

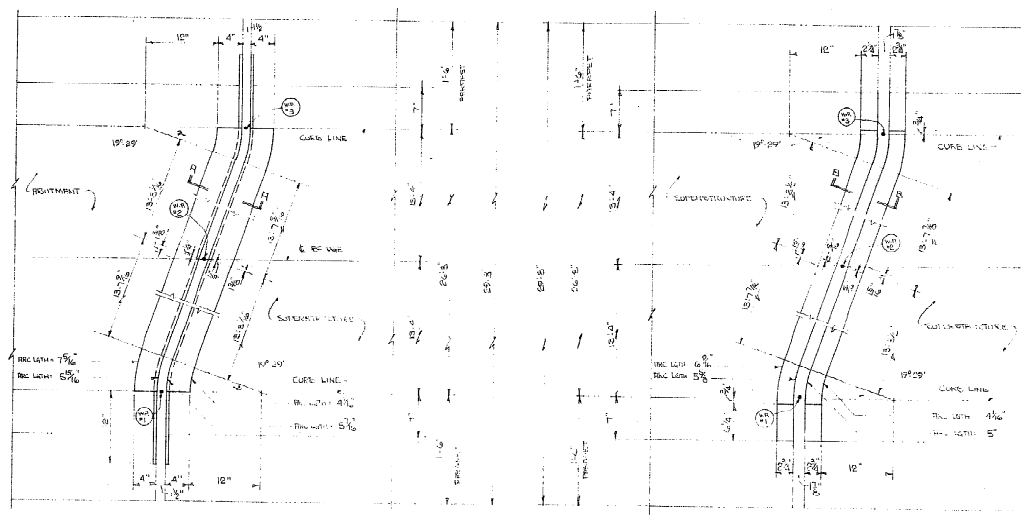
APPROVED
[Signature]
OHIO TURNPIKE COMMISSION

1. NAME (FIRM, FIRM ASSOCIATE, CONSULTING ENGINEER)	
2. ADDRESS (FIRM, FIRM ASSOCIATE, CONSULTING ENGINEER)	
3. PROJECT (NAME, LOCATION, DATE)	
4. DRAWING NO.	
5. DATE	
6. SCALE	
7. SHEET NO.	
8. TOTAL SHEETS	

T&B ENGINEERING, INC.	
ELASTOMERIC BEARING DETAILS	
OHIO TURNPIKE COMMISSION CIP-43-B3-15	
SANDUSKY COUNTY	
MEREDITH BROTHERS, INC.	
DATE BY N.M.	DATE BY 3-20-81
DATE BY 3-17-81	DATE BY 3-17-81

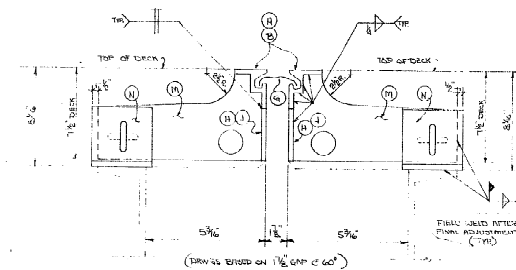


SECTION H-FI
SERIAL 87-1163
(REF. NO. 52 596 LIN. FT. 2" COMPRESSION SEAL)



DETAIL #1
SCALE: 1/2" = 1'-0"
(2) COMPRESSION SEAL

DETAIL #2
SCALE 1/2" = 1'-0"
(3) STEEL SEAL



SECTION 13-15
SCALE: 3"=15'
(REF. NO. 55 59.4 LIN. FT. 3" STRIP SEAL)

STEW. JAWL JOINT OPENING SCHEDULE CHART							
TEMPERATURE ° F							
JAWL SIZE	30	40	50	60	70	80	90
3"	2 1/4	2 3/8	2	1 7/8	1 3/4	1 5/8	1 1/2
4"	2 1/2	2 1/2	2 1/2	2 1/4	2 1/4	2 1/4	2
5"	2 3/4	2 3/4	2 3/4	2 3/8	2 3/8	2 3/8	2 3/8

ROACHE - CUMMINS - LYNN ASSOC. CONSULTING ENGINEERS	
1. Approved as submitted	
2. Approved except as noted on attached transmittal sheet and re-submitted	✓
3. Approved except as noted on attached transmittal sheet. Re-submitting sheets recommended.	
4. Not acceptable. Resubmit effective sheet.	
ATTENTION: Design and material changes affecting safety or substantially the design of the structure must be approved by the Engineer before construction begins. If the design is changed, the proper function and/or structural analysis in accordance with the contract requirements.	
JOB NO.	87-051
Drawn by	Date
T.C.A.	3/2/87

APPROVED
AS NOTED
JAN 11 1989
DENNIS EXECUTIVE DIRECTOR
MAJESTY ENGINEER
HONOLULU FIRE DEPARTMENT

NOTE!
GPTIAL SUBMITTA

PARTIAL SUBMITTA

FIGURA FABRICATORS AND STEEL COMPANY

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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SCALE: 1/8" = 1'-0"
DATE: MAR 15 1987

OHIO TURNPIKE COMMISSION CONTRACT NO. CIP 43-87-15

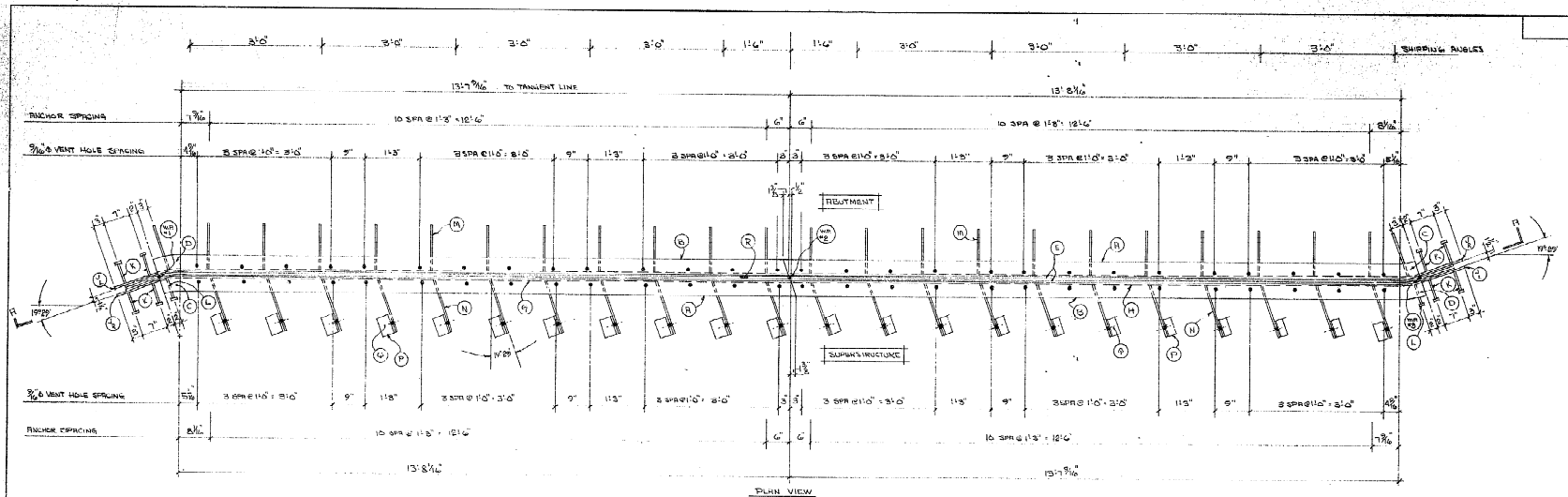
REF. NO. 52 336 L IN. ET. 2" COMPRESSION SEAL

REF. NO. 55	Q24 LN. FT. 3" CRIP SEAL	1 OF
-------------	--------------------------	------

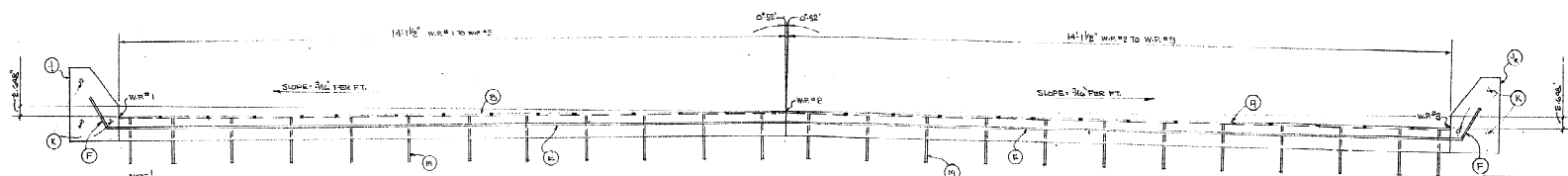
2

1

•



EXPANSION JOINT MK. NO. 231 (7) REF. 10
(REF. NO. 22 25' 6\"/>



NOTE:
1. W.P. TO W.T. DIM. MEASURED ALONG $\frac{1}{2}$ OF COMPRESSION SEAL.
2. SEE DET. 21 (EXHIBIT 1) FOR R.R. LENGTHS OF CURVED P.C.S.

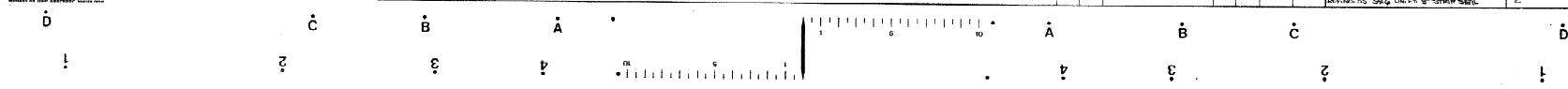
ELEVATION R-R
LOOKING AT REINFORCEMENT ANGLE

QTY	DESCRIPTION	FT.	IN	MARK
2	EXPANSION JOINT			201
4	1/2\"/>			

QTY	DESCRIPTION	FT.	IN	MARK
2	EXPANSION JOINT			201
4	1/2\"/>			

APPROVED
[Signature]
CHD TURNPIKE COMMISSION

QTY	DESCRIPTION	FT.	IN	MARK
2	EXPANSION JOINT			201
4	1/2\"/>			



NOTE!

- VERT. W.P. DIM. MEASURED ALONG ϕ OF TYPICAL SEAL.
- SEE SH-1 DETAIL # 2 FOR ARC LENGTHS ON CURVED FCS.

[illegible][illegible]

SEE SECTION B-3 SHIT #
SEE SECTION B-3 SHIT #

SEE NOTE 1 COL 01241-

APPROVED

8 APR 4 1964

DEPUTY EXECUTIVE DIRECTOR
CHIEF ENGINEER
OHIO TURNPIKE COMMISSION

PIQUA FABRICATORS AND STEEL COMPANY

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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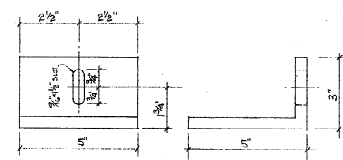
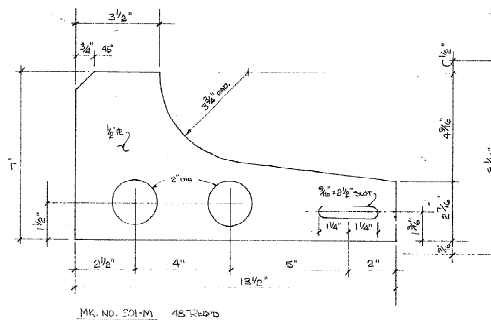
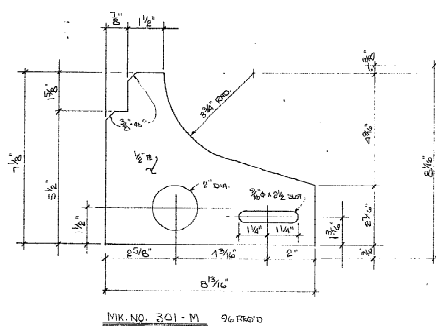
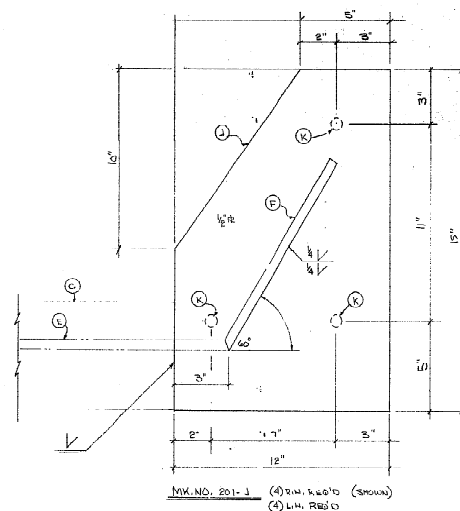
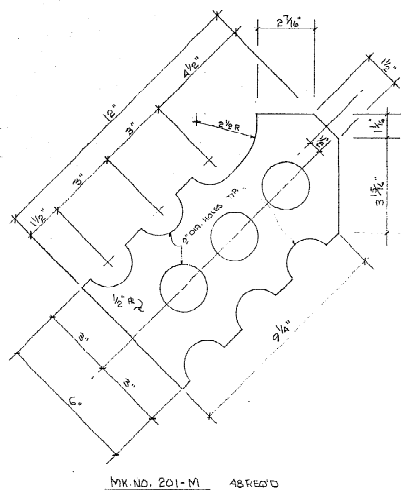
DATE: MAR 15, 1989	RECEIVED BY: L. J. ...
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OHIO TURNPIKE COMMISSION CONTRACT NO. CIP 43-87-15
FRANKLIN ROAD OVER TURNPIKE (SAW. CO.) (PART 1)

REF NO: 226 WAPT. 2" (COMPRESSION) 239L
Doc No. 25 226 WAPT. 2" (COMPRESSION) 239L

தலைப்பு: கல்வி மற்றும் உயர்தொழில்நுட்பம்	பக்கம்: 5
------------------------------------------	-----------

1
2



MK. NO. 301-P 44 1220
 MK. NO. 301-N 96 2300

NYK NO. 301-N 96 R30C

APPROVED
E. Alan ...
DEPUTY EXECUTIVE ENGINEER
CHIEF ENGINEER
OHIO TURNPIKE COMMISSION

ADACHE - CUMI - LYNN ASSOC. CONSULTING ENGINEERS	
A. Approved as submitted	6-
B. Approved except as noted on drawings. Substitution, etc. required.	
C. Approved except as noted on drawings. Notes on attached sheet. Designer's sign required.	
D. Disapproved, see attached sheet.	
Approved sheets and copies retained by consultant for the retention of drawings. Permit the work, or any part thereof, by field staff work to proceed under the consultant's supervision.	
JAN 1964	
E.E.C. 3/ 1964	

[illegible]



(REF. NO. 76 OF COMPTONBACH TOWN)



(REF. NO. 15 10" STRIP DEAL)

STATION	TEMPERATURE OF							
DATE	30	40	50	60	70	80	90	
3'	21½	21½	2	17½	13½	18½	14½	
4'	25½	2½	2½	23½	2½	2½	2	
5'	27½	23½	23½	25½	25½	24½	23½	

ARACHE-CHUMI-LYNN ASSOC. CONSULTING ENGINEERS	
A. Approved as submitted	
B. Approved except as noted in drawings, specifications and conditions	
C. Approved subject to notes on drawings. Major or attached sheet. Reconsideration required.	
D. Unapproved, see attached sheet	
Approval does not imply liability of consultant or approval of responsibility for construction, proper design, safety of facility, or proper functioning of facilities in accordance with the contract requirements.	
JOB NO. 89051	
drawn by JAC	check 7/2/85

APPROVED

APR 4 1968
DEPUTY EXECUTIVE DIRECTOR
GASB EMPLOYEES

NOTE¹

PARTIAL SUBMITTAL

PIGUE FABRICATIONS AND STEEL COMPANY

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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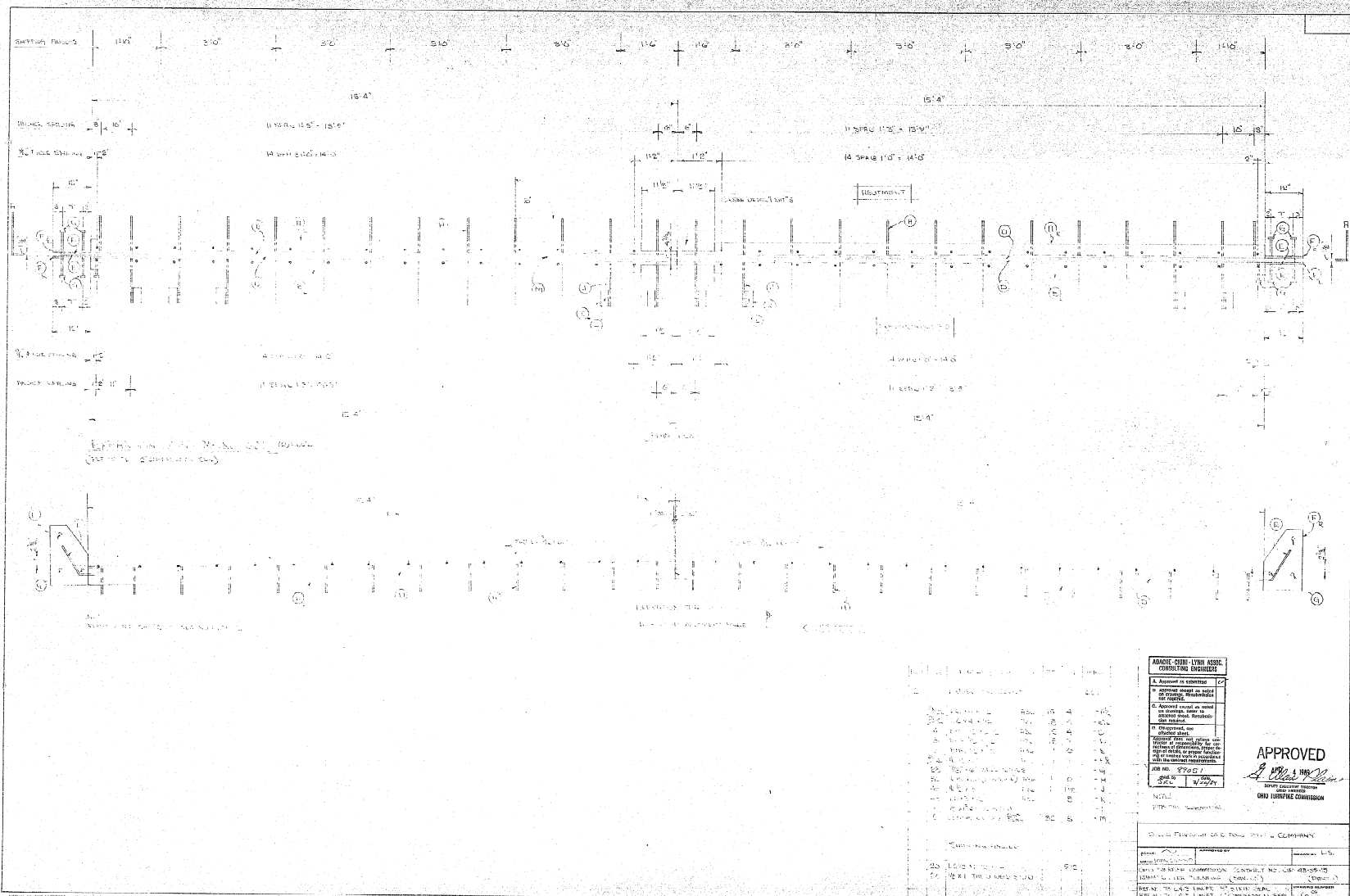
SCALE: 1/8" = 1'-0"	DATE: MAR 24 1987	REVISION: 1-1
---------------------	-------------------	---------------

OWN TURNPIKE COMMISSION CONTRACT NO. CAP 43-87-15
RIVER & OVER TURNPIKE (SIN. CO.) (PAGE 1)

REF. NO. 75 64.3 UNITS 3" STRIP SEAL

REF. NO. 16 643 WILLET. 1" COMPRESSION SEAL 5 OF

1. 2.

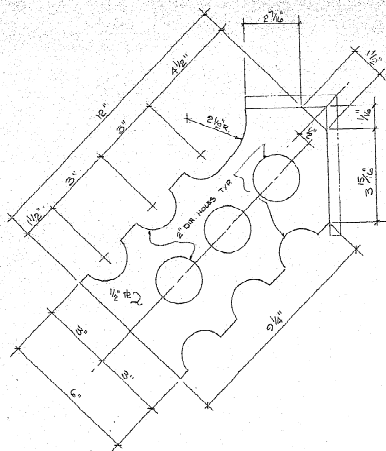


NO.	DESCRIPTION	QTY	UNIT	PRICE	TOTAL
1	CEILING	100	SQ. FT.	1.00	100.00
2	FLOOR	100	SQ. FT.	1.00	100.00
3	WALL	100	SQ. FT.	1.00	100.00
4	DOOR	10	EA.	10.00	100.00
5	WINDOW	10	EA.	10.00	100.00
6	STAIR	10	SQ. FT.	1.00	10.00
7	ROOF	100	SQ. FT.	1.00	100.00
8	FOUNDATION	100	SQ. FT.	1.00	100.00
9	MECHANICAL	100	SQ. FT.	1.00	100.00
10	ELECTRICAL	100	SQ. FT.	1.00	100.00
11	PLUMBING	100	SQ. FT.	1.00	100.00
12	PAINT	100	SQ. FT.	1.00	100.00
13	LANDSCAPE	100	SQ. FT.	1.00	100.00
14	INTERIOR	100	SQ. FT.	1.00	100.00
15	EXTERIOR	100	SQ. FT.	1.00	100.00
16	MECHANICAL	100	SQ. FT.	1.00	100.00
17	ELECTRICAL	100	SQ. FT.	1.00	100.00
18	PLUMBING	100	SQ. FT.	1.00	100.00
19	PAINT	100	SQ. FT.	1.00	100.00
20	LANDSCAPE	100	SQ. FT.	1.00	100.00

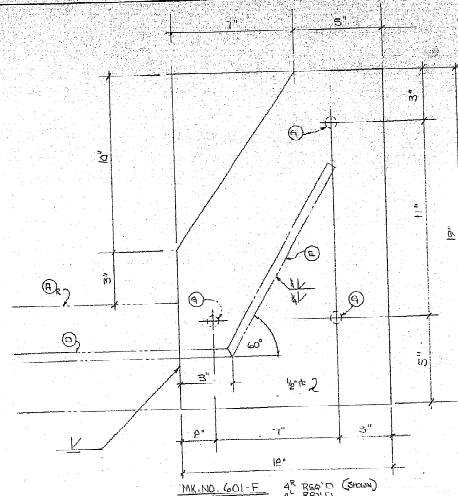
APPROVED
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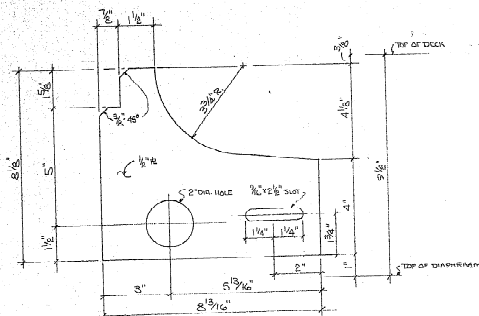
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MK NO. 601-H 52 REV'D

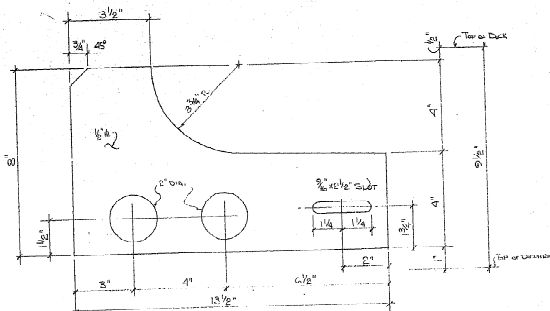


MK NO. 601-F 48 REV'D (Spec)



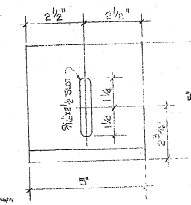
MK NO. 601-E (90) REV'D

NOTE: 601-E TO VERIFY DIMENSIONS LOCATED BEFORE FABRICATION.



MK NO. 601-J (90) REV'D

NOTE: 601-J TO VERIFY DIMENSIONS LOCATED BEFORE FABRICATION.



MK NO. 601-K 48 REV'D

NOTE: 601-K TO VERIFY DIMENSIONS LOCATED BEFORE FABRICATION.

APPROVED

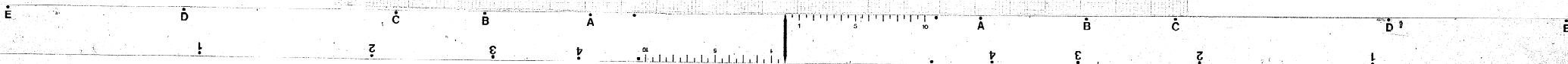
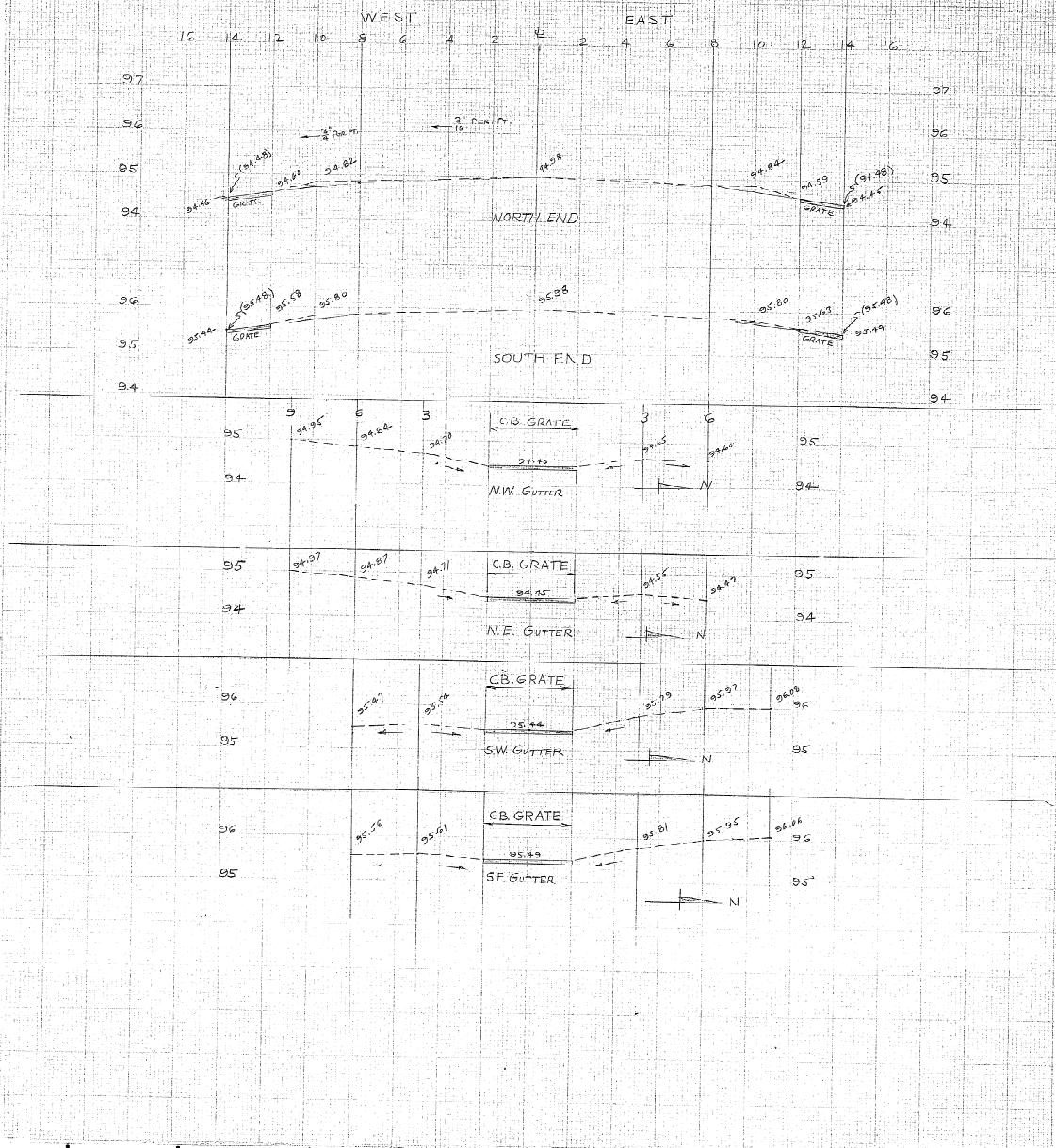
CHIEF ENGINEER

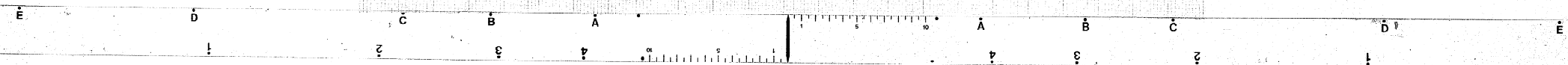
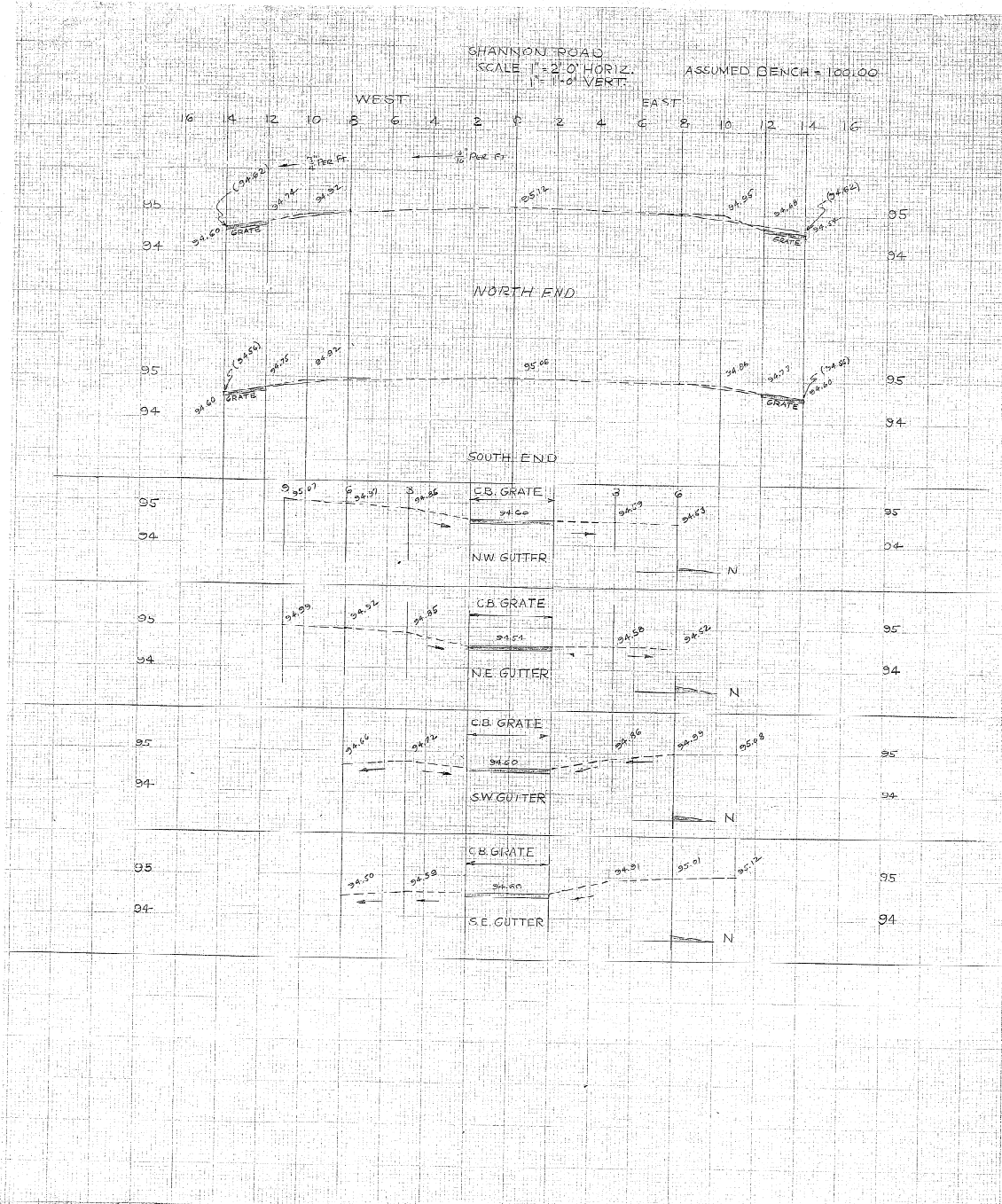
NO.	DATE	DESCRIPTION
1	10/1/54	ORIGINAL
2	10/1/54	REVISION
3	10/1/54	REVISION
4	10/1/54	REVISION
5	10/1/54	REVISION
6	10/1/54	REVISION
7	10/1/54	REVISION
8	10/1/54	REVISION
9	10/1/54	REVISION
10	10/1/54	REVISION

NO.	DATE	DESCRIPTION
1	10/1/54	ORIGINAL
2	10/1/54	REVISION
3	10/1/54	REVISION
4	10/1/54	REVISION
5	10/1/54	REVISION
6	10/1/54	REVISION
7	10/1/54	REVISION
8	10/1/54	REVISION
9	10/1/54	REVISION
10	10/1/54	REVISION

CARLEY ROAD
SCALE 1" = 20' HORIZ.
1" = 10' VERT.

