

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

682 Prospect Street Berea, Ohio 44017 (440) 971-2081

LOI NO. 17-2021

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

BRIDGE DECK REHABILITATION PROJECT NO. 71-21-06

DECK REPLACEMENT OF THE COPP ROAD BRIDGE (TOWNSHIP ROUTE 302) OVER THE MAINLINE AT MILEPOST 104.3 IN SANDUSKY COUNTY; THE NORTHWEST/SOUTHWEST ROAD BRIDGE (COUNTY ROUTE 312) OVER THE MAINLINE AT MILEPOST 106.1 IN SANDUSKY AND ERIE COUNTIES; THE STATE ROUTE 269 BRIDGE OVER THE MAINLINE AT MILEPOST 106.8, AND THE DEYO ROAD BRIDGE (TOWNSHIP ROUTE 102) OVER THE MAINLINE AT MILEPOST 107.5 IN ERIE 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,

DATE: **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.

| | SUBN | ITIN | ΓED | BY: |
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|--|-------------|------|-----|-----|

| COMPANY NAME | |
|----------------|------------------|
| CONTACT NAME | |
| STREET ADDRESS | |
| CITY AND STATE | |
| ZIP CODE | TELEPHONE NUMBER |
| EMAIL ADDRESS | |

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LOI NO. 17-2021

REQUEST FOR LETTERS OF INTEREST (LOIs) TO PERFORM PROFESSIONAL ENGINEERING SERVICES FOR PROJECT NO. 71-21-06

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 <u>Appendix A</u>, for Project No. 71-21-06, Bridge Deck Rehabilitation, Deck Replacement of the Copp Road Bridge (Township Route 302) over the Mainline at Milepost 104.3 in Sandusky County; the Northwest/Southwest Road Bridge (County Route 312) over the Mainline at Milepost 106.1 in Sandusky and Erie Counties; the State Route 269 Bridge over the Mainline at Milepost 106.8, and the Deyo Road Bridge (Township Route 102) over the Mainline at Milepost 107.5 in Erie 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 <u>Appendix A</u> ("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 <u>Appendix B</u>, 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 <u>Appendix B</u>).
- C. A completed, signed, and notarized Non-interest/Non-collusion Affidavit (see <u>Appendix C</u> attached hereto; see also, Ethics Policy attached as <u>Appendix D</u> which is referenced in the affidavit).
- D. Completed and Signed Disclosure and Acknowledgement Governing the Expenditure of Public Funds on Offshore Services (see <u>Appendix E</u> 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 answers will be compiled, posted on the Commission's (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 <u>purchasing@ohioturnpike.org</u> 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 <u>Appendix B</u> 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. 17-2021

DRAFT SCOPE OF SERVICES

PROJECT NO. 71-21-06

A. PROJECT OVERVIEW

Project 71-21-06 includes, but is not limited to:

- a. Design of a deck replacement for the MP 104.3 Copp Road Bridge (Township Route 302) 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 replacement for the MP 106.1 Northwest/Southwest Road Bridge
 (County Route 312) 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 106.8 State Route 269 Bridge 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. Design of a deck replacement for the MP 107.5 Deyo Road Bridge (Township Route 102) over the Mainline and also includes all necessary substructure and superstructure repairs, as well as approach work to provide proper transition to the bridge.
- e. 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.
- f. Preparation of an engineering report summarizing the site inspection and engineering investigation.
- g. 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.
- h. Communication and coordination with all stakeholders, including obtaining the necessary approvals and access required concerning the property interests of others.
- i. Consultation with the Commission staff on the recommendations.
- j. Preparation of final Construction Plans and Specifications for bidding.
- k. Provide for engineering support during construction.
- 1. Prepare record drawings and final load rating reflecting the as-built condition of the structures.

B. <u>SITE INSPECTION/ENGINEERING REPORT/DESIGN/PLAN PREPARATION- PHASE I</u>

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:

- 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, Sandusky County, and Erie 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.

3

CONTRACT FOR PROFESSIONAL SERVICES FOR A CONSTRUCTION PROJECT for Project No. 71-21-06

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. 71-21-06, **Bridge Deck Rehabilitation**, Deck Replacement of the Copp Road Bridge (Township Route 302) over the Mainline at Milepost 104.3 in Sandusky County; the Northwest/Southwest Road Bridge (County Route 312) over the Mainline at Milepost 106.1 in Sandusky and Erie Counties; the State Route 269 Bridge over the Mainline at Milepost 106.8, and the Deyo Road Bridge (Township Route 102) over the Mainline at Milepost 107.5 in Erie County, Ohio (**the "Project"**).

| RECITALS |
|---|
| WHEREAS, on, 2021, the Commission issued Request for Letters of Interest No. 17-2021 ("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. |

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 specification shall be on behalf of both the Consultant as an entity and the individual inspector assigned to perform the inspection services.

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

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.

- Billing Rate Approval. The Consultant, prior to beginning work on the Project, 2.3.4 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.

- 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.
- Meals and Lodging. During performance of said professional services, overnight 2.4.3 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.

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

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

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,

- **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.

ARTICLE 6 INSURANCE

- 6.1 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

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:

[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

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 subconsultants 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

- 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

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.

- 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.

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.

- 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]

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. |
| Printed: | , |
| Title: | Date: |
| Date: | APPROVED AS TO FORM: |
| | By: |
| | Date: |

Exhibit A Consultant's Fee Proposal

Exhibit B Final Project Scope

APPENDIX C

NON-COLLUSION AFFIDAVIT

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

| County of | State of | _} |
|--|---|---|
| The undersigned, being first duly sworn as provided by law, deposes and says: 1. Their name is | County of | } SS: } |
| 2. They make this Affidavit with the knowledge and intent that it is to be filed with the Turnpike and Infrastructure Commission and with the expectation that it will be relied upon by Commission as consideration and any action which it may take with respect to the bid or proaccompanying this Affidavit. 3. The undersigned serves in the capacity of | | |
| 2. They make this Affidavit with the knowledge and intent that it is to be filed with the Turnpike and Infrastructure Commission and with the expectation that it will be relied upon by Commission as consideration and any action which it may take with respect to the bid or proaccompanying this Affidavit. 3. The undersigned serves in the capacity of | 1. Their name is | |
| Turnpike and Infrastructure Commission and with the expectation that it will be relied upon by Commission as consideration and any action which it may take with respect to the bid or proaccompanying this Affidavit. 3. The undersigned serves in the capacity of | and their office is lo | cated at |
| Name of Corporation, Partnership, Limited Liability Company, etc) a | Turnpike and Infras Commission as con accompanying this | tructure Commission and with the expectation that it will be relied upon by said is ideration and any action which it may take with respect to the bid or proposal Affidavit. |
| Name of Corporation, Partnership, Limited Liability Company, etc) a | 3. The undersigned | serves in the capacity of |
| Name of Corporation, Partnership, Limited Liability Company, etc) a | | (Sole Owner, Partner, President, etc.) |
| (Sole Proprietorship, Partnership, Corporation, Limited Liability Company, etc) organized under the laws of, and registered to do business in (Name of State) 4a. Sole Proprietorship Only: The undersigned states that the following is a complete and aclist of the names and addresses of all individuals having an interest in the contract contemplated the bid or proposal accompanying this Affidavit: 4b. Partnership Only: The undersigned states that the following is a complete and accurate the names of the general partners of the partnership and all other individuals having an interest contract contemplated under the bid or proposal accompanying this Affidavit, including any part with a five percent (5%) or more equity interest in the partnership (attach additional page) | and in that capacity | makes and authorized to make representations and this Affidavit on behalf of: |
| (Sole Proprietorship, Partnership, Corporation, Limited Liability Company, etc) organized under the laws of, and registered to do business in (Name of State) 4a. Sole Proprietorship Only: The undersigned states that the following is a complete and aclist of the names and addresses of all individuals having an interest in the contract contemplated the bid or proposal accompanying this Affidavit: 4b. Partnership Only: The undersigned states that the following is a complete and accurate the names of the general partners of the partnership and all other individuals having an interest contract contemplated under the bid or proposal accompanying this Affidavit, including any parwith a five percent (5%) or more equity interest in the partnership (attach additional page) | | |
| 4a. Sole Proprietorship Only: The undersigned states that the following is a complete and aclist of the names and addresses of all individuals having an interest in the contract contemplated the bid or proposal accompanying this Affidavit: 4b. Partnership Only: The undersigned states that the following is a complete and accurate the names of the general partners of the partnership and all other individuals having an interest contract contemplated under the bid or proposal accompanying this Affidavit, including any pawith a five percent (5%) or more equity interest in the partnership (attach additional page) | | |
| 4b. Partnership Only : The undersigned states that the following is a complete and accurate the names of the general partners of the partnership and all other individuals having an interest contract contemplated under the bid or proposal accompanying this Affidavit, including any partners of the percent (5%) or more equity interest in the partnership (attach additional page) | organized under the | |
| the names of the general partners of the partnership and all other individuals having an interest contract contemplated under the bid or proposal accompanying this Affidavit, including any partnership (attach additional page) with a five percent (5%) or more equity interest in the partnership (attach additional page) | list of the names and | l addresses of all individuals having an interest in the contract contemplated under |
| | the names of the ger contract contemplate with a five percent | neral partners of the partnership and all other individuals having an interest in the ed under the bid or proposal accompanying this Affidavit, including any partners |

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 shame; 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;

APPENDIX C

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.

| | (Affia | nnt) |
|---|------------|--------|
| | (Prin | nted) |
| Sworn to before me and subscribed in my presence this | day of | , 20 |
| | (Notary Pu | ıblic) |



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 <u>any</u> 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 busin | ness of Contractor: |
|--------------------------------|---|
| (Address) | (City, State, Zip) |
| 2. Location where services v | vill 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 se | rvices will be performed by subcontractor(s): |
| (Name) | (Address, City, State, Zip) |
| (Name) | (Address, City, State, Zip) |

| (Address, City, State, Zip) | (Address, City, State, Zip) |
|--|--|
| Name/Location(s) where Commissio backed-up by subcontractor(s): | n data will be stored, accessed, tested, maintained or |
| (Name) | (Address, City, State, Zip) |
| (Name) | (Address, City, State, Zip) |
| subcontractors are under a duty to di services performed by the Responder | ffirms, understands and agrees that the Respondent and its sclose to the Commission any change or shift in location of its subcontractors before, during and after execution of its. Respondent agrees it shall so notify the Commission hift in location of its services. |
| The Commission has the right to imm | nediately terminate the contract for material breach if any |
| perform the specific services outside unlimited discretion to determine was is necessary based on the (1) nature of overseas; (2) the porportion of off-sh | ss the Commission has issued the Respondent a waiver to the United States. The Commission has the sole and iving some or all of the requirements of the Executive Order of and risk arising from the services being performed ore services compared to those performed domestically; (3) ng the waiver; (4) the justification to perform the services |
| perform the specific services outside unlimited discretion to determine was is necessary based on the (1) nature of overseas; (2) the porportion of off-ship the cost savings resulting from grantic overseas; and (5) the need to procure The undersigned represents and warr Disclosure Form on behalf of the Research | ss the Commission has issued the Respondent a waiver to the United States. The Commission has the sole and iving some or all of the requirements of the Executive Order of and risk arising from the services being performed ore services compared to those performed domestically; (3) ng the waiver; (4) the justification to perform the services |
| perform the specific services outside unlimited discretion to determine was is necessary based on the (1) nature of overseas; (2) the porportion of off-ship the cost savings resulting from grantic overseas; and (5) the need to procure. The undersigned represents and warr Disclosure Form on behalf of the Resultat Respondent may enter into with | ss the Commission has issued the Respondent a waiver to the United States. The Commission has the sole and iving some or all of the requirements of the Executive Order of and risk arising from the services being performed ore services compared to those performed domestically; (3) ng the waiver; (4) the justification to perform the services the services from the Respondent. ants to be authorized to execute this Affirmation and spondent and agree that this form is a part of any Contract |
| perform the specific services outside unlimited discretion to determine was is necessary based on the (1) nature of overseas; (2) the porportion of off-shifthe cost savings resulting from grantic overseas; and (5) the need to procure. The undersigned represents and warr Disclosure Form on behalf of the Resthat Respondent may enter into with the Respondent: | ss the Commission has issued the Respondent a waiver to the United States. The Commission has the sole and iving some or all of the requirements of the Executive Order of and risk arising from the services being performed ore services compared to those performed domestically; (3) ng the waiver; (4) the justification to perform the services the services from the Respondent. ants to be authorized to execute this Affirmation and spondent and agree that this form is a part of any Contract the Commission and is incorporated therein. |
| perform the specific services outside unlimited discretion to determine was is necessary based on the (1) nature of overseas; (2) the porportion of off-shifthe cost savings resulting from grantic overseas; and (5) the need to procure. The undersigned represents and warr Disclosure Form on behalf of the Rest that Respondent may enter into with Respondent: | ss the Commission has issued the Respondent a waiver to the United States. The Commission has the sole and iving some or all of the requirements of the Executive Order of and risk arising from the services being performed ore services compared to those performed domestically; (3) ng the waiver; (4) the justification to perform the services the services from the Respondent. ants to be authorized to execute this Affirmation and spondent and agree that this form is a part of any Contract the Commission and is incorporated therein. |

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)

| | attained commitments to meet or exceed the participation in the attached Utilization Plant | | | |
|--------|--|---|----------------------------|---|
| | | al Dollar Value | | cent of Total Bid |
| proje | ched is the Utilization Plan evidencing commect in a manner that meets or exceeds the cipation of each business identified. | | | |
| | failed to meet the contract's SBE goal des meet or exceed the goal, and has docum Demonstration of Good Faith Efforts (pa the attached Utilization Plan to SBE parti | ented its efforts to achie age 4 and page 5) and do | ve the goa | al in the attached commitments in |
| | E Participation Commitment: \$ Total | ıl Dollar Value | % Pe | rcent of Total Bid |
| the pr | Attached is the Utilization Plan evidencing roject and affirming the availability and plann Attached is the Good Faith Efforts Demons excessful in attaining SBE participation commi | ed participation of each tration evidencing those | ousiness id Efforts tha | lentified; and at were |
| | | | | |
| By: | Respondent | (if necessary) | the Good 1 | lan (page 2) and Faith Efforts and page 5) with |
| 27. | Signature | the Proposal u instructions th | | emplates and |
| Name: | | <u> </u> | | |
| Title: | | <u> </u> | | |
| Date: | | | | |

Respondent's SBE Utilization Plan (Complete and Submit with Utilization Certification) **BOX 1:**

| Column 1 | Column 2 | Column 3 | Column 4 | Colum |
|--------------------------------|---------------------------------|---|--|-----------------------------------|
| Name of SBE (See instructions) | Project Role (See instructions) | Description of Work (See instructions) | Amount Subcontracted to SBE (See instructions) | Amount Applie Towards (See instru |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

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

- Subcontractor
- Manufacturer or Regular Dealer
- Trucking/Hauler

Broker

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.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 transportation 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.

<u>**DEMONSTRATION OF GOOD FAITH EFFORTS**</u>
(Complete and Submit if Utilization Certification and Plan Fail to Meet Contract Goal)

| Project Name Respondent Name | Project Number Federal Tax I.D. | |
|--------------------------------|--|------------------------------------|
| likelihood of participation b | w the Respondent subdivided portions of by firms certified as SBE with the Committee the Project. (Attach additional pages if ne | ssion (or SBE or DBE with ODOT |
| | rvices or organizations that provided assist SBE (or DBE and EDGE) in preparing the 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: | | |
| about the scopes of work and r | ng all DBEs and/or EDGE firms) that you sup equirements of the project. (Attach additiona ipts or documentation of providing info. etc.) | pages if needed, and copies of all |
| 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 |

| the Contract. Please provide the specific rea | ason(s) for the decision to reject. (Attach additional pages if needed.) |
|---|---|
| A. Business: | |
| Reason(s) for rejection: | |
| B. Business: | |
| | |
| C. Business: | |
| | |
| which you entered into negotiations for negotiated, and the reason why negotiat | its participation on the project and the general scope of work ions were not successful. (Attach additional pages if needed.) |
| A. Business: | D. Business: |
| Contact: | Contact: |
| Phone: | Phone: |
| Date(s) of contact: | Date(s) of contact: |
| Scope of Work: | Scope of Work: |
| Reasons for ending negotiations: | Reasons for ending negotiations: |
| B. Business: | E. Business: |
| Contact: | Contact: |
| Phone: | Phone: |
| Date(s) of contact: | Date(s) of contact: |
| Scope of Work: | Scope of Work: |
| Reasons for ending negotiations: | Reasons for ending negotiations: |
| C. Business: | F. Business: |
| Contact: | Contact: |
| Phone: | Phone: |
| Date(s) of contact: | Date(s) of contact: |
| Scope of Work: | Scope of Work: |
| Reasons for ending negotiations: | 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 Administrative Service's **EDGE** certified Department directory of businesses: http://eodreporting.oit.ohio.gov/searchEDGE.aspx; the Ohio Department of Transportation's registry of SBEs: http://odotextrpt.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.



THE OHIO TURNPIKE COMMISSION

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

INDEX OF SHEETS

TITLE SHEET

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APPROACH PLAN - S.R. 101

APPROACH PLAN — COPP ROAD

APPROACH PLAN — COPP ROAD

MISCELLANEOUS DETAILS — TOWNSHIP LINE ROAD

MISCELLANEOUS DETAILS — S.R. 101

MISCELLANEOUS DETAILS — COPP ROAD

GENERAL PLAN & ESTAILS — TOWNSHIP LINE ROAD

ABUTMENT REPAIR DETAILS — TOWNSHIP LINE ROAD
REMOVAL DETAILS — TOWNSHIP LINE ROAD
SUBSTRUCTURE REPAIR — TOWNSHIP LINE ROAD

SUBSTRUCTURE REPAIR TOWNSHIP LINE ROAD
SLAB PLAN & TRANSVERSE SECTION TOWNSHIP LINE ROAD
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REMOVAL DETAILS — S.R. 101 SUBSTRUCTURE REPAIR — S.R. 101 SLAB PLAN & TRANSVERSE SECTION

ABUTMENT SLAB DETAILS - S.R. 101 BEARING DETAILS - S.R. 101

REINFORCING STEEL LIST - S.R. 101

GENERAL PLAN & EST. QUANT. - COPP ROAD

LATEX OVERLAY & PARAPET DETAILS — COPP ROAD SUBSTRUCTURE REPAIR — COPP ROAD EXPANSION JOINT DETAILS — COPP ROAD SUPERSTRUCTURE DETAILS — COPP ROAD

30. CONCRETE BARRIER PLAN & DETAILS
31. CATCH BASIN & SLOPE DRAIN DETAILS
32. DECK JOINT DETAILS
33. DECK JOINT DETAILS
34 8,344. ALTERNATE DECK JOINT DETAILS
35. CHAIN LINK SAFETY FENCE (ALUMINUM) DETAILS TYPE II
36. SLIPFORM PARAPET DETAILS — DECK REPLACEMENT
37. SLIPFORM PARAPET DETAILS — LMC OVERLAY
38. APPROACH SI ABS

39. TRAFFIC CONTROL — TOWNSHIP LINE ROAD
40.8 40A TRAFFIC CONTROL — S.R. 101
41. TRAFFIC CONTROL — COPP ROAD

OHIO DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS

| BR-1 | BRIDGE RAILINGS | 05-29-79 |
|-----------|---|----------|
| BP3-1 | RESURFACING | 022192 |
| BP-5.1 | CONCRETE CURBS & COMBINED CURB & CUTTER | 02-2192 |
| F-1 | CHAIN LINK FENCE | 11-10-83 |
| GR-1.1 | GUARDRAIL DETAILS | 05-06-91 |
| GR-1.2 | GUARDRAIL DETAILS | 05-06-91 |
| GR-2.1 | GUARDRAIL TYPE 5 | 05-06-91 |
| GR-3.1 | BRIDGE TERMINAL ASSEMBLY, TYPE 1 | 05-06-91 |
| GR-4.1 | TYPE A ANCHOR ASSEMBLY | 05-06-91 |
| GR-4.2 | TYPE T ANCHOR ASSEMBLY | 05-06-91 |
| GR-8.1 | CONCRETE BARRIER AT OBSTRUCTIONS | 01-31-94 |
| MC-4 | DRAINS AND SEWERS | 07-26-76 |
| MC-9.3 | CONCRETE BARRIER | 10-30-92 |
| MT-101.60 | GATES & BARRICADES IN POSITION | 67-31-92 |
| MH-1 | NO. 1 MANHOLE | 12-18-84 |
| мн-3 | NO. 3 MANHOLE | 12-18-84 |

CONTRACT 43-94-03

BRIDGE DECK REPLACEMENT TOWNSHIP LINE ROAD (C.R. 198) OVER THE CHIO TURNFIKE - M.P. 94.1

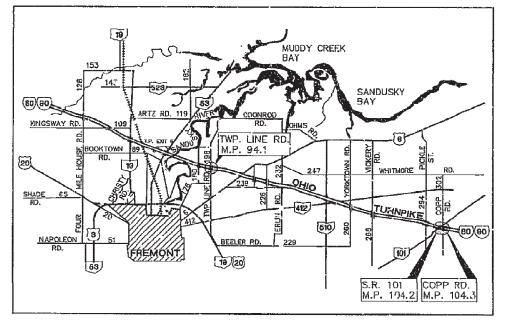
BRIDGE DECK REPAIR AND OVERLAY WITH LATEX MODIFIED CONCRETE COPP ROAD (T.R. 302) OVER THE OHIO TURNPIKE - MP. 104.3

CONTRACT 43-94-04

BRIDGE DECK REPLACEMENT

S.R. 101 OVER THE OHIO TURNPIKE - M.P. 104.2

ORIGINAL CONTRACT SECTIONS C-35 & C-39 SANDUSKY COUNTY



LOCATION MAP



UNDERGROUND UTILITIES

2 WORK DAYS BEFORE YOU DIG

CALL 800-362-2764 (TOLL FREE) OHIO UTILITIES PROTECTION SERVICE NON MEMBERS

MUST BE CALLED DIRECTLY

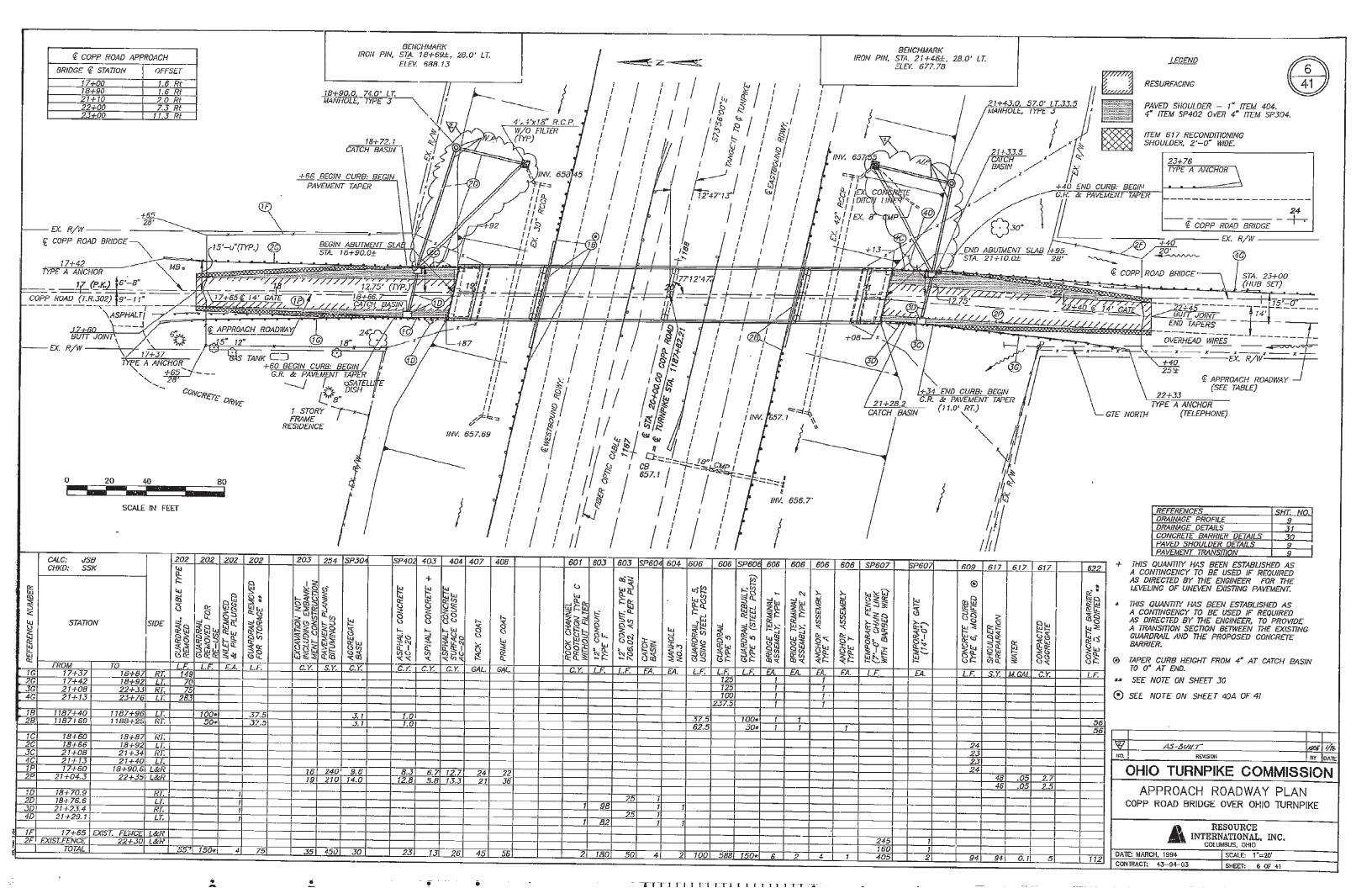
APPROVED FOR THE OHIO TURNPIKE COMMISSION

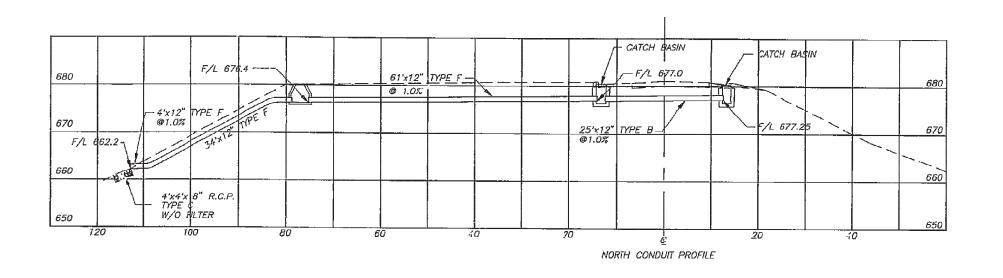
PLANS PREPARED BY

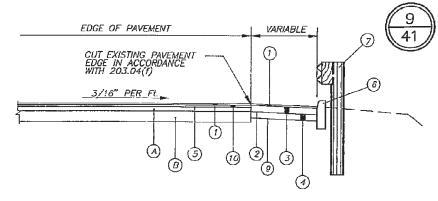


RESOURCE INTERNATIONAL INC. 281 ENTERPRISE DR. WESTERVILLE, OHIO 43081 (614) 885-1959



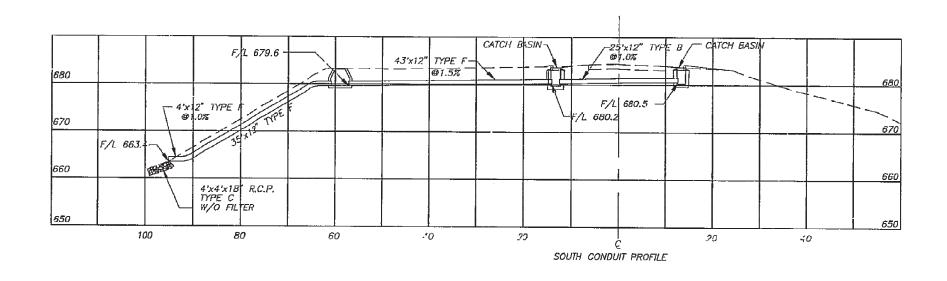


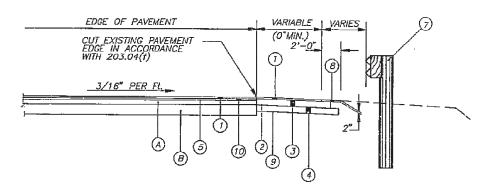




PAVED SHOULDER DETAIL

WITH CURBS

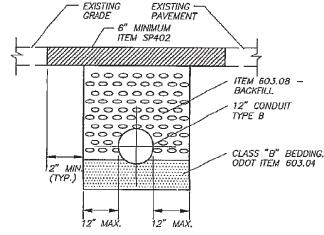




PAVED SHOULDER DETAIL

WITHOUT CURBS

<u>NOTE:</u> SEE STANDARD CONSTRUCTION DRAWING BP-3.1 FOR MERGING EDGE OF PAVEMENT WIDENING AND BUTT JOINT.

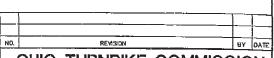


(COST TO BE INCLUDED WITH 12" TYPE B CONDUIT)

TRENCH DETAIL

LEGEND

- ITEM 404 ASPHALT CONCRETE AC-20 (1"MIN.) EXCLUDING GRAVEL
- ITEM 408 PRIME COAT (APPLICATION RATE: 0.35 GAL/SQ.YD.)
- 3 ITEM SF402 4" ASPHALT CONCRETE AC-20
- (4) ITEM SP304 4" AGGREGATE BASE
- (5) ITEM 407 TACK COAT (APPLICATION RATE: 0.1 GAL./SQ.YD.)
- 6 ITEM 609 CONCRETE CURB, TYPE 6, MODIFIED
- **②** ITEM 606 GUARDRAIL, TYPE 5
- 8 ITEM 617 COMPACTED AGGREGATE, TYPE A
- 9) ITEM 203 COMPACTED SUBGRADE 6" AS PER 203.13(a)
- 0 ITEM 403 ASPHALT CONCRETE FOR LEVELING AS DIRECTED BY THE ENGINEER (0"MIN.)
- EXISTING 3" ± ASPHALT SURFACE COURSE
- ՛∂ EXISTING AGGREGATE BASE

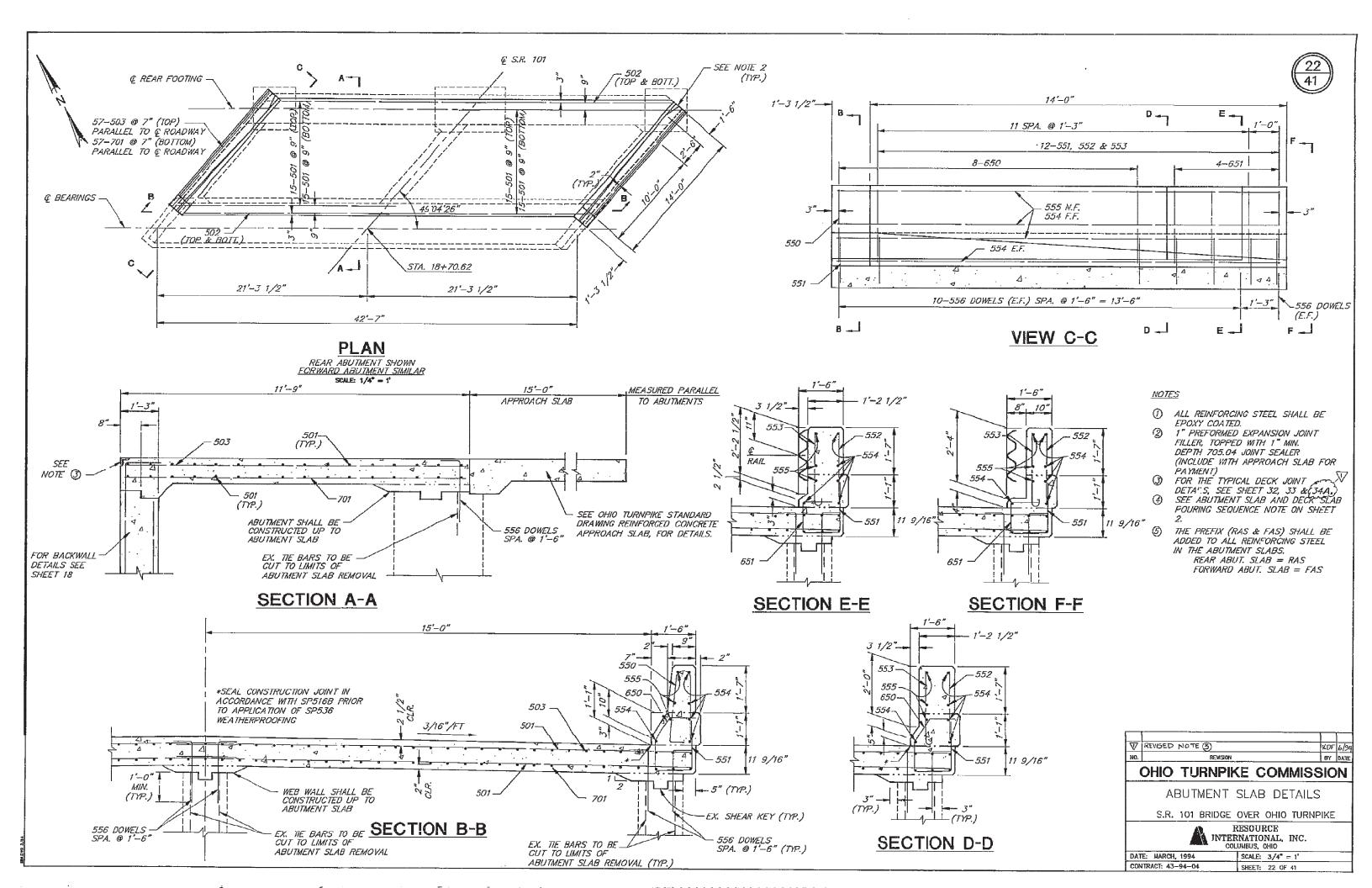


OHIO TURNPIKE COMMISSION

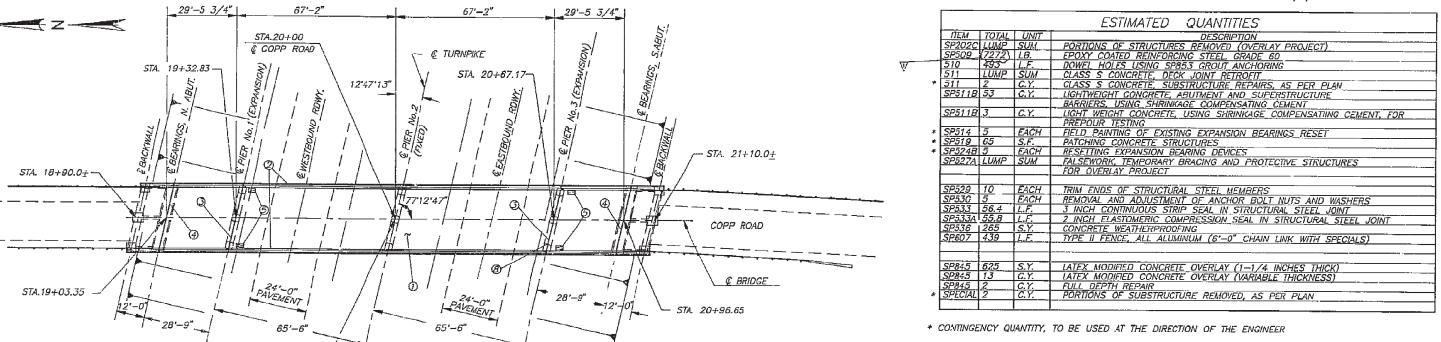
CROSS SECTIONS AND MISCELLANEOUS DETAILS COPP ROAD BRIDGE OVER OHIO TURNPIKE

RESOURCE INTERNATIONAL, INC. COLUMBUS, OHIO

DATE: MARCH, 1994 SCALE: AS SHOWN CONTRACT: 43-94-03 SHEET: 9 OF 41







<u>ITEM</u>

(8)

GENERAL PLAN

STA.1187+82.21

© TURNPIKE

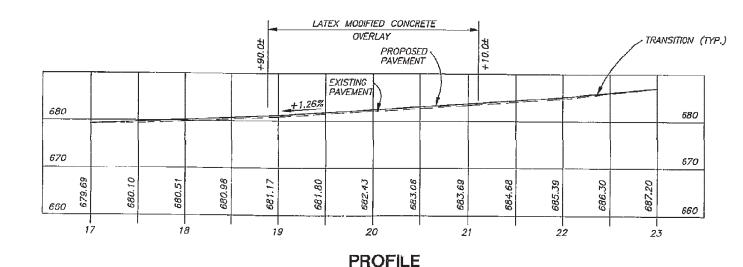
+1.26% PROFILE 15.42' EXISTING MIN. CL. REINFORCING STEEL SAMPLES: REFER TO O.T.C. GENERAL CONDITIONS G-6.02 AND CMS SECTION 700, 709.01 THROUGH 709.05 AND 709.08.
SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR
SAMPLING. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES
BY THE ADDITIONAL STEEL, SPLICED IN ACCORDANCE WITH 509.08. **ELEVATION**

EPOXY COATED REINFORCING STEEL LIST MARK NUMBER LENGTH WEIGHT SHAPE **ABUTMENTS** 10" <u>28 2'-9" 80</u> BENT EA502 16 3'-10" 64 BENT EA503 52 1'-8" 90 BENT 20 13'-8" 285 STR EA504 8 13'-8" 11± 28 3'-6" 102 BENT BENT 8 3'-8" 16 3'-3" STR. 30 BENT 54 -- EA502 9 ES501 SUPERSTRUCTURE 300 4'-3" 1330 1 9'-10" 492 12'-2" 812 STR EA505 STR ES504 6'-6 STR 271 10 E\$506 30'-2STR STR ES511 E3507 940 5 300 ES511 562 1856 9-EA503 6522 EA501 ES510

REINFORCING SPLICE LENGTH SHALL BE 1'-8" FOR \$5 BARS.

DETAIL LOCATION

N/A



INDEX OF STRUCTURE WORK ITEMS

| 1 | 1 1/4 INCH LATEX MODIFIED CONCRETE OVERLAY, STA. 18+90.0± TO STA. 21+10.0± | SHEET NO. 26 |
|---|--|--------------|
| 2 | MODIFY EXISTING PARAPETS TO CONFORM TO DEFLECTOR PARAPET TYPE CONFIGURATION AND MOUNT CHAIN LINK SAFETY FENCE ON PARAPET | SHEET NO. 26 |
| 3 | MODIFY EXISTING EXPANSION JOINT TO PROVIDE STRIP SEAL JOINT | SHEET NO. 28 |
| 4 | MODIFY EXISTING FIXED JOINT TO PROVIDE COMPRESSION SEAL JOINT | SHEET NO. 28 |
| 5 | REMOVE GRATE, PLUG, SANDBLAST CLEAN FILL, AND ABANDON EXISTING SCUPPER, REMOVE DOWNSPOUT, AND CAP DRAIN PIPE, REMOVE SPLASH PLATES, INCLUDE WITH SP 202C FOR PAYMENT | SHEET NO. 29 |
| 6 | SUBSTRUCTURE REPAIR | SHEET NO. 27 |
| 7 | PATCH EXISTING DECK FASCIA (ESTIMATED QUANTITY = 30 S.F.) | SHEET NO. 29 |

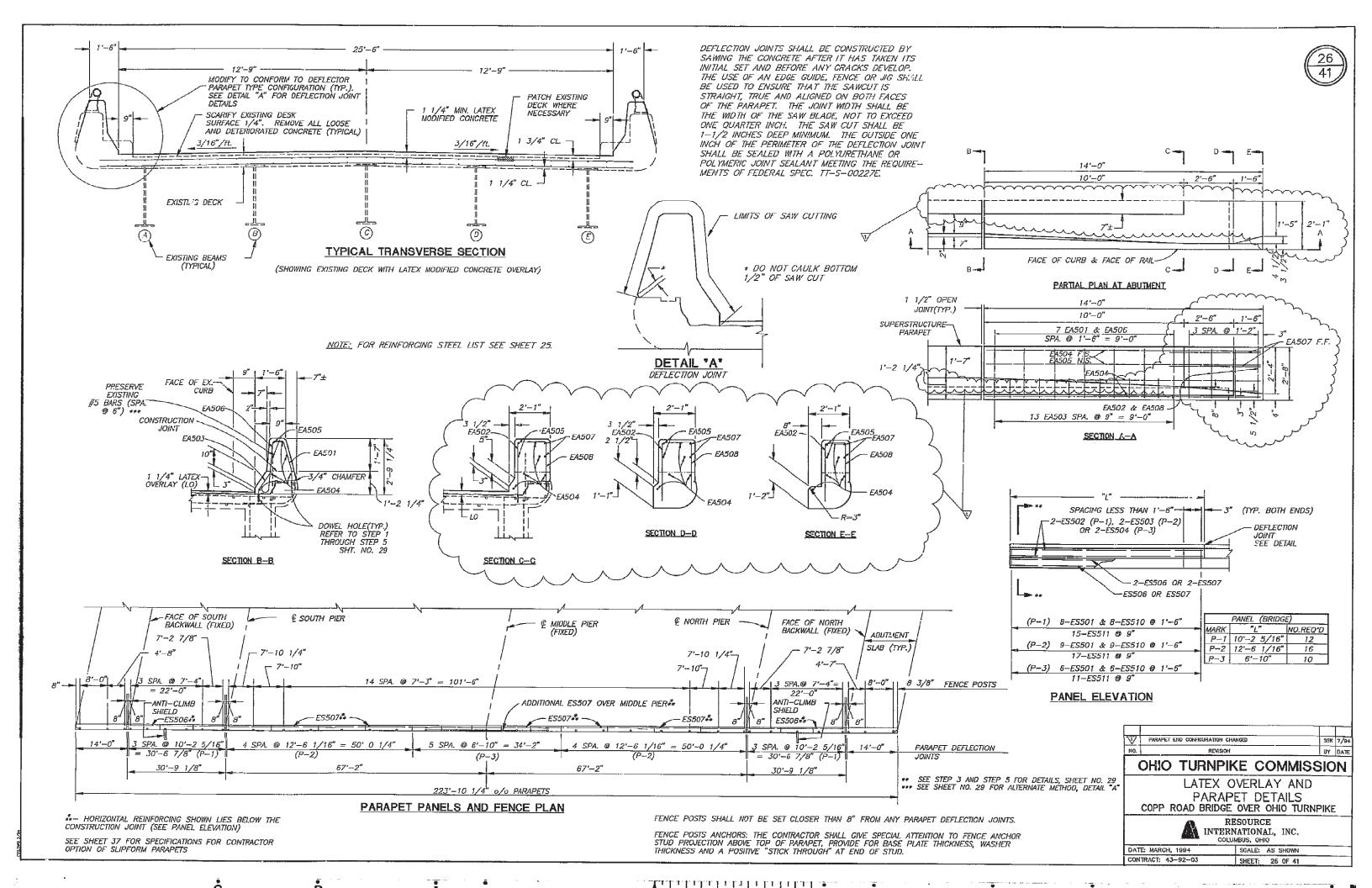
| I | | Т | _ |
|----------|---|-----|------|
| ∇ | REINFORCING REVISIONS DUE TO PARAPET CHANGE ON SHEET 26 | 55K | 7/94 |
| NO. | HEVISION | BY | DATE |

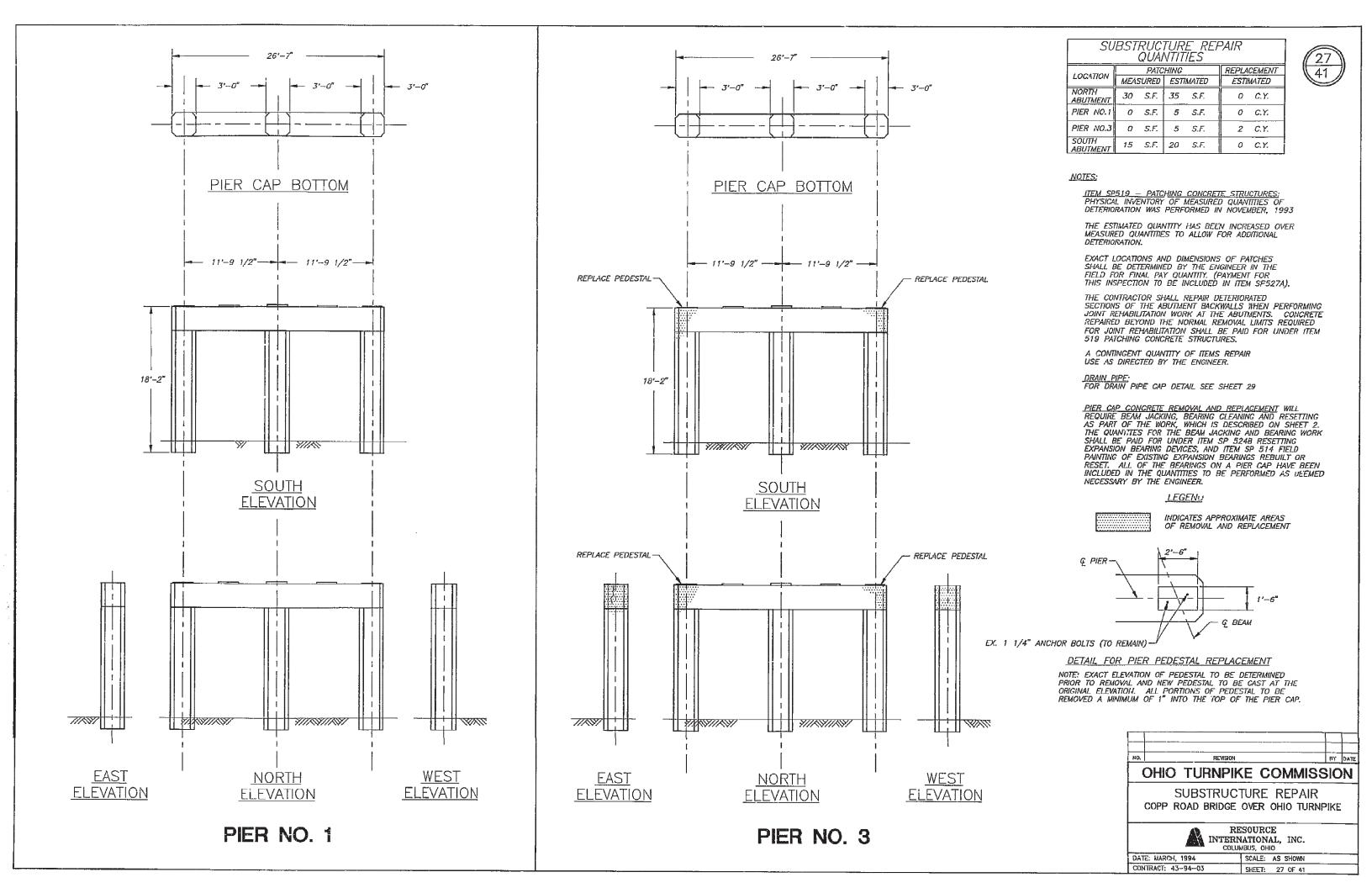
OHIO TURNPIKE COMMISSION

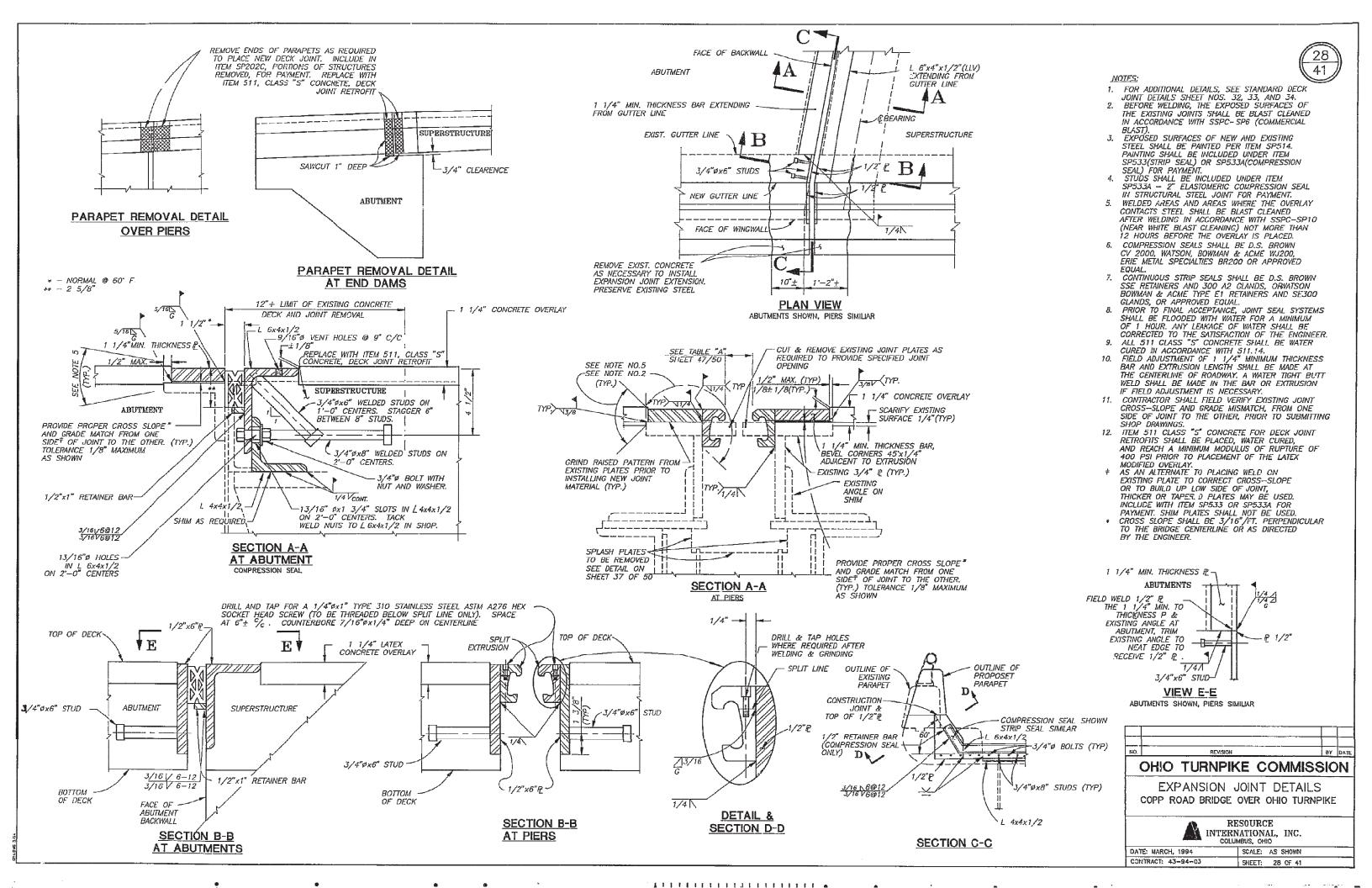
GENERAL PLAN AND ESTIMATED QUANTITIES COPP ROAD BRIDGE OVER OHIO TURNPIKE

| A | RESOURCE INTERNATIONAL, INC. COLUMBUS, OHIO |
|--------------------|---|
| DATE: MARCH, 1994 | SCALE: AS SHOWN |
| CONTRACT: 43-94-03 | SHEET: 25 CF 41 |

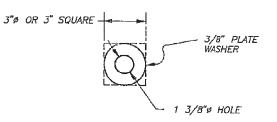
TRIM ENDS OF BEAMS TO PROVIDE 1/4" CLEARANCE



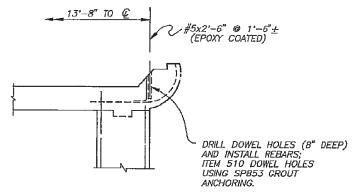




NOTE: AT FASCIA STRINGERS, SPLASH PLATE AT INSIDE ONLY.



SPECIAL WASHER FOR ANCHOR BOLTS AT BEARINGS (ITEM SP530)



REMOVE EXISTING

JOINT FOR FULL

LENGTH OF SPAN

1" (MIN.) DEEP SAWCUT PRIOR TO REMOVAL

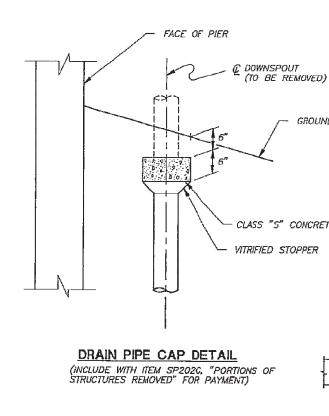
EXISTING CONSTRUCTION JOINT

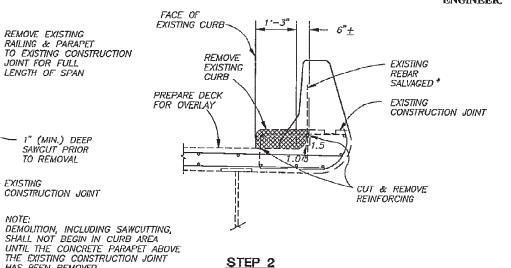
HAS BEEN REMOVED.

RAILING & PARAPET

DETAIL "A"

* THE BARS MAY BE CUT AT THE CONTRACTOR'S OPTION PROVIDED THEY ARE REPLACED AT THE CONTRACTOR'S EXPENSE AND IN ACCORDANCE WITH DETAIL "A"





EXISTING PARAPET MODIFICATION PROCEDURE

2"x3/4" BAR (SUPPORT) INTERIOR BEAM GROUND LINE SPLASH PLATE REMOVAL DETAIL AT JOINT 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" CLASS "S" CONCRETE LIMITS OF ITEM SP536 CONCRETE WEATHERPROOFING VITRIFIED STOPPER PAY LIMITS OF IIEM SP845 LATEX MODIFIED CONCRETE OVERLAY PLACE PARAPET REINFORCING PLACE PARAPET CONCRETE, ITEM SP511B WEATHERPROOFING DETAIL NEW CONSTRUCTION JOINT STEP 1, STEP 2, STEP 3, AND DECK JOINT MODIFICATIONS, SHALL BE COMPLETED PRIOR TO THE PLACEMENT OF THE 3/4" CHAMFER PARAPET CONCRETE. FINAL PREPARATION OF THE DECK FOR THE LATEX MODIFIED CONCRETE OVERLAY SHALL BE DELAYED UNTIL AFTER THE PARAPET CONCRETE HAS REACHED A STRENGTH OF 4500 PSI IN THE FIELD. PROCEDURES SHOWN AND SPECIFIED SHALL BE FOLLOWED UNLESS DEVIATIONS ARE APPROVED BY THE CHIEF ENGINEER. ES501 SPA. @ 18" 2 1/2"MIN.--LOCATE HOLES TO MISS EXISTING ES502, ES503, OR ES504 DECK REINFORCING STEEL (PROVIDE ADDITIONAL ES507 BAR MIN. CONC. COVER) OVER FIXED PIER ES510 SPA. @ 18" ES511 SPA. - DRILL DOWEL HOLES (6"± DEEP) AND INSTALL REINFORCING. ITEM 510 DOWEL HOLES USING SP853 GROUT ANCHORING (TYP.) PLACE AND CURE ITEM ⚠ CHANGED STEP 5 TO STEP 4 JHF 7/94 SP845 LATEX MODIFIED CONCRETE OVERLAY REVISION OHIO TURNPIKE COMMISSION STEP 5 ES506 OR ES507 SUPERSTRUCTURE DETAILS PATCH CONCRETE AS DIRECTED BY COPP ROAD BRIDGE OVER OHIO TURNPIKE THE ENGINEER IN ACCORDANCE WITH SP519 (MIN. PATCH DEPTH SHALL BE 4") ALL PATCHING SHALL BE COMPLETED RESOURCE STEP 3 PRIOR TO PLACEMENT OF PARAPET INTERNATIONAL, INC. CONCRETE COLUMBUS, OHIO DATE: APRIL, 1994 SCALE: AS SHOWN CONTRACT: 43-94-03

REMOVE EXISTING STEEL SPLASH PLATES BETWEEN BEAMS

C 7 SPLASH

STEP 1

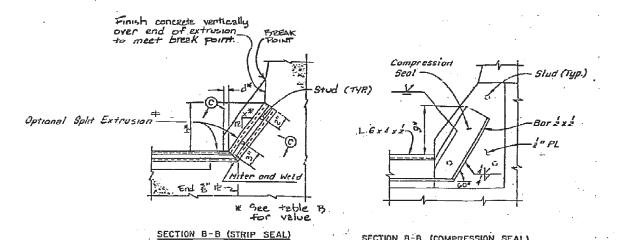
SALVAGE REBAR NEAR *

SIDE. CUT & REMOVE

REMAINING STEEL

PREPARE DECK

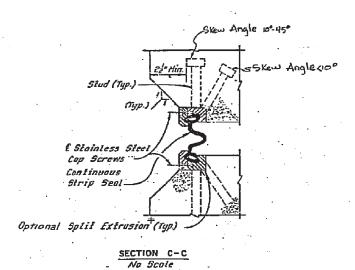
FOR OVERLAY

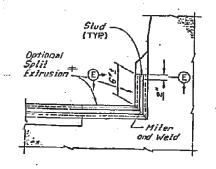


| | TABLE | = B |
|------------------|------------|---------|
| \triangleright | SKEV | V ANGLE |
| | < 10° | 10°-45° |
| C | 3/4" MIN. | 3/4" |
| 7 | (a) 15/16" | 71/2" |
| - Fi | 10" | 10" |

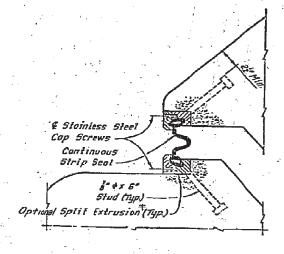
Scale: 12"-1"-0"

SECTION 8-8 (COMPRESSION SEAL)

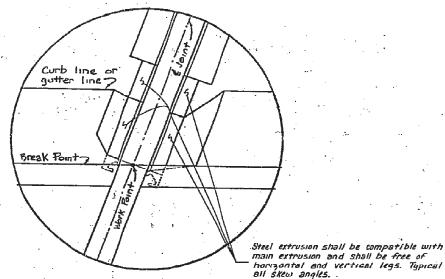




SECTION D-D Scale: 12 - 1'-0"

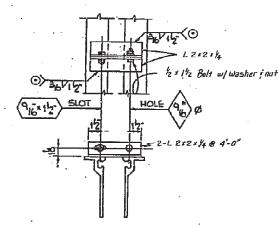


No Scale



FOR JOINT DETAILS IN SIDEWALK SEE SHEET NA Scale 4"= 1"

† THE SPLIT EXTRUSION SHOWN IS A NORMAL EXTRUSION WHICH HAS BEEN MODIFIED. AT JOINT UPTURNS, ESPECIALLY ON SKEWED BRIDGE DECKS. THE ENGINEER THAT THE FURNISHED CONFIGURATION WILL PROVIDE FOR READY



DETAIL - ALIGNMENT BRACKET

• TEMPORARY WELD TO BE REMOVED AND GROUND SMOOTH IN FIELD. LOOSEN TEMPORARY JOINT ARMOR AFTER INITIAL SET OF CONCRETE. PREFERABLY NOT LATER THAN TWO HOURS AFTER CONCLUSION OF

FOR GENERAL NOTES SEE SHEET 33.

| REVISED | 10/87. | 7/89. | 11/89 |
|---------|--------|-------|----------|
| | | | <u> </u> |

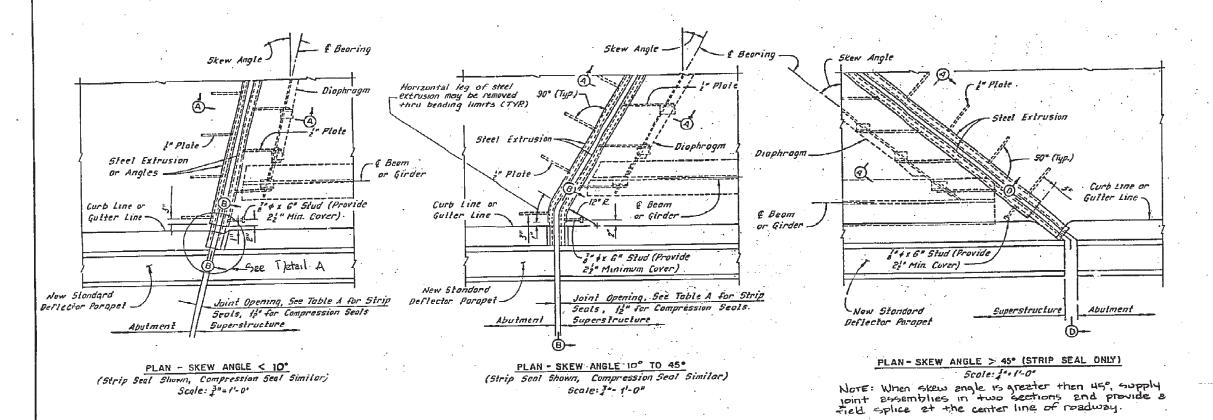
OHIO TURNPIKE COMMISSION

DECK JOINT DETAILS

DATE: JANUARY 1985 | SCALE: AS NOTED CIP: 43-14-03 \$ -04 SHEET 32 OF 41

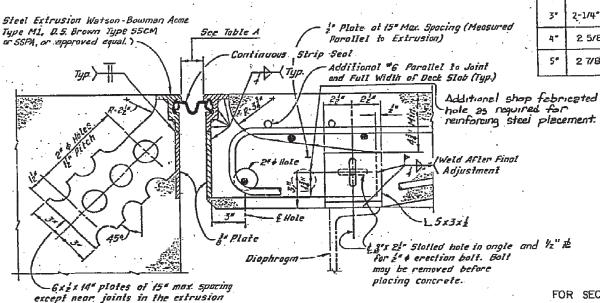
| STR | IP SEAL SE | LECTION T | ABLE |
|------------------------------|-------------------------------|-------------|----------------------------------|
| SEAL | MANUFACT | TURER & DES | IGNATION # |
| MOVEMENT RATING (SIZE) | THE D. S. BROWN COMPANY | | WATSON- BOWMAN & ACME CORP |
| 3" | 300L | | SE-300 |
| 4" | 400L | | SE-400 |
| 5" | 500L | | SE-500 |

OR APPROVED EQUAL



\$ 4" + Holes @ 12" (TYP.)
(Any voids remaining after vibration of concrete shall be filled with SP 956 epoxy mortar.) Continuous Compression Seal Additional #6 Parallel to Join and Full Width of Deck Sleb (Typ.) "Plote of 15" Max. Spacing (Measured Parallel to Angle) Weld After Final Adjustment * Plate 1 gor 21 Stolled hole in ongle and 2" # Bar 2 x 2 (Typ.) for & erection bott. Bott Diaphrogm moy be removed before placing concrete. -6x x 12" plotes of 15" max. spacing except near joints in the angle Additional Shop fabricated tole as recurred for reinforcing steel placement where the plates shall be placed within 6s of each side of the joint. The holes moy be burned in the plate. SUPERSTRUCTURE

> SECTION A-A (COMPRESSION SEAL) Scale: 3"- ['-D"



SUPERSTRUCTURE

SECTION A-A (STRIP SEAL) Scole: 3" - 1'-0"

where the plates shall be placed within

6" of each side of the joint. The holes

moy be burned in the plots.