ASSUMED BENCH = 100.00







CONTRACT NO. C-37
COUNTY - SANDUSKY
DATE:

OHIO TURNPIKE COMMISSION

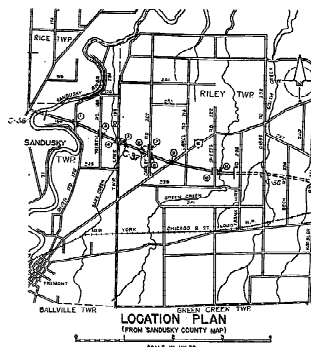
OHIO TURNPIKE PROJECT NO. 1

DESIGN SECTION D-12

CONTRACT NO. C-37

TURNPIKE CONSTRUCTION CONTRACT

STATION 557+52 TO STATION 770+00



APPROVAL RECOMMENDED
BROWN & BLAUVELT
CONTRACTING ENGINEER
Harold A. Blauvelt
Feb. 4, 1953

APPROVED
J. E. GREINER CO.
CONSULTING ENGINEER
J. E. Greiner
5-25-53

APPROVED
OHIO TURNPIKE COMMISSION
[Signature]
CHIEF ENGINEER 5-29-53



1 LIST OF DRAWINGS
2 GENERAL NOTES AND LEGEND
3 MAINTENANCE OF TRAFFIC MAP
4 SUMMARY OF ESTIMATES
5 PLAN AND PROFILE STA. 556+75 TO STA. 576+00
6 PLAN AND PROFILE STA. 576+00 TO STA. 604+00
7 PLAN AND PROFILE RIVER ROAD
8 PLAN AND PROFILE STA. 604+00 TO STA. 632+00
9 PLAN AND PROFILE WERTH ROAD
10 PLAN AND PROFILE STA. 632+00 TO STA. 659+00
11 PLAN AND PROFILE TOWNSHIP LINE ROAD
12 PLAN AND PROFILE STA. 659+00 TO STA. 687+00
13 PLAN AND PROFILE CARLEY ROAD
14 PLAN AND PROFILE STA. 687+00 TO STA. 712+00
15 PLAN AND PROFILE STA. 712+00 TO STA. 740+00
16 PLAN AND PROFILE STA. 740+00 TO STA. 767+00
17 PLAN AND PROFILE SHEETS ROAD
18 PLAN AND PROFILE STA. 767+00 TO STA. 770+00

STRUCTURE *1 RIVER ROAD OVER TURNPIKE
19 PLAN, ELEVATION AND SECTION
20 SUPERSTRUCTURE
21 ABUTMENT
22 PIERS

STRUCTURE *3 WERTH ROAD OVER TURNPIKE
23 PLAN, ELEVATION AND SECTION
24 SUPERSTRUCTURE
25 ABUTMENT
26 PIERS

STRUCTURE *4 TOWNSHIP LINE ROAD OVER TURNPIKE
27 PLAN, ELEVATION AND SECTION
28 SUPERSTRUCTURE
29 ABUTMENT
30 PIERS

STRUCTURE *5 TURNPIKE OVER BARK CREEK
31 PLAN, ELEVATION AND SECTION
32 SUPERSTRUCTURE
33 ABUTMENT
34 PIER

STRUCTURE *6 CULVERT
35 GENERAL PLAN AND DETAILS

STRUCTURE *7 CULVERT
36 GENERAL PLAN AND DETAILS

STRUCTURE *8 CARLEY ROAD OVER TURNPIKE
37 PLAN, ELEVATION AND SECTION
38 SUPERSTRUCTURE
39 ABUTMENT
40 PIERS

STRUCTURE *9 TURNPIKE OVER STATE ROUTE (U.S. 6)
41 PLAN, ELEVATION AND SECTION
42 SUPERSTRUCTURE
43 ABUTMENT
44 PIERS

STRUCTURE *10 SHEETS ROAD OVER TURNPIKE
45 PLAN, ELEVATION AND SECTION
46 SUPERSTRUCTURE
47 ABUTMENT
48 PIERS

STRUCTURE *11 TURNPIKE OVER GREEN CREEK
49 PLAN, ELEVATION AND SECTION

50 SUPERSTRUCTURE
51 ABUTMENT
52 PIERS

MISCELLANEOUS DETAILS
53 STRUCTURAL DETAILS
54 STRUCTURAL DETAILS
55 ARCHITECTURAL DETAILS
56 CROSSROAD AND DETOUR DETAILS
57 PAYMENT LINES AND SUPERELEVATION DETAILS

BORING LOGS

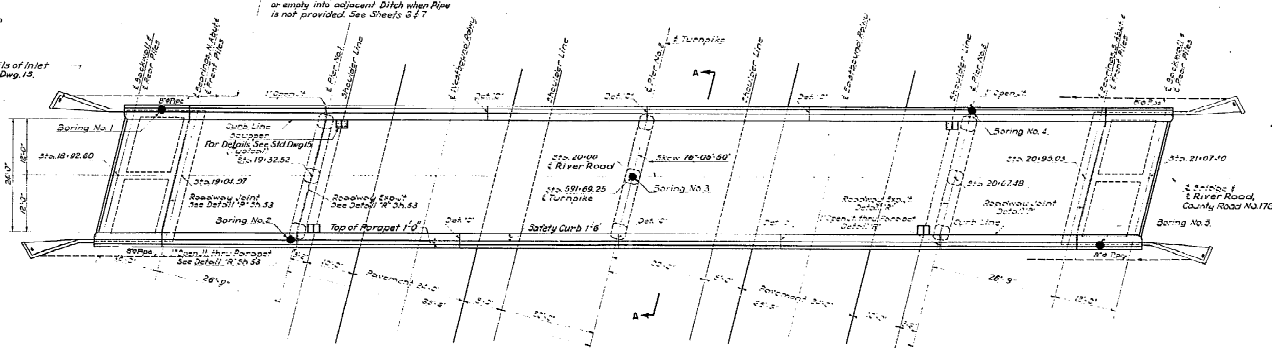
58 STRUCTURES *1,2,3,4
59 STRUCTURES *4 (CONCL.) 5,6,7,8,9
60 STRUCTURES *9 (CONCL.) 10,11

STANDARD DRAWINGS

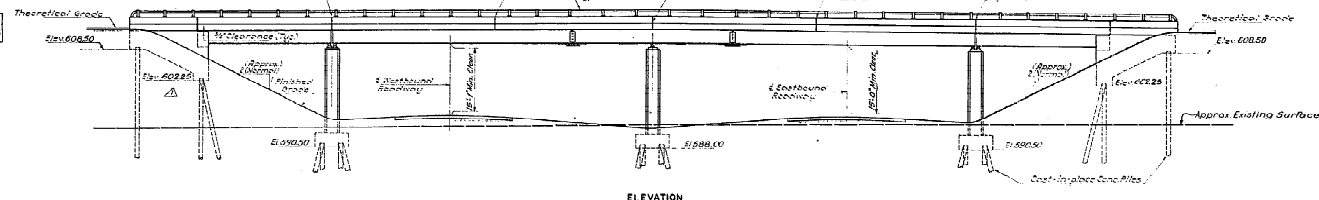
REV. DATE 5-6-53 1 TURNPIKE DITCH DETAILS
" " 1-20-53 2 STANDARD HEADWALLS FOR PIPE SIZES 48" AND UNDER
" " 1-20-53 3 STANDARD HEADWALLS FOR PIPE SIZES OVER 48"
" " 5-6-53 4 TYPICAL ROADWAY SECTIONS
" " 5-6-53 5 HANDRAIL DETAILS
" " 5-6-53 6 INLETS AND CURBS
" " 5-6-53 7 MANHOLES
" " 9-9-53 8 PAVEMENT REINFORCEMENT AND DETAILS
" " 2-7-53 9 TRANSVERSE PAVEMENT JOINTS TYPE A
" " 5-6-53 10 TRANSVERSE PAVEMENT JOINTS TYPE B
" " 12-31-52 11 PAVEMENT JOINT SPACING
" " 5-6-53 12 RIGHT OF WAY FENCE AND GATES
" " 5-6-53 13 RIGHT OF WAY INSTALLATION DETAILS
" " 5-6-53 14 PERMANENT BARRICADE, PERMANENT MONUMENT AND DELINEATORS
" " 4-27-53 15 DRAINAGE DETAILS FOR TURNPIKE OVERPASSES AND UNDERPASSES
" " 1-20-53 16 UNDERDRAINS
" " 1-24-53 17 GUARD RAILS TYPE A AND TYPE B
" " 5-6-53 18 GUARD RAILS TYPE C AND TYPE D
" " 12-5-52 19 AGRICULTURAL TILE DRAINAGE-TYPICAL DETAILS
" " 1-6-53 20 FLOOD GATES FOR RIGHT OF WAY FENCE
" " 1-23-53 21 TRANSVERSE PAVEMENT JOINTS -TYPE C
" " 2-19-53 22 CULVERT PIPE BEDDING AND BACKFILL

A.S. BUILT PLANS		6/50
REV.	REVISION	DATE
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE PROJECT NO. 1		
LIST OF DRAWINGS		
BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION 10-13		
DESIGNED BY	CHECKED BY	DATE
IN CHARGE	BY	DATE
CONTRACT NO. C-37		SHEET 1 OF 30

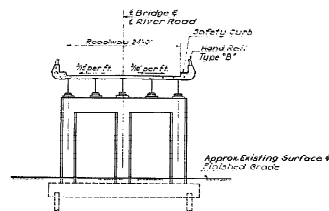
104M-12

For Details of Inlet
See Std. Dep. 13.Connect to Pipe under Abutment Fill
or empty into adjacent ditch when Pipe
is not provided. See Sheets 104M-11 & 13

PLAN

PVC 17+88
El. 600.66

ELEVATION



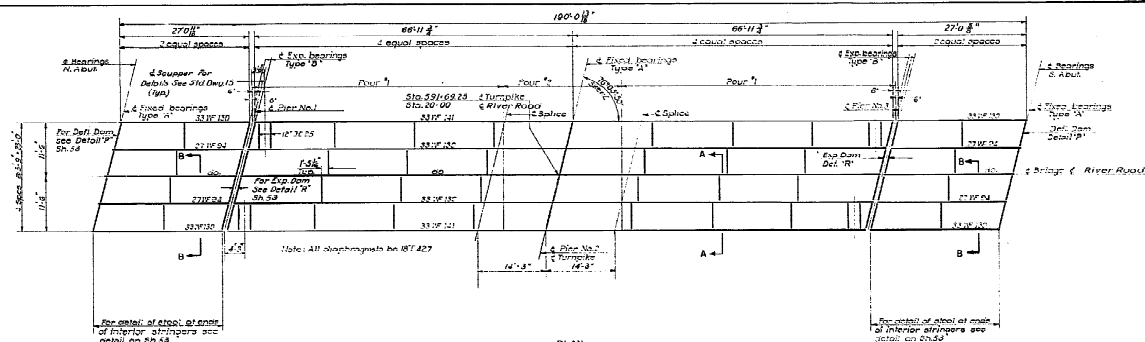
SECTION A-A

References:
For General Notes see Sheet No. 4
For Dimensions, Details, and Details
For Structural Details see Sheet No. 55
Design Frequency Loading, CP-30
For Bridge Log see Sheet No. 56

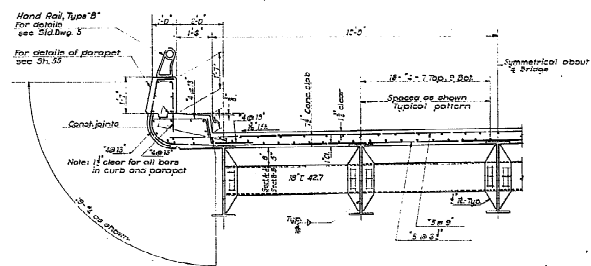
QUANTITIES		C.Y.		S.F.	
ITEM NO.	DESCRIPTION	AMOUNT	UNIT	AMOUNT	UNIT
1	Exc. for Widening	239	300.00'		
2	Exc. for Approach	183	183.72		
3	Exc. for Shoulder	141	141.61		
4	Exc. for Subgrade	71	71		
5	Exc. for Base	71	71		
6	Exc. for Pavement	71	71		
7	Exc. for Concrete	71	71		
8	Exc. for Bridge	71	71		
9	Exc. for Abutment	71	71		
10	Exc. for Pier	71	71		
11	Exc. for Retaining Wall	71	71		
12	Exc. for Ditch	71	71		
13	Exc. for Filling	71	71		
14	Exc. for Gravel	71	71		
15	Exc. for Sand	71	71		
16	Exc. for Clay	71	71		
17	Exc. for Rock	71	71		
18	Exc. for Limestone	71	71		
19	Exc. for Granite	71	71		
20	Exc. for Concrete	71	71		
21	Exc. for Steel	71	71		
22	Exc. for Wood	71	71		
23	Exc. for Brick	71	71		
24	Exc. for Mortar	71	71		
25	Exc. for Plaster	71	71		
26	Exc. for Paint	71	71		
27	Exc. for Oil	71	71		
28	Exc. for Gas	71	71		
29	Exc. for Water	71	71		
30	Exc. for Electricity	71	71		
31	Exc. for Telephone	71	71		
32	Exc. for Sewer	71	71		
33	Exc. for Gas	71	71		
34	Exc. for Water	71	71		
35	Exc. for Electricity	71	71		
36	Exc. for Telephone	71	71		
37	Exc. for Sewer	71	71		
38	Exc. for Gas	71	71		
39	Exc. for Water	71	71		
40	Exc. for Electricity	71	71		
41	Exc. for Telephone	71	71		
42	Exc. for Sewer	71	71		
43	Exc. for Gas	71	71		
44	Exc. for Water	71	71		
45	Exc. for Electricity	71	71		
46	Exc. for Telephone	71	71		
47	Exc. for Sewer	71	71		
48	Exc. for Gas	71	71		
49	Exc. for Water	71	71		
50	Exc. for Electricity	71	71		
51	Exc. for Telephone	71	71		
52	Exc. for Sewer	71	71		
53	Exc. for Gas	71	71		
54	Exc. for Water	71	71		
55	Exc. for Electricity	71	71		
56	Exc. for Telephone	71	71		
57	Exc. for Sewer	71	71		
58	Exc. for Gas	71	71		
59	Exc. for Water	71	71		
60	Exc. for Electricity	71	71		
61	Exc. for Telephone	71	71		
62	Exc. for Sewer	71	71		
63	Exc. for Gas	71	71		
64	Exc. for Water	71	71		
65	Exc. for Electricity	71	71		
66	Exc. for Telephone	71	71		
67	Exc. for Sewer	71	71		
68	Exc. for Gas	71	71		
69	Exc. for Water	71	71		
70	Exc. for Electricity	71	71		
71	Exc. for Telephone	71	71		
72	Exc. for Sewer	71	71		
73	Exc. for Gas	71	71		
74	Exc. for Water	71	71		
75	Exc. for Electricity	71	71		
76	Exc. for Telephone	71	71		
77	Exc. for Sewer	71	71		
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79	Exc. for Water	71	71		
80	Exc. for Electricity	71	71		
81	Exc. for Telephone	71	71		
82	Exc. for Sewer	71	71		
83	Exc. for Gas	71	71		
84	Exc. for Water	71	71		
85	Exc. for Electricity	71	71		
86	Exc. for Telephone	71	71		
87	Exc. for Sewer	71	71		
88	Exc. for Gas	71	71		
89	Exc. for Water	71	71		
90	Exc. for Electricity	71	71		
91	Exc. for Telephone	71	71		
92	Exc. for Sewer	71	71		
93	Exc. for Gas	71	71		
94	Exc. for Water	71	71		
95	Exc. for Electricity	71	71		
96	Exc. for Telephone	71	71		
97	Exc. for Sewer	71	71		
98	Exc. for Gas	71	71		
99	Exc. for Water	71	71		
100	Exc. for Electricity	71	71		

PVC 24+10
El. 600.66

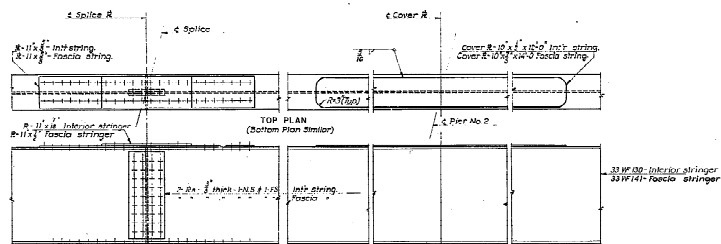
AS-BUILT PLANS		2440
1	As-Built Plans, Mr. Charnock	1/1/2000
OHIO TURNPIKE COMMISSION		
STRUCTURE NO. 1		
CO. ROAD 175 - RIVER ROAD		
PLAN, ELEVATION & SECTION		
BROWN & BLAUVELT		
CONSULTING ENGINEERS		
DESIGN SECTION 5-12		
DESIGNED BY: J. C. BROWN	CHECKED BY: J. C. BROWN	DATE: 10/1/2000
DRAWN BY: J. C. BROWN	IN CHARGE: J. C. BROWN	SCALE: 1"=40'
CONTRACT NO. C-57		SHEET 12 OF 60



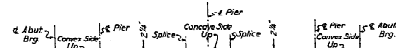
PLAN
Scale: 1/2" = 1'-0"



SECTION A-A
(Section B-B Similar except as noted)
Scale: 1/2" = 1'-0"



TYPICAL SPLICE & COVER PLATE
Scale: $\frac{1}{2}'' = 1'-0''$



CAMBER DIAGRAM
No Scale

References:
For General Notes see 30.2
For Sealing Details see 30.33
For detail and connections of end diaphragms see 30.53

AS BUILT PLANS

M/S	REVISION	BY	DATE
-----	----------	----	------

OHIO TURNPIKE COMMISSION OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 1 GO. ROAD 176 - RIVER ROAD SUPERSTRUCTURE..

SHOWN IN ALJWELT
CONTRACTING CORP.
DESIGN SECTION D-7E

DRAWN BY L.C.
C. WILSON

CONTRACT NO. C-37

SHEET NO. OF 60

iii

D

C

B

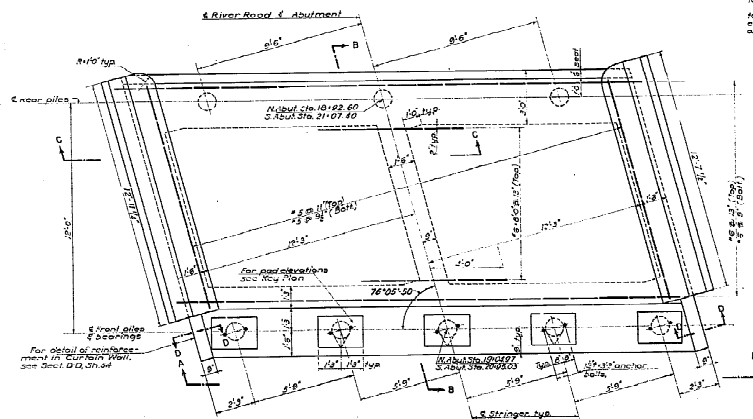
A

A

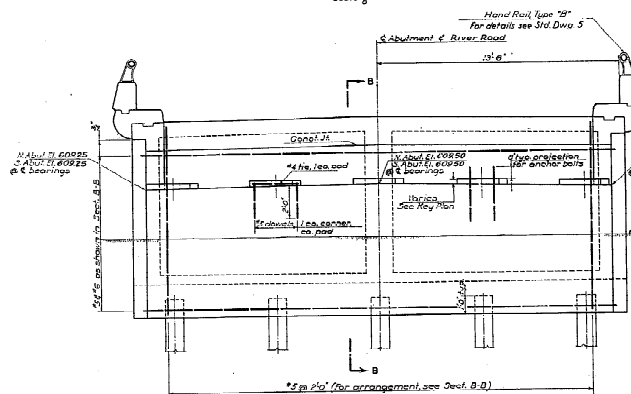
•
A

i

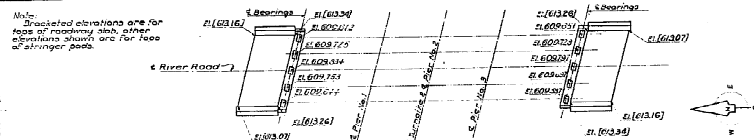
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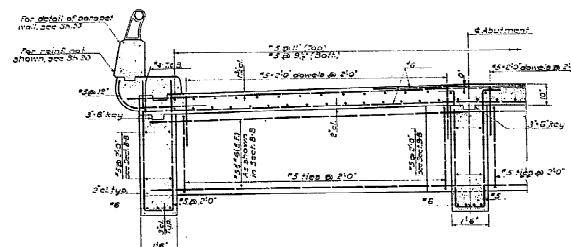
ABUTMENT PLAN
Scale: 1" = 1'-0"



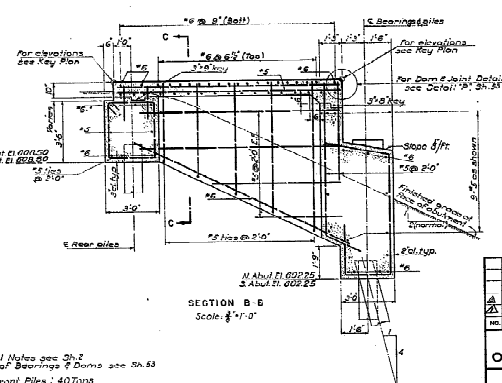
ELEVATION A-A
Scale: $\frac{3"}{8"} \times 1'0"$



KEY PLAN
No. 30012



SECTION C-C
Scale: $\frac{1}{2}'' = 1'-0''$



SECTION B-E
Scale: $\frac{3}{8}$ " = 1'-0"

References:
For General Notes see Sh.2
For Details of Bearings & Dams see Sh.53

Max Load Front Piles : 40 Tons
Max Load Rear Piles : 30 Tons

Estimated Average Length of Front Piles 60.35
Estimated Average Length of Rear Piles 66.17

All Piles to be Cast in Place Conc. Piles.

A	ELEVATIONS			11/1/78	11/1/78
NO.	REVISION		BY	DATE	

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 1

CO. ROAD 176 - RIVER ROAD

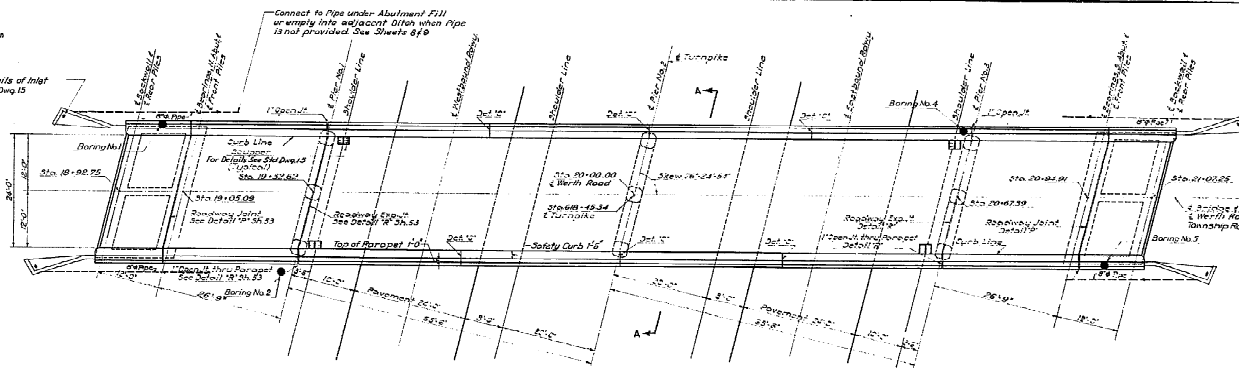
ABUTMENTS

BROWN & BLAUVELT
CONTRACTING ENGINEER
 DESIGN SECTION D-18

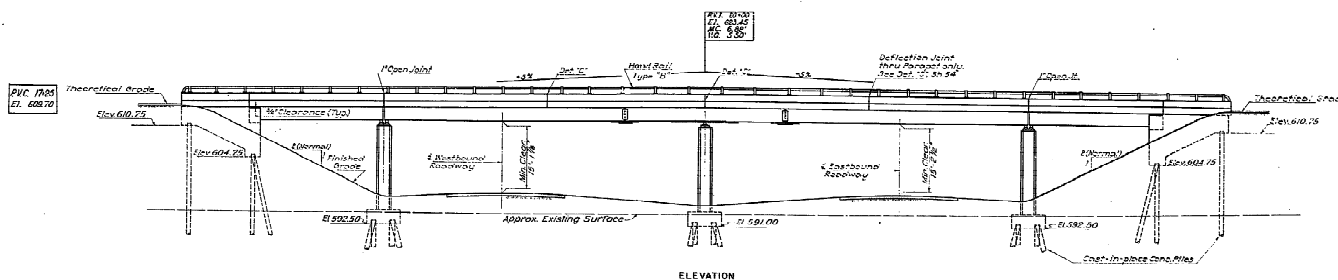
DRAWN BY: J. Gault CHECKED BY: W. Smith	REVISION: E2C IN CHARGE: D-18	DATE: 10/1/78 SCALE: AS SHOWN
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CONTRACT NO. C-37
SHEET 28 OF 30

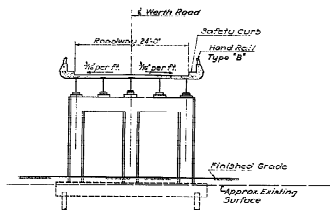
108 M-12

For Details of Inlet
See Sht. Eng. 15

PLAN



ELEVATION



SECTION A-A

References:
See General Notes and Sheet No. 1
For Drainage Details see Sht. Eng. 15
For Architectural Details see Sheet No. 15
Design frequency loading $CF=50$
For Boring Log see Sheet No. 98.

QUANTITIES				
REL. NO.	ITEM NO.	ITEM	LOCATION & REMARKS	ESTIMATED QUANTITY
11	11	Excavate and	61	283
12	12	Backfill	61	100.44
13	13	Concrete	61	132.25
14	14	Concrete	61	1.4
15	15	Concrete	61	10.28
16	16	Concrete	61	10.28
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99	99	Concrete	61	10.28
100	100	Concrete	61	10.28

AS-BUILT PLANS		BY	DATE
REVISION		BY	DATE
OHIO TURNPIKE COMMISSION			
STRUCTURE NO. 3			
TWP. ROAD 188 - WORTH ROAD			
PLAN, ELEVATION & SECTION			
BROWN & BLAUGLY			
CONTRACTOR ENGINEER			
DESIGN SECTION D-12			
DESIGNED BY	CHECKED BY	DATE	FILE
DR. J. R. BLAUGLY	DR. J. R. BLAUGLY	10/1/58	10/1/58
CONTRACT NO. C-37			
SHEET 23 OF 60			

OHIO TURNPIKE COMMISSION

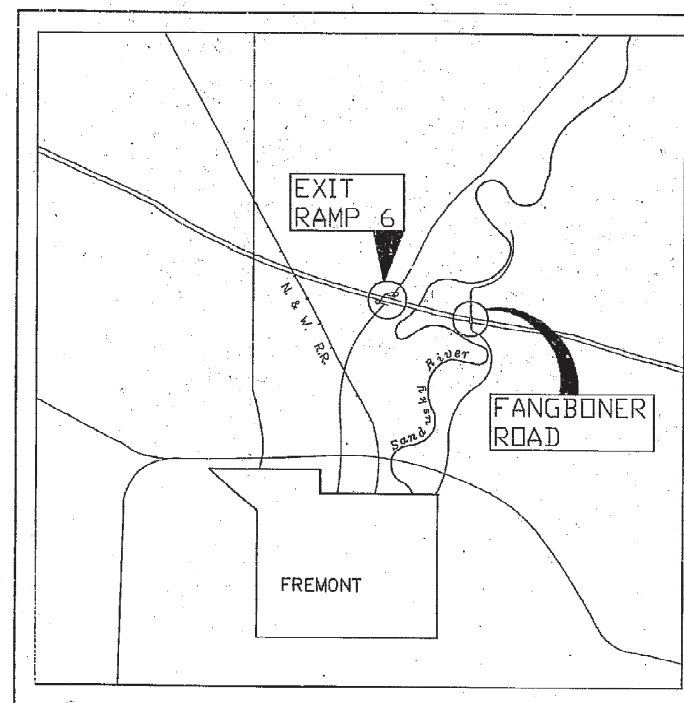
THE JAMES W. SHOCKNESSY OHIO TURNPIKE CONTRACT CIP 43-89-15 (PART 1) DECK REPLACEMENT TURNPIKE STRUCTURES

FANGBONER ROAD OVER THE OHIO TURNPIKE M.P. 91.1
EXIT 6 RAMP OVER THE OHIO TURNPIKE M.P. 91.6

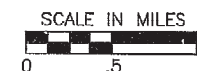
SANDUSKY COUNTY ORIGINAL CONTRACT SECTION C-39

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CHAIN LINK SAFETY FENCE	CL2A

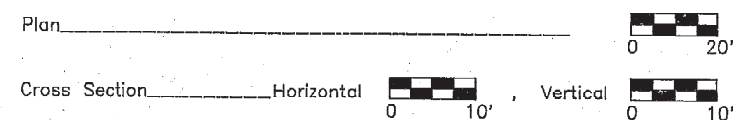


LOCATION MAP



Portion to be improved
Other Roads

SCALES



SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

BP-2	1-11-85	GR-1	1-11-85	BR-1	5-29-79
BP-3	12-6-76	GR-2B	2-5-82	TC 35.10	8-29-84
BP-4	10-1-87	GR-3	1-21-85		
BP-5	10-1-87	GR-4	2-5-82		
BP-7	10-1-87	MC-4	7-26-76		
F-1	11-10-83	MC-6	1-30-84	CB 3A	5-1-79

UNDERGROUND UTILITIES

2 WORKING DAYS
BEFORE YOU DIG
CALL 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

APPROVED FOR
THE OHIO TURNPIKE COMMISSION
BY
Pierre F. O'Hare
CHIEF ENGINEER
2-13-89
DATE

NOTE:
THIS CONTRACT IS COMBINED
WITH CONTRACT CIP 43-89-15
PART 2 TO FORM A SINGLE
CONSTRUCTION CONTRACT.

PLANS PREPARED BY:

WOOLPERT
CONSULTANTS
400 SOUTH FIFTH STREET
COLUMBUS, OHIO 43215-5437



Pierre F. O'Hare 12/21/89
Pierre F. O'Hare, P.E.

△-REVISED TO AS BUILT W.E.B. 1-2-90

OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

CONTRACT CIP 43-89-15 - PART 2 REPLACEMENT OF BRIDGE DECKS

EXIT 6 RAMP OVER S.R. 53 (MP 92.0)
SHANNON ROAD OVER OHIO TURNPIKE (MP 93.0)
CARLEY ROAD OVER OHIO TURNPIKE (MP 94.7)

SANDUSKY COUNTY

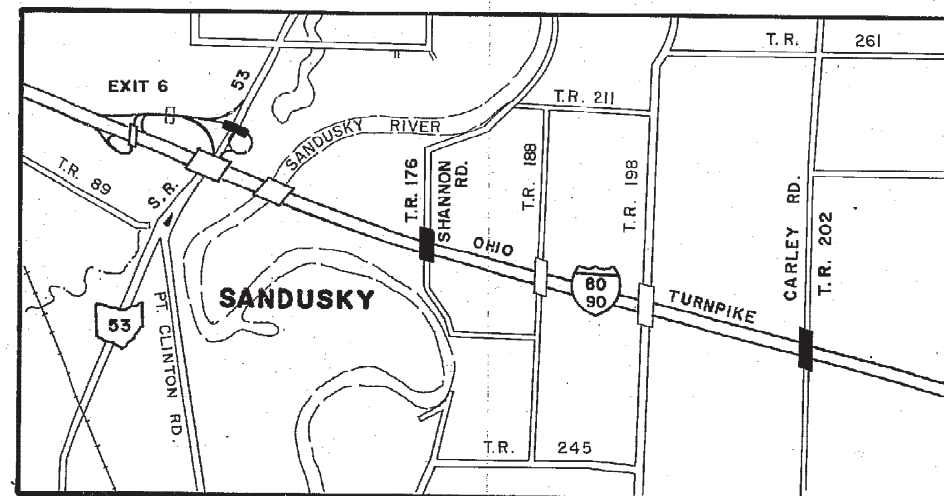
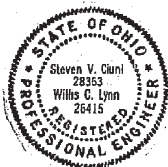
ORIGINAL CONTRACT SECTIONS C-37 AND C-39

STANDARD CONSTRUCTION DRAWINGS OHIO DEPARTMENT OF TRANSPORTATION

DRAWING NO.	DATE
BP - 2	1- 11- 85
BP - 3	12- 6- 76
BP - 4	10- 1- 87
BP - 5	10- 1- 87
BP - 7	10- 1- 87
CB - 3A	5- 1- 79
GR - 1	1- 11- 85
GR - 2B	2- 5- 82
GR - 3	1- 21- 85
GR - 4	2- 5- 82
F - 1	11- 10- 83
TC - 35.10	8- 29- 84
BR - 1	5- 29- 79
MC - 6	1- 30- 84

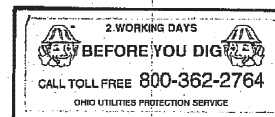
PREPARED BY:

adache-ciuni-lynn associates
CONSULTING ENGINEERS & SURVEYORS
4401 ROCKSIDE RD.
CLEVELAND, OHIO 44131



LOCATION MAP

(N.T.S.)



NOTE:

THIS CONTRACT IS COMBINED
WITH CONTRACT CIP 43-89-15
PART 1 TO FORM A SINGLE
CONSTRUCTION CONTRACT.

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APPROVED FOR:

THE OHIO TURNPIKE COMMISSION

BY *William Plam* DATE *2-13-89*

PROPOSED WORK

THE *EXIT 6* RAMP BRIDGE OVER STATE ROUTE 53 AND THE SHANNON ROAD BRIDGE AND CARLEY ROAD BRIDGE OVER THE OHIO TURNPIKE WILL BE REHABILITATED UNDER THIS CONTRACT. MAJOR WORK TO BE PERFORMED CONSISTS OF:

- 1.) REPLACING THE BRIDGE DECKS AND ABUTMENT ROADWAY SLABS, APPROACH SLABS AND DECK JOINTS WITH NEW REINFORCED CONCRETE DECKS, ABUTMENT SLABS, APPROACH SLABS, SEALED DECK JOINTS AND SAFETY BARRIERS.
- 2.) REPAIRING THE EXISTING CONCRETE ABUTMENTS AND PIERS BY PATCHING THE DETERIORATED SECTIONS WITH CONCRETE.
- 3.) ROADWAY IMPROVEMENTS INCLUDING RELOCATING/REPLACING GUARDRAIL, REPLACING PAVEMENT JOINTS, REPLACING PORTIONS OF EXISTING PAVEMENT AND RELOCATING/REPLACING DRAINAGE ITEMS. DETAILS OF THIS WORK ARE SHOWN ON THE PLANS.

CONSTRUCTION SEQUENCE

THE CONTRACTOR SHALL CONFORM TO THE SEQUENCING OF CONSTRUCTION OPERATIONS IN THE CONSTRUCTION OF THESE BRIDGE PROJECTS.

- 1.) SHANNON AND CARLEY ROADS SHALL BE CLOSED FOR THE DURATION OF THE PROJECT. DETAILS OF SIGNING, BARRICADING AND TEMPORARY FENCE ARE SHOWN ON THE PLANS.
- 2.) EXIT 6 RAMP OVER S.R. 53 SHALL BE CONSTRUCTED IN TWO (2) PHASES. ALL WORK SHALL BE COORDINATED WITH THE MAINTENANCE OF TRAFFIC DETAILS SHOWN IN THE PLANS. ALL PROVISIONS FOR SAFETY MUST BE IN PLACE PRIOR TO ANY DEMOLITION OR CONSTRUCTION WORK COMMENCEMENT.
- 3.) THE SEQUENCE OF CONCRETE PLACEMENT SHALL BE AS SPECIFIED AND INDICATED ON THE DRAWINGS.
- 4.) NO CHANGES IN THE SEQUENCING OF CONSTRUCTION OPERATIONS SHALL BE PERMITTED WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE *ENGINEER*. OBTAINED NO LATER THAN 48 HOURS IN ADVANCE OF THE PROPOSED CHANGE.

ELEVATION DATA

ALL ELEVATIONS SHOWN ON THESE PLANS ARE BASED ON THE U.S. GEODETIC SURVEY AND ARE IN FEET ABOVE SEA LEVEL.

CATCH BASIN AND SLOPE DRAIN

WHERE PLANS PROVIDE FOR NEW CATCH BASIN AND SLOPE DRAIN, ALL WORK SHALL BE IN ACCORDANCE WITH DETAILS SHOWN. IN ADDITION, 4 FT. X 4 FT. X 1.5 FT. THICK OF ROCK CHANNEL PROTECTION TYPE C, WITHOUT FILTER SHALL BE INSTALLED. PAYMENT SHALL BE ACCORDING TO THE UNIT PRICES BID FOR THE PERTINENT ITEMS.

UTILITIES NOTIFICATION

AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE REGISTERED UTILITY PROTECTION SERVICE, TOLL FREE 1-800-362-2764, AND THE OWNERS OF EACH UNDERGROUND UTILITY SHOWN IN THE PLANS.

THE OWNER OF THE UNDERGROUND UTILITY FACILITY SHALL, WITHIN FORTY-EIGHT (48) HOURS, EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, AFTER NOTICE IS RECEIVED, STAKE, MARK OR OTHERWISE IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO (2) DAYS AHEAD OF THE PLANNED CONSTRUCTION.

UNDERGROUND UTILITIES

THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC.

OHIO EDISON 6326 LAKE AVENUE ELYRIA, OHIO 44035 TELEPHONE: (216) 324-5431	COLUMBIA GAS OF OHIO 827 WALNUT STREET ELYRIA, OHIO 44035 TELEPHONE: (216) 323-5551
OHIO BELL TELEPHONE TOLEDO, OHIO TELEPHONE: (419) 245-7304 ATTN: MR. MARK HYLTON	TOLEDO EDISON 2600 W. SANDUSKY U.S. 20 LINDSEY, OHIO 43442 TELEPHONE: 1-(800)-533-2600 ATTN: TIM SHIARLA

LITEL TELECOMMUNICATIONS CORPORATION, FIBER OPTIC CABLE APPROXIMATELY 10 FEET NORTH OF CENTERLINE OF OHIO TURNPIKE IS LOCATED A FIBER OPTIC CABLE. EXTREME CARE MUST BE TAKEN BY THE CONTRACTOR TO PRESERVE AND PROTECT THIS CABLE DURING ALL PHASES OF CONSTRUCTION. ANY EXCAVATION IN THIS AREA FOR ANY REASON SHALL NOT BE PERFORMED WITHOUT LITEL FIRST LOCATING THE CABLE. AFTER THE CABLE HAS BEEN LOCATED BY LITEL, THE CONTRACTOR SHALL EXCAVATE TO WITHIN 12 INCHES OF THE CABLE DEPTH AS PROVIDED. LITEL REPRESENTATIVES WILL THEN HAND DIG TO EXPOSE THE CABLE.