ABUTMENT

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 CLAMPING FORCE.

ELASTOMERIC COMPRESSION SEALS SHALL BE USED AT FIXED JOINTS ONLY, AND AT SKEWS LESS THAN 450.

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

THE MINIMUM LENGTH OF RETAINER SHALL BE 6'-O" BETWEEN JOINTS UNLESS

JOINTS IN EXTRUSIONS SHALL HAVE WATERTIGHT, PARTIAL PENETRATION BUTT WELDS COMPLETELY AROUND THE OUTER PERIPHERY OF THE ABUTTING SURFACES. WELDS WHICH WILL BE IN CONTACT WITH THE SEAL AND/OR ANCHOR PLATES SHALL BE GROUND SMOOTH

CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.

ELASTOMERIC COMPRESSION SEALS SHALL BE WATSON BOWMAN ACME WJ-200. D. S. BROWN C-V 2000, ERIE METAL SPECIALTIES BR 200 OR APPROVED EQUAL.

CONTINUOUS STRIP SEALS SHALL BE AS MANUFACTURED BY WATSON BOWMAN ACME. D. S. BROWN. OR APPROVED EQUAL. AND SHALL BE THE SIZE AS SPECIFIED. SEE STRIP SEAL SELECTION TABLE.

DETAILS AT DIAPHRAGMS SHOWN, DETAILS AT BEAMS OR GIRDERS SIMILAR. TRANSVERSE JOINTS IN COMPRESSION SEAL ARMOR AND VERTICAL LEGS OF EXTRUSIONS SHALL HAVE COMPLETE PENETRATION BUTT WELDS. WELDS WHICH WILL BE IN CONTACT WITH SEALS SHALL BE GROUND FLUSH.

TABLE A

| STRIP | | TRIP SEAL | | ENING INS | | CHART | |
|-----------|--------|-----------|----------|-----------|--------|--------|--------|
| SEAL SIZE | 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" |

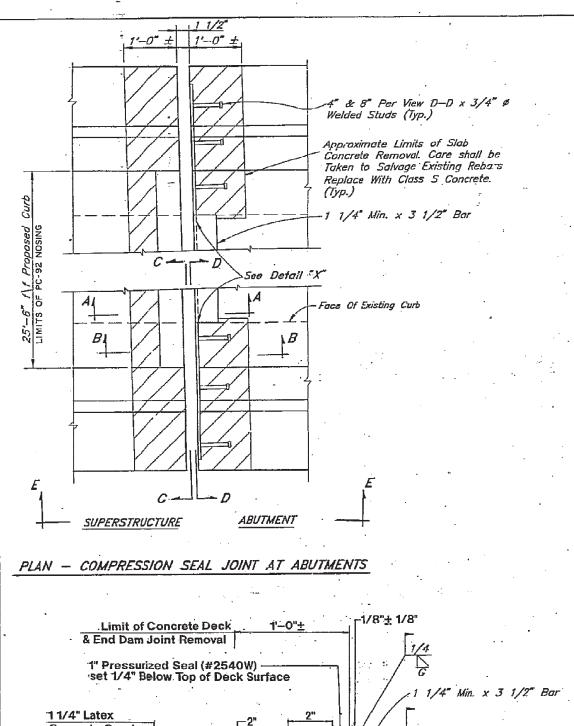
FOR SECTION B-B, SECTION C-C, SECTION D-D, SECTION E-E & DETAIL "A" SEE SHEET 32

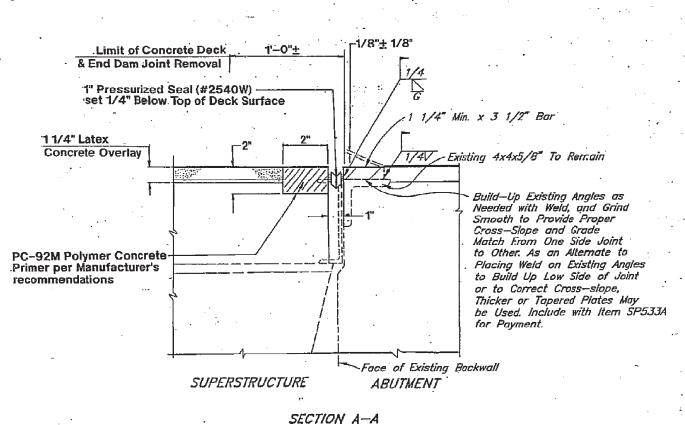
REVISED 10/87, 7/89, 11/89

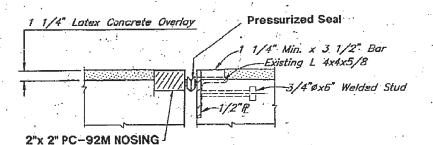
OHIO TURNPIKE COMMISSION

DECK JOINT DETAILS

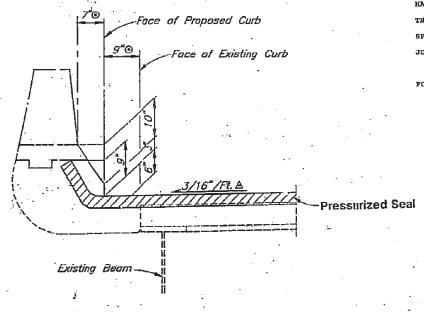
DATE: JANUARY 1985 SCALE: AS NOTED CIP: 43-14-03 9-04 SHEET 33- OF 41





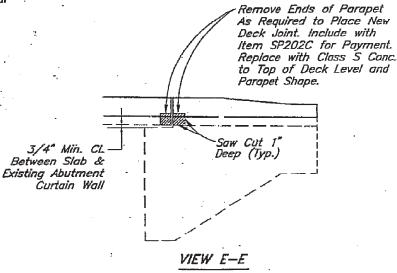


SECTION B-B

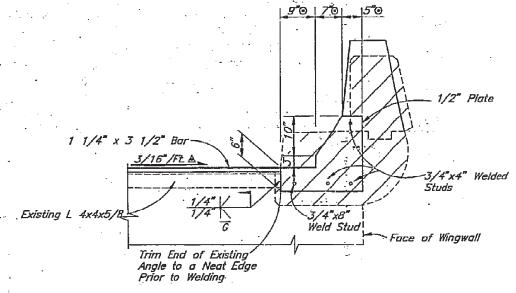


THE DETAILS SHOWN ON THIS SHEET ARE ALTERNATE DETAILS THAT HAY BE USED BY THE CONTRACTOR IN LIEU OF THE DETAILS SHOWN ON SHEET 28 OF 41 FOR MODIFICATIONS TO THE PIXED DECK JOINTS AT THE ABUTMENTS. THE JOINTS SHALL MEET ALL APPLICABLE PROVISIONS OF ITEM SP 533B - CONTINUOUS PRESSURIZED ELASTONER SEAL IN POLYMER CONCRETE OR STRUCTURAL STREL JOINTS, AND SP 533A - ELASTOHERIC COMPRESSION SEALS IN STRUCTURAL STEEL JOINTS. THE COST OF ALL HATERIALS, LABOR, EQUIPMENT AND INCIDENTS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM SP 533A, ELASTOHERIC COKPRESSION SEALS IN STRUCTURAL STEEL

FOR ADDITIONAL NOTES SEE SHEET 33 OF 41.



SECTION C-C



LEGEND

- (Dimensions Are Given Normal To Curb)
- A Normal To @

REVISIONS OHIO TURNPIKE COMMISSION

ALTERNATE
FIXED DECK JOINT DETAILS
TYPICAL AT ABUTMENTS

COPP ROAD

Designed KF/IF Data 6/94 Scale N.T.S CONTRACT: 43-94-03 Sheet 34 of 41

SECTION D-D

SLIPFORM CONSTRUCTION OF BRIDGE PARAPETS APPLICABLE TO THE FOLLOWING:

THE CONTRACTOR SHALL BE PERMITTED THE OPTION OF SLIPFORMING THE DEFLECTOR PARAPET BRIDGE RAILINGS ON THIS PROJECT IF HE CAN DEMONSTRATE TO THE CHIEF ENGINEER, ON A 100 FT.

(MINIMUM) TRIAL LENGTH OF PARAPET, THAT THE PARAPET CAN BE FORMED SATISFACTORILY BY THIS METHOD. THE CONTRACTOR SHALL GIVE THE CHIEF ENGINEER NOTICE THREE WORKING DAYS IN ADVANCE OF THE TIME THAT HE INTENDS TO SLIPFORM THE PARAPET. THE CONTRACTOR SHALL NOT DO ANY SLIPFORMING OF THE TRIAL LENGTH UNTIL THE CHIEF ENGINEER IS PRESENT. IF THIS TRIAL LENGTH OF PARAPET IS UNSATISFACTORY, NO ADDITIONAL SLIPFORMING WILL BE PERMITTED AND IT SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

THE PARAPET WILL BE CONSIDERED UNSATISFACTORY IF THE SLIPFORMING OPERATION, PRIOR TO MANUAL REPAIRS, LEAVES ANY OF THE FOLLOWING CONDITIONS:

- A. HONEYCOMBING OR HOLES WHICH ARE SIX INCHES OR MORE IN DIAMETER.
- B. EXPOSURE OF THE OUTERMOST SURFACE OF ANY REINFORCING STEEL.
- C. CRACKS WHICH ARE GREATER THAN 1/4 INCH IN DEPTH.
- DIMENSIONS IN EXCESS OF THE CONSTRUCTION TOLERANCES LISTED BELOW:

1. BAR REINFORCEMENT

COAES

ייב/ו + יים

2. WIDTH (TOP)

-0" + 1/4"

3. WIDTH (BOTTOM)

-011 + 1/211

4. SURFACE STRAIGHTNESS

OF FLAT SURFACES

1/4" IN 10 FEET

5. VERTICAL ALIGNMENT

(DEVIATION FROM A LINE

PARALLEL TO THE

THEORETICAL GRADE LINE)

1/2" IN 20 FEET

IF THIS OPTION IS USED, THE FOLLOWING PRACTICES SHALL BE OBSERVED:

- A. THE CONCRETE MIX USED SHALL BE OF SUCH A
 CONSISTENCY AS TO EXIT THE MOLD WITHOUT EXCESSIVE
 PULLING AND ENABLE IT TO FLOW INTO THE BOTTOM
 THREE-INCH VERTICAL FACE OF THE CURB. HOWEVER, THE
 MIX SHALL BE STIFF ENOUGH TO PREVENT WAVINESS AND
 SAGS IN THE FLAME SURFACES.
- VERTICAL REBARS SHALL BE TIED SECURELY TO PROHIBIT
 THEIR BEING PUSHED FORWARD AND OUT OF POSITION.
- C. LONGITUDINAL REINFORCING BARS MAY BE CONTINUOUS IN

 THE DEFLECTION JOINT AREAS. EXTRA LONGITUDINAL

 REBARS, IF USED, SHALL BE ADDED AT THE CONTRACTOR'S

 EXPENSE.
- PROMPTLY BEFORE THE CONCRETE SETS. DEFECTS SHALL

 BE COMPLETELY FILLED WITH CONCRETE.
- THE DEFLECTION JOINTS DO NOT HAVE TO BE SAWED ALL
 THE WAY THROUGH THE PARAPET. THE SAWING OF A 1 1/2
 INCH DEEP CUT AT THE DEFLECTION JOINT LOCATION WILL
 BE SUFFICIENT TO FORM A CONTROL JOINT.

DEFLECTION JOINTS SHALL BE CONSTRUCTED BY SAWING
THE CONCRETE AFTER IT HAS TAKEN ITS INITIAL SET AND
BEFORE ANY CRACKS DEVELOF. THE USE OF AN EDGE
GUIDE, FENCE, OR JIG SHALL BE USED TO ENSURE THAT
THE CUT JOINT IS STRAIGHT, TRUE AND ALIGNED ON BOTH
FACES OF THE PARAPET, THE JOINT WIDTH SHALL BE THE
WIDTH OF THE SAW BLADE, NOT TO EXCEED ONE QUARTER
INCH.

- THE OUTSIDE ONE INCH OF THE PERIMETER OF THE
 DEFLECTION JOINT SHALL BE SEALED WITH A
 POLYURETHANE OR POLYMERIC JOINT SEALANT MEETING THE
 REQUIREMENTS OF FEDERAL SPECIFICATION TT-S-0027E.
- THE BEGINNING OF A POUR SHALL BE BULKHEADED AND THE PAVER BACKED UP UNTIL THE BULKHEAD IS JUST BEHIND THE CONCRETE PLACEMENT LOCATION. THIS IS NECESSARY SINCE THE MIX WILL NOT FLOW INTO THE REAR OF THE MOLD.

- ABSOLUTELY NO WATER SHALL BE ADDED OR APPLIED TO THE CONCRETE AFTER IT HAS LEFT THE CONCRETE TRUCK MIXER AND BEFORE IT HAS BEEN FINISHED.
- I. EXCESS CONCRETE LEFT AFTER THE SLIPFORM MACHINE HAS
 PASSED AND CONCRETE THAT HAS FALLEN TO THE DECK
 SURFACE FROM THE PAVER OR TRUCK SHALL NOT BE
 RECYCLED IN THE PAVER AND SHALL NOT BE USED FOR
 REPAIR OF DEFECTS.
- J. FINISHING SHALL BE IN ACCORDANCE WITH C.M.S.
 622.06. ABSOLUTELY NO WATER SHALL BE USED AS A
 FINISHING AID.
- R. IMMEDIATELY AFTER THE PARAPETS HAVE BEEN FINISHED,
 AN APPROVED MONOMOLECULAR FILM SHALL BE APPLIED TO
 THE EXPOSED SURFACE. THE FILM MATERIAL SHALL BE
 MASTER BUILDERS CONFILM OR APPROVED EQUAL, AND
 SHALL BE APPLIED IN ACCORDANCE WITH THE
 MANUFACTURER'S PRINTED INSTRUCTIONS. SLIPFORMING,
 FINISHING, AND MONOMOLECULAR FILM APPLICATION SHALL
 BE A CONTINUOUS, TIGHT OPERATION WITH ADEQUATE
 MANPOWER AND EQUIPMENT.
- L. SURFACES SHALL BE WATER CURED IN ACCORDANCE WITH 511.14 AS MODIFIED BY SP-511A.
- END TRANSITIONS SHALL NOT BE SLIPPORMED.
- N. SPICIAL ATTENTION SHALL BE GIVEN TO THE AREA WHERE
 THE PARAPET MEETS THE DECK. FINISHING SHALL
 PROVIDE A CLEAN, TIGHT JOINT WHICH IS FREE OF ANY
 OVERLAP ONTO THE DECK EDGE. WHEN CURING IS
 COMPLETED, THE CURB LINE SHALL BE SEALED WITH A
 LIBERAL APPLICATION OF AN APPROVED HIGH MOLECULAR
 WEIGHT METHACRYLATE SEALER. THE SEALER AND CURB
 LINE SHALL BE PREPARED, AND THE SEALER APPLIED IN
 ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- AND SHALL NOT REQUIRE A WASHER AND NUT ON THE
 EMBEDDED END. STUDS SHALL BE SET IN 10 1/4" DEEP
 DOWEL HOLES USING ITEM SP 853 GROUT ANCHORING.
 DRILLING OF DOWEL HOLES SHALL BE POSTPONED UNTIL
 THE CONCRETE HAS REACHED ITS 4500 PSI DESIGN
 STRENGTH. HOLES SHALL BE DRILLED WITH CORE OR
 MASONRY BITS; HOWEVER, HAMMER DRILLS SHALL NOT BE
 USED. STUDS, DOWEL HOLES, AND GROUT SHALL BE
 INCLUDED WITH ITEM SP 607 FOR PAYMENT.

OHIO TURNPIKE COMMISSION

SLIPFORMING

NOTES

SLIPFORM CONSTRUCTION OF BRIDGE PARAPETS

THE CONTRACTOR SHALL BE PERMITTED THE OPTION OF SLIPPORMING THE DEPLECTOR PARAPET BRIDGE RAILINGS ON THIS PROJECT IF HE CAN DEMONSTRATE TO THE CHIEF ENGINEER, ON A 100 FT.

(MINIMUM) TRIAL LENGTH OF PARAPET, THAT THE PARAPET CAN BE FORMED SATISFACTORILY BY THIS HETHOD. THE CONTRACTOR SHALL GIVE THE CHIEF ENGINEER NOTICE THREE WORKING DAYS IN ADVANCE OF THE TIME THAT HE INTENDS TO SLIPFORM THE PARAPET. THE CONTRACTOR SHALL NOT DO ANY SLIPFORMING OF THE TRIAL LENGTH UNTIL THE CHIEF ENGINEER IS PRESENT. IF THIS TRIAL LENGTH OF PARAPET IS UNSATISFACTORY, NO ADDITIONAL SLIPFORMING WILL BE PERMITTED AND IT SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

THE PARAPET WILL BE CONSIDERED UNSATISFACTORY IF THE SLIPFORMING OPERATION, PRIOR TO MANUAL REPAIRS, LEAVES ANY OF THE FOLLOWING CONDITIONS:

- A. HONEYCOMBING OR HOLES WHICH ARE SIX INCHES OR MORE IN DIAMETER.
- B. EXPOSURE OF THE OUTERHOST SURFACE OF ANY REINFORCING STEEL.
- C. CRACKS WHICH ARE GREATER THAN 1/4 INCH IN DEPTH.
- D. DIMENSIONS IN EXCESS OF THE CONSTRUCTION TOLERANCES

1. BAR REINFORCEMENT COVER -0" + 1

2. WIDTH (TOP) $-0^{16} + 1/4^{16}$

3. WIDTH (BOTTOM) -0" + 1/2"

4. SURFACE STRAIGHTNESS

OF FLAT SURFACES 1/4" IN 10 FEET

5. VERTICAL ALIGNMENT

(DEVIATION FROM A LINE

PARALLEL TO THE

THEORETICAL GRADE LINE) 1/2" IN 20 FEET

IF THIS OFTION IS USED, THE FOLLOWING PRACTICES SHALL BE OBSERVED:

- A. THE CONCRETE MIX USED SHALL BE OF SUCH A

 CONSISTENCY AS TO EXIT THE MOLD WITHOUT EXCESSIVE

 PULLING AND ENABLE IT TO FLOW INTO THE BOTTOM

 THREE-INCH VERTICAL FACE OF THE CURB. HOWEVER, THE

 MIX SHALL BE STIFF ENOUGH TO PREVENT WAVINESS AND

 EAGS IN THE PLANE SURFACES.
- B. SINCE THE SLIPFORM MOLD WIDTH REMAINS CONSTANT, THE
 VERTICAL REBARS SHALL BE TIED SECURELY TO PROHIFIT
 THEIR BEING PUSHED FORWARD AND OUT OF POSITION.
- C. LONGITUDINAL REINFORCING BARS MAY BE CONTINUOUS IN
 THE DEFLECTION JOINT AREAS. EXTRA LONGITUDINAL
 REBARS, IF USED, SHALL BE ADDED AT THE CONTRACTOR'S
 EXPENSE.
- PROMPTLY BEFORE THE CONCRETE SETS. DEFECTS SHALL
 BE COMPLETELY FILLED WITH CONCRETE.
- THE DEFLECTION JOINTS DO NOT HAVE TO BE SAWED ALL
 THE WAY THROUGH THE PARAPET. THE SAWING OF A 1 1/2
 INCH DEEP CUT AT THE DEFLECTION JOINT LOCATION WILL
 BE SUFFICIENT TO FORM A CONTROL JOINT.
 DEFLECTION JOINTS SHALL BE CONSTRUCTED BY SAWING

THE CONCRETE AFTER IT HAS TAKEN ITS INITIAL SET AND BEFORE ANY CRACKS DEVELOP. THE USE OF AN EDGE'
GUIDE, FENCE, OR JIG SHALL BE USED TO ENSURE THAT
THE CUT JOINT IS STRAIGHT, TRUE AND ALIGNED ON BOTH
FACES OF THE PARAPET. THE JOINT WIDTH SHALL BE THE
WIDTH OF THE SAW BLADE, NOT TO EXCEED ONE QUARTER
INCH.

- F. THE OUTSIDE ONE INCH OF THE PERIMETER OF THE

 DEFLECTION JOINT SHALL BE SEALED WITH A

 POLYURETHANE OR POLYMERIC JOINT SEALANT MEETING THE

 REQUIREMENTS OF FEDERAL SPECIFICATION TT-8-002278.
- THE BEGINNING OF A POUR SHALL BE BULKHEADED AND THE PAVER BACKED UP UNTIL THE BULKHEAD IS JUST BEHIND THE CONCRETE PLACEMENT LOCATION. THIS IS NECESSARY SINCE THE MIX WILL NOT FLOW INTO THE REAR OF THE MOLD.
- H. ABSOLUTELY NO WATER SHALL BE ADDED OR APPLIED TO THE CONCRETE AFTER IT HAS LEFT THE CONCRETE TRUCK MIXER AND BEFORE IT HAS BEEN FINISHED.

- I. EXCESS CONCRETE LEFT AFTER THE SLIPFORM MACHINE HAS PASSED AND CONCRETE THAT HAS FALLEN TO THE DECK SURFACE FROM THE PAVER OR TRUCK SHALL NOT BE RECYCLED IN THE PAVER AND SHALL NOT BE USED FOR REPAIR OF DEFECTS.
- FINISHING SHALL BE IN ACCORDANCE WITH C.M.S.

 622.06. ABSOLUTELY NO WATER SHALL BE USED AS A
 FINISHING AID.
- K. IMMEDIATELY AFTER THE PARAPETS HAVE BEEN FINISHED,
 AN APPROVED MONOMOLECULAR FILM SHALL BE APPLIED TO
 THE EXPOSED SURFACE. THE FILM MATERIAL SHALL BE
 MASTER BUILDERS CONFILM OR APPROVED EQUAL, AND
 SHALL BE APPLIED IN ACCORDANCE WITH THE
 MANUFACTURER'S PRINTED INSTRUCTIONS. SLIPPORMING,
 FINISHING, AND MONOMOLECULAR FILM APPLICATION SHALL
 BE A CONTINUOUS, TIGHT OPERATION WITH ADEQUATE
 MANPOWER AND EQUIPMENT.
- L. SURFACES SHALL BE WATER CURED IN ACCORDANCE WITH 511.14 AS MODIFIED BY SP-511A.
- M. END TRANSITIONS SHALL NOT BE SLIPFORMED.
- THE 3/4" CHAMFER ON THE EDGE OF THE NEW CONCRETE ON
 THE QUISIDE OF THE PARAPET AT THE CONSTRUCTION
 JOINT WITH THE OLD CONCRETE AS SHOWN ON THE PLAN
 DETAILS IS WAIVED FOR SLIPFORMED PARAPETS.
 HOWEVER, SPECIAL ATTENTION SHALL BE GIVEN TO THIS
 AREA WHEN FINISHING SO AS TO PROVIDE A CLEAN, TIGHT
 JOINT FREE OF ANY OVERLAP ONTO THE OLD CONCRETE.
- O. FENCE ANCHOR STUDB, IF REQUIRED, SHALL BE 12" LONG
 AND SHALL NOT REQUIRE A WASHER AND NUT ON THE
 EMBEDDED END. STUDS SHALL BE SET IN 10 1/4" DEEP
 DOWEL HOLES USING ITEM SP 853 GROUT ANCHORING.
 DRILLING OF DOWEL HOLES SHALL BE FOSTPONED UNTIL
 THE CONCRETE HAS REACHED ITS 4500 PSI DESIGN
 STRENGTH. HOLES SHALL BE DRILLED WITH CORE OR
 MASONRY BITS; HOWEVER, HAMMER DRILLS SHALL NOT BE
 USED. STUDS, DOWEL HOLES, AND GROUT SHALL BE
 INCLUDED WITH ITEM SP 607 FOR PAYMENT.

OHIO TURNPIKE COMMISSION

GENERAL NOTES

STRUCTURE

DATE: DECEMBER 1991 | SCALE:

CIP: 43-74-03 SHEET 37 OF 41

I/2" Ø BARS 7 SPA @ 2-0" = 14'-0" - SEE NOTE I E ROADWAY TYPE 'H' OR 'K' JOINT. SEE CRACK B JOINT DETAILS, SHEET NO I" PREFORMED EXPANSION JOINT FILLER (TYP) PLAN (WITHOUT CURB)

2'-0" FOR SKEWS LARGER THAN 20°; 0-0"FOR SKEWS 20° OR LESS SEE NOTE! TYPE 'H' OR 'K' E ROADWAY JOINT. SEÉ CRACK & JOINT DETAILS, SHEET NO. 1/2" OR 3/4" Ø BARS AT EDGE OF SLAB SHALL BE CUT TO FIT

APPROACH SLAB FOR SKEWED BRIDGE

APPROACH SLAB ABUTMENT SLAB -SEE NOTE I PAVEMENT REINFORCING -SEE NOTE 2 -BRIDGE ABUTMENT SLAB 3"CLEAR 6" ITEM 310 SUBBASE-3/4" Ø BARS @ 0'--9" C/C-1/2"0 BARS @ 2'-0" C/C 2'-0" MIN .-3'-0"± SECTION A-A

NOTE 1: GROOVE AND SEAL WITH 705.04 AS PER O.D.O.T. STD. DWG. BP-2.1

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.

-I PREFORMED EXPANSION JOINT FILLER, TOPPED WITH I MINIMUM DEPTH 705.04 JOINT SEALER. ABUTMENT SLAB -SEE NOTE I BRIDGE PARAPET PART PLAN VIEW

APPROACH

SLAB

APPROACH SLAB CURB

(WITH CURB)

SECTION B-B

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.Y. M. AGIS, AGIG OR AGI7 - GRADE GO MIN. YIELD STRENGTH

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

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

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 511.09.

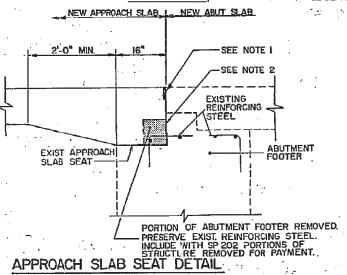
CURBS, BRIDGES WITH SIDEWALKS: FOR BRIDGES CONSTRUCTED WITH RAISED SIDEWALKS, DEFLECTOR PARAPETS OR OTHER TYPES OF CONSTRUCTION WHICH RETAIN ROADWAY SURFACE DRAINAGE, THE APPROACH SLABS SHALL EITHER INCLUDE INTEGRAL, CURBS OR BE CONSTRUCTED IN CONJUNCTION WITH BRIDGE CURBS, CURB, HEIGHT SHALL BE TRANSITIONED 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 IO 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-I

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 IAPPROACH 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 . T LIN. FT. FOR THE JOINT FURNISHED.

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



| | • | | |
|----|--|-----|----------|
| 5 | UPDATED FOR O.D.O.T. STD. DWG. | K.E | 61092 |
| 4 | ADDED DETAILS, REVISED NOTE ! | K.E | 5-23-89 |
| 3 | REVISED APPROACH SLAB SEAT DETAIL | JDL | 4-18-89 |
| 2 | ADDED IMPRESSED JOINT & CHANGED TYPE OF CEMENT | DFC | 11:28 84 |
| 1 | ADDED SEAT REPAIR DETAIL | | 10-2-84 |
| Νº | REVISION | BY | DATE |
| ΔI | UIA TUDNIDIVE CARM | 100 | ION |

OHIO INKULIKE COMIMI22ION

REINFORCED CONCRETE

APPROACH SLABS

DATE: OCTOBER 1983 | SCALE: N.T.S. #-43-94-03 404 SHEET 38 OF 4/

(BRIDGE)

CONTRACT NO. C- 35 COUNTY - SANDUSKY DATE:





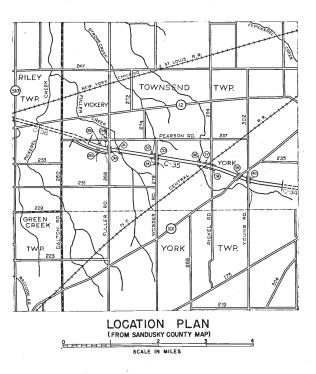
OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

DESIGN SECTION D-12

CONTRACT NO. C-35

TURNPIKE CONSTRUCTION CONTRACT
STATION 985+97 TO STATION 1219+39



APPROVAL RECOMMENDED BROWN & BLAUVELT CONTRACTING ENGINEER

Harold a Blavuel

mar 6, 1953

APPROVED

J. E. GREINER CO.

CONSULTING ENGINEER

Section 1

APPROVED
OHIGHTURNPIKE COMMISSION
CHIEF ENGINEER 5-29-53



| | | LIST OF DRAWINGS |
|------|--|---|
| | 2 | GENERAL NOTES AND LEGEND |
| | 3 | MAINTENANCE OF TRAFFIC MAP |
| . 12 | 4 | SUMMARY OF ESTIMATES |
| | _ | DIAN AND PROFILE CTA COSTON TO CTA COOTEO |
| | 5 | |
| | 6 | READCON DR. RELOCATION |
| | | |
| | | PLAN AND PROFILE STA. 1019+00 TO STA. 1046+00 AND |
| , | 8 | PEARSON RD. RELOCATION PLAN AND PROFILE FULLER RD. AND |
| 7 5 | | PEARSON RD. RELOCATION |
| | 9 | PLAN AND PROFILE STA. 1046+00 TO STA. 1074+00 |
| | | PLAN AND PROFILE STA. 1074+00 TO STA. 1074+00 |
| | | PLAN AND PROFILE WOBSER RD. |
| | | PLAN AND PROFILE STA.1102+00 TO STA.1130+00 |
| | | PLAN AND PROFILE STA. 1130+00 TO STA. 1158+00 |
| | | PLAN AND PROFILE STA. 1158+00 TO STA. 1186+00 |
| | | PLAN AND PROFILE STA. 1186+00 TO STA. 1214+00 |
| | | PLAN AND PROFILE STATE ROUTE IOI AND YOUNG RD. |
| 7 | 17 | PLAN AND PROFILE STA.1214+00 TO STA. 1219+39 |
| | | |
| | | JRE [#] 29 CULVERT |
| | 18 | GENERAL PLAN AND DETAILS |
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| | | JRE *29E CULVERT |
| | | JRE [#] 29E CULVERT GENERAL PLAN AND DETAILS |
| 5 | 20 | |
| | 20 STRUCTI | GENERAL PLAN AND DETAILS |
| - | 20 STRUCTI | GENERAL PLAN AND DETAILS JRE *30 FULLER ROAD OVER TURNPIKE |
| - | 20 STRUCTI 21 22 | GENERAL PLAN AND DETAILS JRE *30 FULLER ROAD OVER TURNPIKE PLAN, ELEVATION AND SECTION |
| | 20 STRUCTI 21 22 | GENERAL PLAN AND DETAILS JRE *30 FULLER ROAD OVER TURNPIKE PLAN, ELEVATION AND SECTION SUPERSTRUCTURE |
| | 20 STRUCTU 21 22 23 24 | GENERAL PLAN AND DETAILS JRE *30 FULLER ROAD OVER TURNPIKE PLAN, ELEVATION AND SECTION SUPERSTRUCTURE ABUTMENTS PIERS |
| | 20 STRUCTU 21 22 23 24 | GENERAL PLAN AND DETAILS JRE *30 FULLER ROAD OVER TURNPIKE PLAN, ELEVATION AND SECTION SUPERSTRUCTURE ABUTMENTS PIERS JRE *31 TURNPIKE OVER FULLER CREEK |
| | 20 STRUCTI 21 22 23 24 STRUCTI | GENERAL PLAN AND DETAILS JRE *30 FULLER ROAD OVER TURNPIKE PLAN, ELEVATION AND SECTION SUPERSTRUCTURE ABUTMENTS PIERS |
| | 20 STRUCTI 21 22 23 24 STRUCTI 25 26 | GENERAL PLAN AND DETAILS JRE *30 FULLER ROAD OVER TURNPIKE PLAN, ELEVATION AND SECTION SUPERSTRUCTURE ABUTMENTS PIERS JRE *31 TURNPIKE OVER FULLER CREEK PLAN, ELEVATION AND SECTION |
| | 20 STRUCTI 21 22 23 24 STRUCTI 25 26 | GENERAL PLAN AND DETAILS JRE *30 FULLER ROAD OVER TURNPIKE PLAN, ELEVATION AND SECTION SUPERSTRUCTURE ABUTMENTS PIERS JRE *31 TURNPIKE OVER FULLER CREEK PLAN, ELEVATION AND SECTION SUPERSTRUCTURE |
| | 20 STRUCTI 21 22 23 24 STRUCTI 25 26 | GENERAL PLAN AND DETAILS JRE *30 FULLER ROAD OVER TURNPIKE PLAN, ELEVATION AND SECTION SUPERSTRUCTURE ABUTMENTS PIERS JRE *31 TURNPIKE OVER FULLER CREEK PLAN, ELEVATION AND SECTION SUPERSTRUCTURE |

| 1.1 | | |
|----------------------|--|-----|
| | JRE # 32 CULVERT GENERAL PLAN AND DETAILS | |
| 29 | RE #33 WOBSER ROAD OVER TURNPIKE PLAN, ELEVATION AND SECTION SUPERSTRUCTURE ABUTMENTS PIERS | |
| | GENERAL PLAN AND DETAILS | |
| | RE [#] 36 CULVERT GENERAL PLAN AND DETAILS | |
| 35 36 37 38 | RE *37 TURNPIKE OVER NEW YORK CENTRAL PLAN, ELEVATION AND SECTION SUPERSTRUCTURE ABUTMENTS PIERS PIER COLLISION WALL | R.R |
| 40 41 | JRE #38 TURNPIKE OVER PICKLE ROAD PLAN, ELEVATION AND SECTION SUPERSTRUCTURE ABUTMENTS PIERS | |
| 44 45 46 47 | JRE *39 STATE ROUTE IOI OVER TURNPIKE PLAN, ELEVATION AND SECTION SUPERSTRUCTURE ABUTMENTS PIER NO.2 PIERS NO.18.3 | |
| | JRE *40 YOUNG ROAD OVER TURNPIKE PLAN, ELEVATION AND SECTION SUPERSTRUCTURE ABUTMENTS PIERS | |
| | | |

STRUCTURAL DETAILS STRUCTURAL DETAILS ARCHITECTURAL DETAILS CROSS ROADS AND DETOUR DETAILS PAYMENT LINES AND SUPERELEVATION DETAILS BORING LOGS 58 STRUCTURES NOS. 29, 29B, 30, 31, 32, & 33 STRUCTURES NOS. 34, 36, 37, 38, 39, & 40 STANDARD DRAWINGS LATEST REVISION DATE I TURNPIKE DITCH DETAILS 5- 6-53 STANDARD HEADWALLS FOR PIPE SIZES 48" AND UNDER 1 - 20 - 53 3 STANDARD HEADWALLS FOR PIPE SIZES OVER 48" 1 - 20 - 53 4 TYPICAL ROADWAY SECTIONS 5-6-53 5 HANDRAIL DETAILS 5-6-53 5-6-53 6 INLETS AND CURBS 7 MANHOLES 5-6-53 6 - 3 - 53 8 PAVEMENT REINFORCEMENT AND DETAILS 9 TRANSVERSE PAVEMENT JOINTS TYPE A IO TRANSVERSE PAVEMENT JOINTS TYPE B 5-6 **-5**3 PAVEMENT JOINT SPACING 12-31 - 52 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 DRAINAGE DETAILS FOR TURNPIKE OVERPASSES AND UNDERPASSES 4-27-53 15 1 -20-53 UNDERDRAINS GUARD RAILS TYPE A AND TYPE B 5-6-53 18 GUARD RAILS TYPE C AND TYPE D AGRICULTURAL TILE DRAINAGE-TYPICAL DETAILS 12 - 5 - 52 FLOOD GATES FOR RIGHT OF WAY FENCE

TRANSVERSE PAVEMENT JOINTS TYPE C

2-19-53 22 CULVERT PIPE BEDDING AND BACKFILL

MISCELLANEOUS DETAILS

1 - 6 - 53

1-23-53

21

| | | _ | - |
|----------|----------------------|-----|---------|
| <u> </u> | AS-BUILT PLANS | | Feb56 |
| 1 | Deleted sheet no. 19 | HEN | 10-6-53 |
| NO. | REVISION | BY | DATE |

OHIO TURNPIKE COMMISSION OHIO TURNPIKE PROJECT NO. 1

LIST OF DRAWINGS

BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12

IN CHARGE: Quodal SCALE: Mone CONTRACT NO. C- 35 SHEET | OF 59

N

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.

LINES AND GRADES OF NEW PAVEMENTS WILL BE ADJUSTED TO MEET EXISTING PAVEMENTS AS DIRECTED

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 SHAIL BE DETERMINED BY THE CONTRACTOR PRIOR TO

MAINTENANCE OF TRAFFIC

FOR MAINTENANCE OF TRAFFIC NOTES AND DETAILS SEE SHEET NO. 3.

CAST-IN-PLACE CONCRETE PILES

PILES DRIVEN WITHOUT CORE OR MANDREL SHALL
HAVE FORGED STEEL OR CAST STEEL POINT 8" DIAMETER, PILES SHALL TAPER 1" IN 7'-0"FIRST THIRTY
FRET OF LENGTH FROM TIP, THEN 5/8" IN 20'-0"TO BUTT.
SHELLS SHALL HAVE SUFFICIENT STRENGTH TO WITHSTAND DRIVING BUT SHALL NOT BE LESS THAN 11
GAUGE. UPPER THIRD OF PILE SHALL BE REINFORCED
WITH 6/HBARS WHICH SHALL BE EXTENDED 1'-3"ABOVE THE
CUT-OFF, AND /8" ITES 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 8-5/8" DIAMETER TIP AND SHALL BE STEP TAPERED 1"IN 8'-0". CASINGS SHALL BE OF SUPFICIENT 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 ADEQUATE PROVISIONS SHALL BE MADE TO INSURE THAT A MINIMUM CLEARANCE OF 1 1/2" SHALL BE MAINTAINED BETWEEN THE REINFORCEMENT AND THE FILE SHELL. ALTERNATE DESIGNS OF CAST-IN-PLACE CORCRETE FILES MAY BE SUBMITTED FOR APPROVAL BY THE ENGINEER.

TOPSOIL (ITEM L-3) SHALL BE SPREAD TO A COMPACTED DEPTH OF TWO (2) INCHES ON AREAS INDICATED ON THE PLANS.

BONEMEAL (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 LIMESTONE (ITEM L-9) SHALL BE APPLIED AT THE RATE OF 100 LBS. PER ONE THOUSAND (1000) SQ. FT. AND THOROUGHLY INCORPORATED INTO

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 FROM 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-35
- c) SUPPLEMENT SPECIFICATIONS B-20, DATED DECEMBER 9,1952
 SUPPLEMENT SPECIFICATIONS I-16, DATED MAY 28,1953
 SUPPLEMENT SPECIFICATIONS I-20, DATED DECEMBER 9,1952
 SUPPLEMENT SPECIFICATIONS T-35, DATED DECEMBER 9,1952
 SUPPLEMENT SPECIFICATIONS T-35, DATED DECEMBER 9,1952
 SUPPLEMENT SPECIFICATIONS B-21, DATED DEBRUARY 20,1993
 SUPPLEMENT SPECIFICATIONS B-21, DATED DECEMBER 9,1952
 SUPPLEMENT SPECIFICATIONS B-35, DATED DECEMBER 9,1952
 SUPPLEMENT SPECIFICATIONS I-9, DATED DECEMBER 9,1952
 SUPPLEMENT SPECIFICATIONS I-30, REV.

 JULY 9,1953

| LEGEND | |
|---|--|
| SURVEY BASE LINE | 630 |
| EXISTING PROPERTY LINE | PL. PI. |
| EXISTING FENCE LINE | Fence is P.L. |
| EXISTING PROPERTY LINE (FENCED) | xx |
| EXISTING R/W LINE | |
| PROPOSED R/W LINE | and the same of th |
| EXISTING FARM TILE DRAINAGE | · ——o—o— |
| PROPOSED FARM DRAINAGE COLLECTOR | 67 |
| PROPOSED DROP INLET | D |
| PROPOSED TILE LINE BREATHER | |
| PROPOSED DITCH AND ELEVATION | Ditch El. 524.2 |
| PROPOSED GUARD RAIL (FOR TYPE SEE PLANS) | |
| PROPOSED MONUMENT | • |
| PROPOSED TILE LINE JUNCTION BOX | |

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

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 DAMS SHALL BE SET IN CORRECT POSITION FOR TEMPERATURE AT TIME OF

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 SPANS WITHOUT HINGED BEARINGS ON AN INCLINED GRADE OF 1% OR MORE THE SOLE PLATES SHALL BE BEVELED

30 THAT THE SUBSTRUCTURE BRIDGE SEATS MAY BE LEVEL

CONCRETE

ALL CONCRETE 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 FOURS. THE FINISH ON THE TURNPIKE OVER STRUCTURES SHALL BE MACHINE FINISH

SUBSTRUCTURES

THE ENTIRE FILL SHALL BE PLACED BEFORE EXCAVATING FOR

| NO. | REVISION | BY | DATE |
|-----|-----------------------------------|-----|--------|
| Δ | Rev. suppl. spec date | 4SN | 10-6-5 |
| A | Rev. breather & junct box symbols | HSU | 12-4-5 |
| A | ri-lait. 7. St Alex | | Feb50 |
| | | | |

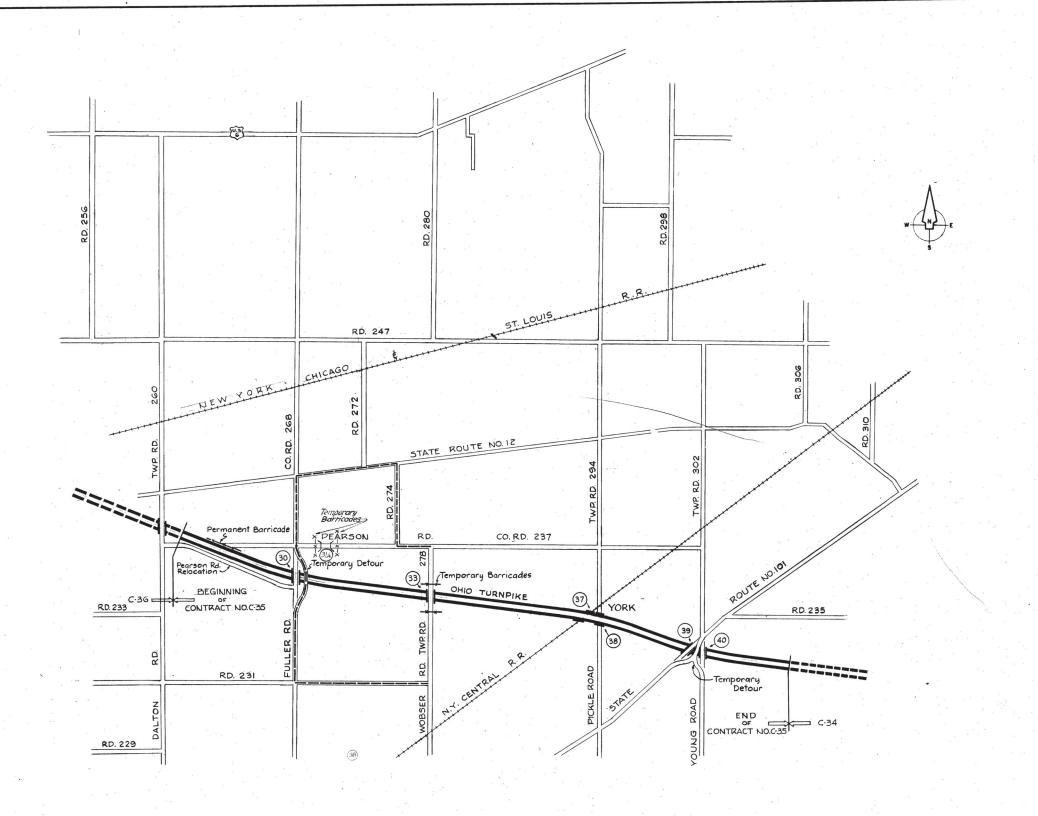
OHIO TURNPIKE COMMISSION OHIO TURNPIKE PROJECT NO. 1

GENERAL NOTES & LEGEND

BROWN & BLAUVELT CONTRACTING ENGINEED DESIGN SECTION D-12

DATE: March 6, 1953

SHEET 2 OF 59 CONTRACT NO. C- 35



MAINTENANCE OF TRAFFIC

The Turnpike construction under this contract crosses one State Highway, State Route No. 101; one County Road, Fuller Road; three Township Roads, Wobser Road, Pickle Road, and Young Road; and one Railroad, the N.Y. Central R.R. The following provisions shall apply with respect to maintenance of traffic on these various routes:

Traffic shall be maintained at all times along the present roadway of Pickle Road under Structure No. 38. The approval of all temporary clearances shall be obtained from the proper authorities, in writing, prior to construction.

Railroad traffic shall be maintained at all times along the present railway. The approval of all temporary clearances shall be obtained from the N.Y. Central R. R.

Traffic on Fuller Road, Young Road and State Route No.101 shall be maintained during the entire construction period. During the period of bridge construction traffic shall be maintained on detour roads as provided on the Contract Plans.

Wobser Road shall be closed to traffic, for a period not to exceed eight months, until completion of the bridge and approaches.

Traffic shall be maintained on existing Pearson Road between Two Rd 260 and Co Rd 268 until Structure No.30 and Pearson Road Relocation have been completed. and opened to traffic.

Pearson Road, between Co.Rd. 268 and Co.Rd. 274, shall be closed to traffic for a period not to exceed tour months, until completion of the bridge and approaches.

---- Denotes Traffic Detour Routing

NOTES:
For details of the Temporary Detours, see Contract Drawings,
Sheets 8, 16 and 56.
For details of the Permanent Barricades, see Standard
Drawing No. 14
Barricades, Warning and Danger Signs shall be in accordance
with Item G-7.07

30--- Denotes Structure Number

| NO. | REVISION | BY | DATE |
|-----|---|------|---------|
| Δ | Add. Str. 31A; rev detoor routing; rev. fold. notes | HSN. | 12-4-53 |
| E | AS-BUILT FLANS | - | Labor |
| -4. | No track And public desired to 47 August | + | / 46 |
| _ | | _ | |
| | | | |
| | | | |

OHIO TURNPIKE COMMISSION OHIO TURNPIKE PROJECT NO. 1

MAINTENANCE OF TRAFFIC

BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12

HECKED: L.A. HSN DATE: March 6, 1953

SHEET 3 OF 59 CONTRACT NO. C- 35

| ΗZ | 05 | | | _ | | | | 51 | łEET | N | UMBE | RS | | | A. | | | | ဟ | AL ES |
|-------|--------------------|---|-------------|---------------|------------|-----------|--|---------------|------------------|------------|-------|--------------|----------|--|-----------|---------|--------|--------|--------------------------------|----------|
| 2 | SPEC. ITEM NUMI | DESCRIPTION | LINU | 5 | +18 +20 | 7 | 9 | 10 +28 | 12 | 13 +34 | 14 | 15 | 17 | | 8 | +33 | 16 | 5 | TOTALS | PROPOSAL |
| | | ROADWAY | | | | | | | | | | ļ | | | - | - | | - | - | - |
| | E-1 E-4 | Roadway Excavation Borrow | C.Y. | 1959 | 16,639 | 13,323 | 51,59 | 50283 | 3 17,33 | 10436 | | 327623 | 15963 | | 4,84 | 2 2804 | 7550 | | 700,224 | 700,20 |
| 3 4 | | Water | C.Y. | 16.4 | 1017 | -70 | 680 | 676 | C12 C | 10,702 | _ | - 50 | | | - | | | | 10,702 | 10,700 |
| | | | L.F. | 10.7 | 164.7 | 570.8 | 68.9 | 67.6 | 6/2.0 | 2886.5 | 14.6 | 30 | 0.1 | | 298, | | | ļ | 49813 | 1 |
| 5 | 1-15 | Guard Rail, Type A | L.F. | \vdash | | 2370 | - | 590 | - | 3105 | 280 | | | | 2690 | | - | - | 9,255 | 9,260 |
| 6 | | Guard Rail, Type B | L.F. | | 380 | 1.7 | | | 1600 | 2010 | | | | | - | | 440 | 1 | 4,430 | 4430 |
| 7 / | | Guard Rail, Type C-2 or C-1 | L.F. | | | | | | | | | 1 | 9 . | | | | 500 | | 500 | 500 |
| | | Guard Rail, Type D-1 or D-2 Right-of-Way Fence, Type 2 | L.F. | - | | | a | | | | | | | | | 1955 | | | 1,955 | 1,960 |
| | | Permanent Barricade | L.F. | 820 | 3675 | 5720 | 5630 | 5640 | 5770 | 5690 | 5760 | | 1130 | | - | | | | 47,625 | 47,630 |
| _ | 1-26 | Permanent Monuments | Eq. | 111 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 144 | | | - | - | - | - | 184 | 180 |
| 12 1 | -28 | Temporary Cattle Fence | L.F. | 1 | <u> </u> | _ | | - | ' - | - | | | - | | | | - | - | 250 | 14. |
| | 1-3 | Placing Stock Piled Topsoil | 5. Y. | 2311 | 16467 | 15186 | 15620 | 14826 | 15678 | 14045 | 14873 | 15089 | 2910 | | 2684 | 1999 | - | 1 | 131,688 | 250 |
| | | Bonemeal & Raw Bone | Ton | 0.21 | 1.50 | 1.37 | 1.41 | 1.33 | 1.41 | 1.26 | 1.34 | 1.36 | 0.26 | | 0.24 | 0.18 | | | 11.87 | 12 |
| | | Roadside Cleanup Seeding and Protecting Tupe A | 2.S. | 2244 | 10.107 | 15100 | 4500 | | | | | | | | | | - 6 | | Lump | Lump |
| | <u>'-9</u> | Commercial Fertilizer 10-6-4 | J.Y. | 0.21 | 16467 | 15186 | 1.41 | 14826 | | 14045 | 1.34 | | 2910 | | 2684 | | | | 131,688 | 131,700 |
| _ | | Agricultural Ground Limestone | Ton | 1.04 | 7.41 | 6.83 | 7.03 | 6.67 | | 6.32 | 6.69 | 1.36 6.79 | 0.26 | - | 0.24 | 0.18 | - | - | 11.87 | 12 |
| 9 1 | -19 | Seeding and Mulching (Special Seeding) | S.Y. | 5404 | 32100 | 39529 | | | 37967 | | 47895 | 58411 | 7046 | | 18999 | | | - | <i>59.24</i> <i>387,581</i> | 387, 600 |
| 20 1 | E 12 | Pipe Removed (16" and Larger) | L.F. | | 45 | | | | | | 14 | | | | 1 | 30 | | | 7.5 | 75 |
| 2/ | | Remove Existing Structure - Pearson Rd. (Streambridge over Fuller Creek) | L.S. | | | | | | | <i>y</i> . | | | | 100 mm m m m m m m m m m m m m m m m m m | | | | | Lump | Lump |
| | | | | | | | | | | 4 | | | | | | | | | | |
| | | DRAINAGE INCLUDING STRUCTURES (BOX CULVERIS) | | 12 | 9E,32, | | | | | | | ,23+00 | (75'Rt), | Pearson R | d. 15+30, | 077+58, | Wobsel | Rd. 23 | +75,1136+1 | Orespec |
| | | Excavation for Structures | C.Y. | | 1439 | 63 | 45 | 3649 | | 3918 | | 278 | 30 | | | 1 . | | | 11,497 | 11,500 |
| _ | | Excavation for Channels | C.Y. | | 1190 | 1. | | 1960 | | | | | | | 1.3 | 14,394 | | | 17,544 | 17,550 |
| | | 15" S.S. Reinf. Conc. Culvert Pipe 18" Paved Invert Bitum. Coated C.M.P.#12Ga. | L.F. | | 202 | 262 78 | 132 | 156 126 | 68 226 | 120 68 | 196 | 192 | 62 | | | | | | 738 1284 | 740 |
| 6 . | 1 | | | | | | | | | | 700 | 752 | 02 | | | - | | - | 1,204 | 1.280 |
| | -5 | Pipe Special - 30°-18" Pvd. Inv. CMP. Bend#12Ga. | Ea. | | | - | | 1.1 | 2 | | | | | | _ | | - | | 2 | 2 |
| | -5 | Pipe Special-30°15"S.S. R.C.C.P. Bend | Ea. | | | | | 5 | | 2 | | | | | | | | | 2 | 2 |
| | | Inlets, Type A-1 Stone Underdrain No. (| Ed. L.F. | | 880 | 320 | | 7. | 1: | 1 | | | | | 1 | | | | 5 | 5 |
| _ | _ | Rip-Rap, Type A | 5. V. | | 20 | 675 | | | 1 1 | - | | | | | 100 | 140 | | | 1,440 | 1,440 |
| 0 1- | | 2'Special Paved Side Ditch, 1'Deep, 4"Conc. | L.F. | | | 95 | | | | 10 | 20 | - | - | | - | | | | 695 | 700 |
| 7 1- | -14 | 2'Special Paved Side Ditch, 2'Deep, 4"Conc. | L.F. | | 35 | | | 10 | | 70 | 20 | - | | | - | | | - | 125 | 130 |
| _ | 14 | 6'Special Paved Side Ditch, 2'Deep,4"Conc. | L.F. | | 30 | | | | | | | | | | + | | | | 30 | 30 |
| _ | \rightarrow | Paved Median Ditch, 4"Conc. | L.F. | | | | | | 50 | | | | | | | | | | 50 | 50 |
| _ | | 6"Extra Quality Drain Tile | L.F. | | 850 | 1300 | 800 | | | | 770 | | | | | | | | 3,720 | 3,720 |
| | | 8"Extra Quality Drain Tile 10"Extra Quality Drain Tile | L.F. | | 400 | 370 | 730 | 330 | | | 1500 | | 339 | | | | | | 3,669 | 3,670 |
| | | 6"Pipe Outlet For Tile Drains | L.F. | \vdash | 20 | 20 | 20 | | | 490 | 510 | | | | - | | | | 1,000 | 1000 |
| - 1 | | 8"Pipe Outlet For Tile Drains | L.F. | | 20 | -20 | 20 | 20 | | | | | | _ | + | | _ | | 60 20 | 20 |
| | | 10 Pipe Outlet For Tile Drains | L.F. | | 20 | | | | | 20 | | - | - | _ | +- | - | | | 40 | 40 |
| 0 5 | 3-1- | Class"C"Concrete for Structures | C.Y. | - | 125.06 | 5.92 | 8.04 | 700.14 | 80.90 | 2278.82 | 25.29 | 23.20 | 2.22 | | 19 | 481.00 | | | 4,030,59 | |
| | | Reinforcing Steel | Lb. | - | 45147 | 316 | 428 | 96131 | 2248 | 428895 | 1112 | 996 | 112 | | 127 | 40,417 | | | 615,802 | |
| 2 .I | -2 | 30"S.S Reinf. Conc. Culv. Pipe | L.F. | | | | | | | | 200 | | | | | | | | 320 | 320 |
| 3 1 | -2 | 36"S.S. Reinf. Conc. Culv. Pipe | L.F. | | N | | | | | | ,2 ° | 120 | | | | | | | 120 | 120 |
| - | | | 2.7 | - | | - | | | | | | | | _ | - | | | | | |
| + | - | | | - | | 3.592.1 | | - | | | | - | | | - | | | 1,127 | - , | 7.1 |
| | | 55 10 3 Pvd. Inv. Bit. Ctd. Sec. # CMP Arch#8 Ga. | L.F. | | | | | | 144 | _ | | - | - | | - | | | | 144 | 144 |
| | | 6-5×4-9"Pvd. Inv. Bit. Ctd. Sec. # C.M.P. Arch#8Ga. | L.F. | | | | | | | 36 | | | | | | | | | 36 | 40 |
| 9 I- | -30 | 12" Pipe Outlet For Tile Drains | L.F. | . 200 , 41 | 20 | | | | | | | | 1 | | | | | | 20 | 20 |
| 2 5 | -27 | 36" 5.5. Reinf. Conc. Culv. Pipe | L.F. | | 50 | | | | | 12.1 | | | | | | | | | 50 | 50 |
| 2 I | -2 | 42"S.S. Reinf, Conc. Culv. Pipe | L.F. | \rightarrow | 20 | , ' | | | | - | 120 | - | -+ | | | | 10 | | 100 | 10.1 |
| + | \top | | / . | - | 20 | | V. | | | - | 120 | - | + | _ | - | | 40 | | 180 | 180 |
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|------------|-------|---|-------|--------|--------|--------|-----------------|--------|--------|--------------|-------|--------------|--------|-------|------|-------|---------|----------|
| REFERENCE | SPEC. | DESCRIPTION | LINU | 5 | 6: | 7. | 9 | 10 | .12 | . 13 | 14 | 15 | .17 | 8 | 11 | 16 | TOTALS | PROPOSAL |
| | | PAVEMENT | | | | | | | | ľ | | | | - | 1 | - | | |
| 101 | 1-22 | 6- 00 | C.Y. | 1106 | 8512 | 6250 | 6720 | 6720 | 6930 | 6717 | 6720 | 6720 | 1272 | | | | 57,667 | 57.70 |
| 102 | | &Water Bound Macadam Base Course | C.Y. | 100 | | | | | | | | | 140 | 532 | | 1.1.1 | 532 | 530 |
| 103 | | Compacted Aggregate Base Course | C.Y. | | 490 | 140 | | | | | | | | | 2798 | - | 3,364 | 3,400 |
| 104 | | Asphaltic Concrete Surface Course, Type | - | | | | - | | | | | | | | | . 2 | 2 | |
| 105 | | Prime Coat | Gal. | | 1770 | - | | | | | | | | 835 | 700 | 9 | 3,814 | |
| 106 | _ | Bitum. Surf. Treatment-Bitum. Matl. | Gal. | | 1240 | - | 90 | | | | | | 100 | | | 3.5 | 1590 | 1,590 |
| 107 | 7-31 | Bitum. Surface Treatment - #6 Aggregate | C.Y. | | 352 | | | | | L . | | | | | | - 1 | 452 | 450 |
| 108 | 7-33 | | S. Y. | 1640 | 11400 | 10420 | 11200 | 11200 | 11200 | 9940 | 11200 | 11200 | 2120 | | | | 91,520 | .91,50 |
| 109 | T-35 | Asphaltic Concrete Surface Course, Type A | C.Y. | | | | | - | | | | | | -99 | 83 | 25 | 207 | 210 |
| 110 | T-71 | Reinf. Portland Cem. Conc. Pavement 10" | 5. Y. | 2190 | 15,200 | 13,880 | 14,900 | 14900 | 14900 | 13253 | 14900 | 14900 | 2827 | 1 | | | 121,850 | |
| 11 | 1-7 | Reinf Concrete Approach Slab | S.Y. | | | | | | | | | | | | | 81 | 81 | 80, |
| | | | | 21 | 25 | 29 | 35 | 40 | 44 | 49 | | 49B- 1354 | | | | - | | _ |
| | | | | STR | | | | STR. | 1220 | | | | 8.84.6 | | 1 1 | | | 1 |
| | | | ^ | | | | 100.010 100.000 | 1 | | 100000 BOXES | | ST.R. | | | l l | , | | |
| | _ | | | 100.50 | JN0.31 | NO.33 | NO.3 / | NO.38 | NO.39 | NO.40 | - | NO. 3IA | | | | | | |
| 12 | E-2 | Excavation for Structures | C.Y. | 175 | 744 | 267 | 2294 | 537 | 375 | 244 | | 334 | | | | | 4,970 | 4,97 |
| 13 | 1-10 | Rip Rap, TypeA | S.Y. | | 447 | | | | | | | | | | | | 447 | 450 |
| 14 | 1-14 | 2'Paved Gutter 4' Conc. | 5. Y. | | | 1" | 117 | | | | | | | | | | 117 | 120 |
| 15 | 1-15 | Guard Rail, Type A | L.F. | | 455 | | 708 | 618 | | 1 | | | | | | | 1781 | 11800 |
| 16 | 5-1- | Class"C"Concrete for Structures | C.Y. | 458 | 564 | 419 | 2733 | 923 | 584 | 449 | | | | | | | 6/30 | 6100 |
| 17 | 5-3 | Water proofing, Type C | S.Y. | 11.5 | | | *A1 5 | | 894 | | - | | | | | | 894 | 890 |
| 18 | 5-3 | Premolded Sealing Strip | L.F. | | | | 140 | | | Tree no. | | | | F 100 | | | 140 | 140 |
| 19 | | Reinforcing Steel | Lb. | 69630 | 81647 | 64705 | 269115 | 128407 | 87215 | 67315 | | 1219 | 7 | | | | 769,253 | |
| 20 | S-7 | Structural Steel | Lb. | 141374 | 300328 | 139593 | 361565 | 216295 | 346412 | 144725 | , | | | | | | 1650298 | + |
| 121 | 5-9 | Structural Expansion and Contraction Uts. | L.b. | 12,903 | 14,290 | 12,856 | 40.432 | 13,000 | 16,502 | 12.856 | | | | | | _ | 122,845 | - |
| 122 | 5-14 | Standard Handrail, Type A | L.F. | | 455 | | 708 | | , | 10,101 | | | 7.2 | DE C | | | 1781 | 1,800 |
| 123 | 5-14 | Standard Handrail, Type B | L.F. | 433 | | 427 | | | 575 | 444 | | | | | | | 1879 | 1,900 |
| 24 | 5-16 | First Test Pile | Ea. | 1 | 1 | 1 | 1. | 1 | | | | - | | | | _ | 5 | 5 |
| 25 | 5-17 | Pile Test Load | Ea. | 1 | 1 | 17. | 1 | 1 | | | - | | - | | | | 5 | 5 |
| 26 | 5-18 | Furnishing Shells for Piles | L.F. | 2270 | 1040 | 350 | 1640 | 1400 | | | | | | | | | 6700 | 6700 |
| 27 | 5-18 | Driving and Filling Piles | L.F. | 2270 | 1040 | 350 | 1640 | 1400 | | | | | - | | | - | 6700 | 6700 |
| 28 | 5-18 | Splicing Piles | Ea. | 55 | 60 | 20 | 50 | 45 | | | | | 5 5 7 | | | | 230 | 230 |
| 29 | 5.29 | Scuppers, Type A | Ea. | | | | 4 | 2. | | | | | | | | | 6 | 6 |
| 30 | | Scuppers, Type B | Ea. | 4 | | 4. | 141 | - | 4 | 4 | | | | | | | 16 | 16. |
| 31 | | Drainage Pipe for Structures 6"Wrought Iron | L.F. | 100 | 20 | 100 | 112 | 112 | 100 | 90 | | | | | | | 634 | -630 |
| 32 | 5-29 | Drainage Pipe for Structures 8" | L.F. | 280 | 280 | 280 | 280 | 280 | 280 | 240 | (*) | | | | | | 1920 | 1900 |
| 33 | 5-29 | Porous Backfill | C.Y. | | 1.2 | | 263 | | | | | | | - | | | 263 | 260 |
| 34 | T-35 | Asphaltic Conc. Surface Course, Type C | C.Y. | | | | | | 30 | | | | | | | | 30 | 30 |
| 35 | s-3 | Water proofing, Type A | S.Y. | | | | 572 | | | | | | 2 | | | | 572 | 570 |
| 37 | 5-1 | Class "E" Concrete for Structures | C.Y. | | | | | | | | | /38 | | | | | 138 | 140 |
| | | A 5 A | | | | 7 | | | | | | , | | | - | | 130 | 140 |
| | | | | | | | | | | | | | | | | | | · |
| | | MISCELLANEOUS | | | | | | | | | | - | - | | | _ | | |
| 36 | T-29 | Construction Contract Information Signs | Ea | | 1.0 | | | | | | | | - | - | | - | 8 | 8 |
| | | | | | | | | | | | 12.00 | | | | | | | <u> </u> |
| | | 5 A5 W A1 S | | | | | | | | | | | | | | | | - |
| | | S 200 - S 3 | | | | | | - | | | - | | | | | | | |
| | | | | | | | | | - | | | | | | - | | | - 1 |
| | | | | | | | | | | | | | | - | -+ | - | | - |
| | 2. | | | | | | | | | | | | | | | | and I | 1 |