LITEL CORPORATION SHALL BE NOTIFIED A MINIMUM OF TWO DAYS PRIOR TO ANY EXCAVATION OVER THEIR LINES AND/OR LOCATING THE CABLE.

THE FOLLOWING SHALL BE CONTACTED FOR LOCATING THE CABLE:

JAYAROM BORAIHA
OFFICE: (419) 884-0400
HOME: (419) 756-6773

CONTRACT NO. C.I.P. 43-89-15 PART 2					
OHIO TURNPIKE COMMISSION					
OHIO TURNPIKE					
adoche ciuni lynn associates CONSULTING ENGINEERS					
GENERAL NOTES (ROADWAY)					
DESIGNED J.R.C.	DRAWN G.A.B.	CHECKED R.J.M.	REVIEWED R.D.H.	DATE 2-7-89	REVISED

DESIGN SPECIFICATIONS:

THESE STRUCTURES CONFORM TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983, INCLUDING INTERIM SPECIFICATIONS THRU 1988, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN LOADING:

EXIT 6 RAMP OVER S.R. 53: HS20-44 CASE I, THE ALTERNATE MILITARY LOADING, AND A 30 P.S.F. FUTURE WEARING SURFACE.

SHANNON/CARLEY ROAD OVER THE OHIO TURNPIKE: HS20-44 CASE II, AND NO PROVISIONS FOR A FUTURE WEARING SURFACE.

DESIGN STRESSES:

- CONCRETE CLASS S - COMPRESSIVE STRENGTH 4500 P.S.I.
- CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 P.S.I.
- REINFORCING STEEL - ASTM A615, A616, A617
- GRADE 60 MINIMUM YIELD STRENGTH 60,000 P.S.I.
- EXISTING STRUCTURAL STEEL ASTM A7 (ASSUMED) - YIELD STRENGTH 33,000 P.S.I.

DECK PROTECTION METHOD FOR ABUTMENT SLAB AND SUPERSTRUCTURE DECK IS EPOXY COATED REINFORCING STEEL IN TOP AND BOTTOM MATS AND CONCRETE WEATHERPROOFING SEALER ON TOP SURFACE.

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1/2" THICK.

MATERIALS:

- 1) WELDED SHEAR STUD CONNECTORS: SHALL CONFORM TO AASHTO M169 AND SP513.

EXISTING STRUCTURE PLANS:

THE ORIGINAL DESIGN PLANS MAY BE EXAMINED BY PROSPECTIVE BIDDERS AT THE COMMISSION'S PRINCIPLE OFFICE, 682 PROSPECT STREET, BEREA, OHIO. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE DRAWINGS.

EXISTING STRUCTURE VERIFICATIONS:

DETAILS AND DIMENSIIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTION 513.02 AND O.T.C. GENERAL CONDITIONS G-2.04 AND G-5.02.

CONTRACT BID PRICES SHALL BE BASED UPON RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS, DIMENSIONS, ELEVATIONS, AND SKEW ANGLES WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD. THE STRUCTURAL STEEL AND STRUCTURAL STEEL DECK JOINTS SHALL NOT BE FABRICATED UNTIL THE ACTUAL DETAILS, DIMENSIONS, ELEVATIONS, AND SKEW ANGLES HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

ANY ADDITIONAL COST RESULTING FROM VARIATIONS FROM PLAN DIMENSIONS IS THE RESPONSIBILITY OF THE CONTRACTION AND NO ADDITIONAL PAYMENT OVER THE UNIT PRICE BID WILL BE AWARDED BY THE COMMISSION.

DIMENSIONS: GIVEN ARE MEASURED HORIZONTALLY AND AT 60 DEGREES FAHRENHEIT, UNLESS OTHERWISE NOTED.

REPLACEMENT OF EXISTING REINFORCING STEEL:

ANY EXISTING REINFORCING BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND WHICH ARE MADE UNUSABLE BY THE CONTRACTOR'S CONCRETE REMOVAL OPERATIONS SHALL BE REPLACED WITH NEW STEEL AT HIS COST. ANY EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION SHALL BE REPLACED WITH NEW STEEL.

DRILLING DOWEL HOLES, FURNISHING AND PLACING SP 956 NONSHRINKING EPOXY MORTAR, AND REINFORCING BAR DOWELS, WHERE NEEDED TO REPLACE EXISTING REINFORCEMENT DAMAGED BY THE CONTRACTOR, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

ITEM SP 536 CONCRETE WEATHERPROOFING SHALL BE APPLIED TO THE FOLLOWING EXPOSED CONCRETE

SURFACES OF THE BRIDGE:

- THE TOPS OF ABUTMENT AND SUPERSTRUCTURE SLABS.
- ALL PARAPET SURFACES AND SLAB SIDE EDGES.
- THE BOTTOM SURFACE OF THE SUPERSTRUCTURE SLAB FROM THE SLAB SIDE EDGE TO THE EXTERIOR STRINGER FLANGE.
- APPROACH SLABS.
- NEW EXPOSED CONCRETE SURFACES OF ALL ABUTMENTS AND PIERS. SEALING SHALL NOT BE DONE UNTIL ANY CONCRETE PATCHING REPAIRS HAVE BEEN COMPLETED AND CURED.

CARE SHALL BE TAKEN NOT TO APPLY WEATHERPROOFING ON CONSTRUCTION JOINT SURFACES, SURFACES TO RECEIVE JOINT SEALER, AND FASCIA BEAM PAINT.

CONCRETE INSERT ASSEMBLIES, AS SHOWN ON STANDARD CONSTRUCTION DRAWING GR-1 AND GR-3, SHALL BE PROVIDED AT ALL WINGWALL TERMINALS FOR ATTACHMENT OF GUARDRAIL TERMINAL CONNECTORS. INCLUDE WITH ITEM SP 511 FOR PAYMENT.

PATCHING CONCRETE STRUCTURES:

A CONTINGENCY OF SP 519 PATCHING CONCRETE STRUCTURES HAS BEEN INCLUDED ON EACH OF THE STRUCTURE'S SUMMARY OF QUANTITIES FOR USE AS DIRECTED BY THE ENGINEER.

ABUTMENT BACKFILL:

THE CONTRACTOR SHALL PROVIDE AND PLACE BACKFILL BETWEEN EXISTING WINGWALLS AS REQUIRED TO BRING THE FILL TO THE LEVEL OF THE PROPOSED SLAB PRIOR TO PLACING THE NEW DECK SLAB. INCLUDE WITH ITEM 503, ABUTMENT BACKFILL, AS PER 503.10 FOR PAYMENT.

EPOXY BONDING COMPOUND:

EPOXY BONDING COMPOUND (SP 526) SHALL BE PLACED ON THE SURFACE AREA OF EXISTING CONCRETE WHICH WILL BE IN CONTACT WITH THE NEW CONCRETE. PRICE INCLUDED IN THE CONTRACT BID PRICE FOR THE PERTINENT CONCRETE ITEMS.

BRIDGE DECK ELEVATIONS, SLAB THICKNESS, AND APPROACH PROFILES:

IN ORDER TO MEET ROADWAY GRADES, TO ASSURE THE CONSTRUCTION OF THE REQUIRED THICKNESS OF DECK SLABS, AND TO ASSURE THE PROPER LOCATION OF THE REINFORCING STEEL, IN THE DECK SLABS; THE CONTRACTOR SHALL OBTAIN THE ELEVATIONS OF THE TOP OF EXISTING STEEL BEAMS, AFTER THE COMPLETE REMVOAL OF THE EXISTING DECK SLAB, AT THE LOCATIONS SHOWN IN THE TABLE ON SHEET 30 OF 43 (FOR EXIT 6 RAMP BRIDGE) AND 41 OF 43 FOR (SHANNON AND CARLEY ROAD BRIDGES) FOR THE FINAL PAVEMENT ELEVATIONS. THE CONTRACTOR SHALL COMPUTE THE DECK SCREED ELEVATIONS UTILIZING THE DEAD LOAD DEFLECTIONS. THEN, THE CONTRACTOR SHALL CALCULATE THE DECK THICKNESS OVER THE BEAMS USING THE DECK SCREED ELEVATIONS AND THE TOP OF BEAM ELEVATIONS. IF THE COMPUTED DECK THICKNESS IS FOUND TO BE LESS THAN A MINIMUM THICKNESS REQUIRED, THE FINAL PAVEMENT ELEVATIONS SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER.

THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON 8 1/2" THICK (EXIT 6 RAMP BRIDGE) AND 8" THICK (SHANNON/CARLEY ROAD BRIDGES) CONCRETE OUTSIDE THE HAUNCH AREAS, AND THE AVERAGE THICKNESS OF CONCRETE PLACED OVER THE EXISTING BEAMS AT THE HAUNCHES. A TYPICAL HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING THE QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 8" AND 12" PROVIDED THAT THE SLOPE SHALL NOT BE MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.

PLACEMENT OF THE ABUTMENT SLAB PRIOR TO THE DECK SLAB WILL NOT BE PERMITTED. HOWEVER, THE ABUTMENT SLAB AND THE DECK SLAB MAY BE POURED AT THE SAME TIME. UPON THE COMPLETION OF THESE POURS AND PRIOR TO POURING THE CONCRETE APPROACH SLABS, THE ENGINEER WILL PROVIDE THE CONTRACTOR WITH FINISH GRADES AND ELEVATIONS REQUIRED TO PROVIDE A SMOOTH TRANSITION FROM THE ASPHALT ROADWAY AND APPROACH SLABS TO THE CONCRETE ABUTMENT AND DECK SLABS.

IN ORDER TO PROVIDE A SMOOTH TRANSITION FROM THE EXISTING PAVEMENT TO THE NEW BRIDGE DECK, THE ENGINEER SHALL PROVIDE THE CONTRACTOR WITH FINISH PAVEMENT ELEVATIONS. UPON COMPLETION OF THE ABUTMENT AND DECK SLABS, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER ELEVATIONS OF THE EXISTING SURFACE ALONG THE CENTERLINE AND BOTH EDGES OF PAVEMENT AT 25' INTERVALS. ELEVATIONS OF THE NEW BRIDGE SLABS, AND THE EXISTING PAVEMENT FOR A DISTANCE 100' BEYOND THE PAVING LIMITS SHALL ALSO BE PROVIDED. UPON RECEIPT OF THESE ELEVATIONS, THE ENGINEER WILL CALCULATE AND PROVIDE THE CONTRACTOR FINAL ELEVATIONS FOR THE CONCRETE APPROACH SLABS AND FOR THE APPROACH PAVEMENT. NO APPROACH SLABS SHALL BE POURED NOR SHALL APPROACH PAVING COMMENCE UNTIL THE CONTRACTOR RECEIVES THE FINAL PAVEMENT ELEVATIONS FROM THE ENGINEER.

PAYMENT FOR THE ABOVE MENTIONED WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM SP 623 - CONSTRUCTION LAYOUT SURVEY.

CONTINGENCY QUANTITIES:

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE ESTIMATED QUANTITIES FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

EPOXY COATED REINFORCING STEEL SUPPORT:

IN ACCORDANCE WITH THE REQUIREMENTS OF SP 824 AND 509.09, THE TOP AND BOTTOM MATS OF ALL LONGITUDINAL AND TRANSVERSE EPOXY COATED REINFORCING STEEL SHALL BE SUPPORTED BY APPROVED EPOXY COATED DEVICES WITH SPACING NOT EXCEEDING 3' - 0" CENTERS IN EACH DIRECTION. BROKEN CONCRETE, BRICK, ETC. SHALL NOT BE USED FOR SUPPORT OF EPOXY COATED REINFORCING STEEL. SUPPORTING DEVICES SHALL BE INCIDENTAL TO ITEM SP 824.

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN:

AS A CONTINGENCY, 10 CU. YD. OF UNCLASSIFIED EXCAVATION HAS BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR EACH BRIDGE FOR EXPOSING AND SUBSEQUENTLY BACKFILLING PORTIONS OF EXISTING PIER COLUMNS, WHERE CONCRETE PATCHING MAY EXTEND BELOW GRADE, AS DIRECTED BY THE ENGINEER. ALL APPLICABLE PROVISIONS OF ITEM 503 SHALL APPLY, EXCEPT THAT THE METHOD OF MEASUREMENT SHALL BE TO THE LIMITS SHOWN ON THE PLAN. THE COST FOR ALL LABOR, EQUIPMENT, AND MATERIALS TO PERFORM THE ABOVE WORK SHALL BE INCLUDED IN THE CUBIC YARD PRICE BID FOR ITEM 503 UNCLASSIFIED EXCAVATION, AS PER PLAN.

PORTIONS OF STRUCTURES REMOVED SHALL INCLUDE SCUPPERS, DOWNSPOUTS, SPLASH PLATES, SCUPPER SUPPORTS, EXPANSION JOINTS AND THE FOLLOWING APPROXIMATE QUANTITIES:

	UNIT	EXIT 6 RAMP	SHANNON ROAD	CARLEY ROAD
SUPERSTRUCTURE CONCRETE	C.Y.	160	180	180
ABUTMENT SLAB CONCRETE	C.Y.	23	30	30
RAILING	L.F.	335	435	435

CONTRACT NO. C.I.P. 43-89-15 - PART 2

OHIO TURNPIKE COMMISSION

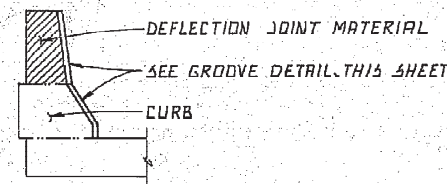
OHIO TURNPIKE

adache ciumi lynn associates

CONSULTING ENGINEERS

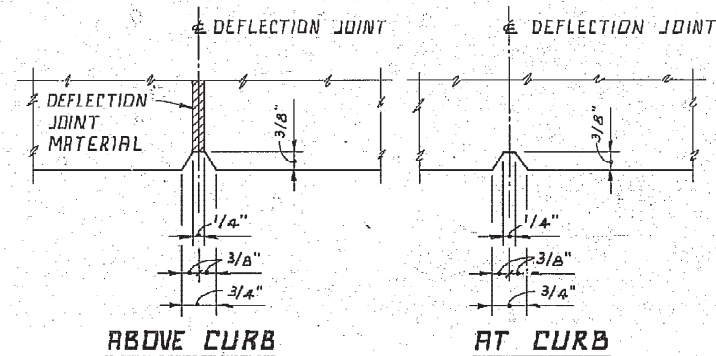
GENERAL NOTES
(BRIDGE)

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
J.R.C.	B.S.B.	R.J.M.	R.D.H.	2-7-89	

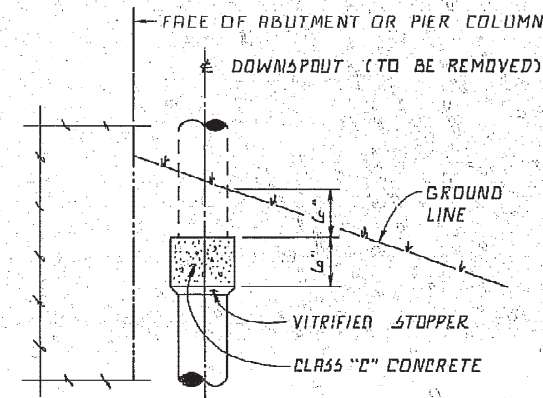


DEFLECTION JOINT DETAIL

DEFLECTION JOINT MATERIAL IN THE PARAPET SHALL BE EITHER 1/4" GRAY SPONGE RUBBER OR 1/4" GRAY CELLULAR POLYVINYL CHLORIDE (P.V.C.) SPONGE. EITHER MATERIAL SHALL MEET THE REQUIREMENTS OF ASTM M-153, TYPE I, EXCEPT THE DENSITY OF THE P.V.C. SPONGE SHALL NOT BE LESS THAN 20 LBS. PER CUBIC FOOT.

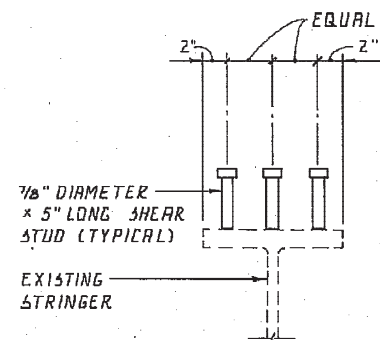


GROOVE DETAIL

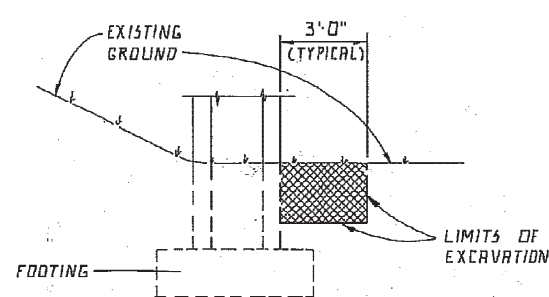


DRAIN PIPE CAP DETAIL

(INCLUDE WITH ITEM SP202 PORTIONS OF STRUCTURES REMOVED FOR PAYMENT).



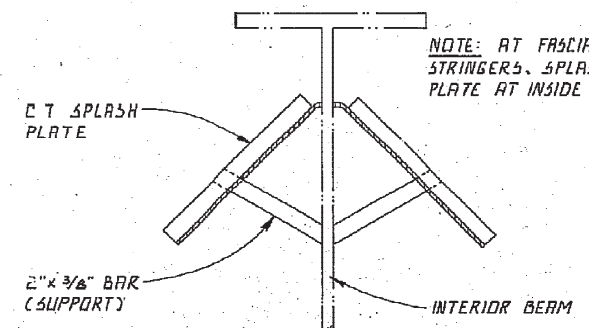
SHEAR STUD DETAIL



EXCAVATION LIMITS FOR UNCLASSIFIED EXCAVATION

AS PER PLAN

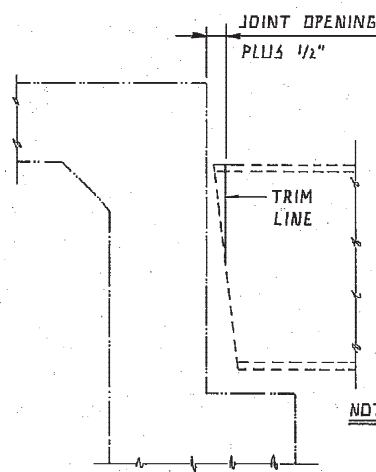
(AT REPAIR OF PIER COLUMNS)



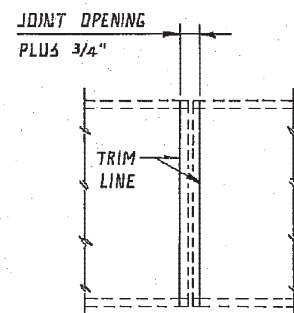
SPLASH PLATE REMOVAL DETAIL

AT JOINTS OVER PIERS

- 1) REMOVE SPLASH PLATE AND BAR SUPPORT
- 2) GRIND STRINGER WEB SMOOTH
- 3) PAINT AS DIRECTED UNDER ITEM SP514 - "FIELD PAINTING OF EXISTING STRUCTURAL STEEL."



AT ABUTMENTS

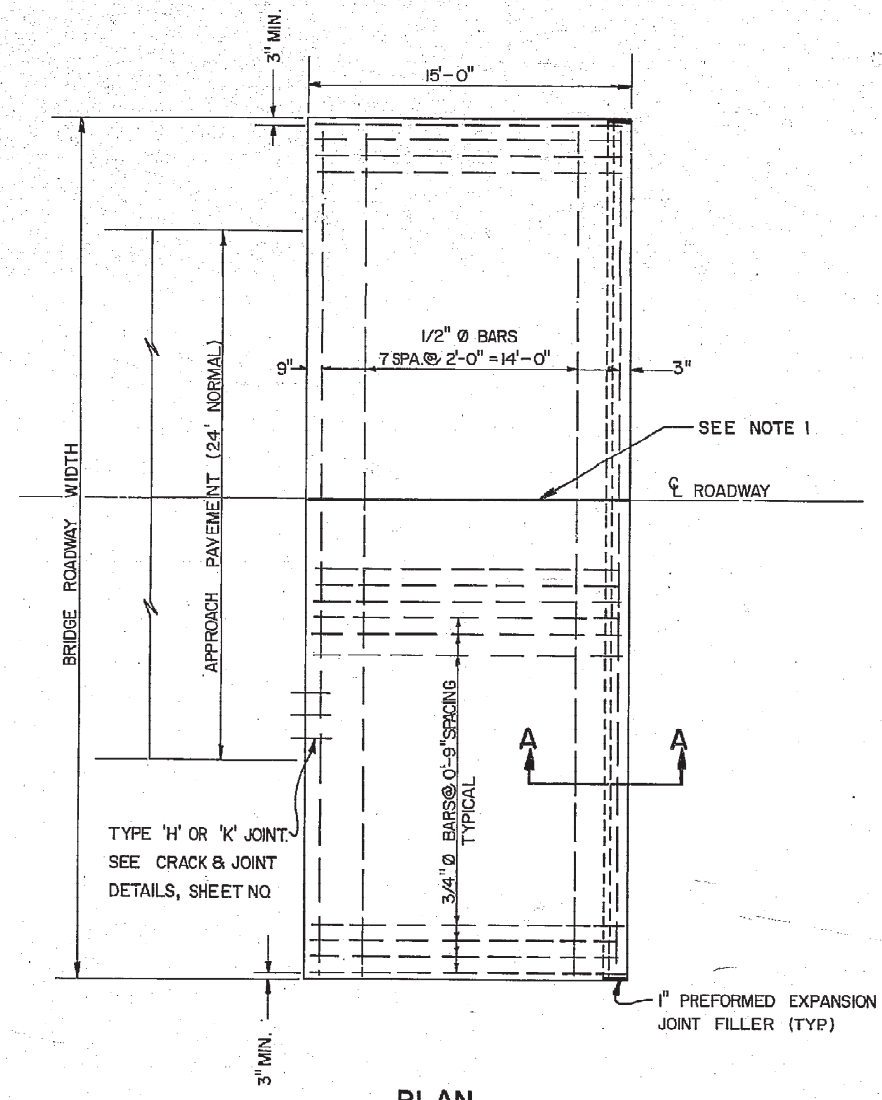


AT PIERS WITH JOINTS

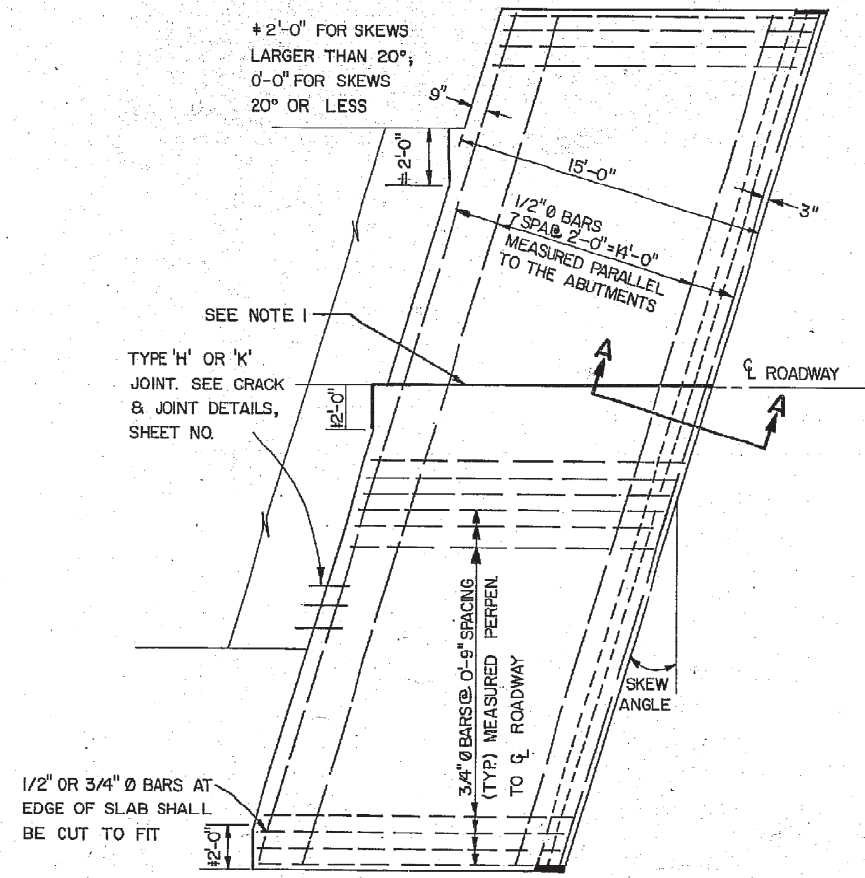
TRIM ENDS OF STRUCTURAL STEEL MEMBERS

FOR JOINT OPENING DIMENSION, SEE DECK JOINT DETAILS, SHEET 15 OF 43.

CONTRACT NO. C.I.P. 43-89-15 PART 2					
OHIO TURNPIKE COMMISSION					
OHIO TURNPIKE					
adache - ciuni - lynn associates					
CONSULTING ENGINEERS CLEVELAND, OHIO 44131					
COMMON STRUCTURAL DETAILS					
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
J.R.C.	T.M.J.	A.J.M.	R.D.H.	2-7-89	



PLAN



APPROACH SLAB FOR SKEWED BRIDGE

GENERAL THIS DRAWING PROVIDES DESIGN AND GENERAL CONSTRUCTION DETAILS. THE PROJECT PLANS WILL SHOW SKEW, CURBS (IF ANY), ESTIMATED QUANTITY (SQ.YDS.), AND SPECIAL NOTES AND DETAILS, WHERE NECESSARY FOR CONDITIONS OTHER THAN THOSE INDICATED HEREON, THE APPROACH SLAB SHALL BE ADAPTED TO FIT THE ENDS OF THE BRIDGE AND THE APPROACH PAVEMENT.

DESIGN DATA:
CONCRETE CLASS S USING SHRINKAGE COMPENSATING CEMENT
REINFORCING STEEL: A.S.T.M. A615, A616 OR A617 - GRADE 60 MIN. YIELD STRENGTH 60,000 P.S.I.

PREFORMED EXPANSION JOINT FILLER AND SEALER AT THE CORNERS AND SIDES OF THE APPROACH SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

GROOVE AND JOINT SEAL SHOWN AT THE BRIDGE LIMIT END OF THE APPROACH SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

TYPE A WATERPROOFING SHOWN AT THE ABUTMENT SLAB SHALL BE INCLUDED IN THE PRICE BID PER SQ. YARD FOR THE APPROACH SLAB.

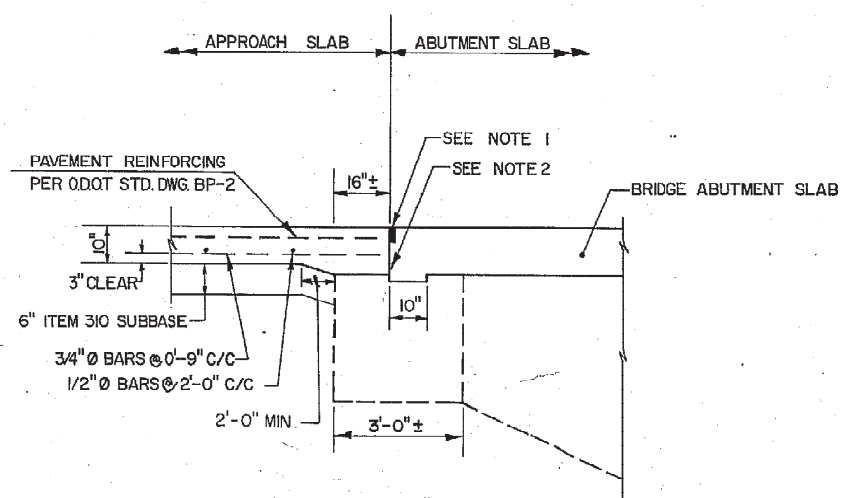
LONGITUDINAL CONSTRUCTION JOINTS REQUIRED FOR STAGE CONSTRUCTION SHALL BE AS PER 51109.

CURBS, BRIDGES WITH SIDEWALKS: FOR BRIDGES CONSTRUCTED WITH RAISED SIDEWALKS, DEFLECTOR PARAPETS OR OTHER TYPES OF CONSTRUCTION WHICH RETAIN ROADWAY SURFACE DRAINAGE, THE APPROACH SLABS SHALL EITHER INCLUDE INTEGRAL CURBS OR BE CONSTRUCTED IN CONJUNCTION WITH BRIDGE CURBS. CURB HEIGHT SHALL BE TRANSITIONED UNIFORMLY BETWEEN BRIDGE CURB HEIGHT AND APPROACH CURB HEIGHT IN LENGTH AS FOLLOWS: WHERE WINGWALL EXTENDS BEYOND END OF APPROACH SLAB, USE A MINIMUM LENGTH OF 10 FT BEYOND END OF WINGWALL WHERE THE APPROACH SLAB EXTENDS BEYOND THE END OF WINGWALL, TRANSITION IN THIS LENGTH. HOWEVER, THE TRANSITION LENGTH SHALL NOT BE LESS THAN 10 FT AND THE TRANSITION SHALL EXTEND BEYOND THE END OF THE APPROACH SLAB IF NECESSARY. CURB PLACEMENT SHALL BE IN ACCORDANCE WITH O.D.O.T. STANDARD CONSTRUCTION DRAWING BR-1.

APPROACH SLAB WIDTH APPROACH SLAB FOR 38'-6" BRIDGE WIDTH SHALL BE 39'-0" WIDE WHEN CURBS ARE NOT INCLUDED; 39'-3" WHEN CURB IS INCLUDED ON ONE SIDE ONLY; 39'-6" WHEN CURBS ARE INCLUDED ON BOTH SIDES.
CROWN SHALL CONFORM TO THAT OF THE APPROACH PAVEMENT AND BRIDGE DECK IF THE RATE OF CROWN OF THE BRIDGE DECK DIFFERS FROM THAT OF THE APPROACH PAVEMENT, A SMOOTH TRANSITION SHALL BE PROVIDED WITHIN THE LIMITS OF THE APPROACH SLAB.

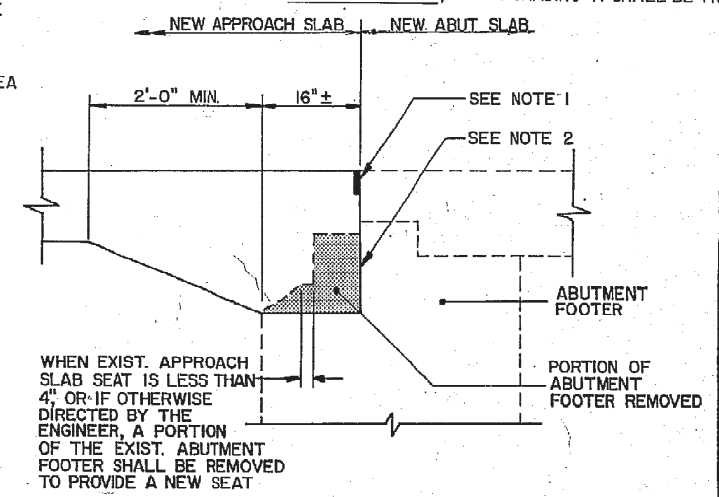
TRANSVERSE JOINT DETAILS AT THE APPROACH PAVEMENT END OF THE APPROACH SLAB SHALL BE EITHER TYPE 'K' OR 'H' AS DETAILED ON THE PLANS. PAYMENT FOR THE TRANSVERSE JOINT SHALL BE AT THE UNIT PRICE BID PER LIN. FT. FOR THE JOINT FURNISHED.

ITEM 310 SUBBASE, TYPE I GRADING "A" SHALL BE PROVIDED UNDER ALL APPROACH SLABS.



SECTION A-A

- NOTE 1: GROOVE AND SEAL AS PER O.D.O.T. STD. CONST. DWG. BP-3.
- NOTE 2: TYPE A WATERPROOFING SHALL NOT EXTEND ABOVE THE BOTTOM OF THE GROOVE INTO WHICH THE JOINT SEALER IS TO BE PLACED. IT SHALL BE APPLIED TO THE ENTIRE AREA OF THE ABUTMENT OR SUPERSTRUCTURE WHICH COMES INTO CONTACT WITH THE APPROACH SLAB.
- NOTE 3: REPAIR OF BROKEN APPROACH SLAB SEAT SHALL BE CONSTRUCTED BY THE CONTRACTOR AS PER DETAIL OR AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE ON THE BASIS OF "DIRECT COSTS" PLUS 15% FOR OVERHEAD AND PROFIT. "DIRECT COSTS" SHALL BE DEFINED UNDER SECTION G-9.02(5) OF THE GENERAL CONDITIONS.



APPROACH SLAB SEAT REPAIR DETAIL

2	ADDED IMPRESSED JOINT & CHANGED TYPE OF CEMENT	DFC	11/28/84
1	ADDED SEAT REPAIR DETAIL	DFC	10/2/84
N#	REVISION	BY	DATE

OHIO TURNPIKE COMMISSION

REINFORCED CONCRETE
APPROACH SLABS

DATE: OCTOBER 1983 SCALE: N.T.S.
CIP: 43-89-15 (PART 2) SHEET 13 OF 43

GENERAL NOTES
 INSTALLATION OF SEAL: DURING INSTALLATION OF SUPPORT / ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE JOINT SEAL, THE SEATING OF BEAMS ON BEARINGS SHALL BE CAREFULLY OBSERVED TO ASSURE THAT POSITIVE BEARING IS MAINTAINED. PROPER VERTICAL FIT OF THE SUPPORT / ARMOR ON THE BEAMS SHALL BE ACHIEVED BY POSITIONING OF THE SUPPORT ANGLES RATHER THAN BY CLAMPING FORCE.

ELASTOMERIC COMPRESSION SEALS SHALL BE USED AT FIXED JOINTS ONLY, AND AT SKEWS LESS THAN 45°.

STUD ANCHORS SHALL BE LOW CARBON STEEL ASTM A-108.

ALL WELDING SHALL CONFORM WITH A.W.S. AND AASHTO SPECIFICATIONS FOR WELDED HIGHWAY AND RAILWAY BRIDGES.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.

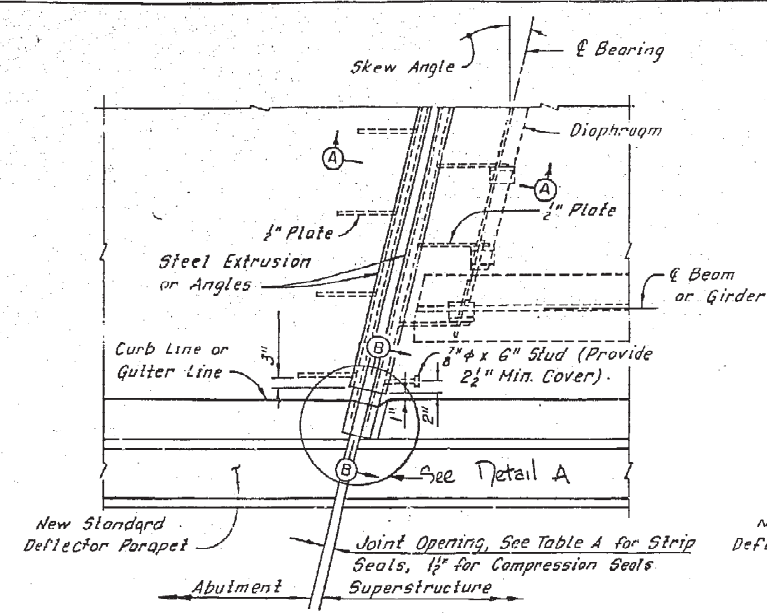
ELASTOMERIC COMPRESSION SEAL SHALL BE WABO WJ-200, D.S. BROWN C-V 2000 OR APPROVED EQUAL.

CONTINUOUS STRIP SEAL SHALL BE AS MANUFACTURED BY WABO-ACME, D.S. BROWN, OR APPROVED EQUAL, AND SHALL BE THE SIZE AS SPECIFIED

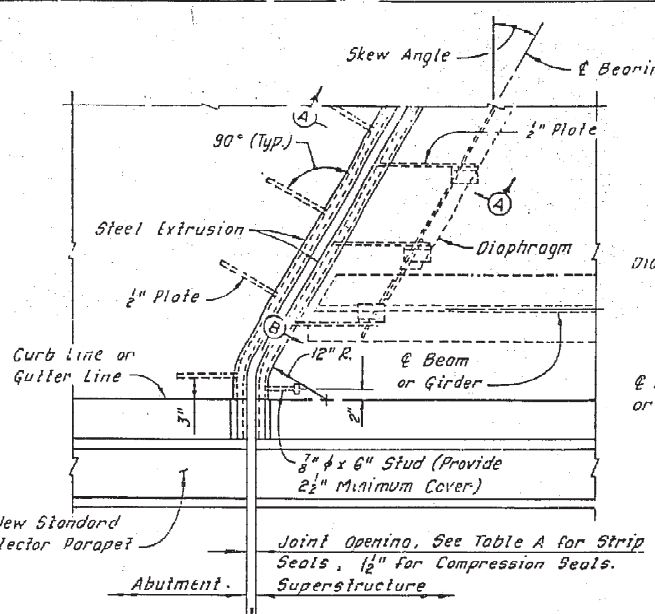
DETAILS 41 DIMENSIONS SHOWN, DETAILS AT BEAMS OR GIRDERS SIMILAR.

TABLE A

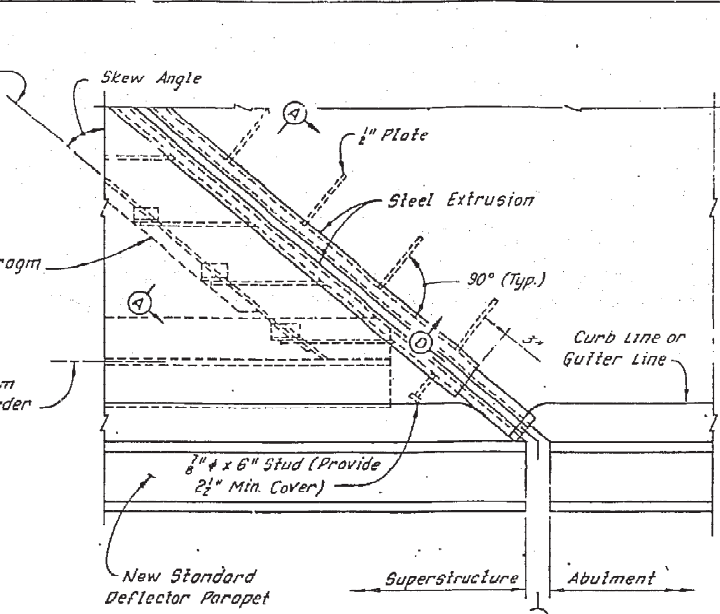
STRIP SEAL SIZE	STRIP SEAL JOINT OPENING INSTALLATION CHART						
	TEMPERATURE °F						
	30	40	50	60	70	80	90
3"	2-1/8"	2-1/8"	2"	1-7/8"	1-3/4"	1-5/8"	1-1/2"
4"	2 5/8"	2 1/2"	2 1/2"	2 3/8"	2 1/4"	2 1/8"	2"
5"	2 7/8"	2 3/4"	2 3/4"	2 5/8"	2 5/8"	2 1/2"	2 3/8"



PLAN - SKEW ANGLE < 10°
 (Strip Seal Shown, Compression Seal Similar)
 Scale: 3/4" = 1'-0"

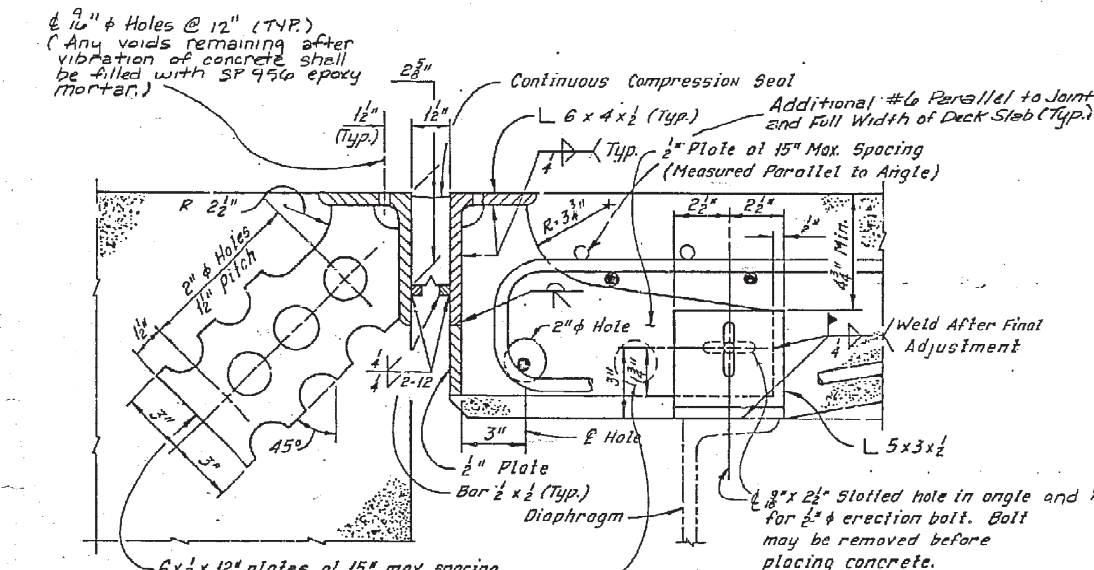


PLAN - SKEW ANGLE 10° TO 45°
 (Strip Seal Shown, Compression Seal Similar)
 Scale: 3/4" = 1'-0"



PLAN - SKEW ANGLE > 45° (STRIP SEAL ONLY)
 Scale: 3/4" = 1'-0"

NOTE: When skew angle is greater than 45°, supply joint assemblies in two sections and provide a field splice at the center line of roadway.



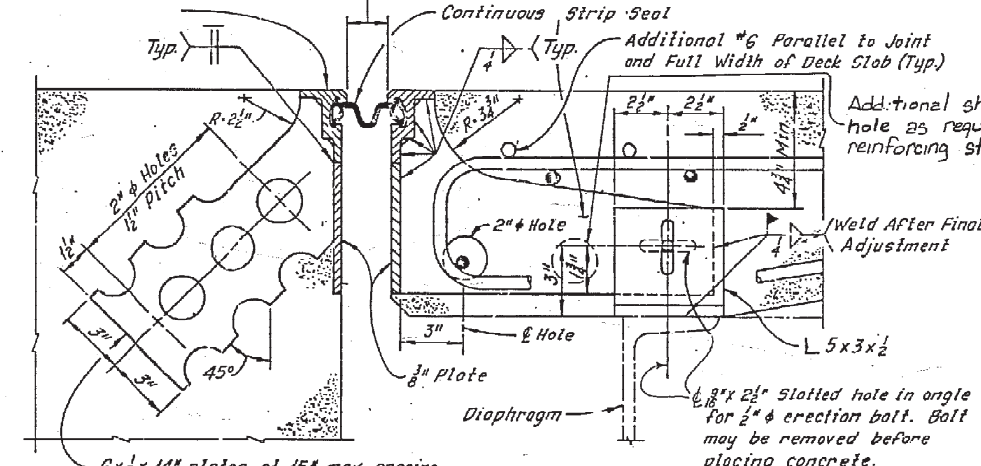
6x12 plates at 15" max spacing except near joints in the angle where the plates shall be placed within 6" of each side of the joint. The holes may be burned in the plate.

Additional shop fabricated hole as required for reinforcing steel placement

TABLE B
SKEW ANGLE

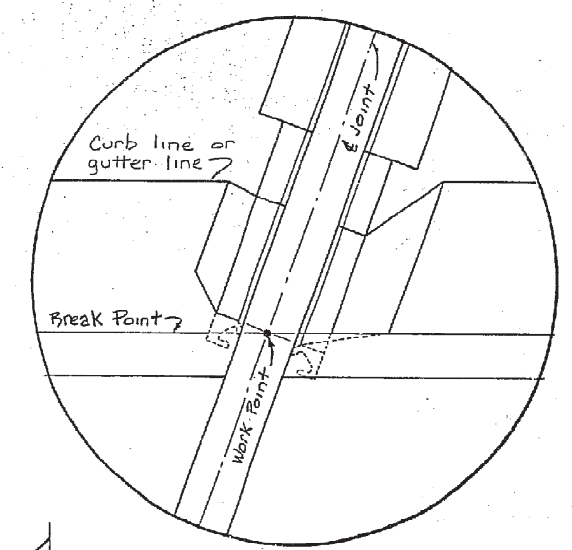
	< 10°	10° - 45°
d	3/4" MIN.	3/4"
x	6 1/16"	8 7/8"

Steel Extrusion (Wabo-Acme Type M, D.S. Brown Type 55CM, or approved equal)

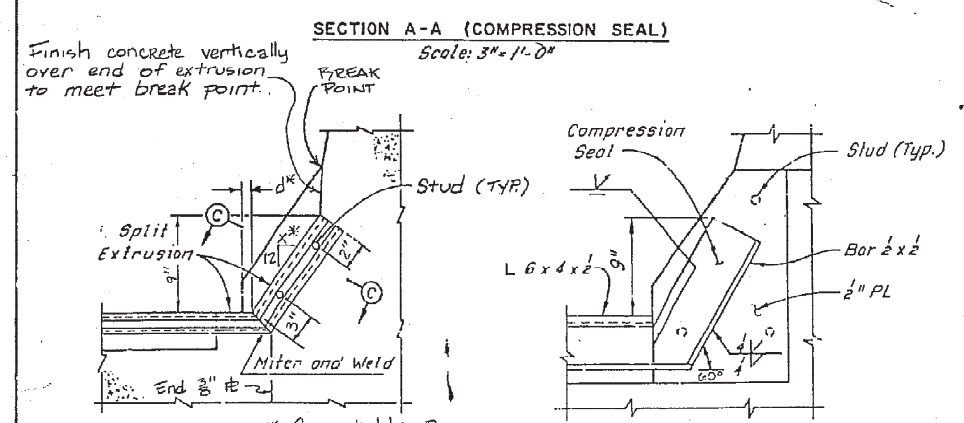


6x14 plates at 15" max spacing except near joints in the extrusion where the plates shall be placed within 6" of each side of the joint. The holes may be burned in the plate.

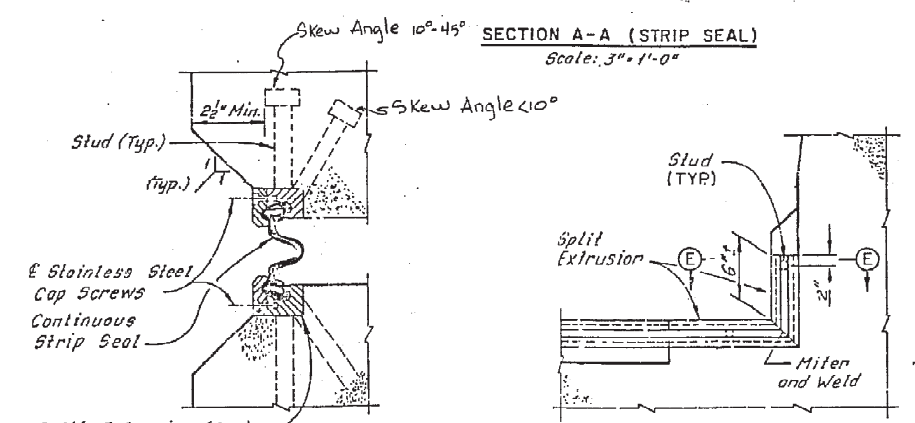
NOTE: For joint details in sidewalk see sheet #



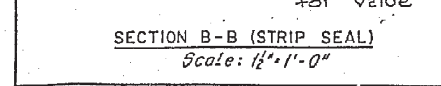
Detail A
 Scale: 1/4" = 1"



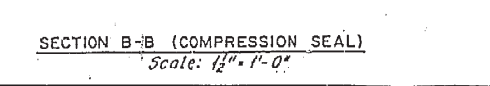
SECTION A-A (COMPRESSION SEAL)
 Scale: 3/4" = 1'-0"



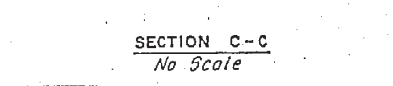
SECTION A-A (STRIP SEAL)
 Scale: 3/4" = 1'-0"



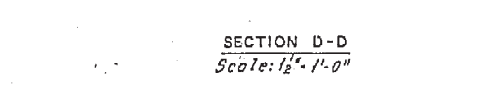
SECTION B-B (STRIP SEAL)
 Scale: 1/2" = 1'-0"



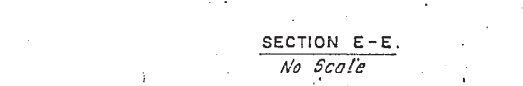
SECTION B-B (COMPRESSION SEAL)
 Scale: 1/2" = 1'-0"



SECTION C-C
 No Scale



SECTION D-D
 Scale: 1/2" = 1'-0"



SECTION E-E
 No Scale

REVISED 10-87

OHIO TURNPIKE COMMISSION

DECK JOINT DETAILS

DATE: JANUARY 1985 SCALE: AS NOTED
 R/P: 43-89-15 (PART 2) SHEET 15 OF 43

GENERAL NOTES

SPECIFICATIONS: 1983 O.D.T. CONSTRUCTION AND MATERIAL SPECIFICATIONS. LATEST A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES FOR DESIGN.

MATERIALS: FABRIC SHALL BE 1" MESH WOVEN FROM NO. 9 GAUGE, ALUMINUM COATED STEEL WIRE CONFORMING TO A.A.S.H.T.O. M181, TYPE II. THE ENDS OF THE FABRIC SHALL BE KNUCKLED SELVAGE AT THE TOP AND BOTTOM.

ALL POSTS, BRACES, FITTINGS AND HARDWARE SHALL MEET THE REQUIREMENTS OF A.A.S.H.T.O. M181. THEY SHALL BE ZINC COATED STEEL EXCEPT CASTINGS FOR OTHER THAN ORNAMENTAL PURPOSES WHICH SHALL BE ZINC COATED MALLEABLE IRON.

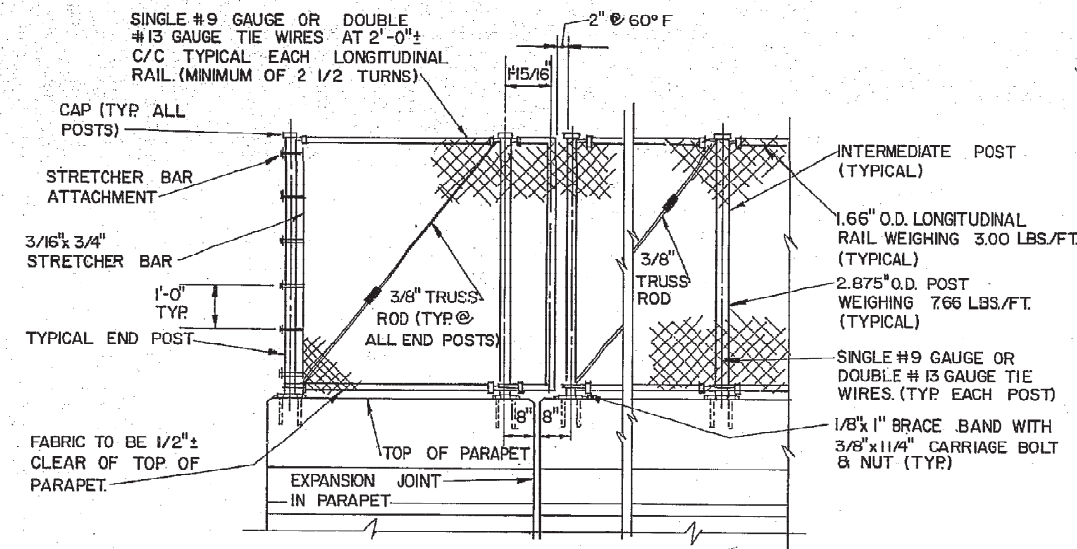
ALL PLATES SHALL BE STEEL CONFORMING TO A.S.T.M. DESIGNATION: A-36. ALL PARTS SHALL BE STEEL GALVANIZED UNLESS OTHERWISE NOTED AND ALL GALVANIZING SHALL BE DONE AFTER FABRICATION. PRECOATED LONGITUDINAL RAILS, IF CUT, WILL HAVE CUT END COATED WITH A ZINC-RICH PRIMER MEETING THE REQUIREMENTS OF FEDERAL SPECIFICATIONS TT-P-641 TYPE II, PRIOR TO ERECTION.

ANCHOR STUDS: MATERIAL FOR ANCHOR STUDS SHALL CONFORM TO A.S.T.M. DESIGNATION: A-276 TYPE 430 TO TYPE 304 STAINLESS STEEL ANNEALED, HOT-FINISHED, ULTIMATE STRENGTH 70,000 P.S.I. MIN., 20% MIN. ELONGATION. THREADS MAY BE ROLLED OR CUT.

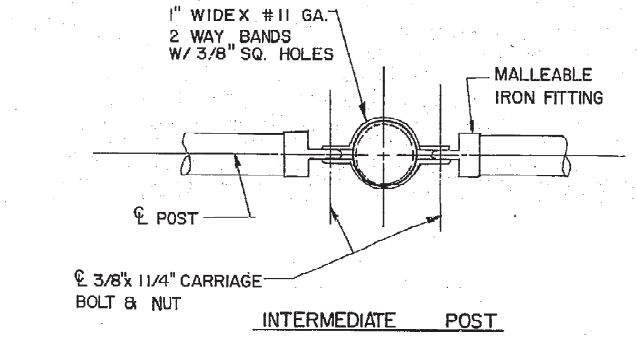
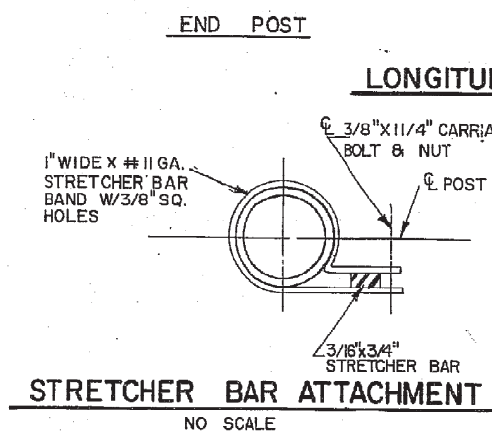
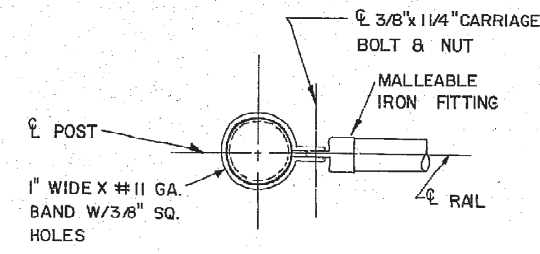
POST SPACING: FOR POST SPACING SEE PERTINENT STRUCTURE SHEETS. POST SPACING SHALL BE 8'-0" MAXIMUM.

ERECTION: ALL LONGITUDINAL RAILS TO BE PARALLEL TO TOP OF PARAPET.

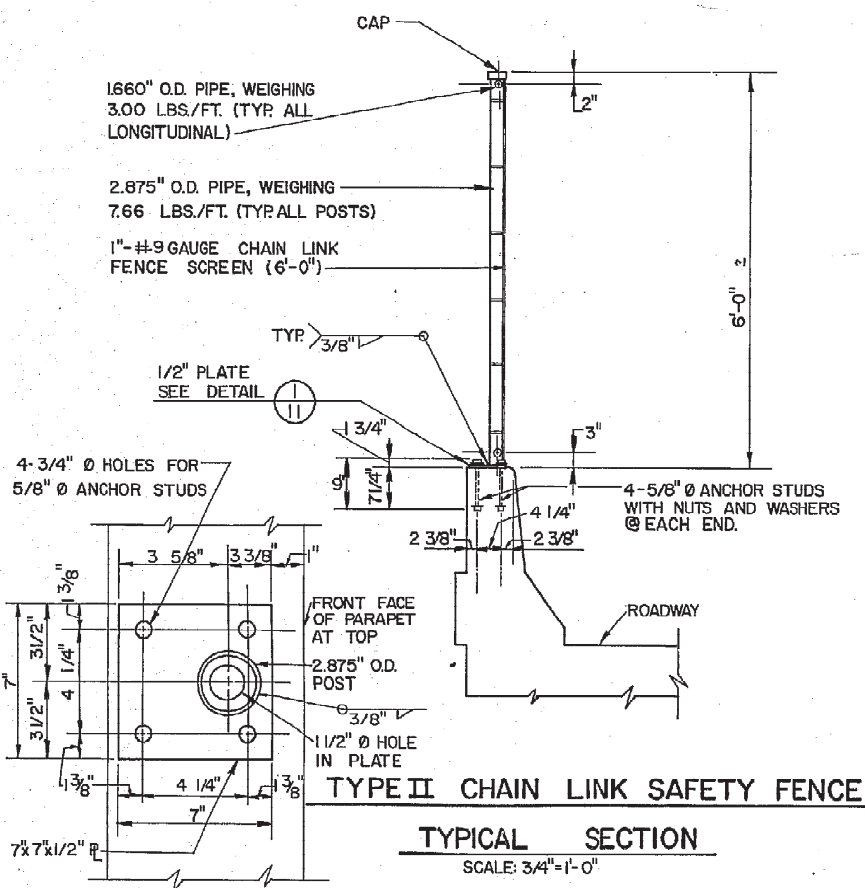
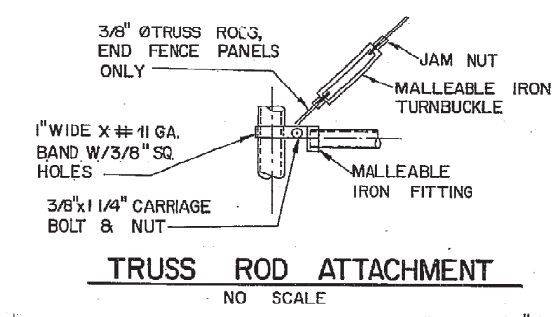
ALL POSTS TO BE SET NORMAL TO TOP OF PARAPET.



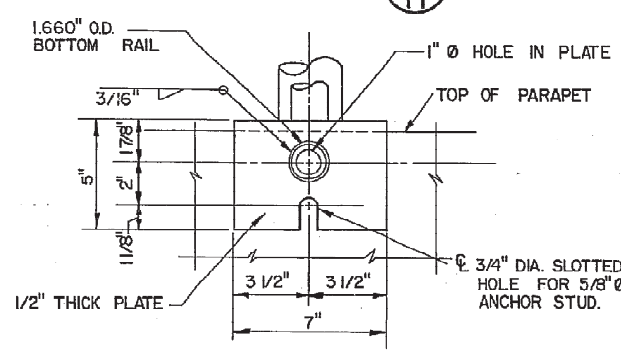
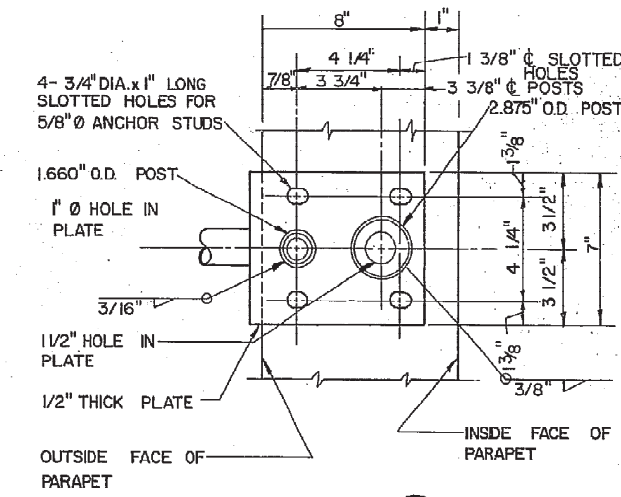
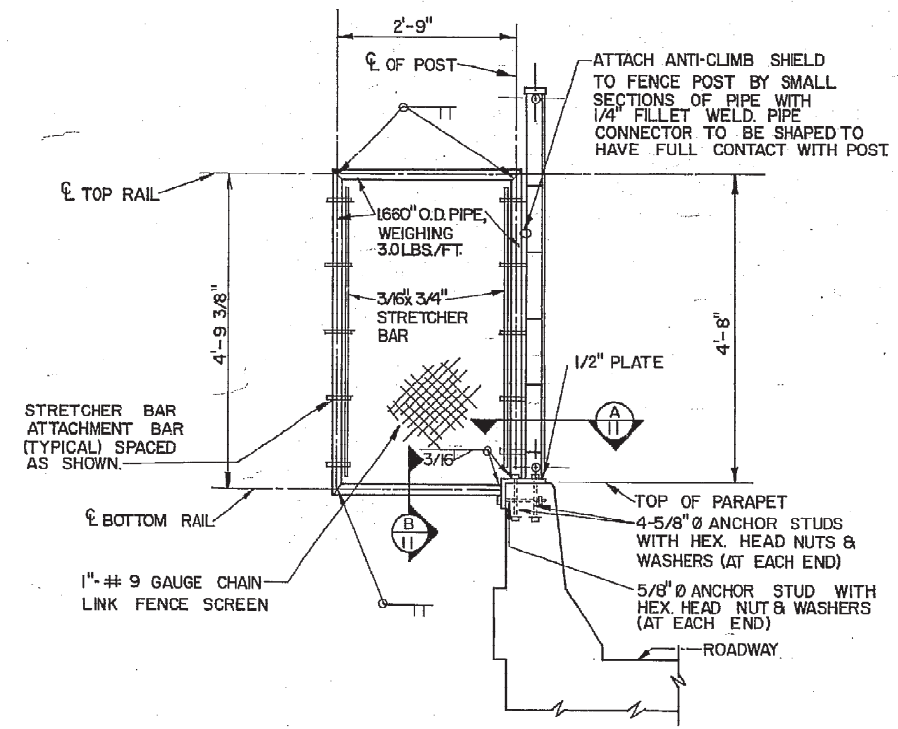
ELEVATION
SCALE: 1/2" = 1'-0"



LONGITUDINAL RAIL - POST ATTACHMENT
SCALE: 3" = 1'-0"



DETAIL I
NOT TO SCALE

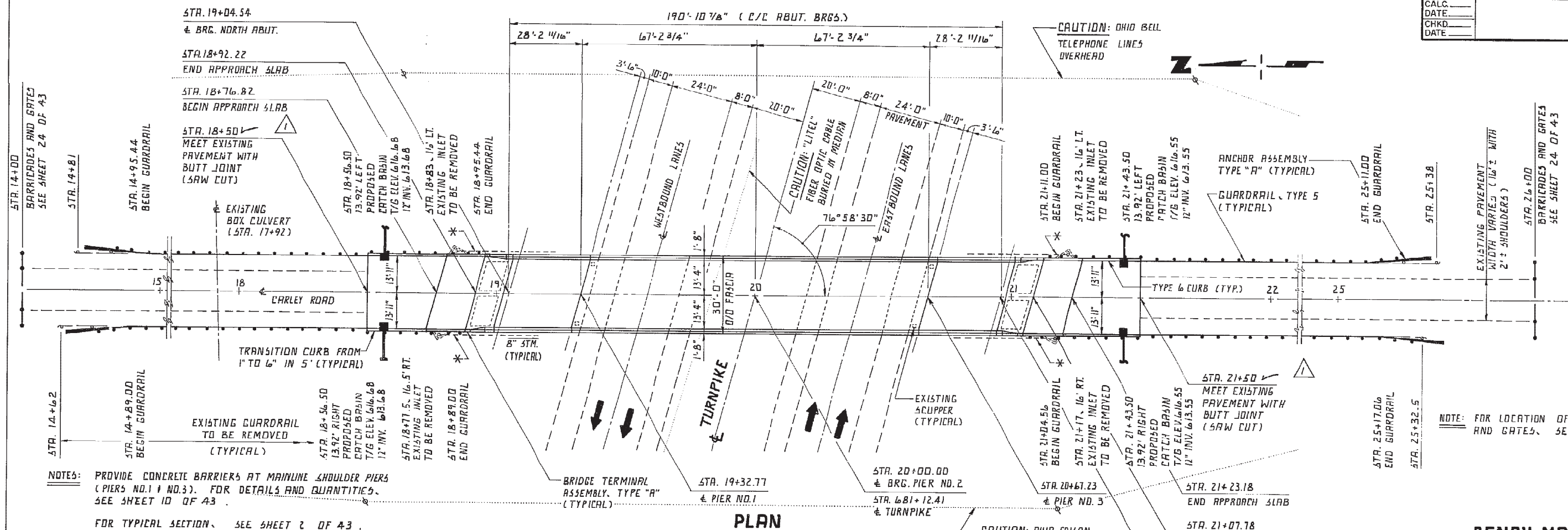


OHIO TURNPIKE COMMISSION

**CHAIN LINK SAFETY FENCE
DETAILS, TYPE II**

DATE: JUNE 1983 SCALE: AS NOTED
STANDARD DRAWING CL-2

REVISED
2-2-84
7-12-88



PLAN

NOTES: PROVIDE CONCRETE BARRIERS AT MAINLINE SHOULDER PIERS (PIERS NO. 1 & NO. 3). FOR DETAILS AND QUANTITIES, SEE SHEET 10 OF 43.

FOR TYPICAL SECTION, SEE SHEET 2 OF 43.

FOR CATCH BASIN AND OUTLET DETAILS, SEE SHEET 11 OF 43.

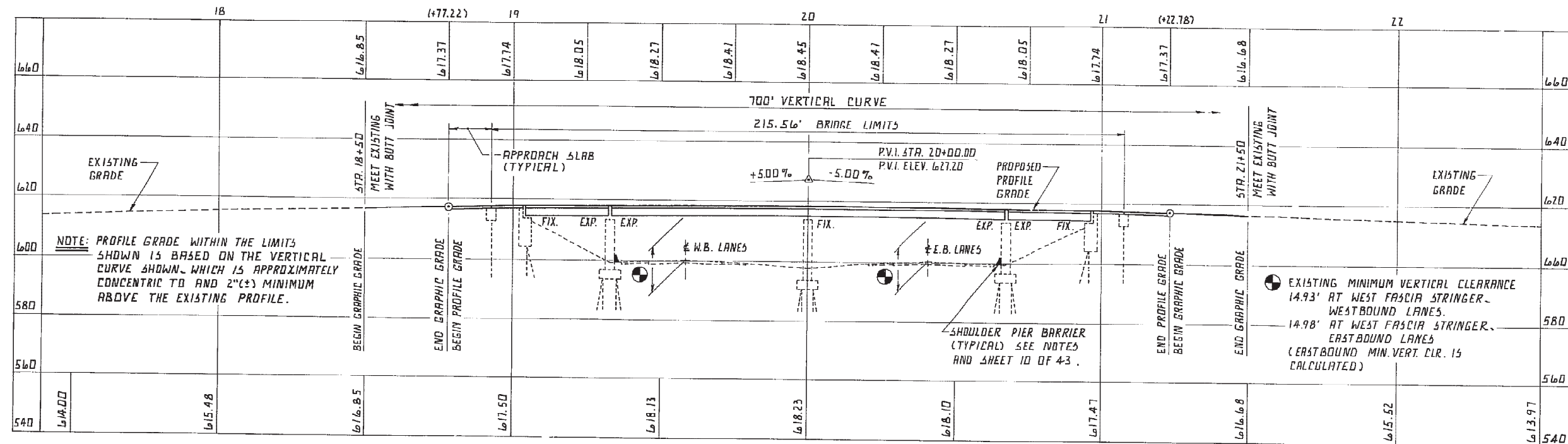
FOR PIPE PROFILES, SEE SHEET 12 OF 43.

FOR QUANTITIES, SEE SHEET 5 OF 43.

FOR GENERAL NOTES, SEE SHEET 3 OF 43.

* PLUG EXISTING PIPE AS PER 202.02. INCLUDE WITH INLET REMOVAL FOR PAYMENT

FOR HORIZONTAL CONTROL, SEE SHEET 8 OF 43.



PROFILE

ALONG & CARLEY ROAD

BENCH MARK:

CENTERLINE MONUMENT AT OHIO TURNPIKE
STA. 681+40.15 (27.74' EAST OF CENTERLINE
OF CARLEY ROAD) TOP OF MONUMENT
ELEVATION: 595.789

NOTE:

THE CONTRACTOR SHALL CONTACT THE LTEL
TELECOMMUNICATIONS CORPORATION TO OBTAIN
FIELD LOCATION(S) OF FIBER OPTIC CABLE
LINE(S) ALONG THE OHIO TURNPIKE PRIOR TO
ANY EXCAVATION.

NOTE:

CARLEY ROAD, COUNTY ROAD NO. 202 OVER
THE OHIO TURNPIKE AT MILEPOST 94.7 WAS
DESIGNATED AS STRUCTURE NO. 8 IN
CONTRACT NO. C-37 OF THE OHIO TURNPIKE
ORIGINAL CONSTRUCTION PLANS.

▲ REVISED TO AS BUILT		W.B. 1-2-90	
CONTRACT NO. C.I.P. 43-89-15		PART 2 2 / 12	
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE			
adache - ciuni - lynn associates			
CONSULTING ENGINEERS		CLEVELAND, OHIO 44131	
SITE PLAN			
CARLEY ROAD			
OVER			
THE OHIO TURNPIKE			
STA. 18+92.22 TO STA. 21+07.18			
DESIGNED	DRAWN	CHECKED	REVIEWED
J.R.E.	T.M.J.	A.J.M.	R.D.H.
DATE		REVISED	
2-7-89			

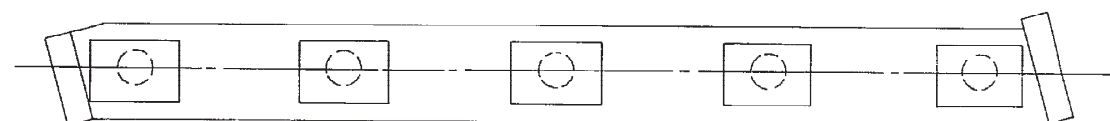
CARLEY RD. ABUTMENT PATCHING QUANTITIES			
LOCATION	MEASURED QUANTITY	CONTINGENT QUANTITY	TOTAL
NORTH ABUT	5SF	45SF	50SF
SOUTH ABUT	5SF	45SF	50SF

ITEM SP 519 - PATCHING CONCRETE STRUCTURES:

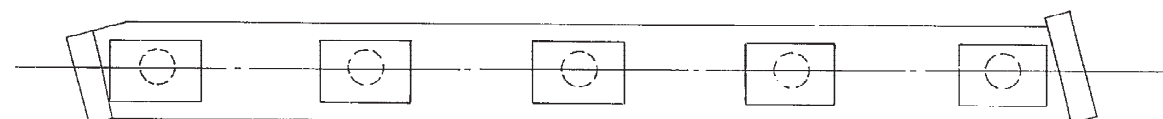
PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN OCTOBER, 1988.

ESTIMATED QUANTITY HAS BEEN INCREASED OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION.

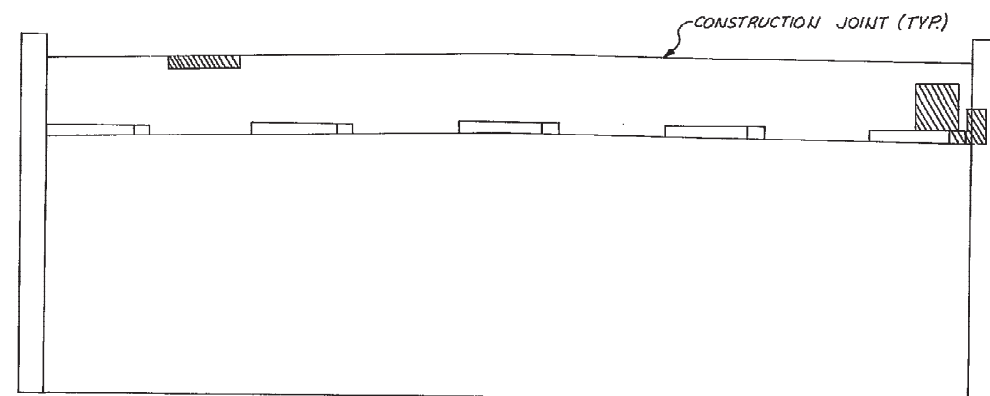
EXACT DIMENSIONS AND LOCATIONS OF PATCHES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITY.