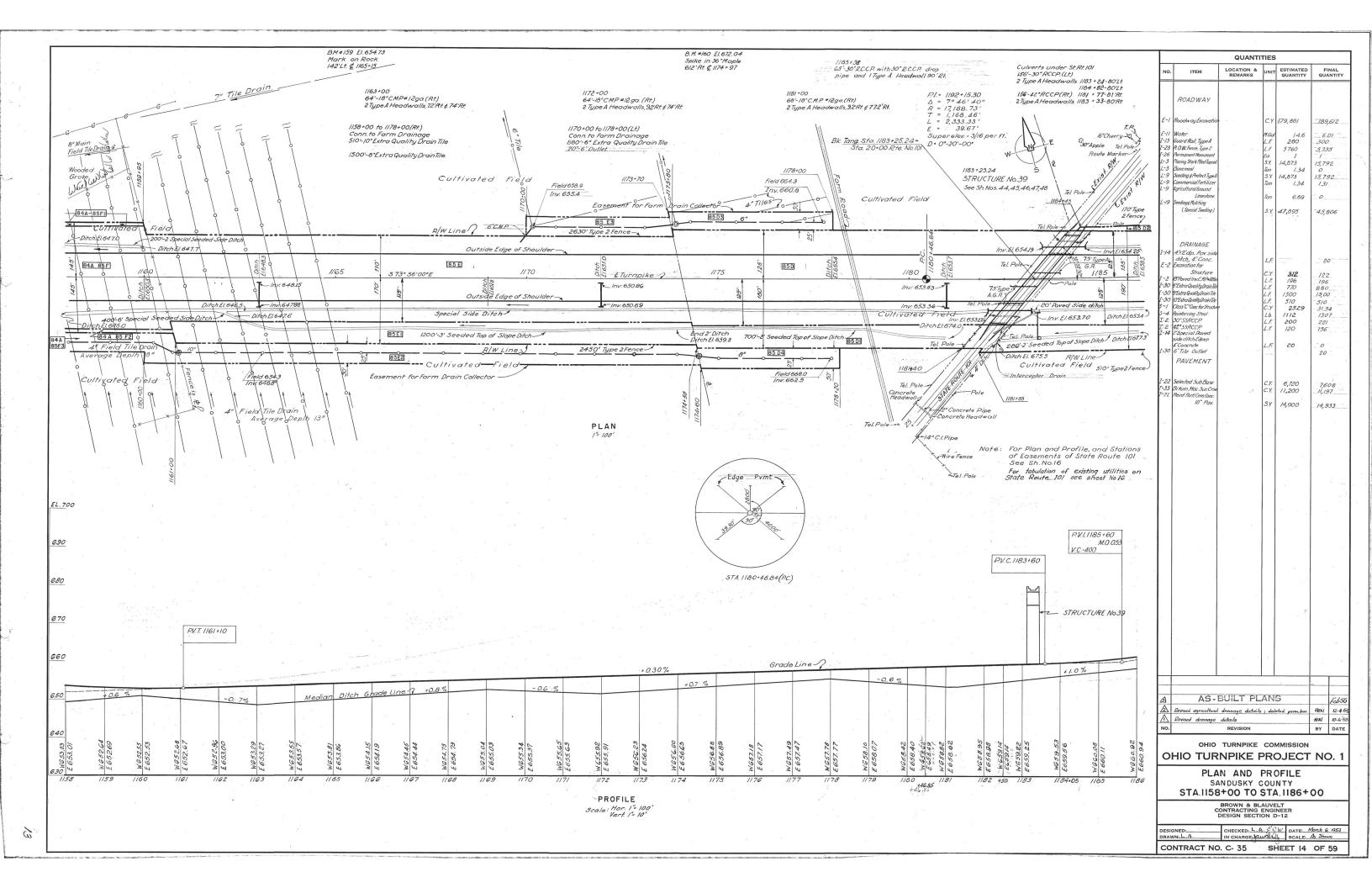
| | | NALYSIS | | | |
|---------------------------------------|--|---|---|--|--|
| TOTAL EXCAVATION AVAILABLE & C (C.Y.) | TOTAL EMBANKMENT | BORROW=1:10 (F= 0.85 C)(C.X) | REMARKS | | |
| 1,831 | 2,046 | 0 | 576CY. excess haul from Sh9 | | |
| 17,921 | 20,589 | 0 | 6,305 C.Y. excess haul from Sh.9. | | |
| 13,167: | 71,350 | 0 | 33,741 C.Y. excess haul from Sh.9; 36,799 c.Y. excess houl from Sh.10 | | |
| 4,693 | 37,330 | 0 | 7.4/3 C.Y. excess haul from Sh.10; 3/8/12 C.Y. excess haul from Sh.14 | | |
| 50,754 | 8,612 | 0 | 40,622 C.Y. Excess: - haul 576C.Y. to sh. 5, houl 6305 C.Y. | | |
| 54,160 | 8,456 | 0 | 44212 C.Y. Excess: haul 36799 C.Y. to Sh.7. | | |
| 18,041 | 35,158 | 0 . | 23,321 C.Y. excess haul from Sh. 14 | | |
| 16,741 | 76,597 | 0 | 73,373 C.Y. excess haul from Sh. 14 | | |
| 14,381 | 360,814 | 10,702 | 48.882 CY. excess haul from Sh.14; 326,419CY. excess haul from Sh.15; 7,550 CY. excess haul from Sh.16; 15809 CY. excess haul from Sh.16 | | |
| 179,536 | 1,826 | 0 | 177,388 C.Y. Excess haul 31,812 C.Y. 10 3h8; haul 23,321 C.Y. to 5h.11 177,388 C.Y. Excess haul 73,373 C.Y. to 5h.12; haul 48,882 C.Y. to 5h-13 | | |
| 327,151 | 622 | 0 | 326,419 C.Y. excess haul to Sh.13 | | |
| 7,550 | | 0 | 7,550 C.Y. excess haul to shi3 | | |
| 15,822 | 11 | 0 | 15,809C.Y. excess haul to sh.13 | | |
| 234 | | 0 | 234 C.Y. excess houl to Sh7 | | |
| ë e | | | er e | | |
| п | | | | | |
| | AVAILABLE® C(KY) 1,831 17,921 13,167 4,693 50,754 54,160 18,041 16,741 14,381 179,536 327.151 7.550 15,822 | AVAILABLE= C(x) RE QUIRED=F(x) 1,831 2,046 17,921 20,589 13,167 71,350 4,693 37,330 50,754 8,612 54,160 8,456 18,041 76,597 14,381 360,814 179,536 1,826 327,151 622 7,550 15,822 11 | AVAILABLE= 0 (xy) RE QUIRED= F(xy) (F= 0.85 c) (c,x) 1,831 2,046 0 0 0 0 0 0 0 0 0 | | |

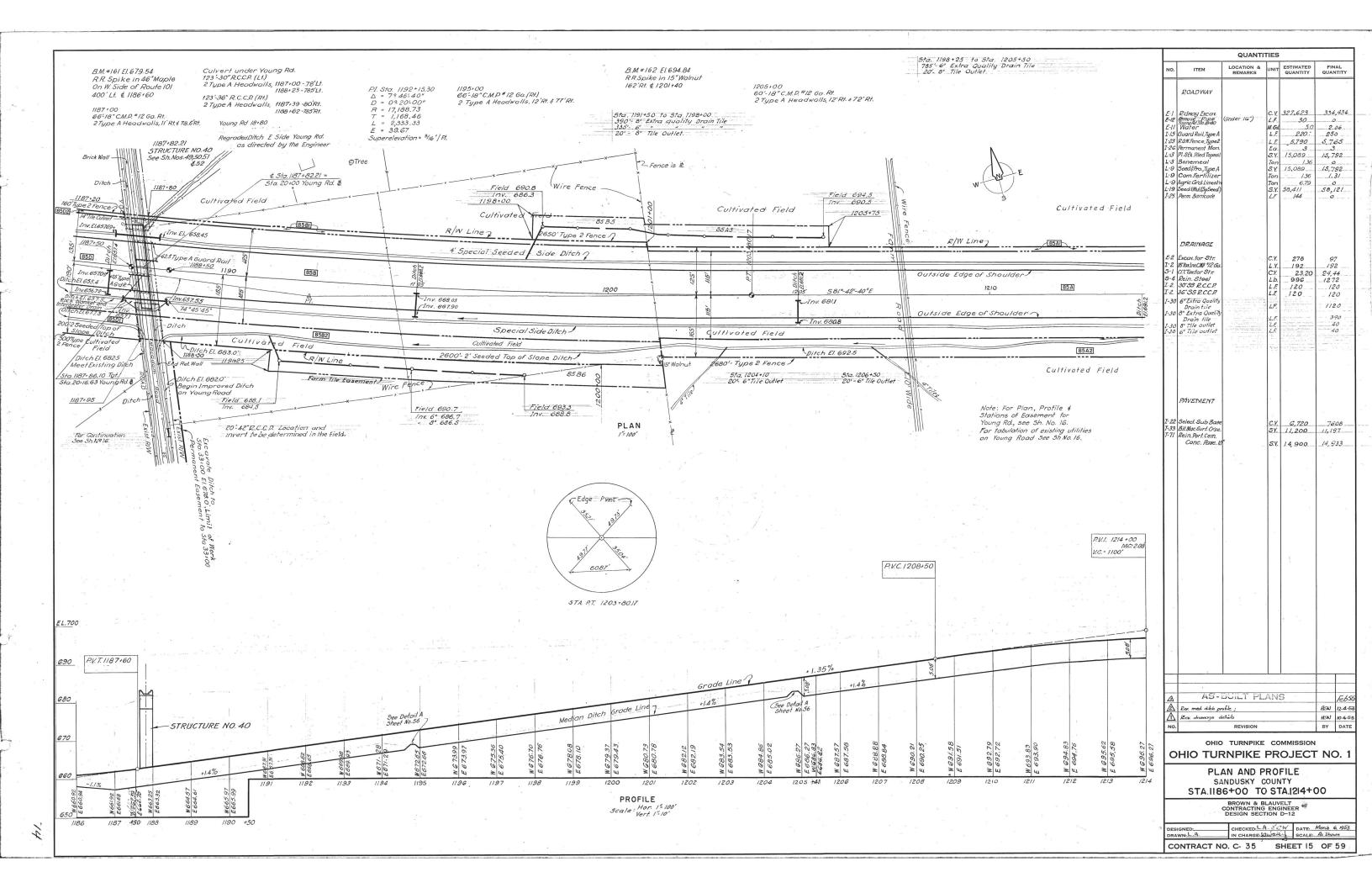
| 3 | AS-EUILT PLANS | | Feb56 |
|-----|---|-----|---------|
| 2 | Misc. drainage revisions; add Str. 31A; rev. guard rail | How | 12-4-53 |
| Δ | Rev. Gr. Analysis; Rev drainage quantities | HSN | 10-6-53 |
| NO. | REVISION | BY | DATE |

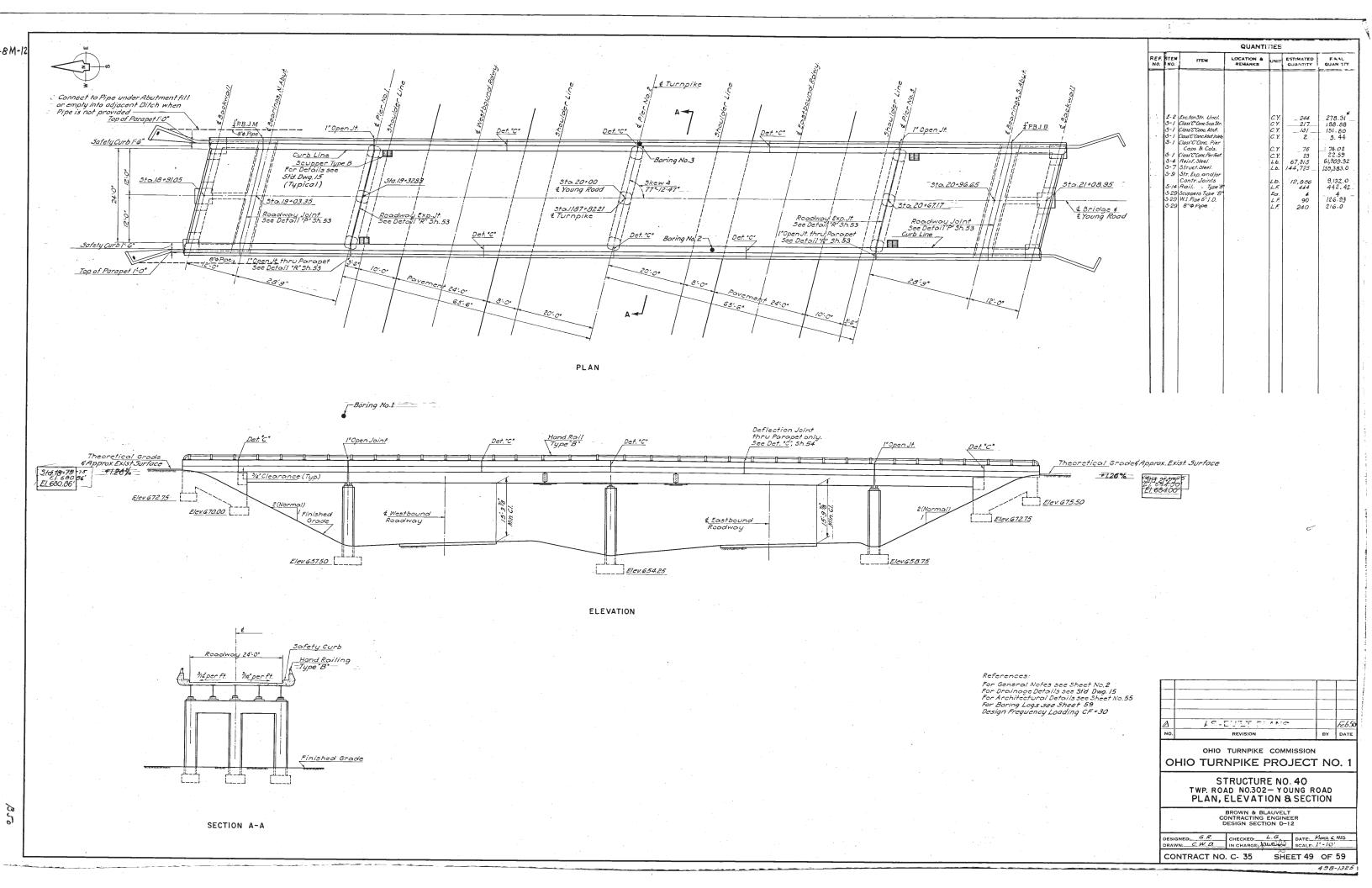
OHIO TURNPIKE COMMISSION OHIO TURNPIKE PROJECT NO. 1

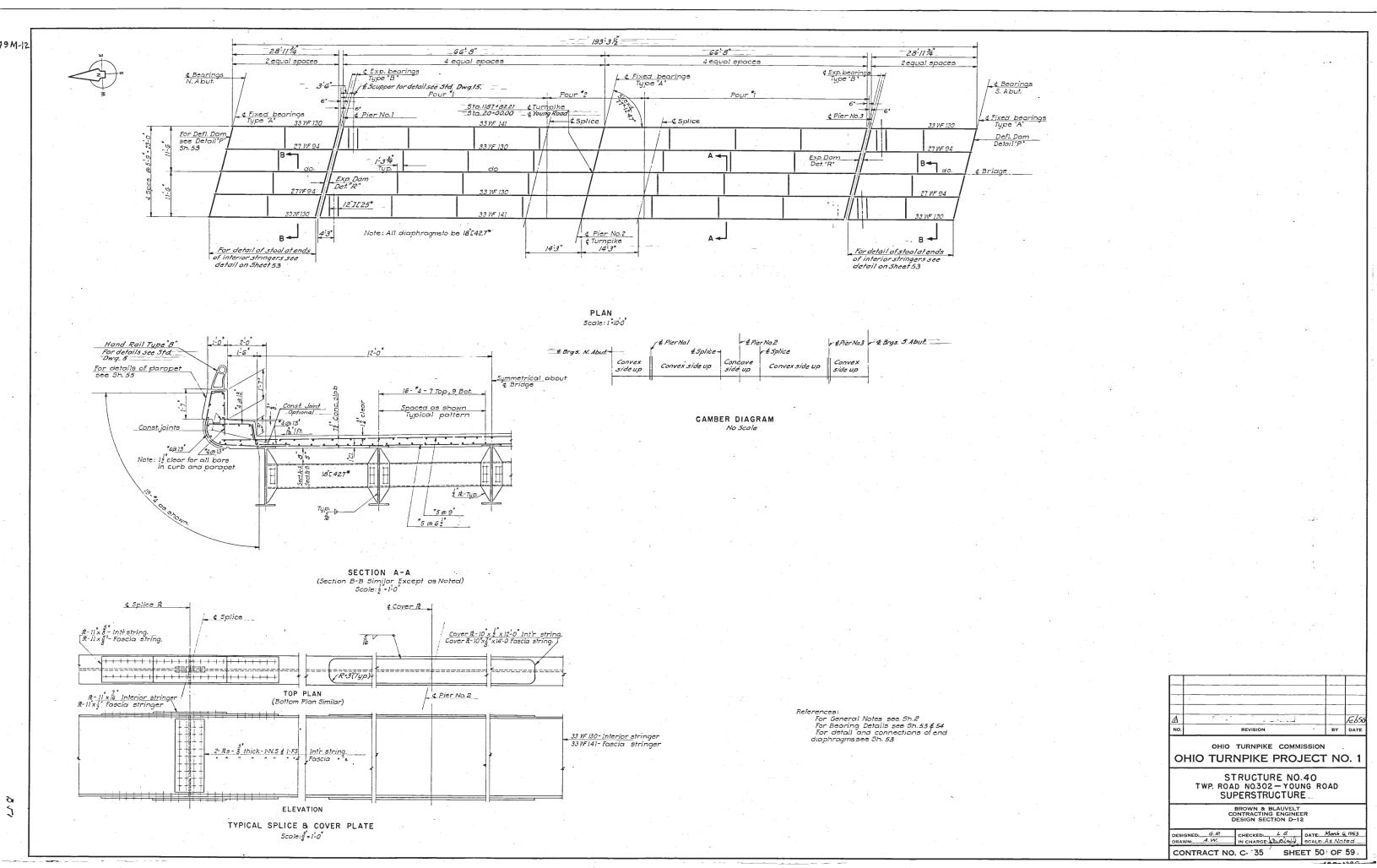
SUMMARY OF ESTIMATES

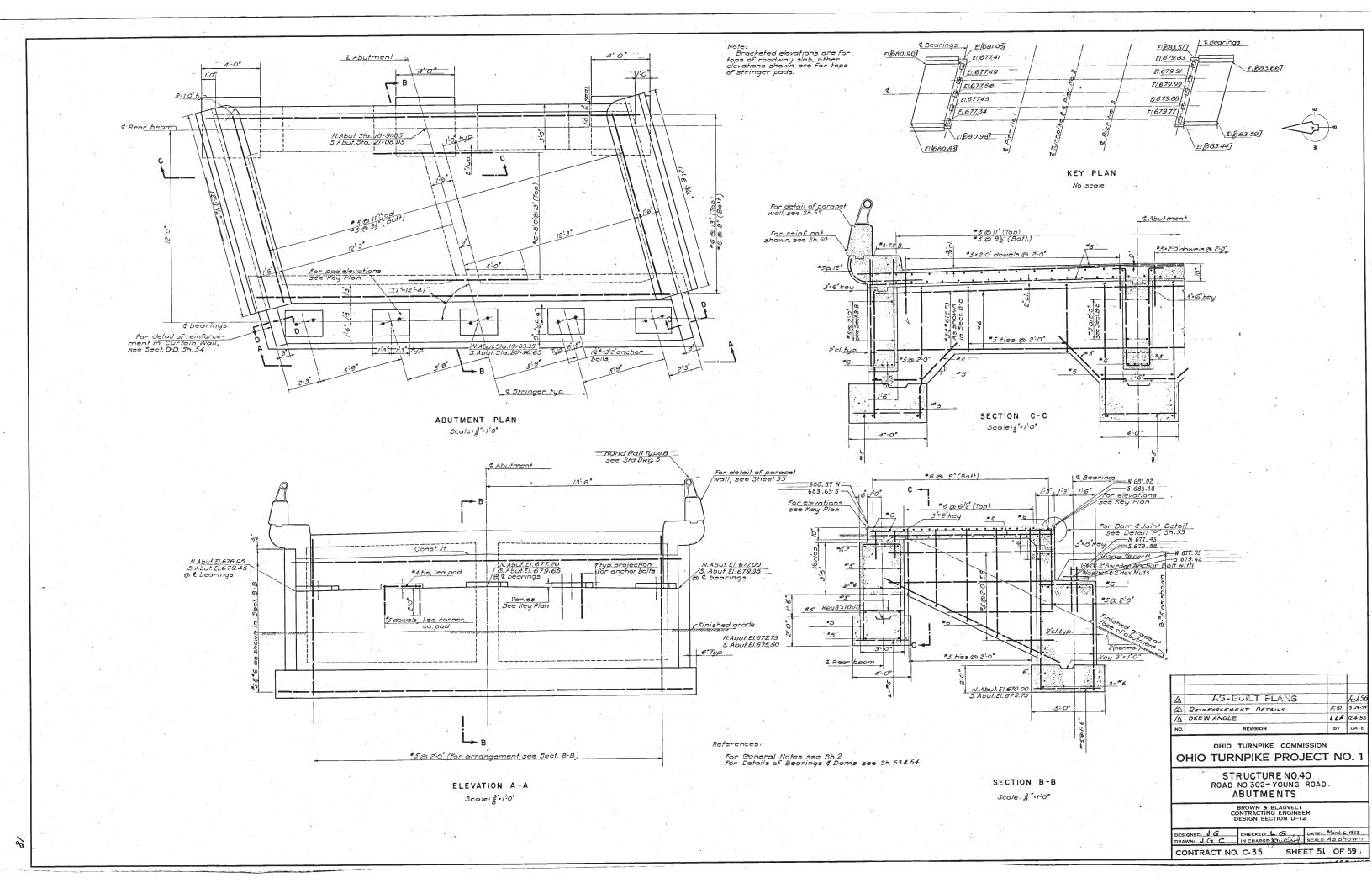
CONTRACT NO. C-35 SHEET 4 OF 59

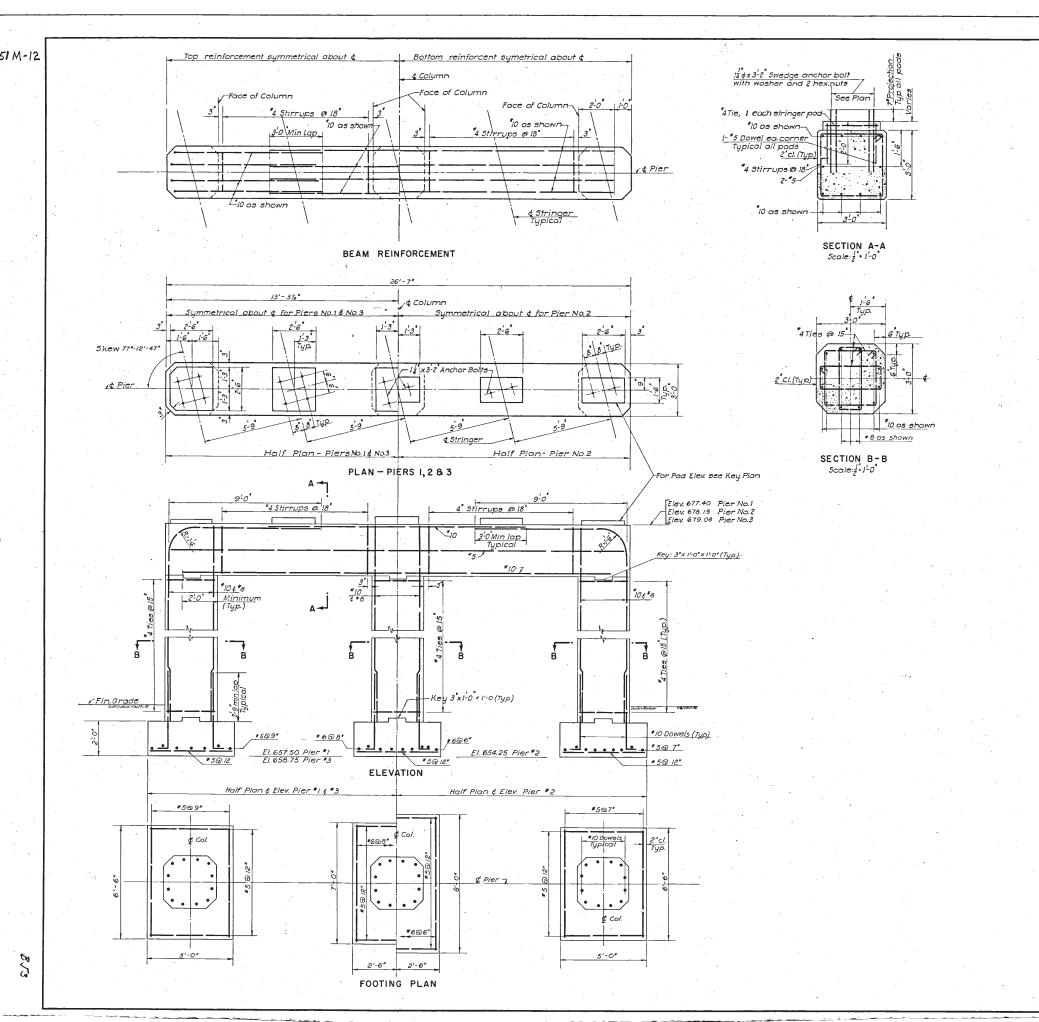




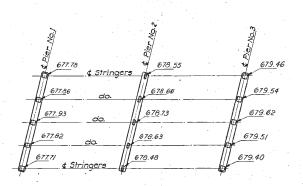






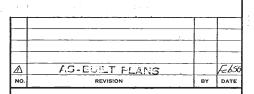






KEY PLAN STRINGER PAD ELEVATIONS No Scole

Notes:
For General Notes see Sheet No. 2
For Framing Plan see Sheet No. 50
For Location of Piers see Sheet No. 49
For Bearing Details see Sheet No. 53 \$ 54
All exposed concrete corners shall have I chamfer.

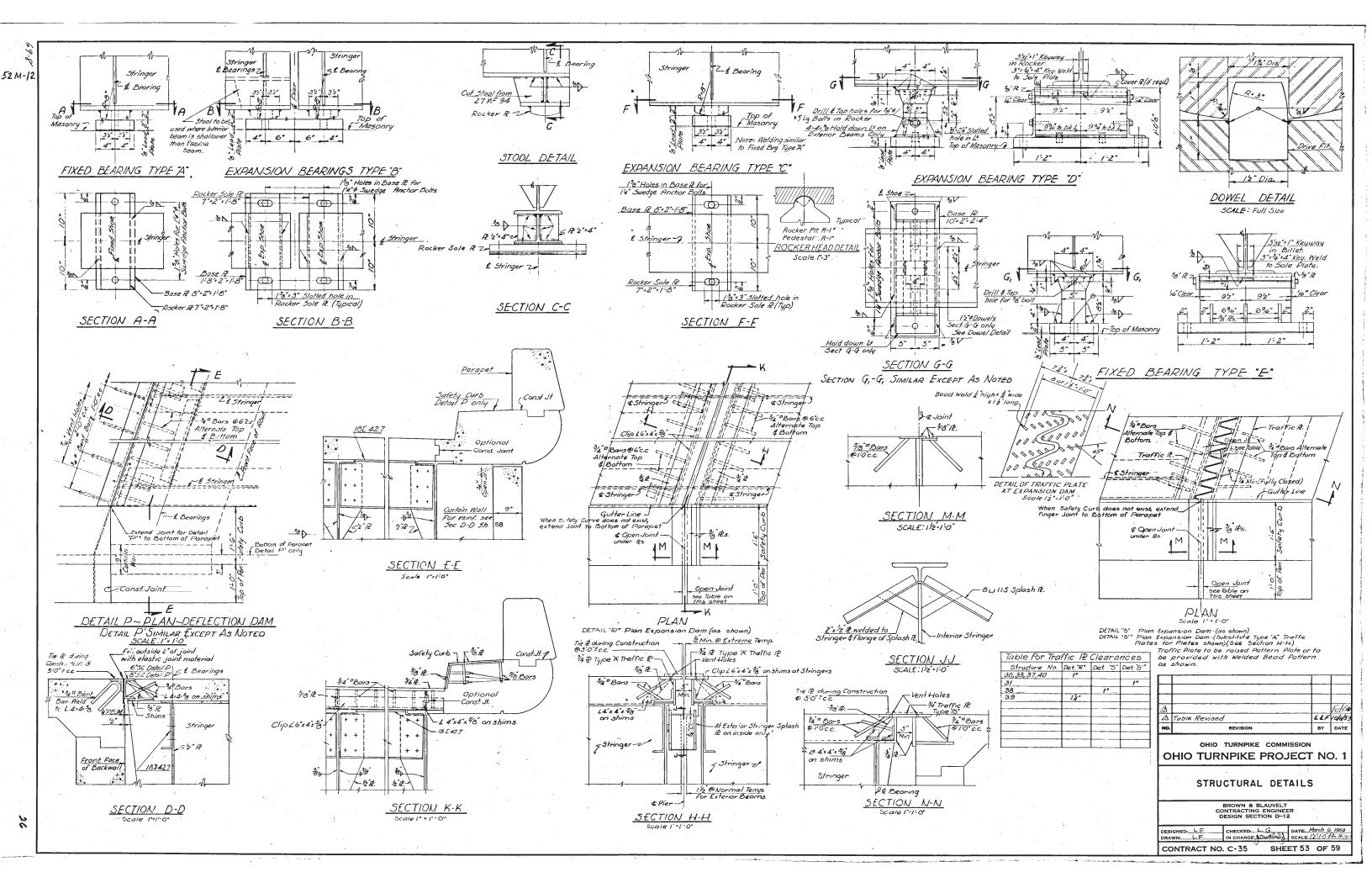


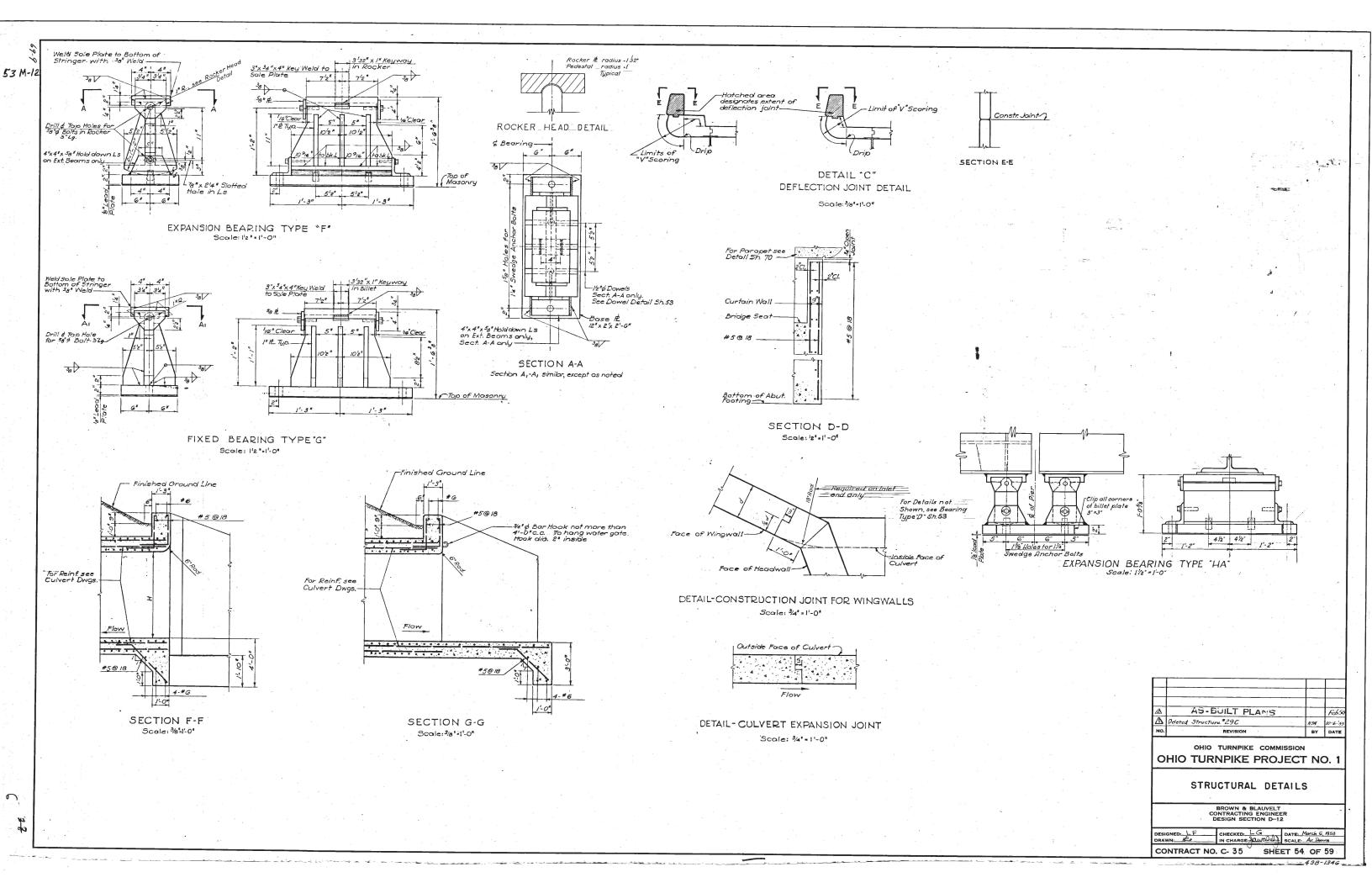
OHIO TURNPIKE COMMISSION OHIO TURNPIKE PROJECT NO. 1

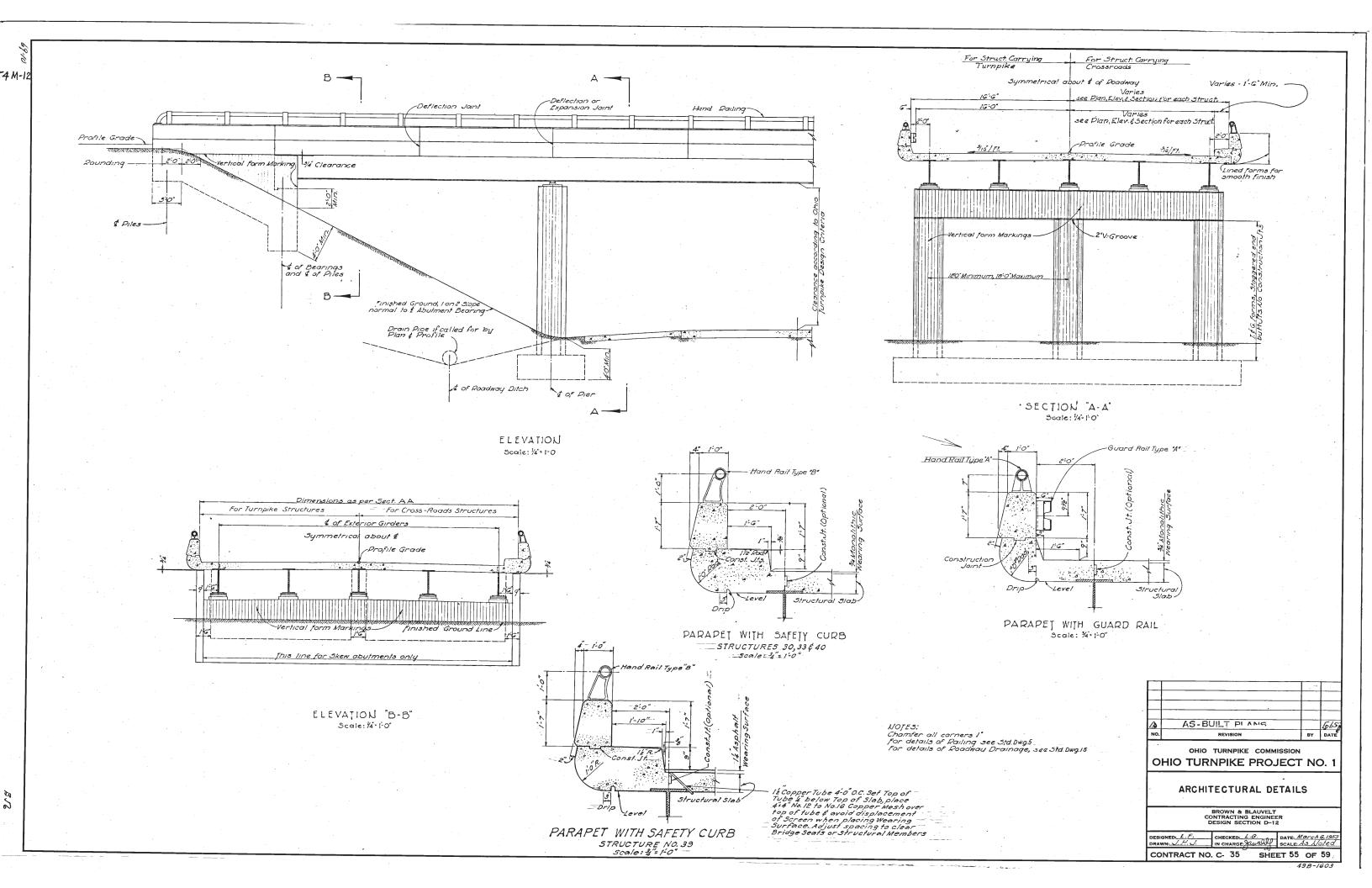
STRUCTURE NO. 40
TWP. ROAD NO.302 - YOUNG ROAD
PIERS

BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12

CONTRACT NO. C-35 SHEET 52 OF 59







OHIO TURNPIKE COMMISSION

JAMES W. SHOCKNESSY CHIO TURNPIKE

PART I DECK REPLACEMENT

NORTHWEST ROAD OVER OHIO TURNPIKE - M.P.106.1 SANDUSKY COUNTY, OHIO

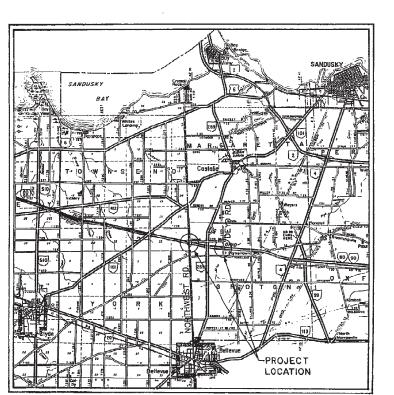
DEYO ROAD OVER OHIO TURNPIKE - M.P.107.5

ERIE COUNTY, OHIO

ORIGINAL CONTRACT C-34

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| GENERAL SUMMARY | 4 |
| PLAN SHEETS | |
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| DEYO ROAD OVER OHIO TURNPIKE | 7-8 |
| REINFORCED CONCRETE APPROACH SLABS | 9_ |
| CATCH BASIN DETAILS | 10 |
| CONCRETE BARRIER PLAN & DETAILS | |
| MAINTENANCE OF TRAFFIC | 12,12A,12E |
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| TRANSVERSE SECTION | 18 |
| ABUTMENT SLAB DETAILS | 19 |
| REINFORCING STEEL LIST | 20 |
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| REINFORCING STEEL LIST | 27 |
| DECK JOINT DETAILS | 28 |
| FENCE DETAILS | 29-30 |
| | |







NOTE:

THIS CONTRACT IS COMBINED WITH CONTRACT FTP: 43-89-18 & CIP: 43-89-17 (PART 2)
TO FORM A SINGLE CONSTRUCTION CONTRACT

UNDERGROUND UTILITIES

48 HOURS

BEFORE YOU DIG

Cal: 800-362-2764(Toll free)

OHIO UTILITIES
PROTECTION SERVICE
NON - MEMBERS,
MUST BE CALLED DIRECTLY

APPROVED FOR

THE OHIO TURNPIKE COMMISSION

Halan Plan

2-/3-89 DATE

REVISED 1-25-90 AS CONSTRUCTED
THE INFORMATION SHOWN HEREON IS INTENDED TO BE

THE INFORMATION SHOWN HEREON IS INTENDED TO BE COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SHALL VERIFY INFORMATION TAKEN FROM THIS DRAWING

| SU | PPLEMENTA | L PRINT | S OF STAND | ARD CON | ISTRUCTIO | N DRAWII | VG S |
|------|-----------|---------|------------|---------|-----------|----------|---------|
| BP-2 | 1-11-85 | F-I | 11-10-83 | GR-I | 1-1185 | MC-4 | 7-26-76 |
| BP-3 | 12-6-76 | 1 | | GR-2B | 2-5-82 | | |
| BP-5 | 1-11-85 | | | GR-3 | 1-21-85 | | |
| BP-7 | 10-1-87 | | | GR-4 | 2-5-82 | | |
| | | | | | | | |

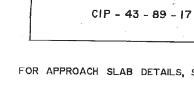
SUPPLEMENTAL PRINTS OF STANDARD BRIDGE DRAWINGS

BR-1 5-29-79

Burgess & Niple, Limited
Engineers and Architects

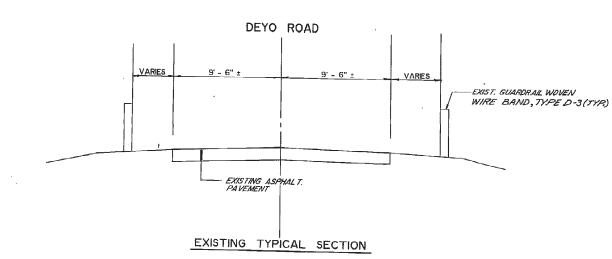






OHIO FHWA

FOR APPROACH SLAB DETAILS, SEE SHEET 9



NORTHWEST ROAD

EXISTING ASPHALT

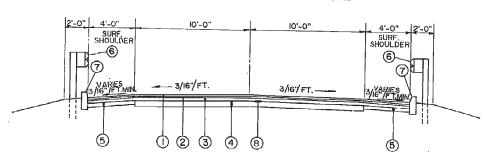
EXISTING TYPICAL SECTION

10' - O"

VARIES

NORTHWEST ROAD & DEYO ROAD

-EXIST, TYPE 4 GUARDRAIL (TYP.)

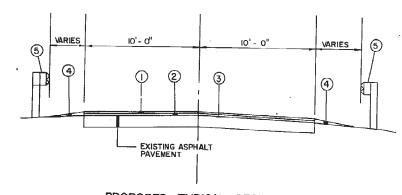


PROPOSED TYPICAL SECTION SCALE . 1/4" = 1'-0"

404 11/4" ASPHALT CONCRETE, 6 606 GUARDRAIL, TYPE 5 OR 606 GUARDRAIL REBUILT, TYPE 5 AC-20. CONCRETE CURB, 2 402 134" ASPHALT BASE, AC-20 TYPE 6 3 3" BITUMINOUS AGGREGATE 301 408 PRIME COAT (0.35 GAL./SY) 4 SP-310 VARIABLE DEPTH SUBBASE, 6" MINIMUM.

(5) SP 310 4"SUBBASE FOR SHOULDERS

NORTHWEST ROAD & DEYO ROAD



PROPOSED TYPICAL SECTION FOR RESURFACING SCALE 1/4" = 1'-0"

4 617

606

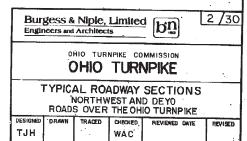
- 1 404 I4"ASPHALT CONCRETE, AC-20 2 403 ASPHALT BASE, AC - 20 (VARIABLE DEPTH, I" MIN.)
 - (5)

3 407 TACK COAT (0.06 GAL/YD.)

AGGREGATE BASE

GUARDRAIL, TYPE 5 OR GUARDRAIL REBUILT, TYPE 5

REVISED 1-25-90 AS CONSTRUCTED THE INFORMATION SHOWN HEREON IS INTENDED TO BE COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SHALL VERIEY INFORMATION TAKEN FROM THIS DRAWING



GENERAL NOTES

PROPOSED WORK

THE BRIDGES CARRYING NORTHWEST ROAD AND DEYO ROAD TRAFFIC OVER THE TURNPIKE SHALL BE REHABILITATED UNDER THIS CONTRACT. MAJOR WORK TO BE PERFORMED CONSISTS OF:

NORTHWEST ROAD AND DEYO ROAD BRIDGES OVER THE OHIO TURNFIKE

- 1. REPLACE EXISTING BRIDGE DECKS, PARAPETS, DECK JOINTS, AND ABUTMENT SLABS WITH NEW DECKS, PARAPETS WITH FENCE WHERE SHOWN, SEALED DECK JOINTS AND ABUTMENT SLABS.
- 2. MAKE THE DECKS COMPOSITE BY ADDING SHEAR STUD CONNECTORS.
- 3. MAKE REPAIRS TO THE CONCRETE PIERS AND ABUTMENTS.
- 4. PROVIDE NEW APPROACH SLABS AND PAVEMENT WITH CATCH BASINS.
- 5. PROVIDE CONCRETE BARRIER PROTECTION AT PIERS 1 AND 3.

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.

WHERE GUARDRAIL IS REPLACED ON LOCAL ROADS, THE SHOULDER AREA SHALL BE GRADED AS SHOWN IN THE TYPICAL ROADWAY SECTION BEFORE INSTALLATION OF THE NEW GUARDRAIL.

CONDUIT END TREATMENT

IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENTS REQUIRED BY THE PLANS AT BOTH THE OUTLET AND INLET ENDS. THIS SHALL INCLUDE ROCK CHANNEL PROTECTION.

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 PROVISION-607.

EXISTING FENCE

ANY EXISTING RIGHT-OF-WAY FENCE THAT IS REMOVED BY THE CONTRACTOR TO PERFORM ANY WORK ITEM, SHALL BE REBUILT BY THE CONTRACTOR TO EQUAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OHIO TURNPIKE COMMISSION.

PAINTING

THIS QUANTITY SHALL BE USED TO PERFORM PAINTING OF EXISTING STRUCTURAL STEEL DESCRIBED IN THE SPECIFICATIONS AS DIRECTED BY THE ENGINEER.

ITEM SP514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL

EXPANSION BEARINGS

THIS ITEM SHALL BE USED TO REMOVE BEARINGS AND BEARING PLATES FROM THE PIER SEATS TO PERFORM CONCRETE PATCHING ON THE PIER SEATS. THE NUMBER OF BEARINGS TO BE REMOVED SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

ITEM SP524B - RESETTING EXPANSION BEARING DEVICES - 24 EACH

UTILITIES NOTIFICATION

AT LEAST TWO 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 AND THE OWNERS OF EACH UTILITY FACILITY SHOWN ON THE PLANS.

THE OWNERS OF UNDERGROUND UTILITY FACILITIES SHALL, WITHIN FORTY-EIGHT HOURS, EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, AFTER NOTICE IS RECEIVED, STAKE, MARK, OR OTHERWISE DESIGNATE THE LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA 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 DAYS AHEAD OF THE PLANNED CONSTRUCTION.

LITEL COMMUNICATIONS CORP. FIBER OPTIC CABLE

THE MEDIAN SHOULDER OF THE WESTBOUND TURNPIKE LANES IS BURIED A FIBER OPTIC CABLE. EXTREME CARE MUST BE TAKEN BY THE CONTRACTOR TO PRESERVE AND PROTECT THIS DUCT DURING ALL PHASES OF CONSTRUCTION. ANY EXCAVATION IS THIS AREA FOR ANY REASON IS NOT TO 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:

JAYARAM BORAIAH OFFICE: (419) 884-0400 HOME: (419) 756-6773

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT.

> TELECOMMUNICATIONS: SEE NOTE * (FIBER OPTIC CABLE)

ELECTRIC

OHIO EDISON COMPANY 2502 WEST PERKINS AVENUE SANDUSKY, OHIO 44870

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 THE PROJECT.

> REVISED 1-25-90 AS CONSTRUCTED THE INFORMATION SHOWN HEREON IS INTENDED TO BE COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SHALL.
> VERIFY INFORMATION TAKEN FROM THIS DRAWING

| ı | Burgess & Ni | ple, Limi | ited | 1 |
|---|-------------------|-----------|------|-----|
| - | Engineers and Arc | rhitects | | F |
| | 0.010 | TURNPIKE | COMB | A15 |

OHIO TURNPIKE

GENERAL NOTES

R.M.H. W.A.C.