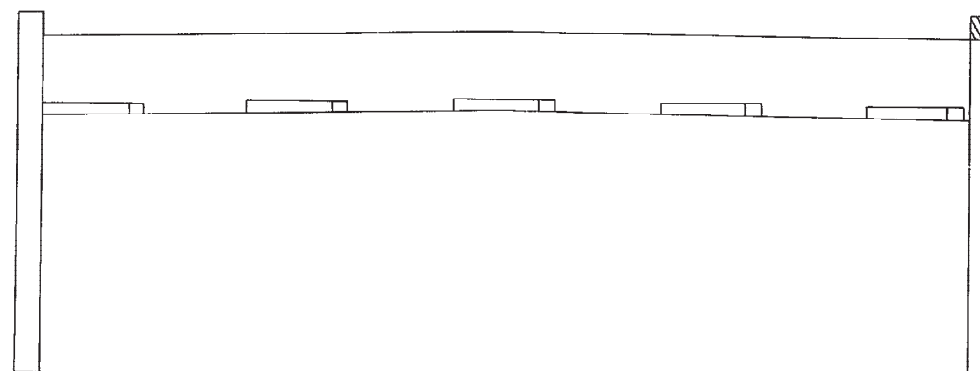
PLAN NORTH ABUTMENT



PLAN SOUTH ABUTMENT



ELEVATION NORTH ABUTMENT

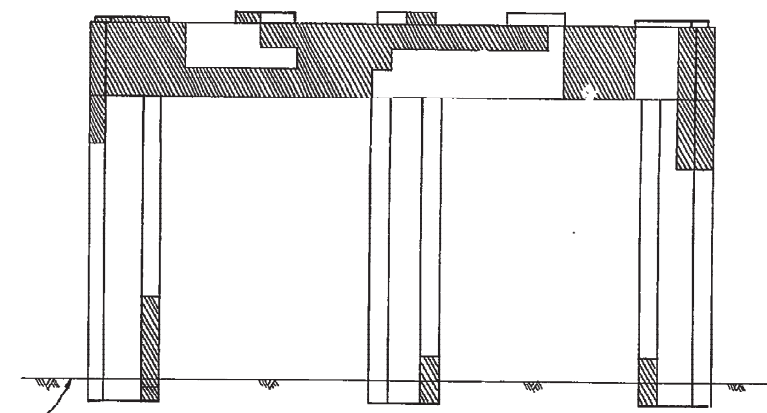
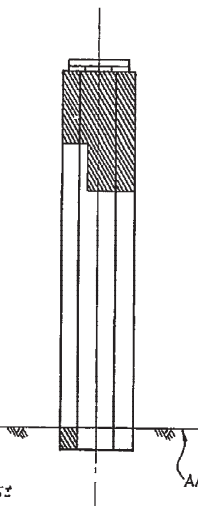
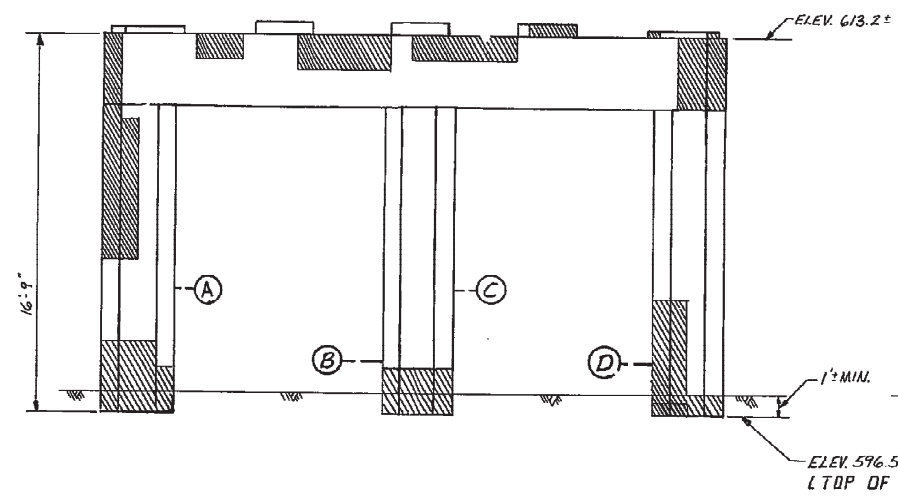
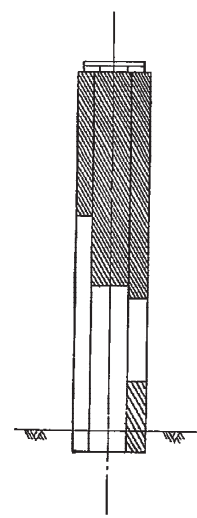
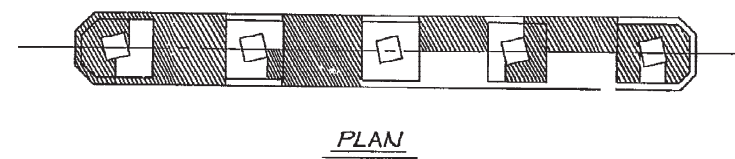
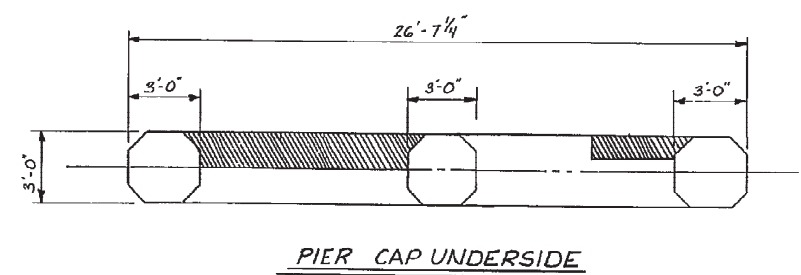


ELEVATION SOUTH ABUTMENT

INDICATES APPROXIMATE AREA OF DETERIORATION

INDICATES APPROXIMATE AREA OF PREVIOUS PATCHING

CONTRACT N° C.I.P. 43-89-15 PART 2		L6 / 12			
OHIO TURNPIKE COMMISSION					
OHIO TURNPIKE					
adache - ciuni - lynn associates					
CONSULTING ENGINEERS CLEVELAND, OHIO 44131					
ABUTMENT REPAIR					
CARLEY ROAD					
OVER					
THE OHIO TURNPIKE					
STA 18+72.22 TO STA 21+07.78					
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
J.R.C.	C.H.H.	R.J.M.	R.D.H.	2-7-89	

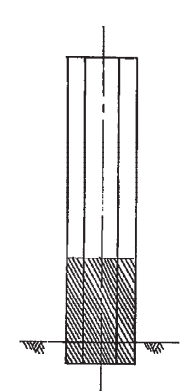
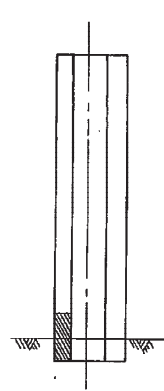
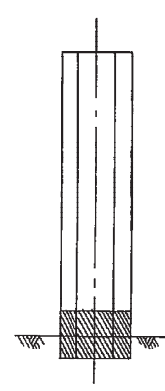
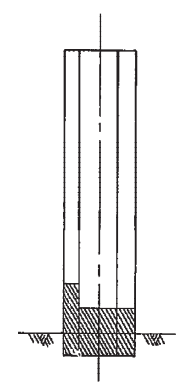


WEST
ELEVATION

SOUTH
ELEVATION

EAST
ELEVATION

NORTH
ELEVATION



VIEW A

VIEW B

VIEW C

VIEW D

INDICATES APPROXIMATE AREA
OF DETERIORATION

NOTES:

ITEM SP519 - PATCHING CONCRETE STRUCTURES:
PHYSICAL INVENTORY OF MEASURED QUANTITIES OF
DETERIORATION WAS PERFORMED IN OCTOBER, 1988.

ESTIMATED QUANTITY HAS BEEN INCREASED OVER
MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL
DETERIORATION.

EXACT DIMENSIONS AND LOCATIONS OF PATCHES SHALL
BE DETERMINED BY THE ENGINEER IN THE FIELD FOR
FINAL PAY QUANTITY.

FOR LIMITS OF EXCAVATION AT PIER COLUMNS, SEE "COMMON
STRUCTURAL DETAILS", SHEET 9 OF 43.

NO SPECIFIC REPAIR IS ANTICIPATED AT PIER NO. 2 -
HOWEVER A CONTINGENT QUANTITY IS PROVIDED FOR
USE AS DIRECTED BY THE ENGINEER.

CARLEY ROAD PIER PATCHING QUANTITIES			
LOCATION	MEASURED QUANTITY	CONTINGENT QUANTITY	TOTAL
PIER N° 1	200 S.F.	100 S.F.	300 S.F.
PIER N° 2	0 S.F.	50 S.F.	50 S.F.
PIER N° 3	150 S.F.	75 S.F.	225 S.F.

CONTRACT N° 43-89-15 PART 2 7 / 12

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE

adache - ciuni - lynn associates

CONSULTING ENGINEERS CLEVELAND, OHIO 44131

PIER NO. 1 REPAIR

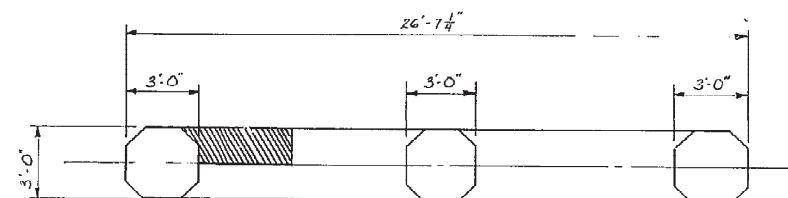
CARLEY ROAD

OVER

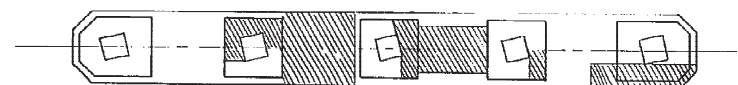
THE OHIO TURNPIKE

STA. 18+92.22 TO STA. 21+07.78

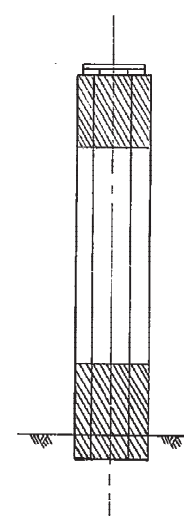
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
J.R.E.	C.H.H.	R.J.M.	R.D.H.	2-7-89	



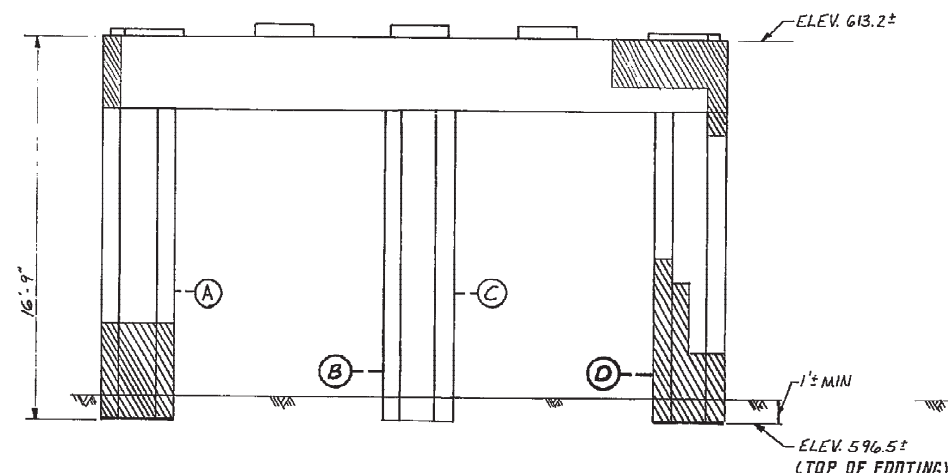
PIER CAP UNDERSIDE



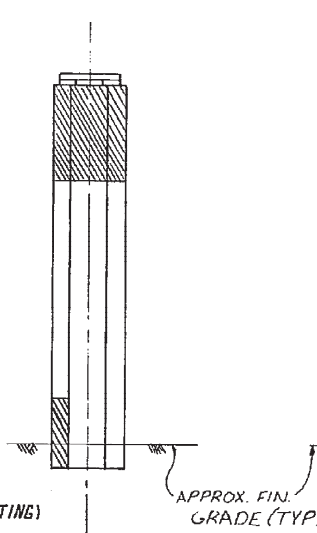
PLAN



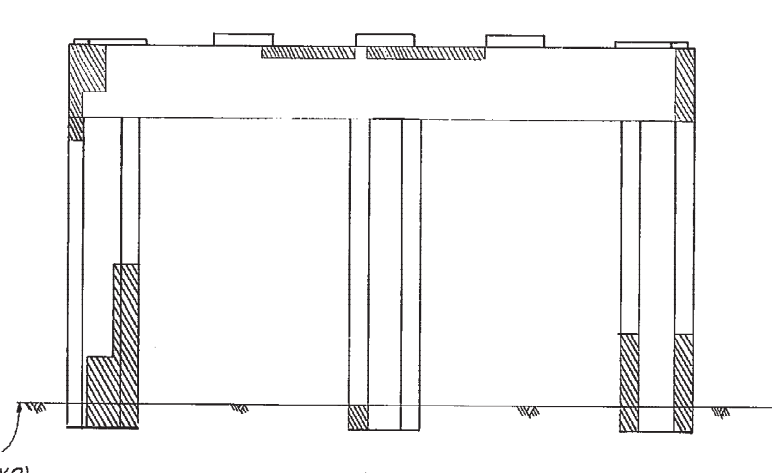
WEST
ELEVATION



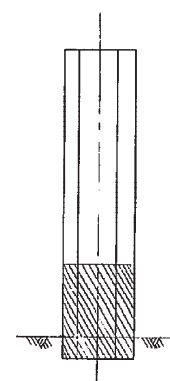
SOUTH ELEVATION



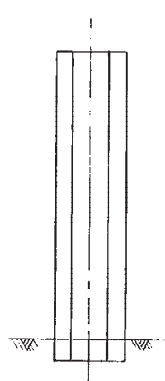
EAST
ELEVATION



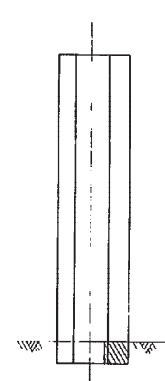
NORTH ELEVATION



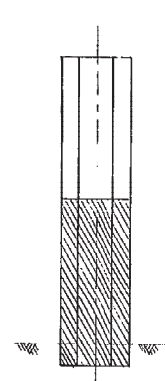
VIEW A



VIEW B



VIEW C

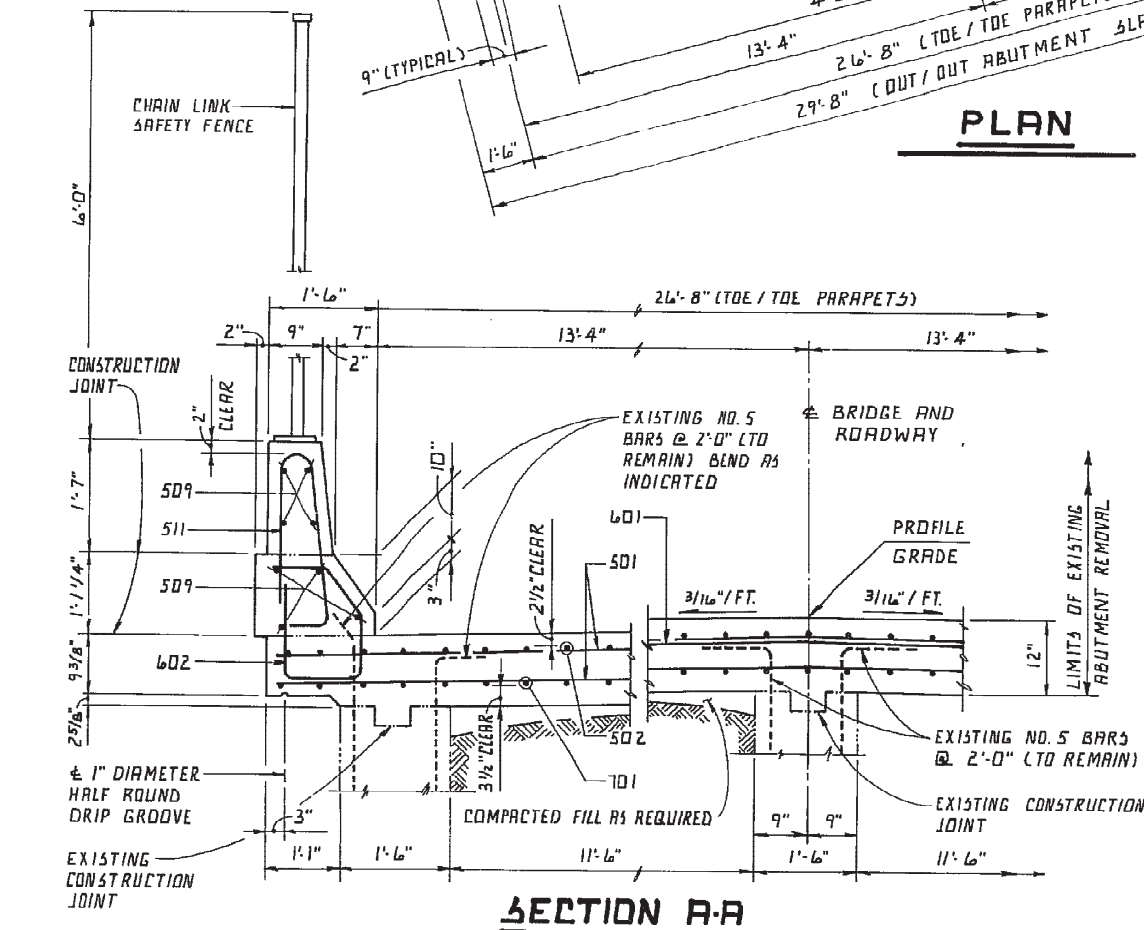


VIEW D

INDICATES APPROXIMATE AREA
OF DETERIORATION

FOR ITEM SP-519 PATCHING NOTES AND QUANTITY TABLE
SEE SHEET 7/12

CONTRACT N ^o 43-89-15 PART 2			8 / 12	
OHIO TURNPIKE COMMISSION				
OHIO TURNPIKE				
adache - ciuni - lynn associates				
CONSULTING ENGINEERS			CLEVELAND, OHIO 44131	
PIER NO.3 REPAIR				
CARLEY ROAD				
OVER				
THE OHIO TURNPIKE				
STA. 18+92.22 TO STA. 21+07.78				
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
J.R.E.	C.H.H.	A.J.M.	R.D.H.	2-7-89
				REVISED



SEE PLAN FOR DIMENSION

VARIES 6'-0" TRANSITION 2'-0"

2" 3 EQUAL SPACES 4 SPACES @ 1'-4" = 5'-4" 8" 9" 9" 2"

3-511 5-508 EACH FACE 3-508 EACH FACE

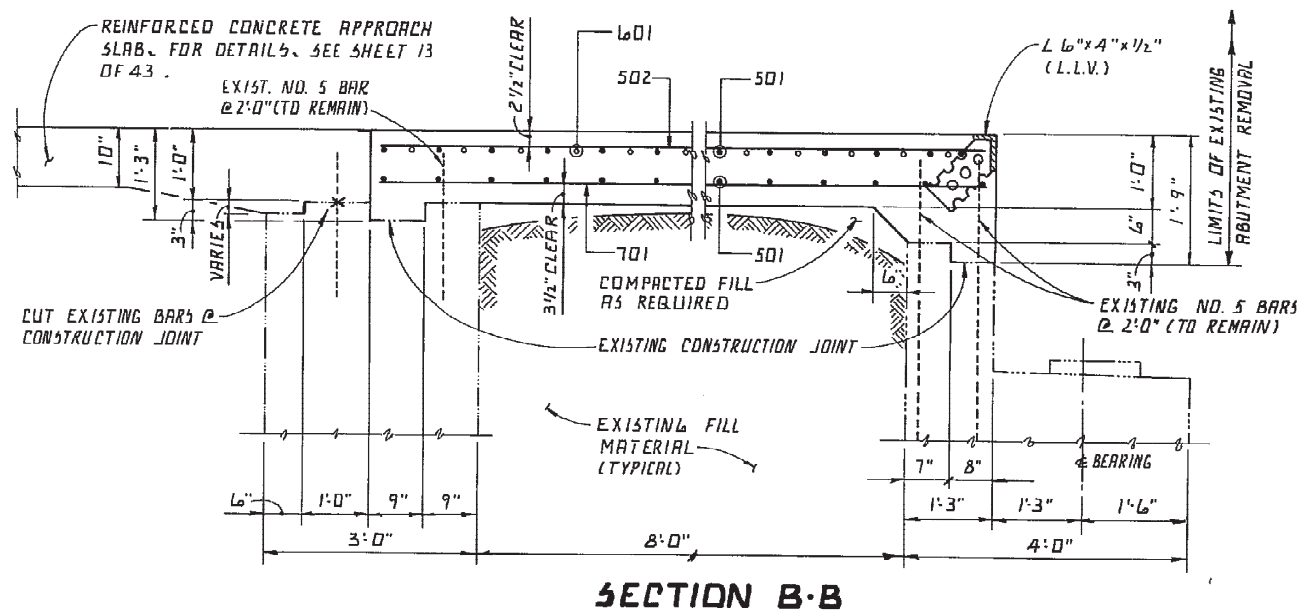
4"

2-509 2-510

3-602 1 EACH 602 THRU 606 3-606

NOTE: FENCE NOT SHOWN.

ALONG INSIDE OF RAILING
FOR DIMENSIONS, DETAILS AND CALLOUTS NOT SHOWN.
SEE O.D.T. STD. DRWG. BR-1 AND GR-3.



SECTION B-B

EXISTING REINFORCING STEEL DESIGNATED TO REMAIN, SHALL BE FIELD BENT WHERE REQUIRED. INCLUDE WITH ITEM SP824 - EPOXY COATED REINFORCING STEEL, GRADE 60 FOR PAYMENT.

THE 501, 509 AND 601 BARS SHALL BE FIELD
BENT AS REQUIRED. INCLUDE WITH ITEM
SPB24 - EPOXY COATED REINFORCING STEEL,
GRADE 60 FOR PAYMENT.

THE PREFIX "AE" SHALL BE ADDED TO ALL
REINFORCING BAR MARKS IN THE ABUTMENT
SLABS AND BARRIERS

ALL REINFORCING STEEL SHALL BE EPOXY
COATED.

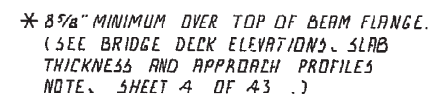
FOR REINFORCING BAR SCHEDULE AND BAR
BENDING DIAGRAMS, SEE SHEET 12 / 12.

CONCRETE INSERT ASSEMBLIES, AS SHOWN ON
O.D.O.T. STD. DRWGS. GR-1 AND GR-3, SHALL
BE PROVIDED AT ALL WINGWALL TERMINALS
FOR ATTACHMENT OF GUARDRAIL TERMINAL
CONNECTORS. INCLUDE WITH ITEM 5P511A
FOR PAYMENT.

EPOXY BONDING COMPOUND (SP526) SHALL BE PLACED ON THE SURFACE AREAS OF EXISTING CONCRETE WHICH WILL BE IN CONTACT WITH NEW CONCRETE. PRICE INCLUDED IN THE CONTRACT BID PRICE FOR THE PERTINENT CONCRETE ITEMS.

LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINTS: OTHER THAN THE SPECIFIED JOINTS SHALL NOT BE PERMITTED IN THE ABUTMENT SLAB.

FOR PARAPET FENCE AND FENCE POST ANCHOR
DETAILS, SEE SHEETS 16 AND 17 OF 43 .



(CENTER SPAN SHOWN, END SPAN SIMILAR)
LOOKING UPSTATION

FINISH PAVEMENT ELEVATIONS: THE ELEVATIONS SHOWN ARE FINISHED PAVEMENT ELEVATIONS. PROPER ALLOWANCE SHALL BE MADE FOR THE DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE.

LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINTS: OTHER THAN THE SPECIFIED JOINTS SHALL NOT BE PERMITTED IN THE SUPERSTRUCTURE DECK SLAB.

A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF DECK CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" (PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 4:1 FOR A HAUNCH LESS THAN 9"

FOR SECTION A-A, SEE SHEET 11 / 12.

FOR ADDITIONAL DETAILS AND NOTES, SEE
SHEET 11 / 12.

ALL REINFORCING BARS SHALL BE EPOXY COATED.

THE PREFIX "SE" AND "RE" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE SUPER-STRUCTURE AND THE RAILING, RESPECTIVELY.

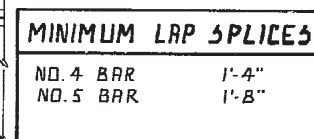
THE 501 AND 601 REINFORCING BARS SHALL BE FIELD BENT TO CONFORM TO THE DECK CROWN. INCLUDE FIELD BENDING WITH ITEM 824 - EPOXY COATED REINFORCING STEEL BRIDGE WD.

FOR REINFORCING STEEL SCHEDULE AND BAR
BENDING DIAGRAM. SEE SHEET 12/12.

FOR PARAPET DEFLECTION JOINT DETAILS,
SEE SHEET 9 OF 43.

FOR EXPANSION JOINT DETAILS, SEE SHEET 15
OF 43.

FOR PARAPET FENCE AND FENCE POST ANCHOR
DETAILS, SEE SHEETS 16 AND 17 OF 43.

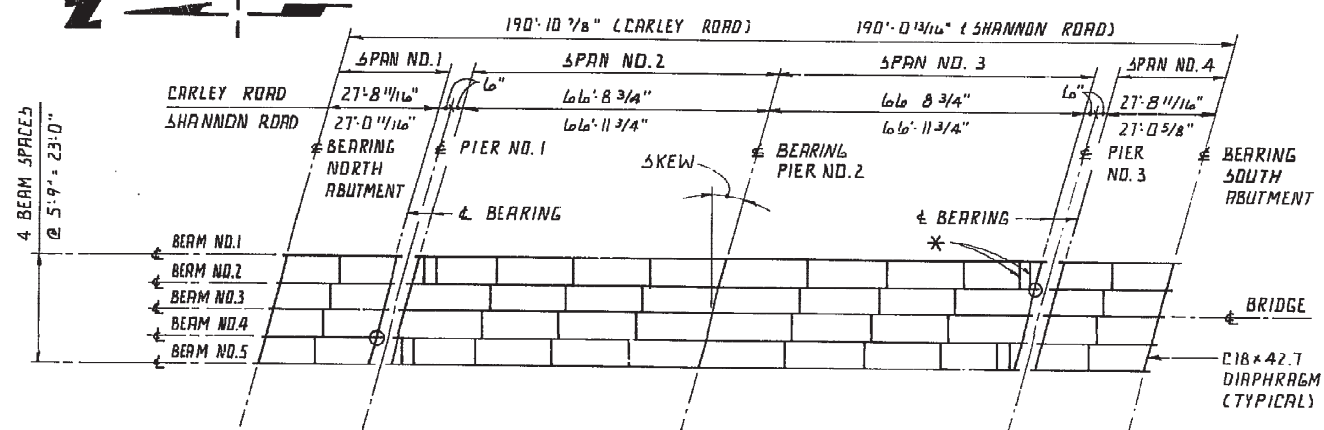


DEAD LOAD DEFLECTIONS CAUSED BY
THE WEIGHT OF CONCRETE.

DESCRIPTION		CARLEY ROAD AND SHANNON ROAD	
		BEAM NO. 1 & 5	BEAM NO. 2, 3 & 4
SPAN NO. 1	± BRG. ABUT.	0.00'	0.00'
	1/2 POINT	0.01'	0.01'
	± BRG. PIER	0.00'	0.00'
SPAN NO. 2	± BRG. PIER	0.00'	0.00'
	1/4 POINT	0.04'	0.04'
	1/2 POINT	0.04'	0.05'
	FIELD SPLICE	0.04'	0.04'
	± BRG. PIER	0.00'	0.00'
SPAN NO. 3	± BRG. PIER	0.00'	0.00'
	FIELD SPLICE	0.04'	0.04'
	1/2 POINT	0.04'	0.05'
	3/4 POINT	0.04'	0.04'
SPAN NO. 4	± BRG. PIER	0.00'	0.00'
	1/2 POINT	0.01'	0.01'
	± BRG. ABUT.	0.00'	0.00'

* FENCE POSTS shall not be set closer than 8" from any parapet deflection joints.

* **FENCE POST ANCHORS:** The contractor shall give special attention to fence anchor stud projection above top of parapet, provide for base plate thickness, washer thickness, and a positive "stick through" at end of stud.



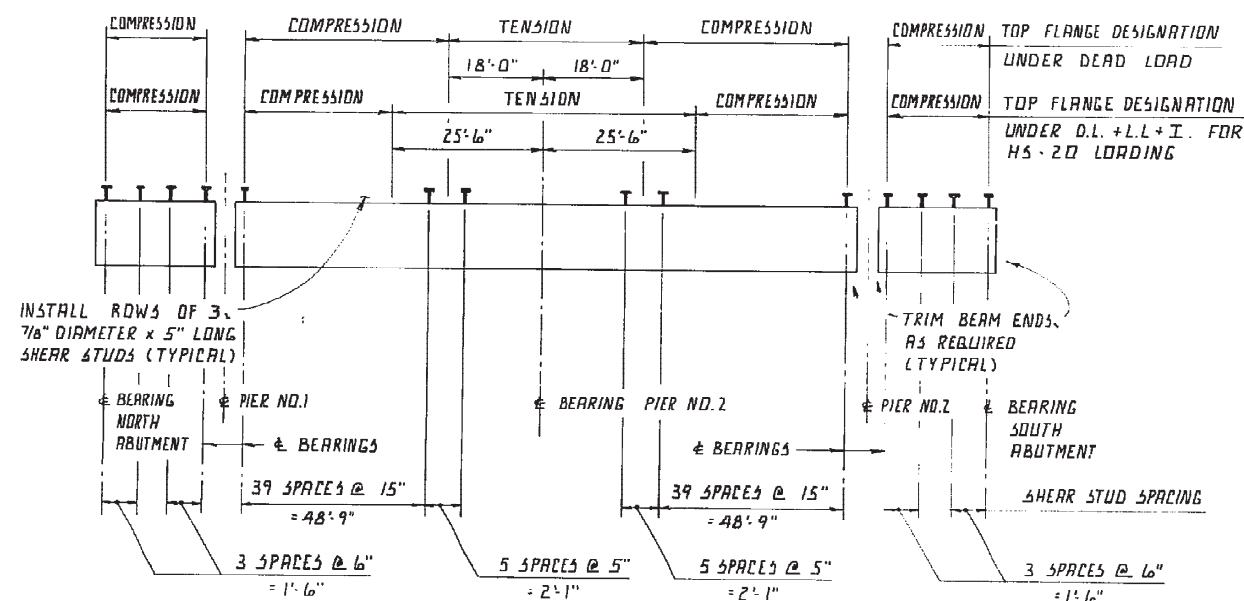
SKIEW = 13° 01' 30" (CARLEY ROAD)
= 13° 54' 10" (SHANNON ROAD)

FRAMING PLAN

(EXISTING)

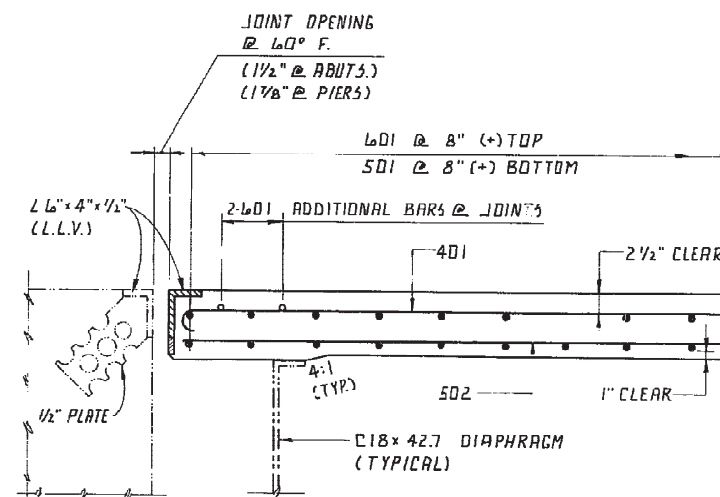
○ DENOTES RESET BEARING AT SHANNON ROAD, ONLY, IN ACCORDANCE WITH ITEM SPECIAL-DIAPHRAGM ADJUSTMENT (SEE SPECIFICATIONS).

* REMOVE C12x25 SCUPPER SUPPORTS WHERE REQUIRED TO ACCOMMODATE RESETTING OF BEARING(S). INCLUDE WITH ITEM SP202 - PORTIONS OF STRUCTURES REMOVED, FOR PAYMENT.



BEAM ELEVATION

INSTALL SHEAR STUDS AS SHOWN, TO EXISTING BEAMS (TYPICAL ALL 5 BEAMS)



SECTION A-A

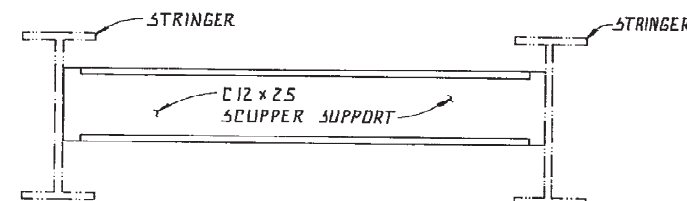
FOR LOCATION OF SECTION A-A, SEE SHEET 10 / 12.

SECTIONS AT ABUTMENTS SHOWN. SECTIONS AT PIERS ARE SIMILAR.

1 1/2" JOINT OPENING IS FOR 2" COMPRESSION SEALS AT ABUTMENTS MEASURED @ 60 DEGREES FAHRENHEIT. USE 1 7/8" JOINT OPENING @ 60° FOR 3" STRIP SEALS AT PIERS NO. 1 AND NO. 3.

FOR ABUTMENT DETAILS, SEE SHEET 9 / 12.

FOR JOINT DETAILS, SEE SHEET 15 OF 43.



SCUPPER SUPPORT

REMOVAL DETAIL

WHERE REQUIRED TO ACCOMMODATE RESETTING OF BEARING (S).

- 1) REMOVE C12x25 SCUPPER SUPPORT
- 2) GRIND STRINGER WEB SMOOTH
- 3) PAINT AS DIRECTED UNDER ITEM SP51A - "FIELD PAINTING OF EXISTING STRUCTURAL STEEL".

CALC.	DATE	CHKD.	DATE

OHIO
F.H.W.A.
REGION 5

42
43

NOTES:

THE ENDS OF THE STRUCTURAL STEEL MEMBERS SHALL BE TRIMMED AS REQUIRED AND PAID FOR UNDER THE UNIT PRICE BID FOR EACH ITEM SP529 - TRIM ENDS OF STRUCTURAL STEEL MEMBERS.

FOR DETAILS OF TRIMMING ENDS OF STRUCTURAL STEEL MEMBERS, SEE SHEET 9 OF 43.

FOR SHEAR STUD DETAILS, SEE SHEET 9 OF 43.

FOR TRANSVERSE SECTION, SLAB PLAN, ADDITIONAL DETAILS AND NOTES, SEE SHEET 10 / 12.

DECK DRAINAGE SYSTEM (INCLUDING SCUPPERS, COLLECTORS, DOWNSPOUTS AND SPLASH PLATES) SHALL BE REMOVED. INCLUDE WITH ITEM SP202 - PORTIONS OF STRUCTURES REMOVED, FOR PAYMENT.

WELDED ATTACHMENTS FOR SUPPORTS OF CONCRETE DECK FINISHING MACHINE OR ANY OTHER PURPOSE IS PROHIBITED. ONLY THOSE WELDS SHOWN ON THE PLANS FOR ATTACHMENT OF SHEAR STUD CONNECTORS, BEARINGS AND STIFFENERS SHALL BE PERMITTED.

CONTRACT NO. C.I.P. 43-89-15 PART 2 11 / 12

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE

adache - ciuni - lynn associates
CONSULTING ENGINEERS CLEVELAND, OHIO 44131

SUPERSTRUCTURE DETAILS
CARLEY RD. & SHANNON RD.

OVER

THE OHIO TURNPIKE

STA. 18+92.22 TO STA. 21+07.78 (CARLEY RD.)
STA. 18+92.61 TO STA. 21+07.39 (SHANNON RD.)