CIP - 43 - 89 - 17 PART 1

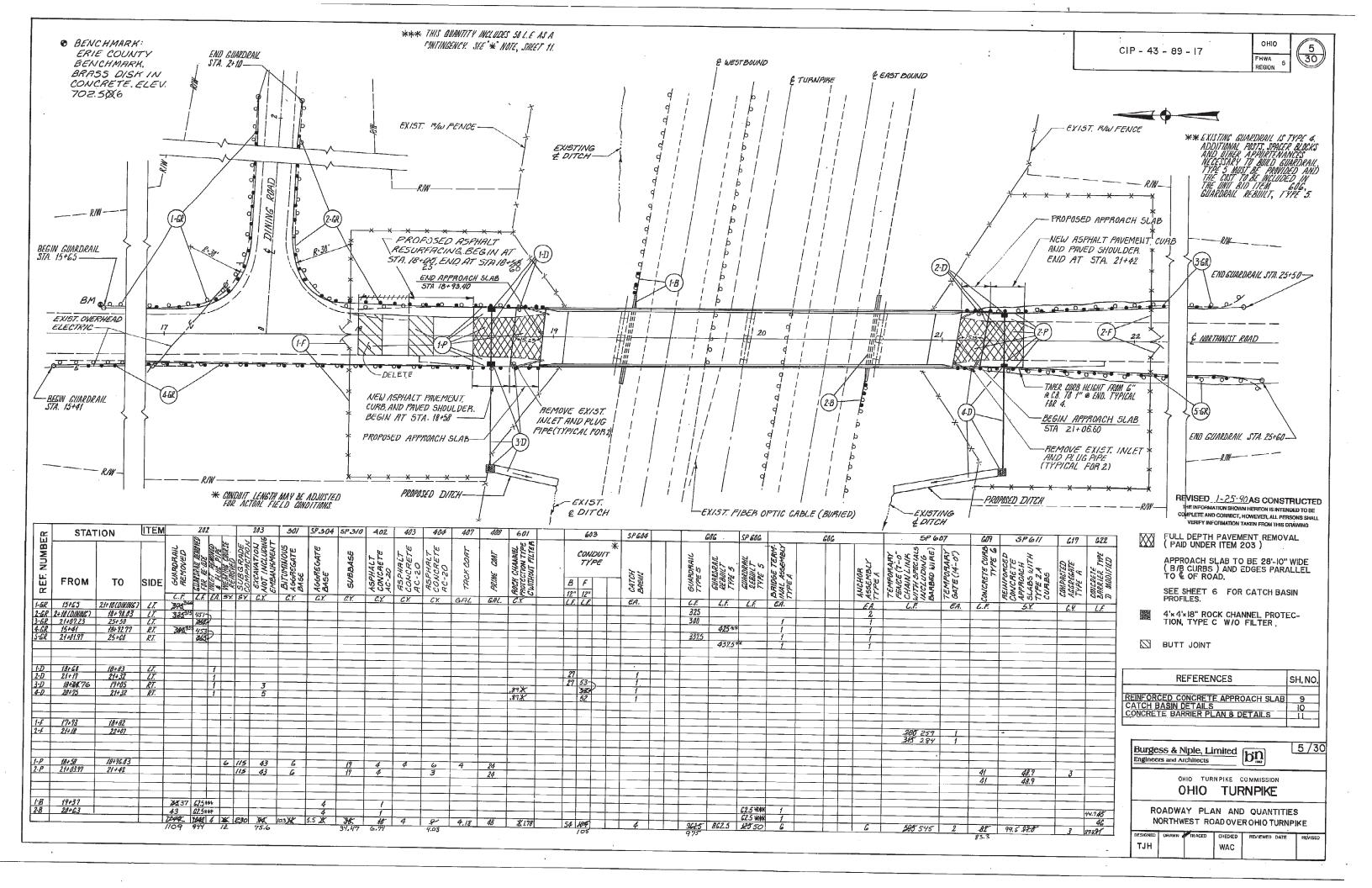


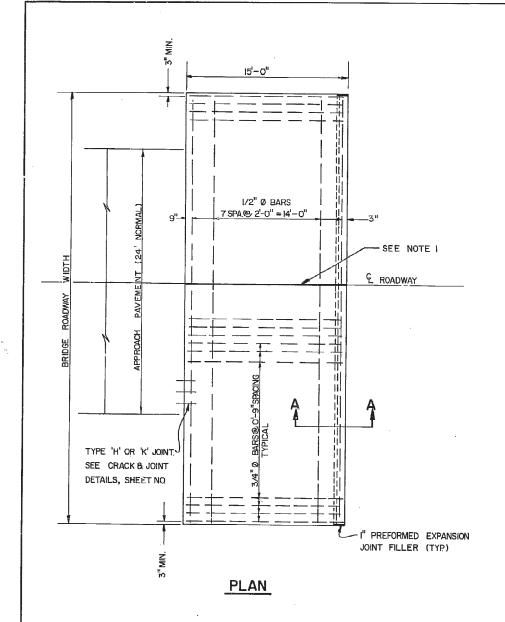
GENERAL SUMMARY

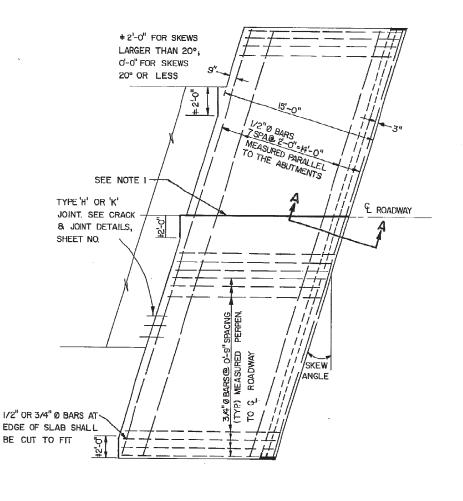
GENERAL SUMMARY

| I TEM | | | SHE | HEET NU | | MBEF | ₹ | | | ITEM | EXT | TOTAL | UNIT | DESCRIPTION |
|-----------|------|------|-----|---------|---|------|--|------------|------------|--------|-----|--------|-------|---|
| | 5 | 7 | | 12 | - | | - | - | | | | | | |
| 3.05 | | | | | | | | | | 107.05 | | 1.1345 | 01114 | |
| 5.05 | | | | | | | | | | 103.05 | | LUMP | SUM | PREMIUM FOR PERFORMANCE BOND AND PAYMENT BOND |
| 202 | 1149 | 1563 | - | | | | <u> </u> | | | 202 | | 2712 | L.F. | GUARDRAIL REMOVED |
| | 1040 | | | | 1 | | _ | | | 202 | | 1165 | L.F. | GUARDRAIL REMOVED FOR REUSE |
| | 4 | 4 | | | - | 1 | | | | 202 | | 8 | EACH | INLET REMOVED & PLUG PIPE |
| :02 | 6 | 6 | | | | | <u> </u> | | | 202 | | 12 | S.Y. | WEARING COURSE REMOVED |
| | | | | | | | | | | | | | | |
| 203 | 94 | 102 | | | | | | | | 203 | | 196 | C.Y. | EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION |
| 203 | 230 | 228 | | | | | | | | 203 | | 458 | S.Y. | SUBGRADE COMPACTION |
| | | | | | | - | | | | | | | | |
| 301 | 12 | 12 | | | | | | | | 301 | | 24 | C.Y. | BITUMINOUS AGGREGATE BASE |
| | _ | | | | | | | | | | | | | |
| P304 | 8 | 8 | | | | | | | | SP304 | | 16 | C,Y, | AGGREGATE BASE |
| | | | | | | | | | | | | | | |
| P3IO | 38 | 36 | | | | | <u> </u> | | | SP3IO | | 74 | C.Y. | SUBBASE, TYPE I, GRADING A |
| 03 | 10 | IQ | | ļ | | | | | | | | | | |
| 102 | 4 | 2 | | - | - | 1 | - | | | 402 | | 20 | C.Y. | ASPHALT CONCRETE, AC-20 |
| 103 | 4 | 2 | | | | | <u> </u> | | | 403 | | 6 | C.Y. | ASPHALT CONCRETE, AC-20 |
| 101 | 9 | 8 | | | | | | | | 404 | | 17 | C,Y, | ASPHALT CONCRETE, AC-20 |
| | | | | | | | | | | | | | | |
| 107 | 4 | 3 | | | | | | | | 407 | | 7 | CAL | TACK COAT |
| | | | | | | | | | | | | , | GAL. | TACK COAT |
| 801 | 48 | 46 | | | | | | | | 408 | | 94 | GAL. | PRIME COAT |
| | | | | | | | | | | | | | | |
| 100 | 2 | 2 | | | | | | | | 601 | | 4 | C.Y. | ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER |
| .03 | 64 | E.4 | | | | | | | | 007 | | 105 | | |
| 503 | 104 | 54 | | | - | - | - | ļ <u> </u> | \vdash | 603 | | 108 | L.F. | I2" CONDUIT, TYPE B, 706.02 |
| 103 | 104 | 99 | | | | | | | | 603 | | 203 | L.F. | I2" CONDUIT, TYPE F, 707.01 (EXCEPT GALVANIZED) OR 707.05 TYPE C WITHOUT PAVED INVERT |
| 604 | 4 | 4 | | | | | _ | | | SP604 | | 8 | EACH | CATCH BASIN |
| | | | | | | | | | | J-604 | | 0 | EAGN | ORIGII DADIN |
| \dashv | | | | | | | _ | | | | | | | |
| \exists | | | | | | | | | | | | | | |
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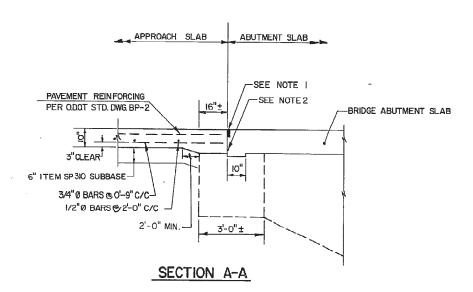
| | | NAS | | | | | | | | | | | | |
|-------------------|-----------------|----------------------|----------------------|----------------------|--|----------------|--------------|--------|------------------|------------------|---------------|--|--------------|--|
| Σ. | | | SHE | FFT | NHI | MBER | , | _ | | \S | \ - | 1 | | |
| JTEM | <u></u> | | U, | | 1 4 0 1 | | | | | TEM | EXT | TOTAL | UNIT | DESCRIPTION |
| | 5 | 7 | | 12 | <u> </u> | \perp | _ | \bot | \Box | <u> </u> | <u> </u> | | | |
| | - | | | + | - | | | + | +-+ | | | + | | |
| 606 | 962.5 | 362.F | أ | +_ | | + | | + | | 606 | | 2325 | L.F. | GUARDRAIL TYPE 5 |
| | | | | | | | | 1 | | | | | | OCCUPATION OF THE OCCUPATION O |
| 606 | _ | 6 | - | - | - | - | | 1 | + -+ | 606 | | 10 | EACH | ANCHOR ASSEMBLY, TYPE A |
| PVP | 6 | ь | - | | - | + | | + | +-+ | 606 | - | 12 | EACH | BRIDGE TERMINAL ASSEMBLY, TYPE A |
| | | | | | | | | | | | | | | |
| | 862.5 | _ | <u> </u> | 1 | | | <u> </u> | | 1 | 606 | | 862,5 | L.F. | GUARDRAIL REBUILT, TYPE 5 |
| SP606 | 125 | 125 | - | - | ' | 1- | _ | + | | SP606 | | 250 | L.F. | GUARDRAIL REBUILT, TYPE 5 |
| | | | <u> </u> | <u> </u> | | | _ | + | + | | <u> </u> | | | |
| SP607 | 595 | 565 | | | | | | | | SP607 | | 1160 | L,F, | TEMPORARY FENCE (7'-0" CHAIN LINK WITH |
| -0007 | <u> </u> | - | - | - | <u> </u> | | | 1 | 1 | | <u> </u> | | | SPECIALS INCLUDING BARBED WIRE) |
| SP607 | 2 | 2 | _ | - | | - | _ | + | + - | SP607 | ' | 4 | EACH | TEMPORARY GATE (14'-O") |
| | | | | | <u> </u> | | _ | + + | | | | | | |
| | | | | | | | | | | | | | | |
| | $\vdash \vdash$ | | | - | | + | | 1 | | <u> </u> | لــــا | <u> </u> | - | |
| 609 | 82 | 80 | <u> </u> | | - | +-+ | | + | | 609 | | 162 | L.F. | CONCRETE CURB, STANDARD TYPE 6 |
| | | | | | | | | | | 605 | | 102 | | CONCRETE CORD, STANDARD TIFE 6 |
| <u> </u> | | 1 | <u> </u> | | | | _ | | | | | | | |
| SP611 | 97.8 | 96,6 | ' | ' | - | - | | + | | SP6H | | 195 | S.Y. | CLASS S CONCRETE, APPROACH SLAB, USING |
| | | | | | | | | +-+ | | | | | - | SHRINKAGE COMPENSATING CEMENT (T = IO") |
| SP614 | | | | LUMP | | | | | ٤ | SP614 | | LUMP | SUM | MAINTAINING TRAFFIC |
| 617 | 3 | 2 | <u> </u> | ' | | - | | | - | | | | | |
| SP619 | - | r 2 | | | | | | + | | 617 SP619 | \rightarrow | 5 LUMP | CY. | COMPACTED AGGREGATE, TYPE A FIELD OFFICE |
| | | | | | | | _ | | | 3F 0.0 | | LOWI | 30lM | FIELD OFFICE |
| -22 | <u> </u> | | <u> </u> | <u> </u> | $\overline{\square}$ | - | | | $\overline{+}$ | | | | | |
| 622 | 91 | 103 | | \vdash | \vdash | - | | ++ | | 622 | | 194 | L.F. | CONCRETE BARRIER, TYPE D, MODIFIED |
| | | | | | | | | | 1 | \dashv | \neg | $\overline{}$ | | |
| SP623 | _ | \Box | ' | | | | | | 5 | SP623 | | LUMP | SUM | CONSTRUCTION LAYOUT SURVEY |
| | | | | \vdash | $\overline{}$ | - | | | \leftarrow | | | | | |
| 624 | | $\overline{}$ | | | $\overline{}$ | \Box | | + | _ | 624 | | LUMP | SUM | MOBILIZATION |
| | | | | | | | | | | | | 1 | | MANIFES 1141 |
| | | $\overline{\square}$ | $\overline{\square}$ | $\overline{\square}$ | $\overline{\square}$ | $\overline{+}$ | | \Box | $=$ \downarrow | $=$ \downarrow | | | | |
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| | | | \longrightarrow | \longrightarrow | -+ | $\overline{}$ | | +-+ | - | | - | | | |
| | | | | | | | | | 士 | $\overline{}$ | | | | STRUCTURES OVER 20' |
| | $\overline{}$ | | \equiv | \sqsubseteq | | \Box | | | \Box | \Box | | | | |
| | \rightarrow | | | \longrightarrow | \longrightarrow | | | + | | | \rightarrow | | | BRIDGE: NORTHWEST ROAD OVER OHIO TURNPIKE |
| - | | | | - | | -+ | | + | | + | - | | | SEE SHEET 14 BRIDGE , DEYO ROAD OVER OHIO TURNPIKE |
| | | | | | | | | | | | | | | SEE SHEET 21 |
| \longrightarrow | | | | \vdash | | | | - | | | | | | REVISED_/-25-90 AS CONSTRUCTED |
| -+ | + | - | \rightarrow | $\overline{}$ | | -+ | | 1- | -+ | \rightarrow | | | | THE INFORMATION SHOWN HEREON IS INTENDED TO BE COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SHALL |
| | | | . 1 | 4 1 | . 1 | . 1 | , | 1 1 | - 1 | 1 | - 1 | . 1 | 1 | VERIFY INFORMATION TAKEN FROM THIS DRAWING |







APPROACH SLAB FOR SKEWED BRIDGE



NOTE I: 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
 PAYEMENT.

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 511 09.

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 IOFT. 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 IOFT 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-I

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.

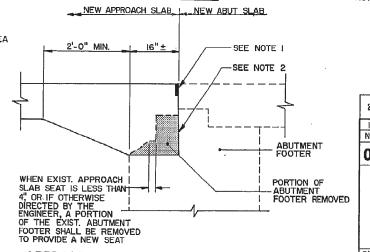
CROWN SHALL CONFORM TO THAT OF THE APPROACH PAVEMENT AND BRIDGE DECK.

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. -



REVISED_/-25-90_AS CONSTRUCTED THE INFORMATION SHOWN HEREON IS INTENDED TO BE COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SHALL VEHILY INFORMATION TAKEN FROM THIS DRAWING

| 2 | ADDED IMPRESSED JOINT & CHANGED TYPE OF CEMENT | DFC | 11:28:84 |
|----|--|-----|----------|
| | ADDED SEAT REPAIR DETAIL | DFC | 10-2-84 |
| Νa | REVISION | BY | DATE |

OHIO TURNPIKE COMMISSION

REINFORCED CONCRETE

APPROACH SLABS

DATE: OCTOBER 1983 | SCALE: N.T.S. | CIP: 43 - 89 - 17 (PARTI) | SHEET | 9 | 0F | 30

APPROACH SLAB SEAT REPAIR DETAIL

30

GENERAL NOTES

DESIGN SPECIFICATIONS

THE PROPOSED REHABILITATION WORK FOR THESE STRUCTURES CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983, INCLUDING THE 1984, 1985, 1986, 1987, AND 1988 INTERIM SPECIFICATIONS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN LOADING

NORTHWEST ROAD AND DEYO ROAD

HS 20-44 WITH NO FUTURE WEARING SURFACE

DESIGN STRESSES

CONCRETE CLASS S -COMPRESSIVE STRENGTH 4500 PSI FOR SUPERSTRUCTURE

REINFORCING STEEL -

ASTM A615, 616, OR A617 - GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI

EXISTING STRUCTURAL STEEL - A7, UNIT STRESS 18,000 PSI

HIGH STRENGTH BOLTS - SHALL BE 1-INCH DIAMETER, ASTM A-325

UNLESS OTHERWISE NOTED.

DECK PROTECTION METHOD

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

MONOLITHIC WEARING SURFACE

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

EXISTING STRUCTURE VERIFICATION

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 CMS SECTION 513.02 AND O.T.C. 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 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 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.

EXISTING STRUCTURE PLANS

THE ORIGINAL DESIGN PLANS MAY BE EXAMINED BY PROSPECTIVE BIDDERS AT THE COMMISSION'S PRINCIPAL OFFICE, 682 PROSPECT STREET, BEREA, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE

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. WHICH SHALL BE PAID FOR AS ITEM SP824 EPOXY COATED REINFORCING STEEL, GRADE 60. AN ALLOWANCE IS INCLUDED IN ITEM SP824 FOR THIS PURPOSE.

DRILLING DOWEL HOLES, FURNISHING AND PLACING SP956 NONSHRINKING EPOXY MORTAR AND REINFORCING DOWEL BARS. WHERE NEEDED TO REPLACE EXISTING REINFORCEMENT DAMAGED BY THE CONTRACTOR, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

CUTTING OR BENDING OF REINFORCING BARS

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

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.

CONCRETE WEATHERPROOFING

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

- ALL SIDES OF PARAPETS ON ABUTMENTS AND SUPERSTRUCTURE.
- EDGES AND UNDERSIDE OF DECK OUTSIDE OF EXTERIOR FASCIA BEAMS
- CONCRETE BRIDGE DECK WEARING SURFACE ON ABUTMENTS. SUPERSTRUCTURE AND APPROACH SLABS.
- NEW EXPOSED CONCRETE SURFACES OF ALL ABUTMENTS AND PIERS. SEALING SHALL NOT BE DONE UNTIL CONCRETE PATCHING REPAIRS HAVE BEEN COMPLETED AND CURED.

THE WORK SHALL PERFORMED PER ITEM SP536 - "CONCRETE WEATHERPROOFING."

CARE SHALL BE TAKEN NOT TO APPLY WEATHERPROOFING ON CONSTRUCTION JOINT SURFACES, SURFACES TO RECEIVE JOINT SEALER, AND FASCIA BEAM

CONCRETE INSERT ASSEMBLIES,

AS SHOWN ON STANDARD CONSTRUCTION DRAWING GR-1 AND GR-3, SHALL BE PROVIDED AT ALL PARAPET TERMINALS FOR ATTACHMENT OF GUARDRAIL TERMINAL CONNECTORS. INCLUDE WITH ITEM SP511 FOR PAYMENT.

REMOVING BEARING DEVICES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF AN ADEQUATE SUPPORT AND JACKING SYSTEM CAPABLE OF RAISING THE EXISTING BRIDGE BEAMS AND BEARING DEVICES.

THE CONTRACTOR 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 THE SUBMITTAL SHALL INDICATE MATERIALS, MEMBER SIZES. SPACING, SUPPORT LOCATIONS, JACKING POINTS, REACTIONS (I.E. LOADS), AND REMOVAL PROCEDURES.

PAYMENT FOR ALL LABOR AND EQUIPMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SP524B - RESETTING EXPANSION BEARING DEVICES.

BEARING RESETTING RESTRICTIONS

JACKING AND/OR TEMPORARY SUPPORTS SHALL BE LIMITED TO ONE (1) SUBSTRUCTURE UNIT AT ANY GIVEN TIME, E.G. 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, E.G. BEAM LINES 1, 2, 3, 4, & 5 SHALL BE RAISED SIMULTANEOUSLY WHEN REMOVING THE PIER BEARINGS. THE STRUCTURE SHALL NOT BE RAISED MORE THAN NECESSARY.

REMOVAL OF SCUPPER DRAINPIPE

THE CONTRACTOR SHALL REMOVE EXPOSED EXISTING SCUPPER DRAINPIPES. AND PLUG PORTION TO REMAIN AS PER DETAIL (SEE REMOVAL DETAILS SHEETS). PAYMENT FOR THIS WORK WILL BE INCLUDED IN ITEM SP202.

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 THE EXISTING STEEL BEAMS AFTER THE COMPLETE REMOVAL OF THE EXISTING DECK SLABS AT THE LOCATIONS SHOWN IN THE TABLES ON SHEET 17 OF 30 FOR THE FINAL PAVEMENT ELEVATIONS AT THE NORTHWEST ROAD BRIDGE AND ON SHEET 24 OF 30 FOR THE FINAL PAVEMENT ELEVATIONS AT THE DEYO ROAD BRIDGE. 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 THE "INIMUM 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 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 6" 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 CONCRETE APPROACH SLABS TO THE CONCRETE ABUTMENT AND DECK SLABS.

PRIOR TO REMOVAL OF THE EXISTING ASPHALT PAVEMENT, AS SHOWN ON PLAN SHEETS 5 OF 30 AND 7 OF 30, THE CONTRACTOR SHALL PROVIDE THE ENGINEER ELEVATIONS OF THE EXISTING PAVEMENT SURFACE ALONG THE CENTERLINE AND BOTH EDGES OF PAVEMENT AT INTERVALS OF 25 FEET. ELEVATIONS OF THE EXISTING ASPHALT, AT 25 FOOT INTERVALS. FOR A DISTANCE OF 100 FEET BEYOND THE PAVING LIMITS AND AS-BUILT ELEVATIONS OF THE ABUTMENT AND DECK SLABS SHALL ALSO BE PROVIDED. AFTER RECEIPT OF THESE ELEVATIONS THE ENGINEER WILL CALCULATE AND PROVIDE TO THE CONTRACTOR FINAL ELEVATIONS FOR THE CONCRETE

APPROACH SLABS AND FOR BOTH ITEM 402, ASPHALT CONCRETE BASE COURSE AND 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 SP623.

BARRIER DEFLECTION JOINT

THE DEFLECTION JOINTS IN THE BARRIER CURB MAY BE FITHER 1/4" GRAY SPONGE RUBBER OR 1/4" GRAY CELLULAR POLYVINYL CHLORIDE (PVC) SPONGE. EITHER MATERIAL SHALL MEET THE REQUIREMENTS OF AASHTO M-153, TYPE 1, EXCEPT THE DENSITY OF THE PVC SPONGE SHALL NOT BE LESS THAN 20 LBS. PER CU. FT.

INCLUDE WITH ITEM SP511B, LIGHTWEIGHT CONCRETE, SUPERSTRUCTURE, FOR PAYMENT.

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'-O" CENTERS IN EACH DIRECTION. BROKEN CONCRETE, BRICKS, ETC. SHALL NOT BE USED FOR SUPPORT OF EPOXY COATED REINFORCING STEEL.

WELDED ATTACHMENTS

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 SHALL

EPOXY BONDING COMPOUND (SP526)

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

REINFORCING STEEL COVER

ALL REINFORCING STEEL COVER SHALL BE 2" UNLESS OTHERWISE NOTED.

ALL CONCRETE CORNERS TO MATCH EXISTING OR CHAMFER CORNERS TO 1".

STRUCTURE REMOVAL

EACH OF THE SCUPPERS ARE ATTACHED TO THE BRIDGE BY BOLTS THROUGH THE TOP FLANGES OF THE BEAMS. THESE BOLTS MUST BE REMOVED BEFORE THE DECK CAN BE REMOVED TO AVOID DAMAGING THE BEAMS. CONTRACTOR SHALL SUBMIT DETAILS OF REMOVAL WITH DECK REMOVAL PLANS. REMOVAL OF THESE BOLTS WILL BE INCLUDED FOR PAYMENT IN ITEM SP2G2, PORTIONS OF STRUCTURE REMOVED. DAMAGE TO THE BEAMS. INCLUDING PAINT, SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE OHIO TURNPIKE COMMISSION.

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 ENGINEERS DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

DIMENSIONS

DIMENSIONS GIVEN ARE MEASURED HORIZONTALLY AND AT 60 DEGREES! FAHRENHEIT, UNLESS OTHERWISE NOTED.

> REVISED_1-25-90 AS CONSTRUCTED THE INFORMATION SHOWN HEREON IS INTENDED TO BE COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SHALL VERIFY INFORMATION TAKEN FROM THIS DRAWN

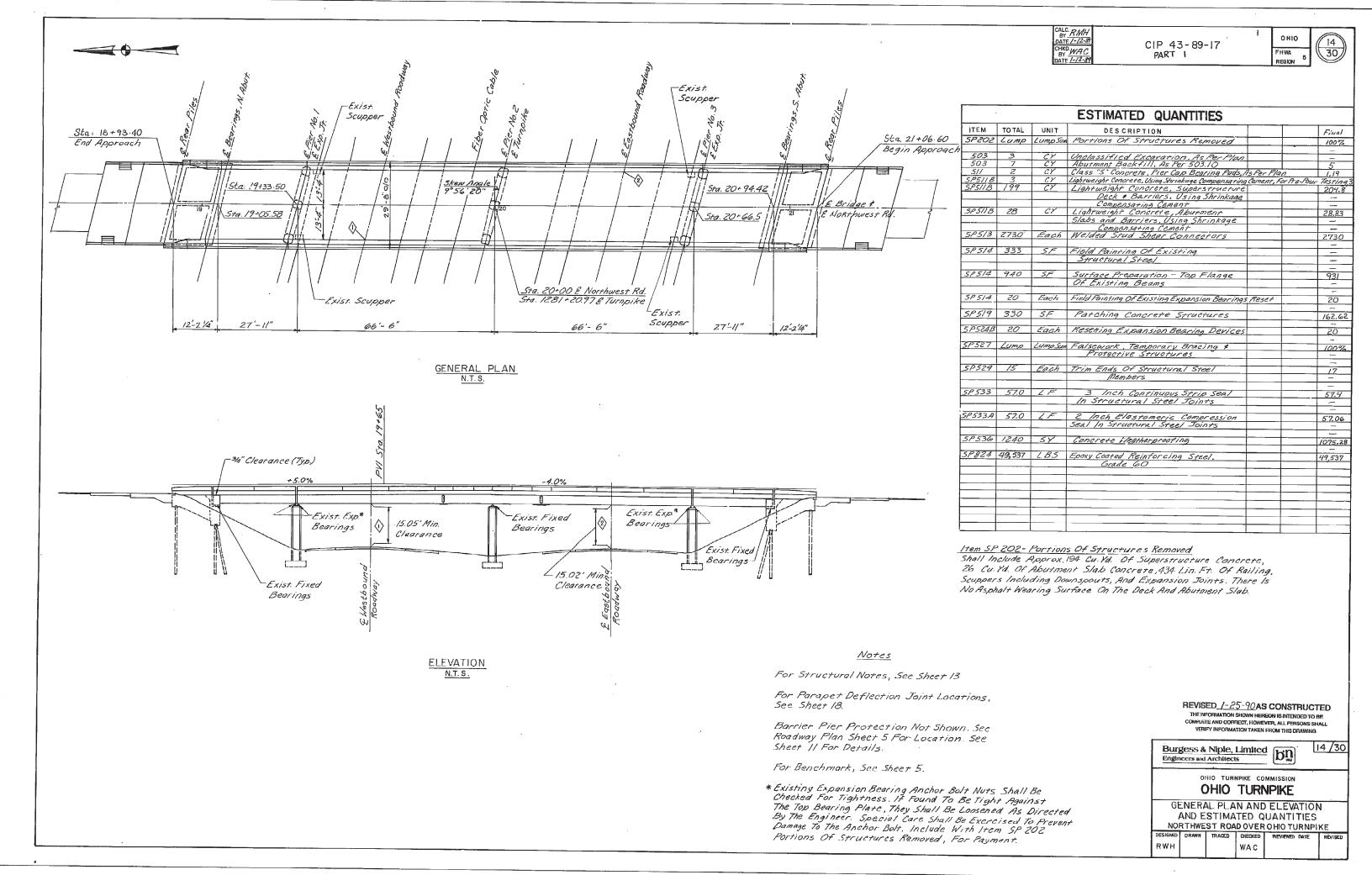
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| Burgess & Niple, Limited Engineers and Architects | $p_{\overline{u}}$ |
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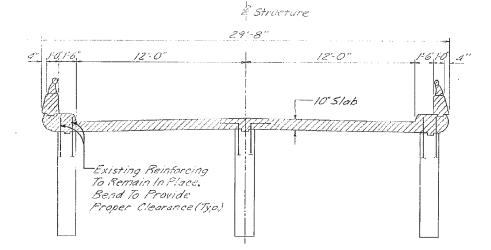
OHIO TURNPIKE

STRUCTURE GENERAL NOTES

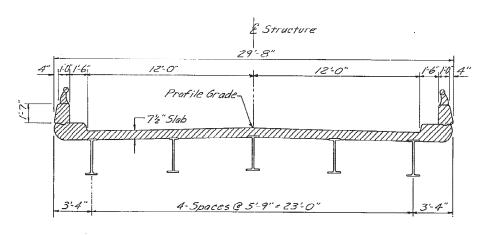
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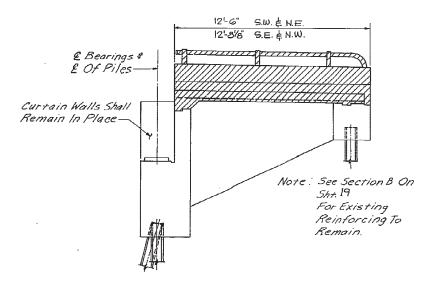
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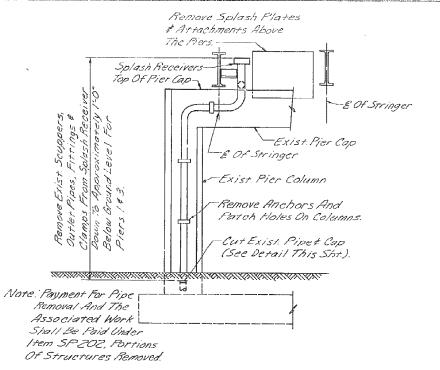
TRANSVERSE SECTION THRU ABUTMENT SLAB



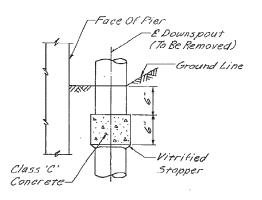
TYPICAL DECK CROSS SECTION



LONGITUDINAL SECTION
THRU ABUTMENT SLAB

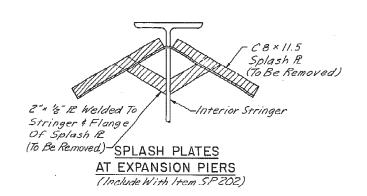


SECTION A



DRAIN PIPE CAP DETAIL

(Include With Item SP 202, Portions Of Structures Removed, For Payment)





REVISED 1-25-90 AS CONSTRUCTED
THE INFORMATION SHOWN HEREON IS INTENDED TO BE
COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SHALL
VERIFY INFORMATION TAKEN FROM THIS DRAWING

Burgess & Niple, Limited Engineers and Architects

OHIO TURNPIKE COMMISSION

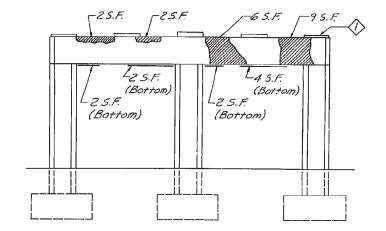
REMOVAL DETAILS

NORTHWEST ROAD OVER OHIO TURNPIKE

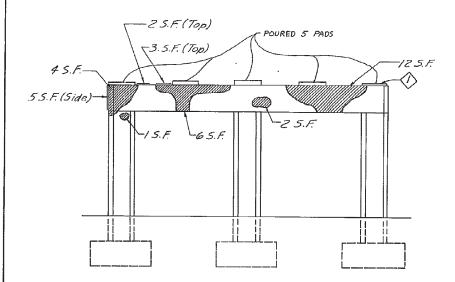
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RMH WAC

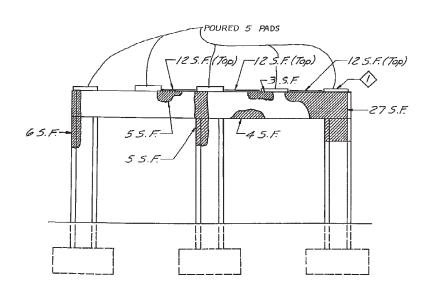




PIER NºI (NORTH FACE)



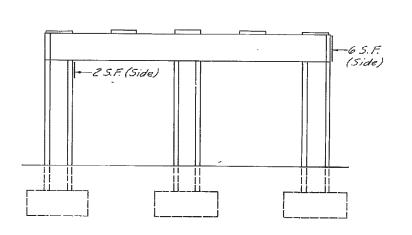
PIER NºI (SOUTH FACE)



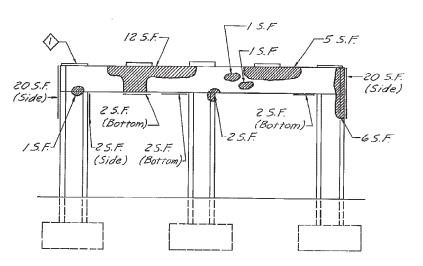
PIER Nº3 (NORTH FACE)



NORTH ABUTMENT

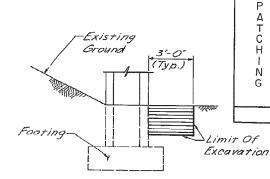


PIER Nº 2 (NORTH FACE)



PIER Nº 3 (SOUTH FACE)





EXCAVATION LIMITS FOR UNCLASSIFIED EXCAVATION AS PER PLAN

All Concrete Bearing Pads On Piers I And 3 Shall Be Removed And Replaced With Item 511-Class "S" Concrete Pier Cap Bearing Pads, As Per Plan. Removal Of Concrete Shall Be Per Item SP519 -Patching Concrete Structures And Shall Be Included For Payment With Item SP 202. Concrete And Reinforcing Steel For Bearing Pads Shall Conform To Item 519.02. Exist. Reinforcing Ties And Dowels Shall Be Salvaged And Reused For The New Pads. New Bearing Pads Shall Be Replaced To Existing Plan Dimensions And Elevations.

Notes

Physical Inventory Of Measured Quantities Of Deterioration Was Performed In Oct. 1988.

Estimated Quantity Has Been Increased Over Measured Quantities To Allow For Additional Deterioration.

VIIIIIIII Indicates Approximate Area To Be Parched Per Irem SP519-Patching Concrete Structures. Exact Dimensions And Locations Of Patches Shall Be Determined By The Engineer In The Field For Final Pay Quantity.

Item 503 Unclassified Excavation As Per Plan. As A Contingency, 3 C.Y. Of Unclassified Execution Has Been Included In The Estimated Quantities 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.

| | SUMMARY OF | REPA | IR QUAN | ITITIES |
|------|-------------|------|----------------------|--------------------|
| TYPE | LOCATION | UNIT | MEASURED QUANTITY | ESTIMATED QUANTITY |
| Р | N. ABUTMENT | SF | 1 | 10 |
| А | PIER Nº I | 5F | .64 | .85 |
| TC | PIER Nº 2 | SF | 8 | 20 |
| l H | PIER Nº 3 | SF | 162 | 215 |
| l ï | | İ | | |
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| G | | | | |
| | | | | |
| | | | 70 | TAL=330 |

Burgess & Niple, Limited bn Engineers and Architects

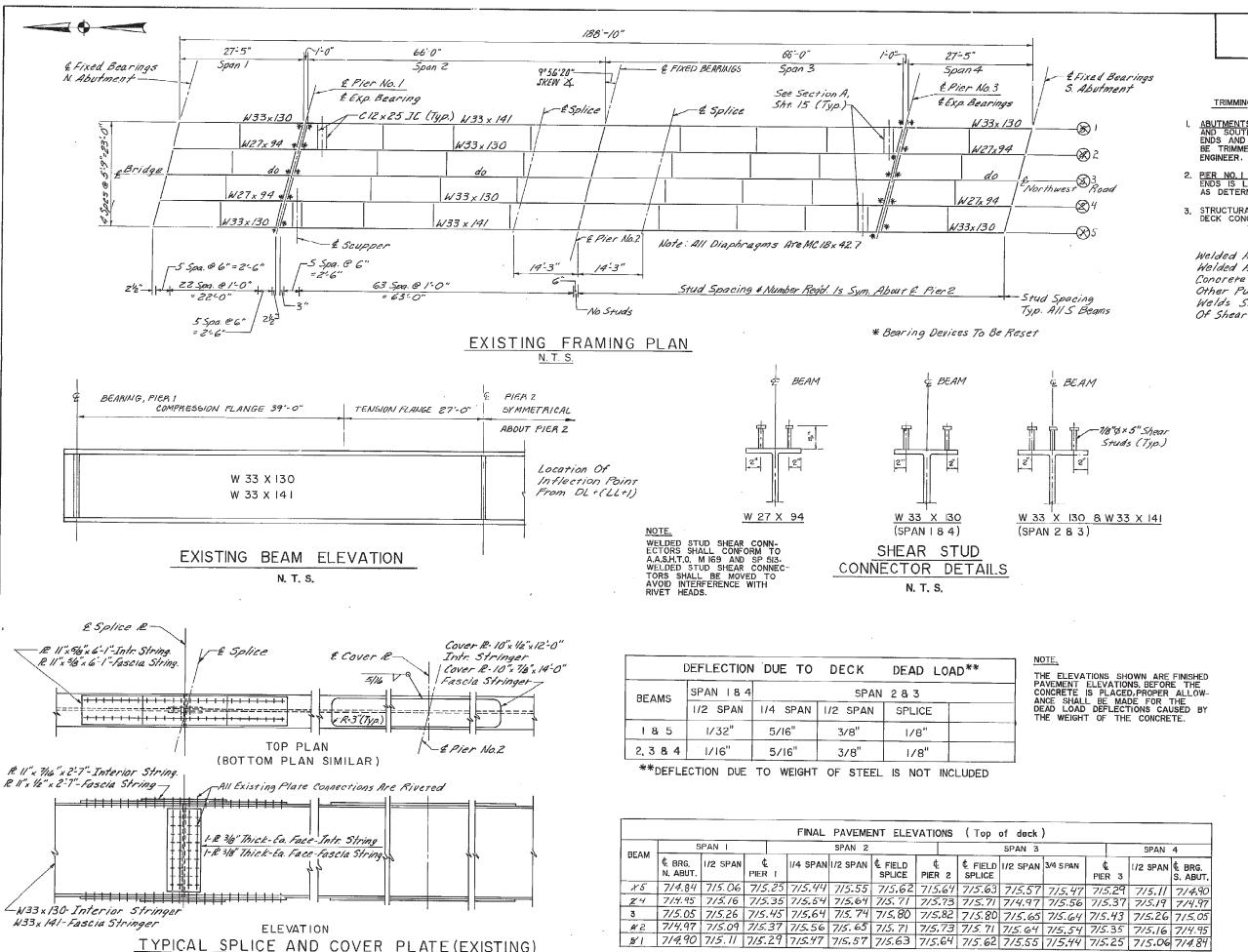
OHIO TURNPIKE COMMISSION

OHIO TURNPIKE

REPAIR DETAILS

NORTHWEST ROAD OVER OHIO TURNPIKE

| ESIGNED | DRAWN | TRACED | CHECKED | REVIEWED DATE | REVISED |
|---------|-------|--------|---------|---------------|---------|
| .м.н. | | | W.A.C. | | |
| | | | | | |



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TRIMMING ENDS OF STRUCTURAL STEEL MEMBERS

- I. ABUTMENTS: BEAMS AT THE FIXED BEARINGS AT NORTH AND SOUTH ABUTMENTS WITH GAPS BETWEEN THE BEAM ENDS AND THE BACKWALLL OF LESS THAN I' SHALL BE TRIMMED AS DETERMINED IN THE FIELD BY THE
- 2. PIER NO.1 8 NO.3: BEAMS WHERE THE GAPS BETWEEN ENDS IS LESS THAN 1 76 AT 60°F, SHALL BE TRIMMED AS DETERMINED IN THE FIELD BY THE ENGINEER,
- 3, STRUCTURAL STEEL SHALL BE TRIMMED AFTER THE DECK CONCRETE HAS BEEN REMOVED.

Welded Attachments-Weided 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 Shall Be Permitted.

| | | | | FINAL | PAVEME | NT ELEV | /ATIONS | (Тор | of deck |) | | | |
|------|----------|----------|--------|----------|--------|---------|-------------|--------|----------|--------|--------|----------|----------|
| ВЕАМ | S | PAN I | | | SPAN 2 | | | | SPAN 3 | | | SPAN | 4 |
| DEAM | N. ABUT. | I/2 SPAN | PIER I | I/4 SPAN | | SPLICE | ¢ PIER 2 | SPLICE | I/2 SPAN | | PIER : | | S. ABUT. |
| X5 | 7/4.84 | 7/5.06 | 7/5.25 | 7/5.44 | 7/5.55 | 7/5.62 | 7/5.64 | 7/5.63 | 715.57 | 7/5,47 | 715,2 | 9 7/5.11 | 7/4,90 |
| 24 | 7/4.95 | 7/5.16 | 7/5.35 | 7/5.54 | 7/5.64 | 7/5.71 | 7/5.73 | 7/5.71 | 7/4.97 | 7/5.56 | 7/5.3 | 7 715.19 | 7/4.97 |
| 3 | 7/5.05 | 7/5.26 | 715.45 | 7/5.64 | 715.74 | 715.80 | 7/5.82 | 7/5.80 | 7/5.65 | 715.64 | 7/5.4. | 3 7/5,26 | 7/5.05 |
| #2 | 7/4.97 | 7/5.09 | 7/5.37 | 7/5.56 | 715.65 | 7/5, 71 | 7/5.73 | 715.71 | 7/5.64 | 7/5.54 | 7/5.3 | 5 715.16 | 7/4.95 |
| 5/1 | 714.90 | 715.11 | 715.29 | 7/5.47 | 7/5.57 | 7/5.63 | 7/5.64 | 7/5.62 | 7/5.55 | 7/5.44 | 7/5.2: | 5 7/5.06 | 7/4.84 |

REVISED /-25-90 AS CONSTRUCTED

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Burgess & Niple, Limited bn Engineers and Architects

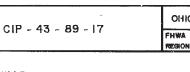
OHIO TURNPIKE COMMISSION

OHIO TURNPIKE

FRAMING PLAN, DETAILS AND **DECK ELEVATIONS** NORTHWEST ROAD OVER OHIO TURNPIKE

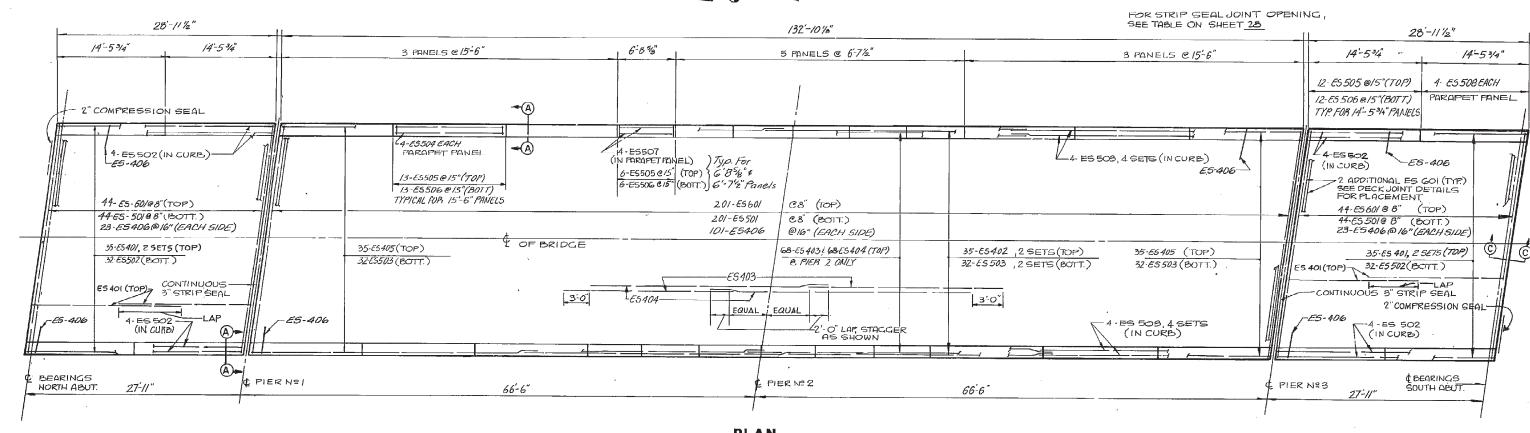
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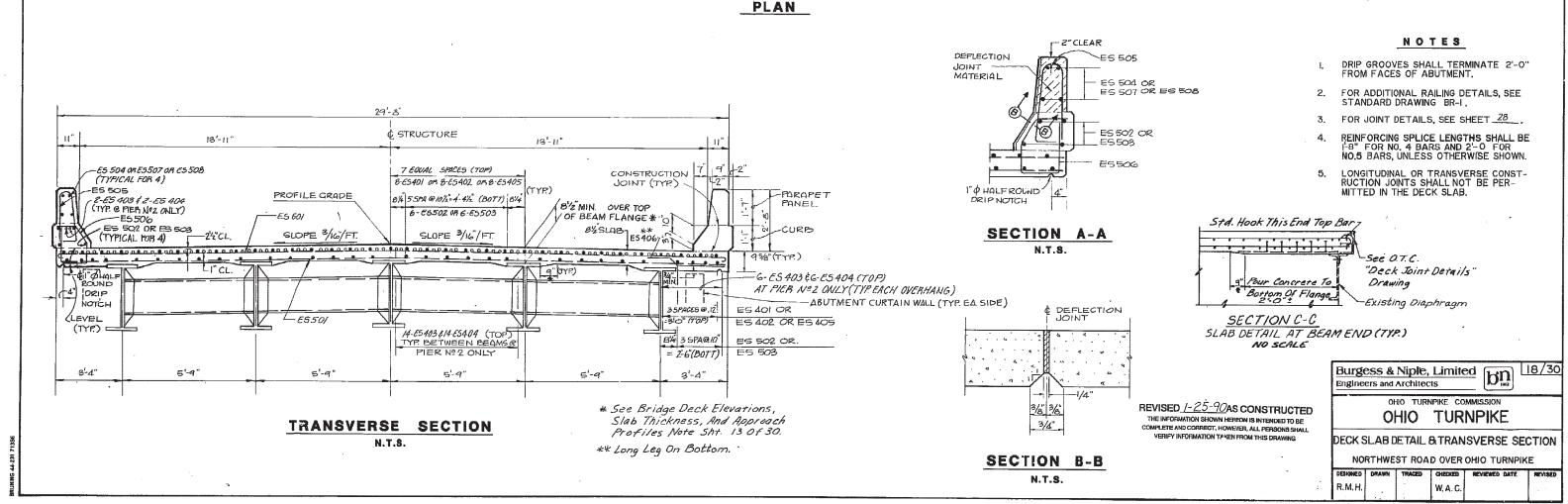
CHECKED REVIEWED DATE R.M.H. W. A.C.

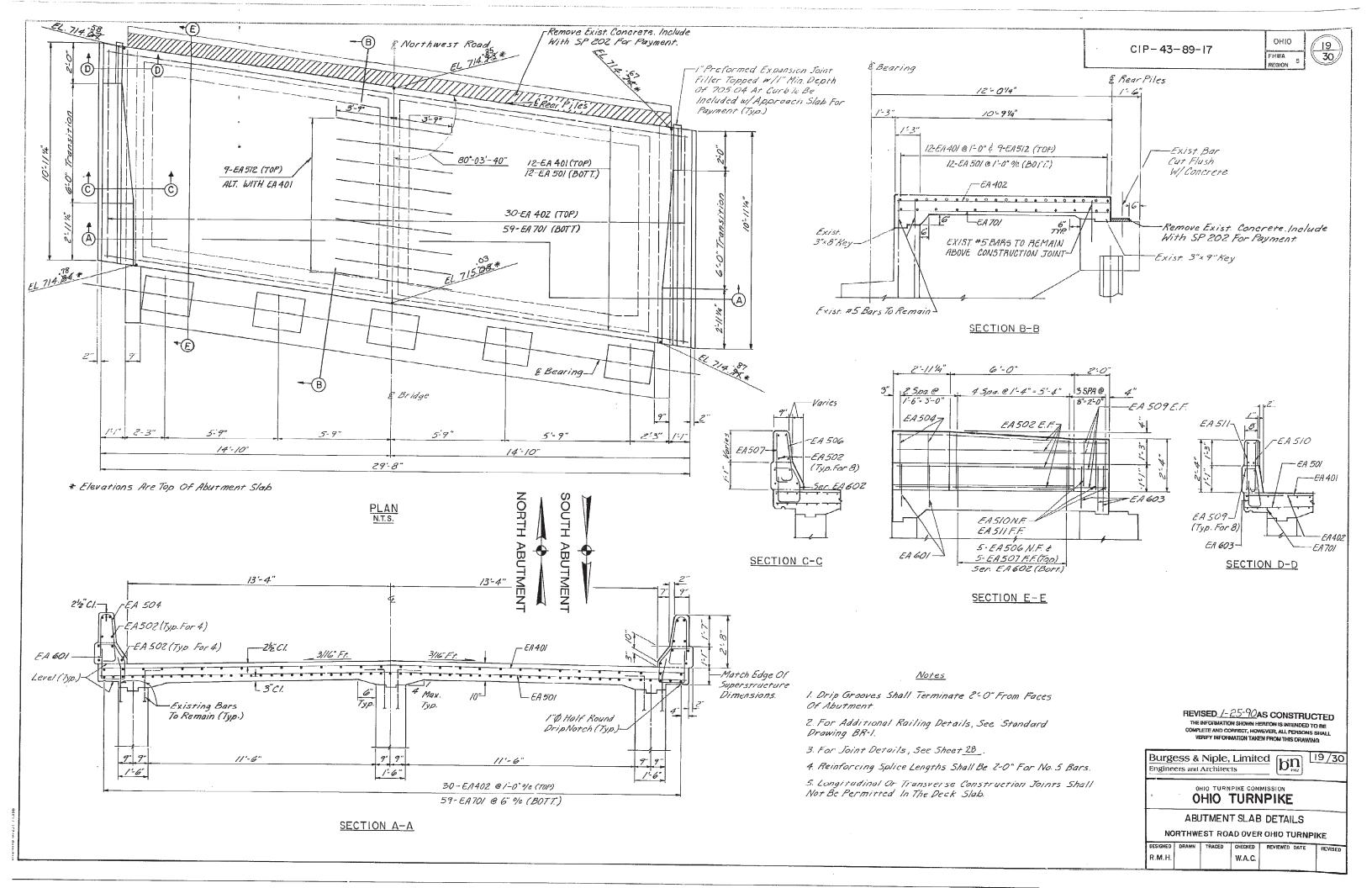


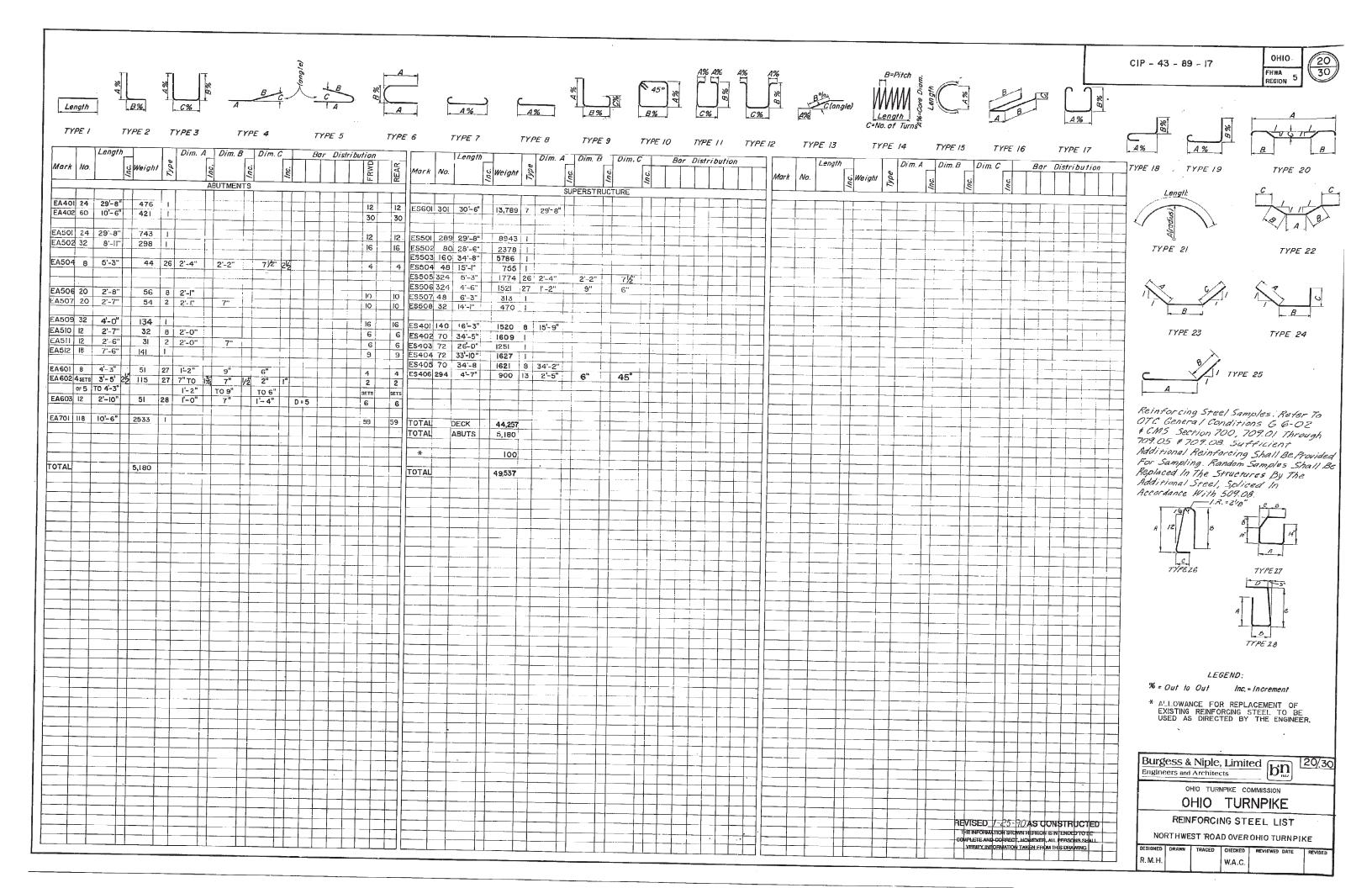
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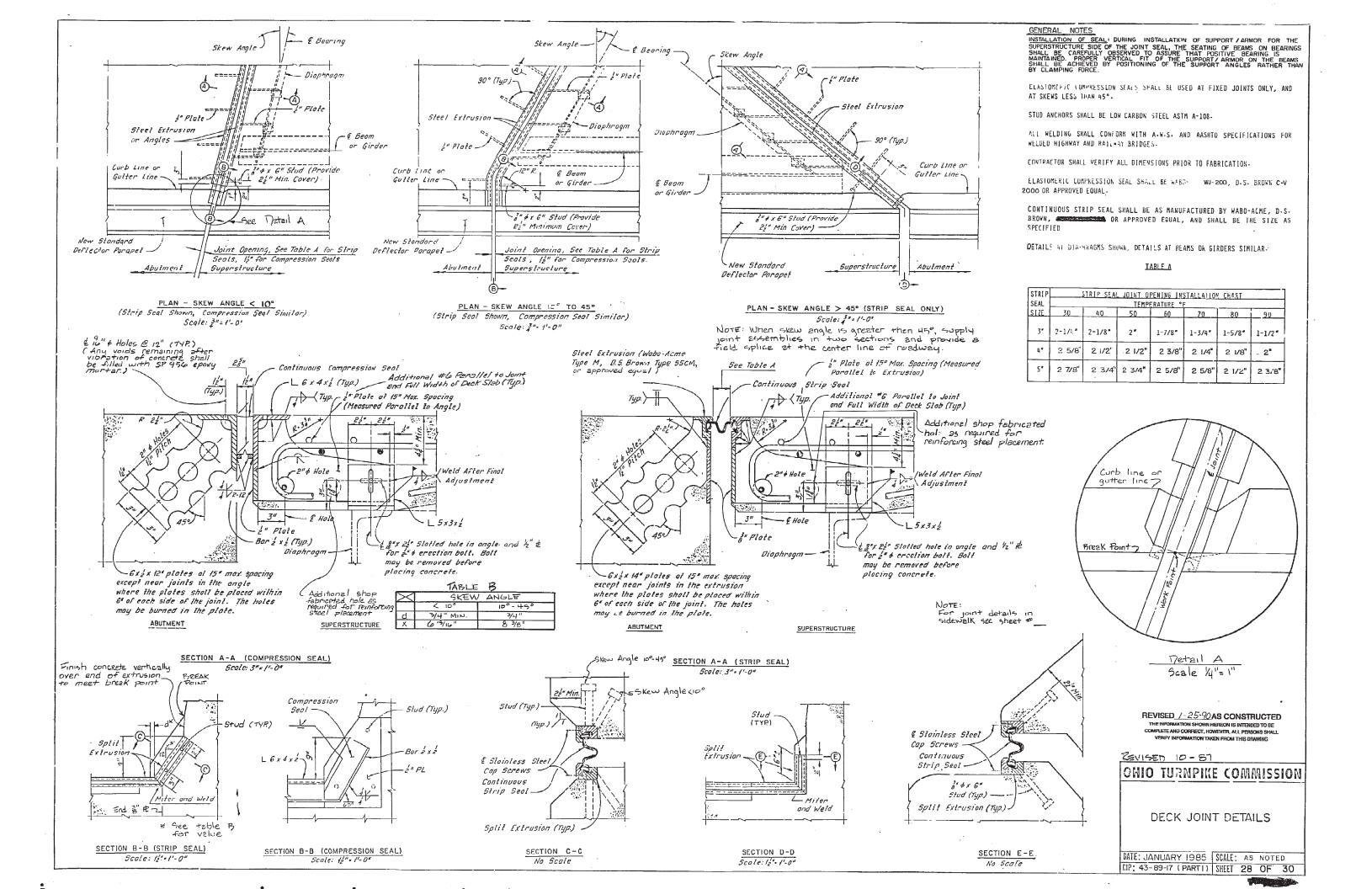
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OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1
DESIGN SECTION D-12

CONTRACT NO. C-34

TURNPIKE CONSTRUCTION CONTRACT
STATION 1219+39 TO STATION 1281+20.97-SANDUSKY COUNTY
STATION 0+00 TO STATION 134+16.88-ERIE COUNTY



APPROVAL RECOMMENDED BROWN & BLAUVELT CONTRACTING ENGINEER

Harved a Blavell

APPROVED

J. E. GREINER CO.

CONSULTING ENGINEER

S-25-53

APPROVED
OHIO TURNPIKE COMMISSION
CHIEF ENGINEER 5-29-53

CONTRACT NO. C- 34

COUNTY - SANDUSKY - ERIE

1-105

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

LINES 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 TURNPIRE AND/OR PUBLIC RIGHTS OF WAY. THE CON-TRACTOR 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

MAINTENANCE OF TRAFFIC

FOR MAINTENANCE OF TRAFFIC NOTES AND DETAILS SEE SHEET NO. 3.