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
J.R.C.	T.M.J.	A.J.M.	R.D.H.	2-7-89	

CARLEY ROAD

ABUTMENTS

MARK	NUMBER REQUIRED			LENGTH ft in	TYPE	DIM A DIM B DIM C DIM D				INCREMENT ft in	WEIGHT (lbs.)
	NORTH	SOUTH	TOTAL			ft in	ft in	ft in	ft in		
AE 501	30	30	60	30	1 STR.						1882
AE 502	53	53	106	10	8 STR.						1180
AE 508	32	32	64	2	8 1	2	1				178
AE 509	16	16	32	8	8 STR.						290
AE 510	16	16	32	4	4 STR.						144
AE 511	6	6	12	5	2 SPEC.						64
AE 601	14	14	28	9	4 STR.						392
AE 602	8	8	16	4	8 SPEC.						112
AE 603	2	2	4	4	5 SPEC.						26
AE 604	2	2	4	4	4 SPEC.						26
AE 605	2	2	4	4	0 SPEC.						24
AE 606	8	8	16	3	11 SPEC.						94
AE 701	53	53	106	10	8 STR.						2312
TOTAL WEIGHT											6724

SUPERSTRUCTURE

MARK	NUMBER REQUIRED	LENGTH		TYPE	DIM A DIM B DIM C DIM D				INCREMENT ft in	WEIGHT (lbs.)
		ft	in		ft in	ft in	ft in	ft in		
SE 401	86	29	11	2	28	11				1719
SE 402	199	30	0	1 STR.						3988
SE 403	86	25	2	1	24	8				1446
SE 404	46	13	8	1 STR.						420
SE 405	16	28	11	1 STR.						309
SE 406	16	24	8	1 STR.						264
SE 501	290	30	1	1 STR.						9099
SE 502	54	28	11	1 STR.						1629
SE 503	108	30	0	1 STR.						3379
SE 504	27	20	8	1 STR.						582
SE 505	294	4	8	1 SPEC.						1431
SE 506	294	5	2	1 SPEC.						1384
SE 601	302	31	5	2	30	1				14251
RE 501	32	14	2	1 STR.						473
RE 502	16	13	8	1 STR.						228
RE 503	32	15	6	1 STR.						517
RE 504	48	6	6	1 STR.						325
TOTAL WEIGHT										41644

SHANNON ROAD

ABUTMENTS

MARK	NUMBER REQUIRED			LENGTH ft in	TYPE	DIM A DIM B DIM C DIM D				INCREMENT ft in	WEIGHT (lbs.)
	NORTH	SOUTH	TOTAL			ft in	ft in	ft in	ft in		
AE 501	30	30	60	30	2 STR.						1888
AE 502	53	53	106	10	9 STR.						1188
AE 508	32	32	64	2	8 1	2	1				178
AE 509	16	16	32	8	8 STR.						290
AE 510	16	16	32	4	4 STR.						144
AE 511	6	6	12	5	2 SPEC.						64
AE 601	14	14	28	9	4 STR.						392
AE 602	8	8	16	4	8 SPEC.						112
AE 603	2	2	4	4	5 SPEC.						26
AE 604	2	2	4	4	4 SPEC.						26
AE 605	2	2	4	4	0 SPEC.						24
AE 606	8	8	16	3	11 SPEC.						94
AE 701	53	53	106	10	9 STR.						2330
TOTAL WEIGHT											6756

SUPERSTRUCTURE

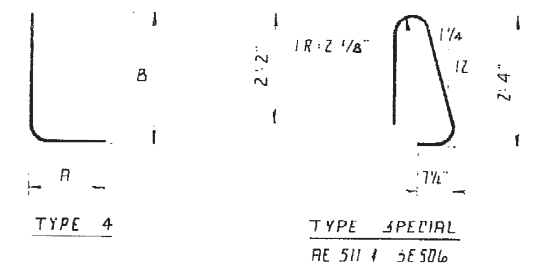
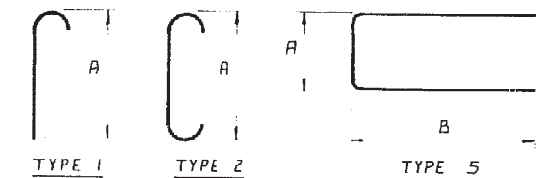
MARK	NUMBER REQUIRED	LENGTH		TYPE	DIM A DIM B DIM C DIM D				INCREMENT ft in	WEIGHT (lbs.)
		ft	in		ft in	ft in	ft in	ft in		
SE 401	86	29	3	2	28	3				1680
SE 402	199	30	0	1 STR.						3988
SE 403	86	25	0	1	24	6				1436
SE 404	46	13	8	1 STR.						420
SE 405	16	28	2	1 STR.						302
SE 406	16	24	6	1 STR.						262
SE 501	289	30	2	1 STR.						9093
SE 502	54	28	3	1 STR.						1591
SE 503	108	30	0	1 STR.						3379
SE 504	27	21	2	1 STR.						596
SE 505	292	4	8	1 SPEC.						1421
SE 506	292	5	2	1 SPEC.						1574
SE 601	301	31	5	2	30	2				14241
RE 501	32	13	10	1 STR.						462
RE 502	16	13	11	1 STR.						232
RE 503	32	15	6	1 STR.						517
RE 504	48	6	6	1 STR.						325
TOTAL WEIGHT										41519

NOTE:

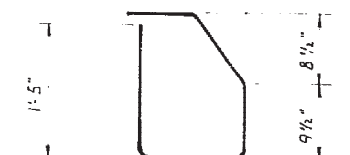
REINFORCING STEEL SAMPLES REFER TO DTD GENERAL CONDITIONS 3-602 AND CMS SECTION 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURE BY THE ADDITIONAL STEEL, APPLIED IN ACCORDANCE WITH 509.08.

CALC. _____	OHIO	43 43
DATE _____	F.H.W.A. REGION 5	
CHKD. _____		
DATE _____		

BAR BENDING DIAGRAMS



9"	6"	AE 602
8"	5"	AE 603
8"	4"	AE 604
7"	3"	AE 605
7"	2"	AE 606
9"	6"	SE 505



1'-2"	AE 602
1'-1"	AE 603
1'-0"	AE 604
10"	AE 605
9"	AE 606
1'-2"	SE 505

TYPE SPECIAL

CONTRACT NO. C.I.P. 43-89-15 PART 2		12 / 12
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE		
adache ciuni lynn associates		
REINFORCING SCHEDULE		
CARLEY RD. & SHANNON RD.		
OVER		
THE OHIO TURNPIKE		
STA. 18+92.22 TO STA. 21+07.78 (CARLEY RD.)		
STA. 18+92.61 TO STA. 21+07.39 (SHANNON RD.)		
DESIGNED	DRAWN	CHECKED
J.R.C.	T.M.J.	A.J.M.
REVIEWED	DATE	REVISED
R.D.H.	2-7-89	

OFFICE
COPY

1
64



TITLE SHEET	1
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LCI COMMUNICATIONS CORP. 1, 2, 9-18, 21-30

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BP-2.1	10-28-94	MT-96.20	9-9-88
BP-2.2	10-28-94	MT-96.25	9-9-88
BP-2.4	2-21-92	MT-97.10	4-25-94
BP-3.1	2-21-92	MT-99.10	11-14-86
BP-5.1	10-28-94	MT-101.60	7-1-92
		MT-105.10	7-1-92
		MT-105.11	7-1-92
GR-1.1	5-6-91		
GR-1.2	10-30-92	RB-1-55	2-2-59
GR-1.3	2-21-92	FB-1-82	5-10-82
GR-2.1	5-6-91		
GR-3.1	5-6-91		
GR-3.2	5-6-91		
GR-4.2	5-6-91	BS-1-93	12-19-94
GR-8.1	1-31-94	SD-1-69	6-12-69
MC-1	6-13-69	F-2	5-1-76
MC-9.1	10-30-92	F-3	5-1-76
MC-9.2	5-6-91	F-5	5-1-76
MC-9.3	10-30-92	F-6	5-1-76
MC-9.4	10-30-92		
I-3A&B	4-1-80	HW-4A	4-1-80
		HW-4B	4-1-80
MC-4	7-26-76	MH-1	12-18-84
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HL-30.22	5-1-87

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OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

3 RD LANE CONSTRUCTION

CONTRACT 77-96-01 PART A

MP. 92.75 TO MP. 96.45

STATION 575+90 TO STATION 770+00 SANDUSKY COUNTY

CONTRACT 77-96-01 PART B

MP. 96.45 TO MP. 100.52

STATION 769+95.36 TO STATION 985+92.57 SANDUSKY COUNTY

RECOMMENDED FOR APPROVAL

BY
URS CONSULTANTS, INC.

REVIEW CONSULTANT

7-9-96

DATE

APPROVED FOR
THE OHIO TURNPIKE COMMISSION
BY

CHIEF ENGINEER

7/8/96

DATE

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OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

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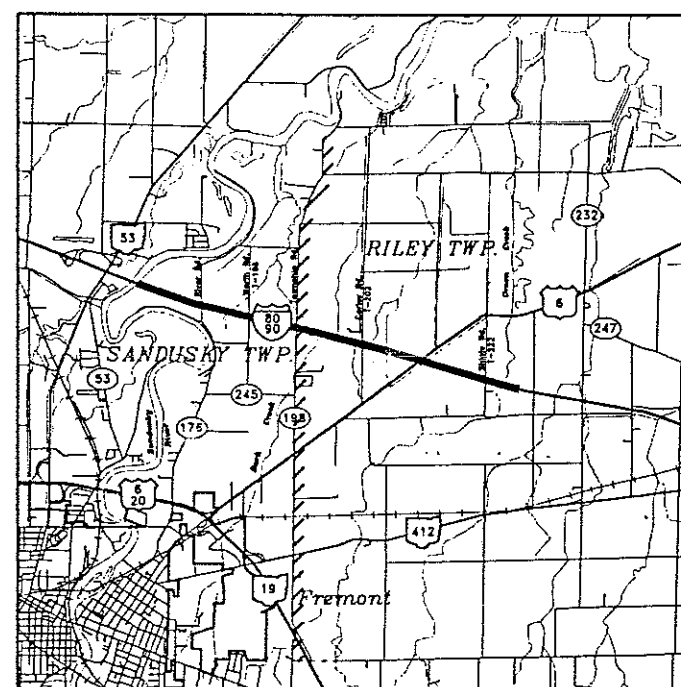
CONTRACT 77-96-01 PART A
3rd. LANE CONSTRUCTION
MP. 92.75 TO MP. 96.45

STATION 575+90 TO STATION 770+00 SANDUSKY COUNTY

OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS

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BP-2.1 LONGITUDINAL PAVEMENT JOINTS	10-28-94	HW-4A 4-1-80
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2 WORKING DAYS
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CALL JAYTEL - (419) 884-0400
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OHIO TURNPIKE DIVISION SUPERINTENDENT
(419) 862-2922
(ROADWAY LIGHTING CABLE)



SCALES

PLAN			
PROFILE	HORIZONTAL	0 50	VERTICAL 0 5
CROSS SECTIONS	HORIZONTAL	0 10	VERTICAL 0 10



APPROVED FOR
THE OHIO TURNPIKE COMMISSION
BY

CHIEF ENGINEER

DATE

RECOMMENDED FOR APPROVAL
BY
URS CONSULTANTS, INC.

REVIEW CONSULTANT

DATE

PLANS PREPARED BY
MANNIK & SMITH, INC.
CONSULTING ENGINEERS & SURVEYORS
3539 GLENDALE AVENUE
TOLEDO, OHIO 43614
(419) 385-9222

Consultants For Bark Creek Bridge
ULRICH-CH'ANG & ASSOCIATES, INC.
3220 CENTRAL PARK WEST
TOLEDO, OHIO 43617
(419) 841-4704



Jean Mannik

DESIGN CONTRACT NO. 71-95-10

SURVEY CONTROL PLAN SECTION C-37

EXISTING MONUMENT SUMMARY

Monument	Station	Offset	North	East
1	561+38.68	0.0000	630974.39	1804629.29
2	583+53.96	0.0017 Lt.	630308.69	1806740.57
3	591+40.74	0.0248 Rt.	630161.46	1807339.52
4	592+00.57	0.0379 Rt.	630147.16	1807397.62
5	605+00.36	0.0445 Rt.	629836.93	1808659.84
6	618+15.12	0.0651 Rt.	629523.12	1809936.60
7	618+74.98	0.0595 Lt.	629508.95	1809994.76
8	644+30.06	0.1083 Lt.	628899.17	1812476.01
9	644+89.81	0.0771 Lt.	628884.88	1812534.03
10	680+79.34	0.0475 Lt.	628028.13	1816019.81
11	681+39.12	0.0274 Lt.	628013.84	1816077.86
12	697+36.90	0.1492 Rt.	627632.32	1817629.42
13	707+37.62	0.0093 Lt.	627365.42	1818593.74
14	717+98.68	0.0188 Lt.	627052.65	1819607.66
15	750+02.55	0.0859 Rt.	626108.11	1822669.13
16	750+62.42	0.0718 Rt.	626090.47	1822726.35
17	758+05.59	0.1295 Lt.	625871.59	1823436.55
18	780+47.21	0.0000	625352.31	1825615.55

LEGEND

□ Existing Monument To Be Destroyed

Coordinate Values Are In Ohio State
Plane System, Based On NAD 83.
Scale Factor = 0.99993169

1953 ALIGNMENT CURVE DATA

P.I. Sta. 702+38.48
 $\Delta = 0^\circ 20' 11''$ Rt.
 $D_c = 0^\circ 20' 00''$
 $R = 17188.74'$
 $T = 500.60'$
 $L = 1000.92'$
 $E = 7.29'$

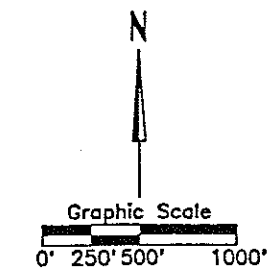
PROPOSED MONUMENT SUMMARY

Monument	Station	Offset	North	East
1	561+38.61	5.00' Rt.	630969.40	1804628.35
2	570+00.00	5.00' Rt.	630678.62	1806438.26
3	583+54.00	5.00' Rt.	630303.82	1806739.42
4	592+00.00	5.00' Rt.	630142.48	1807395.88
5	600+00.00	5.00' Rt.	629951.54	1808172.76
6	610+00.00	5.00' Rt.	629712.87	1809143.86
7	618+75.00	5.00' Rt.	629504.03	1809993.57
8	626+00.00	5.00' Rt.	629330.99	1810697.62
9	636+00.00	5.00' Rt.	629092.32	1811688.72
10	644+90.00	5.00' Rt.	628879.90	1812533.00
11	654+00.00	5.00' Rt.	628662.71	1813416.70
12	664+00.00	5.00' Rt.	628424.04	1814387.80
13	674+00.00	5.00' Rt.	628185.36	1815358.90
14	681+40.00	5.00' Rt.	628008.75	1816077.51
15	689+00.00	5.00' Rt.	627827.35	1816815.55
16	697+35.76	5.00' Rt.	627627.88	1817627.16
17	707+36.61	5.00' Rt.	627360.93	1818591.30
18	718+00.00	5.00' Rt.	627047.46	1819607.44
19	725+00.00	5.00' Rt.	626841.17	1820276.33
20	735+00.00	5.00' Rt.	626546.34	1821231.90
21	745+00.00	5.00' Rt.	626251.55	1822187.46
22	750+62.00	5.00' Rt.	626085.89	1822724.49
23	758+03.40	5.00' Rt.	625867.34	1823432.95
24	765+00.00	5.00' Rt.	625675.48	1824102.77

NOTE: See Plan And Profile Sheets For Pay Quantities

RE-ESTABLISHED CURVE DATA

P.I. Sta. 702+36.33
 $\Delta = 0^\circ 20' 10''$ Rt.
 $D_c = 0^\circ 20' 00''$
 $R = 17188.74'$
 $T = 500.57'$
 $L = 1000.85'$
 $E = 7.29'$
 $e_{max} = 0.0156$ Ft./Ft.



NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE 3rd LANE CONSTRUCTION SURVEY CONTROL PLAN			
MANNIK & SMITH, INC. CONSULTING ENGINEERS & SURVEYORS TOLEDO, OHIO			
DESIGNED: C.E.B.	CHECKED: R.W.L.	DATE: 12/95	
DRAWN: D.A.N.	IN CHARGE: J.W.	SCALE: 1"=500'	
CONTRACT 77-96-01 SHEET A2 OF A173			

1953 ALIGNMENT CURVE DATA

P.I. Sta. 572+48.34
 $\Delta = 0^\circ 23' 00''$ Lt.
 $D_c = 0^\circ 20' 00''$
 $R = 17188.74'$
 $T = 1109.04'$
 $L = 2215.00'$
 $E = 35.74'$

RE-ESTABLISHED CURVE DATA

P.I. Sta. 572+48.34
 $\Delta = 0^\circ 22' 53''$ Lt.
 $D_c = 0^\circ 20' 00''$
 $R = 17188.74'$
 $T = 1108.73'$
 $L = 2214.39'$
 $E = 35.72'$

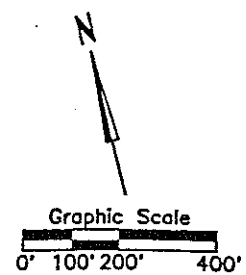
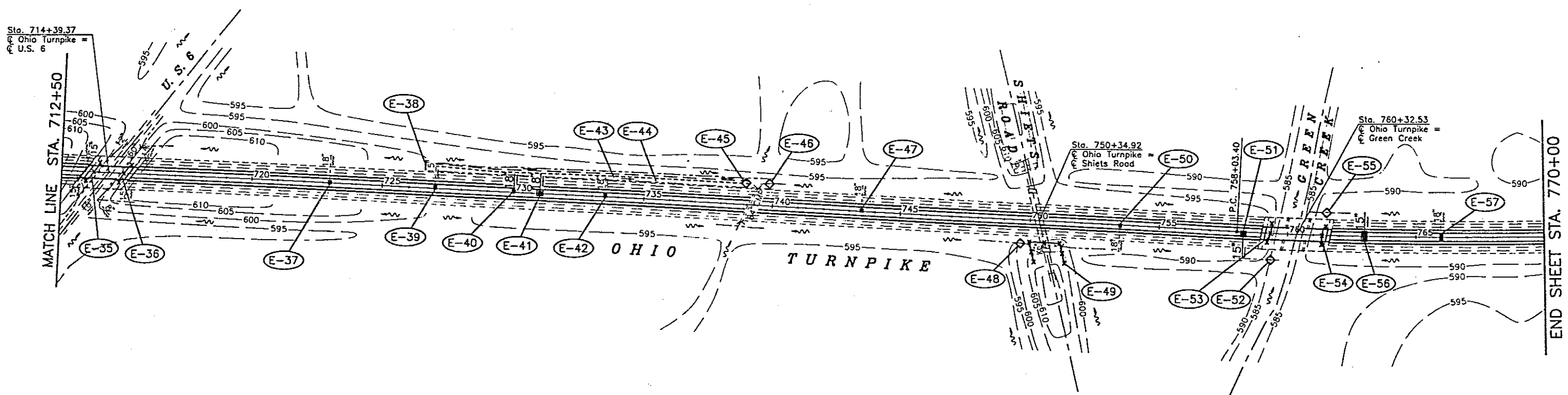
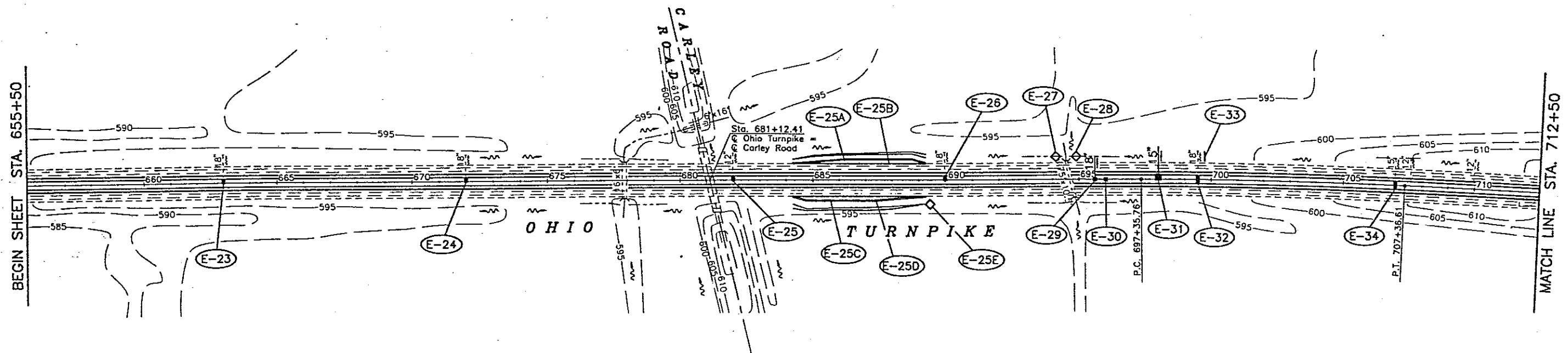
1953 ALIGNMENT CURVE DATA

P.I. Sta. 769+25.91
 $\Delta = 0^\circ 24' 36''$ Lt.
 $D_c = 0^\circ 20' 00''$
 $R = 17188.74'$
 $T = 1113.05'$
 $L = 2223.00'$
 $E = 36.00'$

RE-ESTABLISHED CURVE DATA

P.I. Sta. 769+25.68
 $\Delta = 0^\circ 28' 16''$ Lt.
 $D_c = 0^\circ 20' 00''$
 $R = 17188.74'$
 $T = 1122.28'$
 $L = 2241.37'$
 $E = 36.60'$

END PROJECT
STA. 770+00
77-96-01~PART A



NO.	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION OHIO TURNPIKE 3rd LANE CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN STA. 655+50 TO STA. 770+00 MANNIK & SMITH, INC. CONSULTING ENGINEERS & SURVEYORS TOLEDO, OHIO			
DESIGNED: S.M.F.	CHECKED: C.F.B.	DATE: 12/95	2 / 3
DRAWN: S.M.F.	IN CHARGE: J.M.	SCALE: 1"=200'	
CONTRACT 77-96-01 SHEET A17 OF A173			

Last Revision By: M.S.L.
 Description: Final Revised Tracings

BEGIN SHEET STA. 680+00
 As Per MC-9.4
 Begin Conc. Barrier Transition 680+54.69
 End Conc. Barrier Transition 681+68.18
 Sta. 681+12.41
 Ohio Turnpike
 Carley Road
 27'~6" F @ 2.41%
 24'~15" B
 (D-1)
 6" U.D.
 Cable Marker
 Mon. Cont. Pod
 682 6" U.D.
 683 Cable Marker
 684
 Abandoned Litel Cable
 (GR-3)
 (GR-4)
 (GR-1)
 (JB-1)
 (R-2)
 685+00 Begin Taper Lt.
 687+00 End Taper Lt.
 688+25 Mile Post Reference
 689+50 Begin Taper Lt.
 690+25 End Taper Lt.
 27'~6" F @ 2.52%
 (D-2) 24'~18" B
 6" U.D.
 Abandoned Litel Cable
 689+50
 689+25
 690+25
 686+00 Mile Post Reference
 687+25 Begin Taper Rt.
 688+25 End Taper Rt.
 689+25 End Taper Rt.
 27'~6" F @ 2.56%
 (M-2)
 Conc. Barrier, Type B 50
 As Per P-16R
 (CB-1)
 CARLEY ROAD
 END SHEET STA. 690+25

BENCH MARK NO. 14

FENO Monument
Sta. 685+98~64.9' Lt.
Elevation = 597.93

ESTIMATED QUANTITIES																						
Ref. No.	Station		Side	202	202 SP202K	GOG	SP205	SP205	603	606	SP604	604	SP606A	606	622	622	59254	802	802			
				Lin.Ft.	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	Each	
		From	To Or At	Guardrail, Removed	Concrete Barrier Removed	Anchor Assembly ET-2000, Removed For Storage	BRIDGE TERMINAL ASSEMBLY TYPE 2	CONDUIT, 4" WITH 3 CELL INNERDUCT, 713.07	CONDUIT, 4" WITH 4 CELL INNERDUCT, 713.07	15" Conduit Type B, 706.02	18" Conduit Type B, 706.02	Bridge Terminal Assembly Type 1	Inlet No. 3B50 As Per Plan	Monument Assembly	Anchor Assembly Type ET-2000 Option A	Guardrail, Type 5 Using Steel Posts	Concrete Barrier, Type B 50, As Per Plan	Concrete Barrier Type D Modified	JUNCTION BOX POLYMER CONC., 18"x 8"x 8"	Barrier Reflector, Type A	Barrier Reflector, Type B	
R-1		680+00	681+45	RL	145																	
R-2		680+78	684+90	LL	362																	
GR-2		680+83	681+20	RL	25	14																
GR-3		680+46	680+83	LL	25	14																
GR-4		681+05	681+42	LL	25	14																
CB-1		680+00	690+25	Med.				1025	1025							977					20	
D-1			682+00	Med.&LL																		
D-2			690+00	Med.&LL						24	24		1	1'								
GR-1		682+70	684+92	LL	50																	
JB-1			684+20	Med.															2	3		
M-1			681+40	5' RL																		
M-2			689+00	5' RL																		

NO	REVISIONS	BY	DATE
<h1>OHIO TURNPIKE COMMISSION</h1> <p>OHIO TURNPIKE 3rd LANE CONSTRUCTION PLAN & PROFILE STA. 680+00 TO STA. 690+25</p> <p>MANNIK & SMITH, INC. CONSULTING ENGINEERS & SURVEYORS TOLEDO, OHIO</p>			
DESIGNED: C.E.B.	CHECKED: D.D.Y.	DATE: 12/55	
DRAWN: D.A.N.	IN CHARGE: J.M.	SCALE: 1"=50'	
CONTRACT 77-96-01 SHEET A34 OF A17			

BEGIN SHEET STA. 670+00

MATCH LINE STA. 685+00

MATCH LINE STA. 685+00

END SHEET STA. 700+00

OHIO TURNPIKE

OHIO TURNPIKE

LEGEND

- (N) Raised Pavement Marker-Stimsonite Model 98BP
- (R) Replacement Prismatic Retroreflectors
- (Y) Proposed Edge Line, Yellow, Type 1
- (W) Proposed Edge Line, White, Type 1
- (L) Proposed Lane Line, Type 1
- (Y) Existing Edge Line, Yellow
- (W) Existing Edge Line, White
- (L) Existing Lane Line
- As Per Plan
- Existing Sign To Remain
- Existing Sign To Be Removed
- Proposed Sign

NOTE:
All Proposed Pavement Markings Are As Per Item 642, Traffic Paint Unless Shown Otherwise In The Plans.

See Sheet No. 11 of 11

For Mounting Details See Sheet No. 11 of 11

MOTELS
CAMPING
NEXT EXIT
GET LIST AT
TOLL PLAZA

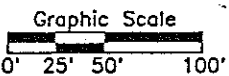
MP 094.80
Sta. 682+44
8' X 10' GS

SANDUSKY COUNTY
CARLEY ROAD

D-7-96
Sta. 681+29
MP 094.77

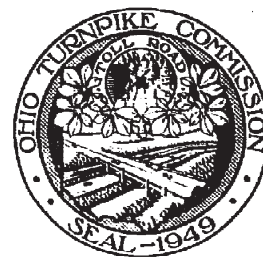
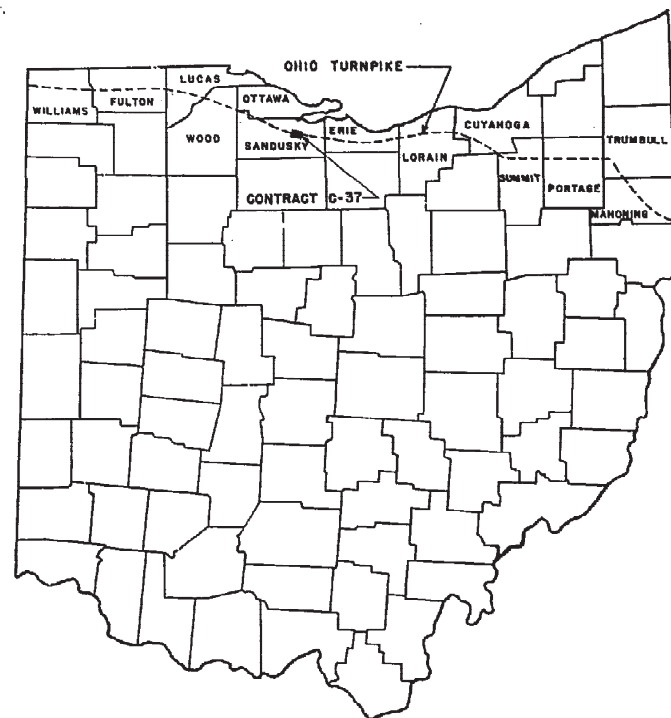
SANDUSKY COUNTY
CARLEY ROAD

D-7-96
Sta. 680+96
MP 094.76



NO	REVISIONS	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE 3rd LANE CONSTRUCTION TRAFFIC CONTROL PLANS STA. 670+00 TO STA. 700+00			
MANNIK & SMITH, INC. CONSULTING ENGINEERS & SURVEYORS TOLEDO, OHIO			7/11
DESIGNED: R.W.L.	CHECKED: C.F.B.	DATE: 12/95	
DRAWN: R.W.L.	IN CHARGE: J.M.	SCALE: 1"=50'	
CONTRACT 77-95-01 SHEET A101 OF A173			

CAD Version: 12/17/96
1. CAD Version: 12/17/96
2. Revision: 12/17/96
3. Revision: 12/17/96
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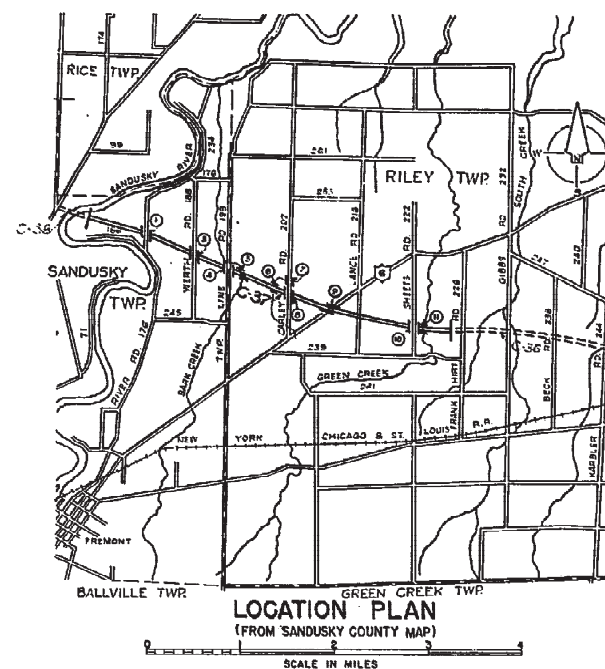


CONTRACT NO. C-37
COUNTY - SANDUSKY
DATE:

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1
DESIGN SECTION D-12

CONTRACT NO. C-37
TURNPIKE CONSTRUCTION CONTRACT
STATION 557+52 TO STATION 770+00



APPROVAL RECOMMENDED
BROWN & BLAUVELT
CONTRACTING ENGINEER

Hansel A. Blauvelt
Feb. 4, 1953

APPROVED
J. E. GREINER CO.
CONSULTING ENGINEER

J. J. Jenkins Jr.
5-25-53

APPROVED
OHIO TURNPIKE COMMISSION

W. K. Ramey
CHIEF ENGINEER 5-29-53



- 1 LIST OF DRAWINGS
- 2 GENERAL NOTES AND LEGEND
- 3 MAINTENANCE OF TRAFFIC MAP
- 4 SUMMARY OF ESTIMATES
- 5 PLAN AND PROFILE STA. 556+75 TO STA. 576+00
- 6 PLAN AND PROFILE STA. 576+00 TO STA. 604+00
- 7 PLAN AND PROFILE RIVER ROAD
- 8 PLAN AND PROFILE STA. 604+00 TO STA. 632+00
- 9 PLAN AND PROFILE WERTH ROAD
- 10 PLAN AND PROFILE STA. 632+00 TO STA. 659+00
- 11 PLAN AND PROFILE TOWNSHIP LINE ROAD
- 12 PLAN AND PROFILE STA. 659+00 TO STA. 687+00
- 13 PLAN AND PROFILE CARLEY ROAD
- 14 PLAN AND PROFILE STA. 687+00 TO STA. 712+00
- 15 PLAN AND PROFILE STA. 712+00 TO STA. 740+00
- 16 PLAN AND PROFILE STA. 740+00 TO STA. 767+00
- 17 PLAN AND PROFILE SHEETS ROAD
- 18 PLAN AND PROFILE STA. 767+00 TO STA. 770+00

- STRUCTURE #1 RIVER ROAD OVER TURNPIKE
- 19 PLAN, ELEVATION AND SECTION
 - 20 SUPERSTRUCTURE
 - 21 ABUTMENT
 - 22 PIERS

- STRUCTURE #3 WERTH ROAD OVER TURNPIKE
- 23 PLAN, ELEVATION AND SECTION
 - 24 SUPERSTRUCTURE
 - 25 ABUTMENT
 - 26 PIERS

- STRUCTURE #4 TOWNSHIP LINE ROAD OVER TURNPIKE
- 27 PLAN, ELEVATION AND SECTION
 - 28 SUPERSTRUCTURE
 - 29 ABUTMENT
 - 30 PIERS

- STRUCTURE #5 TURNPIKE OVER BARK CREEK
- 31 PLAN, ELEVATION AND SECTION
 - 32 SUPERSTRUCTURE
 - 33 ABUTMENT
 - 34 PIER

- STRUCTURE #6 CULVERT
- 35 GENERAL PLAN AND DETAILS

- STRUCTURE #7 CULVERT
- 36 GENERAL PLAN AND DETAILS

- STRUCTURE #8 CARLEY ROAD OVER TURNPIKE
- 37 PLAN, ELEVATION AND SECTION
 - 38 SUPERSTRUCTURE
 - 39 ABUTMENT
 - 40 PIERS

- STRUCTURE #9 TURNPIKE OVER STATE ROUTE (U.S. 6)
- 41 PLAN, ELEVATION AND SECTION
 - 42 SUPERSTRUCTURE
 - 43 ABUTMENT
 - 44 PIERS

- STRUCTURE #10 SHEETS ROAD OVER TURNPIKE
- 45 PLAN, ELEVATION AND SECTION
 - 46 SUPERSTRUCTURE
 - 47 ABUTMENT
 - 48 PIERS

- STRUCTURE #11 TURNPIKE OVER GREEN CREEK
- 49 PLAN, ELEVATION AND SECTION

- 50 SUPERSTRUCTURE
- 51 ABUTMENT
- 52 PIERS

- MISCELLANEOUS DETAILS
- 53 STRUCTURAL DETAILS
 - 54 STRUCTURAL DETAILS
 - 55 ARCHITECTURAL DETAILS
 - 56 CROSSROAD AND DETOUR DETAILS
 - 57 PAYMENT LINES AND SUPERELEVATION DETAILS

- BORING LOGS
- 58 STRUCTURES #1,2,3,4
 - 59 STRUCTURES #4 (CONCL.) 5,6,7,8,9
 - 60 STRUCTURES #9 (CONCL.) 10,11

- STANDARD DRAWINGS
- | REV. DATE | NO. | DESCRIPTION |
|-----------|-----|----------------------------------------------------------|
| 5-6-53 | 1 | TURNPIKE DITCH DETAILS |
| 1-20-53 | 2 | STANDARD HEADWALLS FOR PIPE SIZES 48" AND UNDER |
| 1-20-53 | 3 | STANDARD HEADWALLS FOR PIPE SIZES OVER 48" |
| 5-6-53 | 4 | TYPICAL ROADWAY SECTIONS |
| 5-6-53 | 5 | HANDRAIL DETAILS |
| 5-6-53 | 6 | INLETS AND CURBS |
| 5-6-53 | 7 | MANHOLES |
| 9-9-53 | 8 | PAVEMENT REINFORCEMENT AND DETAILS |
| 2-7-53 | 9 | TRANSVERSE PAVEMENT JOINTS TYPE A |
| 5-6-53 | 10 | TRANSVERSE PAVEMENT JOINTS TYPE B |
| 12-31-52 | 11 | PAVEMENT JOINT SPACING |
| 5-6-53 | 12 | RIGHT OF WAY FENCE AND GATES |
| 5-6-53 | 13 | RIGHT OF WAY INSTALLATION DETAILS |
| 3-3-53 | 14 | PERMANENT BARRICADE, PERMANENT MONUMENT AND DELINEATORS |
| 4-27-53 | 15 | DRAINAGE DETAILS FOR TURNPIKE OVERPASSES AND UNDERPASSES |
| 1-20-53 | 16 | UNDERDRAINS |
| 1-24-53 | 17 | GUARD RAILS TYPE A AND TYPE B |
| 5-6-53 | 18 | GUARD RAILS TYPE C AND TYPE D |
| 12-5-52 | 19 | AGRICULTURAL TILE DRAINAGE-TYPICAL DETAILS |
| 1-6-53 | 20 | FLOOD GATES FOR RIGHT OF WAY FENCE |
| 1-23-53 | 21 | TRANSVERSE PAVEMENT JOINTS - TYPE C |
| 2-19-53 | 22 | CULVERT PIPE BEDDING AND BACKFILL |

AS-BUILT PLANS		DATE
NO.	REVISION	BY
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE PROJECT NO. 1		
LIST OF DRAWINGS		
BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12		
DESIGNED	CHECKED	DATE
DRAWN	IN CHARGE	SCALE
CONTRACT NO. C-37		SHEET 1 OF 50

CIVIL

ALL ELEVATIONS REFER TO THE U.S.C. & G.S. MEAN SEA LEVEL DATUM.