CAST-IN-PLACE CONCRETE PILES (FIPE SHELLS)

CAST - IN-PLACE CONCRETE FILES SHALL BE STEEL PIPE PILES FILLED WITH CONCRETE. STEEL PIPE SHALL CONFORM TO A.S.T.M. A-252, AND SHALL HAVE A MINIMUM OUTSIDE DIAMETER OF 12" AND MINIMUM THICKNESS OF 5/16, AND SHALL BE DRIVEN WITHOUT POINT BUT WITH OPEN END TO REFUSAL IN ROCK. PILES UP TO TWENTY FEET IN LENGTH SHALL BE IN AME PIECE; PILES FROM TWENTY TO PORTY FEET IN LENGTH SHALL HAVE NOT HORE THAN ONE SPLICE; PILES OVER FORTY FEET IN LENGTH SHALL HAVE NOT HORE THAN THE TSPLICES SHALL BE WELDED. PILES SHALL BE WELDED. PILES SHALL BE CAPPED WITH 18" X 1/2"X 11-6" BEARING PILES SHALL BE CREDED OF THE STATES OF TO SETATE OF THE PLATES, GROUTED TO OBTAIN FULL BEARING INTERIOR OF PIPE. PLATES, GROUTED TO OBTAIN FULL BEARING INTERIOR OF PIPES SHALL BE INSPECTED WITH A LIGHT AND ALL OBSTRUCTIONS AND WATER REMOVED BEFORE CONCRETE IS PLACED. SEE SP-4 FOR FURTHUR PROVISION FOR PILES

LANDSCAPING

TOPSOIL (ITEM L-3) SHALL BE SPREAD TO A COMPACTED DEPTH OF TWO (2) INCHES ON AREAS INDICATED ON THE

BONEMEAL (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 LIMESTONE (ITEM L-9) SHALL BE APPLIED AT THE RATE OF 100 LBS. PER ONE THOUSAND (1000) SQ. FT. AND THOROUGHLY INCORPORATED INTO

COMMERCIAL FERTILIZER 10-6-4 (ITEM L-9) SHALL BE APPLIED AT THE RATE OF 20 LBS. FER 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 OALY BETWEEN APRIL 15 & JUNE 15, AND FROM AUGUST 15 & OCTOBER 15, UNLESS OTHERWISE DIRECTED NAMES OF THE PROTECTED OF THE PROTECT 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-34
- c) SUPPLEMENT SPECIFICATIONS B-20, DATED DECEMBER 9,1952 SUPPLEMENT SPECIFICATIONS A-5, DATED AUGUST 7,1953 SUPPLEMENT SPECIFICATIONS T-30, DATED DECEMBER 9,1952

SUPPLEMENT SPECIFICATIONS T-35, DATED DECEMBER 9,1952 .

SUPPLEMENT SPECIFICATIONS T-31, DATED DECEMBER 9,1052 - SUPPLEMENT SPECIFICATIONS B-35, DATED DECEMBER 9,1052 - SUPPLEMENT SPECIFICATIONS I-30, REV. JULY 9,1053 - SUPPLEMENT SPECIFICATIONS I-29, DATED MAY 28,1955

| LEGEND | 630 |
|---|----------------|
| SURVEY BASE LINE | A. Coo |
| EXISTING PROPERTY LINE | <u> P.L.</u> . |
| EXISTING FENCE LINE | x |
| EXISTING PROPERTY LINE (FENCED) | Fence is P.L. |
| EXISTING R/W LINE | |
| PROPOSED R/W LINE | |
| EXISTING FARM TILE DRAINAGE | |
| PROPOSED FARM DRAINAGE COLLECTOR | |
| PROPOSED DROP INLET | D |
| PROPOSED TILE LINE BREATHER | |
| PROPOSED DITCH AND ELEVATION | |
| PROPOSED GUARD RAIL (FOR TYPE SEE PLANS) | |
| PROPOSED MONUMENT | • |
| Proposed Tile Line Junction Box | |

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

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 500 TEMPERATURE. THE SHOES AND EXPANSION DAMS 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 ON E6016 SHALL BE USED.
ALL WELDING SHALL BE CLASS "A".
FOR SPANS WITHOUT HINGED BEARINGS ON AN INCLINED GRADE OF 1% OR MORE THE SOLE PLATES SHALL BE

BEVELED SO THAT THE SUBSTRUCTURE BRIDGE SEATS MAY BE LEVEL.

CONCRETE

ALL CONCRETE 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 TURNES OVER STRUCTURES SHALL BE MACHINE FINISH

THE ENTIRE FILL SHALL BE PLACED BEFORE EXCAVATING FOR

| ed Sup Spec. date | ₩svJ | 10-6-53 |
|---|---------------|---------|
| | | |
| d Legend for Tile breather & junction box | ASM | 11-23-5 |
| A- TELANS | | Feb50 |
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OHIO TURNPIKE COMMISSION OHIO TURNPIKE PROJECT NO. 1

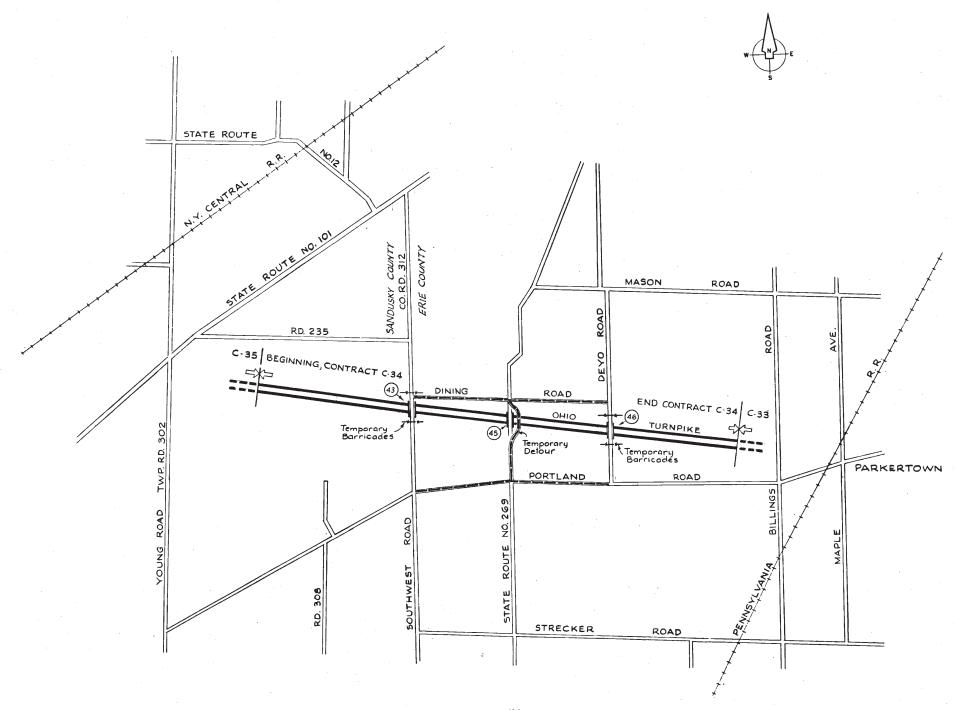
GENERAL NOTES & SYMBOLS

BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12

IN CHARGE TOWN SCALE. None

SHEET 2 OF 38 CONTRACT NO. C- 34

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Not to Scole

MAINTENANCE OF TRAFFIC

The Turnpike construction under this contract crosses one State Highway, State Route No. 269; one County Road, Southwest Road, Co. Rd. 312, on the Sandusky-Erie County Line., and one Township Road, Deyo Road. The following provisions shall apply with respect to maintenance of traffic on these various routes:

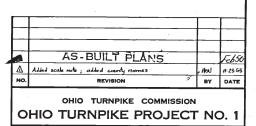
Traffic on State Route No. 269 shall be maintained during the entire construction period. During the period of bridge construction, traffic shall be maintained on the detour road as provided on the Contract Plans.

Traffic on Southwest Road and Deyo Road shall be closed to traffic for a period not to exceed eight months, until completion of the bridges and approaches.

---- Denotes Traffic Detour Routing

NOTES:

For details of the Temporary Detours, see Contract
Drawings, Sheets 10 and 36
For details of the Permanent Barricades, see Standard
Drawing No. 14
Barricades; Danger and Warning Signs shall be in
accordance with Item G-7.07 of the General
Specifications and as directed by the Engineer.
(3)— Denotes Structure Number—



MAINTENANCE OF TRAFFIC

BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12

CHECKED: L.A. DATE: March 6, 1953
IN CHARGE PUROLA SCALE: None

CONTRACT NO. C-34 SHEET 3 OF 38

| ايب | æ | | | | | , | | SH | EET | NI | JMBE | RS | | | | | | | | FIS: |
|---------------------|------------------|--|--------------|---------------|--|------------|----------|----------|----------|----------------|----------|----------|-------|--------|----------------|--|--------------------|-------|------------|------------------------|
| REFERENCE NUMBER | PEC. I NUMBER | DESCRIPTION | TINO | . 5 | 6 | 7 | 9 | 11 | 12 | 14 | 15 | | | 8 | 10 | 13 | | | IOIALS | PROPOSAL QUANTITIES |
| RETE NU | SFITEM | | วั | ÷16 | | | - | - | | - | | | | | | | | 1 | 2 | PRC |
| | • | ROADWAY | 7 - | | | | | | | | | | | | | | | | | |
| | | Roadway Excavation | C.Y. | 17,078 | 8,700 | 24.492 | 92,292 | 80,605 | 14,765 | 15,308 | | | | - | 8309 | . 813 | | | | 264,300 |
| | | Borrow | C.Y. | 045 | 100.0 | | 2010 | 242 | 2010 | 126,942 | | | | 31.887 | | - | - | | | 211,600 |
| | | Water Pipe Removed (under 16") | M.G. L.F. | 87.5 | 126.5 | 453.7 | 201.8 | 31.8 | 10 | 1036.7 | 221.2 | | | 349. | 289.0 80 | 169.6 | | 33 | 22.3 90 | 3,330 90 |
| | | Guard Rail, Tupe "A" | L.F. | | | 220 | 220 | | 220 | 1350 | | | | 1865 | - 50 | | | 3 | 875 | 3,870 |
| _ | | Guard Rail, Type "B" | L.F. | 200 | | 1 | 200 | | | 3280 | 210 | | | | | | | | 90 | 4100 |
| 7 | | Guard Rail, Type "C-2" or C-1 | L.F. | | | | | | | | | | | | 1750 | | | | 150 | . 1,750 |
| $\overline{}$ | _ | Guard Rail, Type "D-2" | L.F. | | | | | | | | | | | | - | 1410 | | | 110 | .1,410 |
| | | Right-of-Way Fence , Type 2 | L.F. | 4480 | _ | _ | 5220 | | | 5820 | 1440 | | | - | 1585 | | | 41, | 000 | 41,000 |
| | | Permanent Monuments Temporary Cattle Fence | Ea. L.F. | 1 | 1 | 2 | 2 | 2 | 2 | 2 | | | | | - | <u> </u> | | | 12 250 | 12. 250 |
| 12 | | Placing Stock Piled Topsoil | 5. Y. | 12,480 | 15,023 | 15,412 | 14836 | 15647 | 15.600 | 14,215 | 4,160 | | - | 2880 | 5788 | 1961 | | | 002 | 118,000 |
| | | Bonemeal & Raw Bone | Ton | 1.12 | 1.35 | 1.39 | 1.34 | 1.41 | - | 1.30 | 0.37 | | - - | 0.25 | | - | | | 2.63 | 11 - |
| 14 | | Roadside Cleanup | L.S. | | | | | | | | | | | | ŀ | | | | mp | Lump |
| | | Seeding and Protecting Type "A" | 5. Y. | _ | 15,023 | _ | 14,836 | | | 14,215 | _ | | | _ | 5788 | _ | · . | | 002 | |
| | | Commercial Fertilizer 10-6-4 | Ton | 1.12 | 1.35 | 1.39 | | 1.41 | _ | 1.30 | 0.37 | | | | | | | | 0.63 | // |
| | | Agricultural Ground Limestone Seeding and Mulching (Special Seeding) | Ton 5. Y. | 5.60 | | 6.95 | 6.70 | 7.05 | _ | 6.50 39,089 | 1.85 | | | - | 2.60 | 0.90 | \vdash | | 3.15 | 53 |
| 10 | 2-19 | Seeding and Mulening (Special Security) | J. 7. | 20,003 | 20,333 | 34,923 | 36,042 | 36,444 | 33,066 | 33,003 | 4,323 | | | 24,130 | 2416 | 10,136 | - | 29 | 3341 | 293,400 |
| | | | | | | | | | | | | | | | | | | | | |
| - | | | | - | | | | | | | | | | - | | | | | _ | |
| 51 | E-2 | DRAINAGE Including Structure (Box Culvert) | 41-5 C.Y. | ta. 12 690 | 38+20 24 | | 27/ | 50 | 272 | 20 | 2 | | | | 07 | | | | 38 | 17/0 |
| 52 | | Excavation for Structures Excavation for Channels | C.Y. | 2660 | 24 | 219 850 | 374 | 30 | 2/2 | 20 | - | | | _ | 87 | 1 | <u> </u> | | 510 | 1740 3,500 |
| | | 15"5.5.Reinf. Conc. Culvert Pipe | Z.F. | 2000 | 72: | 86 | 164 | _ | 68 | | 84 | | - | | | | | - | 74 | 470 |
| - | | 18"Paved Invert Bitum Coated C.M.P. #12Ga. | LF. | 132 | 12 | 168 | 152 | 196 | 280 | 274 | - | | | +- | | <u> </u> | \vdash | | 74 | 1280 |
| | | | | ,,,, | | 1 | | | | - | | | | | | | \vdash | - 1.5 | | |
| 56 | 1-5 | Pipe Special-30°18" Pvd.Inv. Bit.Ctd.CM.P.#12Ga. | Ea. | | | | | | | 2 | | | | | | | | | 2 | 2 |
| | | Inlets, Type A-1 | Ea. | | | 2 | 2 | | 3 | 3_ | 1 | | | | | | | | // | 11 |
| | | Stone Underdrain No.1 | Z.F. | <u> </u> | | | <u> </u> | | ļ | | | | | 140 | 340 | 140 | | | 20 | 620 |
| | | 2 Special Paved Side Ditch, 1 Deep, 4 Conc | | · . | <u> </u> | | 50 | | _ | <u> </u> | | | | | <u> </u> | - | 1-1 | | 50 | 50 |
| | | Z'Special Paved Side Ditch, Z'Deep,4"Conc. 3'Special Paved Side Ditch, 1'Deep,4"Conc. | | 10 | | 10 | - | - | - | - | | - | -+ | - | - | | \vdash | _ | 10 | 10 |
| | | 4'Special Paved Side Ditch,2' Deep,4'Conc. | | 170 | 10 | . : | | - | 1 | | _ | | | | | \vdash | | | 10 | 10 |
| _ | | najnate simperalitin strike bijih | | | | | | | - | | | | | | | 1 | | | | |
| 64 | 1-14 | 5'Special Paved Side Ditch, 2'Deep,4'Cond | L.F. | | | | | | 10 | .10 | | | | | | | | | 20 | 20 |
| 65 | 1-30 | 6"Extra Quality Drain Tile | L.F. | 150 | 1280 | _ | | | 740 | 630 | | . | | | | | | 2 | 800 | 2,800 |
| | | 8"Extra Quality Drain Tile | L.F. | 870 | | | | | 1040 | 880 | 290 | | | | | | | | 080 | .3080 |
| | | 12"Extra Quality Drain Tile | L.F. | 190 | | | <u></u> | <u> </u> | | ļ.,. | | | | | | | | | 190 | 190 |
| | _ | 6" Pipe Outlet for Farm Drainage | 4.75 | 20 | 20 | | 20 | 20 | - 00 | 20 | | | | _ | - | | \vdash | | 100 | 100 |
| | | 8" Pipe Outlet for Farm Drainage 12" Pipe Outlet for Farm Drainage | L.F. | 20 | - | <u> </u> | - | | 20 | 20 | - | | - | - | | - | - | | 40 20 | 20 |
| | | Class "C" Conc. for Structures | C.Y. | 28444 | | 1122 | 1326 | 6.66 | 21.51 | 3.07 | 0.90 | | | - | 15.16 | - | +-+ | 4 | 13.89 | _ |
| | | Reinforcing Steel | Lb. | 31,360 | 214 | 2747 | 3534 | 336 | 906 | 160 | 51 | | | | 724 | | | 40, | 032 | 40,000 |
| | | 24"S.S. Reinf. Conc. Culvert Pipe | L.F. | | | İ | | | 1 | | | | | | 106 | + | | 1 | 06 | 110 |
| 74 | I- 2 | 36"S.S. Reinf. Conc. Culvert Pipe | L.F. | | | | | | 104 | | | | | | | | | | 104 | 100- |
| | | 42"SS. Reinf. Conc. Culvert Pipe | L.F. | | | | 128 | | | | | | | | | | | | 28 | 130 |
| | | 30 Paved Invert Bitum. Coated CM.P.#14 Ga. | | ļ | | | | | 108 | | | | | | ļ | | 1-1 | | 108 | 110 |
| | | 36 Paved Invert Bitum Coated CMP#12 Ga. | | <u> </u> | | 154 | - | | - | - | <u> </u> | | | | - | - | | | 154 154 | 150 |
| | | 72"Paved Invert Bitum Coated C.M.P.# 8Ga. 78"Paved Invert Bitum Coated C.M.P.#8 Ga. | | | | 154 | 156 | | \vdash | | | | - | | | - | \vdash | _ | 156 | 160 |
| | | 18" S.S. Reinf. Conc. Culvert Pipe | L.F. | | - | | 64 | | - | - | | | | +- | 48 | | + | | 112 | 120 |
| 81 | 5.27 | 30" S.S. Reinf. Conc. Culvert Pipe | L.F. | | | t — | 36 | _ | | | | | - | +- | 44_ | 1 | | | 80 | 80 |
| | | 10" Extra Quality Drain_tile | L.F. | 890 | | | | | | | | | | | | | | 6 | 90 | 890 |
| | | | | | | | | | | | | | | | | | | | | |
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| 띵 | E E | | | SHEET NUMBERS | | | | | | | | | | | J. Si | | | | |
|---------------------|--------------|--|----------|----------------|----------|-------------|------------|--------------|--------------|--|--|----------|----------|--|----------|----------|--|------------------------|------|
| REFERENCE NUMBER | | DESCRIPTION | LINO | 5 | 6 | 7 | 9 | 11 | 12 | 14 | 15 | 8 | 10 | 13 | | | TOTALS | PROPOSAL QUANTITIES | |
| | | PAVEMENT | | | | Ι. | | | | | | | | | | | | | 1_ |
| 10. | 1-22 | Selected Sub-Base | C.Y. | 5,187 | 6240 | 6,762 | 6,716 | 6,734 | 6,720 | 7,070 | 2,222 | | | | | | 47,651 | 47 700 | 1 |
| 10. | 2 B-20 | 8" Waterbd. Mac. Bose Crs. 1-4" Courses | C.Y. | | | | -= | - | - | | | 773 | 7.77 | | | | 773 | 770 | 1 |
| 103 | | 5 Waterbd Mac Base Crs. 1-5 Course | C.Y. | | | | 1 | - ' | | | | 3.5 | 53 | 209 | | | 262. | 260 | 1 |
| 104 | B:35 | Asphaltic Conc. Leveling Course | C.Y. | | | | | | | | | 85 | 128 | | | | 213 | 210, | 1 |
| 10: | T-30 | Bitum. Prime Coat | Gal. | | | | | | | | | 1,088 | 2671 | 523 | | | 4282 | 4290 |] |
| 106 | - | | C.Y | | | | | | | | | | 3292 | | | | 3292 | 3300 |] |
| 107 | +- | Compacted Aggregate Base Course | C.Y. | <u> </u> | | | | <u> </u> | | | | | 1306 | | | | 1306 | 1310 | |
| 100 | | Bitum Macadam Surface Course | S. Y. | 8,644 | 10,400 | 11,284 | 10,200 | 11,224 | 11,200 | 10,760 | 2,868 | | | | | | 76,580 | 76,600 | |
| 10 | 7-35 | Asphaltic Conc. Surface Course Type A | C.Y. | | | | 1 1 | | | | | 112 | 391 | 62 | | | 565 | 570 | 1 |
| 110 | 7-71 | Reinf. Portland Cement Conc. Pavement 10" | S. Y. | 11,525 | 13,867 | 15,045 | 14,900 | 14,965 | 14,900 | 14,380 | 3,824 | | | | | | 103,406 | 103,400 |] |
| _ | | | | <u> </u> | <u> </u> | | | | | | | | | | | | | L | |
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| <u> </u> | - | | | l | | | | SH | EET | NUM | BERS | | | | | <u> </u> | | <u> </u> | _ |
| - | | | <u> </u> | 17 | | 26 | | | | <u> </u> | <u> </u> | | | | | | OTALS | <u> </u> | 4 |
| - | - | | 3 | | STR. | | | | ļ | ₩ | | | | | | | <u> </u> | <u> </u> | 4 |
| 1 | | 5 00 00 | | | NO.45 | | | _ | | | | | | \vdash | | - | <u> </u> | <u> </u> | _ |
| 11. | _ | | C.Y. | 229 | 255 | 229 | _ | - | 1 | | | <u> </u> | | \vdash | | 1 | 1203 | 1200 | 4 |
| 112 | | Excavation for Channels | C.Y. | - | | | 1,835 | - | | - | <u> </u> | | | | | - | 1835 | 1800 | 4 |
| 113 | | Rip Rap, Type "A" | _ | - | | | 1720 | - | - | <u> </u> | | | | \vdash | | | 1720 | 1720 | 4 |
| 114 | | Guard Rail, Type"A" | 2.F. | 101 | | 122 | 412 | | - | ├— | | | | | | 1 | 412 | 410 | - |
| 115 | - | Class"C"Conc for Structures | C.Y. | 424 | _ | 423 | 529 | - | - | - | <u> </u> | | | | _ | - | 1822 | 1800_ | ↓. |
| 110 | | Waterproofing, Type"C" | 5. Y. | 67.47 | 68 | 07.07 | 0505 | - | - | - | <u> </u> | _ | | | - | - | 68 | 70 | - |
| 111 | | Reinforcing Steel | Lb. | _ | 82,380 | | | | · · | - | | - | | \vdash | | + | 282,886 | 282,900 | - |
| 1/2 | | Structural Steel | 4.6. | | 197,861 | | | | | - | - | | - | | | - | 7/6,454 | + - | 4 |
| 119 | | Structural Expansion and Contraction Sts. Standard Handrail, Tupe "A" | 1.h | 12,836 | 14,616 | 13,016 | | 1 | | - | | | | - | - | + | 52,836 | 52,800 | + |
| 120 | _ | Furnishing Shells for Piles, 12"Dia. C. I. P. | Z.F. | 100 | 500 | 210 | 412 740 | | <u> </u> | - | | | | - | _ | - | 4/2 | 400 | |
| - | | | L.F. | 390 | _ | 310 -310 | 740 | | | - | - | | | - | | - | 2020 | 2000 | ┨: |
| 122 | | Driving and Filling Piles Splicing Piles | Ea. | 6 | 20 | . 15 | 45 | - | - | - | | | | | - | + | 2020 | 2000 | - |
| 123 | | Anchoring Piles in Rock | Ea. | 6 | 20 | 15 | 45 | - | - | | 1 | | - | \vdash | -+ | | 86 86 | 86 | |
| 12: | | Scuppers, Type "B" | Ea. | 4 | 4 | 4 | | + | ┼─ | - | - | | | - | | +- | 12 | 12 | ┨. |
| 12 | | | | 100 | 100 | 100 | 10 | | 1 | 1 | - | | - | | | + | 310 | 310 | † |
| 12 | _ | | L.F. | 280 | 280 | 280 | - | | \vdash | | T | T- | | | | + | 1080 | 1100 | 1 |
| 128 | _ | Asphaltic Conc. Surface Course, Type "c" | C.Y. | 1-33 | 23 | | 1 / 3 | +- | - | +- | 1 - | | - | | | + | 23 | 23 | 1 |
| 129 | _ | | L.F. | 434 | _ | 428 | <u> </u> | + | | <u> </u> | | | | | | + - | 1296 | 1300 | 1 |
| 130 | | | Ea. | 1.57 | + | 1 | 1 | + | _ | + | | _ | | | \dashv | + | . 2 | 2 | 4- |
| 170 | 10.0 | 7,7,6,7,6,7,1,66 | -a. | 1 | | - | 1 | | - | | | | | | | +- | | + E | + - |
| - | + | | - | + | - | | | | + | 1 | | | | | | + | | | - |
| | + | | 1. | +- | t — | | <u> </u> | | 1 | | 1 | \vdash | | | | + | | | 1 |
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| . — | | MISCELLANEOUS | | 1 | | | | 1 | | | | | | | + | 1 | 1 | 1 - | 1 |
| 13 | T. 24 | Construction Contract Information Signs | Ea. | 1 | | | | | | _ | | | | - | | + | 2 | 2 | 1 |
| 1 | | 2000 | 1 | 1 | | t | | 1 | t | _ | | | _ | | | + | | - | - " |
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| HEET | TOTAL EXCAVATION | GRADING A | NALYSIS BORROW=1:10 | |
|------|------------------|------------|------------------------|--|
| NO. | AVAILABLE = C | REQUIRED=F | (F = 0.85 C) | REMARKS |
| 5 | 19,528 | 10,182 | | 7,549 C.Y. Excess Haul 7,549 C.Y. to Sh.# 6 |
| 6 | 7,892 | 15,809 | | Haul 7,549 C.Y. from Sh.*9 |
| 7 | 24,800 | 56,677 | | Haul 41,879 C.Y. from Sh. #9 |
| 8 | 395 | 43,557 | 31,887 | Haul 16,768 C.Y. from Sh.#5 |
| 9 | 91497 | 25,230 | | 61,815 C.Y. Excess Haul 3168 C.Y. to 5h. *6 Haul 41,879 C.Y. to 5h. *7 Haul 16,768 C.Y. to 5h. *8 |
| 10 | 6,784 | 36,172 | 596 | Haul 35134 C.Y. from 5h.*1 |
| П | 79,771 | 4,847 | | 74,069 C.Y. Excess Haul 38935 C.Y. to Sh. 12. Haul 35134 C.Y. to Sh. 10 |
| 12 | 14,248 | 45,206 | - | Haul 38,935 CY from Sh.1, |
| 13 | 706 | 21,309 | 22,780 | |
| 14 | 16,697 | 129,594 | 126,942 | |
| 15 | 1,150 | 27,644 | 29,333 | |
| • | | | | |

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|----------|--|-----|----------|
| \dashv | | | |
| A | AS-BUILT PLANS | | Feb56 |
| 2] | Revised Moint Area; misc drainage revisions | ÆP. | 11.23.53 |
| Δ | Revised Quantities of Maintenance Area; Rev Borrow and Grading Analysis. | ₫£® | 10-6-53 |
| VO. | REVISION | ву | DATE |

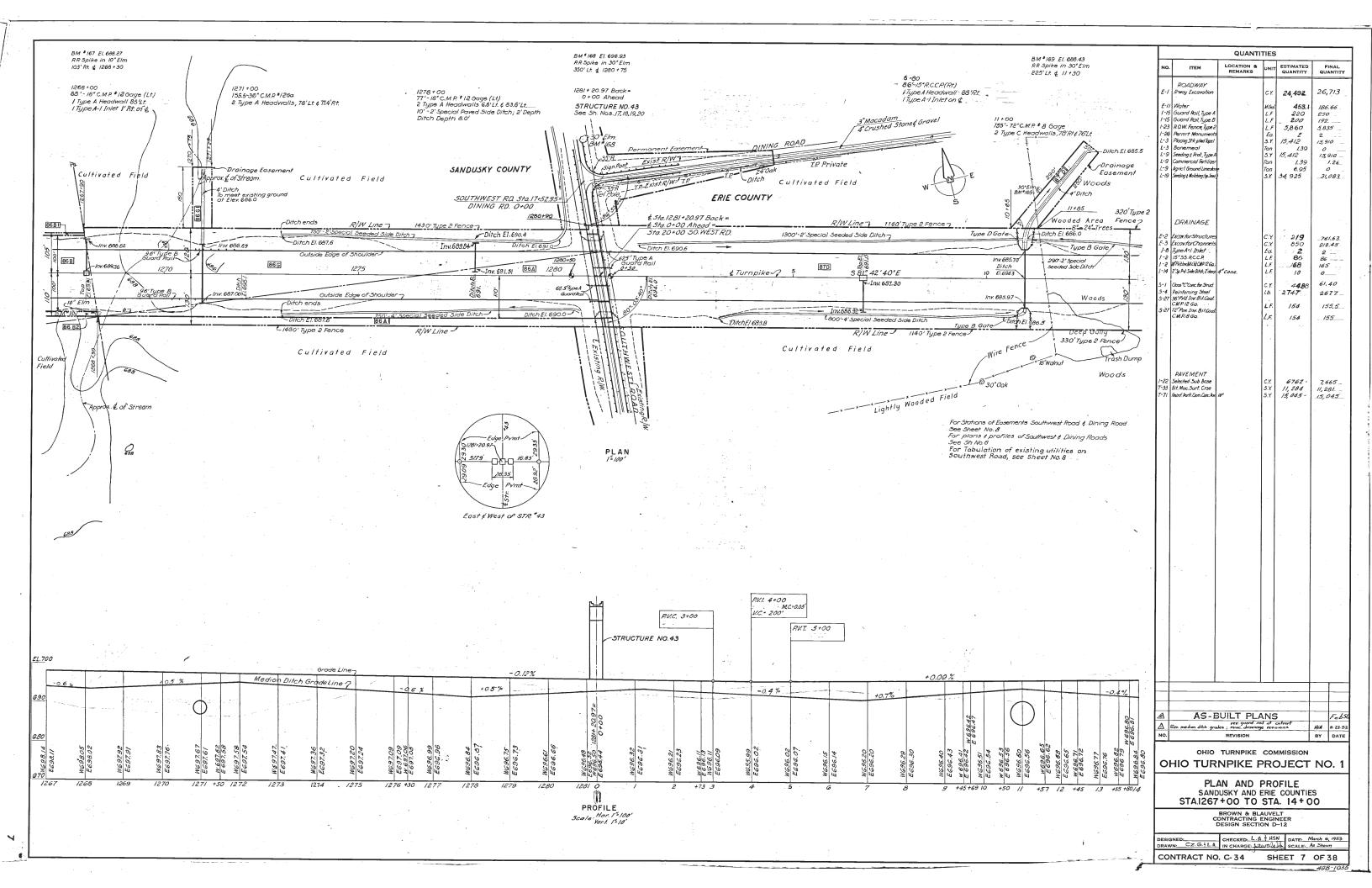
OHIO TURNPIKE COMMISSION
OHIO TURNPIKE PROJECT NO. 1

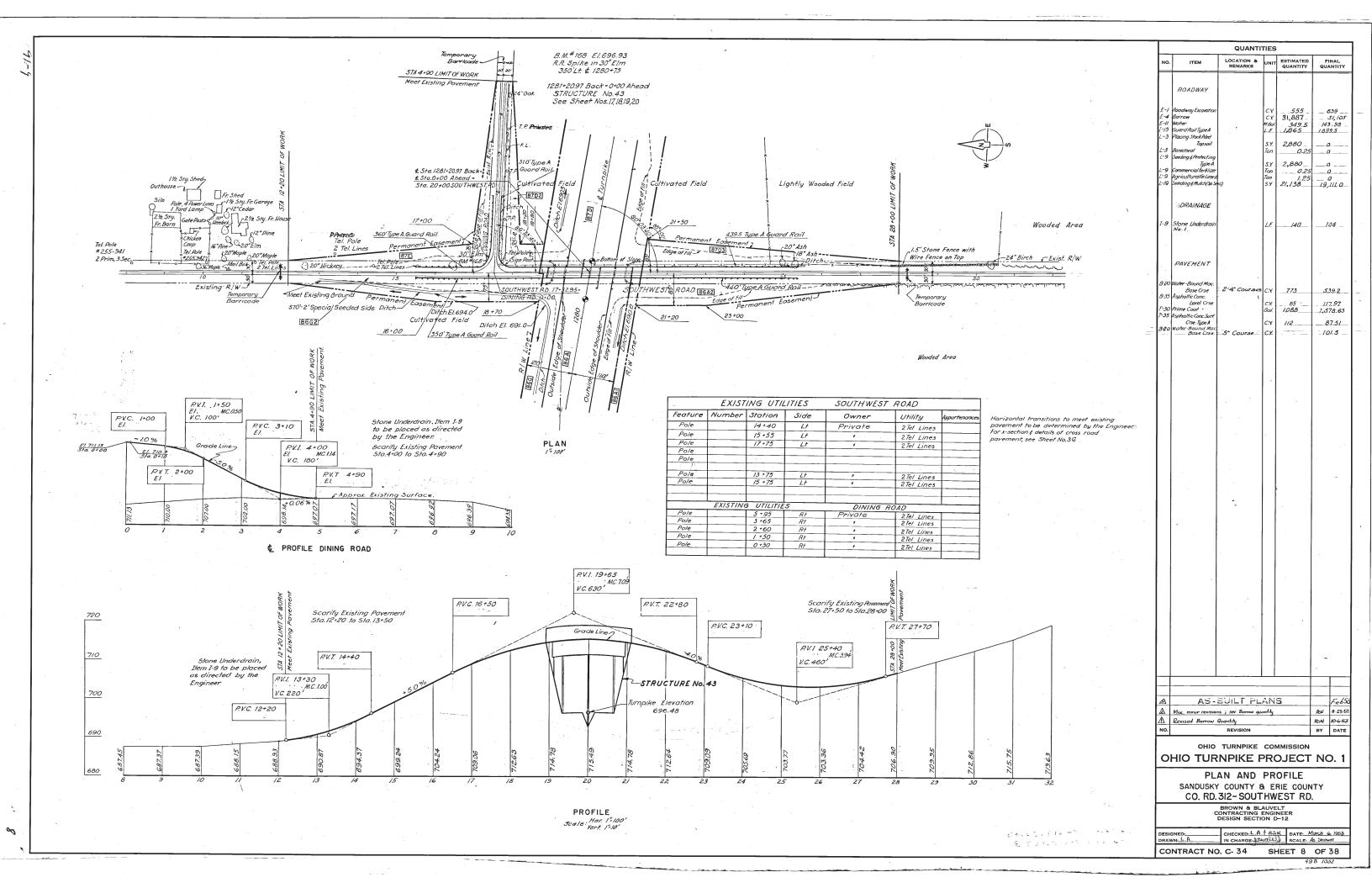
SUMMARY OF ESTIMATES

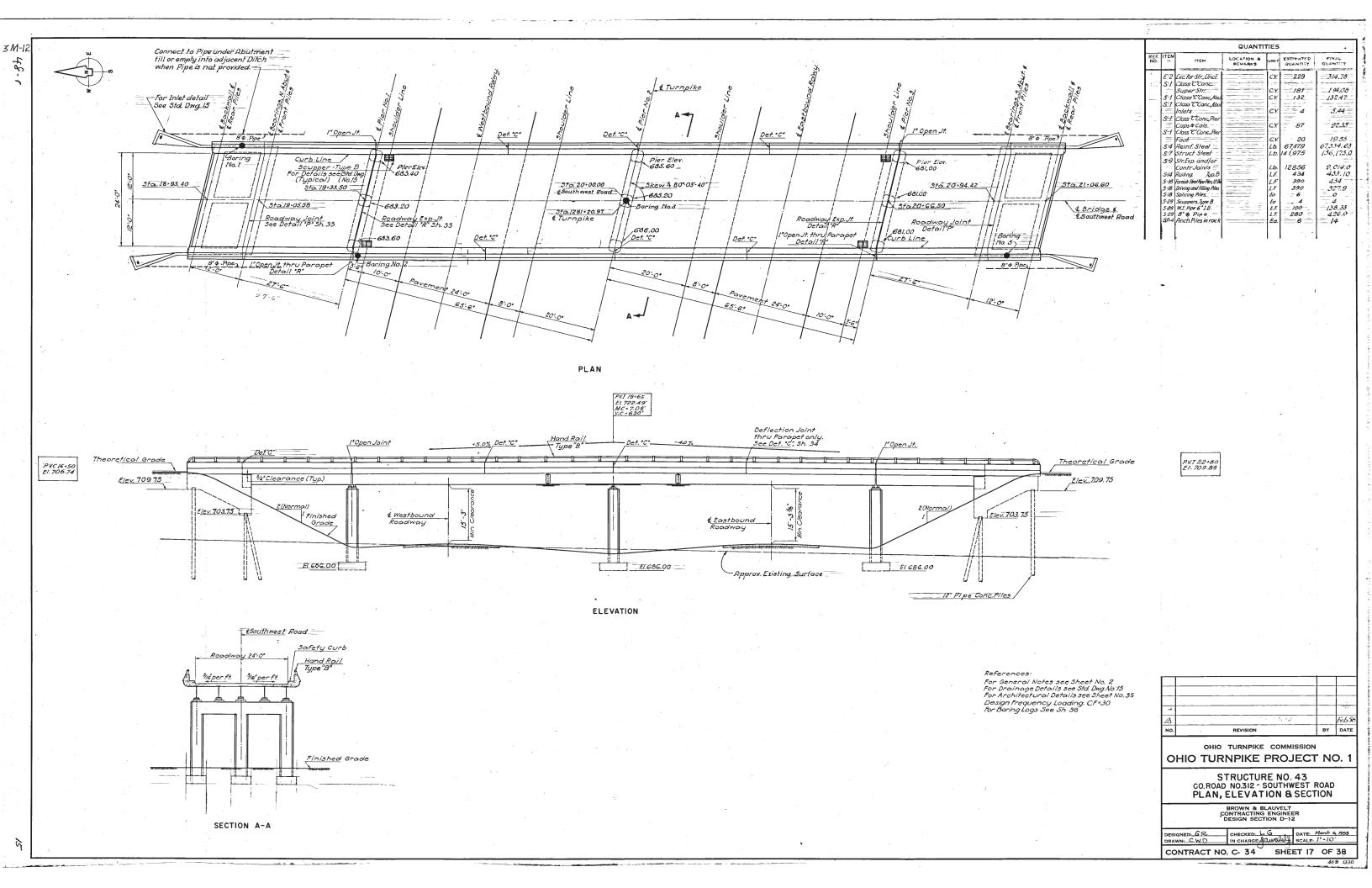
BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12

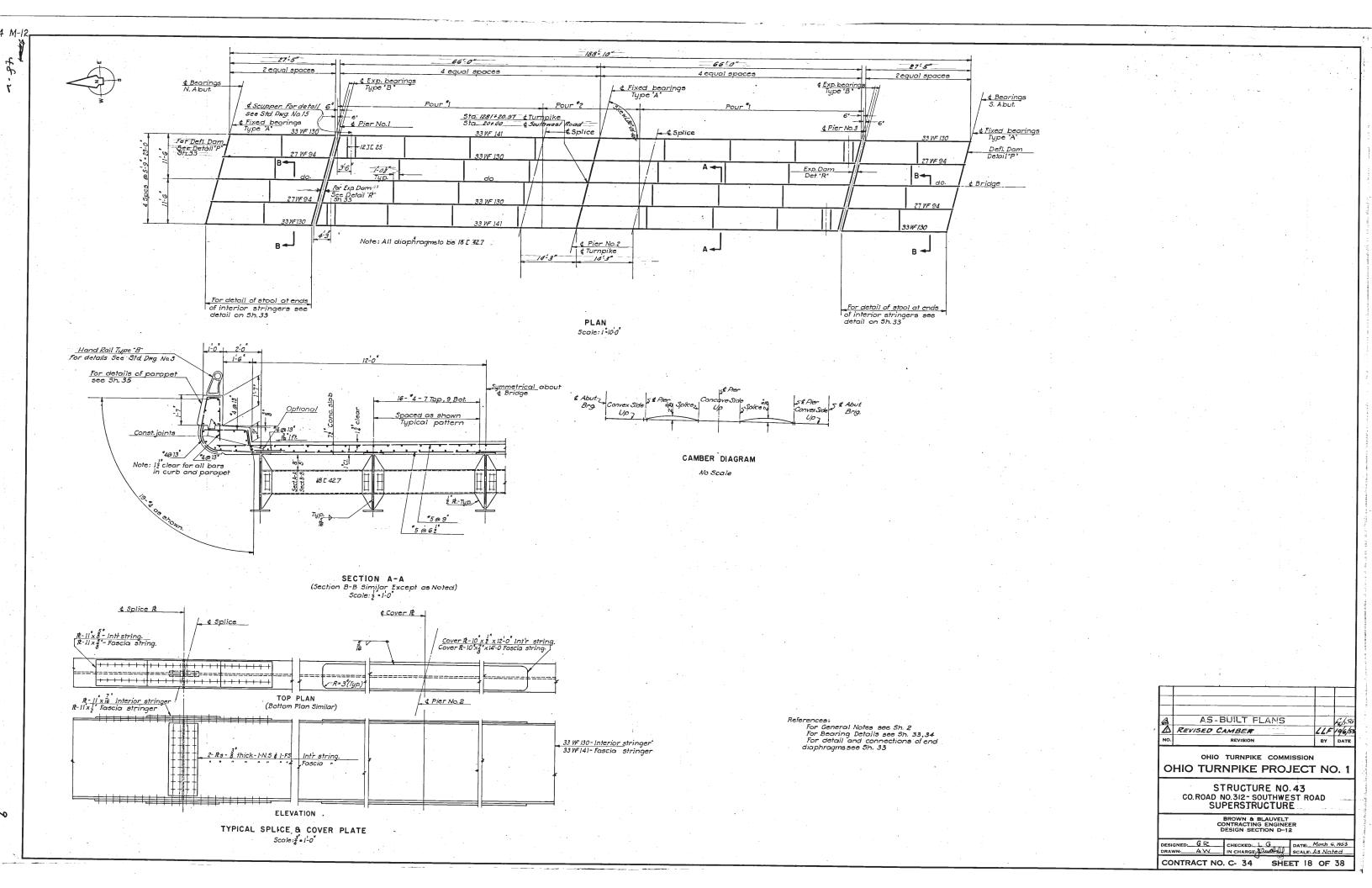
CONTRACT NO. C-34 SHEET 4 OF 3

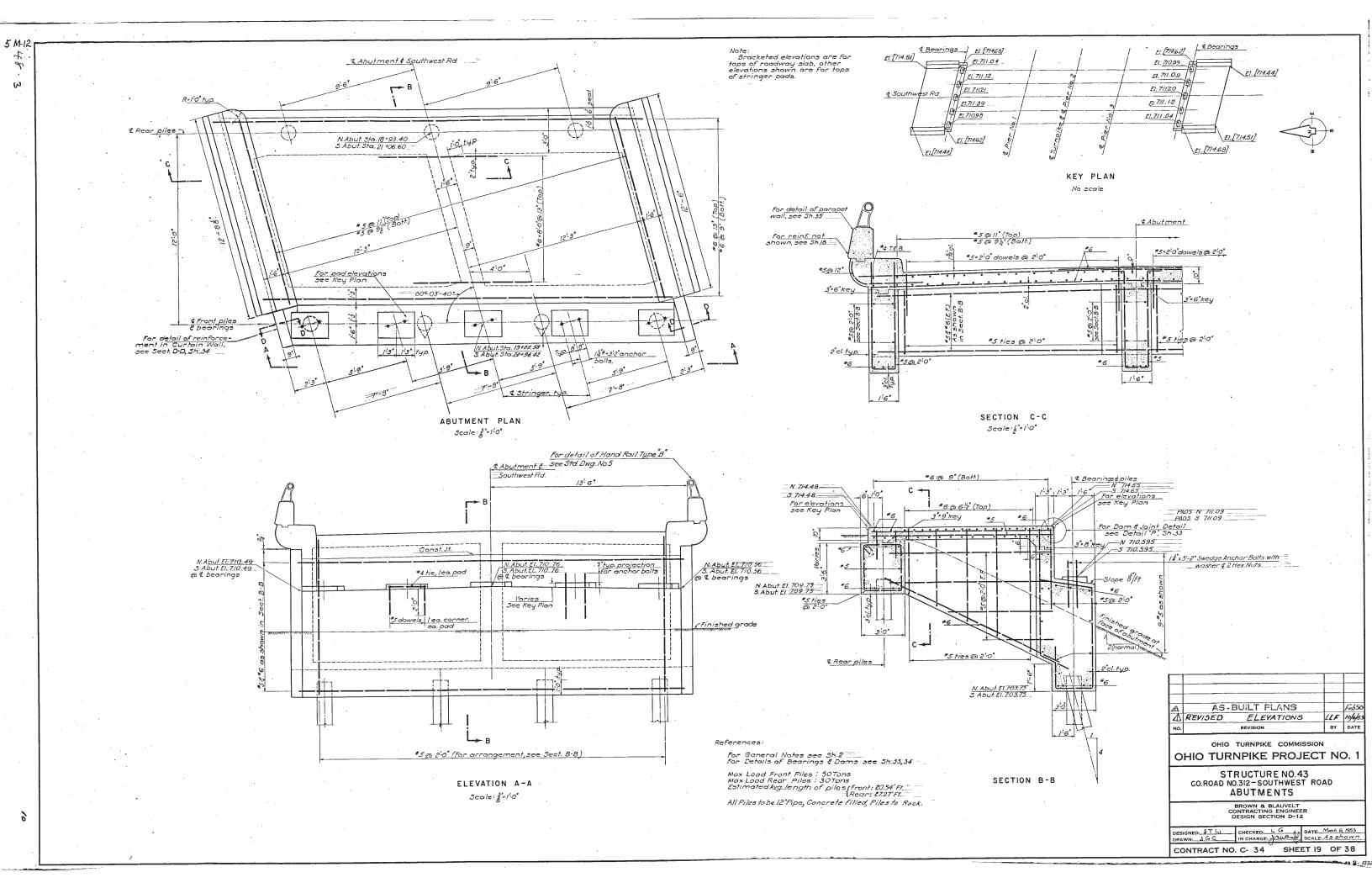
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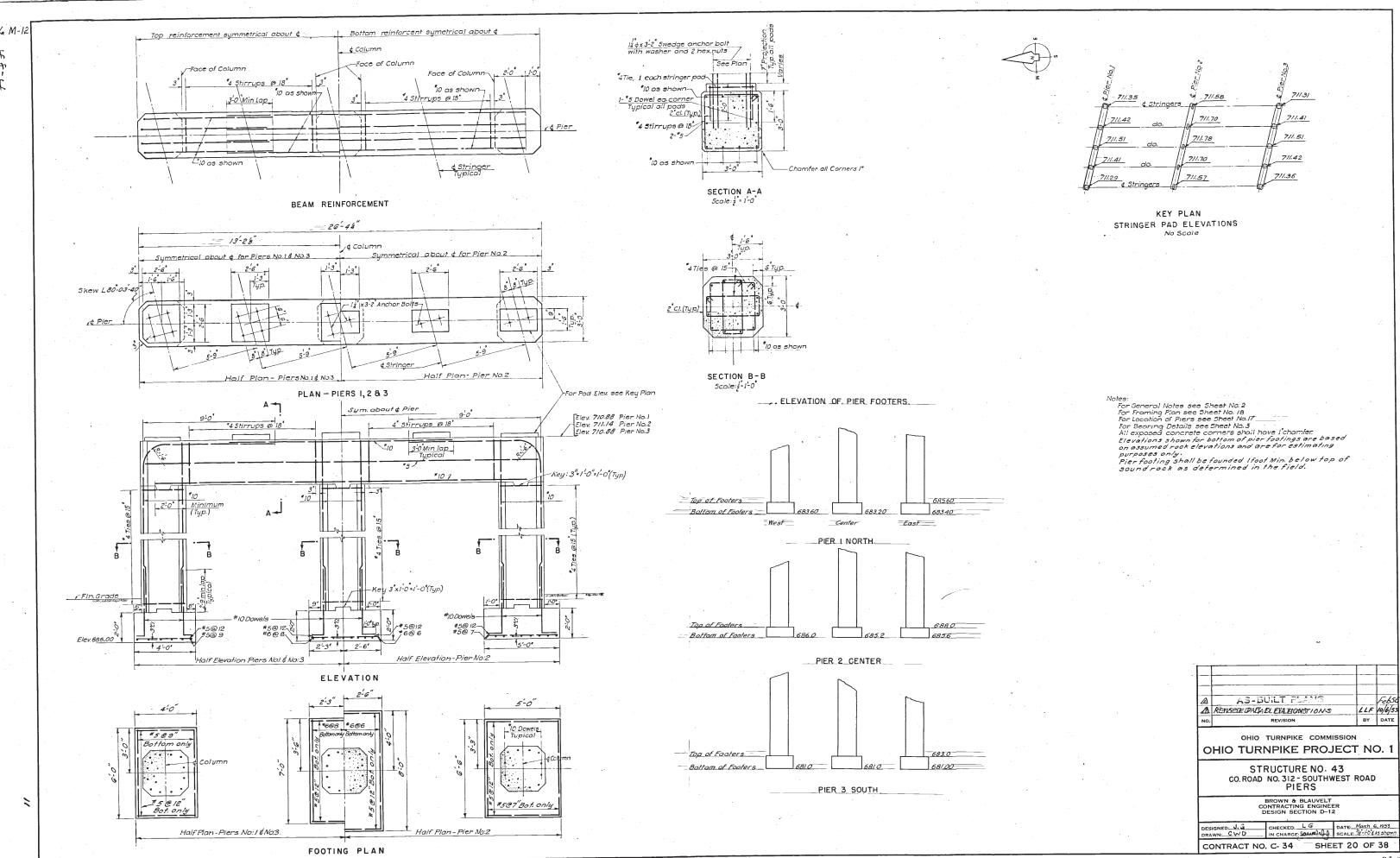


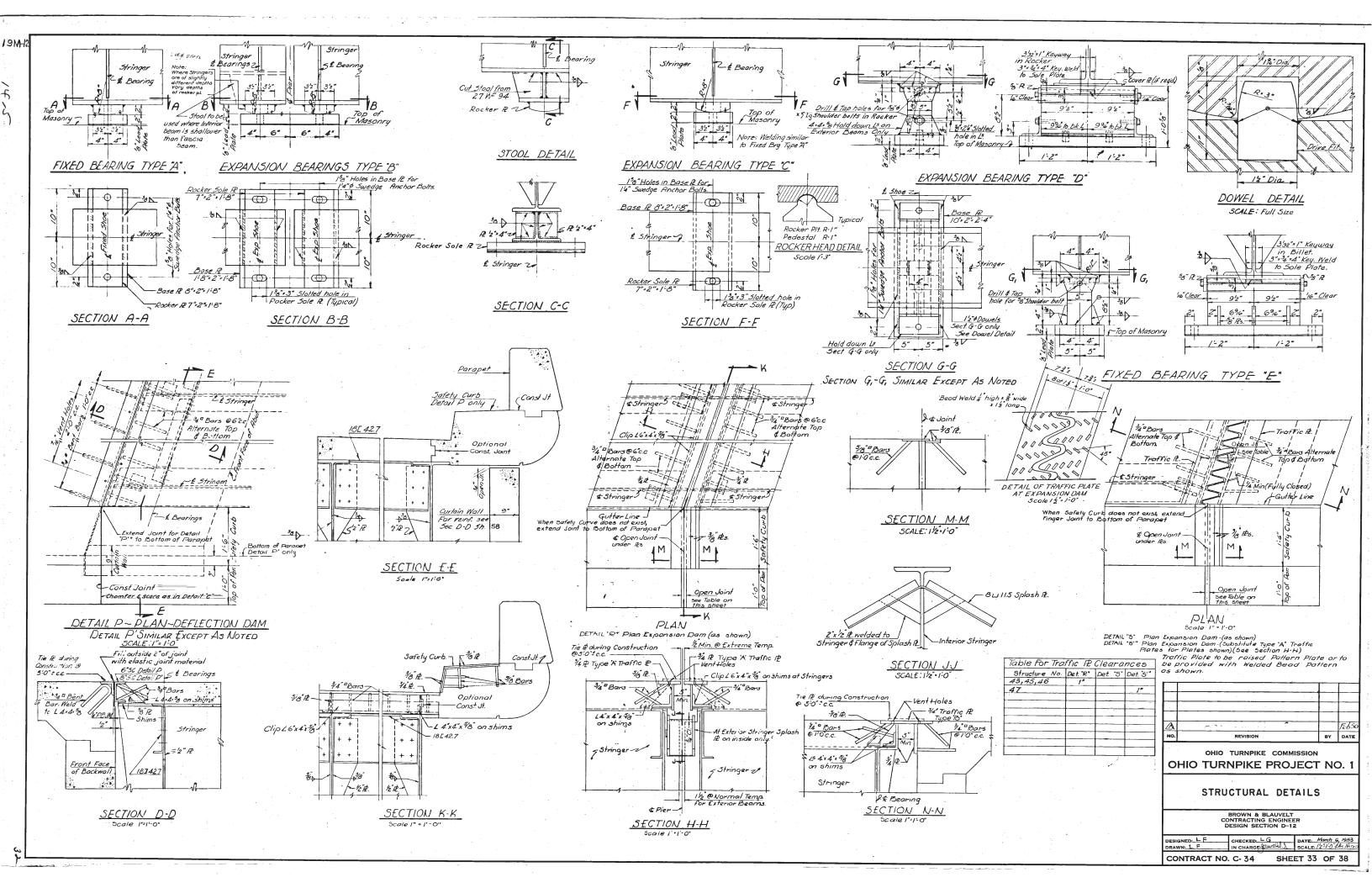


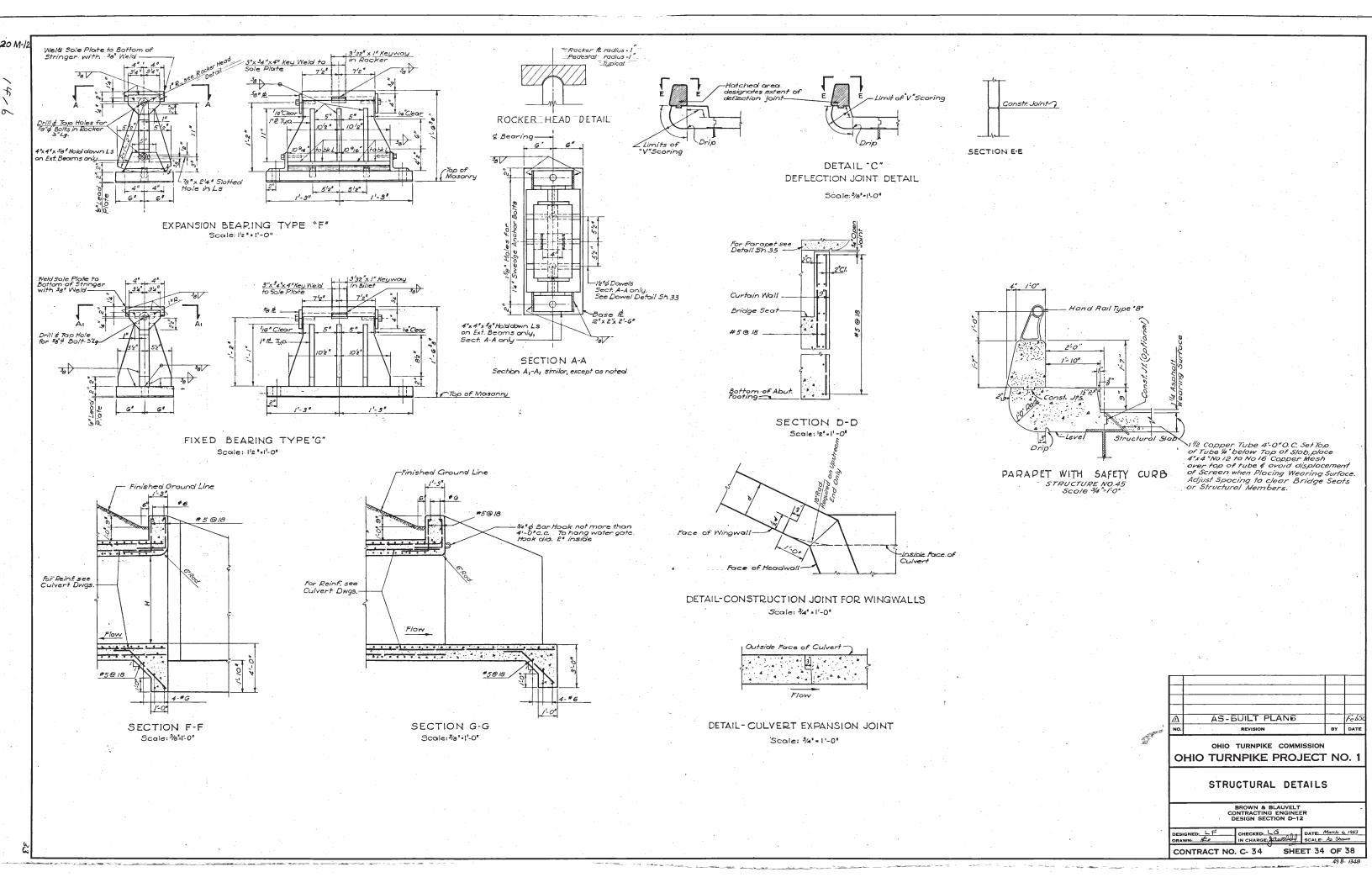


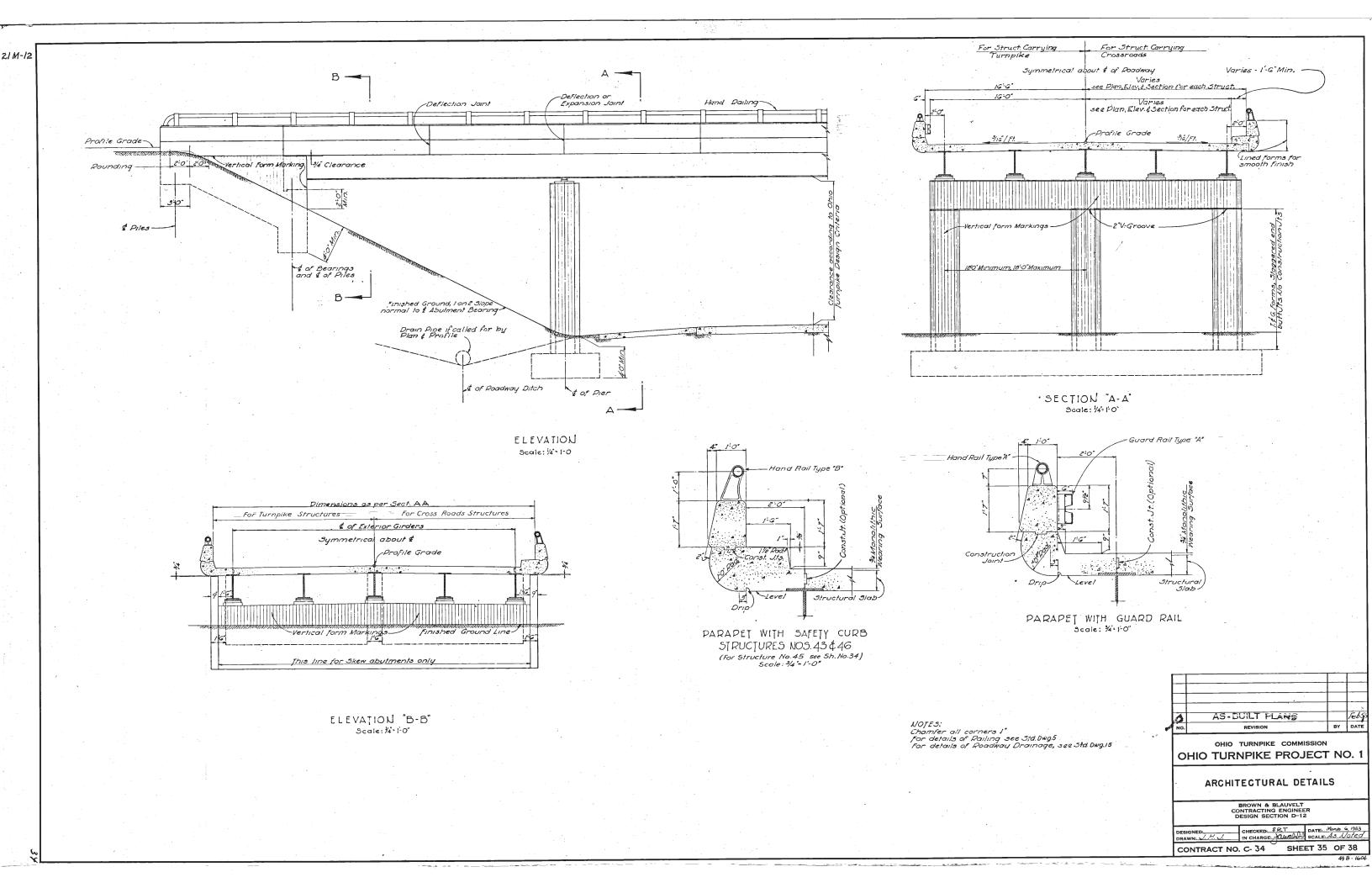












OHIO TURNPIKE COMMISSION

TITLE SHEET
GENERAL SUMMARY AND GENERAL NOTES

PLANS, PROFILE AND QUANTITIES, BRIDGE "1
TYPICAL SECTIONS, DRAINAGE DETAILS AND PAVEMENT
ELEVATIONS, BRIDGE "1

CONCRETE BARRIER PLAN AND DETAILS, BRIDGE -1

PLANS, PROFILE AND QUANTITIES, BRIDGE #2

TYPICAL SECTIONS, DRAINAGE DETAILS AND PAVEMENT

ELEVATIONS, BRIDGE #2
CONCRETE BARRIER PLAN AND DETAILS, BRIDGE #2
DETOUR PLAN, BRIDGE #2

STRUCTURE GENERAL NOTES

GENERAL PLAN, ELEVATION AND ESTIMATED QUANTITIES, BRIDGE #1

ABUTHENT SLAB PLAN, SECTIONS AND DETAILS, BRIDGE *1
PARTIAL FRAMING PLAN AND MISCELLANEOUS DETAILS, BRIDGE *1

DECK PLAN, TYPICAL SECTIONS AND PAVEMENT ELEVATIONS, BRIDGE #1 REINFORCEMENT SCHEDULE, BRIDGE #1

GENERAL PLAN, ELEVATION AND ESTIMATED QUANTITIES, BRIDGE *2
ABUTMENT SLAB PLAN, SECTIONS AND DETAILS, BRIDGE *2

PARTIAL FRAMING PLAN AND MISCELLANEOUS DETAILS, BRIDGE =2

DECK PLAN, TYPICAL SECTIONS AND PAVEMENT ELEVATIONS, BRIDGE #2

REINFORCEMENT SCHEDULE, BRIDGE #2

DEMOLITION PLANS AND SECTIONS

CATCH BASIN DETAILS

25 REINFORCED CONCRETE APPROACH SLAB 26A DECK JOINT DETAILS

STANDARD DRAWINGS

FENCE DETAILS AT BRIDGES

BRIDGE TERMINAL ASSEMBLIES

BP-2 PAVEMENT REINFORCING BP-5 PAVEMENT RESURFACING BP-7 CONCRETE CURBS MC-4 DRAINS AND SEWERS F-2 WOVEN WIRE FENCE

GR-1 GUARDRAIL DETAILS GR-2B GUARDRAIL, TYPE 5 GUARDRAIL DETAILS

F-I CHAINLINK FENCE

26B BARRICADES AND GATES

27 CHAIN LINK SAFETY FENCE DETAILS, TYPE II

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

OHIO DEPARTMENT OF TRANSPORTATION

STANDARD BRIDGE RAILING DEFLECTOR PARAPET TYPE

THE JAMES W. SHOCKNESSY OHIO TURNPIKE

CONTRACT F.T.P. 43 -89-18

DECK REPLACEMENT

STATE ROUTE 269 OVER OHIO TURNPIKE - MILEPOST 106.8 ORIGINAL CONTRACT SECTION C-34 ERIE COUNTY

CONTRACT C.I.P. 43 - 89 - 17 (PART 2)

DECK REPLACEMENT

BILLINGS ROAD OVER OHIO TURNPIKE - MILEPOST 108.7 ORIGINAL CONTRACT SECTION C-33 ERIE COUNTY

EXIT 7 STATE ROUTE 269 BRIDGE, (BRIDGE NO. 1), OVER THE OHIO TURNPIKE AT MILEPOST 106.8 BILLINGS ROAD BRIDGE, (BRIDGE NO. 2), LOCATION PLAN

NOTE:

THIS CONTRACT IS COMBINED WITH CONTRACT CIP: 43 - 89 - 17 (PART I) TO FORM A SINGLE CONSTRUCTION CONTRACT

PLANS PREPARED BY



ARCHITECTS - ENGINEERS CLEVELAND, OHIO

1-11-85 2-5-82

2-5-82



APPROVED FOR

** CIP 43-89-17

GENERAL SUMMARY

| ** | CIP | 43-8 | 39- | 17 | | (| GΕ | NEF | RAL | | SUMMARY |
|---------|-----------|---------------------|----------|----------|------------|---------|--------------|-------------|------------|------------------|--|
| 2 | | EE | Γ • * | 8*1 | NUN *Šì | | TÉM | QUAN. | * * | LINE | DESCRIPTION |
| LUA | AP . | \perp | 1 | | | | 103.65 | LUMP | LUME | LUH | PREMIUM FOR CONTRACT PERFORMANCE AND PAYMENT BONG |
| | _ | | | | | | | | - | | |
| | 300 | 5 10 | 0 | 1375 | 100 | | 202 | 400 | 1575 | | T. GUARDRAIL REMOVED |
| | 510 | | | 217 | | | 262 | 219 | 217 | LINE | T. GUARDRAIL REMOVED FOR REUSE T. FENCE REMOVED |
| _ | 4 | | | 4 | | | 202 | 4 | 4 | EACH | INLET REMOVED & PLUG PIPE |
| | 166 | | _ | 03 | | | 203 | 435 166 | 55I 203 | SQ. Y | |
| _ | 1.0 | | _ | 1.0 | | | 203 | 166 | 1 | CU. YI | D. EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION D. EMBANKMENT |
| _ | # | | \pm | _ | | | | | - | + | |
| | 30 | ╁ | + | 50 | | | 301 | 36 | 50 | CU.YD | DITIMUMOUS LOOPED LTG IN LA |
| | 72 | 20 | _ | | 52 | | 5P304 310 | 29 | 52 | CU.YD | AGGREGATE BASE |
| _ | 17 | 17 | | 4 | 33. | | 402 | 72 34 | 9 <u>7</u> | CU.YD | |
| _ | 128 | +- | | 81 | | | 404 | 128 | 12 | GAL. | ASPHALT CONCRETE, AC-20 |
| _ | | 1 | | | | | | | | | PRIME COAT |
| | 2 | +- | | 2 52 | | | 603 | 2 60 | 2 52 | CU.YD. | ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER 12" CONDUIT, TYPE B, 706.02 |
| | 124 | \vdash | - | 15 | | | 603 | 124 | 115 | LIN.FT | . 12" CONDUIT, TYPE F. 707.01 (EXCEPT GALVANIZED) |
| | 4 | | \pm | 4 | | | P604 | 4 | 4 | EACH | OR 707.15, TYPE C WITHOUT PAVED INVERT |
| ġĠ. | - | 50 | + | \dashv | 100 | | 605 P606 | 50 | 100 | LIN. FT | AGGREGATE DESINE |
| | 300 | | | | | | 606 | 300 | | FIRE I | GUARDRAIL REBUILT TYPE 5 GUARDRAIL, REBUILT, TYPE 5 |
| _ | 37.5 4 | 2 | | 75 4 | 4 | + | 606 | 37.5 6 | 1275 8 | LIN.FT. | GUARDRAIL, TYPE 5 BRIDGE TERMINAL ASSEMBLY, TYPE A |
| | - | | + | 4 | | | 606 | | "4 | EACH | ANCHOR ASSEMBLY, TYPE A |
| _ | | | | | | | | | | | |
| | 330 | - | | 81 | | | 607 P607 | 330 | 217 481 | LIN.FT. | FENCE, TYPE 47 |
| _ | 2 | | | 2 | | | P601 | 2 | 2 | EACH | TEMPORARY FENCE (7'-0" CHAIN LINK WITH SPECIALS) TEMPORARY GATE (14'-0") |
| | 65 | | 68 | | | | 609 | 65 | 68 | LIN.FT. | CONCRETE CURB, TYPE 6, AS PER PLAN |
| | 111.0 | - | 0 | 4 | - | 3 | P611 | 111 . | .97 | SQ.YD. | CLASS S CONCRETE APPROACH SLAB, USING |
| мP | | | 1 | 1 | | - | 2/14 | | | | SHRINKAGE COMPENSATING CEMENT (T-10") |
| _ | | | | \perp | | . 5 | P614 | LUMP | LUMP | LUMP | MAINTAINING TRAFFIC |
| _ | 5. | | 0.0 | 24 | - | | 617 | 0.10 | 0.24 | CU.YD, M.GAL. | COMPACTED ASGREGATE |
| (P | | | F | | | | | | | | |
| | | | \perp | \pm | - | 19 | P619 1 | LUMP | LUMP | LUMP | FIELD OFFICE |
| + | | 100 | ╀ | - 7 | .00 | | 22 | 100 | 200 | LIN.FT. | WIND D. ASSAULT |
| (9) | | | | 1 | | | | | | | |
| P | | | | \pm | | | 623 L | | LUMP | LUMP | CONSTRUCTION LAYOUT SURVEY MOBILIZATION |
| _ | - | | - | + | - | | 53 | 50 | | CU.YD. | |
| 0 | | | _ | 1 | | - 6 | 59 1 | 000 | 1000 | SQ.YD. | TOPSOIL FURNISHED AND PLACED SEEDING AND MULCHING |
| | | | | | | | 59 (| 0.16 | 0.15 | TON | COMMERCIAL FERTILIZER |
| + | - | | - | + | | _ | \perp | | | | · |
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GENERAL NOTES

ELEVATION DATUM

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

CLEARING AND GRUBBING

THE CONTRACTOR SHALL SCALP AREAS, REMOVE ALL BRUSH AND OTHER OVERGROWTH OF VEGETATION IN AREAS OF FENCE REMOVAL AND REPLACEMENT OR IN AREAS OF TEMPORARY FENCE: NO SEPERATE PAYMENT SHALL BE MADE FOR CLEARING AND GRUBBING, BUT SHALL BE CONSIDERED INCIDENTAL TO THE FENCE ITEMS.

ITEM 605 AGGREGATE DRAINS

EXISTING AGGREGATE DRAIN MATERIAL DAMAGED DURING CONSTRUCTION SHALL BE REPLACED, RESHAPED OR RESTORED AND OUTLETS MAINTINED IN ACCORDANCE WITH THE REQUIREMENTS OF ITEM 605, NO ADDITIONAL PAYTENT'S SHALL BE MADE FOR THIS ITEM, AGGREGATE DRAINS SHALL BE INSTALLED AT LOCATIONS AS DIRECTED BY THE ENGINEER IF FIELD CONDITIONS DICTATE THEIR INSTALLATION, THE FOLLOWING CONTINGENCY QUANTITY FOR ITEM 605-AGGREGATE DRAINS AS SHOWN ON STANDARD DRAWING BP-5 HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS WORK.

ITEM 605-AGGREGATE DRAINS-200 LIN. FT.

ITEM 659 SEEDING AND MULCHING

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR SEEDING AND MULCHING OF AREAS DISTURBED BY THE CONSTRUCTION OPERATIONS, AND IS TO BE USED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS WITH HIS CONSTRUCTION OPERATIONS SO AS TO MINIMIZE THE AREAS DISTURBED, PAYMENT FOR ITEM 659 SEEDING AND MULCHING SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR ACCEPTED QUANTITIES COMPLETE IN PLACE AS DIRECTED AND DOCUMENTED BY THE ENGINEER.

TEM 653 TOPSOIL FURNISHED AND PLACED-100 CU. YDS... ITEM 659 SEEDING AND MULCHING-2,000 SQ. YDS ITEM 659, COMMERCIAL FERTILIZER-0.30 TON

THE OHIO TURNPIKE COMMISSION

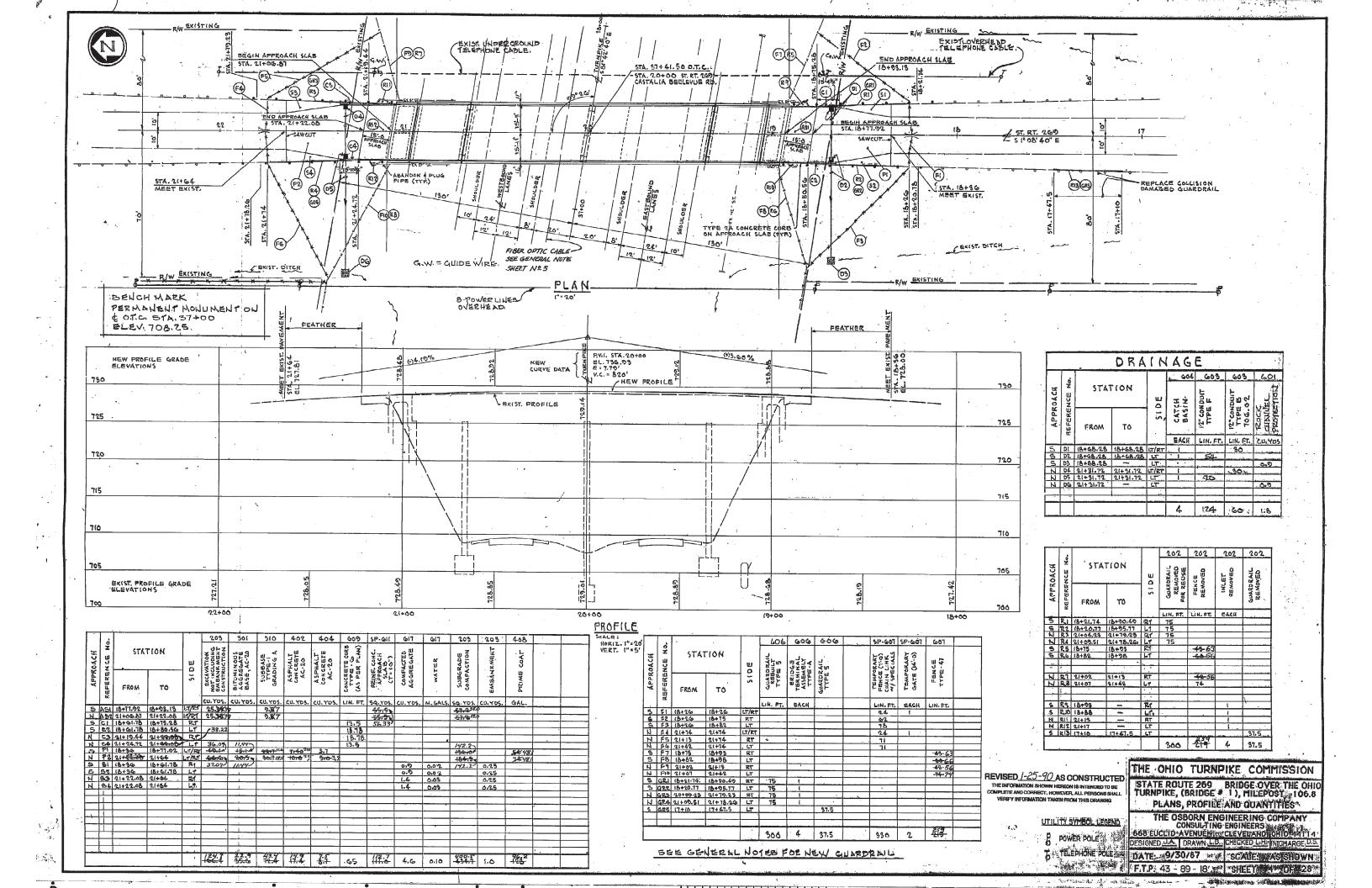
BRIDGES OVER THE OHIO TURNPIKE AT:
STATE ROUTE 269 (BRIDGE *1) MILEPOST 106.8
& BILLINGS ROAD (BRIDGE *2) MILEPOST 106.7
GENERAL SUNTARY AND GENERAL NOTES

THE OSBORN ENGINEERING COMPANY
CONSULTING ENGINEERS (1) 1 CLEVELAND (0HIO) 4811

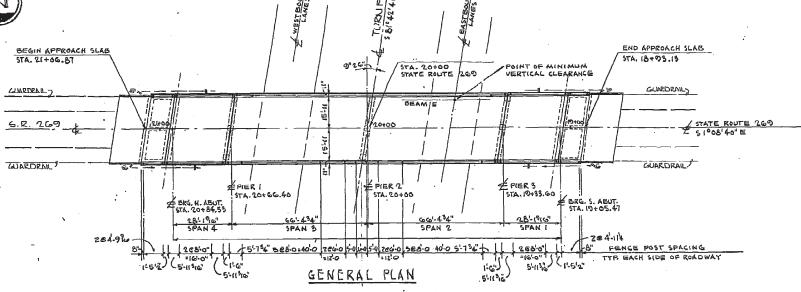
DESIGNED E.L. DRAWNU.W., CHECKED INTERPRICHARGE D. DATE: 9/30/87

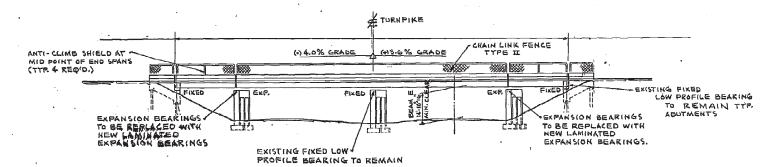
ALDIZE SE GPARTZ SHEET 2 OF 2

REVISED 1-25-90 AS CONSTRUCTED THE INFORMATION SHOWN HEREON IS INTENDED TO BE COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SHALL VEHIEV INFORMATION TAKEN BEGIN THIS DOWNER.









WEST ELEVATION

| | | 1 1 | ESTIMATE | QUANTITIES | L | | |
|-------------|-------------|--------|--|----------------|--|-------|---------|
| ITEM | TOTAL | UNIT | DESCRIPTION | SUPERSTRUCTURE | ABUTMENTS | PIERS | GENERAL |
| 5P202 | LUMP | * LUMP | PORTIONS OF STRUCTURES REMOVED | | | | LUMP |
| 202 | 354 | 154 92 | WEARING COURSE REMOVED, AS PER PLAN | 354 | | | |
| 503 | 14 | CU.YD. | ABUTMENT BACKFILL, AS PER 503:10 | | 14 | | |
| 510 | 10 | LINFT | DOWEL HOLES, USING SP853 GROUT ANCHORING * | | 10 | | |
| 503 | 3 | CU.YD. | UNCLASSIFIED EXCAVATION, AS PER PLAN | | | | |
| SPSIC | 17 | CU.YD. | CLASS C CONCRETE, ABUTMENTS | | l | | |
| SPSIIA | 2(6) | CU. YO | | 2(6 | ' | | |
| 4. 4 | | 1 | BARRIERS, USING SHRINKAGE COMPENSATING CEMENT | | | | |
| SP511A | 35 | CU. YD | CLASS 5 CONCRETE, ABUTMENT SLABS AND BARRIERS | - | 35 | | |
| | | | USING SHRINKAGE COMPENSATING CEMENT | | | | |
| | | 1 | | | | | |
| SP513 | 830 | EACH | WELDED STUD SHEAR CONNECTORS | 830 . | | | |
| | 147 | 50 57 | THE A ALBERTA OF CULTURE CTAILSTIP II CTES | 161 | | | |
| SP514 | 167 | SO,FT. | FIELD PAINTING OF EXISTING STRUCTURAL STEEL SURFACE PREPARATION—TOP FLANGE OF EXISTING BEAMS | 907 | | | |
| SP514 | 767 | 50.FT. | SURFACE PREPARATION-TOP FLANGE OF EXISTING BEATS | 381 | | | |
| 516 | 6 | EACH | LAMINATED ELASTOMERIC EXPANSION BEARINGS, COMPLETE. | | | 9 | |
| | | | AS PER PLAN (E1) | | | | |
| 516 | (6 | EACH | LAMINATED ELASTOMERIC EXPANSION BEARINGS, COMPLETE, | | | (0 | |
| | | | AS PER PLAN (E2) | | | | |
| 516 | 4. | EACH | LAMINATED ELASTOMERIC EXPANSION BEARINGS, COMPLETE, | | 11 | 4 | |
| | | | AS PER PLAN (E3) | | | | |
| | | | | | | 670 | |
| SP519 | 670 | SQ. FT | PATCHING CONCRETE STRUCTURES | | | 610 | |
| SP527 | LUMP | LUMP | FALSEWORK, TEMPORARY BRACING AND | | | | LUMP. |
| 0.02. | | | PROTECTIVE STRUCTURES | | | | |
| SP529 | 26 | EACH | TRIM ENDS OF STRUCTURAL STEEL MEMBERS | (8 | 8 | | |
| | | | r de la companya de l | 65.5 | <u> </u> | | |
| SP533 | <u>65.5</u> | LIN.FT | 3" CONTINUOUS STRIP" SEAL IN STRUCTURAL STEEL JOINT | | | | |
| SP533A | 65.5 | LIN.FT | STEEL COINT | Ø5.5 | | | |
| ar 35574 | | | STRUCTURAL STEEL JOINT | | , | | |
| | | | | | 140 | | |
| SP536 | (3(5 | SQ.YD. | CONCRETE WEATHERPROOFING | (486 | 911 | | 101 |
| SP607() | 425 | LINET | TYPE II FENCE (6'-0" CHAIN LINKS WITH SPECIALS) | | | | |
| SP607(1) | 4/25 | LINET | | | | | |
| ., | 46- | - | WITH SPECIALS) | | | | |
| SP824 | 56.016 | I BC | EPOXY COATED REINFORCING STEEL, GRADE 60 | 46,990 | 6,026 | · · | |

BENCH MARK

PERMANENT MONUMENT

STA. 37+00 CL. 0HIO TURNPIKE

ELEVATION 708.25

ITEM SP202, PORTIONS OF STRUCTURES REMOVED INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING APPROXIMATE QUANTITIES: ,

| CONCRETE (SUPERSTRUCTURES) CONCRETE (ABUTMENTS) RAILING SCUPPERS INCLUDING DOWNSPOUT REMOVAL TO NEW CONCRETE CAP TIE PLATES AT PIERS ASPHALT WEARING COURSE REMOVED CRAINAGE DEFLECTORS INTERIOR BEA. CRAINAGE DEFLECTORS INTERIOR Face of Abutinemi or Pier Covenspaut (15 be removed) | DESCRIPTION | <u>DN</u> | QUANTITY |
|---|--|--|--|
| Ground Line Vitrified Stopper Concrete | CONCRETE CON | SUPERSTRUCTURES) ABUTMENTS) INCLUDING DOWNSPOUT ONEW CONCRETE CAP AT PIERS JEARING COURSE REMOVE T SLABS AND END SPANS DEFLECTORS INTERIOR DEFLECTORS INTERIOR OF A DUTINETIT OF (10 De FEI | 171 C.Y. 30 C.Y. 432 L.F. 4EA. 10 EA. 21 S.Y. 3 EA. 4 EA. 7 Pier aut 10 oved |

DRAIN PIPE CAP DETAIL (Include with Item SP202, Fortions of Structures Removed, for payment)

* THIS QUANTITY HAS BEEN INCLUPED IN THE SUMMARY FOR REPLACEMENT OF PETERIORATED DOWELS 45 PIRECTED BY THE ENGINEER

THE INFORMATION SHOWN MEREON IS INTENDED TO BE COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SHALL

(1) SEE PROPOSAL

REVISED 1-25-90 AS CONSTRUCTED

EXISTING STRUCTURE

TYPE: SIMPLE AND CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND BARRIERS

SPANS: 28'-1.63" ,66'-4.75" ,66'-4.75" AND 28'-1.63" ROADWAY: 28'-0" FACE TO FACE OF SAFETY CURBS

LOADING: CF 30

SKEW: 9 DEGREES AND 26 MINUTES, SEE PLAN

WEARING COURSE: 3/4" MONOLITHIC CONCRETE

ALIGNMENT: TANGENT

MODIFIED STRUCTURE

ALL DATA IS THE SAME AS THE EXISTING STRUCTURE EXCEPT AS MODIFIED BELOW:

TYPE: SIMPLE AND CONTINUOUS STEEL BEAMS WITH COMPOSITE CLASS & CONCRETE DECK AND BARRIERS

ROADWAY: 31-16 FACE TO FACE OF PARAPET

LOADING: HS-20-44 CASE IT

WITH A 30 PSF FUTURE WEARING COURSE

WEARING COURSE: 1/2" MONOLITHIC CONCRETE

APPROACH SLAB: 15'-2.5" LONG PER SHEET 25

- FENCE POSTS SHALL NOT BE SET CLOSER THAN 8" FROM ANY PARAPET DEFLECTION JOINT.
- 2 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.

STATE ROUTE 269 BRIDGE OVER THE ONIO TURNPIKE, (BRIDGE # 1), MILEPOST 106.8 GENERAL PLAN, ELEVATION AND ESTIMATED QUANTITIES

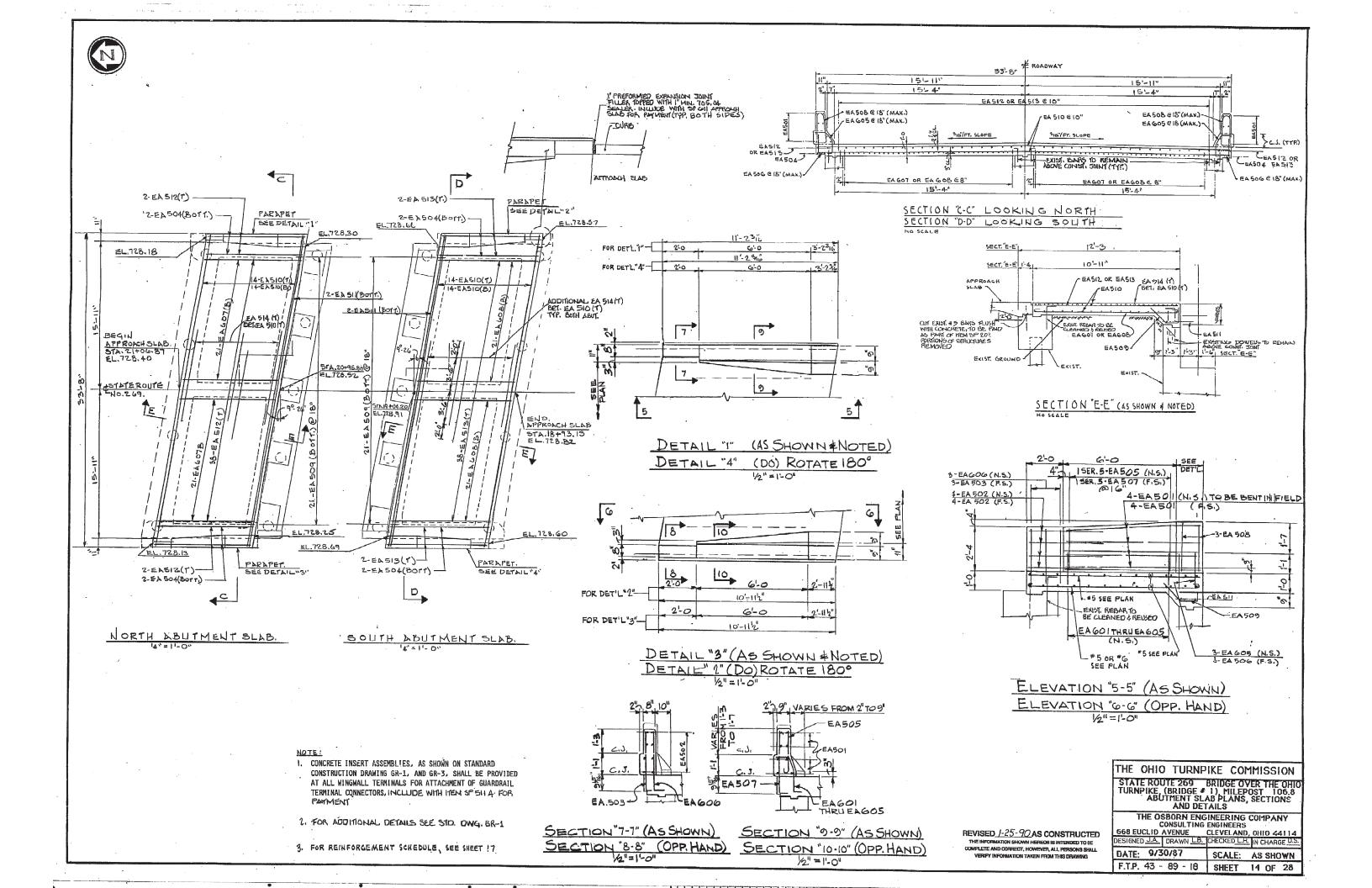
THE OHIO TURNPIKE COMMISSION

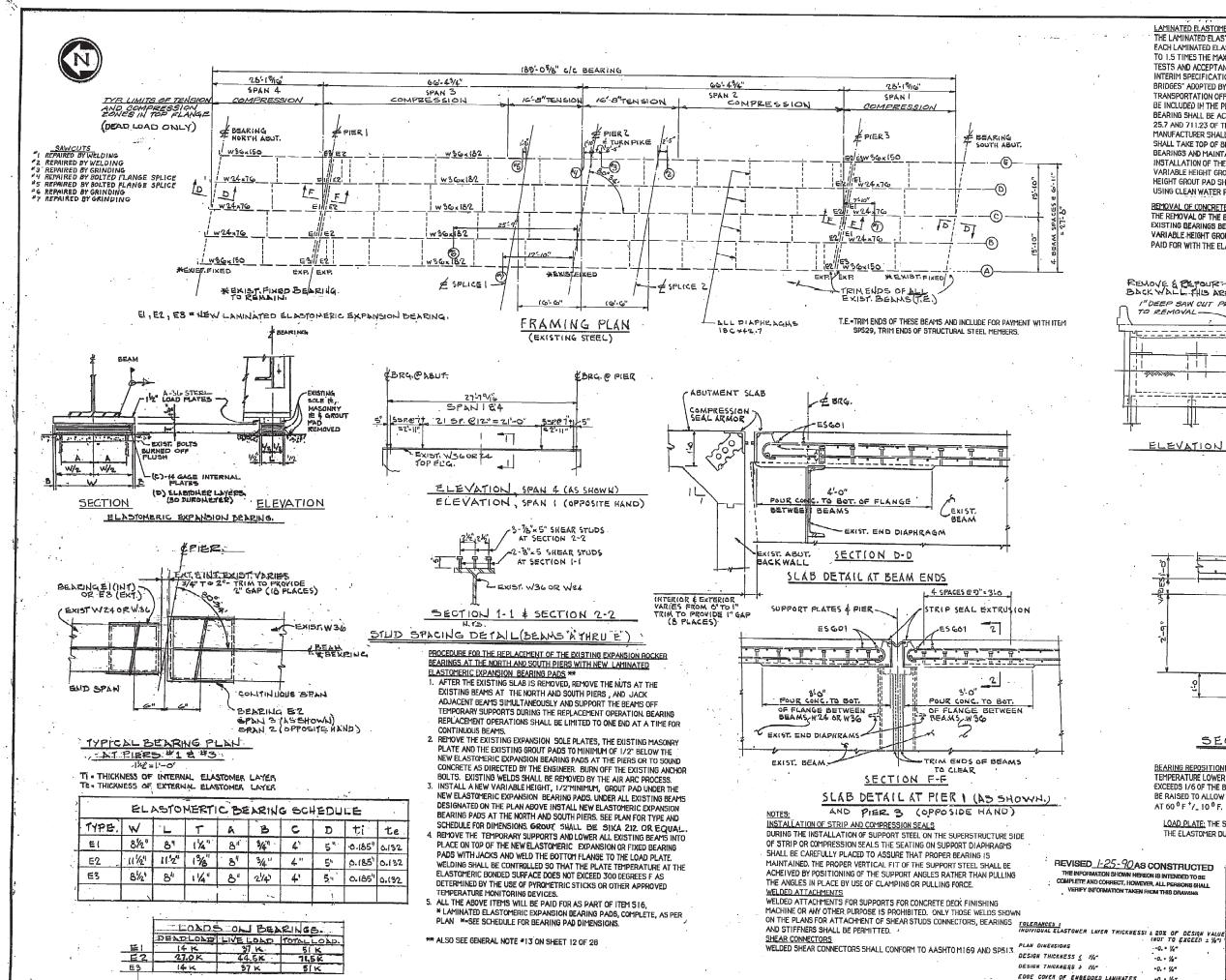
THE OSBORN ENGINEERING COMPANY

CONSULTING ENGINEERS

668 EUCLID AVENUE CLEVELAND, OHIO 44114

DESIGNED J.A. DRAWN L.B. CHECKED L.H. IN CHARGE U.S. DATE: 9/30/87 SCALE: AS SHOWN F.T.P. 43 - 89 - 18 SHEET 13 OF 28



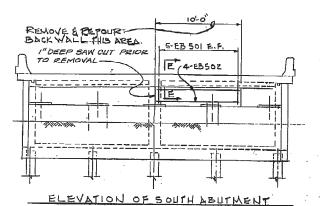


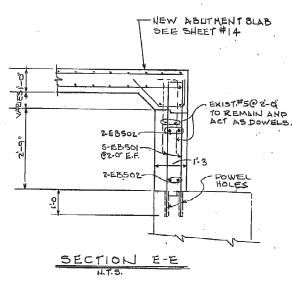
LAMINATED ELASTOMERIC BEARINGS

= 27'B"

THE LAMINATED ELASTOMERIC BEARING MANUFACTURER SHALL PROOF LOAD EACH LAMINATED ELASTOMERIC BEARING WITH A COMPRESSIVE LOAD EQUAL TO 1.5 TIMES THE MAXIMUM DESIGN LOAD AS PER ARTICLE 25.7, BEARING TESTS AND ACCEPTANCE CRITERIA, DIVISION II, CONSTRUCTION OF THE 1985 INTERIM SPECIFICATIONS FOR THE "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, THIRTEENTH EDITION, 1983. THE TESTING SHALL BE INCLUDED IN THE PRICE BID FOR THE BEARINGS. ACCEPTANCE OF THE BEARING SHALL BE ACCORDING TO LEVEL I ACCEPTANCE CRITERIA OF ARTICLE. 25.7 AND 711.23 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE MANUFACTURER SHALL FURNISH CERTIFIED TEST DATA. THE CONTRACTOR SHALL TAKE TOP OF BEAM ELEVATIONS PRIOR TO REMOVING THE EXISTING BEARINGS AND MAINTAIN THIS TOP OF BEAM ELEVATION DURING THE INSTALLATION OF THE NEW ELASTOMERIC BEARINGS BY MEANS OF THE VARIABLE HEIGHT GROUT PAD. THE GROUT TO BE USED IN THE VARIABLE HEIGHT GROUT PAD SHALL BE SIKAGROUT 212 OR APPROVED EQUAL MIXED USING CLEAN WATER PER THE MANUFACTURERS SPECIFICATIONS.

REMOVAL OF CONCRETE AT EXISTING BEARING SEATS
THE REMOVAL OF THE EXISTING CONCRETE AT THE PIER SEATS UNDER THE EXISTING BEARINGS BEING REPLACED AND THE INSTALLATION OF THE NEW VARIABLE HEIGHT GROUT PAD UNDER THE NEW ELASTOMERIC BEARINGS IS TO PAID FOR WITH THE ELASTOMERIC BEARING, ITEM 516.





BEARING REPOSITIONING: IF CONCRETE IS PLACED AT AN AMBIENT TEMPERATURE LOWER THAN 40 ° F AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/6 OF THE BEARING HEIGHT AT 60 ° F +/- 10 ° F THE BEAMS SHALL BE RAISED TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60 ° F +/_ 10 ° F.

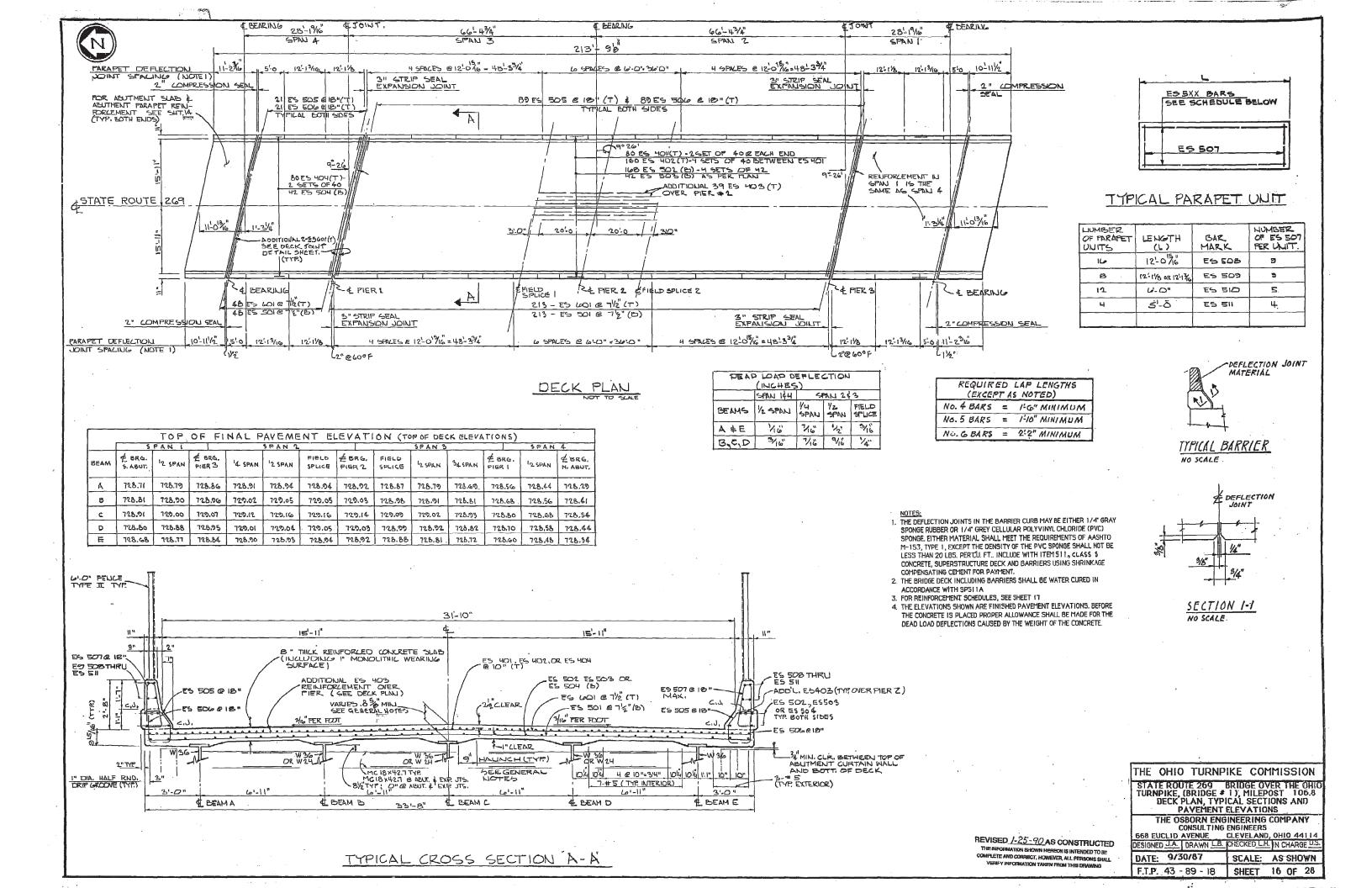
LOAD PLATE: THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.

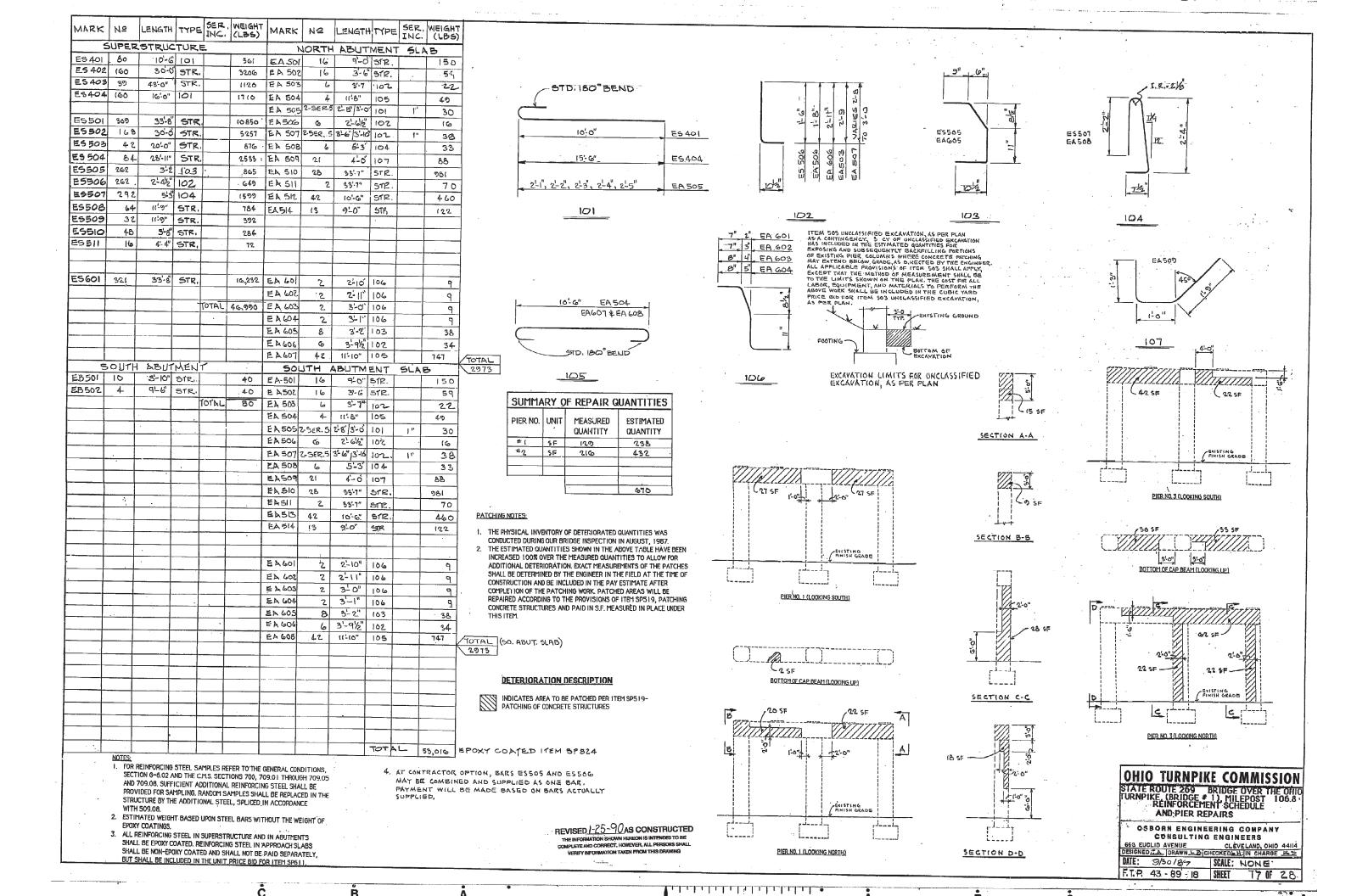
REVISED 1-25-90 AS CONSTRUCTED THE INFORMATION SHOWN HEREON IS INTENDED TO BE COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SHALL

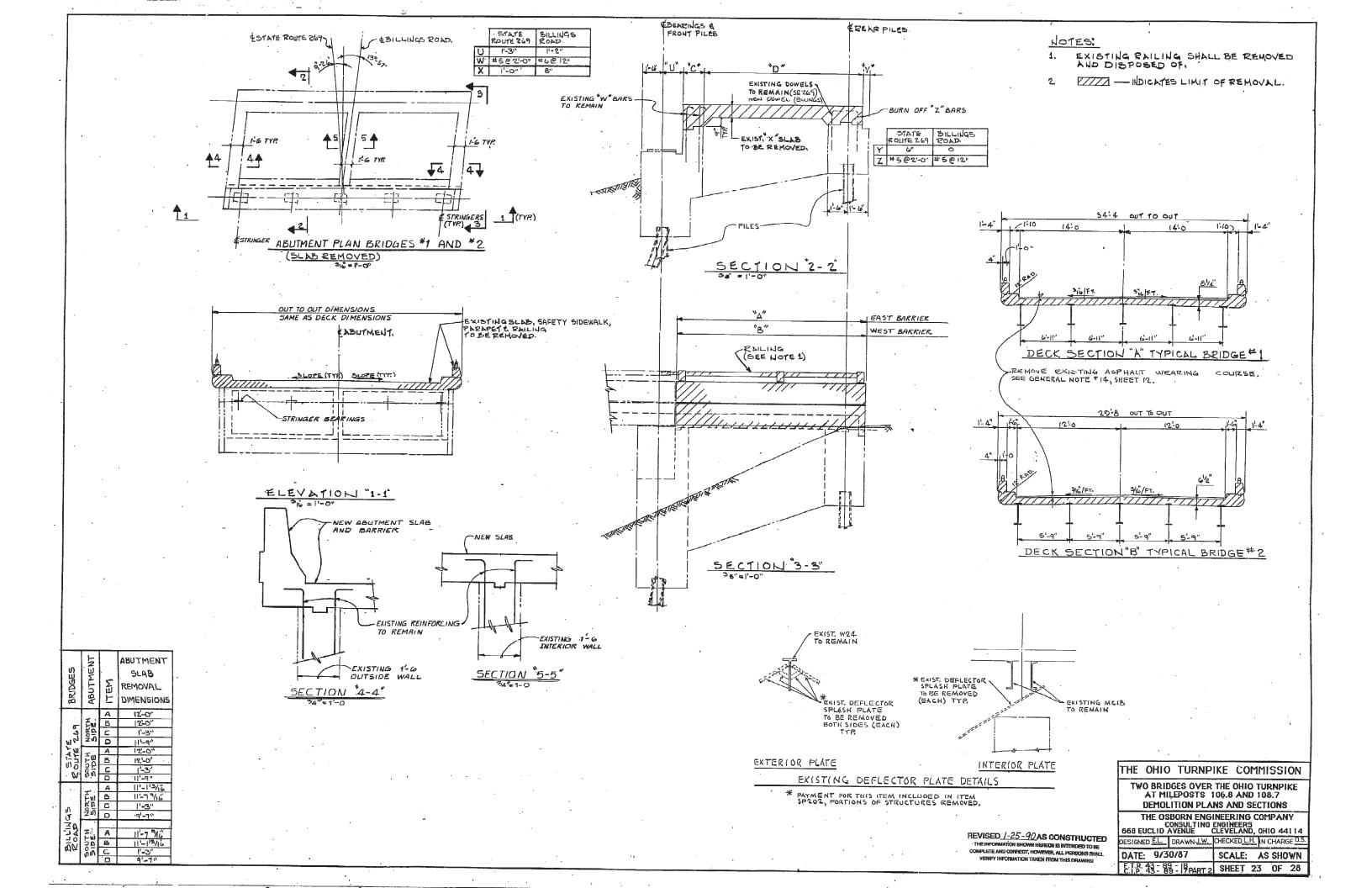
PLAN DIMENSIONS ·-0. · 1/4 DESIGN THICKNESS (1/4--0. + 1/4 DESIGN THICKNESS > 1%" -0. - 1/4 EDGE COVER OF EMBEDDED LAWINATES

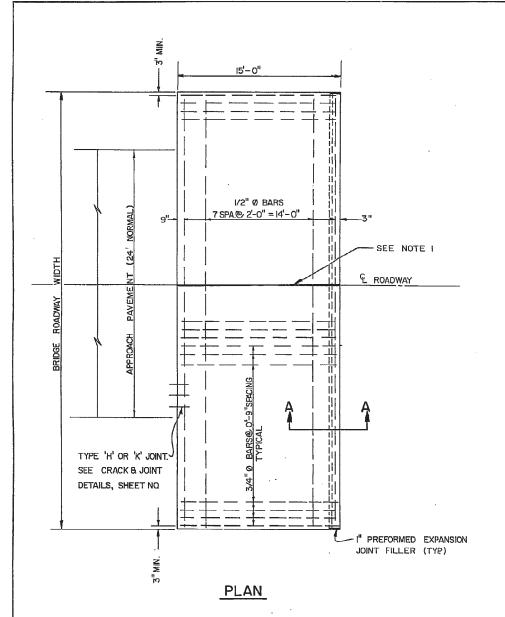
THE OHIO TURNPIKE COMMISSION STATE ROUTE 269 BRIDGE OVER THE OHIO TURNPIKE, (BRIDGE # 1) MILEPOST 106.8 PARTIAL FRAMING PLAN AND MISCELLANEOUS DETAILS

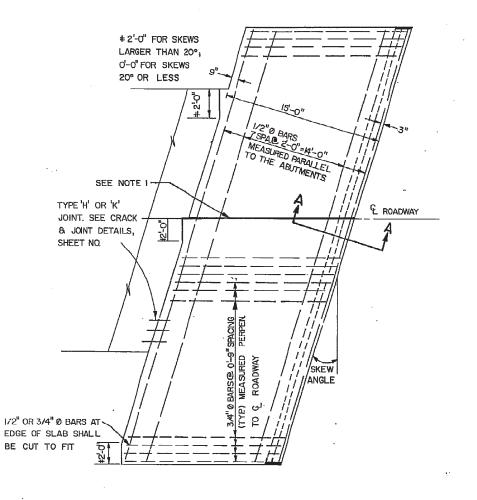
THE OSBORN ENGINEERING COMPANY CONSULTING ENGINEERS
668 EUCLID AVENUE CLEVELAND, OHIO 44114 DESIGNED J.A. DRAWN L.B. CHECKED L.H. IN CHARGE D.S DATE: 9/30/87 SCALE: AS SHOWN F.T.P. 43 - 89 - 18 SHEET 15 OF 28



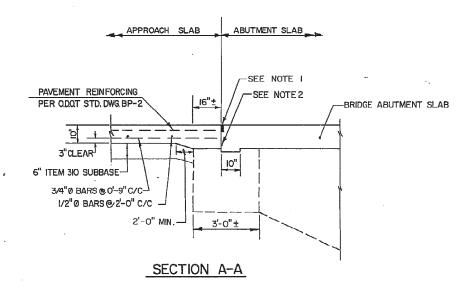








APPROACH SLAB FOR SKEWED BRIDGE



NOTE I: 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.

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 DLANS 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.