ALL CO-ORDINATES AND BEARINGS SHOWN ON THE PLANS ARE BASED ON THE LAMBERT CONFORMAL CONIC PROJECTION FOR THE STATE OF OHIO - NORTH ZONE.

THE THEORETICAL TURNPIKE GRADE LINE AS SHOWN ON THE PLANS REPRESENTS THE CENTER LINE OF BOTH TURNPIKE ROADWAYS PROJECTED TO THE CENTER LINE OF THE TURNPIKE.

LINE AND GRADES OF NEW PAVEMENTS WILL BE ADJUSTED TO MEET EXISTING PAVEMENTS AS DIRECTED BY THE ENGINEER.

THE PLANS PROVIDE FOR THE PERFORMANCE OF CERTAIN WORK, SUCH AS THE RELOCATION OF STREAMS, GRADED AREAS, ETC., OUTSIDE THE ESTABLISHED OHIO TURNPIKE AND/OR PUBLIC RIGHTS OF WAY. THE CONTRACTOR SHALL NOT ORDER MATERIALS NOR PROCEED WITH THIS WORK UNTIL SPECIFICALLY AUTHORIZED TO DO SO BY THE ENGINEER.

UTILITY

LOCATIONS OF EXISTING UTILITIES PUBLIC AND/OR PRIVATE AND FIELD TILE DRAINAGE AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THEIR EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION

MAINTENANCE OF TRAFFIC

TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ALONG THE PRESENT ROADWAY OF U.S. ROUTE #6. THE APPROVAL OF ALL TEMPORARY CLEARANCES SHALL BE OBTAINED FROM THE DEPARTMENT OF HIGHWAYS, STATE OF OHIO IN WRITING PRIOR TO CONSTRUCTION.

CROSSINGS OF THE TURNPIKE AT CO. RD. 176 (RIVER ROAD), TWP. RD. 198 (TOWNSHIP LINE RD.) AND CO. RD. 202 (CARLEY RD.) ARE TO BE MAINTAINED UNTIL COMPLETION OF THEIR RESPECTIVE STRUCTURES AND ROADWAY PAVEMENTS.

LANDSCAPING

TOPSOIL (ITEM L-3) SHALL BE SPREAD TO A COMPACTED DEPTH OF TWO (2) INCHES ON AREAS INDICATED ON THE PLANS.

BONE MEAL (ITEM L-3) SHALL BE APPLIED AT THE RATE OF 20 LBS. PER ONE THOUSAND (1000) SQ. FT. AND THOROUGHLY INCORPORATED INTO THE SUBGRADE BEFORE THE TOPSOIL HAS BEEN PLACED.

AGRICULTURAL GROUND LIME STONE (ITEM L-9) SHALL BE APPLIED AT THE RATE OF 100 LBS. PER ONE THOUSAND (1000) SQ. FT. AND THOROUGHLY INCORPORATED INTO THE TOPSOIL.

COMMERCIAL FERTILIZER 10-6-4 (ITEM L-9) SHALL BE APPLIED AT THE RATE OF 20 LBS. PER ONE THOUSAND SQ. FT. AND THOROUGHLY INCORPORATED INTO THE TOPSOIL.

SEEDING & PROTECTING (ITEM L-9) AND SEEDING & MULCHING (SPECIAL SEEDING, ITEM L-19) SHALL BE DONE ONLY BETWEEN APRIL 15 & JUNE 15, AND BETWEEN AUGUST 15 & OCTOBER 15, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

SPECIFICATIONS

THIS PROJECT SHALL BE CONSTRUCTED UNDER THE FOLLOWING SPECIFICATIONS:

a) OHIO TURNPIKE PROJECT NO. 1, GENERAL SPECIFICATIONS, DATED DECEMBER 9, 1952.

b) SPECIAL PROVISIONS FOR CONTRACT C-37.

c) SUPPLEMENTAL SPECIFICATIONS B-20, DATED DECEMBER 9, 1952
SUPPLEMENTAL SPECIFICATIONS I-18, DATED MAY 28, 1953
SUPPLEMENTAL SPECIFICATIONS I-30, DATED DECEMBER 9, 1952
SUPPLEMENTAL SPECIFICATIONS I-33, REV. JULY 5, 1953
SUPPLEMENTAL SPECIFICATIONS I-35, DATED DECEMBER 9, 1952
SUPPLEMENTAL SPECIFICATIONS I-9, DATED DECEMBER 9, 1952
SUPPLEMENTAL SPECIFICATIONS B-21, DATED FEBRUARY 20, 1953
SUPPLEMENTAL SPECIFICATIONS A-4, DATED MAY 28, 1953
SUPPLEMENTAL SPECIFICATIONS B-35, DATED DECEMBER 9, 1952
SUPPLEMENTAL SPECIFICATIONS I-29, DATED MAY 28, 1953

LEGEND

SURVEY BASE LINE	
EXISTING PROPERTY LINE	
EXISTING FENCE LINE	
EXISTING PROPERTY LINE (FENCED)	
EXISTING R/W LINE	
PROPOSED R/W LINE	
EXISTING FARM TILE DRAINAGE	
PROPOSED FARM DRAINAGE COLLECTOR	
PROPOSED DROP INLET	
PROPOSED TILE LINE BREATHER	
PROPOSED DITCH AND ELEVATION	
PROPOSED GUARD RAIL (FOR TYPE SEE PLANS)	
PROPOSED MONUMENT	
PROPOSED TILE LINE JUNCTION BOX	

CAST-IN-PLACE CONCRETE PILES

PILES DRIVEN WITHOUT CORE OR MANDREL SHALL HAVE FORGED OR CAST STEEL POINT 3" DIAMETER. PILES SHALL TAPER 1" IN 7'-0" FIRST THIRTY FEET OF LENGTH FROM TIP, THEN 3" IN 20'-0" TO BUTT. SHELLS SHALL HAVE SUFFICIENT STRENGTH TO WITHSTAND DRIVING BUT SHALL NOT BE LESS THAN 11 GAUGES. UPPER THIRD OF PILE SHALL BE REINFORCED WITH 6 #4 BARS WHICH SHALL EXTEND 4'-3" ABOVE CUT-OFF, AND #2 TIES 12" O.C. SPLICES SHALL BE OF ADEQUATE STRENGTH AND APPROVED BY THE ENGINEER.

PILES DRIVEN WITH CORE OR MANDREL SHALL HAVE FORGED OR CAST STEEL POINT. PILES 37' AND LESS IN LENGTH SHALL HAVE 8" DIAMETER TIP AND TAPER 1" IN 2'-6". PILES OVER 37' LONG SHALL HAVE 8-1/2" DIAMETER TIP AND SHALL BE STEEP TAPERED 1" IN 8'-0". CASINGS SHALL BE OF SUFFICIENT STRENGTH TO RESIST EARTH PRESSURE. UPPER HALF OF PILE SHALL BE REINFORCED WITH 6-#6 BARS WHICH SHALL EXTEND 1'-3" ABOVE CUT-OFF, AND #2 TIES 12" O.C.

ADEQUATE PROVISIONS SHALL BE MADE TO INSURE THAT A MINIMUM CLEARANCE OF 1'-6" SHALL BE MAINTAINED BETWEEN THE REINFORCEMENT AND THE PILE SHELL. ALTERNATE DESIGNS OF CAST-IN-PLACE CONCRETE PILES MAY BE SUBMITTED FOR APPROVAL BY THE ENGINEER.

STRUCTURAL

DESIGN SPECIFICATIONS & LOADINGS

STRUCTURES HAVE BEEN DESIGNED IN ACCORDANCE WITH THE LATEST REVISION OF THE OHIO HIGHWAY DEPARTMENT "DESIGN SPECIFICATIONS FOR HIGHWAY STRUCTURES."

STRUCTURAL STEEL

15/16" DIAMETER OPEN HOLES AND 7/8" DIAMETER RIVETS UNLESS NOTED.

NO CAMBER IS REQUIRED FOR STEEL BEAMS UNLESS NOTED ON THE DESIGN DRAWINGS BUT ALL BEAMS SHALL BE CHECKED FOR STRAIGHTNESS AND PLACED IN THE STRUCTURE SO THAT ANY CURVATURE WILL GIVE CAMBER. IN GENERAL THIS MEANS THAT ALL BEAMS WILL BE PLACED WITH THE CONVEX SIDE UP WITH THE EXCEPTION OF SHORT BEAM SECTIONS OVER THE SUPPORTS OF CONTINUOUS STRUCTURES WHICH SHOULD BE PLACED WITH THE CONCAVE SIDE UP.

ALL EXPANSION SHOES SHALL BE SET VERTICAL FOR 50° TEMPERATURE. THE SHOES AND EXPANSION DIALS SHALL BE SET IN CORRECT POSITION FOR TEMPERATURE AT TIME OF ERECTION.

ALL BEAM SPLICES SHALL BE ASSEMBLED IN THE SHOP AND REAMED AS SPECIFIED FOR FIELD CONNECTIONS.

WHEN STEEL EXCEEDING ONE INCH IN THICKNESS IS TO BE WELDED, ELECTRODES OF CLASSIFICATION NUMBER E6015 OR E6016 SHALL BE USED. ALL WELDING SHALL BE CLASS "A".

FOR SPAN WITHOUT HINGED BEARINGS ON AN INCLINED GRADE OF 1% OR MORE THE SOLE PLATES SHALL BE REVELLED SO THAT THE SUBSTRUCTURE BRIDGE SEATS MAY BE LEVEL.

CONCRETE

ALL CONCRETE FOR STRUCTURES SHALL BE CLASS "C".

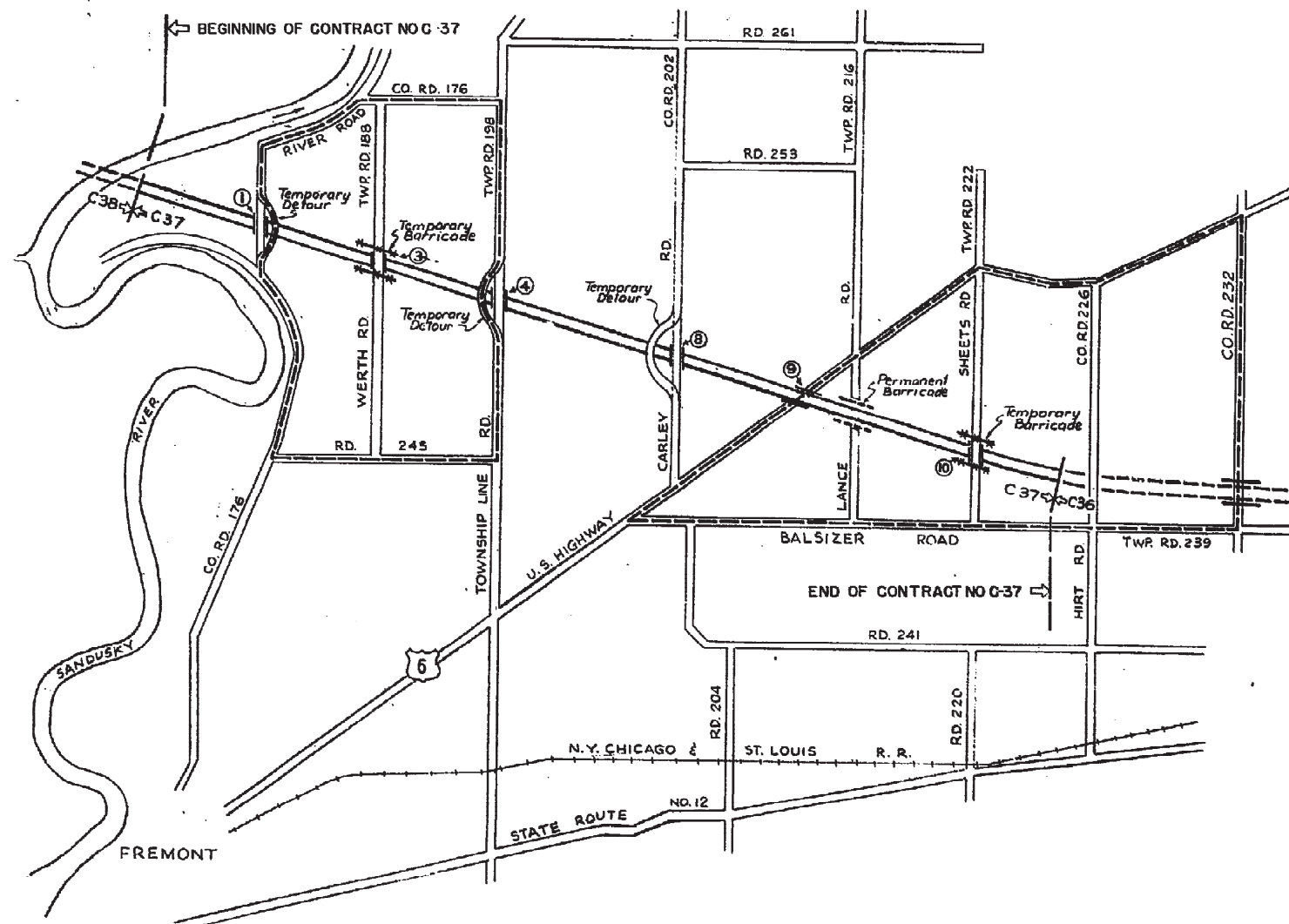
ATTENTION IS DIRECTED TO THE ANCHOR BOLTS REQUIRED FOR ATTACHING HAND RAILS AND GUARD RAILS TO THE PARAPETS OF THE STRUCTURES.

THE SEQUENCE OF DECK SLAB POURS SHALL BE AS SHOWN ON THE DESIGN DRAWINGS. NOT MORE THAN 36 HOURS SHALL ELAPSE BETWEEN ADJACENT POURS. THE FINISH ON THE TURNPIKE OVER STRUCTURES SHALL BE MACHINE FINISH.

SUBSTRUCTURES

THE ENTIRE FILL SHALL BE PLACED BEFORE EXCAVATING FOR THE ABUTMENTS.

AS-BUILT PLANS		6656
Rev. (symbol) designation for agric. drain.		12-8-53
NO.	REVISION	BY DATE
OHIO TURNPIKE COMMISSION		
OHIO TURNPIKE PROJECT NO. 1		
GENERAL NOTES & LEGEND		
BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12		
DESIGNED:	CHECKED: HSN	DATE: Feb. 4, 1953
DRAWN:	IN CHARGE: [signature]	SCALE: Noted
CONTRACT NO. C-37		SHEET (2) OF (6)



MAINTENANCE OF TRAFFIC
 Traffic shall be maintained at all times along the present roadway of U.S. Route #6. The approval of all temporary clearances shall be obtained from the Department of Highways, State of Ohio, in writing prior to construction.

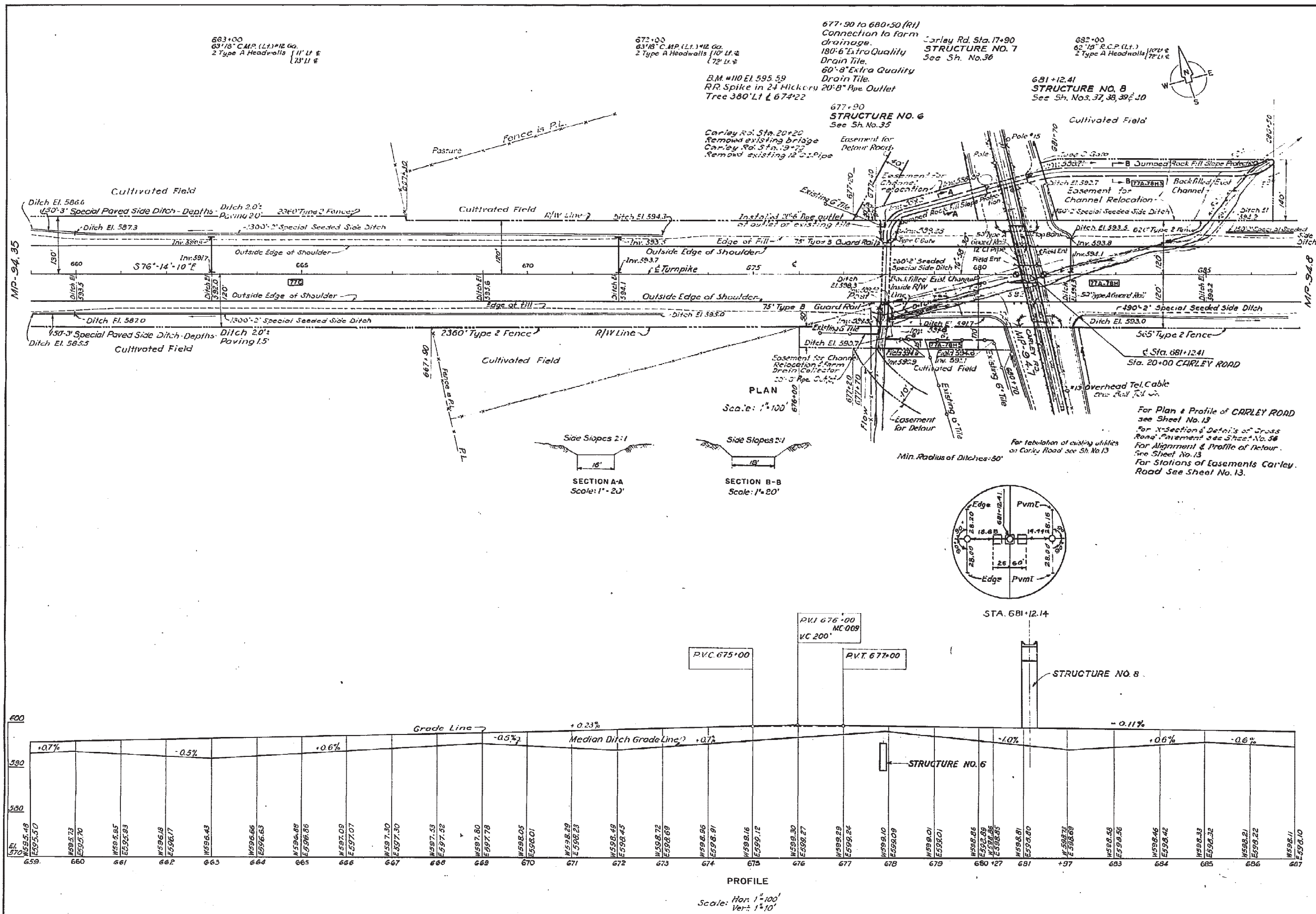
Crossings of the Turnpike at Co. Rd. 176 (River Rd.), Twp. Rd. 198 (Township Line Rd.), and Co. Rd. 202 (Carley Rd.) are to be maintained until completion of their respective structures and pavements.

Immediately upon restoration of traffic to the new bridges and approaches, the temporary roadway surfaces and embankments shall be removed and the site restored to its original condition.

----- Denotes Traffic Detour Routing

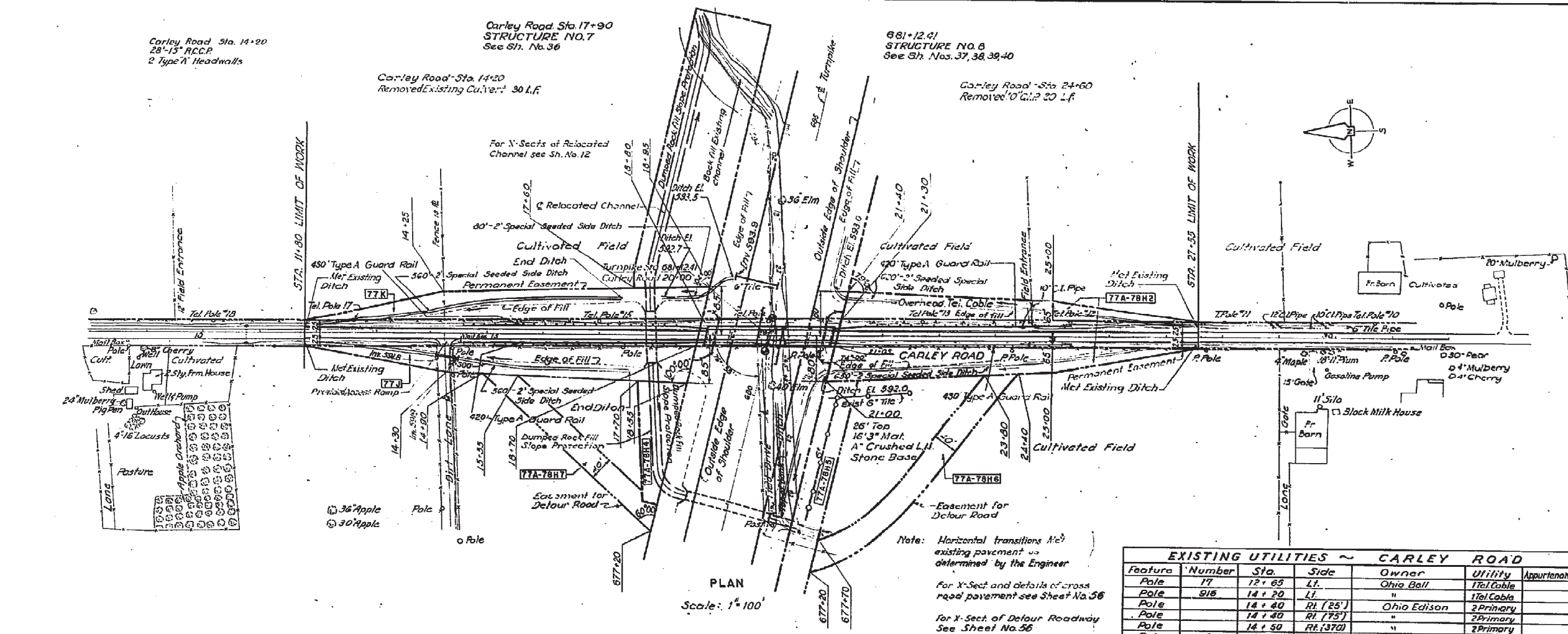
Note:
 For details of the Temporary Detours, see Contract Drawings, Sheets 7, 11, 13 and 56.
 For details of the Permanent Barricades, see Standard Drawing No. 14.
 ① - Denotes Structure No.

AS-BUILT PLANS			
NO.	REVISION	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
MAINTENANCE OF TRAFFIC			
BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12			
DESIGNED: DRAWN: J.A.	CHECKED: HSH IN CHARGE: HSH	DATE: Feb. 4, 1953	SCALE: Not to Scale
CONTRACT NO. C-37		SHEET 3 OF 60	

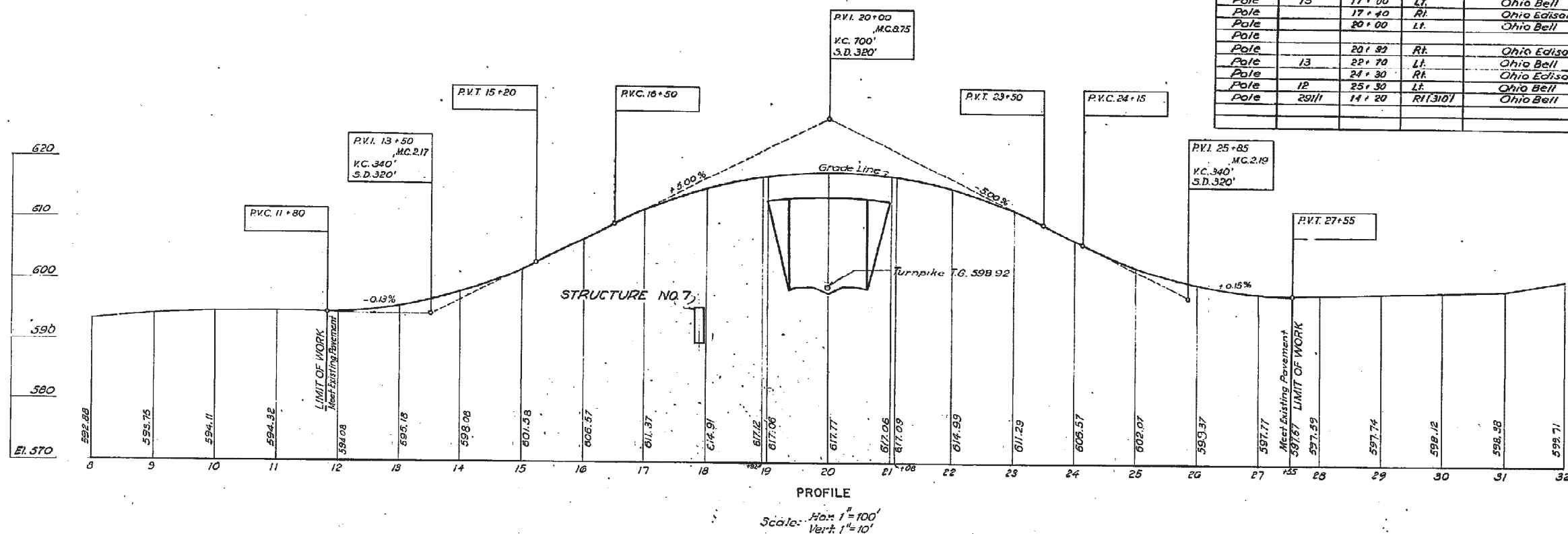


QUANTITIES				
NO.	ITEM	LOCATION & REMARKS	ESTIMATED QUANTITY	FINAL QUANTITY
ROADWAY				
E-1	Roadway Base		9,646	15,040
E-2	Subgrade		16,242	19,072
E-3	Shoulder		215	23
E-4	Guard Rail, Type 1		220	200
E-5	Guard Rail, Type 2		150	150
E-6	Concrete		5,905	3,784
E-7	Place & Spread		16,177	15,681
E-8	Base		146	0
E-9	Shoulder		16,177	15,681
E-10	Concrete		146	130
E-11	Base		73	0
E-12	Concrete		32,566	29,547
E-13	Base		2	2
E-14	Concrete		1.5	1.5
E-15	Base		16	16
DRAINAGE				
E-16	Excavation		21	46
E-17	Backfill		5038	5146.3
E-18	Excavation		150	180
E-19	Backfill		0	0
E-20	Excavation		60	60
E-21	Backfill		20	20
E-22	Excavation		1551	1845.6
E-23	Backfill		100	100
E-24	Excavation		6.24	7.96
E-25	Backfill		326	527.80
E-26	Excavation		62	62
E-27	Backfill		124	126
E-28	Excavation		100	100
PAVEMENT				
E-29	Subgrade		6720	7029
E-30	Base		11,200	11,194
E-31	Concrete		14,933	14,945
AS-BUILT PLANS				
Mic. drainage remarks; not shown				
REVISION				
NO. BY DATE				
OHIO TURNPIKE COMMISSION				
OHIO TURNPIKE PROJECT NO. 1				
PLAN AND PROFILE				
SANDUSKY COUNTY				
STA. 659+00 TO STA. 687+00				
BROWN & BLAUVELT				
CONTRACTING ENGINEER				
DESIGN SECTION D-12				
DESIGNED: JEA				
DRAWN: JEA				
CHECKED: HSN				
DATE: Feb. 4, 1953				
SCALE: AS SHOWN				
CONTRACT NO. C-37				
SHEET 12 OF 60				

Carley Road - Sta. 24+60
Removed 10" G.L. 20 L.F.



EXISTING UTILITIES ~ CARLEY ROAD						
Feature	Number	Sta.	Side	Owner	Utility	Appurtenances
Pole	17	12 + 65	Lt.	Ohio Bell	1Tel Cable	
Pole	916	14 + 20	Lt.	"	1Tel Cable	
Pole		14 + 40	Rt (25')	Ohio Edison	2Primary	
Pole		14 + 40	Rt (75')	"	2Primary	
Pole		14 + 50	Rt (370)	"	2Primary	
Pole	15	17 + 00	Lt.	Ohio Bell	1Tel Cable	
Pole		17 + 40	Rt.	Ohio Edison	2Primary	
Pole		20 + 00	Lt.	Ohio Bell	1Tel Cable	
Pole		20 + 22	Rt.	Ohio Edison	2Primary	
Pole	13	22 + 70	Lt.	Ohio Bell	1Tel Cable	
Pole		24 + 30	Rt.	Ohio Edison	2Primary	
Pole	12	25 + 30	Lt.	Ohio Bell	1Tel Cable	
Pole	291/1	14 + 20	Rt (310)	Ohio Bell	2Tel Lines	



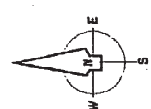
QUANTITIES					
NO.	ITEM	LOCATION & REMARKS	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
ROADWAY					
1-1	Grading Earth		CY	883	414
1-2	Barrow		CY	37,337	438+3
1-3	Water		LF	281	363
1-4	Gravel Sub. Type A		CY	1,300	100
1-5	Gravel Sub. Type A		CY	18,270	6326
1-6	Gravel Removed (under 16")		LF	50	50
1-7	Gravel Sub. Type A		CY	2,650	0
1-8	Gravel Sub. Type A		CY	0.24	0
1-9	Gravel Sub. Type A		CY	2,650	0
1-10	Gravel Sub. Type A		CY	0.24	0
1-11	Gravel Sub. Type A		CY	1.20	0
DRAINAGE					
1-12	15" x 33" RCP		LF	2.4	2.8
1-13	12" x 24" RCP for Storm		LF	1.80	2.28
1-14	Reinft. Steel		LF	102	14336
1-15	Storm Drainage No. 1	as directed by the Engineer	LF	30'	331.3
1-16	Storm Drainage No. 2		LF		549
PAVEMENT					
1-17	Prime Coat	Type A	Gal	840	0
1-18	Agash Surf Course		CY	83	0
1-19	Gravelly Base Course		CY	336	336.3
1-20	Agash Leveling Course		CY	83	0

AS-BUILT PLANS		Feb 50
Add access ramp and culvert; new borrow		Feb 53
NO.	REVISION	BY DATE

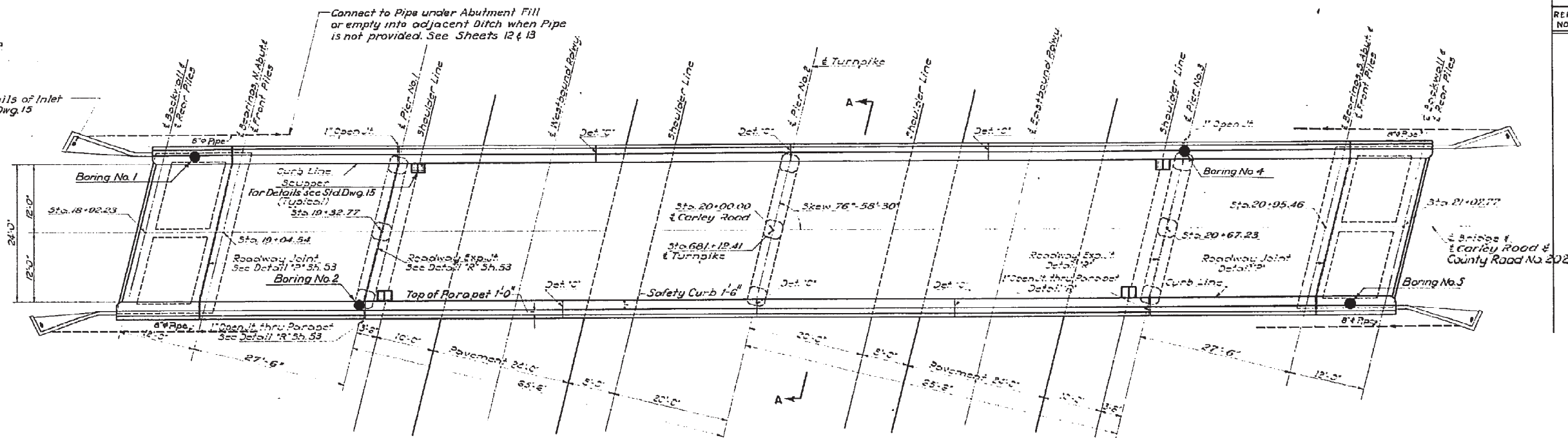
OHIO TURNPIKE COMMISSION
OHIO TURNPIKE PROJECT NO. 1
PLAN AND PROFILE
SANDUSKY COUNTY
CO. RD. 202 - CARLEY RD.
BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: DRAWN: R.O.	CHECKED: JSA IN CHARGE: R.O.	DATE: Feb 4, 1953 SCALE: AS SHOWN
--------------------------	---------------------------------	--------------------------------------

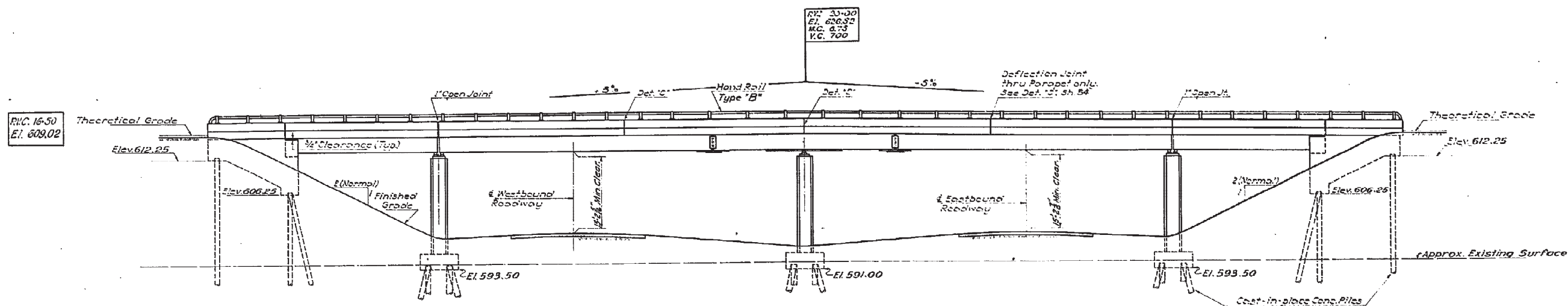
CONTRACT NO. C-37 SHEET 13 OF 60



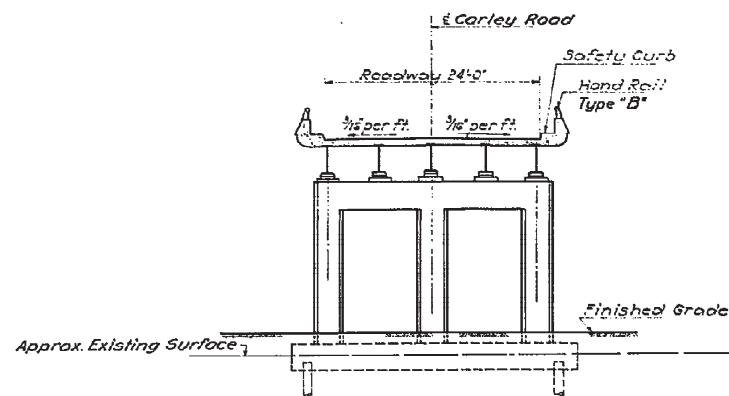
For Details of Inlet
See Std Dwg. 15



PLAN



ELEVATION



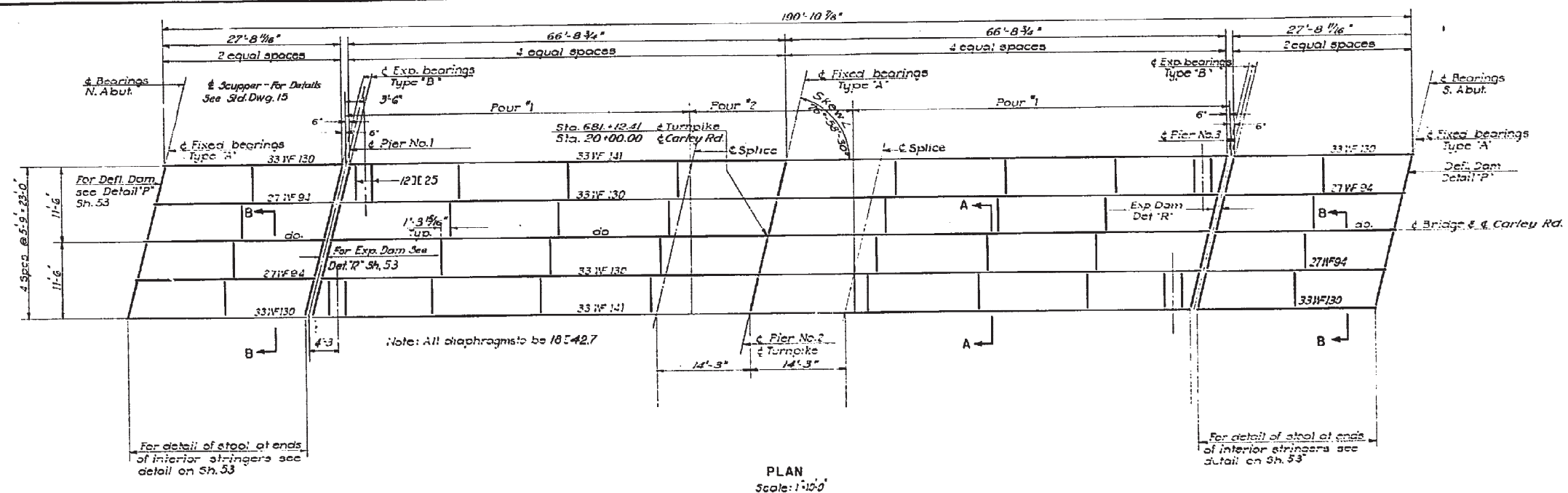
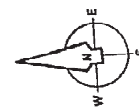
SECTION A-A

References:
For General Notes see Sheet No. 2
For Drainage Details see Std Dwg. 15
For Architectural Details see Sheet No. 55
Design Frequency Loading CF-30
For Boring Log See Sheet No. 59.