CONCRETE : CLASS S USING SHEINKAGE 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 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

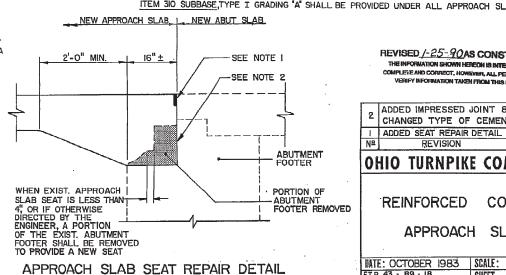
CURBS, BRIDGES WITH SIDEWALKS: FOR BRIDGES CONSTRUCTED WITH RAISED SIDEWALKS, DEFLECTOR PARAPETS OR OTHER TYPES OF CONSTRUCTION WHICH RETAIN ROADWAY SURFACE DRAINAGE, THE APPROACH SLABS SHALL EITHER INCLUDE INTEGRAL CURBS OR BE CONSTRUCTED IN CONJUNCTION WITH BRIDGE CURBS. CURB HEIGHT SHALL BE TRANSITIONED 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-I

APPROACH SLAB WIDTH APPROACH SLAB FOR 38'- 6" BRIDGE WIDTH SHALL BE 39'- 0" WIDE WHEN CURBS ARE NOT INCLUDED; 39'-3" WHEN CURB JS 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. _



REVISION OHIO TURNPIKE COMMISSION

DFC 11:28-84

REVISED /-25-90 AS CONSTRUCTED

COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SHALL

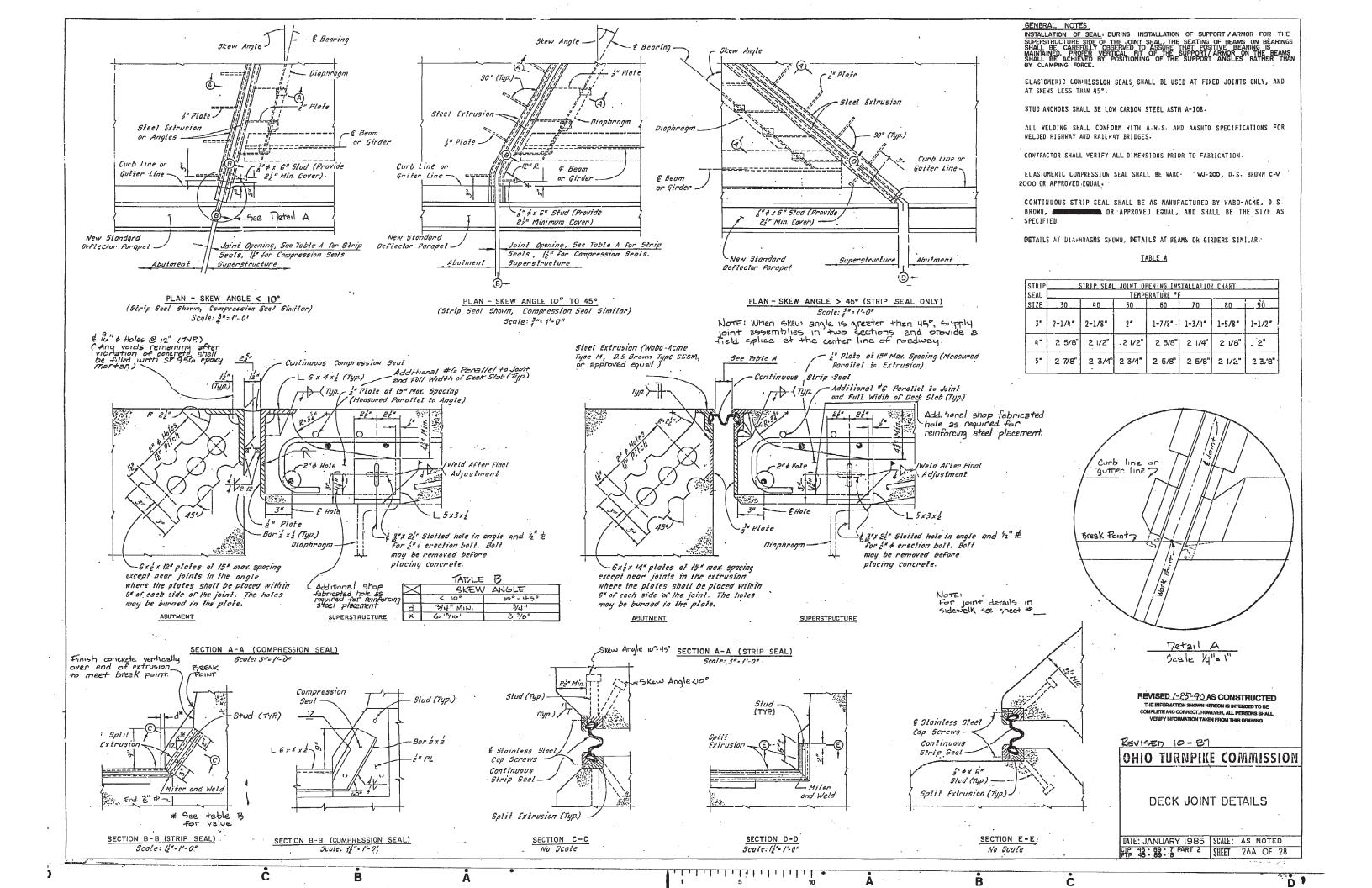
ADDED IMPRESSED JOINT &

CHANGED TYPE OF CEMENT

REINFORCED CONCRETE

APPROACH SLABS

DATE: OCTOBER 1983 | SCALE: N.T.S. ETP 43: 89: 18 PART 2 SHEET 25 OF 28





OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1
DESIGN SECTION D-12

CONTRACT NO. C-34

TURNPIKE CONSTRUCTION CONTRACT
STATION 1219+39 TO STATION 1281+20.97-SANDUSKY COUNTY
STATION 0+00 TO STATION 134+16.88-ERIE COUNTY



APPROVAL RECOMMENDED BROWN & BLAUVELT CONTRACTING ENGINEER

Harved a Blavell

APPROVED

J. E. GREINER CO.

CONSULTING ENGINEER

S-25-53

APPROVED
OHIO TURNPIKE COMMISSION
CHIEF ENGINEER 5-29-53

CONTRACT NO. C- 34

COUNTY - SANDUSKY - ERIE

1-105

| ایر | 띪 | | | | | | | SH | EET | NI | IMBE | RS | - | | | | | | | LIS E |
|-----------------------|------------------|--|--------------|--|-------------|------------|----------------|--------|-------------|----------|-------|---------------|-------|---------------|-------------|----------|----------|-------------|-----------------|--|
| NUMBER | PEC. I NUMBER | DESCRIPTION | TINO | . 5 | 6 | 7 | 9 | 11 | 12 | 14 | 15 | | | 8 | 10 | 13 | | | TOTALS | PROPOSAL QUANTITIES |
| 7 7 1 1 1 | ITEM | | ร์ | ÷16 | | | - | - | | - | | | | | | | | - | 10 | PRC |
| | | ROADWAY | 7.5 | | | | | | | | | | | | | | | | | |
| | | Roadway Excavation | C.Y. | 17,078 | 8,700 | 24.492 | 92,292 | 80,605 | 14,765 | | 1381 | | | \rightarrow | 8309 | . 813 | | | | 264,300 |
| | | Borrow | C.Y. | 045 | 1000 | | 20/0 | 240 | 2010 | 126,942 | | | | 31.887 | | | | -+ | 211,538 | |
| | | Water Pipe Removed (under 16°) | M.G. L.F. | 87.5 | 126.5 | 453.7 | 201.8 | 31.8 | 361.6 10 | 1036.7 | 221.2 | -+ | | 3 493 | 289.0 80 | 169.6 | | | 3322,3 90 | 3,330 90 |
| | | Guard Rail, Tupe "A" | L.F. | | | 220 | 220 | - | 220 | 1350 | | | | 1865 | - 50 | - | | | 3875 | 3,870 |
| _ | | Guard Rail, Type "B" | L.F. | 200 | | t | 200 | | | 3280 | 210 | | | | | | | | 4090 | 4100 |
| 7 | | Guard Rail, Type "C-2" or C-1 | L.F. | | | | | | | | | | | | 1750 | | | | 1750 | . 1,750 |
| $\overline{}$ | | Guard Rail, Type "D-2" | L.F. | | | | | | | | | - | | | | 1410 | | | 1410 | .1,410 |
| _ | | Right-of-Way Fence , Type 2 | L.F. | 4480 | | _ | 5220 | _ | | 5820 | 1440 | | | - | 1585 | | | | 41,000 | 41,000 |
| | | Permanent Monuments Temporary Cattle Fence | Ea. L.F. | 1 | 1 | 2 | 2 | 2 | 2 | 2 | | | | + | | <u> </u> | | - + | 12 250 | 12 250 |
| 12 | | Placing Stock Piled Topsoil | 5. Y. | 12,480 | 15,023 | 15,412 | 14836 | 15647 | 15,600 | 14 215 | 4,160 | | | 2880 | 5788 | 1961 | | - | 118,002 | 118,000 |
| | $\overline{}$ | Bonemeal & Raw Bone | Ton | 1.12 | 1.35 | 1.39 | 1.34 | 1.41 | - | 1.30 | 0.37 | | | 0.25 | | | | | 10.63 | 11 - |
| 14 | | Roadside Cleanup | L.S. | | | | | | | | | | | | • | | | | Lump | Lump |
| | | Seeding and Protecting Type "A" | 5. Y. | _ | 15,023 | _ | 14,836 | | 15,600 | _ | 4,160 | | | _ | 5788 | - | - | | 118,002 | 118,000 |
| | | Commercial Fertilizer 10-6-4 | Ton | 1.12 | 1.35 | 1.39 | 1.34 | 1.41 | | | 0.37 | | | 0.25 | | 0.18 | | | 10.63 | // |
| | | Agricultural Ground Limestone Seeding and Mulching (Special Seeding) | 70n 5. Y. | 5.60 | 6.75 | 6.95 | 6.70 36,042 | 7.05 | | 6.50 | 1.85 | | | _ | 2.60 | 0.90 | | | 53.15 | 53 |
| 10 | 2-19 | Seeding and Mulening (Special Security) | J. 7. | 20,009 | 20,333 | 34,923 | 36,042 | 36,444 | 33,066 | 33,003 | 4,323 | | - | 24,130 | 2416 | 10,136 | | | 293347 | 293,400 |
| | | | | | | | | | | | | | | | | | | | | |
| - | | | - | - | | | | | | | | | | - | | | | | | |
| 51 | E-Z | DRAINAGE Including Structure (Box Cuivert) | 41-5 C.Y. | ta. 12 690 | 38+20 24 | | 27/ | 50 | 272 | 20 | 2 | | | | 07 | | | | 1738 | 17/0 |
| 52 | | Excavation for Structures Excavation for Channels | C.Y. | 2660 | 24 | 219 850 | 374 | 30 | 212 | 20 | | | | +- | 87 | - | - | | 3510 | 1740 3,500 |
| | | 15"S.S.Reinf. Conc. Culvert Pipe | Z.F. | 2000 | 72: | 86 | 164 | | 68 | | 84 | | - + - | | | | | - 1 | 474 | 470 |
| - | | 18"Paved Invert Bitum Coated C.M.P. #12Ga. | LF. | 132 | 72 | 168 | 152 | 196 | 280 | 274 | - | | | +- | | | | | 1274 | 1280 |
| | - | · · · · · · · · · · · · · · · · · · · | | ,,,, | | 1 | | | | | | | | | | | | | | |
| 56 | 1-5 | Pipe Special-30°18" Pvd.Inv. Bit.Cfd.CM.P.#12Ga. | Ea. | | | | | | | 2 | | | | | | | | | 2 | 2 |
| | | Inlets, Type A-1 | Ea. | | | 2 | 2 | | 3 | 3 | 1 | | | | | | | | | 11 |
| | | Stone Underdrain No.1 | Z.F. | <u> </u> | | | | | | | | | | 140 | 340 | 140 | | | 620 | 620 |
| | | 2'Special Paved Side Ditch, 1'Deep, 4'Conc | | · _ | <u> </u> | | 50 | | | | | | _ | | - | | | | 50 | 50 |
| | | 2'Special Paved Side Ditch,2'Deep,4'Conc. 3'Special Paved Side Ditch,1'Deep,4'Conc. | | 10 | | 10 | - | | - | | | \rightarrow | - | - | | - | \vdash | | 10 | 10 |
| | | 4'Special Paved Side Ditch,2' Deep,4'Cond | | 170 | 10 | . : | - | | 1 | | | | _ | + | | | | | 10 | 10 |
| _ | | anija pia nimpa nijima naai ni biji i | | | | | | | - " | | | | | | | | | | | |
| 64 | 1-14 | 5'Special Paved Side Ditch, 2'Deep4'Cond | L.F. | | - | | | | 10 | .10 | | | | | | | | | 20 | 20 |
| 65 | 1-30 | 6"Extra Quality Drain Tile | L.F. | 150 | 1280 | | | | 740 | 630 | | | - | | | - | | | 2800 | 2,800 |
| | | 8"Extra Quality Drain Tile | L.F. | 870 | | | | | 1040 | 880 | 290 | | | | | | | | 3080 | .3080 |
| | | 12"Extra Quality Drain Tile | L.F. | 190 | | | | _ | | | | \perp | | | | | | | 190 | 190 |
| | | 6" Pipe Outlet for Farm Drainage | 4.75 | 20 | 20 | | 20 | 20 | - 0.0 | 20 | | | | - | | | | | 100 | 100 |
| | | 8" Pipe Outlet for Farm Drainage 12" Pipe Outlet for Farm Drainage | L.F. | 20 | | <u> </u> | | | 20 | 20 | _ | - | | - | | - | - | - | <u>40</u> 20 | 20 |
| | | Class "C" Conc. for Structures | | 28444 | | 1188 | 63.25 | 6.66 | 21.51 | .3.07 | 0.90 | | | +- | 15.16 | | +-+ | | 443.89 | 450 |
| | | Reinforcing Steel | Lb. | 31,360 | 214 | 2747 | 3534 | 336 | 906 | 160 | 51 | | | | 724 | | | | 40,032 | 40,000 |
| | | 24"S.S. Reinf. Conc. Culvert Pipe | L.F. | | | | | | | | | | | | 106 | | | | 106 | 110 |
| 74 | I- 2 | 36"S.S. Reinf. Conc. Culvert Pipe | L.F. | | | | | | 104 | | | | | | | | | | 104 | 100- |
| | | 42 ⁸ 55. Reinf. Conc. Culvert Pipe | L.F. | | | | 128 | | | | | | | | | | | | 128 | 130 |
| | | 30"Paved Invert Bitum Coated CM.P.#14Ga. | _ | | | | | | 108 | | | | | | <u> </u> | | 1 | | 108 | 110 |
| | | 36 Paved Invert Bitum Coated CMP#12 Ga. | | <u> </u> | | 154 | · | | - | | | | | | - | _ | | | 154 154 | 150 |
| | | 72"Paved Invert Bitum Coated C.M.P.# 8Ga. 78"Paved Invert Bitum Coated C.M.P.#8 Ga. | | - | | 154 | 156 | | - | | | | _ | +- | | - | \vdash | | 156 | 160 |
| | | 18" S.S. Reinf. Conc. Culvert Pipe | L.F. | | | | 64 | | - | - | | | | +- | 48 | - | | | 112 | 120 |
| 81 | 5.27 | 30" S.S. Reinf. Conc. Culvert Pipe | L.F. | | | | 36 | | | | | | - | + | 44_ | | | | 80 | 80 |
| | | 10" Extro Quality Drain_tile | L.F. | 890 | | | | | • | | | | | | | | | | 890 | 890 |
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| REFERENCE | | DESCRIPTION | LINO | 5 | 6 | 7 | 9 | 11 | 12 | 14 | 15 | 8 | 10 | 13 | | | TOTALS | PROPOSAL QUANTITIES | |
| | | PAVEMENT | | | | Ι. | | | | | | | | | | | | | 1_ |
| 101 | 1-22 | Selected Sub-Base | C.Y. | 5,187 | 6,240 | 6,762 | 6,716 | 6,734 | 6,720 | 7,070 | 2,222 | | | | | | 47,651 | 47,700 | 1 |
| 102 | B-20 | 8" Waterbd. Mac. Bose Crs. 1-4" Courses | C.Y. | | | | -= | - | - | | | 773 | 7.77 | | | | 773 | 770 | 1 |
| 103 | | 5 Waterbd Mac Base Crs. 1-5 Course | C.Y. | | | | - 1 | - ' | | | | 3.5 | 53 | 209 | | | 262. | 260 | 1 |
| 104 | B:35 | Asphaltic Conc. Leveling Course | C.Y. | | | | | | | | | 85 | 128 | | | | 213 | 210- | 1 |
| 105 | 7.30 | Bitum. Prime Coat | Gal. | | | | | | | | - | 1,088 | 2671 | 523 | | | 4282 | 4290 |] |
| 106 | - | | C.Y | | | | | | | | | | 3292 | | | | 3292 | 3300 |] |
| 107 | _ | Compacted Aggregate Base Course | C.Y. | <u> </u> | L | | | <u> </u> | | | | | 1306 | | | | 1306 | 1310 | |
| 108 | | Bitum Macadam Surface Course | S. Y. | 8,644 | 10,400 | 11,284 | 10,200 | 11,224 | 11,200 | 10,760 | 2,868 | | | | | | 76,580 | 76,600 | |
| 109 | + | Asphaltic Conc Surface Course Type A | C.Y. | | | | | | | | | 112 | 391 | 62 | | | 565 | 570 | 1 |
| 110 | 7-71 | Reinf. Portland Cement Conc. Pavement 10" | S. Y. | 11,525 | 13,867 | 15,045 | 14,900 | 14,965 | 14,900 | 14,380 | 3,824 | | | | | | 103,406 | 103,400 |] |
| _ | | | | | | | | | | | | | | | | | | |] |
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| \vdash | - | | E | 17 | | 26 | | | | | | | | | | | OTALS | <u> </u> |] |
| - | - | | <u>z</u> | | STR. | | | | <u> </u> | <u> </u> | | | | | | | <u> </u> | L | 1 |
| <u> </u> | 1 | | | | NO.45 | | | | | ļ | | | | \vdash | | | | | _ |
| 111 | + | Excavation for Structures | C.Y. | 229 | 255 | 229 | _ | _ | - | | | | | \vdash | | 1 | 1203 | 1200 | 4 |
| 112 | | Excavation for Channels | C.Y. | - | | | 1,835 | 1 | - | | | | | | | - | 1835 | 1800 | 4 |
| 1/3 | 1-10 | Rip Rop, Type "A" | | | ļ | | 1720 | - | | <u> </u> | | | | \vdash | | | 1720 | 1720 | 4 |
| 114 | 1-15 | Guard Rail, Type"A" | 2.F. | 1 | | 100 | 412 | | ऻ | ļ | | | | | | | 412 | 410 | - |
| 115 | _ | Class C Conc for Structures | C.Y. | 424 | | 423 | 529 | - | - | - | | | | \vdash | _ _ | | 1822 | 1800 | ↓. |
| 116 | + | Waterproofing, Type"C" | 5. Y. | | 68 | | | | - | - | <u> </u> | _ | <u> </u> | | · | \bot | 68 | 70 | - |
| 117 | 5-4 | Reinforcing Steel | Lb | _ | 82,380 | | _ | | | - | | | | - | | + | 282,886 | 282,900 | - |
| 118 | | Structural Steel | Ļ.b. | | 197,861 | | | | | _ | | ļ | | - | | - | 7/6,454 | + - | 1 |
| 119 | | Structural Expansion and or Contraction Uts. | L.b | 12,856 | 14,616 | 13,076 | | 1 | <u> </u> | | ļ | ļ | - | - | | + | 52,836 | 52,800 | 1 |
| 120 | _ | Standard Handrail, Type"A" | Z.F. | | | | 412 | - | <u> </u> | - | | | | | _ | - | 412 | 400 | ١. |
| 121 | | Furnishing Shells for Piles, 12"Dia. C. I. P. | 2.F. | 390 | _ | 310 | 740 | | - | - | - | | | - | _ | - | 2020 | 2000 | 4 |
| 122 | | Driving and Filling Piles | Z.F. | 390 | <u> </u> | -310 | 740 45 | <u> </u> | - | - | - | | | | | + | 2020 | 2000 | + |
| 123 | 5-18 | Splicing Piles Anchoring Piles in Rock | Ea. | 6 | 20 | 15 | 45 | - | | | - | | | \vdash | | | 86 | 86 | |
| 129 | | Scuppers, Type "B" | Ea. | 4 | 4 | 4 | 1 | +- | ├ | | ļ | | | | | + | 86 | 12 | ┨. |
| 120 | | | | 100 | 100 | 100 | 10 | | ! | | - | | | - | | +- | 310 | 310 | + |
| 127 | | | L.F. | 280 | 280 | 280 | 240 | | | | — | - | | | | + | 1080 | 1100 | 1 |
| 128 | _ | Asphaltic Conc. Surface Course, Type "" | C. Y. | 1200 | 23 | 1 200 | 1275 | \vdash | + | | - | | — | | | + | 23 | 23 | + |
| 129 | _ | | L.F. | 434 | 434 | 428 | - | 1 | 1 | 1 | <u> </u> | | | | _ | +- | 1296 | 1300 | + |
| 130 | | | Ea. | +54 | 1.5.7 | 1 | 1 | + | + | + | | _ | | | \dashv | + | . 2 | 2 | 1 |
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| | | MISCELLANEOUS | | +- | | | | † | 1 | _ | | | | \vdash | _ | +- | 1 | 1 | 1 |
| 12. | T. 20 | Construction Contract Information Signs | Ea. | +- | | | | 1 | \vdash | + - | | | \vdash | - | | + | 2 | 2 | - |
| 131 | 1.69 | Construction Contract Information Olyris | 20. | + | <u> </u> | 1 | | + | +- | - | - | | - | | - | + | +- | - | - " |
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| SHEET | TOTAL EXCAVATION | GRADING A | NALYSIS BORROW=1:10 | |
|-------|------------------|--------------|------------------------|---|
| NO. | AVAILABLE = C | REQUIRED = F | (F = 0.85C) | REMARKS |
| 5 | 19,528 | 10,182 | | 7,549 C.Y. Excess Haul 7,549 C.Y. to Sh.# G |
| 6 | 7,892 | 15,809 | | Haul 7,549 C.Y. from Sh.* Haul 3168 C.Y. from Sh.*9 |
| 7 | 24,800 | 56,677 | | Haul 41,879 C.Y. from Sh. #9 |
| 8 | 395 | 43,557 | 31,887 | Haul 16,768 C.Y. from Sh.# |
| 9 | 94497 | 25,230 | | 61,815 C.Y. Excess Haul 3168 C.Y. to 5h.*6 Haul 41,879 C.Y. to 5h.*7 Haul 16,768 C.Y. to 5h.*8 |
| 10 | 6,784 | 36,172 | 596 | Haul 35134 C.Y. from 5h.*1 |
| П | 79,771 | 4,847 | | 74,069 C.Y. Excess Haul 38935 C.Y. to Sh. 12. Haul 35134 C.Y. to Sh. 10 |
| 12 | 14,248 | 45,206 | | Haul 38,935 CY from Sh.1, |
| 13 | 706 | 21,309 | 22,780 | |
| 14 | 16,697 | 129,594 | 126,942 | |
| 15 | 1,150 | 27,644 | 29,333 | |
| • | | | | |

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|----------|--|-----|----------|
| \dashv | | | - |
| A | AS-BUILT PLANS | | Feb56 |
| 2] | Revised Moint Area; misc drainage revisions | ÆP. | 11.23.53 |
| Δ | Revised Quantities of Maintenance Area; Rev Borrow and Grading Analysis. | ₫£® | 10-6-53 |
| VO. | REVISION | ву | DATE |

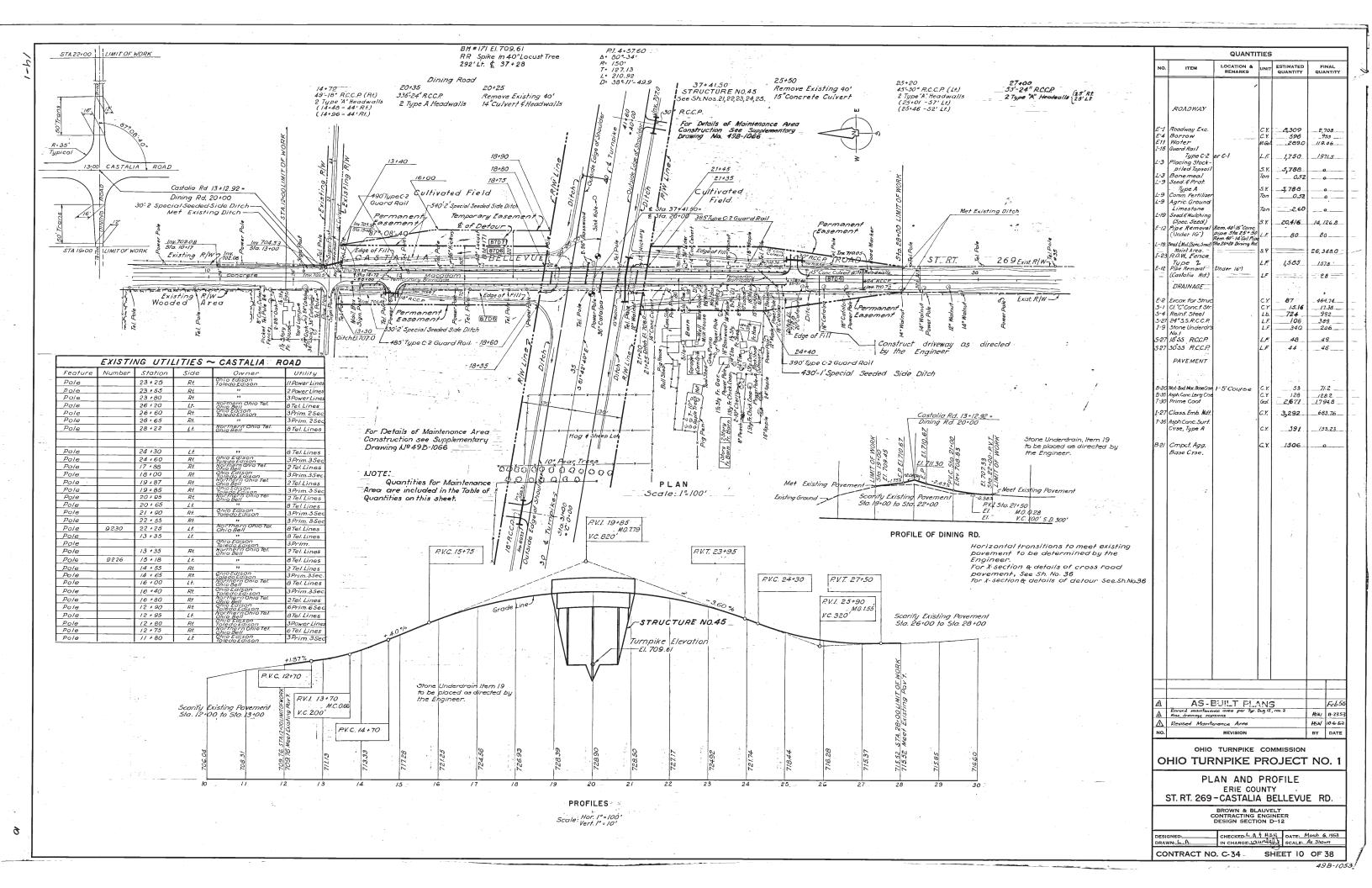
OHIO TURNPIKE COMMISSION
OHIO TURNPIKE PROJECT NO. 1

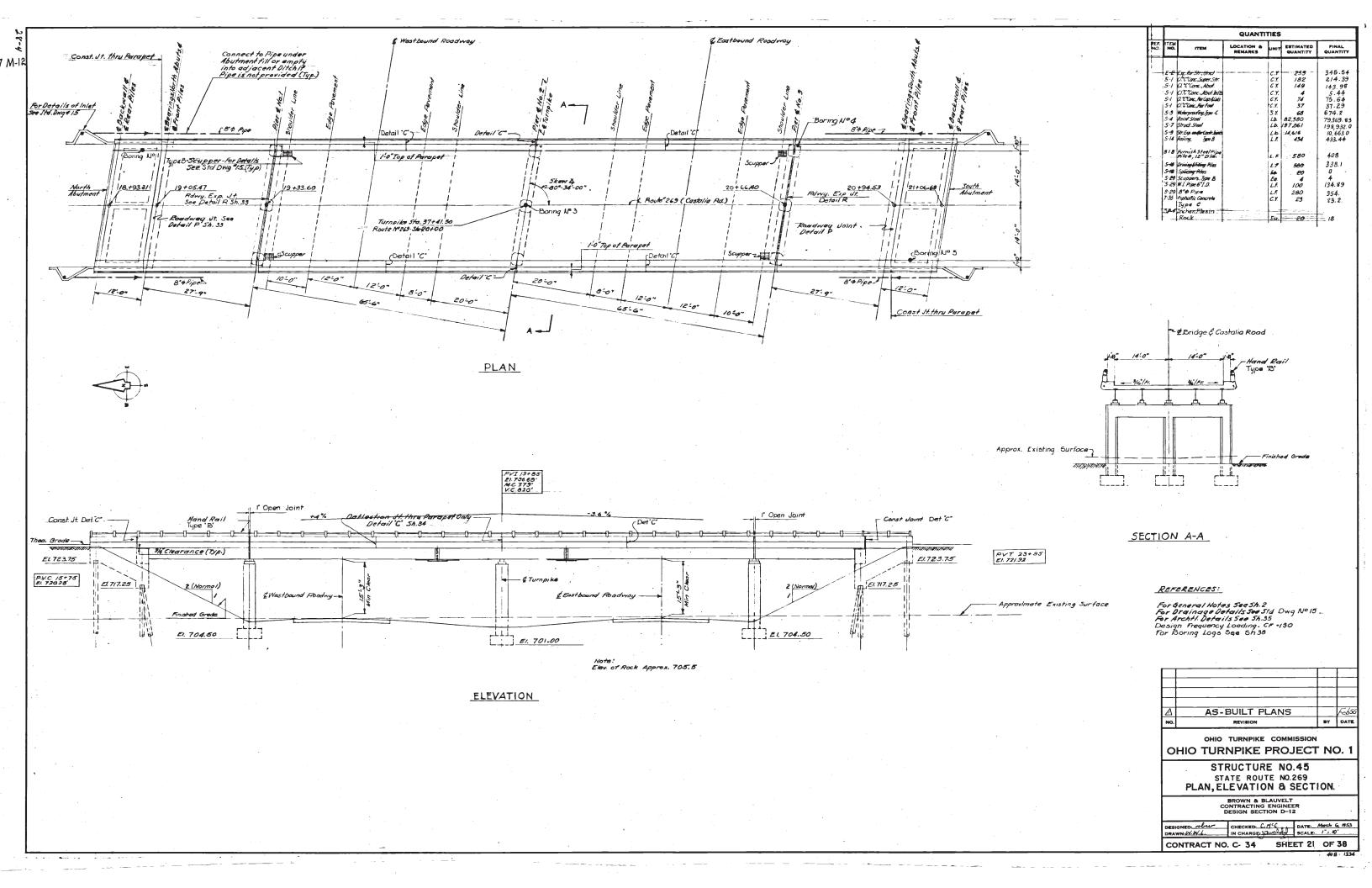
SUMMARY OF ESTIMATES

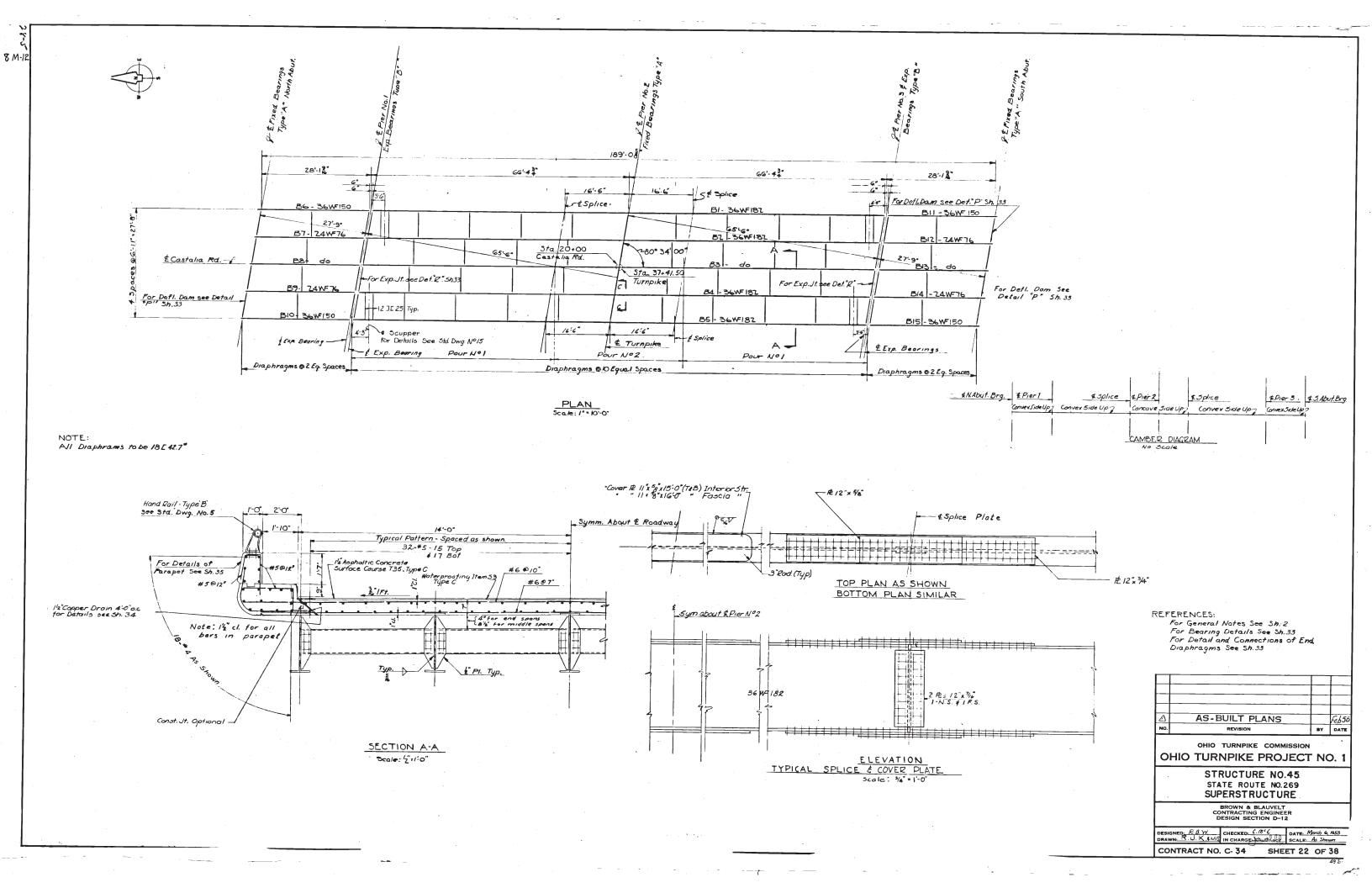
BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12

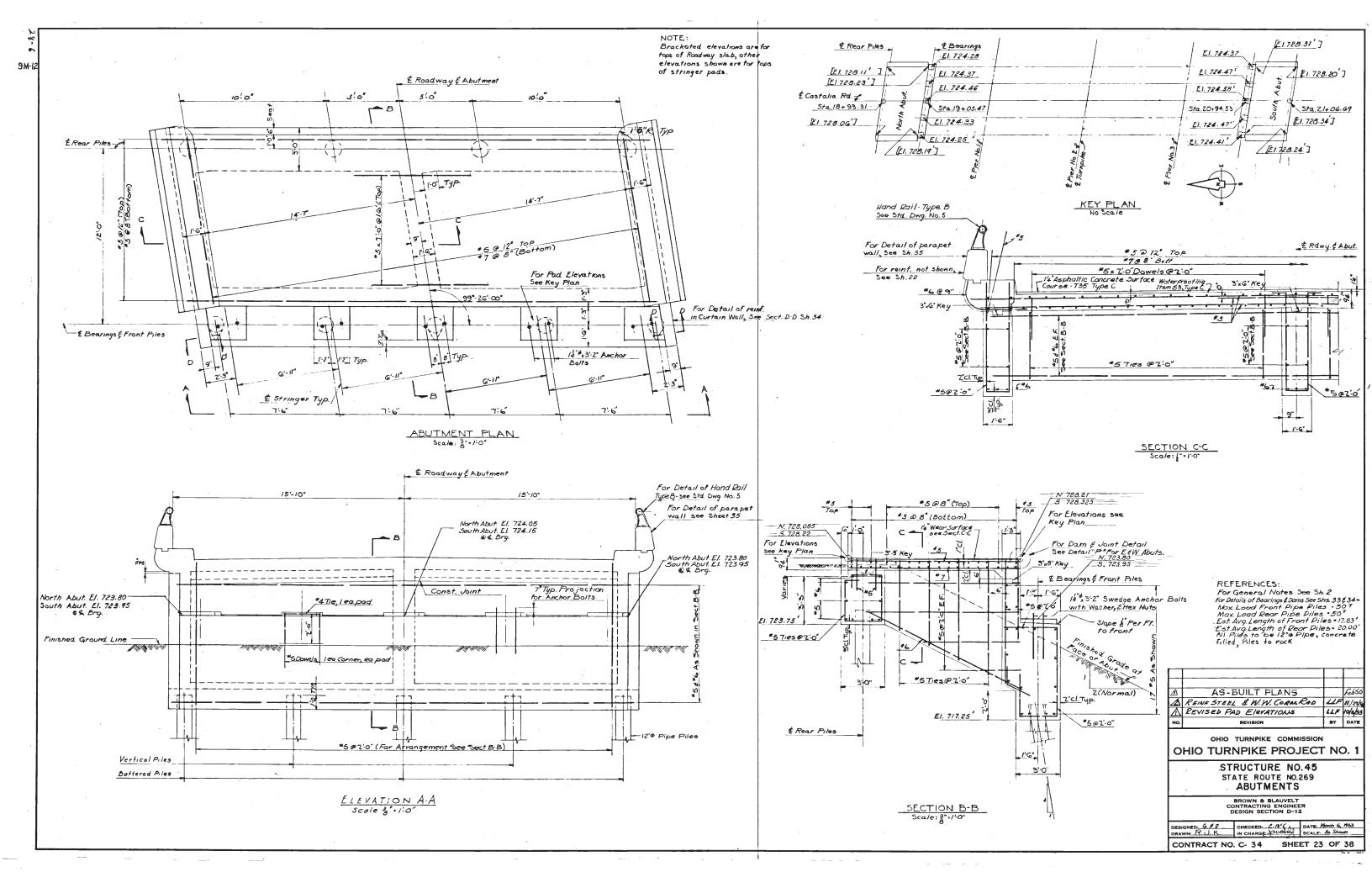
CONTRACT NO. C-34 SHEET 4 OF 3

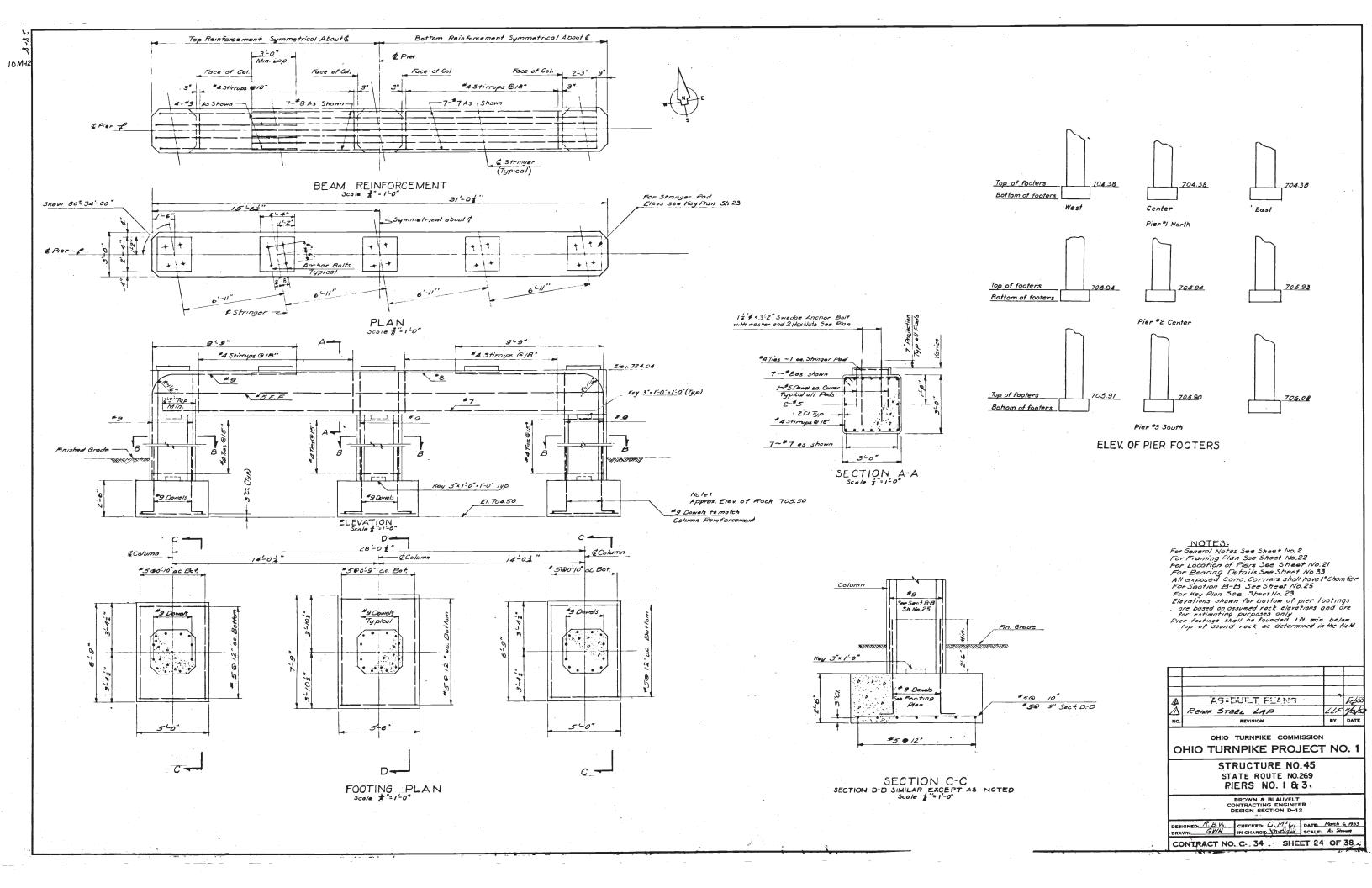
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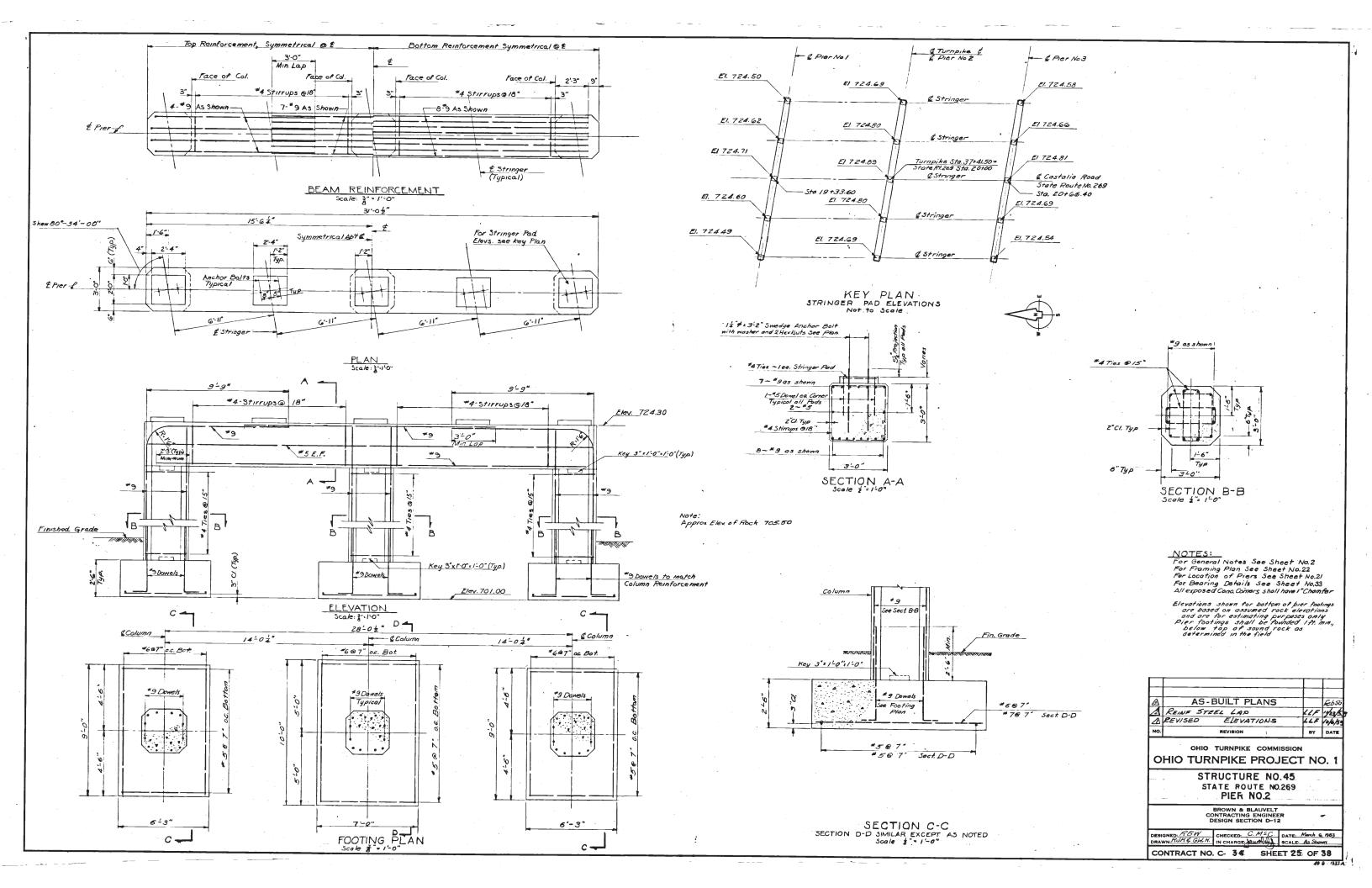


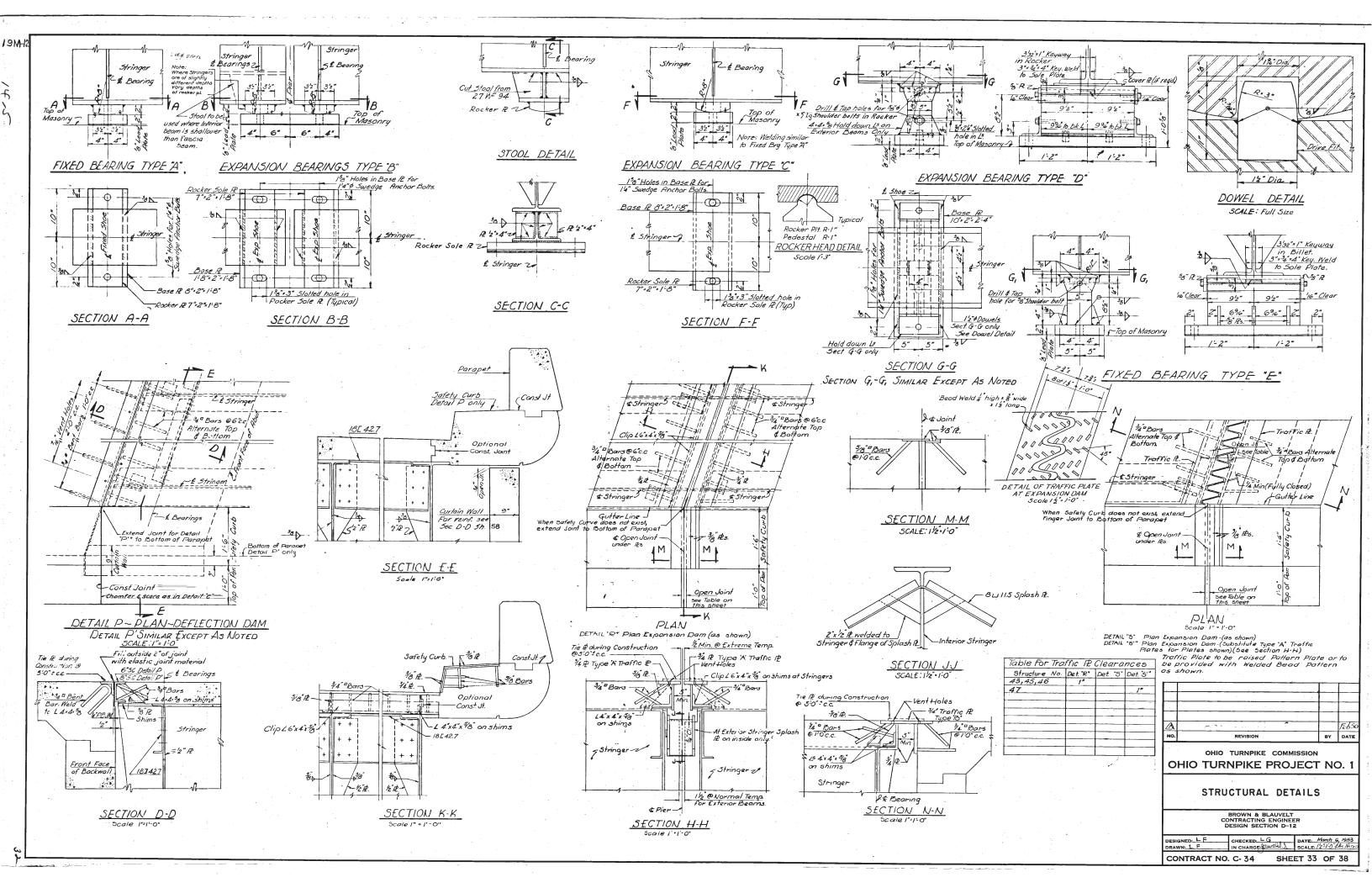


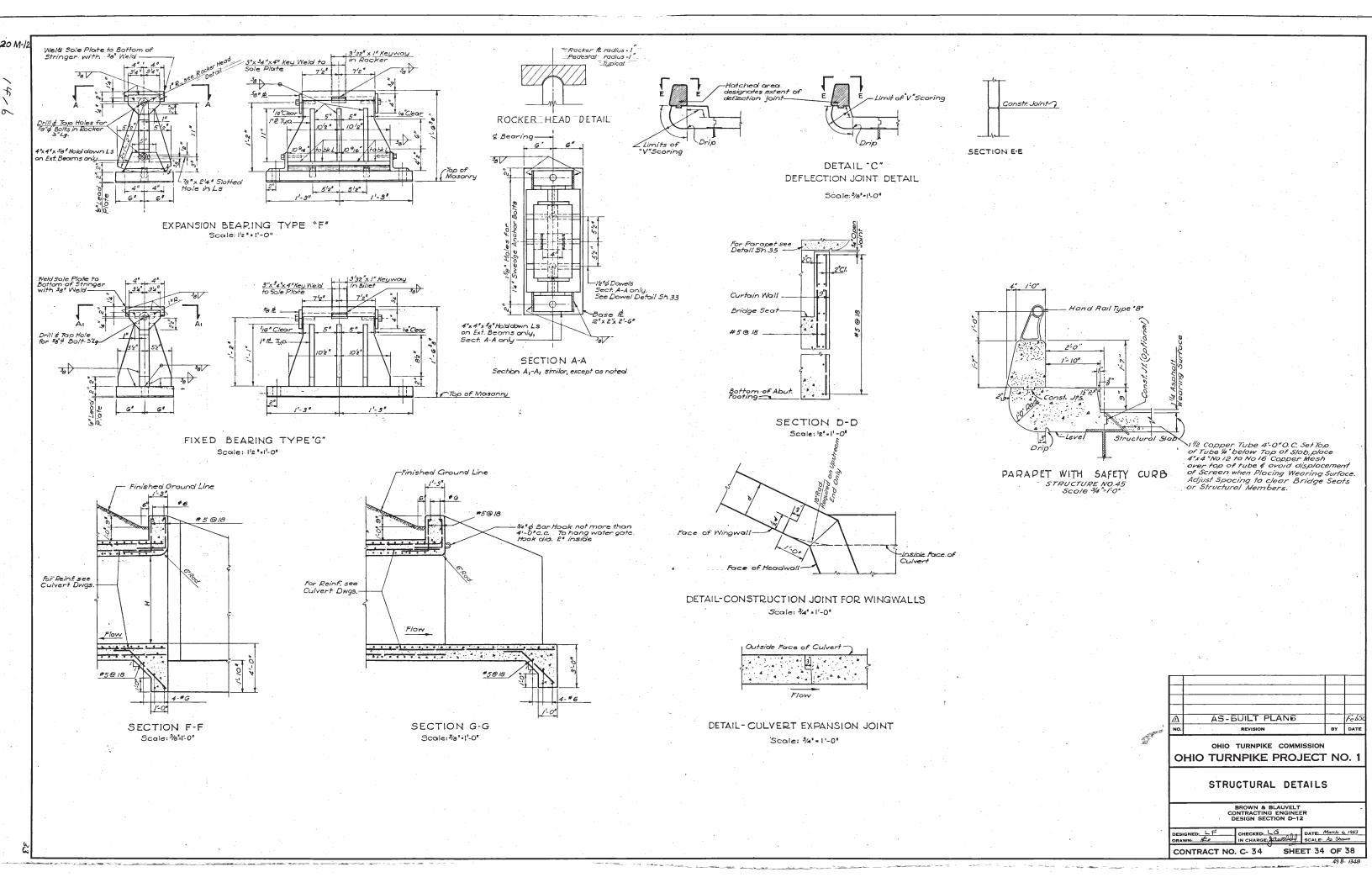


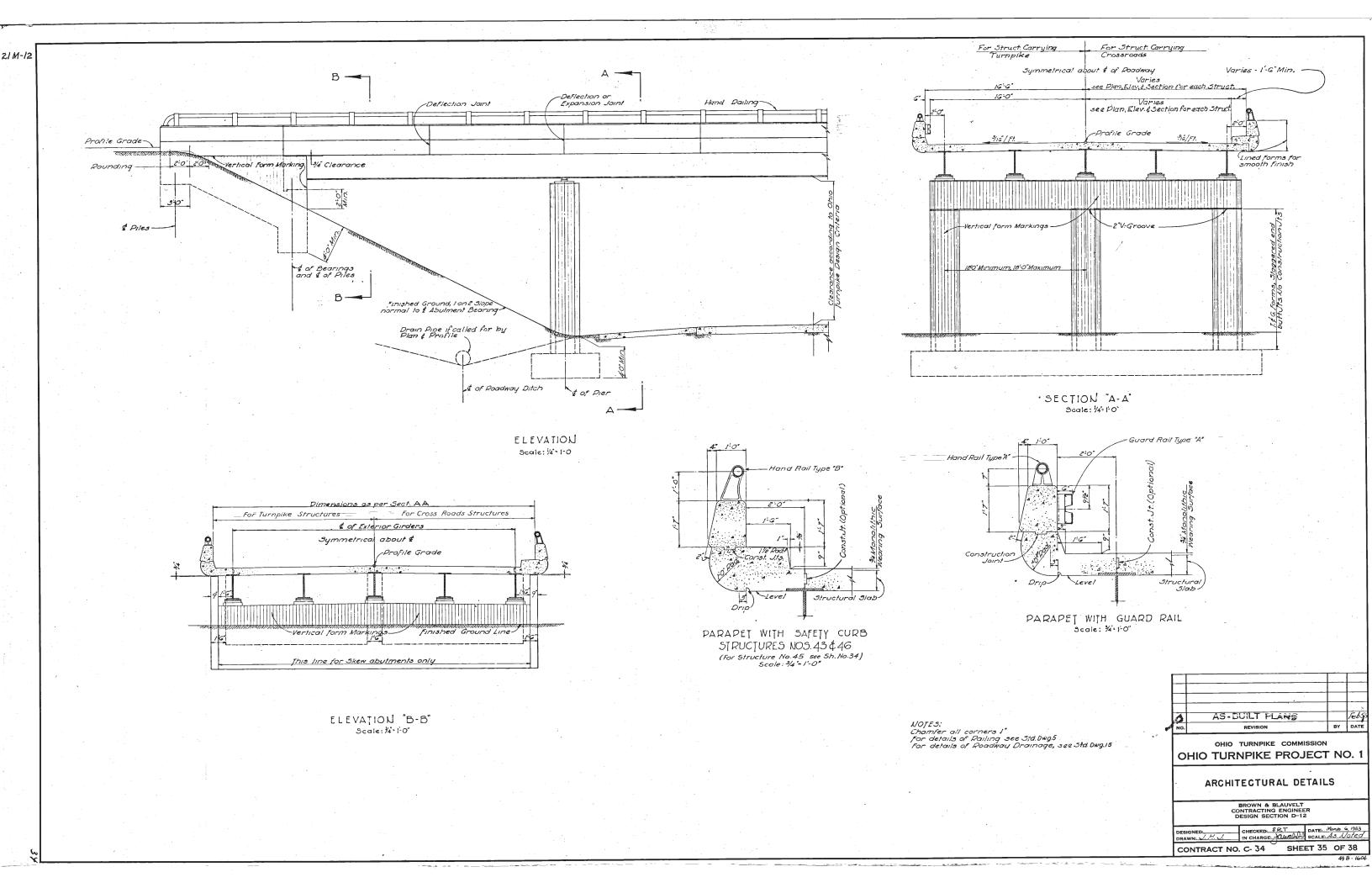












OHIO TURNPIKE COMMISSION

JAMES W. SHOCKNESSY CHIO TURNPIKE

CONTRACT CIP-43-89-17 PART I DECK REPLACEMENT

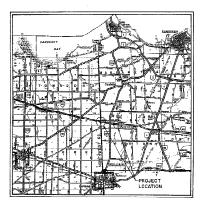
NORTHWEST ROAD OVER OHIO TURNPIKE - M.P.106.1 SANDUSKY COUNTY, OHIO

DEYO ROAD OVER OHIO TURNPIKE - M.P.107.5 ERIE COUNTY, OHIO

ORIGINAL CONTRACT C-34

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| REINFORCING STEEL LIST | 27 |
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| FENCE DETAILS | 29-30 |



SCALE IN MILES

Burgess & Niple, Limited

Engineers and Architects





NOTE:

THIS CONTRACT IS COMBINED WITH CONTRACT FTP: 43-89-18 & CIP: 43-89-17 (PART 2) TO FORM A SINGLE CONSTRUCTION CONTRACT

> UNDERGROUND UTILITIES 48 HOURS BEFORE YOU DIG Cal: 800-362-2764(Toll free) OHIO UTILITIES PROTECTION SERVICE NON - MEMBERS. MUST BE CALLED DIRECTLY

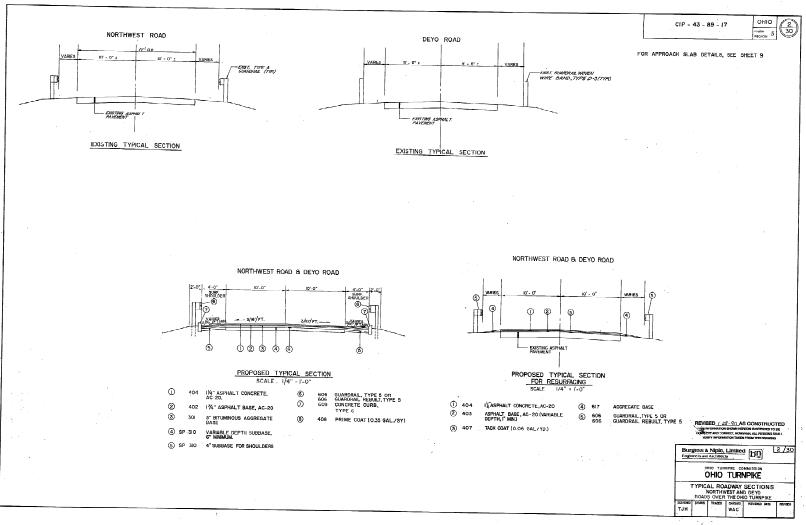
APPROVED FOR

CHIEF ENGINEER

REVISED 1-25-90 AS CONSTRUCTED THE INFORMATION SHOWN HEREON IS INTENDED TO BE COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SHALL

| Şl | JPPLEMENTA | L PRINTS | B OF STAN | DARD CON | ISTRUCTIO | N DRAWIE | IGS |
|------|------------|----------|-----------|----------|-----------|----------|---------|
| BP-2 | I -II-85 | F-I | 11 10 83 | GR-I | 1-11-85 | MG-1 | 7-26-76 |
| BP-3 | 12-6-76 | | | GR-2B | 2-5-82 | | |
| BP-6 | 1-11-85 | | | GR-3 | 1-21-85 | | |
| BP-7 | 10-1-67 | | | GR-4 | 2-5-82 | | |
| | | | | | | | |

SUPPLEMENTAL PRINTS OF STANDAR) BRIDGE DRAWINGS



GENERAL NOTES

PROPOSED WORK

THE BRIDGES CARRYING NORTHWEST ROAD AND DEVO ROAD TRAFFIC OVER THE TURNPIKE SHALL BE REHABILITATED UNDER THIS CONTRACT. MAJOR WORK TO BE PERFORMED CONSISTS OF:

NORTHWEST ROAD AND DEVO ROAD BRIDGES OVER THE ONIO TURNPIKE

- 1. REPLACE EXISTING BRIDGE DECKS, PARAPETS, DECK JOINTS, AND ABUTHENT SLABS WITH NEW DECKS, PARAPETS WITH FENCE WHERE SHOWN, SEALED DECK JOINTS AND ABILTMENT SLABS
- 2. MAKE THE DECKS COMPOSITE BY ADDING SHEAR STUD CONNECTORS.
- 3. MAKE REPAIRS TO THE CONCRETE PIERS AND ABUTMENTS.
- 4. PROVIDE NEW APPROACH SLABS AND PAVEMENT WITH CATCH BASINS.
- 5. PROVIDE CONCRETE BARRIER PROTECTION AT PIERS 1 AND 3.

LOCATION OF GUARDRAIL

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

WHERE GUARDRAIL IS REPLACED ON LOCAL ROADS. THE SHOULDER AREA SHALL BE GRADED AS SHOWN IN THE TYPICAL ROADWAY SECTION BEFORE INSTALLATION OF THE NEW GUARDRAIL.

CONDUIT FND TREATMENT

IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENTS REQUIRED BY THE PLANS AT BOTH THE OUTLET AND INLET ENDS. THIS SHALL INCLUDE ROCK CHANNEL PROTECTION.

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 PROVISION-607.

EXISTING FENCE

ANY EXISTING RIGHT-OF-WAY FENCE THAT IS REMOVED BY THE CONTRACTOR TO PERFORM ANY WORK ITEM, SHALL BE REBUILT BY THE CONTRACTOR TO EQUAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OHIO TURNPIKE COMMISSION.

PAINTING

THIS QUANTITY SHALL BE USED TO PERFORM PAINTING OF EXISTING STRUCTURAL STEEL DESCRIBED IN THE SPECIFICATIONS AS DIRECTED BY THE ENGINEER.

ITEM SP514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL

EXPANSION REARINGS

THIS ITEM SHALL BE USED TO REMOVE BEARINGS AND BEARING PLATES. FROM THE PIER SEATS TO PERFORM CONCRETE PATCHING ON THE PIFR SEATS. THE NUMBER OF BEARINGS TO BE REMOVED SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

ITEM SP524B - RESETTING EXPANSION BEARING DEVICES - 24 FACH

UTILITIES NOTIFICATION

AT LEAST TWO 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 AND THE DWNERS OF EACH UTILITY FACILITY SHOWN ON THE PLANS.

THE OWNERS OF UNDERGROUND UTILITY FACILITIES SHALL WITHIN FORTY-FIGHT HOURS, EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, AFTER NOTICE IS RECEIVED, STAKE, MARK, OR OTHERWISE DESIGNATE THE LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA 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 DAYS AHEAD OF THE PLANNED CONSTRUCTION.

LITEL COMMUNICATIONS CORP. FIBER OPTIC CABLE

ADJACENT TO

THE MEDIAN SHOULDER OF THE WESTBOUND TURNPIKE LANES IS BURIED A
FIBER OPTIC CABLE. EXTREME CARE MUST BE TAKEN BY THE CONTRACTOR TO PRESERVE AND PROTECT THIS DUCT DURING ALL PHASES OF CONSTRUCTION. ANY EXCAVATION IS THIS AREA FOR ANY REASON IS NOT TO 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 CARLE

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 CARLE.

JAYARAM BORATAH OFFICE: (419) 884-0400

HOME: (419) 756-6773

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT.

> TELECOMMUNICATIONS: SEE NOTE * (FIBER OPTIC CABLE)

ELECTRIC

OHIO EDISON COMPANY 2502 WEST PERKINS AVENUE SANDUSKY, OHIO 44870

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR PLAN TITEMS 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 THE PROJECT.

> REVISED 1-25-90 AS CONSTRUCTED THE INFORMATION SHOWN HEREON IS INTEXDED TO DE-COMPLETE MID CORRECT, HOWEVER, ALL PERSONS SHALL

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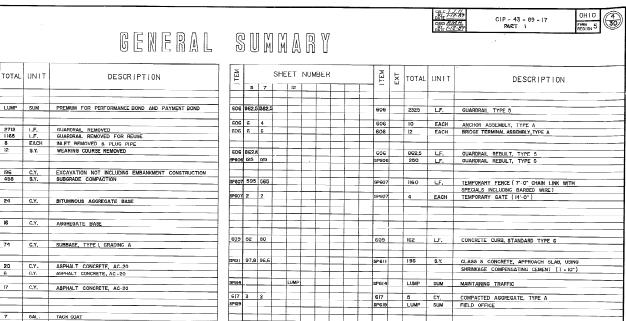
Burgess & Niple, Limited

Engineers and Architects

R.M.H.

GENERAL NOTES

W.A.C



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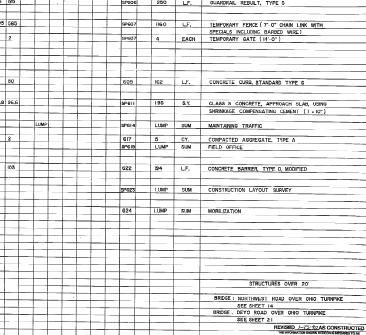
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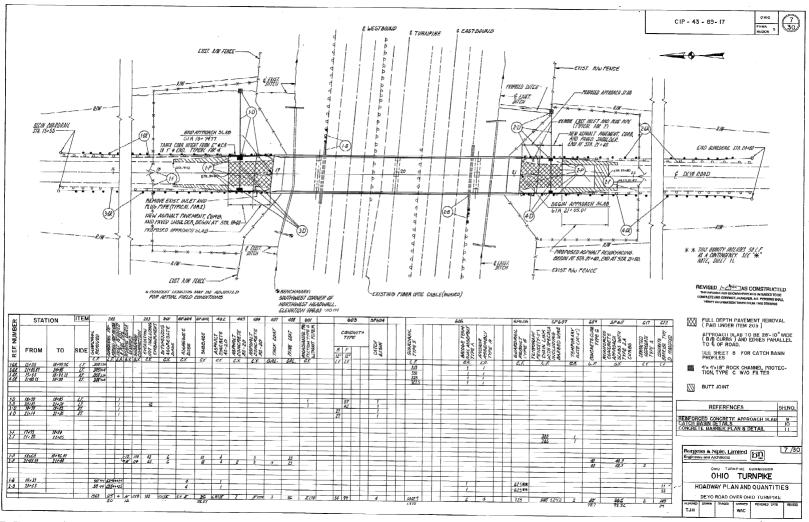
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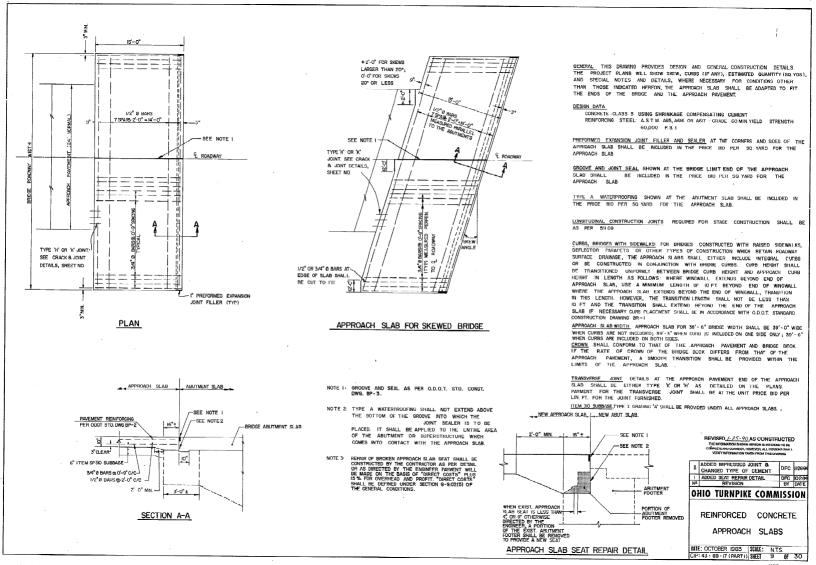
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COMPLETE AND CORRECT, HOWEVER, ALL PERSONS SH VERIFY INFORMATION TAKEN FROM THIS DRAWING. GENERAL SUMMARY





DESIGN SPECIFICATIONS

THE PROPOSED REHABILITATION WORK FOR THESE STRUCTURES COMFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983, INCLUDING THE 1984, 1985, 1986, 1987, AND 1988 INTERIM SPECIFICATIONS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN LOADING NORTHWEST ROAD AND DEVO ROAD HS 20-44 WITH NO FUTURE WEARING SURFACE

DESIGN STRESSES CONCRETE CLASS S

COMPRESSIVE STRENGTH 4500 PSI FOR SUPERSTRUCTURE REINFORCING STEEL -ASTM A615, 616, OR A617 - GRADE 50

MINIMUM YIELD STRENGTH 60,000 PSI

EXISTING STRUCTURAL STEEL - A7, UNIT STRESS 18.000 PSI

HIGH STRENGTH BOLTS - SHALL BE 1-INCH DIAMETER, ASTM A-325 UNLESS OTHERWISE NOTED.

DECK PROTECTION METHOD

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

MONOLITHIC WEARING SURFACE

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

EXISTING STRUCTURE VERIFICATION

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 CMS SECTION 513.02 AND O.T.C. 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 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 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,

EXISTING STRUCTURE PLANS

DRAWINGS.

THE ORIGINAL DESIGN PLANS MAY BE EXAMINED BY PROSPECTIVE BIDDERS AT THE COMMISSION'S PRINCIPAL OFFICE, 682 PROSPECT STREET, BEREA, OHIO. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE

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, WHICH SHALL BE PAID FOR AS ITEM SP824 EPOXY COATED REINFORCING STEEL, GRADE 60. AN ALLOWANCE IS INCLUDED IN ITEM SP824 FOR THIS PURPOSE.

DRILLING DOWEL HOLES, FURNISHING AND PLACING SP956 NONSHRINKING EPOXY MORTAR AND REINFORCING DOWEL BARS, WHERE NEEDED TO REPLACE EXISTING REINFORCEMENT DAMAGED BY THE CONTRACTOR, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

CUTTING OR BENDING OF REINFORCING BARS

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

ABUTMENT BACKFILL

THE CONTRACTOR SHALL PROVIDE AND PLACE RACKFILL 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.

CONCRETE WEATHERPROOFING

SHALL BE APPLIED TO THE FOLLOWING EXPOSED CONCRETE SURFACES OF

- ALL SIDES OF PARAPETS ON ABUTMENTS AND SUPERSTRUCTURE.
- EDGES AND UNDERSIDE OF DECK OUTSIDE OF EXTERIOR FASCIA BEAMS.
- CONCRETE BRIDGE DECK WEARING SURFACE ON ABUTMENTS. SUPERSTRUCTURE AND APPROACH SLABS. NEW EXPOSED CONCRETE SURFACES OF ALL ABUTMENTS AND PIERS.
- SEALING SHALL NOT BE DONE UNTIL CONCRETE PATCHING REPAIRS HAVE BEEN COMPLETED AND CURED.

THE WORK SHALL PERFORMED PER ITEM SP536 - "CONCRETE MEATHERPROPERING *

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 PARAPET TERMINALS FOR ATTACHMENT OF GUARDRAIL TERMINAL CONNECTORS. INCLUDE WITH ITEM SP511 FOR PAYMENT.

REMOVING BEARING DEVICES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF AN ADEQUATE SUPPORT AND JACKING SYSTEM CAPABLE OF RAISING THE EXISTING BRIDGE BEAMS AND BEARING DEVICES.

THE CONTRACTOR 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 REARINGS.

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 (I.E. LOADS), AND REMOVAL PROCEDURES.

PAYMENT FOR ALL LABOR AND EQUIPMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SP524B - RESETTING EXPANSION BEARING DEVICES.

BEARING RESETTING RESTRICTIONS

JACKING AND/OR TEMPORARY SUPPORTS SHALL BE LIMITED TO ONE (1) SUBSTRUCTURE UNIT AT ANY GIVEN TIME, E.G. 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, E.G. BEAM LINES 1, 2, 3, 4, 4 5 SHALL BE RAISED SIMULTANEOUSLY WHEN REMOVING THE PIER BEARINGS. THE STRUCTURE SHALL NOT BE RAISED MORE THAN NECESSARY

REMOVAL OF SCUPPER DRAINFIPE

THE CONTRACTOR SHALL REMOVE EXPOSED EXISTING SCUPPER DRAINPIPES. AND PLUG PORTION TO REMAIN AS PER DETAIL (SEE REMOVAL DETAILS SHEETS). PAYMENT FOR THIS WORK WILL BE INCLUDED IN ITEM SP202

BRIDGE DECK ELEVATIONS, SLAB THICKNESS, AND APPROACH PROFILES IN ORDER TO MEET ROADWAY GRADES. TO ASSURE THE CONSTRUCTION OF

THE REGULTRED 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 EXISTING STEEL BEAMS AFTER THE COMPLETE REMOVAL OF THE EXISTING DECK SLARS AT THE LOCATIONS SHOWN IN THE TABLES ON SHEET 17 OF 30 FOR THE FINAL PAVENENT ELEVATIONS AT THE NORTHWEST ROAD BRIDGE AND ON SHEET 24 OF 30 FOR THE FINAL PAVEMENT ELEVATIONS AT THE DEVO ROAD BRIDGE. 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 THE "INTIMUM 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 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 6" 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

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 CONCRETE APPROACH SLABS TO THE CONCRETE ABUTMENT AND DECK SLABS. PRIOR TO REMOVAL OF THE EXISTING ASPHALT PAVEMENT, AS SHOWN ON PLAN SHEETS 5 OF 30 AND 7 OF 30, THE CONTRACTOR SHALL PROVIDE THE ENGINEER ELEVATIONS OF THE EXISTING PAVEMENT SURFACE ALONG THE

CENTERLINE AND BOTH EDGES OF PAVEMENT AT INTERVALS OF 25 FEET.

PERMITTED, HOWEVER, THE ABUTMENT SLAB AND THE DECK SLAB MAY BE

ELEVATIONS OF THE EXISTING ASPHALT, AT 25 FOOT INTERVALS, FOR A DISTANCE OF 100 FEET BEYOND THE PAVING LIMITS AND AS-BUILT FIFVATIONS OF THE ABUTMENT AND DECK SLABS SHALL ALSO BE PROVIDED. AFTER RECEIPT OF THESE ELEVATIONS THE ENGINEER WILL CALCULATE AND PROVIDE TO THE CONTRACTOR FINAL ELEVATIONS FOR THE CONCRETE APPROACH SLABS AND FOR BOTH ITEM 402, ASPHALT CONCRETE BASE COURSE AND 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 SP623.

BARRIER DEFLECTION JOINT

THE DEFLECTION JOINTS IN THE BARRIER CURS MAY BE EITHER 1/4" GRAY SPONGE RUBBER OR 1/4" GRAY CELLULAR POLYVINYL CHLORIDE (PVC) SPONGE. EITHER MATERIAL SHALL MEET THE REQUIREMENTS OF AASHTO M-153, TYPE I, EXCEPT THE DENSITY OF THE PVC SPONGE SHALL NOT BE LESS THAN 20 LBS. PER CU. FT.

INCLUDE WITH ITEM SP511B, LIGHTWEIGHT CONCRETE, SUPERSTRUCTURE, FOR PAYMENT.

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 FROXY COATED DEVICES WITH SPACING NOT EXCEEDING 3'-O" CENTERS IN EACH DIRECTION. BROKEN CONCRETE, BRICKS, ETC. SHALL NOT BE USED FOR SUPPORT OF EPOXY COATED REINFORCING STEEL.

WELDED ATTACHMENTS

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 SHALL
DE PERMITTED EPOXY BONDING COMPOUND (SP526)

REINFORCING STEEL COVER

ALL REINFORCING STEEL COVER SHALL BC 2" UNLESS OTHERWISE NOTED.

EPOXY BONDING COMPOUND SHALL BE PLACED ON THE SURFACE OF EXISTING

CONCRETE WHICH WILL BE IN CONTACT WITH NEW CONCRETE. THE PRICE

SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE PERTINENT

ALL CONCRETE CORNERS TO MATCH EXISTING OR CHAMFER CORNERS TO 1".

STRUCTURE REMOVAL

CONCRETE ITEMS.

EACH OF THE SCUPPERS ARE ATTACHED TO THE BRIDGE BY BOLTS THROUGH THE TOP FLANGES OF THE BEAMS. THESE BOLTS MUST BE REMOVED BEFORE THE DECK CAN BE REMOVED TO AVOID DAMAGING THE BEAMS. THE CONTRACTOR SHALL SUBMIT DETAILS OF REMOVAL WITH DECK REMOVAL PLANS. REMOVAL OF THESE BOLTS WILL BE INCLUDED FOR PAYMENT IN ITEM SP202, PORTIONS OF STRUCTURE REMOVED. DAMAGE TO THE BEAMS, INCLUDING PAINT, SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE OHIO TURNPIKE COMMISSION.

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 ENGINEERS DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

DIMENSIONS

DIMENSIONS GIVEN ARE MEASURED HORIZONTALLY AND AT 60 DEGREES FAHRENHEIT, UNLESS OTHERWISE NOTED,

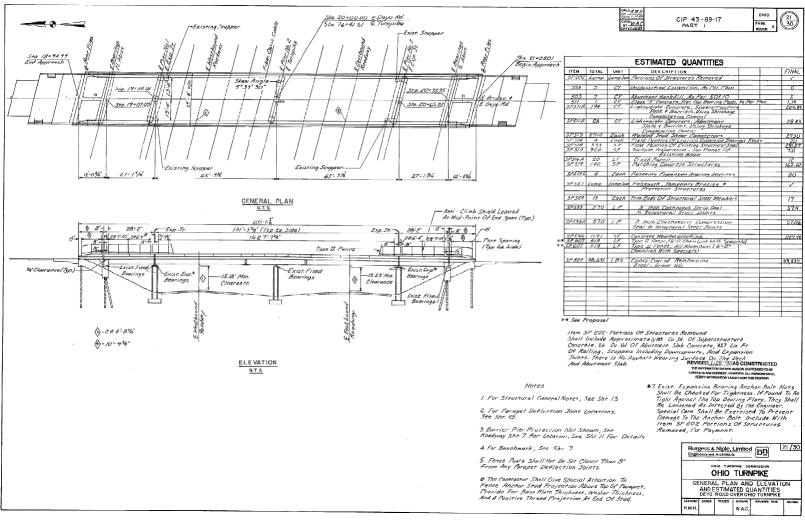
> REVISED 1-25-90 AS CONSTRUCTED THE INFORMATION SHOWN NEREON IS INTENDED TO BE COMPLETE AND CONTECT, HOWEVER, ALL PERSONS SHALL VERTEY INFORMATION TAKEN FROM THIS DRAWNER

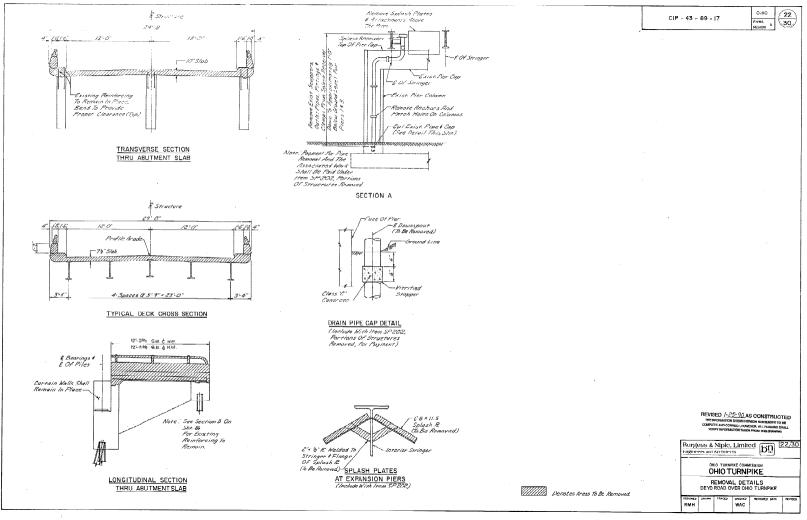
Burgess & Niple, Limited [bn] 0:110 TURNPIKE COMMISSION

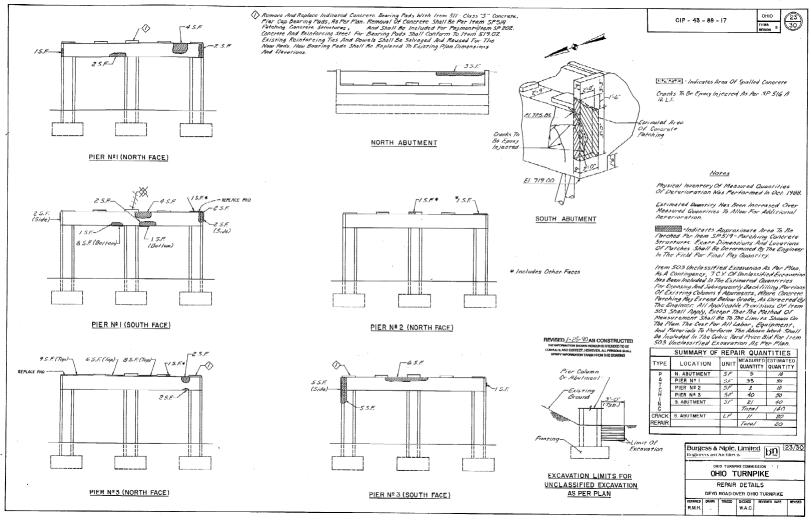
OHIO TURNPIKE STRUCTURE

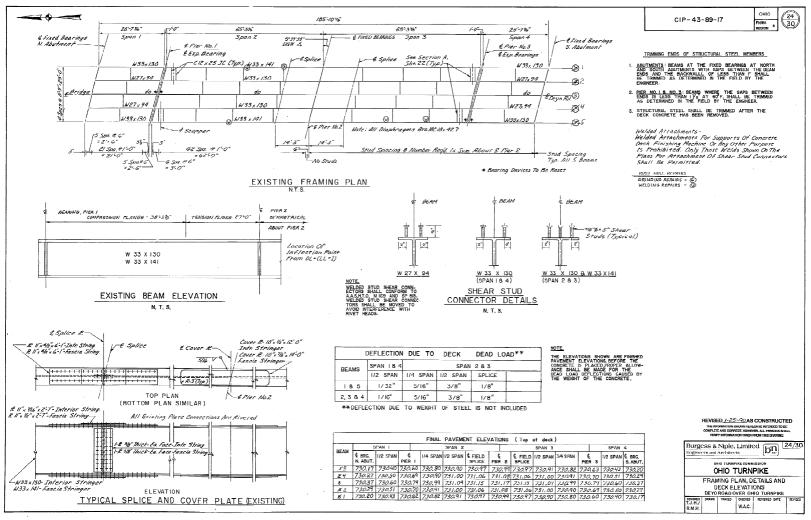
GENERAL NOTES DESIGNED | DRAWN TRACED RM.H.

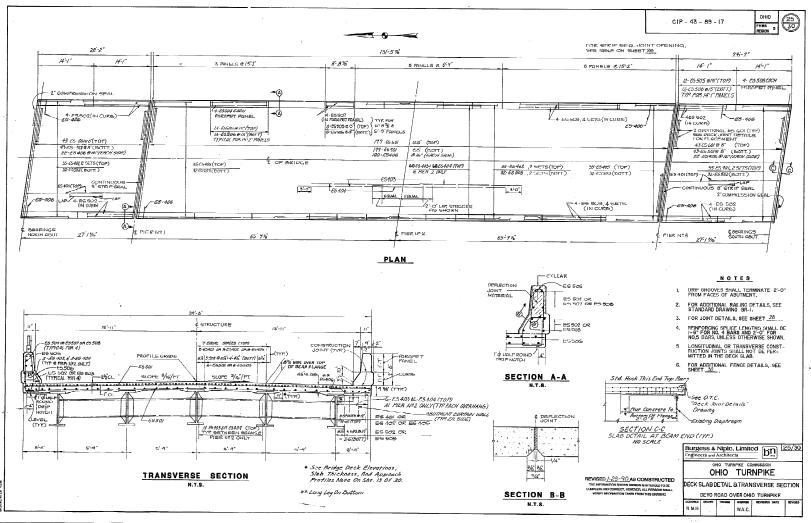
W.A.C.

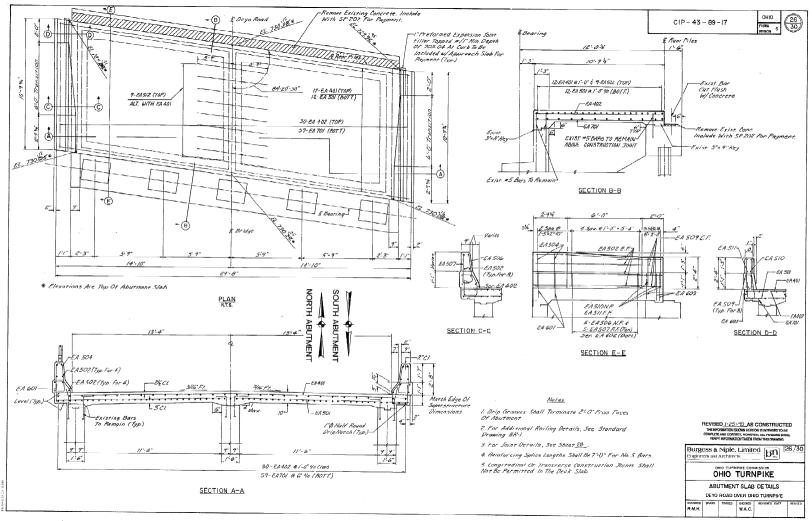


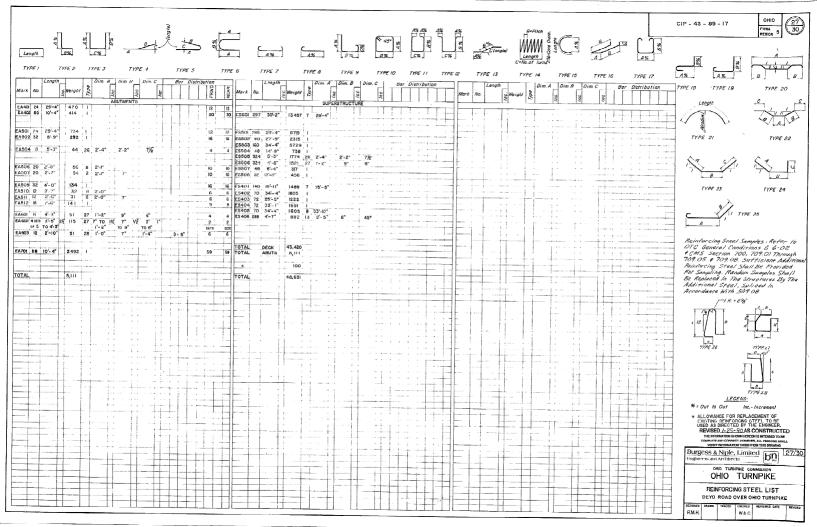


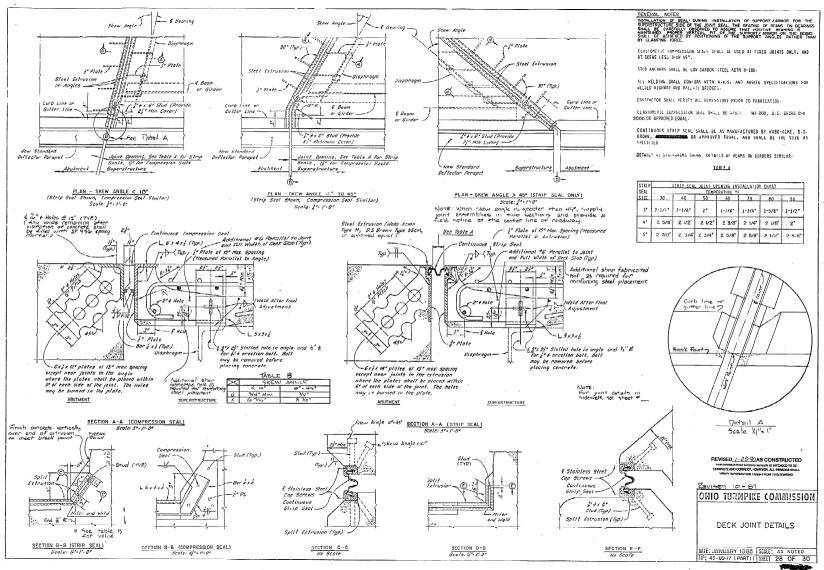












CONTRACT NO. C- 34
COUNTY - SANDUSKY - ERIE
DATE:





OHIO TURNPIKE COMMISSION

OHIO TURNPIKE PROJECT NO. 1

DESIGN SECTION D-12

CONTRACT NO. C-34

TURNPIKE CONSTRUCTION CONTRACT

STATION 1219+39 TO STATION 1281+20.97-SANDUSKY COUNTY STATION 0+00 TO STATION 134+16.88-ERIE COUNTY



APPROVAL RECOMMENDED BROWN & BLAUVELT CONTRACTING ENGINEER

8 B. K. Elliott Co., Cleveland, Ohio

Harved a Blauvert Mar 6, 1953 APPROVED

J. E. GREINER CO.

CONSULTING ENGINEER

S-25-53

APPROVED
OHIO TURNPIKE COMMISSION

5-29-53

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.

LINES 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

FOR MAINTENANCE OF TRAFFIC NOTES AND DETAILS SEE SHEET NO. 3.

CAST-IN-PLACE CONCRETE PILES (PIPE SHELLS)

CAST - IN-PLACE CONCRETE PILES SHALL BE STEEL PIPE PILES FILLED WITH CONCRETE. STEEL PIPE SHALL CONFORM TO A.S.T.M. A-252, AND SHALL HAVE A MINIMUM OUTSIDE DIAMETER OF 12" AND MINIMUM THICKNESS OF 5/16, AND SHALL BE DRIVEN WITHOUT POINT BUT WITH OPEN END TO REFUSAL IN ROCK. PILES UP TO TWENTY FEET IN LENGTH SHALL BE IN ONE PIECE; PILES FROM TWENTY TO FORTY FEET IN LENGTH SHALL HAVE NOT MORE THAN ONE SPLICE; PILES OVER FORTY FEET IN LENGTH SHALL HAVE SPLICES NOT CLOSER TOGETHER THAN TWENTY FEET. SPLICES SHALL BE WELDED. PILES SHALL BE CAPPED WITH 18" X 1/2"X 1-6" BEARING PLATES, GROUTED TO OBTAIN FULL BEARING. INTERIOR OF PIPES SHALL BE INSPECTED WITH A LIGHT AND ALL OBSTRUC-TIONS AND WATER REMOVED BEFORE CONCRETE IS PLACED. SEE SP-4 FOR FURTHUR PROVISION FOR PILES

LANDSCAPING

TOPSOIL (ITEM L-3) SHALL BE SPREAD TO A COMPACTED DEPTH OF TWO (2) INCHES ON AREAS INDICATED ON THE PLANS.

BONEMEAL (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 LIMESTONE (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 TOP-

SEEDING & PROTECTING (ITEM L-9) AND SEEDING & MULCHING (SPECIAL SEEDING, ITEM L-19) SHALL BE DONE ONLY BETWEEN APRIL 15 & JUNE 15, AND FROM 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-34
- c) SUPPLEMENT SPECIFICATIONS B-20, DATED DECEMBER 9,1952 SUPPLEMENT SPECIFICATIONS A-5, DATED AUGUST 7,1953 SUPPLEMENT SPECIFICATIONS T-30, DATED DECEMBER 9,1952

SUPPLEMENT SPECIFICATIONS T-35, DATED DECEMBER 9,1952 .

SUPPLEMENT SPECIFICATIONS T-31, DATED DECEMBER 9,1952 - SUPPLEMENT SPECIFICATIONS B-35, DATED DECEMBER 9,1952 - SUPPLEMENT SPECIFICATIONS I-9, DATED DECEMBER 9,1952 - SUPPLEMENT SPECIFICATIONS I-30, REV. JULY 9,1953 - SUPPLEMENT SPECIFICATIONS I-29, DATED MAY 28,1953

| TEGENO | 630 |
|---|--|
| SURVEY BASE LINE | A. A. A. A. A. A. A. A. A. A. A. A. A. A |
| EXISTING PROPERTY LINE | <u>P.L.</u> |
| EXISTING FENCE LINE | x |
| EXISTING PROPERTY LINE (FENCED) | Fence is P.L. |
| EXISTING R/W LINE | |
| PROPOSED R/W LINE | |
| EXISTING FARM TILE DRAINAGE | |
| PROPOSED FARM DRAINAGE COLLECTOR | <u> </u> |
| PROPOSED DROP INLET | D |
| PROPOSED TILE LINE BREATHER | |
| PROPOSED DITCH AND ELEVATION | |
| PROPOSED GUARD RAIL (FOR TYPE SEE PLANS) | |
| PROPOSED MONUMENT | • . |
| Proposed Tile Line Junction Box | > |

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 DAMS 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 SPANS WITHOUT HINGED BEARINGS ON AN INCLINED GRADE OF 1% OR MORE THE SOLE PLATES SHALL BE BEVELED SO THAT THE SUBSTRUCTURE BRIDGE SEATS MAY BE LEVEL.

CONCRET

ALL CONCRETE 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.

| NO. | REVISION | BY | LOVIE |
|-----|---|-----|----------|
| | | - | DATE |
| Δ | Revised Sup. Spec. date . | HSV | 10-6-53 |
| ◬ | Revised Legend for Tile breather & junction box | HSV | 11-23-53 |
| A | AS TOTANS | | Feb56 |
| | | | |
| | | | |

OHIO TURNPIKE COMMISSION
OHIO TURNPIKE PROJECT NO. 1

GENERAL NOTES & SYMBOLS

BROWN & BLAUVELT CONTRACTING ENGINEER

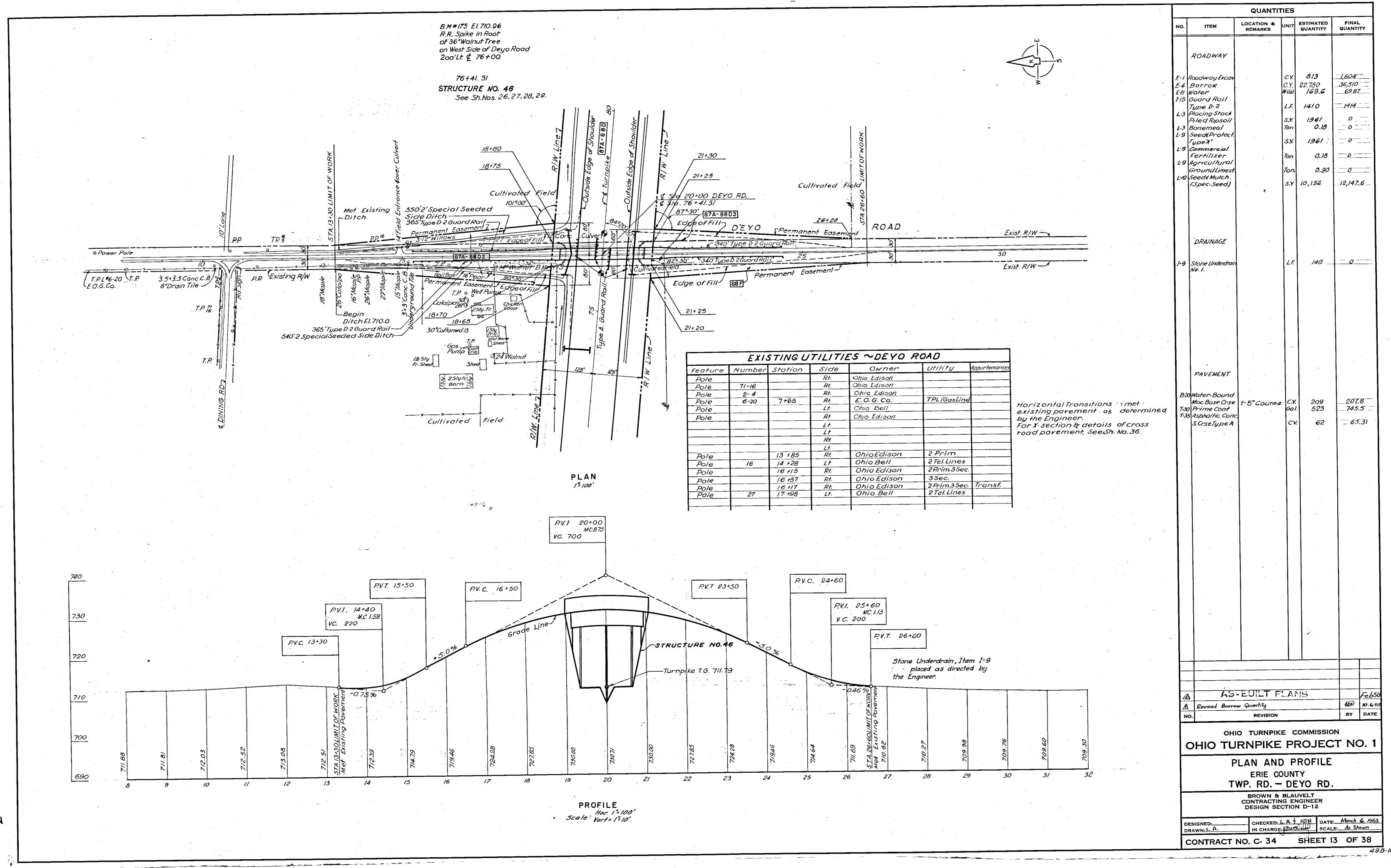
DESIGN SECTION D-12

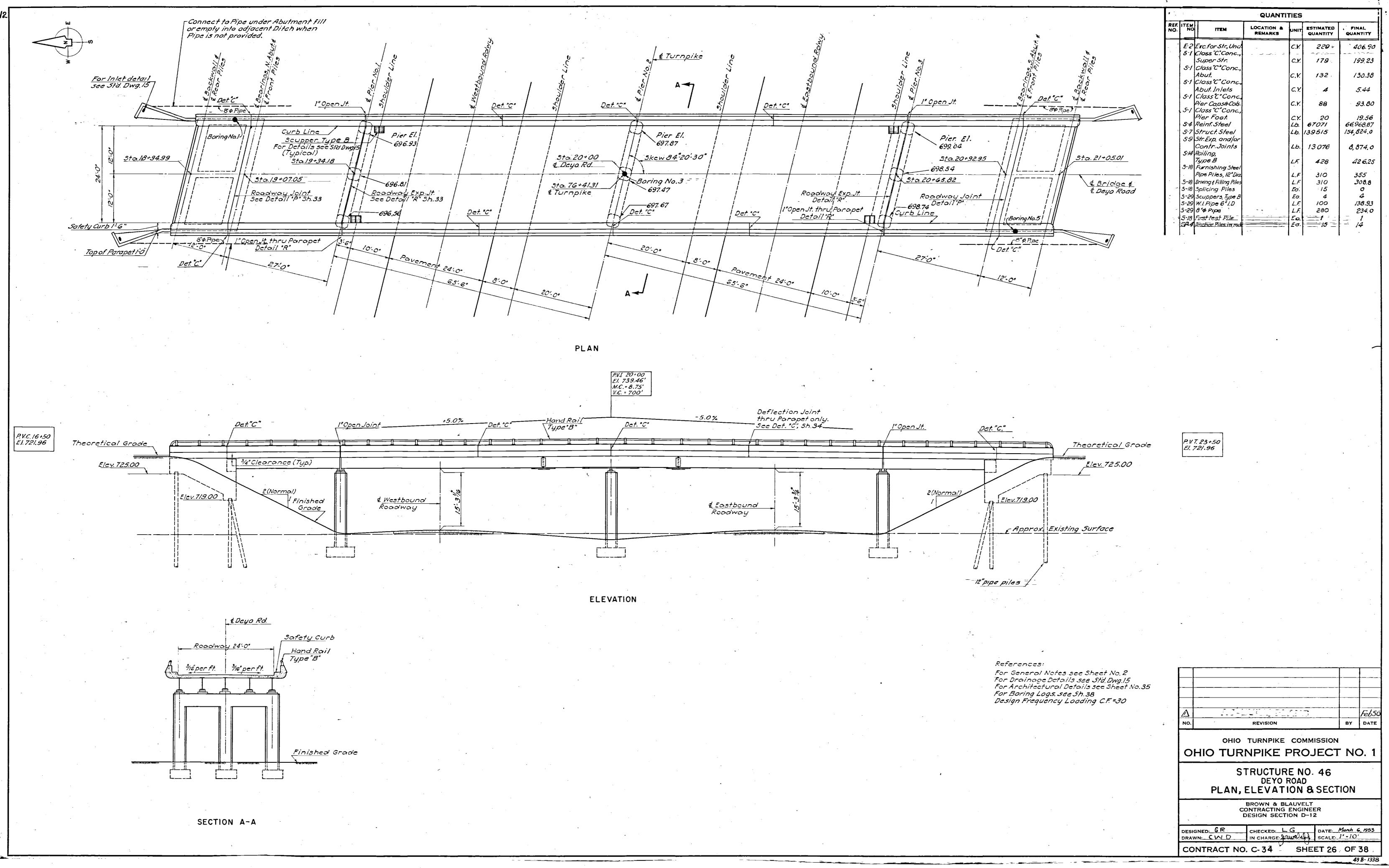
DESIGNED: CHECKED: L.A. DATE: March 6, 1953

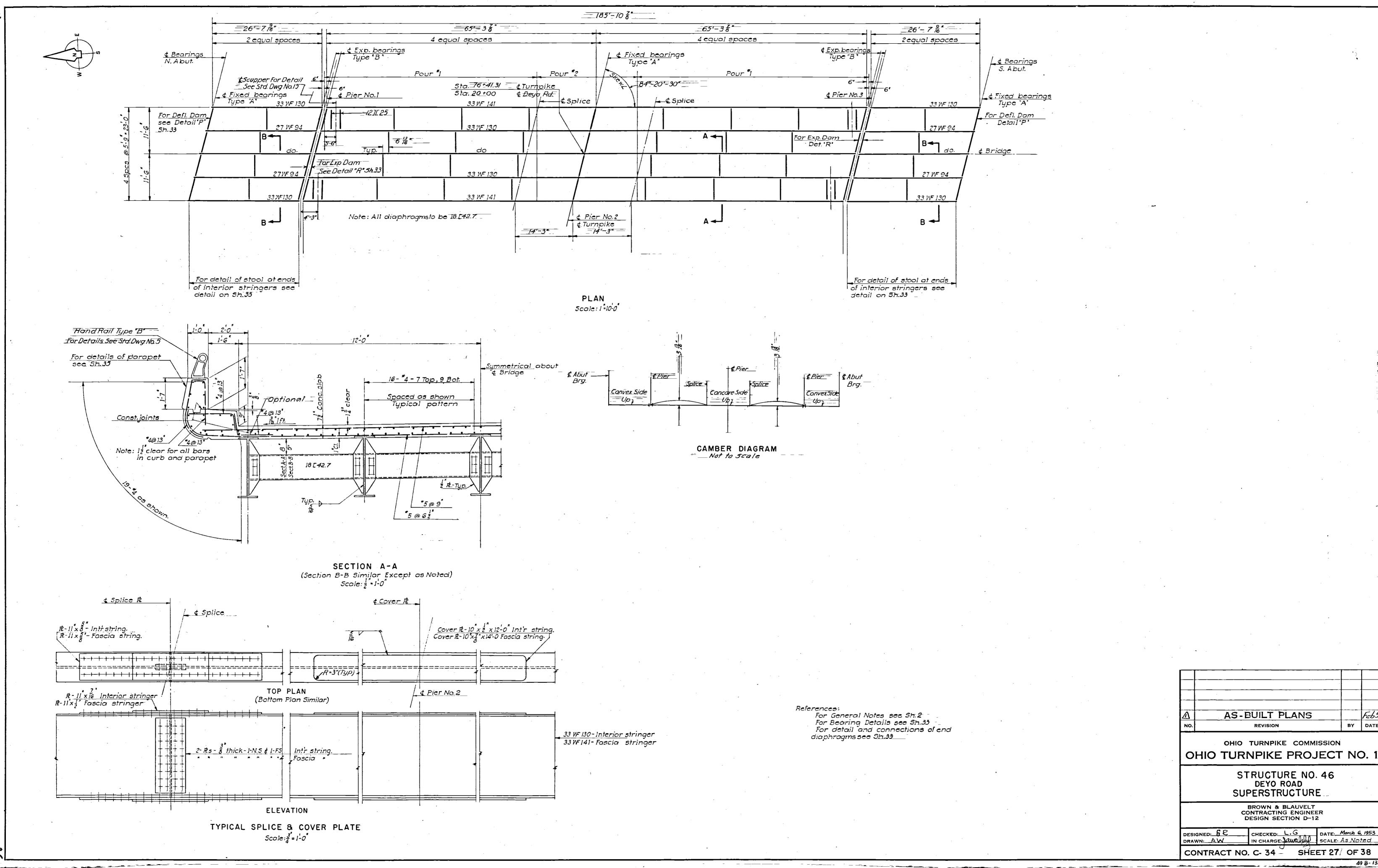
DRAWN: CZ.G. IN CHARGE: Guiding SCALE: None

CONTRACT NO. C- 34 SHEET 2 OF 38

| u <u>«</u> | CUEET NUMBERS | | v | SHEET NUMBERS |
|---|---|-------------------------------------|--------------------------------------|--|
| SPEC. ITEM NUMBER SPEC. ITEM NUMBER SS SS SS SS SS SS SS SS SS SS SS SS SS | SHEET NUMBERS | 8 10 13 | ALS POSAI | |
| DESCRIPTION | 5 6 7 9 II I2 I4 I5 5 16 5 16 5 16 5 16 5 16 5 16 5 16 5 | | TOTAL | AN OUNT OF OUNT ON TO TO TO TO TO TO TO TO TO TO TO TO TO |
| | | | -8 | E E PAVEMENT |
| 1 E-1 Roodway Excavation | C.Y. 17,078 8,700 24.492 92,292 80,605 14,765 15,308 1381 | 555 8309 813 | 264,298 264,300 | |
| 2 E-4 Borrow 3 E-11 Water | C.Y. 126,942 29,333 M.G. 81.5 126.5 453.1 201.8 31.8 361.6 1036.7 221.2 | 31,887 596 22780 3495289.0 169.6 | 211,538 211,600 | 102 B-20 8" Waterbid. Mac. Base Crs. 1-4 Courses - C.Y |
| 4 E-12 Pipe Removed (under 16") | L.F. 10 | 80 | <i>3322.3 3,</i> 330 <i>90 90</i> | 104 B35 Asphaltic Conc. Leveling Course C.Y. 85 128 213 210 |
| 5 1-15 Guard Rail, Type "A" 6 1-15 Guard Rail, Type "B" | L.F. 220 220 220 1350 L.F. 200 200 200 3280 210 | 1865 | 3875 3,870 4090 4100 | 105 T-30 Bitum. Prime Coat Gal. 1,088 2671 523 4282 4290 106 I-27 Classified Embankment Material C.Y 3292 3292 3300 |
| 7 1-15 Guard Rail, Type "C-2" or C-1- | <i>L.F.</i> | 1750 | 1750 1,750 | 107 B-21 Compacted Aggregate Base Course C.Y. 1306 1306 1310 |
| 8 1-15 Guard Rail, Type "D-2" 9 1-23 Right-of-Way Fence, Type 2 | L.F. 4480 5200 5860 5220 5660 5735 5820 1440 | 1585 | 1410 .1,410 41,000 41,000 | 109 T-35 Asphaltic Conc. Surface Course-Type A C.Y. 112 391 62 565 570 |
| 10 1-26 Permanent Monuments 11 1-28 Temporary Cattle Fence | Ea. 1 1 2 2 2 2 2 1 | | 12 I2 250 250 | 110 T-71 Reinf. Portland Cement Conc. Pavement 10" S.Y. 11,525 13,867 15,045 14,900 14,965 14,900 14,380 3,824 103,400 |
| 12 L-3 Placing Stock Piled Topsoil | S. Y. 12,480 15,023 15,412 14,83G 15,647 15,600 14,215 4,160 | 2880 5788 1961 | 118,002 118,000 | |
| 13 L-3 Bonemeal & Raw Bone 14 L-6 Roadside Cleanup | Ton 1.12 1.35 1.39 1.34 1.41 1.40 1.30 0.37 L.S. | 0.25 0.52 0.18 | 10.63 II - | |
| 15 L-9 Seeding and Protecting Type "A" | S.Y. 12,480 15,023 15,412 14,836 15,647 15,600 14,215 4,160 | 2880 5788 1961 | 118,002 118,000 | |
| 16 L-9 Commercial Fertilizer 10-6-4 17 L-9 Agricultural Ground Limestone | Ton 1.12 1.35 1.39 1.34 1.41 1.40 1.30 0.37 Ton 5.60 6.75 6.95 6.70 7.05 7.00 6.50 1.85 | 9 0.25 052 0.18 1.25 2.60 0.90 | 10.63 II 53.15 53 | 17 21 26 30 Y |
| 18 L-19 Seeding and Mulching (Special Seeding | ng) S.Y. 26,609 28,533 34,925 36,042 36,444 35,066 39,089 4,929 | 21,138 294/6 10,156 | 293,347 293,400 | |
| | | | | 111 E-2 Excavation for Structures C.Y. 229 255 229 490 1203 1200 |
| | | | | 113 1-10 Rip-Rap, Type"A" S.Y. 1720 1720 |
| DRAINAGE-Including Structure (Box Culverion 51 E-Z Excavation for Structures | -t) 41-5ta.1238+20 C.Y. 690 24 219 374 50 272 20 2 | 87 | 1738 1740 | 114 1-15 Guard Rail, Type"A" L.F. 412 115 S-1 Class"C"Conc. for Structures C.Y. 424 446 423 529 1822 1800 1822 182 |
| 52 E-3 Excavation for Channels | C.Y. 2660 850 | | 3510 3,500 | 116 S-3 Waterproofing, Type"C" S.Y. 68 68 70 |
| 53 1-2 15"S.S. Reinf. Conc. Culvert Pipe 54 1-2 18" Paved Invert Bitum. Coated C.M.P. #12Go | L.F. 72 86 164 68 84 | | 474 470 1274 1280 | 117 S-4 Reinforcing Steel Lb. 67,479 82,380 67,071 65,956 282,886 282,900 |
| 56 J-5 Pipe Special-30°18"Pvd.Inv. Bit.Ctd.CM.P.#12Ga | | | 2 2 | 119 5-9 Structural Expansion and/or Contraction Uts. L.b. 12,856 14,616 13,076 12,288 52,800 |
| 57 I-8 Inlets, Type A-1 | Ea. 2 2 3 3 1 | | 11 11 | 121 S-18 Furnishing Shells for Piles, 12"Dia. C.1.P. L.F. 390 580 310 740 2020 2000 - |
| 58 1-9 Stone Underdrain No.1 59 1-14 2'Special Paved Side Ditch, 1'Deep, 4"Con | L.F. 50 | 140 340 140 | 620 620 50 50 | 122 S-18 Driving and Filling Piles L.F. 390 580 -310 740 2020 2000 123 S-18 Splicing Piles Ea. 6 20 15 45 86 86 |
| 60 1-14 2'Special Paved Side Ditch, 2' Deep,4"Con | one L.F. 10 | | 10 10 | 124 SP-4 Anchoring Piles in Rock Ea. 6 20 15 45 86 |
| 61 1-14 3'Special Paved Side Ditch, 1'Decp,4'Con 62 1-14 4'Special Paved Side Ditch,2'Decp,4'Con | | | 10 10 | 125 S-29 Scuppers, Type "B" Ea. 4 |
| 64 1-14 5'Special Paved Side Ditch, 2'Deep4'6 | onc L.F. 10 10 | | 20 20 | 121 S-29 Drainage Pipe for Structures, 8" L.F. 280 280 240 |
| 65 1-30 6"Extra Quality Drain Tile | L.F. 150 1280 740 630 | | 2800 2800 | 129 5-14 Standard Handrail. Type "B" L.F. 434 434 428 1296 1300 |
| 66 1-30 8"Extra Quality Drain Tile 67 1-30 12"Extra Quality Drain Tile | L.F. 190 1040 880 290 | | 3080 3080 190 190 | 130 5-16 First test Piles Ea. 1 1 1 |
| 68 1-30 6" Pipe Outlet for Farm Drainage | L.F. 20 20 20 20 L.F. 20 20 20 | | 100 100 | |
| 69 1-30 8" Pipe Outlet for Farm Drainage 70 1-30 12" Pipe Outlet for Farm Drainage | L.F. 20 . | | 40 40 20 20 | |
| -71 S-1 Class "C" Conc. for Structures 72 S-4 Reinforcing Steel | C.Y. 28444 4.02 4488 63.25 6.66 21.51 3.07 0.90 Lb. 31,360 214 2747 3534 336 906 160 51 | 15.16 724 | 443.89 450 | MISCELLANEOUS |
| 73 5-27 24"S.S. Reinf. Conc. Culvert Pipe | 2.F. | 106 | 106 110 | 131 T.29 Construction Contract Information Signs Ea. |
| 74 I-2 36"S.S. Reinf. Conc. Culvert Pipe 75 I-2 42"S.S. Reinf. Conc. Culvert Pipe | 2.F. 104 2.F. 128 | | 104 100- | |
| 76 I-2 30"Paved Invert Bitum Coated CM.P.#14Go | a. L.F. 108 | | 108 II0 154 I50 | |
| 78 S-27 72"Paved Invert Bitum. Coated C.M.P.# 8G | ia. L.F. 154 | | 154 160 | |
| 79 5-27 78"Paved Invert Bitum. Coated C.M.P.#8 Go 80 5-27 18" S.S. Reinf. Conc. Culvert Pipe | 2. L.F. 156 | 48 | 156 160 112 120 | GRADING ANALYSIS SHEET TOTAL EXCAVATION TOTAL EMBANKMENT BORROW=1:10 |
| 81 5.27 30" S.S. Reinf. Conc. Culvert Ripe | L.F. 36 | 44_ | 80 80 | NO. AVAILABLE: C REQUIRED: F (F = 0.85 C) REMARKS F. (9.536 |
| 82 I-30 10 Extra Quality Drain_tile | L.F. 890 | | 890 890 | 5 19,528 10,182 Haul 7,549C.Y. to Sh.# 6 Haul 7,549 C.Y. from 5h.5 |
| | | | | 6 7,892 15,809 Haul 3168C.Y. from Sh.*9 |
| | | | | 7 24,800 56,677 Haul 41,879 CY from Sh. #9 |
| | | | | 8 395 43,557 31,887 Houl 1G,768 CY. from Sh.*9 61,815 CY. Excess A AS-BUILT PLANS Feb56 |
| | | | - | 9 91,497 25,230 Haul 41,879 CY. to 5h. #6 Haul 41,879 CY. to 5h. #7 |
| | | | | 10 6,784 36,172 596 Haul 35/34 C.Y. from 5h.* II |
| | | | | 74,069 C.Y. Excess Haul 38935 C.Y. to Sh.12. Haul 35/34 C.Y. to Sh.12. Haul 35/34 C.Y. to Sh.10 |
| | | | - | OHIO TURNPIKE PROJECT NO. 1 |
| | | | | 12 14,248 45,206 Haul 38,935 CY from Sh.11. |
| | | | | 13 |
| | | | | 15 1,150 27,644 29,333 BROWN & BLAUVELT CONTRACTING ENGINEER |
| | | | | DESIGN SECTION D-12 |
| | | | | DESIGNED: CHECKED: 9.H. Sketz 9 DATE: March G. 1953 DRAWN: EL. IN CHARGE DURLE SCALE: None |
| | | | | CONTRACT NO. C-34 SHEET 4 OF 38 |





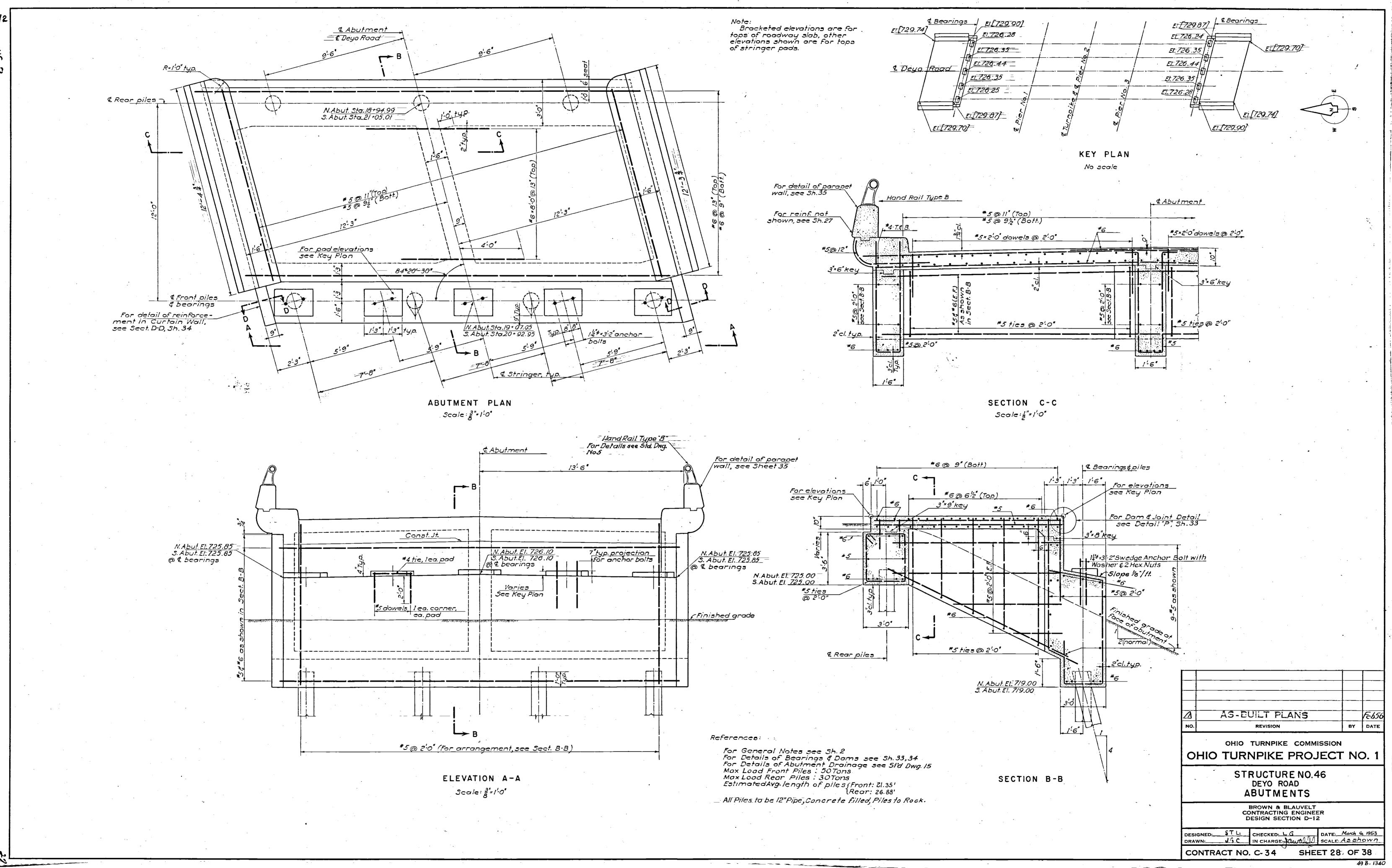


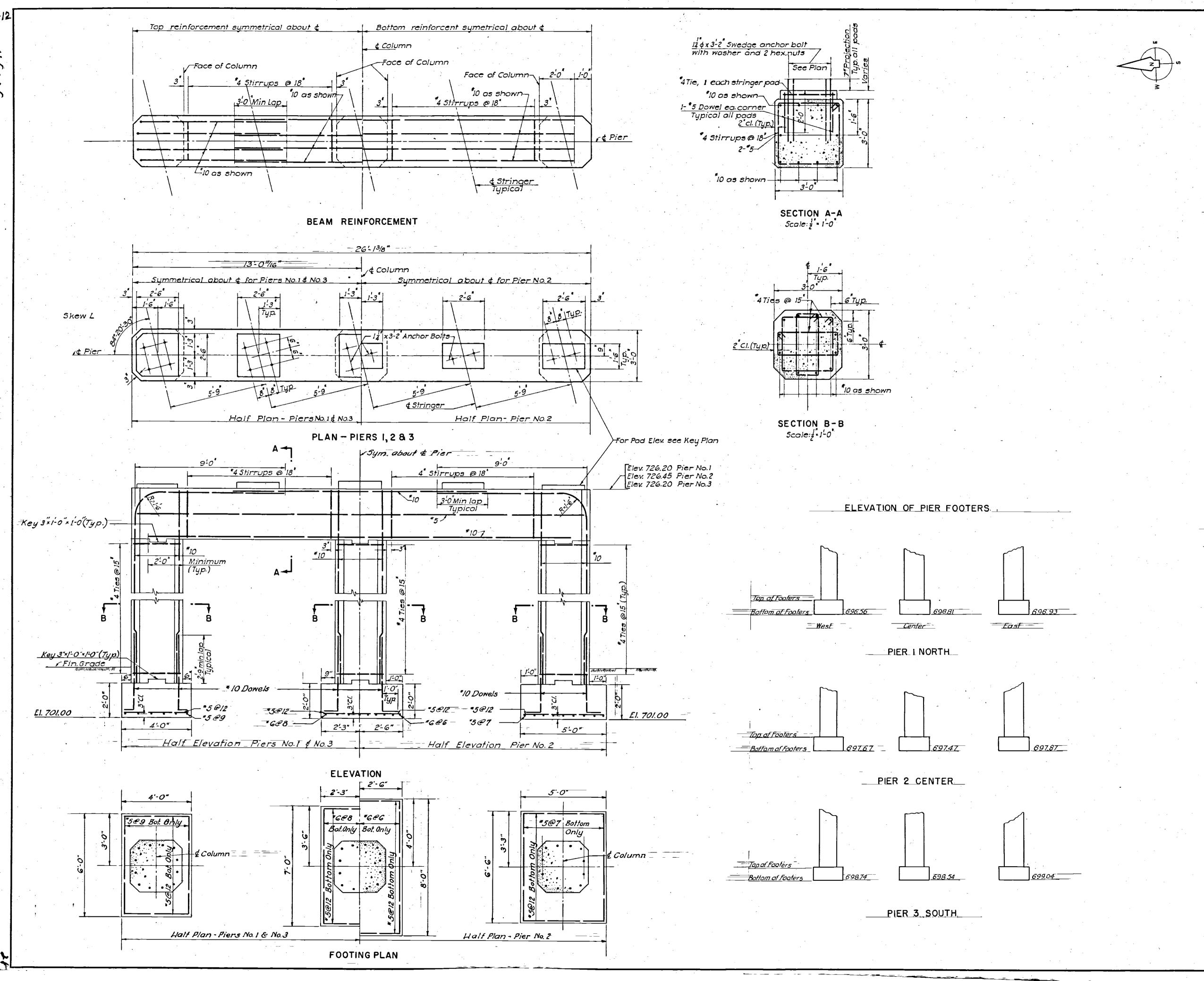
Feb56

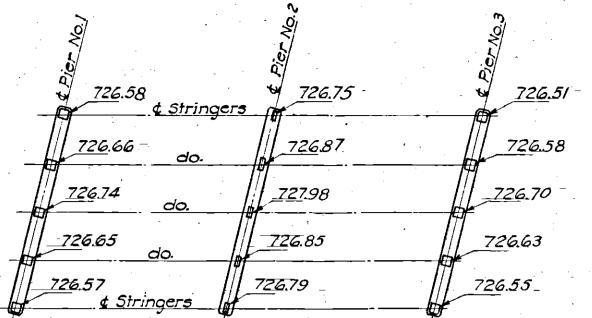
REVISION

BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12

CHECKED: L.G DATE: March 6, 1953
IN CHARGE: Jamah SCALE: As Noted







KEY PLAN
STRINGER PAD ELEVATIONS
No Scale

Notes:
For General Notes see Sheet No.2
For Framing Plan see Sheet No. 27
For Location of Piers see Sheet No. 26
For Bearing Details see Sheet No. 33
All exposed concrete corners shall have I chamfer.

— Elevations shown for bottom of pier footingsare _
based on assumed rock elevations and are for _
estimating purposes only.

— Pier footings shall be founded I foot min. below—
top of sound rock as determined in the field.

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| NO. | REVISION | BY | D. |

OHIO TURNPIKE PROJECT NO. 1

STRUCTURE NO. 46
DEYO ROAD
PIERS

BROWN & BLAUVELT CONTRACTING ENGINEER DESIGN SECTION D-12

DESIGNED: JG CHECKED: LG DATE: March 6, 1953

DRAWN: CWD IN CHARGE: Caurols SCALE: 36 -1-0 t As shown

CONTRACT NO. C- 34 SHEET 29 OF 38

49 B - 1341