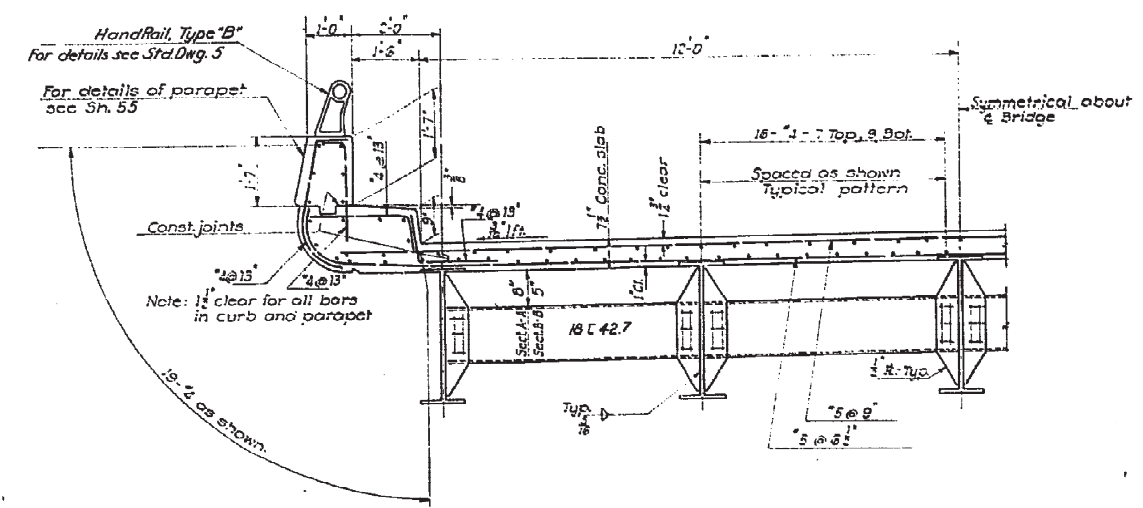
QUANTITIES					
REF NO	ITEM NO	ITEM	LOCATION & REMARKS	UNIT	ESTIMATED QUANTITY
					FINAL QUANTITY
	E-2	Exc. for Str. Incl.		CY	180
	S-1	Cl. Conc. Super Str.		CY	184
	S-1	Cl. Conc. Abut.		CY	131
	S-1	Cl. Conc. Abut. Inlet		CY	4
	S-1	Cl. Conc. Pier		CY	72
	S-1	Cl. Conc. Pier Foot		CY	71
	S-4	Reinf. Steel		Lb.	70,523
	S-7	Struct. Steel		Lb.	143,733
	S-9	Str. Expansion for Conc. Jts.		Lb.	12,771
	S-14	Reinf. Steel Type B		L.F.	230
	S-16	First Test Pile		L.F.	1
	S-17	Pile Test Load		L.F.	1
	S-29	Scuppers Type B		Ea.	4
	S-29	W. Pipe 6" I.D.		L.F.	100
	S-29	8" Pipe		L.F.	290
	S-18	Furnishing Piles		L.F.	2610
	S-18	Driving & Filling Piles		L.F.	2610
	S-18	Splicing Piles		Ea.	50
					236.7
					181.79
					130.1
					5.44
					69.29
					70.38
					66,618.06
					158,130.0
					3134.0
					437.79
					1
					1
					4
					148.31
					465.17
					3250
					31238
					0

P.V.T. 23-30
E.I. 609.02

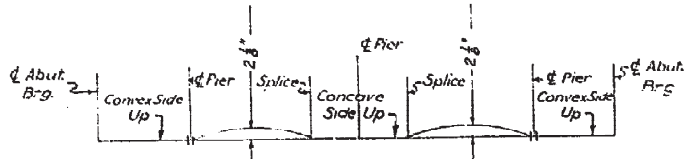
NO.	REVISION	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
STRUCTURE NO. 8			
CO. ROAD 202—CARLEY ROAD			
PLAN, ELEVATION & SECTION			
BROWN & BLAUVELT			
CONTRACTING ENGINEER			
DESIGN SECTION D-12			
DESIGNED: L.C.	CHECKED: R.C.	DATE: Feb 4, 1953	
DRAWN: C. Jones	IN CHARGE: J. Jones	SCALE: 1"=10'	
CONTRACT NO. C-37		SHEET 37 OF 60	



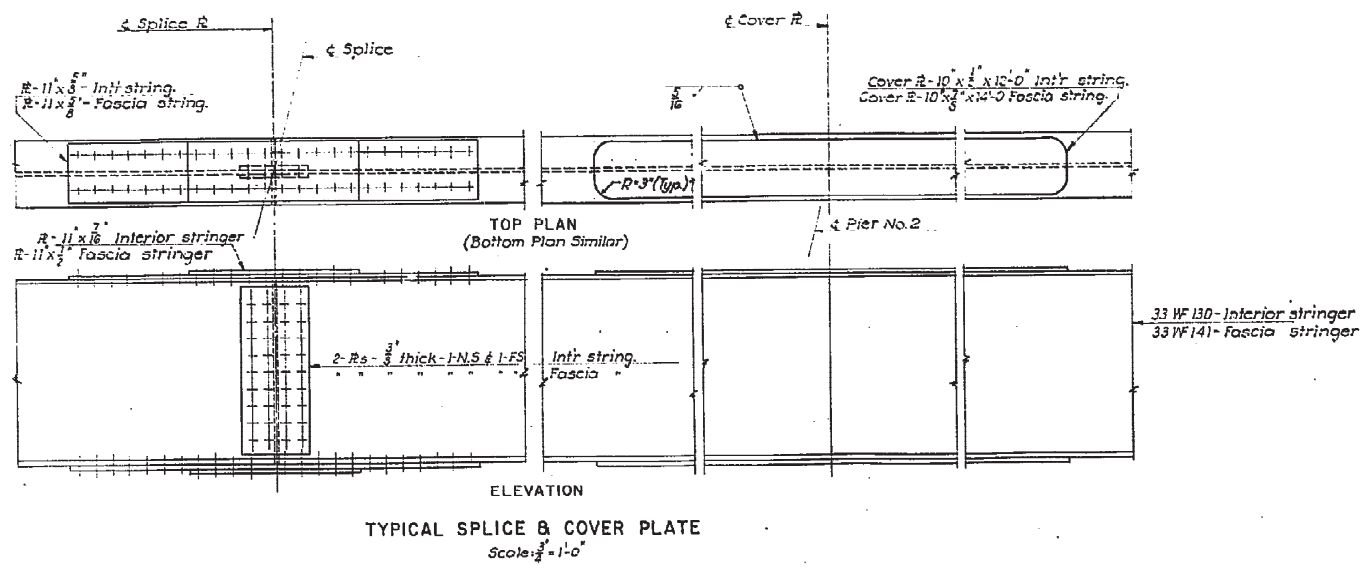
PLAN
Scale: 1"=10'-0"



SECTION A-A
(Section B-B Similar Except as Noted)
Scale: 1/2"=1'-0"



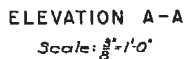
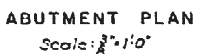
GAMBER DIAGRAM
No Scale



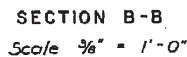
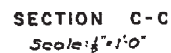
TYPICAL SPLICE & COVER PLATE
Scale: 1/2"=1'-0"

References:
For General Notes see Sh. 2
For Bearing Details see Sh. 53
For detail and connections of end diaphragms see Sh. 53

AS-BUILT PLANS			
NO.	REVISION	BY	DATE
OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
STRUCTURE NO. 8			
CO. ROAD 202 - CARLEY ROAD			
SUPERSTRUCTURE			
BROWN & BLAUVELT			
CONTRACTING ENGINEER			
DESIGN SECTION D-12			
DESIGNED: L.B.	CHECKED: R.C.	DATE: Feb. 1, 1953	
DRAWN: A.W.	IN CHARGE: [Signature]	SCALE: As Noted	
CONTRACT NO. C-37		SHEET 38 OF 60	

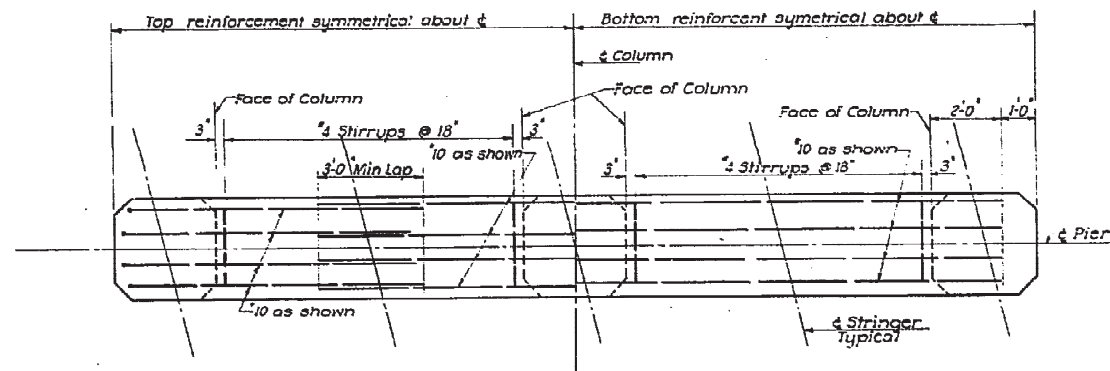
[illegible]

KEY PLAN
No 300's

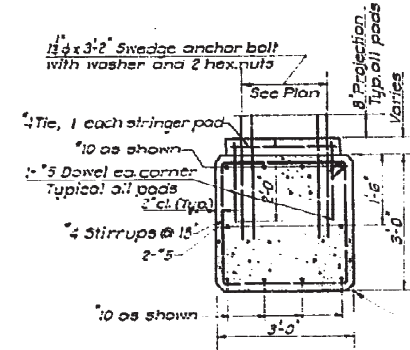


Max Load Front Piles : 40Tons
Max Load Rear Piles : 30Tons
Estimated Average Length of Front Piles 68.79'
Estimated Average Length of Rear Piles. 73.13'
All Piles to be Cast in Place Conc. Piles.

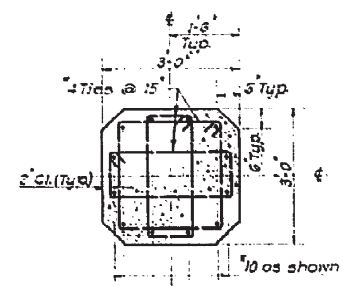
A	AS-BUILT PLANS		Feb 68
NO.	REVISION	BY	DATE
<p align="center">OHIO TURNPIKE COMMISSION</p> <p align="center">OHIO TURNPIKE PROJECT NO. 1</p> <p align="center">STRUCTURE NO. 8</p> <p align="center">CO. ROAD 202 - CARLEY ROAD</p> <p align="center">ABUTMENTS</p>			
<p align="center">BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12</p>			
DESIGNED: STL	CHECKED: RC	DATE: Feb. 4, 1958	
DRAWN: CHC	IN CHARGE: CHC	SCALE: As Shown	
CONTRACT NO. C-37		SHEET 39 OF 60	



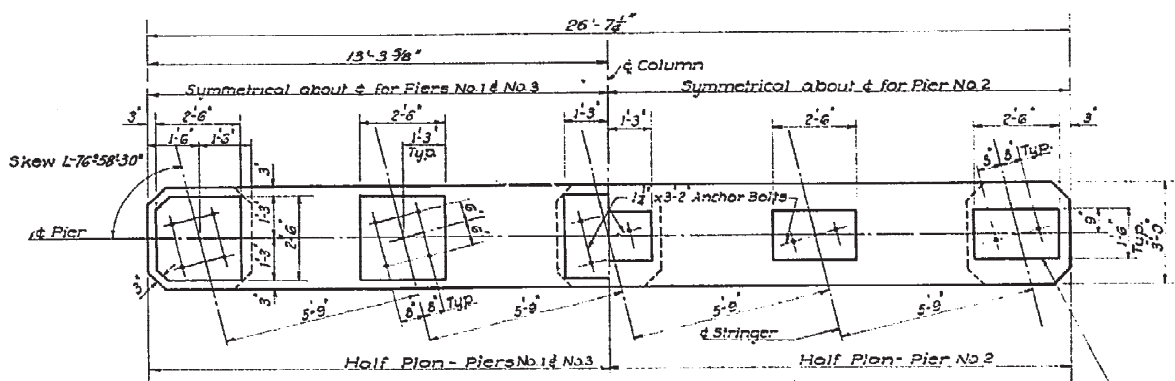
BEAM REINFORCEMENT



SECTION A-A
Scale: 1/2" = 1'-0"

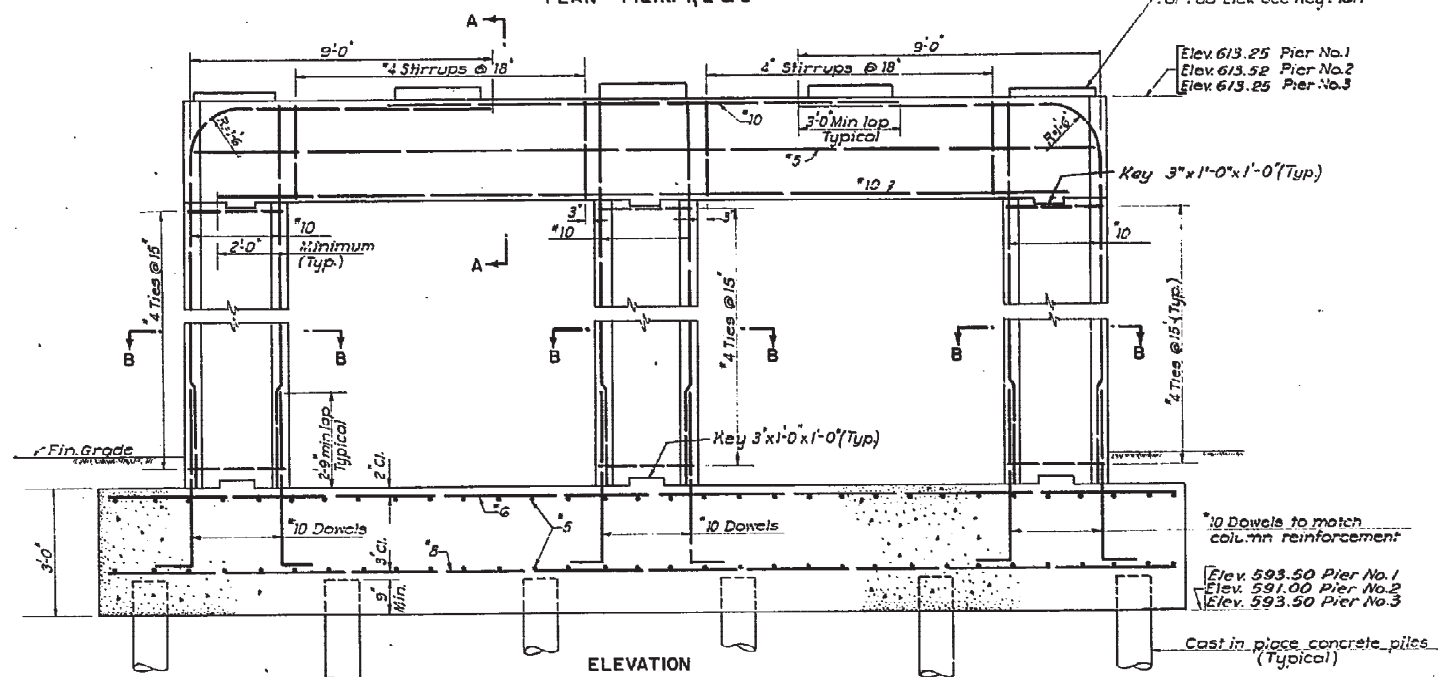


SECTION B-B
Scale: 1/2" = 1'-0"

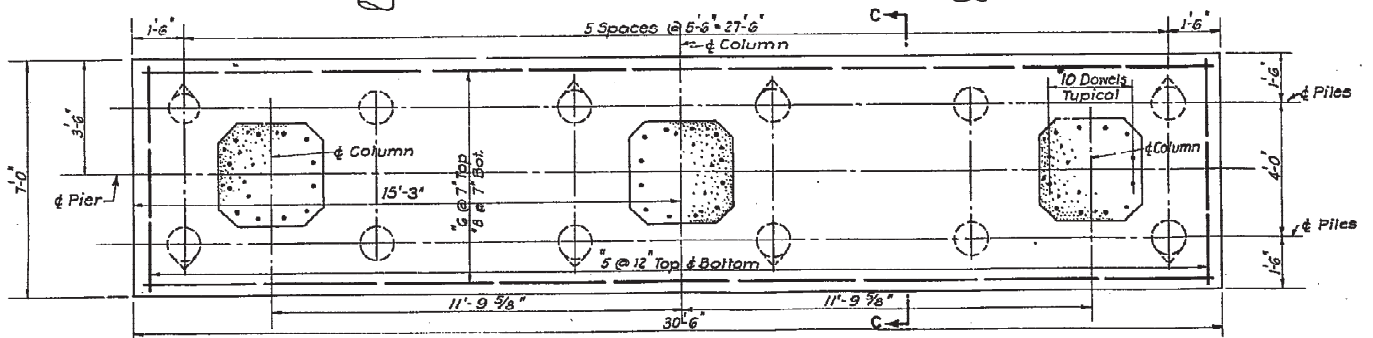


PLAN - PIERS 1, 2 & 3

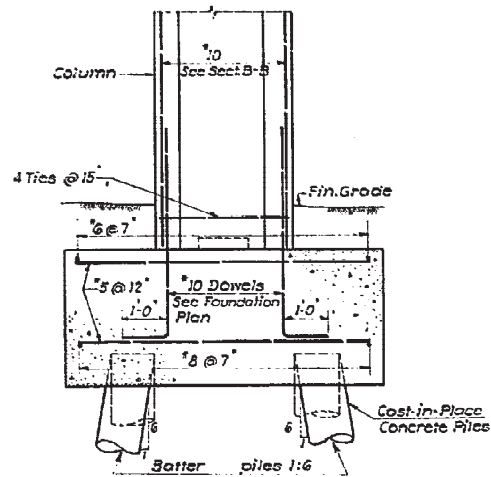
For Pad Elev see Key Plan



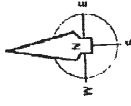
ELEVATION



PILE CAP PLAN



SECTION C-C
Scale: 1/2" = 1'-0"



Stringer	Pier No. 1	Pier No. 2	Pier No. 3
El. 613.63	El. 613.86	El. 613.58	
El. 613.71	El. 613.90	El. 613.69	
El. 613.79	El. 614.07	El. 613.79	
El. 613.69	El. 613.98	El. 613.71	
El. 613.58	El. 613.86	El. 613.63	

KEY PLAN
STRINGER PAD ELEVATIONS
No Scale

Notes:
For General Notes see Sheet No. 2
For Framing Plan see Sheet No. 39
For location of Piers see Sheet No. 38
For Bearing Details see Sheet No. 53
All exposed concrete corners shall have 1" chamfer.
All piles are cast-in-place concrete piles.
Maximum pile load: 40 tons per pile.
Estimated Average Length of Piles 55.64'

OHIO TURNPIKE COMMISSION			
OHIO TURNPIKE PROJECT NO. 1			
STRUCTURE NO. 8			
CO. ROAD 202 - CARLEY ROAD PIERS			
BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12			
DESIGNED: L.G.	CHECKED: R.C.	DATE: Feb. 4, 1955	
DRAWN: C. Davis	IN CHARGE: [Signature]	SCALE: 1/2" = 1'-0"	
CONTRACT NO. C-37		SHEET 40 OF 60	



AS-BUILT FLANS

NO. _____ REVISION _____ BY _____ DATE _____

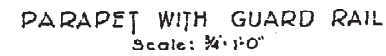
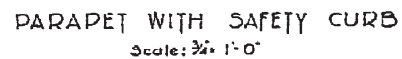
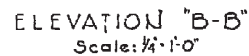
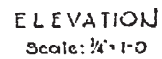
OHIO TURNPIKE COMMISSION OHIO TURNPIKE PROJECT NO.

STRUCTURAL DETAILS

BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: L. Feinerman	CHECKED: L. Gensky	DATE Feb. 4, 1968
DRAWN: HSE	IN CHARGE: [Signature]	SCALE: As Shown

CONTRACT NO. C-37
SHEET 54 OF 60



NOTES:
Chamfer all corners 1"
for details of Railing see Std. Dwg. 5
for details of Roadway Drainage, see Std. Dwg. 15

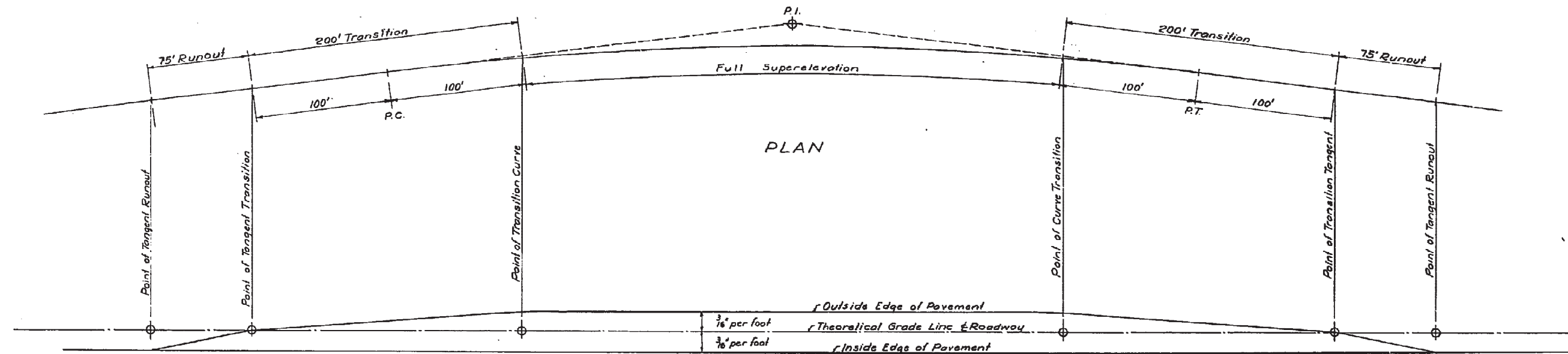
OHIO TURNPIKE COMMISSION OHIO TURNPIKE PROJECT NO. 1

ARCHITECTURAL DETAILS

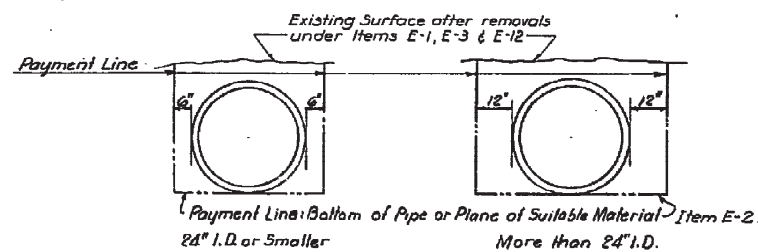
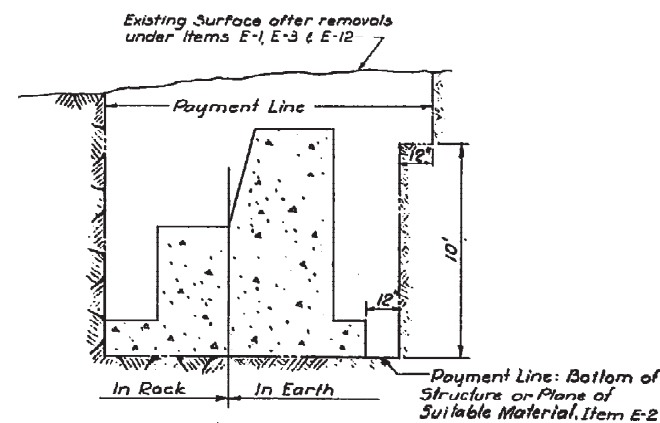
BROWN & BLAUVELT
CONTRACTING ENGINEER
DESIGN SECTION D-12

DESIGNED: _____ DRAWN: <i>H.H.</i>	CHECKED: <i>S. TAYLOR</i> IN CHARGE: <i>J. HANLEY</i>	DATE: Feb 4 1953 SCALE: As Noted
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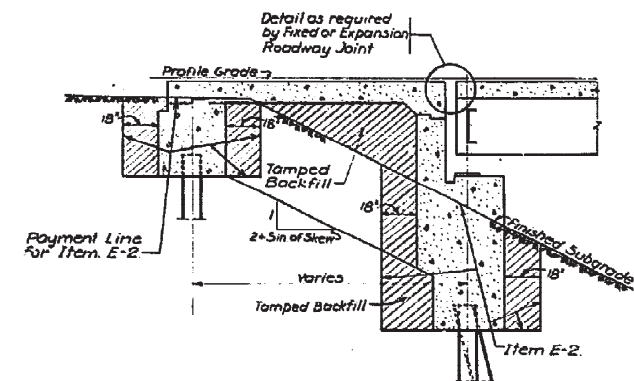
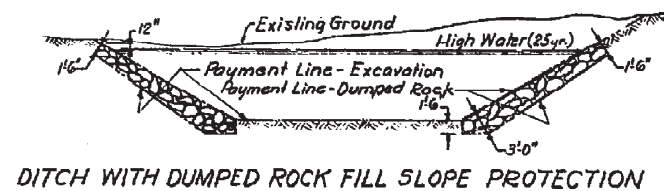
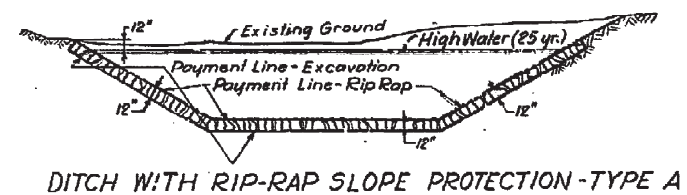
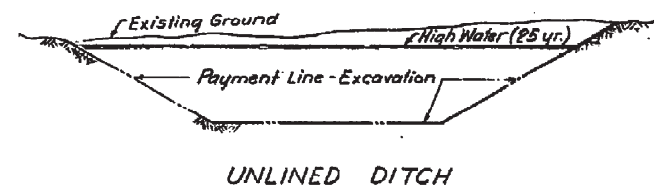
CONTRACT NO. C-37
SHEET 55 OF 60



DEVELOPMENT OF SUPERELEVATION ON CURVES



STRUCTURAL EXCAVATION PAYMENT LINES



STRUCTURAL EXCAVATION PAYMENT LINES IN FILL

TYPE C CULVERT HEADWALL					
Size	"H"	"h"	"W"	Cu. Yds. Concrete	Lbs. Steel
6'5" x 10'3" CIP with 14" Arch "B" 6" Pad over B/C	7'-2"	5'-5"	12'-4"	18.80	1220
7'8" CIP "B" 6" Pad over B/C	7'-3"	5'-6"	12'-6"	18.20	1180

For Details of Type C Culvert Headwalls See Standard Drawing No. 3

NO.	REVISION	BY	DATE
AS-BUILT PLANS			
OHIO TURNPIKE COMMISSION OHIO TURNPIKE PROJECT NO. 1			
PAYMENT LINES & SUPERELEVATION DETAILS			
BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12			
DESIGNED: JMC	CHECKED: JMC	DATE: Feb 4, 1955	SCALE: As Shown
CONTRACT NO. C-37 SHEET 57 OF 60			

STRUCTURE NO. 4 (CONCL.)						STRUCTURE NO. 5						STRUCTURE NO. 6						STRUCTURE NO. 7					
HOLE NO. 4			HOLE NO. 5			HOLE NO. 1			HOLE NO. 3			HOLE NO. 1			HOLE NO. 1								
DEPTH FEET	CASING BLOWS	SAMPLE BLOWS	CASING BLOWS	SAMPLE BLOWS	CASING BLOWS	SAMPLE BLOWS	DEPTH FEET	CASING BLOWS	SAMPLE BLOWS	CASING BLOWS	SAMPLE BLOWS	CASING BLOWS	SAMPLE BLOWS	CASING BLOWS	SAMPLE BLOWS								
0.0		591.3' - Surface		593.5' - Surface		582.9' - Surface	0.0		577.4' - Surface		592.6' - Surface		594.6' - Surface										
5.0		11 Clay, Silt, Tan, Moist, Stiff	28	14 Silt, Clay, Sand,	19	9	5.0		10 Sand, Clay, Silt, Brown	15	20 Clay, Fine to Coarse Sand, Dk-Gray, Moist, Firm		20 Clay, Sand, Small Gravel										
		38	Brown, Dry, Hard	30	21 Dry to Moist, Firm to Hard	14			Dk-Gray, Moist, Firm, Loose														
		34		25		16																	
		37	Silt, Brown, Moist, Medium	20	7 Silt, Clay, Sand	20			588.6'														
10.0	Not recorded	11 584.3'	39	14 588.5'	20	7	10.0		15 571.4'	20			19										
		40		20	8 Silt, Clay, Sand	20																	
		40	Clay, Silt, Gray,	20	Brown to Dk-Gray	20																	
		36	Moist, Medium	20	Dry to Moist, Hard	20																	
15.0		21 580.3'	30		25	8	15.0		8 Clay, Silt, Dk-Gray to Brown,	20	11 Clay, Silt, Fine to Coarse		20										
		20		20	Moist, Medium	21			Sand, Dk-Gray to Brown,	37	Clay, Silt, Fine Sand, Dk-Gray												
		24		18	570.9'	21			Moist, Hard to Firm	36	Brown, Moist, Firm to Medium												
		28		22	150 lbs Push Sample	21				35													
20.0		12	35	7	18	3	20.0		6 561.4'	20	8		7										
		36	Clay, Gray, Moist,	17	366.9'	16				38													
		37	Stiff to Medium	15		17				38													
		35		16		14				28													
25.0		7	34	6	14	4	25.0		5	1	300 lbs Hammer		2	300 lbs Hammer									
		36		18	Clay, Silt, Fine Gravel	16			374.6'	20	574.6'												
		37		20	Dk-Gray, Moist, Firm	16																	
		34		15	to Medium	16																	
30.0		3	36		18	4	30.0																
		40		20	Clay, Silt, Fine Gravel	20																	
		42		22	Dk-Gray, Moist, Firm	20																	
		44		24	to Medium	20																	
35.0		4 501.3'	37	3	20	7	35.0		3 566.4'														
			Casing ends	22	551.9'	21			545.4'														
			68'	20	Clay, Silt, Fine Sand,	21			150 lbs Push Sample														
				22	Dk-Gray, Moist, Medium	21			544.4'														
40.0		3 Clay, Little Silt, Coarse	65	3	76	8	40.0		6														
		Sand, Dk-Gray, Moist,	65	546.9'																			
		Medium	76	545.5'																			
		3	553.5'	85	150 lbs Push Sample																		
45.0			88		90	72	45.0		9														
				88	546.6'																		
				88	Clay, Silt, Fine Sand,																		
				88	Gravel, Dk-Gray,																		
50.0					310	495	50.0		400														
					335	534.9'																	

STRUCTURE NO. 8						STRUCTURE NO. 9					
HOLE NO. 1			HOLE NO. 2			HOLE NO. 4			HOLE NO. 5		
DEPTH FEET	CASING BLOWS	SAMPLE BLOWS	CASING BLOWS	SAMPLE BLOWS	CASING BLOWS	SAMPLE BLOWS	DEPTH FEET	CASING BLOWS	SAMPLE BLOWS	CASING BLOWS	SAMPLE BLOWS
0.0		594.2' - Surface		593.6' - Surface		594.7' - Surface	0.0		593.4' - Surface		594.2' - Surface
5.0		17 Silt, Clay, Sand, Dk-Gray - Brown, Dry to Moist, Hard		10 Clay, Sand, Humus, Fine Gravel, Brown, Moist, Firm		18 Clay, Silt, Sand, Gravel, Dk-Gray, Moist, Firm	5.0		18 Clay, Silt, Sand, Gravel, Dk-Gray, Moist to Dry, Loose		11 Silt, Clay, Fine Sand, Brown to Gray, Dry, Hard
10.0		19 580.2'		17 587.6'		15 Clay, Silt, Fine Sand, Dk-Gray, Brown, Moist, Firm to Medium	10.0		13 Clay, Silt, Fine Sand, Dk-Gray to Brown, Moist, Firm to Medium		16 588.2'
15.0		17 582.2'		18 582.6'		15 578.7'	15.0		15 578.7'		11 582.3'
20.0		19 Clay, Silt, Dk-Gray to Brown, Moist, Medium		19 577.8'		9 578.7'	20.0		8 576.4'		14 Silt, Clay, Lt-Brown to Gray, Moist, Medium
25.0		14 573.2'		18 Clay, Silt, Dk-Gray, Moist, Medium		5 579.7'	25.0		4 567.4'		12 574.6'
30.0		22 566.2'		21 563.6'		8 563.7'	30.0		6 561.4'		14 568.2'
35.0		19 557.8'		19 577.8'		9 563.7'	35.0		5 557.4'		14 568.2'
40.0		37 553.2'					40.0				14 568.2'
45.0		20 Clay, Silt, Coarse Sand, Dk-Gray, Moist, Medium					45.0				14 568.2'
50.0		21 543.2'					50.0				14 568.2'

OHIO TURNPIKE COMMISSION		OHIO TURNPIKE PROJECT NO. 1	
BORING LOGS			
STRUCTURES NOS. 4 (CONCL.), 5, 6, 7, 8 & 9			
BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12			
DESIGNED:	CHECKED: JG	DATE: 12-18-53	SCALE: None
DRAWN: C. Davis	IN CHARGE: J. Davis	CONTRACT NO. C-37 SHEET 59 OF 60	